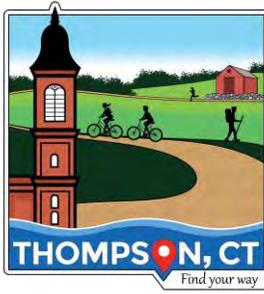


INLAND WETLANDS COMMISSION
TUESDAY, April 9, 2023
ZOOM Meeting

- A) Call to Order & Roll Call
- B) Appointment of Alternates

Agenda Item C) 1
Action on Minutes of Previous Meeting

- 1) Minutes of February 13, 2024



TOWN OF THOMPSON

Inland Wetlands Commission

815 Riverside Drive - P.O. Box 899
North Grosvenordale, CT 06255
office phone: (860) 923-1852
www.thompsonct.org

MEETING MINUTES: Tuesday, February 13, 2024, 7:00PM

Via ZOOM Online Meeting Portal

- A) The Meeting was called to order at 7:07 PM by Chairman George O'Neil who announced the protocols for conducting the online meeting.

Members and staff present: George O'Neil (Chairman), Charlie Obert (Vice Chairman), Diane Chapin (Treasurer), Fran Morano Commissioner, Commissioner Christopher Dustin, Dan Malo (IWC Agent)
Members of the Public: Marla Butts, Tyra Penn-Gesek, Town Planner, Michelle G Giammarinaro, Human Resource, Norm Thibeault, Dan Mullins, Sep Sadhegi, Dave Citron, Valerie Clark and others.

- B) Appointment of Alternates - None

- C) Action on Minutes of Previous Meetings

1. Minutes of January 9th, 2024 – Regular Meeting
The Minutes of January 9, 2024 were unanimously accepted as presented.
2. Minutes of January 25th, 2024 – Special Meeting
The Minutes of January 25, 2024 Special Meeting were unanimously accepted as presented.
3. Minutes of January 30th, 2024 – Special Meeting
The Minutes of January 30, 2024 Special Meeting were unanimously accepted as presented.
4. Minutes of February 10th, 2024 – Site walk Special Meeting
The Minutes of February 10, 2024 Special Meeting were unanimously accepted as presented.

- D) Citizens Comments on Agenda Items - None

- E) Applications

- a. Old Applications

1. **SUB24001**, John & Cheryl Lowinski, 90 Thompson Rd (map 87, block 38, lot 16),
Three (3)-Lot Subdivision containing wetlands. Stamped received 1/3/24. Statutorily received 1/9/24. Site walk scheduled for 2/10/24.

Dan Malo, IWC Agent, Chairman George O'Neil, Vice Chairman Charlie Obert, Commissioner Fran Morano and Norm Thibeault licensed Professional Engineer and partner with Killingly Building Associates represented Mr. Lowinski and his son conducted a site walk on February 10, 2024 at 90 Thompson Road. The meeting was called to order at 9:30 AM by Chairman O'Neil. Norm Thibeault gave an overview of the proposed subdivision with Lot 1, containing the existing house, 46.5 acres, Lot 2 - 1 acre, and Lot 3 - 5 acres. The site walk meeting adjourned at 9:45 AM. Norm Thibeault commented that there were no direct wetlands impact. The existing shared driveway is paved and 700' of the driveway will be improved to access Lot 3. He also stated that the initial plan in the Zoom document did not contain the spring on the property, however the spring is incorporated in the final plans. Several Commissioners commented they would like to see a final version of the subdivision plan that the IWC is being asked to approve and Norm Thibeault shared the final version from his computer and agreed to submit a final version to the IWC office. Discussion took place and,

Commissioner Obert made a motion to grant a conditional approval to SUB24001, John & Cheryl Lowinski, 90 Thompson Rd (map 87, block 38, lot 16), Three (3)-Lot Subdivision containing wetlands with the proviso that the IWC office receives the exact final plans, revision date 2/7/2024, both by email and hard copy, presented by Norm Thibeault's computer screen this evening. Commissioner Dustin seconded the motion. The motion was **APPROVED** by Commissioner O'Neil, Commissioner Obert, Commissioner Morano, and Commissioner Dustin. Commissioner Chapin voted not to approve.

b. New Applications

1. **WAA24004**, Robert & Paula Mooney, 66 Logee Rd (map 141, block 17, lot 184G), cottage demolition and construction of single-family home within upland review area. Stamped received 1/24/24. Wetlands Agent approval 2/1/24. Notice scheduled for 2/9/24.

Dan Malo issued a Wetlands Agent Approval for WAA24004 in the upland review area near Quaddick Lake. Approval received from NDDH. No action was required by the Commission.

2. **WAA24005**, Dan Mullins for Town of Thompson, 934 Riverside Dr (map 169, block 90, lot 1), Installation of permeable pavers. Stamped received 2/6/24. Under review.

Dan Mullins, Executive Director ECCD (Eastern Connecticut Conservation District) commented that they were doing a water quality improvement project at the Thompson Library. Two Site Plans were created by Paul Burgess in order to meet the grant deadlines. Option A-requires replacing the pavers along the back of the Library (preferred option) and Option B- to be used if Option A cannot be used because the Library is removing and installing a fuel storage tank at the same location as Option A. This is a Use Permitted as of Right. No action is required by the Commission.

c. Applications Received After Agenda was Published – None

F) Permit Extensions / Changes

1. **Modification of WAA16021**, Sep Sadhegi for Dave Citron, 0 Greene Island (map 143, block 16, lot 53), single-family home and septic within upland review area of Quaddick Reservoir. WAA16021 extended by state statute 07/12/21. Application stamped received 2/7/24.

Dan Malo explained that typically Wetland Agent Approvals have a five-year life span, however this application is a modification of WAA2016 and is still active because it was extended by State Statute as a Covid response. Sep Sadhegi who is in the process of doing a purchase and sale with the owner Dave Citron stated the modification would be to rotate the orientation of the house for a different view and add a deck. Dan Malo stated that the erosion sediment control is in the same place, same footprint of disturbance. Commissioner Chapin commented that the paperwork needs to be changed and if the current owner of record is willing to be the applicant, remove the buyer from the modifications, correct the square footage then she has no problem with approving a Wetlands Agent Approval. The other Commissioners agreed with Commissioner Chapin that the Commission needs to get the paperwork right. The owner agreed with the Commissioners and will stop by the IWC to file the correct paperwork.

G) Violations & Pending Enforcement Actions

1. **VIOL21036**, Permit IWA20022, Marc Baer, 1227 Thompson Rd (map 116, block 24, lot 10), grades not as authorized in modified plan approved by the Commission on 2/9/21.

Received voice mail communication from a neighbor regarding concerns and attempts to reach the neighbor have failed. Dan will try reaching out again before contacting Mr. Baer. No progress has been made to resolve this violation at this point. Will forward a timeline

summary which Dan and Marla have done.

2. **VIOL23013**, Wojciech Sudyka, 1574 Riverside Drive, (map 55, block 65, lot 14), grading work exceeded scope of work authorized by Permit IWA21028, issued 5/22/23.

Request by the Commission for a timeline summary, enforcement, problems with erosion and drainage onto Route 12, Perryville Dam, work that exceeded scope of the permit approval, and stockpiles as a result of blasting was completed. Dan drove by a few times and noticed stockpiles are within the upland review area because they encountered ledge and had to blast. Daniel Blanchette sent a preliminary site plan for work that would be permitted in the future. Dan will forward the summary he has to the Dudley Wetlands Consultant. No progress has been made.

3. **VIOL23035**, James Quaiel, 0 Hill Road, aka 6 Hill Rd, (map 109, block 34, lot 32), fill and earthmoving within upland review area without permit. Violation issued 11/1/23.

Dan visited the site and noted that an 8" culvert has been installed and was carrying water. He reached out to Daniel Blanchette who provided an updated site plan which incorporated the culvert. Daniel Blanchette recommended some upgrades and stated in an email that in his estimation this driveway is not responsible for the neighbors' flooding. Complaints about erosion, rocks, sand, and branches on Hill Road after the heavy rainstorm, according to Dan, were a town wide result and not caused by the driveway. Discussion on whether or not to close this violation took place. Commissioner Obert stated he would like to keep it open and Commissioner Morano and Commissioner Chapin stated that this violation should be closed because the driveway has been inspected by a professional engineer who stated in an email that the driveway didn't cause the flooding. Chairman O'Neil called for a vote and it was the consensus of the majority of Commissioners to close this violation and Commissioner Obert voted to keep it open. This violation is closed and the record will be kept in the Wetlands Office along with the written document from the professional engineer stating he inspected the driveway and said that the driveway didn't cause the flooding.

4. **VIOL23037**, St. Joseph's Church, 12-18 Main Street, (map 63, block 94, lot 3), fill along Reardon Road within upland review area and wetlands. Violation issued 12/15/23.

Dan deferred this violation to First Selectman Amy St. Onge who said she would reach out to the church and as of this meeting no update has been received from Amy St. Onge. Dan will reach out to her again this week. Dan said the next step is an additional notice of violation. Dan stated that the purpose was to expand the cemetery and Commissioner Morano commented that this is in the flood plain which is questionable. Commissioner O'Neil questioned if a Cease and Desist would be the next step and Dan replied that he would be willing to prepare one but would prefer to exhaust all other possibilities before doing so. Due to the long duration of this complaint with no response from the Church, Commissioner O'Neil told Dan to get guidance from Town Attorney as to what the next step should be. Dan agreed and will do so.

H) Other Business

1. Invitation to the Director of Planning & Development and First Selectman, regarding Budget

Dan stated the big item was the combination of the IWC officer's salary and the Conservation officer's salary and the addition of a Land Use Clerk. He gave an overview of the IWC and the Conservation budgets including a 2.2% salary increase for the Recording Secretary as recommended by the Finance Department. The proposal included an 88% decrease in the Conservation budget and a 134% increase in the Wetlands budget which includes the salary of the Conservation officer. The proposed 2024-2025 budget is \$69,198 which is a 20% increase combining both Commissions.

- Commissioner Obert questioned how realistic it would be to find one person who will meet the requirements of both positions when the Conservation salary is being cut.
- Commissioner Morano stated she would like to hear from the chair/member of the Conservation Commission represented in this discussion.
- Commissioner Chapin stated that she agrees with Commissioner Morano and believes it should remain two separate budgets with two separate people. She also said this needs to be more structured with clearer delineation.
- Commissioner Dustin commented he needs to have a clearer understanding on the needs of both Commissions.
- Commissioner O’Neil stated there is a need to compensate the Wetlands Agent for the work being done, and hire someone who can perform it. He also suggested a salary increase to attract more experienced people due to the increased activity created by the revised regulations which is evident in the amount of workflow. He also questioned how much time would be allocated to each position.

The Town Planner spoke to the combined position and stated salary and structure of positions are determined by the Board of Selectmen and not by Commissions. She suggested that the salary line for a Conservation agent, Wetlands officer and shared secretarial position be moved into her department budget as this would control the balance of the tasks with a new well-constructed job description.

The Finance Director recommended moving the salary for the IWC and Conservation agent into one account.

Dan Malo stated the Conservation Commission will discuss their budget at their next meeting on the 20th. Dan will present both Commission budgets on February 22nd.

Commissioner O’Neil said there are two full time positions and with the amount of workload that has been created, suggested bolstering the salary to at least up to \$100,000 for both positions

Michelle Giammarinaro spoke to the hiring of a of a new Conservation and Wetlands officer and she is forming a job description for this newly combined position which will define hours allocated to each position and she hopes to post next week. She also stated that she is in favor of the Town Planner handling the clerical part, and having a shared secretary is a good idea as well as a part time Conservation agent.

Commissioner Chapin said she didn't feel shared help or shared secretary was necessary and some Commissioners thought it was necessary. She asked if the Town Planner wanted to take control of the IWC budget. The reply was just the payroll aspect. Commissioner Chapin asked for clarification that whatever money is allocated to the Wetlands budget be expended by the Commission.

Commissioner O’Neil addressed compensation, staffing, administrative support, skill levels, span of control, and responsibility and authority to direct the process.

2. Proposed Commission Budget
Discussion on this agenda item is mingled with this the discussion in Item 1 above.
3. Review revisions to draft Inland Wetlands and Watercourse Regulations and revised application forms with Marla Butts
Marla stated the revised application forms (1) incorporate the changes the Commission requested at the special meetings, (2) include the updated fees referenced based on the “fully loaded” unit cost in the revised fee structure analysis and (3) the recommended additional revisions for clarity. She provided the Commissioners a redlined version showing the changes

she made and a blackline version for easier reading.

The following areas required a decision at the 2/13/24 meeting:

- Decide if you want 3 or 4 dwellings referenced in the "Roadway construction" definition. Her recommendation for Roadway construction is as follows: Roadway construction involves installing asphalt, concrete or other materials to create a smooth surface for vehicles to provide access to any combination of 3 or more dwellings and/or commercial buildings or when such accessway meets the definition of town street, private street or shared driveway as found in the Subdivision Regulations of the town of Thompson, as amended. Following discussion, Commissioner Obert made a motion to accept the language for the proposed definition of roadway construction recommended by Marla Butts. Commissioner Chapin seconded the motion. The motion was unanimously **APPROVED**.
- Decide if the word "substantial" is to be kept in the definition of "Significant activity". Marla suggested deleting it. Following discussion, Commissioner Chapin made a motion to accept the proposed recommendation of Marla Butts to remove the word "substantial" from the definition of "Significant activity". Commissioner Dustin seconded the motion. The motion was unanimously **APPROVED**.
- Decide on the status of the last sentence in section 3.1. Marla's recommendation was to delete the last sentence altogether because since it is required to have the detailed soil scientist delineation in an application that it's not required for regulated areas, therefore delete that sentence altogether and leave it up to the evidence that gets presented in an enforcement action. Following discussion, Commissioner Chapin made a motion to delete the last sentence in section 3.1. There wasn't a second so the motion **FAILED**.

Marla Butts made a second recommendation stating the last sentence in section 3.1 should read "the final determination as to the boundary of inland wetlands will be made by a qualified soil scientist." Commissioner Obert made a motion to accept the recommendation of Marla Butts that the final determination as to the boundary of inland wetlands will be made by a qualified soil scientist. Commissioner Dustin seconded the motion. The motion was unanimously **APPROVED**.

- Decide what fee, if any, should be charged for a declaratory ruling. Marla Butts stated the revised fee structure is \$30 due to minor administrative cost to process a jurisdictional ruling for use permitted as of right or non-regulated use. Following discussion, Commissioner Obert made a motion to charge \$30. Commissioner Dustin seconded the motion. The motion to charge \$30 was **APPROVED** 4-1.

Marla asked the Commission for a motion to be made and approved to authorize the forwarding of the final language of the draft regulations, the application forms, and the inland and watercourses new map to the town's attorney and DEEP for their review and comment. Commissioner Obert made a motion to authorize Marla to send the final language of the draft regulations, the application forms, and the inland and watercourses new map to the town's attorney and DEEP for their review and comment. Commissioner Morano seconded the motion. The motion was unanimously **APPROVED**.

4. Operational Procedures

Dan Malo commented that there was some communication between Human Resources and the Town Planner earlier in tonight's meeting addressing this issue.

5. Resignation of Wetlands Agent, effective 2/28/24

Dan Malo, Wetlands Agent, announced he accepted a full-time position with the Town of Woodstock, CT., which will require a different set of roles. He said his departure is bittersweet in leaving the town of Thompson and was grateful for an opportunity to serve the town. The effective date of his departure is March 1, 2024. The Commissioners congratulated Dan and thanked him for his work in the Wetlands Office.

I) Citizen's Comments

- Valerie Clark questioned the removal of pavers by Eastern Connecticut Conservation District at the library and asked for guidance on who to contact to discuss this issue. Dan Malo will forward her the paperwork on this project and he advised her to also speak with the library staff.

J) Reports

a. Budget & Expenditures

Commissioner Chapin reported available budget from July 1, 2023 to February 15, 2024 has an available balance of \$19,452.28 and has expended 40.7% of the budget.

b. Wetlands Agent Report

- Eastern Connecticut Conservation District submitted their annual contribution request and annual report to the selectman's office and that was forwarded to the IWC.
- North Grosvenordale Pond Dam – Dan reached out to Dan Lesniewski and he reached out to GZA about the status of scheduling a pre-application meeting and as soon as a meeting date is available, he will notify the Commissioners to make sure the IWC has representation at that meeting. Dan Malo also took videos and pictures of the dam after the heavy rains.
- Dan has written an activity summary for Wojciech Sudyka, and will also do the same for Marc Baer property to help the next Inland Wetlands agent acclimate to the position.
- Inquiries in the office continue to come in, as well as building permits.

c. Correspondence

- Eastern Connecticut Conservation District (ECCD) request for \$1,000 contribution was received. This money is appropriated in the budget but there was no approval to pay this request. It is in the Conservation budget. Commissioner Obert voiced his support of this invoice and Commissioner Chapin stated that she wanted to see results for the money spent.
- Various emails focused on Conservation

K) Signing of Mylars – None

L) Comments by Commissioners

- Commissioner Obert questioned URLs in the Zoom Documents and Dan explained that the Zoom documents are scans of what is recorded in the Town Clerk's office.
- Commissioner O'Neil wished Dan good luck in his future endeavors and thanked him for his hard work with the Commission.

M) Adjournment

Commissioner Morano made a motion to adjourn. Commissioner Chapin seconded the motion. The motion was unanimously **APPROVED** and the meeting adjourned at 10:14 PM.

To see/hear the entire meeting via ZOOM, copy and paste the following link into your search bar:

https://us02web.zoom.us/rec/share/ZCN30jbZeW2l5AIGMe2AY3bUkThfUbnr9LRavOkR3NVp09t5uxvf8G4yM59P8be..GaHR7jNBXGE_u_Tb

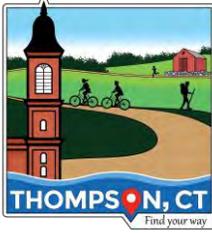
Passcode: 53GaP2d@

Disclaimer: These minutes have not yet been approved by the Inland Wetlands Commission. Please refer to the next meeting's minutes for approval of, and/or amendments to these minutes.

Respectfully submitted, Gloria Harvey, Recording Secretary,

Gloria Harvey

Agenda Item C) 2
Action on Minutes of Previous Meeting
Minutes of March 14, 2024 (Special Meeting)



**TOWN OF
THOMPSON
Inland Wetlands Commission**

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

SPECIAL MEETING MINUTES: Thursday, March 14th, 2024, 5:30PM

Via ZOOM Online Meeting Portal

A) Call to Order & Roll Call

The meeting was called to order at 7:00 PM by Vice Chairman Charlie Obert who announced the purpose of this special meeting was due to technical difficulties with the regular online meeting on March 12, 2024.

Members and staff present: Charlie Obert (Vice Chairman), Diane Chapin (Treasurer), Fran Morano (Commissioner) joined the meeting at 5:33 pm, Commissioner Christopher Dustin, Amy St. Onge (First Selectman), Tyra Penn-Gesek, (Town Planner)

Members of the Public: Sep Sadhegi, Dave Citron, Valerie Clark and others.

B) Appointment of Alternates – None

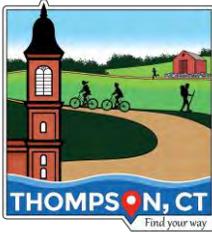
C) Proposed Appointment of Cindy Dunne as Temporary Wetlands Officer:

Commissioner Obert stated that we do have a candidate, Cindy Dunne, Zoning Enforcement Officer for the Town of Thompson, that could fill as an interim officer and asked either Tyra or Amy St. Onge to speak to her background and experience. Tyra Penn-Gesek, Town Planner, stated the job search is open and active for the combined position of wetlands enforcement officer and conservation agent, and seven applications have been received thus far with varying levels of qualifications. Tyra spoke to the HR Director who stated that the posting would remain up until the end of March, then review the candidates, schedule interviews for the second week of April, and hopefully have an offer accepted by the end of April beginning of May. If no suitable candidate is selected, then the position will be reposted.

Tyra further stated that Cindy has the certification required by state statute to act on behalf of the IWC as an enforcement officer. She currently does zoning enforcement for the town, working 25 hours three days a week (Monday, Wednesday, Thursday), and is prepared to come in Tuesdays and Fridays to exclusively work on wetlands. She is actively working in the wetland sphere as a Commissioner for the Town of Putnam, very conversant with wetlands issues, and has been a professional in land use enforcement for decades. She also worked closely with Marla since so many applications get reviewed by both departments for the entire time they were coworkers.

Commissioner Dustin made a motion to approve the appointment of Cindy Dunne as the temporary Wetlands Officer. Commissioner Morano seconded the motion. Discussion: Commissioner Chapin asked for a definition of temporary and stated she didn't want to see this vacancy open indefinitely. The





TOWN OF THOMPSON Inland Wetlands Commission

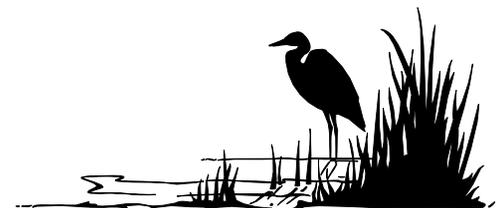
815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

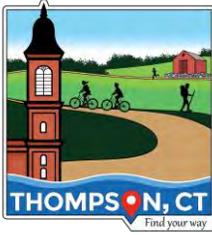
Commissioners discussed and agreed upon, at the suggestion of the Town Planner, to leaving this acting wetlands officer position open until June 30, 2024, the end of the fiscal year. Commissioner Obert commented we've lost the corporate body of knowledge that we had and the point is we're not likely to find somebody that has that kind of experience/knowledge about the town and about the issues facing us, however we need to fill that gap until a qualified candidate is hired. Hearing no further discussion, Commissioner Dustin amended his motion to approve the appointment of Cindy Dunne as the temporary Wetlands Officer until June 30, 2024, the end of the fiscal year. Commissioner Morano seconded the amended motion. The motion was **APPROVED** unanimously.

D) Permit Extensions / Changes

Transfer of WAA240006, Dave Citron, 0 Greene Island (map 143, block 16, lot 53), single-family home and septic within upland review area of Quaddick Reservoir to Sep Sadhegi.

The Commissioners reviewed the corrected version of the plan for WAA24006 and saw that the modifications they required at the February meeting were officially approved by Dan Malo and are shown on the plan. The current owner stated he completed the incorrect form and following the February IWC meeting he met with Dan Malo and completed the correct permit form which Dan Malo signed, however, this transfer request cannot be approved because the prospective buyer doesn't own the property yet. During discussion several questions were raised including the dimensions on the structure. J & D Civil Engineering informed David Citron that they never put square footage on their drawings, the dimension of 422' on the updated drawing refers to the elevation of the structure to the elevation of the septic system above sea level and not the square footage of the house. He further stated the house is to scale on this drawing and is a 26' by 34' structure. The size of the house is correct and the position is correct. The current owner is going to sell it that way which meets with the needs of the buyer, however it cannot be transferred until the buyer becomes the owner. The Commissioners agreed that they were satisfied that the permit has been properly modified and approved by the wetland agent at the time and as long as there are no changes, that it was premature to grant the transfer at this time, however they would have no problem granting this transfer once the prospective buyer owns the property. The prospective buyer commented that in order to obtain an Occupancy Certificate J & D Engineering will provide a certified as built plan to verify no changes have been made.





TOWN OF THOMPSON Inland Wetlands Commission

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

E) Adjournment

Following completion of the agenda, the meeting adjourned by unanimous consent.

To see/hear the entire meeting via ZOOM, copy and paste the following link into your search bar:

https://us02web.zoom.us/rec/share/cXYJLVH5znSD6UIXuIIP_Jw9II0odwtIhnQcU780UIa_rbRXr-ROKroY_--CRCiK.zRitbuoIzDLGC37u?startTime=1710451831000

Passcode: 1u3#=EXJ

YouTube:

<https://www.youtube.com/watch?v=umUwypmhSqA>

Disclaimer: These minutes have not yet been approved by the Inland Wetlands Commission. Please refer to the next meeting's minutes for approval of, and/or amendments to these minutes.

Respectfully submitted, Gloria Harvey, Recording Secretary,

Gloria Harvey



Agenda Item D)
Citizens Comments on Agenda Items

Agenda Item E) a. Old Applications - None

Agenda Item E) b.1. New Applications

DEC24007, Sherri Audette, 4 Jason Heights, (map 120, block 30, lot 8 I), addition to existing garage for use permitted as of right.

Stamped received March 14, 2024.



Town of Thompson
INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

For Commission Use Only
Application #: DEC 24007

Received

MAR 14 2024

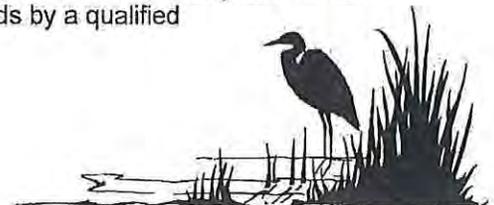
Thompson Wetlands Office

APPLICATION FORM - USE PERMITTED AS OF RIGHT OR NON-REGULATED USE

Applies to those actions proposed as a use permitted as of right or non-regulated use listed in sections 4.1 and 4.2 of the Thompson Inland Wetland and Watercourse Regulations, except timber harvests (for timber harvests use Timber Harvest Form). Unless identified as "Optional" all information is mandatory.

Part I Request for Use Permitted as of Right or Non-Regulation Use (check one only):

1. Propose use or activity conforms to the following permitted uses as outlined in section 4.1 of the Thompson Inland Wetland and Watercourse Regulations (check as appropriate):
 - a. Grazing, farming, nurseries, gardening and harvesting of crops.
 - b. Farm pond three (3) acres or less essential to the farming operation.
 - c. Construction of a residential home for which a building permit has been issued prior to July 1, 1987, attach copy of valid building permit and site plan.
 - d. Boat anchorage or mooring.
 - e. Use incidental to the maintenance and enjoyment of property presently used for residential purposes that contains a dwelling. Such property is equal to or smaller than the largest minimum residential lot size as permitted in the Town of Thompson.
 - f. Construction and operation by a water company of a dam, reservoir or other facility necessary for the impounding, storage and withdrawal of water in connection with public water supplies.
 - g. Maintenance of drainage pipes on residential property that existed prior to July 1, 1974.
2. Proposed use or activity will not disturb the natural or indigenous character of the wetland or watercourse and conforms to one of the following non-regulated uses outlined in section 4.2 of the Thompson Inland Wetlands and Watercourses Regulations (check as appropriate):
 - a. Conservation of soil, vegetation, water, fish or wildlife.
 - b. Outdoor recreation
 - c. Dry Hydrant installation by authority of the municipal fire department
3. The proposed use or activity is not regulated by the Thompson Inland Wetlands and Watercourses Regulations because (check as appropriate):
 - a. The proposed activity or use is one which is the exclusive jurisdiction of State or Federal agency. Provide documentation (See Section 5 of these regulations)
 - b. The use or activity legally existed as of July 1, 1974, and does not involve new, additional or expanded use or activity. Provide documentation.
 - c. The proposed activity is not a regulated activity as defined by section 2 to the Thompson Inland Wetlands and Watercourses Regulations (delineation of wetlands by a qualified soil scientist may be required)



Part II Contact Information

1) Applicant Contact Information

a) Applicant Name: SHERRIE AUDLETTE

b) Mailing Address: 4 JASON HTS THOMPSON CT 06777
 (Include town state zip)

c) Daytime Phone #: 860-450-6534

d) Evening Phone #: N/A

e) Cell Phone # (optional): _____

f) Email Address (optional): _____

2) Applicant's Interest in Property (check one only)

property owner lessee easement holder

3) Owner Contact Information (required if applicant is not property owner)

a) Name: _____

b) Mailing Address: _____
 (include town state zip)

c) Daytime Phone #: _____

d) Evening Phone #: _____

e) Cell Phone # (optional): _____

f) Email Address (optional): _____

Part III Site Information

1) Property Involved (following information obtained from tax assessor and town clerk's records):

Street Address	Assessor's Reference		
	Map	Block	Lot
<u>4 JASON HEIGHTS</u>	<u>120</u>	<u>30</u>	<u>81</u>

2) Attach an 8 1/2 inch by 11 inch location map for the property (printable map from Thompson MapGeo with property outlined is acceptable - see <https://thompsonct.mapgeo.io>)

3) Wetlands (as delineated by qualified soil scientist) / Watercourse Area Altered

a) Wetlands: 0 (in square feet)

b) Open Water Body: 0 (in square feet)

c) Stream: 0 (in linear feet)

4) Noteworthy Wetlands / Watercourses: Does the property contain a noteworthy wetland or watercourse as identified in the document "Town of Thompson Inland Wetland Inventory" prepared by the Northeastern Connecticut Regional Planning Agency dated 1980? (see http://thompsonct.org/images/stories/Inland_Wetlands/Inlands-Wetlands-Watercourse-Map.pdf - check one) No Yes (If Yes, then upland review area = 200 ft.)

5) Upland Review Area altered: _____ (in square feet)

For 6 & 7 below see http://thompsonct.org/images/stories/Planning_Development/Inland_Wetlands/Drainage-BasinsTopo-Grid-2017.pdf

6) U.S.G.S. Topographic Quadrangle (check all involved)

#13 Webster MA

#14 Oxford MA

#28 Putnam

#29 Thompson

7) Drainage Basin #(s) wherein the proposed activity will take place (check all involved):

French River 3300 3301

Quinebaug River 3700 3708

Five Mile River 3400 3401 3402

Part IV Description of Activity Proposed

1. Detailed project description and purpose: Proposed additions to existing 32x26 detached garage, which received wetlands approval in 1996. map on file in wetlands office #96-07-01, permit attached. 16 x 28 additions on each side of garage, shown on 2024 As built A-2 Survey (2 copies provided) wetlands from 1996 map plotted on new survey map. 2 photos attached showing we are only disturbing existing parking areas created in 1996.

2. Attach a diagram, drawing or plot plan of sufficient scale and detail to portray the proposed activity.

Part V Application Permissions & Certifications

1) Owner's Permission¹

I, the undersigned, am the owner of the above reference property and hereby grant permission to the Thompson Inland Wetlands Commission and its duly authorized agents to enter upon this property at reasonable times both before and after a final decision on this application has been issued by the Thompson Inland Wetlands Commission for purposes of inspection and enforcement of the Inland Wetlands and Watercourse regulation of the town of Thompson. Further, I have had an opportunity to review the Inland Wetlands and Watercourses Regulations of the Town of Thompson and understand that these regulations regulate activities conducted on my property.

Sherrie Cuddeitt
(Signature of property owner)

3/11/2024
Date

For all persons excluding individuals print name and title of signatory above

2) Applicant's Certification¹

I, the undersigned, certify that the information supplied in the completed application is accurate, to the best of my knowledge and belief and am aware of the penalties for obtaining the permit through deception, inaccurate or misleading information.

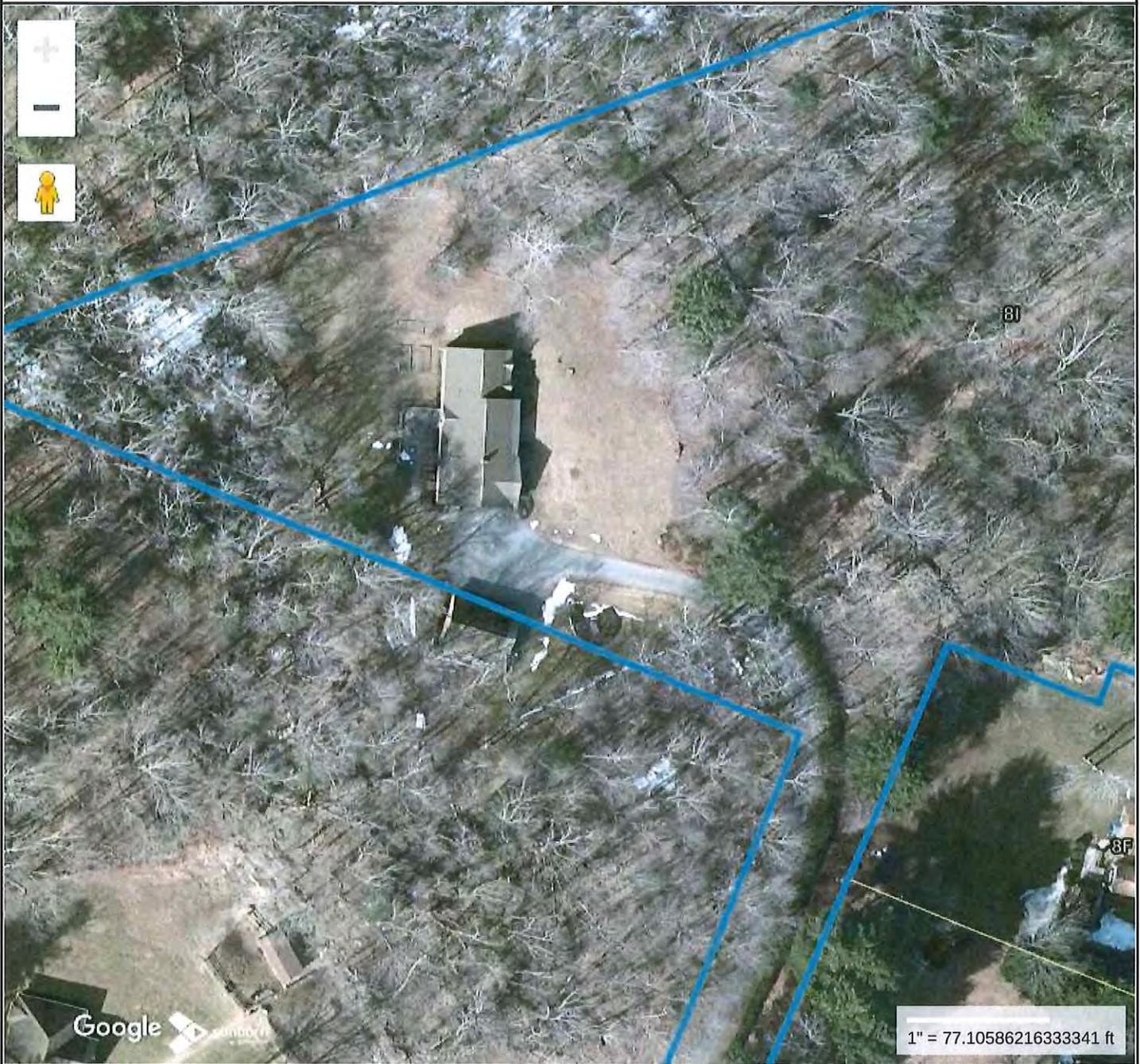
Sherrie Cuddeitt
(Signature of applicant)

3/11/2024
Date

For all persons excluding individuals print name and title of signatory above

*** For Commission Use Only ***	
Agency Response:	
IWC Chair Signature:	Date:

¹ If owner is (1) a corporation, then signature is required to be by a principal executive officer of at least the level of vice president, (2) a limited liability company (LLC), then signature is required to be by a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s), (3) a partnership, then signature is required by a general partner, (4) the Town of Thompson, then signature is required by the First Selectman, (5) any other municipality, the signature is required by a ranking elected official, or by other representatives of such applicant authorized by law, and (6) a sole proprietor, then signature is required by the proprietor.



Property Information

Property ID 3741
Location 4 JASON HEIGHTS
Owner AUDETTE SHERRIE M

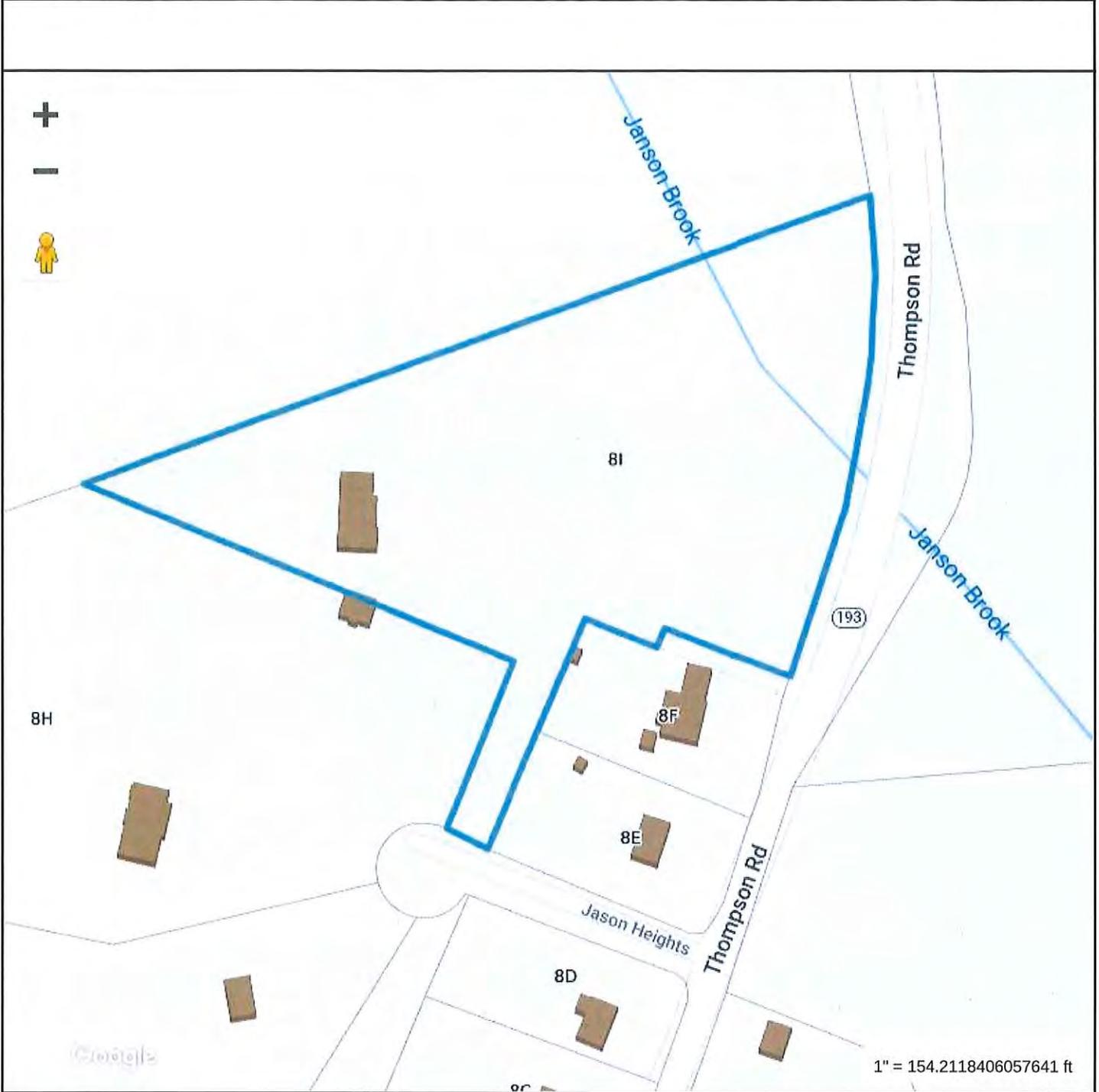


**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated December 1, 2022
Data updated Daily

Print map scale is approximate.
Critical layout or measurement
activities should not be done using
this resource.



Property Information	
Property ID	3741
Location	4 JASON HEIGHTS
Owner	AUDETTE SHERRIE M


MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT
 Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.
 Geometry updated December 1, 2022
 Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.





Town of Thompson

CONSERVATION & INLAND WETLANDS COMMISSION

015 RIVERSIDE DRIVE

NORTH GROSVENORDALE, CT 06255

INLAND WETLAND PERMIT # 96-07-01

Name: Michael Audette

Address: .5 Jason Heights, Thompson, Ct.

Location of Permit

Activity: 5 Jason Heights; Map 120, Block 30, Lot 8I

Permitted Activity: Regulated activities associated with the construction of a 32'x26' garage/shed.

Effective Date: 07-09-96

Expires: 07-09-2001

The Thompson Conservation & Inland Wetlands Commission, according to Section Eleven (11) of the Inland Wetlands & Watercourses Regulations of the Town of Thompson, CT, hereby grants to the above named a permit to conduct regulated activities as described above.

Your permit will be valid for five (5) years. You are expected to notify the Commission of your starting date and to complete your activities within one year of beginning your site work. If you expect to take longer than one year for completion, you must request an extension of the active time of your permit. A written request for an extension must be directed to the Thompson Conservation & Inland Wetlands Commission, and submitted to the Town Clerk, 65 days prior to the date of expiration of this permit. Failure to comply will require a new application and an immediate cessation of work.

If the activity authorized by this Wetland Permit also needs Zoning or Sub-division approval, variance or Special Exception, etc., then NO WORK PURSUANT TO THE WETLAND PERMIT IS AUTHORIZED UNTIL SUCH APPROVAL IS ISSUED.

CONDITIONS:

- 1) The Commission must be notified in writing one week prior to the beginning of construction and within one week of completion.
- 2) If there are any changes in the location of any of the proposed activities for which this permit has been granted, then the new proposal must be presented to this Commission for approval of such changes prior to commencing such activities.
- 3) Erosion controls be in place prior to any construction activity.

Chair: *F. Moran*

Dated: 7/9/96

Agenda Item E) b) 2. New Applications

WAA24008, Ishwara Sharma, 1410 Thompson Road, (map 114, block 27, lot 21), grading work in upland review area and two discharges to wetlands for construction of 16 single family homes, 4 duplexes, community building, road and septic systems.

Stamped received April 2, 2024.

J & D CIVIL ENGINEERS

401 Ravenelle Road
 North Grosvenordale, CT 06255
 (860) 923-2920
 Jdcivilengineers.com

LETTER OF TRANSMITTAL

Date:	4/2/24	Job No.	22166
Attention:	CINDY DUNNE		
Re:	1410 THOMPSON RD		
SHARMA MULTI-FAMILY			

TO: 1-W COMMISSION

We are sending you: Attached Under Separate Cover via _____ the following items:
 Shop Drawings Prints Plans Samples Specifications
 Copy of Letter Change Order

COPIES	DATE	NO.	DESCRIPTION
2	3/30/24	—	WETLAND AGENT APPLICATION
1	4/2/24	1967	J&D CHECK
2	3/27/24	—	LETTER TO WEBSTER CONS COMM
2	3/23/24	—	NDDH APPROVAL LETTER
2	4/2/24	—	STORMWATER MANAGEMENT REPORT
2	4/2/24	1-11	PLANS (STAMPED & SIGNED)
2	12/18/22	—	ZVLICK (SOIL SCIENTIST) SKETCH

THESE ARE TRANSMITTED as checked below:

- For Approval
- For your use
- As requested
- For review and comment
- FOR BIDS DUE _____
- Approval as submitted
- Approved as noted
- Returned for corrections
- Resubmit _____ copies for approval
- Submit _____ copies for distribution
- Return _____ corrected prints
- PRINTS RETURNED AFTER LOAN TO US

REMARKS:

COPY TO: _____

SIGNED: Janet J Blanchette

For Wetland Agent:	rev 01/11
APPLICATION #WAA	<u>24008</u>
DATE RECEIVED	<u>4-2-24</u>

Application
for
Wetland Agent Approval
to conduct a regulated activity

Town of Thompson

INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

Received
APR 2 2024
Thompson Wetlands Office

Instructions:

Two (2) copies of the completed application and two (2) copies of all the additional attached documents (site plan, etc.) must be submitted to the Agent.

The applicant is advised to read Sections 7 and 8 of the Regulations for further information regarding application requirements and procedures. THE APPLICANT IS FURTHER ADVISED THAT A BUFFER (SETBACK) OF 100 FEET FROM AN INLAND WETLAND OR WATERCOURSE IS REQUIRED, AND A BUFFER/SETBACK OF 200 FEET FROM THE TEN (10) ESPECIALLY NOTEWORTHY WETLANDS AND WATERCOURSES IDENTIFIED IN THE TOWN OF THOMPSON INLAND WETLAND INVENTORY PREPARED BY NORTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY 1980 PAGES 9, 14 AND 15 IS REQUIRED. See Section 6 of the Regulations for further information regarding regulated activities.

Please provide the following information:

- Directions to the property from the Thompson Town Hall
- Location of Utility Pole nearest your property
 - *Pole Number
 - *Location of property in reference to Pole

NO APPROVAL SHALL BE TRANSFERRED WITHOUT PERMISSION OF THE AGENCY.

FEE SCHEDULE:

(Additional \$60.00 fee to State as per Public Act 09-03, Section 396)

- Individual Lot \$50 + \$60
(Includes Mandatory Legal Advertisements Fee of \$20)

If the Agent finds that greater than a minimal impact may occur to wetlands, then this proposal must undergo a full permit application. Fee will be applied to the permit application.

Please complete the following application information.
If you need assistance contact the Wetland Agent (office 860- 923-1852)
Fax 860-923-9897
www.thompsonct.org/wetlands

Date 3/27/24

1) Name of Applicant ISHWARA SHARMA
Home Address 1 RATAN RD, WEBSTER, MA 01570
Home Tele & Hrs 508-612-3629 Business Tele & Hrs _____
Business Address _____

2) Applicant's interest in the Property: Owner _____ Other _____
INLAND WETLANDS APPROVALS CAN BE GRANTED TO PROPERTY OWNER ONLY.

3) Name of Property Owner (if not applicant) THE 1 RATAN ROAD REALTY TR.
Home Address 1 RATAN RD, WEBSTER, MA 01570
Business Address _____
Home Tele & Hrs 508-612-3629 Business Tele & Hrs _____

4) Geographical Location of the Property (site plan to include utility pole number nearest property or other identifying landmarks) 1410 THOMPSON RD
Pole # and Location CLIP 1726
Street or Road Location _____
Tax Assessor's Map # 114
Block # 27
Lot # that appears on site plan 21
Deed Information : Volume # 712
Page # 189

5) The property to be affected by the proposed activity contains:
Soil Types SEE SOIL SCIENTIST LETTER
Wetland Soils (Swamp _____ Marsh _____ Bog _____ Vernal Pool _____)
Watercourses _____ (Lake or Pond _____ Stream or River _____ Intermittent Stream _____)
Floodplain - Yes/No

6) Description of the Activity for which Approval is requested CONSTRUCTION OF 16 SINGLE FAMILY (2 BDRM) & 4 DUPLEX UNITS, COMMUNITY BLDG, ROAD, SEPTIC SYSTEMS, DRAINAGE & GRADING

7) Submit a Site Plan, drawn to scale, with the certification of the preparing Surveyor and/or Engineer including:

- 1-Locus map at approx. 1" = 1000'
- 2-Location of property, with boundaries defined and utility pole # near property and any other identifying landmarks.
- 3-Location of wetlands and /or watercourses. A wetland delineation in the field must be marked with numbered wetlands flags by a certified soil scientist and located on the map/site plan. Site plan shall bear the soil scientist's original signature.
- 4-Soil types on the property.
- N/A 5-Flood Hazard area classification and delineation.
- 6-(a)Location of the proposed activity (i.e. house, septic, well or other areas to be disturbed).
(b)Location of perc tests and soil test holes.
(c)Copy of NDDH approval to construct or repair subsurface sewage disposal system.
- N/A 7-Nature and volume of the material to be placed, removed, or transferred.
- 8-Topographical contours, proposed and existing.
- 9-Location and supporting data for proposed drainage.
- 10-Date, scale (recommend 1"=40') and North arrow.
- 11-Proposed limits of clearing/disturbance and location of stockpiles during construction.
- 12-Location of proposed Erosion and Sedimentation controls and other management practices and mitigation measures which may be considered as a condition of issuing a permit for the proposed regulated activity. The erosion and sedimentation control provisions on the site plan must comply with the most current CT DEP edition of the *Connecticut Guidelines for Soil Erosion and Sedimentation Control* and be so noted on the plans.
- 13 -Location of proposed Stormwater treatment design on the site plan must comply with the most current CT DEP edition of the *Connecticut Stormwater Quality Manual* and be so noted on the plans. It is strongly recommended that low impact development techniques, stormwater management techniques that are designed to approximate the pre-development site hydrology, be utilized in the stormwater system design wherever practical and possible.
- N/A 14-Location of proposed mitigation or wetland enhancement measures which may be considered as a condition of issuing a permit for the proposed regulated activity.
- 15-Timing and description of phases of activities, installation of sediment and stormwater control measures and temporary and permanent stabilization methods.

The Wetland Agent will notify you if any additional information is needed in order to properly evaluate your proposal.

8) Is any portion of this property located within the watershed of a water company as defined in section 16-1 of the Connecticut General Statutes? NO If yes, the Applicant is required to provide written notice of the application by certified mail, return receipt requested, to the water company on the same day of filing this permit application with the Thompson Inland Wetlands and Watercourses Commission. Documentation of such notice shall be provided to the Commission.

9) Does any portion of this property contain a Natural Diversity Data Base (NDDDB) area of concern as defined on the map of Federal and State Listed Species and Significant Natural Communities, for Thompson, Connecticut, prepared by the Connecticut Department of Environmental Protection? NO If yes, the Applicant must contact the CT DEP for information regarding the State or Federal Listed Species of Concern.

10) Names and Addresses of Abutters:

ATTACHED

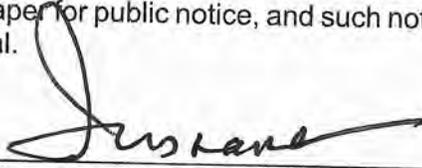
11) Estimated start date SUMMER 2024
Estimated date of completion (all disturbed areas are stabilized) SUMMER 2029

12) The undersigned hereby consents to necessary and proper inspections of the above mentioned property by the Agents of the Town of Thompson Inland Wetlands Commission, at reasonable times, both before and after the approval in question has been granted by the Agent, including site walks by Commission members and staff for the purpose of understanding existing site conditions, which may be necessary in order to render a decision on this application.

The undersigned swears that the information supplied in this completed application is accurate to the best of her/his knowledge and belief.

ABSOLUTELY NO WORK IS TO BEGIN UNTIL ALL NECESSARY APPROVALS ARE OBTAINED.

Upon Approval the Applicant is responsible for publishing a notice of the approval, at the applicant's expense, in a newspaper having a general circulation in the Town of Thompson. The Agent will provide the necessary notice to the newspaper for public notice, and such notice must be published within ten (10) days of the date of approval.

 3/30/24
Signature of Applicant Date

Consent of Landowner if other than applicant Date

Please attach a written consent by the owner if applicant is not the property owner.

Site Address	Owner Name	Owner Address	Owner City	Owner State	Owner Zip
0 RICH RD EXT	BLUE STAR CAR WASH LLC	629 BROAD ST	NEW LONDON	CT	06320
0 THOMPSON RD	HUBBARD HEALTH SYSTEMS R E INC	6 RIVER CT	WEBSTER	MA	01570
1406-1408 THOMPSON RD	BROCHU ARTHUR J + CHERYL A	1408 THOMPSON ROAD	THOMPSON	CT	06277
0 THOMPSON RD	POPIAK JOHN P EST OF	20 WILLIS DR	CHARLTON	MA	01507-6654

J & D CIVIL
ENGINEERS, LLC

401 Ravenelle Road
N. Grosvenordale, CT 06255
www.jdcivilengineers.com
(860) 923-2920

March 27, 2024

Webster Conservation Commission
Town Hall
350 Main Street
Webster, MA 01570

Re: 1410 Thompson Road – Thompson, CT

Job No.22166

Dear Commission Members:

As required by Thompson Inland Wetland regulations we are providing notice that a Wetland Agent Approval application has been filed with the Thompson Inland Wetlands Commission for activities within the 100' upland review area at the above referenced location.

Very truly yours,

J & D Civil Engineers, LLC



Janet J. Blanchette, PE

CC: Thompson Inland Wetlands Commission

Certified mail #7018 0680 0000 5191 8659



Northeast District Department of Health

69 South Main Street, Unit 4 Brooklyn, CT 06234
Phone 860-774-7350 Fax 860-774-1308 WEB SITE www.nddh.org

March 23, 2024

The 1 Rattan Road Realty Trust
1 Rattan Road,
Webster, MA. 01570

**SUBJECT: Feasibility plan review for Friends Village Condominiums,
J&D Civil Engineers, Job Number 22166, drawn 02/15/2024
Map #114, Block #27, Lot #21, 1410 Thompson Road, Thompson, CT**

Dears Sir,

The above subject plan has been reviewed and demonstrates that it is feasible for future development, with the following notations.

1. Each building will require an engineers plan to be submitted to NDDH for review and approval.
2. Buildings 1 thru 16 are based on two bedrooms
3. Buildings 17 thru 20 are duplexes with a total of four bedrooms each
4. One building is a community with well pump room.
5. Well location will be determined by the State of Connecticut Drinking Water section as the property will service over 25 residents.


Maureen Marcoux RS
Senior Sanitarian – NDDH

CC: J & D Civil Engineers, Thompson Building, Zoning, Wetlands

SKETCH NOT TO SCALE



Lines WB1 - WB61
WB A-1 - WB A50

THIS MAP HAS BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF THE CONNECTICUT STATE AGENCIES SECTIONS 20-201-1 THROUGH 20-201-3 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 18, 1988.

ENGINEER'S EXPLANATION PLAN
PURPOSE: CONCEPTUAL DEVELOPMENT
HORIZONTAL ACCURACY: CLASS D

THIS PLAN WAS COMPILED FROM OTHER STATE RECORDS, SEARCH OF OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSIDERED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY AND IS SUBJECT TO SUCH CHANGE AS MAY BE NECESSARY. FIELD SURVEY MAY DISCLOSE TO MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS BLANCHETTE
DATE: 12/18/22
EXPIRE: 12/18/25

THIS MAP IS NOT VALID WITHOUT A REGISTERING NUMBER
© 2022 J&D CIVIL ENGINEERS, LLC

PROJECT DESCRIPTION
24 TWO BEDROOM HOUSES
24 DWELLING UNITS TOTAL
SEPTIC DESIGN FLOW = 24 X 300 GPD = 7200 GPD

LEGEND

- PROPERTY LINE
- BUILDING SETBACK LINE
- MAJOR CONTIGUOUS LINE
- SEPTIC CONTIGUOUS LINE
- EDGE OF WETLANDS
- SHEDLINE

MULTI-FAMILY CONCEPTUAL DEVELOPMENT PLAN 24 - TWO BEDROOM HOUSES 1410 THOMPSON ROAD - THOMPSON, CT MAP 114 - BLOCK 07 - LOT 01	
J&D CIVIL ENGINEERS, LLC <small>100 BENTLEY ROAD 14 GARDEN HILLS, CT 06255 860-923-2520</small>	
DESIGNED: JJB	REVISIONS:
CHECKED: DBB	
JOB NO: 22100	DATE: NOVEMBER 8, 2022
SCALE: 1" = 60'	SHEET: 2 OF 2

DEVELOPMENT BY
 DATUM ENGINEERING + SURVEYING LLC
 RICHARD ZULICK
 400 NOTT HWY
 ASHFORD, CT 06278

12/18/22

Richard Zulick
Certified Forester / Soil Scientist
400 Nott Highway
Ashford, CT
06278

March 30, 2024

Town of Thompson
Inland Wetlands Commission
Thompson, CT.

Re: Wetland Report, 1410 Thompson Road, Thompson, CT Map 114 Block 27, lot 21

Dear Commissioners:

I have reviewed the overview plan for the Driveway and Utility Layout Plan – Thompson Shanti Village, for the purposes of assessing the wetland functions and values and potential impacts to the wetlands associated with the development of 20 residential dwellings and 1 Community Building on approximately 38 acres.

Existing Conditions

The proposed development area consists of a gently sloping gravelly sandy loamy upland area located west of Thompson Road and south of the Massachusetts line in the Town of Thompson, CT.

This proposed development area consists of 21 buildings, wells, access road /driveways, individual on-site septic systems and a large storm infiltration basin. The prevalent soil is a Canton and Charlton fine sandy loam with areas of Woodbridge fine sandy loam.

These soils are fairly deep and well drained. They have moderately rapid permeability in the substratum. The runoff class is low, and saturated conductivity is high. The soils are well suited for the proposed development.

The wetlands have been field delineated in accordance with the standards of the National Cooperative Soil Survey and the definition of wetlands as found in the Connecticut General Statutes, Chapter 440, Section 22A-38.

This delineation is not intended to be used for soil mapping but to identify the wetland soils relative to the development and management of this parcel. The wetland boundaries have been marked with pink and blue flagging as shown on plan.

Wetlands

The wetland areas flagged are located to the west of the proposed development and are shown on the plan by flags numbered WF A-1 to WF A-50, WF B-1 to WF B-58 and WF BZ-01 to WF BZ-12.

Soils in the wetland areas are primarily the Ridgebury Soil Series and Ridgebury Leicester complex. The Ridgebury Soil Series consists of deep, somewhat poorly and poorly drained soils formed in till derived from granite and schist. These soils are commonly shallow to a densic contact. They are nearly level and gently sloping in low areas within uplands.

TAXONOMIC CLASS: Loamy, mixed, active, acid, mesic shallow Areic Endoaquept

The wetland area consists of a palustrine scrub-shrub/forested wetland complex. This wetland is vegetated with mixed hardwoods in the sapling and/or small saw timber stages in the overstory, (red and sugar maple, scarlet oak and hickory) and the understory is made up of saplings and various wetland shrub species and vines.

Plants found at the ground and herbaceous levels included, cinnamon, royal, lady and sensitive ferns, jewelweed, goldenrod, poison ivy, skunk cabbage, reeds and misc. grasses such as tussock sedges and rushes.

Wetland Functions and Values

The wetland complex was inspected to determine wetland functions and values utilizing the Army Corps. of Engineers methodology as outlined in "The Highway Methodology Workbook Supplement". These wetlands and Brook exhibited the following wetland functions and values with the corresponding rationale:

Ground water recharge and discharge: potential for public or private wells occur downstream of the wetland, wetland is underlain by gravel or sandy soils present in or adjacent to the

wetland, quality of water associated with the wetland is high and wetland shows signs of variable water levels.

Flood flow alteration: the area of this wetland is small relative to its watershed. Effective flood storage exists within the wetland areas. Wetland contains hydric soils which are able to absorb and detain water, wetland exists in a relatively flat area that has flood storage potential, wetland has ponded water, and signs are present of variable water level, wetland receives and retains overland or sheet flow runoff from surrounding uplands. In the event of a large storm, this wetland receives and detains excessive flood water.

Sediment/toxicant retention: potential sources of sediment are in the watershed to the north of wetland, opportunity for sediment trapping by slow moving water and deep water habitat are present in this wetland, fine grained mineral or organic soils are present, long duration water retention time is present in this wetland, public or private water sources may occur downstream, effective floodwater storage in wetland is occurring, areas of impounded open water are present, channelized flows have visible velocity decreases in the wetland, diffuse water flows are present in the wetland, wetland has a high degree of water and vegetation interspersion, and dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation.

Nutrient removal: Shallow water exists within the complex of wetlands. Overall potential for sediment trapping exists in the same areas. Saturated soils exist for most of the season, ponded water may be present in the wetland, dense vegetation is present with emergent vegetation and/or dense woody stems dominant, water retention/detention time in this wetland is increased by thick vegetation and other dense herbaceous and shrub vegetation in wetlands utilize and immobilize excess nutrients transported/deposited by any developed areas up gradient.

Production export: Wildlife food sources grow within the wetland, evidence of limited wildlife use found within this wetland, higher trophic level consumers may be utilizing this wetland, a few high vegetation density species are present, wetland exhibits moderate degree of plant community structure/species diversity, wetland contains flowering plants that are used by nectar-gathering insects.

Wildlife habitat: Wetland is fragmented by significant development both upstream and downstream, however, upland immediately surrounding this wetland is undeveloped and will remain so after completion of this project. No significant animal signs observed (tracks, scats, nesting areas, etc.), wetland contains a population of insects and amphibian populations.

The wetlands were also examined for wetland values (recreational, educational/scientific, visual/aesthetic, or uniqueness/heritage values) and the following values were noted with their rationale:

None found

Conclusions:

In summary, it is my opinion that the wetland area, the palustrine scrub-shrub/forested wetlands are a functioning wetland ecosystem which exhibits 6 of 8 wetland functions.

A storm water infiltration Basin has been incorporated into this plan to manage water generated by the additional impermeable surfaces created by this development. The discharge terminates to a modified rip rap outlet with existing stone wall and demonstrates adequate separation distance to the existing wetland below. It is my opinion that these engineering efforts combined with appropriate sedimentation barriers will adequately protect the existing wetlands both throughout and beyond construction..

If you have any questions concerning the wetland function assessment or this report, please feel free to contact me.

Sincerely,



Richard Zulick
Certified Forester and Soil Scientist
Member SSSSNE

Thompson Shanti Village Proposed Condominiums

Stormwater Management Report

1410 Thompson Road
Thompson, CT

April 2, 2024

Prepared by:

**J & D Civil
Engineers, LLC**

401 Ravenelle Road
N. Grosvenordale, CT 06255

Table of Contents

- A. Project Narrative
- B. Drainage Patterns
- C. Hydrologic Soil Group Descriptions
- D. Methodology
- E. Proposed Stormwater Handling Methods
- F. Results and Comparison of Existing and Proposed Flows
- G. Stormwater Quality

Appendices

- I. Hydrologic Models
- II. Stormwater Quality Calculations
- III. NRCS Soil data
- IV. Existing Conditions Drainage Area Map
- V. Developed Conditions Drainage Area Map

A. Project Narrative

A 24-unit multifamily project is proposed in northern Thompson along the border with Webster, Massachusetts. The units will be detached single family and two family dwellings within a condominium development. The project will disturb approximately 11 acres of a 38 acre property. Wetlands, with an intermittent watercourse, are located west of the proposed development area. The stormwater system has been designed with LID stormwater practices recommended with the new 2023 CT Stormwater Quality Manual.

B. Drainage Patterns

The watershed through the project property is relatively large at almost 140 acres in size. Runoff travels from south of Rich Road northerly through a long wide wetland. The flow from the wetland forms into an intermittent watercourse prior to the Massachusetts state line and then flows into a neighborhood and under Asselin Avenue via a 24" culvert.

For analysis purposes, the watershed was broken into two sub-catchments, the West and the East. The West catchment includes 133 acres flowing to the 24" culvert and the East catchment includes 7 acres sheet flowing northerly across the property line. The comparison points for existing and developed conditions are the 24" culvert for the western catchment and the property line for the eastern catchment.

C. Hydrologic Soil Group Description

The Natural Resource Conservation Service (NRCS) groups soils into four categories according to their runoff producing characteristics. Hydrologic Soil Group A consists of soils that have a high infiltrative capacity and a low runoff potential even when saturated. Hydrologic Soil Group D soils have a very low infiltration rate and high runoff potential.

The drainage area is large enough to contain soils from all four Hydrologic soil groups. Generally, the wetlands are in hydrologic group D and the portion of the site where the development is located is mostly in hydrologic soils group B.

Within the portion of the site to be developed 22 percolation tests for septic system were performed and recorded by NDDH. All perc rates were less than 10 minutes per inch which confirms that the soil is well-drained and consistent with Hydrologic soil group B characteristics.

D. Methodology

The HydroCAD computer program was utilized for the stormwater design of this project. This program models the hydrology and hydraulics of stormwater runoff based largely upon the methods developed by the Soil Conservation Service (now known as the Natural Resources Conservation Service). Required input data includes the size of the contributing drainage area, curve numbers which are based upon land use and soil types, and times of concentration.

Hydrographs with peak flows determined are calculated for each drainage area based upon the SCS synthetic unit hydrograph method. The rainfall distribution used in the program was the NOAA D storm recommended for Connecticut in the 2023 Stormwater Quality Manual. Precipitation amounts for Connecticut from NOAA, as listed in the manual, were utilized in the hydrologic model for this site.

E. Proposed Drainage Patterns and Stormwater Handling Methods

LID stormwater techniques were incorporated into the project. Curbing was minimized and sheet flow was encouraged. Also, the development was clustered to one third of the property leaving the other two thirds wooded and undisturbed.

There will be no increase in impervious area within the eastern catchment. Impervious area primarily consists of the existing house and driveway. For the condominium development some pine trees will be cut down and septic systems installed and covered by lawn. Sheet flow to the north will continue.

Most of the developed impervious area within the western catchment will be directed to a stormwater infiltration basin that will provide water quality treatment and attenuate peak flow. Flow from the hammerhead driveway will pass over a crushed stone filter strip and will sheet flow to the north. Flow from the proposed cul-de-sac will be directed to an island in the center for infiltration.

F. Results and Comparison of Existing and Developed Flows

West Catchment Peak Flow Comparison

	2 YR	10YR	50 YR	100YR
Existing Flow (CFS)	21.2	68.4	133.0	165.4
Developed Flow (CFS)	22.1	68.9	131.5	163.5

As per the results above, peak flows after development are substantially similar to existing conditions. Importantly, runoff will be slightly reduced in large flooding storm events.

East Catchment Peak Flow Comparison

	2 YR	10YR	50 YR	100YR
Existing Flow (CFS)	0.9	4.4	9.7	12.5
Developed Flow (CFS)	1.0	4.6	9.6	12.1

There will be a very minor increase in sheet flow for the small catchment that flows over the northern property line. This can be attributed to replacing some wooded areas with lawn areas. However, there is no increase in impervious area for this catchment and no point discharges will be created. The runoff will be spread out and distributed over 980' of property line.

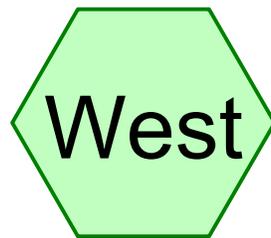
G. Stormwater Quality

Guidelines from the 2023 Stormwater Quality Manual were utilized to meet the recommended standards and performance criteria.

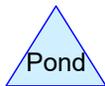
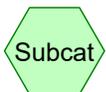
The required water quality volume (WQV) for the impervious areas was calculated to be 10,819 CF based upon the new 90th percentile CT rainfall depth of 1.3". The stormwater infiltration basin provides 46,000 CF of storage up to the invert of the outlet pipe therefore the pollutant reduction standards is met. The runoff is pre-treated in a sediment forebay as recommended.



Exist



exist west



Routing Diagram for 22166 Friends Village - Sharma exist conditions

Prepared by J & D Civil Engineers, LLC, Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

22166 Friends Village - Sharma exist conditions

Prepared by J & D Civil Engineers, LLC

Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	CT 10-year	NOAA 24-hr	D	Default	24.00	1	5.23	2
2	CT 100-year	NOAA 24-hr	D	Default	24.00	1	8.23	2
3	CT 2 year	NOAA 24-hr	D	Default	24.00	1	3.35	2
4	CT 50-year	NOAA 24-hr	D	Default	24.00	1	7.28	2

22166 Friends Village - Sharma exist conditions NOAA 24-hr D CT 10-year Rainfall=5.23"

Prepared by J & D Civil Engineers, LLC

Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 3

Summary for Subcatchment East: Exist

Runoff = 4.44 cfs @ 12.54 hrs, Volume= 0.723 af, Depth= 1.30"
Routed to nonexistent node 2P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
0.470	98	Paved parking, HSG C
6.220	55	Woods, Good, HSG B
6.690	58	Weighted Average
6.220		92.97% Pervious Area
0.470		7.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment West: exist west

Runoff = 68.41 cfs @ 13.38 hrs, Volume= 19.150 af, Depth= 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
1.130	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
58.160	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
132.690	64	Weighted Average
128.742		97.02% Pervious Area
3.948		2.98% Impervious Area

22166 Friends Village - Sharma exist conditions NOAA 24-hr D CT 10-year Rainfall=5.23"

Prepared by J & D Civil Engineers, LLC

Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 4

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Subcatchment East: Exist

Runoff = 12.46 cfs @ 12.49 hrs, Volume= 1.828 af, Depth= 3.28"
 Routed to nonexistent node 2P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
0.470	98	Paved parking, HSG C
6.220	55	Woods, Good, HSG B
6.690	58	Weighted Average
6.220		92.97% Pervious Area
0.470		7.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description	
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"	
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps	
34.1	752	Total				

Summary for Subcatchment West: exist west

Runoff = 165.36 cfs @ 13.38 hrs, Volume= 43.849 af, Depth= 3.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
1.130	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
58.160	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
132.690	64	Weighted Average
128.742		97.02% Pervious Area
3.948		2.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Subcatchment East: Exist

Runoff = 0.88 cfs @ 12.65 hrs, Volume= 0.221 af, Depth= 0.40"
 Routed to nonexistent node 2P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
0.470	98	Paved parking, HSG C
6.220	55	Woods, Good, HSG B
6.690	58	Weighted Average
6.220		92.97% Pervious Area
0.470		7.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment West: exist west

Runoff = 21.18 cfs @ 13.60 hrs, Volume= 6.973 af, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
1.130	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
58.160	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
132.690	64	Weighted Average
128.742		97.02% Pervious Area
3.948		2.98% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

22166 Friends Village - Sharma exist conditions NOAA 24-hr D CT 50-year Rainfall=7.28"

Prepared by J & D Civil Engineers, LLC

Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 9

Summary for Subcatchment East: Exist

Runoff = 9.72 cfs @ 12.50 hrs, Volume= 1.450 af, Depth= 2.60"
 Routed to nonexistent node 2P

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
0.470	98	Paved parking, HSG C
6.220	55	Woods, Good, HSG B
6.690	58	Weighted Average
6.220		92.97% Pervious Area
0.470		7.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment West: exist west

Runoff = 133.04 cfs @ 13.38 hrs, Volume= 35.560 af, Depth= 3.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
1.130	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
58.160	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
132.690	64	Weighted Average
128.742		97.02% Pervious Area
3.948		2.98% Impervious Area

22166 Friends Village - Sharma exist conditions NOAA 24-hr D CT 50-year Rainfall=7.28"

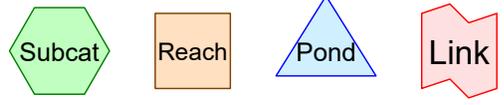
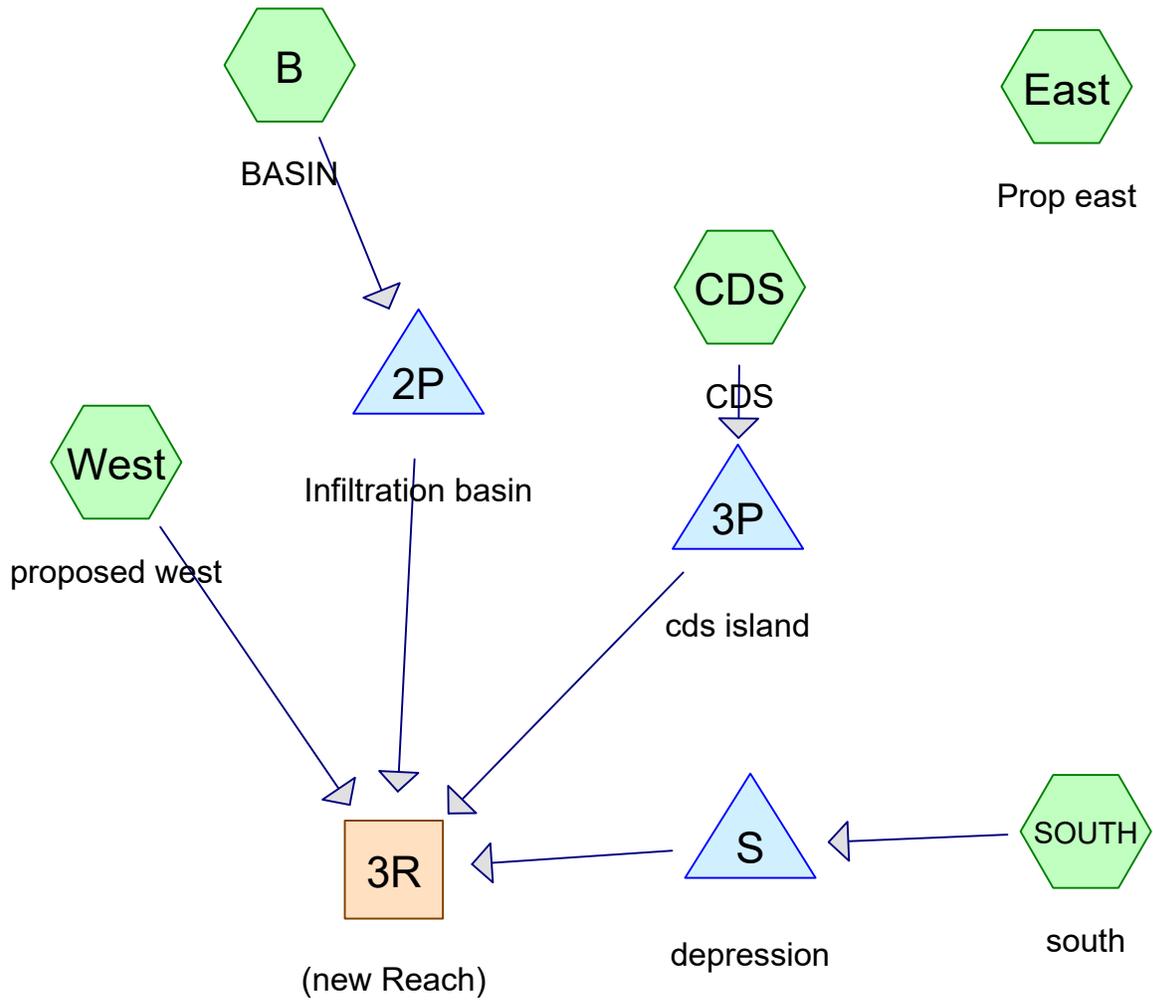
Prepared by J & D Civil Engineers, LLC

Printed 3/15/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 10

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			



Routing Diagram for 22166 Friends Village - Sharma proposed conditions
 Prepared by J & D Civil Engineers, LLC, Printed 3/16/2024
 HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

22166 Friends Village - Sharma proposed conditions

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	CT 10-year	NOAA 24-hr	D	Default	24.00	1	5.23	2
2	CT 100-year	NOAA 24-hr	D	Default	24.00	1	8.23	2
3	CT 2 year	NOAA 24-hr	D	Default	24.00	1	3.35	2
4	CT 50-year	NOAA 24-hr	D	Default	24.00	1	7.28	2

Summary for Subcatchment B: BASIN

Runoff = 8.43 cfs @ 12.30 hrs, Volume= 0.944 af, Depth= 2.46"
Routed to Pond 2P : Infiltration basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
1.120	98	Paved parking & roofs
2.080	61	>75% Grass cover, Good, HSG B
1.230	74	>75% Grass cover, Good, HSG C
0.170	55	Woods, Good, HSG B
4.600	73	Weighted Average
3.480		75.65% Pervious Area
1.120		24.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.5	300	0.0600	0.24		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment CDS: CDS

Runoff = 2.62 cfs @ 12.26 hrs, Volume= 0.267 af, Depth= 2.91"
Routed to Pond 3P : cds island

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.590	61	>75% Grass cover, Good, HSG B
1.100	78	Weighted Average
0.590		53.64% Pervious Area
0.510		46.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	176	0.0340	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment East: Prop east

Runoff = 4.57 cfs @ 12.53 hrs, Volume= 0.724 af, Depth= 1.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 10-year Rainfall=5.23"

22166 Friends Village - Sharma proposed conditions

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 4

Area (ac)	CN	Description
0.460	98	Paved parking, HSG C
4.050	55	Woods, Good, HSG B
1.530	61	>75% Grass cover, Good, HSG B
6.040	60	Weighted Average
5.580		92.38% Pervious Area
0.460		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment SOUTH: south

Runoff = 3.73 cfs @ 12.64 hrs, Volume= 0.645 af, Depth= 1.58"
 Routed to Pond S : depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
0.330	98	Paved parking & roofs
1.290	61	>75% Grass cover, Good, HSG B
0.530	74	>75% Grass cover, Good, HSG C
2.670	55	Woods, Good, HSG B
0.070	70	Woods, Good, HSG C
4.890	62	Weighted Average
4.560		93.25% Pervious Area
0.330		6.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.3	300	0.0400	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
3.7	340	0.0940	1.53		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	594	0.0178	5.96	35.78	Channel Flow, Area= 6.0 sf Perim= 7.0' r= 0.86' n= 0.030 Short grass
41.7	1,234	Total			

Summary for Subcatchment West: proposed west

Runoff = 66.58 cfs @ 13.38 hrs, Volume= 18.473 af, Depth= 1.81"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 10-year Rainfall=5.23"

Area (ac)	CN	Description
1.310	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
45.970	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
1.150	61	>75% Grass cover, Good, HSG B
0.750	74	>75% Grass cover, Good, HSG C
122.580	65	Weighted Average
118.452		96.63% Pervious Area
4.128		3.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Reach 3R: (new Reach)

Inflow Area = 133.170 ac, 4.57% Impervious, Inflow Depth = 1.74" for CT 10-year event
 Inflow = 68.96 cfs @ 13.38 hrs, Volume= 19.266 af
 Outflow = 68.96 cfs @ 13.38 hrs, Volume= 19.266 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Summary for Pond 2P: Infiltration basin

Inflow Area = 4.600 ac, 24.35% Impervious, Inflow Depth = 2.46" for CT 10-year event
 Inflow = 8.43 cfs @ 12.30 hrs, Volume= 0.944 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5
 Peak Elev= 542.44' @ 25.16 hrs Surf.Area= 19,024 sf Storage= 41,113 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description		
#1	540.00'	96,008 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
540.00	14,690	563.0	0	0	14,690
542.00	18,229	603.0	32,855	32,855	18,580
544.00	21,950	639.0	40,121	72,977	22,349
545.00	24,129	662.0	23,031	96,008	24,817

Device	Routing	Invert	Outlet Devices							
#1	Primary	543.00'	10.0' long + 0.5 ' SideZ x 10.0' breadth Broad-Crested Rectangular Weir							
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.40	1.60
			Coef. (English)	2.49	2.56	2.70	2.69	2.68	2.69	2.67
#2	Primary	542.50'	12.0" Round Culvert							
			L= 30.0' CPP, square edge headwall, Ke= 0.500							
			Inlet / Outlet Invert= 542.50' / 541.00' S= 0.0500 '/' Cc= 0.900							
			n= 0.012, Flow Area= 0.79 sf							

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=540.00' TW=0.00' (Dynamic Tailwater)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Culvert (Controls 0.00 cfs)

Summary for Pond 3P: cds island

Inflow Area = 1.100 ac, 46.36% Impervious, Inflow Depth = 2.91" for CT 10-year event
 Inflow = 2.62 cfs @ 12.26 hrs, Volume= 0.267 af
 Outflow = 2.39 cfs @ 12.32 hrs, Volume= 0.192 af, Atten= 9%, Lag= 4.0 min
 Primary = 2.39 cfs @ 12.32 hrs, Volume= 0.192 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

22166 Friends Village - Sharma proposed condition NOAA 24-hr D CT 10-year Rainfall=5.23"

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 7

Peak Elev= 559.78' @ 12.32 hrs Surf.Area= 3,941 sf Storage= 3,520 cf

Plug-Flow detention time= 162.7 min calculated for 0.192 af (72% of inflow)

Center-of-Mass det. time= 61.2 min (905.7 - 844.5)

Volume	Invert	Avail.Storage	Storage Description
#1	558.00'	4,654 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
558.00	861	107.0	0	0	861
559.70	3,194	205.0	3,238	3,238	3,309
560.00	6,438	298.0	1,417	4,654	7,032

Device	Routing	Invert	Outlet Devices
#1	Primary	559.70'	40.0' long + 0.5 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=2.39 cfs @ 12.32 hrs HW=559.78' TW=0.00' (Dynamic Tailwater)↑1=**Broad-Crested Rectangular Weir** (Weir Controls 2.39 cfs @ 0.75 fps)**Summary for Pond S: depression**

Inflow Area = 4.890 ac, 6.75% Impervious, Inflow Depth = 1.58" for CT 10-year event
 Inflow = 3.73 cfs @ 12.64 hrs, Volume= 0.645 af
 Outflow = 3.26 cfs @ 12.82 hrs, Volume= 0.601 af, Atten= 13%, Lag= 10.9 min
 Primary = 3.26 cfs @ 12.82 hrs, Volume= 0.601 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Peak Elev= 552.36' @ 12.82 hrs Surf.Area= 7,117 sf Storage= 4,403 cf

Plug-Flow detention time= 69.9 min calculated for 0.600 af (93% of inflow)

Center-of-Mass det. time= 34.5 min (947.4 - 912.9)

Volume	Invert	Avail.Storage	Storage Description
#1	551.50'	17,227 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
551.50	1,502	151.0	0	0	1,502
552.00	6,834	328.0	1,923	1,923	8,250
554.00	8,500	420.0	15,304	17,227	13,777

Device	Routing	Invert	Outlet Devices
#1	Primary	552.00'	20.4" x 36.0" Horiz. Orifice/Grate X 0.50 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.26 cfs @ 12.82 hrs HW=552.36' TW=0.00' (Dynamic Tailwater)

↑1=Orifice/Grate (Weir Controls 3.26 cfs @ 0.97 fps)

Summary for Subcatchment B: BASIN

Runoff = 17.21 cfs @ 12.30 hrs, Volume= 1.922 af, Depth= 5.01"
 Routed to Pond 2P : Infiltration basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
1.120	98	Paved parking & roofs
2.080	61	>75% Grass cover, Good, HSG B
1.230	74	>75% Grass cover, Good, HSG C
0.170	55	Woods, Good, HSG B
4.600	73	Weighted Average
3.480		75.65% Pervious Area
1.120		24.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.5	300	0.0600	0.24		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment CDS: CDS

Runoff = 4.99 cfs @ 12.25 hrs, Volume= 0.514 af, Depth= 5.60"
 Routed to Pond 3P : cds island

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.590	61	>75% Grass cover, Good, HSG B
1.100	78	Weighted Average
0.590		53.64% Pervious Area
0.510		46.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	176	0.0340	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment East: Prop east

Runoff = 12.14 cfs @ 12.47 hrs, Volume= 1.765 af, Depth= 3.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
0.460	98	Paved parking, HSG C
4.050	55	Woods, Good, HSG B
1.530	61	>75% Grass cover, Good, HSG B
6.040	60	Weighted Average
5.580		92.38% Pervious Area
0.460		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment SOUTH: south

Runoff = 9.40 cfs @ 12.60 hrs, Volume= 1.522 af, Depth= 3.74"
 Routed to Pond S : depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
0.330	98	Paved parking & roofs
1.290	61	>75% Grass cover, Good, HSG B
0.530	74	>75% Grass cover, Good, HSG C
2.670	55	Woods, Good, HSG B
0.070	70	Woods, Good, HSG C
4.890	62	Weighted Average
4.560		93.25% Pervious Area
0.330		6.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.3	300	0.0400	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
3.7	340	0.0940	1.53		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	594	0.0178	5.96	35.78	Channel Flow, Area= 6.0 sf Perim= 7.0' r= 0.86' n= 0.030 Short grass
41.7	1,234	Total			

Summary for Subcatchment West: proposed west

Runoff = 157.53 cfs @ 13.38 hrs, Volume= 41.688 af, Depth= 4.08"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 100-year Rainfall=8.23"

Area (ac)	CN	Description
1.310	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
45.970	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
1.150	61	>75% Grass cover, Good, HSG B
0.750	74	>75% Grass cover, Good, HSG C
122.580	65	Weighted Average
118.452		96.63% Pervious Area
4.128		3.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Reach 3R: (new Reach)

Inflow Area = 133.170 ac, 4.57% Impervious, Inflow Depth = 4.01" for CT 100-year event
 Inflow = 163.55 cfs @ 13.38 hrs, Volume= 44.539 af
 Outflow = 163.55 cfs @ 13.38 hrs, Volume= 44.539 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Summary for Pond 2P: Infiltration basin

Inflow Area = 4.600 ac, 24.35% Impervious, Inflow Depth = 5.01" for CT 100-year event
 Inflow = 17.21 cfs @ 12.30 hrs, Volume= 1.922 af
 Outflow = 1.73 cfs @ 13.99 hrs, Volume= 0.934 af, Atten= 90%, Lag= 101.3 min
 Primary = 1.73 cfs @ 13.99 hrs, Volume= 0.934 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5
 Peak Elev= 543.08' @ 13.99 hrs Surf.Area= 20,188 sf Storage= 53,514 cf

Plug-Flow detention time= 432.4 min calculated for 0.934 af (49% of inflow)
 Center-of-Mass det. time= 305.6 min (1,144.8 - 839.2)

Volume	Invert	Avail.Storage	Storage Description			
#1	540.00'	96,008 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
540.00	14,690	563.0	0	0	14,690	
542.00	18,229	603.0	32,855	32,855	18,580	
544.00	21,950	639.0	40,121	72,977	22,349	
545.00	24,129	662.0	23,031	96,008	24,817	

Device	Routing	Invert	Outlet Devices								
#1	Primary	543.00'	10.0' long + 0.5 ' SideZ x 10.0' breadth Broad-Crested Rectangular Weir								
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60
			Coef. (English)	2.49	2.56	2.70	2.69	2.68	2.69	2.67	2.64
#2	Primary	542.50'	12.0" Round Culvert								
			L= 30.0' CPP, square edge headwall, Ke= 0.500								
			Inlet / Outlet Invert= 542.50' / 541.00' S= 0.0500 ' /' Cc= 0.900								
			n= 0.012, Flow Area= 0.79 sf								

Primary OutFlow Max=1.73 cfs @ 13.99 hrs HW=543.08' TW=0.00' (Dynamic Tailwater)

1=Broad-Crested Rectangular Weir (Weir Controls 0.52 cfs @ 0.69 fps)

2=Culvert (Inlet Controls 1.21 cfs @ 2.58 fps)

Summary for Pond 3P: cds island

Inflow Area = 1.100 ac, 46.36% Impervious, Inflow Depth = 5.60" for CT 100-year event
 Inflow = 4.99 cfs @ 12.25 hrs, Volume= 0.514 af
 Outflow = 4.94 cfs @ 12.27 hrs, Volume= 0.439 af, Atten= 1%, Lag= 1.2 min
 Primary = 4.94 cfs @ 12.27 hrs, Volume= 0.439 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

22166 Friends Village - Sharma proposed conditions NOAA 24-hr D CT 100-year Rainfall=8.23"

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 13

Peak Elev= 559.83' @ 12.27 hrs Surf.Area= 4,444 sf Storage= 3,726 cf

Plug-Flow detention time= 104.6 min calculated for 0.439 af (86% of inflow)

Center-of-Mass det. time= 37.3 min (861.1 - 823.7)

Volume	Invert	Avail.Storage	Storage Description
#1	558.00'	4,654 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
558.00	861	107.0	0	0	861
559.70	3,194	205.0	3,238	3,238	3,309
560.00	6,438	298.0	1,417	4,654	7,032

Device	Routing	Invert	Outlet Devices
#1	Primary	559.70'	40.0' long + 0.5 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=4.94 cfs @ 12.27 hrs HW=559.83' TW=0.00' (Dynamic Tailwater)↑1=**Broad-Crested Rectangular Weir** (Weir Controls 4.94 cfs @ 0.96 fps)**Summary for Pond S: depression**

Inflow Area = 4.890 ac, 6.75% Impervious, Inflow Depth = 3.74" for CT 100-year event
 Inflow = 9.40 cfs @ 12.60 hrs, Volume= 1.522 af
 Outflow = 8.92 cfs @ 12.71 hrs, Volume= 1.478 af, Atten= 5%, Lag= 6.3 min
 Primary = 8.92 cfs @ 12.71 hrs, Volume= 1.478 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Peak Elev= 552.70' @ 12.71 hrs Surf.Area= 7,393 sf Storage= 6,873 cf

Plug-Flow detention time= 38.7 min calculated for 1.478 af (97% of inflow)

Center-of-Mass det. time= 22.1 min (906.5 - 884.4)

Volume	Invert	Avail.Storage	Storage Description
#1	551.50'	17,227 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
551.50	1,502	151.0	0	0	1,502
552.00	6,834	328.0	1,923	1,923	8,250
554.00	8,500	420.0	15,304	17,227	13,777

Device	Routing	Invert	Outlet Devices
#1	Primary	552.00'	20.4" x 36.0" Horiz. Orifice/Grate X 0.50 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=8.92 cfs @ 12.71 hrs HW=552.70' TW=0.00' (Dynamic Tailwater)

↳ **1=Orifice/Grate** (Weir Controls 8.92 cfs @ 1.36 fps)

Summary for Subcatchment B: BASIN

Runoff = 3.53 cfs @ 12.32 hrs, Volume= 0.414 af, Depth= 1.08"
 Routed to Pond 2P : Infiltration basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
1.120	98	Paved parking & roofs
2.080	61	>75% Grass cover, Good, HSG B
1.230	74	>75% Grass cover, Good, HSG C
0.170	55	Woods, Good, HSG B
4.600	73	Weighted Average
3.480		75.65% Pervious Area
1.120		24.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.5	300	0.0600	0.24		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment CDS: CDS

Runoff = 1.23 cfs @ 12.26 hrs, Volume= 0.127 af, Depth= 1.38"
 Routed to Pond 3P : cds island

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.590	61	>75% Grass cover, Good, HSG B
1.100	78	Weighted Average
0.590		53.64% Pervious Area
0.510		46.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	176	0.0340	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment East: Prop east

Runoff = 1.07 cfs @ 12.61 hrs, Volume= 0.236 af, Depth= 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
0.460	98	Paved parking, HSG C
4.050	55	Woods, Good, HSG B
1.530	61	>75% Grass cover, Good, HSG B
6.040	60	Weighted Average
5.580		92.38% Pervious Area
0.460		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment SOUTH: south

Runoff = 1.01 cfs @ 12.70 hrs, Volume= 0.223 af, Depth= 0.55"
Routed to Pond S : depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
0.330	98	Paved parking & roofs
1.290	61	>75% Grass cover, Good, HSG B
0.530	74	>75% Grass cover, Good, HSG C
2.670	55	Woods, Good, HSG B
0.070	70	Woods, Good, HSG C
4.890	62	Weighted Average
4.560		93.25% Pervious Area
0.330		6.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.3	300	0.0400	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
3.7	340	0.0940	1.53		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	594	0.0178	5.96	35.78	Channel Flow, Area= 6.0 sf Perim= 7.0' r= 0.86' n= 0.030 Short grass
41.7	1,234	Total			

Summary for Subcatchment West: proposed west

Runoff = 21.43 cfs @ 13.59 hrs, Volume= 6.892 af, Depth= 0.67"
Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 2 year Rainfall=3.35"

Area (ac)	CN	Description
1.310	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
45.970	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
1.150	61	>75% Grass cover, Good, HSG B
0.750	74	>75% Grass cover, Good, HSG C
122.580	65	Weighted Average
118.452		96.63% Pervious Area
4.128		3.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Reach 3R: (new Reach)

Inflow Area = 133.170 ac, 4.57% Impervious, Inflow Depth = 0.64" for CT 2 year event
Inflow = 22.11 cfs @ 13.60 hrs, Volume= 7.124 af
Outflow = 22.11 cfs @ 13.60 hrs, Volume= 7.124 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Summary for Pond 2P: Infiltration basin

Inflow Area = 4.600 ac, 24.35% Impervious, Inflow Depth = 1.08" for CT 2 year event
 Inflow = 3.53 cfs @ 12.32 hrs, Volume= 0.414 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5
 Peak Elev= 541.15' @ 25.16 hrs Surf.Area= 16,679 sf Storage= 18,034 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description		
#1	540.00'	96,008 cf	Custom Stage Data (Irregular) Listed below (Recalc)		
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
540.00	14,690	563.0	0	0	14,690
542.00	18,229	603.0	32,855	32,855	18,580
544.00	21,950	639.0	40,121	72,977	22,349
545.00	24,129	662.0	23,031	96,008	24,817

Device	Routing	Invert	Outlet Devices								
#1	Primary	543.00'	10.0' long + 0.5 ' SideZ x 10.0' breadth Broad-Crested Rectangular Weir								
			Head (feet)	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60
			Coef. (English)	2.49	2.56	2.70	2.69	2.68	2.69	2.67	2.64
#2	Primary	542.50'	12.0" Round Culvert								
			L= 30.0' CPP, square edge headwall, Ke= 0.500								
			Inlet / Outlet Invert= 542.50' / 541.00' S= 0.0500 ' /' Cc= 0.900								
			n= 0.012, Flow Area= 0.79 sf								

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=540.00' TW=0.00' (Dynamic Tailwater)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Culvert (Controls 0.00 cfs)

Summary for Pond 3P: cds island

Inflow Area = 1.100 ac, 46.36% Impervious, Inflow Depth = 1.38" for CT 2 year event
 Inflow = 1.23 cfs @ 12.26 hrs, Volume= 0.127 af
 Outflow = 0.15 cfs @ 13.67 hrs, Volume= 0.053 af, Atten= 87%, Lag= 84.5 min
 Primary = 0.15 cfs @ 13.67 hrs, Volume= 0.053 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

22166 Friends Village - Sharma proposed condition NOAA 24-hr D CT 2 year Rainfall=3.35"

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 19

Peak Elev= 559.71' @ 13.67 hrs Surf.Area= 3,309 sf Storage= 3,279 cf

Plug-Flow detention time= 326.7 min calculated for 0.053 af (41% of inflow)

Center-of-Mass det. time= 185.3 min (1,053.6 - 868.3)

Volume	Invert	Avail.Storage	Storage Description
#1	558.00'	4,654 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
558.00	861	107.0	0	0	861
559.70	3,194	205.0	3,238	3,238	3,309
560.00	6,438	298.0	1,417	4,654	7,032

Device	Routing	Invert	Outlet Devices
#1	Primary	559.70'	40.0' long + 0.5 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=0.15 cfs @ 13.67 hrs HW=559.71' TW=0.00' (Dynamic Tailwater)

1=Broad-Crested Rectangular Weir (Weir Controls 0.15 cfs @ 0.30 fps)

Summary for Pond S: depression

Inflow Area = 4.890 ac, 6.75% Impervious, Inflow Depth = 0.55" for CT 2 year event
 Inflow = 1.01 cfs @ 12.70 hrs, Volume= 0.223 af
 Outflow = 0.54 cfs @ 13.50 hrs, Volume= 0.179 af, Atten= 47%, Lag= 47.8 min
 Primary = 0.54 cfs @ 13.50 hrs, Volume= 0.179 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Peak Elev= 552.11' @ 13.50 hrs Surf.Area= 6,919 sf Storage= 2,661 cf

Plug-Flow detention time= 168.8 min calculated for 0.179 af (80% of inflow)

Center-of-Mass det. time= 81.6 min (1,035.8 - 954.2)

Volume	Invert	Avail.Storage	Storage Description
#1	551.50'	17,227 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
551.50	1,502	151.0	0	0	1,502
552.00	6,834	328.0	1,923	1,923	8,250
554.00	8,500	420.0	15,304	17,227	13,777

Device	Routing	Invert	Outlet Devices
#1	Primary	552.00'	20.4" x 36.0" Horiz. Orifice/Grate X 0.50 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.54 cfs @ 13.50 hrs HW=552.11' TW=0.00' (Dynamic Tailwater)

↑1=Orifice/Grate (Weir Controls 0.54 cfs @ 0.54 fps)

Summary for Subcatchment B: BASIN

Runoff = 14.37 cfs @ 12.30 hrs, Volume= 1.601 af, Depth= 4.18"
Routed to Pond 2P : Infiltration basin

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
1.120	98	Paved parking & roofs
2.080	61	>75% Grass cover, Good, HSG B
1.230	74	>75% Grass cover, Good, HSG C
0.170	55	Woods, Good, HSG B
4.600	73	Weighted Average
3.480		75.65% Pervious Area
1.120		24.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
20.5	300	0.0600	0.24		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment CDS: CDS

Runoff = 4.23 cfs @ 12.25 hrs, Volume= 0.434 af, Depth= 4.73"
Routed to Pond 3P : cds island

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
0.510	98	Paved parking & roofs
0.590	61	>75% Grass cover, Good, HSG B
1.100	78	Weighted Average
0.590		53.64% Pervious Area
0.510		46.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.8	176	0.0340	0.17		Sheet Flow, Grass: Dense n= 0.240 P2= 3.72"

Summary for Subcatchment East: Prop east

Runoff = 9.57 cfs @ 12.50 hrs, Volume= 1.411 af, Depth= 2.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 50-year Rainfall=7.28"

22166 Friends Village - Sharma proposed conditions

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 22

Area (ac)	CN	Description
0.460	98	Paved parking, HSG C
4.050	55	Woods, Good, HSG B
1.530	61	>75% Grass cover, Good, HSG B
6.040	60	Weighted Average
5.580		92.38% Pervious Area
0.460		7.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.6	300	0.0670	0.17		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
4.5	452	0.1100	1.66		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
34.1	752	Total			

Summary for Subcatchment SOUTH: south

Runoff = 7.50 cfs @ 12.60 hrs, Volume= 1.226 af, Depth= 3.01"
Routed to Pond S : depression

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
0.330	98	Paved parking & roofs
1.290	61	>75% Grass cover, Good, HSG B
0.530	74	>75% Grass cover, Good, HSG C
2.670	55	Woods, Good, HSG B
0.070	70	Woods, Good, HSG C
4.890	62	Weighted Average
4.560		93.25% Pervious Area
0.330		6.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
36.3	300	0.0400	0.14		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
3.7	340	0.0940	1.53		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.7	594	0.0178	5.96	35.78	Channel Flow, Area= 6.0 sf Perim= 7.0' r= 0.86' n= 0.030 Short grass
41.7	1,234	Total			

Summary for Subcatchment West: proposed west

Runoff = 127.31 cfs @ 13.38 hrs, Volume= 33.920 af, Depth= 3.32"
 Routed to Reach 3R : (new Reach)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 NOAA 24-hr D CT 50-year Rainfall=7.28"

Area (ac)	CN	Description
1.310	98	Paved parking & roofs
4.910	66	Woods, Poor, HSG B
17.180	77	Woods, Poor, HSG C
12.130	83	Woods, Poor, HSG D
18.480	65	2 acre lots, 12% imp, HSG B
0.830	77	2 acre lots, 12% imp, HSG C
4.170	82	2 acre lots, 12% imp, HSG D
2.860	30	Woods, Good, HSG A
45.970	55	Woods, Good, HSG B
12.840	70	Woods, Good, HSG C
1.150	61	>75% Grass cover, Good, HSG B
0.750	74	>75% Grass cover, Good, HSG C
122.580	65	Weighted Average
118.452		96.63% Pervious Area
4.128		3.37% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
40.8	300	0.0300	0.12		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.72"
11.3	700	0.0430	1.04		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
1.2	970	0.0230	13.47	646.36	Channel Flow, Area= 48.0 sf Perim= 20.0' r= 2.40' n= 0.030 Stream, clean & straight
43.1	2,300	0.0009	0.89	328.71	Channel Flow, Area= 370.0 sf Perim= 372.0' r= 0.99' n= 0.050 Scattered brush, heavy weeds
1.5	1,470	0.0330	16.42	492.56	Channel Flow, Area= 30.0 sf Perim= 16.0' r= 1.88' n= 0.025 Earth, clean & winding
97.9	5,740	Total			

Summary for Reach 3R: (new Reach)

Inflow Area = 133.170 ac, 4.57% Impervious, Inflow Depth = 3.25" for CT 50-year event
 Inflow = 131.52 cfs @ 13.38 hrs, Volume= 36.074 af
 Outflow = 131.52 cfs @ 13.38 hrs, Volume= 36.074 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Summary for Pond 2P: Infiltration basin

Inflow Area = 4.600 ac, 24.35% Impervious, Inflow Depth = 4.18" for CT 50-year event
 Inflow = 14.37 cfs @ 12.30 hrs, Volume= 1.601 af
 Outflow = 0.75 cfs @ 16.42 hrs, Volume= 0.613 af, Atten= 95%, Lag= 247.3 min
 Primary = 0.75 cfs @ 16.42 hrs, Volume= 0.613 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5
 Peak Elev= 542.94' @ 16.42 hrs Surf.Area= 19,931 sf Storage= 50,745 cf

Plug-Flow detention time= 537.3 min calculated for 0.613 af (38% of inflow)
 Center-of-Mass det. time= 399.9 min (1,244.9 - 845.0)

Volume	Invert	Avail.Storage	Storage Description			
#1	540.00'	96,008 cf	Custom Stage Data (Irregular) Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
540.00	14,690	563.0	0	0	14,690	
542.00	18,229	603.0	32,855	32,855	18,580	
544.00	21,950	639.0	40,121	72,977	22,349	
545.00	24,129	662.0	23,031	96,008	24,817	

Device	Routing	Invert	Outlet Devices							
#1	Primary	543.00'	10.0' long + 0.5 ' SideZ x 10.0' breadth Broad-Crested Rectangular Weir							
			Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60							
			Coef. (English) 2.49 2.56 2.70 2.69 2.68 2.69 2.67 2.64							
#2	Primary	542.50'	12.0" Round Culvert							
			L= 30.0' CPP, square edge headwall, Ke= 0.500							
			Inlet / Outlet Invert= 542.50' / 541.00' S= 0.0500 ' /' Cc= 0.900							
			n= 0.012, Flow Area= 0.79 sf							

Primary OutFlow Max=0.75 cfs @ 16.42 hrs HW=542.94' TW=0.00' (Dynamic Tailwater)

- 1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)
- 2=Culvert (Inlet Controls 0.75 cfs @ 2.25 fps)

Summary for Pond 3P: cds island

Inflow Area = 1.100 ac, 46.36% Impervious, Inflow Depth = 4.73" for CT 50-year event
 Inflow = 4.23 cfs @ 12.25 hrs, Volume= 0.434 af
 Outflow = 4.19 cfs @ 12.27 hrs, Volume= 0.359 af, Atten= 1%, Lag= 1.2 min
 Primary = 4.19 cfs @ 12.27 hrs, Volume= 0.359 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

22166 Friends Village - Sharma proposed condition NOAA 24-hr D CT 50-year Rainfall=7.28"

Prepared by J & D Civil Engineers, LLC

Printed 3/16/2024

HydroCAD® 10.10-7a s/n 02673 © 2021 HydroCAD Software Solutions LLC

Page 25

Peak Elev= 559.82' @ 12.27 hrs Surf.Area= 4,305 sf Storage= 3,667 cf

Plug-Flow detention time= 116.5 min calculated for 0.359 af (83% of inflow)

Center-of-Mass det. time= 41.1 min (870.2 - 829.1)

Volume	Invert	Avail.Storage	Storage Description
#1	558.00'	4,654 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
558.00	861	107.0	0	0	861
559.70	3,194	205.0	3,238	3,238	3,309
560.00	6,438	298.0	1,417	4,654	7,032

Device	Routing	Invert	Outlet Devices
#1	Primary	559.70'	40.0' long + 0.5 ' SideZ x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63

Primary OutFlow Max=4.18 cfs @ 12.27 hrs HW=559.81' TW=0.00' (Dynamic Tailwater)↑1=**Broad-Crested Rectangular Weir** (Weir Controls 4.18 cfs @ 0.91 fps)**Summary for Pond S: depression**

Inflow Area = 4.890 ac, 6.75% Impervious, Inflow Depth = 3.01" for CT 50-year event
 Inflow = 7.50 cfs @ 12.60 hrs, Volume= 1.226 af
 Outflow = 7.06 cfs @ 12.72 hrs, Volume= 1.182 af, Atten= 6%, Lag= 7.4 min
 Primary = 7.06 cfs @ 12.72 hrs, Volume= 1.182 af
 Routed to Reach 3R : (new Reach)

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 5

Peak Elev= 552.60' @ 12.72 hrs Surf.Area= 7,311 sf Storage= 6,132 cf

Plug-Flow detention time= 44.4 min calculated for 1.182 af (96% of inflow)

Center-of-Mass det. time= 24.3 min (915.6 - 891.4)

Volume	Invert	Avail.Storage	Storage Description
#1	551.50'	17,227 cf	Custom Stage Data (Irregular) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
551.50	1,502	151.0	0	0	1,502
552.00	6,834	328.0	1,923	1,923	8,250
554.00	8,500	420.0	15,304	17,227	13,777

Device	Routing	Invert	Outlet Devices
#1	Primary	552.00'	20.4" x 36.0" Horiz. Orifice/Grate X 0.50 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=7.06 cfs @ 12.72 hrs HW=552.60' TW=0.00' (Dynamic Tailwater)

↳ **1=Orifice/Grate** (Weir Controls 7.06 cfs @ 1.26 fps)

JOB NO. 22166
DATE 3/14/24
BY JJB
CH'D BY _____

J & D CIVIL
ENGINEERS LLC
401 Ravenelle Road
North Grosvenordale, CT 06255
(860) 923-2920 | www.jdcivilengineers.com

SHEET NO. _____
JOB _____
SUBJECT STORMWATER
CLIENT SHARMA

WATER QUALITY CALCULATIONS

$$WQV = \frac{PRA}{12}$$

$$P = 1.3 \text{ IN}$$

$$I = \text{IMPERV \%}$$

$$R = 0.05 + 0.009I$$

$$A = DA \text{ (FT}^2\text{)}$$

FOR AREA USE $DA = \text{BASIN} + \text{CDS} + \text{SOUTH}$
 $= 10.59 \text{ AC (43560)} = 461,300 \text{ FT}^2$

(DA EAST HAS NO IMPERVIOUS & THE PERCENT IMP IN DA WEST IS INSIGNIFICANT)

$$I = \frac{1.96 \text{ AC IMP}}{10.59 \text{ AC TOTAL}} = 18.5\%$$

$$R = 0.05 + 0.009(18.5) = 0.217$$

$$WQV = \frac{1.3(0.217)(461,300 \text{ FT}^2)}{12} = 10,819 \text{ FT}^3$$

WQV PROVIDED UP TO ELEV 542.5 (OUTLET)
 $\hat{=} 46,000 \text{ FT}^3 \therefore \text{GOOD}$

PRE-TREATMENT

FOR STORMWATER INFILTRATION BASIN USE
SEDIMENT FOREBAY AT LEAST 25% WQV

$$\text{SIZE} = 0.25(10,819) = 2705 \text{ FT}^3$$

SIZE PROVIDED = 6300 FT³ ∴ GOOD

Contents

Preface.....	2
Soil Map.....	5
Soil Map.....	6
Legend.....	7
Map Unit Legend.....	9
Map Unit Descriptions.....	10
State of Connecticut, Eastern Part.....	13
3—Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony.....	13
15—Scarboro muck, 0 to 3 percent slopes.....	15
18—Catden and Freetown soils, 0 to 2 percent slopes.....	17
23A—Sudbury sandy loam, 0 to 5 percent slopes.....	19
34A—Merrimac fine sandy loam, 0 to 3 percent slopes.....	21
38C—Hinckley loamy sand, 3 to 15 percent slopes.....	23
38E—Hinckley loamy sand, 15 to 45 percent slopes.....	25
45B—Woodbridge fine sandy loam, 3 to 8 percent slopes.....	27
46B—Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony.....	28
47C—Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony.....	29
59C—Gloucester gravelly sandy loam, 3 to 15 percent slopes, extremely stony.....	31
61B—Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony.....	33
62C—Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony.....	35
62D—Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony.....	38
73C—Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky.....	40
73E—Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky.....	42
75C—Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes.....	45
103—Rippowam fine sandy loam.....	47
305—Udorthents-Pits complex, gravelly.....	49
306—Udorthents-Urban land complex.....	51
W—Water.....	52
Worcester County, Massachusetts, Southern Part.....	53
1—Water.....	53
3A—Scarboro and Walpole soils, 0 to 3 percent slopes.....	53
73A—Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony.....	55
102C—Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes.....	57
245B—Hinckley loamy sand, 3 to 8 percent slopes.....	59
254B—Merrimac fine sandy loam, 3 to 8 percent slopes.....	61
407B—Charlton fine sandy loam, 3 to 8 percent slopes, extremely stony.....	63
651—Udorthents, smoothed.....	64

Custom Soil Resource Report

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
3	D Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	87.7	14.0%
15	D Scarboro muck, 0 to 3 percent slopes	2.4	0.4%
18	C Catden and Freetown soils, 0 to 2 percent slopes	24.2	3.9%
23A	C Sudbury sandy loam, 0 to 5 percent slopes	7.4	1.2%
34A	A Merrimac fine sandy loam, 0 to 3 percent slopes	12.8	2.0%
38C	A Hinckley loamy sand, 3 to 15 percent slopes	29.9	4.8%
38E	A Hinckley loamy sand, 15 to 45 percent slopes	15.5	2.5%
45B	C Woodbridge fine sandy loam, 3 to 8 percent slopes	6.8	1.1%
46B	C Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	11.5	1.8%
47C	C Woodbridge fine sandy loam, 3 to 15 percent slopes, extremely stony	14.7	2.4%
59C	A Gloucester gravelly sandy loam, 3 to 15 percent slopes, extremely stony	1.6	0.3%
61B	B Canton and Charlton fine sandy loams, 0 to 8 percent slopes, very stony	32.6	5.2%
62C	B Canton and Charlton fine sandy loams, 3 to 15 percent slopes, extremely stony	22.5	3.6%
62D	B Canton and Charlton fine sandy loams, 15 to 35 percent slopes, extremely stony	5.2	0.8%
73C	B Charlton-Chatfield complex, 0 to 15 percent slopes, very rocky	219.6	35.1%
73E	B Charlton-Chatfield complex, 15 to 45 percent slopes, very rocky	14.8	2.4%
75C	B Hollis-Chatfield-Rock outcrop complex, 3 to 15 percent slopes	38.0	6.1%
103	C Rippowam fine sandy loam	2.5	0.4%
305	B Udorthents-Pits complex, gravelly	6.4	1.0%

Custom Soil Resource Report

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
306	B	Udorthents-Urban land complex	45.4	7.3%
W		Water	7.1	1.1%
Subtotals for Soil Survey Area		608.3	97.3%	
Totals for Area of Interest		625.0	100.0%	

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
1		Water	0.6	0.1%
3A	D	Scarboro and Walpole soils, 0 to 3 percent slopes	0.8	0.1%
73A	D	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	0.8	0.1%
102C	B	Chatfield-Hollis-Rock outcrop complex, 0 to 15 percent slopes	9.5	1.5%
245B	A	Hinckley loamy sand, 3 to 8 percent slopes	0.5	0.1%
254B	A	Merrimac fine sandy loam, 3 to 8 percent slopes	0.4	0.1%
407B	A	Charlton fine sandy loam, 3 to 8 percent slopes, extremely stony	3.8	0.6%
651	A	Udorthents, smoothed	0.6	0.1%
Subtotals for Soil Survey Area		17.0	2.7%	
Totals for Area of Interest		625.0	100.0%	

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a



LEGEND

- BUILDING SETBACK LINE
- PROPERTY LINE
- - - - - EXISTING CONTOUR LINE
- EDGE OF WETLANDS
- ○ ○ ○ ○ STONEWALL
- - - - - UPLAND REVIEW AREA
- =====
===== EXISTING DRAINAGE

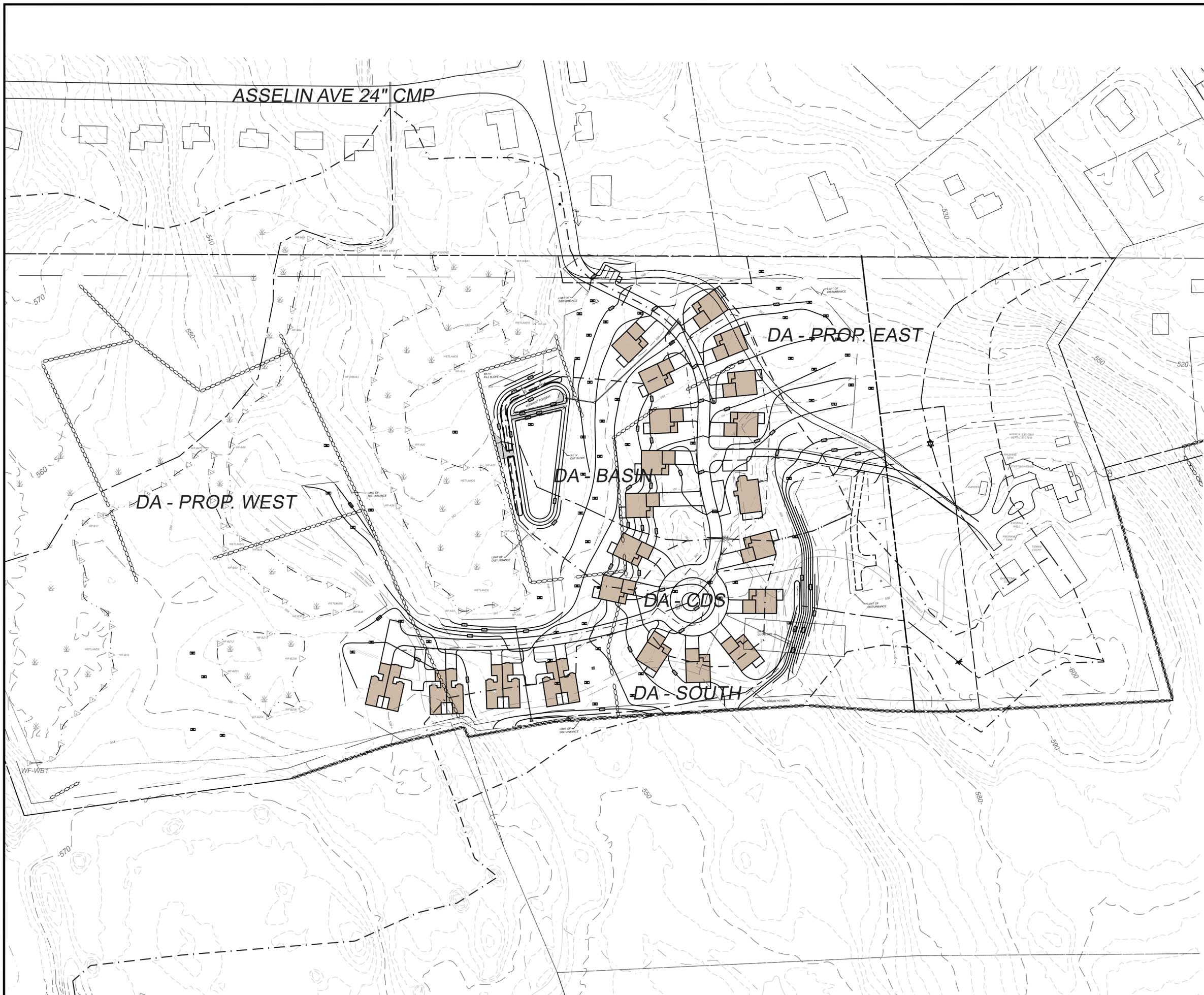
**EXISTING CONDITIONS DRAINAGE AREA MAP
FRIENDS VILLAGE CONDOMINIUMS
1410 THOMPSON ROAD - THOMPSON, CT
MAP 114 - BLOCK 27 - LOT 21**

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB
CHECKED: DRB

REVISIONS:

JOB NO: 22166 DATE: MARCH 15, 2024
SCALE: 1" = 200' SHEET: 1



LEGEND

—	BUILDING SETBACK LINE
—	PROPERTY LINE
- - -	EXISTING CONTOUR LINE
- - -	PROPOSED CONTOUR LINE
- - -	EDGE OF WETLANDS
⊠	TEST PIT
⊞	STONEWALL
—	UTILITIES
—	EXISTING DRAINAGE
—	PROPOSED DRAINAGE
- - -	LIMIT OF DISTURBANCE (L.O.D.)

**DEVELOPED CONDITIONS
DRAINAGE AREA MAP
FRIENDS VILLAGE CONDOMINIUMS
1410 THOMPSON ROAD - THOMPSON, CT
MAP 114 - BLOCK 27 - LOT 21**

J&D CIVIL ENGINEERS, LLC 401 RAVENELLE ROAD N. GROSVENORDALE, CT 06255 860-923-2920	
DESIGNED: JJB CHECKED: DRB	REVISIONS:
JOB NO: 22166 SCALE: 1" = 80'	DATE: MARCH 15, 2024 SHEET: 1

THOMPSON SHANTI VILLAGE PROPOSED CONDOMINIUM PROJECT

1410 THOMPSON ROAD
THOMPSON, CONNECTICUT

DATED: APRIL 2, 2024

OWNER:
THE 1 RATTAN ROAD REALTY TRUST
1 RATTEN ROAD
WEBSTER, MA 01570

TABLE OF ZONING COMPLIANCE

ZONE: RURAL RESIDENTIAL AGRICULTURAL DISTRICT (RRAD)

ITEM	REQUIRED*	PROPOSED
FRONTAGE	150'	0' (EXISTING CONDITION)
LOT COVERAGE	< 50%	3.8%
FRONT SETBACK	40'	61'±
SIDE SETBACK	20'	218' ±
REAR SETBACK	20'	24' ±
LOT SIZE	40,000 SF	1,655,280 SF (38 ACRES±)

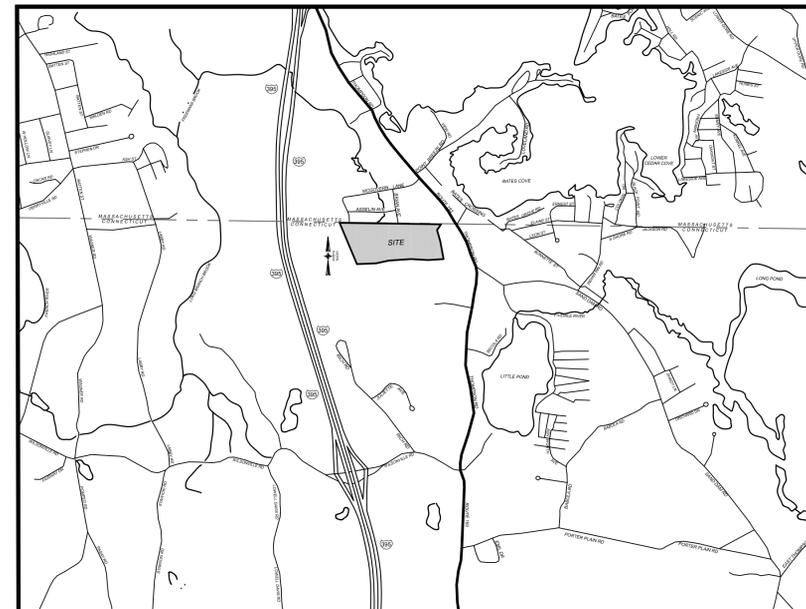
*MULTI-FAMILY, THREE OR MORE UNITS

THOMPSON SHANTI VILLAGE IS INTENDED TO BE AN ADULT COMMUNITY. THE CONDOMINIUM ASSOCIATION DOCUMENTS SHALL SPECIFY THAT PERMANENT RESIDENTS SHALL BE A MINIMUM OF AGE OF 30.

ALTHOUGH THE PROPERTY IS WHOLLY WITHIN THE TOWN OF THOMPSON THE PROPERTY DOES NOT HAVE DIRECT ACCESS TO THE TOWN OF THOMPSON PUBLIC ROAD SYSTEM. THE PROPOSED ACCESS ROAD WILL BE PRIVATE AND NOT PART OF THE THOMPSON PUBLIC ROAD SYSTEM. NO SHOOL BUS ACCESS SHALL BE PROVIDED BY THE TOWN OF THOMPSON.

INDEX OF DRAWINGS

- 1 COVER AND LOCATION MAP
- 2 VICINITY PLAN
- 3 PROPERTY SURVEY
- 4 UTILITY LAYOUT PLAN
- 5 GRADING AND EROSION CONTROL PLAN
- 6 TEST PIT RESULTS
- 7 SEPTIC SYSTEM DETAILS AND PERC TEST RESULTS
- 8 CUL-DE-SAC PROFILE
- 9 HAMMERHEAD AND HOUSE DRIVEWAY PROFILES
- 10 CONSTRUCTION DETAILS - E & S
- 11 CONSTRUCTION DETAILS - DRAINAGE



LOCATION MAP

1" = 2000'

PERMIT APPROVAL BY THE THOMPSON
INLAND WETLAND COMMISSION

CHAIRMAN _____ DATE _____

SPECIAL PERMIT APPROVAL BY THE THOMPSON
PLANNING AND ZONING COMMISSION

CHAIRMAN _____ DATE _____

DIRECTIONS TO SITE FROM TOWN HALL:
HEAD NORTHEAST ON RIVERSIDE DRIVE (ROUTE 12)
TOWARDS MARKET ST. TURN RIGHT ONTO
WILSONVILLE RD. THEN TURN LEFT ONTO
THOMPSON RD (ROUTE 193). CONTINUE TO FOLLOW
THOMPSON RD ENTERING MASSACHUSETTS. TURN
LEFT ONTO MCGOVERN LN. THEN TURN LEFT ONTO
BRIAN AVE. CONTINUE ONTO DRIVEWAY. SITE IS ON
THE MASSACHUSETTS/ CONNECTICUT BORDER.

J & D CIVIL ENGINEERS, LLC

**401 RAVENELLE ROAD
THOMPSON, CT 06255**

JDCIVILENGINEERS.COM

860-923-2920

SURVEY NOTES

1. THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARD FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.

SURVEY TYPE: COMPILATION PLAN

PURPOSE: TO DEPICT NEARBY PROPERTIES AND STRUCTURES.

HORIZONTAL ACCURACY: CLASS D

THIS PLAN WAS COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY

DATUM: HORIZONTAL NAD 83

2. REFERENCE PLANS:

(A) "BRIAN ACRES IN WEBSTER MASSACHUSETTS, GEORGE ASSELIN 7 SONS, INC. WEBSTER MA 01570", SCALE 1" = 40', DATED MARCH 3, 1973, PREPARED BY ALLEN R. PAIGE.

(B) UTILITY EASEMENT ON THE PROPERTY OF JOHN D. AHERN AND BERNICE BEGREN AHERN, PREPARED BY THE CONNECTICUT LIGHT AND POWER COMPANY, TOWN OF THOMPSON, PREPARED ON NOVEMBER 10, 1976. SCALED 1" = 50'. ON FILE WITH THE TOWN CLERK'S OFFICE AS MAP NUMBER 738.

(C) BOUNDARY SURVEY FOR CHARLES R. STEPHENS, RICH ROAD, THOMPSON, CONNECTICUT, SCALED 1" = 100'. PREPARED ON MARCH 21, 1975. PREPARED BY A.H. FEINSTEIN, L.S. ON FILE WITH THE TOWN CLERK'S OFFICE AS MAP NUMBER 661.

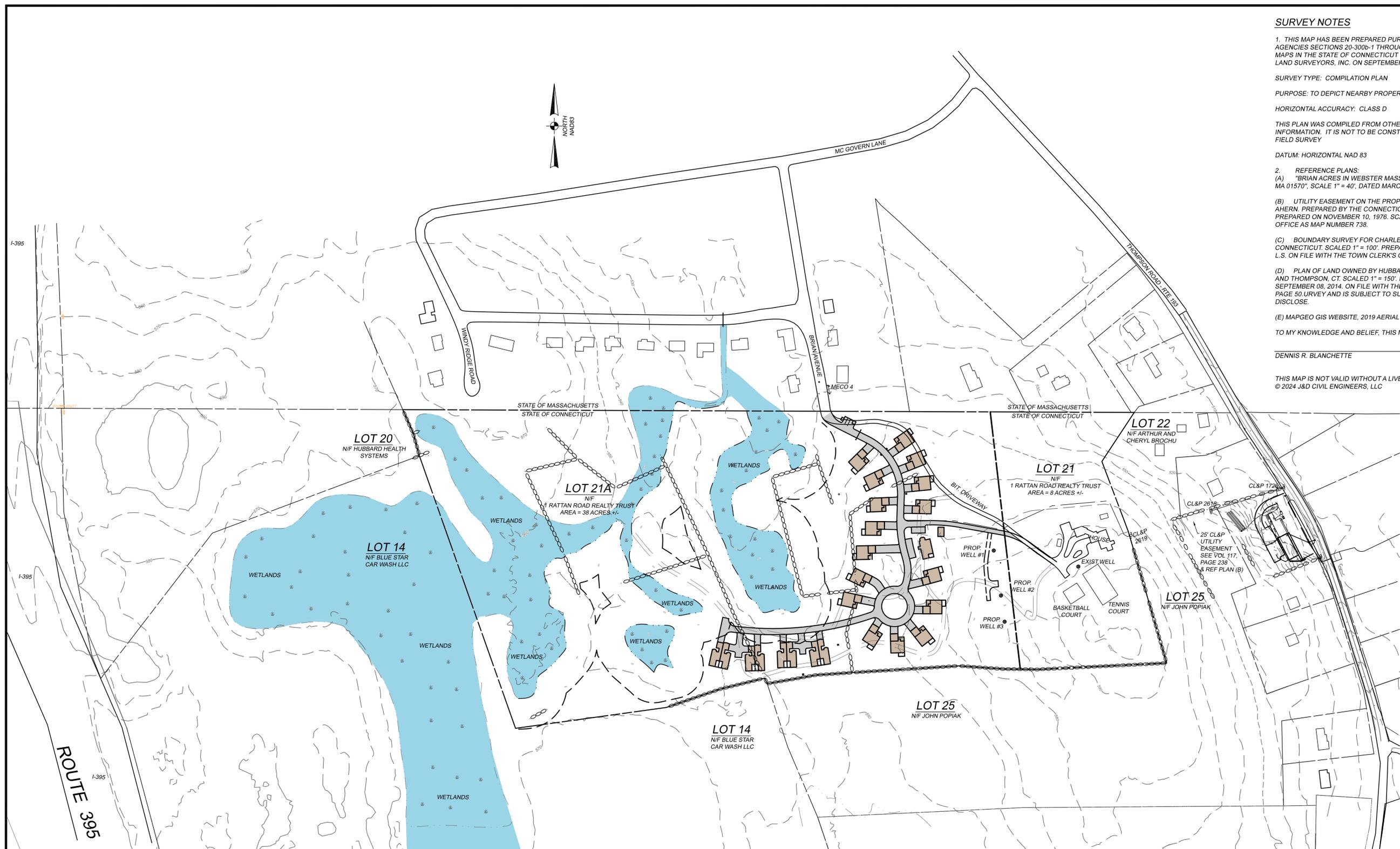
(D) PLAN OF LAND OWNED BY HUBBARD HEALTH SYSTEMS REAL ESTATE, INC. WEBSTER, MA AND THOMPSON, CT. SCALED 1" = 150'. PREPARED BY JALBERT ENGINEERING, PREPARED ON SEPTEMBER 08, 2014. ON FILE WITH THE WORCESTER COUNTY REGISTRY IN MAP BOOK 909 PAGE 50. SURVEY AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

(E) MAPGEO GIS WEBSITE, 2019 AERIAL PHOTOGRAPHY

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS R. BLANCHETTE DATE 12/07/2024 LICENSE NUMBER

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2024 J&D CIVIL ENGINEERS, LLC

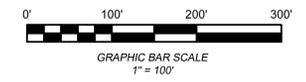
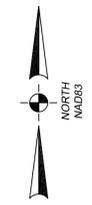
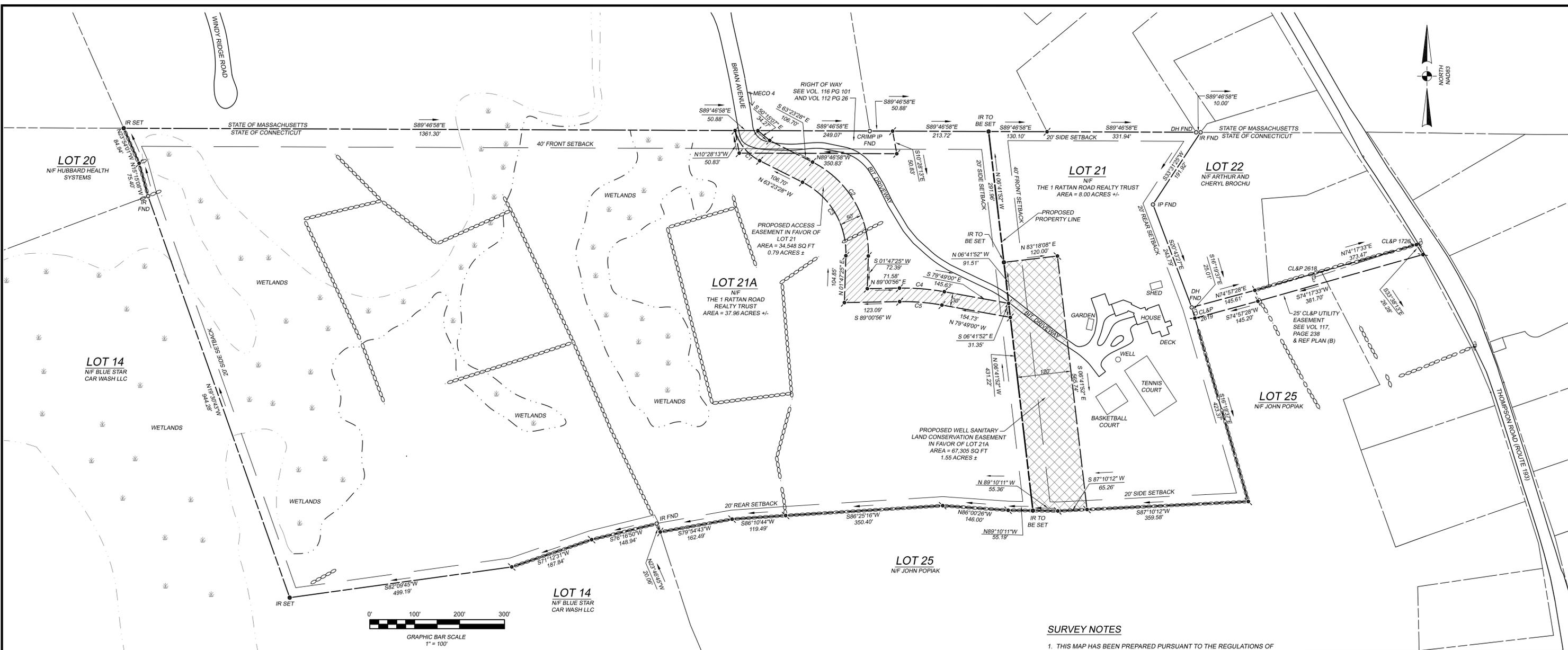


VICINITY PLAN
PREPARED FOR
THOMPSON SHANTI VILLAGE
1410 THOMPSON ROAD - THOMPSON, CT
MAP 114 - BLOCK 27 - LOT 21

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: **DDB** REVISIONS:
CHECKED: **JJB**

JOB NO: **22166** DATE: **APRIL 2, 2024**
SCALE: **1" = 150'** SHEET: **2**



ZONING INFORMATION

ZONE: RURAL RESIDENTIAL AGRICULTURAL DISTRICT (RRAD)

MINIMUM LOT AREA: 40,000 SQUARE FEET
 MINIMUM FRONTAGE: 150 FEET
 MINIMUM FRONT YARD: 40 FEET
 MINIMUM SIDE YARD: 20 FEET
 MINIMUM REAR YARD: 20 FEET
 LOT COVERAGE: 50%

PROPERTY OWNER
THE 1 RATTAN ROAD REALTY TRUST

PROPERTY CO-OWNER
NEELU SHARMA (TR)

REFERENCE DEED
2009 LAND RECORDS
VOL. 712 PG. 193

ASSESSORS REFERENCE
MAP 114 BLOCK 27 LOT 21

TOWN OF THOMPSON
RECEIVED FOR RECORDING

TOWN CLERK DATE TIME MAP #

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	107.29'	88.95'	86.43'	S 39°22'36" E	47°30'16"
C2	225.00'	255.97'	242.38'	N 30°48'01" W	65°10'53"
C3	175.00'	199.08'	188.52'	N 30°48'01" W	65°10'53"
C4	515.00'	100.38'	100.22'	N 85°24'02" W	11°10'04"
C5	485.00'	94.53'	94.38'	N 85°24'02" W	11°10'04"

LEGEND

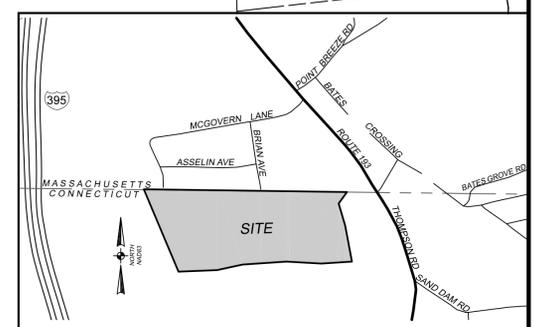
- IRON ROD OR DRILL HOLE TO BE SET
- ANGLE POINT
- EXISTING IRON ROD DRILL HOLE
- EXISTING PROPERTY LINE
- ABUTTING PROPERTY LINE
- BUILDING SETBACK
- EDGE OF EASEMENT
- ○ ○ ○ ○ STONE WALL
- UTILITIES
- WETLAND

SURVEY NOTES

- THIS MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS AND SUGGESTED METHODS AND PROCEDURES FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON AUGUST 29, 2019.
 SURVEY TYPE: PROPERTY SURVEY
 BOUNDARY DETERMINATION CATEGORY: RESURVEY OF EXISTING LINES, ORIGINAL SURVEY OF PROPOSED LINE.
 HORIZONTAL ACCURACY: CLASS A-2
 GLOBAL NAVIGATION SATELLITE SYSTEMS (GNSS) CONFIDENCE LEVEL: CLASS G-1
 PURPOSE: FREE SPLIT
 DATUM: HORIZONTAL NAD 83
 - REFERENCE PLANS:
 (A) "BRIAN ACRES IN WEBSTER MASSACHUSETTS, GEORGE ASSELIN 7 SONS, INC. WEBSTER MA 01570", SCALE 1" = 40', DATED MARCH 3, 1973, PREPARED BY ALLEN R. PAIGE.
 (B) UTILITY EASEMENT ON THE PROPERTY OF JOHN D. AHERN AND BERNICE BEGREEN AHERN. PREPARED BY THE CONNECTICUT LIGHT AND POWER COMPANY. TOWN OF THOMPSON. PREPARED ON NOVEMBER 10, 1976. SCALED 1" = 50'. ON FILE WITH THE TOWN CLERK'S OFFICE AS MAP NUMBER 738.
 (C) BOUNDARY SURVEY FOR CHARLES R. STEPHENS, RICH ROAD, THOMPSON, CONNECTICUT. SCALED 1" = 100'. PREPARED ON MARCH 21, 1975. PREPARED BY A.H. FEINSTEIN, L.S. ON FILE WITH THE TOWN CLERK'S OFFICE AS MAP NUMBER 661.
 (D) PLAN OF LAND OWNED BY HUBBARD HEALTH SYSTEMS REAL ESTATE, INC. WEBSTER, MA AND THOMPSON, CT. SCALED 1" = 150'. PREPARED BY JALBERT ENGINEERING. PREPARED ON SEPTEMBER 08, 2014. ON FILE WITH THE WORCESTER COUNTY REGISTRY IN MAP BOOK 909 PAGE 50.
- TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

DENNIS R. BLANCHETTE DATE 12107 LICENSE #

THIS MAP IS NOT VALID WITHOUT A LIVE SIGNATURE
© 2024 J&D CIVIL ENGINEERS, LLC



LOCATION MAP
1" = 100'

PROPERTY SURVEY
PREPARED FOR
ISHWARA SHARMA
1410 THOMPSON ROAD - THOMPSON, CT
MAP 114 - BLOCK 27 - LOT 21

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: APS REVISIONS:
CHECKED: JAB

JOB NO: 22166 DATE: APRIL 2, 2024
SCALE: 1" = 100' SHEET: 3



LEGEND

	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	EDGE OF WETLANDS
	EROSION CONTROL DEVICES
	TEST PIT
	STONEWALL
	UTILITIES
	UPLAND REVIEW AREA
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	EXISTING UTILITY POLE
	SIGN
	LIMIT OF DISTURBANCE (L.O.D.)
	PROPOSED WATER LINE

UTILITY AND LAYOUT PLAN
THOMPSON SHANTI VILLAGE
 1410 THOMPSON ROAD - THOMPSON, CT
 MAP 114 - BLOCK 27 - LOT 21

J&D CIVIL ENGINEERS, LLC
 401 RAVENELLE ROAD
 N. GROSVENORDALE, CT 06255
 860-923-2920

DESIGNED: JJB CHECKED: DRB	REVISIONS:
JOB NO: 22166 SCALE: 1" = 40'	DATE: APRIL 2, 2024 SHEET: 4



LEGEND

	BUILDING SETBACK LINE
	PROPERTY LINE
	EXISTING CONTOUR LINE
	PROPOSED CONTOUR LINE
	EDGE OF WETLANDS
	EROSION CONTROL DEVICES
	TEST PIT
	STONEWALL
	UTILITIES
	UPLAND REVIEW AREA
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	EXISTING UTILITY POLE
	SIGN
	LIMIT OF DISTURBANCE (L.O.D.)
	PROPOSED WATER LINE

GRADING AND EROSION CONTROL PLAN
THOMPSON SHANTI VILLAGE
 1410 THOMPSON ROAD - THOMPSON, CT
 MAP 114 - BLOCK 27 - LOT 21

J&D CIVIL ENGINEERS, LLC
 401 RAVENELLE ROAD
 N. GROSVENORDALE, CT 06255
 860-923-2920

DESIGNED: JJB	REVISIONS:
CHECKED: DRB	
JOB NO: 22166	DATE: APRIL 2, 2024
SCALE: 1" = 40'	SHEET: 5

TEST PIT RESULTS

OBSERVED BY: RICHARD ZULICK
DATE: 12/10/22

PIT NO. 2

0" - 2" (TOPSOIL)
2" - 44" (YELLOWISH BROWN LOAMY SAND AND GRAVEL FILL)
44" - 50" (AB BURIED TOPSOIL)
50" - 68" (YELLOWISH BROWN FINE SANDY LOAM)
68" - 85" (LIGHT BROWNISH GREY)

MOTTLING: 56"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 60"
RESTRICTIVE: N/A

PIT NO. 2A

0" - 9" (TOPSOIL)
9" - 32" (YELLOWISH BROWN FINE SANDY LOAM)
32" - 74" (LIGHT BROWN GRAYISH LOAMY SAND)
50" - 68" (YELLOWISH BROWN FINE SANDY LOAM)
68" - 85" (LIGHT BROWNISH GREY)

MOTTLING: 36"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 32"
RESTRICTIVE: 40"

PIT NO. 4

0" - 9" (TOPSOIL)
9" - 24" (BROWNISH SANDY LOAM)
24" - 36" (LT BROWNISH LOAMY SAND WITH GRAVEL,
COBBLES AND BOULDERS)
36" - 60" (GRAYISH LOAMY GRAVEL)

MOTTLING: 36"
GROUND WATER: 48"
LEDGE: 50" - 60"
ROOTS: 36"
RESTRICTIVE: N/A

PIT NO. 5

0" - 10" (TOPSOIL)
10" - 20" (LIGHT BROWN FINE SANDY LOAM)
20" - 28" (GRAYISH SILTY LOAMY SAND)

MOTTLING: 17"
GROUND WATER: 20"
LEDGE: N/A
ROOTS: N/A
RESTRICTIVE: N/A

PIT NO. 6

0" - 10" (TOPSOIL)
10" - 34" (LIGHT BROWN FINE SANDY LOAM)
34" - 64" (LIGHT BROWN GREY LS (LOAMY SAND)

MOTTLING: 30"
GROUND WATER: 48"
LEDGE: 64"
ROOTS: 30"
RESTRICTIVE: N/A

PIT NO. 7

0" - 8" (TOPSOIL)
8" - 28" (LIGHT BROWN FINE SANDY LOAM)
28" - 60" (LIGHT BROWNISH GREY LOAMY SAND)

MOTTLING: INDISTINCT
GROUND WATER: N/A
LEDGE: 54" (POSSIBLE)
ROOTS: 30"
RESTRICTIVE: N/A

PIT NO. 7A

0" - 6" (TOPSOIL)
6" - 14" (LIGHT BROWN FINE SANDY LOAM)
14" - 30" (LIGHT BROWNISH GREY VERY FINE LOAMY SAND, WITH
SILT)
30" - 54" (BROKEN)

MOTTLING: 32"
GROUND WATER: N/A
LEDGE: 54" (RISING TO THE EAST)
ROOTS: 32"
RESTRICTIVE: N/A

PIT NO. 8

0" - 9" (TOPSOIL)
9" - 32" (BROWNISH FINE SANDY LOAM)
32" - 54" (BROWNISH GREY LOAMY SAND)

MOTTLING: INDISTINCT
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 32"
RESTRICTIVE: N/A

PIT NO. 11

0" - 9" (DARK BROWN ORGANIC TOPSOIL)
9" - 20" (PALE BROWN FINE SANDY LOAM)
20" - 50" (GRAYISH LOAMY SAND WITH REDOX CONCENTRATION
(MOTTLES)

MOTTLING: 17" - 18"
GROUND WATER: 22"
LEDGE: N/A
ROOTS: 18"
RESTRICTIVE: N/A

PIT NO. 12

0" - 6" (DARK BROWN ORGANIC TOPSOIL)
6" - 24" (PALE BROWN FINE SANDY LOAM)
24" - 30"/80" (LIGHT BROWN GRAYISH LOAMY SAND))

MOTTLING: 48"
GROUND WATER: N/A
LEDGE: 36" (@ SOUTH END)/60" (@ NORTH END)
ROOTS: 36"
RESTRICTIVE: N/A

TEST PIT RESULTS

OBSERVED BY: MAUREEN MARCOUX
DATE: 11/29/23 - 12/5/23
FILE # 09000049

PIT NO. 13

0" - 5" (ORGANICS, ROOTS)
5" - 16" (SANDY FILL MATERIAL)
16" - 23" (TOPSOIL)
23" - 52" (COMPACT SANDY PAN MOTTLES)

MOTTLING: 23" ACTUAL 7"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 48" - 52" ACTUAL 32" - 36"
RESTRICTIVE: N/A

PIT NO. 14

0" - 7" (ORGANICS, TOPSOIL MANY ROOTS)
7" - 32" (LOAMY SAND ROOTS)
32" - 84" (MOD COMPACT SANDY PAN)

MOTTLING: 32"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 32"
RESTRICTIVE: 32"

PIT NO. 15

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 24" (LOAMY SAND ROOTS)
24" - 75" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 25"
RESTRICTIVE: 24"

PIT NO. 16

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 26" (LOAMY SAND ROOTS)
26" - 77" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 26"
RESTRICTIVE: 26"

PIT NO. 17

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 28" (LOAMY SAND ROOTS)
28" - 54" (MOD COMPACT SANDY PAN)
(BROKEN ROCK STARTS AT 24"-29")

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 49"
ROOTS: 28"
RESTRICTIVE: 28"

PIT NO. 17A

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 28" (LOAMY SAND ROOTS)
28" - 67" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 67"
ROOTS: 33"
RESTRICTIVE: 28"

PIT NO. 18

0" - 8" (ORGANICS, TOPSOIL ROOTS)
8" - 23" (LOAMY SAND ROOTS)
23" - 32" (MOD COMPACT SANDY PAN)
32" (LEDGE)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 32"
ROOTS: 23"
RESTRICTIVE: 23"

PIT NO. 18A

0" - 9" (ORGANICS, TOPSOIL ROOTS)
9" - 31" (LOAMY SAND ROOTS)
31" - 74" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: FEW TO 44"
RESTRICTIVE: 31"

PIT NO. 19

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 28" (LOAMY SAND ROOTS, SO ROCKS)
28" - 80" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 28"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 30"
RESTRICTIVE: 28"

PIT NO. 20

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 28" (LOAMY SAND ROOTS, SOME ROCKS)
28" - 80" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 28"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 24"
RESTRICTIVE: 28"

PIT NO. 21

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 25" (LOAMY SAND ROOTS, SO ROCKS)
25" - 77" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 25" FEW TO 27"
RESTRICTIVE: 31"

PIT NO. 22

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 26" (LOAMY SAND ROOTS)
26" - 72" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 26"
RESTRICTIVE: 26"

PIT NO. 23

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 34" (LOAMY SAND ROOTS)
34" - 82" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 34"
RESTRICTIVE: 34"

PIT NO. 24

0" - 4" (ORGANICS, TOPSOIL ROOTS)
4" - 19" (LOAMY SAND ROOTS)
19" - 75" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 21"
RESTRICTIVE: 19"

PIT NO. 25

0" - 9" (ORGANICS, TOPSOIL ROOTS)
9" - 29" (LOAMY SAND, SOME ROCKS)
29" - 73" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 36"
RESTRICTIVE: 29"

PIT NO. 26

0" - 8" (ORGANICS, TOPSOIL ROOTS)
8" - 26" (LOAMY SAND ROOTS, SOME ROCKS)
26" - 76" (MOD COMPACT SANDY PAN, ROCKS)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 24"
RESTRICTIVE: 26"

PIT NO. 27

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 26" (LOAMY SAND ROOTS)
26" - 86" (MOD COMPACT SANDY PAN, MOTTLED)

MOTTLING: 26"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 26"
RESTRICTIVE: 26"

PIT NO. 28

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 27" (LOAMY SAND ROOTS)
27" - 85" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 27"
GROUND WATER: 85"
LEDGE: N/A
ROOTS: 27"
RESTRICTIVE: 27"

PIT NO. 29

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 28" (LOAMY SAND ROOTS)
28" - 86" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 28"
RESTRICTIVE: 28"

PIT NO. 30

0" - 8" (ORGANICS, TOPSOIL ROOTS)
8" - 27" (LOAMY SAND ROOTS)
27" - 82" (MOD COMPACT SANDY PAN)

MOTTLING: 27"
GROUND WATER: 82"
LEDGE: N/A
ROOTS: 27"
RESTRICTIVE: 27"

PIT NO. 31

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 27" (LOAMY SAND ROOTS)
27" - 84" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 27"
GROUND WATER: SEEPS 69"
LEDGE: N/A
ROOTS: 27"
RESTRICTIVE: 27"

PIT NO. 32

0" - 8" (ORGANICS, TOPSOIL ROOTS)
8" - 24" (LOAMY SAND ROOTS)
24" - 90" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 24"
GROUND WATER: 80" SEEPS 67"
LEDGE: N/A
ROOTS: 24"
RESTRICTIVE: 24"

PIT NO. 33

0" - 9" (ORGANICS, TOPSOIL ROOTS)
9" - 25" (LOAMY SAND)
25" - 80" (MOD COMPACT SANDY PAN)

MOTTLING: 25"
GROUND WATER: 80" SEEPS 62"
LEDGE: N/A
ROOTS: N/A
RESTRICTIVE: 25"

PIT NO. 34

0" - 8" (ORGANICS, TOPSOIL ROOTS)
8" - 25" (LOAMY SAND ROOTS)
25" - 85" (MOD COMPACT SANDY PAN)

MOTTLING: 25"
GROUND WATER: 83" SEEPS 72"
LEDGE: N/A
ROOTS: 25"
RESTRICTIVE: 25"

PIT NO. 35

0" - 11" (ORGANICS, TOPSOIL LARGE ROOTS)
11" - 30" (LOAMY SAND)
30" - 84" (MOD COMPACT SANDY PAN)

MOTTLING: 26"
GROUND WATER: 84" SEEPS 66"
LEDGE: N/A
ROOTS: N/A
RESTRICTIVE: 26"

PIT NO. 36

0" - 7" (ORGANICS, TOPSOIL ROOTS, LARGE ROCKS)
7" - 26" (LOAMY SAND ROOTS, LARGE ROCKS)
26" - 74" (MOD COMPACT SANDY PAN, ROCKS)

MOTTLING: 26"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 26"
RESTRICTIVE: 26"

PIT NO. 37

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 28" (LOAMY SAND ROOTS)
28" - 74" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 28"
RESTRICTIVE: 28"

PIT NO. 38

0" - 7" (ORGANICS, TOPSOIL ROOTS, LARGE ROCKS)
7" - 27" (LOAMY SAND SOME ROOTS, STONES)
27" - 57" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 27"
RESTRICTIVE: 27"

PIT NO. 39

0" - 5" (ORGANICS, TOPSOIL ROOTS, ROCKS)
5" - 27" (SILTY LOAMY FINE SAND ROOTS, ROCKS)
27" - 74" (MOD COMPACT SANDY PAN MOTTLED)

MOTTLING: 27"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 27"
RESTRICTIVE: 27"

PIT NO. 40

0" - 4" (ORGANICS, TOPSOIL ROOTS)
4" - 10" (SANDY LOAM ROOTS)
10" - 25" (LOAMY SAND WITH FINES)
25" - 70" (MOD COMPACT SANDY PAN)

MOTTLING: 25"
GROUND WATER: N/A
LEDGE: 70"
ROOTS: N/A
RESTRICTIVE: 25"

PIT NO. 41

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 9" (SANDY LOAM ROOTS)
9" - 25" (LOAMY SAND)
25" - 58" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 51" - 58"
ROOTS: N/A
RESTRICTIVE: 25"

PIT NO. 42

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 14" (FINE SANDY LOAM)
14" - 28" (SILTY LOAMY VERY FINE SAND)
28" - 54" (MOD COMPACT SANDY PAN WITH FINES)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 54"
ROOTS: 27"
RESTRICTIVE: 28"

PIT NO. 43

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 17" (SANDY LOAM ROOTS)
17" - 27" (LOAMY SAND FEW ROOTS)
27" - 48" (MOTTLED MOD COMPACT SILTY FINE SAND)

MOTTLING: 27"
GROUND WATER: N/A
LEDGE: 48"
ROOTS: N/A
RESTRICTIVE: 27"

PIT NO. 44 - UNSUITABLE

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 27" (SANDY LOAM)
(LEDGE STARTING AT 7")

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 7" - 27"
ROOTS: N/A
RESTRICTIVE: N/A

PIT NO. 45 - UNSUITABLE AT THIS TIME

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 25" (LOAMY SAND ROOTS)
25" - 39" (LEDGE STARTING AT 32")

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 32" - 39"
ROOTS: N/A
RESTRICTIVE: 25"

PIT NO. 46

0" - 7" (ORGANICS, TOPSOIL ROOTS, SOME ROCKS)
7" - 29" (LOAMY SAND ROOTS)
29" - 80" (MOD COMPACT SANDY PAN)

MOTTLING: 29"
GROUND WATER: 72"
LEDGE: N/A
ROOTS: N/A
RESTRICTIVE: 29"

PIT NO. 47

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 30" (LOAMY SAND ROOTS)
30" - 76" (MOD COMPACT SANDY PAN)

MOTTLING: 30"
GROUND WATER: 69"
LEDGE: N/A
ROOTS: 30"
RESTRICTIVE: 30"

PIT NO. 48

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 30" (LOAMY SAND WITH FINES ROOTS, ROCKS)
30" - 76" (MOD COMPACT SANDY PAN WITH FINES)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 76"
ROOTS: 30"
RESTRICTIVE: 30"

PIT NO. 49

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 29" (LOAMY SAND WITH FINES, ROOTS)
29" - 72" (MOD COMPACT SANDY PAN)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: 27" - 72"
ROOTS: 28"
RESTRICTIVE: 29"

PIT NO. 50

0" - 5" (ORGANICS, TOPSOIL ROOTS)
5" - 31" (FINE SANDY LOAM ROOTS, ROCKS, STONES)
31" - 76" (MOD COMPACT STONEY LOAMY FINE SAND WITH COARSE SANDS)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 31"
RESTRICTIVE: 31"

PIT NO. 51

0" - 7" (ORGANICS, TOPSOIL ROOTS)
7" - 32" (GRAVELLY SANDY LOAM, ROOTS)
32" - 77" (MOD COMPACT GRAVELLY PEBBLY LOAMY SANDS)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 32"
RESTRICTIVE: 32"

PIT NO. 52

0" - 11" (ORGANICS, TOPSOIL ROOTS)
4" - 28" (FINE SANDY LOAM, STONES, ROOTS)
28" - 70" (MOD COMPACT STONEY LOAMY SAND)

MOTTLING: N/A
GROUND WATER: 63" SEEPS 47"
LEDGE: N/A
ROOTS: 25"
RESTRICTIVE: 28"

PIT NO. 53

0" - 6" (ORGANICS, TOPSOIL ROOTS)
6" - 34" (SANDY LOAM ROOTS, ROCKS)
34" - 70" (WET MOD COMPACT LOAMY COARSE SAND WITH GRAVEL)

MOTTLING: N/A
GROUND WATER: 45"
LEDGE: N/A
ROOTS: 34"
RESTRICTIVE: 34"

PIT NO. 54

0" - 9" (ORGANICS, TOPSOIL ROOTS)
8" - 30" (LOAMY SAND WITH FINES, ROOTS)
30" - 49" (MOD COMPACT LOAMY SANDS WITH FINES)
49" - 74" (COARSE SANDS HIGH IRON CONTENT)

MOTTLING: 30"
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 47"
RESTRICTIVE: 30"

PIT NO. 55

0" - 6" (ORGANICS, TOPSOIL ROOTS, ROCKS)
6" - 28" (GRAVELLY SANDY LOAM ROCKS, ROOTS)
28" - 78" (TIGHT STONY COARSE SANDS AND GRAVEL)

MOTTLING: N/A
GROUND WATER: N/A
LEDGE: N/A
ROOTS: 29"
RESTRICTIVE: N/A

PIT NO. 56 - UNSUITABLE

0" - 18" (WET BLACK ORGANIC TOPSOIL, ROCKS)
18" - 48" (WET GRAY SILTY LOAMY VERY FINE SAND, MOTTLED)

PIT NO. 57- UNSUITABLE

0" - 12" (WET BLACK ORGANIC TOPSOIL, ROCKS)
12" - 16" (SILTY LOAMY VERY FINE SAND, ROOTS)
16" - 37" (ROCK WET GRAY SILTY LOAMY VERY FINE SAND)

MOTTLING: 16"
GROUND WATER: 21" SEEPS 18"
LEDGE: 57" - 37"
ROOTS: N/A
RESTRICTIVE: N/A

PIT NO. 58

SEPTIC SYSTEM MLSS COMPUTATIONS

BUILDING 1 - 2 BEDROOMS

TP 15 & 16
 PERC RATE W = 6.2 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 24"
 S = 6.1% - 8.0%
 MLSS = 30' (HF = 30, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 2 - 2 BEDROOMS

TP 14 & 63
 PERC RATE W = 4.2 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 30"
 S = 4.1% - 6.0%
 MLSS = 30' (HF = 30, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 3 - 2 BEDROOMS

TP 17, 17A & 18
 PERC RATE = 5.4 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 23"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 4 - 2 BEDROOMS

TP 27 & 28
 PERC RATE = 4.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 26"
 S = 6.1% - 8.0%
 MLSS = 30' (HF = 30, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 5 - 2 BEDROOMS

TP 18A & 19
 PERC RATE = 8.6 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 28"
 S = 4.1% - 6.0%
 MLSS = 30' (HF = 30, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 6 - 2 BEDROOMS

TP 29 & 30
 PERC RATE = 6.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 27"
 S = 4.1% - 6.0%
 MLSS = 30' (HF = 30, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 7 - 2 BEDROOMS

TP 18A, 21 & 22
 PERC RATE = 5.5 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 26"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 8 - 2 BEDROOMS

TP 31 & 32
 PERC RATE = 8.8 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 24"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 9 - 2 BEDROOMS

TP 33 & 34
 PERC RATE = 1.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 25"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 10 - 2 BEDROOMS

TP 34 & 35
 PERC RATE = 1.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 25"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 11 - 2 BEDROOMS

TP 23 & 25
 PERC RATE = 5.3 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 34"
 S = 4.1% - 6.0%
 MLSS = 28' (HF = 28, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 12 - 2 BEDROOMS

TP 37
 PERC RATE = 4.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 28"
 S = 3.1% - 4.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 13 - 2 BEDROOMS

TP 39 & 41
 PERC RATE = 2.5 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 25"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 14 - 2 BEDROOMS

TP 38
 PERC RATE = 5.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 26"
 S = 4.1% - 6.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 15 - 2 BEDROOMS

TP 42 & 43
 PERC RATE W = 4.36 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 27"
 S = 3.1% - 4.0%
 MLSS = 34' (HF = 34, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 16 - 2 BEDROOMS

TP 37 & 64
 PERC RATE W = 7.0 MIN./IN.
 375 S.F. LEACHING AREA REQ., 406 S.F. PROVIDED
 RL = 28"
 S = 6.1% - 8.0%
 MLSS = 28' (HF = 28, PF = 1.0, FF = 1.0)
 LSS PROVIDED = 35'

BUILDING 17 (DUPLICATE) - 4 BEDROOMS

TP 54
 PERC RATE W = 5 MIN./IN.
 632.50 S.F. LEACHING AREA REQ., 638 S.F. PROVIDED
 RL = 30"
 S = 6.1% - 8.0%
 MLSS = 53.76' (HF = 28, PF = 1.0, FF = 1.92)
 LSS PROVIDED = 55'

BUILDING 18 (DUPLICATE) - 4 BEDROOMS

TP 55
 PERC RATE W = 5.0 MIN./IN.
 632.50 S.F. LEACHING AREA REQ., 638 S.F. PROVIDED
 RL = N/A
 S = 6.1% - 8.0%
 MLSS = NOT APPLICABLE
 LSS PROVIDED = 55'

BUILDING 19 (DUPLICATE) - 4 BEDROOMS

TP 50
 PERC RATE W = 5.0 MIN./IN.
 632.50 S.F. LEACHING AREA REQ., 638 S.F. PROVIDED
 RL = 31"
 S = 6.1% - 8.0%
 MLSS = 49.92' (HF = 26, PF = 1.0, FF = 1.92)
 LSS PROVIDED = 55'

BUILDING 20 (DUPLICATE) - 4 BEDROOMS

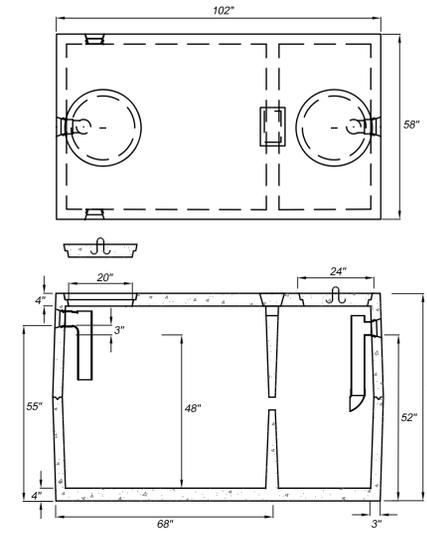
TP 52 & 53
 PERC RATE W = 5.6 MIN./IN.
 632.50 S.F. LEACHING AREA REQ., 754 S.F. PROVIDED
 RL = 34"
 S = 2.1% - 3.0%
 MLSS = 65.28' (HF = 34, PF = 1.0, FF = 1.92)
 LSS PROVIDED = 65'

COMMUNITY BUILDING

FOR DESIGN FLOW:
 1) WEEKEND USE: ASSUME 2, 40 PERSON SOCIAL EVENTS WITH MEALS @ 5 GAL/PERSON = 400 GALLONS/WEEK
 2) WEEKDAY USE: ASSUME 10 PEOPLE RECREATIONAL FOR 5 DAYS @ 3.5 GAL/PERSON = 175 GALLONS/WEEK
 3) 400 + 175 GALLONS/WEEK = 575 GALLONS/WEEK = 82 GPD, ROUND UP TO 100 GPD

TP 25

PERC RATE = 5.3 MIN./IN.
 125 S.F. LEACHING AREA REQ., 232 SF PROVIDED
 RL = 29"
 S = 4.1% - 6.0%
 MLSS = 9.9' (HF = 30, PF = 1.0, FF = 0.33)
 LSS PROVIDED = 20"



- DESIGN NOTES**
- 1) JOINTS TO BE SEALED WITH BUTYL RUBBER SEALANT
 - 2) INLETS AND OUTLETS TO HAVE STATE-APPROVED SEALS
 - 3) USE 8" HEAVY DUTY TOP IF SPECIFIED
 - 4) MUST MEET ASTM C 1227-97A
 - 5) CONCRETE STRENGTH SHALL BE 5000 PSI MIN. 28 DAYS

1000 GALLON TWO-COMPARTMENT SEPTIC TANK
 N.T.S.

PERC TEST RESULTS

OBSERVED BY: MAUREEN MARCOUX
 DATE: 11/29/23

TEST PITS 13 & 14

TIME	READING
10:19	4.50"
10:21	6.375"
10:24	7.75"
10:29	9.75"
10:37	11.625"

DEPTH: 28"
 RATE: 4.2 MIN/IN

OBSERVED BY: MAUREEN MARCOUX
 DATE: 12/5/23

TEST PIT 16

TIME	READING
12:32	4.25"
12:38	7.5"
12:43	8.875"
12:53	10.5"
1:07	12.75"

DEPTH: 27"
 RATE: 6.2 MIN/IN

TEST PIT 18

TIME	READING
12:37	3.25"
12:41	5.5"
12:46	7.75"
12:57	10.375"
1:10	12.75"

DEPTH: 20"
 RATE: 5.4 MIN/IN

TEST PIT 19

TIME	READING
12:34	4.00"
12:39	6.125"
12:45	7.375"
12:55	9.125"
1:09	10.75"

DEPTH: 30"
 RATE: 8.6 MIN/IN

TEST PIT 22

TIME	READING
1:32	3.00"
1:40	6.375"
1:47	8.00"
1:55	9.50"
2:04	11.125"

DEPTH: 26"
 RATE: 5.5 MIN/IN

TEST PIT 24

TIME	READING
1:39	2.50"
1:46	6.00"
1:53	8.50"
2:01	10.50"
2:09	12.00"

DEPTH: 28"
 RATE: 5.3 MIN/IN

TEST PIT 26

TIME	READING
2:31	4.75"
2:36	7.25"
2:41	9.25"
2:45	10.25"
2:53	11.50"
3:03	13.25"

TEST PIT 27 & 28

TIME	READING
10:35	1.75"
10:38	4.00"
10:44	6.00"
10:49	7.25"
10:59	9.50"
11:03	10.50"

DEPTH: 27"
 RATE: 4.0 MIN/IN

TEST PITS 29 & 30

TIME	READING
10:53	3.25"
11:00	6.625"
11:06	7.75"
11:12	8.75"
11:18	9.75"

DEPTH: 29"
 RATE: 8.8 MIN/IN

TEST PITS 31 & 32

TIME	READING
11:33	3.50"
11:39	6.50"
11:49	8.25"
12:00	9.50"

DEPTH: 29"
 RATE: 12.8 MIN/IN

TEST PIT 34

TIME	READING
1:45	8.25"
1:46	14.00"
1:47	16.50"
1:48	17.75"
1:49	18.75"

DEPTH: 26"
 RATE: 1.0 MIN/IN

TEST PIT 36

TIME	READING
2:12	9.50"
2:13	10.25"
2:18	11.25"
2:23	12.25"
2:28	13.25"

DEPTH: 20"
 RATE: 5.0 MIN/IN

TEST PITS 37 & 38

TIME	READING
2:41	4.50"
2:43	6.50"
2:45	7.375"
2:52	9.50"
2:57	10.75"
3:02	12.00"

DEPTH: 28"
 RATE: 4.0 MIN/IN

TEST PITS 39 & 40

TIME	READING
2:39	8.75"
2:42	11.00"
2:45	12.75"
2:50	14.75"
2:55	16.75"

DEPTH: 28"
 RATE: 2.5 MIN/IN

TEST PITS 42 & 43

TIME	READING
12:39	3.25"
12:42	5.25"
12:45	6.75"
12:55	10.50"
1:07	13.25"

DEPTH: 28"
 RATE: 6.0 MIN/IN

TEST PIT 58

TIME	READING
1:33	4.75"
1:40	8.00"
1:47	10.00"
1:55	11.75"
2:04	13.25"

DEPTH: 28"
 RATE: 5.6 MIN/IN

TEST PITS 54 & 55

TIME	READING
11:10	6.50"
11:11	7.75"
11:13	8.50"
11:18	9.50"
11:23	10.50"
11:28	11.50"
11:33	12.50"

DEPTH: 28"
 RATE: 2.5 MIN/IN

TEST PIT 58

TIME	READING
12:39	3.25"
12:42	5.25"
12:45	6.75"
12:55	10.50"
1:07	13.25"

DEPTH: 28"
 RATE: 4.36 MIN/IN

TEST PIT 58

TIME	READING
1:33	4.75"
1:40	8.00"
1:47	10.00"
1:55	11.75"
2:04	13.25"

DEPTH: 28"
 RATE: 6.0 MIN/IN/TEST PIT 64

TEST PIT 46 & 47

TIME	READING
11:41	5.25"
11:47	8.50"
11:54	10.25"
12:01	11.25"

DEPTH: 27"
 RATE: 7.0 MIN/IN

TEST PIT 48 & 49

TIME	READING
11:18	5.75"
11:21	8.50"
11:27	10.25"
11:33	11.00"
11:41	11.625"

DEPTH: 29"
 RATE: 12.8 MIN/IN

TEST PITS 50 & 51

TIME	READING
12:13	4.50"
12:16	6.375"
12:19	10.875"
12:22	13.00"
12:25	15.00"

DEPTH: 28"
 RATE: 1.5 MIN/IN

TEST PITS 50 & 51

TIME	READING
12:13	4.50"
12:16	6.375"
12:19	10.875"
12:22	13.00"
12:25	15.00"

DEPTH: 28"
 RATE: 1.5 MIN/IN

TEST PITS 50 & 51

TIME	READING
12:13	4.50"
12:16	6.375"
12:19	10.875"
12:22	13.00"
12:25	15.00"

DEPTH: 28"
 RATE: 1.5 MIN/IN

TEST PITS 50 & 51

TIME	READING
12:13	4.50"
12:16	6.375"
12:19	10.875"
12:22	13.00"
12:25	15.00"

OBSERVED BY: MAUREEN MARCOUX
 DATE: 12/1/23

TEST PIT 52

TIME	READING
12:10	9.75"
12:17	12.50"
12:24	14.25"
12:31	15.50"
12:38	16.75"
12:45	18.00"

DEPTH: 28"
 RATE: 5.6 MIN/IN

TEST PITS 54 & 55

TIME	READING
11:10	6.50"
11:11	7.75"
11:13	8.50"
11:18	9.50"
11:23	10.50"
11:28	11.50"
11:33	12.50"

DEPTH: 28"
 RATE: 6.0 MIN/IN/TEST PIT 64

TEST PIT 58

TIME	READING
11:41	5.25"
11:47	8.50"
11:54	10.25"
12:01	11.25"

DEPTH: 27"
 RATE: 7.0 MIN/IN

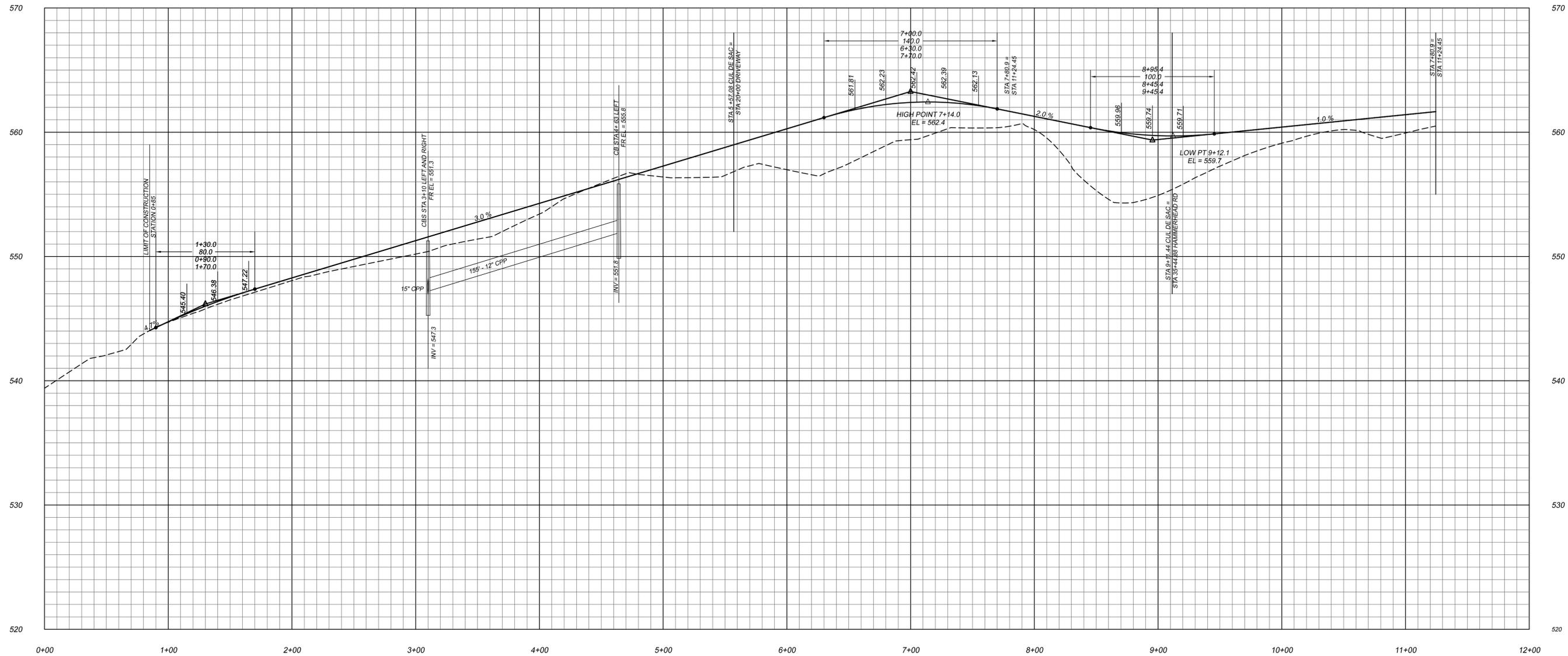
TEST PIT 48 & 49

TIME	READING
11:18	5.75"
11:21	8.50"
11:27	10.25"
11:33	11.00"
11:41	11.625"

DEPTH: 29"
 RATE: 12.8 MIN/IN

TEST PITS 50 & 51

TIME	READING
12:13	4.50"
12:16	6.375"
12:19	10.875"
12:22	13.00"
12:25	15.00"



CUL-DE-SAC PROFILE
 1" = 40' HORIZ
 1" = 4' VERTICAL

CUL-DE-SAC PROFILE
 PREPARED FOR
THOMPSON SHANTI VILLAGE
 1410 THOMPSON ROAD - THOMPSON, CT
 MAP 114 - BLOCK 27 - LOT 21

J&D CIVIL ENGINEERS, LLC
 401 RAVENELLE ROAD
 N. GROSVENORDALE, CT 06255
 860-923-2920

DESIGNED: DDB	REVISIONS:
CHECKED: JJB	

JOB NO: 22166	DATE: APRIL 2, 2024
SCALE: 1" = 40' H, 1" = 4' V	SHEET: 8

PHASING NARRATIVE :

THE OWNER INTENDS TO BUILD THE PROJECT OVER A MULTI-YEAR PERIOD. WORK WILL GENERALLY PROCEED FROM NORTH TO SOUTH. THE FOLLOWING IS THE WORK WHICH SHALL BE COMPLETED IN EACH PHASE PRIOR TO INITIATING BUILDING CONSTRUCTION ON SUBSEQUENT PHASES.

PHASE 1 :
8 SINGLE FAMILY HOUSES: 1, 2, 3, 4, 5, 6, 7, 8, THE WATER AND UTILITY BUILDING AND THE COMMUNITY BUILDING

ROAD CONSTRUCTION: STATION 0+80 TO 6+15 AND 20+00 TO 25+39.77 (T INTERSECTION WITH PORTION OF DRIVEWAY GOING TO LOT 21)

SEPTIC SYSTEMS ASSOCIATED WITH BUILDINGS OF PHASE 1

WATER: DRILL WELLS 1 AND 2, ESTABLISH PUBLIC WATER SUPPLY - COORDINATE WITH CT DPH, INSTALL WATER MAIN FOR PHASE 1.

DRAINAGE: CONSTRUCT STORMWATER INFILTRATION BASIN, DMH AND 3 CBS

PHASE 2 :
8 SINGLE FAMILY HOUSES: 9, 10, 11, 12, 13, 14, 15, 16

ROAD CONSTRUCTION: STATION 6+15 TO 33+60 (INCLUDING CUL-DE-SAC)

SEPTIC SYSTEMS ASSOCIATED WITH BUILDINGS OF PHASE 2

WATER: INSTALL WATER MAIN FOR PHASE 2.

DRAINAGE: CONSTRUCT SWALE AT TOE OF SLOPE ON EAST SIDE OF PROJECT

PHASE 3 : 4 DUPLEXES : 17, 18, 19, 20

ROAD CONSTRUCTION: DRIVEWAY: HAMMERHEAD ROAD STATION 33+60 TO 30+20

SEPTIC SYSTEMS ASSOCIATED WITH BUILDINGS OF PHASE 3

WATER: INSTALL WATER MAIN FOR PHASE 3.

DRAINAGE: CONSTRUCT CB AND 15" CPP

SEQUENCE OF CONSTRUCTION :

SEE PHASING NARRATIVE FOR FEATURES TO BE CONSTRUCTED IN EACH PHASE. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH PHASE SHALL BE COMPLETED AND IMMEDIATELY STABILIZED BEFORE BUILDING CONSTRUCTION FOR ANY FOLLOWING PHASE IS INITIATED. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

- EXCAVATING CONTRACTOR SHALL NOTIFY CALL BEFORE YOU DIG AS REQUIRED, AND IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL BURIED UTILITIES PRIOR TO COMMENCING CONSTRUCTION.
- FIELD STAKE THE BUILDINGS, DRIVEWAYS AND UTILITY STRUCTURES. THROUGHOUT THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL PROTECT DOWNSTREAM WETLANDS FROM SEDIMENTATION.
- INSTALL COMPOST FILTER SOCK ALONG THE DOWNSLOPE SIDE OF CONSTRUCTION ACTIVITIES AS SHOWN ON THE DRAWINGS.
- STRIP TOPSOIL FROM SITE. STOCKPILE SIDE SLOPES MUST BE 2:1 OR FLATTER. INSTALL FILTER SOCK BELOW TOPSOIL AND EXCESS MATERIAL STOCKPILES. STOCKPILES IN PLACE MORE THAN 30 DAYS SHALL BE SEEDED OR COVERED.
- UPON COMPLETION OF AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY, THE SITE SHALL BE IMMEDIATELY SEEDED, MULCHED OR OTHERWISE PROTECTED FROM ACCELERATED EROSION AND SEDIMENTATION. EROSION AND SEDIMENT CONTROL BMPs SHALL BE IMPLEMENTED AND MAINTAINED UNTIL THE PERMANENT STABILIZATION IS COMPLETED. FOR AN EARTH DISTURBANCE ACTIVITY OR ANY STAGE OR PHASE OF AN ACTIVITY TO BE CONSIDERED PERMANENTLY STABILIZED, THE DISTURBED AREAS SHALL BE COVERED WITH ONE OF THE FOLLOWINGS: (1) A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION, (2) AN ACCEPTABLE BMP WHICH PERMANENTLY MINIMIZES ACCELERATED EROSION AND SEDIMENTATION.
- IN THE EVENT THAT CONSTRUCTION OF ANY STRUCTURES IS DELAYED, EITHER DO NOT BEGIN EARTHWORK IN THE AREA OF FEATURES THAT WILL NOT BE CONSTRUCTED IMMEDIATELY, OR COMPLETE EARTHWORK, THEN PROVIDE STABILIZATION OF BUILDING PADS AND ALL ASSOCIATED DISTURBED AREAS WITH CLEAN STONE OR VEGETATION AS INDICATED IN THE PLAN.
- FINE GRADE AND RESPREAD TOPSOIL ALL AREAS AND IMMEDIATELY PERMANENTLY SEED AND MULCH ALL DISTURBED AREAS. PROVIDE EROSION CONTROL BLANKET IN AREAS SHOWN AND AREAS STEEPER THAN 3:1 SLOPE.
- AFTER PERMANENT STABILIZATION OF SITE (I.E. A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER, WITH A DENSITY CAPABLE OF RESISTING ACCELERATED EROSION AND SEDIMENTATION) HAS BEEN ACHIEVED, THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING THE REMOVAL OF THE CONTROLS SHALL BE RESTABILIZED. PERMANENT STORMWATER FEATURES SHOULD BE CLEANOUT OUT AS NEEDED UPON FINAL STABILIZATION OF THE SITE.

GENERAL SEEDING NOTES

- TEMPORARY SEEDING NOTES - SITE PREPARATION: APPLY 1-2 TON /ACRE AGRICULTURAL GRADE LIMESTONE AND 10-10-10 FERTILIZER AT A RATE OF 300 LBS./ACRE AND WORK IN WHERE POSSIBLE. REFER TO FIGURE TS-2 IN THE 2002 CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL FOR APPROPRIATE SEEDING MIXES AND RATES. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.
- PERMANENT SEEDING NOTES - SITE PREPARATION: GRADE AS NECESSARY TO BRING THE SUBGRADE TO A TRUE, SMOOTH SLOPE PARALLEL TO AND SIX INCHES BELOW FINISHED GRADE. PLACE TOPSOIL OVER SPECIFIED AREAS TO A DEPTH SUFFICIENTLY GREATER THAN SIX INCHES SO THAT AFTER SETTLEMENT AND LIGHT ROLLING THE COMPLETE WORK WILL CONFORM TO LINES, GRADES AND ELEVATIONS SHOWN.
- APPLY 4 TONS/ACRE AGRICULTURAL GRADE LIMESTONE AND 10-10-10 FERTILIZER AT A RATE OF 300 LBS/AC OR AS PER SOIL TEST. LIMESTONE AND FERTILIZER MAY NOT BE REQUIRED IN AGRICULTURAL FIELDS.
- FERTILIZER AND AGRICULTURAL LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE SOIL BY ROTOTILLING OR OTHER METHOD TO A MINIMUM DEPTH OF FOUR INCHES. THE ENTIRE SURFACE SHALL BE DONE IN TWO SEPARATE OPERATIONS. THE SECOND SEEDING SHALL BE DONE IMMEDIATELY AFTER THE FIRST AND AT RIGHT ANGLES TO THE FIRST SEEDING AND LIGHTLY RAKED INTO THE SOIL. MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING.

AREA TO BE SEEDED	MIXTURE NUMBER	SPECIES	SEEDING RATES (LB/AC) PURE LIVE SEED
SLOPES, BANKS CHANNELS AND DIVERSIONS	2	CREeping RED FESCUE	20
		REDTOP	2
		TALL FESCUE OR SMOOTH BROMEGRASS	20
LAWN AND HIGH MAINTENANCE AREAS	1	KENTUCKY BLUEGRASS	20
		CREeping RED FESCUE	20
		PERENNIAL RYEGRASS	5

SEED MIXTURE NUMBERS REFER TO TABLE 5.5 FROM THE 2023 CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO MANUAL FOR POTENTIAL ALTERNATIVE MIXTURES.

PURE LIVE SEED (PLS) IS THE PRODUCT OF THE PERCENTAGE OF PURE SEED TIMES PERCENTAGE GERMINATION DIVIDED BY 100.

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A CONDOMINIUM DEVELOPMENT. SITE WORK WILL INCLUDE CONSTRUCTION OF BUILDINGS, ACCESS DRIVES, PARKING AREAS, AND NECESSARY UTILITIES.

ATTENTION SHALL BE GIVEN TO THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES. EROSION CONTROL DEVICES SHALL CONSIST OF SILT SOCK BARRIERS OR WOODCHIP BERMS TO FACILITATE MOVEMENT OF VERNAL POOLS AMPHIBIANS. SILT FENCE SHALL NOT BE USED ON THE PROJECT. NO ERODED SEDIMENTS SHALL BE PERMITTED TO FLOW OFF THE SITE. IF FIELD CONDITIONS WARRANT IT OR THE TOWN REQUESTS IT, ADDITIONAL E & S CONTROL MEASURES, BEYOND WHAT IS SHOWN ON THE PLAN, SHALL BE INSTALLED.

SEDIMENT AND EROSION CONTROL DEVICES WILL BE INSTALLED AS DETAILED ON THIS SHEET AND CHECKED REGULARLY FOR REPLACEMENT AND AFTER EVERY RAIN FOR REMOVAL OF DEPOSITED MATERIALS. RESPONSIBILITY FOR COMPLIANCE WITH THIS PLAN SHALL BELONG TO THE CONTRACTOR. THE CONTRACTOR SHALL BE THE DESIGNATED ON-SITE AGENT RESPONSIBLE FOR ENSURING TO THE TOWN THAT E & S CONTROL MEASURES ARE STRICTLY ENFORCED.

SEEDING DATES FOR PERMANENT VEGETATION ARE MARCH 15 - JUNE 30 AND AUGUST 15 - OCTOBER 31. OUTSIDE OF THESE DATES TEMPORARY MULCH CONSISTING OF STRAW OR HAY APPLIED AT THE RATE OF 95 LB/1000 SQUARE FEET SHALL BE USED. HYDROSEEDING WILL BE PERMITTED WHERE SLOPES ARE NO STEEPER THAN 2 TO 1 AND SEEDING RATES WILL BE INCREASED BY 10%.

OPERATIONS AND MAINTENANCE

- ALL PROPOSED WORK SHALL CONFORM TO "2023 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL OF SOIL AND WATER CONSERVATION AND TOWN REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE GOALS OF THIS EROSION CONTROL PLAN ARE MET BY WHATEVER MEANS ARE NECESSARY. THE CONTRACTOR SHALL PLAN ALL LAND DISTURBING ACTIVITIES IN A MANNER AS TO MINIMIZE THE EXTENT OF DISTURBED AREAS.
- PRIOR TO CONSTRUCTION OR EXCAVATION, SEDIMENT BARRIERS SHALL BE INSTALLED IN LOCATIONS AS SHOWN ON THE PLAN OR AS REQUIRED BY THE TOWN AND MAINTAINED THROUGHOUT CONSTRUCTION.
- UPON FINAL GRADING, DISTURBED AREAS SHALL COVERED WITH A MINIMUM OF 6" LOAM AND SEEDED WITH PERENNIAL GRASSES AS SPECIFIED FOR THE PROJECT. IMMEDIATELY AFTER SEEDING, MULCH THE SEEDED AREA, NOT COVERED WITH EROSION CONTROL BLANKET, WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE. SEEDING DATES ARE TO BE BETWEEN APRIL 1 THRU JUNE 15 AND AUGUST 15 THRU OCTOBER 15.
- DAILY INSPECTIONS SHALL BE MADE OF EROSION AND SEDIMENT CONTROL MEASURES TO INSURE EFFECTIVENESS AND IMMEDIATE CORRECTIVE ACTION SHALL BE TAKEN IF FAILURE OCCURS. ADDITIONAL EROSION CONTROL MEASURES BEYOND WHAT IS SHOWN ON THE PLAN MAY BE NECESSARY.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS HAVE BEEN STABILIZED AND VEGETATIVE COVER HAS BEEN ESTABLISHED, AT WHICH TIME THEY SHALL BE REMOVED.
- SITE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THIS EROSION AND SEDIMENT CONTROL PLAN.

MINIMIZE DISTURBED AREAS

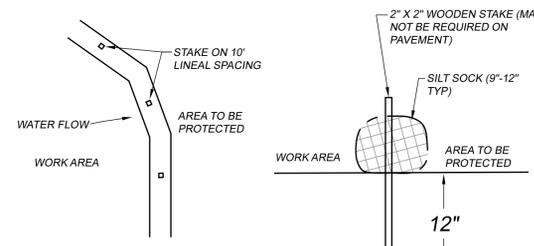
- KEEP LAND DISTURBANCE TO A MINIMUM - THE MORE LAND THAT IS IN VEGETATIVE COVER, THE MORE SURFACE WATER WILL INFILTRATE INTO THE SOIL, THUS MINIMIZING STORMWATER RUNOFF AND POTENTIAL EROSION. KEEPING LAND DISTURBANCE TO A MINIMUM NOT ONLY INVOLVES MINIMIZING THE EXTENT OF EXPOSURE AT AN ONE TIME, BUT ALSO THE DURATION OF EXPOSURE.
- PHASE CONSTRUCTION SO THAT AREAS WHICH ARE ACTIVELY BEING DEVELOPED AT ANY ONE TIME ARE MINIMIZED AND ONLY THAT AREA UNDER CONSTRUCTION IS EXPOSED. CLEAR ONLY THOSE AREAS ESSENTIAL FOR CONSTRUCTION.
- SEQUENCE THE CONSTRUCTION OF STORM DRAINAGE SYSTEMS SO THAT THEY ARE OPERATIONAL AS SOON AS POSSIBLE DURING CONSTRUCTION. ENSURE ALL OUTLETS ARE STABLE BEFORE OUTLETTING STORM DRAINAGE FLOW INTO THEM.
- SCHEDULE CONSTRUCTION SO THAT FINAL GRADING AND STABILIZATION IS COMPLETED AS SOON AS POSSIBLE.

MANAGING RUNOFF

- USE DIVERSIONS, STONE DIKES, SILT FENCES AND SIMILAR MEASURES TO BREAK FLOW LINES AND DISSIPATE STORM WATER ENERGY.
- AVOID DIVERTING ONE DRAINAGE SYSTEM INTO ANOTHER WITHOUT CALCULATING THE POTENTIAL FOR DOWNSTREAM FLOODING OR EROSION.
- CLEAN RUNOFF SHOULD BE KEPT SEPARATED FROM SEDIMENT LADEN WATER AND SHOULD NOT BE DIRECTED OVER DISTURBED AREAS WITHOUT ADDITIONAL CONTROLS. ADDITIONALLY, PREVENT THE MIXING OF CLEAN OFF-SITE GENERATED RUNOFF WITH SEDIMENT LADEN RUNOFF GENERATED ON-SITE UNTIL AFTER ADEQUATE INFILTRATION OF ON-SITE WATERS HAS OCCURRED.

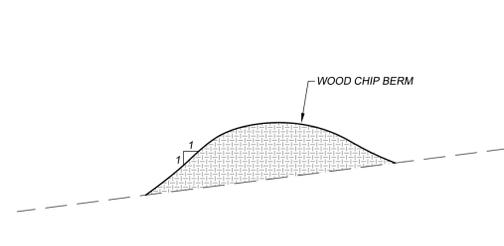
INTERNAL EROSION CONTROLS

- DO NOT RELY EXCLUSIVELY ON PERIMETER EROSION CONTROL DEVICES.
- CONTROL EROSION AND SEDIMENTATION BY INSTALLING INTERNAL EROSION CONTROL IN THE SMALLEST DRAINAGE AREA POSSIBLE.
- DIRECT RUNOFF FROM SMALL DISTURBED AREAS TO ADJOINING UNDISTURBED VEGETATED AREAS.
- CONCENTRATED RUNOFF SHOULD BE CONVEYED TO SEDIMENT TRAPS OR BASINS AND STABLE OUTLETS USING RIP RAPPED CHANNELS, STORM DRAINS OR SIMILAR MEASURES.



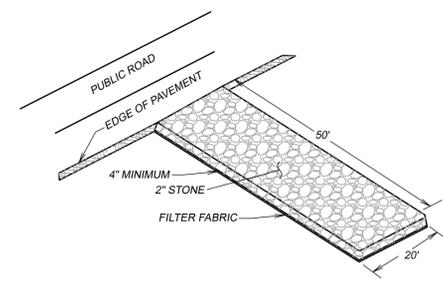
- NOTES**
- SILT SOCK MANUFACTURER SHALL BE SILT SOXX OR ENGINEER APPROVED EQUAL
 - ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS
 - SEDIMENT SILT SOCK TO BE FILLED WITH LEAF COMPOST AND/OR WOODY MULCH PER MANUFACTURER'S REQUIREMENTS.
 - FOLLOWING CONSTRUCTION AND SITE STABILIZATION, COMPOST MATERIAL SHALL BE REMOVED OR DISPERSED ON SITE, AS APPROVED BY THE ENGINEER.

SILT SOCK DETAIL
NOT TO SCALE



- NOTES**
- WOOD CHIPS FROM SITE CLEARING OPERATIONS MAY BE USED TO FORM BERMS AS SEDIMENT BARRIERS TO FACILITATE MOVEMENT OF AMPHIBIANS THROUGHOUT THE SITE.
 - MAXIMUM HEIGHT OF BERM = 5'
 - THE BOTTOM WIDTH OF THE BERM SHALL BE GREATER THAN TWICE ITS HEIGHT
 - FOLLOWING CONSTRUCTION AND SITE STABILIZATION, THE BERMS CAN BE SPREAD OUT TO BLEND INTO THE SURROUNDING SLOPES AND TO ALLOW THE WOOD CHIPS TO DECOMPOSE IN PLACE NATURALLY.

WOOD CHIP BERM SECTION
NOT TO SCALE



TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE

CONSTRUCTION DETAILS
EROSION AND SEDIMENT CONTROL
FOR
THOMPSON SHANTI VILLAGE
1410 THOMPSON RD ROAD - THOMPSON, CT

J&D

CIVIL ENGINEERS, LLC

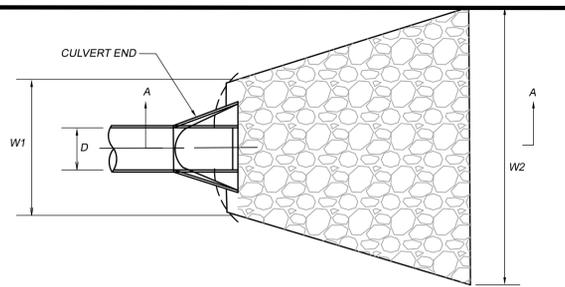
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB
CHECKED: DRB

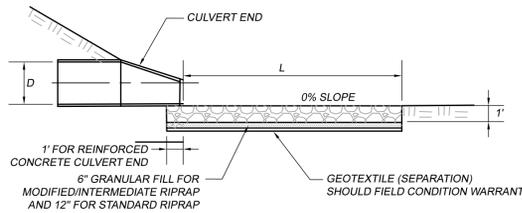
REVISIONS:

JOB NO: 22166
SCALE: AS NOTED

DATE: APRIL 2, 2024
SHEET: 10



PLAN VIEW

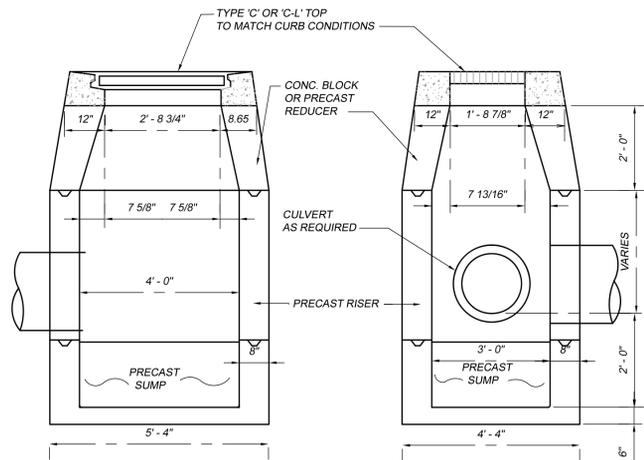


SECTION A-A

APRON #	W1	W2	L
1	3'	10'	10'
2	3'	10'	10'
3	4'	11'	10'
4	8'	12'	16'

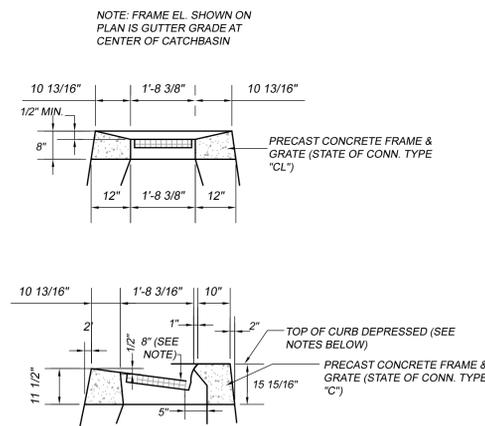
MODIFIED RIPRAP APRON - TYPE A

NOT TO SCALE



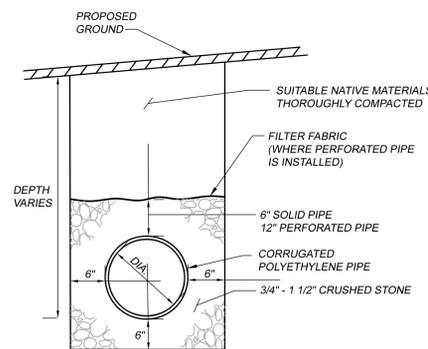
TYPE "C" OR "C-L" CATCH BASIN WITH SUMP

NOT TO SCALE



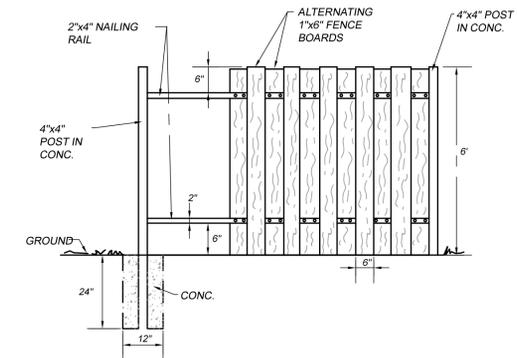
FRAME AND GRATE FOR TYPE "C" OR "C-L" CATCH BASIN

NOT TO SCALE

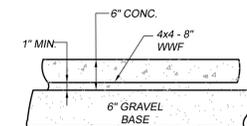


CPP DRAINAGE PIPE INSTALLATION DETAIL

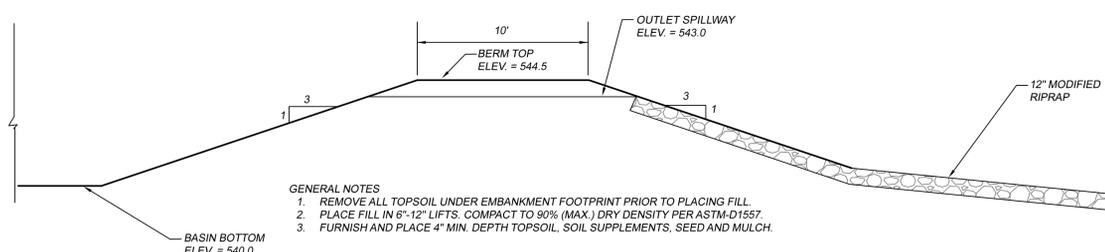
NOT TO SCALE



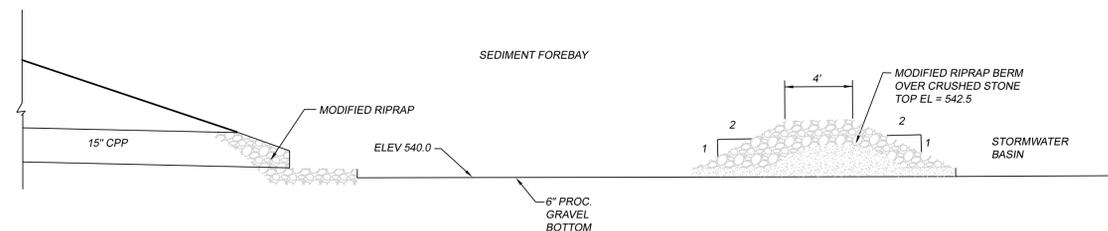
DUMPSTER SCREENING FENCE N.T.S.



DUMPSTER PAD DETAIL N.T.S.



STORMWATER INFILTRATION BASIN TYPICAL SECTION N.T.S.



SEDIMENT FOREBAY TYPICAL SECTION N.T.S.

GENERAL CONSTRUCTION NOTES:

LOCATIONS OF UNDERGROUND UTILITIES HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR SHALL NOTIFY CALL BEFORE YOU DIG AND FIELD VERIFY THE LOCATION, DEPTH AND ALIGNMENT OF ALL EXISTING PIPES, CABLES, ETC.

CONSTRUCTION SHALL BE IN CONFORMANCE WITH CONNDOT FORM 818 UNLESS OTHERWISE NOTED ON THE PLANS. UTILITY INSTALLATION SHALL BE IN CONFORMANCE WITH THE APPROPRIATE UTILITY COMPANY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH EACH UTILITY AND ALL COSTS ASSOCIATED WITH THE PROTECTION OF EXISTING FACILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN IN SERVICE ALL EXISTING PIPING UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

TYPICAL DETAILS SHOWN ARE TO ILLUSTRATE THE ENGINEER'S INTENT AND ARE NOT PRESENTED AS A SOLUTION TO ALL CONSTRUCTION PROBLEMS ENCOUNTERED IN THE FIELD. THE CONTRACTOR MAY SUBMIT PROPOSALS FOR ALTERNATE METHODS TO SUIT FIELD CONDITIONS.

ALL PIPING SHALL HAVE WARNING TAPE INSTALLED. IN ADDITION, ALL NONMETALLIC PIPE MUST BE PARALLELED BY A METALLIC WIRE OR METALLIC DETECTION TAPE FOR EASE OF LOCATING.

ALL PIPING SHALL BE CLEANED AND TESTED IN ACCORDANCE WITH THE APPLICABLE UTILITY'S REQUIREMENTS. COPIES OF ALL TESTS SHALL BE PROVIDED TO THE OWNER PRIOR TO ACCEPTANCE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TESTING EQUIPMENT.

ALL TRENCHING SHALL BE DONE IN COMPLIANCE WITH OSHA REGULATIONS AND THE INSTALLATION REQUIREMENTS OF THE PIPE MANUFACTURER.

BENCHMARKS WILL BE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR IN LAYING OUT THE PROJECT. ANY DISCREPANCIES BETWEEN FIELD MEASUREMENTS AND THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

THE CONTRACTOR SHALL PROTECT BENCHMARKS, PROPERTY CORNERS AND SURVEY MONUMENTS FROM DAMAGE OR DISPLACEMENT. ANY SUCH ITEMS WHICH NEED TO BE REPLACED SHALL BE AT THE CONTRACTOR'S EXPENSE.

**CONSTRUCTION DETAILS
DRAINAGE
FOR
THOMPSON SHANTI VILLAGE
1410 THOMPSON ROAD - THOMPSON, CT**

J&D CIVIL ENGINEERS, LLC
401 RAVENELLE ROAD
N. GROSVENORDALE, CT 06255
860-923-2920

DESIGNED: JJB CHECKED: DRB	REVISIONS:
JOB NO: 22166 SCALE: AS NOTED	DATE: APRIL 2, 2024 SHEET: 11

Agenda Item E) b) 3. New Applications

DEC24009, Karl Kuhn Jr., contractor, (Chris Brunett property) 23 Lapiere Rd (map 79, block 62, lot 47), installation of 28 x 48 garage for use permitted as of right.

Stamped Received April 3, 2024.



Town of Thompson
INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

For Commission Use Only
Application #: DEC 24009

Received

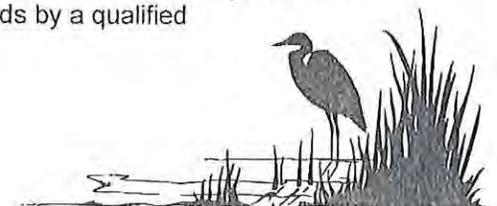
APR 3 2024

APPLICATION FORM - USE PERMITTED AS OF RIGHT OR NON-REGULATED USE

Applies to those actions proposed as a use permitted as of right or non-regulated use listed in sections 4.1 and 4.2 of the Thompson Inland Wetland and Watercourse Regulations, except timber harvests (for timber harvests use Timber Harvest Form). Unless identified as "Optional" all information is mandatory.

Part I Request for Use Permitted as of Right or Non-Regulation Use (check one only):

1. Propose use or activity conforms to the following permitted uses as outlined in section 4.1 of the Thompson Inland Wetland and Watercourse Regulations (check as appropriate):
 - a. Grazing, farming, nurseries, gardening and harvesting of crops.
 - b. Farm pond three (3) acres or less essential to the farming operation.
 - c. Construction of a residential home for which a building permit has been issued prior to July 1, 1987, attach copy of valid building permit and site plan.
 - d. Boat anchorage or mooring.
 - e. Use incidental to the maintenance and enjoyment of property presently used for residential purposes that contains a dwelling. Such property is equal to or smaller than the largest minimum residential lot size as permitted in the Town of Thompson.
 - f. Construction and operation by a water company of a dam, reservoir or other facility necessary for the impounding, storage and withdrawal of water in connection with public water supplies.
 - g. Maintenance of drainage pipes on residential property that existed prior to July 1, 1974.
2. Proposed use or activity will not disturb the natural or indigenous character of the wetland or watercourse and conforms to one of the following non-regulated uses outlined in section 4.2 of the Thompson Inland Wetlands and Watercourses Regulations (check as appropriate):
 - a. Conservation of soil, vegetation, water, fish or wildlife.
 - b. Outdoor recreation
 - c. Dry Hydrant installation by authority of the municipal fire department
3. The proposed use or activity is not regulated by the Thompson Inland Wetlands and Watercourses Regulations because (check as appropriate):
 - a. The proposed activity or use is one which is the exclusive jurisdiction of State or Federal agency. Provide documentation (See Section 5 of these regulations)
 - b. The use or activity legally existed as of July 1, 1974, and does not involve new, additional or expanded use or activity. Provide documentation.
 - c. The proposed activity is not a regulated activity as defined by section 2 to the Thompson Inland Wetlands and Watercourses Regulations (delineation of wetlands by a qualified soil scientist may be required)



Part II Contact Information

1) Applicant Contact Information

a) Applicant Name: HMK Renovations Karl Kuhn Jr.

b) Mailing Address: 23 Hulmelea Court Woodstock CT 06222
 (include town state zip)

c) Daytime Phone #: _____

d) Evening Phone #: _____

e) Cell Phone # (optional): 860 576 3411

f) Email Address (optional): _____

2) Applicant's Interest in Property (check one only)

property owner lessee easement holder

3) Owner Contact Information (required if applicant is not property owner)

a) Name: Chris Brunette

b) Mailing Address: 23 Lapiere Rd Thompson CT
 (include town state zip)

c) Daytime Phone #: _____

d) Evening Phone #: _____

e) Cell Phone # (optional): _____

f) Email Address (optional): _____

Part III Site Information

1) Property Involved (following information obtained from tax assessor and town clerk's records):

Street Address	Assessor's Reference		
	Map	Block	Lot
	<u>79</u>	<u>52</u>	<u>47</u>

2) Attach an 8 1/2 inch by 11 inch location map for the property (printable map from Thompson MapGeo with property outlined is acceptable – see <https://thompsonct.mapgeo.io>)

3) Wetlands (as delineated by qualified soil scientist) / Watercourse Area Altered

a) Wetlands: _____ (in square feet)

b) Open Water Body: _____ (in square feet)

c) Stream: _____ (in linear feet)

4) Noteworthy Wetlands / Watercourses: Does the property contain a noteworthy wetland or watercourse as identified in the document "Town of Thompson Inland Wetland Inventory" prepared by the Northeastern Connecticut Regional Planning Agency dated 1980? (see http://thompsonct.org/images/stories/Inland_Wetlands/Inlands-Wetlands-Watercourse-Map.pdf - check one) No Yes (If Yes, then upland review area = 200 ft.)

5) Upland Review Area altered: _____ (in square feet)

For 6 & 7 below see http://thompsonct.org/images/stories/Planning_Development/Inland_Wetlands/Drainage-BasinsTopo-Grid-2017.pdf

6) U.S.G.S. Topographic Quadrangle (check all involved)

#13 Webster MA

#14 Oxford MA

#28 Putnam

#29 Thompson

7) Drainage Basin #(s) wherein the proposed activity will take place (check all involved):

French River 3300 3301

Quinebaug River 3700 3708

Five Mile River 3400 3401 3402

Part IV Description of Activity Proposed

1. Detailed project description and purpose: 28x48 Detached Garage.

2. Attach a diagram, drawing or plot plan of sufficient scale and detail to portray the proposed activity.

Part V Application Permissions & Certifications

1) Owner's Permission¹

I, the undersigned, am the owner of the above reference property and hereby grant permission to the Thompson Inland Wetlands Commission and its duly authorized agents to enter upon this property at reasonable times both before and after a final decision on this application has been issued by the Thompson Inland Wetlands Commission for purposed of inspection and enforcement of the Inland Wetlands and Watercourse regulation of the town of Thompson. Further, I have had an opportunity to review the Inland Wetlands and Watercourses Regulations of the Town of Thompson and understand that these regulations regulate activities conducted on my property.

[Signature] 4-3-24
(Signature of property owner) Date

For all persons excluding individuals print name and title of signatory above

2) Applicant's Certification¹

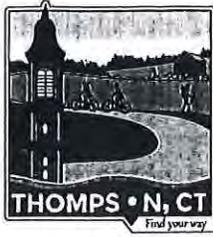
I, the undersigned, certify that the information supplied in the completed application is accurate, to the best of my knowledge and belief and am aware of the penalties for obtaining the permit through deception, inaccurate or misleading information.

[Signature] 4-3-24
(Signature of applicant) Date

For all persons excluding individuals print name and title of signatory above

*** For Commission Use Only ***	
Agency Response:	
IWC Chair Signature:	Date:

¹ If owner is (1) a corporation, then signature is required to be by a principal executive officer of at least the level of vice president , (2) a limited liability company (LLC), then signature is required to be by a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s), (3) a partnership, then signature is required by a general partner, (4) the Town of Thompson, then signature is required by the First Selectman, (5) any other municipality, the signature is required by a ranking elected official, or by other representatives of such applicant authorized by law, and (6) a sole proprietor, then signature is required by the proprietor.



**TOWN OF
THOMPSON
Inland Wetlands Commission**

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

May 23, 2023

Chris Burnett
1895 Birch CT SW
Conyers, GA 30094-3436

RE: 28' X 48' Detached Garage Built without Wetlands Approval
Hold Placed on Building Permit Application
23 Lapiere Rd, Thompson CT

Dear Mr. Burnett,

I was asked to review a building permit application for your 28' X 48' detached garage at 23 Lapiere Road in Thompson, Connecticut. This building permit was applied for on October 4, 2022 by Karl Kuhn of HJK Renovations. On October 5th I advised the Building Office that I needed to see a site plan to determine possible wetlands regulation. Subsequently I provided the Building Office with a locus map containing my area of concern (copy attached). Processing of the building permit was placed on hold at my request pending my receipt of a map showing the location of the garage. I never received one.

On May 1, 2023 I visited 23 Lapiere Road and found that a detached garage had already been built in the absence of a building permit within 100 feet of delineated wetlands. Grass was already beginning to grow. Earthmoving work and construction within 100 feet of wetlands and/or watercourses is a regulated activity and requires a permit from the Wetlands Office pursuant to section 6.1 of the Thompson Inland Wetlands and Watercourse Regulations.

Please be advised that I will not sign off on the building permit application until a wetlands application is submitted for an after-the-fact Wetlands Agent Approval for the garage and associated earthmoving work. The wetlands application will need to contain a scaled site plan showing the existing grades, nearby delineated wetlands and property boundaries.

If you have any questions regarding this matter, please feel free to contact me. By copy of the letter the Building Office is notified of the same.

Sincerely

Marla Butts
Wetlands Agent

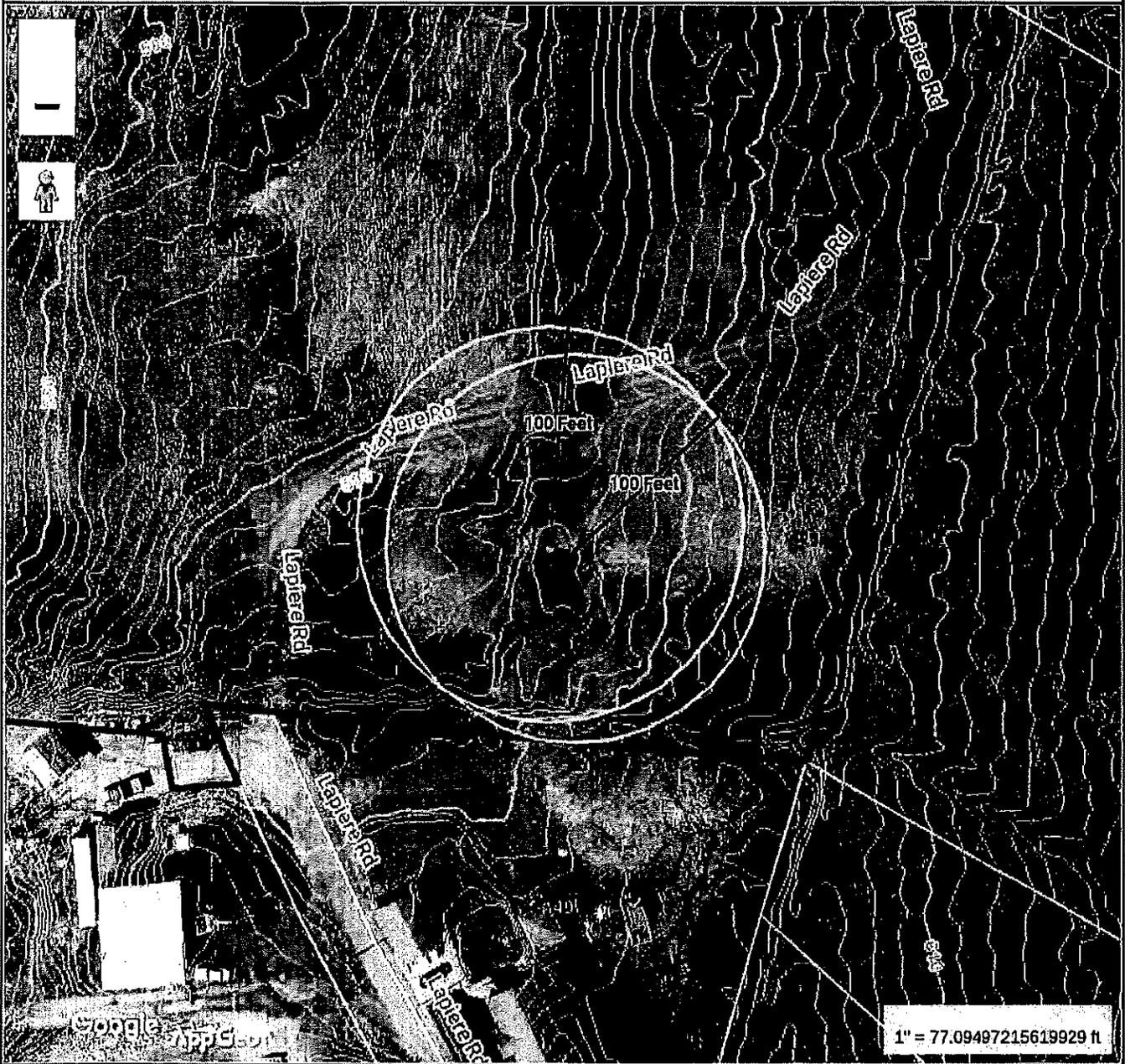
File: Itr 05-23-23 Building Permit Hold For Wetlands Approval

Attachment as Stated

cc: Terry Bellman, Thompson Building Official
Karl Kuhn, HJK Renovations, 441 Allen Hill Rd, Brooklyn, CT 06234
Chris Burnett, 23 Lapiere Road, No. Grosvenordale CT 06255
Cynthia Dunne, Thompson Zoning Enforcement Officer
Paul Hopkins, Thompson Tax Assessor



23 Lapiere Rd 100-foot URA from Wetlands



Property information

Property ID 1895
 Location 23 LAPIERE RD
 Owner YOUSSEF HANY S



**MAP FOR REFERENCE ONLY
 NOT A LEGAL DOCUMENT**

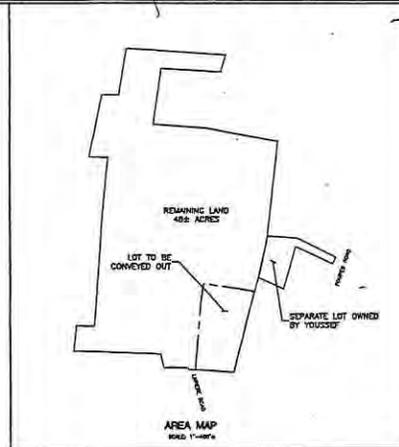
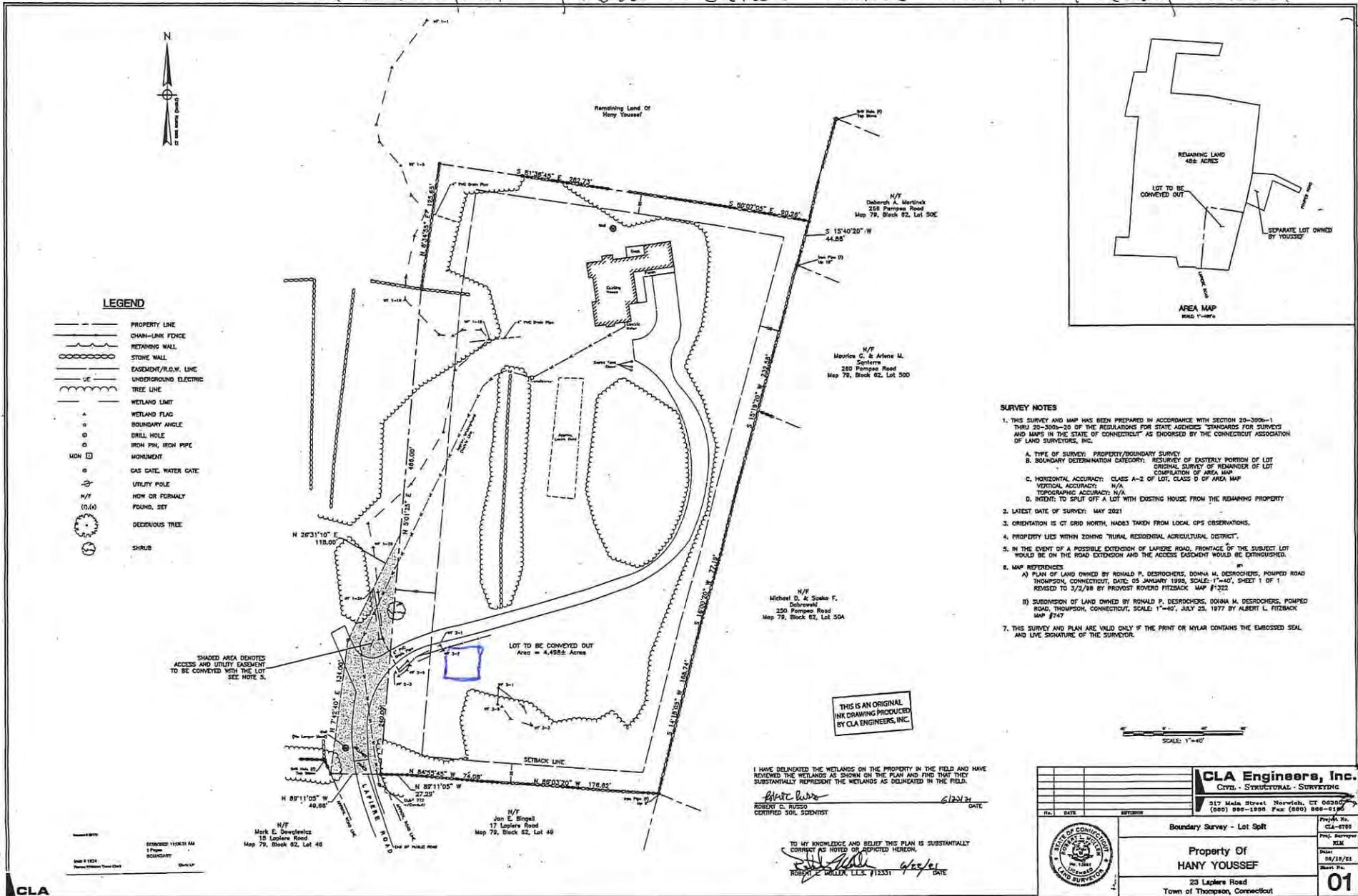
Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated October 19, 2021
 Data updated March 20, 2019

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

6/20/23 Full size copy given to Karl Kuhn along with WAA application form
 Kuhn told needed line signed signature of owner - owner returns to CT every several weeks

5/1/23



LEGEND

- PROPERTY LINE
- - - CHAIN-LINK FENCE
- ===== RETAINING WALL
- STONE WALL
- EASEMENT/R.O.W. LINE
- UNDERGROUND ELECTRIC
- TREE LINE
- WETLAND LIMIT
- WETLAND FLAG
- BOUNDARY ANGLE
- DRILL HOLE
- IRON PIN, IRON PIPE
- MON □ MONUMENT
- GAS GATE, WATER GATE
- UTILITY POLE
- N/F HOW OR FORMALLY FOUND, SET
- (D, (A) DECIDUOUS TREE
- SHRUB

SURVEY NOTES

1. THIS SURVEY AND MAP HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 20-309b-1 THRU 20-309b-20 OF THE REGULATIONS FOR STATE AGENCIES "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ENFORCED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC.
- A. TYPE OF SURVEY: PROPERTY/BOUNDARY SURVEY
- B. BOUNDARY DETERMINATION CATEGORY: RESURVEY OF EXISTING PORTION OF LOT ORIGINAL SURVEY OF REMAINDER OF LOT COMPLETION OF AREA MAP
- C. HORIZONTAL ACCURACY: CLASS A-2 OF LOT, CLASS D OF AREA MAP
- VERTICAL ACCURACY: N/A
- TOPOGRAPHIC ACCURACY: N/A
- D. INTENT: TO SPLIT OFF A LOT WITH EXISTING HOUSE FROM THE REMAINING PROPERTY
2. LATEST DATE OF SURVEY: MAY 2021
3. ORIENTATION IS GT GRID NORTH, HADES TAKEN FROM LOCAL GPS OBSERVATIONS.
4. PROPERTY LIES WITHIN ZONING "RURAL RESIDENTIAL AGRICULTURAL DISTRICT".
5. IN THE EVENT OF A POSSIBLE EXTENSION OF LAVERIE ROAD, FRONTAGE OF THE SUBJECT LOT WOULD BE ON THE ROAD EXTENSION AND THE ACCESS EASEMENT WOULD BE EXTINGUISHED.
6. MAP REFERENCES
 - A) PLAN OF LAND OWNED BY RONALD P. DESROCHERS, DONNA M. DESROCHERS, POMPEY ROAD THOMPSON, CONNECTICUT, DATE: 05 JANUARY 1978, SCALE: 1"=40', SHEET 1 OF 1 REVISIONS TO 3/2/78 BY PROVOST ROVERO FITZBACK MAP #1322
 - B) SUBDIVISION OF LAND OWNED BY RONALD P. DESROCHERS, DONNA M. DESROCHERS, POMPEY ROAD, THOMPSON, CONNECTICUT, SCALE: 1"=40', JULY 25, 1977 BY ALBERT L. FITZBACK MAP #247
7. THIS SURVEY AND PLAN ARE VALID ONLY IF THE PRINT OR MYLAR CONTAINS THE EMBOSSED SEAL AND LIVE SIGNATURE OF THE SURVEYOR.

THIS IS AN ORIGINAL INK DRAWING PRODUCED BY CLA ENGINEERS, INC.

I HAVE DELINEATED THE WETLANDS ON THE PROPERTY IN THE FIELD AND HAVE REVIEWED THE WETLANDS AS SHOWN ON THE PLAN AND FIND THAT THEY SUBSTANTIALLY REPRESENT THE WETLANDS AS DELINEATED IN THE FIELD.

Robert C. Russo
 ROBERT C. RUSSO
 CERTIFIED SOIL SCIENTIST

TO MY KNOWLEDGE AND BELIEF THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED OR SPECIFIED HEREON.

Michael D. & Spake F. Debrauwel
 MICHAEL D. & SPAKE F. DEBRAUWEL
 REGISTERED PROFESSIONAL LAND SURVEYOR

		CLA Engineers, Inc. CIVIL - STRUCTURAL - SURVEYING 917 Main Street, Norwich, CT 06250 (800) 999-1900 Fax (800) 999-8182	
No. _____ DATE _____ BY/ISSUED _____	Boundary Survey - Lot Split	Project No. CLA-8788 Scale	Date: 06/19/23 Sheet No.
Property Of HANY YOUSSEF 23 Lapere Road Town of Thompson, Connecticut		01	

Agenda Item E) b) 4. New Applications

DEC24010, Joe and Lucy Gattoni, 21 Becola Rd, (map 116, Block 24, Lot 21), attached deck to existing house constructed on existing stone patio.

Stamped Received April 3, 2024



Town of Thompson
INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT 06255

For Commission Use Only
Application #: DEC24018

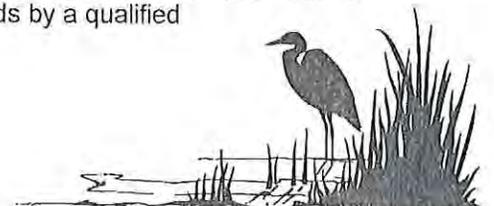
RECEIVED
7-7-24

APPLICATION FORM - USE PERMITTED AS OF RIGHT OR NON-REGULATED USE

Applies to those actions proposed as a use permitted as of right or non-regulated use listed in sections 4.1 and 4.2 of the Thompson Inland Wetland and Watercourse Regulations, except timber harvests (for timber harvests use Timber Harvest Form). Unless identified as "Optional" all information is mandatory.

Part I Request for Use Permitted as of Right or Non-Regulation Use (check one only):

1. Propose use or activity conforms to the following permitted uses as outlined in section 4.1 of the Thompson Inland Wetland and Watercourse Regulations (check as appropriate):
 - a. Grazing, farming, nurseries, gardening and harvesting of crops.
 - b. Farm pond three (3) acres or less essential to the farming operation.
 - c. Construction of a residential home for which a building permit has been issued prior to July 1, 1987, attach copy of valid building permit and site plan.
 - d. Boat anchorage or mooring.
 - e. Use incidental to the maintenance and enjoyment of property presently used for residential purposes that contains a dwelling. Such property is equal to or smaller than the largest minimum residential lot size as permitted in the Town of Thompson.
 - f. Construction and operation by a water company of a dam, reservoir or other facility necessary for the impounding, storage and withdrawal of water in connection with public water supplies.
 - g. Maintenance of drainage pipes on residential property that existed prior to July 1, 1974.
2. Proposed use or activity will not disturb the natural or indigenous character of the wetland or watercourse and conforms to one of the following non-regulated uses outlined in section 4.2 of the Thompson Inland Wetlands and Watercourses Regulations (check as appropriate):
 - a. Conservation of soil, vegetation, water, fish or wildlife.
 - b. Outdoor recreation
 - c. Dry Hydrant installation by authority of the municipal fire department
3. The proposed use or activity is not regulated by the Thompson Inland Wetlands and Watercourses Regulations because (check as appropriate):
 - a. The proposed activity or use is one which is the exclusive jurisdiction of State or Federal agency. Provide documentation (See Section 5 of these regulations)
 - b. The use or activity legally existed as of July 1, 1974, and does not involve new, additional or expanded use or activity. Provide documentation.
 - c. The proposed activity is not a regulated activity as defined by section 2 to the Thompson Inland Wetlands and Watercourses Regulations (delineation of wetlands by a qualified soil scientist may be required)



Part II Contact Information

1) Applicant Contact Information

a) Applicant Name: Jared Swabby

b) Mailing Address: 1043 Route 171 Woodstock Ct. 06281
 (include town state zip)

c) Daytime Phone #: 860-207-6483

d) Evening Phone #: _____

e) Cell Phone # (optional): _____

f) Email Address (optional): WOODVALL6483@gmail.com

2) Applicant's Interest in Property (check one only)

property owner lessee easement holder

3) Owner Contact Information (required if applicant is not property owner)

a) Name: Joe & Lucy Patton

b) Mailing Address: 21 Becola rd. Thompson, Ct.
 (include town state zip)

c) Daytime Phone #: 508-330-3071

d) Evening Phone #: _____

e) Cell Phone # (optional): _____

f) Email Address (optional): _____

Part III Site Information

1) Property Involved (following information obtained from tax assessor and town clerk's records):

Street Address	Assessor's Reference		
	Map	Block	Lot
<u>21 Becola Rd</u>	<u>116</u>	<u>24</u>	<u>21</u>

2) Attach an 8 1/2 inch by 11 inch location map for the property (printable map from Thompson MapGeo with property outlined is acceptable – see <https://thompsonct.mapgeo.io>)

3) Wetlands (as delineated by qualified soil scientist) / Watercourse Area Altered

a) Wetlands: _____ (in square feet)

b) Open Water Body: _____ (in square feet) LITTLE Pond

c) Stream: _____ (in linear feet)

4) Noteworthy Wetlands / Watercourses: Does the property contain a noteworthy wetland or watercourse as identified in the document "Town of Thompson Inland Wetland Inventory" prepared by the Northeastern Connecticut Regional Planning Agency dated 1980? (see http://thompsonct.org/images/stories/Inland_Wetlands/Inlands-Wetlands-Watercourse-Map.pdf - check one) No Yes (If Yes, then upland review area = 200 ft.)

5) Upland Review Area altered: _____ (in square feet)

For 6 & 7 below see http://thompsonct.org/images/stories/Planning_Development/Inland_Wetlands/Drainage-BasinsTopo-Grid-2017.pdf

6) U.S.G.S. Topographic Quadrangle (check all involved)	7) Drainage Basin #(s) wherein the proposed activity will take place (check all involved):
<input type="checkbox"/> #13 Webster MA	French River <input type="checkbox"/> 3300 <input type="checkbox"/> 3301
<input type="checkbox"/> #14 Oxford MA	Quinebaug River <input type="checkbox"/> 3700 <input type="checkbox"/> 3708
<input type="checkbox"/> #28 Putnam	Five Mile River <input type="checkbox"/> 3400 <input type="checkbox"/> 3401 <input type="checkbox"/> 3402
<input type="checkbox"/> #29 Thompson	

Part IV Description of Activity Proposed

1. Detailed project description and purpose: Build new 8x32' deck
over existing patio and attached to gable end
of house

2. Attach a diagram, drawing or plot plan of sufficient scale and detail to portray the proposed activity.

Part V Application Permissions & Certifications

1) Owner's Permission¹

I, the undersigned, am the owner of the above reference property and hereby grant permission to the Thompson Inland Wetlands Commission and its duly authorized agents to enter upon this property at reasonable times both before and after a final decision on this application has been issued by the Thompson Inland Wetlands Commission for purposes of inspection and enforcement of the Inland Wetlands and Watercourse regulation of the town of Thompson. Further, I have had an opportunity to review the Inland Wetlands and Watercourses Regulations of the Town of Thompson and understand that these regulations regulate activities conducted on my property.

X Joseph Grattoni _____ 4/4/24 _____
(Signature of property owner) Date

Joseph Grattoni
For all persons excluding individuals print name and title of signatory above

2) Applicant's Certification¹

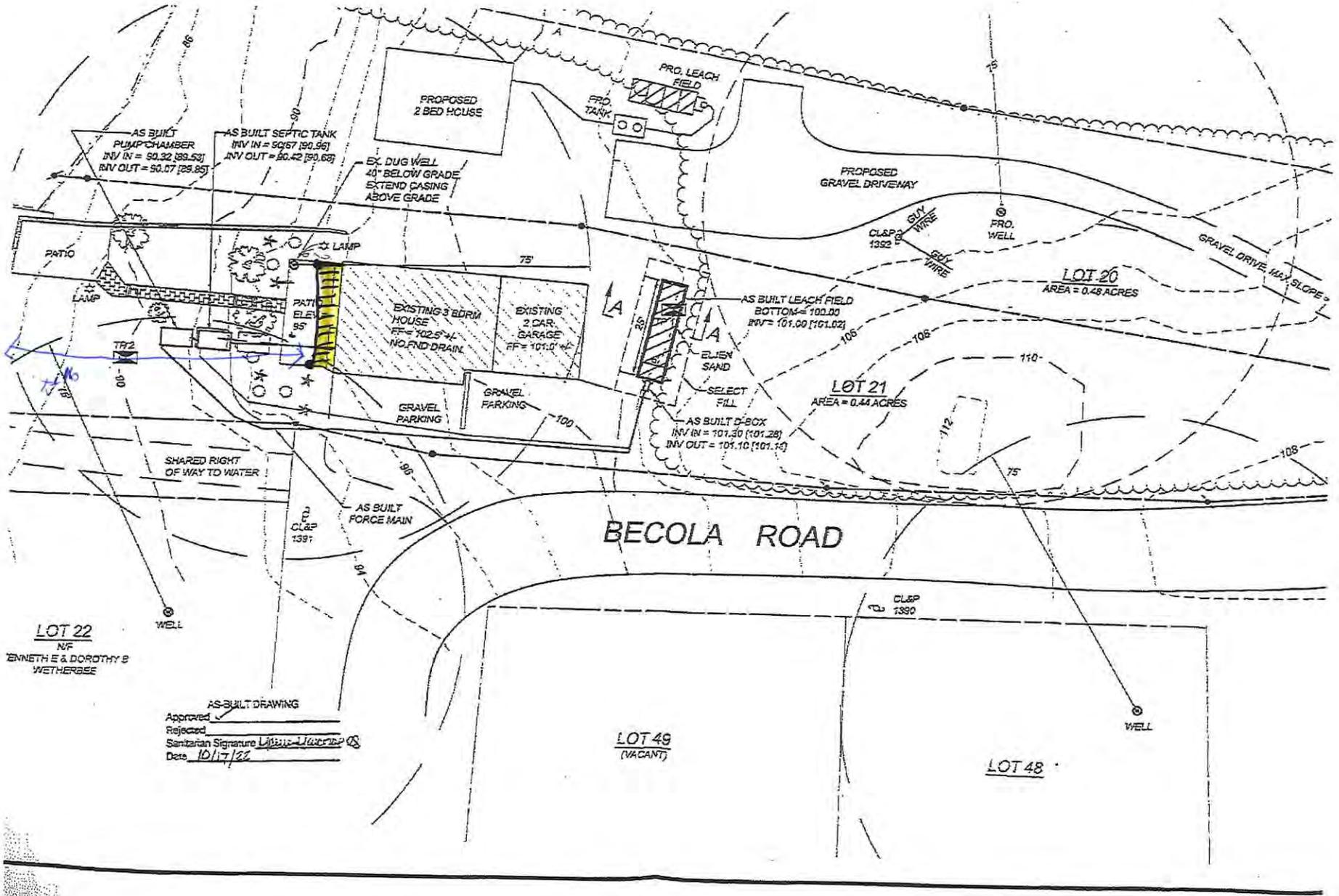
I, the undersigned, certify that the information supplied in the completed application is accurate, to the best of my knowledge and belief and am aware of the penalties for obtaining the permit through deception, inaccurate or misleading information.

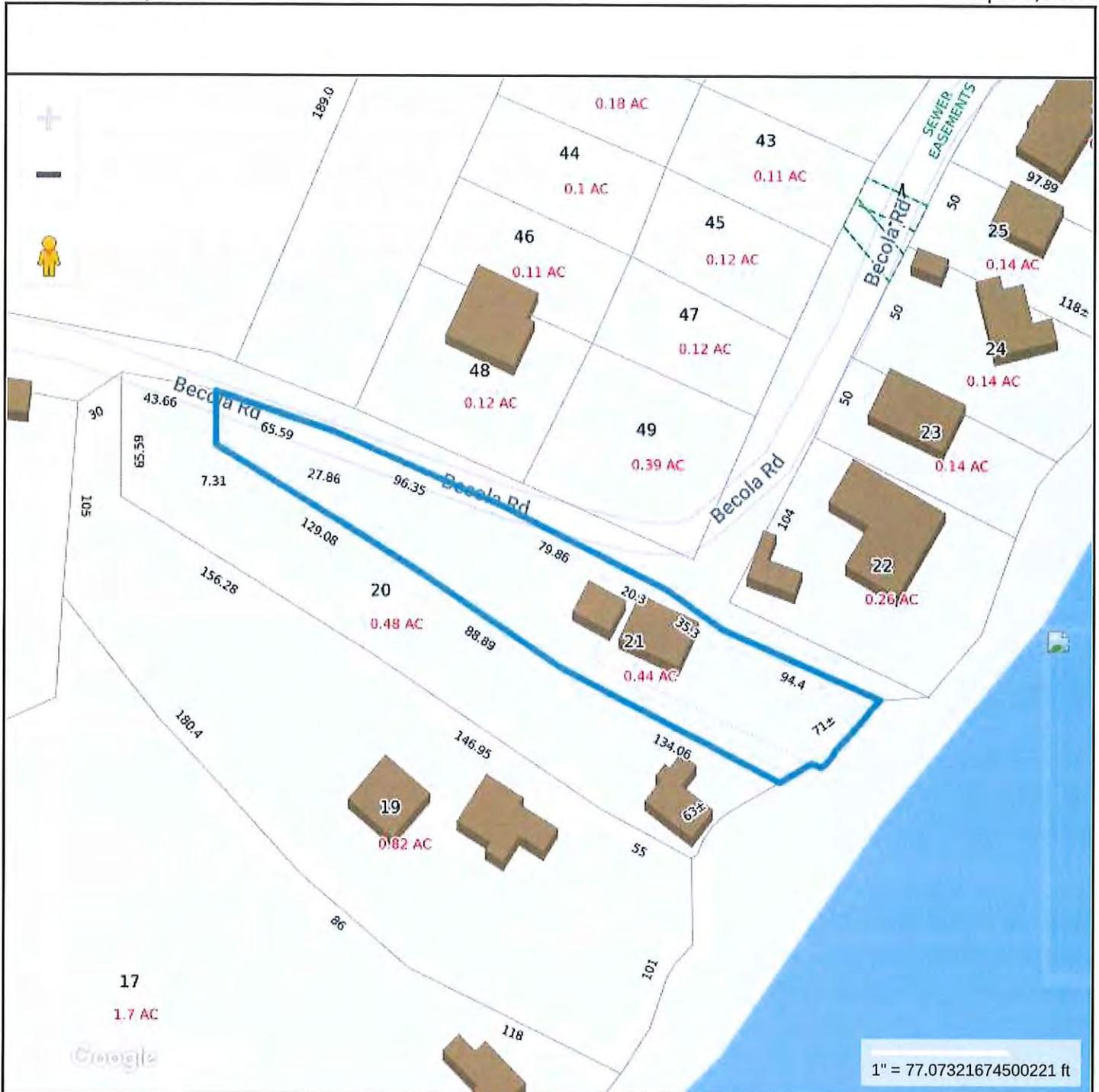
X Jared Swabby _____ 4/4/24 _____
(Signature of applicant) Date

Jared Swabby
For all persons excluding individuals print name and title of signatory above

*** For Commission Use Only ***	
Agency Response:	
IWC Chair Signature:	Date:

¹ If owner is (1) a corporation, then signature is required to be by a principal executive officer of at least the level of vice president, (2) a limited liability company (LLC), then signature is required to be by a manager, if management of the LLC is vested in a manager(s) in accordance with the company's "Articles of Organization", or a member of the LLC if no authority is vested in a manager(s), (3) a partnership, then signature is required by a general partner, (4) the Town of Thompson, then signature is required by the First Selectman, (5) any other municipality, the signature is required by a ranking elected official, or by other representatives of such applicant authorized by law, and (6) a sole proprietor, then signature is required by the proprietor.





Property Information

Property ID 3505
 Location 21 BECOLA RD
 Owner GATTONI JOSEPH M + LUCILLE R

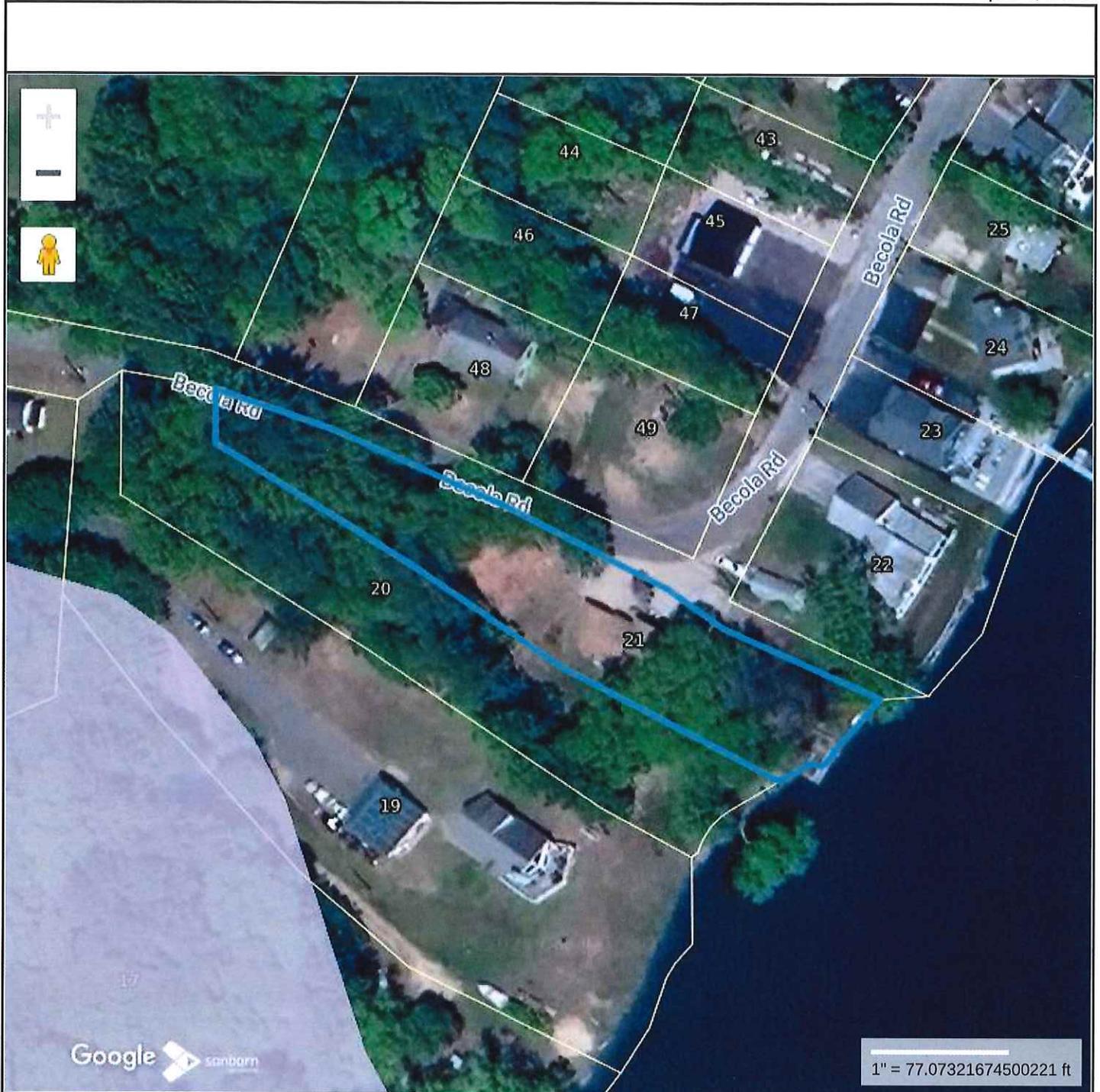


**MAP FOR REFERENCE ONLY
 NOT A LEGAL DOCUMENT**

Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated December 1, 2022
 Data updated Daily

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.



Property Information

Property ID 3505
Location 21 BECOLA RD
Owner GATTONI JOSEPH M + LUCILLE R



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Thompson, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated December 1, 2022
 Data updated Daily

Print map scale is approximate.
 Critical layout or measurement
 activities should not be done using
 this resource.

Agenda Item E) c) Applications Received After Agenda
was Published.

None

Agenda Item F)1. Permit Extensions / Changes

Transfer of WAA24006, Dave Citron, 0 Greene Island (map 143, block 16, lot 53), single-family home and septic within upland review area of Quaddick Reservoir to Sep Sadhegi.



Town of Thompson
INLAND WETLANDS COMMISSION
 815 RIVERSIDE DRIVE
 NORTH GROSVENORDALE, CT 06255

RECEIVED
 3/28/24



REQUEST FOR TRANSFER OF PERMIT/APPROVAL TO NEW LANDOWNER

The following is the legal agreement regarding application approvals which must be signed by the current and prospective owner / permittee. For a limited liability corporation (LLC), signature is required to be by a managing member. For a corporation other than an LLC, signature is required to be by an authorized corporate officer.

PERMIT/APPROVAL # WAA 24006 DATE ISSUED: 2-15-24

LOCATION OF PROPERTY INVOLVED:

1. Street Address: 0 Greene Island, Thompson, CT 06277
2. Assessor's Reference :Map 143 Block 16 Lot 53

TRANSFER PERMIT TO:

NAME: Mr. Sepehr Sadeghi
 MAILING ADDRESS: 151 Laconia Street
Lexington, MA 02420

DAYTIME PHONE #: 781-350-8738 HOME PHONE #: Same

For the current Permittee*:

I, David Citron do hereby give permission to transfer Thompson
 (print name of signatory listed below)

Inland Wetlands Permit / Approval # referenced above to Sepehr Sadeghi
 (print name of prospective permittee)

David Citron
 (Signature of permittee)

Dated: 2-15-24

For the prospective Permittee*:

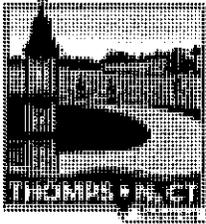
I, the undersigned, am the owner of the above reference property and hereby apply for approval of the transfer in the permit/approval referenced above. This request is made in full knowledge and understanding of the permit/approval and agree to comply with the permit/approval as applied for and issued. Further I grant permission to the Thompson Inland Wetlands Commission and its duly authorized agents to enter upon the property at reasonable times for purposed of inspection and enforcement of the Inland Wetlands and Watercourse regulation of the town of Thompson.

[Signature]
 (Signature of property owner)

Dated: 3/28/24

* If current permittee or prospective permittee is limited liability corporation (LLC), signature is required to be by a managing member. If current permittee or prospective permittee is a corporation other than an LLC, signature is required to be by an authorized corporate officer.

*** For Commission Use Only ***	
Chairman's Signature:	Date:



**TOWN OF
THOMPSON**
Inland Wetlands Commission

815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

WETLAND AGENT APPROVAL WAA24006

APPROVAL GRANTED TO:

David Citron
47 Katherine Avenue
Danielson, CT 06239

DATE OF APPROVAL: February 16, 2024

EXPIRATION DATE: February 16, 2029

LOCATION OF AUTHORIZED ACTIVITY:

0 Greene Island, Assessor's Map 143, Block 16, Lot 53

DESCRIPTION OF AUTHORIZED ACTIVITY: To conduct regulated activities associated with Construction of Single-Family Home within Upland Review Area as shown in Wetlands Agent Approval Application WAA24006 stamped received by the Thompson Wetlands Office February 6th, 2024 and as shown in drawing(s) entitled "Site Development Plan for Sep Sadhegi, Lot 53 Greene Island, Thompson, CT" prepared by J&D Civil Engineers, LLC dated January 4, 2024" dated received February 6, 2024.

This approval is issued pursuant to section 11(b) of the Inland Wetlands and Watercourses Regulations of the Town of Thompson.

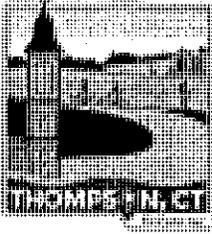
APPROVAL CONDITIONS:

1. A notice of decision will be requested to be published in the Thompson Villager. Note this approval is subject to appeal to the Inland Wetlands Commission for 15 days from the date of publication for a final decision.
2. If the authorized activity also involves an activity or a project which requires zoning or subdivision approval, special permit, variance, or special exception, then no work pursuant to this approval may begin until such other approval is obtained. (See section 11.10.c. of the Inland Wetlands and Watercourses Regulations of the Town of Thompson)
3. This approval will be valid for five (5) years. You are expected to notify the Wetland Agent of your starting date and to complete your activities within 2 years of beginning your site work. If you expect to take longer, you must contact the Wetland Agent for an extension.
4. The Thompson Wetland Agent/Inland Wetlands Commission must be notified in writing one week prior to the beginning of any regulated activities. Please use the enclosed card.
5. Appropriate erosion and sediment controls shall be installed prior to the beginning of any regulated activities. Until all disturbed soils are stabilized appropriate erosion and sediment controls shall be used and maintained. (See document entitled "2002 Connecticut Guidelines for Soil Erosion and Sediment Controls" for guidance.)
6. If there are any changes in the location of any of the proposed activities for which this approval has been granted, then the new proposal must be presented to Thompson Wetland Agent/ Inland Wetlands Commission for approval of such changes prior to commencing activities.

Wetlands Agent: DM

Dan Malo

Dated: 02/16/24



**TOWN OF
THOMPSON
Inland Wetlands Commission**

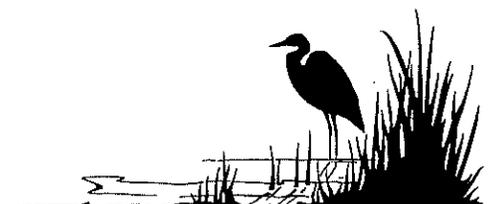
815 Riverside Drive
P.O. Box 899
North Grosvenordale, CT 06255
Phone: 860-923-1852, Ext. 1
Email: wetlands@thompsonct.org
Web: <https://www.thompsonct.org/>

Commissioners discussed and agreed upon, at the suggestion of the Town Planner, to leaving this acting wetlands officer position open until June 30, 2024, the end of the fiscal year. Commissioner Obert commented we've lost the corporate body of knowledge that we had and the point is we're not likely to find somebody that has that kind of experience/knowledge about the town and about the issues facing us, however we need to fill that gap until a qualified candidate is hired. Hearing no further discussion, Commissioner Dustin amended his motion to approve the appointment of Cindy Dunne as the temporary Wetlands Officer until June 30, 2024, the end of the fiscal year. Commissioner Morano seconded the amended motion. The motion was **APPROVED** unanimously.

D) Permit Extensions / Changes

Transfer of WAA240006, Dave Citron, 0 Greene Island (map 143, block 16, lot 53), single-family home and septic within upland review area of Quaddick Reservoir to Sep Sadhegi.

The Commissioners reviewed the corrected version of the plan for WAA24006 and saw that the modifications they required at the February meeting were officially approved by Dan Malo and are shown on the plan. The current owner stated he completed the incorrect form and following the February IWC meeting he met with Dan Malo and completed the correct permit form which Dan Malo signed, however, this transfer request cannot be approved because the prospective buyer doesn't own the property yet. During discussion several questions were raised including the dimensions on the structure. J & D Civil Engineering informed David Citron that they never put square footage on their drawings, the dimension of 422' on the updated drawing refers to the elevation of the structure to the elevation of the septic system above sea level and not the square footage of the house. He further stated the house is to scale on this drawing and is a 26' by 34' structure. The size of the house is correct and the position is correct. The current owner is going to sell it that way which meets with the needs of the buyer, however it cannot be transferred until the buyer becomes the owner. The Commissioners agreed that they were satisfied that the permit has been properly modified and approved by the wetland agent at the time and as long as there are no changes, that it was premature to grant the transfer at this time, however they would have no problem granting this transfer once the prospective buyer owns the property. The prospective buyer commented that in order to obtain an Occupancy Certificate J & D Engineering will provide a certified as built plan to verify no changes have been made.



Agenda Item G) 1. Violations & Pending Enforcement
Actions

Notice of Permit Violation VIOL21036, Permit
IWA20022, Marc Baer, 1227 Thompson Rd
(Assessor's map 116, block 24, lot 10), grades not
as authorized in modified plan approved by the
Commission on February 9, 2021 - status.

Agenda Item G) 2. Violations & Pending Enforcement Actions

Notice of Violation VIOL23013, Wojiech, Sudyka,
1574 Riverside Drive, (Assessor's map 55, block 65, lot
14), grading work exceeded scope of work authorized
by Permit IWA 21028, issued 5/22/23 - status

Agenda Item G) 3. Violations & Pending Enforcement
Actions

VIOL23037, St. Joseph's Church, 12-18 Main
Street, (map 63, block 94, lot 3), fill along Reardon
Road within upland review area and wetlands.
Violation issued 12/15/23.

3/5/2024

RECEIVED
TOWN OF THOMPSON, CT.
2024 MAR 11 P 12:54
Emi Udele
TOWN CLERK

To: The Inlands Wetlands Commission;

I am writing on behalf of St. Joseph's Cemetery regarding the dirt piles on Reardon Road. I have spoken with Reverend David Choquette, pastor of St. Joseph's Church, and he has agreed to a plan that includes a clean up of the area, removal of excess fill material, finish grading of the area, as well as loaming and seeding the area to stabilize it.

I hope that this will satisfy the commission's request to clean up this area.

Please let me know if there is anything else that needs to be done and feel free to contact me at (860) 428-7707 with any questions or concerns.

As soon as we have your approval we can schedule the work to be completed before Memorial Day.

Thank You,
Ron Desrochers
Grave Digger for St. Joseph's Church

My Address:
34 Munyan Road
Putnam, CT 06260

Church Address:
St. Theresa's Parish
PO Box 665
Putnam, CT 06260

Agenda Item H) a. Other Business

Discussion on finalizing draft regulation revisions,
scheduling of follow-up actions and Butts contract
amendment

Definition of “Permittee”

Permit means the whole or any part of any license issued pursuant to section 22a-42a(c)(1) of the Connecticut General Statutes, as amended, which may be required of any person by the provisions of these regulations under the authority of the Commission.

Permittee means the person to whom a permit or wetland agent approval has been issued.

Commented [MB1]: Language added to distinguish a permit from a jurisdictional ruling and wetland agent approval

Commented [MB2]: Removed language to avoid confusion. Note the definition of “permit” was removed from the model regulation and is not in the IWW Act

Commented [MB3]: For legal counsel: To avoid confusion wouldn't it be more appropriate to change the definition to “Licensee” and replace “permittee” with “licensee” in subsection 11.14.d, section 13 and subsection 14.4? Note the Commission did not weigh in on bonding for wetland agent approvals; should they decide bonding is not appropriate for wetland agent approvals then a definition for permittee should be kept and remove “or wetlands agent approval” from the permittee definition and a definition for “licensee” added using the original language for permittee.

Commented [MB4R3]: No comment by Atty Slater. I suggest removing “or wetland agent approval” from draft language. Note the consequence is no bonding for wetlands agent approvals. Is this acceptable to IWC?

SECTION 4 - PERMITTED USES AS OF RIGHT & NON-REGULATED USES

Section 4.3 All activities in wetlands or watercourses involving filling, excavation, dredging, clear cutting, grading and excavation or any other alteration or use of a wetland or watercourse not specifically authorized by this section shall require a permit from the Commission in accordance with section 6 of these regulations, or for regulated activities located outside of wetlands and watercourses shall require a wetland agent approval from the wetland agent in accordance with section 12 of these regulations.

Commented [MB5]: For legal counsel: Although the DEEP Model Regulations use the term "permitted" here, is there a legal problem with replacing it with "authorized"? This is to avoid confusion over the meaning of "permitted" which could be interpreted to mean "licensed" given the definition of "Permit" in these regulations. See comment for subsection 4.1.

Commented [MB6R5]: Per 3/22/24 Atty Slater discussion may keep the word "authorized" but for consistency with section 4.1 and the statutes suggests using the term "permitted" instead of "authorized".

Commented [MB7]: Per 3/22/24 Atty Slater discussion recommend keeping the original language "outside of wetlands and watercourses" instead of "in the upland review area". Concur.

SECTION 10 – CONSIDERATIONS FOR DECISIONS

10.7. In reaching its decision on any application after a public hearing, the Commission shall base its decision on the record of that hearing. Documentary evidence or other material not in the hearing record shall not be considered by the Commission in its decision. However, the Commission is not precluded from seeking advice from its wetland agent on information already in the record of the public hearing. A conclusion that a feasible and prudent alternative does not exist does not create a presumption that a permit should be issued. The applicant has the burden of demonstrating that his application is consistent with these regulations and of sections 22a-36 to 22a-45, inclusive, of the Connecticut General Statutes, as amended.

Commented [MB8]: "own experts" replaced with "wetland agent" to avoid misleading the Commission and the public that the Commission may have discussions with "experts" other than its wetland agent (i.e. its staff) after the public hearing is closed. Discussion with other experts may result in the Commission receiving new information outside of the hearing, which is prohibited by FOIA. Added reference to hired experts by adding subsection 10.1.b.6.

Commented [MB9R8]: 3/5/24 Atty Slater commented "It goes without saying that it can accept advice from staff and legal counsel. The commission could employ experts including the town engineer or outside consultants if it wished and there are funds. This specifically states that the expert can comment only on information in the record. I recommend that continue to state "experts" or that the entire sentence be deleted. I favor leaving it in as is. Maybe a comprise would be "it wetlands agent, town counsel, town engineer or such other consultant engaged by the Commission"

From 3/27/24 discussion with Atty Slater it is up to the Commission what language is used. Due to concerns about new information being considered after the hearing is closed I recommend replacing "own experts" with "wetland agent and legal counsel" Commission need to decide.

SECTION 11 – DECISION PROCESS AND LICENSE

11.12.No license shall be assigned or transferred without the written permission of the Commission. **Partial**
transfer of a license for regulated activities is prohibited.

Commented [MB10]: See prior comments and questions regarding the use of the term "permit" versus "license"

Commented [MB11]: This language was specifically added to address a permit associated with a subdivision or re-subdivision. Individual lot development that is not to be the responsibility of the original permittee should require a new permit.

Commented [MB12R11]: 3/5/24 Atty Slater commented "Consider allowing partial assignment if approved by the commission. It can say no and require a new permit for individual lot owners but there might be an instance where the commission may favor partial assignment to an entire new application."

Per 3/28/24 Atty Slater discussion with tracking partial transfers prohibiting partial transfer of licenses is within the Commission's purview. Keeping prohibition is recommended

SECTION 20 - RECORDS RETENTION AND DISPOSITION

20.1. The Commission and the Thompson Town Clerk shall retain complete administrative records of Commission actions and dispose of such records in accordance with the current retention/disposition schedules established pursuant to subsections 11-8 and 11-8a of the Connecticut General Statutes, as amended.

Commented [MB13]: For legal counsel: Is this language acceptable and adequate to comply with the statutes regarding records retention and disposal or should it be removed altogether? Records retentions and disposal are not found in DEEP's current model regulations. This section has been recommended to either be removed or reduced to a simple statement the records retention / disposal is subject to CGS § 11-8 and § 11-8a and is administered by Office of the Public Records Administrator [OPRA] of the Connecticut State Library. Records retention/disposals are not in the control of the IWC and therefore any information in this section is subject to change and not within the control of the Commission. Also due to the statute extending permit expiration dates the State Library is expected to amend its record retention/disposal schedules to address those changes.

Commented [MB14R13]: Commission had no object to the proposed language

Commented [MB15R13]: 3/5/24 Atty Slater suggested deleting the entire section but after discussion on 3/27/24 Atty Slater has no objection to leaving it in if helps to remind that there are requirements for records retention and disposal. Recommend keeping section as drafted. See my comments for by-laws changes regarding records disposal by staff.

Scheduling of Informational Hearing and Public Hearing

1. Draft regs and legal notice submitted to DEEP at least 5 weeks before Public Hearing.
2. 2 Legal notices for Public Hearing must be published:
 - a. First 15 -10 days before hearing
 - b. Second at no more than 2 days before hearing and at least 2 days after first notice

Meaning legal notices in Thompson Villager (published on Fridays) should be 2 consecutive weeks (see April - May – June Calendar)

April 2024

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May 2024

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June 2024

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Contract Amendment

Contract was amended on 3/28/24 to increase hours for services from 100 to 144 and to provide up to 8 hours of assistance to the Wetlands Agent. No change in the termination date.

Agenda Item H) b. Other Business

Status of Hiring New Wetlands Agent

Agenda Item H) c.

Preliminary Discussion of Development on 0 Quaddick
Town Farm Road, map 160 block 11 lot 154



LOCUS MAP
not to scale

ZONING

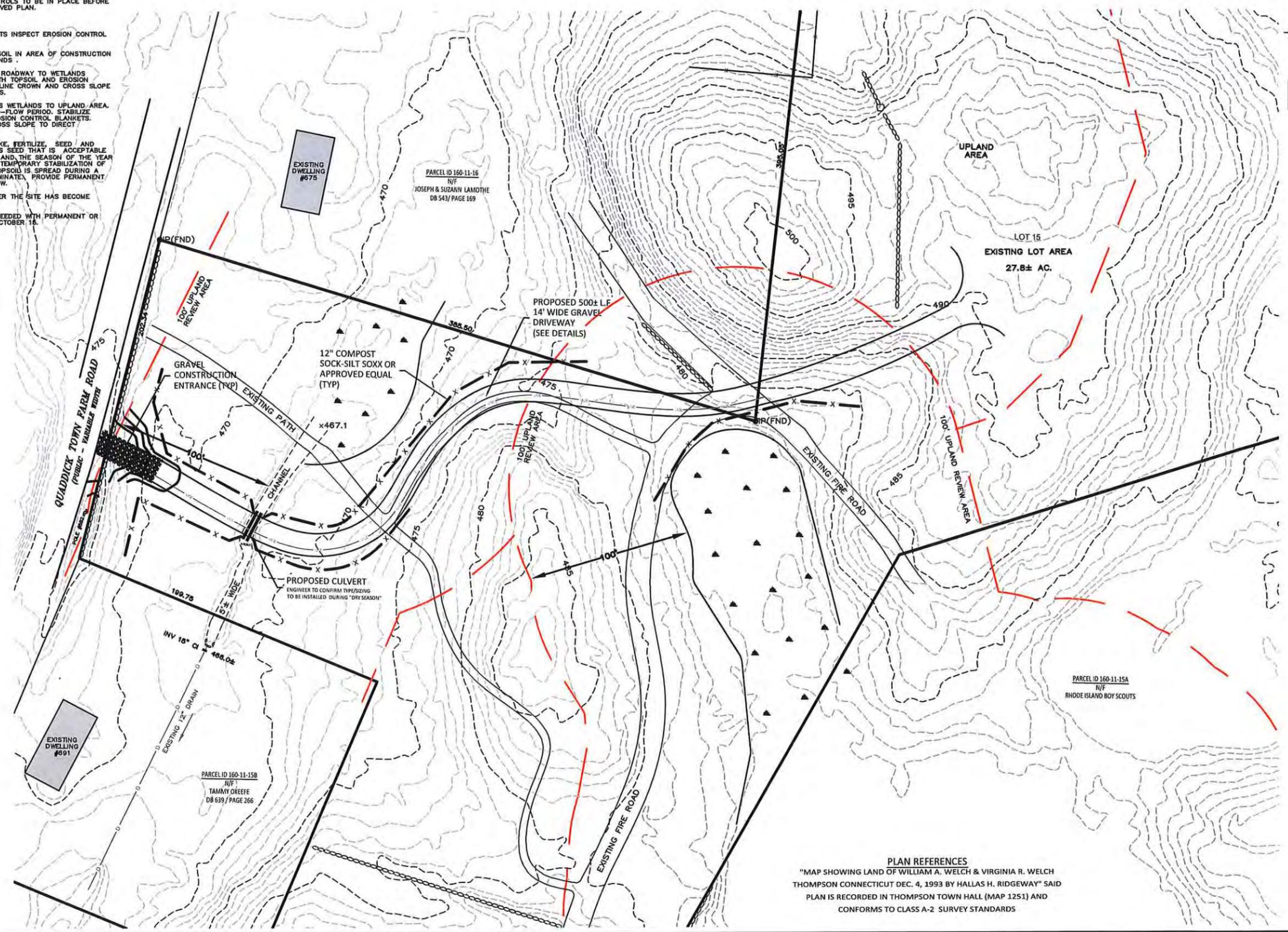
DISTRICT: RURAL RESIDENTIAL AGRICULTURAL DISTRICT

DIMENSIONAL REGULATIONS

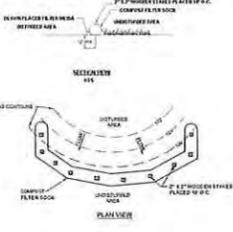
- BRAD
 - MIN. LOT FRONTAGE: 150 FT
 - MIN. LOT AREA: 40,000 SF (RESIDENTIAL)
 - MIN. FRONT YARD: 40 FT
 - MIN. SIDE YARD: 20 FT
 - MIN. REAR YARD: 20 FT
 - MAX LOT COVERAGE: 50%
- *SEE ZONING ORDINANCE FOR COMPLETE LISTING OF REGULATIONS

- CONSTRUCTION NOTES:**
- 1.) ALL LIMITS OF DISTURBANCE/EROSION CONTROLS TO BE IN PLACE BEFORE CONSTRUCTION IN ACCORDANCE WITH THE APPROVED PLAN.
 - 2.) TREES TO BE CLEARED AS REQUIRED.
 - 3.) PERIODICALLY AND AFTER LARGE RAIN EVENTS INSPECT EROSION CONTROL MEASURES AND REPAIR AS NECESSARY.
 - 4.) GRUB AND STRIP TOPSOIL. STOCKPILE TOPSOIL IN AREA OF CONSTRUCTION FROM ROADWAY TO TO THE EDGE OF THE WETLANDS.
 - 5.) CONSTRUCT AND STABILIZE DRIVEWAY FROM ROADWAY TO WETLANDS CROSSING. STABILIZE DISTURBED SIDE SLOPES WITH TOPSOIL AND EROSION CONTROL BLANKETS. MAINTAIN DRIVEWAY CENTERLINE CROWN AND CROSS SLOPE TO DIRECT STORMWATER TO DRIVEWAY SHOULDERS.
 - 6.) CONSTRUCT CULVERT AND DRIVEWAY ACROSS WETLANDS TO UPLAND AREA. COMPLETE WORK IN THE WETLANDS DURING A NO-FLOW PERIOD. STABILIZE DISTURBED SIDE SLOPES WITH TOP SOIL AND EROSION CONTROL BLANKETS. MAINTAIN DRIVEWAY CENTERLINE CROWN AND CROSS SLOPE TO DIRECT STORMWATER TO DRIVEWAY SHOULDERS.
 - 7.) SPREAD STOCKPILED TOPSOIL. MACHINE RAKE, FERTILIZE, SEED AND MULCH ALL OTHER DISTURBED AREAS. USE GRASS SEED THAT IS ACCEPTABLE FOR THE SITE CONDITIONS (I.E. SUN OR SHADE) AND, THE SEASON OF THE YEAR IN WHICH THIS ACTIVITY IS COMPLETED. PROVIDE TEMPORARY STABILIZATION OF THE SITE (I.E. STRAW OR HAY ETC.) IF THE TOPSOIL IS SPREAD DURING A TIME OF YEAR WHEN GRASS SEED WILL NOT GERMINATE. PROVIDE PERMANENT STABILIZATION WHEN WEATHER CONDITIONS ALLOW.
 - 8.) REMOVE EROSION CONTROL MEASURES AFTER THE SITE HAS BECOME FULLY ESTABLISHED.
 - 9.) ANY EXISTING DISTURBED AREAS MUST BE SEEDED WITH PERMANENT OR TEMPORARY GROUND COVER AND MULCHED BY OCTOBER 15.

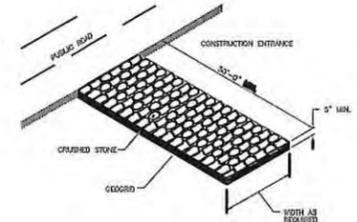
THIS SITE IS NOT LOCATED IN ANY HAZARDOUS FLOOD ZONES AS SHOWN ON FIRM FLOOD INSURANCE RATE MAP #0901500160F - EFFECTIVE DATE 09-07-2023



Compost Sock



- * Sock should extend at least 3' up slope at a 45 degree angle.
- * For example, 12" socks should be pointed upslope at least 12" upslope in elevation difference to ensure that end-around flows are avoided.



GRAVEL DRIVEWAY DETAIL (10% MAX. GRADE)
NOT TO SCALE

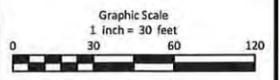
CURRENT OWNER:
LAND PARTNER FUNDING LLC
1846 E ROSEMEADE PKWY #5007
CARROLLTON, TX

PLAN REFERENCES
"MAP SHOWING LAND OF WILLIAM A. WELCH & VIRGINIA R. WELCH THOMPSON CONNECTICUT DEC. 4, 1993 BY HALLAS H. RIDGEWAY" SAID PLAN IS RECORDED IN THOMPSON TOWN HALL (MAP 1251) AND CONFORMS TO CLASS A-2 SURVEY STANDARDS

RECEIVED
4-8-24
CJ

REVISIONS:

NO.	DATE	DESCRIPTION	BY



PREPARED BY:
LEVEL
DESIGN GROUP
Civil Engineers & Land Surveyors

CIVIL ENGINEERING & LAND SURVEYING
249 SOUTH STREET, UNIT 1, PLAINVILLE, MA 02762
Tel. 508 - 695-2221
website: www.levelkg.com

PROJECT:
PARCEL ID: 160-11-15
0 QUADDICK TOWN FARM ROAD
THOMPSON, CONNECTICUT

TITLE:
GRAVEL DRIVEWAY AND CULVERT
QUADDICK TOWN FARM ROAD
THOMPSON, CONNECTICUT

APPLICANT:
JASON E. SMITH
2338 DIAMOND HILL ROAD
WOONSOCKET, RI 02895

DATE:
APRIL, 2024

SHEET NO.:
1 OF 1







Agenda Item H) d. Other Business

Review of By-Laws for discussion of possible changes

**TOWN OF THOMPSON
INLAND WETLANDS COMMISSION
815 RIVERSIDE DRIVE
NORTH GROSVENORDALE, CT. 06255**

BYLAWS OF THE THOMPSON INLAND WETLANDS COMMISSION

Revised April 4, 2023

ARTICLE I PURPOSE AND AUTHORIZATION

The objectives and purposes of the Town of Thompson Inland Wetlands Commission are those set forth in the Connecticut General Statutes section 22a-36 through 22a-45, as amended, and those powers and duties delegated to the Town of Thompson Inland Wetlands Commission by the aforementioned statutes and by ordinances enacted by the Town of Thompson in accordance with its regulations established there under (hereafter referred to as “the IWC Regulations”).

ARTICLE II NAME

The Commission shall be known as the Thompson Inland Wetlands Commission.

ARTICLE III OFFICE OF AGENCY

The office of the Thompson Inland Wetlands Commission shall be the Municipal Building at 815 Riverside Drive, North Grosvenordale, CT, where all Commission records will be kept.

ARTICLE IV MEMBERSHIP

1. The membership, terms of members and the filling of vacancies shall be as specified in the ordinance adopted on May 20, 1974, as amended May 6, 2019, establishing the Commission and the aforementioned general statutes. The number of members shall be five (5) and two (2) alternates, with terms of office of five (5) years for staggered terms of five (5) years beginning on March 15th wherein no more than two (2) terms expire in the same calendar year.
2. Resignations from the Commission shall be in writing and transmitted to the Chair, who will then forward it to the Board of Selectmen and the Town Clerk.
3. The Chair may recommend to the Board of Selectmen the removal of any member who misses more than 50% of the Commission's regular meetings in a calendar year.

ARTICLE V OFFICERS AND THEIR DUTIES

1. The officers of the Commission shall consist of a Chair, Vice-Chair, and a Treasurer.

2. The Chair shall preside at all meetings and hearings of the Commission and shall have the duties normally conferred by parliamentary usage on such officers. The Chair shall have the authority to seat alternates, appoint committees, call special meetings, establish the agenda, and generally perform other duties as may be prescribed in these bylaws.
3. The Chair shall have the privilege of discussing all matters before the Commission and of voting thereon.
4. In the absence of the Chair, the Vice-Chair shall preside and have all the powers and duties of the Chair as stated in these bylaws. In the event that the Vice-Chair is acting Chair at the start of the meeting, he or she shall remain as Chair throughout the entire meeting.
5. The Treasurer shall be responsible for reporting on account balances in the Commission's budget at its regular meetings and shall on the request of the Commission conduct an investigation of expenditures from the inland wetlands budget and report to the Commission with the results of the requested investigation. The Treasurer may from time to time conduct an investigation of expenditures from the inland wetlands budget and report to the Commission any concerns regarding such expenditures.

ARTICLE VI STAFF AND THEIR DUTIES

1. The Commission may by a majority vote appoint a duly authorized agent to carry out specific functions and duties as prescribed by the Commission. These duties may include:
 - a) making determinations of regulated activities except for those identified in section 4 of the IWC Regulations and issuing wetlands agent approvals provided the duly authorized agent has provided proof of completing the comprehensive training program developed pursuant to § 22a-39(l) of the Connecticut General Statutes,
 - b) issuing notices of violation and enforcement orders,
 - c) making permit compliance inspections,
 - d) investigating complaints, and
 - e) authorize the expenditure of funds up to \$100 without the prior approval of the Commission.
2. The duly authorized agent shall make a report to the Commission at its regular meeting. Such report shall consist of a list and description of all determination, approvals and activities performed.
3. Any determination or approval made by the duly authorized agent is subject to appeal and/or approval by the Commission.
4. The Commission shall include in its annual fiscal budget proposal funding for a Recording Secretary who may be hired by the chief elected official. The Recording Secretary shall in coordination with the Chair or the duly authorized agent produce and file agendas, minutes, draft and arrange for the publication of legal notices, draft permits for approved applications, keep records of the Commission all in accordance with the Freedom of Information Act (Chapter 14 of the Connecticut General Statutes), the Inland Wetlands and Watercourses Act

(§ 22a-36 through 22a-45 of the Connecticut General Statutes) and other applicable statutes and perform other such duties as may be identified in a job description for the Recording Secretary.

ARTICLE VII ELECTION OF OFFICERS

1. An Annual organizational meeting shall be held on the second Tuesday in April at which time officers will be elected and bylaws reviewed and be made a part of the minutes of the annual meeting. A majority of the members must be present before election of officers can take place.
2. Nominations shall be made from the floor at the annual organizational meeting and elections of the officers specified in Section 1 of Article V shall follow immediately thereafter.
3. A candidate receiving a majority vote of those present shall be declared elected and shall serve for one year or until his successor shall take office.
4. Vacancies in offices shall be filled by election at a meeting warned for the purpose.

ARTICLE VIII MEETINGS

1. In the event that both Chair and Vice-Chair are absent at the start of a meeting, the Treasurer shall preside and have all the powers and duties of the Chair as stated in these bylaws and he or she shall remain as Chair throughout the meeting.
2. Alternates shall be seated by the Chair as regular members in alphabetical order by last name on a rotating basis. Unseated alternates may take part in Commission discussions but shall not vote except for election of officers.
3. An annual schedule of regular meetings shall be adopted at the November meeting for the following calendar year to be forwarded to the Town Clerk for filing under the Freedom of Information Act (see § 1-225(b) of the Connecticut General Statutes). Regular meetings will be scheduled for the second Tuesday of every month at 7:00 P.M. to be held either in a municipal building, virtually via ZOOM or in a hybrid format via ZOOM, except when there is a conflict with holidays or other events. Conflicts may be resolved by scheduling a regular meeting to an alternative date or alternatively by cancelling the regularly scheduled meeting and holding a special meeting in accordance with the requirements of the Freedom of Information Act (see § 1-225 of the Connecticut General Statutes).
4. Three (3) members constitute a quorum and no action on an agenda item may be taken in the absence of a quorum. If a member recuses himself/herself from any agenda item that results in a lack of a quorum, then no business on that item may be transacted.
5. All Commission meetings shall be open to the public unless closed by a two-thirds vote of the members present for an executive session.

6. Executive sessions closed to the public shall be limited to types of discussions specified in the state Freedom of Information Act, including but not limited to the following:
 - a) Specific employees (unless the employee agrees to an open session),
 - b) Strategy relating to negotiations regarding pending claims to litigation,
 - c) Security matters, and
 - d) Real estate acquisition
7. The Chair shall govern the proceedings at the meetings of the Commission using as a guide Robert's Rules of Order, 11th edition in all cases to which they are applicable and in which they are not inconsistent with these bylaws and any special rules of order the Commission may adopt.

ARTICLE IX CONFLICT OF INTEREST AND DISQUALIFICATION

No member of the Commission shall participate as a Commission member in a hearing or decision of the Commission upon any matter in which he/she (or any member of his/her immediate family) is directly or indirectly involved financially and/or is an abutter of the property in question. If a member declares a conflict of interest, he/she must state that they have this interest and abstain from voting.

ARTICLE X ORDER OF BUSINESS

1. Unless otherwise determined by the Chair, the order of business at regular meetings shall be:
 - A. Call to Order & Role Call
 - B. Appointment of Alternates
 - C. Action on Minutes of Previous Meetings
 - D. Citizen's Comments Pertaining to Agenda Items
 - E. Applications
 - a. Old Applications
 - b. New Applications
 - c. Applications Received After Agenda was Published
 - F. Permit Extensions / Changes
 - G. Active Violations and Pending Enforcement Actions
 - H. Other Business
 - I. Citizen's Comments
 - J. Reports
 - a. Budget and Expenditures
 - b. Wetlands Agent Report
 - K. Correspondence
 - L. Signing of Mylars
 - M. Comments by Commission
 - N. Adjournment
2. A motion from the floor must be made and passed by a majority vote of the Commission members present in order to dispense with any item on the agenda or change the order of business.

ARTICLE XI PUBLIC HEARINGS

1. A public hearing shall only be held by the Commission on any application in accordance with section 9 of the IWC Regulations and § 8-7d of the Connecticut General Statutes. All applications, maps, and documents relating to the hearing shall be open for public inspection. Any person may appear and be heard at any public hearing.
2. Where possible, public hearings shall be completed in a single session. However, the hearing may be continued (to a date and place certain) where necessary for the full development of the evidence, for the full participation of the parties, or for such other substantial purposes, provided that the public hearing shall be completed within thirty-five (35) days from the date it commenced, unless the applicant consents to an extension. Verbal notice at the public hearing as to the date and place where the continuation will take place shall be considered sufficient notice to interested parties.

ARTICLE XII CONDUCTING THE PUBLIC HEARING

1. If a recording by a sound-recording device is made at the direction of the Commission, then such recording shall be maintained as a public document in accordance with the Freedom of Information Act and § 7-109 of the Connecticut General Statutes. An order of presentation and documents offered shall be submitted into the minutes of the Commission.
2. An officer of the Commission shall preside as Chair at the public hearing in accordance with Article V and Article VIII of these bylaws.
3. At the opening of the public hearing the Chair shall state a summary of the question or issue that is the subject of the public hearing and shall describe the method of conduct of the hearing including the order presentations, the reading of the legal advertisement and the involvement of the public at the hearing.
4. Comments shall be limited to the subject advertised for hearing.
5. Each party and members of the public shall make their presentation as provided for in the Chair's opening statement in succession without allowing an interruption of comments pro or con.
6. The Chair shall make clear to the hearing participants that all questions and comments must be directed through the Chair only after being properly recognized.
7. All persons recognized shall approach the hearing table in order to facilitate proper recording of comments. Before commenting on the matter before the hearing, each person shall give his/her name and address.

8. The Chair shall assure an orderly hearing and shall take necessary steps to maintain the order and decorum of the hearing at all times. The Chair shall reserve the right to terminate the hearing in the event the discussion becomes unruly and unmanageable.
9. The polling of persons present at the hearing shall not be allowed on any general question presented to the Commission or applicant at the public hearing. The hearing shall be conducted only for the purpose of taking testimony to be considered in deliberations during the regular meeting of the Commission.

ARTICLE XIII THE HEARING RECORD

1. The hearing record shall consist of the following:
 - a) any recording of the hearing made at the direction of the Commission,
 - b) minutes of the hearing, and
 - c) all physical evidence and material received (i.e.: legal documents, reports, plans, etc).
2. Reports, documents, and plans received at previous meetings may be entered into the record of the public hearing.
3. Decisions shall be based solely on the contents of the hearing record. Documentary evidence not entered into the record of the hearing shall not be considered when rendering a final decision.

ARTICLE XIV COMMITTEES

Committees may be appointed by the Chair for purposes and terms that the Commission approves.

ARTICLE XV EMPLOYEES

Within the limits of the funds available for its use, the Commission may seek the employment of such staff personnel and/or consultants as it sees fit to aid the Commission in its work. Appointments shall be made by the Board of Selectmen.

ARTICLE XVI AMENDMENTS

These bylaws may be amended by a majority (3) vote of the entire voting membership of the Commission only after the proposed change has been read and discussed at a previous regular meeting except that the bylaws may be changed at any meeting by the unanimous vote of the entire voting membership (5) of the Commission.

Agenda Item H) e. Other Business

Election of officers

Agenda Item I
Citizens Comments on Agenda Items

Agenda Item J Reports

a) Budget & Expenditures

b) Wetlands Agent Report

c) Correspondence - DEEP
Letter of March 21, 2024 Wakefield
Pond Dam Request for Engineering
and Maintenance Work



Boy Scouts of America
Narragansett Council #546
223 Scituate Ave
Cranston, RI 02921

Attn: Joram Northup, Director of Camping
joram.northup@scouting.org

Re: Request for Engineering and Maintenance Work
Wakefield Pond Dam, ID#: 14105
Hazard Class: BB [Moderate Hazard Potential Dam]
Registration#: N/A
Municipality: Thompson

Dear Mr. Northup:

Thank you for having the Wakefield Pond Dam inspected. An inspection report was submitted to the Department of Energy and Environmental Protection (DEEP) Dam Safety Program on January 5, 2024, which was based on October 20, 2023 inspection by Pare Corporation.

Your consulting engineer assessed the dam to be in Poor condition overall and we concur with the condition assessment.

COMPLETING RECOMMENDED WORK:

The DEEP Dam Safety Program requests that you, as the dam owner, complete all the studies and analyses, recurrent maintenance, monitoring and inspection activities, remedial measures and upgrades, repair and improvement work recommended by your consulting engineer in the above-referenced inspection report.

Some activities identified in the inspection report may require a Dam Safety permit. Information on Dam Safety permits is available on the DEEP Dam Permitting webpage: <https://portal.ct.gov/DEEP/Water/Dams/Dam-Permitting>, which includes examples of activities that require a Dam Safety permit. We recommend working with your consulting engineer to identify required permits for work identified in the inspection report.

The DEEP Dam Safety Program must receive your proposed schedule to complete the engineering studies and/or repairs recommended in the inspection report, as well as any additional documents requested below, within 30 days of receipt of this letter (unless otherwise stated). We prefer that you email the proposed schedule to DEEP.DamSafety@ct.gov. If you do not have access to a computer, you may mail us the proposed schedule and other requested documents to the DEEP Dam Safety Program, 79 Elm Street, Hartford, CT 06106.

14105 Wakefield Pond Dam- M&E letter

Mirza, Akhila <Akhila.Mirza@ct.gov>

Thu 3/21/2024 2:41 PM

To:joram.northup@scouting.org <joram.northup@scouting.org>

Cc:Laskin, Anna <Anna.Laskin@ct.gov>;Lesniewski, Daniel K <Daniel.Lesniewski@ct.gov>;First Selectman <firstselectman@thompsonct.org>;Wetlands <wetlands@thompsonct.org>;dcaouette@parecorp.com <dcaouette@parecorp.com>;Pinto, Stacey (DEM) <stacey.pinto@dem.ri.gov>;Lee, Charles <Charles.Lee@ct.gov>

📎 1 attachments (678 KB)

14105 M&E letter 2024-03-21.pdf;

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Mr. Northup:

Please see the attached Engineering and Maintenance request letter for your dam.
If you have any questions, please contact me.

Thank you

Akhila Mirza
Civil Engineer II

Dam Safety Program

Water Planning & Management Division

Bureau of Water Protection & Land Reuse

Connecticut Department of Energy and Environmental Protection

79 Elm Street, Hartford, CT 06106-5127

p: 860.424.3695 | Akhila.Mirza@ct.gov



Connecticut
**Department of Energy &
Environmental Protection**

*Conserving, improving, and protecting our natural resources and environment;
Ensuring a clean, affordable, reliable, and sustainable energy supply.*

| portal.ct.gov/DEEP

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Agenda Item L, Signing of Mylars - None

Agenda Item M, Comments by Commissioners

Agenda Item N, Adjournment