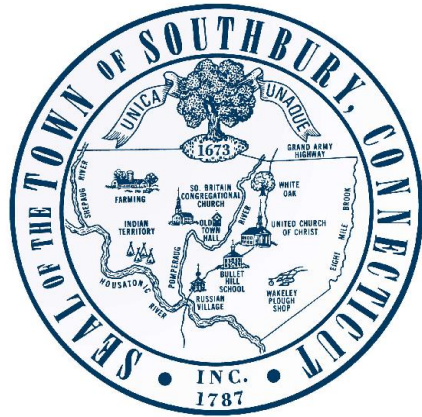


# **SPECIFICATIONS AND BID DOCUMENTS**



## **CULVERT REPLACEMENT ENGINEERING SERVICES**

**RFP 2025-009**

**TOWN OF SOUTHBURY**

**DEPARTMENT OF PUBLIC WORKS**

**501 MAIN STREET SOUTH**

**SOUTHBURY, CT 06488**

**AUGUST 25, 2025**

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**LEGAL NOTICE  
INVITATION TO BID  
CULVERT REPLACEMENT ENGINEERING SERVICES  
RFP 2025-009**

The Town of Southbury, Connecticut is seeking sealed bids for engineering services required for the replacement of Bucks Hill Road and Munn Road culverts. It is the intent of the Town to enter into a contractual agreement with one engineering firm to provide services. Engineering firms must have been previously prequalified by RFQ 2023-005. Only proposals from firms on the town's on-call engineering list will be considered.

Bids will be received by the First Selectman's Office, Town Hall, 501 Main Street South, Southbury, Connecticut 06488 until 10:00 AM local time, on September 22, 2025 at which time the bids will be publicly opened and read in Room 208 of Town Hall.

Specifications and bidding documents may be obtained at the Office of the First Selectman at the above address or electronically on the town's website at [www.southbury-ct.org/bids](http://www.southbury-ct.org/bids).

All Proposals must be on the form furnished by the Town of Southbury and must be requested for the above-named project.

No Bidder may withdraw their bid within one hundred twenty (120) days after the actual date of the opening thereof.

Requests for Information (RFIs) concerning the project should be emailed to Matthew Tarnowski, Public Works Project Administrator, at [MTarnowski@southbury-ct.gov](mailto:MTarnowski@southbury-ct.gov). RFIs should be received by September 8, 2025. RFIs may not be directly responded to. If necessary, an addendum containing RFI responses will be posted to the Town of Southbury's website at the link above by September 11, 2025.

The right is reserved to reject any or all bids in whole or in part, to award any item, group of items, or total bid and to waive any informality or technical defects, if it is deemed to be in the best interest of the Town of Southbury. The Town of Southbury is an affirmative action, equal opportunity employer.

Jeffrey Manville  
First Selectman, Town of Southbury  
August 25, 2025

## INFORMATION FOR BIDDERS

### 1. PROPOSAL

Proposals are being sought for engineering services required for the replacement of Bucks Hill Road and Munn Road culverts. All work shall be furnished in full accordance with the specifications.

### 2. RECEIPT AND OPENING OF BIDS

Separate sealed bids shall be received in the **Office of the First Selectman**, 501 Main Street South, Southbury, CT 06488, until the time and date stated in the INVITATION TO BID, and will thereafter be opened and read aloud in **Room 208 of Town Hall**. Proposals may be withdrawn 120 days after opening if no award has been made, except upon the mutual consent of the Town and the bidder. All bids shall be submitted in sealed, opaque envelopes clearly labeled with the name of the bidder, his address, and the words **“Bid Documents, RFP 2025-009 – Culvert Replacement Engineering Services”** so as to guard against opening prior to the time set therefore. **One printed copy and one digital copy (via flash drive)** of all bids shall be submitted.

Bids may be forwarded by mail. If mailed, the sealed opaque envelope containing the proposal, marked as described above, shall be enclosed in another envelope properly addressed for mailing. The Town may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities in or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening thereof.

### 3. PREPARATION OF PROPOSAL

Each bid must be submitted on the prescribed form and all blank spaces for bid prices must be filled, handwritten in ink or type written, in both words and figures. Bid prices shall include **all labor, materials and equipment necessary to complete the work** in accordance with the bid documents.

### 4. WITHDRAWAL OF BIDS

Bids may be withdrawn personally or on written or telegraphic request dispatched by the bidder in time for delivery in the normal course of business prior to the time fixed for opening, provided that written confirmation of any telegraphic withdrawal over the signature of the bidder is placed in the mail and postmarked prior to the time set for bid opening. Negligence on the part of the bidder in preparing his bid confers no right of withdrawal or modification of his bid after such bid has been opened.

### 5. FAMILIARITY WITH LAWS, SITE CONDITIONS AND DOCUMENTS

Each bidder is required to be familiar with and to comply with the terms and conditions of the specifications and all other bid documents and with all federal, state and local laws, ordinances or



regulations which in any manner relate to the furnishing of the services in accordance with the bid. Each bidder shall thoroughly familiarize himself with all conditions of the bid documents and specifications before preparing his proposal. The submission of a proposal shall be construed as an assurance that such examination has been made and the failure of the bidder to familiarize himself with conditions relating to the specifications shall not in any way relieve any bidder from any obligation in respect to his bid.

Each Bidder shall visit the site of the proposed work and fully acquaint itself with the existing conditions there relating to construction and labor and should fully inform itself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The bidders shall also examine all records on file with the Town of Southbury, "Call Before You Dig" and State Authorities regarding the Project, and the areas within the Project limits, so as to be apprised of all subsurface conditions and other relevant information. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to the failure to receive or examine any form or legal instrument or to visit the site and acquaint itself with the conditions there existing and the Town of Southbury will reject any claim based on the facts regarding which it should have been on notice.

#### 6. TAX EXEMPTION

The Town of Southbury is exempt from paying tax and, for that reason; the bid price shall not include any tax on the items specified.

#### 7. QUALIFICATIONS OF BIDDER

Bidders must be regular full time Contractors in the type of service specified. The Town may make such investigations as it deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid should the evidence submitted by, or investigation of, such bidder fail to satisfy the Town that such bidder is properly qualified to carry out the obligations of the bid and to complete the project contemplated therein. Conditional bids will not be accepted.

Bidders must have provided engineering services (including design and construction phase services) on at least three (3) projects funded under the CT DOT State Local Bridge Program in the last five (5) years.

#### 8. ERRORS, INTERPRETATIONS, AND ADDENDA

Should a bidder find any omissions, discrepancies or errors in the specifications or other bid documents or should he be in doubt as to the meaning of the specifications or other bid documents, he should immediately notify the Town who may correct, amend or clarify such documents by a written interpretation or addendum. No oral interpretations shall be made to any bidder and no oral statement of the Town shall be effective to modify any of the provisions of the bid documents.

#### 9. METHOD OF AWARD - LOWEST QUALIFIED BIDDER

The Town reserves the right to reject any or all bids and may waive any informalities. The bid will be awarded to the responsible bidder submitting the lowest bid complying with all conditions set forth in these bid documents. The delivery or completion date and skill and experience of the bidder shall be factors considered in the awarding of the bid and may result in an award to a vendor other than the bidder quoting the lowest price. In the event that there is a discrepancy between the price written in words and in figures, the price written in words shall govern.

#### 10. SUBCONTRACTORS

The bidder is specifically advised that any person, firm or other party to whom it is proposed to award a subcontract under this bid must be acceptable to the Town and that approval of the proposed subcontract award cannot be given by the Town unless and until the successful bidder submits all information and evidence requested by the Town regarding the proposed subcontractor. Although the bidder is not required to attach such information and evidence to his bid, the bidder is hereby advised of this requirement so that appropriate action can be taken to prevent subsequent delay in subcontract awards.

#### 11. RIGHT OF THE TOWN TO TERMINATE PROJECT

In the event that any of the provisions of this bid are violated by the Contractor, or by any of his subcontractors, the Town may serve written notice upon the vendor of its intention to terminate the work, such notices to contain the reasons for such intention to terminate the work, and unless within five (5) days after the serving of such notice upon the Contractor, such violation or delay shall cease and satisfactory arrangement of correction be made, the project shall, upon expiration of said five (5) days, cease and terminate. In the event of any such termination, the Town shall immediately serve notice thereof upon the Contractor. In the event of such termination, the Town may take over the work or any portion thereof, and prosecute the same, by contract or any other method, for the account and at the expense of the Contractor, and the Contractor shall be liable to the Town for any excess cost occasioned by the Town as a result of such termination.

#### 12. PAYMENTS

Invoices shall be furnished to the Finance Director or his designee monthly for verification and approval of the amount due the Contractor. Final payment will not be made until final acceptance by the Town of Southbury of all work. The Contractor agrees that he will indemnify and save the Town harmless for all claims growing out of the lawful demands of subcontractors, laborers, suppliers and assignee.

#### 13. GUARANTEE

All equipment and materials including all parts and assemblies, if applicable, shall be guaranteed against defects in material and workmanship for a period of at least one (1) year after acceptance. Guarantee shall commence at the time of official acceptance by the Director of Public Works or his designee. Where it is required for the Contractor to repair, replace, resurface, replant or to modify, alter, add or remove hardware, parts, components, or related accessories for the purpose of ensuring proper appearance, performance or operation, such work shall be done as required by

the Contractor until such time as acceptable performance has been established. Problems which occur shall be corrected in an appropriate fashion under guarantee. The Contractor shall be responsible to attend to and remedy such items within a reasonable amount of time. Appropriate logs and schedules shall be maintained to reflect these items and their redress.

#### 14. PRELIMINARY SCHEDULE

|                                 |                    |
|---------------------------------|--------------------|
| RFP Release                     | August 25, 2025    |
| RFI Deadline                    | September 8, 2025  |
| Addendum Release (if necessary) | September 11, 2025 |
| RFP Submission Date             | September 22, 2025 |

#### 15. COMPLIANCE WITH LAWS

The successful bidder shall comply with all applicable laws, regulations, ordinances, OSHA, codes and orders of the United States, the State of Connecticut, and the Town related to its bid and the performance of the work described in the contract.

#### 16. SCHEDULING OF WORK

If notified of the acceptance of this proposal within the acceptance period, the bidder agrees to promptly schedule the work and submit verification of having scheduled the work within five (5) working days of such notice unless otherwise mutually agreed upon. The successful bidder shall promptly commence the work and prosecute the work diligently for the duration of the project.

## GENERAL PROVISIONS

### 1. INDEMNIFICATION/INSURANCE

The Contractor agrees to indemnify the Town against and save the Town harmless from any and all liability and loss from any claim, suit, or action based upon any alleged injury or death of any person including any employee of the Contractor or subcontractor, and for damage to any property that may occur or that may be alleged to have occurred in the course of the performance of the work, or from failure to guard the same, whether such act or failure to act is by the Contractor of any subcontractor or anyone directly or indirectly employed by any of them or by anyone for whose acts any of them maybe liable, and the Contractor agrees at its own expense to pay all charges for attorneys in connection with the defense against any such claim, and if any judgment should be rendered against the Town in any such action, the Contractor will satisfy and discharge the same without cost or expense to the Town.

Before commencing work, the Contractor shall obtain and deliver certificates of insurance to the Director of Public Works and during the performance of the work, the Contractor shall maintain insurance of the kinds and in at least the amounts specified hereunder in a form satisfactory to the Town; such certificates shall contain a provision that the Town shall be given thirty (30) days advance written notice by registered mail of, modification, change, termination, cancellation or expiration of, coverage. Renewal certificates shall be provided at least 60 days prior to expiration of the policy. With each Certificate of Insurance the contractor shall provide an endorsement naming the Town of Southbury as an "Additional Insured". Such endorsement shall include the following language "The Town of Southbury is an additional insured." The cost of such insurance shall be the sole responsibility of the Contractor. The Contractor shall require each Subcontractor employed on the Project to maintain the coverage listed below unless the Contractor's insurance covers activities of the Subcontractor on the Project.

Worker's Compensation Coverage and Employer's Liability Coverage A at                      Statutory  
Limits in accordance Connecticut Law and Coverage B at limits of \$100,000/\$500,000/\$100,000.

Broad Form Commercial General Liability including premises and operations, products, completed operations, contractual liability, independent contractors, and broad form property damage coverage, written on a "per occurrence" basis with minimum combined coverage for bodily injury, personal injury, and property damage liability of \$2,000,000 general annual aggregate, \$1,000,000 per occurrence and \$2,000,000 Products/Completed Operations Aggregate.

Comprehensive Automobile Liability, covering all vehicles used by Contractor in the course of work, including owned, non-owned and hired with minimum coverage of \$2,000,000 combined single limit for bodily injury and property damage.

Excess Liability with minimum coverage of \$ 2,000,000 in umbrella form.

If a policy written on a "Claims Made " basis is proposed for consideration as a substitute for the required insurance it shall be considered only if the Certificate states that the coverage is "claims made," the retroactive date is stated and is prior to or coincident with the date of the Contract,

evidence is provided that the policy is prepaid for a minimum of two years from the completion date of the contract or the Contractor provides an Extended Reporting Period endorsement or Prior Acts Coverage. The Town shall be under no obligation to accept a "Claims Made" policy.

All Coverage is to be provided on a primary noncontributory basis.

All insurance shall be provided by a company authorized to do business in the State of Connecticut and having an A.M. Best rating of no less than A-VIII.

The insurer shall agree to waive all rights of subrogation against the Town of Southbury, its officers, officials, and employees for losses arising from work performed by the Contractor for the Town.

No insurance required or furnished hereunder shall in any way relieve the Contractor of or diminish any of his responsibilities, obligations and liabilities under the Contract.

## 2. INSPECTION

The Director of Public Works shall be the Contractor's direct contact and periodic conferences will be held to review the status of work progress.

The Contractor shall employ only honest and responsible employees, skilled in the tasks assigned to them. The Contractor shall be responsible for all conduct of his employees.

All work shall be completed in a thoroughly professional and workmanlike manner in strict accordance with the Bid Documents.

The Town of Southbury reserves the right to establish the order of priority for completion of the various portions of the work and to delete any portion of the work upon notification of the Contractor.

The Director shall be the judge of the character, nature and fitness of all work and materials furnished under the contract and the amount, quality and classification of the several kinds of work for which payment is to be made and he shall decide as to the meaning, intent and performance of the contract. The entire work shall be done under his supervision and to his satisfaction, and his estimates and his decisions upon all questions relating to said work shall be a condition precedent to the right of said Contractor to payments under the Contract.

Inspectors representing the Director may be authorized to inspect all work done and all materials

## **CODE OF ETHICS/CONFLICT OF INTEREST ORDINANCE**

### **A. DEFINITIONS.** The following definitions shall apply to this Ordinance:

- a. **Public Official (or Public Office).** An elected or appointed official, whether paid or unpaid, full or part-time, of the Town of Southbury. This includes being a member or alternate member of any board, committee, commission or agency that exists in the Town of Southbury government.
- b. **Town Employee (or Town Employment).** A paid employee, full or part-time, of the Town of Southbury.
- c. **Ethics Commission.** The Town of Southbury Commission on Ethics as authorized by Section 7-148h of the Connecticut General Statutes.
- d. **Conflict of Interest.** A conflict of interest shall be deemed to exist if any Public Official or Town Employee has a Direct Interest or an Indirect Interest, in any purchase, contract, transaction, or decision involving his/her office, board, commission, agency or employment.
- e. **Direct Interest.** An interest of a Public Official or Town Employee or any business, investment, or property in which such Public Official or Town Employee is an owner, member, partner, officer, employee or stockholder or has any other form of participation, that is a Financial Interest or an Adverse Interest in any purchase, contract, transaction or decision involving his or her office, board, committee, commission, agency or employment.
- f. **Indirect Interest.** An interest of a family member within the fourth degree by blood or marriage or a person engaged in a close business relationship with a Public Official or Town Employee in any purchase, contract, transaction or decision involving the Public Official's or Town Employee's office, board, committee, commission, agency or employment which, if held by the Public Official or Town Employee directly, would meet the definition of a Direct Interest.
- g. **Financial Interest.** A Financial Interest shall be deemed to exist if a person or entity with a Direct Interest or an Indirect Interest as defined herein might, directly or indirectly, derive pecuniary or financial gain or suffer loss from any Town purchase, contract, transaction, decision or employment.
- h. **Adverse Interest.** An interest that is adverse to the interests of the Town with respect to the matter under consideration.
- i. **Material Conflict of Interest.** A conflict of interest shall be deemed to be material where a reasonable person would conclude that a Financial Interest or Adverse Interest:
  - i. Is incompatible, or would to a reasonable person appear to be incompatible, with the proper discharge of official duties; or
  - ii. Would tend to impair, or would to a reasonable person appear to impair, independence of judgment and action in the performance of official duties.

### **B. DECLARATION OF POLICY.**

The proper operation of the government of the Town of Southbury requires that Public Officials and Town Employees be independent, impartial and responsible to the people; that governmental decisions and policies be made in the proper channels of the government structure and free from coercive or other improper influence; that Public

Officials and Town Employees not use their positions for personal gain; and that the general public have confidence in the integrity of its government.

This Ordinance sets forth standards of ethical conduct to maintain and enhance responsible and effective public service by our Public Officials and Town Employees in the performance of their duties.

In the interest of ensuring that concerns regarding possible conflict of interests are promptly raised, this Ordinance permits a concern that a conflict of interest may exist to be raised by any person, regardless of whether the person would be considered an aggrieved party as that term is interpreted under Connecticut law. Any failure to observe the procedures set forth in this Ordinance shall not, however, afford a basis for an action for damages against the Town, any Town board, committee, commission, agency or employee, or any member of any Town board, committee, commission, or agency, or for challenging a decision, license, permit or other action of a Town Employee, board, committee, commission or agency or member of same by a person who would not, but for the provisions of this Ordinance, have standing to bring such an action.

C. DISCLOSURE OF CONFLICT.

Any Public official or Town Employee who has a conflict or potential conflict of interest as defined herein, whether or not such conflict or potential conflict is material, shall disclose the interest causing such conflict or potential conflict in writing to the Board of Selectmen.

Any Public Official or Town Employee who is a member of any Town board, committee, commission or agency who has a conflict or potential conflict of interest as defined herein, whether or not such conflict or potential conflict is material, shall, in addition to the disclosure required by this Ordinance, disclose the interest causing such conflict to such board, committee, commission, or agency and such disclosure shall be recorded in the board's, committee's, commission's or agency's minutes.

D. DETERMINATION OF MATERIALITY.

In the event that a disclosure or a claim of a conflict of interest with respect to any Public Official or Town Employee has been made to the Ethics Commission, and the Public Official or Town Employee does not disqualify himself/herself from matters with respect to which the conflict of interest allegedly exists, the Ethics Commission shall promptly inquire into the facts of the matter and determine whether or not a conflict exists and if so, whether it is material.

In the event that a disclosure or a claim or a conflict of interest with respect to any Public Official or Town Employee who is a member of a Town board, committee, commission or agency has been made to such board, committee, commission, or agency and the member does not disqualify himself/herself from matters with respect to which the conflict of interest allegedly exists, the board, committee, commission or agency shall forthwith determine by a majority of those members present, excluding the member whose interest is in question, whether or not a conflict exists and, if so, whether it is material.

E. DISQUALIFICATION.

If it has been determined that a material conflict of interest exists, the Public Official or Town Employee who has the conflict shall be disqualified from discussing or acting upon any matter encompassed by that conflict of interest, and shall leave the room during any public hearing, discussions or deliberations regarding the matter. Any Public

Official or Town Employee may disqualify himself/herself even though the conflict of interest is not material.

**F. CLAIM OF CONFLICT.**

If a formal written complaint is made to the Ethics Commission that any Public Official or Town Employee has an undisclosed conflict of interest, the Ethics Commission shall record and act upon the claim in accordance with its procedures as outlined in Section J.

**G. GIFTS AND FAVORS.**

No Public Official or Town Employee shall accept or receive, directly or indirectly, anything of value (whether by rebate, gift, promise, obligation or contract for future reward or compensation or otherwise) for awarding or influencing the award of any decision, permit, license, contract or purchase order by the Town. Anything of value when in the form of a gift shall not be deemed relevant if the actual cost of that item is less than \$25.00.

**H. REPRESENTATION.**

Without the prior written consent of the Ethics Commission, no Public official or Town Employee shall appear for compensation, except on behalf of the town, before any Town board or agency in which he/she was formerly employed or served as an official at any time within a period of one (1) year after termination of his/her service with the Town.

Without the prior written consent of the Ethics Commission, no current or former Public Official or Town Employee shall represent anyone other than the Town concerning any particular matter in which he/she participated personally and substantially while in municipal service.

No current or former Public Official or Town Employee shall disclose or use confidential information acquired in the course of and by reason of his/her official duties, for personal and/or financial gain for himself/herself or others.

No former Public Official or Town Employee who participated substantially in the negotiation or award of municipal contract or who supervised the negotiation or award of such a contract shall accept employment with a party to the contract other than the Town for a period of one (1) year after such contract is signed.

**I. INDEPENDENT CONTRACTORS.**

Before hiring any consultant, independent Contractor or other advisor, the Public Official, Town Employee, board, committee, commission or agency that proposes to hire the independent Contractor shall inquire whether the independent Contractor has any conflict of interest as that term is defined in this Ordinance or as defined in any code of ethics or similar code applicable to the independent Contractor. Any such conflict shall be specified in the appropriate Town records (such as minutes of any relevant board, committee, commission, or agency).

Prior to hiring any independent Contractor with a conflict, the Public Official, Town Employee, board, committee, commission or agency proposing to hire the independent Contractor must make a determination that the conflict is not material and/or that despite the conflict, the independent Contractor should be hired. The decision and the reasons therefore must be a matter of public record.

No consultant, independent Contractor or other advisor of the Town shall represent a private interest in any action or proceeding against the interest of the Town which is in conflict with the performance of his/her duties as such consultant, independent Contractor



or advisor. No consultant, independent Contractor or advisor may represent anyone other than the Town concerning any matter in which he/she participated personally and substantially as a consultant to the Town. Neither shall such consultant, independent Contractor or advisor disclose confidential information acquired while performing his/her duties for the Town, nor shall he/she use such information for the personal and/or financial interests of himself/herself or others.

J. PROCEDURE.

All claims pertaining to a violation of this Ordinance shall be made, in writing, to the Ethics Commission in accordance with the rules and regulations promulgated by that Commission which shall be found in the Town of Southbury Ethics Commission Statement of Procedures. These rules shall require the Complainant to specify the facts that gave rise to his/her claim and the specific provision of this Ordinance that has been breached on a Form provided by the Ethics Commission. The Ethics Commission may, but is not required to consider claims made against individuals who are former Public Officials or Town Employees. Any allegations and any information learned, supplied to or received from or by the Ethics Commission shall remain confidential until a finding of Probable Cause is determined by the Ethics Commission.

The Ethics Commission is authorized to issue advisory opinions at its discretion.

K. PENALTIES.

Any person who violates any of the provisions of this Ordinance may be censured or reprimanded or may be suspended or removed from Public Office or Town Employment, as the case may be, in the manner provided by law as recommended by the Ethics Commission with action by the Board of Selectman.

Any violation of this Ordinance shall render any purchase, contract, or transaction or any part thereof affected thereby voidable as recommended by the Ethics Commission with action by the Board of Selectmen.

Any violation of this Ordinance with respect to any decision of a board, committee, commission or agency shall be subject to any remedies deemed proper as recommended by the Ethics Commission with action by the Board of Selectmen and permitted by law.

The penalties provided above are in addition to any other penalties provided by law to address violations of the provisions of this Ordinance.

L. CONCURRENT OFFICES.

No Town Employee shall serve on any board, committee, commission or agency to which the Town Employee reports or acts as staff, except as otherwise stated in the Town Charter or Ordinances. Notwithstanding the foregoing, a Town Employee may serve on any board, committee, commission or agency in an advisory capacity.

Except as otherwise provided in the Charter or by Ordinance, the First Selectman, the Selectmen, the Town Clerk, members of the Board of Finance and members of the Ethics Commission shall hold no other Public Office, and the provisions of Section 9-210 of the General Statutes concerning incompatible Town offices shall apply to the officers described therein.

The restrictions set forth in Section L. 1 and Section L. 2 shall not apply to membership on any temporary or advisory only committee, task force, working group, or the like.

Subject to the restrictions set forth in applicable law, or by the Charter or by Ordinance, and in Section L. 2 of this Ordinance, nothing in this Ordinance shall prevent

the appointment of the same person to more than one Public Office, provided the offices are not incompatible, provided the duties of the offices to which he/she is appointed may, in the opinion of the Ethics Commission, be satisfactorily fulfilled by one person, and provided further that inability to fulfill satisfactorily the duties of all offices to which he is appointed shall be cause for removal from any one or more of said offices.

#### M. MEETINGS.

Members Attendance. Public Officials who are members of boards, committees, commissions, and agencies are expected to attend all meetings of such boards, committees, commissions and agencies or attend meetings in accordance with the by-laws or other duly adopted rules of the group to which they belong. However, it shall not be deemed to be a violation of this Ordinance if public officials who are members of boards, committees, commissions, and agencies comply with the standards set forth in Section 512 of the Town Charter. For the purposes of this Ordinance only, the attendance standards set forth in Section 512 shall apply to both elected and appointed members of boards, committees, commissions and agencies.

Alternates' Attendance. Public Officials who are alternate members of boards, committees, commissions and agencies are expected to attend all meetings of such boards, committees, commissions and agencies, or attend meetings in accordance with the by-laws or other duly adopted rules of the group to which they belong. However, it shall not be deemed to be a violation of this Ordinance if Public Officials who are alternate members of boards, committees, commissions and agencies comply with the standards set forth in Section 512 of the Town Charter. For the purposes of this Ordinance only, the attendance standards set forth in Section 512 shall apply to both elected and appointed alternate members of boards, committees, commissions and agencies.

Voting. All Public Official members or seated alternate members of boards, committees, commissions and agencies who are qualified to vote, shall vote on all matters upon which a vote is held by such board, committee, commission or agency unless there shall be reasonable cause for abstention and said cause is stated and recorded in the minutes of the meeting.

Statement of Reasons. In every case where the action of any board, committee, commission or agency is subject to a right of appeal to another administrative body or to the courts of the State of Connecticut, a statement of the reasons for its action shall be included in the minutes of the meeting.

## **GENERAL SPECIFICATIONS/PROJECT APPROACH**

This project consists of the replacement of Bucks Hill Road and Munn Road culverts. The replacement structure types are to be precast concrete box culverts. The existing roadway will be reconstructed for a length of 150 feet on either side of the Munn Road culvert, and for a length of 150 feet north and 175 feet south of the Bucks Hill Road culvert (to the Munn Road intersection). Construction of this project will be funded under the State Local Bridge Program. The design will be in accordance with the Town of Southbury and Connecticut Department of Transportation design standards. The roadway at the bridge location will be closed during construction and traffic will be detoured, with the exception of local traffic within the project limits.

Engineers should review all documents available for the two structures and visit the project site. Available documents include:

- CTDOT Inspection Reports
- Cardinal Engineering inspection reports dated May 2025 (attached)

Both structures will be designed, bid and constructed concurrently under one contract. For the purpose of this bid proposal the consultant is to assume 960 hours of inspector's time. Phases 1-3 are to be completed by December 2026. Construction is to be completed by October 2027. Engineers should submit a preliminary schedule with their bids and include an estimated breakdown of costs by hours and rate for each TASK in the proposal form. Hourly rates to be used are those found in the on-call engineering agreement.

### **PHASE 1: PRELIMINARY DESIGN**

#### **Task 1: Survey and Base Mapping**

The engineer will provide a topographic survey of the area within the limits of pavement reconstruction and 50 feet on each side of the roadway pavement. Walnut Hill Brook will be surveyed 100 feet upstream and downstream of the culvert crossings. The tree line, pavement, guide rail, culvert, channel, and other pertinent features will be located. The horizontal and vertical datum will be NAVD88. Street lines and property lines will be obtained from the Assessor's maps. The plans will be plotted at a scale of 1"=20' horizontal and 1"=2' vertical.

#### **Task 2: Design**

Preliminary design will culminate in the submittal of a 30% design package consisting of 1" = 20' scale preliminary roadway design drawing and 1" = 20' scale structure design drawings, outlining the layout and general conditions for the preferred roadway alignment and proposed structure. The 30% design package will be submitted to the Town and DOT in accordance with the requirements of the State Local Bridge Program. The 30% plans will also be submitted to the utility companies to verify that all existing utilities have been properly depicted on the plans and any conflicts or required relocations have been identified. It is assumed that any required utility relocations will be performed by the respective utility companies.

## **A. Hydrology**

The drainage area and 2 to 100-year flows will be computed using the USGS web-based StreamStats application.

The FEMA Map for the Town of Southbury dated December 17, 2010, indicates that the project area is located in Zone X. Zone X are areas determined to be outside the 100-year and 500-year storm floodplain. A summary report presenting the results of the hydrologic analysis will be submitted to the Town. Any written comments will be included in the final Hydrology and Hydraulic Report.

## **B. Hydraulics**

There is no detailed hydraulic study of Walnut Hill Brook. The engineer will design the proposed structure based on the surveyed culvert, roadway, upstream and downstream cross sections. The design flow is the 100-year discharge, and the check flow is the 500-year flood.

A brief hydraulic report summarizing the analysis and recommendations will be prepared.

## **C. Roadway Design**

The roadway will be reconstructed within the limits necessary to construct the new bridge. No roadway drainage improvements are included in the proposed scope nor are any anticipated in the design. The roadway is to match the existing.

Plan and profile of the proposed horizontal and vertical alignment, including centerline geometry, pavement transitions, guide railing and cut and fill lines will be developed. A typical roadway section and a preliminary estimate of the construction quantities and cost will be developed for the roadway.

## **D. Structure Design**

The bridge width, face of curb to face of curb, shall match the existing roadway width.

The preliminary design of the bridge replacement will include the preparation of the 30 percent structural plans. The engineer will coordinate the design activities with the Town of Southbury. Connecticut Department of Transportation standard details will be incorporated as applicable.

The structural plans will show the proposed geometric layout, bridge cross-section, bridge elevation and proposed grading. It is assumed that standard construction methods and procedures will be sufficient and no unusual foundation designs will be required. Included with the preliminary design submission will be a preliminary construction cost estimate.

## **E. Soil Borings and Geotechnical Services**

The engineer will provide all services involving the field investigation of existing soils and development of design requirements of the roadway and structure. Two (2) soil borings will be performed at each bridge location and the information obtained will be used for the design. The engineer will provide qualified personnel to observe the borings and prepare a geotechnical report with the findings and recommendations for the new structure.

### **Task 3: Easements**

It is anticipated that 3 easement maps will be required for the project. The engineer shall:

1. Prepare schedule of property owners and title plan Mylar.
2. After discussing preliminary design review comments, prepare Class D right of way mapping for takings, transfers, easements, and rights as may be required for the proposed construction.
3. Prepare metes and bounds descriptions of any permanent easements required.

The DOT ROW section will not be involved in this project and the town will acquire any property rights, takings, or easements that are required including appraisals, negotiations, and legal services.

## **PHASE 2: ENVIRONMENTAL PERMITTING & PUBLIC INFORMATION MEETING**

### **Task 1: Permits**

It is assumed that the following regulatory approvals will be required:

#### **A. Local Inland Wetland Permit**

The engineer will retain the services of a certified soil scientist to delineate State and Federal wetland boundaries which will be field located, plotted, and used during the design phase. It is anticipated that wetland functions and values evaluations will be required for an ACOE PCN (Pre-Construction Notification) permit.

The engineer will prepare the permit and provide one set of plans for the Town of Southbury to submit the application to the Town's Inland Wetland Commission. The engineer will attend one IWC meeting. Any concerns brought up by the Commission will be addressed and incorporated into the design, as necessary.

#### **B. U.S. ACOE 404 Permit Application**

It is assumed that this project is eligible for Department of the Army Regional General Permit for the State of Connecticut – GP-19, Stream, River, and Brook Crossings. It is also assumed that the project will be presented at the monthly DOT-DEEP-ACOE Managers' Meeting in order to qualify for the PCN Permit.

#### **C. CTDEEP 401 Water Quality Certificate**

In conjunction with Item B above, the engineer will coordinate the proposed design with CTDEEP and prepare an application for a CTDEEP 401 Water Quality Certificate. CTDEEP Fisheries will be consulted to obtain input as to their requirements. Also, CTDEEP Bureau of Natural Resources Wildlife Division will be contacted to identify if any Federal or State Endangered, Threatened or Special Concern species will be impacted by the project.

An Environmental Review Request form and supporting documents will be submitted to the DOT. Also, the State Historic Preservation Office (SHPO) and the four (4) Tribal Historic Preservation Offices in Connecticut (THPO) will be contacted.

## **Task 2: Public Information Meeting**

The engineer will prepare visual aids and will make a presentation of the project at a meeting which will address the proposed construction of the culvert replacements. At the meeting, details of the proposed improvements and the expected project schedule will be described. Any comments or suggestions which result from this meeting will be evaluated and considered throughout the completion of the Final Design Phase.

## **PHASE 3: FINAL DESIGN**

After approval of the Preliminary Design Submittal, the engineer will begin Final Design. Two copies of the final plans, specifications and cost estimates will be provided for review by the Town.

### **Task 1: Design**

#### **A. Roadway**

The final design phase of the roadway design will include incorporation of any review comments and further development of the plans, specifications, and details. The coordinated geometry for the horizontal layout will be calculated. The design of the guide railing, erosion control devices, pavement structure, and signing will be completed. Cross sections along the proposed roadway at 50-foot intervals and at critical locations will be developed. Final construction cost and quantity estimates for the project will be developed. It is assumed that the roadway geometry is adequate.

#### **B. Structure**

The final design phase of the structure design will proceed upon approval of the 30 percent plans. During this phase, a complete set of plans, specifications, and estimates will be developed. Formal design submissions will include the following:

- a. Completion of the design of major structural components.
- b. Coordination with the highway design in finalizing roadway vertical geometry, drainage requirements and right-of-way impacts to adjacent properties.

### **C. Water Handling**

The engineer will provide information on the plans and specifications including construction staging plans showing the proposed use of water handling devices, such as cofferdams, in the project area which will be necessary for the construction of the proposed improvements.

### **D. Maintenance and Protection of Traffic**

A maintenance and protection of traffic plan will be developed for the bridge replacement. This plan will be based on road closure and a detour. The plan will include a layout plan and all the required barricades and signage in accordance with the MUTCD.

### **Task 2: Utility Coordination**

Project information will be distributed to all utility companies affected by the proposed activities, if applicable. A meeting with the utility companies will be held at the beginning of the Final Design to ensure that all existing utilities within the project area and any utility relocations required as a result of the proposed improvements have been identified. A report of the meeting will be prepared. Utility test pits, if required, and the design of temporary utility support or utility relocations shall be provided by the utility companies. The utility relocation plans and specifications, prepared by the respective utility companies, will be reviewed, and inserted into the final construction plans for informational purposes.

### **Task 3: Bid Documents**

The engineer will prepare bid documents for the project that will include:

Information to Bidders, Forms, Bid Proposal Forms, General Conditions and Technical Specifications. The technical specifications will consist of the CTDOT Standard Form 819 and required Special Provisions. Two copies of final plans and bidding documents will be provided to the Town at the completion of the Final Design.

Incorporate all review comments and submit two copies of the Final Design Submittal (Plans, Contract Document, Specifications, and Estimate) to the Town. An electronic copy will be provided to a printing company for contractors to directly purchase the Contract Documents.

Perform a load rating of the culvert which is required by Connecticut DOT as part of the supplemental application.

The engineer will assist the Town in preparing the supplemental funding application and will prepare the final design package (final plans, final cost estimate, specifications, bid documents, hydraulic analyses, and reports) and submit one copy to CTDOT along with a supplemental funding application including municipal certifications.

## **PHASE 4: CONSTRUCTION PHASE**

### **Task 1: Bidding & Award Services**

Provide the Town with assistance throughout the bidding period, including answering contractor questions and issuing any required addenda. The engineer will attend the pre-bid meeting, the bid opening, review and tabulate all bids received, review contractor qualifications, and make a recommendation of the lowest qualified bidder to the Town.

### **Task 2: Construction Contract Administration**

Upon the award of the construction contract pursuant to this Agreement, the engineer shall provide the following Construction Contract Administration Services:

1. Furnish consultation and advice during construction. This shall include, but not be limited to, the following:
  - Conduct preconstruction conference.
  - Analysis and review of job problems.
  - Preparation of change orders.
2. Direction of the field engineering and inspection work.
3. Advise on special engineering construction problems that may arise during construction.
4. Review shop drawings and work drawings submitted by the contractor. It is assumed that a maximum of two reviews will be required for each submission.
5. Review of progress schedules and review, approval or rejection of Applications for Progress Payments made by the construction contractor. All progress payments to the contractor during the course of the job shall be certified for payment by the engineer.
6. Make a final inspection and prepare a written report to ensure that the completed work is acceptable and in substantial conformance with the requirements of the construction contract.

### **Task 3: Project Representative Services**

Upon the award of any construction contract pursuant to this Agreement, the engineer shall provide a Resident Project Representative on a full-time basis. Project Representative Services shall include the following:

1. On-site observation of the work during all stages of construction as a basis for determining that the project is proceeding in accordance with the contract documents.
2. Carry out field inspections as required and review the field layout of all construction to ensure proper location in accordance with construction contract plans and specifications.
3. Direction of field tests performed by outside testing companies. Testing will be included in the construction contract.
4. Obtain data and maintain records necessary to check contractor's requisitions for payment.
5. Prepare daily inspection reports.
6. Prepare as-built plans.
7. Carry out field inspections as required and review the field layout of all construction to ensure proper location in accordance with construction contract plans and specifications.



The Inspector shall coordinate the inspection schedule with the Contractor to provide inspection services at specific critical phases of the project as agreed to with the Town of Southbury but are assumed to include:

1. Completion of all sedimentation and erosion control devices prior to the removal of the existing superstructure.
2. Completion of the water handling and construction of cofferdam after the removal of the existing superstructure.
3. Inspection of subgrade prior to installation of bridge foundation.
4. Setting the precast concrete foundation elements.
5. Setting the precast concrete box culverts.
6. Inspection of backfill and subbase material.
7. Setting roadway layout and grades.
8. Placement of riprap and other stream improvements as required.
9. Final inspection of bridge and approach roadway including any required guiderail.

#### **Task 4: Project Closeout**

Upon completion of the project by the contractor, the engineer will perform an as-built survey of the project identifying changed condition, close out the contractor's books including all change orders, obtaining the required Maintenance Bond from the contractor, and preparing a package for the Town to include the information above and all shop drawings, RFIs, and design changes for the Town's record.

**BID PROPOSAL  
CULVERT REPLACEMENT ENGINEERING SERVICES  
RFP 2025-009**



TO: Mr. Jeffrey Manville  
First Selectman  
501 Main Street South  
Southbury, Connecticut 06488

PROPOSAL OF

Name of Company \_\_\_\_\_

Address \_\_\_\_\_

City, State, ZIP \_\_\_\_\_

Contact \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

Telephone \_\_\_\_\_

Email \_\_\_\_\_

**BID FORM  
CULVERT REPLACEMENT ENGINEERING SERVICES  
RFP 2025-009**

The bidder declares that he/she has thoroughly examined the specifications and all other bidding documents for the proposed work, dated August 25, 2025, and that, if his/her bid is accepted, he/she will contract with the Town to perform all the work required by the Town of Southbury as directed and as stipulated in the specifications, and that he/she will take in full payment therefore, the lump sum price applicable to each item of the work as stated in the following schedule. It is understood and agreed that should a bid be accepted, it will automatically become the contract or an addendum to any contract agreed upon.

| <b>Item</b> | <b>Description</b> | <b>Price in Words</b> |
|-------------|--------------------|-----------------------|
|-------------|--------------------|-----------------------|

**Bucks Hill Road Culvert**

- |   |   |                                  |
|---|---|----------------------------------|
| <b>1</b>                                    | Preliminary Design                                    | _____ dollars and<br>_____ cents |
| <b>2</b>                                    | Environmental Permitting & Public Information Meeting | _____ dollars and<br>_____ cents |
| <b>3</b>                                    | Final Design  | _____ dollars and<br>_____ cents |
| <b>4</b>                                    | Construction Phase                                    | _____ dollars and<br>_____ cents |
| Total items 1-4 for Bucks Hill Road Culvert |   | _____ dollars and<br>_____ cents |

**Munn Road Culvert**

- |          |                    |                   |
|----------|--------------------|-------------------|
| <b>5</b> | Preliminary Design | _____ dollars and |
|----------|--------------------|-------------------|

|          |   |             |
|----------|---|-------------|
|          | _____   | cents       |
| <b>6</b> | Environmental Permitting & Public Information Meeting |             |
|          | _____   | dollars and |
|          | _____   | cents       |
| <b>7</b> | Final Design  |             |
|          | _____   | dollars and |
|          | _____   | cents       |
| <b>8</b> | Construction Phase                                    |             |
|          | _____   | dollars and |
|          | _____   | cents       |
|          | Total items 5-8 for Munn Road Culvert                 |             |
|          | _____   | dollars and |
|          | _____   | cents       |
|          | Total items 1-8                                       |             |
|          | _____   | dollars and |
|          | _____   | cents       |

**EXCEPTIONS:** All bidders must list below any and all exceptions to the attached specifications:

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The bidder certifies that his bid is made independently without collusion, agreement, understanding or planned course of action with any other bidder and that the contents of his bid have not been disclosed to anyone other than his employees, agents or sureties prior to the official bid opening.

The bidder, by submittal of this bid, agrees with the Town that the amount of bid security deposited with this bid (if required) fairly and reasonably represents the amount of damages the Town will suffer due to the failure of the Bidder to fulfill his agreements as above provided.

Legal Company Name \_\_\_\_\_

Signature of Authorized Representative \_\_\_\_\_

Title of Authorized Representative \_\_\_\_\_

Business Address \_\_\_\_\_

City, State and Zip Code \_\_\_\_\_

Telephone Number \_\_\_\_\_

Email \_\_\_\_\_

Date \_\_\_\_\_

The successful bidder must submit satisfactory proof of insurance and a signed Indemnification Certificate.

### **INDEMNIFICATION CERTIFICATE**

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Town of Southbury, and agents and employees of said Town from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss or use resulting therefrom, but only to the extent caused in whole or in part by acts or omissions of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to the Town of Southbury. In claims against any person or entity indemnified under this paragraph by an employee of the Contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a subcontractor under workers' or workmen's compensation acts, disability benefits acts or other employee benefits acts.

Contractor \_\_\_\_\_

Signature of Authorized Representative \_\_\_\_\_

Title of Authorized Representative \_\_\_\_\_

Business Address \_\_\_\_\_

Date \_\_\_\_\_

## NOTICE TO CONTRACTORS — CODE OF ETHICS/CONFLICT OF INTEREST ORDINANCE

The Town of Southbury has amended its Code of Ethics/Conflict of Interest Ordinance to become effective on February 28, 2017 and is included in this package. The Contractor shall comply with all applicable provisions of said Ordinance. The Contractor acknowledges receiving a copy of said Ordinance, a copy of which is attached hereto and made a part hereof. The Contractor further agrees that any instance of its violating any provisions of the Code of Ethics/Conflict of Interest Ordinance will be sufficient cause for the Town to terminate any or all of the Contractor's contracts or pending contracts with the Town. The Contractor agrees that the above clause will also be incorporated in all of its contracts with its subcontractors and consultants.

### ACKNOWLEDGEMENT OF RECEIPT

I have **read** the above Code of Ethics/Conflict of Interest Ordinance, and agree to abide by its terms.

### ORDINANCE RECEIVED BY

Print Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

## REFERENCES

The Bidder is required to complete the following form to allow the Town of Southbury to make inquiries and judgment as to the Bidder's experience, skill, available financial resources, credit, and business standing.

1. The Bidder has been in business for \_\_\_\_\_ years.
2. List three (3) projects of similar nature to the project described herein that the Bidder has completed. Include the name of entity, address, contact person, email, and telephone number of a reference for each project.

a. Name \_\_\_\_\_

Address \_\_\_\_\_

Contact \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_

b. Name \_\_\_\_\_

Address \_\_\_\_\_

Contact \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_

c. Name \_\_\_\_\_

Address \_\_\_\_\_

Contact \_\_\_\_\_

Email \_\_\_\_\_

Phone \_\_\_\_\_



Other Conditions:

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person with respect to this Bid, or any other bid, or in the submitting of this Bid.

The Bidder is enclosing a statement of their qualifications and is prepared to submit a financial statement upon request.

The acceptance of subcontractors shall rest with the Town and their decision shall be final.

Addenda:

The bidder hereby acknowledges receipt of the following Addenda. (Include signed copies of addenda with bid submittal)

| Addendum Number | Date Received | Signature |
|-----------------|---------------|-----------|
|                 |               |           |
|                 |               |           |
|                 |               |           |

Inspection Type: Routine



## **BRIDGE NO. 130006**

Southbury  
Bucks Hill Road  
Over  
Walnut Hill Brook

Routine Inspection

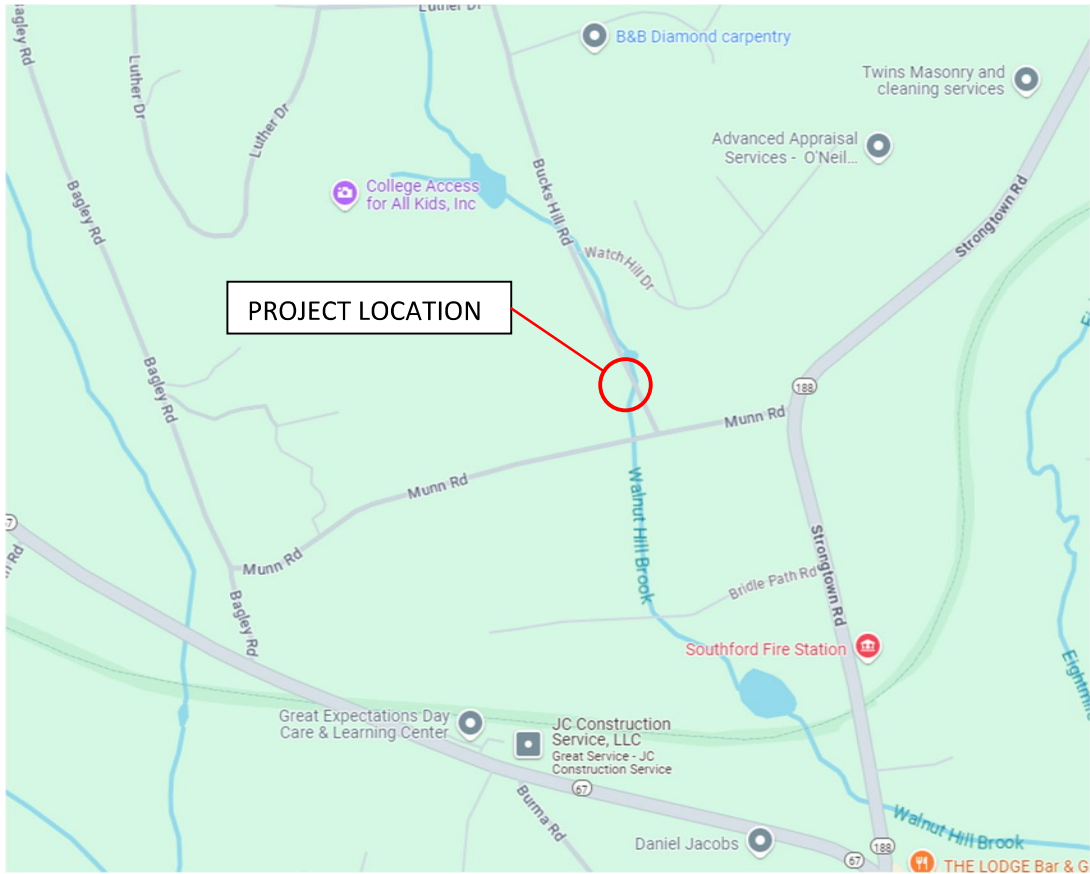
05/08/2025

Inspected by: Cardinal Engineering Associates



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**Location Map # 1**

Southbury, CT

Bridge 130006, Bucks Hill Road over Walnut Hill Brook

Latitude: 41° 28' 17.4"

Longitude: -73° 10' 0.5"

## **EXECUTIVE SUMMARY**

Bridge 130006 carries Bucks Hill Road over Walnut Hill Brook in the Town of Southbury, CT. This culvert is a 7' wide x 5'-3" steel plate arch. The paved width of the approach roadway is 26'-0" and the out-to-out width of the structure is 40'-0".

This bridge inspection was performed according to CTDOT standards for routine bridge inspections. The bridge was found to be in serious condition with replacement advised due to the age and condition of the structure.

### **Approach Condition**

*Overall Rating: 7*

The Culvert Approaches are in good condition. There are several hairline transverse cracks in the approach pavements. Aside from cracks, no other issues were noted. See Approach Condition Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Deck**

*Overall Rating: N*

Due to being a culvert, there is no deck on this structure. The bituminous overlay and curbing are assessed in this section. The overlay is in satisfactory condition due to the pavement patch and cracks. See Deck Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Culverts & Retaining Wall**

*Overall Rating: 2*

The culvert is a steel plate arch and has up to 2' wide x full length deterioration with up to 100% section loss along the pipe invert. There is water traveling beneath the pipe with the pipe perched 14" at the outlet. Due to these conditions, the culvert receives a critical condition rating. See Culverts and Retaining Wall Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Channel and Channel Protection**

*Overall Rating: 7*

The Channel and Channel Protection are in good condition with no major issues noted. There is an area of built-up gravel just past the outlet and a scour hole roughly 10 feet past the outlet. See Channel Protection Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Traffic Safety Features**

*Overall Rating: 7*

Approach Guardrails: The guide rails are typically in good condition. The area of guide rail along the repaired section of roadway has been had the posts put back in place, although the two repaired posts are bent. See the Traffic Safety Features Section in the Bridge Inspection Report BRI-18 Form for more information.

Form: BRI-19, Rev. 2/15  
Inspection type: ROUTINE  
Inspection Date: 05/08/2025  
Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130006

Town: SOUTHBURY  
Carried: BUCKS HILL ROAD  
Crossed: WALNUT HILL BROOK  
Inventory Route: Non-NHS

## STRUCTURE INVENTORY & APPRAISAL

### INSPECTION

|                        |   |                            |                                |
|------------------------|---|----------------------------|--------------------------------|
| Structurally Deficient | <input type="text" value="Y"/>          | Functionally Obsolete      | <input type="text" value="N"/> |
| Sufficiency Rating     | <input type="text" value="32.79"/>      |                            |                                |
| (90) Inspection Date   | <input type="text" value="04/16/2025"/> | (91) Frequency             | <input type="text"/>           |
| Indepth Insp           | <input type="text" value="N"/>          | Proposed next Indepth Year | <input type="text"/>           |
| Survey Date            | <input type="text"/>                    | Class                      | <input type="text"/>           |
| Access                 | <input type="text"/>                    | Flagman                    | <input type="text"/>           |
|                        | Frequency                               | Date                       | Type                           |
| Fracture               | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |
| Underwater             | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |
| Special                | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |

### IDENTIFICATION

|                                  |   |                                      |  |
|----------------------------------|---|--------------------------------------|--|
| Bridge Name                      | <input type="text"/>  |                                      |  |
| Town Code - Name                 | <input type="text" value="69640 - SOUTHBURY TOWN"/>         |                                      |  |
| (5) Inventory Route              |   |                                      |  |
| (A) Record Type                  | <input type="text" value="1 - ROUTE CARRIED ON STRUCTURE"/> |                                      |  |
| (B) Signing Prefix               | <input type="text" value="5 - TOWN ROAD"/>                  |                                      |  |
| (C) Level of Service             | <input type="text"/>  |                                      |  |
| (D) Route Number.                | <input type="text" value="00000"/>                          |                                      |  |
| (E) Dir Suffix                   | <input type="text" value="0 - NOT APPLICABLE"/>             |                                      |  |
| (6A) Featured Intersected        | <input type="text" value="WALNUT HILL BROOK"/>              |                                      |  |
| (6B) Critical Facility Indicator | <input type="text"/>  |                                      |  |
| (7) Facility Carried             | <input type="text" value="BUCKS HILL ROAD"/>                |                                      |  |
| (9) Location                     | <input type="text" value="0.05 MI NORTH OF MUNN ROAD"/>     |                                      |  |
| (11) Mile Post                   | <input type="text"/> Miles                                  |                                      |  |
| (16) Latitude                    | <input type="text" value="41"/> Deg.                        | <input type="text" value="28"/> Min. | <input type="text" value="17.4"/> Sec. |
| (17) Longitude                   | <input type="text" value="-73"/> Deg.                       | <input type="text" value="10"/> Min. | <input type="text" value="0.5"/> Sec.  |
| (98) Border Bridge               |   |                                      |  |
| (A) State Code                   | <input type="text"/>  | (B) Percent Responsibility           | <input type="text"/> %                 |
| (C) Border Town Name             | <input type="text"/>  |                                      |  |
| (99) Border Bridge Structure No. | <input type="text"/>  |                                      |  |

### STRUCTURE TYPE & MATERIALS

|  |   |
|--|---|
| (43) Structure Type, Main                |   |
| A) Material                              | <input type="text" value="19 - CULVERT"/>       |
| B) Design Type                           | <input type="text" value="03 - STEEL"/>         |
| (44) Structure Type, Approach            |   |
| A) Material                              | <input type="text"/>                            |
| B) Design Type                           | <input type="text"/>                            |
| (45) Number of Spans, Main Unit          | <input type="text" value="1"/>                  |
| (46) Number of Approach Spans            | <input type="text" value="0"/>                  |
| (107) Deck Structure Type                | <input type="text" value="5 - STEEL PLATE"/>    |
| (108) Wearing Surface/Protection Systems |   |
| A) Type of Wearing Surface               | <input type="text" value="6 - BITUMINOUS"/>     |
| B) Type of Membrane                      | <input type="text" value="8 - UNKNOWN"/>        |
| C) Type of Deck Protection               | <input type="text" value="8 - UNKNOWN"/>        |
| Substructure                             |   |
| A) Material                              | <input type="text" value="0 - NOT APPLICABLE"/> |
| B) Design Type                           | <input type="text" value="0 - NOT APPLICABLE"/> |
| Paint                                    |   |
| Type                                     | <input type="text"/>                            |
| Year                                     | <input type="text"/>                            |
| Comment                                  | <input type="text"/>                            |

### GEOMETRIC DATA

|  |  |
|--|--|
| (48) Length of Maximum Span            | <input type="text" value="7.0"/> ft.                                   |
| (49) Structure Length                  | <input type="text" value="7.0"/> ft.                                   |
| (50) Curb or Sidewalk Widths           |  |
| A) Left                                | <input type="text" value="0"/> ft. <input type="text" value="0"/> in.  |
| B) Right                               | <input type="text" value="0"/> ft. <input type="text" value="0"/> in.  |
| (51) Bridge Roadway Width Curb to Curb | <input type="text" value="26"/> ft. <input type="text" value="0"/> in. |
| (52) Deck Width, Out to Out            | <input type="text" value="40"/> ft. <input type="text" value="0"/> in. |
| (32) Approach Roadway Width            | <input type="text" value="26.0"/> ft.                                  |

Form: BRI-19, Rev. 2/15

Inspection type: ROUTINE

Inspection Date: 05/08/2025

Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130006

Town: SOUTHBURY

Carried: BUCKS HILL ROAD

Crossed: WALNUT HILL BROOK

Inventory Route: Non-NHS

(33) Bridge Median

0 - NO MEDIAN

Deck Area

304 sq. ft.

(34) Skew Angle

23 deg.

(35) Structure Flared

0 - NO FLARE

(10) Inv. Rte. Min. Vert. Clearance

99 ft. 99 in.

(47) Inv. Rte. Total Horiz. Clr.

15 ft. 6 in.

Log Inv. Rte. Total Horiz. Clr.

ft. in.

RLog Inv. Rte. Total Horiz. Clr.

ft. in.

(53) Min. Vert. Clearance Over Bridge

99 ft. 99 in.

(54) Log-Min. Vert. Underclearance

N ref. 0 ft. 0 in.

(55) Min. Lat Underclearance on Right

N ref. 0 ft. 0 in.

(56) Min. Lat Underclearance on Left

0 ft. 0 in.

#### CONDITION

(58) Deck

N

(59) Superstructure

N

(60) Substructure

N

(61) Channel & Channel Protections

7

(62) Culverts

2

(36) Traffic Safety Features

A) Bridge Railings

N

B) Transitions

N

C) Approach Guardrail

7

D) Approach Guardrail Ends

N

#### WATERWAY

Drainage Basin Waterway

(38) Navigation Control

0 - No navigation control  
on waterway (bridge permit  
not required)

(39) Navigation Vertical Clearance

0 ft.

(40) Navigation Horiz. Clr.

0 ft.

(111) Pier/Abutment Navigation

(116) Vert-Lift Brg Nav Min

0 ft. 0 in.

#### AGE AND SERVICE

Year Built

1960

(106) Year Reconstructed

(42) Type of Service

A) On

1 - HIGHWAY, WITHOUT PEDESTRIAN

B) Under

5 - WATERWAY

(28) Number of Lanes

A) On

02

B)

00

(29) Average Daily Traffic

750

Is Above Half ADT?

(109) Percent Truck

%

(30) Years of ADT

1991

(19) Bypass, Detour Length

2.7 Miles

#### APPRAISALS

(67) Structural Evaluation

2

(68) Deck Geometry

6

(69) Underclearances, Vert. & Horiz.

N

(71) Waterway Adequacy

6

(72) Approach Roadway Alignment

8

(113) Scour Critical

2

#### COMMENTS

#### CLASSIFICATION

(112) NBIS Bridge Length

No

(104) Highway System

0 - Structure/Route is NOT on NHS

(26) Functional Class

09 - Rural Local

(100) Defense Highway

0 - NOT on a STRAHNET Route

(101) Parallel Structure

N - No Parallel Structure

(102) Direction of Traffic

2 - 2-way Traffic



Form: BRI-19, Rev. 2/15

Inspection type: ROUTINE

Inspection Date: 05/08/2025

Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130006

Town: SOUTHBURY

Carried: BUCKS HILL ROAD

Crossed: WALNUT HILL BROOK

Inventory Route: Non-NHS

|                                   |                                    |
|-----------------------------------|------------------------------------|
| (103) Temporary Structure         |                                    |
| (110) Designated National Network | 0 - Inventory Route Not on Network |
| (20) Toll                         | 3 - On Free Road                   |
| (21) Maintain                     | 03 - Town Highway Agency           |
| (22) Owner                        | 03 - Town Highway Agency           |
| Report Class                      | L - Local                          |
| (37) Historical Significance      | 4 - Not Determinable               |

#### POSTED SIGNS

|                                  |           |             |      |     |
|----------------------------------|-----------|-------------|------|-----|
| Other Posted Sign 1              | 0 - Blank |             |      |     |
| Other Posted Sign 2              | 0 - Blank |             |      |     |
|                                  | Actual    | Recommended |      |     |
| Posted Load Single Unit Truck    |           |             | tons |     |
| Posted Load Semi-Trailer Truck   |           |             | tons |     |
| Posted Load 4 Axle Truck         |           |             | tons |     |
| Posted Load 3S2 Truck            |           |             | tons |     |
| All Vehicles                     |           |             | tons |     |
| Posted Vert. Clearance on Bridge |           | ft.         |      | in. |
| Posted Vert. Underclearance      |           | ft.         |      | in. |
| Posted Speed Limit on Bridge     | 30        | m.p.h.      |      |     |

#### OTHER FEATURES

|                               |                          |
|-------------------------------|--------------------------|
| Fence Required                | No                       |
| Fence Present                 | No                       |
| Fence Type                    | Blank                    |
| Fence Height                  | Blank                    |
| Fence Material                | Blank                    |
| Fence Top Type                | Blank                    |
| Barrel Ladders                | No                       |
| Stand Pipes                   | No                       |
| Catwalks                      | No                       |
| Moveable Inspection System    | No                       |
| Haunches Present over Roadway | No                       |
| Utilities                     | N   No Utilities present |

#### PROPOSED IMPROVEMENTS

|                                      |    |     |
|--------------------------------------|----|-----|
| (75A) Type of Work Proposed          |    |     |
| (75B) Work Done By                   |    |     |
| (76) Length of Structure Improvement |    | ft. |
| (94) Bridge Improvement Cost         | \$ |     |
| (95) Roadway Improvement Cost        | \$ |     |
| (96) Total Project Cost              | \$ |     |
| (97) Year of Improvement Estimate    |    |     |
| (114) Future ADT                     |    |     |
| (115) Year of Future ADT             |    |     |
| DOT Bridge Program List No           |    |     |
| Project No                           |    |     |
| Advertised Date                      |    |     |

#### LOAD RATING & POSTING

|                            |          |
|----------------------------|----------|
| (31) Design Load           |          |
| (63) Operating Rating Type |          |
| (64) Operating Rating      |          |
| (65) Inventory Rating Type |          |
| (66) Inventory Rating      |          |
| Evaluation Code            |          |
| Year of Evaluation         |          |
| (70) Bridge Posting        |          |
| (41) Structure Status      | A - OPEN |



# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130006

INSPECTION DATE: 5/8/2025

|                          |                                 |                           |                            |                   |      |
|--------------------------|---------------------------------|---------------------------|----------------------------|-------------------|------|
| INSPECTION TYPE:         | Routine                         | PREVIOUS INSPECTION DATE: | 9/26/2016                  | SNOOPER REQUIRED: | No   |
| INSPECTION PERFORMED BY: | Cardinal Engineering Associates |                           |                            | SNOOPER USED:     | No   |
| TOWN:                    | Southbury                       | FEATURE CARRIED:          | Bucks Hill Road            | YEAR BUILT:       | 1960 |
| LOCATION:                | 0.05 mi north of Munn Road      | FEATURE INTERSECTED:      | Walnut Hill Brook          | YEAR REBUILT:     | N/A  |
| MAIN MATERIAL:           | Steel                           | MAIN DESIGN:              | Culvert - Steel Plate Arch |                   |      |

|   |   |                     |                          |                 |                    |                       |                 |  |            |       |
|---|---|---------------------|--------------------------|-----------------|--------------------|-----------------------|-----------------|--|------------|-------|
| <b>INSPECTION VISITS:</b><br>Inspection Date: 5/8/2025<br>Temperature: 64° F, Sunny | <b>INSPECTORS:</b><br><table style="width: 100%;"> <tr> <td style="width: 33%;">Start Time: 8:45 AM</td> <td style="width: 33%;">Inspector: Elias Noujaim</td> <td style="width: 33%;">Task: Inspector</td> </tr> <tr> <td>End Time: 10:00 AM</td> <td>Inspector: Tim Milone</td> <td>Task: Inspector</td> </tr> <tr> <td></td> <td>Inspector:</td> <td>Task:</td> </tr> </table> | Start Time: 8:45 AM | Inspector: Elias Noujaim | Task: Inspector | End Time: 10:00 AM | Inspector: Tim Milone | Task: Inspector |  | Inspector: | Task: |
| Start Time: 8:45 AM   | Inspector: Elias Noujaim  | Task: Inspector     |                          |                 |                    |                       |                 |  |            |       |
| End Time: 10:00 AM  | Inspector: Tim Milone   | Task: Inspector     |                          |                 |                    |                       |                 |  |            |       |
|   | Inspector:  | Task:               |                          |                 |                    |                       |                 |  |            |       |

### 58. DECK

OVERALL RATING: N

|                     | RATING |  |
|---------------------|--------|--|
| OVERLAY             | 6      | The bituminous overlay is typically in good condition. There is a 24'L x 15'W bituminous patch along the southbound roadway (west side of roadway) that is a repair to flood damage from 2024. There is a 15'L hairline crack along the south approach in the northbound roadway (east side of roadway) at the end of the bituminous patch. Along the north approach, there is a full length hairline crack with 3'L x 2'W bituminous patch at the northbound roadway along the two catch basins. See photo numbers 1-5, 14-16, 18-19. |
| DECK STR. CONDITION | N      |  |
| CURBS               | 7      | Bituminous curbs are typically in good condition. There is a section of repaired roadway where the bituminous curb was not replaced. See photo numbers 5 and 16-18.  |
| MEDIAN              | N      |  |
| SIDEWALKS           | N      |  |
| PARAPET             | N      |  |
| RAILING             | N      |  |
| PAINT               | N      |  |
| FENCE               | N      |  |
| DRAINS              | N      |  |
| LIGHTING STANDARD   | N      |  |
| UTILITIES TYPE/SIDE | N      |  |
| CONSTRUCTION JOINTS | N      |  |
| EXPANSION JOINTS    | N      |  |

### 59. SUPERSTRUCTURE

OVERALL RATING: N

|                 | RATING |  |
|-----------------|--------|--|
| BEARING DEVICES | N      |  |
| STRINGERS       | N      |  |
| GIRDERS         | N      |  |
| FLOOR BEAMS     | N      |  |
| TRUSSES-GENERAL | N      |  |
| TRUSSES-PORTALS | N      |  |
| TRUSSES BRACING | N      |  |
| PAINT           | N      |  |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130006

INSPECTION DATE: 5/8/2025

|                     |   |                        |
|---------------------|---|------------------------|
| RUST                | N |                        |
| MACHINERY MOV SPAN  | N |                        |
| RIVETS & BOLTS      | N |                        |
| WELDS & CRACKS      | N |                        |
| TIMBER DECAY        | N |                        |
| CONCRETE CRACKING   | N |                        |
| COLLISION DAMAGE    | N |                        |
| MEMBER ALIGNMENT    | N |                        |
| DEFLECT. UNDER LOAD | 8 | No deficiencies noted. |
| VIBR. UNDER LOAD    | 8 | No deficiencies noted. |
| STAND PIPES         | N |                        |
| BARREL LADDERS      | N |                        |

ARE BARREL LADDERS OSHA COMPLIANT? N/A

### 60. SUBSTRUCTURE

OVERALL RATING N

|                        | RATING |  |
|------------------------|--------|--|
| ABUTMENTS-STEM         | N      |  |
| ABUTMENTS-BACKWALL     | N      |  |
| ABUTMENTS-FOOTINGS     | N      |  |
| ABUT.-SETTLEMENT       | N      |  |
| ABUTMENTS-WINGWALLS    | N      |  |
| PIERS/BENTS-CAPS       | N      |  |
| PIERS/BENTS-PILE BENT  | N      |  |
| PIERS/BENTS-COLUMN     | N      |  |
| PIERS/BENTS-FOOTINGS   | N      |  |
| PIERS/BENTS-SETTLEMENT | N      |  |
| EROSION-SCOUR          | N      |  |
| CONCRETE CRACK-SPALL   | N      |  |
| STEEL CORROSION        | N      |  |
| PAINT                  | N      |  |
| TIMBER DECAY           | N      |  |
| COLLISION DAMAGE       | N      |  |
| DEBRIS                 | N      |  |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130006

INSPECTION DATE: 5/8/2025

### 61. CHANNEL PROTECTION

OVERALL RATING 7

|                      | RATING |  |
|----------------------|--------|--|
| CHANNEL SCOUR        | 6      | The downstream channel has a 6' diameter x 1' deep scour hole. There is an area of built up gravel just before the scour hole.         |
| EMBANKMENT EROSION   | 8      | No deficiencies noted.   |
| DEBRIS               | 6      | The upstream and downstream channels are typically in good condition with no debris noted in the channels.<br>See photo numbers 6 - 7. |
| VEGETATION           | 6      | Banks are well vegetated with no issues noted. See photo numbers 6 - 7.  |
| CHANNEL CHANGE       | 8      | No deficiencies noted.   |
| FENDER SYSTEM        | N      |  |
| SPUR DIKES & JETTIES | N      |  |
| RIP RAP              | N      |  |

### 62. CULVERTS & RETAINING WALL

OVERALL RATING 2

|                     | RATING |   |
|---------------------|--------|---|
| BARREL              | 2      | The steel plate arch is perched 14" above the channel at the invert. The pipe has up to 100% section loss along the pipe invert for up to full length. The pipe has no notable deflection.<br>See photo numbers 8-13. |
| CONCRETE            | N      |   |
| STEEL               | 3      | The pipe has up to 100% section loss along the pipe invert for up to full length. The pipe has no notable deflection.<br>See photo numbers 8-13.  |
| TIMBER              | N      |   |
| HEADWALL            | N      |   |
| CUTOFF WALL         | N      |   |
| RETAINING WALL STEM | N      |   |
| FOOTING             | N      |   |

### APPROACH CONDITION

OVERALL RATING 7

|                     | RATING |   |
|---------------------|--------|---|
| APPROACH SLAB       | N      |   |
| RELIEF JOINT        | N      |   |
| APPROACH GUIDE RAIL | 7      | The guide rails are typically in good condition. The area of guide rail along the repaired section of roadway has been has had the posts put back in place, although the two repaired posts are bent.<br>See photo numbers 14-18.   |
| APPROACH PAVEMENT   | 7      | The bituminous overlay is typically in good condition. There is a 24'L x 15'W bituminous patch along the southbound roadway (west side of roadway) that is a repair to flood damage from 2024. There is a 15'L hairline crack along the south approach in the northbound roadway (east side of roadway) at the end of the bituminous patch. Along the north approach, there is a full length hairline crack with 3'L x 2'W bituminous patch at the northbound roadway along the two catch basins.<br>See photo numbers 1-5, 14-16, 18-19. |
| APPROACH EMBANKMENT | 7      | No deficiencies noted. See photo numbers 1 - 4.   |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130006

INSPECTION DATE: 5/8/2025

**TRAFFIC SAFETY FEATURES:**

|                      |   |  |
|----------------------|---|--|
| BRIDGE RAILINGS      | N |  |
| TRANSITIONS          | N |  |
| APPROACH GUARDRAILS  | 7 | The guide rails are typically in good condition. The area of guide rail along the repaired section of roadway has been has had the posts put back in place, although the two repaired posts are bent. See photo numbers 14-18. |
| APPR. GUARDRAIL ENDS | N |  |

**LOAD POSTED**

|                     | RATING |  |
|---------------------|--------|--|
| SINGLE UNIT (TONS)  | N      |  |
| HS (TONS)           | N      |  |
| 4 AXLE (TONS)       | N      |  |
| 2S3 (TONS)          | N      |  |
| ADVANCE WARNING Y/N | N      |  |
| LEGIBILITY          | N      |  |
| VISIBILITY/LOCATION | N      |  |



**MISC.**

|                          |                            |     |  |
|--------------------------|----------------------------|-----|--|
| MIN VERT. UNDERCLR.      | 0                          | 0   |  |
| POSTED CLR. UNDER BRIDGE | 0                          | 0   |  |
| POSTED CLR. ON BRIDGE    | 0                          | 0   |  |
| ADVANCE WARNING (Y/N)    | N                          |     |  |
| SPEED LIMIT (IF ANY)     | N                          | MPH |  |
| CHARACTER OF TRAFFIC     | Light, passenger vehicles. |     |  |

**ADDITIONAL NOTES**

**ADDITIONAL COMMENTS:**

Inspectors' Signatures:

|    |               |   |                    |
|----|---------------|---|--------------------|
| 1) | Elias Noujaim |  | Date: 05 / 20 / 24 |
| 2) | Tim Milone    |  | Date: 05 / 20 / 24 |
| 3) |               |   | Date: __ / __ / __ |
| 4) |               |   | Date: __ / __ / __ |

P.E. Signature:

Gary Giroux, P.E. # 11477

P.E. #:

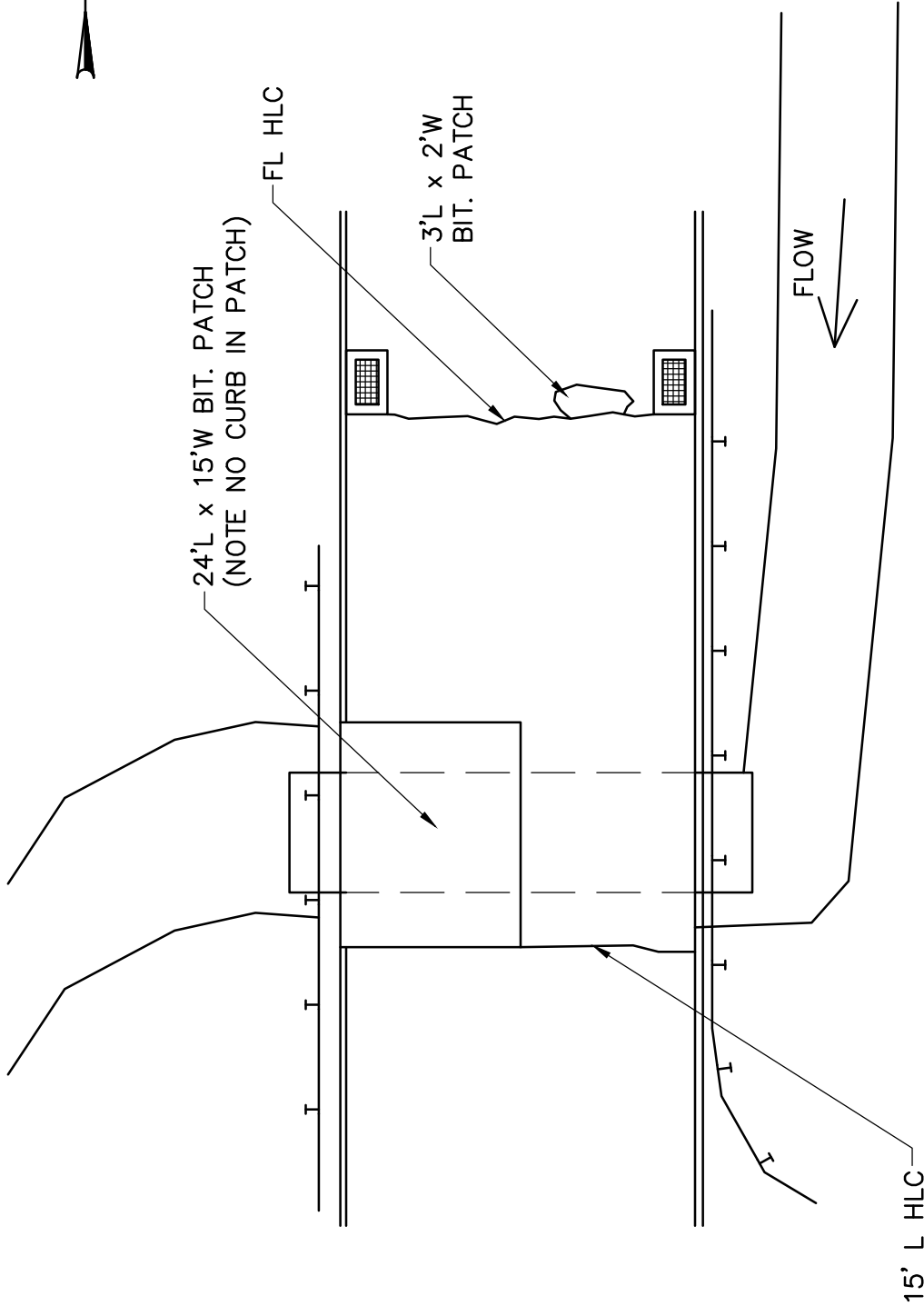
Reviewed by:





05 / 20 / 24

Date: \_\_ / \_\_ / \_\_



**NOTE:**

- UNDERMINED AREA REPAIRED WITH RIP
- RAP AND NEW BIT. PAVEMENT.
- AREA OF NEW PATCH HAS NO CURB

PROJECT TITLE:

130006

BUCKS HILL RD OVER WALNUT HILL BRK

DRAWING TITLE:

TOP OF DECK

DRAFTER:

ERN

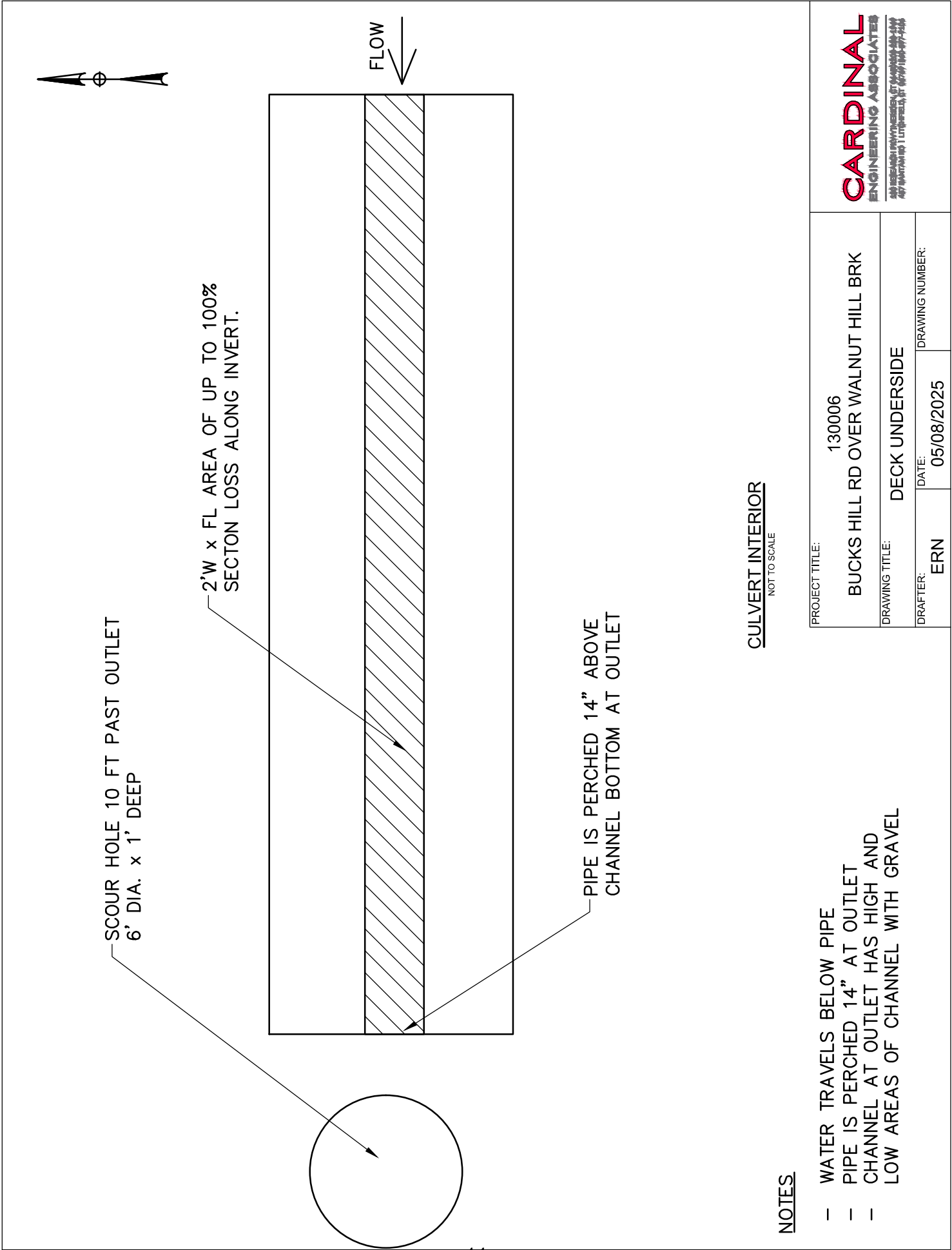
DATE:

05/08/2025

DRAWING NUMBER:

**CARDINAL**  
ENGINEERING ASSOCIATES

ALL DESIGN DRAWINGS ARE THE PROPERTY OF CARDINAL  
ENGINEERING ASSOCIATES. NO PARTS MAY BE REPRODUCED  
OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC  
OR MECHANICAL, WITHOUT PERMISSION IN WRITING.





**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 1

Photo Taken: 05/08/2025



Bridge from North Approach – Looking South

Photo Number: 2

Photo Taken: 05/08/2025



Bridge from South Approach – Looking North



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130006**

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 3

Photo Taken: 05/08/2025



North Approach from Bridge – Looking North

Photo Number: 4

Photo Taken: 05/08/2025



South Approach from Bridge – Looking South



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130006**

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 5

Photo Taken: 05/08/2025



Top of Deck – Looking southwest. Note repaired roadway section.

Photo Number: 6

Photo Taken: 05/08/2025



Upstream Channel – Looking North



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130006**

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 7

Photo Taken: 05/08/2025



Downstream Channel – Looking South

Photo Number: 8

Photo Taken: 05/08/2025



Upstream Bridge Elevation – Looking South



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 9

Photo Taken: 05/08/2025



Downstream Bridge Elevation – Looking North. Note 14” perching.

Photo Number: 10

Photo Taken: 05/08/2025



Pipe interior from inlet. Note deterioration along invert.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 11

Photo Taken: 05/08/2025



Pipe deterioration at outlet, up to 2' wide x full length with up to 100% section loss.

Photo Number: 12

Photo Taken: 05/08/2025



Pipe deterioration at outlet with up to 100% section loss. Note water flowing under pipe.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 13

Photo Taken: 05/08/2025



Pipe outlet perched 14".

Photo Number: 14

Photo Taken: 05/08/2025



West Guiderail, looking southwest



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 15

Photo Taken: 05/08/2025



East Guiderail, looking southeast

Photo Number: 16

Photo Taken: 05/08/2025



West side repair with riprap and bituminous roadway patch. Note no new curbing.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 17

Photo Taken: 05/08/2025



West side repair with riprap and bituminous roadway patch. Note no new curbing.

Photo Number: 18

Photo Taken: 05/08/2025



15' long hairline crack along east side of roadway opposite bituminous patch.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130006

**Town:** Southbury

**Carried:** Bucks Hill Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 19

Photo Taken: 05/08/2025



Bituminous patch and full-length hairline crack along catch basins, at north approach



Inspection Type: Routine



## BRIDGE NO. 130029

Southbury  
Munn Road  
Over  
Walnut Hill Brook

Routine Inspection

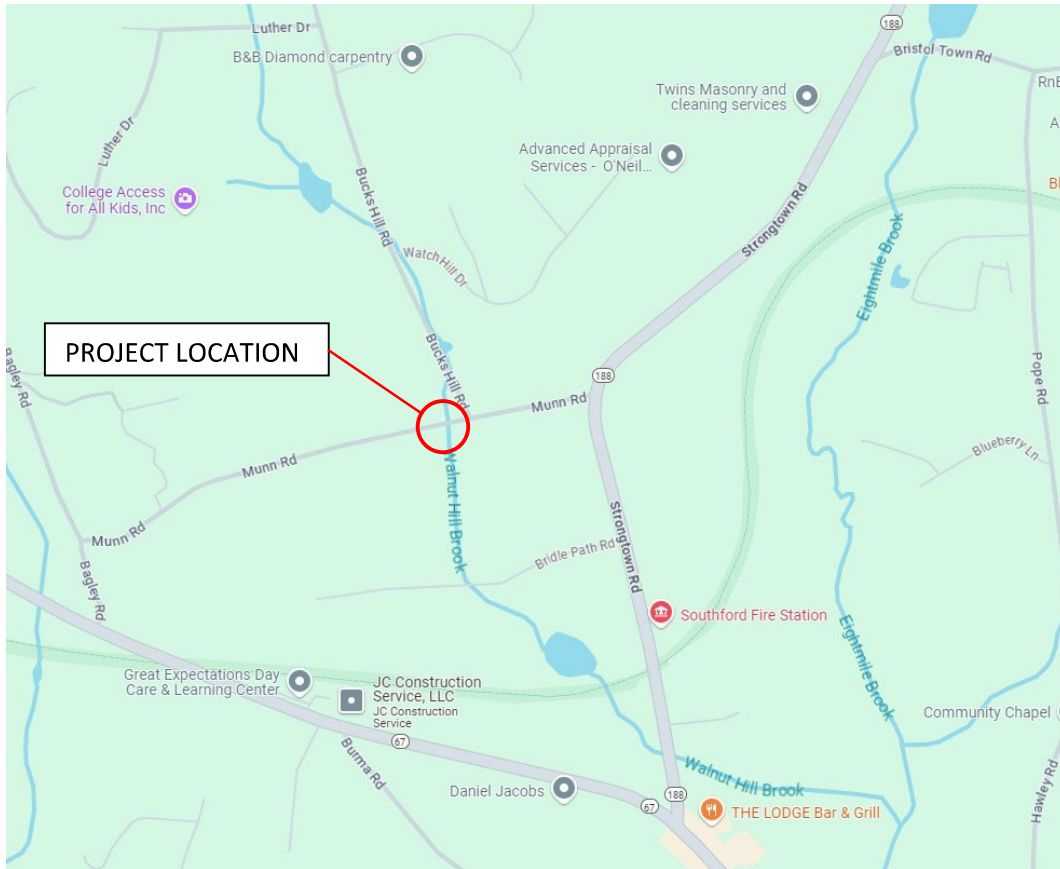
05/08/2025

Inspected by: Cardinal Engineering Associates



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| Structure Inventory and Appraisal (BRI-19) ..... | 3                         |
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**Location Map # 1**

Southbury, CT

Bridge 130029, Munn Road over Walnut Hill Brook

Latitude: 41° 28' 14.7"

Longitude: -73° 10' 0.5"

## **EXECUTIVE SUMMARY**

Bridge 130029 carries Munn Road over Walnut Hill Brook in the Town of Southbury, CT. This bridge is a 72" x 44" h steel pipe arch. The paved width of the approach roadway is 25'-0" and the out-to-out width of the structure is 35'-0".

This bridge inspection was performed according to CTDOT standards for routine bridge inspections. The bridge was found to be in serious condition with replacement advised due to the condition of the structure.

### **Approach Condition**

*Overall Rating: 7*

The Culvert Approaches are in good condition due to the condition of the bituminous overlay. The overlay is in good condition with no issues noted. See Approach Condition Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Deck**

*Overall Rating: 7*

Although the culvert does not formally have a deck, the bituminous overlay is assessed in this section. The deck receives a good condition rating due to the bituminous overlay being in good condition. It has been patched and the patch is in good condition. See Deck Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Culvert**

*Overall Rating: 3*

The steel pipe arch is in serious condition due to heavy rust along the pipe invert, random perforations up to 6" long x 2" wide and water traveling below the structure. See Culverts and Retaining Wall Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Channel and Channel Protection**

*Overall Rating: 6*

The Channel and Channel Protection are in satisfactory condition with no major issues noted. There are random fallen trees spanning the upstream channel banks. See Channel Protection Section in the Bridge Inspection Report BRI-18 Form for more information.

### **Traffic Safety Features**

Approach Guardrails: There are no approach guide rails present.

See Traffic Safety Features Section in the Bridge Inspection Report BRI-18 Form for more information.

Form: BRI-19, Rev. 2/15  
Inspection type: ROUTINE  
Inspection Date: 05/08/2025  
Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130029

Town: SOUTHBURY  
Carried: MUNN ROAD  
Crossed: WALNUT HILL BROOK  
Inventory Route: Non-NHS

## STRUCTURE INVENTORY & APPRAISAL

### INSPECTION

|                        |   |                            |                                |
|------------------------|---|----------------------------|--------------------------------|
| Structurally Deficient | <input type="text" value="Y"/>          | Functionally Obsolete      | <input type="text" value="N"/> |
| Sufficiency Rating     | <input type="text" value="46.24"/>      |                            |                                |
| (90) Inspection Date   | <input type="text" value="05/15/2025"/> | (91) Frequency             | <input type="text"/>           |
| Indepth Insp           | <input type="text" value="N"/>          | Proposed next Indepth Year | <input type="text"/>           |
| Survey Date            | <input type="text"/>                    | Class                      | <input type="text"/>           |
| Access                 | <input type="text"/>                    | Flagman                    | <input type="text"/>           |
|                        | Frequency                               | Date                       | Type                           |
| Fracture               | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |
| Underwater             | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |
| Special                | <input type="text"/>                    | <input type="text"/>       | <input type="text"/>           |

### IDENTIFICATION

|                                  |   |                                      |  |
|----------------------------------|---|--------------------------------------|--|
| Bridge Name                      | <input type="text"/>  |                                      |  |
| Town Code - Name                 | <input type="text" value="69640 - SOUTHBURY"/>              |                                      |  |
| (5) Inventory Route              |   |                                      |  |
| (A) Record Type                  | <input type="text" value="1 - ROUTE CARRIED ON STRUCTURE"/> |                                      |  |
| (B) Signing Prefix               | <input type="text" value="5 - TOWN ROAD"/>                  |                                      |  |
| (C) Level of Service             | <input type="text"/>  |                                      |  |
| (D) Route Number.                | <input type="text" value="00000"/>                          |                                      |  |
| (E) Dir Suffix                   | <input type="text" value="0 - NOT APPLICABLE"/>             |                                      |  |
| (6A) Featured Intersected        | <input type="text" value="WALNUT HILL BROOK"/>              |                                      |  |
| (6B) Critical Facility Indicator | <input type="text"/>  |                                      |  |
| (7) Facility Carried             | <input type="text" value="MUNN ROAD"/>                      |                                      |  |
| (9) Location                     | <input type="text" value="0.2 MI WEST OF STRONGTOWN ROAD"/> |                                      |  |
| (11) Mile Post                   | <input type="text"/> Miles                                  |                                      |  |
| (16) Latitude                    | <input type="text" value="41"/> Deg.                        | <input type="text" value="28"/> Min. | <input type="text" value="14.7"/> Sec. |
| (17) Longitude                   | <input type="text" value="-73"/> Deg.                       | <input type="text" value="10"/> Min. | <input type="text" value="0.5"/> Sec.  |
| (98) Border Bridge               |   |                                      |  |
| (A) State Code                   | <input type="text"/>  | (B) Percent Responsibility           | <input type="text"/> %                 |
| (C) Border Town Name             | <input type="text"/>  |                                      |  |
| (99) Border Bridge Structure No. | <input type="text"/>  |                                      |  |

### STRUCTURE TYPE & MATERIALS

|  |   |
|--|---|
| (43) Structure Type, Main                |   |
| A) Material                              | <input type="text" value="03 - STEEL"/>         |
| B) Design Type                           | <input type="text" value="19 - CULVERT"/>       |
| (44) Structure Type, Approach            |   |
| A) Material                              | <input type="text"/>                            |
| B) Design Type                           | <input type="text"/>                            |
| (45) Number of Spans, Main Unit          | <input type="text" value="1"/>                  |
| (46) Number of Approach Spans            | <input type="text" value="0"/>                  |
| (107) Deck Structure Type                | <input type="text" value="N - NOT APPLICABLE"/> |
| (108) Wearing Surface/Protection Systems |   |
| A) Type of Wearing Surface               | <input type="text" value="6 - BITUMINOUS"/>     |
| B) Type of Membrane                      | <input type="text" value="8 - UNKNOWN"/>        |
| C) Type of Deck Protection               | <input type="text" value="8 - UNKNOWN"/>        |
| Substructure                             |   |
| A) Material                              | <input type="text" value="0 - NOT APPLICABLE"/> |
| B) Design Type                           | <input type="text" value="0 - NOT APPLICABLE"/> |
| Paint                                    |   |
| Type                                     | <input type="text"/>                            |
| Year                                     | <input type="text"/>                            |
| Comment                                  | <input type="text"/>                            |

### GEOMETRIC DATA

|  |  |
|--|--|
| (48) Length of Maximum Span            | <input type="text" value="6.0"/> ft.                                   |
| (49) Structure Length                  | <input type="text" value="6.0"/> ft.                                   |
| (50) Curb or Sidewalk Widths           |  |
| A) Left                                | <input type="text" value="0"/> ft. <input type="text" value="0"/> in.  |
| B) Right                               | <input type="text" value="0"/> ft. <input type="text" value="0"/> in.  |
| (51) Bridge Roadway Width Curb to Curb | <input type="text" value="25"/> ft. <input type="text" value="0"/> in. |
| (52) Deck Width, Out to Out            | <input type="text" value="35"/> ft. <input type="text" value="0"/> in. |
| (32) Approach Roadway Width            | <input type="text" value="25.0"/> ft.                                  |



Form: BRI-19, Rev. 2/15

Inspection type: ROUTINE

Inspection Date: 05/08/2025

Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130029

Town: SOUTHBURY

Carried: MUNN ROAD

Crossed: WALNUT HILL BROOK

Inventory Route: Non-NHS

(33) Bridge Median

0 - NO MEDIAN

Deck Area

217 sq. ft.

(34) Skew Angle

0 deg.

(35) Structure Flared

0 - NO FLARE

(10) Inv. Rte. Min. Vert. Clearance

99 ft. 99 in.

(47) Inv. Rte. Total Horiz. Clr.

15 ft. 6 in.

Log Inv. Rte. Total Horiz. Clr.

ft. in.

RLog Inv. Rte. Total Horiz. Clr.

ft. in.

(53) Min. Vert. Clearance Over Bridge

99 ft. 99 in.

(54) Log-Min. Vert. Underclearance

N ref. 0 ft. 0 in.

(55) Min. Lat Underclearance on Right

N ref. 0 ft. 0 in.

(56) Min. Lat Underclearance on Left

0 ft. 0 in.

**CONDITION**

(58) Deck

7

(59) Superstructure

N

(60) Substructure

N

(61) Channel &amp; Channel Protections

6

(62) Culverts

3

(36) Traffic Safety Features

A) Bridge Railings

N

B) Transitions

N

C) Approach Guardrail

N

D) Approach Guardrail Ends

N

**WATERWAY**

Drainage Basin Waterway

(38) Navigation Control

0 - No navigation control  
on waterway (bridge permit  
not required)

(39) Navigation Vertical Clearance

0 ft.

(40) Navigation Horiz. Clr.

0 ft.

(111) Pier/Abutment Navigation

(116) Vert-Lift Brg Nav Min

0 ft. 0 in.

**AGE AND SERVICE**

Year Built

1960

(106) Year Reconstructed

(42) Type of Service

A) On

1 - HIGHWAY, WITHOUT PEDESTRIAN

B) Under

5 - WATERWAY

(28) Number of Lanes

A) On

02

B)

00

(29) Average Daily Traffic

475

Is Above Half ADT?

(109) Percent Truck

%

(30) Years of ADT

2023

(19) Bypass, Detour Length

2.72 Miles

**APPRAISALS**

(67) Structural Evaluation

3

(68) Deck Geometry

4

(69) Underclearances, Vert. &amp; Horiz.

N

(71) Waterway Adequacy

6

(72) Approach Roadway Alignment

8

(113) Scour Critical

6

**COMMENTS****CLASSIFICATION**

(112) NBIS Bridge Length

No

(104) Highway System

0 - Structure/Route is NOT on NHS

(26) Functional Class

09 - Rural Local

(100) Defense Highway

0 - NOT on a STRAHNET Route

(101) Parallel Structure

N - No Parallel Structure

(102) Direction of Traffic

2 - 2-way Traffic

Form: BRI-19, Rev. 2/15

Inspection type: ROUTINE

Inspection Date: : 05/08/2025

Inspected by: CARDINAL ENGINEERING ASSOCIATES

Bridge No: 130029

Town: SOUTHBURY

Carried: MUNN ROAD

Crossed: WALNUT HILL

Inventory Route: Non-NHS

|                                   |                                    |
|-----------------------------------|------------------------------------|
| (103) Temporary Structure         | <input type="text"/>               |
| (110) Designated National Network | 0 - Inventory Route Not on Network |
| (20) Toll                         | 3 - On Free Road                   |
| (21) Maintain                     | 03 - Town Highway Agency           |
| (22) Owner                        | 03 - Town Highway Agency           |
| Report Class                      | L - Local                          |
| (37) Historical Significance      | 4 - Not Determinable               |

#### POSTED SIGNS

|                                  |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| Other Posted Sign 1              | 0 - Blank                |                          |
| Other Posted Sign 2              | 0 - Blank                |                          |
|                                  | Actual                   | Recomended               |
| Posted Load Single Unit Truck    | <input type="text"/>     | <input type="text"/>     |
| Posted Load Semi-Trailer Truck   | <input type="text"/>     | <input type="text"/>     |
| Posted Load 4 Axle Truck         | <input type="text"/>     | <input type="text"/>     |
| Posted Load 3S2 Truck            | <input type="text"/>     | <input type="text"/>     |
| All Vehicles                     | <input type="text"/>     | <input type="text"/>     |
|                                  |                          | tons                     |
|                                  |                          | tons                     |
|                                  |                          | tons                     |
|                                  |                          | tons                     |
|                                  |                          | tons                     |
| Posted Vert. Clearance on Bridge | <input type="text"/> ft. | <input type="text"/> in. |
| Posted Vert. Underclearance      | <input type="text"/> ft. | <input type="text"/> in. |
| Posted Speed Limit on Bridge     | 25                       | m.p.h.                   |

#### OTHER FEATURES

|                               |                          |
|-------------------------------|--------------------------|
| Fence Required                | No                       |
| Fence Present                 | No                       |
| Fence Type                    | Blank                    |
| Fence Height                  | Blank                    |
| Fence Material                | Blank                    |
| Fence Top Type                | Blank                    |
| Barrel Ladders                | No                       |
| Stand Pipes                   | No                       |
| Catwalks                      | No                       |
| Moveable Inspection System    | No                       |
| Haunches Present over Roadway | No                       |
| Utilities                     | N   No Utilities present |

#### PROPOSED IMPROVEMENTS

|                                      |                          |
|--------------------------------------|--------------------------|
| (75A) Type of Work Proposed          | <input type="text"/>     |
| (75B) Work Done By                   | <input type="text"/>     |
| (76) Length of Structure Improvement | <input type="text"/> ft. |
| (94) Bridge Improvement Cost         | \$ <input type="text"/>  |
| (95) Roadway Improvement Cost        | \$ <input type="text"/>  |
| (96) Total Project Cost              | \$ <input type="text"/>  |
| (97) Year of Improvement Estimate    | <input type="text"/>     |
| (114) Future ADT                     | <input type="text"/>     |
| (115) Year of Future ADT             | <input type="text"/>     |
| DOT Bridge Program List No           | <input type="text"/>     |
| Project No                           | <input type="text"/>     |
| Advertised Date                      | <input type="text"/>     |

#### LOAD RATING & POSTING

|                            |                      |
|----------------------------|----------------------|
| (31) Design Load           | <input type="text"/> |
| (63) Operating Rating Type | <input type="text"/> |
| (64) Operating Rating      | <input type="text"/> |
| (65) Inventory Rating Type | <input type="text"/> |
| (66) Inventory Rating      | <input type="text"/> |
| Evaluation Code            | <input type="text"/> |
| Year of Evaluation         | <input type="text"/> |
| (70) Bridge Posting        | <input type="text"/> |
| (41) Structure Status      | A - OPEN             |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130029

INSPECTION DATE: 5/8/2025

|                          |                                 |                           |                   |                   |     |
|--------------------------|---------------------------------|---------------------------|-------------------|-------------------|-----|
| INSPECTION TYPE:         | Routine                         | PREVIOUS INSPECTION DATE: | 5/5/2016          | SNOOPER REQUIRED: | No  |
| INSPECTION PERFORMED BY: | Cardinal Engineering Associates |                           |                   | SNOOPER USED:     | No  |
| TOWN:                    | Southbury                       | FEATURE CARRIED:          | Munn Road         | YEAR BUILT:       | N/A |
| LOCATION:                | 0.0 mi W of Bucks Hill Road     | FEATURE INTERSECTED:      | Walnut Hill Brook | YEAR REBUILT:     | N/A |
| MAIN MATERIAL:           | Steel                           | MAIN DESIGN:              | Steel Pipe Arch   |                   |     |

|   |  |                      |                          |                 |                    |                       |                 |  |            |       |
|---|--|----------------------|--------------------------|-----------------|--------------------|-----------------------|-----------------|--|------------|-------|
| <b>INSPECTION VISITS:</b><br>Inspection Date: 5/8/2025<br>Temperature: 66° F, Sunny | <b>INSPECTORS:</b><br><table style="width: 100%;"> <tr> <td style="width: 33%;">Start Time: 10:15 AM</td> <td style="width: 33%;">Inspector: Elias Noujaim</td> <td style="width: 33%;">Task: Inspector</td> </tr> <tr> <td>End Time: 11:35 AM</td> <td>Inspector: Tim Milone</td> <td>Task: Inspector</td> </tr> <tr> <td></td> <td>Inspector:</td> <td>Task:</td> </tr> </table> | Start Time: 10:15 AM | Inspector: Elias Noujaim | Task: Inspector | End Time: 11:35 AM | Inspector: Tim Milone | Task: Inspector |  | Inspector: | Task: |
| Start Time: 10:15 AM  | Inspector: Elias Noujaim   | Task: Inspector      |                          |                 |                    |                       |                 |  |            |       |
| End Time: 11:35 AM  | Inspector: Tim Milone  | Task: Inspector      |                          |                 |                    |                       |                 |  |            |       |
|   | Inspector:   | Task:                |                          |                 |                    |                       |                 |  |            |       |

58. DECK N/A OVERALL RATING: N

|                     | RATING |   |
|---------------------|--------|---|
| OVERLAY             | 7      | The bituminous overlay is typically in good condition. There is one 8' long x 2' wide bituminous patch at the south side with no issues noted. See photo numbers 1 - 5.   |
| DECK STR. CONDITION | N      |   |
| CURBS               | 7      | The bituminous curbs are in good condition. There is a new section of bituminous curb in conjunction with the new patch that is in good condition. The leak off at the north side has a bituminous curb with several cracks. See photo numbers 1 - 4 and 13 - 14. |
| MEDIAN              | N      |   |
| SIDEWALKS           | N      |   |
| PARAPET             | N      |   |
| RAILING             | N      |   |
| PAINT               | N      |   |
| FENCE               | N      |   |
| DRAINS              | N      |   |
| LIGHTING STANDARD   | N      |   |
| UTILITIES TYPE/SIDE | N      |   |
| CONSTRUCTION JOINTS | N      |   |
| EXPANSION JOINTS    | N      |   |

59. SUPERSTRUCTURE N/A OVERALL RATING: N

|                 | RATING |  |
|-----------------|--------|--|
| BEARING DEVICES | N      |  |
| STRINGERS       | N      |  |
| GIRDERS         | N      |  |
| FLOOR BEAMS     | N      |  |
| TRUSSES-GENERAL | N      |  |
| TRUSSES-PORTALS | N      |  |
| TRUSSES BRACING | N      |  |
| PAINT           | N      |  |
| RUST            | N      |  |



# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130029

INSPECTION DATE: 5/8/2025

|                     |   |                        |
|---------------------|---|------------------------|
| MACHINERY MOV SPAN  | N |                        |
| RIVETS & BOLTS      | N |                        |
| WELDS & CRACKS      | N |                        |
| TIMBER DECAY        | N |                        |
| CONCRETE CRACKING   | N |                        |
| COLLISION DAMAGE    | N |                        |
| MEMBER ALIGNMENT    | N |                        |
| DEFLECT. UNDER LOAD | 8 | No deficiencies noted. |
| VIBR. UNDER LOAD    | 8 | No deficiencies noted. |
| STAND PIPES         | N |                        |
| BARREL LADDERS      | N |                        |

ARE BARREL LADDERS OSHA COMPLIANT? N/A

60. SUBSTRUCTURE N/A OVERALL RATING N

|                        | RATING |  |
|------------------------|--------|--|
| ABUTMENTS-STEM         | N      |  |
| ABUTMENTS-BACKWALL     | N      |  |
| ABUTMENTS-FOOTINGS     | N      |  |
| ABUT.-SETTLEMENT       | N      |  |
| ABUTMENTS-WINGWALLS    | N      |  |
| PIERS/BENTS-CAPS       | N      |  |
| PIERS/BENTS-PILE BENT  | N      |  |
| PIERS/BENTS-COLUMN     | N      |  |
| PIERS/BENTS-FOOTINGS   | N      |  |
| PIERS/BENTS-SETTLEMENT | N      |  |
| EROSION-SCOUR          | N      |  |
| CONCRETE CRACK-SPALL   | N      |  |
| STEEL CORROSION        | N      |  |
| PAINT                  | N      |  |
| TIMBER DECAY           | N      |  |
| COLLISION DAMAGE       | N      |  |
| DEBRIS                 | N      |  |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130029

INSPECTION DATE: 5/8/2025

### 61. CHANNEL PROTECTION

OVERALL RATING 6

|                      | RATING |  |
|----------------------|--------|--|
| CHANNEL SCOUR        | 8      | No deficiencies noted.   |
| EMBANKMENT EROSION   | 8      | No deficiencies noted.   |
| DEBRIS               | 6      | The upstream channel has multiple fallen trees overtopping the stream channel while not impeding the channel flow. The downstream channel has small to large sized stones throughout the channel. See photo numbers 6 - 7. |
| VEGETATION           | 6      | The upstream embankment is well vegetated with no issues noted. See photo number 6.  |
| CHANNEL CHANGE       | 7      | Upstream channel banks into a stone wall before turning towards the steel pipe arch. No issues noted. See photo number 6.  |
| FENDER SYSTEM        | N      |  |
| SPUR DIKES & JETTIES | N      |  |
| RIP RAP              | N      |  |

### 62. CULVERTS & RETAINING WALL

OVERALL RATING 3

|                     | RATING |   |
|---------------------|--------|---|
| BARREL              | 3      | The 72"w x 44" h steel pipe arch is in serious condition with heavy rust along the pipe invert, random perforations up to 6" long x 2" wide at random locations throughout the structure. The water travels below the pipe at the outlet. The outlet is perched 6". See photo numbers 9 - 12. |
| CONCRETE            | N      |   |
| STEEL               | 3      | The pipe has heavy rust along the invert and perforations up to 6" long x 2" wide. See photos 9 - 12.   |
| TIMBER              | N      |   |
| HEADWALL            | N      |   |
| CUTOFF WALL         | N      |   |
| RETAINING WALL STEM | N      |   |
| FOOTING             | N      |   |

### APPROACH CONDITION

OVERALL RATING 7

|                     | RATING |   |
|---------------------|--------|---|
| APPROACH SLAB       | N      |   |
| RELIEF JOINT        | N      |   |
| APPROACH GUIDE RAIL | N      |   |
| APPROACH PAVEMENT   | 7      | No deficiencies noted. See photo numbers 1 - 4. |
| APPROACH EMBANKMENT | 7      | No deficiencies noted. See photo numbers 1 - 4. |

### TRAFFIC SAFETY FEATURES:

|                      |   |  |
|----------------------|---|--|
| BRIDGE RAILINGS      | N |  |
| TRANSITIONS          | N |  |
| APPROACH GUARDRAILS  | N |  |
| APPR. GUARDRAIL ENDS | N |  |

# Connecticut Department of Transportation

## Bridge Inspection Report BRI-18

BRIDGE #: 130029

INSPECTION DATE: 5/8/2025

### LOAD POSTED

|                     | RATING |  |
|---------------------|--------|--|
| SINGLE UNIT (TONS)  | N      |  |
| HS (TONS)           | N      |  |
| 4 AXLE (TONS)       | N      |  |
| 2S3 (TONS)          | N      |  |
| ADVANCE WARNING Y/N | N      |  |
| LEGIBILITY          | N      |  |
| VISIBILITY/LOCATION | N      |  |



### MISC.

|                          |                            |     |  |
|--------------------------|----------------------------|-----|--|
| MIN VERT. UNDERCLR.      | 0'                         | 0"  |  |
| POSTED CLR. UNDER BRIDGE | 0'                         | 0"  |  |
| POSTED CLR. ON BRIDGE    | 0'                         | 0"  |  |
| ADVANCE WARNING (Y/N)    | N                          |     |  |
| SPEED LIMIT (IF ANY)     | 25                         | MPH |  |
| CHARACTER OF TRAFFIC     | Light, passenger vehicles. |     |  |

### ADDITIONAL NOTES

### ADDITIONAL COMMENTS:

Inspectors' Signatures:

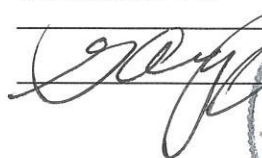

|    |               |   |                    |
|----|---------------|---|--------------------|
| 1) | Elias Noujaim |  | Date: 05 / 27 / 25 |
| 2) | Tim Milone    |  | Date: 05 / 27 / 25 |
| 3) |               |   | Date: __ / __ / __ |
| 4) |               |   | Date: __ / __ / __ |

### P.E. Signature:

Gary Giroux, P.E. # 11477

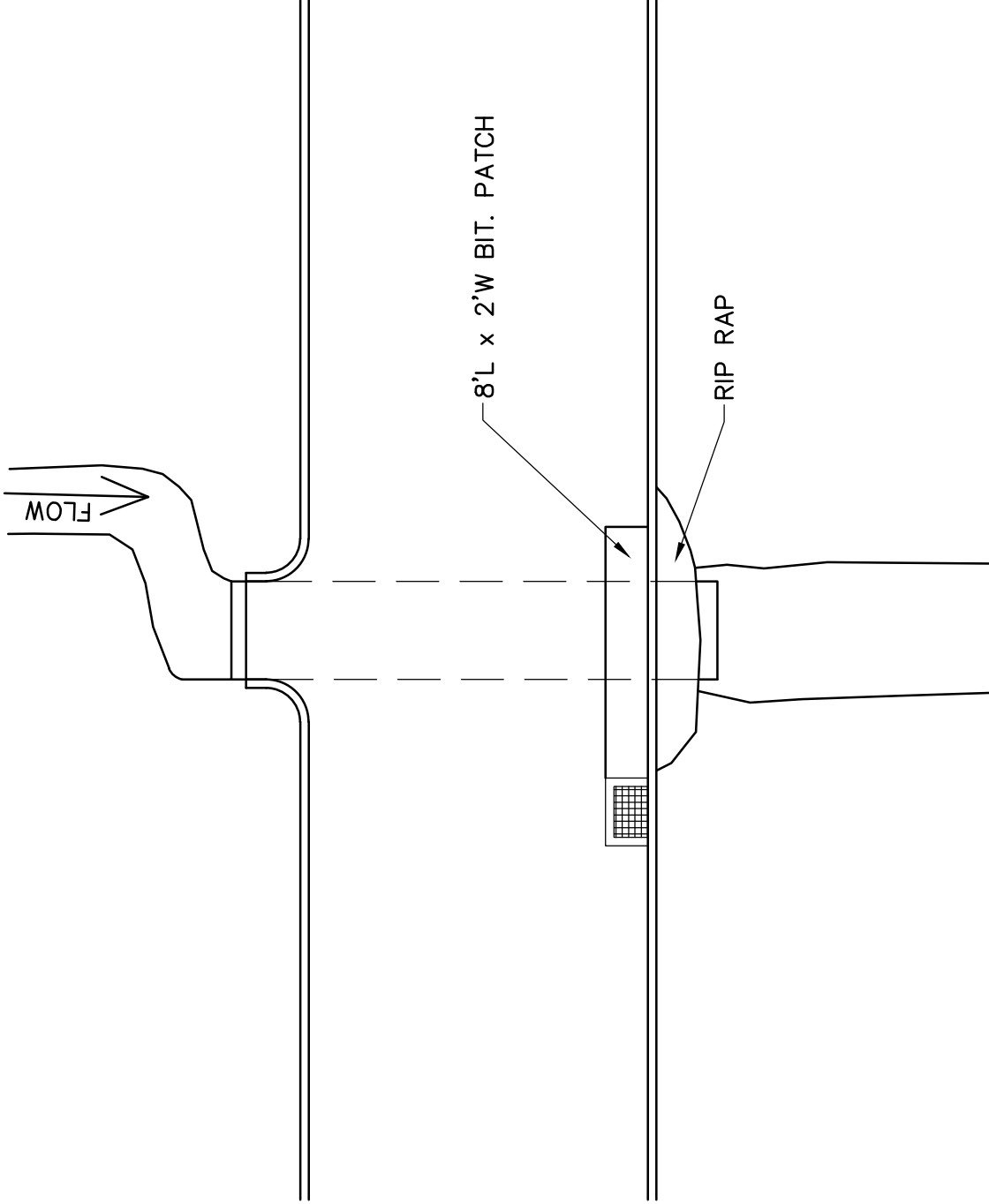
P.E. #:

Reviewed by:

05 / 27 / 25

Date: \_\_ / \_\_ / \_\_



PROJECT TITLE:

130029 MUNN ROAD OVER WALNUT HILL BRK

DRAWING TITLE:

TOP OF DECK

DRAFTER:

ERN

DATE:

05/08/2025

DRAWING NUMBER:

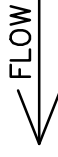
**CARDINAL**  
ENGINEERING ASSOCIATES

ALL DESIGN DRAWINGS ARE THE PROPERTY OF CARDINAL  
ANY REPRODUCTION WITHOUT WRITTEN PERMISSION IS PROHIBITED



CULVERT FLANGE END

PERCHED 6"



RANDOM LOCATIONS OF 100% SL  
UP TO 6"L x 2"W

**CULVERT INTERIOR**  
NOT TO SCALE

**NOTE:**

- WATER TRAVELS BELOW PIPE
- UP TO HEAVY RUST ALONG INVERT

PROJECT TITLE:

130029 MUNN ROAD OVER WALNUT HILL BRK

DRAWING TITLE:

CULVERT INTERIOR

DRAFTER:

ERN

DATE:

05/08/2025

DRAWING NUMBER:

**CARDINAL**  
ENGINEERING ASSOCIATES  
ALL DESIGN DRAWINGS ARE THE PROPERTY OF CARDINAL ENGINEERING ASSOCIATES  
AND SHALL REMAIN THE PROPERTY OF CARDINAL ENGINEERING ASSOCIATES



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130029

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 1

Photo Taken: 05/08/2025



Bridge from East Approach – Looking West

Photo Number: 2

Photo Taken: 05/08/2025



Bridge from West Approach – Looking East



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130029**

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 3

Photo Taken: 05/08/2025



East Approach from Bridge – Looking East

Photo Number: 4

Photo Taken: 05/08/2025



West Approach from Bridge – Looking West



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130029**

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 5

Photo Taken: 05/08/2025



Top of Deck – Looking Southwest

Photo Number: 6

Photo Taken: 05/08/2025



Upstream Channel – Looking North



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130029**

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 7

Photo Taken: 05/08/2025



Downstream Channel – Looking South

Photo Number: 8

Photo Taken: 05/08/2025



Upstream Bridge Elevation – Looking South



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130029

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 9

Photo Taken: 05/08/2025



Downstream Bridge Elevation – Looking North. Note 6” perch at outlet.

Photo Number: 10

Photo Taken: 05/08/2025



Pipe interior from outlet. Note heavy rust at invert.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130029**

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 11

Photo Taken: 05/08/2025



Deterioration at outlet. 100% section loss up to 6" long x 2" wide.

Photo Number: 12

Photo Taken: 05/08/2025



Deterioration at outlet. 100% section loss up to 6" long x 2" wide.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No.** 130029

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 13

Photo Taken: 05/08/2025



Leak-off at upstream side.

Photo Number: 14

Photo Taken: 05/08/2025



Roadway repair at downstream side. Note bituminous patch, bituminous curb and riprap.



**Form: Asset Photos**

**Inspection type:** ROUTINE

**Inspection Date:** 05/08/2025

**Inspected by:** CARDINAL ENGINEERING ASSOCIATES

**Bridge No. 130029**

**Town:** Southbury

**Carried:** Munn Road

**Crossed:** Walnut Hill Brook

**Inventory Route:** Non-NHS

Photo Number: 15

Photo Taken: 05/08/2025



Drainpipe at upstream side.