The Hebron Public Building Committee On Behalf of The Town of Hebron And Hebron Board of Education

HEBRON ELEMENTARY SCHOOL

RE-ROOFING PROJECT PROJECT 2024-06

MARCH 18, 2024

ADDENDUM NO. 1

Each Respondent must acknowledge receipt of this Addendum by inserting its number within the cover letter of the Request for Qualifications (RFQ) submission. Failure to do so may result in the Respondent's disqualification.

This Addendum consists of seven (7) Pages.

Appended to and made part of this Addendum are the following documents:

Architectural Drawings-Thirteen (13) Drawings Structural Drawings-Thirteen (13) Drawings Structural SK-Drawings-Thirty-Six (36) Pages Infrared Roof Inspection Report-March 11, 2020-21 Pages Non-Mandatory Pre-Submission Meeting and Site Tour-Sign-In Sheet is attached-one (1) page.

A. General Clarifications

- **a.** Non-Mandatory Pre-Submission Meeting and Site Tour-Sign-In Sheet is attached-one (1) page.
- B. Clarifications and Additions to the RFQ.
 - a. RFQ-Two Separate Submissions-Pursuant to Connecticut State Statute CGS 10-287 (b) (2) and (4) and the direction provided by the Office School Construction and Grants and Review (OSCG &R) the Request for

Qualification submissions <u>must</u> be submitted as two separate documents for each school and <u>cannot</u> be combined.

- b. Square Footage of Building and Estimated Square Footage of Roof Replacement-The approximate gross square footage of the building is 72,000 +/- and the approximate square footage of the roof replacement is 56,000 +/-.
- c. Schedule-The RFQ indicates that the schedule for both roofs is to have them replaced during the Summer of 2025. However, there are several significant logistical challenges that the Town and Board of Education are in the process of working on. One major factor is that the Parks and Recreation Department utilizes both schools during the summer months. There is a strong possibility that the roof replacement at the Hebron Elementary School will occur during the summer of 2025 and the roof replacement at the Gilead Hill will occur during the summer of 2026. In any case, the Town and Board of Education would still want the Architect(s) to secure approval for both schools from OSCG & R well in advance of the summer of 2025. The RFP (Fee Proposal) will clearly indicate what the schedule will be for the roof replacements at the schools.
- d. OSCG & R Required Documents-When the RFQ was drafted it attempted to identify all the required steps, documentation, and submissions that OSCG & R will be required by the Architect(s). The Architect(s) will be responsible for providing all work that will be necessary and as required by the OSCG &R.

C. Pre-Submission Meeting and Site Tour-Questions and Answers

a. Q-1-Reports-The RFQ references a "roof report," however there does not appear to be anything included in it.
 A 1. The report was included in emitted from the DEC. It is appeared.

A-1. The report was inadvertently omitted from the RFQ. It is appended and made part of this Addendum and is entitled "Nuclear Backscatter Inspection Report that is dated March 11, 2020.

b. Q-2-Architectural Drawings-Are there any relevant architectural drawings that can be made available?

A-2-Yes, appended and made part of this Addendum are thirteen (13) architectural drawings.

c. Q-3.- Structural Drawings-*Are there any relevant structural drawings that can be made available?*

A-2-Yes, appended and made part of this Addendum are thirteen (13) structural drawings and thirty-six (36) SK Drawings.

D. Submission Meeting and Site Tour-Questions and Answers

- a. Q-4-Environmental/Hazardous Materials Consultant/Hygienist-The RFQ indicates that the Architects should include the services of an Environmental/Hazardous Materials /Consultant/Hygienist. Please confirm what the expected scope of services this subconsultant is expected to provide.
 A-4-The purpose for that specialist would be to: 1-conduct pre-roofing and post-roofing indoor air quality test samples-this would help the BOE to dispel any assertions that the indoor air quality is not good after the roofing has been completed; 2-identify during the pre-construction any suspected mold and/or mildew that is detected above and below the suspending acoustical ceilings and provide a plan on to address it; 3-identify during the pre-construction any suspected hazardous materials above the ceilings that will need to be abated.
- D. Q-5-The afore-listed scope of services would be rather difficult to quantify and therefore assemble a cost to be included in the RFP Fee submission.
 A-5-Agreed. When the RFP is issued, it will indicate a dollar amount allowance to include for the work of the Environmental/Hazardous Materials Consultant/Hygienist.
- c. **Q-6- Test Cuts in Roofing System**-The RFQ indicates that the Architect should include the cost of performing a number of test cuts through the existing roofs. That would be rather difficult to quantify and therefore assemble a cost to be included in the RFP Fee submission.

A-6- Agreed. When the RFP is issued, it will indicate a dollar amount allowance to include for the work related to performing the necessary test cuts in the roofing.

d. Q-7-Infrared (IR) Thermal Imaging and Thermo Scans-The RFQ indicates that the Architects should include "infrared (IR) thermal imaging, thermosscans, etc. to determine any unforeseen conditions that need to be addressed." That would be rather difficult to quantify and therefore assemble a cost to be included in the RFP Fee submission.
A-7- Agreed. When the RFP is issued, it will indicate a dollar amount allowance to include for the work related to performing the pecessary.

allowance to include for the work related to performing the necessary work related to the Infrared (IR) Thermal Imaging and Thermo Scans.

e. Q-8-Recoating the Sarnafil Roofs- In the RFQ it is requested that the Architects provide an analysis of "1-Recoat existing Sarnafil Roofs and 2-Remove existing membrane and top course of insulation and replace with new insulation and new membrane." Is this analysis going to be required. A-8-Delete these paragraphs in reference to providing an analysis of recoating the existing Sarnafil Roofs from the RFQ in their entirety.

- **f. Q-9-Structural As-Built Drawings and Shop Drawings-***The RFQ's require a Structural Engineer to review structural implications of the roof design. Does the Town have existing as-built structural drawings?*
- g. A-9-There are no structural as-built drawings and no structural shop drawings available for either school. As a result, the review of the structural implications of the new roofing system will need to be conducted based on the structural drawings that have been made part of this RFQ and appended and made part of this Addendum. Some of those documents which are either PDF's or some other similar type files have been generated from AutoCAD files that are over 20 years old. They are provided for your reference only and should not be considered 'as-built' documents. They may contain inaccuracies and must be verified against the existing conditions.
- *h.* **Q-10-Registered Roof Consultant (RRC)-** The RFQ indicates that the Architect must carry the services of a "Registered Roof Consultant." Please reconsider this requirement.

A-10-After considerable deliberations and discussions, it has been decided that the inclusion of these services will not be necessary.

i. **Q-11-Roof Maintenance and Repairs Vendor-**Do the Schools have a vendor that provides maintenance and repairs on the roofs? If so, who is the firm, and may we contact them if we have questions?

A-11-Yes, the Schools has retained Eagle Revit to perform maintenance and repairs and all proposers can feel free to contact them if they have any questions.

*Q-12-Environemental Hygienist-*Do the Schools have an Environmental Hygienist that has performed work them for them? If so, who is the firm and may we contact them if we have any questions?
 A-12-The firms is Mystic Air, and all proposers can feel free to contact

them if they have any questions.

k. Q-13-List of Subconsultants-In our RFQ submission should we list all of the subconsultants that we intend on making part of our design team?
 A-13-Yes. As per the RFQ, it is imperative that you include all of the names of the firms that you intend on having as part of your design team.

The following list of documents which are appended to this RFQ as either PDF's or some other similar files and some have been generated from AutoCAD files that are over 20 years old. They are provided for your reference only and should <u>not</u> be considered 'as-built' documents. They may contain inaccuracies and must be verified against the existing conditions.

ARCHITECTURAL DRAWINGS

The following drawings issued by CJ Lawler Associates were originally dated 12/1/98 with a revision date of 4/30/1998.

DRAWING NO.	DESCRIPTION
A1.2	Partial Floor Plan Area B
A1.3	Partial Floor Plan Area C
A3.2	Roof Details
A4.1	Exterior Details
A4.3	Building Sections
A7.1	Section Details
A7.2	Section Details
A7.3	Section Details
A7.4	Section Details
A7.5	Section Details
A7.6	Section Details
A7.7	Section Details
A7.8	Section Details

STRUCTURAL DRAWINGS

The following drawings issued by CJ Lawler Associates were originally dated 12/1/98 with a revision date of 4/30/1998.

DRAWING NO. DESCRIPTION

- S1.1 Foundation Plan Area A
- S1.2 Foundation Plan Area B
- S1.3 Foundation Plan Area C
- S2.1 Area A Roof Framing Plan Mezzanine Framing Plan

S2.2	Low Roof & Mech. Mezz., Framing Plan Area B
S2.3	Roof Framing Plan Area C
S3.1	Foundations Sections
S4.1	Framing Sections
S5.1	Column Schedule
S5.2	Plan Details
S5.3	Plan Details
S6.1	Typical Details and Design Data
S6.2	Typical Details

SK-DRAWINGS

DRAWING NO.	DESCRIPTION	DATE
HSK-S01	Section at Hung Lintel Typical	8-12-99
HSK-S02	Section Exterior Wall Corridor 01B	8-12-99
HSK-S03	Section Existing Wall Corridor 01B	8-12-99
HSK-S04	Section Column Line 15.9	8-12-99
HSK-S05	Section at Mezzanine Slab	8-12-99
HSK-S06	Section at Mezzanine Salb	8-12-99
HSK-S07	Section at Column Line 15.9	8-12-99
	Low Roof Column Line V-W	
HSK-S08	Moment Connections Key Plan Area "B"	8-12-99
HSK-S09	Roof Framing Plan Area "A"	8-12-99
	Revision Top Steel	
HSK-S10	Work Point Bottom of Deck Gymnasium	8-26-99
	Roof	
HSK-S11	Section Column Line 14	8-26-99
	Revised Section 2/S4.1	
HSK-S12	Section at Perimeter of Gymnasium	8-26-99
	High Roof	
HSK-S13	Loose Lintel Schedule	8-26-99
HSK-S14	Work Point Low Eave Area "B"	8-26-99
HSK-S15	Corridor 88 Entry	
	Clarification Curved Lintel	9-27-99
HSK-S16	Corrective Work for Anchor Bolt Layout	11-4-99
HSK-S17	Steel Frame for HRU-2	11-5-99
HSK-S18	Brick Pier Foundation Section	11-29-99
HSK-S19	Field Revision Section 10/S3.1	12-28-99

HSK-S20	Deck Reinforcement at Duct	
	Penetrations In Gym	1-6-00
HSK-S21	Precast Concrete Lintel	1-14-00
	Typical Section Gymnasium	
HSK-S22	Precast Concrete Lintel	1-14-00
	Typical Plan at Column	
HSK-S23	Top of Interior Masonry Wall	1-21-00
	Connection at Wood Trusses	
HSK-S24_	Revised Gymnasium Stage	2-16-00
	Framing Plan	
HSK-S25	Section Thru Stage Framing	2-16-00
HSK-S26	Eave Channel Between	2-17-00
	Column Line "K" and "L"	
HSK-S27	Pump House	3-6-00
	Structural Plans and Sections	
HSK-S28	Elevation of Hung Lintel Line "L" and "V"	3-20-00
HSK-S29	NOT ISSUED	
HSK-S30	Reloacted W12X14	3-31-00
	Steel Tie Beam to Line H.6	
HSK-S31	Reloacted W12X14	3-31-00
	Steel Tie Beam to Line H.6	
HSK-S32	Masonry Support Between	4-10-00
	Column V-12 and V-14	
HSK-S33	Partial Existing Framing Plan	4-10-00
	Mechanical Unit HRU-1	
HSK-S34	Hung Lintel Line "K" – Area "B"	4-10-00
HSK-S35	Precast Concrete Support	5-1-00
	Gym Canopies Area "B"	
HSK-S36	Mechanical Duct Support	5-2-00
	Gymnasium Area "B"	
HSK-S37	Backstop Support Gym	6-12-00
	Area "B"-4 Locations	

END OF ADDENDUM NO. 1



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	JRATE OOF SYSTEM	A3.1	

5TH GRADE CLASSROOM 63 MATCHLINE ∽ AREA C ∞ <u></u> MATCHLINE AREA B 4 NEW COUNTER-5TH GRADE CLASSROOM A9.2 .~<6> 5TH GRADE CLASSROOM 62 - EXIST. STORAGE <u>8'-0"</u> EXIST. (A9.2) OPP. STORAGE BOILER ROOM 5TH GRADE CLASSROOM (59)× FEMALE TOILETS \square CORRIDOR (58) TEACHER'S ROOM 68 STORAGE $\langle A3 \rangle$ Ġ. EXIST. D.F. TO REMAIN- $\langle A3 \rangle$ \square $\langle A3 \rangle$ (EL.0.0') NURSE 8 A6.2 14'-0" (EXI $\langle A5 \rangle$ $\langle A6 \rangle$ $\langle A5 \rangle$ $\langle A5 \rangle$ MATCHL INE (54B) (EL. 1.13') (54A) AREA B Acegress) MATCHLINE (4A)(EGRESS) (4A)(EGRESS) 10 (A9.2) r 6

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- 2. FLOOR SLAB TO BE 4" MIN. (U.N.O.) OF 3000 p.s.i. CONCRETE REINFORCED WITH 6x6-WI.4xWI.4 WELDED WIRE FABRIC OVER 6 MIL. POLY VAPOR BARRIER ON MINIMUM 8" COMPACTED STRUCTURAL FILL.
- 3. T.W. INDICATES TOP OF WALL ELEVATION.
- 4. T.S. INDICATES TOP OF SHELF ELEVATION.
- 5. B.F. INDICATES BOTTOM OF FOOTING ELEVATION.
- 6. S.F. INDICATES STEP FOOTING. SEE TYPICAL DETAIL ON DRAWING SXXX
- 7. C.J. INDICATES CONTROL JOINT. SEE TYPICAL DETAIL ON DWG SXXX
- 8. \bigcirc INDICATES CONCRETE FOOTING, SEE SCHEDULE ON DRAWING SXXX
- 9. \triangle INDICATES CONCRETE PIER, SEE SCHEDULE ON DRAWING SXXX
- 10. PROVIDE 1-* 4 x 5'-O" LONG IN CONCRETE SLABS AT RE-ENTRY CORNERS.
- 11. ----- INDICATES 4" DIAMETER WALL FOOTING DRAIN IN FREE DRAINING MATERIAL. SEE SPECIFICATIONS.
- 12. ALL VERTICAL WALL REINFORCING IN MASONRY WALLS SHALL BE DOWELED INTO CONRETE WALL BELOW. DOWELS MAY BE DRILLED AND EPOXY GROUTED AT CONTRACTORS OPTION.
- 13. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES, WHETHER
- INDICATED OR NOT ON DRAWINGS, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS. 14. SHADED AREAS INDICATE DROP IN TOP OF FOUNDATION WALL,
- 15. MARCATES EXISTING FOUNDATIONS TO REMAIN.
- 17. $\frac{1}{1}$ INDICATES EXISTING FOUNDATION TO BE REMOVED COMPLETE

MARK	SIZE	REINFORCING (BOTH WAY'S BOTTOM)
F3.0	3'-0" x 3'-0" x 1'-0"	4 * 4
F4.0	4'-0" x 4'-0" x 1'-0"	4 *5
F5.0	5'-0" x 5'-0" x 1'-2"	6 *5
F6.0	6'-0" x 6'-0" x l'-6"	6 *5
F7.0	-1'-0" x 1'-0" x 1'-6	7 #5
	PIER SCI	
MARK	SIZE	REINFORCING (provide *3 ties @ 12" o.c. typ.)
P1.6	16" x 20"	4 * 1 VERTICAL
P1.8	18" x 18"	4 # 1 VERTICAL
P2.0	20" × 20"	4 # 1 VERTICAL
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Lawler / ssocia · U • 7 South Main Street, West Hartford, Connecticut 0610 (860) 233-8526 FAX: (860) 231-906 FAX: (860) 231-9063

GIRARD CO. ENGINEER Structural Engineer 40 Wethersfield Avenue, Hartford, Connecticut 06114 (860) 524-5196 FAX: (860) 548-1463 M.R. ROMING ASSOCIATE Landscape Architects-Land Planners 224 Whiting Lane, West Hartford, Connecticut 06119 (860) 233-1265 FAX: (860) 523-019 van ZELM HEYWOOD & SHADFORD IN Mechanical and Electrical Engineer 29 South Main Street, West Hartford, Connecticut 06107 (860) 521-4329 FAX: (860) 521-5620 FOOD SERVICE DESIG P. O. Box 18191, East Hartford, CT 06118 (860) 528-7101 FAX: (860) 528-8839 ENVIRO SAFE Safety and Enviromental Health Consultant Services 7 Rogers Lake Trail, Old Lyme, Connecticut 06371 (860) 434-8383 FAX: (860) 434-0036 CLARK ENGINEERIN Engineering P. O. Box 419, Granby, CT 06035 (860) 653-4352 FAX: (860) 653-8256 MEGSON & HEAGL Civil Engineers Land Surveyors

FOUNDATION PLAN AREA "C" Scale: AS NOTED Drawn By: KA

Date: 12-1-98 Checked By: MG

Hebron Elementary School Hebron, Cońnecticut

Additions and Renovations State Project Number #067-029-EA

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GIRARD CO. ENGINEER X Structural Engineer 40 Wethersfield Avenue, Hartford, Connecticut 06114 (860) 524-5196 FAX: (860) 548-1463 M.R. ROMING ASSOCIATE Landscape Architects-Land Planners 224 Whiting Lane, West Hartford, Connecticut 06119 (860) 233-1265 FAX: (860) 523-0191 van ZELM HEYWOOD & SHADFORD IN Mechanical and Electrical Engineer 29 South Main Street, West Hartford, Connecticut 0610 (860) 521-4329 FAX: (860) 521-5620 FOOD SERVICE DESIGN Service Food P. O. Box 18191, East Hartford, CT 06118 (860) 528-7101 FAX: (860) 528-8839 ENVIRO SAFE Safety and Enviromental Health Consultant Services 7 Rogers Lake Trail, Old Lyme, Connecticut 06371 (860) 434-8383 FAX: (860) 434-0036 CLARK ENGINEERING Engineering Services P. O. Box 419, Granby, CT 06035 (860) 653-4352 FAX: (860) 653-8256 MEGSON & HEAGLE Civil Engineers Land Surveyors 81 Rankin Road, Glastonbury, CT 06033 (860) 659-0587 FAX: (860) 657-4429

AREA"A" ROOF FRAMING PLAN MEZZANINE FRAMING PLAN

Scale: AS NOTED Drawn By: KA Date: 12–1–98 Checked By: MG

> Hebron Elementary School Hebron, Cońnecticut

> > Additions and Renovations

State Project Number #067-029-EA

- 1. TOP OF STEEL ROOF DECK ELEVATION = (+x'-x'') FROM TOP OF SLAB REFERENCE ELEVATION = (+O'-O'')UNLESS TOP OF STEEL ROOF DECK ELEVATION NOTED (\pm) THUS FROM TOP OF STEEL ROOF DECK ELEVATION = (+x'-x''). REFER TO ARCHITECTURAL DRAWINGS FOR REFERENCE ELEVATIONS.
- 2. TOP OF STEEL JOIST ELEVATION = $-1\frac{1}{2}$ " FROM TOP OF STEEL ROOF DECK. 3. TOP OF STEEL FRAMING ELEVATION PERPENDICULAR TO STEEL ROOF JOISTS = $-4\frac{1}{2}$ " FROM TOP OF STEEL ROOF DECK.
- 4. TOP OF STEEL FRAMING ELEVATION PARALLEL TO STEEL ROOF JOISTS = $-1\frac{1}{2}$ " FROM TOP OF STEEL ROOF DECK.
- 5. TOP OF STEEL ELEVATION OF BEAMS PARALLEL TO JOISTS IS TO MATCH SLOPE OF JOIST BETWEEN SUPPORTING GIRDERS AT EACH END UNLESS NOTED.
- 6. A INDICATES SPAN DIRECTION OF ROOF DECK, TO BE $1\frac{1}{2}$ " DEEP 20 GAGE, WIDE RIB STEEL ROOF DECK, PAINTED TYPICAL UNLESS NOTED OTHERWISE.
- B INDICATES SPAN DIRECTION OF ROOF DECK, TO BE 6" DEEP 18 GAGE LONG SPAN DECK WITH 18 GAGE ACOUSTIC FLAT BOTTOM SHEET UNLESS NOTED OTHERWISE.
- STRUCTURAL STEEL FRAMING KEY:

- 8. ALL JOISTS AND BEAMS ARE SPACED EVENLY BETWEEN COLUMN LINES UNLESS NOTED.
- 9. SEE S6.1 AND S6.2 FOR TYPICAL DETAILS AND GENERAL NOTES.
- 10. COORDINATE SIZE AND LOCATION OF ALL OPENINGS AND SLEEVES WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
- 11, ---- INDICATES HORIZONTAL BRIDGING L 1 1/4 "x1 1/4 "x 7/64 " CONTINUOUS TOP & BOTTOM
- 12. JOISTS OCCURING AT COLUMNS SHALL HAVE BOTTOM CHORDS EXTENDED AND WELDED TO COLUMNS AFTER ROOFING DEAD LOAD IS APPLIED.
- 13. G.C. SHALL BE BE RESPONSIBLE FOR ALL SHORING OF EXISTING CONSTRUCTION REQUIRED TO SAFELY COMPLETE THE WORK.
- 14. G.C. SHALL VERIFY ALL EXISTING CONDITIONS, MATERIALS, AND DIMENSIONS BEFORE COMPLETING PRICING, ORDERING, FABRICATING AND/OR ASSEMBLING ANY AND ALL PARTS OF THE WORK

OF CONNECTICUT. ALSO INCLUDE TRUSS LAYOUT PLAN WITH TRUSS

DESIGNATIONS.

ITECTS 7 South Main Street, West Hartford, Connecticut 0610 (860) 233-8526 FAX: (860) 231-9063 ENGINEEF IRARD CO. X. Structural Engineer 40 Wethersfield Avenue, Hartford, Connecticut 0611-(860) 524-5196 FAX: (860) 548-146 ASSOCIATE Roming Landscape Architects-Land Planner 224 Whiting Lane, West Hartford, Connecticut 0611 (860) 233-1265 FAX: (860) 523-019 van ZELM HEYWOOD & SHADFORD I Mechanical and Electrical Enginee 29 South Main Street, West Hartford, Connecticut 0610 (860) 521-4329 FAX: (860) 521-562 FOOD SERVICE DESIG P. O. Box 18191, East Hartford, CT 06118 (860) 528-7101 FAX: (860) 528-883 ENVIRO SAFE Safety and Enviromental Health Consultant Service 7 Rogers Lake Trail, Old Lyme, Connecticut 06371 (860) 434-8383 FAX: (860) 434-0036 CLARK ENGINEERING Engineering Services P. O. Box 419, Granby, CT 06035 (860) 653-4352 FAX: (860) 653-8256 MEGSON & HEAGL Civil Engineers Land Surveyors 81 Rankin Road, Glastonbury, CT 06033 (860) 659-0587 FAX: (860) 657-4429 4-30-99 ISSUE BID Description Date Revisions FOUNDATION SECTIONS Scale: AS NOTED Drawn By: KA Date: 12–1–98 Checked By: MG Hebron Elementary School Hebron, Connecticut Additions and Renovations State Project Number #067-029-EA

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	(A-2)	(A-4)	A-6	(A-8)	A-II	(A-13)	(A-15)	B-I	B-16	(C-1)	C-6	(C-11)	C-16	(D-I)	D-3	D-5	D-6	(D-1)	(D-9)	(D-10)	D-II)	(D-12)	(D-14)	D-16	(E-11)	EJ-1	El-9
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	4×4×3 ₆	1.9. 8×.	1.6. 8x				4×4×3%		1.9. 8x	1.9.8×			1.0. 8.	0. 7. 7.	<u></u>	9. 19. 8x	1.9. 8׫		1.9.8×		1.9. 8×		1.5. 8×	, 4×4×	S. S.	1.0.4×.	1.9. 4×.
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BASE PLATE	$10 \times \frac{1}{2} \times 10$	$14 \times {}^{3}4 \times 14$	14 x ³ 4 x 14	14 × ³ / ₄ × 14	14 × ³ 4 × 14	14 × ³ ⁄4 × 14	10 x ¹ / ₂ x 10	14 × ³ 4 × 14	$14 \times {}^{3}\!$	$14 \times {}^{3}\!$	14 × ³ 4 × 14	14 × ³ 4 × 14	14 × ³ 4 × 14	$10 \times \frac{1}{2} \times 10$	14 × ³ ⁄4 × 14	14 × ³ 4 × 14	$14 \times {}^{3}4 \times 14$	$14 \times {}^{3}4 \times 14$	$14 \times {}^{3}\!$	$14 \times {}^{3}_{4} \times 14$	14 × ³ ⁄4 × 14	$14 \times {}^{3}_{4} \times 14$	14 × ³ 4 × 14	$10 \times \frac{1}{2} \times 10$	14 × ³ 4 × 14	14 × ³ ⁄4 × 14	14 × ³ ⁄4 × 14
PLAN DETAIL	PI	₽2	P3	₽2	₽3	₽2	PI	PI SIM.	PI SIM.	₽4	P5	P5	P4 SIM.	P6	P7	Гя	rq	P8	P8 SIM.	P9	P9	PIO	P10 SIM.	PII	PI SIM.	-	-
COLUMN	SCH	HEDUL	- E																								
COLUMN NUMBER																											
	(F-12)	(F-14)	(G-10)	G-11	(H-12)	(H-14)	(H.6-12)	H6-14	(J-10)	(J-IT)	(J2-11.9)	J2-14	(J2-16.1)	(К-Б.9)	(K-18)	(K-19)	K-20	(K-21)	(L-10)	(L-12)	(L-14)	(M-15.9)	(M-20)	(M-21)	(N-10)	(N-12)	(P-14)
COLUMN HEIGHT																											
																				_			- STEEL TRUSS			-	
TOP OF STEEL																					4'-11/2	4'-11/2					4'-11/2'
AUDITORIUM/GYMNASIUM ELEVATION = 19'-9%"																							, , , , , , , , , , , , , , , , , , ,	2'-3'2"			
	<u>=</u>	=(=(=_ (=	=(<u>=</u>	 =	¯ O (Ō	¯ O (4=									
ELEVATION = 11'-93%"																											
	×8× ¹ 2	88×1/2	x8x ^{1/} 2	×8×1/2	×8× ^{1/} 3	8×\- 			×8× ¹ 2	8× -	×6×3%		×6×3%	е С	е В С	ц С	32 32		*	<u></u>	6	6	× ۵	8 0		8 8	2 0 10
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TOP OF CONCRETE SLAB																		ENCAD	3						Э		
REFERENCE ELEV. = 0'-0"																											
BASE PLATE	$14 \times {}^{3}\!$	$14 \times {}^{3}\!$	14 x ³ ⁄4 x 14	14 × ³ ⁄ ₄ × 14	14 x ³ / ₄ x 14	14 × ³ ⁄ ₄ × 14	14 x ³ 4 x 14	14 × ³ ⁄ ₄ × 14	$14 \times {}^{3}\!$	$14 \times {}^{3}_{4} \times 14$	12 × ³ 4 × 12	12 × ³ ⁄ ₄ × 12	12 × ³ 4 × 12	14 × ³ ⁄ ₄ × 14	14 × ³ ⁄ ₄ × 14	14 × ³ ⁄4 × 14	$14 \times {}^{3}\!$	$10 \times \frac{1}{2} \times 10$	$14 \times {}^{3}\!$	14 × ³ ⁄ ₄ × 14	14 × ³ ⁄ ₄ × 14	$14 \times {}^{3}\!$	14 × ³ ⁄ ₄ × 14	14 × ³ 4 × 14	14 × ³ 4 × 14	14 × ³ ⁄ ₄ × 14	$14 \times {}^{3}\!$
			F2 5IM.	P2 5IM.			P14 5IM.							P20	P21 5IM.	P21 5IM.	P22 5IM.	-	P23	P24	P25	P25 5IM.	P26	P22 5IM.	P23 5IM.	<u>P</u> 21	P28
			- -																								
	(P-15.9)	F9-104	Q-21)	(R-10)	(R-12)	5-2 I	(T-14)	(1-15.9)	(15-103	(15-12)	(U-15.9)	U-20	(U-21)	(V-II.I)	(V-II.T)	V-12	(Y-14)	W-15.9	W-18	(e1-W)	(W-20)	W-21	(X-11.7)	(X-14)	(X-15.9)	×-175	
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																	 →── □ □										
TOP OF STEEL	4'-1 ½"				م م ش س		4'-11 ¹ / ₂ "	4'-11/5"			4'-11\2"				2°5 2°5		4'-11\/2"	⁵ 0 (↓	= ○ (↓								
AUDITORIUM/GYMNASIUM ELEVATION = 19'-9%"			2'-3/2"			2'-31/2"							2'-312"														
														=													
		-1234=																					-258"			= "5 ⁸ "	
TOP OF STEEL LOW ROOF ELEVATION = 11'-93%"		WB WB		U.S.											DRACE												
	Д		ц Ø		<u></u>	a L	۵ س	й		\$	04	۵ و	Ш Ш			<u></u>	6	â	<u>ع</u>	35	ц С		8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	86×38	46× ³ ⁸	
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		3		3					∃ ∃					З В													
REFERENCE ELEV. = 0'-0"		+++		<u> </u>		++			+++											╡ ╪ ╪						+++	
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BASE PLATE	14 × ³ ⁄4 × 14	14 × ³ 4 × 14	14 x ³ ⁄4 x 14	$14 \times {}^{3}\!$	14 × ³ ⁄ ₄ × 14	14 × ³ 4 × 14	14 x ³ 4 x 14	14 × ³ 4 × 14	$14 \times {}^{3}_{4} \times 14$	14 x ³ 4 x 14	14 × ³ 4 × 14	14 × ³ 4 × 14	14 × ³ 4 × 14	$12 \times {}^{3}\!$	-	14 × ³ 4 × 14	$14 \times {}^{3}_{4} \times 14$	14 x ³ ⁄4 x 14	$14 \times {}^{3}\!$	14 × ³ ⁄4 × 14	14 x ³ / ₄ x 14	$10 \times \frac{1}{2} \times 10$	12 × ³ 4 × 12	12 × ³ 4 × 12	12 × ³ 4 × 12	12 × ³ 4 × 12	
PLAN DETAIL	P29	P30	P 31	P32	P25	P31	P28	P29	P30	P25	P25 SIM.	P26 SIM.	P22 SIM.	P33		P25	P25	P20	P21	P21	P22	-	P34	P35	P36	P31	

COLUMN SCHEDULE NOTES

- . WIDE FLANGE STEEL TO BE A.S.T.M. A-572, GRADE 50 STEEL, Fy=50 ks.i.
- 2. COLUMN BASES TO BE SET ON LEVELING NUTS & WASHERS UNLESS NOTED OTHERWISE.
- COLUMN BASES TO HAVE 4-1" ANCHOR BOLTS 1-6" LONG + 3" HOOK TYPICAL UNLESS NOTED OTHERWISE.
- COLUMN BASES TO BE DRY PACKED SOLID UNDER BASE PLATES WITH 1¹/₂" MINIMUM 5,000 P.S.I. NON-SHRINK GROUT AFTER STEEL HAS BEEN PLUMBED AND LEVELED.
 ALL BEAM TO GIRDER, GIRDER TO GIRDER AND GIRDER TO COLUMN CONNECTIONS SHALL BE DOUBLE ANGLE TYPE.
- 5. DIMENSIONS GIVEN ARE TO BOTTOM OF BASE PLATE OR TOP OF CAP PLATE.
- 6. ERECTION TOLERANCES OF ALL COLUMNS AND FRAMING MEMBERS SHALL BE IN ACCORDANCE WITH ALL AISC STANDARDS.
- 1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY LATERAL SUPPORT TO THE STEEL FRAME DURING CONSTRUCTION. THE TEMPORARY BRACING SHALL NOT BE REMOVED UNTIL ALL COLUMN SPLICES, FRAME MOMENT CONNECTIONS, AND CONCRETE AND STEEL DECK HAVE BEEN COMPLETELY INSTALLED AND ACCEPTED.
- 8. PROVIDE MASONRY TIES @ 16" O.C. ON ALL COLUMNS ADJACENT TO MASONRY. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.
- 10. PROVIDE 3/16" COVER PLATES AT WIDE FLANGE COLUMNS WHEN FACE OF WEB 1S EXPOSED TO INTERIOR SPACES. SEAM WELD AND GRIND FLUSH. EXTEND ABOVE FINISH CEILING 2". SEE ARCHITECTS DRAWINGS FOR LOCATIONS. WHEN COLUMN IS INTERUPTED, OR SUPPORTED BY STEEL FRAMING. PROVIDE 4 - 3/8" WEB STIFFENERS IN BEAM, SOLID FROM FLANGE TO FLANGE. ALIGN STIFFENERS
- WITH WALLS OF TUBE STEEL AND FLANGES OF WIDE FLANGE COLUMNS.

PLAN DETAIL (PI3)

³⁄4"=|'-*O*"

55.2

PLAN DETAIL P8

(14)

1'-1Ø"

- T. PIER ELEV. -12"

³⁄4"=1'-*O*"

B. PLATE - SEE SCHED. —

COLUMN - SEE SCHED.-

H <u><u><u></u></u></u>

55.2

rchitects ✓ ssociate 7 South Main Street, West Hartford, Connecticut 06107 (860) 233-8526 FAX: (860) 231-9063 (860) 233-8526 ENGINEER CO. GIRARD Structural Engineer 40 Wethersfield Avenue, Hartford, Connecticut 06114 (860) 524-5196 FAX: (860) 548-1463 ASSOCIATE Roming M.R. Landscape Architects-Land Planner 224 Whiting Lane, West Hartford, Connecticut 0611 (860) 233–1265 FAX: (860) 523–019 FAX: (860) 523-019 van ZELM HEYWOOD & SHADFORD I Mechanical and Electrical Engineer
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Hebron Elementary School Hebron, Connecticut	SECTION AT	MEZZANINE SLAB	HSK-S05	-awler
Additions and Renovations State Project Number : 067-029-EA	SCALE: 1" = 1'-0"	Sheet Ref. : S2.2	DATE: 8-12-99	













HSK-S08

DATE: 8-12-99













LOOSE	LINTEL SCHEDULE		
MASONRY OPENING	SIZE		
TYPICAL	TYPICAL		
UP TO 3'-4"	ONE ANGLE - 4" VERT. X 3^{1}_{2} " HORZ. X $^{1}_{4}$ " FOR EACH 4" OF MASONRY THICKNESS		
3'-4" TO 6'-0"	ONE ANGLE - 5" VERT. x $3\frac{1}{2}$ " HORZ. x 5/16" FOR EACH 4" OF MASONRY THICKNESS		
6'-0" TO 8'-0"	ONE ANGLE - 6" VERT. X $3\frac{1}{2}$ " HORZ. X $\frac{3}{6}$ " FOR EACH 4" OF MASONRY THICKNESS		
8'-0" TO 12'-0"	W 8 x 1 8 + 3/8" PLATE x 11" WIDE		
6" MASONRY PARTITIONS			
UP TO 3'-4"	WT 4 x 9		
3'-4" TO 6'-0"	WT 4 x 10.5		
6'-0" TO 8'-0"	WT 7 x 13		
ALL OTHER LINTELS	SEE STRUCTURAL DRAWINGS		
ALL LINTELS TO BEAR 8" EACH END UNLESS OTHERWISE NOTED ON THE DRAWINGS			
EXTEND ALL HUNG LINTEL ENDS 4" MINIMUM INTO MASONRY EACH END.			
BOLT VERTICAL ADJACENT ANGLE LEGS WITH $\frac{1}{2}$ "& BOLTS @ 24" O.C.			
ALL EXTERIOR LOOSE LINTELS TO BE HOT DIPPED GALVANIZED.			
GROUT SOLID MASONRY CELLS ONE COURSE EACH SIDE OF WT WEB AT 6" MASONRY PARTITIONS.			















¹⁄8"=1'-0"

 Hebron Elementary School Hebron, Connecticut
 STEEL FRAME FOR HRU-2
 HSK-S17

 Additions and Renovations State Project Number : 067-029-EA
 SCALE : 1/8' = 1'-0'
 SHEET REF. : M12
 DATE: 11-5-99

REVISED 4-10-00



BRICK PIER FOUNDATION SECTION

N.T.S.















INTERIOR MASONRY WALL PARALLEL TO WOOD TRUSSES



INTERIOR MASONRY WALL PERPENDICULAR TO WOOD TRUSSES

Hebron Elementary School Hebron, Connecticut	TOP OF INTERIOR MASONRY WALL	HSK-S23	awler ciates
Additions and Renovations State Project Number : 067–029–EA	SCALE: 1' = 1'-0' SHEET REF. : S6.2	DATE: 1-27-00	



Additions	and Renovations	
State Project	Number : 067-029-EA	

SCALE: 1/8" = 1'-0"

SHEET REF. : S1.2













NOTE: PROVIDE SHORING AS REQUIRED TO INSTALL NEW STEEL BEAMS AND MECHANICAL UNIT.











C.J. Lawler Associates Hebron Elementary School MECHANICAL DUCT SUPPORT

TOP OF STEEL ELEVATION FOR W 8 x 24 (-2") FROM BOTTOM OF STEEL ROOF DECK.

NOTE: PROVIDE W 8 x 24 IN BAY "M"="Q" BETWEEN LINES 18 AND 19



GYMNASIUM AREA "B"

Additions and Renovations State Project Number : 067-029-EA

SCALE: 1/8" = 1'-0"

SHEET REF. : S2.2

DATE: 5 = 2 = 00

HSK-S36







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andscape Architects-	Land Planners
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an ZELM HEYWOOD &	SHADFORD INC
echanical and Electr	ical Engineers
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FOOD SERVICE	<u>e desig</u> n
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afety and Enviromental Health	Consultant Services
Rogers Lake Trail, Old Lyme 360) 434-8383	, Connecticut 06371 FAX: (860) 434-0036
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/EGSON &	HEAGLE
ivil Engineers	Land Surveyors
1 Rankin Road, Glaston 360) 659-0587	bury, CT 06033 FAX: (860) 657-4429







PARTIAL ROOF FRAMING PLAN AREA "C"

1⁄8"=1'-0"







PARTIAL ROOF FRAMING PLAN AREA "C"

¹⁄8"=1'-0"





INFRARED ROOF INSPECTION

Hebron Elementary School

FOR:

Tremco Mr. Mike Boudreau

DATE:

March 11, 2020

BY:

Infrared Predictive Surveys, Inc. P.O. Box 224 Adamstown, MD 21710

> Phone: 301-831-1978 Toll Free: 800-869-3720 Fax: 301-874-2295



SYNOPSIS

An Infrared survey of the roofs was made at the Hebron Elementary School, located at 92 Church St., Hebron, CT. Visual observations have been made and the data has been documented.

INTRODUCTION

This report has been prepared for the exclusive use of Mike Boudreau at Tremco, for the specific application of the roofs at 92 Church St., Hebron, CT.

Authorization

Authorization to perform this evaluation, analysis and Infrared roof scan was in the form of a written agreement between Mike Boudreau at Tremco and Infrared Predictive Surveys Inc. (IPSI)

<u>Scope</u>

The scope of the roof survey included infrared thermography, capacitance and core sampling verification. Data from this survey has been incorporated into this final report.

<u>Purpose</u>

The purpose of the roof survey was to gain an overview of the condition of the roof areas.

<u>General</u>

Observations described in this report are based upon roof at the time of the survey and these conditions may change as the roof ages.

Infrared Predictive Surveys, Inc. warrants that these findings are published after being prepared in accordance with generally accepted practices of the construction industry. No other warranties are implied or expressed.


TEST INSTRUMENT DESCRIPTION

(Only testing that has been completed during your survey will be checked.)

Infrared Testing

The infrared roof survey locates moisture in a roof by seeking areas of increased surface temperature. Roof areas that contain moisture have higher thermal conductivity and capacitance than dry areas. During the heating season, heat from the building interior is lost at a greater rate through wet roof areas and their surface temperatures are elevated. Alternatively, during the cooling season, solar heat is absorbed into the wet area, and then retained for hours after the sun sets.

When viewed through the infrared imager, wet areas appear as brighter, lighter tones of gray in black-and-white images. Alternatively, in color images, wet areas will appear as hotter colors. A color scale appears at the side of color images. As colors progress upward, temperatures increase. In general, the higher the concentration of water, the higher the surface temperatures.

Because higher surface temperatures, and consequently hotter colors, may be produced by several phenomena not related to moisture intrusion, tests are made to verify the findings of the infrared inspection using destructive testing (core cuts) and other nondestructive tests (capacitance & nuclear). Wet areas found by infrared testing are illustrated with thermograms (photographs of infrared images).

Capacitance (Verification)

The Tramex capacitance meter is a mobile device that is used for detecting relative moisture content of roof areas. This non-destructive testing method is often combined with nuclear and thermal testing and/or moisture intrusion testing to accurately identify water entry pathways and areas of entrapped water. The Tramex moisture meter is designed for testing built up roofing and non-conductive single ply membrane. It provides instantaneous, clear indications of roof conditions and is able to detect as little as 2% excess moisture in roofing systems.



Core Sampling

Core samples consist of cuts through the roof membrane. The sample provides an absolute test of moisture content and location. The core cut also permits the constituents of the roof system, and their condition, to be determined. Core sample may be weighed, dried and reweighed to provide a quantitative measure of moisture content.

A cut is made into the roof with a two inch (2") circumference roof sampling tool. The repaired core cuts are made with an appropriate material.

Nuclear Backscatter-Verification

A radioactive isotope consisting of Americium-241 with a Beryllium target is utilized. The measurement method relies on the thermalization (slowing) of fast neutrons by the hydrogen atoms in water. Since other Hydrogen bearing materials also thermalize neutrons, a measurement survey is necessary to establish a relative base level before an analysis can be performed.

The meter used, Troxler 3216, is a portable instrument with a periodic counter to measure the rate of thermalization of neutrons.

EQUIPMENT USED

The qualitative infrared scan was conducted by a certified thermographer using a Mikron 7515 uncooled infrared imager. Lens for the Mikron was 29 degree FOV, 320 X 240 array with 7.5-13 spectral response. Temperature sensitivity is .1 degree C with accuracy of 2%.

FLIR PM1000

 \square

Tramex Meter



FIELD SURVEY METHODS

Visual Observations

Visual observations were made by Infrared Predictive Surveys, Inc. (IPSI) personnel. These observations included roofing structure, roof drainage, roof surface conditions and other accessory items.

Photographic Documentation

Photographs were made by IPSI personnel. While these photographs were not intended to provide a complete record of the roof, they do provide a visual description of typical roof conditions or selected problem areas.

PROJECT IDENTIFICATION

Project Location

92 Church St., Hebron, CT

INFRARED ROOF SCAN

Date of Scan: October 18, 2019

This scan was performed in conjunction with the visual roof survey conducted the same day. The purpose of this scan was to locate areas of suspected subsurface moisture and determine the extent of the moisture migration.

Environmental Conditions

October 18, 2019-Scan time temperature: 62°F.



FINDINGS AND RESULTS

Infrared Findings

Roof A

• No suspected wet areas were found on this roof section.

Roof B

- One (1) wet area was found on this roof section.
 - One (1) core cut was taken at wet area #B1.
 - #CC1 (Wet)
 - TPO
 - 1.5" Polyisocyanurate (Top: 70%; Bottom: 67%)
 - 1/2" Polyisocyanurate (Top: 78%; Bottom: 77%)
 - 3" Polyisocyanurate (Top: 72%; Bottom: 0%)
 - Metal Deck

Roof C

• No suspected wet areas were found on this roof section.

Roof D

• No suspected wet areas were found on this roof section.

Roof E

• No suspected wet areas were found on this roof section.



If additional information is required, please do not hesitate to contact me. Thank you again for giving us the opportunity to provide our services.

Sincerely,

Joseph Fitzpatrick Infrared Predictive Surveys, Inc. PO Box 224 Adamstown, MD 21710

 Phone:
 301-831-1978

 Toll-Free:
 800-869-3720

 Fax:
 301-874-2295

 E-mail:
 joe@infraredpsi.com

 Website:
 www.InfraredPSI.com



<u>APPENDIX</u>

- Maintenance Program
- Digital Photographs
- Infrared Photographs
- CAD Drawing



Hebron Elementary School



North side of building, looking South



Roof A-Overview, looking North



Roof A-Overview, looking East



Roof A-Overview, looking South



Roof A-Overview, looking West



Roof A-No suspected wet areas identifed or recorded on this roof section.



Roof B-Overview, looking East



Roof B-Wet area #1, looking East



Core Cut #CC1-TPO, 1 1/2" Polyisocyanurate, 1/2" Polyisocyanurate, 3" Polyisocyanurate and a metal deck. (Wet)



Core Cut #CC1 repaired



Wet area #1



Roof C-Overview, looking North



Roof C-Overview, looking East



Roof C-No suspected wet areas identifed or recorded on this roof section.



Roof D-Overview, looking North



Roof D-Overview, looking East



Roof D-Overview, looking South



Roof D-Overview, looking West



Roof D-No suspected wet areas identifed or recorded on this roof section.



Roof E-Overview, looking East



Roof E-No suspected wet areas identifed or recorded on this roof section.



SCAN NOTES:

- GRAY ROOF INDICATES AREA NOT SCANNED
- SUSPECTED MOISTURE AREAS SHADED RED
- NUCLEAR READINGS TAKEN ON A ' x ' GRID U.N.O.
- CC# = CORE CUT NUMBER, P# = PROBE NUMBER
 DATE OF SCAN : 10.18.19





	'B' TOTAL SUSPECTED WET SQ FT = 70						
	AREA#		SIZE	Ξ	SQ FT	NOTES	
[D1	10	X	7	70	CC1	



HEBRON ES 92 CHURCH ST. HEBRON, CT

ΒL	JILDING F	ROOF	- M0	DISTU	RE S	SCAN	
		DRAWN:	DATE	DRAWN:	REV:	SHEET	NO
	SURVEYS	AJR	03/	16/20	0	844	A

The Hebron Public Building Committee On Behalf of The Town of Hebron And Hebron Board of Education

HEBRON ELEMENTARY SCHOOL RE-ROOFING PROJECT PRE-SUBMISSION CONFERENCE MARCH 12, 2024 11 AM

SIGN-IN SHEET

NAME	FIRM	PHONE NUMBER	E-MAIL ADDRESS
UTKARSH PATIL	RUSSELL & DAWSON INC.	860-289-1100	utkarsh. patil@sdaep.com
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Tom HIBEALD	HIBBARD & RISA ARH	- 860-961-2107	tomehra.bz
Devise La Rose	Silver Petruceli	203-230-4007×240	dlarosa Dsilverpetrucelli.con
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Boß Roteri	FRIAR ARCH	860-678-1291	rwrefriar. Com
BL JOCUNGED	JECHNSKI ISUMIES	860-928-9221	WAJAMNAKI OJAANGAMECKS, NET