

Engine House 23 Renovation

ATTACHMENT J.1.13

ROOF WORK:

- SUMMARY OF SPECIFIC REQUIREMENTS\*
- WORK STATEMENT\*
- ROOFING AND CONDITIONS ASSESSMENT REPORT

[\*SUMMARY OF SPECIFIC REQUIREMENTS AND WORK STATEMENT ALSO INCLUDED UNDER THE SCOPE OF WORK/SSR/ "ROOF" SECTION]

SUMMARY OF SPECIFIC REQUIREMENTS

F&I NEW EXTERIOR GUTTER AND GUARD SYSTEM; STAINLESS STEEL FINISH. REMOVE AND DISPOSE OF OLD SYSTEM.

REPLACE IN-KIND ALL ROOFING SYSTEM AND MATERIALS TO INCLUDE:

- F&I NEW SLATE
- F&I NEW SNOW-STOP SYSTEM
- F&I NEW ISOLATED GUTTERS AND ASSOCIATED GUTTER GUARDS
- F&I ISOLATED COPPER TRIM METAL AREAS
- F&I NEW DOWNSPOUTS AND GUTTERS
- F&I NEW PAN PITCH POCKETS
- F&I NEW FLASHING AND ROOF TERMINATION DETAILS

REPLACE IN-KIND IN ALL FLAT ROOF AREAS:

- THIS PROJECT INCLUDES A BASE BID FOR REPLACEMENT OF EXISTING ROOF SYSTEMS AND ASSOCIATED METAL FLASHINGS. THIS PROJECT DOES NOT INCLUDE ANY INCREASE IN AREA OR CHANGES IN OCCUPANCY.
- ALL WORK TO BE PERFORMED IN CONFORMANCE WITH THE LATEST ADOPTED 2013 DC IBC BUILDING CODES, MECHANICAL & PLUMBING CODES, LOCAL GOVERNING BUILDING CODES, ORDINANCES AND ALL REFERENCED STANDARDS. THESE DOCUMENTS SERVE TO DEPICT THE FINAL CONFIGURATION OF IMPROVEMENTS, NOT DICTATE ALL RESPONSIBILITIES THE CONTRACTORS HAVE IN ACHIEVING THAT END. THE CONTRACTOR IS TO REPORT TO DGS PROJECT MANAGER ANY CONFLICT BETWEEN BID DOCUMENTS, FIELD CONDITIONS AND/OR CODE REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHETHER SHOWN HEREIN OR NOT, AND TO PROTECT UTILITIES FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT BUILDING OCCUPANTS AND PASSERS-BY FROM FALLING DEBRIS OR EQUIPMENT. DO NOT THROW MATERIALS FROM THE ROOF.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS OF THE PROJECT, INCLUDING VERIFICATION OF EXISTING ROOF SYSTEM CONSTRUCTION AND MATERIALS
- CONTRACTOR STAGING AND STORAGE AREAS SHALL BE AS DIRECTED BY THE DGS PROJECT MANAGER AT THE PRE-CONSTRUCTION MEETING. CONTRACTOR SHALL ASSUME A REASONABLE AMOUNT OF STORAGE AND STAGING SPACE WILL BE MADE AVAILABLE
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING BUILDING SURFACES, FINISHES, AND SYSTEMS FROM DAMAGE, DISCOLORATION, ETC. DURING THE COURSE OF ALL CONSTRUCTION ACTIVITIES
- PERSONAL FALL PROTECTION DEVICES ARE NOT, NOR WILL BE, PROVIDED BY THE OWNER ON ANY ROOF AREA DESIGNATED TO RECEIVE WORK. PERSONAL FALL PROTECTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- COORDINATE ALL WORK WITH OWNER.
- REMOVE EXISTING ROOF SYSTEM TO THE STRUCTURAL DECK. PROVIDE NEW 2-PLY SBS MODIFIED BITUMEN ROOF SYSTEM OVER 1/2" EXTERIOR FIBERGLASS FACED GYPSUM COVER BOARD OVER 1 LAYER OF 1.5" 20 PSI POLYISOCYANURATE ROOF INSULATION AND 1/4" TAPERED POLYISOCYANURATE ROOF INSULATION (Rt=25.00) OVER CONCRETE ROOF DECK.
  - SET ALL INSULATION LOW RISE POLYURETHANE ADHESIVE. BEAD SPACING AS REQUIRED TO ACHIEVE THE EVALUATED WIND LOADS FOR ALL (4) ROOF SECTIONS AS DEFINED BY ASCE 7-16
  - THE ROOFING CONTRACTOR IS TO PLACE EVENLY DISTRUBUTED MANUFACTURERS RECOMMENDED WEIGHTS ACROSS THE NEWLY ADHERED INSULATION SHEETS. CONTRACTOR IS TO ALSO PLACE FOUR FASTENERS AND PLATES, ONE AT EACH CORNER OF THE INSULATION BOARD TO HELP HOLD THE INSULATION IN PLACE WHILE THE ADHESIVE IS SETTING. FASTENERS MUST NOT PENETRATE THE ROOF DECK. PROVIDE SCREWS AND PLATES SUPPLIED AND APPROVED BY THE ROOF MANUFACTURER ON THE PITCHED ROOF AREAS GREATER THAN 2 IN 12.
  - WOOD NAILERS TO MATCH INSULATION THICKNESS AT EXISTING LOCATIONS AND AS DETAILED. WHERE INSULATION IS TAPERED PROVIDE A MINIMUM 2" THICKNESS AT DRAIN. SEE ALSO DETAIL 10/A160.
- TAPER FIELD INSULATION IS TO BE A MINIMUM OF 1/4" PER FOOT WHERE THE ROOF DECK IS NOT SLOPED. TAPER CRICKETS AND SADDLES A MINIMUM OF 1/2" PER FOOT. PROVIDE A MINIMUM OF 2 LAYERS OF 1/2" THICK POLYISOCYANURATE INSULATION. STAGGER ALL JOINTS. ALL GAPS 1/4" OR LARGER ARE TO BE FILLED WITH INSULATION. EXISTING FLASHING HEIGHTS MAY DICTATE MODIFICATIONS TO THE SLOPE OF THE TAPERED INSULATION (CONSULT WITH DGS PROJECT MANAGER).

- SECURE TOP EDGE OR TERMINATION OF ALL MEMBRANE FLASHING USING AN ALUMINUM TERMINATION BAR SECURED 12-INCHES O.C., MAX., AND WITHIN 2-INCHES OF EACH END. PRIOR TO TERMINATION BAR INSTALLATION, INSTALL MANUFACTURERS RECOMMENDED COMPRESSION SEALANT BEHIND FLASHING WHERE TERMINATION BAR WILL BE PLACED. APPLY MANUFACTURERS' APPROVED SEALANT TO THE TOP EDGE OF FLASHING AND TERMINATION BAR AFTER PROPER MECHANICAL ATTACHMENT.
- ALL ROOF MEMBRANE DETAILS ARE TO FOLLOW ROOF MANUFACTURER'S DETAILS FOR A 30 YEAR WARRANTY WHETHER OR NOT A 30 YEAR WARRANTY IS REQUIRED.
- INSTALL INSIDE AND OUTSIDE FLASHING CORNERS FOLLOWING THE RECOMMENDATIONS AND REQUIREMENTS OF THE ROOFING MEMBRANE MANUFACTURER. PROVIDE "T-JOINT COVERS" AT THE BASE OF ALL VERTICAL FLASHING / FIELD SEAM INTERSECTIONS.
- THE USE OF "PITCH PANS" OR PENETRATION POCKETS IS NOT PERMITTED UNLESS THE GEOMETRY OF MULTIPLE PENETRATIONS IS NOT SUFFICIENT FOR FIELD WRAPPING AND WITHOUT PRIOR OWNER APPROVAL. THE USE OF PMMA LIQUID FLASHING MEMBRANE IS PREFERRED FOR ALL VENT STACKS AND SINGLE CYLINDRICAL OR STEEL PIPING, OR I-BEAM PENETRATIONS
- EXTEND ALL NEW MEMBRANE FLASHING UP PERIMETER PARAPET WALL AND UNDER METAL EDGE TO COVER BEYOND THE EXTERIOR OF THE WOOD NAILER / PARAPET TRANSITION BY 1 ½" MINIMUM.
- EXTEND ALL NEW MEMBRANE FLASHING UNDER ROOF METAL EDGE TO COVER BEYOND THE EXTERIOR OF THE WOOD NAILER / PARAPET TRANSITION BY 1 ½" MINIMUM.
- ADD WOOD BLOCKING AND PLYWOOD TO PERIMETER PARAPET WALLS AND RAKE WALLS TO ACCOMMODATE THE NEW INSULATION THICKNESS TO EXCEED INSULATION HEIGHT BY (1) 2 X BOARD (1 1/2") AT LOWEST POINT.
- COUNTER SINK ALL FASTENERS FOR WOOD BLOCKING.
- ALL EXISTING WOOD BLOCKING TO REMAIN IS TO BE FASTENED WITH ADDITIONAL SCREWS AS PER FM 1-49 PLACEMENT. PRE-DRILL AS REQUIRED FOR ATTACHMENT TO MASONRY OR STRUCTURAL STEEL, ETC.
- ALL WOOD SUPPORTS FOR ELECTRICAL CONDUIT AND GAS LINE SUPPORTS MUST BE REPLACED WITH NEW CADDY, MIRO, OR EQUAL UNITS TO ACCOMMODATE THE NEW ROOF SYSTEM.
- DO NOT INSTALL WOOD NAILERS AHEAD OF NEW ROOFING WORK. ONLY INSTALL NAILERS THAT CAN BE COVERED THE SAME DAY.
- ALL LUMBER TO BE PRESSURE TREATED EXCEPT FOR PLYWOOD, U.O.N.
- ALL PERIMETER EDGE METAL PROFILES MUST MEET ANSI/SPRI ES-1 WIND DESIGN REQUIREMENTS FOR FM GLOBAL AND INCLUDED IN THE MEMBRANE MANUFACTURERS WARRANTY FOR THE MINIMUM OF 30 YEARS INCLUDING WIND AND PERFORMANCE .
- ALL DISSIMILAR METALS TO BE SEPARATED BY PAINT COAT TO AVOID ELECTROLYTIC REACTION.
- ALL METAL SEAMS TO BE SOLDERED UNLESS PRE-FINISHED OR ALUMINUM IS USED. HEM ALL METAL EDGES.

- EXISTING ROOF DRAINS ARE TO BE REPLACED AS SPECIFIED. PLUMBING IS TO BE REPLACED TO THE FIRST ELBOW OR WITHIN 10 LINEAR FEET OF THE NO-HUB CONNECTION. COORDINATE LOCATION WITH DESIGNER & OWNER.
- ALL ELECTRICAL WORK TO BE PERFORMED BY A LICENSED ELECTRICIAN WITHIN THE JURISDICTION OF THE CONTRACT FACILITY'S ADDRESS.
- ALL SECURITY CAMERAS MUST REMAIN OPERATIONAL DURING THE NEW ROOF INSTALLATION.
- INSPECT ALL HEATER STACKS (B-VENTS) AND REPLACE DEFECTIVE / RUSTED PIPING ABOVE THE ROOF WITH NEW STAINLESS STEEL INSULATED UNITS TO FIT EXISTING EXTENSIONS.
- ALL ROOF TOP CONDENSER UNITS ARE TO BE SECURED TO THE EXISTING OR NEW ROOF CURBS IN ACCORDANCE WITH NEW FM GLOBAL REQUIREMENTS FOR ROOF TOP WIND SECUREMENT.
- ALL HVAC AND RTU CURBS, DUCTWORK, ELECTRICAL PENETRATIONS AND GAS SUPPORTS SHALL BE ADJUSTED TO ACCOMMODATE THE NEW ROOF INSULATION THICKNESS. ALL ROOF CURBS SHALL MEET A MIN. 12" VERTICAL HEIGHT ABOVE FINISHED ROOF, UNLESS APPROVED IN WRITING BY ROOFING MANUFACTURER AND DESIGN CONSULTANT.
- F&I NEW 2-PLY MODIFIED BITUMEN ROOF SYSTEM OVER TAPERED INSULATION
- F&I NEW ROOF DRAINS AND DRAINAGE SCUPPERS
- F&I NEW PAN PITCH POCKETS
- F&I NEW FLASHING AND ROOF TERMINATION DETAILS

**WARRANTY:**

- 20-YEAR LEAK-FREE WARRANTY ON MATERIALS
- 5-YEAR CONTRACTOR'S WORKMANSHIP WARRANTY

**WORK STATEMENT**

**I. OBJECTIVES:**

- A. GENERAL. THE INTENT OF THIS SOLICITATION IS TO OBTAIN A COMPETITIVE AND QUALIFIED OFFER TO PROVIDE A LEAK-FREE ROOF DESCRIBED IN THE SCOPE OF WORK OUTLINED BELOW. ALL VENDORS MUST HAVE A MINIMUM OF 7 YEARS' EXPERIENCE IN SLATE REMOVAL AND REPLACEMENT (INCLUDING RE-USE OF SOUND MATERIAL), COPPER SHEET METAL FABRICATION, INSTALLATION AND FIELD SOLDERING, STAINLESS GUTTER AND DOWNSPOUT INSTALLATION AND SOLDERING WITH SOME OF THAT EXPERIENCE ASSOCIATED WITH HISTORIC RENOVATIONS.**

THIS PROJECT WILL INVOLVE SELECTIVE DEMOLITION OVER AN ACTIVE FACILITY WITH SCHEDULED ACTIVITIES IN THE FACILITY AT VARIOUS TIMES THAT MAY REQUIRE COORDINATION OF WORK TO OTHER AREAS OR TO BE

POSTPONED AND RE-SCHEDULED. THIS SITE HAS LIMITED PARKING AND STAGING. DESIGNATED AREAS FOR STAGING AND PARKING WILL BE DISCUSSED AT THE PRE-PROPOSAL MEETING.

**B. SPECIFIC. THE SUCCESSFUL OFFEROR WILL BE EXPECTED TO:**

- 1) COMPLY WITH ALL DGS, FEMS, OSHA AND LOCAL CODE REQUIREMENTS FOR SAFETY.
- 2) COMPLY WITH ALL WAGE & HOUR REQUIREMENTS ASSOCIATED WITH THE CORRECT DAVIS BACON WAGE DECISION FOR THIS REGION.
- 3) COMPLETE A THOROUGH INSPECTION OF THE ROOF AREA IDENTIFIED IN THIS RFP, INCLUDING THE EXTERIOR CONDITION OF THE SLATE, COPPER FLASHING, EXPOSED MASONRY PARAPET WALLS AND CAPS, GUTTERS, DOWNSPOUTS, DECKING, EXTERIOR WOOD FASCIA AND TRIM, PRIOR TO SUBMITTING A PROPOSAL.
- 4) COMPLETE A THOROUGH INSPECTION OF ALL STAGING AREAS FOR MATERIALS AND EQUIPMENT, MOBILE DEBRIS REMOVAL UNIT, ACCESS POINTS TO THE ROOF AND BUILDING INTERIOR, ELECTRICAL OR WATER ACCESS (IF REQUIRED), AND RESTROOM FACILITIES.
- 5) PROVIDE A SITE SPECIFIC PLAN OF ACCESS AND PERFORMANCE, INCLUDING ALL OSHA APPROVED JHA'S (JOB HAZARD ANALYSIS) ASSOCIATED WITH THE SOW (SCOPE OF WORK).
- 6) PROVIDE MATERIAL SUBMITTALS AND OSHA APPROVED SDA'S FOR THE WORK TO BE PERFORMED. SLATE SAMPLES MUST BE APPROVED, ORDERED AND A COPY OF THE DELIVERY SCHEDULE RECEIVED BY THE PROJECT MANAGER PRIOR TO COMMENCEMENT OF WORK.
- 7) PROVIDE DAILY WORK COMPLETED REPORTS TO BE TURNED IN WEEKLY TO THE DESIGNATED PROJECT MANAGER OR DGS REPRESENTATIVE.
- 8) PROVIDE A CONSISTENT TEAM OF INSTALLERS WITH CRAFTSMANSHIP QUALITIES THAT WILL PROVIDE A HIGH PERFORMANCE AND QUALITY INSTALLATION OF A LEAK-FREE ROOF, COPPER FLASHINGS AND STAINLESS GUTTER. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A CONTRACTOR'S "LEAK-FREE" GUARANTEE FOR 5-YEARS FROM THE DATE OF COMPLETION.

## II. SCOPE OF THE PROJECT.

### A. GENERAL SCOPE OF WORK SLATE

- 1) REMOVE ALL EXISTING DAMAGED AND SOUND SLATE FROM THE IDENTIFIED AREAS IS A SUFFICIENT QUANTITY TO AFFECT THE AREA REPAIR TO PROVIDE THE SPECIAL PROJECT WARRANTY. SEPARATE AND STACK THE "SOUND" UNITS ON PALLETS FOR RE-USE. REMOVE THE BROKEN UNITS AND DISCARD IN ACCORDANCE WITH THE APPROVED SITE-SPECIFIC WORK PLAN AND JHA OR AHA. SLATE SHALL BE OF QUALITY, FINISH, COLOR, SIZE AND SHAPE TO MATCH EXISTING.
  - a. REPLACE IDENTIFIED DAMAGED SLATE
  - b. SLATE SHALL BE OF QUALITY, FINISH, COLOR, SIZE AND SHAPE TO MATCH EXISTING.
  - c. COLOR: SELECT COLOR(S) BEARING IN MIND THE SLATE'S WEATHERING CHARACTERISTICS. THERE ARE THREE BROAD CLASSIFICATIONS OF WEATHERING CHARACTERISTICS: "UNFADING", "SEMI-WEATHERING" AND "WEATHERING". UNFADING SLATES WILL HOLD THEIR BASIC COLOR AFTER MANY YEARS; WEATHERING SLATES WILL CHANGE COLOR (USUALLY TO BROWNISH TONES) OVER TIME.
  - d. SLATES WITH A STRONG GRAIN MUST BE PRODUCED "ON THE GRAIN", THAT IS, THE DIRECTION OF THE GRAIN OF THE STONE MUST BE PARALLEL TO THE LONG DIMENSION OF THE SHINGLE. SLATES SHALL BE RANDOMLY SELECTED FROM EACH SHIPMENT AND TESTED FOR GRAIN DIRECTION TO ENSURE PROPER FABRICATION.
  - e. SLATES WITH BROKEN CORNERS ON THE EXPOSED ENDS SHALL NOT BE INSTALLED WHEN EITHER THE BASE OR LEG OF THE RIGHT TRIANGULAR PIECE BROKEN OFF IS GREATER THAN 1 1/2 INCHES. SLATES WITH BROKEN CORNERS ARE ACCEPTABLE FOR CUTTING STOCK.
  - f. THE CURVATURE OF SHINGLES SHALL NOT EXCEED 1/8 INCH IN 12 INCHES. CURVED SLATES SHALL BE TRIMMED AND HOLED TO PERMIT THEM TO BE LAID WITH THE CONVEX SIDE FACING UP.
  - g. "KNOTS" AND "KNURLS" ARE ROUNDED DEFECTS THAT AFFECT THE SMOOTHNESS OF SPLIT. THEY ARE ACCEPTABLE ON THE EXPOSED PORTION OF THE TOP FACE BUT ON OTHER PARTS WILL PREVENT CLOSE CONTACT OF SHINGLES. SHINGLES HAVING KNOTS OR KNURLS ON THE COVERED PORTIONS PROJECTING IN EXCESS OF 1/16 INCH SHALL NOT BE USED IF THEY PREVENT PROPER FIT AND CONTACT.
  - h. SLATES SHALL BE FREE FROM RIBBONS.
  - i. NOT MORE THAN 1% OF BROKEN SLATES, INCLUDING THOSE HAVING CRACKS MATERIALLY PRECLUDING RINGING WHEN SOUNDED, SHALL BE ACCEPTED. FACE DIMENSIONS SHALL NOT DIFFER FROM THE EXSITING BY MORE THAN 1/8 INCH.

- j. ALL RIDGES SHALL BE LAID TO FORM "SADDLED" RIDGES. NAILS OF THE COMBING SLATE SHALL PASS THROUGH THE JOINTS OF THE SLATES BENEATH.
- k. NAILS FOR SLATES AND CLEATS SHALL BE 11 GAUGE COPPER, OR STAINLESS, LARGE HEAD AND LONG ENOUGH TO PENETRATE 3/4" INTO DECK.
- l. NEW FLASHING SHALL BE 20 OZ. COPPER. ALL FLASHING SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH CURRENT INDUSTRY STANDARDS REFERENCED IN BOTH COPPER AND COMMON SENSE AND SMACNA MANUALS FOR COPPER ROOFING AND FLASHING INSTALLATIONS. ALL FIELD SEAMS MUST BE FULLY SOLDERED AS SPECIFIED IN THE ABOVE REFERENCED MANUALS. NO DEVIATIONS ARE ALLOWED FOR SEALANTS OR EXPOSED FASTENER ATTACHMENTS.
- m. PLASTIC ROOF CEMENT (TO BE USED AT RIDGE AND HIP APPLICATIONS) SHALL MEET OR EXCEED ASTM D2822 AND FEDERAL SPECIFICATION SS-C-153, TYPE I.
- n. SEALANT FOR METAL TO MASONRY FLASHING TERMINATIONS SHALL BE SILICONE TO MEET OR EXCEED ASTM D1002 OR ASTM D42.
- o. BEGIN INSTALLATION ONLY AFTER VERIFYING PHYSICAL AND ENVIRONMENTAL CONDITIONS ARE ACCEPTABLE TO ACCOMPLISH WORK.
- p. ALL REPAIR / REPLACEMENT UNDERLAYMENT MUST BE A MINIMUM 30 MIL SBS SELF-ADHERING SHEET MEMBRANE (ASTM D5147 / D5147M-18) WITH A HIGH TEMPERATURE RESISTANCE OVER 205 DEG. (ASTM D1970) SHEET MEMBRANE. INSTALLATION OF THE UNDERLAYMENT IS TO BE APPLIED HORIZONTALLY; LAP AT LEAST 4" IN THE FIELD AND 6" OVER VALLEY AND GUTTER METAL; TURN UP 8" AGAINST ALL ABUTTING VERTICAL SURFACES AND EXTEND WITHOUT BREAK OVER HIPS AND RIDGES.
- q. NAIL EACH SHEET ALONG THE EDGES WHICH WILL BE COVERED BY THE LAP OF THE NEXT SHEET; LAP THE SHEETS 3" AT SIDES AND 6" AT ENDS AND CEMENT TOGETHER.
- r. SLATE SHALL BE LAID IN REGULAR COURSES PARALLEL WITH THE EAVES AND NO ATTEMPT MADE TO STRETCH THE COURSES. THE COURSES SHALL BE ACCURATELY SPACED SO AS TO FINISH EVEN AND PARALLEL AT THE TOP OF ALL LEVEL TERMINATIONS.
- s. WHEN THE SLOPES OF THE ABUTTING ROOF SURFACES ARE AT THE SAME PITCH, THE COURSES SHALL GIBE A CONTINUITY OF LINE ACROSS VALLEYS AND AROUND HIPS. VALLEYS SHALL BE OPEN 6" WIDE BETWEEN SLATE. FIT THE SLATE CLOSELY AT HIPS AND RIDGES AND AROUND VENT PIPES, VENTILATORS, AND OTHER PROJECTIONS THROUGH THE ROOF.
- t. EVERY PIECE OF SLATE SHALL BE SECURED BY AT LEAST ONE FASTENING; SPANISH TYPE SLATE SHALL HAVE TWO, UNLESS

IMPRACTICABLE. WHERE NAILING IS NOT POSSIBLE, OR TO AVOID NAILING THROUGH SHEET METAL, USE WIRE ATTACHED TO NAILS DRIVEN ABOVE THE METAL LINE OR TO OTHER PERMANENT FASTENINGS AND SET THE SLATE IN ELASTIC CEMENT. ALL SLATE SHALL BE LAID WITH AN END LAP OF AT LEAST 3". EAVE CLOSURES OF PAN AND COVER SLATE SHALL BE RECESSED AT LEAST 1 1/2" FROM THE LOWER END OF THE SLATE.

- u. HIPS AND RIDGES SHALL HAVE ROLL COVER SLATE WITH CLOSED HIP STARTERS AND PLAIN TERMINALS. FIELD SLATE THAT VERGE ALONG HIPS AND VALLEYS SHALL BE CUT BEFORE BURNING AND VALLEY SLATE SHALL HAVE CLOSED ENDS. TOP FIXTURES SHALL BE FURNISHED AT DECK AND RIDGE AND AT THE LOWER SIDE OF ABUTTING VERTICAL SURFACES. GABLES SHALL HAVE END BANDS, GABLE RAKES AND CLOSED GABLE ENDS AT RIDGE.
- v. THE LAP OF END BANDS, OR COVER SLATE ON HIPS AND RIDGES, OF GABLE RAKES TO END BANDS AND FIELD SLATES, AND THE SPACES BETWEEN FIELD SLATES AND HIP STRINGERS SHALL BE FILLED WITH ELASTIC CEMENT. A LIMITED AMOUNT OF ELASTIC CEMENT OR RT-100 MAY BE USED FOR LEVELING SLATE AND FOR POINTING AROUND EAVE CLOSURES AND TOP FIXTURES.
- w. ALL INTERSECTIONS OF ROOFS WITH VERTICAL SURFACES OF EVERY KIND AND ALL OPENINGS IN ROOF SURFACES SHALL BE FLASHED AND COUNTER FLASHED. FLASHINGS SHALL TURN UP NO LESS THAN 6" AGAINST ABUTTING VERTICAL SURFACES WHERE POSSIBLE AND SHALL BE AS LONG LENGTHS AS PRACTICAL. ON SLOPES THEY SHALL LAP LONGITUDINALLY NOT LESS THAN 3". ELSEWHERE THE JOINTS SHALL BE FLAT-LOCKED AND SOLDERED. LAPS AND LOCKS SHALL BE MADE TO SHED WATER IN THE DIRECTION OF WATER FLOW; RIDGES AND DECK MOLDS SHALL BE FLASHED OVER THE WOOD STRINGERS. EXPOSED BOTTOM EDGES OF ALL FLASHINGS SHALL BE HEMMED UNDER ABOUT 1/2" TO STRAIGHT LINES.
- x. AT VERTICAL SURFACES ALONG SLOPES, THE FLASHINGS SHALL EXTEND UNDER THE SLATE AT LEAST 8 1/2" WITH AN UPTURNED EDGE AS HIGH AS THE CONTOUR OF THE SLATE WILL PERMIT, BUT NOT LESS THAN 5" INCHES. AT THE UPPER SIDE OF VERTICAL SURFACES, THE FLASHINGS SHALL EXTEND UNDER THE SLATE TO THE NAILS, WITH THE UPPER EDGES TURNED BACK 1/2". FLASHINGS AT THE LOWER SIDE OF VERTICAL SURFACE AND THE FLASHINGS OF RIDGES AND DECK MOLDS SHALL EXTEND ONTO THE ROOF SLATES AND TOP FIXTURES AT LEAST 4 1/2" AND BE BENT DOWN FOR STIFFNESS.
- y. AT CORNERS AND PROJECTIONS THROUGH THE ROOF, THE INTERSECTING BASE FLASHINGS SHALL BE LAPPED OR LOCKED AND THE JOINTS SWEATED WITH SOLDER. BASE

FLASHINGS AT THE SIDES WHICH ARE NORMAL TO THE SLATE COURSES SHALL SPILL ONTO THE ROOFING BELOW.

- z. EXPOSED NAILS ARE ONLY PERMISSIBLE AT THE TOP COURSES WHERE UNAVOIDABLE. EXPOSED NAIL HEADS SHALL BE COVERED WITH ELASTIC CEMENT. HIP SLATES AND RIDGE SLATES SHALL BE LAID IN ELASTIC CEMENT SPREAD THICKLY OVER UNEXPOSED SURFACE OF UNDER COURSES, NAILED SECURELY IN PLACE, AND POINTED WITH ELASTIC CEMENT.
- aa. ALL PENETRATIONS SUCH AS PIPES AND VENTILATORS SHALL HAVE SLATE NEATLY FITTED AROUND THEM.
- bb. THE ROOFER SHALL BUILD IN, AND PLACE, ALL FLASHING PIECES. EACH COURSE OF SLATE SHALL HAVE COPPER STEP-FLASHING NEATLY WOVEN INTO THE SLATE.
- cc. ENTIRE SURFACES OF ALL ROOFS, EXCEPT AS NOTED, SHALL BE COVERED WITH SLATE IN A PROPER AND WEATHERPROOF MANNER. UPON COMPLETION, ALL SLATES MUST BE SOUND, WHOLE AND CLEAN. THE ROOF MUST BE LEFT WATERTIGHT AND NEAT IN EVERY RESPECT, AND SUBJECT TO THE ARCHITECT'S APPROVAL.
- dd. THE OWNER SHALL BE FURNISHED WITH A STOCK OF 2% EXTRA SLATES FOR FUTURE ROOF REPAIRS.
- ee. FLASHINGS AT THE SILLS OF OPENINGS, WHICH ARE NOT COUNTER FLASHED, SHALL EXTEND UNDER THE SILLS OF THE FRAMES AND TURN UP AT LEAST 3/4" AT THE BACK EDGES.
- ff. BASE FLASHINGS AT THE CURBS OF ROOF OPENINGS, WHICH ARE NOT COUNTER FLASHED, SHALL TURN OVER THE TOPS OF THE CURBS AND BE FASTENED ON THE INSIDE BY LOCKING TO CONTINUOUS CLEATS OF THE SAME METAL WHICH SHALL BE FASTENED EVERY 4" TO THE CURBS.
- gg. SUMMARY NOTE: REMOVE EXISTING SLATES, CAREFULLY TO AVOID BREAKAGE. STOCKPILE EXISTING ROOF SLATES. INSTALL A NEW 30 MIL SBS SA MEMBRANE UNDERLAYMENT; MAKE MINOR REPAIRS TO THE EXISTING FLASHINGS, THEN REPLACE SLATE IN ACCORDANCE WITH ABOVE SPECIFICATIONS. NEW FLASHING INSTALLATION WILL BE DONE UNDER A SEPARATE LINE ITEM.
- hh. NATURAL SLATE SHALL MEET OR EXCEED UNDERWRITERS' LABORATORIES STANDARD UL-790, UNIFORM BUILDING CODE STANDARD 15-2 AND NATIONAL FIRE PROTECTION ASSOCIATION STANDARD NFPA 256.
- ii. PROVIDE OWNER WITH CONTRACTORS WORKMANSHIP WARRANTY FOR A 2-YEAR PERIOD.

## GUTTERS

- 2) INSPECT AND REPAIR ALL GUTTERS AND DOWNSPOUTS TO A "LIKE-NEW" CONDITION. THE CURRENT REPORT HAS IDENTIFIED APPROXIMATELY 20 LINEAR FEET OF GUTTER TO BE REPLACED AT THE SOUTH ELEVATION OF THE FACILITY. ALL DISPLACED GUTTER SCREENS

ARE TO BE RE-ATTACHED AND SECURED WITH NEW STAINLESS CLIPS OR APPROVED STAINLESS FASTENERS. NEW GUTTERS ARE TO BE REPLACED IN A MINIMUM OF 10 FT. SECTIONS, OR TO THE NEAREST EXISTING SPLICE JOINT. CONTRACTOR IS TO MAKE EVERY EFFORT TO PROVIDE A CLEAN AND "LIKE-NEW" SPLICE OF THE NEW MATERIALS TO THE EXISTING GUTTERS. THE NEW REPLACEMENT SECTIONS ARE TO MATCH THE EXISTING IN GAUGE, FINISH AND PROFILE. NO DEVIATION WILL BE ACCEPTED. THE EXISTING GUTTERS APPEAR TO BE A 6" "K-STYLE" WITH HIDDEN AND CLIPS TO BE CORRECTLY INSTALLED AT THE EXISTING EAVE CONDITION. CONTRACTOR IS TO INCREASE THE HIDDEN HANGER FREQUENCY TO MAXIMUM OF 24" O.C. THE QUANTITY OF ADDITIONAL HANGERS IS TO BE INSTALLED IS TO BE ESTIMATED AT AN 100 EA. THE EXACT HANGER STYLE WILL BE IDENTIFIED AT THE PRE-PROPOSAL MEETING. DOWNSPOUTS APPEAR TO BE GOOD CONDITION AND ARE NOT PART OF THIS REPAIR SCOPE OF WORK.

### **III. REQUIREMENTS:**

- A. **PROFESSIONAL ETHICS AND STANDARDS OF PRACTICE:** ALL WORK SHALL CONFORM TO THE CODE OF ETHICS AND STANDARDS OF PRACTICE OF THE NRCA, NSA (NATIONAL SLATE ASSOCIATION) COPPER AND COMMON SENSE, SMACNA AND OTHER CONFORMING TRADE ORGANIZATIONS. ALL WORKMANSHIP WILL BE HELD TO THE HIGHEST OF QUALITY ESTABLISHED BY THOSE IDENTIFIED ORGANIZATIONS FOR THE BENEFIT OF THE OWNER.
  
- B. **INSURANCE:** DGS FEMS STANDARD CONTRACT TERMS AND CONDITIONS
  
- C. **WARRANTY:** CONTRACTOR WILL PROVIDE A 5-YEAR "LEAK-FREE" WARRANTY DATED FROM THE ACCEPTANCE OF THE WORK PERFORMED TO THE SATISFACTION OF THE OWNER.

### **IV. REPORTING AND PROJECT CONTROL:**

- A. **PROJECT PLAN.** A DETAILED INSTALLATION SCHEDULE WILL BE REQUIRED FOR THIS PROJECT. THE RFP RESPONSE SHOULD IDENTIFY RESOURCES REQUIRED BY THE PROJECT (FOREMAN, WORK HISTORY AND MATERIALS), ASSOCIATED COSTS, AND A TIMELINE FOR COMPLETION.
  
- B. **STATUS REPORT.** A SHORT DAILY PROGRESS REPORT COVERING ACTIVITIES, PROBLEMS AND RECOMMENDATIONS. THIS REPORT MUST SUBMITTED TO BLUEFIN FOR REVIEW WEEKLY.

- C. **SCOPE DEVIATION OR HIDDEN CONDITION IDENTIFICATION.** IT IS THE INTENT OF THIS RFP TO PRESENT A “TEAM” APPROACH TO THE PROJECT MANAGEMENT, AND THEREFORE COMMUNICATION WILL BE A REQUIRED AND EXPECTED TO BE OF THE HIGHEST PRIORITY. ANY DEVIATION FROM THE SITE-SPECIFIC SOW DEVELOPED AS A RESULT OF THE POST WARD PRE-CONSTRUCTION MEETING WILL BE REQUIRED TO BE DOCUMENTED VIA PHOTO AND CORRESPONDENCE TO BE DETERMINED AND ACCEPTED AT THE PRE-CONSTRUCTION MEETING.
- D. **FINAL REPORT.** THE FINAL REPORT SHOULD BE PREPARED PER THE DELIVERABLES LISTED BELOW:
- 1) PROVIDE AN ORIGINAL PLUS COPIES (THREE) OF THE PROGRESS PHOTOS AND DAILY REPORTS (INCLUDING ANY ROOF PLANS OR DETAIL CLARIFICATIONS INCLUDING THE SUBMITTALS).



## *Proposal*



Engine 23 - FY19  
2119 G St NW  
Washington, DC 20037

***Inspection Date:*** Friday, December 7, 2018

# Proposal Recommendations

## Building & Job Summary

<b>Building Name</b>	Engine 23 - FY19
<b>Building Address</b>	2119 G St NW Washington, DC 20037
<b>Year Built</b>	
<b>Roof Area (total)</b>	3,914 SF
<b>Building Description</b>	Building Type: Institutional/Government Roof Access: Bring Ladder Floors: Multi
<b>Inspection Date</b>	Friday, December 7, 2018
<b>Inspector</b>	DGS - DCPEP Kevin Versak kversak@bluefinllc.com
<b>Inspection Notes</b>	
<b>Building Contact</b>	
<b>Client Contact</b>	



## Section Information

**Section ID:** A - A

**Area:** 3,671 SF

**Roof Type:** Slate

**Layers:**

- Slate:
  - Material: Natural
  - Attachment: Hand nailed
  - Color: Gray

**Roof Condition Score:** 78 (Degraded)



**Section ID:** A - A (Photo #2)

**Area:** 3,671 SF

**Roof Condition Score:** 78 (Degraded)



**Section ID:** A - A (Photo #3)

**Area:** 3,671 SF

**Roof Condition Score:** 78 (Degraded)



**Section ID:** A - A (Photo #4)

**Area:** 3,671 SF

**Roof Condition Score:** 78 (Degraded)



**Section ID:** A - A (Photo #5)

**Area:** 3,671 SF

**Roof Condition Score:** 78 (Degraded)



**Section ID:** A - A (Photo #6)

**Area:** 3,671 SF

**Roof Condition Score:** 78 (Degraded)



**Section ID:** B - B

**Area:** 150 SF

**Roof Type:** Slate

**Layers:**

- Slate:
  - Material: Natural
  - Attachment: Hand nailed
  - Color: Gray

**Roof Condition Score:** 80 (Degraded)



**Section ID:** R-C - R-C

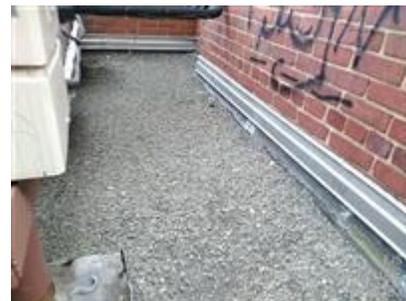
**Area:** 93 SF

**Roof Type:** Built-up membrane

**Layers:**

- Surface:
  - Surface: Aggregate
  - Color: Gray

**Roof Condition Score:** 56 (Unsatisfactory)



---

**Section ID:** R-C - R-C (Photo #2)

**Area:** 93 SF

**Roof Condition Score:** 56 (Unsatisfactory)



---

**Section ID:** R-C - R-C (Photo #3)

**Area:** 93 SF

**Roof Condition Score:** 56 (Unsatisfactory)



---

**Section ID:** R-C - R-C (Photo #4)

**Area:** 93 SF

**Roof Condition Score:** 56 (Unsatisfactory)



---

**Section ID:** R-C - R-C (Photo #5)

**Area:** 93 SF

**Roof Condition Score:** 56 (Unsatisfactory)



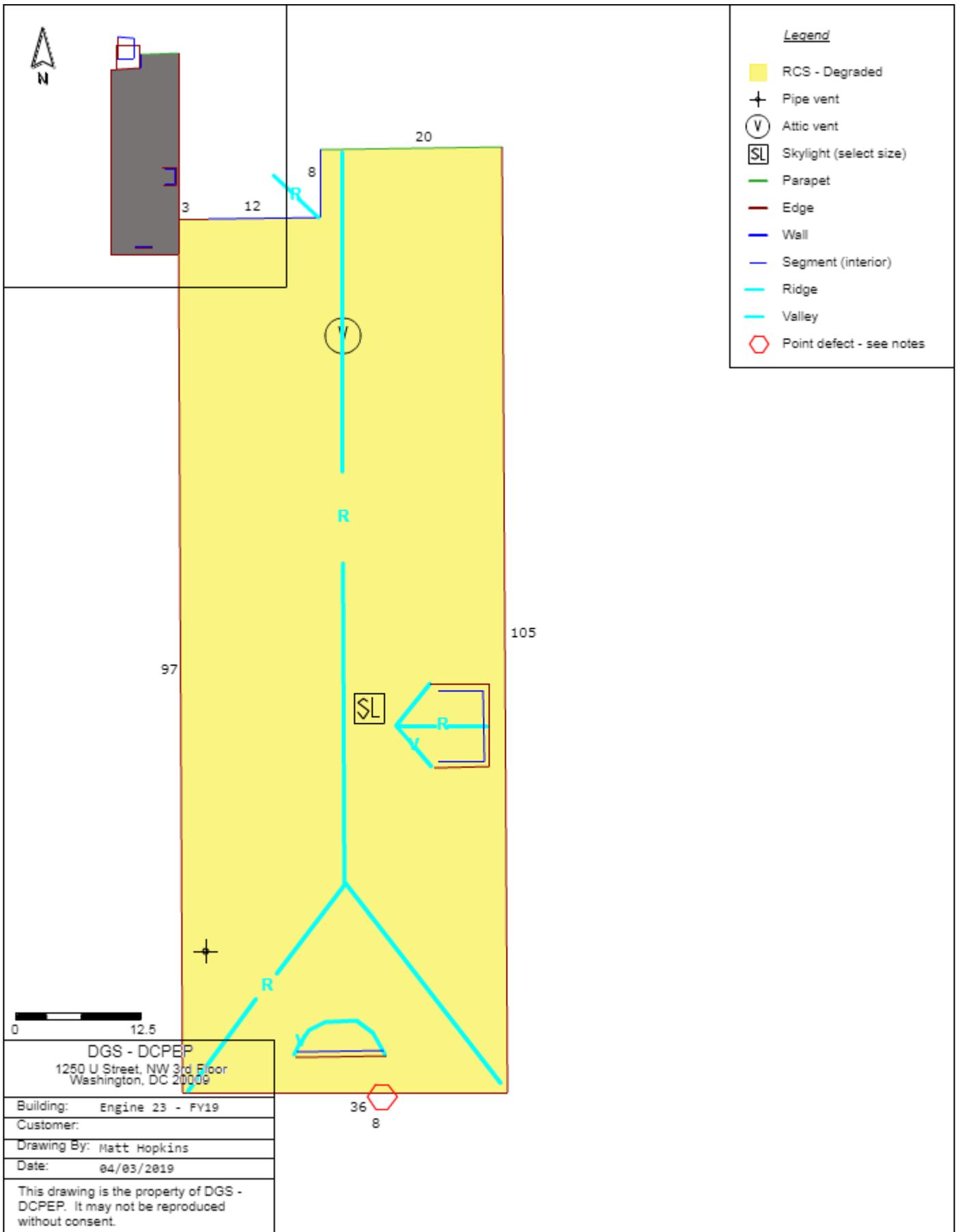
## Roof Condition Scores

Section	Score
A - A (Area = 3,671 SF)	<b>78 - Degraded</b>
B - B (Area = 150 SF)	<b>80 - Degraded</b>
R-C - R-C (Area = 93 SF)	<b>56 - Unsatisfactory</b>

**Legend**

- Adequate ( 0% )
- Degraded ( 98% )
- Unsatisfactory ( 2% )
- Unspecified ( 0% )

# Section A



## Section Summary – A



**Section ID:** A - A  
**Area:** 3,671 SF  
**Year Installed:** 1970 (approximate)  
**Height:** 35 FT  
**Floors:** 2  
**Sensitivity:** None

**Roof Type:** Slate

**Layers:**

- Slate:
  - Material: Natural
  - Attachment: Hand nailed
  - Color: Gray

**Roof Condition Score:** 78 (Degraded)

**Notes:** Prior RCS=80; prior ERSL React/Proact=11/2. Prior RCS=75; prior ERSL React/Proact=15/0. Prior RCS=80; prior ERSL React/Proact=15/0. Prior RCS=80; prior ERSL React/Proact=15/0.

## Inventory Detail – Section A

---

### Segment

- Type: Parapet
- 

### Drip edge

- Gutter: No
- 

### Drip edge

- Gutter: No
- 

### Segment

- Type: Edge

Segment 200



Photo 1 of 2

### Segment (Continued)



Photo 2 of 2

### Gutter

---

### Segment

- Type: Edge

Segment 200

---

**Segment**

- Type: Wall

Segment 400



Photo 1 of 2

**Segment (Continued)**



Photo 2 of 2

**Skylight (select size)**

- Base height: 6"
- Length: 3'
- Width: 3'
- Finish: None

**Pipe vent**

- Size: 2"
- Flashing: Pipe jack



Photo 1 of 2

---

**Pipe vent (Continued)**



Photo 2 of 2

---

**Attic vent**

- Size: > 24"
- Flashing: None



Photo 1 of 2

---

**Attic vent (Continued)**



Photo 2 of 2

---

**Ridge**

---

**Valley**

---

**Ridge**

---

**Valley**



Photo 1 of 2

---

**Valley (Continued)**



Photo 2 of 2

---

**Ridge**

---

**Ridge**

---

**Segment (interior)**

- Type: Wall

---

**Segment (interior)**

- Type: Edge

---

**Segment (interior)**

- Type: Edge

---

**Segment (interior)**

- Type: Wall
-

## Defect Summary – Section A

### Defect #8 - Field defect

**Defect:** Point defect - see notes.

**Severity:** See notes (EA) - Low severity.

**Status:** Proposed

**Recommendation:** Straighten and reseal damaged section of gutter and reposition gutter screens.



### Defect #8 - Field defect (Continued)

**Defect:** Point defect - see notes.

**Severity:** See notes (EA) - Low severity.

**Status:** Proposed



**Defect #8 - Field defect  
(Continued)**

**Defect:** Point defect - see notes.

**Severity:** See notes (EA) - Low severity.

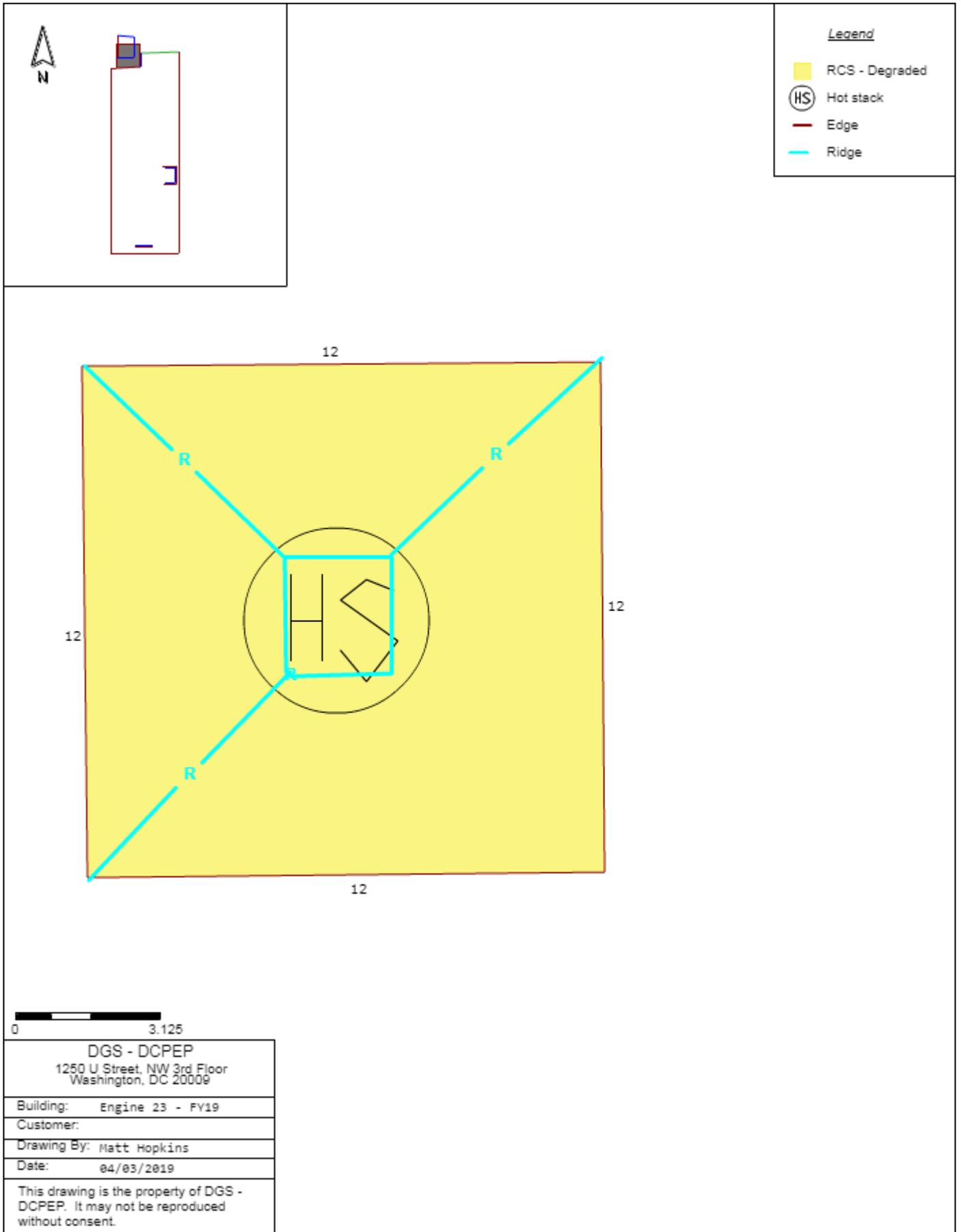
**Status:** Proposed



## Roof Condition Score – Section A

#	Question (Max Value) / Notes	Score
1	Roof is less than 5 years old and in excellent condition - no observed deficiencies (0)	
2	Are there roof leaks? (5)	
3	Have the past roof leaks caused significant interior damage? (10)	
4	Have roof leaks caused significant damage to building's structural integrity? (10)	
5	Has the roof been leaking for over 1 year? (7)	
6	Does the roof leak every time it rains in 3 or fewer places? (5)	
7	Does the roof leak every time it rains in 4 or more places? (10)	
8	Is the surface of the roofing deteriorated excessively? (4)	
9	Is there excessive patching on the roof? (8)	
10	Is roof-top equipment mounted improperly? (5)	
11	Is roof installation workmanship of medium quality? (3)	
12	Is roof installation workmanship of poor quality? (5)	
13	Remaining roof life > 75% (5)	
14	Remaining roof life 50% - 74% (10)	
15	Remaining roof life 25% - 49% (20)	20
16	Remaining roof life <25% (30)	
17	Does the flashing look deteriorated but does not appear to be letting water enter the building? (2)	
18	Does the flashing look deteriorated and appear to be letting the water enter the building in a few places? (6)	
19	Does the flashing look deteriorated and appear to be letting the water enter the building in an excessive number of places? (10)	
20	Is there a moderate number of broken or missing slate pieces? (4)	
21	Is there an excessive number of broken or missing slate pieces? (9)	
22	Is there a moderate number of missing or displaced hip/ridge tiles? (4)	
23	Is there an excessive number of missing or displaced hip/ridge tiles? (9)	
24	Is the roof slope less than 4 in 12? (4)	
25	Miscellaneous and other conditions - Low (5)	2
26	Miscellaneous and other conditions - Medium (10)	
27	Miscellaneous and other conditions - High (15)	
28	Roof is at the end of its life - Immediate Action Required! (0)	
	<b>Total</b>	<b>22</b>
	<b>FINAL SCORE (100 – Total)</b>	<b>78</b>
<b>ROOF CONDITION SCORE: Degraded</b>		

# Section B



## Section Summary – B



**Section ID:** B - B  
**Area:** 150 SF  
**Year Installed:** 1970 (approximate)  
**Height:** 50 FT  
**Floors:** 3  
**Sensitivity:** None

**Roof Type:** Slate

- Layers:**
- Slate:
    - Material: Natural
    - Attachment: Hand nailed
    - Color: Gray

**Roof Condition Score:** 80 (Degraded)

**Notes:** Prior RCS=80; prior ERSL React/Proact=11/0. Prior RCS=75; prior ERSL React/Proact=15/0. Prior RCS=80; prior ERSL React/Proact=15/0. Prior RCS=80; prior ERSL React/Proact=15/0.

No access, unable to survey

---

## Inventory Detail – Section B

---

**Segment**

- Type: Edge
- 

**Gutter**

---

**Hot stack**

- Diameter: 16"
  - Flashing: None
  - Material: Metal
- 

**Ridge**

---

**Ridge**

---

**Ridge**

---

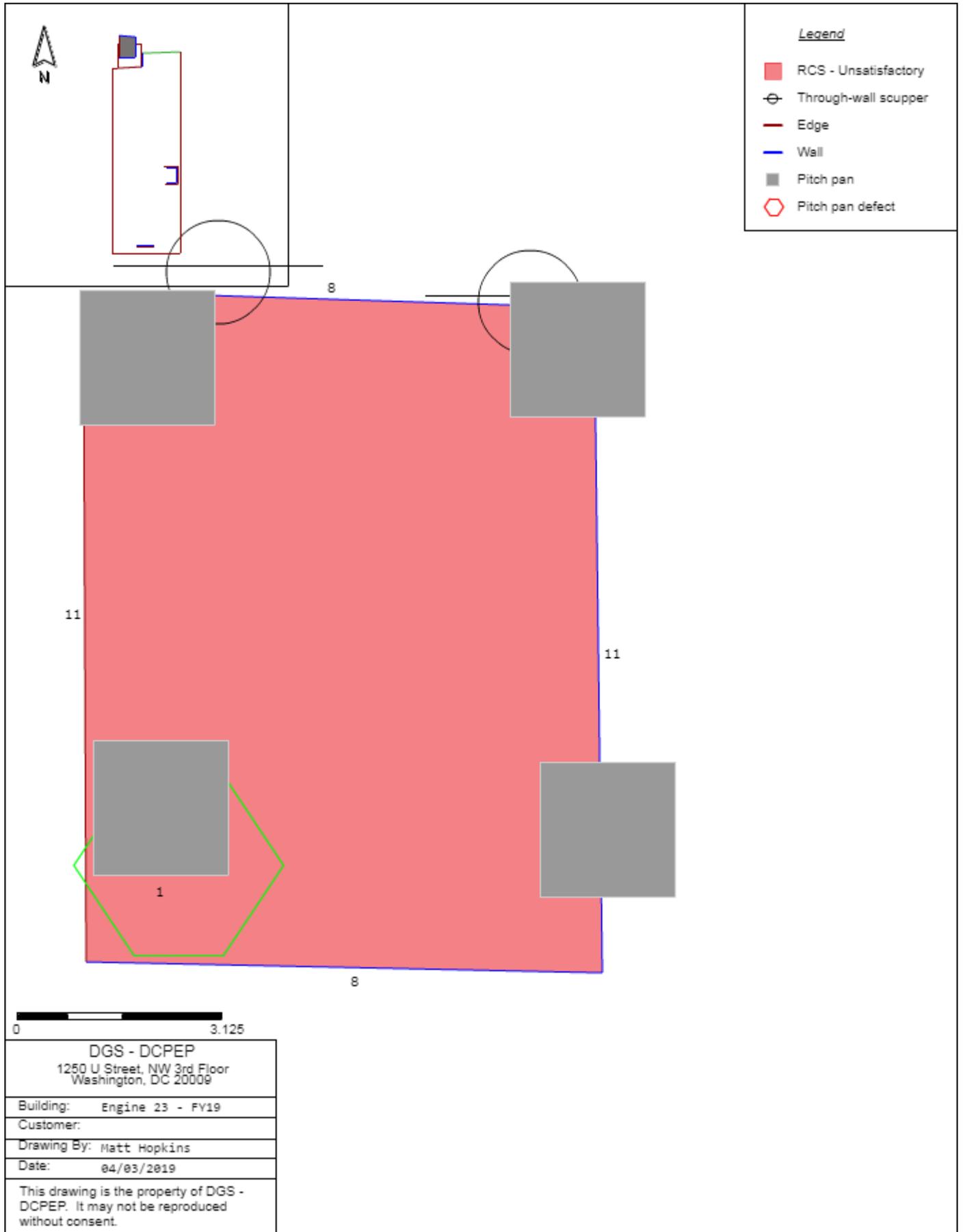
**Ridge**

---

## Roof Condition Score – Section B

#	Question (Max Value) / Notes	Score
1	Roof is less than 5 years old and in excellent condition - no observed deficiencies (0)	
2	Are there roof leaks? (5)	
3	Have the past roof leaks caused significant interior damage? (10)	
4	Have roof leaks caused significant damage to building's structural integrity? (10)	
5	Has the roof been leaking for over 1 year? (7)	
6	Does the roof leak every time it rains in 3 or fewer places? (5)	
7	Does the roof leak every time it rains in 4 or more places? (10)	
8	Is the surface of the roofing deteriorated excessively? (4)	
9	Is there excessive patching on the roof? (8)	
10	Is roof-top equipment mounted improperly? (5)	
11	Is roof installation workmanship of medium quality? (3)	
12	Is roof installation workmanship of poor quality? (5)	
13	Remaining roof life > 75% (5)	
14	Remaining roof life 50% - 74% (10)	
15	Remaining roof life 25% - 49% (20)	20
16	Remaining roof life <25% (30)	
17	Does the flashing look deteriorated but does not appear to be letting water enter the building? (2)	
18	Does the flashing look deteriorated and appear to be letting the water enter the building in a few places? (6)	
19	Does the flashing look deteriorated and appear to be letting the water enter the building in an excessive number of places? (10)	
20	Is there a moderate number of broken or missing slate pieces? (4)	
21	Is there an excessive number of broken or missing slate pieces? (9)	
22	Is there a moderate number of missing or displaced hip/ridge tiles? (4)	
23	Is there an excessive number of missing or displaced hip/ridge tiles? (9)	
24	Is the roof slope less than 4 in 12? (4)	
25	Miscellaneous and other conditions - Low (5)	
26	Miscellaneous and other conditions - Medium (10)	
27	Miscellaneous and other conditions - High (15)	
28	Roof is at the end of its life - Immediate Action Required! (0)	
	<b>Total</b>	<b>20</b>
	<b>FINAL SCORE (100 – Total)</b>	<b>80</b>
<b>ROOF CONDITION SCORE: Degraded</b>		

# Section R-C



## Section Summary – R-C



**Section ID:** R-C - R-C

**Area:** 93 SF

**Year Installed:** Unknown

**Height:** 8 FT

**Floors:** 1

**Sensitivity:** None

**Roof Condition Score:** 56 (Unsatisfactory)

**Notes:** None

**Roof Type:** Built-up membrane

**Layers:**

- Surface:
  - Surface: Aggregate
  - Color: Gray

## Inventory Detail – Section R-C

---

### Wall

- Height: > 12'
  - Type: Brick
  - Height (min): 3'
- 

### Drip edge

- Gutter: No
- 

### Wall membrane flashing

- Type: Roof
  - Stretch out: 12"
  - Attachment: Adhered
  - Wall height: 3'
  - Wall matl: Brick
- 

### Wall counter flashing

- Type: Reglet - 1 piece
- 

### Segment

- Type: Edge

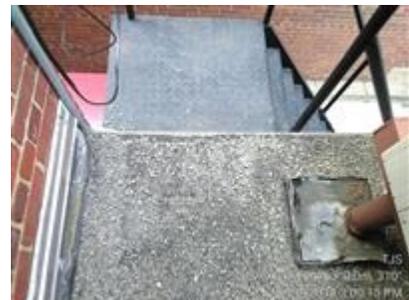


Photo 1 of 2

### Segment (Continued)



Photo 2 of 2

---

**Segment**

- Type: Wall



Photo 1 of 2

---

**Segment (Continued)**



Photo 2 of 2

---

**Pitch pan**

- Type: Metal
- Length: 12"
- Width: 12"
- Height: 3"



Photo 1 of 3

---

**Pitch pan (Continued)**



Photo 2 of 3

---

**Pitch pan (Continued)**



Photo 3 of 3

---

**Pitch pan**

- Type: Metal
- Length: 12"
- Width: 12"
- Height: 3"

---

**Pitch pan**

- Type: Metal
- Length: 12"
- Width: 12"
- Height: 3"

---

**Pitch pan**

- Type: Metal
- Length: 12"
- Width: 12"
- Height: 3"

---

**Through-wall scupper**

- Width: 6"
- Height: 2"
- Length: 8"
- Downspout: No



Photo 1 of 2

---

**Through-wall scupper (Continued)**



Photo 2 of 2

---

**Through-wall scupper**

- Width: 6"
- Height: 2"
- Length: 8"
- Downspout: No

## Defect Summary – Section R-C

### Defect #1 - Field defect

**Defect:** Pitch pan defect.  
**Severity:** Pitch pan sealer is cracked or separated from the pan or penetration.  
**Status:** Repaired

**Recommendation:** Add pourable sealant and crown for positive drainage. Typical of 4.

**Notes:** 4 Pitch Pans re-sealed and crowned.



### Defect #1 - Field defect (Continued)

**Defect:** Pitch pan defect.  
**Severity:** Pitch pan sealer is cracked or separated from the pan or penetration.  
**Status:** Repaired



**Defect #1 - Field defect  
(Continued)**

**Defect:** Pitch pan defect.  
**Severity:** Pitch pan sealer is cracked or separated from the pan or penetration.  
**Status:** Repaired



## Roof Condition Score – Section R-C

#	Question (Max Value) / Notes	Score
1	Roof is less than 5 years old and in excellent condition - no observed deficiencies (0)	
2	Are there roof leaks? (5)	
3	Have the past roof leaks caused significant interior damage? (10)	
4	Have roof leaks caused significant damage to building's structural integrity? (10)	
5	Has the roof been leaking for over 1 year? (7)	
6	Does the roof leak every time it rains in 3 or fewer places? (5)	
7	Does the roof leak every time it rains in 4 or more places? (10)	
8	Is the surface of the roofing deteriorated excessively? (4)	4
9	Is there excessive patching on the roof? (8)	
10	Is roof-top equipment mounted improperly? (5)	
11	Is roof installation workmanship of medium quality? (3)	
12	Is roof installation workmanship of poor quality? (5)	
13	Remaining roof life > 75% (5)	
14	Remaining roof life 50% - 74% (10)	
15	Remaining roof life 25% - 49% (20)	
16	Remaining roof life <25% (30)	30
17	Does the flashing look deteriorated but does not appear to be letting water enter the building? (2)	2
18	Does the flashing look deteriorated and appear to be letting the water enter the building in a few places? (6)	
19	Does the flashing look deteriorated and appear to be letting the water enter the building in an excessive number of places? (10)	
20	Is there a moderate amount of shrinkage, bridging, blisters, ridging, open laps, or splits? (3)	
21	Is there an excessive amount of shrinkage, bridging, blisters, ridging, open laps, or splits? (5)	
22	Is there a moderate number of cracks or openings in the flashing that are 4 inches or higher off of the roof level? (2)	
23	Is there an excessive number of cracks or openings in the flashing that are 4 inches or higher off of the roof level? (5)	
24	Is there indication of minimal standing water? (2)	
25	Is there indication of excessive standing water/a visual indication of the roof decking being low? (6)	
26	Miscellaneous and other conditions - Low (5)	
27	Miscellaneous and other conditions - Medium (10)	8
28	Miscellaneous and other conditions - High (15)	
29	Roof is at the end of its life - Immediate Action Required! (0)	
	<b>Total</b>	<b>44</b>
	<b>FINAL SCORE (100 – Total)</b>	<b>56</b>

#	Question (Max Value) / Notes	Score
<b>ROOF CONDITION SCORE: Unsatisfactory</b>		

## Defect Recommendations

Recommended Actions				
Inventory	Defect #	Defect Information	Qty	Recommendation
Field defect	8	Point defect - see notes ..... Section: A ..... Severity: See notes (EA) - Low severity	1 EA	<b>** PROPOSED **</b>  Straighten and sesecure damaged section of gutter and reposition gutter screens.
Field defect	1	Pitch pan defect ..... Section: R-C ..... Severity: Pitch pan sealer is cracked or separated from the pan or penetration Notes: 4 Pitch Pans re- sealed and crowned.	1 EA	<b>**** REPAIRED</b> <b>****</b>  Add pourable sealant and crown for positive drainage. Typical of 4.

# Photo Album



Building Photo



Building Photo



Building Photo



Building Photo



Building Photo



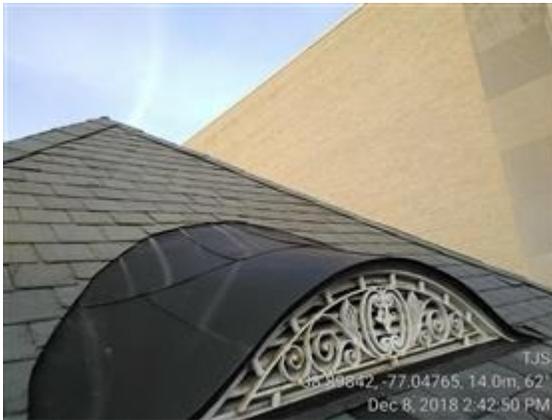
Building Photo



Section A: A



Section A: A



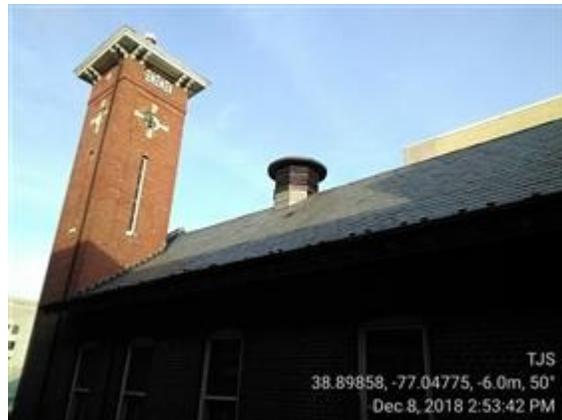
Section A: A



Section A: A



Section A: A



Section A: A



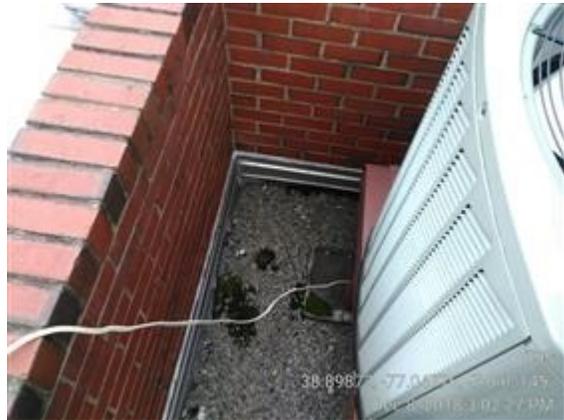
Section R-C: R-C



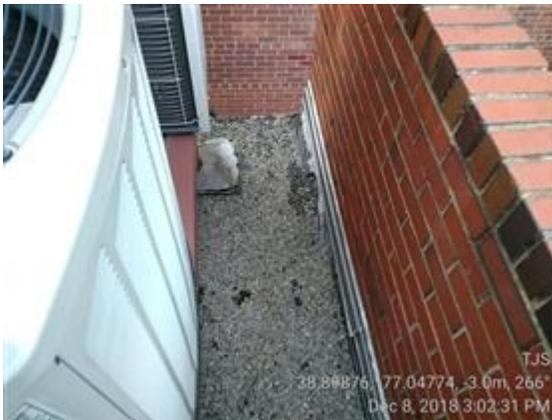
Section R-C: R-C



Section R-C: R-C



Section R-C: R-C



Section R-C: R-C



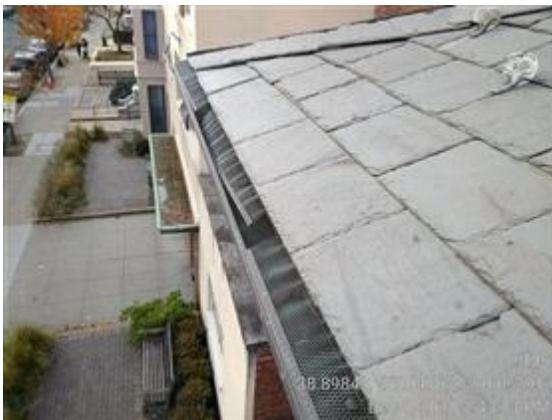
Inventory #9: Valley



Inventory #9: Valley



Inventory #13: Segment



Inventory #13: Segment



Inventory #14: Segment



Inventory #14: Segment



Inventory #19: Pipe vent



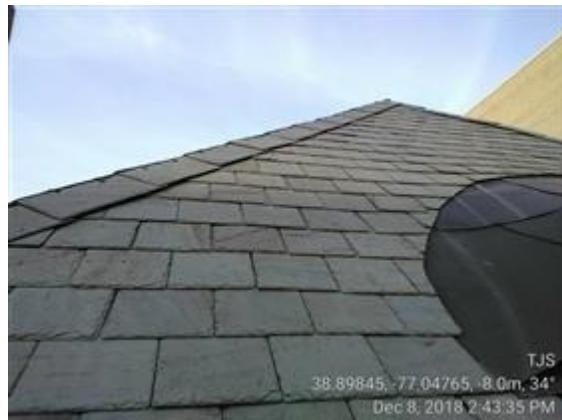
Inventory #19: Pipe vent



Inventory #27: Attic vent



Inventory #27: Attic vent



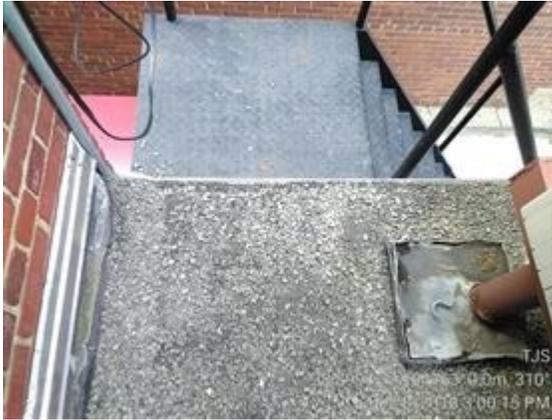
Inventory #28: Slate roof surface



Inventory #30: Segment



Inventory #30: Segment



Inventory #34: Segment



Inventory #34: Segment



Inventory #36: BUR surface



Inventory #37: Pitch pan



Inventory #37: Pitch pan



Inventory #37: Pitch pan



Inventory #42: Through-wall scupper



Inventory #42: Through-wall scupper



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #1: Pitch pan defect



Defect #8: Point defect - see notes



Defect #8: Point defect - see notes



Defect #8: Point defect - see notes