INFRARED ROOF INSPECTION

PERFORMED FOR:
WESTPORT BOE
TED HUNYADI

LOCATION:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880

PERFORMED BY:

JJC DRONES
2 SAMSON ROCK DR UNIT 1H
MADISON CT 06443

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WEBSITE: WWW.JJCDRONES.COM

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INTRODUCTION

This report summarizes the findings of our Infrared Roof Moisture Analysis of the roof at Staples High School, Westport, CT, performed on November 7, 2020.

Included in this report are an overall roof plan, a roof plan key and 38 Thermograms taken during the inspection, and information about interpreting these images. A roof area plan created by Offshore Construction on page 9 of this report is used as reference on the thermograms to specify the respective roof areas. The suspected wet areas are marked on the overall roof plan, the key, and the respective detail picture and measurement are also included. This report also includes descriptions of Infrared Thermography, as well as survey procedures and the weather conditions on the date of the infrared testing.

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

WEATHER CONDITIONS

The Infrared Roof Moisture Survey was performed during the evening of November 7, 2020. During the day the weather was sunny with a high temperature of approximately 65°F. At night the sky was clear with no wind and an ambient nighttime temperature of approximately 50°F.

INFRARED THERMOGRAPHY

Infrared thermography is the science of detecting infrared energy (heat) emitted from an object, converting it to an apparent temperature, and displaying the result as an infrared image that is captured by a thermal camera.

Using this science allows us to detect and locate areas where heat is released more slowly in areas of suspected moisture.

During the day moist insulation will absorb more heat than dry insulation. In the evening when the temperature drops and the roof cools, the wet insulation will release the absorbed heat more slowly than the dry areas. An infrared camera has the ability to show these areas as a different color than the surrounding dry areas. In a black and white scale, the area will appear darker. In a color scale, the areas will be a different color than the dry areas of the roof.

The results of infrared thermography do not guarantee the presence of moisture.

It is recommended that these findings be investigated further by obtaining core cuts or moisture probes of the roof to confirm the presence of wet insulation in the respective areas of interest.

Test Instrument and Method

This roof was inspected by a DJI Inspire 1 v2 drone which was flown with a DJI Zenmuse XT Flir Thermal camera at an altitude of 200'. The drone was flown by an FAA licensed pilot and certified thermographer. The photos were then uploaded to Flir Tools software and our licensed drone software to evaluate the findings and create this report.

Drone	DJI Inspire 1 v2
Camera	DJI Zenmuse XT
IR Resolution	640 x 512
Range	-10 to 40 °C
Lens	13 mm
Image Output format	R-JPEG

Findings

The total size of the roof is approximately 178,588 square feet. The total amount of suspected potential moisture, heat or standing water roof area is approximately 39,962 square feet. The suspected wet areas are equal to about 22% of the entire roof. Please refer to the following maps, key and detail pictures for location of these areas.

This report documents the locations and extent of suspected wet insulation at the time of the inspection. No information regarding the integrity of the roofing system or building is provided or implied in this report. Many factors, including sunlight, precipitation, wind, foot traffic, and building movement and the like can affect a roof over a short period of time. Regular inspections ensure early detection of problems and can extend the life of a roof membrane.

Thank you for using JJC Drones for your services. Please call us with any questions regarding this report or any other thermal projects.

Regards,

Jimmy Girolamo
Owner – JJC Drones

Survey Location:
STAPLES HIGH SCHOOL
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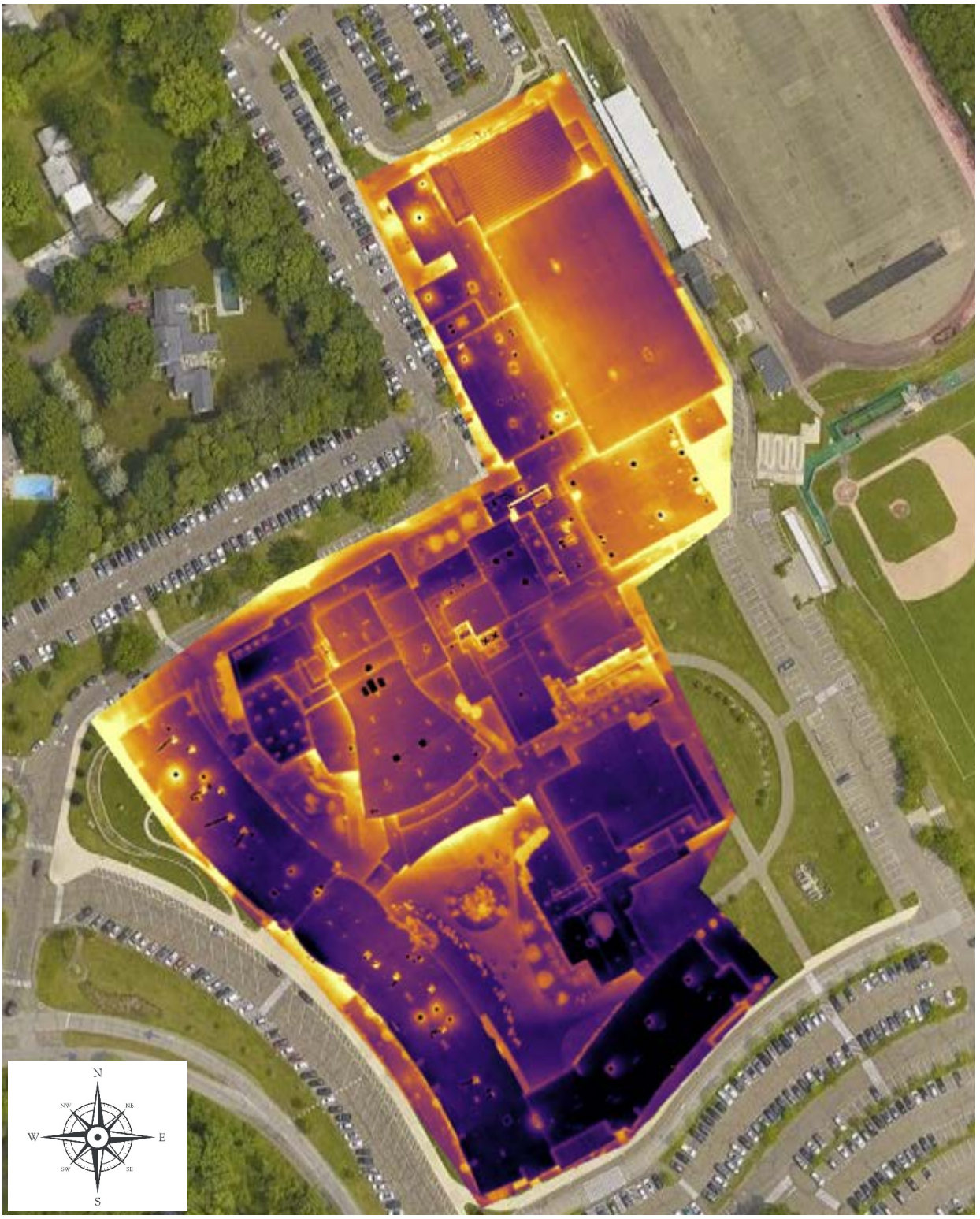
WESTPORT CT 06880

OVERALL ROOF AREA OF INTEREST ~ 178588 SQFT

OVERALL THERMAL ROOF LAYOUT



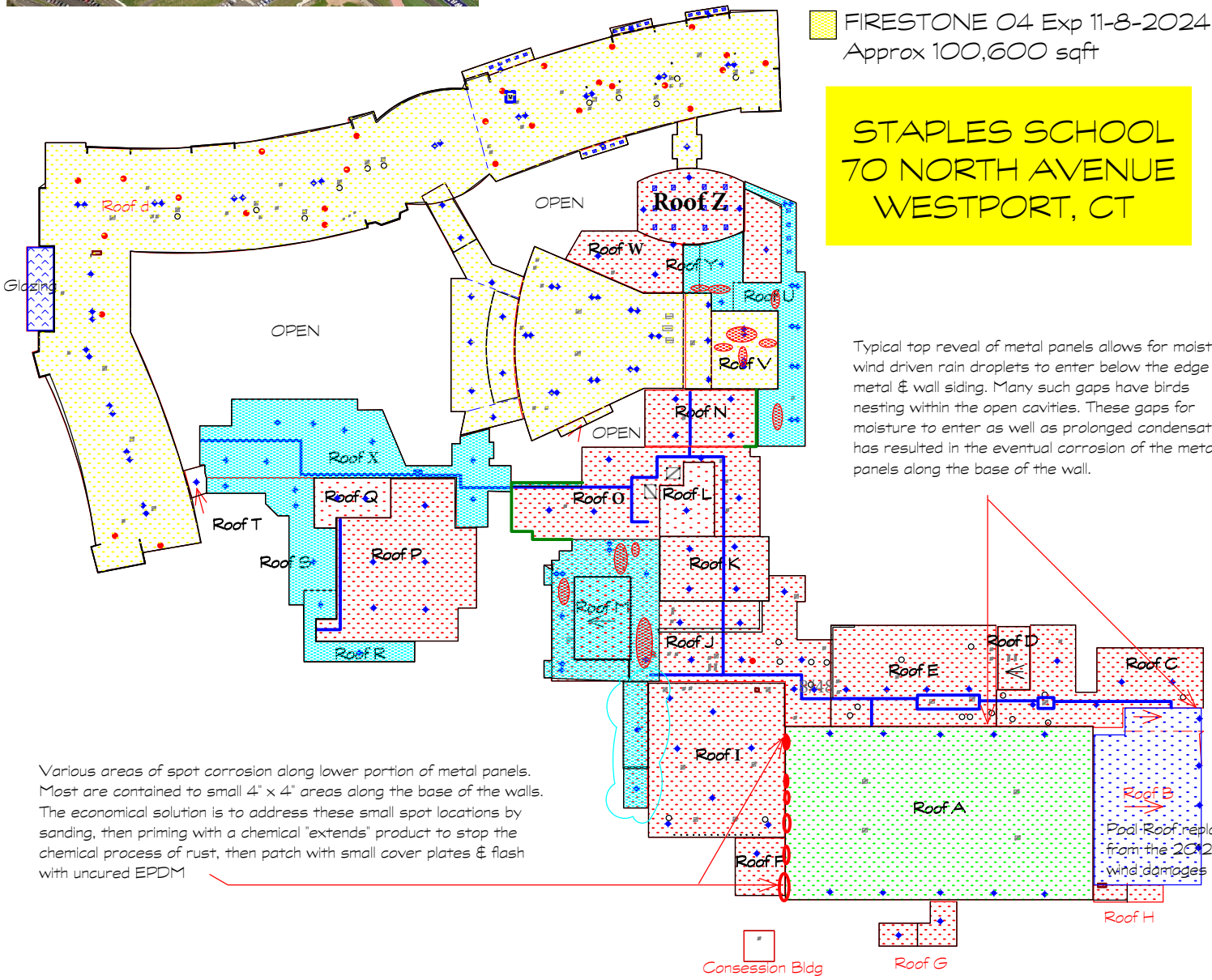
CARLISLE CMD629N - 97 Expires 9-19-2013
Approx 117,581 sqft

CARLISLE CMD1003827 - 06 Expires 8-31-2026
Approx 15,600 sqft

CARLISLE AB#596N-98 - 98 Expires 9-22-2008
Approx 36,560 sqft

FIRESTONE 04 Exp 11-8-2024
Approx 100,600 sqft

STAPLES SCHOOL
70 NORTH AVENUE
WESTPORT, CT



Typical top reveal of metal panels allows for moist wind driven rain droplets to enter below the edge metal & wall siding. Many such gaps have birds nesting within the open cavities. These gaps for moisture to enter as well as prolonged condensation has resulted in the eventual corrosion of the metal panels along the base of the wall.

Various areas of spot corrosion along lower portion of metal panels. Most are contained to small 4" x 4" areas along the base of the walls. The economical solution is to address these small spot locations by sanding, then priming with a chemical "extends" product to stop the chemical process of rust, then patch with small cover plates & flash with uncured EPDM

Legend

Control Joint
Expansion Joint

Roof Top Units

Roof Hatch
Skylight
Unit on Sleepers
Unit on Curb

Projections

Plumbing Stack
Hot Stack
Pitch Pan
Metal Sleeve Stack

Drainage

Drain (Existing)
Scupper
Drain (New)

Miscellaneous

Gas Line
Crickets
Walkway
Roof Level Change
Paver Walkway
Core Test

Problem Indicators

Blister
Vegetation
Ponding
Flashing Problem / Roof Defect

* Note: -U indicates an unused item

* Note: - indicates an area where the ISO insulation is warped from previous water infiltration

Project	Staples School, Westport
Customer	Town of Westport
DWG. By	Joseph Kiss
Date	5-13-20
Scale	N.T.S

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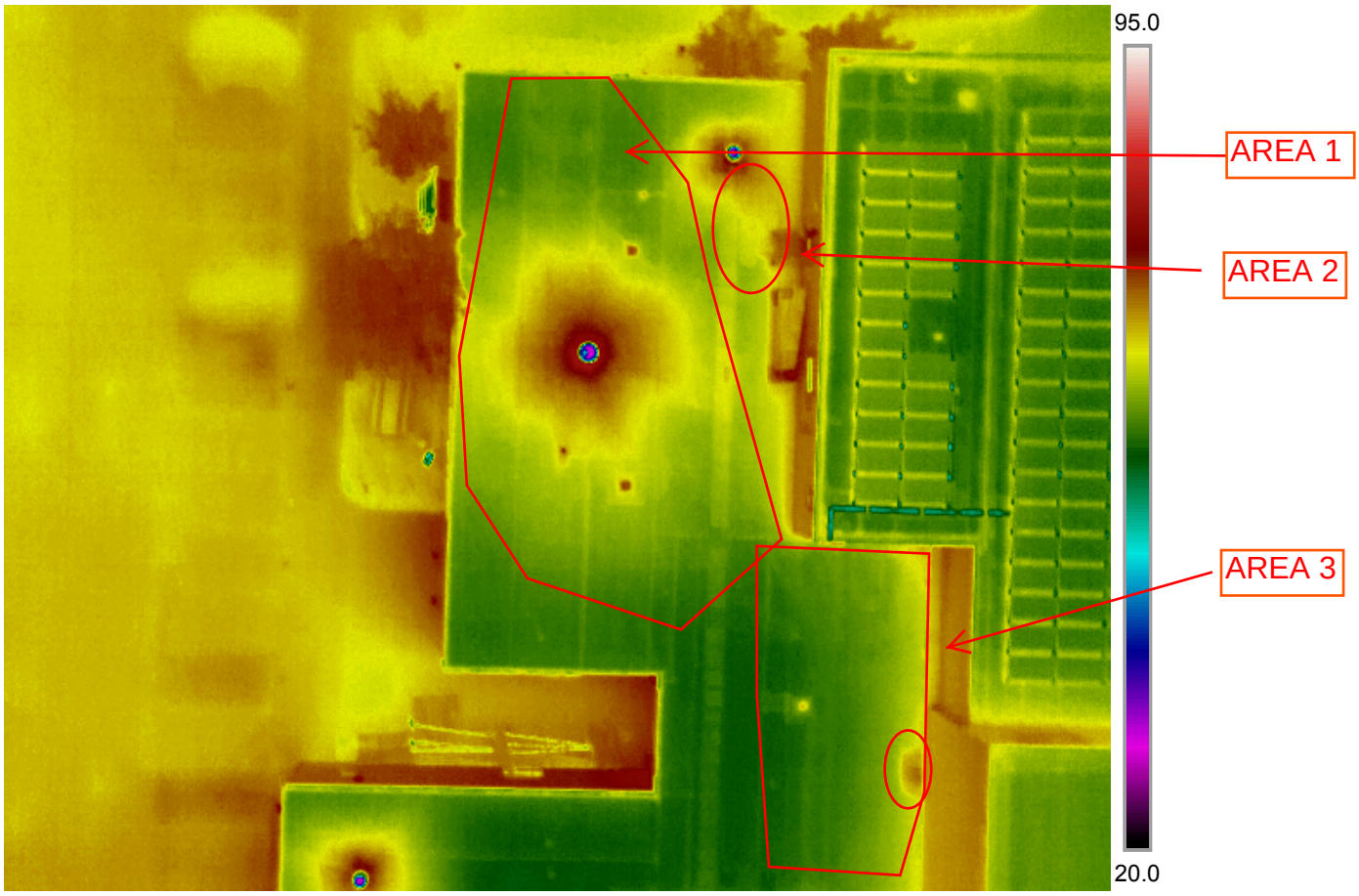


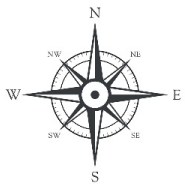
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Area 1 ~ 1751 sqft. This area appears to have a significant amount of possible standing water or residue near and around the drain.

Area 2 ~ 97 sqft. There appears to be heat coming from a patch near the walk way pads as well as residual standing water around the drain and wall.

Area 3 ~ 916 sqft. The area along the Eastern wall and over to the walk way pads shows traces of heat and possible moisture.



Roof C

JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

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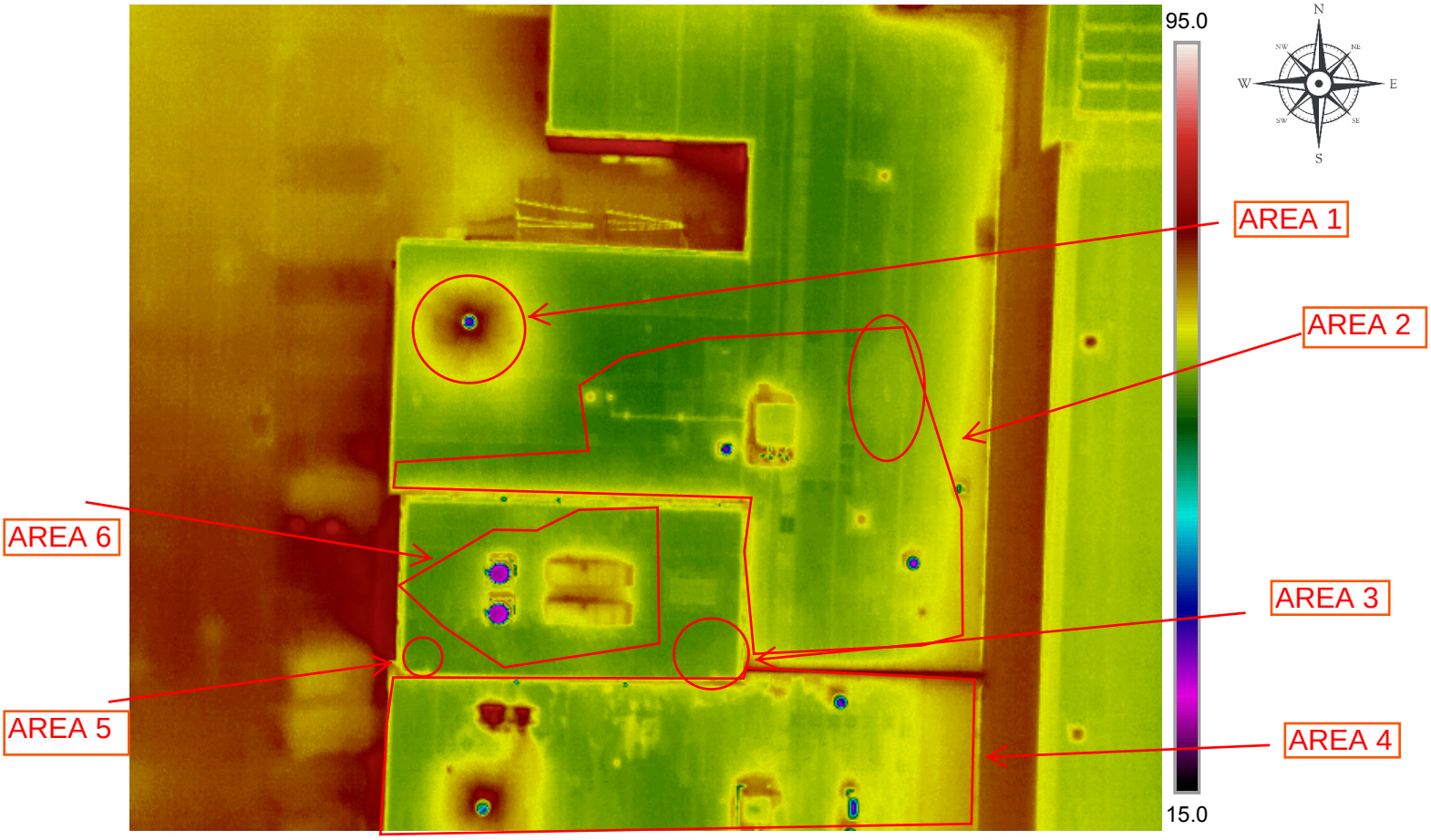

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AREA 1 ~ 200 sqft. Area revolves around a possible drain or unit which will emit heat. Appears there may be some ponding water or residual moisture left.
Area 2 ~ 2126 sqft. Large area including the areas around the unit, stretching from the edge of the south, east and west portions of the area. Also the large oval shaped area East of the walk pads is called out.
Area 3 ~ 42 sqft. Small south eastern corner of this section Area 4 ~ 2422 sqft. Large area. Almost the entire portion of this section appears to have some sort of heat/possible moisture showing between many small sections and some larger areas. Area 5 ~ 30 sqft. Small SW corner.
Area 6 ~ 581 sqft. The majority of the area surrounding the 4 units on this roof appears to have heat and possible moisture present.

Roof C, D, E

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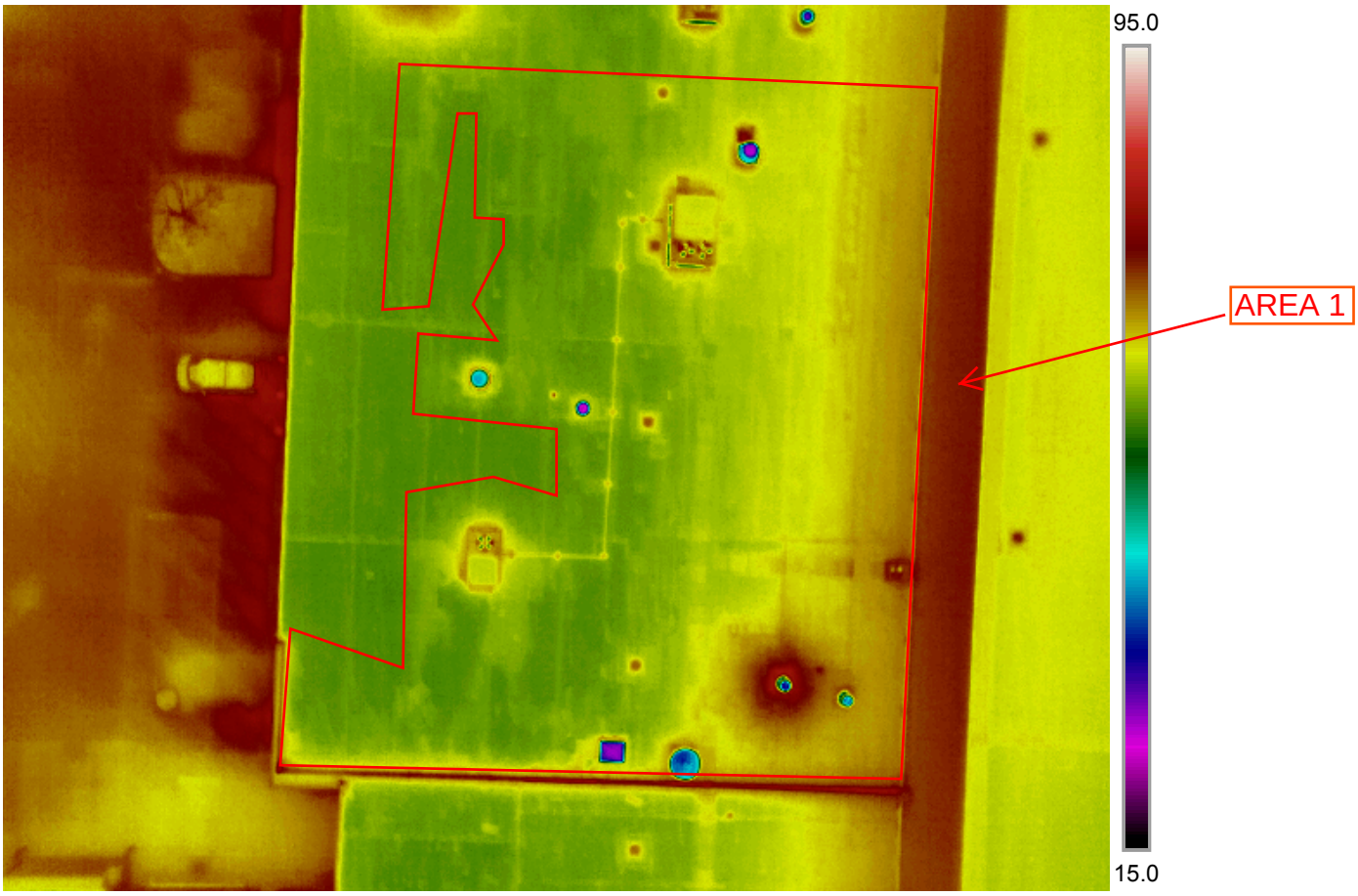

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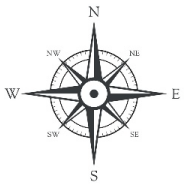
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

AREA 1 ~ 7111 sqft. A large area that has traces of heat/possible moisture almost entirely covering the section. It cannot be definitely determined whether these areas are standing water or wet insulation etc. However the presence of heat and possible moisture is abundant in this area of the roof.

Roof E



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FAA PART 107 LICENSED DRONE PILOT

Survey Location:
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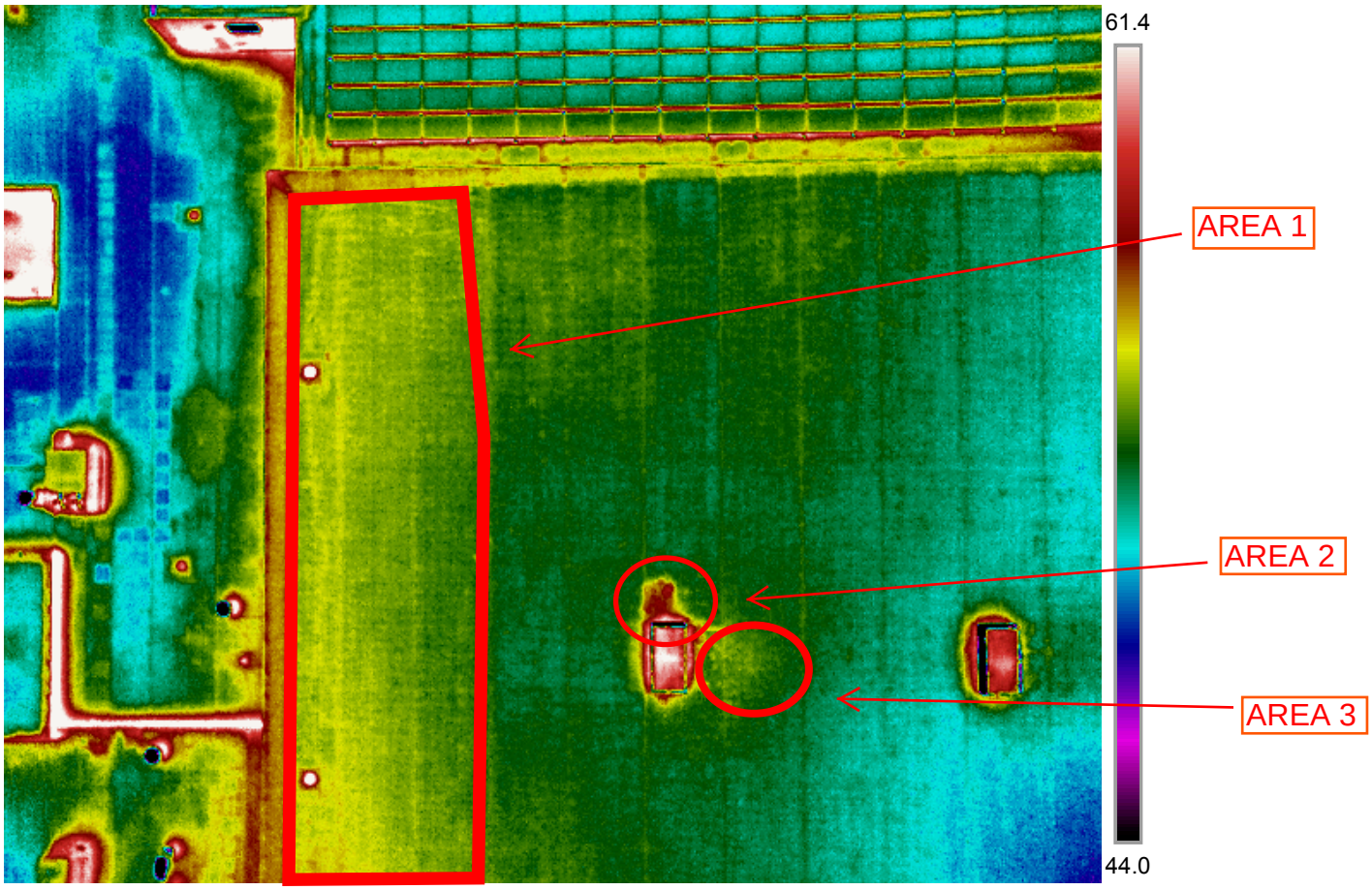

Parameters

Emissivity	1
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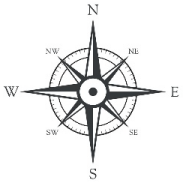
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Roof A

Area 1 ~ 2539 sqft. Area that runs along the W edge of this section appears to have heat/possible moisture.
Area 2 ~ 30 sqft. Small area N of the closest unit to the marked location
Area 3 ~ 30 sqft. Small area E of the closest unit to the marked location



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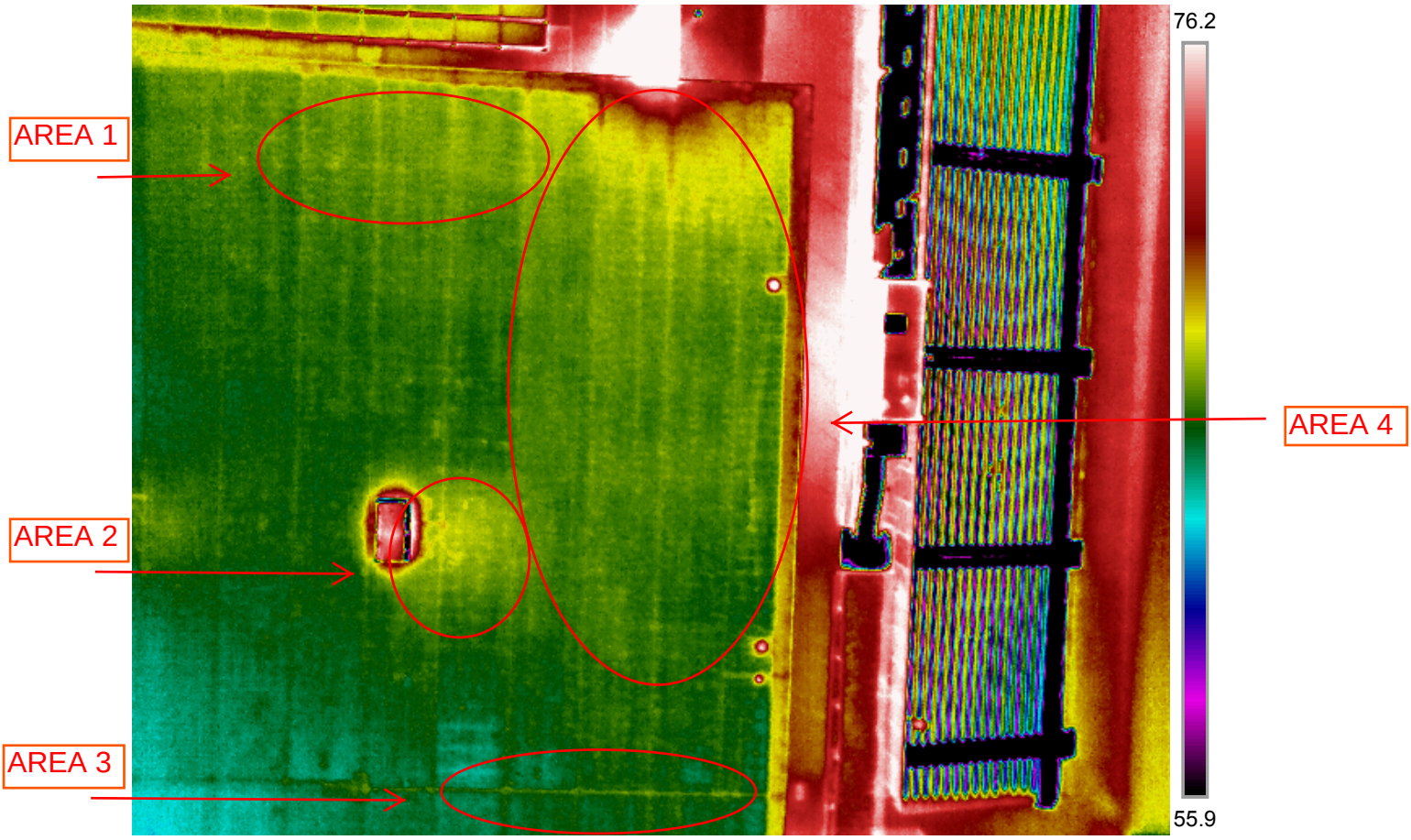

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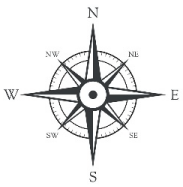
Ext. optics trans.	1
Relative humidity	50 %

Roof A

Area 1 ~ 684 sqft. Area along the N edge of the roof. Appears to be standing water marks or possible heat/moisture.
Area 2 ~ 113 sqft. Small area E of the closest unit.
Area 3 ~ 40 ft. Area that runs along a seam from E to W.
Area 4 ~ 2881 sqft. Large area along the E and NE part of the roof edge. Appears to be possible standing water marks or heat/moisture underlying.



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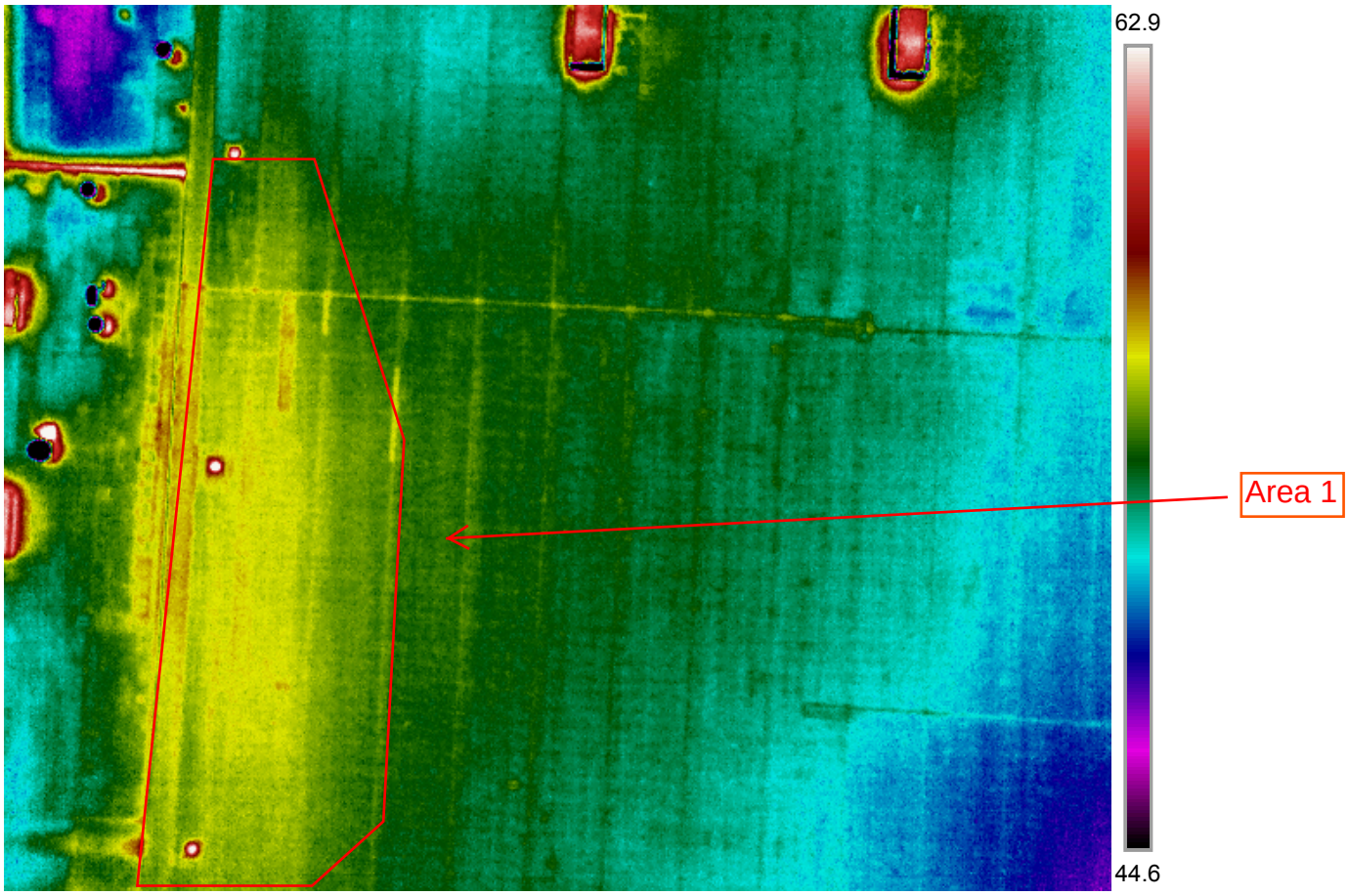

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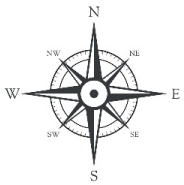
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Roof A

Area 1 ~ 2525 sqft. Area that runs along the W edge of this roof area.



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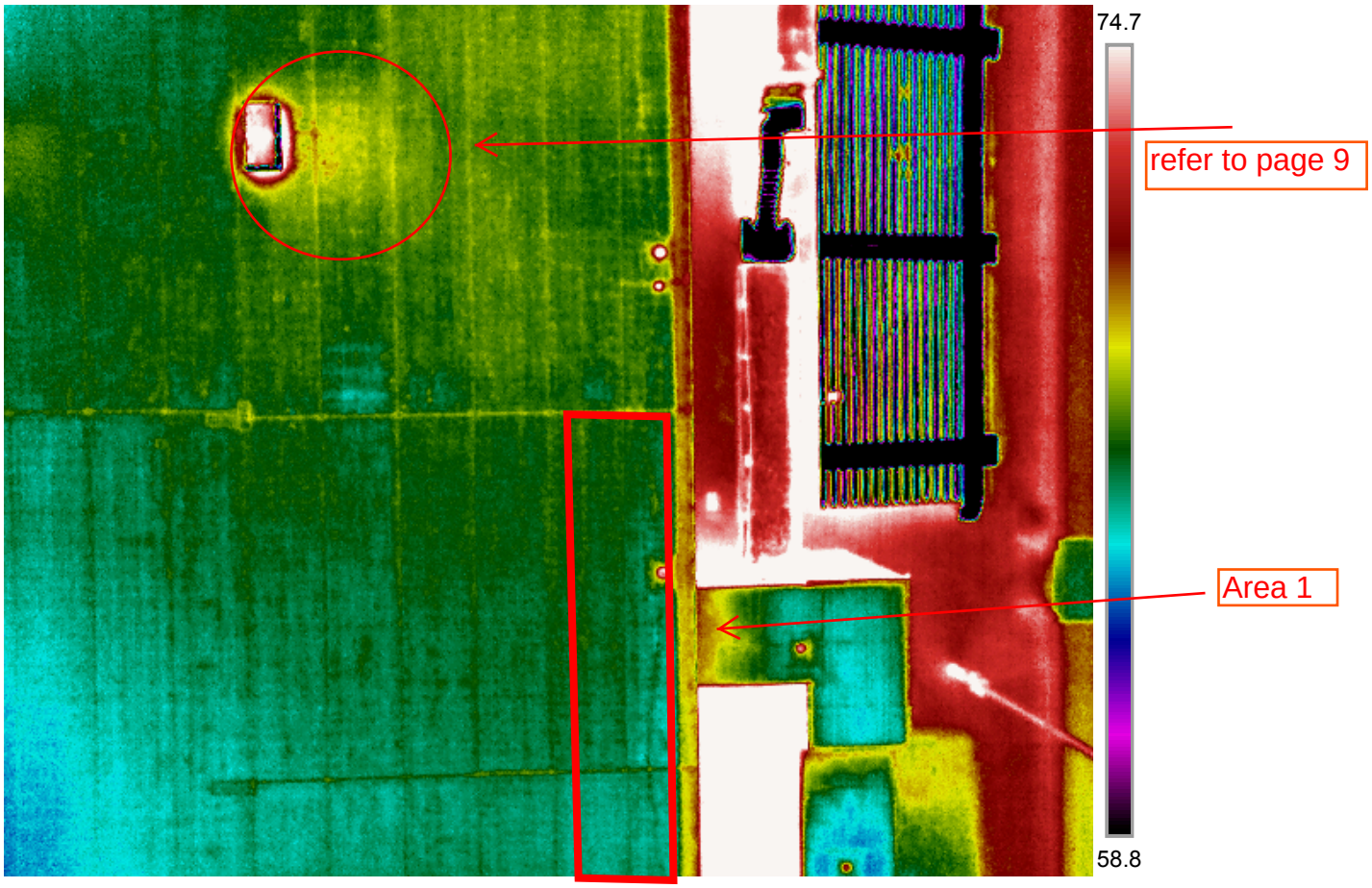

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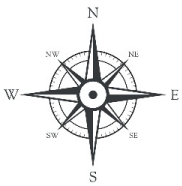
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Roof A

Area 1 ~ 272 sqft. Area that runs beneath the seam, along the E wall. Appears to be standing water spots or possible heat/ moisture spots.



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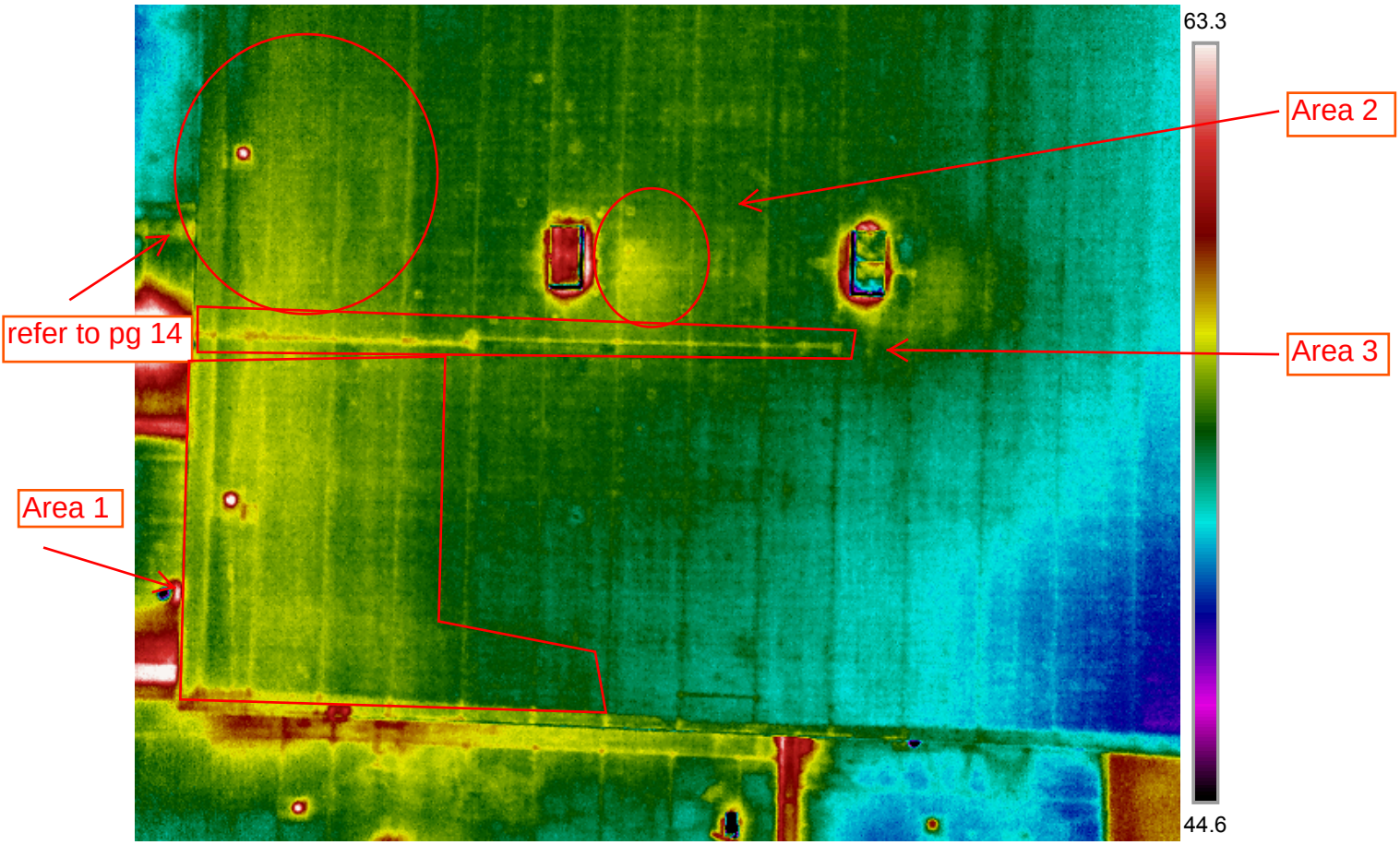

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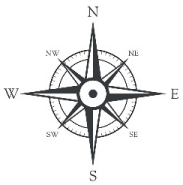
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Roof A

Area 1 ~ 2111 sqft. Area that runs along the W and S edge of the roof section and extends towards the middle of the roof.
Area 2 ~ 40 sqft. Small area on the E side of the closest unit to the marked location
Area 3 ~ 81 ft. Seam running from W to E below the two units in the middle of the roof.



JJC DRONES
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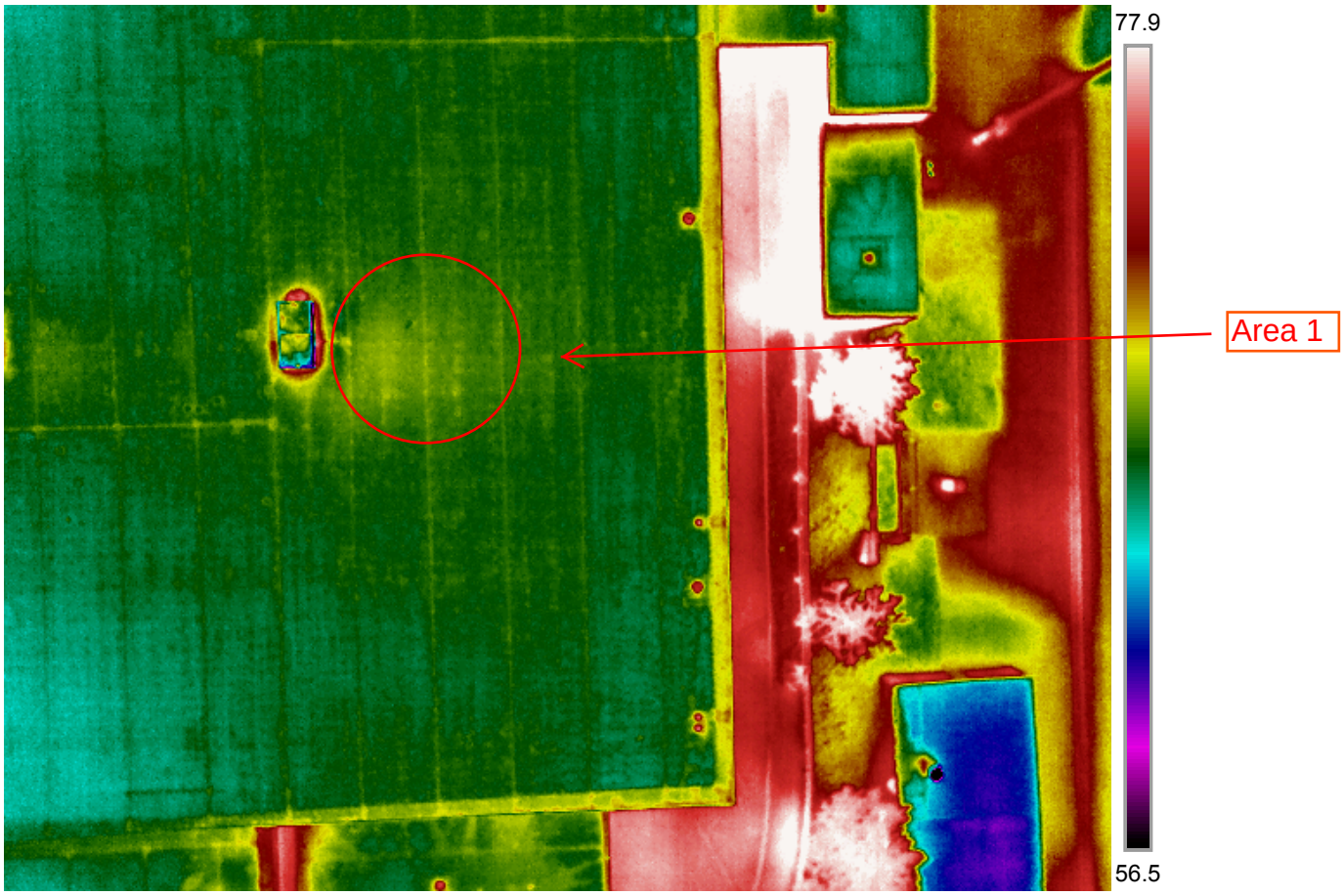

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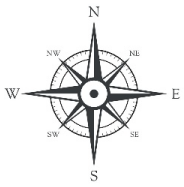
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Area 1 ~ 50 sqft. Small area to the E of the closest unit

Roof A



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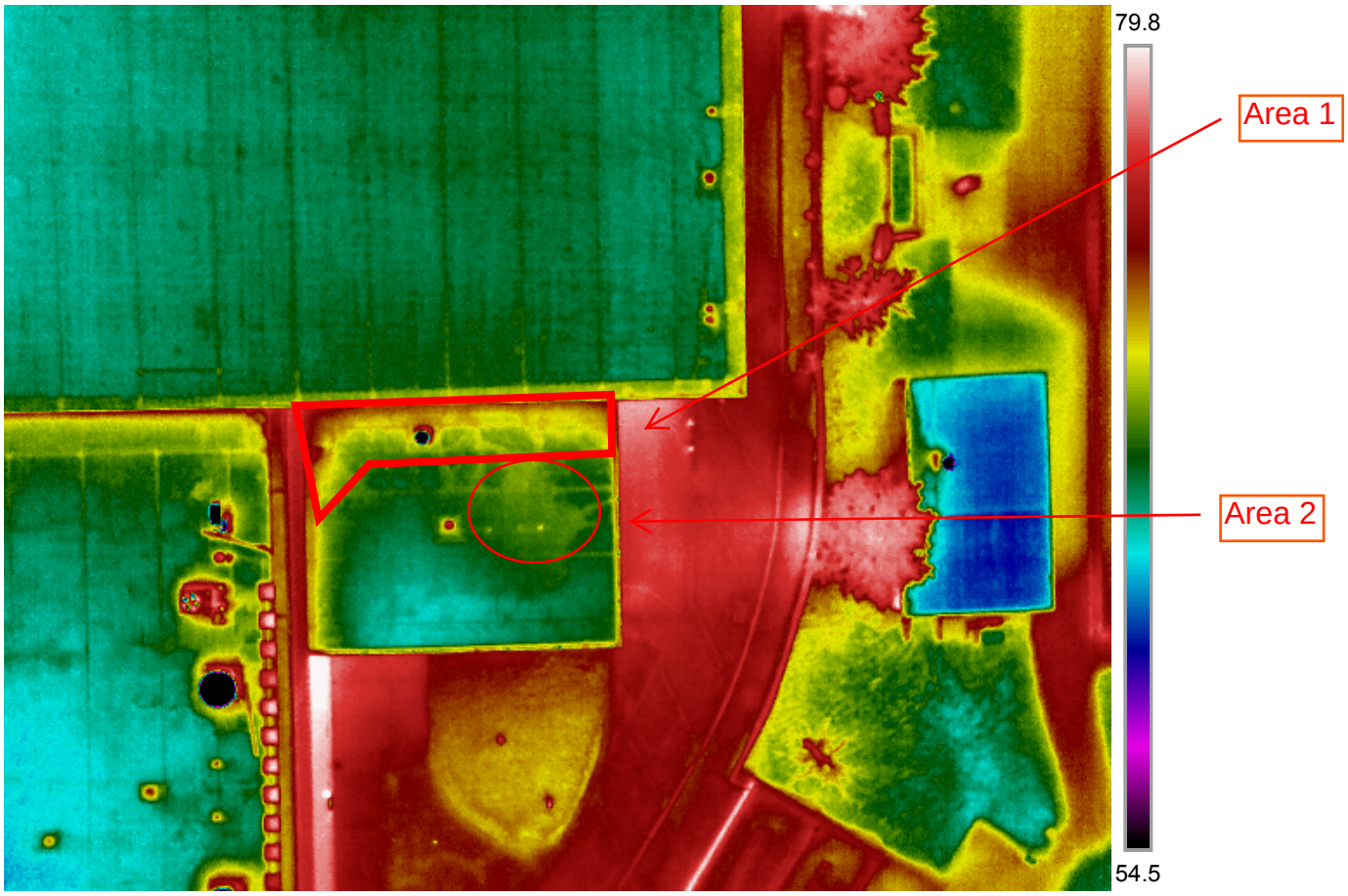

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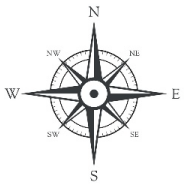
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof F

Area 1 ~ 270 sqft. Along the N portion of this roof that runs against the wall leading up to Roof A.
Area 2 ~ 251 sqft. Area to the E of the drain in the center of the roof.



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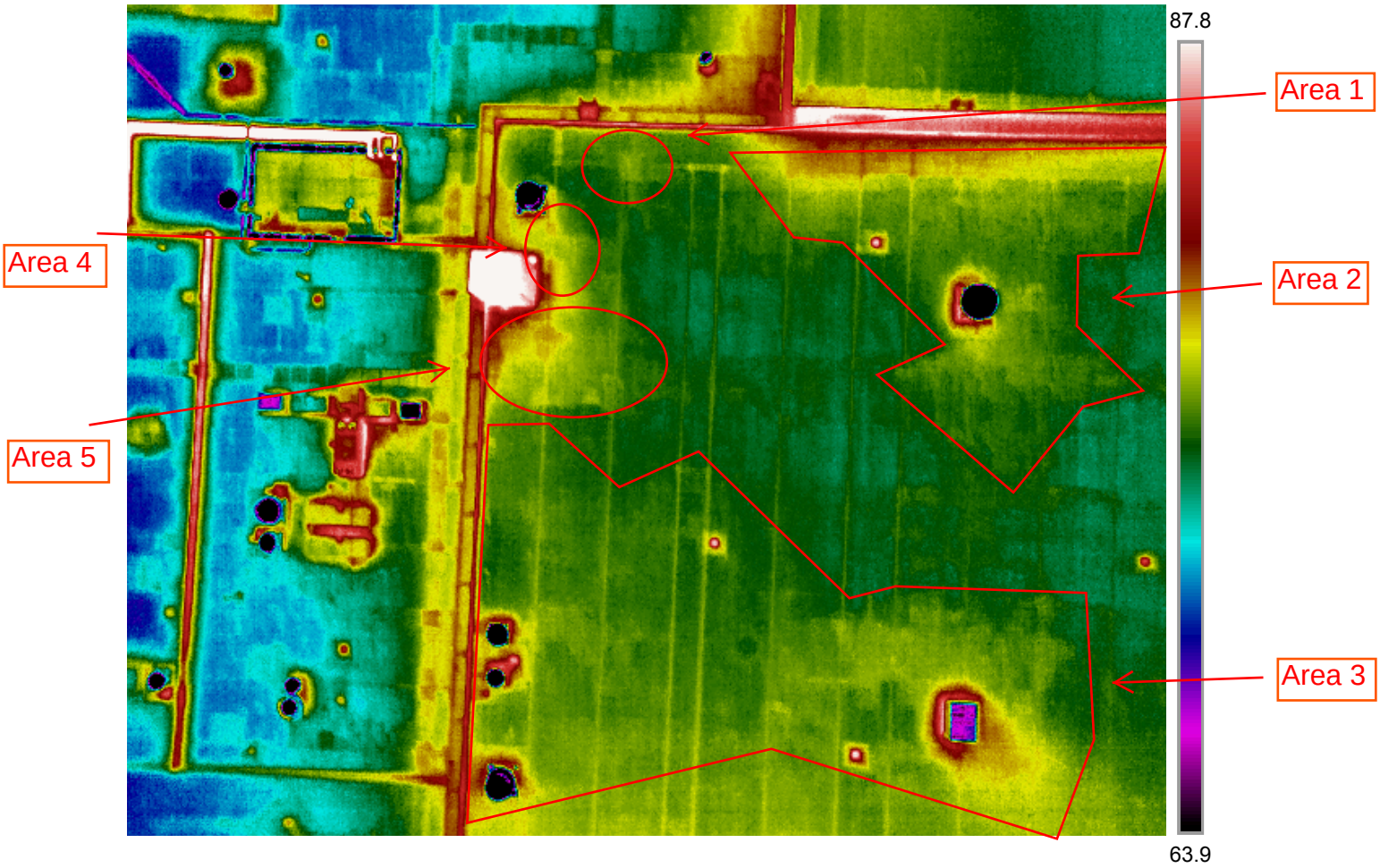

Parameters

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Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof I

Area 1 ~ 33 sqft. Small area along the N edge of the roof section. Appears to be on or next to a former roof patch.
Area 2 ~ 1927 sqft. Large area surrounding the curb/unit in this marked area extending to the N edge of the roof section which goes up to Roof A. Appears to be an abundance of residual water/ponding or heat/moisture.
Area 3 ~ 3177 sqft. Large area extening almost the entire S area of this roof section. Large thermal spots which could be standing water or heat/moisture underneath.
Area 4 ~ 35 sqft. Small area next to the unit and seems to be on the SW corner of a roof patch
Area 5 ~ 240 sqft. Area Just SE of the closest roof unit.

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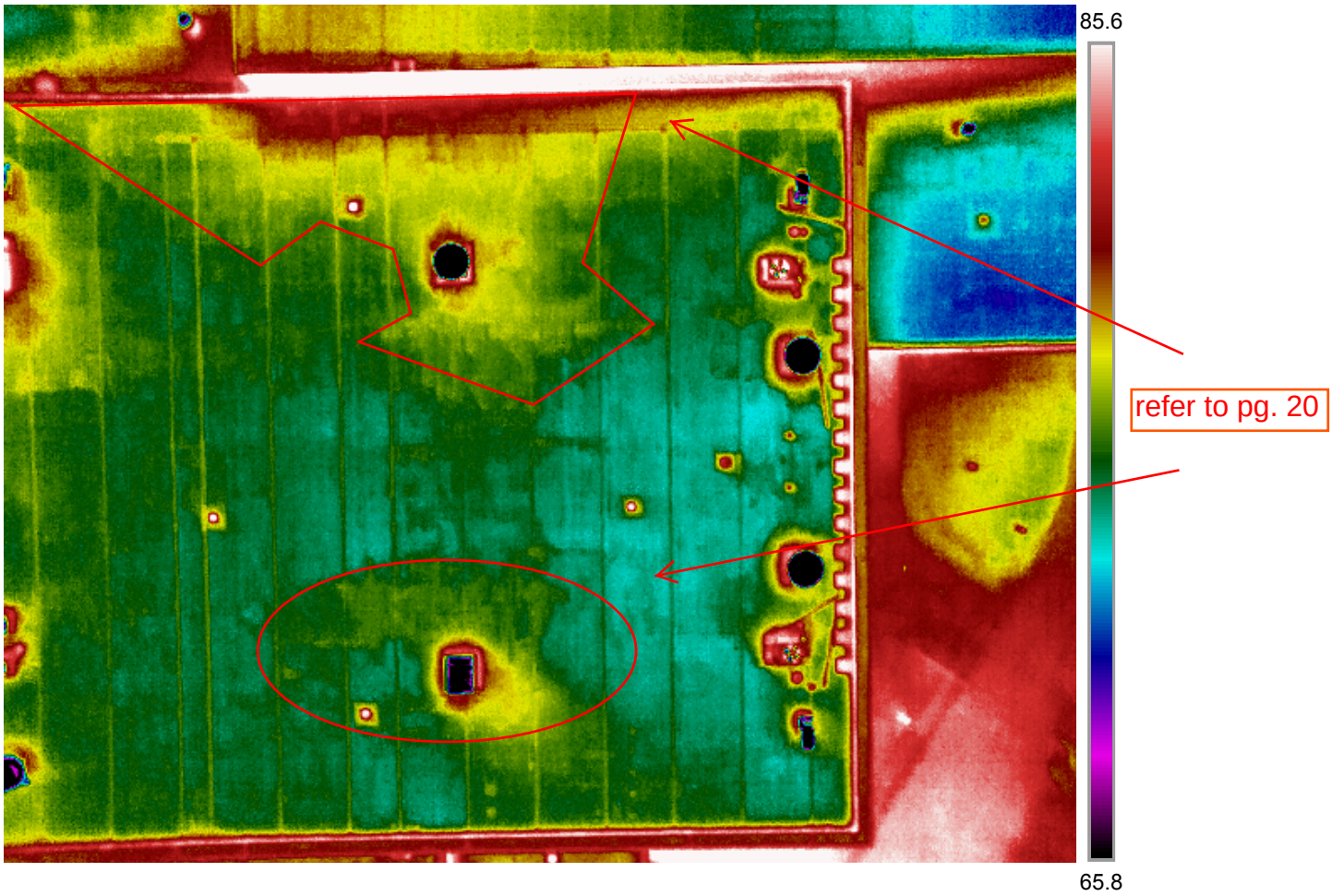

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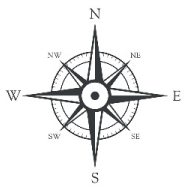
Relative humidity	50 %

Note

Roof I



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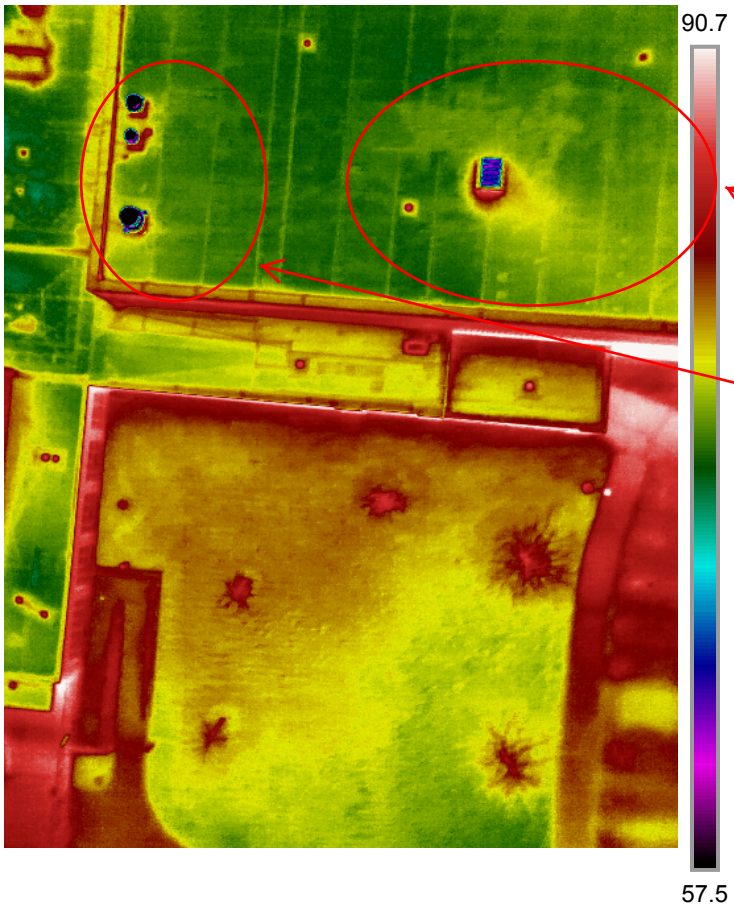

refer to pg. 20

Parameters

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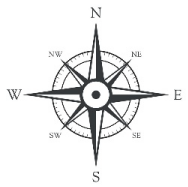
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof I



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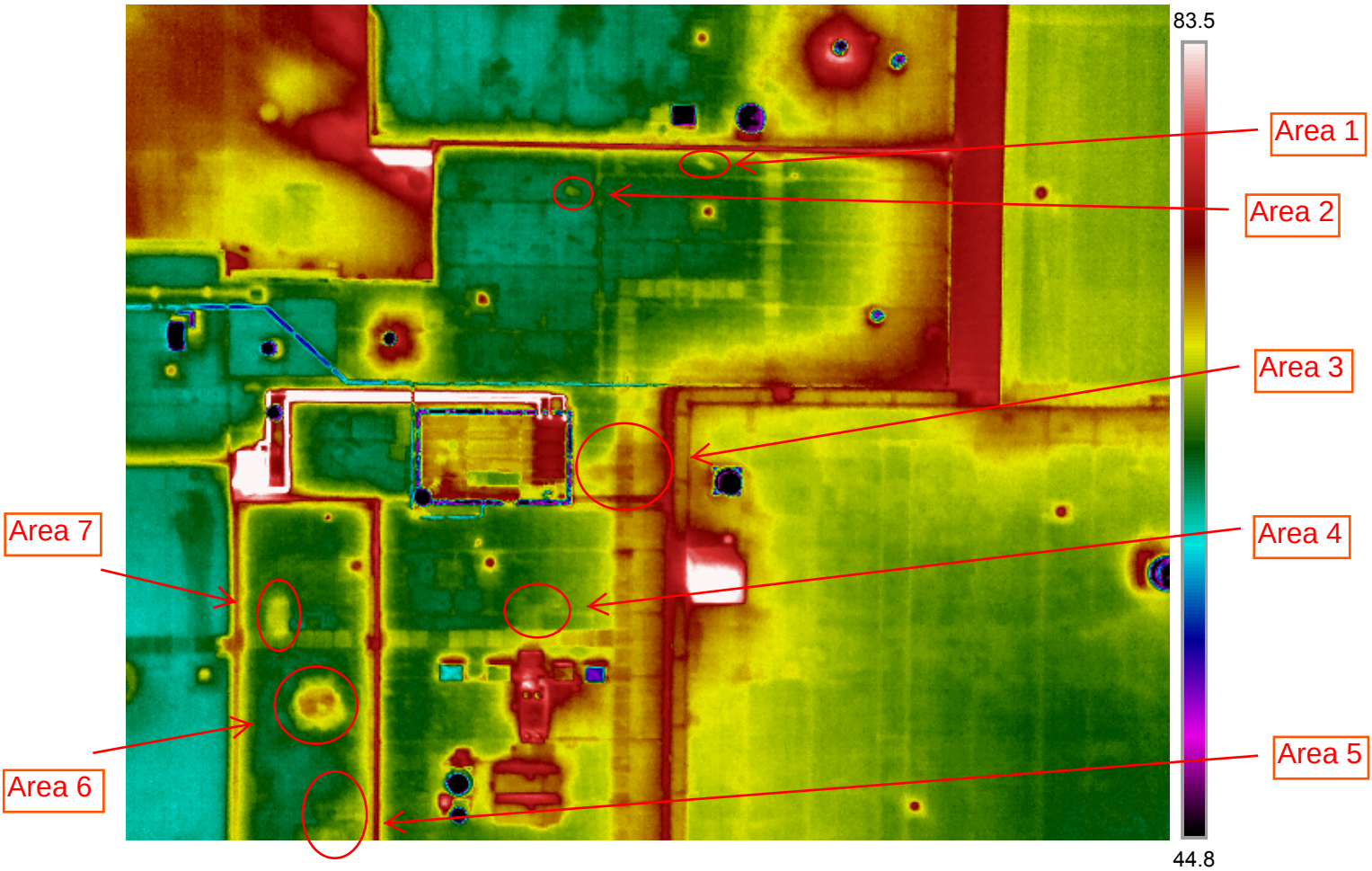
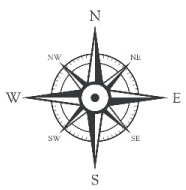


Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

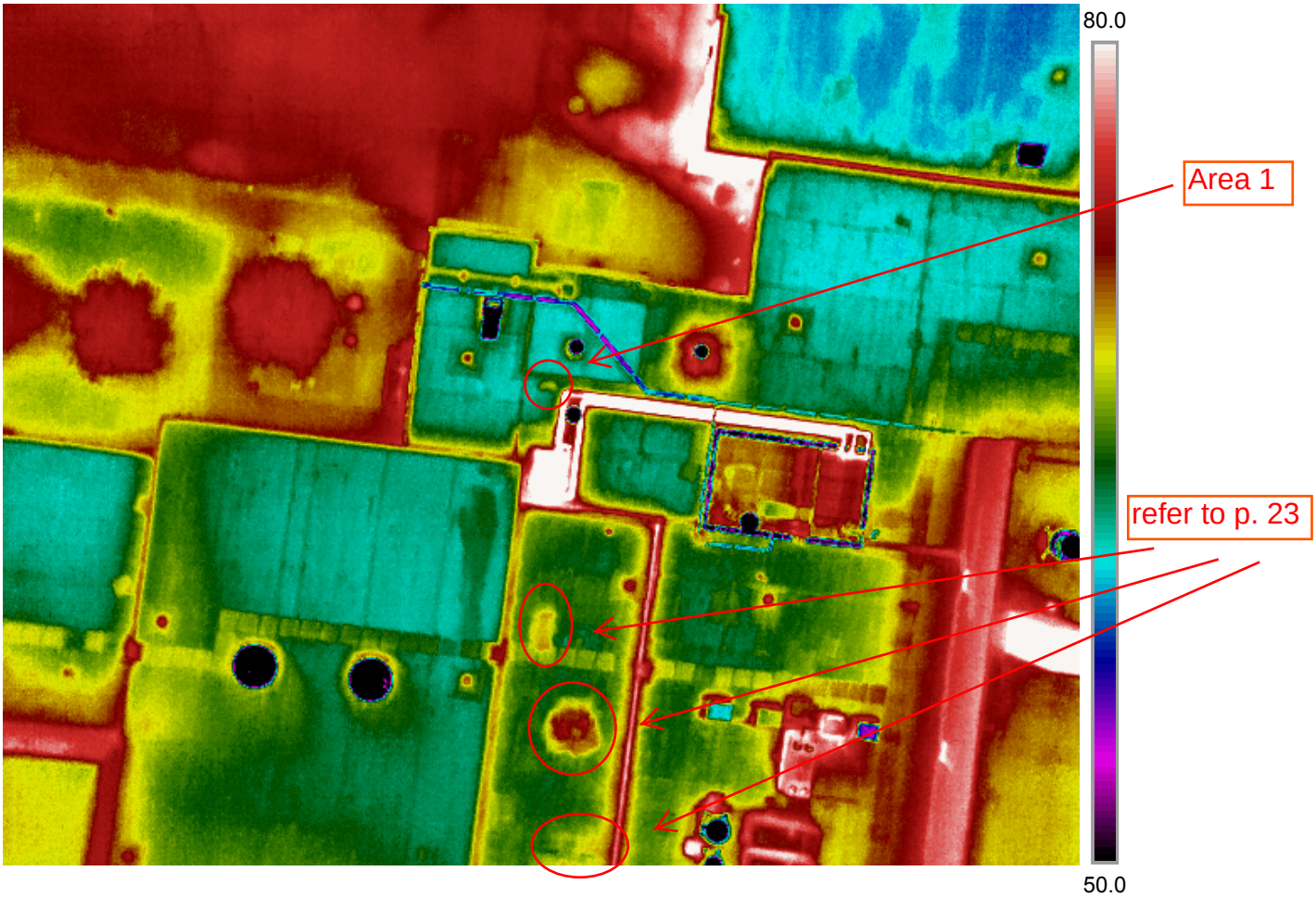
Area 1 ~ 8 sqft. Small area along the N edge of this roof section
Area 2 ~ 8 sqft. Small area also along the N edge of this roof section
Area 3 ~ 74 sqft. Area in between unit and E edge of adjacent wall mostly around the walkpads
Area 4 ~ 43 sqft. Area of possible standing water/moisture/heat just N of the walkpads and unit.
Area 5/6/7 ~ This section of the roof appears to be have lots of residual moisture spots or possible heat. The 3 main spots are pointed out.



Roof J

JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



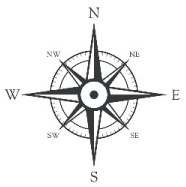
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

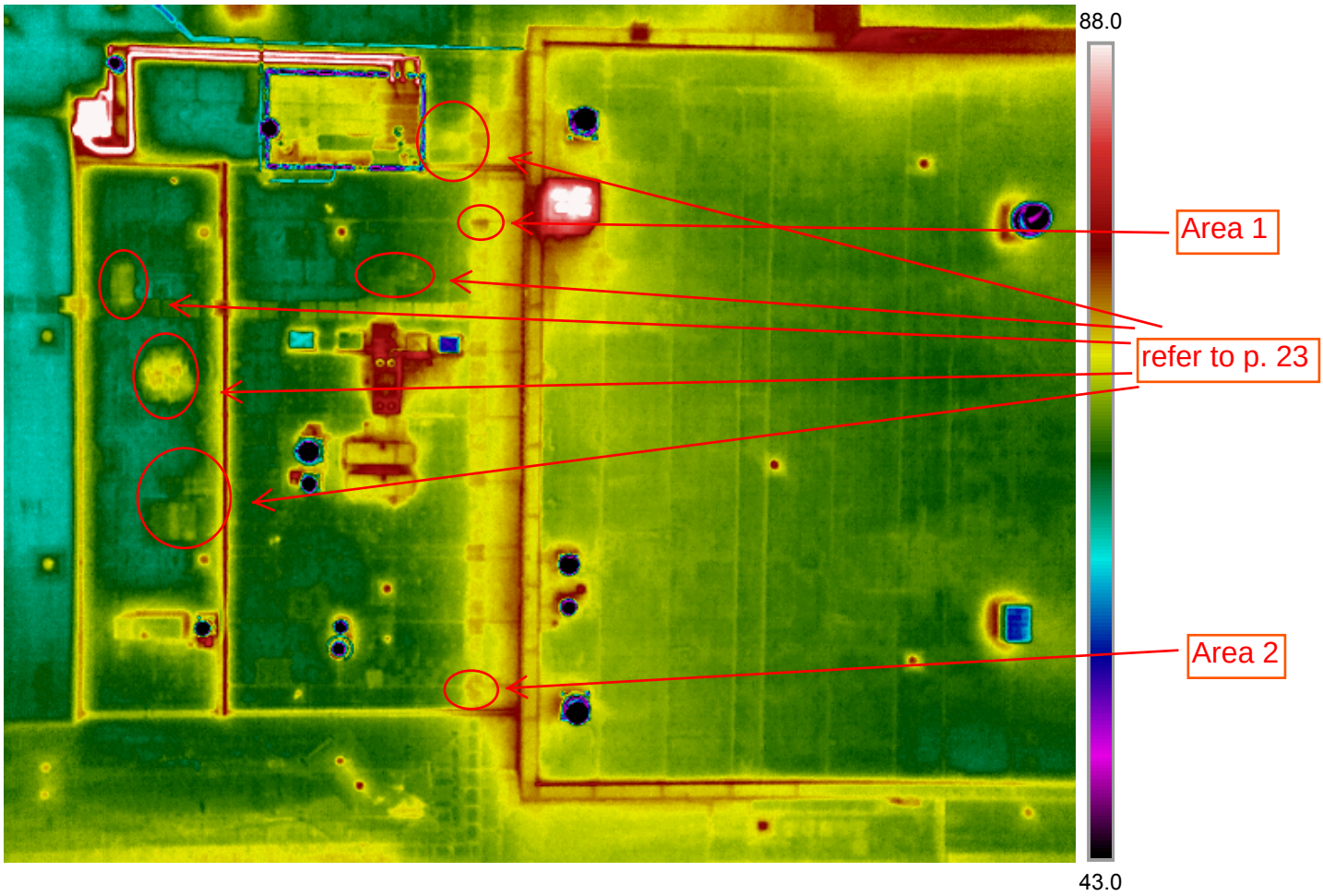
Roof J

Area 1 ~ 6 sqft. Small area in between roof vent/unit and pipe just S of what appears to be a roof patch.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



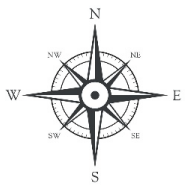
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

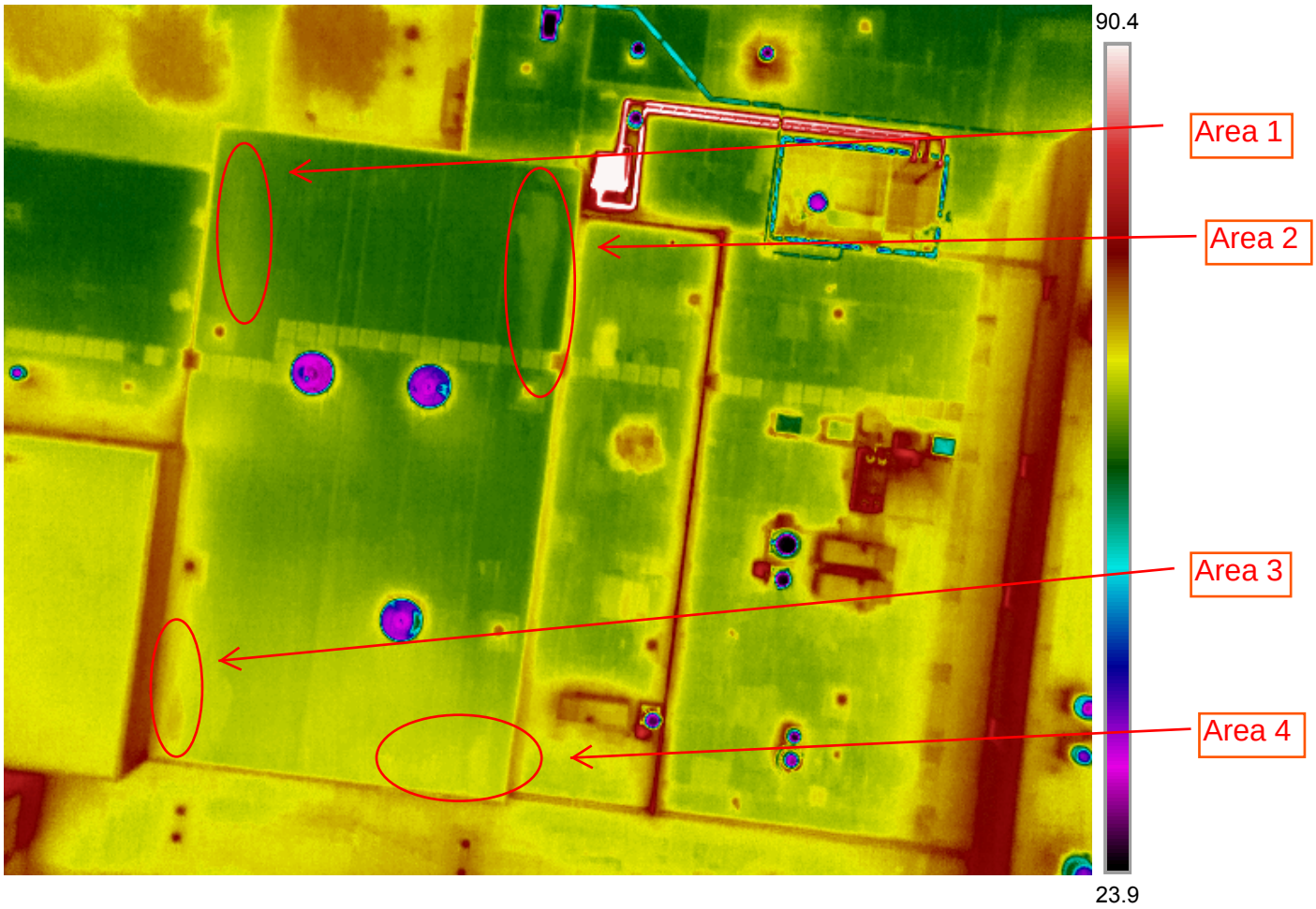
Roof J

Area 1 ~ 8 sqft. Small area of heat/possible moisture along the walk pads near the E edge of this roof section
Area 2 ~ 8 sqft. Small area of heat/possible moisture along the walk pads near the SE edge of this roof section.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HS
70 NORTH AVE
WESTPORT CT 06880



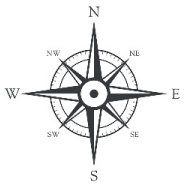
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

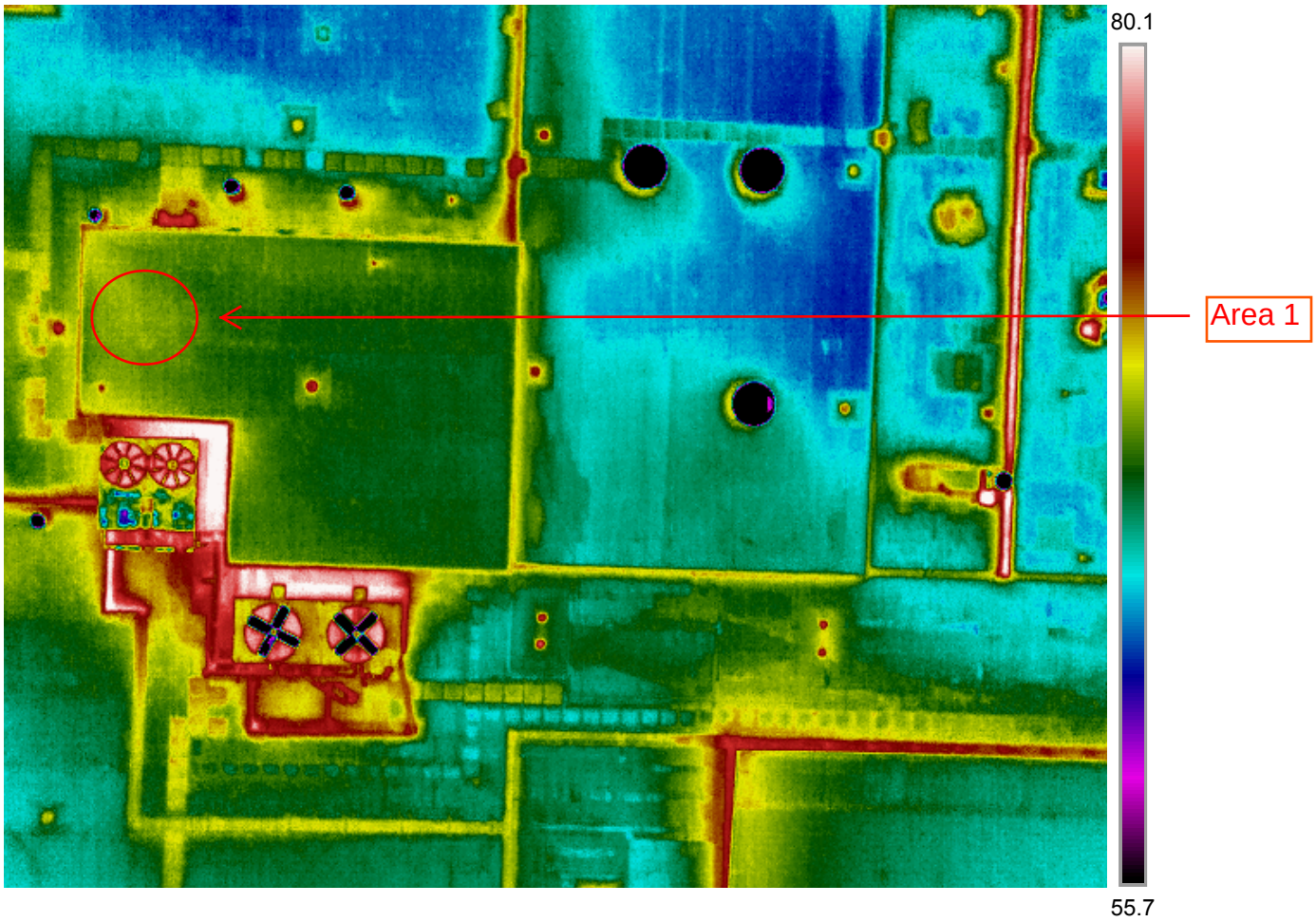
Note

Roof K

Area 1 ~ 105 sqft. Area along the W edge of this roof section. Potential standing water residue or heat/moisture.
Area 2 ~ 117 sqft. Area along E edge of this roof section extending to the walk pads. Potentially standing water or heat/moisture presence.
Area 3 ~ 33 sqft. Small area in the SW corner.
Area 4 ~ 45 sqft. SE corner of this roof section. Possible standing water or heat/moisture.



Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



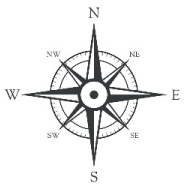
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

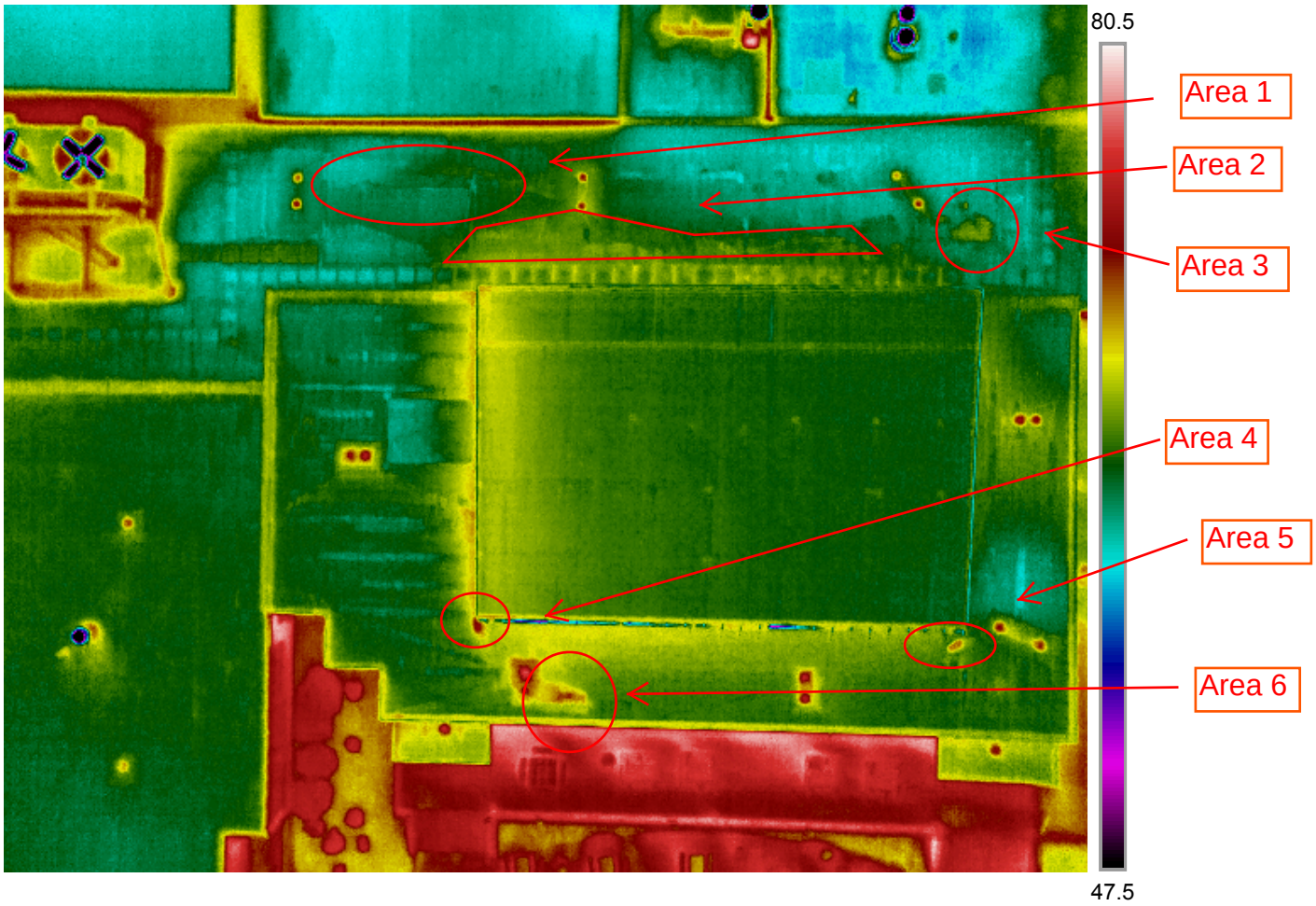
Roof L

Area 1 ~ 89 sqft. Possible area of standing water staining or heat/moisture.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



Parameters

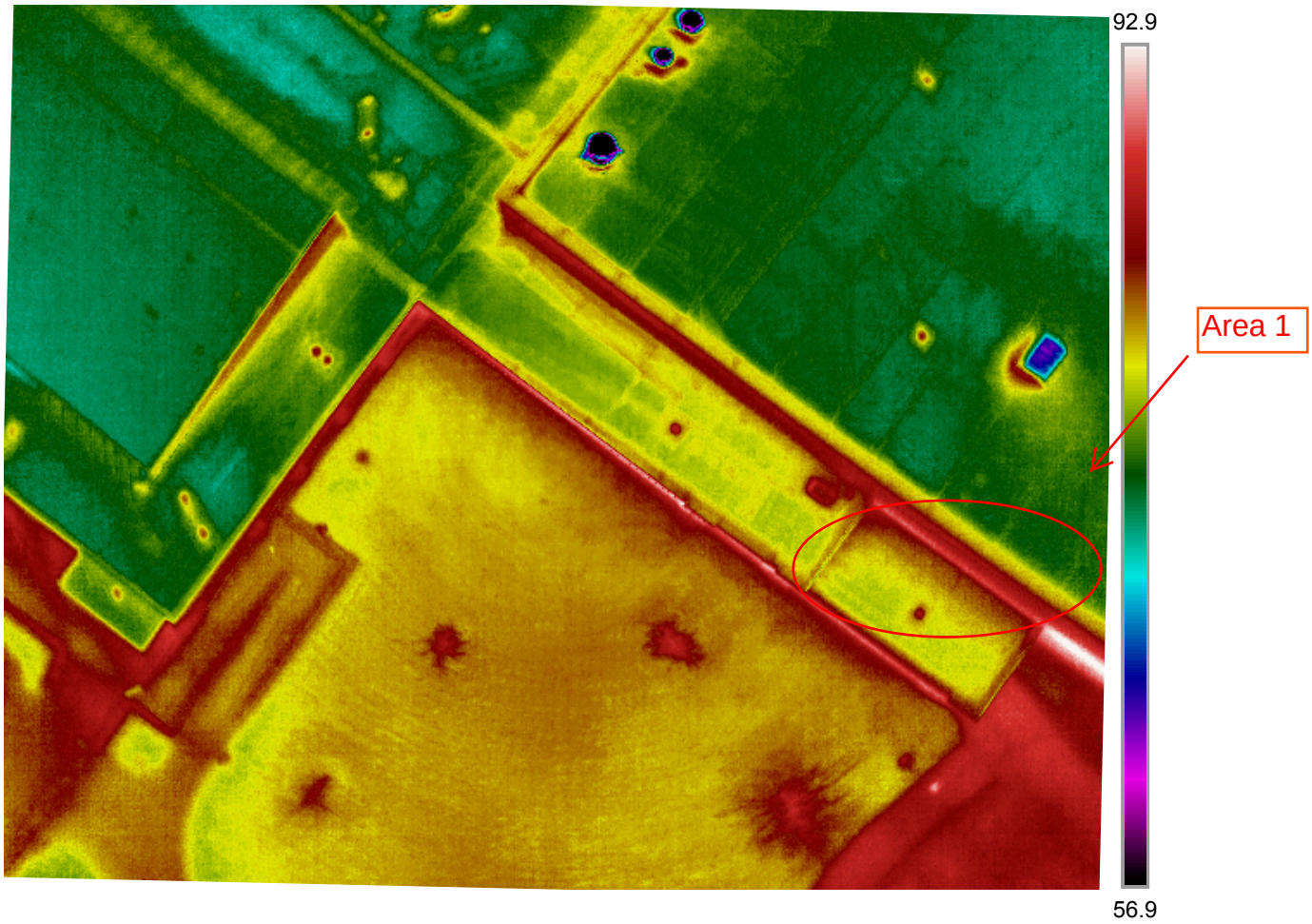
Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof M

Area 1 ~ 295 sqft. Possible standing water residue or heat/moisture. Runs along the NW section of this roof area
Area 2 ~ 305 sqft. Long area stretching along the N side of the walk pads. Appears to be standing water residue or heat/moisture.
Area 3 ~ 15 sqft. Small area in the NE area of this roof section.
Area 4 ~ 6 sqft. Small area at the bottom of the wall that touches the SW corner of the upper roof.
Area 5 ~ Small area on the bottom of the wall at the SE corner of the wall to the upper roof.
Area 6 ~ 25 sqft. Area to the E of the unit closest to this marked area.

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



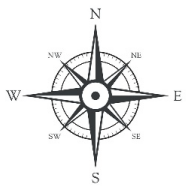
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

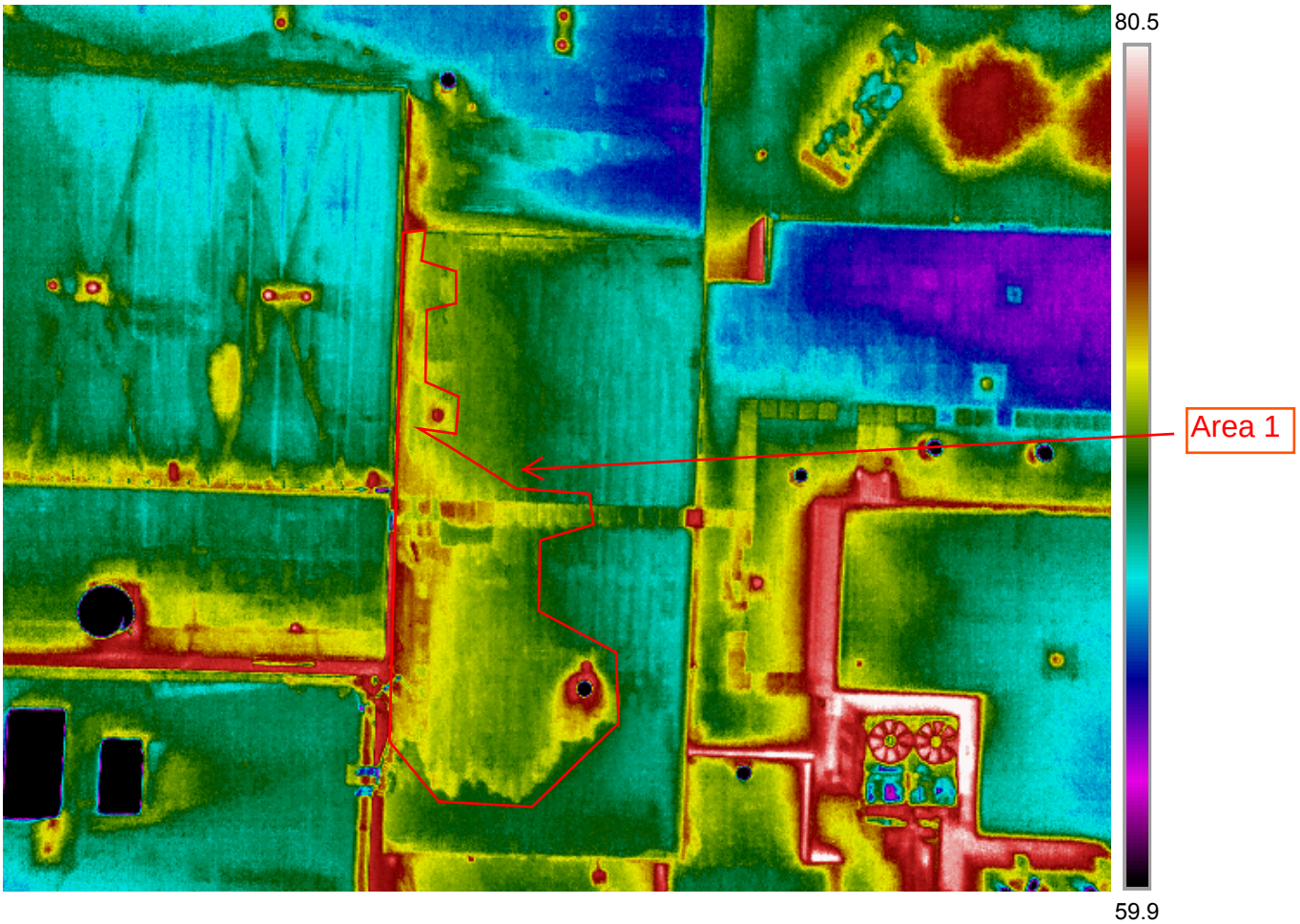
Roof M

Area 1 ~ 95 sqft. Area that runs along the base of the wall to Roof i.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



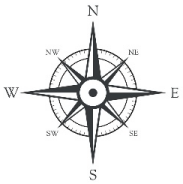
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

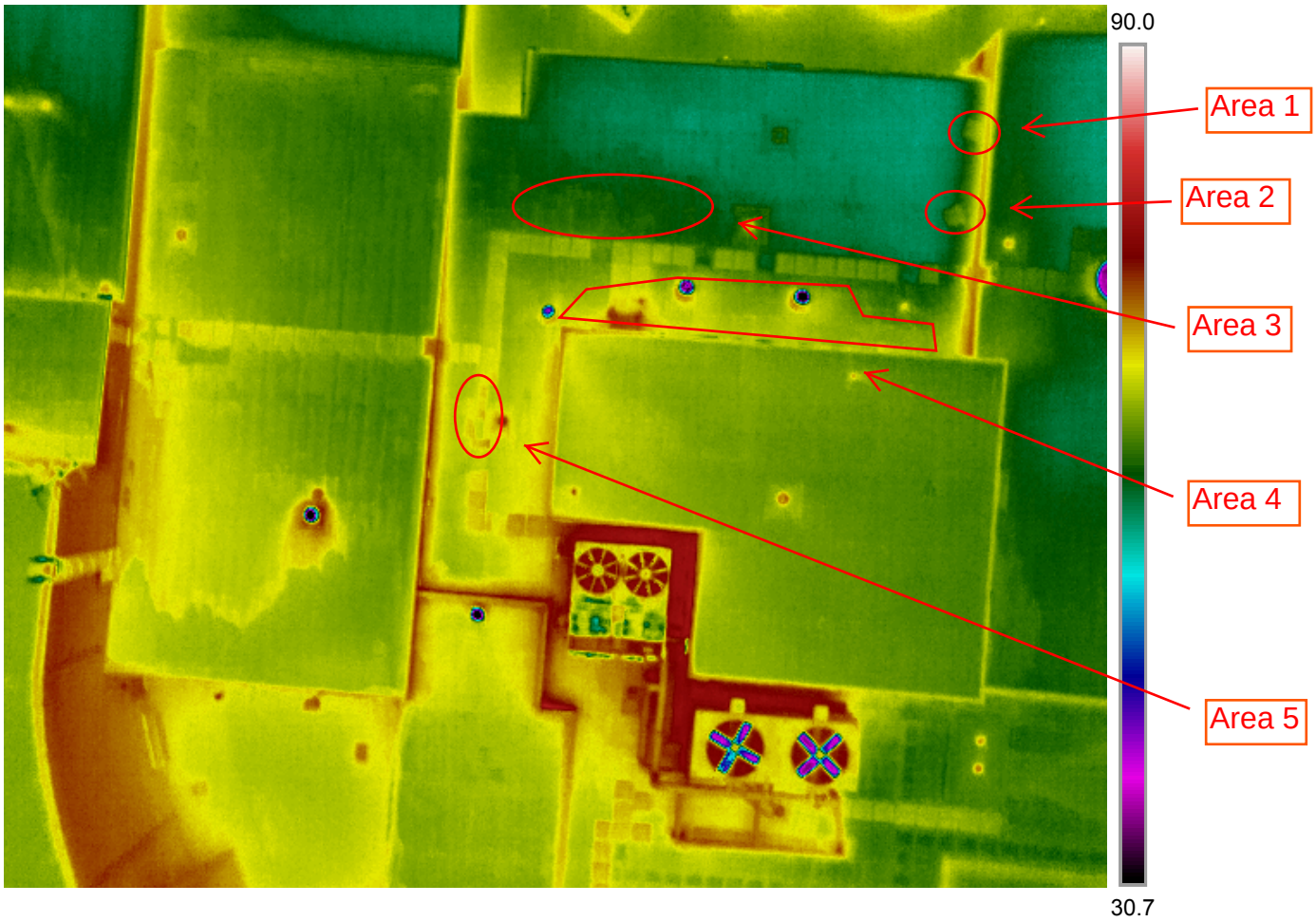
Roof N

Area 1 ~ 1228 sqft. Large area that encompasses almost the entire W edge of this roof section stretching in to the middle. Could be standing water residue or heat/moisture.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



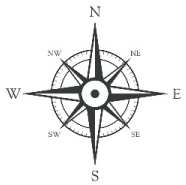
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

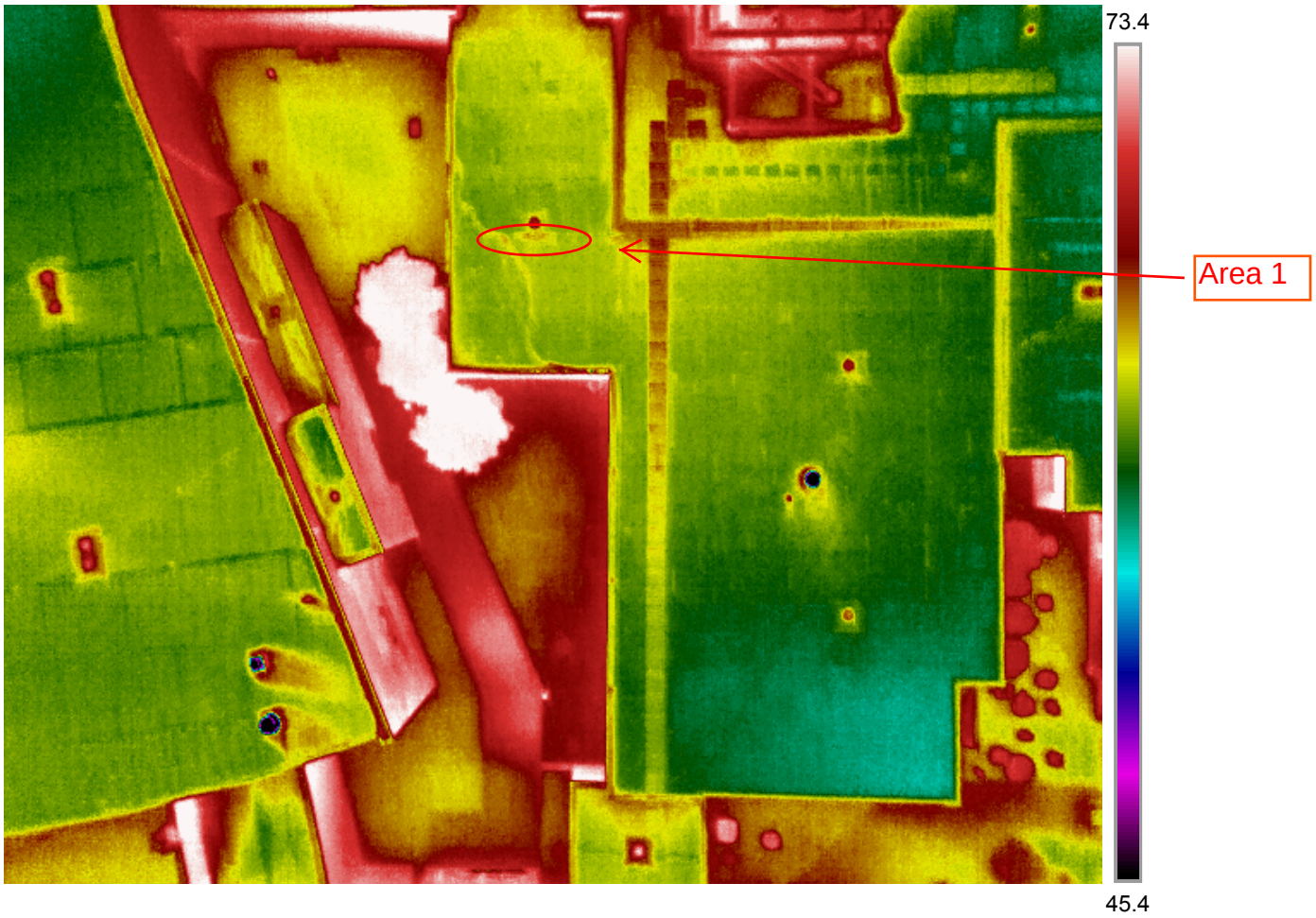
Roof O

Area 1 ~ 7 sqft. Small area in the NE corner of this roof section
Area 2 ~ 8 sqft. Small area in the NE corner of this roof section.
Area 3 ~ 127 sqft. Area along the N side of the walk pads appears to have possible standing water residue or heat/moisture.
Area 4 ~ 350 sqft. Along the base of the wall to Roof Area L including the ladder and units. Possible stains from standing water or heat/moisture.
Area 5 ~ Small area along the W edge of this section along walk pads.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



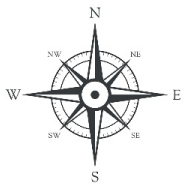
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

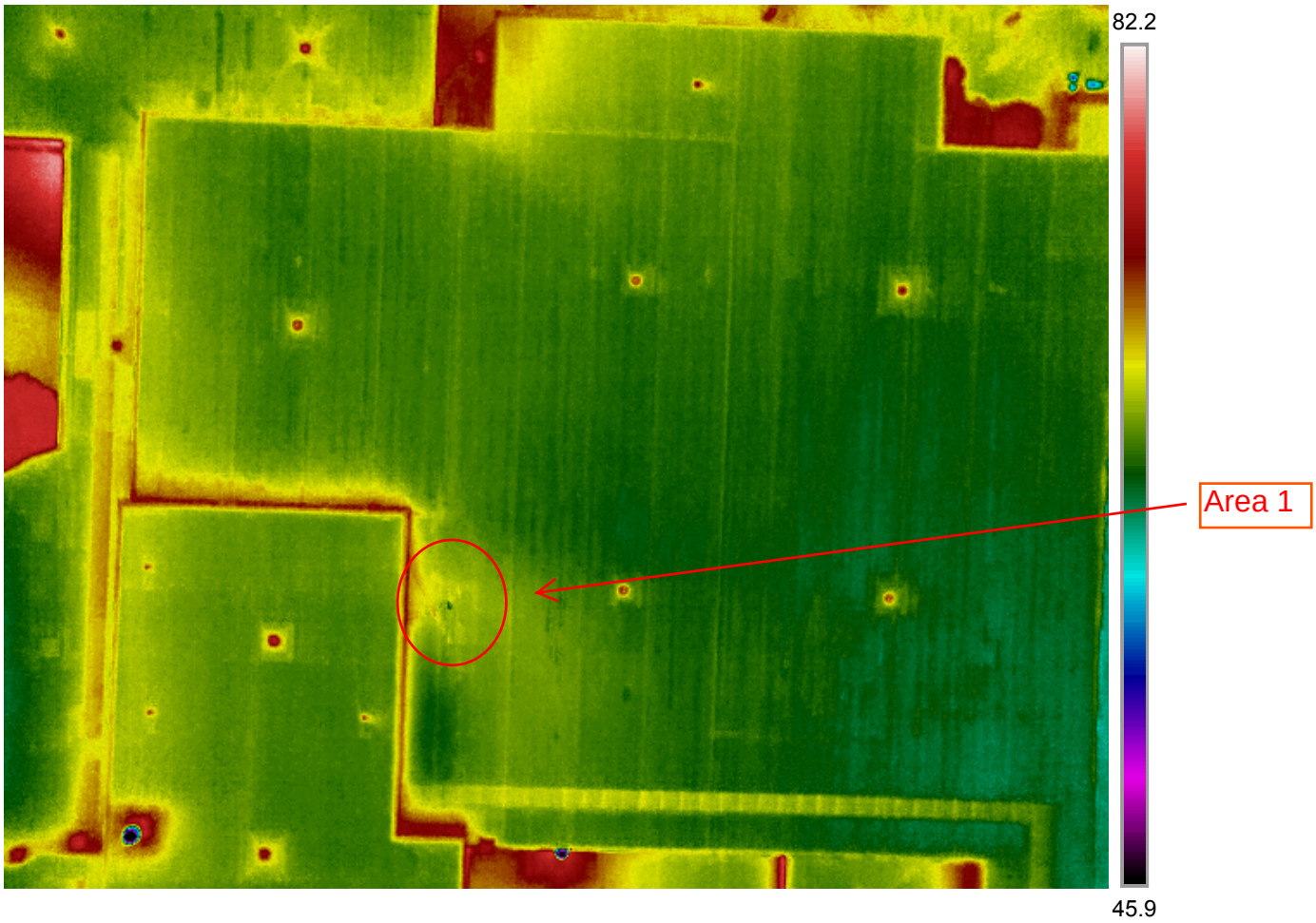
Roof O

Area 1 ~ 5 sqft. Small area on the S of the unit nearest the marked location.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



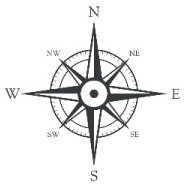
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

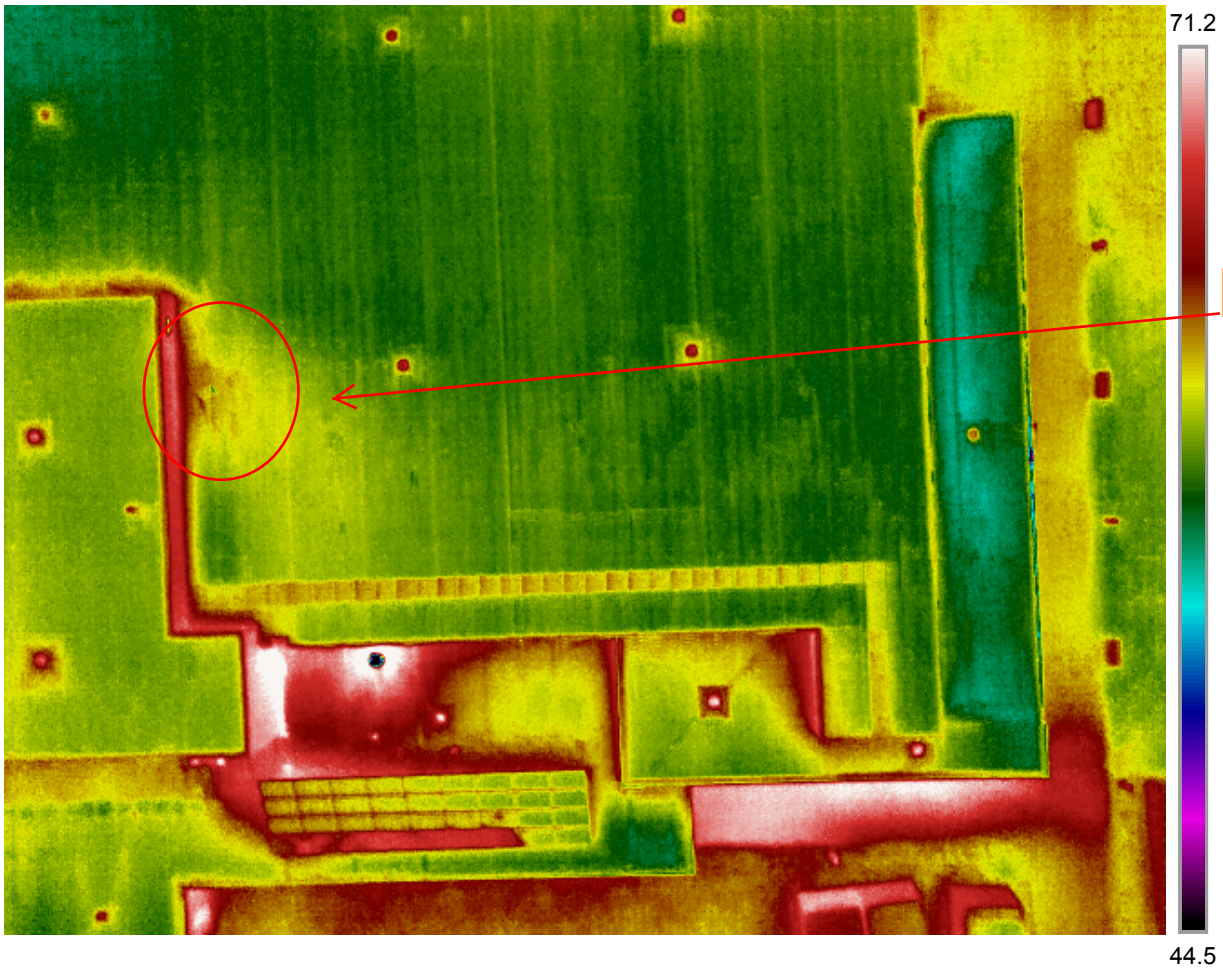
Roof P

Area 1 ~ 57 sqft. Small area near the base of the wall adjacent to roof area Q.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



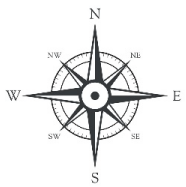
refer to pg. 33

Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

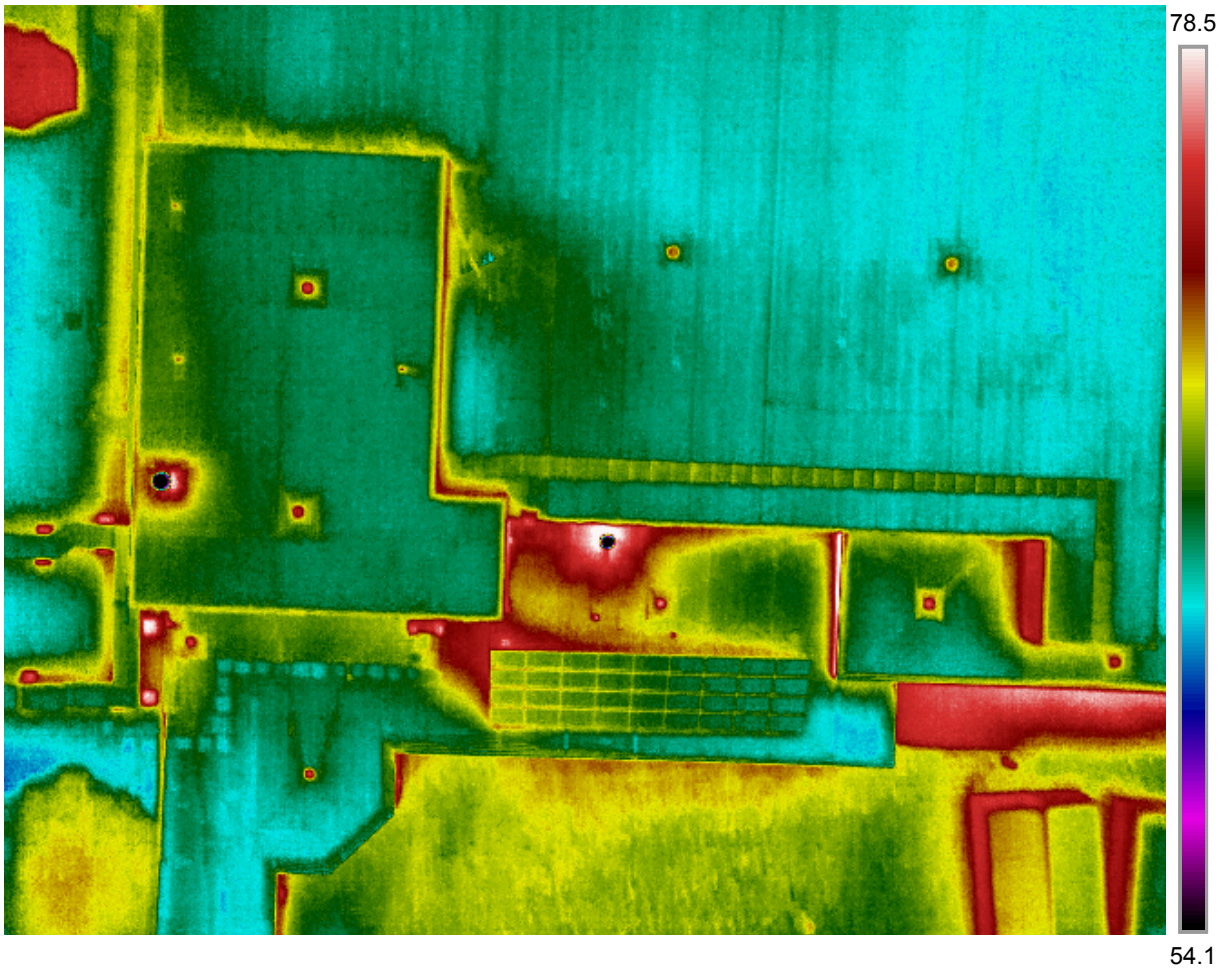
Note

Roof P



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



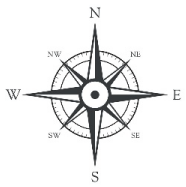
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

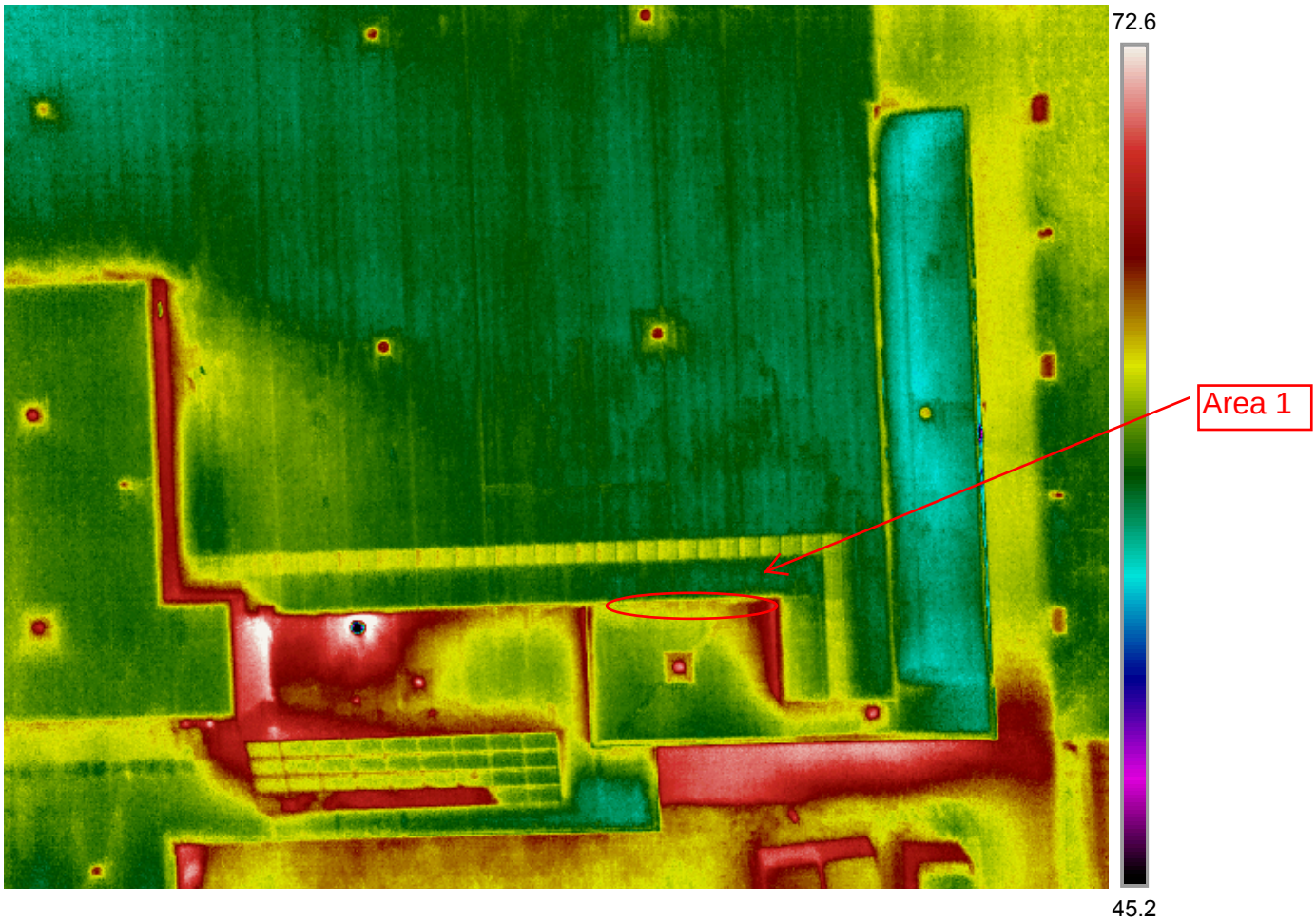
Roof Q

No major issues or concerns



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



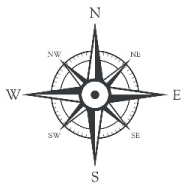
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

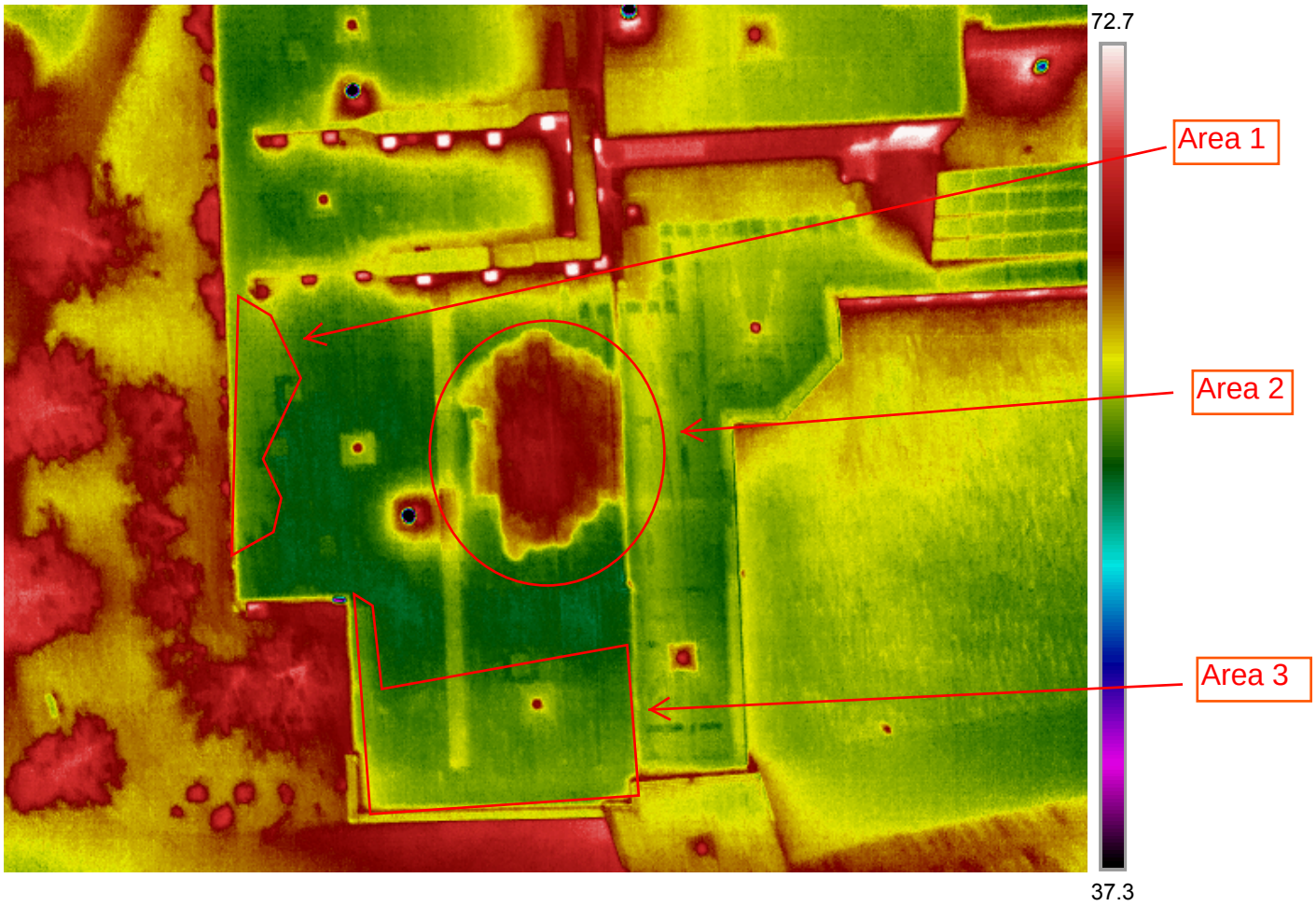
Roof R

Area 1 ~ 25 sqft. Small section at the base of the wall. Possible standing water or residue.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



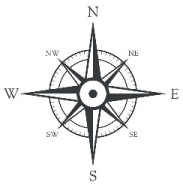
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

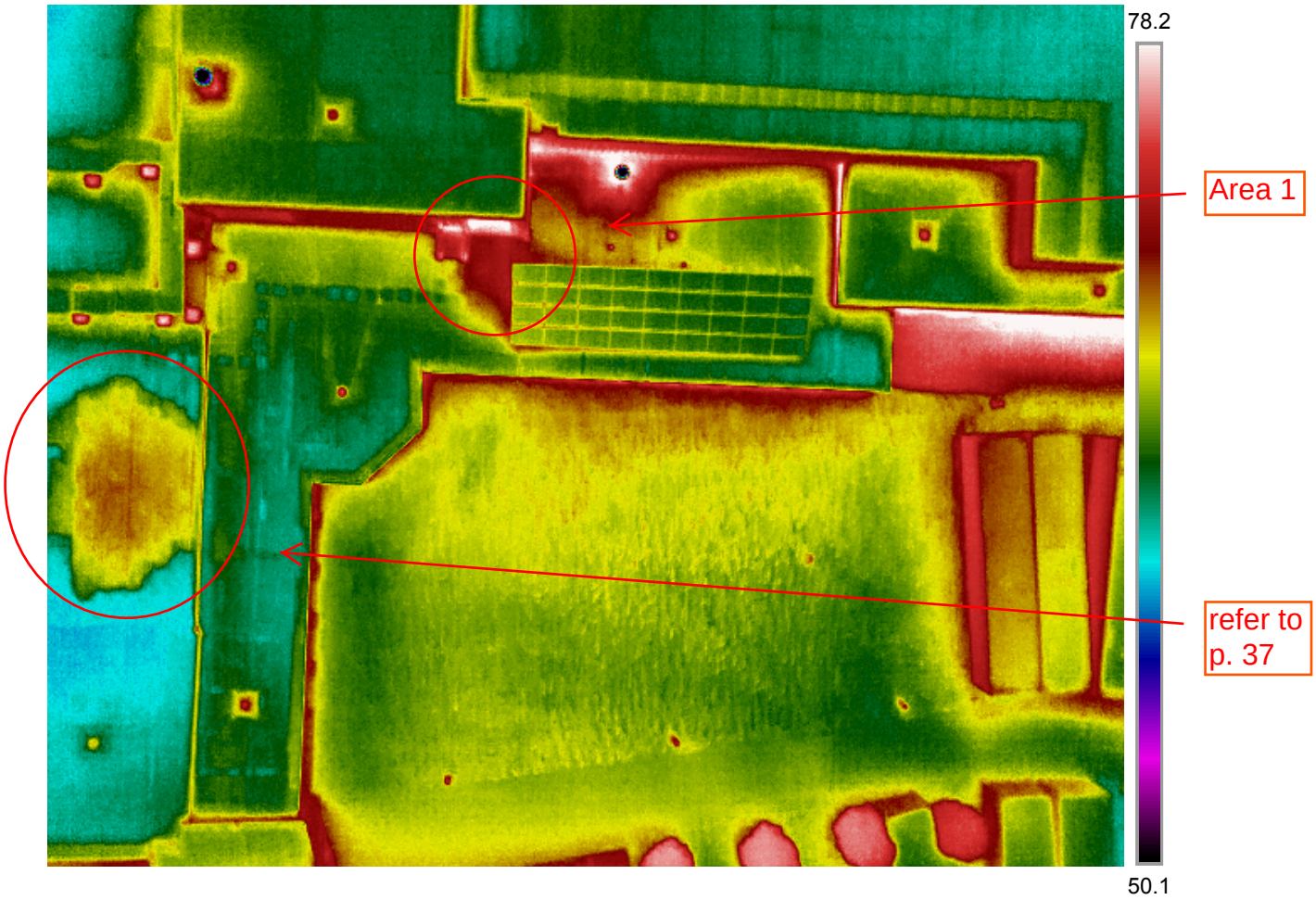
Roof S

Area 1 ~ 225 sqft. Area along the W edge of this roof section. Appears to be possible standing water stain or heat/moisture.
Area 2 ~ 623 sqft. Large area of concern. Appears to be significant heat/moisture in this location.
Area 3 ~ 710 sqft. Area along the S edge of this roof section. Likely due to stain from standing water or light moisture/heat.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



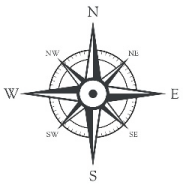
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

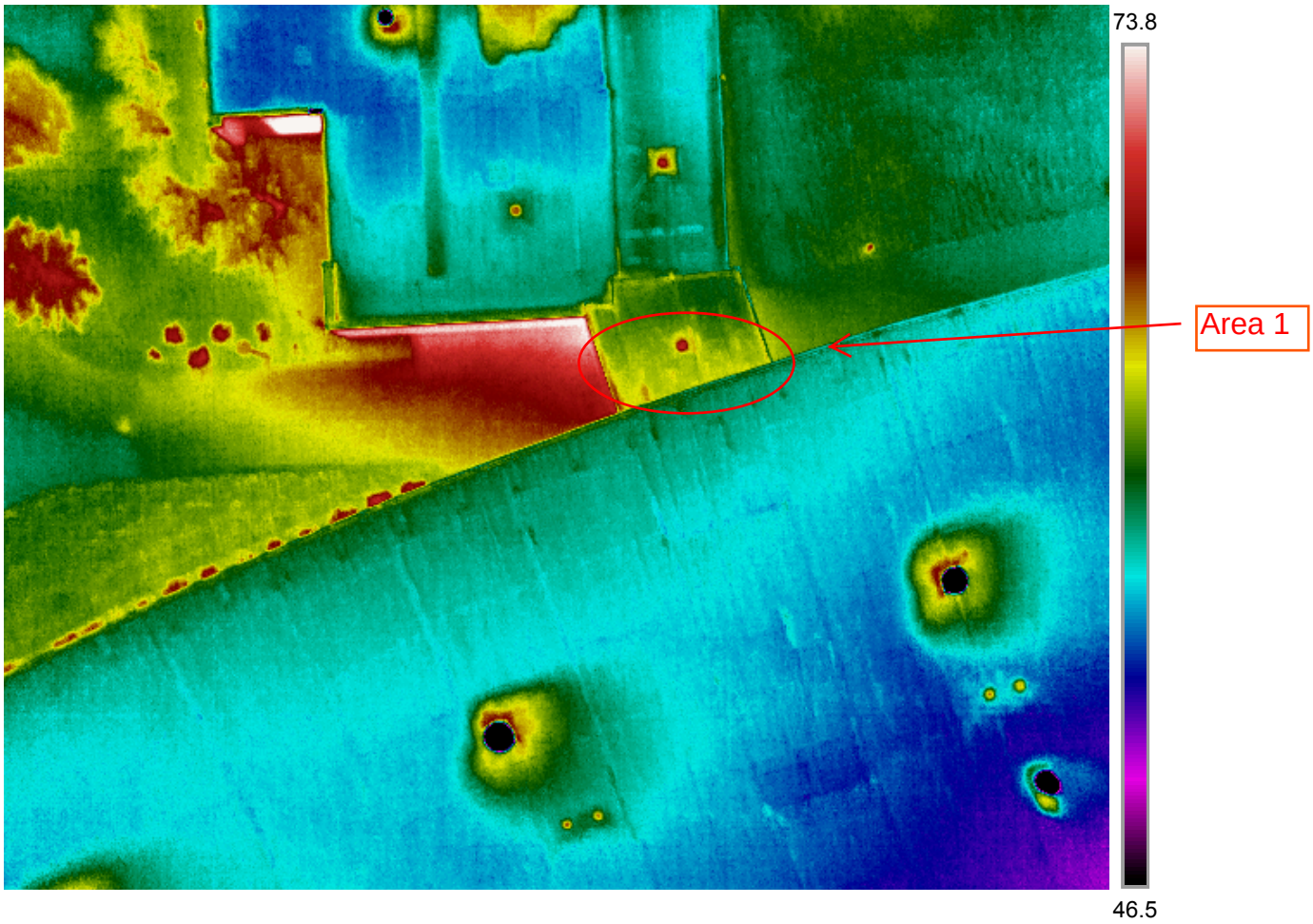
Note

Roof S

Area 1 ~ 164 sqft. Area in between solar panels and corner of roof Q.



Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



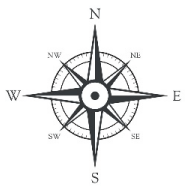
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

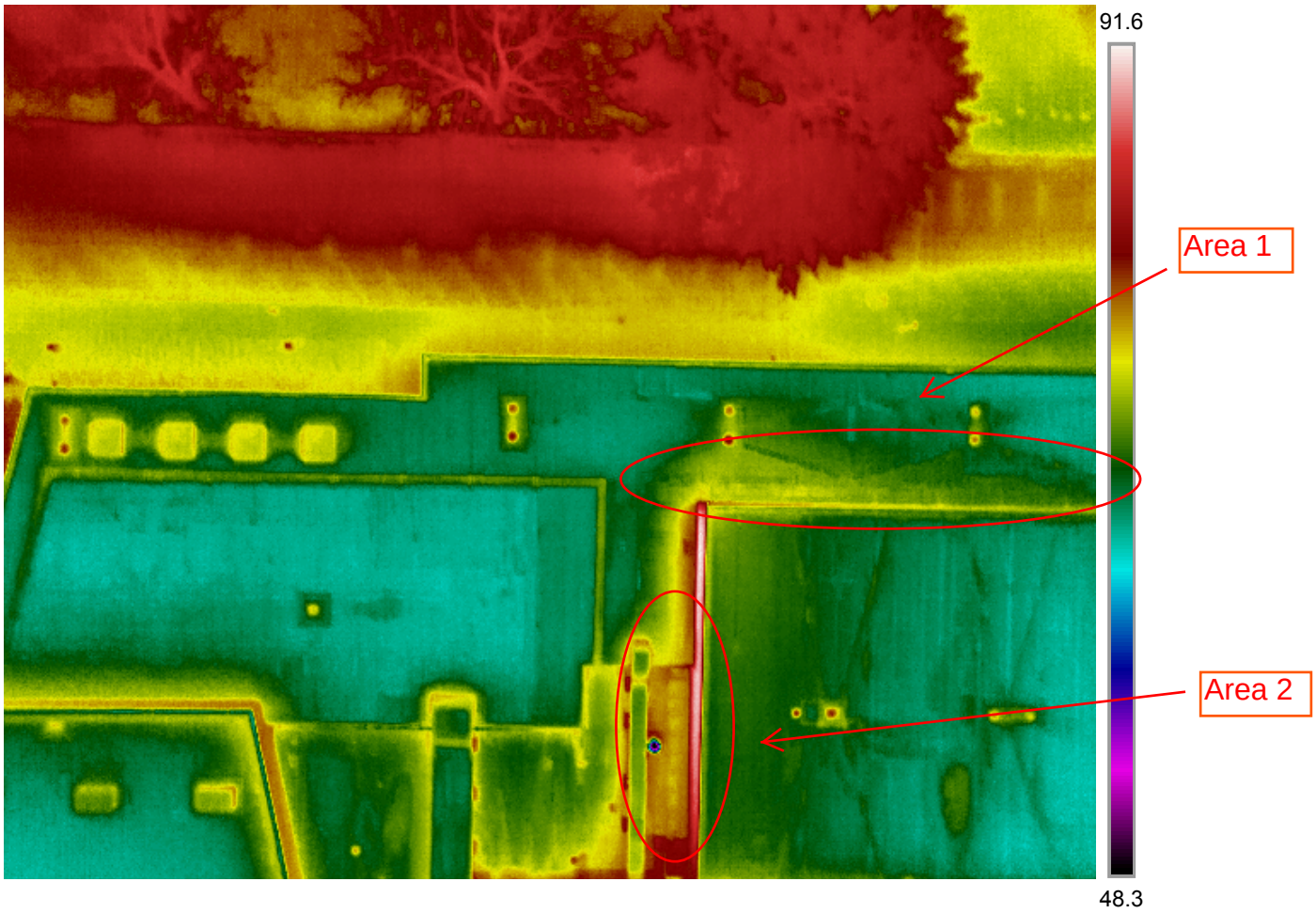
Roof T

Area 1 ~ 125 sqft. Small area along the south portion of this roof area.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



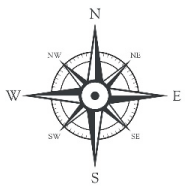
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

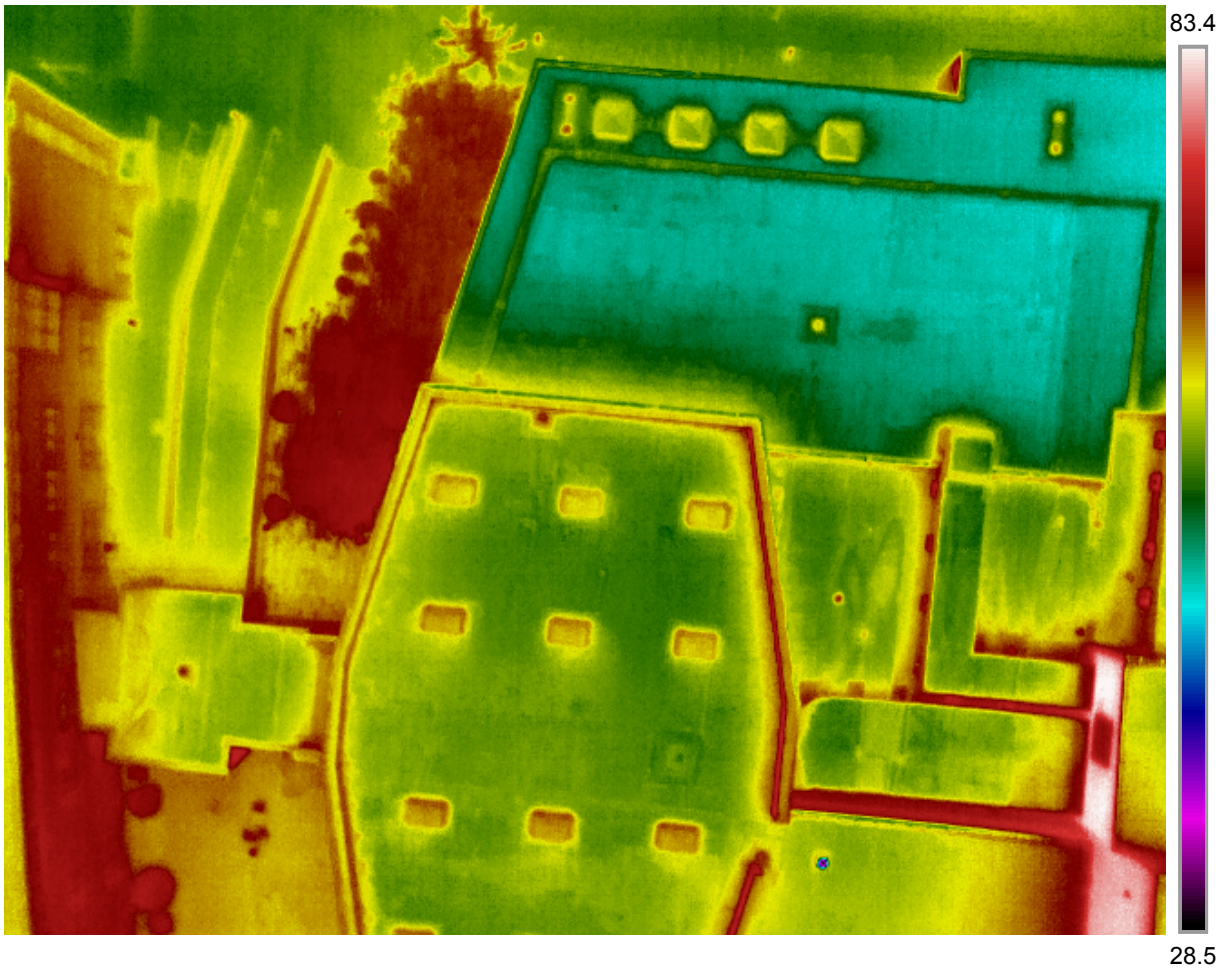
Roof U

Area 1 ~ 269 sqft. Area along the wall that is adjacent to Roof Area V.
Area 2 ~ 199 sqft. Area in between hvac and Roof Area V.



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



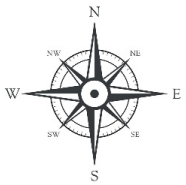
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

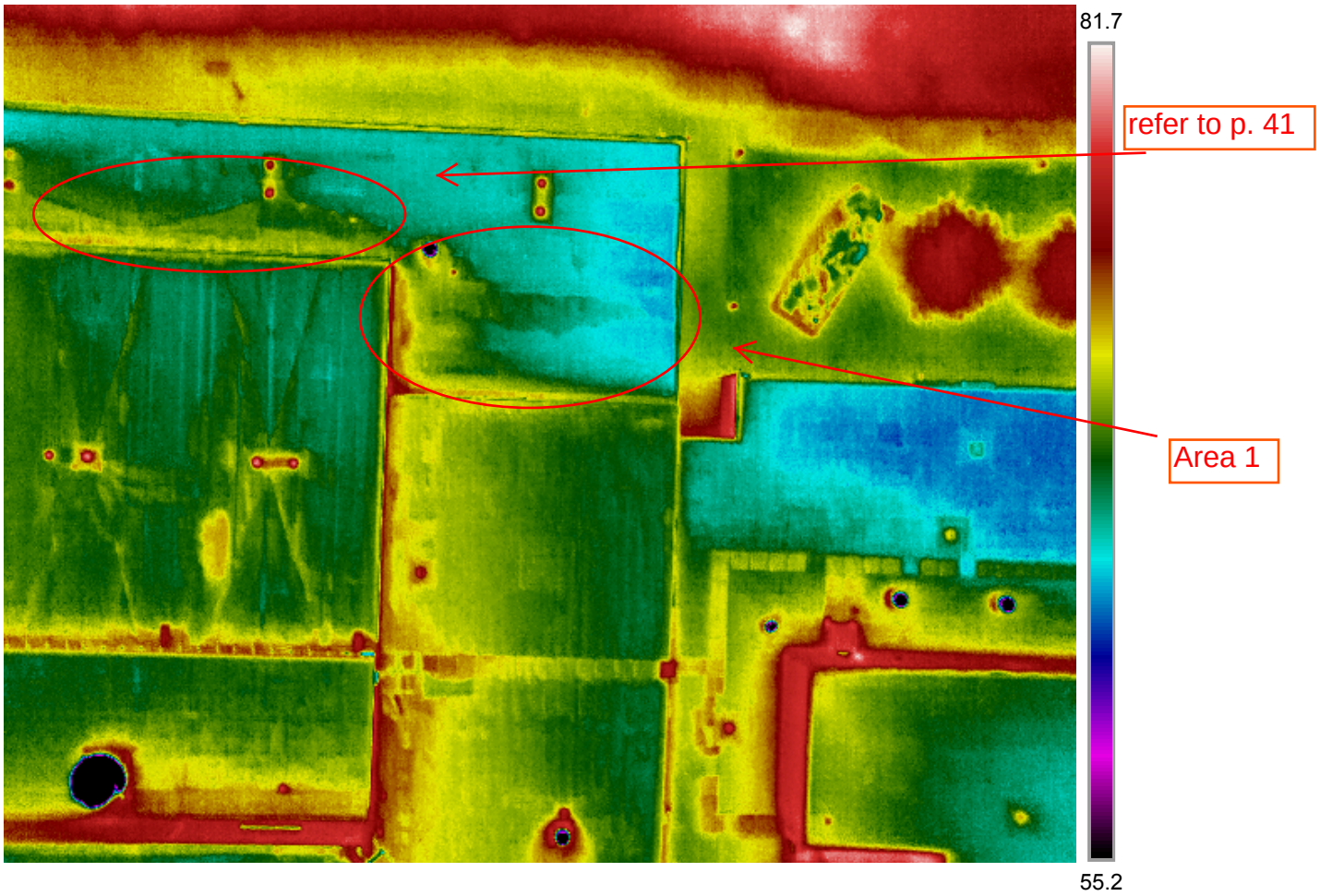
Roof U

No issues or concerns



JJC DRONES
LEVEL 1 THERMOGRAPHER
FAA PART 107 LICENSED DRONE PILOT

Survey Location:
STAPLES HIGH SCHOOL
70 NORTH AVE
WESTPORT CT 06880



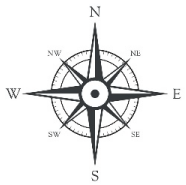
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof U

Area 1 ~ 306 sqft. Area along the wall that is adjacent to Roof Area V. Could be presence of standing water or stains.



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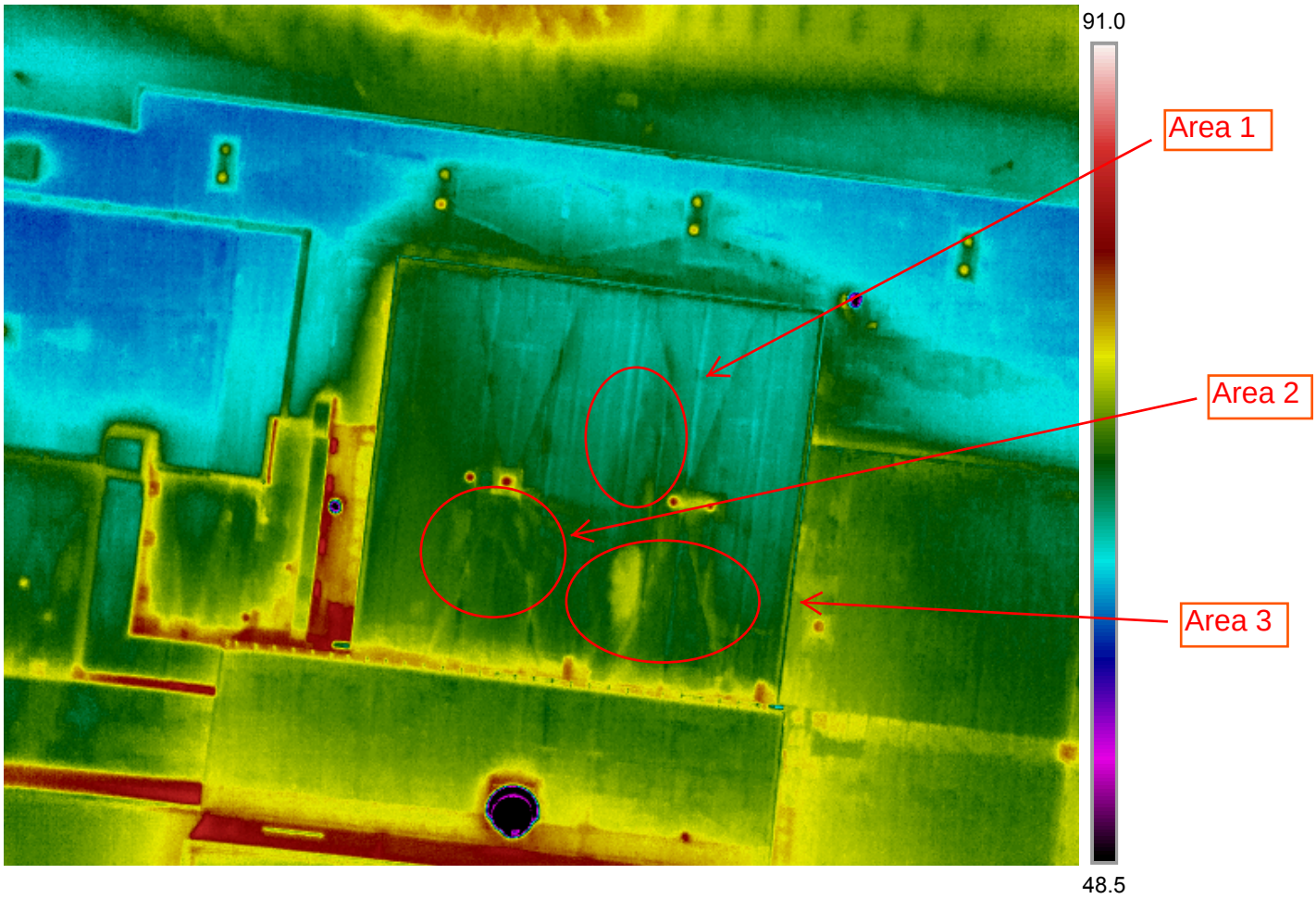

Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof V

Area 1 ~ 95 sqft. N of Area 3. Looks like possible standing water or staining resulting from crickets underneath.
Area 2 ~ 115 sqft. Area just S of the drain. Appears to be standing water or stains.
Area 3 ~ 361 sqft. SE corner of this roof section. Appears to be a combination of some standing water/stains and a large spot of moisture/heat.

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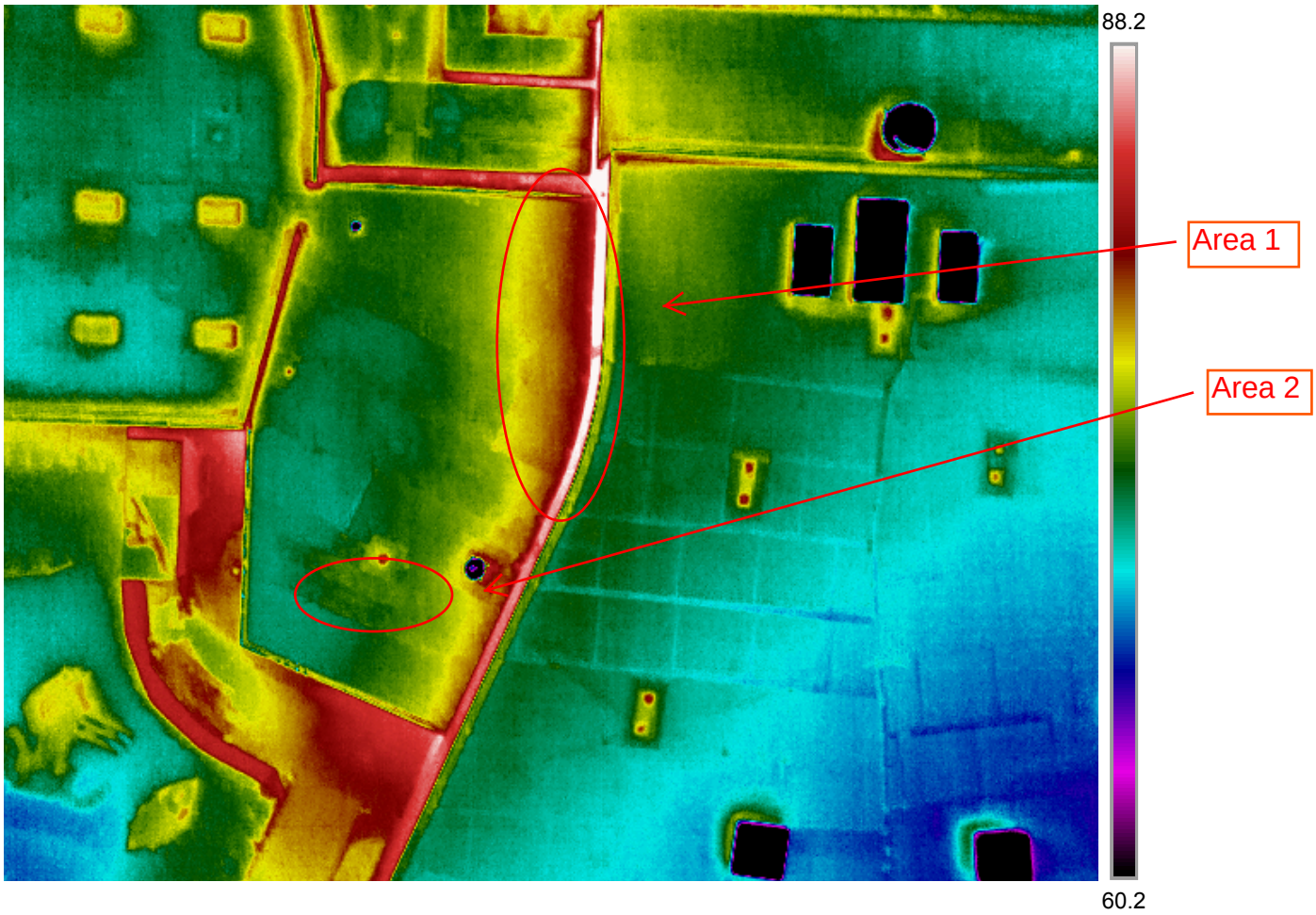


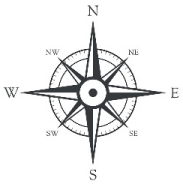
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof W

Area 1 ~ 250 sqft. Area along the E edge of this roof section where possible water stains/moisture come from the higher roof.
Area 2 ~ 52 sqft/ Small area S of the drain closest to the marked area. Appears to be residue from standing water or possible heat/moisture.



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FAA PART 107 LICENSED DRONE PILOT

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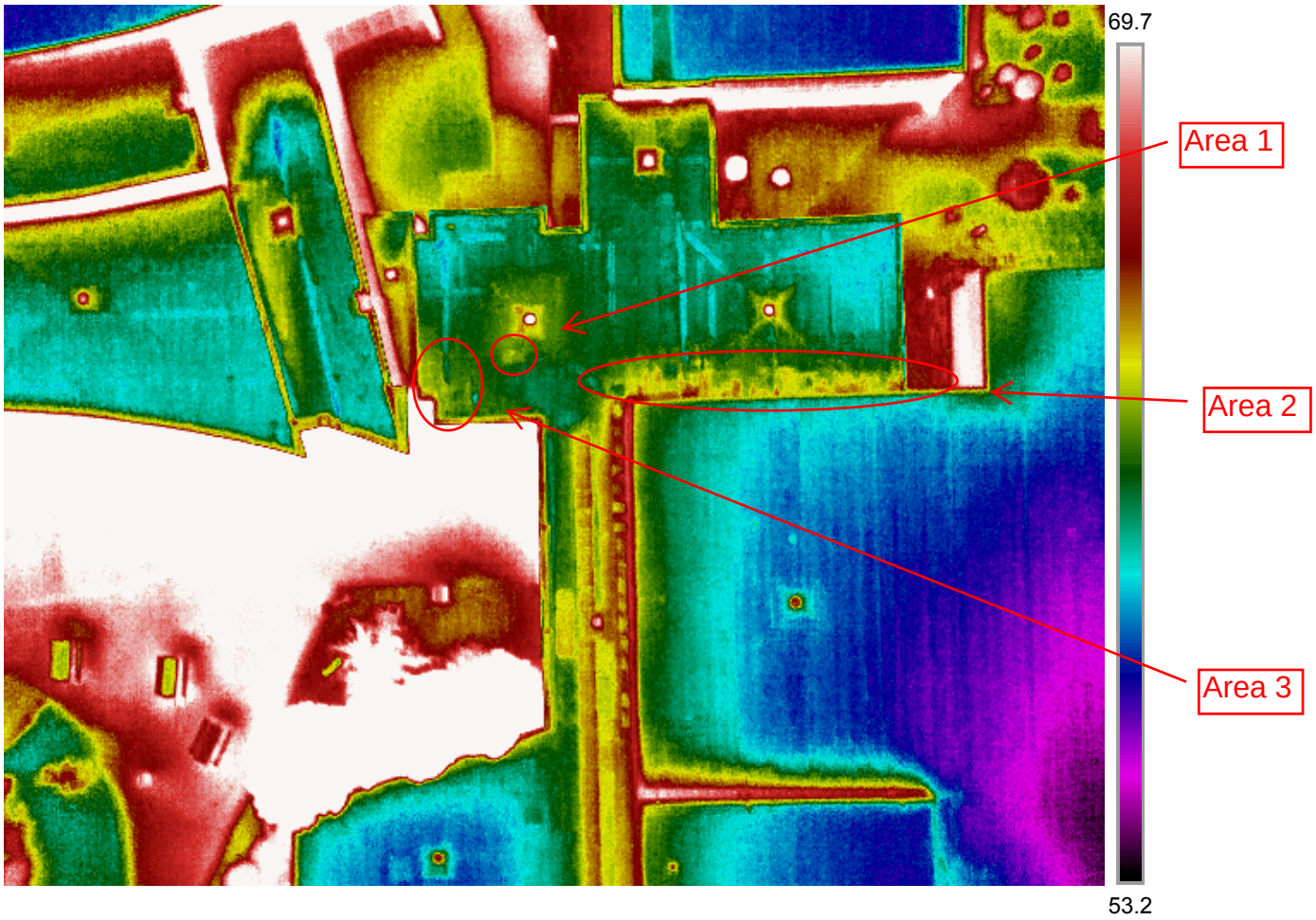


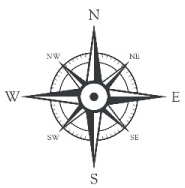
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof X

Area 1 ~ 12 sqft. Small marked area S of roof drain.
Area 2 ~ 185 sqft. Roof section along the base of the Roof P wall. Likely standing water or stains. Possible moisture/heat from water coming from above.
Area 3 ~ 43 sqft. Corner section along the base of the SW corner of this roof area.



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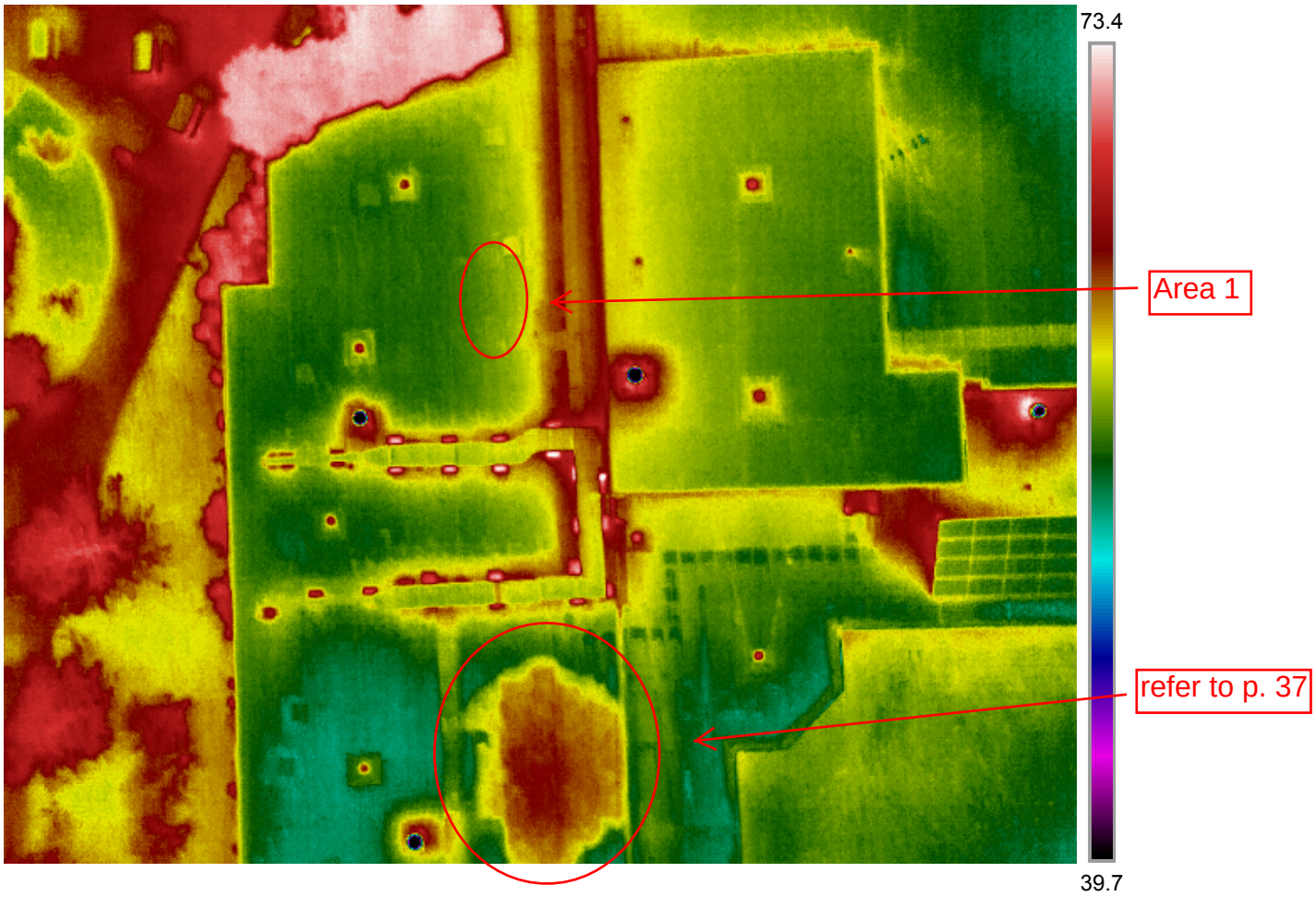


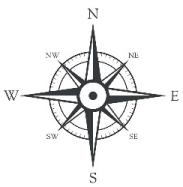
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof X

Area 1 ~ 45 sqft. Area along the W edge of the walk pads that appears to have standing water or water staining. Possible moisture/heat.



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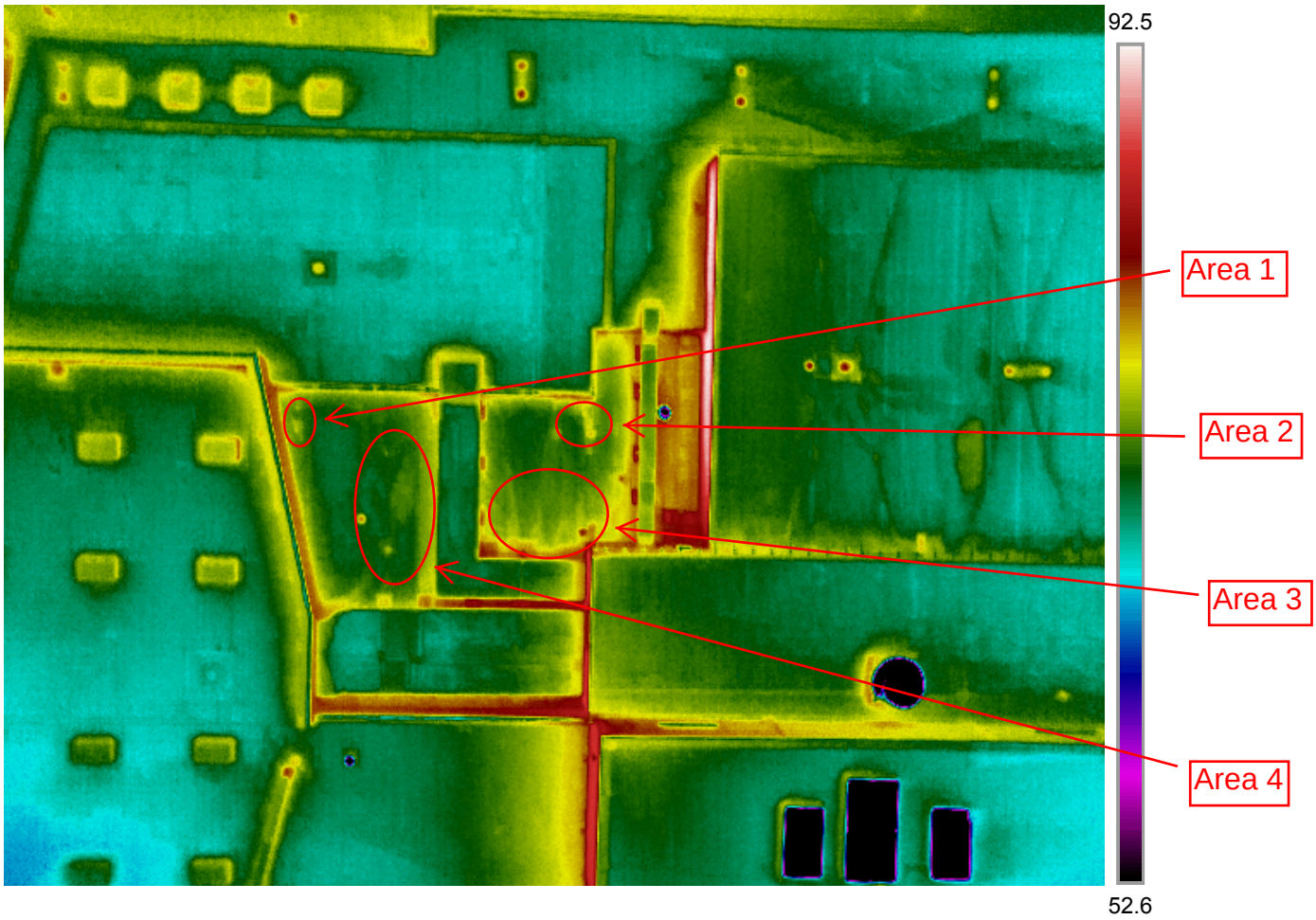


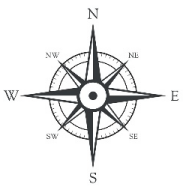
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof Y

Area 1 ~ 6 sqft. Small spot in the NW corner of this roof section
Area 2 ~ 25 sqft. Small area in the NE corner of this roof section
Area 3 ~ 45 sqft. Area along the edge of the vent/ductwork.
Area 4 ~ 65 sqft. Appears to be standing water or staining.
Possible moisture/heat.



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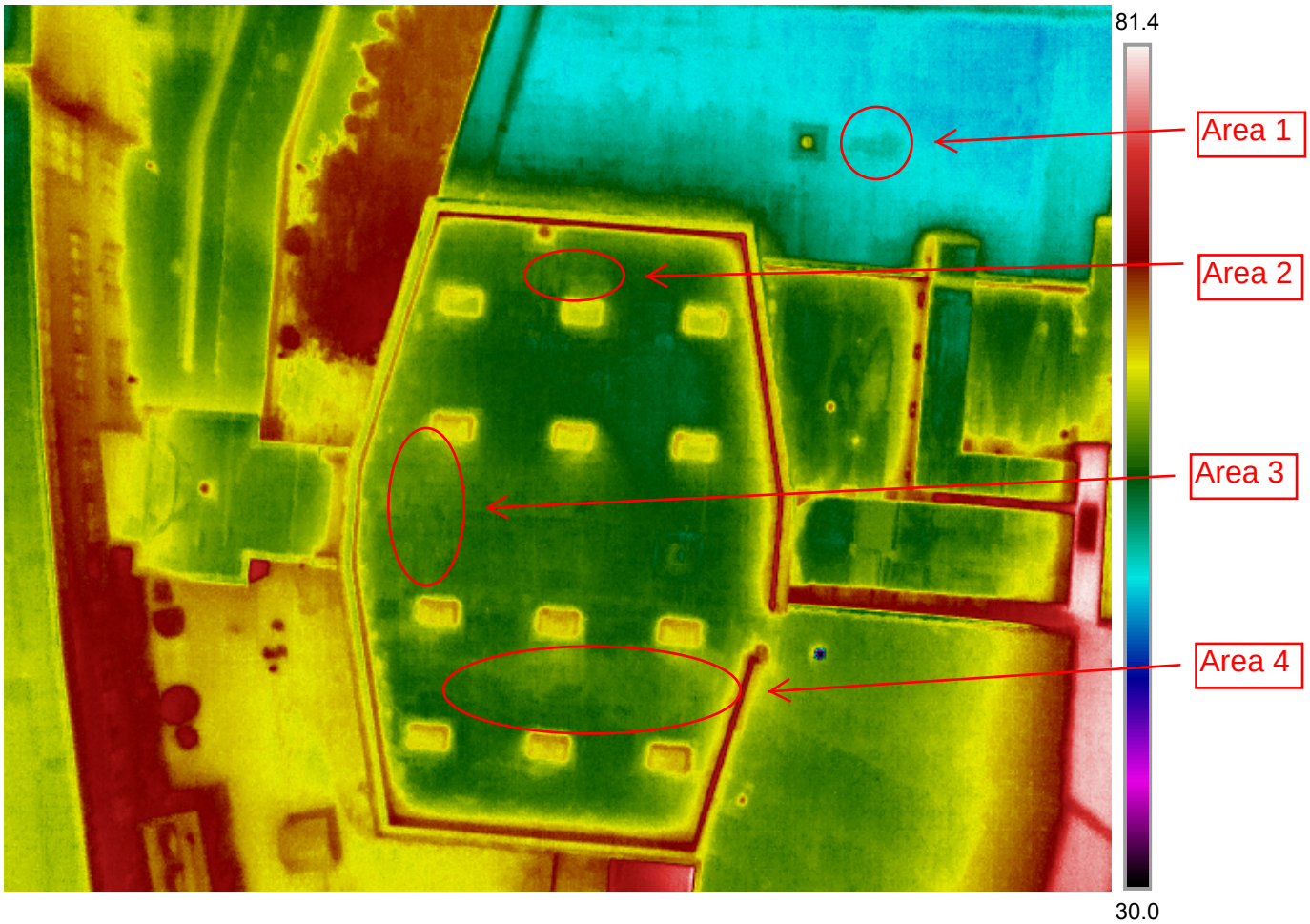


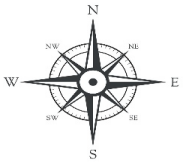
Parameters

Emissivity	1
Refl. temp.	71.6 °F
Distance	65.7 ft
Atmospheric temp.	71.6 °F
Ext. optics temp.	71.6 °F
Ext. optics trans.	1
Relative humidity	50 %

Note

Roof Z

Area 1 ~ 42 sqft. E side of the drain on the upper portion of this roof section.
Area 2 ~ 38 sqft. N side of the closest unit to the marked area. Potential standing water/staining or heat/moisture.
Area 3 ~ 105 sqft. Appears to be standing water or staining. Possible moisture/heat.
Area 4 ~ 125 sqft. Appears to be standing water or staining. Possible moisture/heat.



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FAA PART 107 LICENSED DRONE PILOT