ROOF DIAGNOSTIC SURVEY FOR:

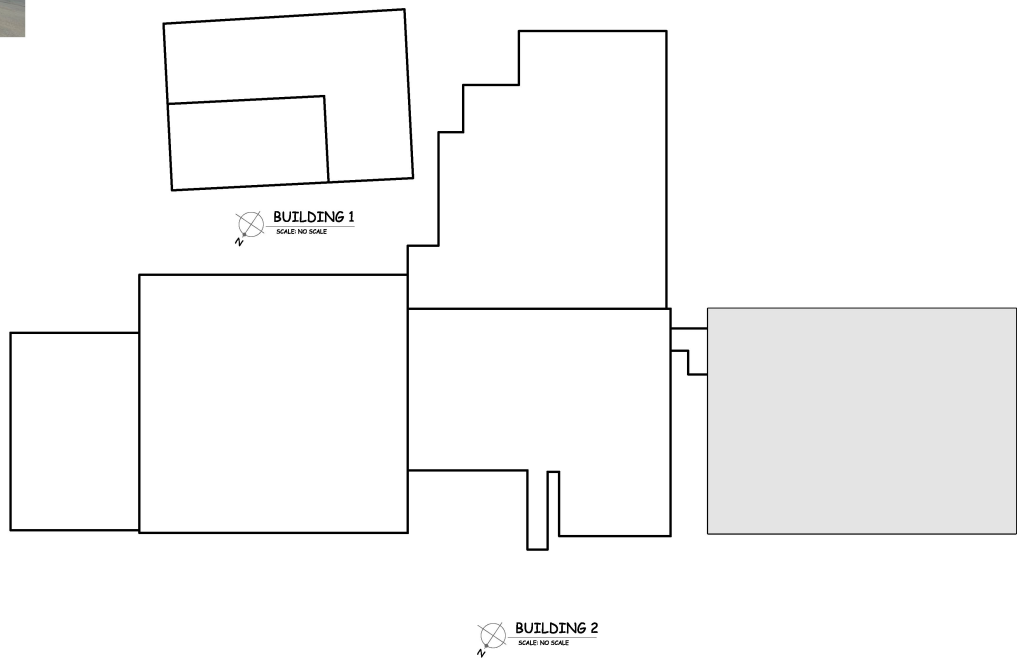
CITY OF ORLAND PARK

15655 S Ravinia Ave - ORLAND PARK, IL

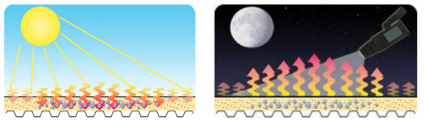
DRAWINGS

TITLE PAGE

SHEET A-1 CITY OF ORLAND PARK - MOISTURE SURVEY



How An Infrared Survey Works:

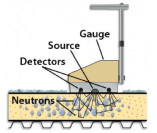


During the daytime, wet roof insulation absorbs more solar energy from the sun than dry roof insulation. During the nighttime, after the roof surface cools, the wet roof insulation will retain more solar energy than dry insulation and these temperature differences are detected by the infrared camera.

The wet roof areas are marked on the roof surface with visible paint markings. The wet roof areas are verified through core cuts and/or a Roof Moisture Meter.

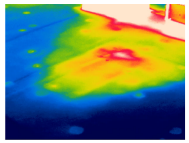
How A Moisture Density Survey Works:

During the daytime, a 10'x10' or 5'x5' grid pattern is marked on the roof surface. Readings are taken and recorded at each grid intersection.

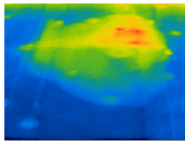


Fast neutrons are emitted from the source in the Roof Moisture Density Gauge into the roof system. The presence of hydrogen in the roof system slows the neutrons. These slowed neutrons as well as the fast neutrons are detected by the Roof Moisture Density Gauge "detectors". A reading is displayed in the digital readout and gets recorded.

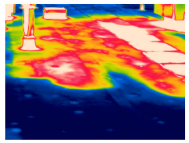
Core cuts are taken to determine a baseline for dry roof materials. Then wet roof areas are marked on the roof surface with visible paint markings.



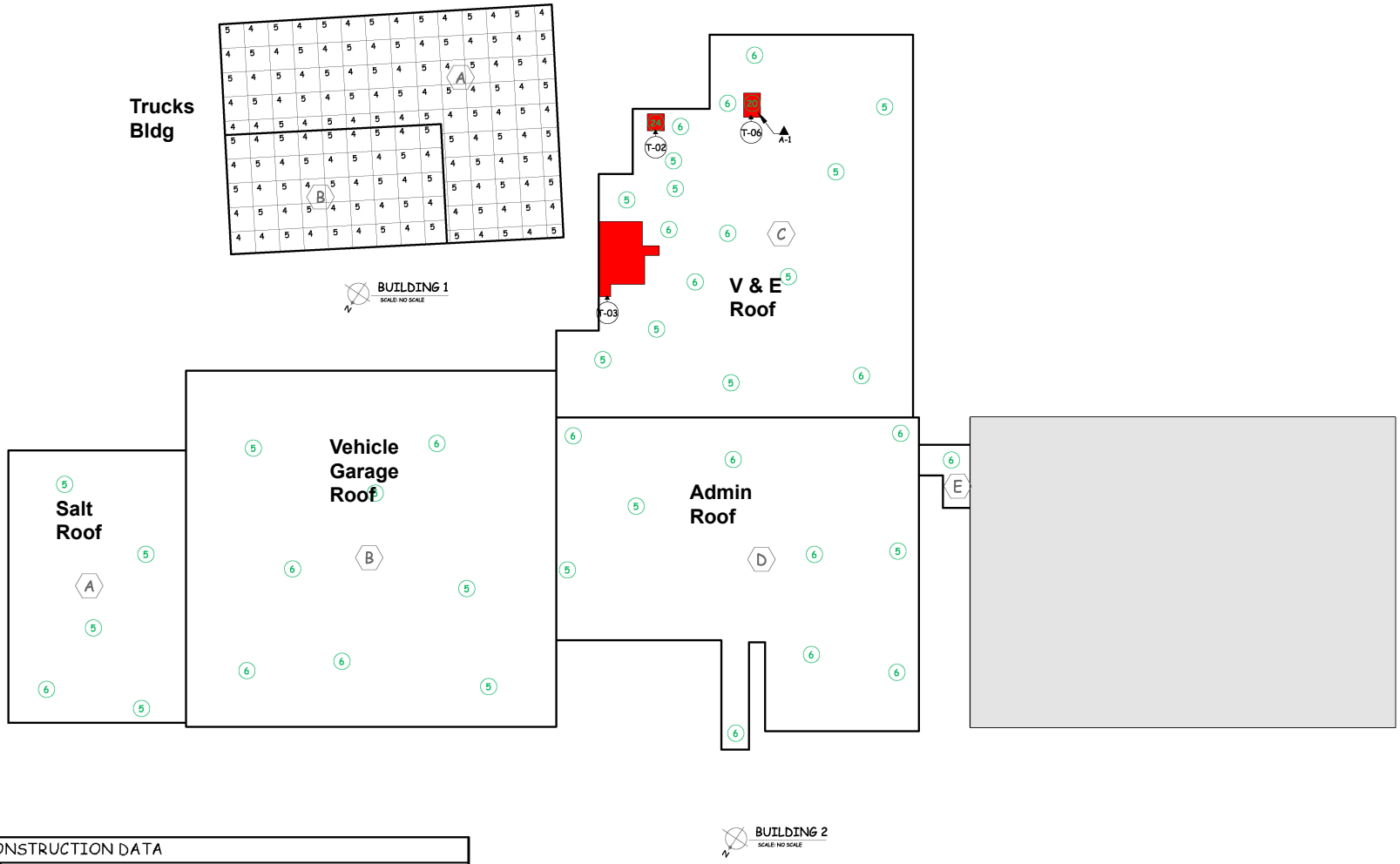
Thermogram T-01



Thermogram T-02



Thermogram T-03



ROOF SECTION DATA - BUILDING 1			
ROOF SECT.	SIZE (S.F.)	WET (S.F.)	% WET
A	8,510	0	0.00%
B	4,280	0	0.00%
TOTALS	12,790	0	0.00%

ROOF SECTION DATA - BUILDING 2			
ROOF SECT.	SIZE (S.F.)	WET (S.F.)	% WET
A	7,938	0	0.00%
B	25,836	0	0.00%
C	17,210	620	3.60%
D	13,128	0	0.00%
E	140	0	0.00%
TOTALS	64,252	620	0.96%

CONSTRUCTION DATA

ROOF SECTION	CORE CUT NUMBER	MOISTURE READING	MOISTURE PERCENTAGE	ROOF CONSTRUCTION	
A	A-1	20	N/A		SINGLE-PLY (RUBBER) ROOF SYSTEM
			0%	1/2"	WOODFIBER INSULATION
			75%	2-1/2"	POLYISOCYANURATE INSULATION
			N/A		METAL DECK

STANDARD KEY OF SYMBOLS

A AREA DESIGNATION
△ DRY CUT
▲ WET CUT
T-01 THERMOGRAM
TRACE CORE
P-01 PHOTOGRAPH
WET INSULATION
R.I.M. (RANDOM INTERMITTANT MOISTURE)
N.I.C.
MOISTURE GRID
MOISTURE READING

TREMCO ROOFING & BUILDING MAINTENANCE

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CITY OF ORLAND PARK
15655 S Ravinia Ave
ORLAND PARK, IL

PROJECT NO.: -
DRAWN BY: C.R.C. / T.T.
DATE: 08/25/20

SHEET NO.: A-1

2020 VILLAGE OF ORLAND PARK ROOFING PROJECT

Customer: Orland Park Public Works
Address: 15655 S. Ravinia Ave
Orland Park, Illinois 60462

Village Contacts: Scott Hiland, Mike Mazza

Tremco Contacts: Kevin Garmey, Chanc Laws

Inspection Date: Sept 10, 2020

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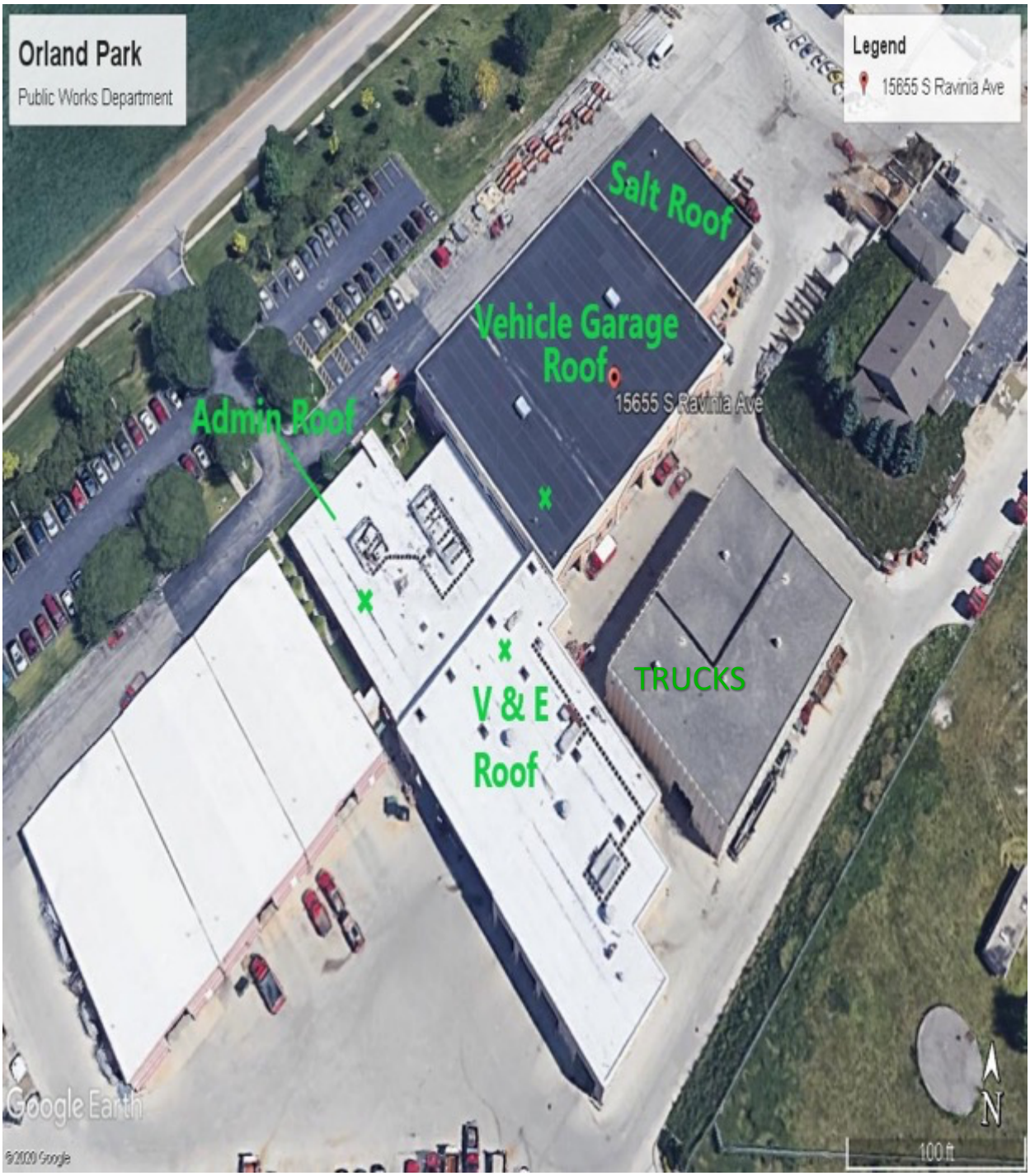
Roofing and Building Maintenance

MAP



Green X indicates roof core locations

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ROOF SECTION INFORMATION

Section:	**Admin Roof**
Membrane:	Adhered EPDM w/ coating
Coverboard:	Yes
Insulation:	2.5” ISO, .5” Wood fiber Cover board
Wet?	Moisture present
Deck type:	Metal
Size: Approx.	13,130 ft²
Leaking:	Yes
Slope:	Approximately ¼” per foot
Drainage:	Internal drains

Core sample- 2.5” iso .5 wood fiber

TREMCO™
Roofing and Building Maintenance

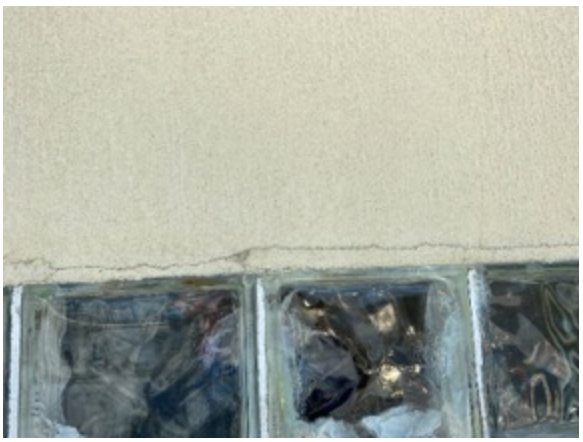
ROOF SECTION INFORMATION

Section:	**V & E Roof**
Membrane:	Adhered EPDM w/ coating
Cover board:	Yes
Insulation:	2.5” ISO, .5 Wood fiber cover board
Vapor barrier:	No
Wet?	Moisture present
Deck:	Metal
Size: Approx.	17,210 ft²
Leaking:	Yes
Slope:	¼ per foot slope
Drainage:	Internal drains

Overview

Overview

Core sample- 2.5” Iso, .5” Wood fiber cover board



Large crack across the top of the window

TREMCO™
Roofing and Building Maintenance

SOW: Admin and V&E Roof Restoration with Alpha Guard

- Tremco services to utilize water reclamation system to clean roof surface to provide suitable substrate for application of liquid restorative membrane.
- Remove existing walk pads and mark their location for new walkways.
- Cut out wet areas and repair with same size insulation and fully adhered EPDM. Strip into existing field membrane at cut joints using 6” wide cured cover strip.
- Repair designated flashing deficiencies, loose membrane, loose patches and field seams, punctures, and open corners using EPDM repair material.
- Prime existing repaired flashings and membrane with Alpha Guard WB Primer at 250 sf/gal
- Flashings: While primer is still tacky, apply Alpha Guard Bio Base coat at 3 gallons per square and fully embed Permafab polyester fabric so that no fabric is visible.
- Field: Same methodology with AG Base Coat and Permafab
- Top Coat: Apply 2 gallons per square of Alpha Guard Top coat to flashings and field in a uniform coverage.
- Walkway Areas: Around serviceable equipment and areas where walk pads existed, tape off 3 foot wide strip and apply ½ gallon per square of AG Top coat to surface. Broadcast white roofing granules into wet liquid and back roll with a roller to provide even coverage and traction.
- EIFS and Masonry Walls: cracks and open mortar joints are visible in the wall substrates. Power wash loose paint/coating from surface, prime with Solarguard primer, coat with Solarguard masonry coating.