

Central Florida Testing Laboratories, Inc.

Testing Development and Research

12625 – 40TH STREET NORTH • CLEARWATER, FL 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

December 17, 2024

Hennessy Construction Services Corp.
2300 22nd Street North
St. Petersburg, FL 33713

Attn: Ms. Kelly Byrne
Project Manager

Re: Completion Report for the Ground Stabilization Program at City of New Port Richey Fleet Maintenance Facility, located at 6420 Pine Hill Road, Port Richey, FL 34668
CFTL Report No. 250676

Dear Ms. Byrne,

In accordance with the recommendations presented in our geotechnical investigation report issued in August of 2021 (under our Report No. 238123A), our office was present to monitor the subsurface compaction grouting program implemented by your subcontractor, Helicon Foundation Repair, Inc. (Helicon). This program of deep compaction grouting was completed in order to address potential sinkhole activity identified to exist beneath the footprint of the proposed new Fleet Maintenance Facility building. The new Fleet Maintenance Building will be located to the immediate east of the existing building.

Based on the results of our geotechnical investigation in conjunction with the reconfiguration of the

planned new building, it was our professional opinion that the two separate areas in which buried solution features along with common indicators of sinkhole activity had been identified should be stabilized by a program of subsurface compaction grouting where a cementitious grout mix is pumped under low to moderate controlled pressures beginning at a depth representative of competent rock,



progressing upward through the sinkhole weakened or raveled soil zones towards the surface. This remediation program was intended to seal off the limestone layer



to prevent future soil raveling and downward migration of the soils into the underlying weathered limestone formation, fill existing voids within the overburden soils and improve the overall density of the soil profile and supporting soils beneath the building.

Helicon performed the recommended subsurface ground stabilization program over the course

of 14 working days between the dates of November 4th, 2024 and November 22nd, 2024. Site work included casing installation, grout injection and casing removal. The compaction grouting program consisted of 28 total deep grout injection points. Eight (8) of the 28 injection locations (DG-1 through DG-8) were positioned within a grid pattern encompassing the smaller anomalous area beneath the southeastern portion of the footprint of planned new construction, with the remaining 20 injection locations (DG-9 through DG-28) positioned within a grid pattern encompassing the larger anomalous area beneath the northwestern portion of the footprint of the planned new construction.

Of note during the installation of the grout injection points a small sinkhole opened up around the location of grout injection point DG-5. The surface expression was widened and then filled in with sand and tamped with the bucket of the backhoe. Additional compaction of this area will take place when the new building footprint is “proof-rolled” in accordance with the recommendations provided in our initial report (CFTL Lab No. 238123A)



The depth to competent limestone and the starting depth of this program varied from 31 to 96 feet below the ground surface, with an average drilling depth of 68 feet deep. The extreme variance is attributable to the depth of the buried conical solution features.



A total of 1,913 linear feet of casing was installed and removed through the 28 total deep injection locations. An additional total of 184 linear feet of redrilling was required at

4 injection locations (DG-15, DG-21, DG-25, DG-28) as a result of tight, locked, or broken casing. The actual drilling depths proved to be somewhat deeper than our estimate of 20 to 50 feet deep.

The deeper depths reflect the beginning depth to competent limestone in the bottom of the identified solutions features while the more shallow depths reflect the outer limits or assumed perimeter of the buried solution features.

Our monitoring efforts recorded that a total of 370.0 cubic yards of cementitious grout was injected in through the 28 individual locations. The total quantity of grout utilized exceeded our estimate of approximately 200 to 300 cubic yards; however, soil conditions dictated the additional grout material in order to fully and completely stabilize the sinkhole weakened or raveled soils existing beneath the two areas of concern. Upon completion of the grouting program a total of 10.0 cubic yards of material was returned to the supplier, Maschmeyer.



The localized solution feature beneath the southeastern portion of the planned building (DG-1 through DG-8) accounted for 120.0 cubic yards of injected

cementitious grout while the localized feature beneath the northwestern portion of the planned building (DG-9 through DG-28) accounted for a total of 250.0 cubic yards of injected cementitious grout.

Limiting criteria of the injection process was either an injection pressure of 100 psi over the line pressure required to move the grout from the pump through the supply hose and to the injection casing, ground heave, or movement of any adjacent structures. A maximum of 40 cubic yards of grout was recommended to be pumped at any one a location in a single day.

The mix design used for this project was coded by the supplier Maschmeyer as "P15GF9000540" with a product description of "1500 GROUT 900." Mix codes



from each truck ticket upon delivery were checked and confirmed by our representative to be this specific mix.

Our office also sampled the delivered grout material for unconfined compressive strength on 10 separate days in order to verify that the delivered

material was in accordance with our recommended strength of at least 1,500 psi at 28 days of age. The results of our compressive strength tests confirmed that the delivered grout mix met or exceeded our recommended strength of 1,500 psi at 28 days of age (see attached Concrete Compressive Strength Reports).

Attached for reference is a site schematic showing the locations and numbering of the 28 individual injection locations along with a chart in tabular form showing the depth of each point and quantity of grout injected.

Based upon the above cumulative information, it is our professional opinion that the recommended deep compaction grouting program has been implemented in accordance with our recommendations and industry standards and that the sinkhole weakened soil conditions previously identified within the limits of the grouting program have been sufficiently stabilized to eliminate ongoing soil weakening or the potential for soil collapse to occur.

Daily report sheets, detailed concrete supplier tickets, field notes, and photos of the work efforts will be kept in our files for future review, if necessary.

We appreciate the opportunity to have been of service. If any questions arise concerning this report, please do not hesitate to contact our office.

Sincerely,

CENTRAL FLORIDA TESTING LABORATORIES, INC.

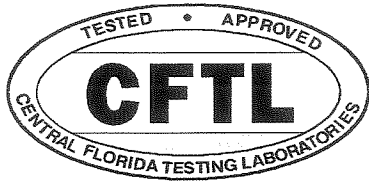


This item has been electronically signed and sealed by George C. Sinn, Jr., P.E. using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

George C. Sinn, Jr., P.E.
President / Principal Engineer
FLN16911
GCS/sls

Attachments

cc: City of New Port Richey – Derek Silver, Construction Project Manager (email)
Helicon – Bob Burgen, Sr. Executive Account Manager (email)



Central Florida Testing Laboratories, Inc.

Testing Development and Research

12625 - 40TH STREET NORTH • CLEARWATER, FL 33762
 Tampa Bay Area: (727) 572-9797 Florida: 1-800-248-CFTL Fax: (727) 299-0023

Lab No.:	250676	Monitored By:	DS
Project:	NPR Fleet Maintenance Facility	Start Date:	11/4/2024
Address:	6420 Pine Hill Road	End Date:	11/22/2024
City / State:	New Port Richey	Grout Company:	Helicon Foundation Repair, Inc.
Client:	City of New Port Richey	Date Reported:	12/17/2024

DEEP COMPACTION GROUTING SUMMARY

Grout Point No.	Grout Pt. Depth (ft.)	Quantity Pumped (yd. ³)
DG-1	36	5.9
DG-2	60	7.9
DG-3	96	22.5
DG-4	80	19.8
DG-5	84	13.0
DG-6	84	8.9
DG-7	88	14.5
DG-8	80	27.5
DG-9	82	20.0
DG-10	40	12.9
DG-11	94	42.9
DG-12	79	27.1
DG-13	31	1.7
DG-14	82	15.2
DG-15	84	5.4
DG-16	59	6.6
DG-17	59	3.9
DG-18	79	13.7
DG-19	59	8.7
DG-20	33	1.8
DG-21	59	7.1
DG-22	32	2.0
DG-23	79	10.7
DG-24	78	29.6
DG-25	76	16.5
DG-26	70	14.4
DG-27	58	6.3
DG-28	72	3.5

Notes
MIX DESIGN:
MASCHMEYER P15GF9000540
RETURNED GROUT
11/22/24 - Returned 10.0 yd ³ of grout to the supplier.
Total amount of grout returned: 10.0 yd³
REDRILLS
DG-15 to 59'
DG-21 to 63'
DG-25 to 24'
DG-28 to 38'
Total depth of redrills: 184 ft

TOTAL POINTS	TOTAL FEET DRILLED	TOTAL QUANTITY (YD. ³)
28	1913	370.0

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/04/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-1

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 1

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 7.0 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Clear and Sunny Air Temperature: 84 °F
 Truck No: 1236 Ticket No: 4430050 Time Batched: - Time Sampled: 7:30 AM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 7 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #7
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

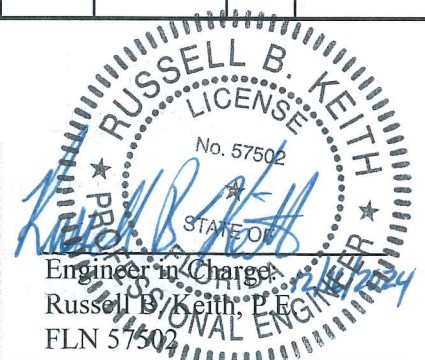
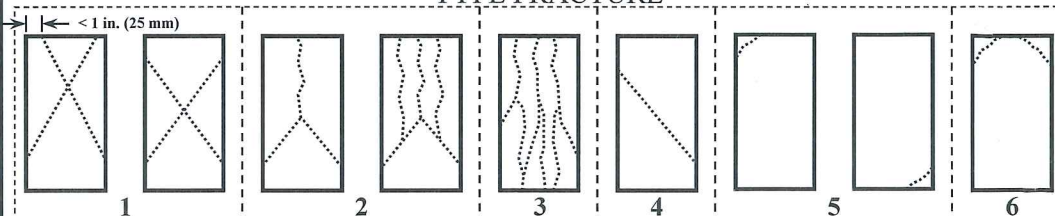
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/06/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/07/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
						1	11/13/24	7	9,330	1,300
2	11/20/24	14	10,700	1,490	2	5.65	3.02	7.16	No	No
3	12/04/24	28	13,900	1,940	2	5.80	3.02	7.16	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/05/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-2

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 2

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 4-6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Clear and Sunny Air Temperature: 88 °F
 Truck No: 2447 Ticket No: 4430704 Time Batched: - Time Sampled: 1:15 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 7 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #8
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

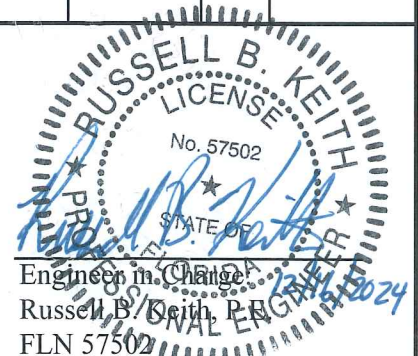
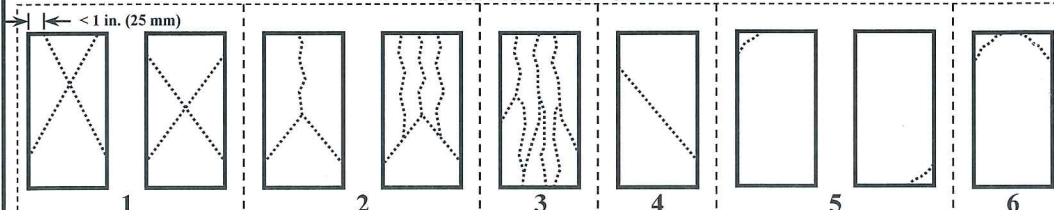
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/07/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/08/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA. (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
1	11/14/24	7	9,790	1,370	2	5.80	3.02	7.16	No	No
2	11/21/24	14	11,410	1,600	6	5.65	3.01	7.12	No	No
3	12/05/24	28	13,650	1,910	2	5.90	3.02	7.16	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/06/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-3

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 3

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Cloudy and Overcast Air Temperature: 81 °F
 Truck No: 2458 Ticket No: 4431865 Time Batched: - Time Sampled: 2:20 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 7 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #4
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

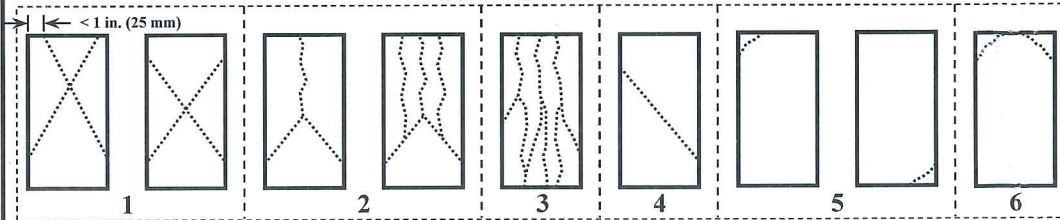
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/08/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/09/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in. ²)	CAP	SPECIMEN
1	11/15/24	7	9,200	1,280	2	5.90	3.03	7.21	No	No
2	11/22/24	14	11,400	1,600	5	5.75	3.01	7.12	No	No
3	12/06/24	28	14,140	1,960	1	5.75	3.03	7.21	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/09/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-4

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 4

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA
 Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

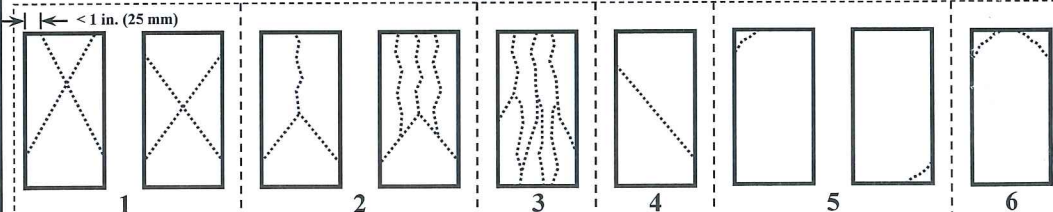
FIELD DATA
 Weather Conditions: Clear and Sunny Air Temperature: 84 °F
 Truck No: 1239 Ticket No: 4433865 Time Batched: - Time Sampled: 10:40 AM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 7 in. Air Content: - %
 Water Added: 4 gal. Authorized by: Raphael of Helicon
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #11
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA
 Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/11/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/12/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH	SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
							HT. (in.)	AVG. DIA. (in.)	AVG. AREA (in. ²)	CAP	SPECIMEN
							1	11/18/24	7	8,920	1,250
2	11/25/24	14	12,180	1,700	2	5.55	3.02	7.16	No	No	
3	12/09/24	28	16,270	2,270	2	5.70	3.02	7.16	No	No	

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Russell B. Keith, P.E.
 Engineer in Charge
 FLN 57502
 12/11/2024

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/10/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-5

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 5

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Clear and Sunny Air Temperature: 86 °F
 Truck No: 2323 Ticket No: 4434785 Time Batched: - Time Sampled: 12:24 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 6 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #12
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

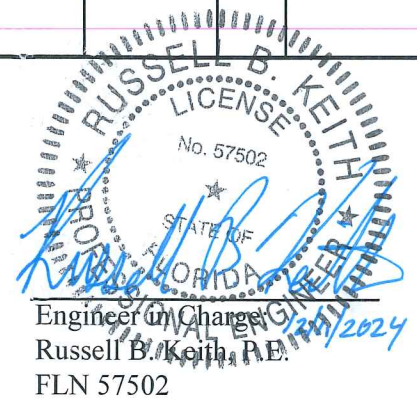
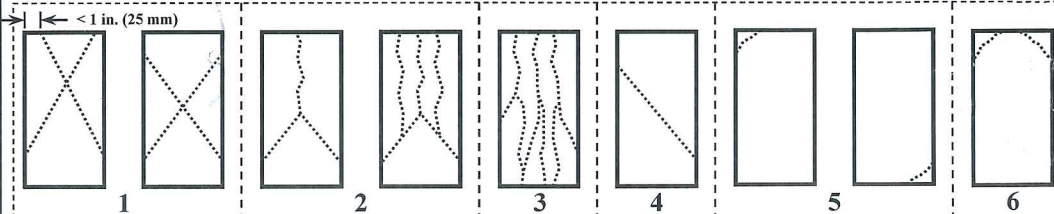
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/12/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/13/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA. (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
						1	11/19/24	7	8,360	1,170
2	11/26/24	14	12,010	1,680	1	5.40	3.02	7.16	No	No
3	12/10/24	28	19,050	2,660	2	5.50	3.02	7.16	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Engineer in Charge
 Russell B. Keith, P.E.
 FLN 57502

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/11/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-6

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 6

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 7.0 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000548
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Clear and Sunny Air Temperature: 84 °F
 Truck No: 2458 Ticket No: 4435695 Time Batched: - Time Sampled: 12:15 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 6 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #9
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

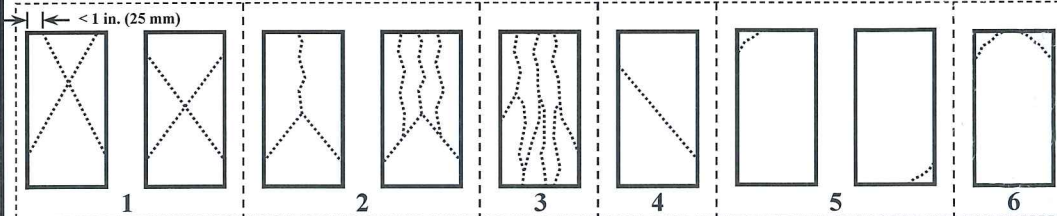
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/13/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/14/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
						1	11/20/24	7	9,690	1,350
2	11/27/24	14	12,510	1,740	2	5.75	3.03	7.21	No	No
3	12/11/24	28	16,990	2,370	2	5.85	3.02	7.16	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Russell B. Keith, P.E.
 FLN 57502
 12/11/2024

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

GEOLOGY BUSINESS NO. 224

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/12/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-7

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 7

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA
 Specified Strength: 1,500 psi in 28 Days Slump: 4-6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

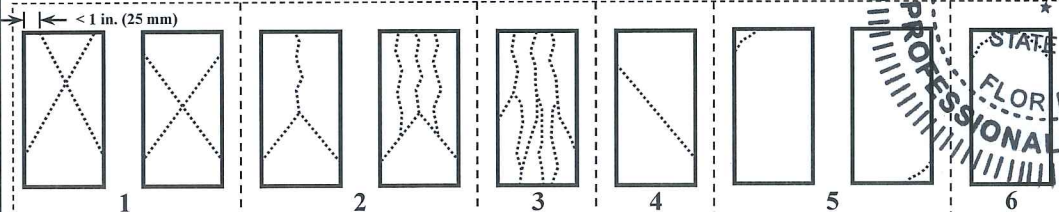
FIELD DATA
 Weather Conditions: Clear and Sunny Air Temperature: 84 °F
 Truck No: 2411 Ticket No: 4436832 Time Batched: - Time Sampled: 12:30 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 6 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #24
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA
 Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/14/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/15/2024 Tested according to ASTM C-39 yes no unknown

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
1	11/21/24	7	9,980	1,400	6	5.80	3.01	7.12	No	No
2	11/28/24	14	12,390	1,730	2	5.55	3.02	7.16	No	No
3	12/12/24	28	15,330	2,130	2	5.50	3.03	7.21	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Professional Engineer Seal: GEORGE C. SINN, JR., LICENSE No 16911, STATE OF FLORIDA, PROFESSIONAL ENGINEER. Signature: George C. Sinn, Jr., P.E. FLN 16911 12-13-24

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/16/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-8

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 8

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA
 Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

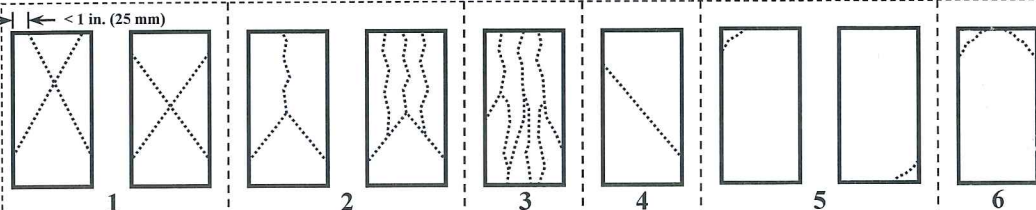
FIELD DATA
 Weather Conditions: Clear and Sunny Air Temperature: 81 °F
 Truck No: 1236 Ticket No: 4439211 Time Batched: - Time Sampled: 1:00 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 5 in. Air Content: - %
 Water Added: 4 gal. Authorized by: Raphael of Helicon
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #25
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA
 Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/18/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/19/2024 Tested according to ASTM C-39 yes no unknown

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
1	11/25/24	7	10,710	1,500	2	5.55	3.02	7.16	No	No
2	12/02/24	14	11,910	1,660	2	5.70	3.02	7.16	No	No
3	12/16/24	28	15,920	2,210	2	5.70	3.03	7.21	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



RUSSELL B. KEITH
 LICENSE No. 57502
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 Engineer in Charge
 Russell B. Keith, P.E.
 FLN 57502
 12/16/2024

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066

GEOLOGY BUSINESS NO. 224

TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/17/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-9

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 9

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA

Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
 Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
 Design Specifications: Unknown ASTM ACI Other -

FIELD DATA

Weather Conditions: Slightly Cloudy & Warm Air Temperature: 81 °F
 Truck No: 2404 Ticket No: 4440274 Time Batched: - Time Sampled: 2:00 PM
 Load: 10 cu. yd. Concrete Temp.: - °F Slump: 6 in. Air Content: - %
 Water Added: - gal. Authorized by: - of -
 Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
 Molding & Field Data By: DS of CFTL
 Location of Pour: Injection Point #16
 Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA

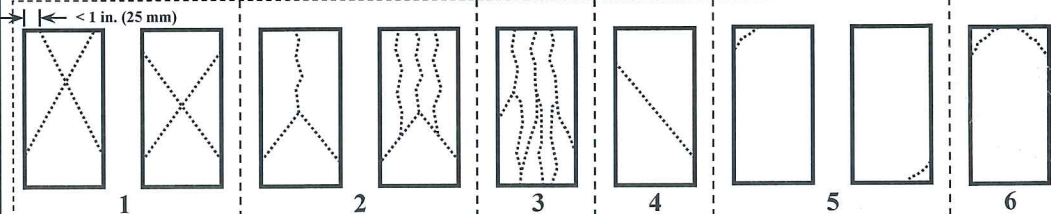
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
 Date Cylinders Made: 11/19/2024 Lab Cured according to ASTM C-31 yes no unknown
 Date Cylinders Received: 11/20/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE STRENGTH

SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
						HT. (in.)	AVG. DIA (in.)	AVG. AREA (in. ²)	CAP	SPECIMEN
1	11/26/24	7	8,960	1,250	2	5.70	3.02	7.16	No	No
2	12/03/24	14	10,700	1,490	5	5.80	3.02	7.16	No	No
3	12/17/24	28	13,630	1,900	2	5.90	3.02	7.16	No	No

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Engineer in Charge:
 Russell B. Keith, P.E.
 FLN 57502
 12/17/2024

Central Florida Testing Laboratories, Inc.

Testing, Development and Research

12625 40th STREET NORTH • CLEARWATER, FLORIDA 33762

ENGINEERING BUSINESS NO. 1066
TAMPA BAY AREA (727) 572-9797

FLORIDA 1-800-248-CFTL

GEOLOGY BUSINESS NO. 224
FAX (727) 299-0023

CONCRETE COMPRESSIVE STRENGTH REPORT

Client: City of New Port Richey Fleet Maintenance & Warehouse Facility

Date: 12/18/24

Project: New Port Richey - Fleet Maintenance

Location: 6420 Pine Hill Road, New Port Richey, Florida

Lab No: 250676-10

Contractor: Helicon

Concrete Supplied by: Maschmeyer

Set No: 10

Reports to: City of New Port Richey Fleet Maintenance & Warehouse Facility

DESIGN DATA
Specified Strength: 1,500 psi in 28 Days Slump: 4 - 6 in. Air Content: - %
Mix Type: Normal Weight Light Weight Other Mix Designation: P15GF9000540
Design Specifications: Unknown ASTM ACI Other -

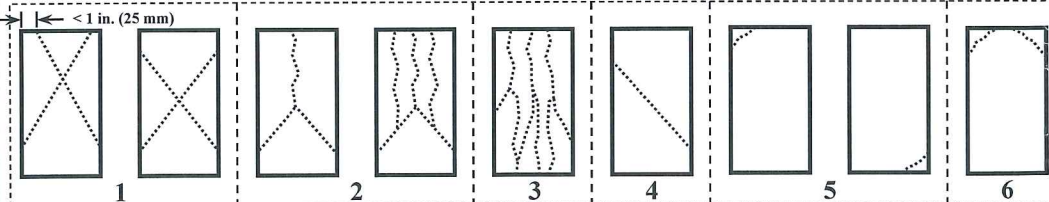
FIELD DATA
Weather Conditions: Overcast Air Temperature: 81 °F
Truck No: 1207 Ticket No: 4440663 Time Batched: - Time Sampled: 9:15 AM
Load: 10 cu. yd. Concrete Temp.: - °F Slump: 6 in. Air Content: - %
Water Added: - gal. Authorized by: - of -
Plastic Unit Weight: - Pcf Yield: - cu.ft./cu.yd.
Molding & Field Data By: DS of CFTL
Location of Pour: Injection Point #19
Curing Method: Field Lab Made According to ASTM C-31 yes no unknown

LAB DATA
Delivered by: CFTL Site Cured according to ASTM C-31 yes no unknown
Date Cylinders Made: 11/20/2024 Lab Cured according to ASTM C-31 yes no unknown
Date Cylinders Received: 11/21/2024 Tested according to ASTM C-39 yes no unknown

COMPRESSIVE	SPECIMEN MARKING	DATE TESTED	AGE (days)	TOTAL LOAD (lbs.)	UNIT LOAD (psi)	TYPE FRACTURE	SIZE			DEFECTS	
							HT. (in.)	AVG. DIA (in.)	AVG. AREA (in ²)	CAP	SPECIMEN
							1	11/27/24	7	8,540	1,190
2	12/04/24	14	9,730	1,360	2	5.90	3.02	7.16	No	No	
3	12/18/24	28	10,870	1,520	1	5.75	3.02	7.16	No	No	

Remarks: "-" Denotes Information Not Provided.

TYPE FRACTURE



Engineer in Charge
 Russell B. Keith, P.E.
 FLN 57502