VIA EMAIL

October 10, 2018

Robert Brzak
Real Estate Services Coordinator
City of Clearwater

Email: Robert.Brzak@MyClearwater.com

Subject: Limited Condition Assessment
115 S MLK Jr. Ave.
Clearwater, FL 33756

Introduction

Jeremiah Mosley, E.I. and Caitlin Williams of Biller Reinhart Engineering Group, Inc. (BillerReinhart) performed a limited condition assessment of the interior, exterior, roof and other site features of the commercial building located at the above stated address. The assessment was conducted on September 26, 2018. The purpose of the assessment is to visually observe the current state of the readily discernible structural elements of the structure, existing conditions that require repair and/or preventative maintenance, and generate a report to document our observations and recommendations.

The visual survey by BillerReinhart was of the structure's current state and did not involve any destructive activity to view inaccessible areas.

Structure Description

The structure is a commercial warehouse building with several interior office spaces located along the west side of the structure, and an interior mezzanine area. According to records from the Pinellas County Property Appraiser's website, the structure consists of an original structure, with an addition installed post-construction. The original structure was constructed in 1960, with the addition at the north side of the structure being constructed in 1975.

Pre-engineered moment frames were observed throughout the interior of the original structure and addition. Framing members consisted of tapered steel columns and beams and were connected via bolted and welded fastenings. Steel columns are anchored to the concrete foundation slab.

The roof system consists of standing seam metal panels. The roof system is connected to steel purlins, which are attached to the steel moment frames. Steel purlins were observed to span in the north-south direction. Purlins appeared to be spaced approximately 1 foot to 3.5 feet on-center, with the highest concentrations located near the exterior walls and the center of the structure. Fasteners at the purlins appeared to generally be spaced at approximately 6-inches on-center.

Exterior walls along the west elevation and the western 1/3rd of the south elevation consists of concrete masonry block units and corrugated metal panels. Concrete masonry block units extend from the concrete slab up to approximately 10-feet. An aluminum canopy was installed along the entire length of the west elevation. The canopy was fastened into the exterior wall surfaces.

The southern 2/3rd of the east elevation consists of corrugated metal panels, with a 2-course concrete masonry block unit stem wall located at the bottom portion of the exterior wall system.

Corrugated metal panels installed along the exterior walls are attached to interior steel girts, which are attached to the steel moment frames. Fasteners at the girts are spaced approximately 12-inches on-center.

Exterior walls located along the north elevation and the northern 1/3rd of the west elevation consists of cast-in-place concrete columns and beams, with concrete masonry unit block infills. Concrete columns were spaced at approximately 20-feet on-center.

Roll-up overhead doors were installed at the eastern 2/3rd of the south elevation. Steel columns were installed along the interior of the south elevation at this location. Columns were anchored to the concrete foundation slab. Column spacing was approximately 20-feet on-center.

The interior mezzanine floor was constructed utilizing wood framing, supported by steel column posts. Wood floor joists are spaced approximately 16-inches on-center, with cross-bracing installed between the floor joists. Floor joists are supported by 3-ply wood beam members. Steel columns are attached to the underside of the 3-ply wood beams and concrete foundation slab. Steel column posts were spaced approximately 10-feet on-center in either direction.

Survey of the Structure Exterior

Readily discernible structural elements of the structure exterior were visually observed. Photographs were taken during the survey and are included in *Appendix A* of this report. Note that some of the conditions listed below were observed throughout the structure and the selected photographs are representative of the respective conditions.

Table A – Structure Exterior Observations	
Conditions Observed	**Reference Photos (Figures in Appendix A)**
West Elevation	*A-1*
Horizontal, Vertical, and stair-step cracking at the concrete masonry block (highest concentration at original structure; south end)	*A-2 thru A-4*
Cracking at concrete lintels overlying window units	*A-5 and A-6*
Cracking at the concrete window sills (addition)	*A-7 and A-8*
Paint delamination at lower concrete masonry block wall section (central portion of structure)	*A-9*
Indentations at metal wall panels	*A-10*
Paint delamination at metal wall panels	*A-11*
Deformation at canopy tension member	*A-12*
Tree branches bearing on canopy (north side)	*A-13*
Deformation and tearing at the canopy fascia (central portion)	*A-14*
Corrosion at fasteners underlying canopy	*A-15*
Run-off rust staining at concrete masonry block wall (central portion)	*A-16*
Minor wood decay at window framing	*A-17*
Separation cracking at the window frame and wall interface	*A-18*
Deformation at window screen framing	*A-19*
North Elevation	*A-20*
Hairline stair-step cracking at the east side of the north elevation	*A-21*
Partially displaced fascia	*A-22*
Paint delamination	*A-23*
Gap at wall and roof interface	*A-24*
South Elevation	*A-25*
Horizontal, Vertical, and stair-step cracking at the concrete masonry block	*A-26 thru A-28*
Cracking and spalling at concrete lintel overlying window units	*A-29*
Corrosion at fasteners located at abandoned canopy framing	*A-30*
Corrosion at overhead door rollers	*A-31*
Deformation at the gutter downspouts	*A-32*
Deformation at the overhead doors	*A-33*

East Elevation	*A-34*
Penetration at the corrugated metal wall panel (central portion)	*A-35*
Cracking, staining, and vegetation growth at concrete masonry stem wall	*A-36*
Corrosion at metal door	*A-37*
Deformation, paint delamination, and corrosion at loading dock overhead door	*A-38*
Separation cracking, paint delamination, and corrosion at metal accessory overlying the top concrete masonry unit course	*A-39 and A-40*
Run-off rust staining at concrete masonry block wall (north portion)	*A-41*
Displaced gutter system section (north section)	*A-42*

Survey of Structure Interior

Readily discernible structural elements of the warehouse interior were visually observed. Photographs were taken during the survey and are included in *Appendix B* of this report. Note that some of the conditions listed below were observed throughout the structure and the selected photographs are representative of the respective conditions.

Table B – Structure Interior Observations	
Conditions Observed	**Reference Photos (Figures in Appendix B)**
View of roof structure	*B-1*
View of bracing at wall girts, and roof purlins	B-2
Steel cable cross-bracing at moment frame	*B-3*
Steel cable cross-bracing at roof purlins	*B-4*
Moment frame connections	*B-5 thru B-7*
Steel wall girts	*Reference B-2*
Transition between metal wall panel and concrete masonry unit wall	*B-8*
Concrete columns and beams with concrete masonry block infills	*B-9*
Framing at the underside of the 2nd floor mezzanine	*B-10*
Wood floor joists and cross-bracing at underside of 2nd floor mezzanine	*B-11*
Elevation differentials at concrete slab joints (up to 2-inch differential)	*B-12 and B-13*
Cracking at concrete slab (isolated areas)	*B-14 thru B-16*

Missing concrete section at north side of the loading dock along the east elevation	*B-17*
Isolated areas of torn roof insulation	*B-18*
Runoff rust staining down the concrete masonry unit wall and corrosion at the roof purlin located at the upper northwest corner of the structure	*B-19*
Corrosion at the bases of the steel columns located along the south elevation	*B-20*
Corrosion at steel framing located adjacent to the overhead doors along the south elevation	*B-21*
Corrosion at lower wall panel sections along the east elevation	*B-22*
Corrosion at lower metal angle along the east elevation	*B-23*
Wood decay at wall-mounted wood member (non-load bearing)	*B-24*
Splitting at wood beams underlying the 2nd floor mezzanine	*B-25*
Tearing at metal wall panel located along the east elevation	*B-26*
Displaced railing at mezzanine stairway	*B-27*
Wood decay at the top of the mezzanine stairway landing and stair railing at the 2nd story of the mezzanine	*B-28 and B-29*
Gap between overhead door and exterior wall	*B-30*
Shattered glass at exterior office door along the west elevation	*B-31*

Survey of Roof System

The roof system was visually observed. Photographs were taken during the survey and are included in *Appendix C* of this report. Note that some of the conditions listed below were observed throughout the structure and the selected photographs are representative of the respective conditions.

Table C – Roof System Observations	
Conditions Observed	**Reference Photos (Figures in Appendix C)**
Roof System	*C-1*
Corrosion at the metal flashing installed along the northern roof rake	*C-2*
Intermittent isolated corrosion at the metal roof panels	*C-3 and C-4*
Protruding metal fastener at the east side of the roof transition between the original structure and the addition	*C-5*
Indentation at metal roof panel located at the southwest portion of the roof covering system	*C-6*
Corrosion at metal accessories attaching gutter system to roof system	*C-7*

Significant vegetation growth and debris accumulation within gutter system section located at the north side of the west elevation	*C-8*
Loosely attached roof flashing member at the east side of the southern roof rake	*C-9*

Survey of Other Site Features

Site features were visually observed. Photographs were taken during the survey and are included in *Appendix D* of this report. Note that some of the conditions listed below were observed throughout and the selected photographs are representative of the respective conditions.

Table D – Other Site Features Observations	
Conditions Observed	**Reference Photos (Figures in Appendix D)**
Cracking, vegetation growth, and depressions in the parking lot area	*D-1 and D-2*
Cracking at the concrete masonry units, concrete decking, and stairs at the loading dock along the east elevation	*D-3 and D-4*

Conclusions and Recommendations

Based on the results of the limited visual survey of the subject structure, BillerReinhart believes that the condition of the structure can be described as fair. Significant wall cracking was observed along the west side of the south elevation and the west elevation (original structure). Vertical displacements of up to 2-inches at original to addition structure floor slab joint were observed; refer to *Figures B-12 and B-13*. Evidence of water intrusion was also observed. Regarding the exterior building envelope, surfaces are in need of cleaning, painting and sealing and the windows and doors, including roll-up doors, are in need of upgrade/replacement.

Remaining damages observed at the structure consisted of normal/expected age-related and use-related deterioration/damage of the exterior and interior portions of the structure. It also appears that the exterior of the building/building finishes may have been affected by Hurricane Irma in 2017, based on observed conditions.

BillerReinhart observed damage along the exterior and interior of the building, as well as various site features on the property which should be repaired. The following repairs should be performed at the property:

Exterior:

1) Repair wall cracking at the west elevation and the west side of the south elevation
   a) Cracking in masonry block mortar joints can be restored via repointed (tuckpointing) repairs
   b) Masonry blocks and lintels exhibiting cracking through face shell need to be removed and replaced – removal and replacement can be performed one block at a time
2) Seal non-structural cracks at all exterior elevations with an elastomeric joint sealant
3) Removal and replacement of the canopy system
4) Removal of tree branches bearing on canopy at northwest corner of building
5) Installation of soffit vent at separation between the roof surface and wall surface at the north elevation
6) Removal and replacement of overhead doors at south and east elevations
7) Removal and replacement of all doors and windows
8) Repair of metal wall panel with penetration along east elevation
9) Repaint all exterior elevations
10) Removal and replacement of metal flashing along north roof rake
11) Removal and replacement of corroded metal roof panels
12) Removal and replacement of gutter systems, including attachment supports and downspouts
13) Removal and replacement of protruding metal fastener(s) along the roof transition
14) Re-attachment of the loose roof flashing at the east side of the south roof rake
15) Removal and replacement of metal roof ventilation appurtenances

Interior:

1) Install elastomeric joint sealant at cracks within concrete slab
2) Repair concrete section at loading dock along east wall
3) Cleaning and coating of corroded metal members at the upper northwest corner of the structure
4) Cleaning and coating of steel columns and framing along the south wall
5) Cleaning and coating of corroded metal angle and wall panel along the east wall
6) Installation of new mezzanine railing system, including mezzanine stair railing
7) Removal and replacement of decayed mezzanine stairway landing members

BillerReinhart observed conditions that we believe should be evaluated further by professional consultants and recommendations obtained from them:

- Load analysis of mezzanine structure performed by a Structural Engineer
- Evaluation of exterior wall panel and roof panel fastening by a Structural Engineer to determine compliance with existing wind code
- Torn roof insulation – consultation with roof and architectural consultant

- Cracking and depressions within the parking lot - consultation with a licensed Civil Engineer
- Painting – for specific paint coating requirements, we recommend consultation with painting specialists
- Elevation differential at interior concrete slabs – we recommend further evaluation, including consultation with a licensed Geotechnical Engineer
- A water test/flood test of the existing roof system to test water-tightness.

All repair work recommended above if performed should conform to the 2017 Florida Building Code.

Closing

In addition to the above recommended repairs, BillerReinhart believes that a maintenance program should be developed and implemented for the exterior building envelope of the commercial building. The development and implementation of the maintenance program should include, at a minimum, the following:

- Development of a maintenance manual containing specifications, record drawings, product and warranty information, and maintenance information from manufacturers of the various components of the building.
- Periodic visual observations/walk-through surveys performed by an engineer with experience in the field of structural condition assessments of building envelope and building structure
- Preventative maintenance to reduce life-cycle repair expenses and to extend the service life of the office building.

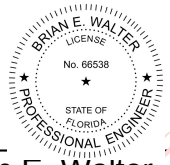
Neither the survey nor this report is intended to cover hidden defects, mechanical, electrical, or architectural features, nor environmental concerns. Unauthorized use of this report, without the permission of BillerReinhart, shall not result in any liability or legal exposure to Biller Reinhart Engineering Group, Inc.

Biller Reinhart Engineering Group, Inc. reserves the right to update the information contained in this report if deemed necessary due to modified site conditions or the availability of new/additional information.

Thank you for offering us the opportunity to provide our services for this project. Please contact our office if you have any questions regarding this report.

Sincerely,

Biller Reinhart Engineering Group, Inc.



DN: c=US, o=IdenTrust ACES Business Representative, ou=Biller Reinhart Engineering Group, cn=Brian E Walter, 0.9.2342.19200300.100.1.1=A01097C0000015DA3B5FB8A00014D9C
Date: 2018.10.10 14:59:42 -04'00'

Brian E. Walter
Principal Structural Engineer
FL P.E. No. 66538

Appendix A
Structure Exterior

Figure A-1

Figure A-2

Figure A-3

Figure A-4

Figure A-5

Figure A-6

Figure A-7

Figure A-8

Figure A-9

Figure A-10

Figure A-11

Figure A-12

Figure A-13

Figure A-14

Figure A-15

Figure A-16

Figure A-17

Figure A-18

Figure A-19

Figure A-20

Figure A-21

Figure A-22

Figure A-23

Figure A-24

Figure A-25

Figure A-26

Figure A-27

Figure A-28

Figure A-29

Figure A-30

Figure A-31

Figure A-32

Figure A-33

Figure A-34

Figure A-35

Figure A-36

Figure A-37

Figure A-38

Figure A-39

Figure A-40

Figure A-41

Figure A-42

Appendix B

Structure Interior

Figure B-1

Figure B-2

Figure B-3

Figure B-4

Figure B-5

Figure B-6

Figure B-7

Figure B-8

Figure B-9

Figure B-10

Figure B-11

Figure B-12

Figure B-13

Figure B-14

Figure B-15

Figure B-16

Figure B-17

Figure B-18

Figure B-19

Figure B-20

Figure B-21

Figure B-22

Figure B-23

Figure B-24

Figure B-25

Figure B-26

Figure B-27

Figure B-28

Figure B-29

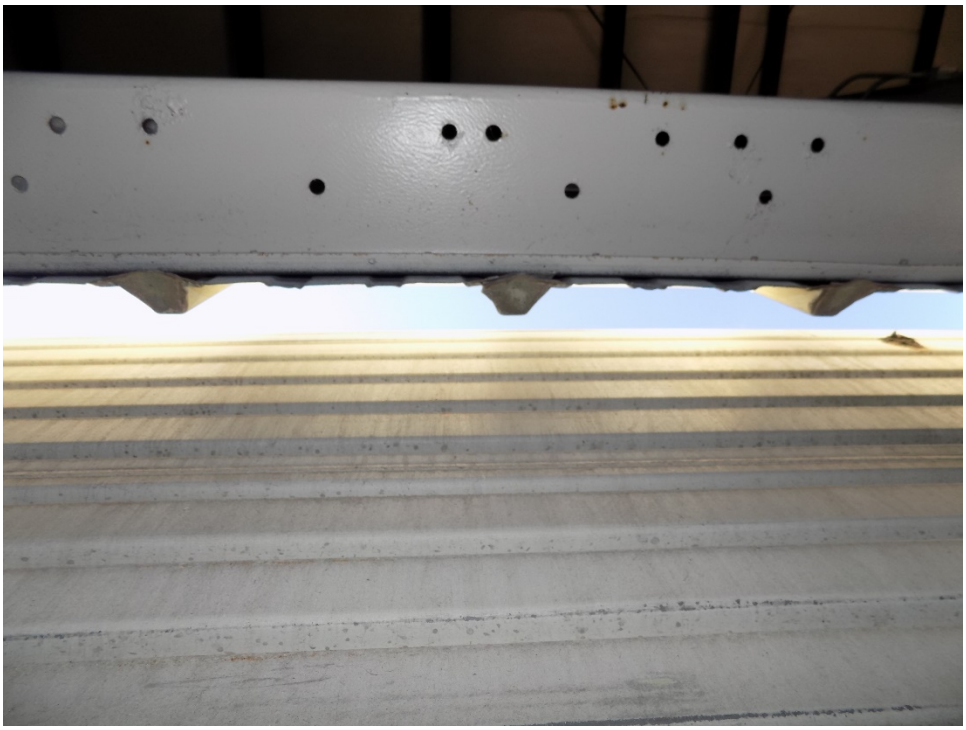


Figure B-30

Figure B-31

Appendix C

Roof System

Figure C-1

Figure C-2

Figure C-3

Figure C-4

Figure C-5

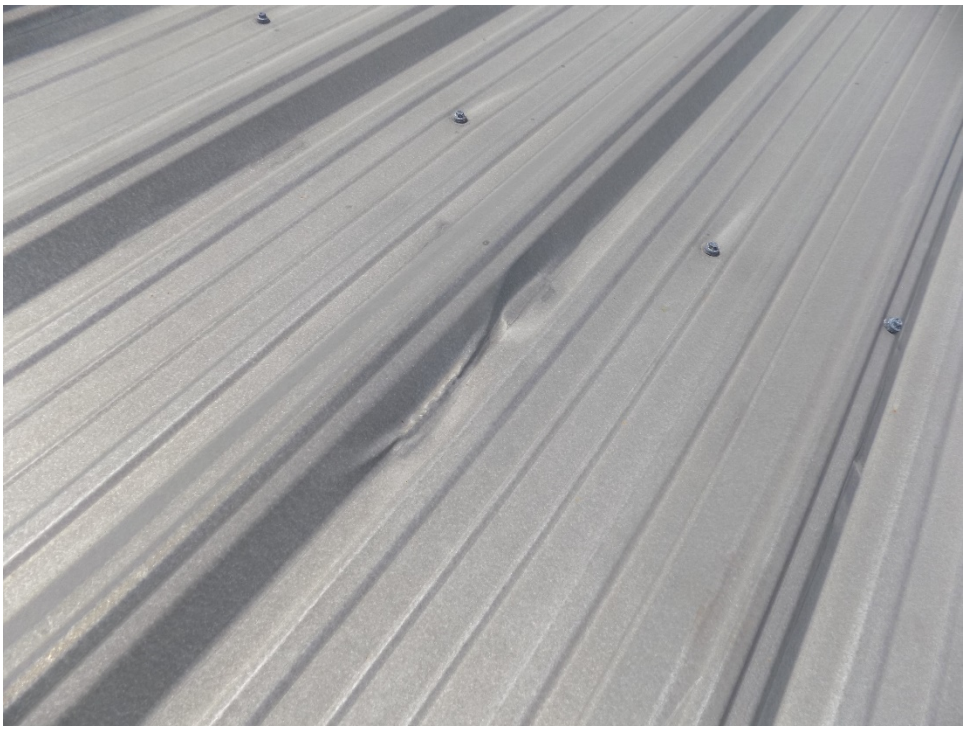


Figure C-6

Figure C-7

Figure C-8

Figure C-9

Appendix D

Other Site Features

Figure D-1

Figure D-2

Figure D-3

Figure D-4