EXPERT REPORT OF Roger Greenwald, AIA Re: , INC v. June 6, 2021

Assignment

I have been engaged by **Contractor**, INC. ("Owners") for case preparation, review of records, investigation, evaluation, assessment, analysis and preparation of an expert report. My rate is \$240/hour. This constitutes my expert report for my opinions relating to work performed by [Defendants] (the "Contractor") and its employees and contractors at

("Premises") and the cause of and liability for certain deficiencies described below. All statements contained herein represent my professional opinion made to a reasonable degree of certainty in the construction and architectural industry, based on the information available to me.

Summary of Experience

I am a registered and licensed Architect in the State of New York, and a national award-winning general contractor with over 40 years of experience in high-end residential design and construction. I founded Greenwald Cassell Associates, Inc., a licensed Class A General Contractor in the state of Virginia, in 1984, and was awarded the National Gold Medal for Full House Renovations Over \$500,000.00 in 2008 by the remodeling industry's leading trade journal, Qualified Remodeler Magazine. I have designed and constructed over 800 high-end projects. Based on my education, training, and experience, I am familiar with the relevant industry standards, practices and customs in the construction industry and architectural profession that exist now, and at the operative times at issue in this lawsuit. I am qualified to analyze and evaluate the project in question in terms of both the finished product and the construction process which produced it, and the defects discussed below.

Relevant Background

I visited the Premises on October 20, 2020 and inspected the state and quality of the construction performed by Contractor at the Premises, studied the defects present in the work in question, and compared the work as built to the plans, specifications, and documents, and to the Residential Code 2015 of New York State, which is the governing building code for this project. I have studied and evaluated the contractual obligations, roles, and actions of the parties concerned, as expressed in the written record and in the work itself and have considered the following documents, attached as appendices to this report:

1. Contract AIA Document A101-2017 between Owner and Contractor dated 15 December, 2018 (Appendix A)

- 2. Plans by Associates, dated 17 July 2018 (Appendix B)
- Construction Specifications by Associates, dated October 4, 2018 (appendix D).
- 4. Contract between Associates and the City of (Appendix E)
- 5. Various photographic evidence (attached as exhibits to this report)
- 6. Assessment of Damages

Based on my evaluation, I am able to provide the following observations and opinions:

General Observations: I observed and analyzed multiple material defects and deficiencies in the work which constitute clear violations of the building code, the contract, and accepted industry standards. Taken together, these defects and deficiencies constitute a failure to deliver the renovation promised to the Owners in the contract documents. These observed defects and deficiencies, the forensic analysis of the origins of these defects, and the adverse impacts of and remedies for these defects are described below.

CATEGORY I: FAILURES IN EXECUTION OF WORK PERFORMED BY THE CONTRACTOR

- 1. Electrical Defects:
 - 1.1. Observations: I observed and corroborate the findings of serious electrical defects by the third-party electrical inspector, Electrical Inspectors, LLC (attached as an appendix to this report):
 - 1.1.1. Improper wet location wire
 - 1.1.2. Unsecured BX cable
 - 1.1.3. Use of Non-Metallic (Romex) wire where MC wire is called for in the code
 - 1.1.4. Additionally, I observed loose open wires hanging from a vent in the exterior.
 - 1.1.5. Exterior lighting fixtures were installed misaligned, and asymmetrically, with severe aesthetic impact to the façade.
 - 1.2. Remedy: A licensed electrician must immediately perform a full survey of the electrical work and correct any and all violations of the electrical code, per contract. Exterior fixtures must be re-installed, which requires replacement of the wood trim panels into which they must be cut and set.

Conclusion: In my professional opinion, this project cannot be found to be substantially complete with these dangerous and uncorrected electrical defects. In my professional opinion, the observed electrical defects present serious code violations constituting a real and present threat of personal injury and property damage and should be corrected immediately. In my professional opinion, Architect of Record, **Mathematical Associates**, would have been negligent in approving the work with these dangerous electrical defects uncorrected. In my professional

opinion, the City of Middletown committed a negligent action in the issuance of any electrical inspection and certificate of completion with these serious and potentially life-threatening electrical defects uncorrected by the contractor.

- 2. <u>Windows:</u>
 - 2.1. Wrong Window Units Provided:
 - 2.1.1. Observation: I observed that the windows installed were wood windows, rather than the aluminum clad windows specifically called for in the contract documents. This is a material change with unacceptable adverse impacts to the owner regarding longevity, and maintenance of the windows. The wood windows are significantly cheaper than the wood windows, and require significant maintenance and upkeep not required by the more expensive aluminum clad widows included in the contract. As such, this change required written agreement by the Owners, which, on information and belief, was neither sought nor obtained.
 - 2.1.2. Remedy: The wood windows must be replaced by the aluminum windows specified in the contract.
 - 2.2. Improper Window Installation:
 - 2.2.1. Observation: I observed that the windows were improperly installed per industry standards and code. I concur with the findings of Messrs. (attached as exhibits to this report).
 - 2.2.1.1. The building code clearly states: "1405.4 Flashing Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies". No butyl tape flashing was installed as required by code (see above), by manufacturer's recommendations, and by industry standards. I observed open gaps between the window and the framing which permitted unimpeded water infiltration, air infiltration and heat loss, and access for vermin. This condition guarantees rot, energy waste. It also offers insects and vermin unimpeded access to the interior.
 - 2.2.1.2. I observed that the windows were incorrectly sized, and incompetently infilled.
 - 2.2.1.3. I observed improper shimming and fastening, including a lack of proper shims and improper nailing through the head jamb, which binds the window.
 - 2.2.1.4. The windows were finished in an unworkmanlike manner, with rough exposed materials, gaps, and improper joints. (see Paragraph 5, Finish Carpentry, below)
 - 2.2.2. Remedy: The proper windows must be installed by skilled and qualified workers consistent with the specifications, code, manufacturer's recommendations, and industry standards.
- 3. Substandard Masonry Work

- 3.1. Observations: I observed a generalized and egregious failure of workmanship in the execution of the masonry restoration as required in Section 04520 of the specifications (attached as an exhibit to this report). This section clearly sets forth the normal and accepted industry standards for masonry restoration. The observed work grossly violated these standards.
 - 3.1.1. The above referenced specifications, subsecton 3.4 on page 7 of the specifications, titled : "Repointing Joints" states: "A. The Contractor shall take all precautions required to ensure the original appearace of the building is maintained...." This was clearly not done. (See photograph P[x] attached as an exhibit to this report). Mismatched mortar was left improperly tooled and smeared over the surrounding bricks in an unskilled and unworkmanlike manner. Furthermore, the 4 pages of specific standards of work set forth in the specifications were clearly ignored, and/or violated in the execution of the work. To summarize these four pages of clearly specified standards: the contract and industry standards require that the joints between bricks be cleaned of loose and/or crumbling morter, and new mortar applied with tooling pressure in a skilled and workmanlike manner. The joints I observed were variously left unpointed, or improperly pointed. The joints were not properly tooled, and excess mortar was left smeared on the finished surface of the façade. This work fails to meet the most basic standards of acceptability in the contract, the construction industry and the architectural profession, and would properly be rejected both by the supervising architect and the owner.
- 3.2. Remedy: The brick façade must be cleaned, and improperly tooled joints raked and cleaned per architect's specifications, loose and missing bricks handled per architect's specifications, and the facade properly repointed, and left in a finished manner acceptable by the contract specifications and industry standards.

4. <u>Illegal Entrances</u>

- 4.1. Observations: I observed that the contractor had left the front entrances misaligned with the masonry openings, creating serious trip and fall hazards and a condition non-compliant with the legal requirements of the ADA. This gross violation of the ADA law restricts the use of the premises by large classes of physical disabilities. The Owners are therefore subject to extreme liability under the ADA law and non-ADA tort litigation.
- 4.2. Remedy: The sidewalk must be removed and replaced in a manner compliant with the ADA law, and accepted industry standards, and the entrances reconfigured for ADA compliance.

- 5. <u>Improper Finish Carpentry</u>: The overall quality of finish carpentry work observed generally and materially failed to meet the contractually specified standards, and the most basic standards of acceptable quality generally accepted in the construction industry and the architectural profession. Furthermore, the level of this failure is sufficiently clear and obvious as to constitute negligence on the part of the Contractor in the fulfillment of his contract with the owners.
 - 5.1. Section 06200 of the architect's specifications, 1.03.A, titled "QUALITY ASSURANCE", states: "Perform work in accordance with AWI premium quality." This reference to the Architectural Woodwork Institutes standards of quality was egregiously violated. Finish joinery was crudely executed in an unskilled and unworkmanlike manner. Rough raw edges were left exposed. Joints did not align. Gaps were left exposed.
 - 5.2. Section 01001, Basic Requirements of the architect's specifications, I.1 states: "*All work to be done by people skilled in their trades*". It is clear to a reasonable person that the work performed was executed by people who lacked basic skills of their trades.
 - 5.3. The overall impact of the unskilled and unworkmanlike finish work degrades the premises rather than renovating it as required in the contract.
- 6. <u>Improperly Executed Paint Work</u>: The painting on the job egregiously failed to meet the standards set forth in the contract and failed to meet the most basic standards of the industry.
 - 6.1. Observations: Section 09900 of the architect's specifications, Part 3, titled "EXECUTION", clearly sets forth the standards of care and quality required for the performance of the paint phase of the work. The contractor egregiously failed to even approach these standards.
 - 6.1.1. Subsection 3.02 of the above cited specification, titled "Preparation", requires sanding and cleaning of surfaces to be painted. The required preparation in this case was observably deficient, and in many cases, totally lacking. Paint was slopped over unsanded and unprepared joints throughout the work.
 - 6.1.2. Subsection 3.03, titled "Application" requires a uniform and defect free application of paint. This was clearly not achieved. The overall effect of the paint job fails to rise to the level required by any reasonable definition of a renovation.
 - 6.2. Remedy: The entire project must be professionally cleaned and repainted according to the standards set forth in the architect's specifications and industry standards.

CATEGORY II: NEGLIGENT ERRORS AND OMISSIONS OF THE ARCHITECT

- 1. <u>General Negligence</u>: In my professional opinion, the architect was negligent in the execution of his duties as set forth in his own General Conditions, 01000, which is a contract document listed in A101, Article 9:
 - 1.1. The architect failed to properly represent the interests of the Owners as required on page 17of his own General Conditions, 01000.27, to wit:
 - 1.1.1. "The ARCHITECT shall act as the OWNER'S representative during the construction period". And:
 - 1.1.2. "He [the ARCHITECT] shall interpret the intent of the CONTRACT DOCUMENTS in a fair and unbiased manner. And:
 - 1.1.3. "The ARCHITET will make visits to the site and will endeavor to determine, in general, if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.
 - 1.1.4. In my professional opinion, based on my interpretation of the standards of the architectural profession, the fact that the architect contracted with the City of

obligations set forth in his own contract documents governing the architect's responsibilities to the Owners, and, on information and belief, the Owners did in fact place reliance on the role and duties of the architect to protect their interests as set forth in the above referenced contract documents prepared by the architect and signed by the Owners. Furthermore:

- 1.1.4.1. On page 1 of 2, of the Advertisement for Bids, included by the architect in his contract documents, it is clearly stated that: "*The Office of Economic and Community Development is not the OWNER. Individual property Owners are listed on the separate bid forms.* Therefore, it must be assumed that the Owners listed in A101, i.e., **Development**, Inc. is the Owner referred to in the architect's General Conditions and Specifications, and that as Owners, they were entitled to place full reliance on the architect for the proper execution of his duties as set forth in the architect's own contract documents.
- Failure to Enforce the Contract in Regard to the Windows: In my professional opinion, the architect acted negligently and without regard to the requirements of the contract governing changes in the windows in his failure to object to the changes in the windows discussed below.
 - 2.1. The architect, to the extent that his periodic inspections of the job may be reasonably assumed and required by the General Conditions, was or should have been aware that the

windows were downgraded by the contractor from more expensive aluminum clad windows to cheaper wood windows, in violation of the contract documents. This substitution clearly qualifies as a "Substitution", as defined in 8.1 of the architect's general conditions. According to the contract, "Substitutions" are only permitted in . the event that, "...*in the opinion of the ARCHITECT, such material, article or piece of equipment is of equal substance, quality, performance, and function to that specified*". The substitution of wood windows for the specified aluminum clad windows clearly fails to meet that standard. It is an inferior product for the purposes of the Owners due to high maintenance cost of painting every five years, and the deterioration and shortened life if maintenance is delayed or imperfectly performed. In short, this improper substitution saved the contractor significant money, and cost the Owners significant money. Nevertheless, this substitution was negligently permitted, whether actively or passively, by the architect, violating the architect's obligation to interpret the contract documents in a fair and unbiased manner.

- 2.2. To the extent that the architect in any way approved or failed to object in any phase of this project after the installation of the windows, such approval by the architect of this material downgrade would be considered negligent according to any reasonable standard of the industry. To the extent that it is found that the City of **Constant** issued the Certificate of Occupancy in reliance on the lack of objection of the architect, the architect bears significant responsibility for the improper issuance of the Certificate of Occupancy.
- **3.** <u>Failure of the Architect to Address the Legal Requirements of the ADA</u>. The architect acted negligently in failing to clearly address the legal requirements of the ADA law in the design of renovations of the entrances to the premises. The plans show absolutely no concern for the fact that the entrances as designed would require major work to achieve compliance with the laws of the ADA regarding accessible entrances. The architect provided no guidance to the contractor alerting him to the requirements of the ADA law regarding accessible entrances, and the plans show no design solution for the issues which the changes in the entrances automatically triggered in the ADA law. In fact, the contractor proceeded to leave owners with an egregiously non-compliant, unsafe, and inaccessible entrances, with the following adverse impacts:</u>
 - **3.1.** The entrances fail to meet ADA standards, thus subjecting the Owners to extreme risk of litigation under the ADA laws. This fact has been noted in the report of the Owner's insurance agency, attached as an exhibit to this report.
 - **3.2.** These non-compliant entrances present a serious risk of trip-fall injury to the public.
 - **3.3.** The entrances are inaccessible and dangerous to people using a wheelchair or who are otherwise physically impaired.
- 4. <u>The Architect Negligently Failed to Perform His Contractual Duties</u> as set forth in paragraph 27 of the architect's own Construction Specifications, to wit:

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- **4.1.** 27.1: "*He [the architect] shall interpret the intent of the CONTRACT DOOCUMENT in a fair and unbiased manner.*" It is clear that by failing to uphold the clear intent of the contract documents upon which the Owners reasonably relied, in the face of generalized and egregious failure of the Contractor to perform, and to the extent that the architect actively or passively facilitated (1) the failures of the contractor in the execution of the work, and (2) failed to object to the City of **Contractor** improper issuance of a certificate of occupancy, the architect acted in an unfair and biased manner. He effectively favored the interests of the contractor to the detriment of the interests of the Owners.
- **4.2.** Also, from 27.1: "*The ARCHITECT will make visits to the site and will endeavor to determine, in general, if the WORK is proceeding in accordance with the CONTRACT DOCUMENTS.*" Whether the architect failed to properly conduct effective visits to the site, or whether he failed to act in defense of the contract in the face of egregious failures of the contractor to perform, the architect was negligent in the fulfilment of his duties, according to the letter of the contract and the prevailing common-sense standards of the architectural profession.
- **4.3.** 27.2 of the General Conditions states: "*The CONTRACTOR will be held strictly to the intent of the CONTRACT DOCUMENT in regard to the quality of materials, workmanship and execution of the WORK.* The architect was negligent in failing to hold the contractor to the intent of the contract in all of the failures cited in this report.
- 5. <u>The Architect acted negligently to the extent that his failure to raise proper objections was a factor in the issuance of various inspections and the Certificate of Occupancy by the City.</u> (See CATEGORY III, Improper Actions of the City of Middletown, below)

CATEGORY III: IMPROPER ACTIONS OF THE CITY OF MIDDLETOWN

- 1. <u>Improper Issuance of Certificate of Occupancy</u>: The City of **Departure** Building Department acted negligently in the issuance of a Certificate of Occupancy. The definition of "Substantial Completion" generally accepted in the architectural profession, is " *the stage in the progress of the Work where the Work or designated portion is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use*". The failure of the contractor to provide a safe and legal entrance to the premises is, on its face, a failure to achieve substantial completion. Therefore, the City of was negligent in issuing a Certificate of Occupancy for the Work.
- 2. <u>Improper Issuance of Electrical Inspection</u>. The existence of clear violations of the electrical code, as documented by the report of the third-party electrical inspector and confirmed by my own observations is clear evidence that the City of was negligent when it approved the electrical inspection. The negligent approval of the electrical work in turn

contributed to the cascade of negligence on the part of the City of which led to their negligent issuance of a Certificate of Occupancy.

3. <u>Improper issuance of thermal envelope inspection (AKA close-in inspection)</u>. The City of inspected the installation of the windows, and either saw or should have seen that the windows were installed incorrectly, with a resultant breach of the thermal envelope, contrary to code and industry standards. The issuance of the building inspection relating to the windows and thermal envelope was therefore on its face negligent. This negligent act contributed to the cascade of negligence on the part of the City of which led to their negligent issuance of a Certificate of Occupancy. "1405.4 Flashing Flashing shall be installed in such a manner so as to prevent moisture from entering the wall or to redirect that moisture to the exterior. Flashing shall be installed at the perimeters of exterior door and window assemblies"

In conclusion, in my professional opinion, the Owners suffered severe damages due to a cascade of negligence, originating with the architect's failure to fulfil his contractual obligations, continuing with the contractor failing to execute the contract documents as required, and culminating with the City of the negligently declaring the project ready for the use for which it was intended. The entire purpose of the State supported Façade Improvement program was defeated by the very entities on which the Owners were entitled to rely. The interests of the Owners were thereby damaged.

CATEGORY IV: DAMAGES

I have reviewed and analyzed Plaintiff's bids for the correction of damages relative to the above described defects:

- 1. Bid of Carmello Giacchi, licensed electrician:
 - 1.1. In my professional opinion, the bid of Mr. correctly identifies the NYS electrical code violations cited in the report above.
 - 1.2. In my professional opinion, the corrective measures proposed by Mr. appropriately address said NYS electrical code violations, and are required to render the property safe and habitable.
 - 1.3. In my professional opinion, the prices quoted in Mr. **Security** s proposal for these corrections are slightly below market, and represent a fair and reasonable cost for the correction of said code violations.
- 2. Bid of Sara Construction:
 - 2.1. Window replacement:
 - 2.1.1. In my professional opinion, the bid of Construction to remove, and replace the affected windows, and to perform the corrections to the underlying weatherproof envelope which I observed to be defective is a fair and reasonable price.

2.1.2. In my professional opinion, the aforementioned work is necessary to render the property code compliant and to bring it into compliance with the contract.

2.2. Cornice repair:

- 2.2.1. In my professional opinion, the bid of Construction to bring the current substandard cornice work into compliance with the contract and industry standards correctly identifies the substandard and non-complaint violations of the contract noted in this report.
- 2.2.2. In my professional opinion, the bid of Construction is substantially below market and represents a fair and reasonable price for said work.
- 2.3. Storefront replacement:
 - 2.3.1.
 - 2.3.1.1. In my professional opinion, the bid of Construction for the replacement of the improperly installed storefront windows and doors appropriately identifies and corrects the defects in the installation and is required to bring the property into compliance with the contract and with code.
 - 2.3.1.2. This bid also includes correction of the entrances to bring said entrances into compliance with the ADA laws.
 - 2.3.1.3. In my professional opinion, the combined bid of Construction for Storefront replacement and the ADA correction and the correction of the non-complaint entrances is substantially below market. I have advised Plaintiff that if Sara were to fail in delivery, she might have difficulty getting this work done for twice the quoted price from a qualified contractor.
- 2.4. Signs:
 - 2.4.1. In my professional opinion, the bid of Construction correctly identifies and proposes appropriate correction to the sign installation.
 - 2.4.2. In my professional opinion, the bid of Construction, the price quoted is substantially below market value for the work required.
- 2.5. Bricks:
 - 2.5.1. In my professional opinion, the bid of Construction is a fair and reasonable market price for the correction of the improper brick restoration required by the contract.
 - 2.5.2. Scaffolding:
- 2.5.2.1. In my professional opinion, the bid of Construction correctly prices the cost of the required scaffolding with proper OSHA protections for 3 weeks. I note that the bid places Plaintiff at risk for additional cost should the project be held up due to conditions beyond the control of the control of

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STATEMENT REGARDING NATURE OF REPORTS

Matters set forth herein are not final in nature. As additional information is obtained, the opinions and statements set forth herein could be supplemented or be refined.

List of Appendices:

A-1: PROPOSAL OF TO CITY

A-1-B PROPOSAL ANNOTATED BY RGA

A-2 SPECIFICATIONS

A-3 GENERAL CONDITIONS

A-4 PLANS

P-1-P21 PHOTOGRAPHIC DOCUMENTATION

B-1 BID- ELECTRICAL

B-2 BID- CONSTRUCTION

Respectfully,

Roger Greenwald, AIA

Licensed Architect