

TAKEOVER AGREEMENT

This Takeover Agreement ("Takeover Agreement") is entered into between Liberty Mutual Insurance Company ("Surety" or "Completing Surety"), and the Board of County Commissioners of Broward County, Florida ("County").

W I T N E S S E T H:

WHEREAS, R.C. ALUMINUM INDUSTRIES, INC. ("RCAI"), and the County entered into a contract ("Original Contract") for RCAI to furnish all labor, equipment, materials, and perform all work for Broward County Main Library Wind Mitigation ("Project") in accordance with the terms and provisions of the Original Contract, including all contract documents forming a part of the Original Contract; and,

WHEREAS, RCAI and the Surety made, executed and delivered to the County both a payment and a performance bond, identified as Bond No. 964 114 984 (collectively, the "Bond") in the penal sum of \$8,058,043.00 (which was later increased by rider to \$10,020,951.05); and,

WHEREAS, the County, by letter dated November 13, 2013, informed RCAI that the County had terminated RCAI on the Project, which took the prosecution of the work out of the hands of RCAI before full and final completion of the work on the Project. The County has demanded that the Surety complete the Project under the terms and conditions of the Bond; and,

WHEREAS, in response to the County's demand, Surety promptly investigated the County's assertions; and

WHEREAS, the Surety, through the engagement of a completion contractor (the "Completion Contractor"¹), is willing and able to undertake the completion of the Original Contract, which is one of Surety's options under the Bond, as modified or provided for in this Takeover Agreement, provided (among other things described herein) that the County agrees to pay the unpaid balance of the Original Contract to the Surety (subject to adjustment for change orders or variations of the estimated quantities) as the work progresses (as more fully described herein).

TERMS OF AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants, agreements, and undertakings and for other good and valuable consideration, the receipt and sufficiency being hereby acknowledged, the County and the Surety mutually agree as follows:

1. Each of the above recitations is true and correct, and is incorporated into this Takeover Agreement as if fully set forth herein.

¹ The definition of "Completion Contractor" includes all subcontractors, laborers, materialman, or rental equipment providers, or persons that any of them shall retain, or that Completion Contractor retains, to perform the work called for in the Completion Agreement, which the Surety and Completion Contractor have or will enter into with respect to the Project.

2. The Surety and County represent and warrant to each other that they are authorized and empowered to enter into this Takeover Agreement.

3. The Bond and the Original Contract, including all plans, specifications, and other contract documents as defined therein, are incorporated by reference, and are made a part of this Takeover Agreement, except as otherwise provided for herein. If any provisions of the Takeover Agreement conflict with the provisions of the Original Contract (and all documents that make a part of the Original Contract, including change orders), the provisions of this Takeover Agreement shall control.

4. The Surety agrees to have the Completion Contractor perform and complete the following work, and only the following work, to complete the physical work left to be performed on the Project:

- The work remaining in the Original Contract and all work required by Change Orders 1 through 30, Construction Change Directives 1 through 7, and Consultant's Supplementary Instructions 2 through 20 issued by the County or County's architect (the "Completion Work"). The County and its Consultant, Saltz Michelson Architects, have made a good faith effort to identify the Completion Work, and have listed what they believe to be the Completion Work in a document titled "List of Remaining Work to Complete the Project" prepared by the County and Saltz Michelson Architects dated November 18, 2013 (the "Completion Work"), which is attached hereto as **Exhibit "A."**

The Surety also agrees to have the Completion Contractor provide the County with the following close-out documents at the time identified in the Original Contract, and only the following close-out documents:

- The close-out documents identified in the Original Contract. The County has made and Saltz Michelson Architects have made a good faith effort to identify the required close-out documents, which include the close-out documents referenced in the "List of Close-Out Documents," (hereafter, the "Close Out Documents"), which is attached hereto as **Exhibit "B."**

The Completion Work and the preparation of the Close-Out Documents are collectively referred to herein as the "Scope of Work."

5. The County acknowledges that the Surety, by its execution of this Takeover Agreement, is acting in its capacity as surety for RCAI, and is making arrangements for the performance and completion of the Scope of Work through a completion contractor, and is not itself acting as a completing contractor, and that the Surety is not assuming any obligations or liabilities beyond those contained in the Bond or contained in this Takeover Agreement.

6. The County acknowledges that Surety cannot, and will not, guaranty a completion date for the performance of the Scope of Work. Surety will endeavor to negotiate with the Completion Contractor a completion date. In addition to those contained herein, in order to expedite the completion of the Scope of Work, County may need to modify certain timelines,

conditions, or requirements of the Original Contract, including but not limited to those related to deliverables and Close-Out Documents. Such required modification (in addition to those provided herein) can be agreed to in writing between Surety and County as they become known. The Completion Contractor shall endeavor to substantially complete the Scope of Work within twenty (20) calendar weeks from the date it receives a Notice to Proceed from the Surety and shall endeavor to attain final completion within four (4) calendar weeks from substantial completion. The Surety shall issue a Notice to Proceed within five (5) days after receiving a Notice to Proceed from the County following the County's approval of this Agreement. The Parties acknowledge that if, for any reason, Completion Contractor fails to complete the Scope of Work and/or attain final completion within the estimated time frame referenced in this paragraph, that such failure shall not be deemed a breach by the Surety of this Agreement. The Surety reserves all rights and defenses with respect to the performance of the Scope of Work, including but not limited to the claim or defense that certain items contained within the Scope of Work are not part of the Original Contract, or that the County removed certain items from the Original Contract, and as a result, the Surety is not liable under the Bond for such items. The Surety will ensure that Completion Contractor performs the Scope of Work under a full reservation of all of the Surety's rights and defenses. As to such items, the Surety reserves the right to make a claim as part of its final pay application to the County for the County to reimburse the Surety for all work of the Completion Contractor, or assert the cost of such work as a setoff or backcharge for any liability that the County asserts against RCAI or Surety related to the Project.

7. Except as otherwise modified by this Takeover Agreement, the County acknowledges that the Surety will subcontract the performance of each and every one of the terms, covenants, and conditions of the Original Contract and this Takeover Agreement, including all modifications thereto, to the Completion Contractor. The Completion Contractor shall be subject to the terms and conditions of the Original Contract as if it had originally executed the Original Contract, except to the extent otherwise provided in this Takeover Agreement or the Completion Contract between the Surety and the Completion Contractor (the "Completion Contract"). The Surety may satisfy the required insurance obligations under the Original Contract by providing evidence of the required insurance coverage carried by the Completion Contractor. The Completion Contractor shall be an independent contractor of the Surety, and no contractual relationship pursuant to this Takeover Agreement shall exist between the County and the Completion Contractor. The County shall recognize the Completion Contractor only in the capacity of a subcontractor of the Surety.

8. The Surety shall be represented at the Project by Forcon International Corp. ("Authorized Representative"). Prior to the issuance of the Surety's Notice to Proceed to the Completion Contractor, the Surety shall provide the County with written notice of the individual with the Completion Contractor ("Authorized Individual") authorized to communicate with the County solely for day-to-day construction issues with respect to the Project. The Authorized Individual does not, and shall not, have any authority to bind the Surety to any obligations, and is not an agent or representative of the Surety.

9. The County and the Surety agree that as of the date of this Takeover Agreement:

- (a) The authorized amount of the Original Contract, including all approved Change Orders, is in the sum of \$10,040,723.07.
- (b) RCAI has been paid the sum of \$9,645,477.63.
- (c) The "Contract Balance" shall be hereinafter defined as the sum of \$395,245.44 [subsection (a) minus subsection (b)].
- (d) The Contract Balance shall be increased or decreased, as appropriate, as a result of any Change Orders / Change Orders for extra work (work that is different from, in excess of, or beyond the scope of the Scope of Work) requested or required by the County after the date of the execution of this Takeover Agreement, and such change orders are governed by paragraph 11 herein.
- (e) As of the date of the execution of this Takeover Agreement, the County represents and warrants that, to the best of its knowledge and ability based upon the records available to it, that the Contract Balance as defined herein is accurate. The Surety reserves the right to verify and confirm the accuracy of the Contract Balance. The Surety's sole remedy against the County for breach of this representation and warranty is reformation of the Contract Balance to the proper amount.
- (f) Unapproved requested change orders/supplemental agreements by RCAI are in the sum of at least \$1,393,273.98 (i.e. RCAI has requested at least \$1,393,273.98 in additional funds, plus weather days, in COR #49R1). RCAI may have other claims or defenses that it can assert against the County, including additional amounts for unapproved change orders. The County, the Surety, and RCAI each reserve all rights and defenses in full with respect to the unapproved requested change orders and other claims or defenses that RCAI (or the Surety as assignee or subrogee to RCAI's rights) may be able to assert against the County. Surety asserts that there are change orders to the Original Contract that County has not approved but that should be approved. The County asserts that there are back charges and other claims that it has and has notified RCAI and the Surety of such back charges and claims, including but not limited to those identified in the "List of Pending Deductive Change Orders and Back Charges" attached as **Exhibit "C"**. The parties have agreed to reserve their respective rights, claims and defenses (and the rights, claims and defenses of RCAI) for such matters, whether or not specifically listed or identified above, and are entering this Takeover Agreement now so as not to delay the completion of the Scope of Work.

10. The County agrees that the Contract Balance is dedicated to and will be applied as payment for the completion of the Scope of Work pursuant to this Takeover Agreement. The County shall pay directly to the Surety the Contract Balance, plus or minus any additional

amounts of money on account of any modifications to the Scope of Work requested and authorized by the County, as the work progresses, subject to all of the terms and conditions of the Original Contract, except as provided herein. The County shall not withhold any amount of the Contract Balance from the Surety as retainage (and all amounts that the County previously withheld from RCAI as retainage are now part of the Contract Balance). The County agrees that the Completion Contractor shall sign applications for payment as the contractor and that Surety may sign the applications as performing surety. The County will pay the Surety within 30 days of a receipt of a payment application from the Surety, the full amount requested in the payment application for the cost to perform the Scope of Work, plus the cost for all Change Order work (as defined below), through the date listed in the application. Surety agrees to expend its own funds as may be necessary from time to time to pay for the Completion Contractor to perform the Original Contract (except as provided herein), and the Scope of Work, in the event that the Contract Balance is insufficient, and the County acknowledges that any such payments are credited against the penal sum of the Bond. Notwithstanding any provision in the Original Contract to the contrary, the County agrees to release the Contract Balance, which includes retainage, to the Surety when and as due under this Takeover Agreement. In consideration of the Contract Balance being paid by the County to the Surety, as provided herein, the Surety agrees to (a) ensure that the Completion Contractor complies with the obligations of the Original Contract (except as provided for herein or in the Completion Contract), and (b) comply with this Takeover Agreement.

11. All change orders prepared after the date this agreement is fully executed must be executed and delivered by the Surety and the County. The Surety's Authorized Representative, and the Authorized Individual, shall have on behalf of the Surety the authority to negotiate, but not to sign, change orders for extra work (i.e. work that is different from, in excess of, or beyond the scope of the work listed in the Scope of Work) requested or required by the County ("Change Orders" or "Change Order"). The Surety hereby designates the Authorized Representative to review and negotiate any contract modifications, and assist in the resolution of disputes that may arise during the performance of the Scope of Work. The County agrees that Surety need not sign pay requisitions submitted to the County, and that they may be signed on Surety's behalf by the Authorized Representative. Except as expressly provided for in this paragraph, neither Completion Contractor, nor the Authorized Individual, nor the Authorized Representative shall have any authority to sign Change Orders or modifications to this Takeover Agreement without Surety's prior written approval delivered to both the Authorized Representative and County. However, Surety shall have the option, but not the obligation, to have any Change Order work performed (i.e. the Surety is not obligated to agree to perform or have performed any Change Order work). Moreover, Surety shall have the authority to make final decisions as it relates to the completion of the Scope of Work and any agreed upon Change Order work.

12. Payments from the County under this Takeover Agreement or the Original Contract shall be made to the Surety and transmitted to the Surety at the following address, unless and until the County is notified in writing of any different address:

Liberty Mutual Insurance Company
Attention: James Rumpf
2055 Sugarloaf Circle
Duluth, GA 30097

13. The County agrees that Surety's total aggregate liability under the Bond, whether for the performance of the Original Contract, performance under the Bond, performance under this Takeover Agreement, payments to Completion Contractor for its work, including the Completion Contractor's fee, on the Project on a Time and Materials basis before Completion Contractor received a notice to proceed from the Surety, or for any claims, liens, suits or demands by any persons or entities furnishing or alleging to have furnished labor and/or materials to the Project, shall not exceed the penal sum of the Bond, which was increased by rider to its current amount of \$10,020,951.05. All payments made by the Surety pursuant to the Bond, and all costs and expenses incurred by Surety in connection with the completion of this Project, including but not limited to payments for the Completion Contractor or others to complete the Scope of Work (whether under the Completion Contract or on a Time and Materials basis), for consultants' fees, and to claimants entitled to payment for labor, services, materials, equipment or supplies under the Bond, which will all be credited toward and reduce the penal sum of the Bond.

14. Insofar as the County has any right, title or interest therein, the County agrees that the Surety and the Completion Contractor shall have the right to use, without charge, any of the equipment, materials and appurtenances furnished or supplied by RCAI which may be stored on or about the premises of the Project site, or materials which may have been fabricated for the County and/or Project in connection with the Original Contract, whether or not presently upon the Project site.

15. The provisions of the Bond shall remain in full force and effect in accordance with its terms and conditions. Nothing in this Takeover Agreement constitutes a waiver of such penal sum or an increase in the liability of the Surety under the payment and performance provisions of the Bond.

16. This Takeover Agreement is solely for the benefit of the County and the Surety. The County and the Surety do not intend by any provision of this Takeover Agreement to create any rights, nor to confer any benefit upon or confer any enforceable rights under this Takeover Agreement or otherwise, upon anyone other than the County and the Surety. Specifically, the County and Surety acknowledge that nothing in this Takeover Agreement shall extend or increase the rights of any third-party claimants or the liabilities or obligations of Surety under the Bond. Likewise, the Completion Contractor has no contractual rights pursuant to this Takeover Agreement and no contractual relationship shall exist between the County and the Completion Contractor.

17. Save and except for the Bond, this Takeover Agreement constitutes the whole of the understanding, discussions, and agreements by and between the County and the Surety upon the subject matter contained herein. The terms and provisions of this Takeover Agreement are contractual and not mere recitals. The County and the Surety acknowledge that there have been no oral, written or other agreements of any kind as a condition precedent to or to induce the execution and delivery of this Takeover Agreement. Any written or oral discussions conducted prior to the effective date of this Takeover Agreement shall not in any way vary or alter the terms of this Takeover Agreement.

18. This Takeover Agreement shall not be changed, amended, or altered in any way except in writing and executed by both the County and the Surety.

19. This Takeover Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original. Facsimile or electronic signatures shall be treated as original signatures for all purposes.

20. This Takeover Agreement shall be construed and interpreted in accordance with the laws of the State of Florida.

21. Any notices that are required to be given by the terms of this Takeover Agreement, the Original Contract, or the Bond, shall be made as follows:

As to the County:

Via certified mail, return receipt requested,
postage prepaid to:

Attn: Ms. Ariadna Musarra, A.I.A, LEED AP, Director
Broward County Public Works Department
Construction Management Division
115 S. Andrews Ave., Room A550
Ft. Lauderdale, FL 33301

With a copy to:

Michael Kerr, Esq.
Broward County Attorney
115 S. Andrews Ave., Ste. 423
Ft. Lauderdale, FL 33301

As to the Surety:

Via certified mail, return receipt requested,
postage prepaid to:

Liberty Mutual Insurance Company
Attention: James Rumpf
2055 Sugarloaf Circle
Duluth, GA 30097

With a copy to:

Brandon J. Held, Esq.
Mills Paskert Divers
100 North Tampa Street, Suite 3700
Tampa, FL 33602

22. The failure of any party to exercise in any respect a right provided for in this Takeover Agreement shall not be deemed to be a subsequent waiver of the same right or any other right.

23. This Takeover Agreement shall be binding upon the parties and shall inure to the benefit of themselves and their respective successors and assigns.

24. In the event that one or more of the provisions of this Takeover Agreement shall be declared to be invalid, illegal or unenforceable in any respect, unless such invalidity, illegality or unenforceability shall be tantamount to a failure of consideration, the validity, legality, and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired thereby.

25. It is understood and agreed by the County and the Surety that this Takeover Agreement shall be construed without regard to any presumption or other rule requiring construction against the party causing this Takeover Agreement to be drafted.

26. Neither this Takeover Agreement nor any provision herein shall be deemed or construed to be an admission or concession of liability of any kind or nature by RCAI, the Surety or the County, or a waiver or release of any rights, claims or defenses of RCAI, the Surety or the County including, but not limited to, claims that the determination that RCAI had defaulted was improper and invalid, claims for delay, additional costs, and other claims for additional compensation or time extensions; all of which claims, rights, and defenses of RCAI, Surety and County are specifically reserved, it being the understanding and intention of the parties that any rights, claims, or defenses which have been made or which may be made in relation to the Original Contract, including but not limited to alleged breaches thereof by RCAI on the one hand, and the County or others on the other, are in no way affected by this Takeover Agreement, and that by entering into this Takeover Agreement are fully reserved.

27. In no event shall the County withhold any of the Contract Balance from the Surety because of or on account of any claims, liens, suits or demands by any persons or entities furnishing or alleging to have furnished labor and/or materials to the Project, or for any other reason that the County could have withheld any portion of the Contract Balance under the Original Contract. The Bond shall remain in full force and effect in accordance with its terms and provisions. All Bond payments properly made by Surety on account of such claims shall be credited against the penal sum of the Bond.

28. Nothing in this Agreement shall be deemed to waive, alter, limit, modify, alter or abridge any of the Surety's rights, claims or remedies, including but not limited to those against the following: (a) RCAI, (b) the indemnitors under any agreement of indemnity between the Surety, RCAI and such indemnitors, (c) RCAI and/or any other persons under any other contract between them, (d) at law, (e) or in equity.

IN WITNESS WHEREOF, the parties have executed this Takeover Agreement on the date indicated above, and each of the undersigned personally represent and warrant that they have the full right, power and authority to execute this Takeover Agreement on behalf of the respective parties.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement: BROWARD COUNTY through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the ____ day of _____, 20____, and SURETY, signing by and through its _____, duly authorized to execute same.

SURETY

Liberty Mutual Insurance Company

By: _____
(Signature)

Its: _____
(Title)

____ day of _____, 20____

COUNTY

ATTEST:

BROWARD COUNTY, by and through
its Board of County Commissioners

Broward County Administrator, as
Ex-officio Clerk of the Broward County
Board of County Commissioners

By _____
Mayor

_____ day of _____, 20____

Insurance requirements
approved by Broward County
Risk Management Division

Approved as to form by
Joni Armstrong Coffey
Broward County Attorney
Governmental Center, Suite 423
115 South Andrews Avenue
Fort Lauderdale, Florida 33301
Telephone: (954) 357-7600
Telecopier: (954) 357-7641

By _____
Signature (Date)

By _____
Attorney's Name (Date)
Deputy County Attorney

Print Name and Title above



LIST OF REMAINING WORK TO COMPLETE THE PROJECT
November 18, 2013

RE: Wind Mitigation of Broward County Main Library
100 South Andrews Ave. Ft.Lauderdale, Florida
CMD Project No. 2600-2008-00 (Formerly PMIS #130908)
HMGP Contract #9HM-37-11-16-01-072
SMA Project No. 2010-127

Below is a list of work still to be completed for the Library Wind Mitigation Project, based on a visit to a site visit on 9/10/13 and on 11/15/13. This list is not a detailed compilation of all items related to the glazing still to be completed. It may or may not be complete.

I. LIST OF REMAINING WORK TO COMPLETE THE GLAZING SYSTEM
based on visit of 11/15/13.

A. 1st Floor North Side

1. Complete the skylight, including over the 2nd Floor and Bridge, which includes:
 - a. Install the missing glass pieces in the skylight.
 - b. Complete the gutter along the north face at the juncture between the skylight and the vertical glazing. Remove construction debris out of underground drainage system pipes, complete and connect leaders to underground drainage system.
 - c. Install the beauty trim aluminum pieces on the remainder of the skylight exterior.
 - d. Repair the ceramic tile on the walls below the glazing on the exterior side including on planter walls.
 - e. Repair ceramic tile on the walls below the new glazing including restoration of tile in the reflecting pool and on planter walls.
 - f. Seal the new glazing system to the walls below the floor.
 - g. Install closure pieces at the juncture between the skylight and vertical glazing above the skylight.
 - h. Repair defect with breakaway panels of NW automatic doors scraping slab.
 - i. Remove shoring and concrete beams that were installed to support shoring.

B. 1st Floor East Elevation

1. Complete installation of the NE Door #103 and glazing either side.

3501 GRIFFIN ROAD, FORT LAUDERDALE, FL 33312-5444
(954) 266-2700 FAX: (954) 266-2701

www.saltzmichelson.com • e-mail: sma@saltzmichelson.com

AA-0002897



2. Install ADA overhead operator at Door #103, including push buttons on the inside and exterior side, with stainless steel pedestal on exterior and electrical connections.
 3. Repair the terrazzo floor at the door and adjacent glazing at old Talking Books, and seal the glazing system to the floor.
 4. Complete repairs to the ceramic tile on the wall below the east side glazing and at the planters.
 5. Install aluminum break metal trim piece below the east side glazing after the ceramic tile is installed and seal the trim piece to the ceramic tile.
- C. 2nd Floor NE Entrance Area and Terrace
1. Complete the installation of Door #203 and glazing either side and above the door.
 2. Install the ADA overhead operator at Door #203, including push buttons on the inside and exterior side, with stainless steel pedestal on exterior and electrical connections.
 3. Repair the terrazzo floor along all the glazing on the exterior and interior side of the glazing including the Café Area. Seal the glazing to the floor.
- D. Replace broken glass panels in various locations throughout the building.
- E. Provide facilities/assistance for water testing remaining to be performed of the glazing systems.
- F. Install new signage on glazing at the four entrances conforming to the signage that was removed when the old glazing was demolished. The new signage should be reviewed with the Library prior to ordering.
- G. Provide fill, weep holes and weep hole covers in steel tube columns.
- I. Reinstall all light, fixtures, devices, security cameras, and all other devices that were temporarily removed.

II. LIST OF REMAINING WORK NOT RELATED TO THE GLAZING SYSTEM
September 18, 2013 (based on visit of 9/10/13)

- A. Roof Areas
1. Repaint new doors at stair, storage and elevator machine room to match exterior walls.
 2. Repair wall and door at storage room.



3. Recertification of roofing.
- B. West Stair Vestibules – Floors 2 through 8
1. Touch up paint on walls and doors exterior side of both doors in each vestibule.
 2. Stair doors – interior trim pieces not installed on glass lites on all doors, floors 2 through 8 (16 doors total).
 3. Replace white tiles incorrectly installed on the blue tile walls with matching blue tiles; several floors, but not all.
 4. Remove protective covers off glass railings in W. stair vestibules for inspection.
- C. Terraces
1. Modify and Reinstall railings and/or aluminum trim pieces and flashings on top of planter walls that were modified on all terraces, floors 4 through 8.
 2. Reinstall terrace pavers including insulation board, etc., along glazing on terraces 4B, 5A, 6A, 6B, 7A, 7B, 7C, 8A, 8B & 8C.
 3. Repair tile floors including insulation board, etc. at terraces 4A, 5B, 5C, 6C & 6D.
 4. Replace lock cylinders on all terrace doors with double keyed cylinders.
 5. Pressure cleaning all terraces.
- D. 1st Floor
1. Repaint exterior side of Auditorium door 114 correctly.
 2. Install threshold on door 111 at East stair.
 3. Reinstall lights on steel structure over Atrium area throughout.
 4. Remove construction barriers and restore atrium.
 5. Restore 1st floor NE lobby.
 6. Complete installation of door 105 and walls both sides, (door frame needs to be repaired as well).
 7. Repaint brackets on twin tees at Talking Books the correct color – both sides.
 8. It is our interpretation that repairing tile walls below the new glazing at Talking Books, the North Atrium on both the exterior and interior sides and also repairing the tile in the pools is required to completely seal the new glazing system in those areas so that work should not be included in a request for credit.
 9. It is our interpretation that restoring the terrazzo floors along the new glazing systems on the 1st and 2nd floors is required to properly seal the new glazing systems so that work should not to be included in a request for credit.
 10. Restore A/C grills, diffusers and ducts in Atrium and NE Lobby.
 11. Restore light and electrical items in the Atrium and NE Lobby.
 12. Steel column repairs per the Change Order.
 - a. Clean interior and install fill material.
 - b. Install weep holes in columns and sloping beams.



- c. Reinstall access covers and steel pieces cut out for access into the columns.
- 13. Restore Atrium plantings.
- E. 2nd Floor
 - 1. Remove construction barrier at atrium and restore adjacent finishes, etc.
 - 2. Reinstall short piece of glass rail at north wall, at column 4B after barrier is removed.
 - 3. Restore 2nd Floor lobby at NE entrance.
 - 4. Reinstall lights and framing at ceiling of café along north wall.
 - 5. Reinstall lights in steel framework over NE lobby and 2nd Floor Terrace outside Café.
 - 6. Repaint steel brackets on the twin tees the correct colors at the Café on both sides of the glass wall.
 - 7. Restore A/C grills, diffusers and ducts at the NE Lobby area.
 - 8. Restore lights and electrical devices at NE Lobby.
 - 9. See West Stair above for work in that area.
- F. Bridge
 - 1. Repair terrazzo floor at curbs.
 - 2. Reinstall lights in steel structure.
 - 3. Steel column repairs, including steel columns on the 2nd floor terrace per the Change Order.
 - a. Clean interior and install fill material.
 - b. Install weep holes in columns and sloping beams.
 - c. Reinstall access covers and steel pieces cut out for access into the columns.
 - 4. Provide rubbed finish on bridge concrete curbs.
- G. 3rd Floor
 - 1. Clean carpet in Phase 4 area being used for drywall work, (columns 2A & B to the east glass wall of Phase A).
 - 2. Clean carpet in area from column 5BCD to 6BCD, used for storage by RCAI.
 - 3. Clean and/or replace carpet in areas used as RCAI's Staging Area; Columns 6BCD, to the east wall.
 - 4. Restore walls around Staging Area resulting from RC's use to their pre-construction condition.
 - 5. See West Stair above for work in that area.
- H. 4th Floor
 - 1. County is to provide and install new carpet in Phases B, C and D, along the north wall.
 - 2. See Terraces and West Stair above for other work.



I. 5th Floor

1. Replace carpet in Phase A, as part of Change Order 21 (COR 35).
2. Reinstall piece of partition, about 4' long, from Column 2A to North curtain wall in Phase A.
3. Install new carpet in Phases B, C and D, as part of Change Order 22 (COR 40).
4. Reinstall carpet strip at east window at Column 7F-G.
5. Reinstall carpet strip at windows at Terrace 5B in book stack area.
6. Install shades in office space west of Terrace 5B, 2 sets of windows (east and south).
7. See Terraces and West Stair above for work at those areas.

J. 6th Floor

1. Seal the partition and triangular window above to the Phase A east wall glazing at the NE corner of Phase A; both sides (office and Gallery area).
2. Complete installation of carpet squares in Bienes Conference Room.
3. Reinstall furniture in Bienes Conference Room.
4. Reinstall carpet on ramp at east terrace door in Bienes Ceremonial Room.
5. Repair cracked floor tile(s) and clean mortar off tile in Bienes Ceremonial Room.
6. Install shades in Bienes Conference Room east wall.
7. Reinstall carpet strip at west window of Terrace 6C.
8. Install shades at west window of Terrace 6C.
9. Restore office area west of Terrace 6C and remove construction barrier.
10. Reinstall movable partition in west area (Inter Library Loan area) to create vestibule from other staff area.
11. Repaint twin tee and brackets above glazing at Terrace 6D north wall the correct color.
12. Install shades on west window Column 1F-G.
13. See Terraces and West Stair above for work in those areas.

K. 7th Floor

1. Reinstall carpet along curtain wall in Phases A, B, C and D.
2. Repair Fire Alarm device at Column 4C.
3. Install shades on north and east wall of Phase C.
4. Reinstall partition and door at east wall near column 7G.
5. See Terraces and West Stair above for work in those areas.

L. 8th Floor

1. Install door and complete partition between Board Room and Hallway.
2. Reinstall carpet in Board Room and Hallway.



3. Install shades in Board Room.
4. Install threshold ramp piece at door to Terrace 8A in Board Room.
5. Replace all cupped V.C.T. tile in Staff Lounge, about 5 feet wide along north wall and east wall and repair remainder along curtain wall in Phases C and D.
6. Complete work on partition between Staff Lounge and Director's Office on the Lounge side.
7. Restore offices in Foundation area, including partitions, ceilings, paint, and carpet. Move staff, furniture and equipment back in.
8. Repair ceilings in the 2 offices west of Terrace 8C.
9. Repair carpet in the 6 offices west of Terrace 8C.
10. Complete painting in the 2 offices west of Terrace 8C.
11. Complete minor drywall patching and painting in some of the 6 office areas east of Terrace 8C.
12. Complete carpet strip, about 4' long, in one office adjacent to Terrace 8C.
13. Install shades in all offices along the south wall of the 8th floor (about 16 offices, one with 2 sets of windows).
14. Install shades on west windows at column 1F-G in Business and Support Services.
15. Repair the partition with V.W.C. in the SE Hall near the east Women's room.
16. Repair the three concrete beams in the SE Hall near columns 4H, 5H and 6H.
17. Reinstall correct lockset on office doors where they had been changed for construction; Foundation, possibly 2 offices west of Terrace 8C, office east of Terrace 8C and doors off SE Hall to office areas.
18. See Terraces and West Stair above for work in those areas.

M. General Items

1. Final cleaning of interior spaces, and surfaces.
2. Repair gouges, marks, etc. in wood office doors.
3. Reinstall wall bases.
4. Provide final locksets & cores on all doors.

N. Exterior Areas

1. Restore West Compound area including sod and landscape restoration.
2. Repair pavers along the Phase A areas including depressions, chipped and broken pavers, etc.
3. Restore "East" Compound areas around reflecting pools including: repairing pavers, repairing any depressions in the pavers, replacing chipped and broken pavers, etc.
4. Repair broken and chipped concrete in the Compound areas.
5. Reinstall the lighted concrete bollard along SE 1st Avenue.
6. Clean paver and patio areas inside the compounds, including removing foreign



- substances and materials, etc.
 - 7. Final spot elevation survey of plaza areas.
 - 8. Final building survey.
 - 9. Reinstall lightning protection on the north curtain wall and recertification of the lightning system.
 - 10. Repair broken vacuum breaker in NW construction compound.
- Landscape –
- O. New plantings and mulch as shown on the Landscape Drawings, and also including plantings that have been damaged or destroyed and replaced resulting from construction activities.
- 1. L-1: 1st Floor on the exterior and on the interior. Also any plantings in the west compound.
 - 2. L-2: New plantings not yet installed.
 - 3. L-4: There were no existing plantings at Terraces 4A and 4B, nor were new plantings required. Mulching the planters is required.
 - 4. L-5 appears complete except refilling planters on Terraces 5B and 5C at the electric connection repair only. Mulch has been installed in those planters.
 - 5. L-6: Terraces 6A B C D.
 - 6. L-7: Terraces 7A B C.
 - 7. L-8: Terraces 8A & B; Terrace 8C refilling and mulching only.
 - 8. Irrigation repair at planter on Terrace 8A and 8C and 1st Floor inside and out; the rest appear to be complete.



Construction Management Division

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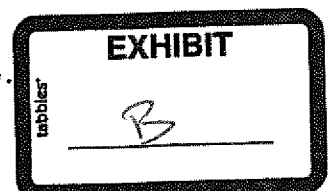
SUMMARY LIST OF CLOSEOUT REQUIREMENTS
January 7, 2014

Re: **Broward County Main Library (BCML) Wind Mitigation Project**
100 South Andrews Ave. Ft. Lauderdale, Florida
CMD Project No. 2600-2008-00 (Formerly PMIS #130908)
HMGP Contract #9HM-37-11-16-01-072
SMA Project No. 2010-127

Below is a list, summarized from the Contract documents to summarize Substantial and Final Completion requirements to be completed for the Main Library Wind Mitigation Project. This list is not a detailed compilation of requirements. The contractor shall comply and the work shall be completed in strict accordance with the Contract Documents.

A. SUMMARIZED SUBSTANTIAL COMPLETION REQUIREMENTS

1. Complete the work in accordance with Substantial Completion requirements. Comply with Sect. 01770, 1.1 Preliminary Procedures but not limited there to. Remove Temporary Facilities from site. Complete final cleanup and touch-up painting.
2. Obtain Certificate of Completion from Building Department.
3. Provide submittals for A/E review:
 - FINAL SITE SURVEY
 - MAINTENANCE CONTRACTS
 - OPERATION AND MAINTENANCE DATA
 - MAINTENANCE MATERIALS
 - PRODUCT WARRANTIES
 - PRODUCT BONDS
 - PROJECT RECORD DOCUMENTS
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders, Project Consultant's Supplementary Instructions and other modifications to the Contract.
 - 5. Approved submittals including all administrative submittals as may be required in the Project Manual.
 - 6. Field Test Records and Reports.
 - 7. Construction Photographs.
 - SPARE PARTS
 - ELECTRONIC MEDIA
 - DEM AND FEMA CLOSEOUT SUBMITTAL DOCUMENTS (See Exhibits in DVD Titled: Information Available to Bidders)
 - DEMONSTRATION AND TRAINING
4. Provide A/E approved submittals (listed above).
5. Deliver Master & Grand master keys (01770, 1.1, B. 4.)



6. Form 01770a Contractor's Request for Substantial Completion Inspection. To be submitted at least 10 calendar days prior to the requested inspection date to allow scheduling of the inspection.
7. Form 01770b Notification of Readiness for Substantial Completion Inspection
8. Form 01770c Substantial Completion Inspection
9. Form 01770d Substantial Completion Inspection - Punch List
10. Form 01770e Letter Establishing Substantial Completion Date
11. Form 00925 CERTIFICATE OF SUBSTANTIAL COMPLETION
12. Submit Pay Application, including Form 00924 Certification of Payments to Subcontractors, and all other required documents and backup.

B. SUMMARIZED FINAL COMPLETION REQUIREMENTS

1. Florida Department of Emergency Management (DEM) inspection for conformance with scope of work in FEMA Grant. County will notify and coordinate and schedule this inspection with D.E.M. inspector upon certification of Substantial Completion. At the DEM inspection, the DEM inspector will require:
 - a. (1) copy of the Certificate of Completion,
 - b. (1) set of full-size as-built drawings,
 - c. (1) set of as-built Project Manual,
 - d. (1) set of all test reports,
 - e. (1) set of all approved shop drawings, and
 - f. (1) set of all NOA's.
2. Global Risk Consultants (GRC) inspection for conformance with FM Global Design Requirements. County will notify and coordinate and schedule this inspection with GRC inspector upon certification of Substantial Completion. *Note: County's relationship with FM-Global ended on February, 2013. FM Global is no longer County insurance carrier. Design to previous project FM Global's Design Requirements. Reviews & approvals shall be by CMD and Global Risk Consultants (GRC).* At the GRC inspection, the GRC inspector will require:
 - a. (1) copy of FM Global Design Requirements approval letter (this was previously provided to GRC by CMD).
 - b. (1) copy of the Certificate of Completion,
 - c. (1) set of full-size as-built drawings,
 - d. (1) set of all test reports,
 - e. (1) set of as-built Project Manual,
 - f. (1) set of all approved shop drawings, and
 - g. (1) set of all NOA's.
- 3.
4. Complete the work in accordance with Final Completion requirements.
5. Form 01770f Contractor's Request for Final Completion Inspection
6. Form 01770g Notification for Readiness for Final Completion Inspection
7. Form 01770h Establishing Final Completion Date
8. Final Application for Payment, including Form 00924 Certification of Payments to Subcontractors, and all other required documents and backup.
9. Form 00926 Final Certificate of Payment
10. Form 00930 FORM OF FINAL RECEIPT
11. Final Releases of Liens
12. Surety's Consent to Final Payment
13. Final Bill of Materials (Doc. 00800, 48)
14. Final Statement of accounts (01770, 1.9)

- 15. Final List of Subcontractors/Sub-vendors (Doc. 00600, P. 46)
- 16. County's Final Evaluation of Contractor

C. CLOSEOUT REFERENCES FROM THE CONTRACT DOCUMENTS

- ❖ Doc. 00200 Definitions: 1.22. Substantial Completion.
 - Comply with fully executed Consultant's Supplemental Instruction (CSI) No.20, dated: 5/24/2013. Submit to the County Project Manager City of Fort Lauderdale Certificate of Completion for the project. This is a prerequisite for Substantial Completion.
- ❖ Doc. 00600, CONTRACT:
 - 2.3
 - P. 46 Final list of Subcontractors/Sub-vendors
 - 5.1 Final Inspection & Acceptance
 - Form 00926
 - 5.2 Before issuance of the Final Certificate for Payment, CONTRACTOR shall deliver to CONSULTANT a complete release of all liens arising out of this Contract, receipts in full in lieu thereof; an affidavit certifying that all suppliers and subcontractors have been paid in full and that all other indebtedness connected with the Work has been paid, or a consent of the surety to final payment; the final corrected as-built drawings; and the final bill of materials, if required, and invoice. Final Payment package is to include the certification document titled "Final list of non-certified sub-vendors," attached hereto as Exhibit "B" and made a part of this bid document, that must be signed and notarized by CONTRACTOR. A list of all non-certified sub-vendors used must be attached to this certified document.
 - 5.4 Final payment shall be made only after the COUNTY's Director of Purchasing has reviewed a written evaluation of the performance of CONTRACTOR prepared by the Contract Administrator, and approved the final payment. The acceptance of final payment shall constitute a waiver of all claims by CONTRACTOR, except those previously made in strict accordance with the provisions of the General Conditions and identified by CONTRACTOR as unsettled at the time of the application for final payment.
- ❖ Doc. 00800, GENERAL CONDITIONS:
 - 20. Differing Site Conditions.
 - 23. CONTRACTOR's Responsibility for Damages and Accidents:
 - 23.1. CONTRACTOR shall accept full responsibility for the Work against all loss or damage of whatsoever nature sustained until final acceptance by COUNTY, and shall promptly repair any damage done from any cause whatsoever, except as provided in Article 30.
 - 23.2. CONTRACTOR shall be responsible for all materials, equipment and supplies pertaining to the Project. In the event any such materials, equipment and supplies are lost, stolen, damaged or destroyed prior to final acceptance by COUNTY, CONTRACTOR shall replace same without cost to COUNTY, except as provided in Article 30.
 - 26. Defective Work:
 - 26.4. Failure to reject any defective work or material shall not in any way prevent later rejection when such defect is discovered, or obligate COUNTY to final acceptance.
 - 43. Substantial Completion.
 - 46. Field Layout of the Work and Record Drawings:
 - 46.1. The entire responsibility for establishing and maintaining line and grade in the field lies with CONTRACTOR. CONTRACTOR shall maintain an accurate and precise record of the location and elevation of all pipe lines, conduits, structures, maintenance access structures, handholes, fittings and the like and shall prepare record or "as-built" drawings of the same which are sealed by a Professional Surveyor. CONTRACTOR shall deliver these records in

good order to CONSULTANT as the Work is completed. The cost of all such field layout and recording work is included in the prices bid for the appropriate items. All record drawings shall be made on reproducible paper and shall be delivered to CONSULTANT prior to, and as a condition of, final payment.

- 46.2. CONTRACTOR shall maintain in a safe place at the Project site one record copy of all Drawings, Plans, Specifications, Addenda, written amendments, Change Orders, Field Orders and written interpretations and clarifications in good order and annotated to show all changes made during construction. These record documents together with all approved samples and a counterpart of all approved Shop Drawings shall be available at all times to CONSULTANT for reference. Upon Final Completion of the Project and prior to Final Payment, these record documents, samples and Shop Drawings shall be delivered to the Contract Administrator.
- 46.3. Prior to, and as a condition precedent to Final Payment, CONTRACTOR shall submit to COUNTY, CONTRACTOR's record drawings or as-built drawings acceptable to CONSULTANT.

➤ 48. Final Bill of Materials:

- CONTRACTOR shall be required to submit to COUNTY and CONSULTANT a final bill of materials with unit costs for each bid item for supply of materials in place. This shall be an itemized list of all materials with a unit cost for each material and the total shall agree with unit costs established for each Contract item. A Final Certificate for Payment cannot be issued by CONSULTANT until CONTRACTOR submits the final bill of materials and CONSULTANT verifies the accuracy of the units of Work.

❖ Doc. 00925, CERTIFICATE OF SUBSTANTIAL COMPLETION:

- The Work performed under this Contract has been reviewed and found to be substantially complete and all documents required to be submitted by CONTRACTOR under the Contract Documents have been received and accepted.

➤ DEFINITION OF DATE OF SUBSTANTIAL COMPLETION:

- Substantial Completion: That date, as certified in writing by CONSULTANT and as finally determined by CONTRACT ADMINISTRATOR in its sole discretion, the Work, or a portion thereof, is at a level of completion in substantial compliance with the Contract Documents such that all conditions of permits and regulatory agencies have been satisfied and the Owner or its designee can enjoy use or occupancy and can use or operate it in all respects for its intended purpose. A Certificate of Occupancy (or a Temporary Certificate of Occupancy (TCO) or other alternate municipal/county authorization for limited or conditional occupancy acceptable to the Contract Administrator) must be issued for Substantial Completion to be achieved, however, the issuance of a Certificate of Occupancy or the date thereof are not to be determinative of the achievement or date of Substantial Completion.

❖ Sect. 01320 CONSTRUCTION PROGRESS DOCUMENTATION

➤ 1.7 CONSTRUCTION PHOTOGRAPHS

- G. Negatives:

➤ 1.8 CONSTRUCTION AERIAL PHOTOGRAPHS

- D Provide aerial photograph with each monthly application for payment and as follows:
 - 9. Substantial and Final Completion of a major phase or component of work.
- E. Negatives:

❖ Sect. 01450 QUALITY CONTROL

- H. Section 01770: Closeout Procedures: Substantial Completion and Acceptance inspections.

❖ Sect. 01510 TEMPORARY UTILITIES

- 3.3 OPERATION, TERMINATION AND REMOVAL
 - C. Termination and Removal:
 - D. Prior to Substantial Completion, clean and renovate permanent facilities that have been used during the construction period.
- ❖ Sect. 01520 CONSTRUCTION FACILITIES
 - 3.4 OPERATION, TERMINATION AND REMOVAL
 - C. Termination and Removal:
 - 1. Unless the Project Consultant requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or no later than Substantial Completion.
- ❖ Sect. 01524 CONSTRUCTION WASTE MANAGEMENT
 - 1.6 INFORMATIONAL SUBMITTALS
 - B Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- ❖ Sect. 01530 TEMPORARY CONSTRUCTION
 - 3.2 TEMPORARY CONSTRUCTION INSTALLATION
 - A General: Comply with the following:
 - 3. Maintain temporary construction until use is no longer required or until before Substantial Completion. Remove before Substantial Completion.
 - C. Existing Elevator Usage: At Substantial Completion, restore elevators to condition existing before initial use, including replacing worn cables, guide shoes, and similar items of limited life.
 - D. Existing Stair Usage: At Substantial Completion, restore stairs to condition existing before initial use.
 - 3.4 OPERATION, TERMINATION, AND REMOVAL
 - 2. Termination and Removal: Remove each temporary construction when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
- ❖ Sect. 01560 TEMPORARY BARRIERS AND ENCLOSURES
 - A. Remove temporary barriers, barricades, fencing, enclosures and protections as warranted by the progress of the Work and prior to Substantial Completion.
 - B. Remove underground installations to a minimum depth of 2 feet Grade site as indicated.
 - C. Clean and repair damage caused by installation or use of temporary work.
 - D. Restore existing facilities used during construction to original condition or as specified elsewhere in the Contract Documents.
- ❖ Sect. 01570 TEMPORARY CONTROLS
 - 1.5 PEST CONTROL
 - 2. Provide extermination and control procedures at regular intervals so the Project will be relatively free of pests and their residues at Substantial Completion.
 - 1.6 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
 - A. Remove temporary above grade or buried controls as warranted by the progress of the Work or prior to Substantial Completion.

❖ Sect. 01610 BASIC PRODUCT REQUIREMENTS

➤ 3.1 INSTALLATION OF PRODUCTS

- B. Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

❖ Sect. 01720 SURVEYING

➤ 1.7 SURVEYING

- F. Final Property Survey: Before Substantial Completion, prepare a final property survey showing significant features (real property) for the Project.
 - 1. Include on the survey a certification, signed by the Surveyor, to the effect that principal metes, bounds, lines and levels of the Project are accurately positioned as shown on the survey.
 - 2. Show all fences, walls, walks, building(s), including new footprint and/or new line of the new glazing, and appurtenances, fire hydrant(s), manholes, catch basins, meters, valve boxes, asphalt playing area, parking, drives, curbs, trees and shrubs.
 - 3. Base survey on the mean sea level datum.
 - 4. Show elevations to the 0.01 foot in sufficient number of points to clearly indicate the scope of parking, sidewalks, floor and other improved areas.
 - 5. Show grate and invert elevation for all manholes and catch basins.
 - 6. Indicate elevations to 0.1 foot at all changes in ground level, such as ditches, and at intervals not exceeding 100 feet including all adjacent rights-of-way.
 - 7. Replace all permanent corner markers which have been removed.
 - 8. Update and correct initial survey furnished to the Contractor by the Owner to accurately illustrate the Work's relationships to the previously existing site and its previously existing improvements and appurtenances.
- G. Recording: At Substantial Completion, have the final property survey recorded by or with local governing authorities as the official "property survey".

❖ Sect. 01730 EXECUTOIN

➤ 1.8 PROTECTION OF ADJACENT PROPERTY

- A. Cleaning And Protection:
 - 1. During handling and installation, clean and protect construction in progress and adjoining materials in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
 - 2. Clean and maintain completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

❖ Sect. 01740 CLEANING

➤ 3.1 DURING CONSTRUCTION

- E. Vacuum clean interior of building areas:
 - 4. On an as-needed basis to maintain clean work areas through substantial and final completion.

➤ 3.2 CLEANING PRIOR TO SUBSTANTIAL COMPLETION

- A. Conduct inspection of sight-exposed interior and exterior surfaces and concealed spaces: Ensure clean condition and removal of debris.
- B. Complete the following cleaning operations before requesting Substantial Completion Inspection:
 - 1. Remove labels that are not permanent labels.
 - 2. Clean transparent materials, including mirrors and glass in doors and windows.

- ♦ a. Remove glazing compound and other substances that are noticeable vision-obscuring materials.
- ♦ b. Replace chipped or broken glass and other damaged transparent materials.
- 3. Clean exposed exterior and interior hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances:
 - ♦ a. Restore reflective surfaces to their original reflective condition.
 - ♦ b. Leave concrete floors broom clean.
- 4.. Vacuum carpeted and other "soft" finished surfaces:
 - ♦ a. Remove and repair stains, discolorations, abrasions, cuts or other damage.
 - ♦ b. Do not "spot patch" sheet or roll products unless approved by the Project Consultant and Owner.
- 5. Wipe surfaces of mechanical and electrical equipment:
 - ♦ a. Remove excess lubrication and other substances.
 - ♦ b. Clean plumbing fixtures to a sanitary condition.
 - ♦ c. Clean light fixtures and lamps, including reflectors, bulbs and diffusers.
- 6. Clean ducts, blowers, coils, diffusers and other elements of air conditioning systems
- 7. Replace air conditioning filters.
- 8. Clean the site, including landscape development areas, of rubbish, litter and other foreign substances:
 - ♦ a. Sweep paved areas broom clean; remove stains, spills and other foreign deposits.
 - ♦ b. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
- 9. Install a new set of filters to each air handling unit in the building after construction has been completed.
 - ♦ a. Filters for each air handling unit consists of:
 - 1) 2" deep Merv 8 pleated Pre filters.
 - 2) 12" deep Merv 14 filters.

❖ Sect. 01770 CLOSEOUT PROCEDURES

➢ 1.1 PRELIMINARY PROCEDURES

- A. If the date required for Substantial Completion has past or cannot otherwise be met by the Contractor, the Contractor shall submit:
 - 1. A request for time extension if the required date of Substantial Completion stipulate by the Contract Documents (or as modified by a COUNTY approved Change Order allowing a change in Contract Time) has past
 - 2. Provide complete details and attach substantiating evidence concerning reasons for requested Time extension
 - 3. Format: Submit request for time extension with associated detail sheets.
- B. Before requesting inspection for certification of Substantial Completion, complete the following:
 - 1. All air conditioning, ventilation, security systems, fire alarms, fire sprinklers and other life safety systems and building systems must be completed, tested, approved and demonstrated.
 - 2. Air Conditioning systems must be completed, tested, approved and demonstrate and test and balance reports submitted and approved by the Consultant and Contract Administrator, see mechanical drawings for specifications and notes.
 - 3. Landscape irrigation systems must be completed, tested, approved and demonstrated.
 - 4. Master and grand master keys must be delivered in sealed containers to the Contract Administrator.

- 5. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.
 - 6. Advise Contract Administrator of pending insurance change-over requirements
 - 7. Prepare specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents for submittal under provisions of Section 01780, Closeout Submittals.
 - 8. Obtain and submit releases enabling the Contract Administrator unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
 - 9. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information under provisions of Section 01780, Closeout Submittals.
 - 10. Deliver tools, spare parts, extra stock, and similar items as specified in respective specification sections of Divisions 2 through 16 and in Section 017800, Closeout specification submittals.
 - 11. Make final change-over of permanent locks and transmit master and grand master keys to the Contract Administrator.
 - 12. Advise the Contract Administrator's personnel of pending change-over in security provisions.
 - 13. Complete start-up testing of systems, and instruction of the County's operating and maintenance personnel
 - 14. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
 - 15. Complete final clean up requirements, including touch-up painting.
 - 16. Touch-up and otherwise repair and restore marred exposed finishes.
 - 17. Obtaining a Certificate of Occupancy (or, with prior written approval from the Contract Administrator, a Temporary Certificate of Occupancy (TCO)) from the Building Department having jurisdiction over the project.
 - Note: comply with CSI No. 20.
- 1.2 CONTRACTOR'S REQUEST FOR INSPECTION
- A. When the Contractor considers that the Work, or a portion thereof which the Contract Administrator agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Consultant a Request for Substantial Completion Inspection including a comprehensive list of items to be completed or corrected.
 - B. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.
 - C. Project Closeout Submittals: Project closeout submittals required by the Contract Documents for the Work, or a portion thereof, shall be submitted by the Contractor at or prior to the time of his request.
- 1.3 CONSULTANT'S DETERMINATION OF READINESS
- A. Upon receipt of the Contractor's Request for Substantial Completion Inspection, the Consultant will make a preliminary inspection to determine whether the Work or designated portion thereof is appropriately ready for a Substantial Completion Inspection.

- B. The Consultant will notify the Contract Administrator and the Contractor of the results of his inspection by completing and distributing the Consultant's Notification of Readiness for Substantial Completion Inspection.
 - 1. If the Consultant's inspection discloses any item, whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents and which would preclude beneficial occupancy and would render the Work not Substantially Complete, the Contractor shall correct such item upon receipt of the Consultant's Notification. The Contractor shall then submit another request for inspection by the Consultant to determine the completion status of the Work or inspection by the Consultant designated portion thereof.
 - 2. When the Consultant judges that the Project may be substantially complete in accordance with the terms of the Contract Documents, he will notify the Contract Administrator that the Work, or portion thereof, is ready for the Contract Administrator's Substantial Completion Inspection.
- 1.4 SUBSTANTIAL COMPLETION INSPECTION
 - A. The Contract Administrator, upon notification from the Consultant that the Work, or a portion thereof, may be substantially complete and all project closeout submittals pertaining to the Work, or portion thereof, have been approved and forwarded to the Contract Administrator, will direct the Consultant to schedule and coordinate the Contract Administrator's Substantial Completion Inspection.
 - B. The Contract Administrator's Substantial Completion Inspection will be conducted by the Consultant, the Contract Administrator, and the Contractor.
 - C. The following representatives shall attend and conduct the Substantial Completion Inspection:
 - 1. Contractor Personnel:
 - ♦ a. Project Manager
 - ♦ b. Superintendent
 - ♦ c. Plumbing Superintendent
 - ♦ d. Mechanical Superintendent
 - ♦ e. Electrical Superintendent
 - ♦ f. Specialty Sub-Contractors
 - 2. Contract Administrator Personnel:
 - ♦ a. Project Manager
 - ♦ b. Field Construction Personnel and/or Supervisors
 - ♦ c. Contract Administrator's Professional Staff
 - ♦ d. Contract Administrator's Test and Balance Consultant (as applicable)
 - ♦ e. Commissioning Agent (as applicable)
 - ♦ f. Other specialty representatives of the Contract Administrator
 - 3. Consultant Personnel:
 - ♦ a. Architectural Project Manager
 - ♦ b. Architectural Special Project Representative/Field Representative
 - ♦ c. Structural Engineer
 - ♦ d. Mechanical Engineer
 - ♦ e. Electrical Engineer
 - ♦ f. Specialty Sub-Consultants
 - D. Inspection Teams:
 - 1. At the direction of the Consultant's senior representative, inspection teams will be established at the project site based upon the following disciplines:
 - ♦ a. Architectural/Civil

- ♦ b. Plumbing
 - ♦ c. Mechanical
 - ♦ d. Electrical
 - ♦ e. Electronics
 - ♦ f. Specialties
 - 2. Each inspection teams will be composed of specialty representatives of the Contract Administrator, Consultant and Contractor who will perform independently of each other.
 - 3. Each team will appoint a Team Leader
 - 4. The Consultant's senior representative will provide each Team Leader with:
 - ♦ a. Copy of the Contractor's List of Deficiencies.
 - ♦ b. Floor and site plans (with the remainder of the Contract Documents available to the team).
 - E. At the Completion of the Substantial Completion Inspection, the Consultant will issue a Substantial Completion Inspection report and Substantial Completion Punch List. Contract Administrator shall either approve or deny substantial completion of the work, or portion thereof.
 - F. If Substantial Completion of the Work, or portion thereof, is denied, the Contractor shall promptly correct deficiencies noted which caused the denial of substantial completion. Upon correcting these deficiencies, the Contractor shall notify the Consultant that these deficiencies are ready for re-inspection by submitting a new Request for Substantial Completion at which time the Consultant, Contract Administrator, and Contractor will re- conduct the Contract Administrator's Substantial Completion Inspection for substantial completion deficiencies only.
 - G. When Substantial Completion of the Work, or portion thereof, is granted, the Consultant will prepare and issue Contract Administrator's Form 1, Certificate of Substantial Completion to indicate the date of substantial completion.
- 1.5 READINESS FOR FINAL COMPLETION (ACCEPTANCE) INSPECTION
- A. Deficiencies noted on or attached to Substantial Completion Inspection Report and Substantial Completion Inspection Punch List, must be completed prior to the Contract Administrator's Final Completion Inspection. Limitations on the Time during which these corrections must be made shall be consistent with the Time specified in the Contract.
 - B. Upon correction of the punch list, the Contractor shall notify the Consultant and issue a Request for Final Completion Inspection, that the Work, or portion thereof is ready for the Contract Administrator's Final Completion Inspection.
 - C. Upon receipt of the Contractor's Request for Final Completion Inspection, the Consultant will make an inspection to determine whether the Work or designated portion thereof is complete. The Consultant will notify the Contract Administrator and the Contractor of the results of his inspection by completing and distributing the Consultant's Notification of Readiness for Final Completion Inspection.
 - 1. If the Consultant's inspection discloses any item which is not in accordance with the requirements of the Contract Documents and which would render the Work not complete, the Contractor shall correct such item upon receipt of the Consultant's Notification of Readiness for Final Completion Inspection. The Contractor shall then submit another request for inspection by the Consultant to determine the completion status of the Work or designated portion thereof.
 - 2. When the Consultant judges that the Project is complete in accordance with the terms of the Contract Documents, he will notify the Contract Administrator that the Work, or portion thereof, is ready for the Contract Administrator's Final Completion Inspection.
- 1.6 CONTRACT ADMINISTRATOR'S FINAL COMPLETION INSPECTION

- A. The Contract Administrator, upon notification from the Consultant that the Work, or a portion thereof, is complete will direct the Consultant to schedule and coordinate the Contract Administrator's Final Completion Inspection.
 - B. The Contract Administrator's Final Completion Inspection will be conducted by the Consultant, the Contract Administrator, and the Contractor.
 - 1. Members of the inspection teams which inspected the facility for Substantial Completion will reconvene to conduct the Final Completion Inspection.
 - 2. Members of the inspection teams for which there are no outstanding Punch List Items may be excused upon request to and approval by the Consultant.
 - C. If Final Completion of the Work, or portion thereof, is denied, the Contractor shall promptly correct deficiencies noted which caused the denial of final completion.
 - D. Upon correcting these deficiencies, the Contractor shall notify the Consultant that these deficiencies are ready for re-inspection (by submitting a new Contractor's Request for Final Completion Inspection at which time the Consultant, Contract Administrator, and Contractor will re-conduct the Contract Administrator's Final Completion Inspection).
- 1.7 FINAL COMPLETION DATE
- A. When Final Completion of the Work, or portion thereof, is granted, the Consultant will issue the Consultant's Letter Establishing Final Completion Date to indicate the date of final completion.
 - B. Upon receipt of Consultant's Letter Establishing Final Completion Date, the Contractor may make application for final payment.
 - C. If correction of Punch List is not fully completed within a period twice as long as that allowed by the Contract Documents, the Contract Administrator, at his option, may close out the Work or designated portion thereof, by deducting his estimate of the cost to correct the outstanding items and complete with Work by a separate contractor or the Contract Administrator's own forces.
- 1.8 OCCUPANCY INSPECTION
- A. The Municipal or County Building Departments having jurisdiction will conduct a inspection for the purpose of determining that the Work, or portion thereof, is in compliance with the statutes, rules, and codes affecting the health and safety of the occupants.
 - B. Upon successful completion of this inspection, the jurisdictional Building Department will issue a Certificate of Occupancy authorizing occupancy of the Work, or portion thereof:
 - 1. The Contractor shall be responsible for corrections to discrepancies noted by the jurisdictional Building Department during the Occupancy Inspection, except for items identified which are not parts of the requirements of the Contract Documents.
 - 2. Corrections to identified discrepancies which are not part of the requirements of the Contract Documents will be made by the Contract Administrator using his own forces or separate contractor(s), or by the Contractor after execution of a change order instructing the Contractor to complete such Work.
 - C. Obtaining a Certificate of Occupancy from the Jurisdictional Building Department is a prerequisite to the Contractor achieving Substantial Completion. Note: see and comply with CSI No. 20.
- 1.9 FINAL ADJUSTMENTS OF ACCOUNTS
- A. Submit a final statement of accounting to the Consultant.
 - B. Statement shall reflect all adjustments to the Contract Sum:
 - 1. The original Contract Sum.
 - 2. Additions and deductions resulting from:
 - ♦ a. Previous Change Orders
 - ♦ b. Deductions for uncorrected work

- ♦ c. Deductions for liquidated damages
 - ♦ d. Deductions for re-inspection payments
 - ♦ e. Other adjustments
 - 3. Total Contract Sum, as adjusted.
 - 4. Previous payments
 - 5. Sum remaining due
 - 6. The applicable Purchase Order Number issued by the Contract Administrator
- 1.10 FINAL APPLICATION FOR PAYMENT
 - A. Submit the final Application for Payment in accordance with procedure and requirements stated in the Contractor's agreement with the County.
- 1.11 REINSPECTION FEES
 - A. Should it be necessary for the Consultant to perform re-inspections due to the failure of the Work to comply with the claims of status of completion made by the Contractor:
 - 1. The Contract Administrator will compensate the Consultant for such additional services.
 - 2. Contract Administrator will deduct the amount of such compensation from the Contract Sum due to the Contractor.
- 1.12 PUNCH LIST COMPLETION
 - A. The facilities may be occupied by County during completion of all or a portion of the Punch List.
 - B. Complete Punch List work during the County's normal hours of operation (8:30 AM to 5:00 PM Monday through Friday).
 - C. Make arrangements concerning access and other than normal work hours with the Contract Administrator.
- ❖ Sect. 01780 CLOSEOUT SUBMITTALS
 - 1.1 SECTION INCLUDES
 - A. Final Site Survey
 - B. Maintenance Contracts
 - C. Operation and Maintenance Data
 - D. Maintenance Materials
 - E. Product Warranties
 - F. Product Bonds
 - G. Project Record Documents
 - H. Spare Parts
 - I. Electronic Media
 - J. Miscellaneous Schedules
 - K. DEM and FEMA CloseOut Documents
 - 1.2 RELATED DOCUMENTS
 - A. Document CAF#170
 - B. Section 01120: Information Available to Bidders
 - C. Section 01330: Submittal Procedures
 - D. Section 01770: Closeout Procedures
 - E. Section 01820: Demonstration and Training
 - F. Related requirements specified in respective specification Sections of Divisions 2 through 16.
 - 1.3 SUBMITTALS
 - A. Project closeout submittals required by the Contract Documents for the Work, or a portion thereof, shall be submitted by the Contractor at or prior to the time of his request for the Project Consultant's inspection unless otherwise specified in this Section or elsewhere in the Contract Documents.

- B. Project Consultant (assisted by the Owner's Commissioning Agent, Test and Balance Consultant and others as applicable) will review project closeout submittals with the Owner for content, accuracy, and format:
 - 1. If the Project Consultant disapproves or rejects any project closeout submittal, it shall be returned to the Contractor for correction and modification.
 - 2. The Contractor shall then submit his revised and corrected project closeout submittals to the Project Consultant for review and approval.
 - 3. The Contractor shall continue to revise and resubmit project closeout submittals until all required submittals have been accepted by the Project Consultant.
 - 4. The Project Consultant will forward approved project closeout submittals to the Owner prior to the Owner's Substantial Completion Inspection.
 - 5. Corrections or modifications of Project Closeout Submittals shall not be used as justification for an extension of Time.
 - C. Submit closeout submittals under provisions of Section 01330 - Submittal procedures, with content and in formats specified within this Section and elsewhere in the Contract Documents.
- 1.4 FINAL SITE SURVEY
- A. Submit the certificates, copies of final property survey, electronic media files and project record documents.
 - B. Electronic Media: Conform to requirements for electronic media specified below.
- 1.5 MAINTENANCE CONTRACTS
- A. Preparation of Submittals
 - 1. Obtain maintenance contracts as may be required by the Contract Documents executed in duplicate by responsible Subcontractors, suppliers, or manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of maintenance contracts until the Date of Substantial Completion is determined.
 - 2. Verify that documents are in proper form, contain full information, and are notarized.
 - 3. Co-execute submittals when required.
 - 4. Retain maintenance contracts until time specified for submittal.
 - B. Form of Submittals
 - 1. Draft Copies:
 - ♦ a. When a maintenance contract is required to be executed by the Contractor, or the Contractor or a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties.
 - ♦ b. Forms for maintenance contracts: Will not be provided by Owner. Prepare a written document utilizing an appropriate contract form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer Submit a draft to the Owner through the Project Consultant for approval
 - ♦ c. Submit draft copies of all proposed final maintenance contracts to the Project Consultant under provisions of Section 01300, Submittals for the Owner and Project Consultant's review.
 - 2. Form of Submittal:
 - ♦ a. Prior to Substantial Completion compile two copies of each required maintenance contract properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer.
 - ♦ b. Organize maintenance contracts into an orderly sequence based on the table of contents of the Project Manual and bind in ring binders with the cover titled "MAINTENANCE CONTRACTS" with binder, accessories, index tabs and table of

contents, and other identifications as specified for Warranty documents below adjusted to reflect the appropriate product bonds content

- ♦ c. When operating and maintenance manuals are required for construction or products for which a maintenance contract is required, provide additional copies of each required maintenance contract, as necessary, for inclusion in each required manual.
- C. Timing of Submittals:
 - 1. Preliminary Draft:
 - ♦ a. Submit two copies of preliminary draft maintenance agreement within ninety (90) days of the Contract's required Substantial Completion Date for the Work or a phase thereof.
 - ♦ b. Project Consultant will review draft and return one copy with comments.
 - 2. Final Submittals:
 - ♦ a. Submit five (5) copies of revised final maintenance agreements in final form ready for the Owner's execution prior to submitting Contractor's Request for Substantial Completion Inspection.
 - ♦ b. Effective date of Contract will be the final completion date for the Work or portion thereof as established by Consultant's Letter Establishing Substantial Completion Date, or as otherwise required in the Contract Documents.

➤ 1.6 OPERATION AND MAINTENANCE DATA

- A Quality Assurance:
 - 1. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B Format:
 - 1. Prepare data in the form of an instructional manual
 - 2. Bind in commercial quality 8-1/2 x 11 inch three D side ring binders with durable plastic covers, 3 inch maximum ring size:
 - ♦ a. When multiple binders are used, correlate data into related consistent groupings
 - ♦ b. Provide sheet lifters for front and back of binder.
 - ♦ c. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
 - ♦ d. Index Tab Dividers:
 - 1) Provide tabbed dividers for each separate product and system, with type description of product and major component parts of equipment
 - 2) Provide index tab sheet identified as "Contents" in front of the first page of the table of contents to prevent laser printer or copier toner from sticking to vinyl binder.
 - 3. Text: Manufacturer's printed data, or neatly typewritten data on 20 pound minimum paper.
 - 4. Drawings: Provide with reinforced punched binder tab Bind in with text; fold larger drawings to size of text pages.
- C. Contents, Each Volume:
 - 1. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Project Consultant, Subconsultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume
 - 2. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts and applicable local maintenance contractors

- 3. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information
- 4. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- 5. Typed Text: As required to supplement product data Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.
- 6. Warranties: Bind in copy of each.
- 7. Product Bonds: Bind in photocopy of each.
- D. Manual For Materials And Finishes:
 - 1. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Provide information for re-ordering custom manufactured Products.
 - 2. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance
 - 3. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
 - 4. Additional Requirements: As specified in individual Product specification sections.
 - 5. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.
- E. Manual for Equipment and Systems:
 - 1. Each Item of Equipment and Each System: Include description of unit or system, and component parts Identify function, normal operating characteristics, and limiting conditions Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts
 - 2. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
 - 3. Include color-coded wiring diagrams as installed.
 - 4. Operating Procedures:
 - ♦ a. Include start-up, break-in, and routine normal operating instructions and sequences.
 - ♦ b. Include regulation, control, stopping, shut-down, and emergency instructions.
 - ♦ c. Include summer, winter, and any special operating instructions.
 - 5. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
 - 6. Provide servicing and lubrication schedule, and list of lubricants required.
 - 7. Include manufacturer's printed operation and maintenance instructions.
 - 8. Include sequence of operation by controls manufacturer.
 - 9. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
 - 10. Provide control diagrams by controls manufacturer as installed.
 - 11. Provide Contractor's coordination drawings, with color-coded piping diagrams as installed.
 - 12. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
 - 13. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.

- 14. Include test and balancing reports as specified in the Contract Document.
- 15. Additional Requirements: As specified in individual Product specification sections.
- 16. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.
- F. Instruction of Owner Personnel:
 - 1. Provide copies of all instructional materials, including video taped documentation of training sessions or other instructional audio-visual materials, as specified in Section 01820, Demonstration and Training and other locations in the Contract Documents.
 - 2. Prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.
- G. Submittals:
 - 1. Preliminary Draft/Outline:
 - ♦ a. Submit two copies of preliminary draft or proposed formats and outlines of contents within ninety (90) days of receipt of Notice to Proceed.
 - ♦ b. Project Consultant and, as applicable, the Owner's Commissioning Authority and/or other consultants, will review draft and return one copy with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance
 - 3. Review Copy:
 - ♦ a. Submit 1 copy of completed volumes thirty (30) days prior to submitting Contractor's Request for Substantial Completion Inspection.
 - ♦ b. This copy will be reviewed and returned with comments by the Project Consultant, the Owner, and other Owner consulting reviewers as applicable.
 - ♦ c. Revise content of all document sets as required by comments provide by the Project Consultant and the Owner prior to final submission.
 - 4. Final Submittals:
 - ♦ a. Submit five (5) sets of revised final volumes in final form prior to submitting Contractor's Request for Substantial Completion Inspection.
- 1.7 MAINTENANCE MATERIALS
 - A. Submit maintenance materials, equipment and accessories of the types and in the quantities specified within the respective specification Sections of Divisions 2 through 16.
 - B. Provide maintenance materials, equipment and accessories in original manufacturer's packaging with manufacturer's original, clearly legible labeling.
 - C. Coordinate delivery date and final storage location of maintenance materials, equipment and accessories to the Owner through the Project Consultant prior to submittal of Contractor's Request for Substantial Completion Inspection.
 - D. Do not utilize maintenance materials or equipment for cleaning, maintenance or other Contractor operations.
 - E. Test and inspect maintenance materials, equipment and accessories to ensure operability, fitness for purpose and new condition prior to submitting to the Owner.
- 1.8 PRODUCT WARRANTIES
 - A. Summary:
 - 1. This article specifies general administrative and procedural requirements for warranties required by the Contract Documents, including manufacturers standard warranties on products and special warranties.
 - ♦ b. Refer to Document CAF#170. FRM for terms of the Contractor's special warranty of workmanship and materials.
 - ♦ a. Specific requirements for warranties for the Work and products and installations that are specified to be warranted, are included in the individual Sections of Divisions 2 through 16.

- 2. Disclaimers and Limitations: Manufacturer's exclusions, disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.
- B. Definitions:
 - 1. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
 - 2. Special Warranties:
 - ♦ a. Are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.
 - ♦ b. Refer to individual Sections of Divisions 2 through 16 for specific content requirements, standard form documents, and particular requirements for submittal of special warranties.
- C. Warranty Requirements
 - 1. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
 - 2. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
 - 3. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
 - 4. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 5. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
 - 6. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- D. Submittals:
 - 1. Draft Copies:
 - ♦ a. When a warranty document is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner through the Project Consultant for approval.
 - ♦ b. Forms for special warranties are included in the Project Manual in the respective Sections of Divisions 2 through 16 or are available through the Project Consultant. Prepare a written document utilizing the appropriate form, ready for

- execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer. Submit a draft to the Owner through the Project Consultant for approval.
- ♦ c. Submit draft copies of all proposed final warranty documents to the Project Consultant under provisions of Section 01300, Submittals for the Owner and Project Consultant's review.
 - ♦ d. Edit warranty documents to make them project specific for the Owner.
 - ♦ e. Remove exclusions, disclaimers and limitations on product warranties not allowed by the Contract Documents.
 - ♦ f. Include terms and conditions in addition to the "standard" warranty as may be required by the Contract Documents.
 - ♦ g. Catalog copies or other "sample" warranty forms not presented in project specific format for the Owner shall be resubmitted2 Form of Submittal:
- 2. Form of Submittal:
 - ♦ a. Prior to Substantial Completion compile two copies of each required warranty properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer.
 - ♦ b. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - ♦ c. Bind in commercial quality 8-1/2 x 11 inch three D side ring binders with durable plastic covers, 3 inch maximum ring size:
 - 1) Provide sheet lifters for front and back of binder
 - 2) Cover: Identify each binder with typed or printed title WARRANTIES with title of Project; name, address and telephone number of Contractor and name of responsible company principal.
 - 3) Table of Contents:
 - i) Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of Product or work item.
 - ii) Provide index tab sheet identified as "Contents" in front of the first page of the table of contents to prevent laser printer or copier toner from sticking to vinyl binder.
 - 4) Separate each warranty with index tab sheets keyed to the Table of Contents listing.
 - i) Provide full information, using separate typed sheets as necessary
 - ii) List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
 - ♦ d. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty documents, as necessary, for inclusion in each required manual.
 - E. Timing of Submittals:
 - 1. Draft warranty documents: Submit with shop drawings, product data or samples as otherwise required for the specified product. If no other submittals are required for a specific product, submit required draft warranty documents in a timely manner prior to delivery and installation of the product on the site.
 - 2. Submit final warranty documents to the Project Consultant not later than seven (7) days after the date of Substantial Completion for the Work or a portion thereof as established on the Project Consultant's executed Consultant's Letter Establishing Substantial Completion Date.
 - 3. If the Project Consultant's executed Consultant's Letter Establishing Substantial

- Completion Date, designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Project Consultant.
- 4. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Project Consultant within seven (7) days of completion of that designated portion of the Work.

➤ 1.9 PRODUCT BONDS

- A. Preparation of Submittals
 - 1. Obtain bonds executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of bond until the Date of Substantial completion is determined.
 - 2. Verify that documents are in proper form, contain full information, and are notarized.
 - 3. Co-execute submittals when required.
 - 4. Retain bonds until time specified for submittal.
- B. Form of Submittals.
 - 1. Draft Copies:
 - ♦ a. When a product bond is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties.
 - ♦ b. Forms for product bonds: Provided by Contractor. Prepare a written document utilizing an appropriate form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer. Submit a draft to the Owner through the Project Consultant for approval.
 - ♦ c. Submit draft copies of all proposed final product bonds to the Project Consultant for review.
 - 2. Form of Submittal:
 - ♦ a. Prior to Substantial Completion compile two copies of each required product bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer.
 - ♦ b. Organize product bonds into an orderly sequence based on the table of contents of the Project Manual and bind in ring binders with the cover titled "Product Bonds" with accessories, index tabs and table of contents, and other identifications as specified for Warranty documents above adjusted to reflect the appropriate product bonds content.
 - ♦ c. When operating and maintenance manuals are required for bonded construction or products, provide additional copies of each required product bonds, as necessary, for inclusion in each required manual.
- C. Timing of Submittals:
 - 1. Draft product bonds: Submit with shop drawings, product data or samples as otherwise required for the specified product. If no other submittals are required for a specific product, submit required draft product bonds in a timely manner prior to delivery and installation of the product on the site.
 - 2. Submit final product bond documents to the Project Consultant not later than seven (7) days after the date of Substantial Completion for the Work or a portion thereof as established on the Project Consultant's executed Consultant's Letter Establishing Substantial Completion Date.

- 3. If the Project Consultant's executed Consultant's Letter Establishing Substantial Completion
- Date, designates a commencement date for product bonds other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit product bonds upon request of the Project Consultant.
- 4. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed product bonds to the Project Consultant within seven (7) days of completion of that designated portion of the Work.

➤ 1.10 PROJECT RECORD DOCUMENTS

- A. General Requirements:
 - 1. Do not use record documents for construction purposes
 - 2. Protect from deterioration and loss in a secure, fire-resistive location.
 - 3. Provide access to record documents for reference by the Project Consultant, the Owner, and other Owner related personnel during normal working hours.
 - 4. Make project record documents available for inspection by jurisdictional authorities at all times
 - 5. Ensure special protection of project record documents
- B. Maintain at the site for the Owner one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders, Project Consultant's Supplementary Instructions and other modifications to the Contract.
 - 5. Approved submittals including all administrative submittals as may be required in the Project Manual.
 - 6. Field Test Records and Reports.
 - 7. Construction Photographs.
- C. Maintenance of Project Record Documents:
 - 1. Store documents, samples in contractor's field office apart from documents used for construction.
 - ♦ a. Provide fire resistive files and racks for storage of documents.
 - ♦ b. Provide locked fire resistive cabinets or secure storage spaces for storage of samples.
 - 2. Filing Organization:
 - ♦ a. File information concerning individual products according to the 1995 edition of MasterFormat as published by the Construction Specifications Institute.
 - ♦ b. File information concerning assemblies and systems according to the CSI/CSC UniFormat as published by the Construction Specifications Institute, edition current upon Notice to Proceed date.
 - 3. Maintain documents in a clean, dry, legible condition and in good order.
- D. Record Drawings:
 - 1. Maintain a clean, undamaged set of blue or black line on white prints of Contract Drawings and Shop Drawings.
 - 2. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown.
 - 3. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings.

- 4. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
- 5. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
- 6. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
- 7. Note related Change Order numbers where applicable.
- 8. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
- E. Record Specifications:
 - 1. Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction.
 - 2. Mark these documents to show substantial variations in actual Work performed in comparison with the text of the Specifications and modifications.
 - 3. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation.
 - 4. Note related record drawing information and Product Data.
 - 5. Upon completion of the Work, submit record Specifications to the Project Consultant for the Owner's records.
- F. Record Product Data:
 - 1. Maintain one copy of each Product Data submittal. Mark these documents to show significant variations in actual Work performed in comparison with information submitted.
 - 2. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations.
 - 3. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation.
 - 4. Note related Change Orders and mark-up of record drawings and Specifications.
 - 5. Upon completion of mark-up, submit complete set of record Product Data to the Project Consultant for the Owner's records.
- G. Record Sample Submitted:
 - 1. Immediately prior to the date or dates of Substantial Completion, the Contractor will meet at the site with the Project Consultant and the Owner's personnel to determine which of the submitted Samples that have been maintained during progress of the Work are to be transmitted to the Owner for record purposes.
 - 2. Comply with delivery to the Owner's Sample storage area.
- H. Miscellaneous Record Submittals:
 - 1. Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with actual performance of the Work.
 - 2. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference.
 - 3. Submit to the Project Consultant for the Owner's records.
- 1.11 SPARE PARTS
 - A. Submit spare parts and related accessories of the types and in the quantities specified within the respective specification Sections of Divisions 2 through 16.

- B. Provide spare parts in original manufacturer's packaging with manufacturer's original, clearly legible labeling.
 - C. Coordinate delivery date and final storage location of spare parts through the Project Consultant prior to submittal of Contractor's Request for Substantial Completion Inspection.
 - D. Do not utilize spare parts for any purpose during construction.
 - E. Test and inspect spare parts to ensure operability, fitness for purpose and new condition prior to submitting to the Owner.
- 12. ELECTRONIC MEDIA
- A. General Requirements:
 - 1. All Work, including surveying work, drawings, maps, details or other drawing information to be provided in electronic media by the Contractor shall be accomplished and developed using computer-aided design and drafting (CADD) software and procedures conforming to the following criteria.
 - B. Graphic Format:
 - 1. Provide all CADD data in Autodesk, Inc.'s AutoCAD release 2004 (or later version) for Windows native electronic digital format i.e., .dwg).
 - 2. Target platform: Pentium III based IBM compatible personal computer with a minimum Windows 98 compatibility.
 - 3. Ensure that all digital files and data (e.g., base files, prototype drawings, reference files, blocks, attribute links, etc.) are compatible with the Owner's target CADD system (Le., basic and advanced CADD software, platform, database software), and adhere to the standard and requirements specified herein.
 - 4. The term "compatible" means that data can be accessed directly by the target CADD system without translation, preprocessing, or postprocessing of the electronic digital data files. It is the responsibility of the contractor to ensure this level of compatibility.
 - 5. Any non-graphical database delivered with prepared drawings: provide in relational database format compatible with Microsoft Access 2004 or higher, or other compatible SQL format database.
 - 6. Maintain all linkages of non-graphical data with graphic elements, relationships between database tables, and report formats.
 - 7. All database tables: conform to the structure and field-naming guidance provided upon request by the Owner.
 - C. CADD Standards:
 - 1. Standard plotted drawing size: 24 inch x 36 inch sheets; this project utilizes 30 inch x 42 inch sheets.
 - 2. Coordinate with the Owner concerning the standard file naming protocol to be utilized.
 - 3. No deviations from the Owner's established CADD standards will be permitted unless prior written approval of such deviation has been received from the Owner.
 - D. Delivery Media And Format:
 - 1. Submit two copies of all CADD data and files developed under this contract shall be delivered to the Owner on electronic digital media as a closeout submittal as required in Section 01770, Closeout Procedures.
 - 2. For projects with electronic digital files the electronic digital data and files shall be provided on CD-ROM.
 - 3. The electronic digital media shall be in the format which can be read and processed by the Owner's target CADD system.
 - 4. The external label for each electronic digital media shall contain, as a minimum, the following information:

- ♦ a. The Project Number, Project Title and date.
- ♦ b. The Facility Name.
- ♦ c. The format and version of operating system software.
- ♦ d. The name and version of utility software used for preparation (e.g., compression/decompression) and copying files to the media.
- ♦ e. The sequence number of the digital media.
- ♦ f. A list of the filenames.
- 5. Before a CADD file is placed on the delivery electronic digital media, the following procedures shall be performed:
 - ♦ a. Make sure all reference files are attached without device or directory specifications.
 - ♦ b. Compress and reduce all design files using WINZIP or other compatible file compression/decompression software approved by the Owner. If the file compression/decompression software is different from that specified above, then a electronic digital media copy of the file compression/decompression software shall be purchased for the Owner and provided to the Owner with the delivery media.
 - ♦ c. Make sure that all support files such as those listed above are in the same directory and that references to those files do not include device or directory specifications.
 - ♦ d. Include any standard sheets (i.e., abbreviation sheets, standard symbol sheets, etc. necessary for a complete project).
- E Submittal:
 - 1. Submit as Project Record Documents specified above and under provisions of Section 01770, Closeout Procedures.
 - 2. Submit electronic media with a transmittal letter containing, as a minimum, the following information:
 - ♦ a. The information included on the external label of each media unit (e.g., disk, tape), along with the total number being delivered, and a list of the names and descriptions of the files on each one.
 - ♦ b. Certification that all delivery media are free of known computer viruses. A statement including the name(s) and release date(s) of the virus-scanning software used to analyze the delivery media, the date the virus-scan was performed, and the operator's name shall also be included with the certification. The release or version date of the virus-scanning software shall be the current version that has detected the latest known viruses at the time of delivery of the digital media.
 - ♦ c. The following "Plot File Development and Project Documentation Information" as a enclosure or attachment to the transmittal letter provided with each electronic digital media submittal
 - 1) Documentation of the plot file for each drawing which will be needed to be able to duplicate the creation of the plot file by the Owner at a later date. This documentation shall include the plotter configuration (e.g., name and model of plotter), pen settings, drawing orientation, drawing size, and any other special plotter instructions.
 - 2) Instructions concerning how to generate plotted, or hard copy, drawings from the provided plot files.
 - 3) List of any deviations from the Owner's standard layer/level scheme and file-naming conventions.
 - 4) List of all new symbol blocks created for project, which were not provided to the Contractor with the Owner-furnished materials.
 - 5) List of any non-IGES crosshatch/patterns used.

- 6) List of all new figures, symbols, tables, schedules, details, and other blocks create for the project, which were not provided to the Contractor with the Owner-furnished materials, and any associated properties.
- 7) List of all database files associated with each drawing, as well as a description and documentation of the database format and schema design.
- 8) Recommended modifications which will be necessary to make the data available for GIS use.
- F. Ownership:
 - 1. Broward County, Florida, for itself and such others as it deems appropriate, will have unlimited rights under this contract to all information and materials developed under this contract and furnished to the Owner and documentation thereof, reports, and listings, and all other items pertaining to the work and services pursuant to this agreement including any copyright.
 - 2. Unlimited rights under this contract are rights to use, duplicate, or disclose text, data, drawings, and information, in whole or in part in any manner and for any purpose whatsoever without compensation to or approval from the Contractor or Surveyor.
 - 3. The Owner will at all reasonable times have the right to inspect the work and will have access to and the right to make copies of the above-mentioned items.
 - 4. All text, electronic digital files, data, and other products generated under this contract shall become the property of the Owner.
- 1.13 DEM AND FEMA CLOSEOUT SUBMITTAL DOCUMENTS
 - A. In accordance with the documents listed below, the Contractor shall submit all documents, records, etc. required by the State of Florida Department of Emergency Management (DEM) and FEMA to complete project closeout requirements.
 - B. The following documents are included as noted in Specification Section 01120 Information Available to Bidders, Paragraph 4.
 - 1. Exhibit "C": State of Florida DEM HMGP FMA Closeout Checklist.
 - 2. Exhibit "D": FEMA Hazard Mitigation Grant Program Desk Reference, October, 1999.
 - 3. Exhibit "E": FEMA Hazard Mitigation Assistance Unified Guidance, June 16, 2009.
 - C. Submittals shall be in the form and number required by the respective Exhibits listed above.
 - D. All records and documents associated with this project should be retained for five (5) years.
 - E. Hazard Mitigation Grant Program (HMGP) - Items Required by Contractor:
 - 1. This information should include, but is not limited to the following:
 - ♦ a. Description of completed project or Engineer's certificate of completion.
 - ♦ b. Invoices, receipts, vouchers, or other verification of expenses.
 - ♦ c. All correspondence from project approval to completion.
 - ♦ d. Copies of contracts awarded for project work.
 - ♦ e. Copies of Purchase Orders.
 - ♦ f. Any additional items identified as necessary for audit purposes by auditors.
 - ♦ g. Any additional items as requested by the State Inspector.
 - ♦ h. Copies of closed permits.
 - ♦ i. Copy Product Approval (NOA).
 - ♦ j. Multiple Proposals (include proposals that were rejected).
 - ♦ k. Final Proposals.
 - ♦ l. Photographs of work in progress | complete.
 - ♦ m. Daily Logs.

- ♦ n. Inspection Reports
- ♦ o. Testing Reports
- ♦ p. Plans & Specs.
- ♦ q. Warranties
- ♦ r. Submittals, Shop Drawings.
- ♦ s. Signed Permit Card, C. O. or Acceptance of project completion by Bldg. Dept.
- ♦ t. Certificate of Substantial Completion, Punch List .
- ♦ u. Final Inspection Report.
- ♦ v. Partial Releases of Lien & Final Releases of Lien.
- ♦ w. Release of Retainer (letter from contractor & paid invoice).

❖ Sect. 01820 DEMONSTRATION AND TRAINING

➤ 1.3 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.

❖ Sect. 07841 THROUGH-PENETRATION FIRESTOP SYSTEMS

➤ 3.6 CLEANING AND PROTECTING

- B. Provide final protection and maintain conditions during and after installation that ensure that through-penetration firestop systems are without damage or deterioration at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged.

❖ Sect. 07920 JOINT SEALANTS

➤ 1.5 WARRANTY

- B. Furnish written warranty that work executed under this section is free from defects of material and workmanship for a period of 10 years from date of substantial completion of the entire project.

❖ Sect. 08411 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

➤ 1.10 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to
- repair or replace components of aluminum-framed systems that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - ♦ a. Structural failures including, but not limited to, excessive deflection..
 - ♦ b. Noise or vibration caused by thermal movements
 - ♦ c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - ♦ d. Adhesive or cohesive sealant failures.
 - ♦ e. Water leakage through fixed glazing and framing areas.
 - ♦ f. Failure of operating components.
 - 2. Warranty Period: Ten (10) years from date of Substantial Completion.
- B. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components on which finishes do not comply with requirements or that fail in materials or workmanship within specified warranty period. Warranty does not include normal weathering.
 - 1. Warranty Period: Twenty (20) years from date of Substantial Completion.

➤ 1.11 MAINTENANCE SERVICE

- A. Entrance Door Hardware:

- 1. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of entrance door hardware.
- 2. Initial Maintenance Service: Beginning at Substantial Completion, provide twelve (12) months' full maintenance by skilled employees of entrance door hardware Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper entrance door hardware operation at rated speed and capacity.. Provide parts and supplies the same as those used in the manufacture and installation of original equipment.
- B. Structural-Sealant-Glazed Systems:
 - 1. Initial Maintenance Service: Beginning at Substantial Completion, provide Twelve (12) months' full maintenance by skilled employees of structural-sealant-glazed system Installer, at no additional cost to the Owner. Include quarterly preventive maintenance, repair or replacement to ensure long-term performance and durability of structural-sealant-glazed system as required for proper entrance door hardware operation at rated speed and capacity. Provide parts and supplies the same as those used in the manufacture and installation of original system.
 - 2. Continuing Maintenance Proposal: From Installer to Owner, in the form of a standard yearly (or other period) maintenance agreement, starting on date initial maintenance service is concluded. State services, obligations, conditions, and terms for agreement period and for future renewal options.

❖ Sect. 08441 GLAZED ALUMINUM CURTAIN WALLS

➤ 1.10 WARRANTY

- A. Special Assembly Warranty: Standard form in which manufacturer agrees to repair or replace components of glazed aluminum curtain walls that do not comply with requirements or that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - ♦ a. Structural failures including, but not limited to, excessive deflection.
 - ♦ b. Noise or vibration created by wind and thermal and structural movements.
 - ♦ c. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - ♦ d. Water penetration through fixed glazing and framing areas.
 - ♦ e. Failure of operating components.
 - 2. Warranty Period: Ten (10) years from date of Substantial Completion.
- B. Special Finish Warranty: Standard form in which manufacturer agrees to repair finishes or replace aluminum that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Deterioration includes, but is not limited to, the following:
 - ♦ a. Color fading more than 5 Hunter units when tested according to ASTM D2244.
 - ♦ b. Chalking in excess of a No. 8 rating when tested according to ASTM D4214.
 - ♦ c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Warranty Period: Twenty (20) years from date of Substantial Completion.

➤ 3.4 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform field water tests and inspections.

- B. Testing Services: Testing and inspecting of representative areas of glazed aluminum curtain walls shall take place as installation proceeds to determine compliance of installed assemblies with specified requirements.
 - 1. Water Penetration: Areas shall be tested according to ASTM E 1105 at a pressure differential of 15% of the highest positive design pressure approved for this project or 12 psf, whichever is greater and shall not evidence water penetration.
 - ♦ a. Test Area: One bay wide, but not less than 30 feet (9.1 m), by one story of glazed aluminum curtain wall.
 - ♦ b. Perform a minimum of two (2) tests per test session in areas as directed by
 - ♦ Consultant.
 - ♦ c. Perform tests in each test area as directed by Consultant Three (3) test sessions to be provided: one at 10 percent installation, one at 50 percent installation and one at substantial completion of installation.
 - ♦ d. Costs for the initial tests shall be paid for by the Owner. All unsuccessful tests, both initial and re-tests shall be paid for by the glazing subcontractor.
 - ♦ Testing shall continue at contractor's expense until three (3) consecutive successful tests have been achieved.
 - ♦ e. Prior to remedial work of failed units, Contractor to submit written remedial procedures to Consultant for review. Contractor to incorporate the approved remedial work into all similar areas of curtain wall on the entire project.
- C. Glazed aluminum curtain walls will be considered defective if they do not pass tests and inspections.

❖ Sect. 08461 IMPACT RATED SLIDING AUTOMATIC ENTRANCES

➤ 1.10 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of automatic entrances that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - 2. Warranty Period: Two (2) years from date of Substantial Completion.
- B. During the warranty period the Contractor shall engage a factory-trained technician to perform service and affect repairs. A safety inspection shall be performed after each adjustment or repair and a completed inspection form shall be submitted to the Owner.
- C. During the warranty period all warranty work, including but not limited to emergency service, shall be performed during normal working hours.
- D. Special Finish Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components that show evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Deterioration includes, but is not limited to, the following:
 - ♦ a. Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - ♦ b. Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - ♦ c. Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Warranty Period: Twenty (20) years from date of Substantial Completion.

➤ 1.11 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, provide Twelve (12) months' full maintenance by skilled employees of automatic entrance Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper automatic entrance operation at rated speed and capacity. Provide parts and supplies the same as those used in the manufacture and installation of original equipment.

- 1. Engage a certified inspector to perform safety inspection after each adjustment or repair and at end of maintenance period. Furnish completed inspection reports to Owner.
- 2. Perform maintenance, including emergency callback service, during normal working hours.
- 3. Include 24-hour-per-day, 7-day-per-week, emergency callback service.

❖ Sect. 08710 DOOR HARDWARE

➤ 1.9 WARRANTY

- A. Ensure material furnished is warranted for one (1) year after Substantial Completion or longer as the individual manufacturer's warranty permits.
- B. Mechanical Locks and Electronic Access Locks: Warranted in writing by the manufacturer against failure due to defective materials and workmanship, for a period of five (5) years commencing from the Date of Substantial Completion.
- C. Other Electronic Hardware (Power supplies, ELIRX/LX switches, etc.): Warranted for one (1) year from Date of Purchase.
- D. Overhead Door Closers: Warranted in writing by the manufacturer against failure due to defective materials and workmanship, for a period of ten (10) years commencing on the Date of Final Completion and Acceptance, and in the event of failure, the manufacturer is to promptly repair or replace the defective with no additional cost to the Owner.

❖ Sect. 08716 AUTOMATIC DOOR OPERATORS

➤ 1.10 WARRANTY

- A. Automatic door operators shall be free of defects in material and workmanship for a period of one (1) year from the date of substantial completion.
- B. During the warranty period the Owner shall engage a factory-trained technician to perform service and affect repairs. A safety inspection shall be performed after each adjustment or repair and a completed inspection form shall be submitted to the Owner.
- C. During the warranty period all warranty work, including but not limited to emergency service, shall be performed during normal working hours.

❖ Sect. 08800 GLAZING

➤ 1.11 WARRANTY

- A. Manufacturer's Special Warranty for Coated-Glass Products: Manufacturer's standard form in which coated-glass manufacturer agrees to replace coated-glass units that deteriorate within specified warranty period. Deterioration of coated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning coated glass contrary to manufacturer's written instructions. Defects include peeling, cracking, and other indications of deterioration in coating.
 - 1. Warranty Period: 10 years from date of Substantial Completion.
- B. Manufacturer's Special Warranty on Laminated Glass: Manufacturer's standard form in which laminated-glass manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.
 - 1. Warranty Period: 10 years from date of Substantial Completion
- C. Manufacturer's Special Warranty on Insulating Glass: Manufacturer's standard form in which insulating-glass manufacturer agrees to replace insulating-glass units that deteriorate within specified warranty period. Deterioration of insulating glass is defined as failure of

hermetic seal under normal use that is not attributed to glass breakage or to maintaining and cleaning insulating glass contrary to manufacturer's written instructions. Evidence of failure is the obstruction of vision by dust, moisture, or film on interior surfaces of glass.

- 1. Warranty Period: 10 years from date of Substantial Completion.

- Note: check Addendums for any modifications.

➤ 3.8 CLEANING AND PROTECTION

- E. Wash glass on both exposed surfaces in each area of Project not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

❖ Sect. 09310 CERAMIC

➤ 3.7 CLEANING and PROTECTION

- D. Protect final tile installation in a manner, and so as to maintain conditions, to ensure tile work will not deteriorate or be damaged at time of Substantial Completion.
- G. Just prior to acceptance remove protective paper and rinse neutral cleaner from surfaces of tile. Dry and lightly buff.

❖ Sect. 09650 RESILIENT FLOORING

➤ 3.5 CLEANING AND PROTECTION

- A. Perform following operations immediately upon completion of resilient flooring:
 - 1. Sweep or vacuum floor thoroughly.
- B. Do not wash floor until time period recommended by resilient flooring manufacturer has elapsed to allow resilient flooring to become well-sealed in adhesive.
- C. Contractor is to strip and wax resilient flooring.. Contractor to provide floor wax Contractor to coordinate with owner representative for information regarding type of floor wax.
- D. Apply seven (7) successive coats of polish, buffing between coats
- E. Protection:
 - 1. Protect resilient flooring against damage from rolling loads for initial period following installation by covering by covering with undyed, untreated building paper until inspection for Substantial Completion or hardboard where required to protect against loading or heavy traffic. Use dollies to move stationary equipment or furnishings across floors.
 - 2. Prohibit traffic on floor finish for 48 hours after installation

➤ 3.6 EXTRA STOCK

- A. Deliver stock of maintenance materials to Owner equal to two percent (2%) of amount installed for each type of resilient tile, base and accessory item installed.
- B. Furnish maintenance materials from same manufactured lot as materials installed and enclosed in protective packaging with appropriate identifying labels.

❖ Sect. 09680 CARPET

➤ 1.11 WARRANTY

- A. Special Warranty for Carpet: Manufacturer agrees to repair or replace components of carpet installation that fail in materials or workmanship within specified warranty period.
 - 1. Warranty does not include deterioration or failure of carpet due to unusual traffic, failure of substrate, vandalism, or abuse.
 - 2. Failures include, but are not limited to, more than 10 percent loss of face fiber, edge raveling, snags, runs, loss of tuft bind strength, excess static discharge, and delamination.
 - 3. Warranty Period: 15 years from date of Substantial Completion, including but not restricted to static wear, delamination, and edge ravel.

❖ Sect. 12492 VERTICAL LOUVER BLINDS

➤ 3.4 CLEANING AND PROTECTION

- A. Clean vertical louver blind surfaces after installation according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions in a manner acceptable to manufacturer and installer and that ensures that vertical louver blinds are without damage or deterioration at time of Substantial Completion.

- C. Replace damaged vertical louver blinds that cannot be repaired in a manner approved by Architect before time of Substantial Completion.
- 3.5 DEMONSTRATION
 - A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain systems.
- ❖ Sect. 12494 ROLLER SHADES
 - 3.4 CLEANING AND PROTECTION
 - A. Clean roller-shade surfaces after installation, according to manufacturer's written instructions.
 - B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and Installer, that ensure that roller shades are without damage or deterioration at time of Substantial Completion.
 - C. Replace damaged roller shades that cannot be repaired, in a manner approved by Architect, before time of Substantial Completion.
 - 3.5 DEMONSTRATION
 - A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain motor-operated roller shades.



Construction Management Division

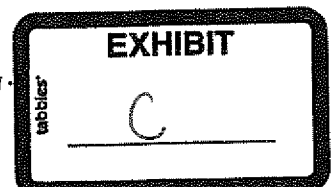
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**List of Pending Deductive Change Orders & Back Charges
April 3, 2014**

Re: **Broward County Main Library (BCML) Wind Mitigation Project**
100 South Andrews Ave. Ft. Lauderdale, Florida
CMD Project No. 2600-2008-00 (Formerly PMIS #130908)
HMGP Contract #9HM-37-11-16-01-072
SMA Project No. 2010-127

Below is a List of pending Deductive Change Orders & Back Charges for the Main Library Wind Mitigation Project. This list is not a detailed and final compilation of all of the county's claims against the surety.

Item	Cost
1. Liquidated Damages (127 days (July 2 – Nov. 5, 2013) @ \$1,300/day):	\$165,000.00 to Nov. 5th termination, and growing @ \$1,330/day.
2. COR#(TBD) 05/02/13 Water Damage Claim	(\$41,012.72) and possibly more.
3. COR#64-Equally shared revenues from recycled materials	To be determined (TBD)
4. COR#61R2-Back charge for setting off fire alarms	(\$1,652.00)
5. COR#63-Backcharge for 8th Fl. SW compliant CB's not installed	(TBD)
6. COR#59: credit for not reinstalling bad carpet at 4th Fl. N. curtain wall (PR#21).	(\$800)
7. COR#60: credit for palms & plants not removed & reinstalled.	(TBD)
8. COR#(TBD) Back charge for Automatic Doors Repaired 10/24/13	(TBD)
9. COR#(TBD) Back charge for Repair NW Doors Broken 01/08/14	(TBD)
10. COR#(TBD) Back charge for opening walkway to NW entrance (1/9/14)	(TBD)
11. Back charge for damaged atrium palm fronds	(TBD)
12. Back charge for repairs of automatic doors defects (Coastal Doors 10/24/13 invoice)	(\$960.00) and possibly more.
13. Back charge for cleanup of the plaza, NE entrances, and consolidation of staging areas (Facilities Management Divisions' (FMD) completed on or about 2/24/14).	\$9,710.46
14. Design Consultant's extended Contract Administration services	(TBD)
15. Facilities Management Divisions' expenditures due to contractor's failures and surety takeover	(TBD)
16. Property damage due to the contractor's failures	(TBD)
17. County Attorneys' fees	(TBD)
18. County repairs to roof doors 901 & 902 (see 3/7/14 Observation Report)	(TBD)



19.	County securing materials from being blown off South terraces (see 3/7/14 Observation Report)	(TBD)
20.	Other damages	(TBD)