Board of Education

REGULAR MEETING Thursday, March 18, 2021 – 6:30 p.m. Virtual Meeting via ZOOM

In an effort to adhere to social distancing guidelines, this meeting will be held without normal in-person public access. However, the meeting will be broadcasted live on the City of Waterbury's Government Access Channel (Comcast 96, Frontier 6096), streamed live a <u>https://youtu.be/tB0Kh3xZFsc</u> or listened to via teleconference by calling 1-701-802-5303 with access code 7755337.

For information regarding agenda items please visit <u>www.waterbury.k12.ct.us/board</u> and refer to the March 18, 2021 Meeting Agenda AND March 4, 2021 Workshop Agenda which will provide additional backup materials for agenda items.

If you wish to address the Board during the public portion of the meeting please call 1-701-802-5303 with access code 7755337 between 6:00 and 6:15 p.m. and provide your name, address, and phone number. You will then need to participate via the above teleconference call information at 6:30 p.m. The Board President will call upon you to address the Board during the public speaking portion of the meeting.

AGENDA

- 1. Silent Prayer
- 2. Pledge of Allegiance to the Flag
- 3. Roll Call

4. Communications

- a) Copy of communication dated February 17, 2021 from Civil Service certifying Dale LeGree for the position of Maintainer I.
- b) Email communication dated February 17, 2021 from Thomas Mallon regarding parent concern.
- c) Copy of communications dated February 19, 2021 from Civil Service certifying Shawn Lasky and Zachary Grillo for the position of Maintainer I.
- d) Email communication dated February 19, 2021 from CABE regarding Policy Highlights.
- e) Copy of communication dated February 23, 2021 from Civil Service certifying Adrian Rijos for the position of Maintainer I.
- f) Copy of communications dated March 1, 2021 from Civil Service offering employment for the position of Food Service Worker to Arellys Cruz Velazquez, Larissa Espinosa Acevedo, Maria Talbot, and Angela Rossi.
- g) Copy of communication dated March 5, 2021 from Civil Service offering employment for the position of Food Service Worker to Donna Hassinger-Synott.
- h) Email communication dated March 5, 2021 from CABE regarding Policy Highlights.
- i) Copy of communications dated March 9, 2021 from Civil Service offering employment for the position of Food Service Worker to Elizabeth Lopez and Carolyn Thorpe.
- j) Copy of communication dated March 10, 2021 from Civil Service certifying Abigail Gyampo for the position of Paraprofessional.
- k) Copy of communications dated March 22, 2021 from Civil Service offering employment for the position of Food Service Worker to Genevieve Manfredi and Iris Lebron.
- **5. Public Addresses the Board** (see instructions above) All speakers are encouraged to submit prepared written statements to the Commissioners. Comments shall be limited to a maximum of five minutes. There will be no responses this evening to any questions or concerns raised; they will be referred to the Administration for review and response.

6. Superintendent's Announcements

7. President's Comments

8. Student Representatives' Comments

9. Consent Calendar

- 9.1 *Committee on Finance:* Request approval of a Student Teacher Practicum Affiliation Agreement with Alternate Route to Teacher Certification (ARC) for Alternate Route to Certification Student Practicum Placement Program.
- 9.2 *Committee on Finance:* Request approval of a Professional Services Agreement with Family and Children's Aid, Inc. to provide consulting services under the School Readiness Quality Enhancement Grant.
- 9.3 *Committee on Finance:* Request approval of an Agreement with Waterford Country School, Inc. to provide special education services to students.
- 9.4 *Committee on Finance:* Request approval of a Student Intern Affiliation Agreement with Southern Connecticut State University for Social Work Student Internships.
- 9.5 *Committee on Finance:* Request approval to apply for the CSDE Career and Technical Education Secondary Special Populations Recruitment and Retention Grant.
- 9.6 *Committee on Finance:* Request approval to apply for the CSDE Promoting Financial Literacy in Middle School Statewide Grant 2021.
- 9.7 *Committee on Finance:* Request approval of a Construction Contract with SK Mechanical, LLC for the Walsh School Boiler Replacement Project.
- 9.8 *Committee on Finance:* Request approval of Amendment #1 to the Agreement with Stanley Convergent Security Solutions, Inc.
- 9.9 *Committee on Policy & Legislation:* Request approval of revised Policy 4000.1 Title IX (staff).
- 9.10 *Committee on Policy & Legislation:* Request approval of new Policy 5145.44 Title IX (students).

10. Items removed from Consent Calendar

11. Committee on Finance – Commissioner Orso

11.1 Request approval of a Construction Contract with Creative Recreation, LLC, to provide Playscape Equipment and Installation for the Wendell Cross Project.

11.2 Request approval of contract with Connecticut Communications, LLC for voice over IP equipment and services.

12. Committee on Building & School Facilities – Commissioner Sweeney

12.1 Request approval of Final Plans, Form SCG-042, for the Generali Roof Project.

13. Committee of the Whole – Commissioner Harvey

13.1 Request approval of the Collective Bargaining Agreement with the School Crossing Guards for the period of July 1, 2020 through June 30, 2023.

14. Superintendent's Notification to the Board

14.1 Appointments:

Moriarty, Shea – Middle School Athletic Director, effective immediately.

14.2 <u>Maloney Magnet School's Before and After School Program appointments:</u> Kelly Lund – Teacher

14.3 <u>Commissioner's Network/SIG Appointments:</u>

NAME	SCHOOL	TITLE
Shortt, Katia	WMS	Science Instructional Tutor/SIG
Torres, Lianne	WMS	Math Instructional Tutor/SIG
Pelosi, Emily	WMS	After-school Math Teacher/Comm. Network
Meringer, Cynthia	WMS	After-school Math Teacher/Comm. Network
Banks, Melissa	WMS	Social Studies Tutor/SIG
Greene, David	WMS	ELA Instructional Tutor/SIG

14.4 Grant Funded appointments:

Name	Position/Location	FT/PT	Rate of Pay	Union	Effective
NeShanda Johnson	Behavior Counselor Wilby High School	FT	\$22.00	UPSEU 69	02/25/2021
Julianne Burdo	Grant Facilitator Rotella	FT	\$20.00	UPSEU 69	02/25/2021
Stephaniel Carlo	Secretary 2 WSMS	FT	\$16.18	UPSEU 69	02/25/2021
Rhiana Murphy	Parent Educator Reed Elementary	РТ	\$15.12	Non BOE	03/04/2021
Pedro Silva II	Birth-3 Transition Coord./Early Childhood	FT	\$22.00	UPSEU 69	03/04/2021
Craig Everitt Jr	Network Specialist Maloney	FT	\$19.00	UPSEU 69	03/04/2021
Louis SantaBarbara	IntaBarbara Classroom Aide Adult Education		\$21.50	NonBOE	03/11/2021
Joan Kelly	Tutor Yeshiva K'Tana	РТ	\$33.00	NonBOE	03/18/2021

Mary Simms	Tutor Holy Cross	РТ	\$33.00	NonBOE	03/18/2021
Nicholas Napp	Extended Hours Tutor Carrington	РТ	\$25.00	NonBOE	01/28/2021
Elizabeth Swartz	Extended Hours Tutor Regan	РТ	\$25.00	NonBOE	2/09/2021

14.5 Extended School Hours (ESH) appointments:

SCHOOL	LAST NAME	FIRST NAME	ASSIGNMENT
Bunker Hill	Brayton	Katie	Teacher
Bunker Hill	Santulli	Nicole	Paraprofessional
Tinker	Wehry	Nina	Secretary
Tinker	Mastrianna	Catherine	Substitute Teacher
Tinker	Gannon	Danielle	Substitute Teacher
Tinker	Jones	Imani	Substitute Admin./or Substitute Teacher
Tinker	Sagendorf	Janet	Administrator
Duggan	DeFeo	Dawn	Teacher (replacing Maureen McCasland)
Duggan	Peters	Courtney	Substitute Teacher
Duggan	Ciarlo	Marion	Substitute Teacher

14.6 <u>New teacher hires:</u>

<u>Last</u>	<u>First</u>	<u>Assignment</u>		<u>Effective</u>
Bickley	Robert	Wilby	General Science	1/28/2021
Camacho	Reule	North End MS	Music (Chorus)	1/22/2021
Cassidy	Lauren	North End MS	Special Ed-ABA	1/4/2021
Coniku	Vistela	West Side MS	Math	3/11/2021
Cummings	Thomas	Wallace	SEL Counselor	3/11/2021
Kozma	Tarra	Waterbury Arts	Guidance Counselor	3/8/2021
Munoz	Trevor	Wallace	Social Studies	3/1/2021
Muro	Candida	Rotella	Gr 4	3/11/2021
Notchick	Maria	North End MS	English	3/11/2021
Pete	Latasha	Wallace	Math Gr 6-8	1/25/2021
Rivera	Kalyrin	Generali	Gr 1	2/18/2021
Weinstein	Irene	Tinker	Library Media	2/22/2021

14.7 <u>Resignations:</u>

Alberstadt, Karyn – CHS ELA, effective 02/25/21. Carroll, Amy – Reed Special Education, effective 03/17/21. Nott, Timothy – Wilson BDLC, effective 03/03/21.

14.8 <u>Retirements:</u>

Glass, Rosalyn – KHS Vice Principal, effective 09/30/21. Quattrociocchi, Domenic – WAMS Social Studies, effective 06/30/21. Rek, Lori – WMS ELA, effective 06/30/21. Tasimi, Donika – Generali ESL, effective 08/31/21. Van Amburg, Sandra – Kingsbury Art, effective 03/31/21. Warhola, Gayle – WSMS Special Education, effective 03/22/21 (date correction). Williams, Richard – WMS Math, effective 06/30/21. Zillo, Maria – Chase Vice Principal, effective 04/01/21.

15. Unfinished Business of Preceding Meeting Only

16. Other Unfinished, New, and Miscellaneous Business

17. Executive Session

18. Adjournment

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.1

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a Student Teacher Practicum Affiliation Agreement with Alternate Route to Teacher Certification (ARC), Connecticut Office of Higher Education, for a three-year period and at no cost, for Alternate Route to Certification Student Practicum Placement Program.

Approved

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.2

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a Professional Services Agreement with Family and Children's Aid, Inc. to provide consulting services under the School Readiness Quality Enhancement Grant.

Approved

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.3

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve an Agreement with Waterford Country School, Inc., for a three-year period, to provide special education services to students with disabilities.

Approved:

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.4

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a Student Intern Affiliation Agreement with Southern Connecticut State University, for a three-year period and at no costs, for Social Work Student Internships.

Approved:

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.5

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve to apply for the Connecticut State Department of Education Career & Technical Education Secondary Special Populations Recruitment and Retention Grant 2021.

Approved:

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.6

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve to apply for the Connecticut State Department of Education Promoting Middle School Financial Literacy Statewide Grant 2021.

Approved:

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.7

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a Construction Contract with SK Mechanical, LLC, for the Walsh Elementary School Boiler Replacement Project.

Approved:

Memorandum

To: Board of Aldermen

From: Chris Harmon, Inspector, School Inspector's Office

Date: March 9, 2021

Re: Board of Aldermen Approval Request / Executive Summary - Construction Contract for Walsh Boilers Replacement between the City of Waterbury and SK Mechanical, LLC

The School Inspector's Office respectfully requests your approval of the above-referenced contract in the amount of \$287,155 for Walsh Boiler System Replacement between the City of Waterbury and SK Mechanical, LLC. This contract is subject to Board of Education approval anticipated at their upcoming meeting on 3/18/2021.

This contract was initiated under the Request for Proposal process (RFP #6760). There were several bidders for this project with SK Mechanical, LLC being the unanimous choice and the lowest responsible bidder.

This project consists of replacing the boiler system at Walsh Elementary School which is past its useful life. This will create a more cost effective and efficient heating system at Walsh. The project's engineering and design consultant, BL Companies, will supervise the work. The one year Contractor Warranty for materials, workmanship and installation is included in this contract.

The Contract Term is 150 consecutive calendar days for Final Completion. The project is funded through approved Capital Funds. This project is subject to Prevailing Wage Rates.

Accordingly, attached for your review and consideration are the requisite number of copies of the proposed contract, Disclosure and Certification of Obligations Affidavit Regarding Outstanding Obligations Form plus a copy of the Tax Clearance issued by the Office of Tax Collections.

Please note further that an electronic version and one complete set ("record copy") of Construction Documents, including Contract, Plans and Specifications, has been placed on file with the City Clerk's Office.

Lastly, please be advised that the department will have a representative present at your upcoming meeting to answer any questions you may have regarding this matter.

Thank you,

Chris Harmon Attachment

cc: Attorney Kara J. Summa, via email, w/o attachment.

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CONSTRUCTION CONTRACT [RFP No. 6760] for WALSH ELEMENTARY SCHOOL BOILER REPLACEMENT PROJECT between City of Waterbury and SK MECHANICAL, LLC

THIS CONTRACT ("Contract" or "Agreement"), effective on the date signed by the Mayor, is by and between the CITY OF WATERBURY ("City"), City Hall, 235 Grand Street, Waterbury, Connecticut and SK MECHANICAL, LLC ("Contractor"), located at 266 Center Street, Manchester, Connecticut 06040, a State of Connecticut duly registered limited liability company (jointly referred to as the "Parties" to this Agreement).

WHEREAS, the Contractor submitted a proposal to the City in response to Request for Proposal ("RFP") Number 6760 for Walsh Elementary School Boiler Replacement Project; and,

WHEREAS, the City selected the Contractor to perform services regarding RFP Number 6760 and; and

WHEREAS, the City desires to obtain the Contractor's services pursuant to the terms, conditions and provisions set forth in this Contract (the "Project").

NOW THEREFORE, THE PARTIES AGREE AND COVENANT AS FOLLOWS:

1. Scope of Services. The Contractor shall furnish all of the labor, services, equipment, materials, supplies, transportation, and incidentals necessary to complete the Project as specified in this agreement (also referred to herein as "Contract") and such shall be completed in a satisfactory manner, as reasonably determined by the City. All labor, services, equipment, materials, supplies, transportation, and incidentals shall comply with (i) any and all applicable local, state and federal laws, statutes, ordinances, rules and regulations, including without limitation all notice requirements thereunder, and (ii) generally accepted professional standards.

1.1. The Project consists of Walsh Elementary School Boiler Replacement Project which consists of the furnishing and installation of a new boiler system at Walsh Elementary School located at 55 Dikeman Street in Waterbury. Furthermore, the project consists of demolition to facilitate installation of new boiler system and disassembly and removal of old equipment and debris; installation of two (2) new natural gas high efficiency steam boilers, venting, and accessories; installation of one (1) new condensate pump, piping and accessories; installation of one (1) new boiler feed system, piping, chemical feed system and blowdown separator; startup and owner training including which includes providing manufacturer startup for all equipment, one (1) day of owner training with the manufacturer, and chemical burn in treatment; Contractor providing protections for all finishes and restoring finishes to existing condition after construction; one-year

manufacturer warranty and one-year warranty for installation of parts; Contractor will service boiler system for one year after installation; as is all detailed and described in the Contract Documents in **Attachment A**, all of which are hereby made material provisions of this Contract. **Attachment A** shall consist of the following, which are attached hereto, are acknowledged by the Contractor as having been received, or otherwise hereby incorporated by reference as noted below, and all are made a part hereof:

- City's RFP No. 6760, consisting of 9 pages (excluding attachments thereto), (attached hereto);
- 1.1.2 Addendum #4 to City's RFP No. 6760, consisting of 1 page (attached hereto);
- 1.1.3 Addendum #2 to City's RFP No. 6760, consisting of 2 pages (attached hereto);
- **1.1.4** Contractor's Revised Price Proposal, dated November 11, 2020, consisting of 2 pages (attached hereto);
- 1.1.5 Contractor's Response (also referred to as "Contractor's Qualification Statement" as attachment "E" to RFP/Response) to RFP No. 6760, dated September 18, 2020, consisting of 6 pages (excluding original price proposal, City contract compliance documents and Contractor's bid bond, all incorporated by reference), (attached hereto);
- 1.1.6 "City of Waterbury, Board of Education, RFP #6760, Attachment F Scope of Services, General Description" (also may be referred to as Technical Specifications") including Division 01 - General Requirements and Division 02 - Exiting Conditions, consisting of 46 pages (attached hereto);
- **1.1.7** "Site Map" with List of Drawings prepared by BL Companies, consisting of 11 pages (attached hereto);
- **1.1.8** State of Connecticut Prevailing Wage Schedule, dated March 2, 2021, and related information, consisting of 10 pages (attached hereto and as otherwise incorporated by reference).
- **1.1.9** Contractor's Certificate of Insurance (attached hereto, or otherwise incorporated by reference);
- 1.1.10 Contractor's Performance Bond (attached hereto, or otherwise incorporated by reference);
- 1.1.11 Contractor's Payment Bond (attached hereto, or otherwise incorporated by reference);
- 1.1.12 Any and all amendment(s) and Change Orders issued by the City after execution of Contract (incorporated by reference);
- 1.1.13 All applicable Federal, State and local statutes, regulations charter and ordinances (incorporated by reference); and
- 1.1.14 All applicable permits and licenses (incorporated by reference).

1.2. The entirety of **Attachment A** plus this executed instrument are together deemed the Contract Documents (hereinafter collectively referred to as "Contract Documents"). The City's record copy of the Contract Documents shall control and shall be effective and binding on the Contractor. In the event that any provision in the Contract Documents conflict with any other provision therein, the provision in the component part of the

Contract Document first enumerated below shall govern over any other component part which follows it numerically.

- 1.2.1 Amendment(s) and Change Orders
- 1.2.2 This Contract
- 1.2.4 Addendum #4 to RFP No. 6760
- 1.2.4 Addendum #2 to RFP No. 6760
- **1.2.5** "City of Waterbury, Board of Education, RFP #6760, Attachment F Scope of Services, General Description" (also may be referred to as Technical Specifications).
- 1.2.6 Contractor's Revised Price Proposal
- 1.2.7 RFP No. 6760
- 1.2.8 Contractor's Response
- 1.2.9 Federal, State, and local laws, regulations, charter and ordinances
- 1.2.10 Drawings

1.3. The City and Contractor agree and understand that SK Mechanical is the single prime contractor for this project. The Parties further agree that wherever the word "contractor" is used, and however it is used, whether referring to multiple contractors, or otherwise, any such reference to contractor for purposes of this Agreement is meant to, and shall be construed to, solely mean SK Mechanical, LLC. Specifically, in Attachment A, "City of Waterbury, Board of Education, RFP #6760, Attachment F Scope of Services, General Description" (also may be referred to as Technical Specifications) the document refers to multiple contractors, etc.; the Parties agree all such references mean SK Mechanical, LLC as the sole prime contractor.

2. Representations Regarding Qualification and Accreditation. The Contractor represents that its employees are licensed to perform the scope of work set forth in this Contract. The Contractor further represents that its employees have the requisite skill, expertise and knowledge necessary to perform the scope of work required under the terms of this Contract, including any supplementary work and the City relies upon Contractor's representations.

2.1. Representations regarding Personnel. The Contractor represents that it has, or will secure at its own expense, all personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City, unless use of City employees or of personnel having a contractual relationship with the City is approved in writing. As set forth above, all the services required hereunder shall be performed by the Contractor or under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state or local law to perform such services.

2.2. Representations regarding Qualifications. The Consultant hereby represents that, to the extent required by Federal, State and Local statutes, regulations, codes, ordinances, and policies, that the Consultant and/or its employees be licensed, certified, registered, or otherwise qualified, the Consultant and all employees providing services under this Contract, are in full compliance with those statutes, regulations and

ordinances. Upon City request, the Consultant shall provide to the City a copy of the Consultant's licenses, certifications, registrations, etc.

3. **Responsibilities of the Contractor.** The Contractor agrees to properly implement the services required in the manner herein provided. The Contractor shall, in addition to any other responsibilities set forth in this Contract and the Schedules and Attachments hereto, perform the following coincident with the performance of this Contract:

3.1. Due Diligence Obligation. The Contractor acknowledges its responsibilities to examine and to be thoroughly familiar with the City's request for proposal documents, including, but not limited to the plans, specifications, drawings and any addenda thereto. The Contractor hereby warrants and represents that prior to the submission of its proposal during the solicitation process it reviewed or was afforded opportunity, by the City, to review all physical items, facilities, services and functions essential to the satisfactory performance of the services required ("Due Diligence") and thereby certifies that all such items facilities, services and functions are included in this Contract and thereby warrants that:

3.1.1 it conducted or had opportunity to conduct all due diligence prior to the submission of its proposal and, accordingly, any additional costs, services or products resulting from the failure of the Contractor to complete Due Diligence prior to submission of its proposal shall be borne by the Contractor. Furthermore, the Contractor had the opportunity during the bid process to ask questions it saw fit and to review the responses from the City;

3.1.2 its failure or omission to make investigation and verification of data shall, in no way, be cause for future claim of ignorance of such data or conditions nor shall such failure to investigate and verify be the basis for any claim whatsoever, monetary or otherwise;

3.1.3 it is solely responsible for resolving any issues resulting from its failure to conduct due diligence and it shall assume any and all resulting costs it incurs during the Project;

3.1.4 it was responsible for specifying any changes and disclosing any associated new costs prior to submittal of its proposal. In the event the Contractor failed to disclose any such new cost prior to the submittal of its bid, the Contractor hereby covenants that it shall remain solely responsible for, and shall absorb, those non-disclosed costs;

3.1.5 it has familiarized itself with the nature and extent of the Contract Documents, Project, locality, and with all local conditions and Federal, State and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Project;

3.1.6 it has given the City written notice of any conflict, error or discrepancy that the Contractor discovered in the City's proposal documents and other documents for **RFP No. 6760** (collectively "Proposal Documents");

3.1.7. it agrees that the Bid Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Project;

3.1.8. it has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Scope of Services which were utilized in the preparation of the plans and specifications;

3.1.9 it has made or caused to be made examinations, investigations, measurements and tests and studies of any applicable reports and related data as it deems necessary for ensuring performance of the Scope of Services at the Contract Price within the Contract Time and in accordance with the other terms and conditions of the Contracts; and certifies no additional examinations, investigations, tests, reports or similar data are or will be required by Contractor for such purposes; and

3.1.10 The Contractor shall not take advantage of any obvious error or apparent discrepancy in the Contract. Notice of any error or discrepancy discovered shall be given immediately in writing to the City, who shall make such corrections and interpretations as it may deem necessary for the completion of the Project in a satisfactory and acceptable manner.

3.2. Safety. Contractor shall perform all work in a safe manner in full compliance with local, state and federal health and safety regulations. Contractor shall immediately correct any dangerous condition caused by or resulting from its work. If it fails to correct, or to act diligently to correct, any condition which the City reasonably believes to be a hazard to persons or property, then immediately upon oral or written notice to any supervisory or similar personnel of Contractor, City may, but shall not be required to, correct same at Contractor's expense. City shall confirm in writing any oral notice given within five (5) business days thereafter.

3.3. Storage. In the event the Project site has insufficient, inadequate, and/or improper storage space, it shall be the responsibility of the Contractor to secure, provide and maintain at the Contractor's sole cost and expense (i) adequate off-site storage space for equipment, materials, incidentals, etc., and (ii) all associated delivery and transportation services. In either event, the Contractor shall assume full responsibility for equipment, materials, incidentals, etc. until both title and risk of loss pass to the City pursuant to Section 8 of this Contract.

3.4. Working Hours. To the extent the Contractor is required to be on City property to render the Contractor's services hereunder, the Contractor shall coordinate its schedule so that work on and at the Project site is performed during the hours of 7:00 a.m. and

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6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturday, Sunday and legal holidays unless more exactly specified elsewhere in this Contract or **Attachment A** or unless prior written permission is obtained from the City to work during other times. This provision shall not excuse the Contractor from timely performance under the Contract.

3.5. Cleaning Up. The Contractor shall at all times keep the Project site free from accumulation of waste materials or rubbish caused by Contractor's employees or subcontractors, and at the completion of the work shall remove all rubbish from and about the Project and all tools, scaffolding and surplus materials and shall leave the Project site "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the City may remove the rubbish and charge the cost to the Contractor.

3.6. Publicity. Contractor agrees not to deliberately disclose the fact that the City has entered into or terminated this Contract or disclose any of the terms of the Contract or use the City's name in connection with any publicity, unless the City gives prior written consent to such use of the City's name in each instance.

3.7. Standard of Performance. All Contractor labor, materials, supplies, components, equipment, reports, plans, specifications, drawings, deliverables, incidentals, etc., required to be furnished or delivered under this Contract shall conform in all respects with the requirements set forth in this Contract and shall meet or exceed those standards generally recognized in the Contractor's craft and trade in the State of Connecticut. City specified manufacturer and/or brand name substitution desired by the Contractor shall be made only with the prior written consent of an authorized representative of the City's Using Agency.

3.7.1 In carrying out the Project, the Contractor must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor, nor with the normal routine of the institution or agency operating at the Project site.

3.8. Contractor's Employees. The Contractor shall at all times enforce strict discipline and good order among its employees, and shall not employ on the work any unfit person or anyone not skilled in the work assigned. The Contractor shall not, without the prior written approval of the City's Using Agency, substitute, terminate, replace or otherwise remove any Contractor employee expressly named, identified or required in this Contract.

3.9. Subsurface/Unknown Site Conditions. If Project site conditions are encountered which are (i) subsurface or otherwise concealed physical conditions or other conditions which differ materially from those indicated in the Contract Documents, or (ii) unknown conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent or common in construction activities of the character provided for in this Contract, then prompt notice by the observing party shall be given to the other party to this Contract before Project site

conditions may be disturbed. The Contractor shall thereafter wait for written instructions from the City before proceeding with regard to such conditions.

3.10. Surveys. All surveys required under this Contract shall be performed by a State of Connecticut duly licensed land surveyor. Unless expressly stated to the contrary in Section 1 of this Contract and Attachment A, the Contractor shall perform all layout work, all field measurements and all construction staking required, necessary or prudent for the satisfactory prosecution of the Contractor's obligations under this Contract.

3.11. Permits and Licenses. Unless expressly stated to the contrary in Section 1 of this Contract and Attachment A, the Contractor shall secure and obtain all permits and all licenses required, or necessary, or prudent for the performance of the Contractor's obligations under this Contract and for the City's occupancy, use, and operation of the Project.

3.12. Manufacturer's Directions. Where it is required in this Contract that materials, products, processes, equipment or the like be installed or applied in accord with manufacturer's directions, specifications or instructions, it shall be construed to mean that the said application or installation by the Contractor shall be in strict accord with printed instructions furnished by the manufacturer of the material concerned for use under conditions similar to those at the Project site. One (1) copy of such instructions shall be furnished to the City.

3.13. Review by the City. The Contractor shall permit the City and the City's duly authorized representatives and agents to review, at any time, all work performed under the terms of this Contract at any stage of the Project.

3.14. Records Maintenance. The Contractor shall maintain or cause to be maintained all records, books or other documents relative to charges, costs, expenses, fees, alleged breaches of the Contract, settlement of claims or any other matter pertaining to the Contractor's demand for payment.

3.15. Temporary Utilities. The City shall not permit connection to its utilities.

4. **Responsibilities of the City and City Reservation of Rights.** Upon the City's receipt of Contractor's written request for specific information, the City will provide the Contractor with existing documents, data and other materials the City agrees are necessary and appropriate to the services to be performed by the Contractor hereunder and the City will endeavor to secure, where feasible and where the City agrees it is necessary and appropriate, materials or information from other sources requested by the Contractor for the purpose of carrying out the services under this Contract.

4.1. The City may, in its sole discretion, designate person(s) to act as the City's Project Engineer(s) and/or Manager(s) and the City may, in its sole discretion, define such person(s) authority and responsibilities.

4.2. The City reserves the right to (i) perform work related or unrelated to the Project with the City's own forces adjoining, adjacent to, or in the vicinity of, the Project site and/or (ii) let separate contracts related or unrelated to the Project for work and services adjoining, adjacent to, or in the vicinity of, the Project site. In such event, the Contractor shall afford all such parties reasonable opportunity for storage of materials and equipment and for the uninterrupted provision and delivery of such parties' work and/or services. The Contractor shall cooperate with such parties and in the case of a dispute, the decision of the City shall be complied with by all.

5. Contract Time. The Contractor shall Substantially Complete all work and services required under this Contract within **One Hundred Twenty (120) consecutive calendar days** of the City's written Notice to Proceed and shall reach Final Completion within **One Hundred Fifty (150) consecutive calendar days** of the City's written Notice to Proceed ("Contract Time").

5.1. Within one (1) week of the City's issuance of its written notice to proceed, and prior to the commencement of any work on the Project site, the Contractor shall submit for the City's written approval a construction progress schedule. On a monthly basis, the Contractor shall deliver to the City a written status report setting forth an analysis and critique of the Contractor's compliance with said schedule.

5.2. Delay Damages

5.2.1 Time is and shall be of the essence for all Project Phase Completion Dates, Milestones, Substantial and Final Completion Date. The Contractor further agrees that the Project shall be prosecuted regularly, diligently and uninterruptedly and at such rate of progress as will insure full completion thereof within the Contract time stated above. It is expressly understood and agreed, by and between the Contractor and City, that the Phase Completion Dates, Milestones, Substantial and Final Completion Date are reasonable for the completion of the Project.

5.2.1.1 The Contractor shall pay to the City the sum of the greater of **Five Hundred Dollars and Zero Cents (\$500.00) per consecutive calendar day** for each and every calendar day for which the Contractor is in default in completing the work beyond 120 days from the start of the Project, the Final Completion Date, Substantial Completion Date, Milestones and Phase Completion Dates, as set forth in Section 5, or the actual damages incurred by the City caused by the delay. The preceding sum is hereby agreed upon not as a penalty, but as delay damages for the delay that the City shall suffer due to such default.

5.2.1.2 The City shall have the right to recover all damages pursuant to any remedy at law or equity including but not limited to deducting the amount of any such damages from any monies due the Contractor under this Contract. The Contractor understands that if the entire Work or of any portion of the Work that the City has agreed to accept separately, if any, is not attained by the applicable completion dates as set forth in the

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entire Section 5, the City will suffer damages, which are difficult to specify accurately and ascertain. Delay damages based upon delay shall be assessed to compensate the City for all actual loss sustained by the delay, including, but not limited to, loss of use, increased cost of material or services to complete the project, loss of State funding, all other another actual expense, and all other damages allowed by law, including attorney's fees.

5.3 No Damage for Delay

In no event shall the Contractor be entitled to any compensation or recovery of any damages in connection with any Delay, including, without limitation, consequential damages, lost opportunity damages, attorney's fees or other, similar remuneration. The City's exercise of any of its rights or remedies under the Contract Documents, including without limitation, ordering changes in the Work, or directing suspension, rescheduling or correction of the Work, regardless of the extent or frequency of the City's exercise of these rights has been contemplated by the parties and shall not be construed as an exception.

6. **Compensation.** The City shall compensate the Contractor for satisfactory provision of all of the goods and services set forth in this Contract as follows in this Section 6. No claims for additional compensation will be considered for conditions made known to the Contractor prior to bidding. No claims for additional compensation will be considered on account of failure of the Contractor to completely inform itself as required herein above.

6.1. Fee Schedule. Subject to retainage, limitations, etc. set forth below in this Section 6, the fee payable to the Contractor shall not exceed TWO HUNDRED EIGHTY SEVEN THOUSAND ONE HUNDRED FIFTY FIVE DOLLRS AND ZERO CENTS (\$287,155.00) (hereafter referred to as "Total Compensation") with the basis for payment being Contractor's Revised Price Proposal set forth in Attachment A's "Contractor's Revised Price proposal, dated November 11, 2020," which is summarized below:

6.1.1 \$261,050.00.....(Bid Item #1.0 - Base Bid/Payment)

6.1.2 \$26,105.00.....(Bid Item #2.0 Allowance for Changes)

6.2. Retainage. At the City's sole discretion, it hereby reserves the right to withhold as retainage five percent (5%) of any payment (or monetary sum otherwise required by law) owed to the Contractor to be withheld from payments to the Contractor otherwise payable to the Contractor until such time as the Contractor's work and services to be provided under this Contact are fully completed and accepted in writing by the City. The retainage does not does not include additional sums that the City may withhold due to the Contractor's failure to comply with provisions of this Contract.

6.3. Limitation of Payment. Compensation to the Contractor is limited to those fees set forth in Section 6.1. of this Contract and is further limited to work (i) performed in fact, (ii) conforming with this Contract, and (iii) accepted in writing by a duly authorized City employee. Such compensation shall be paid by the City upon its review and approval of the Contractor's invoices for payment and review of the Contractor's work.

6.3.1 Funding. In the event this Contract is funded, in whole or in part, by Federal and/or State monies, grants, loans, etc, all City payment(s) shall fully comply with all relevant Federal and State statutes and regulations. In the event this Contract is 100% funded by Federal and/or State monies, grants, loans, etc., the aggregate sum of all City payments shall not exceed the aggregate sum of such funding.

6.3.2 The Contractor and its affiliates are hereby provided with notice that the City reserves the right, in the City's sole discretion, to offset, withhold, or otherwise reduce City payment(s) to the Contractor, in an amount equaling the sum or sums of money the Contractor and/or its affiliates is/are, or become delinquent or in arrears on, regarding the Vendor's and/or its affiliates real and personal property taxes and other payment obligations to the City.

6.4. Proposal Costs. All costs of the Contractor in preparing its bid for RFP Number6760 shall be solely borne by the Contractor and are not included in the compensationto be paid by the City to the Contractor under this Contract or any other agreement.

6.5. Payment for Services, Materials, Appliances, Employees. The Contractor shall be responsible to the City for the suitability of services, materials and equipment furnished to comply fully with the requirements set forth in this Contract. The Contractor shall promptly pay all employees as their pay falls due, shall pay promptly as they fall due all bills for subcontractors, materials, supplies and services going into the work, and all bills for insurance, bonds, Worker's Compensation coverage, Federal and State Unemployment Compensation, and Social Security charges applicable to this Project. Before final City payment is made, the Contractor shall furnish to the City a sworn, notarized, affidavit stating that all of the foregoing payment obligations have been fully completed.

6.6. Liens. Neither the City's final payment nor any part of the retained percentage, if any, shall become due until the Contractor, if required by the City, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required, in either case, an affidavit that so far as the Contractor has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the City, to indemnify it against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the City all moneys that the City may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

6.7. Contractor's Certificate of Completion. Upon the Contractor's (i) completion of all Project milestones, and (ii) Substantial Completion of the Project, and (iii) Final Completion of the Project, the Contractor shall, in each instance, file with the City a written, notarized affidavit setting forth the amount of Project work performed. The City reserves the right to verify or challenge by any reasonable means the accuracy of said affidavit.

6.8. Final Payment. All prior estimates and City payments, including those relating to extra or additional work, retainage(s), and holdback(s), shall be subject to correction by this final payment which is throughout this Contract called "Final Payment". No payment, final or partial, shall act as a release to the Contractor or its surety from any Contractor obligation(s) under this Contract.

6.9. Clean Water Fund Project Requirements. In the event this Contract is funded in whole or in part, is reliant upon, or falls within the jurisdiction of the Clean Water Fund and its statutes, regulations and rules, the Contractor shall:

6.9.1 submit Applications for Payment in accordance with the following:

The City must receive the Contractor's Application for Payment by the City's or its designee's, review and recommendation for payment, by the fifteenth calendar day of the month to receive payment within the next 50 days. If not received by the fifteenth calendar day of the month, payment cannot be made until 50 days after the fifteenth calendar day of the subsequent month. The Contractor shall provide at the City's request, reasonable documentation to substantiate Contractor's Application for Payment.

6.9.2 Progress and Final Payments

The City will make progress payments on account of the Contract Price on the basis of the Contractor's Applications for Payment, monthly during construction as provided below. All progress payments will be on the basis of the progress of the Scope of Services as determined by the City, according to the schedule of values provided for in the Contract Documents, and approved by the City. Prior to Substantial Completion, progress payments will be limited to an amount equal to 95 percent of the value of the Scope of Services completed. Upon Substantial Completion, the City will pay the amount as specified in the Contract Documents.

7. Warranty of the Contractor. The Contractor warrants to the City that all materials, supplies, components, equipment, etc. furnished under this Contract shall be new and of good quality, except as otherwise expressly stated and permitted by the City elsewhere in this Contract. The Contractor warrants that none of its work shall be defective. The Contractor shall be liable to repair and install and/or replace without charge any service, component, equipment or part thereof which is defective or does not conform with this Contract within the greater of (i) three hundred sixty five (365) calendar days after the City delivers its written notice of its acceptance of the Project and statement therein establishing the final completion date, or (ii) that time period or date expressly stated elsewhere in this Contract or Attachment A.

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7.1. The Contractor further warrants that all materials, supplies, services, components, equipment, reports, plans, drawings, deliverables, incidentals, etc., shall be free from any and all defects caused by faulty design, faulty material or poor workmanship. The Contractor shall supply to the City copies of any written manufacturer's warranties and guarantees. The Contractor's foregoing warranty obligations are in addition to, and not a limitation of, all manufacturer's warranties and guarantees, and any other remedy stated in this contract or otherwise available to the City under applicable law.

8. Passing of Title and Risk of Loss.

8.1. City beneficial use of Project equipment, materials, site-work, etc. prior to the Contractor's final completion of the Project or prior to the City's final payment for the Project shall neither act to vest title in the City nor act to transfer risk of loss from the Contractor to the City. Said title and risk shall pass to the City upon the City's final payment for the Project.

8.2. Contractor and its insurer shall assume the risks of loss or damage to the equipment up to and including the date title passes, except that City shall be responsible for loss or damage caused by City's gross negligence.

8.3. After Project equipment, materials, etc. are delivered to the Project work-site and become operable or functional, the Contractor shall not thereafter remove any such equipment, materials, etc. from the Project work-site without securing the prior written consent of an authorized City Using Agency employee.

9. Indemnification.

9.1. The Contractor shall indemnify, defend, and hold harmless the City, City's Boards, and Board of Education, commissions, agents, officials and employees from and against all claims, suits, damages, losses, judgments, costs and expenses including attorney's fees arising out of or resulting from the delivery of the labor, services, equipment, materials, reports, plans, specifications, design, drawings, deliverables, incidentals, etc. provided that any such claims, suits, damages, losses, judgments, costs or expenses (i) are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting there from, (ii) are alleged to be caused in whole or in part by any willful, intentional, negligent, or reckless act or omission of the Contractor, its employees, any subcontractor or consultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder; (iii) enforcement action or any claim for breach of the Contractor's duties hereunder or (iv) claim for intangible loss(es) including but not limited to business losses, lost profits or revenue, regardless of whether or not it is caused in part by a party indemnified hereunder.

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9.2. In any and all claims against the City, Board of Education or any of City's boards, agents, employees or officers by the Contractor or any employee of the Contractor, any subcontractor or consultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 9 above, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

9.3. The Contractor understands and agrees that any insurance required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, defend, keep and hold harmless the City, the Board of Education, any of City's boards, agents, employees as provided in this Contract.

9.4. The Contractor expressly understands and agrees that any performance bond or insurance protection required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City and the City's boards, agents, employees or officers as provided herein.

9.5. Royalties and Patents. The Contractor shall, for all time, secure to the City the free and undisputed right to the use of any and all patented articles and methods used in the work and shall defend at Contractor's own expense any and all suits for infringement or alleged infringement of such patents, and in the event of adverse award under patent suits, the Contractor shall pay such awards and hold the City harmless in connection with any patent suits that may arise as a result of installations made by the Contractor and as to any award made thereunder.

9.6. In the event this Contract and/or the Contractor's, or its subcontractor, work and services provisioned hereunder is/are subject to the provisions of any Federal or State statute or regulations, or the City Charter or City Ordinance, the Contractor shall indemnify, defend and hold harmless the City from any fine, penalty or other amounts imposed on the City under said statutes, regulations, Charter or Ordinances, if caused by Contractor, or its subcontractor, omission or commission.

10. Contract Bonds. The Contractor shall furnish to the City, prior to the execution of this Contract by the City, both a performance bond and a payment bond, each bond written for a penal sum equaling the Section 6 "Total Compensation" amount in a form and with a surety acceptable to the City. The bonds shall continue in effect for the greater of (i) the warranty period set forth in Section 7 of this Contract, or (ii) 365 calendar days after the Final Completion Date referenced elsewhere in this Contract.

11. Contractor's Insurance.

11.1. The Contractor shall not commence work under this Contract until all insurance required under this Section 11 has been obtained by the Contractor and such insurance has been approved by the City. The Contractor shall not allow any subcontractor to commence work on any subcontract until all insurance required of any such

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subcontractor has been so obtained and approved by the City. Insurance shall be provided by insurers, satisfactory to the City and authorized to do business in the State of Connecticut, an "A-" Best's Rating and at least a Class V3 or better financial size category as shown in the most current A.M. Best Company ratings.

11.2. At no additional cost to the City, the Contractor shall purchase and maintain the insurance coverages set forth below, or as otherwise approved by the City in writing, which shall protect the City from claims which may arise out of or result from the Contractor's obligation under this Contract, whether such obligations are the Contractor's or subcontractor or person or entity directly or indirectly employed by said Contractor or subcontractor, or by any person or entity for whose acts said Contractor or subcontractor or subcontractor or subcontractor.

11.3. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this Contract and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 60 months.

11.4. The following policies, or insurance coverages as otherwise approved by the City in writing, with stated limits shall be maintained, in full force and effect, at all times during which the services are to be performed by the Contractor:

11.4.1 General Liability Insurance:

\$1,000,000.00 each Occurrence

\$2,000,000.00 General Aggregate

\$2,000,000.00 Products/Completed Operations Aggregate Providing coverage to protect the City for all damages arising out of bodily injuries, sickness to or death of all persons in any one accident or occurrence and for all damages arising out of destruction of property in any one accident or occurrence.

11.4.2 Automobile Liability Insurance:

\$1,000,000.00 Combined Single Limit Each Accident Any Auto, All Owned and Hired Autos

Providing coverage to protect the City with respect to claims for damage for bodily injury and or property damage arising out of ownership, maintenance, operation, use or loading and unloading of any auto including hired & nonowned autos.

11.4.3 Workers' Compensation: Statutory Limits within the State of Connecticut: Employer Liability (EL):

EL Each Accident \$500,000.00

EL Disease Each Employee \$500,000.00

EL Disease Policy Limit \$500,000.00

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Contractor shall comply with all State of Connecticut statutes as it relates to workers' compensation.

11.4.4 Excess/Umbrella Liability Insurance:

\$1,000,000.00 each Occurrence

\$1,000,000.00 Aggregate

Excess or Umbrella insurance coverage that follows form or sits over General Liability, Automobile Liability and Workers Compensation insurances.

11.4.5 Builder's Risk/Installation Floater Insurance:

\$1,000,000.00 each Occurrence

OR Limits Equaling the Value of the Project.

11.4.6 Contractors Pollution Liability Insurance:

\$1,000,000.00 each Occurrence/Claim

\$1,000,000.00 Aggregate

There will be no exclusion for hazardous materials, including asbestos and lead.

The foregoing coverage plus appropriate aggregate coverage depending on the size of the job for contractor caused pollution events such as asbestos or lead abatement, but not limited to only these pollution causes of loss.

11.5. Failure to Maintain Insurance: In the event the Contractor fails to maintain the minimum required coverage as set forth herein, the City may at its option purchase same, and offset the Contractor's invoices for the cost of said insurance.

11.6. Cancellation: The City of Waterbury shall receive written notice of cancellation from the Contractor at least thirty (30) calendar days prior to the date of actual cancellation, regardless of the reason for such cancellation.

11.7. Certificates of Insurance: All Contractor's Insurance except Workers' Compensation shall be endorsed to add the City as additional insured and provide waiver of subrogation on all policies except Builders Risk. The insurance afforded the additional insured shall be primary and non-contributory insurance and the coverage and limits provided under the Contractor's policies shall not be reduced or prorated by the existence of any other insurance applicable to any loss the additional insured may have suffered. Prior to the execution of this Contract by the City, the Contractor shall furnish to the City, subject to City approval, certificate(s) of insurance and Additional Insured Endorsement and Waiver of Subrogation Endorsement verifying the above coverages, including the naming of the City of Waterbury, as follows: "The City of Waterbury is listed as Additional Insured on a primary and non-contributory basis on all policies except Workers' Compensation. All policies shall include a Waiver of Subrogation except Builders Risk". The City's Request for Proposal Number must be shown on the certificate of insurance to assure correct filing. The Contractor must supply replacement/renewal certificates at least 30 days prior to the expiration of the policy(ies).

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12. Conformance with Federal, State and Other Jurisdictional Requirements. By executing this Contract, the Contractor represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with all applicable statutes, acts, ordinances, guidelines, resolutions, orders, judgments, decrees, injunctions, rules, and regulations of all government authorities applicable to performance by the Contractor of services hereunder, including those having jurisdiction over its registration and licensing to perform services hereunder; including, but not limited to, the following: EQUAL EMPLOYMENT OPPORTUNUTY; COPELAND ANTI-KICKBACK ACT, as supplemented in the Department of Labor Regulations (29 CFR, Part 3); DAVIS BACON ACT as supplemented by Department of Labor Regulations (29 CFR Part 5); Section 103 and 107 of the Contract Work Hours and Safety Standards Act, as supplemented by the Department of Labor Regulations (29 CFR Part 5); the HOUSING and COMMUNITY DEVELOPMENT ACT of 1974, as amended; TITLE 31 and Section 12-430(7) of the State of Connecticut General Statutes. All applicable sections of the City Charter and Code of Ordinances are incorporated by reference made a part hereof.

12.1. Taxes-Federal, State and Local. The City is exempt from Federal Excise and Transportation, State and Local Sales and Use Taxes, including without limitation, taxes that would otherwise be imposed upon the Contractor for transactions required or necessitated hereunder between it and its subcontractors, suppliers, etc. The Contractor remains liable, however, for any applicable tax obligations it incurs. Moreover, the Contractor represents that the bid and pricing contained in this Contract do not include the amount payable for said taxes.

12.2. Labor and Wages-Federal and State. The Contractor and its subcontractors shall conform to Federal and State of Connecticut labor laws, and all other laws, ordinances, and legal requirements affecting the work in Connecticut.

12.2.1 The Contractor is aware of, and shall comply with, the provisions of Title 31, §53 of the Connecticut General Statutes, latest revision (the "Act"), concerning the payment of minimum wages for work on public facilities. The provisions of the Act are hereby incorporated by reference and made a part of this Contract. The Act provides that the Connecticut prevailing wage law applies to certain remodeling, refurbishing, alteration, repair and new construction. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Conn.Gen.Statute 31-53(i), shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

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12.2.2 The Contractor is aware of, and shall comply with, the provisions of both the Federal Davis-Bacon Act and the Federal American Recovery and Reinvestment Act of 2009, the provisions of both acts hereby incorporated by reference and made a part of this Contract. The Federal Davis-Bacon Act provides that Federal wage rate laws apply to certain federally funded contracts. The American Recovery and Reinvestment Act ("ARRA") provides that Federal wage rate laws apply to all ARRA funded contracts regardless of the contract's dollar value.

12.3. Compliance with Chapters 34, 38, and 39 of the Code of Ordinances of the City. By executing this Contract, the Contractor represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with the provisions of Chapters 34, 38, and 39 of the Code of Ordinances of the City and well as any other relevant provisions of the Charter and the Code of Ordinances.

12.4. Compliance with CONN. GEN. STAT. § 4a-60g, as amended by June 2015 Special Session Public Act 15-5.

12.4.1 Definitions - For purposes of this paragraph:

i. "Small contractor" means any contractor, subcontractor, manufacturer, service company or nonprofit corporation (A) that maintains its principal place of business in the state, (B) that had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year prior to such application, and (C) that is independent. "Small contractor" does not include any person who is affiliated with another person if both persons considered together have a gross revenue exceeding fifteen million dollars.

ii. "Minority business enterprise" means any small contractor (A) fifty-one per cent or more of the capital stock, if any, or assets of which are owned by a person or persons who (i) exercise operational authority over the daily affairs of the enterprise, (ii) have the power to direct the management and policies and receive the beneficial interest of the enterprise, (iii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, and (iv) are members of a minority, as such term is defined in subsection (a) of section 32-9n, or are individuals with a disability, or (B) which is a nonprofit corporation in which fifty-one per cent or more of the persons who (i) exercise operational authority over the enterprise, (ii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, and (iv) are members of a minority, as such term is defined in subsection (a) of section 32-9n, or are individuals with a disability, or (B) which is a nonprofit corporation in which fifty-one per cent or more of the persons who (i) exercise operational authority over the enterprise, (ii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, (iii) have the power to direct the management and policies of the enterprise, and (iv) are members of a minority, as defined in this subsection, or are individuals with a disability.

iii. "Municipal public works contract" means that portion of an agreement entered into on or after October 1, 2015, between any individual, Contractor or corporation and a municipality for the construction, rehabilitation,

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conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, as amended by this act, financed by state funding in an amount equal to fifty thousand dollars or less.

12.4.2 The Contractor and subcontractor shall comply with the specific requirements of the State of Connecticut Set Aside Program, CONN. GEN. STAT. § 4a-60g, as amended by June 2015 Special Session Public Act 15-5, if the municipal public works contact awarded to the Contactor is funded in whole or in part by state funds.

12.4.3 The Contactor shall be subject to the following set-aside requirements if the municipal public works contact, is funded in whole or in part by the State of Connecticut, and is in excess of FIFTY THOUSAND DOLLARS (\$50,000.00), for the construction, rehabilitation, conversion, extension, demolition, or repairing of a public building or highway, or other changes or improvements in real property.

12.4.4 Set-Aside requirements – Any contractor awarded a municipal public works contract, on the basis of competitive bidding procedures, shall comply with the following Set –Aside requirements:

i. set aside at least twenty-five per cent (25%) of the total value of the state's financial assistance for such contract for award to subcontractors who are small contractors, and

ii. of that portion to be set aside in accordance with Subparagraph i. of this subdivision, reserve a portion equivalent to twenty-five per cent (25%) of the total value of the contract or portion thereof to be set aside for awards to subcontractors who are minority business enterprises.

12.4.5 Failure of the Contractor or subcontractor to comply with the State of Connecticut Set-Aside requirements shall be a material breach of this Contract.

13. Discriminatory Practices. In performing this Contract, the Contractor shall not discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, age, religious creed, disability, national origin or ancestry, marital status, family status, prior psychiatric treatment, health care, military status or source of income or because of a handicap that is unrelated to the employee's or the applicant's ability to perform the duties of a particular job or position. Subcontracts with each subcontractor shall contain a provision requiring non-discrimination in employment as herein specified. This covenant is required pursuant to §93.04 of the Code of Ordinances of the City and any breach thereof may be regarded as a material breach of this Contract. Said provisions with subcontractors shall require conformity and compliance with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements.

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13.1. Discrimination Because of Certain Labor Matters. No person employed on the work covered by this Contract shall be discharged or in any way discriminated against because such person has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or related to the labor standards applicable hereunder to its employer.

13.2. Equal Opportunity. In its execution of the performance of this Contract, the Contractor shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, national origin or citizenship status, age or handicap. The Contractor agrees to comply with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements, and will require the same of all subcontractors

13.3. Affirmative Action.

13.3.1. Pursuant to CONN. GEN. STAT. § 4a-60, as amended by June 2015 Special Session Public Act 15-5, the following are required for every Municipal Public Works Contract:

(a) Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or expression, intellectual disability, mental stability or expression, intellectual disability, mental origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;

(2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities;

(3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or

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other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

(4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, as amended by this act, 46a-68e, 46a-68f and 46a-86; and

(5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56, as amended by this act.

(b) If the contract is a public works contract, municipal public works contract or contract for a quasi-public agency project, the contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works or quasi-public agency project.

13.3.2. Pursuant to CONN. GEN. STAT. § 4a-60a, as amended by June 2015 Special Session Public Act 15-5, the following are required for every Municipal Public Works Contract:

(a) Every contract to which an awarding agency is a party, every contract for a quasi-public agency project and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;

(2) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

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(3) The contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said commission pursuant to section 46a-56; and

(4) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor which relate to the provisions of this section and section 46a-56.

14. Good Jobs Ordinance

14.1. Conformance With An Ordinance Concerning The Hiring Of Waterbury Residents On Certain Publicly-Funded Construction Projects.

14.1.1 The Contractors and its Subcontractors shall comply with the specific requirements of "An Ordinance Concerning the Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects" (the "Good Jobs Ordinance"), as may be amended from time to time and as set forth in Chapter 34 of the Code of Ordinances of the City. While the principal provisions of the ordinance are summarized as set forth in paragraphs C-H below, the Contractor does hereby acknowledge that it has reviewed a copy of the Good Jobs Ordinance and that it has read the Ordinance and that Contractor is familiar with the obligations imposed on the Contractor and each Subcontractor by the Good Jobs Ordinance.

14.1.2 Failure of the Contractor or its Subcontractors to comply with the Good Jobs Ordinance shall be a material breach of this Agreement.

14.1.3 This paragraph shall apply to a Covered Project, as that term is defined in the Good Jobs Ordinance, in the City with a value of \$500,000.00 or greater and only to the extent permitted by federal and state law.

14.1.4 Definitions. For purposes of this paragraph:

i. "Administrator" shall be defined as it is in the Good Jobs Ordinance.

ii. "Apprentice" shall be defined as it is in the Good Jobs Ordinance.

iii. "Basic Skilled Worker" shall be defined as it is in the Good Jobs Ordinance.

iv. "Contractor" shall be defined as it is in the Good Jobs Ordinance.

v. "Covered Project" shall be defined as it is in the Good Jobs Ordinance.

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vi. "Hiring Goal" shall be defined as it is in the Good Jobs Ordinance.

vii. "Resident" shall be defined as it is in the Good Jobs Ordinance.

viii. "Subcontractor" shall be defined as it is in the Good Jobs Ordinance and shall include the Contractor's direct subcontractor providing construction work and all lower tiered (level) providers of construction work.

14.1.5 Hiring Goals. If this Agreement requires the Contractor to perform work on a Covered Project, the Contractor and each Subcontractor shall have as its hiring goals:

i. at least thirty percent (30%) of its total worker hours performed by City Residents, and

ii. at least twenty-five percent (25%) of construction trade jobs shall go to Apprentices and/or Basic Skilled Workers, and

iii. at least seventy percent (70%) of all "new hires" (as that term is defined in the Good Jobs Ordinance) shall be "economically disadvantaged" individuals (as that term is defined in the Good Jobs Ordinance), and

iv. a minimum of five percent (5%) of the construction workforce labor hours will be local resident, minority artisans, and

v. a minimum of five percent (5%) of the construction workforce labor hours will be women, and

vi. a minimum of ten percent (10%) of the total work hours shall be allocated for minorities, or

vii. as may otherwise be required by any superseding Federal or State employment discrimination prohibition laws.

14.1.6 Good Faith Efforts. The Contractor and each Subcontractor shall engage in Good Faith Efforts to comply with the Hiring Goals. For the purposes of this paragraph, the term "Good Faith Efforts" shall have the same meaning as it does in the Good Jobs Ordinance.

The Contractor and each Subcontractor shall individually implement Good Faith efforts to satisfy the Hiring Goals.

14.1.7 Action Plan and Pre-Construction Meeting. Not later than fourteen (14) business days prior to the scheduled commencement date for construction, the Contractor shall submit a written plan-of-action to the City and to the

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Administrator of the Good Jobs Ordinance defining how the Contractor, and each Subcontractor, shall implement Good Faith Efforts to fulfill the Hiring Goals. Each plan-of-action shall include the anticipated number of job positions required for the Work. Not later than five (5) business day prior to the commencement date of construction, the Contractor must attend a mandatory "pre-construction" meeting with the City to review all plans-of-action and other relevant materials. No construction work shall proceed absent this pre-construction meeting.

14.1.8 Other Contractor Obligations. In addition to the foregoing, the Contractor shall ensure that all Subcontractor contracts and agreements expressly set forth and state as binding obligations therein, subject to appropriate party name change, the above Hiring Goals and Good Faith Efforts. The Contractor shall be accountable for, and liable to the City for, Contractor and each Subcontractor compliance with Hiring Goals and Good Faith efforts.

i. The Contractor shall meet with the Administrator no less than four (4) weeks prior to the commencement of construction on a Covered Project and provide the Administrator with the number of job positions to be created by the project by trade and the qualifications by job tile.

ii. The Contractor shall be required to produce Contractor and Subcontractor documentation that may be required under the provisions of the Good Jobs Ordinance or that the City or the Administrator reasonably believes will assist the City or the Administrator with their evaluation of Hiring Goals and Good Faith Efforts.

iii. The Contractor shall deliver weekly certified payroll records to the City within five (5) working days of the end of each payroll period. Moreover, the Contractor shall require each Subcontractor to create weekly certified payroll records.

iv. The Contractor's and each Subcontractor's payroll records shall include the person-hours, the residential address, race, gender, hiring date, and apprentice (job) classification of all personnel employed under this Agreement and all Contracts and Sub-Contracts thereunder. The Contractor and each Subcontractor shall mark their respective final payroll period records as being final and be signed by an authorized officer or employee.

14.2 Liquidated Damages Applicable To Section 14.1

14.2.1 If the City finds that the Contractor, or a Subcontractor, has failed to achieve Hiring Goals during any five (5) day work period (Monday through Friday), the City shall:

i. issue a written notice to the Contractor specifying the matters constituting such failure and the time period within which Good Faith

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Efforts documentation must be delivered to the City for its evaluation.

ii. if the Good Faith documentation is not provided or, if provided, it fails to demonstrate compliance with Good Faith Efforts, the Contractor shall, for each failure by the Contractor or a Subcontractor to achieve the Hiring Goals during a full five day work period, pay to the City one thousand dollars (\$1,000.00) as liquidated damages.

14.2.2 If the City finds that the Contractor, or a Subcontractor, has failed to deliver weekly certified payroll records to the City within five (5) working days of the end of each payroll period the Contractor shall, as liquidated damages pay one thousand dollars (\$1,000.00) to the City for each week of ongoing violation.

14.2.3 The City shall provide the Contractor with an invoice identifying all sums due the City, as liquidated damages, as a result of the Contractor or a Subcontractor's failure to comply with the Good Jobs Ordinance as set forth above.

14.2.4 No portion of any invoice submitted by a Contractor that is subject to liquidated damages shall be paid by the City until such time as all liquidated damages relating to that invoice have been paid to the City.

14.2.5 The foregoing liquidated damages provisions shall be expressly set forth, subject to appropriate party name adjustments, as material provisions in all Contracts that the Contractor has with Subcontractors and the Contractor is obligated hereunder to enforce compliance in such Contracts with Subcontractors.

14.2.6 Any payment of liquidated damages hereunder shall not preclude a later claim, nor any later finding of a breach, or any payment of additional damages related to such later claim.

15. Housing and Urban Development Section 3 Clause. In the event this Contract is funded, in whole or in part, through Housing and Urban Development assistance, 24 C.F.R. §135.38 may apply and the Contractor shall then be required to comply with the following (referred to as the "Section 3 clause"):

15.1. The work to be performed under this Contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted Projects covered by Section 3, shall, to the greatest extent feasible, be directed to low and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

15.2. The parties to this Contract agree to comply with HUD's regulations in 24 C.F.R. part 135, which implement Section 3. As evidenced by their execution of this Contract, the parties to this Contract certify that they are under no contractual or other impediment

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that would prevent them from complying with the part 135 regulations.

15.3. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

15.4. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 C.F.R. part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 C.F.R. part 135. The Contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 C.F.R. part 135.

15.5. The Contractor will certify that any vacant employment positions, including training positions, that are filled (i) after the Contractor is selected but before the Contract is executed, and (ii) with persons other than those to whom the regulations of 24 C.F.R. part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 C.F.R. part 135.

15.6. Noncompliance with HUD's regulations in 24 C.F.R. part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

15.7. With respect to work performed in connection with Section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this Contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this Contract that are subject to the provisions of Section 3 and section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

16. Termination.

16.1. Termination of Contract for Cause. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner its obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by either (i)

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giving written notice to the Contractor of a date certain by which Contractor shall, to the written satisfaction of the City, cure after which and without further action by any party, such termination shall automatically become effective and binding, or (ii) giving written notice to the Contractor specifying the effective date of such termination at least five (5) business days before the effective date of such termination.

16.1.1 In the event of a termination, all finished or unfinished documents, data, studies, reports, plans, specifications, drawings, supplies, services, etc. prepared by the Contractor under this Contract shall, at the option of the City, become the City's property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed for such.

16.1.2 Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Contract by the Contractor, and the City may withhold any payments to the Contractor for the purpose of setoff until such time as the exact amount of damages due the City from the Contractor is determined.

16.2. Termination for Convenience of the City. The City may terminate this Contract at any time for the convenience of the City, by a notice in writing from the City to the Contractor. If this Contract is terminated by the City as provided herein, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Contract, less payments of compensation previously made.

16.3. Termination for Non-Appropriation or Lack of Funding. The Contractor acknowledges that the City is a municipal corporation and that this Contract is subject to the appropriation and disbursement of funds by the City sufficient for this Contract for each budget year in which this Contract is in effect. The Contractor therefore agrees that the City shall have the right to terminate this Contract in whole or in part without penalty to the City in the event that sufficient funds to provide for City payment(s) under this Contract is not appropriated, not authorized, or not made available, or such funding has been reduced. In the event this Contract is subject, in whole or in part, to the appropriation and disbursement of Federal and/or State funds and those Federal and/or State funds are not appropriated or are not disbursed to the City, the Contractor hereby agrees that the City shall have the right to terminate this Contract in whole or in part without penalty to the City.

16.3.1 Effects of Non-Appropriation. If funds to enable the City to effect continued payment under this Contract are not appropriated, authorized or otherwise made available by law, the City shall have the right to terminate this Contract without penalty at the end of the last period for which funds have been appropriated, authorized or otherwise made available by law by giving written notice of termination to the Contractor.

16.3.2 Effects of Reduced Levels of Funding. If funding is reduced by law, or funds to pay the Contractor for the agreed to level of the products, services and

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functions to be provided by the Contractor under this Contract are not appropriated, authorized or otherwise made available by law, the City may, upon seven (7) business days written notice to the Contractor, reduce the level of the products, services or functions in such manner and for such periods of time as the City may elect. The charges payable under this Contract shall be equitably adjusted to reflect such reduced level of products, services or functions and the parties shall be afforded the rights set forth in this Contract.

16.3.3 No Payment for Lost Profits. In no event shall the City be obligated to pay or otherwise compensate the Contractor for any lost or expected future profits.

16.4. Rights Upon Termination.

16.4.1 Termination for Cause. In the event the City terminates this Contract for cause, the Contractor shall relinquish to the City any applicable interest, title and ownership including, but not limited to, perpetual use of any proprietary rights in and to the products and deliverables delivered to, in possession of and properly invoiced and paid for by (except to the extent such invoiced amount is disputed) the City. With regard to third party products, the Contractor shall transfer all licenses which it is permitted to transfer in accordance with the applicable third party license. The City shall have no financial obligation to compensate the Contractor for such terminated products unless payment is otherwise approved by the City prior to such termination. The Contractor shall be liable for costs incurred by the City, including but not limited to reasonable attorney fees and all court awarded fees and costs incurred in terminating this Contract in whole or in part.

16.4.2 Termination for Lack of Funding or Convenience. In the event of termination by the City for lack of funding or convenience, the City shall pay the Contractor for all labor, services, equipment, materials, reports, plans, specifications, drawings, deliverables, incidentals, etc.(including any holdbacks) installed and delivered to the City as of the Termination Date and the Contractor shall relinquish to the City any applicable interest, title and ownership including, but not limited to perpetual use of any proprietary rights in and to said labor, services, equipment, materials, reports, plans, specifications, drawings, deliverables, incidentals, etc. delivered to, in possession of and paid for by the City (except to the extent any invoiced amount is disputed). The Contractor shall be required to exercise commercially reasonable efforts to mitigate damages. In the event of a termination for Lack of Funding or Convenience the City and the Contractor may negotiate a mutually acceptable payment to the Contractor for reasonable demobilization expenses. Said demobilization expenses, if any, shall be handled in accordance with the provision of this Contract pertaining to changes in the Project.

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16.4.3 Assumption of Subcontracts. In the event of termination, the City shall have the right to assume, at its option, any and all subcontracts for products, services and functions provided exclusively under this Contract.

16.4.4 Delivery of Documents. In the event of termination, (i) the Contractor shall promptly deliver to the City, in a manner reasonably specified by the City, all documents and other tangible items furnished by, or owned, leased, or licensed by, the City, and (ii) the City shall pay the Contractor for all services performed and deliverables completed and accepted (pro-rated for deliverables partially completed) prior to the effective date of the termination (except to the extent any invoice amount is disputed).

17. Force Majeure. Neither the Contractor nor the City shall be held responsible for delays or be considered to be in breach of this Contract or be subject to liquidated damages when their respective obligations under this Contract are caused by conditions beyond either Party's control, including without limitation:

17.1. Acts of God, such as severe acts of nature or weather events including floods, fires, earthquakes, hurricanes, cyclones, or explosions;

17.2. war, acts of terrorism, acts of public enemies, revolution, civil commotion or unrest, riots, or epidemics;

17.3. acts of governmental authorities such as expropriation, condemnation, changes of law and order or regulations, proclamation, ordinance, or other governmental requirement;

17.4. strikes and labor disputes; and

17.5. certain accidents including but not limited to hazardous, toxic, radioactive or nuclear contamination spills, contamination, combustion or explosion, which prevent a Party from fulfilling their obligations or otherwise render performance under the Contract impossible.

Upon cessation of work for reason of force majeure delays, the Party(ies) whose obligations are affected shall use their best efforts to meet the schedule set forth in Section 5 of this Contract.

18. Subcontracting. The Contractor shall not, without the prior written approval of the City's Using Agency, subcontract, in whole or in part, any of the Contractor's services. Any subcontractor so approved shall be required to secure and maintain insurance coverage equal to or better than that required of the Contractor and shall name the City as an additional insured party and said subcontractors shall deliver to the City a certificate of insurance evidencing such coverages. All subcontractors shall comply with all federal, state and local, laws, regulations and ordinances but such requirement shall not relieve the Contractor from its requirement that all services provided hereunder shall comply with all Federal, State and local, laws, regulations and ordinances.

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18.1. The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by the Contractor.

18.2. The Contractor is responsible for and shall control activities of its subcontractors, and the subcontractors shall consult and cooperate with one another and other contractors working on the Project site. Each subcontractor shall furnish all necessary information to other subcontractors and shall lay out and install its own work so as to avoid any delays or interferences with the work of another. Any cost for changes, cutting and/or repairing, made necessary by failure to observe the above requirements shall be borne by the Contractor or subcontractor responsible for such failure or neglect.

18.3. The Contractor shall not, without the prior written approval of the City's Using Agency, substitute, terminate, replace or otherwise remove a subcontractor.

19. Assignability. The Contractor shall not assign any interest in this Contract, and shall not transfer any interest in the same (whether by assignment or novation) without the prior written approval of the City; provided, however, that claims for money due or to become due the Contractor from the City under this Contract may be assigned to a bank, trust, company, or other financial institution, or to a Trustee in Bankruptcy, without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.

20. Audit. The City reserves the right to audit the Contractor's books of account in relation to this Contract any time during the period of this Contract or at any time during the twelve month period immediately following the closing or termination of this Contract. In the event the City elects to make such an audit, the Contractor shall immediately make available to the City all records pertaining to this Contract, including, but not limited to, payroll records, bank statements and canceled checks.

21. Interest of City Officials. No member of the governing bodies of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the Project to which this Contract pertains, shall have any personal interest, direct or indirect, in this Contract.

22. Interest of Contractor. The Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in the Project or any parcel of land therein or any other interest which would conflict in any manner or degree with the performance of its services hereunder. The Contractor further covenants that in the performance of this Contract no person having any such interest shall be employed.

23. Entire Contract. This Contract shall constitute the complete and exclusive statement of the contract between the parties as it relates to this transaction and supersedes all previous agreements and understandings, whether written or oral, relating to such subject matter. Any amendment to this Contract must be in writing and agreed to and executed by the City and the Contractor, and must comply with the City's Charter and Code of Ordinances.

24. Independent Contractor Relationship. The relationship between the City and the Contractor is that of client and independent contractor. No agent, employee, or servant of the Contractor shall be deemed to be an employee, agent or servant of the City. The Contractor shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract.

25. Severability. Whenever possible, each provision of this Contract shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Contract, however, is held to be prohibited or invalid under applicable law, such provision shall be deemed restated to reflect the original intentions of the parties, as nearly as possible in accordance with applicable law, and if capable of substantial performance, the remaining provisions of this Contract shall be enforced as if this Contract was entered into without an invalid provision. If the ruling and/or controlling principle of law or equity leading to the ruling is subsequently overruled, modified or amended by legislation, judicial or administrative action, then the provision(s) in question as originally set forth in this Contract shall be deemed valid and enforceable to the maximum extent permitted by the new controlling principal of law or equity.

26. Survival. Any provisions of this Contract that impose continuing obligations on the parties shall survive the expiration or termination of this Contract for any reason.

27. Changes in the Project: Change Orders.

27.1. Requests for Change Orders. The City reserves the right on its own volition, or based upon a proposal for a Change Order submitted in written form with a thorough explanation by the Contractor, to request from time to time any changes to the requirements and specifications of this Contract and the products to be provided and the functions and services to be performed by the Contractor under this Contract. Such changes must be authorized by the City. The City will not approve of any change orders, deletions, additions, or additional work items to the Scope of Services or any change in the terms and conditions of this Contract except by means of a City authorized amended Scope of Services, applicable and restricted to those items set forth in §1, above, or Change Order issued as set forth in this section, except in the event of an emergency endangering life or property.

27.2. Procedures.

27.2.1 The Contractor's Response to a Change Request.

i. Within thirty (30) calendar days after receipt of a request by the City for any such change or such other period of time as the Parties may mutually agree to in writing, the Contractor shall submit to the City a proposal describing any changes in Contract Milestones or Contract completion dates, products, functions, timing of delivery, assignment of personnel, and the like, and any associated price adjustment. The Contractor's proposal shall describe, in detail, the basis for the proposed price adjustment, including the charges for any products required to implement the change request.

ii. To the extent that additional cost or cost savings result from a change in required products, the Contractor shall obtain any additional products and provide them to the City at a negotiated price acceptable to the City and the Contractor. Similarly, if the change request is expected to result in a reduction in products required to perform the services, the Contractor's charges shall be reduced by the cost savings resulting from the products eliminated by the change request.

27.2.2 City's Acceptance of Change Request. If the City accepts the Contractor's proposal, the City shall issue a change order referencing the Contractor's proposal and both parties shall sign the change order. The Contractor shall not implement any change request until the City has issued a valid, properly executed, change order.

27.2.3 City's Rejection of Change Request. If the City does not accept the Contractor's proposal, the City may within two weeks of such non-acceptance: (i) withdraw its change request; or, (ii) modify its change request, in which case the procedures set forth above shall apply to the Contractor's response to the modified change request.

27.3. City Discretion. The City may, in its sole discretion, approve the proposed Change Order and shall forward same for additional signatures under the following conditions: (i) If it conforms to provisions of applicable laws, and (ii) if it is consistent with this Contract, and (iii) if the time of performance of this Contract will not be unreasonably delayed, (iv) the Final Completion date is not changed, (v) if the Change Order requires a change to the Final Completion date, such change has been authorized by an approved, executed, written Amendment to this Contract, and (vii) if the Change Order requires an increase in the price of the Contract, the City (1) has sufficient funds, and (2) if a budget transfer is required to cover the cost of the proposed Change Order, such transfer has secured the written approval of the Board of Aldermen and other required regulatory agencies.

27.4. Change Orders Governed by the Provisions of this Contract. All work performed under a Change Order is governed by the provisions of this Contract.

28. Conflicts or Disputes. This Contract represents the concurrence between the City and the Contractor and governs all disputes between them. In the instance of a conflict or dispute over issues not specifically referenced within the Contract, the following documents shall be used as historical documents, without regard to the order of precedence, to resolve such conflicts or disputes, as follows: (i) the City's RFP Number 6760 (ii) the Contractor's Revised Cost Proposal dated November 11, 2020; and (iii) Contractor's Response to RFP Number 6760. Said historical documents are attached hereto as part of Attachment A.

28.1. Procedure. This procedure supersedes all statements to the contrary occurring either in proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

28.2. Presumption. This Contract or any section thereof shall not be construed against any party due to the fact that the Contract or any section thereof was drafted by such party.

29. Disputes; Legal Proceedings; Waiver of Trial by Jury and Continued Performance. The Contractor agrees that its waives a trial by jury as to any and all claims, causes of action or disputes arising out of this Contract or services to be provided pursuant to this Contract. Notwithstanding any such claim, dispute or legal action, the Contractor shall continue to perform services under this Contract in a timely manner, unless otherwise directed by the City.

30. Binding Contract. The City and the Contractor each bind themselves, and their successors, assigns and legal representatives to the other party to this Contract and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Contract.

31. Waiver. Any waiver of the terms and conditions of this Contract by either of the parties hereto shall not be construed to be a waiver of any other term or condition of this Contract.

32. Governing Laws. This Contract, its terms and conditions and any claims arising there from shall be governed by the laws of the State of Connecticut.

33. Notice. Except as otherwise specifically prohibited in this Contract, whenever under this Contract approvals, authorizations, determinations, notices, satisfactions or waivers are required or permitted, such items shall be effective and valid only when given in writing signed by a duly authorized officer of the City or the Contractor, and delivered in hand or sent by mail, postage prepaid, to the party to whom it is directed, which until changed by written notice, are as follows:

Contractor:	SK Mechanical, LLC 266 Center Street		
	Manchester, CT 06040		
City:	City of Waterbury		
	Chase Municipal Building		
	School Inspector's Office		
	235 Grand Street		
	Waterbury, CT 06702		
With a co	py to: City of Waterbury		

City of Waterbury Office of the Corporation Counsel 235 Grand Street, 3rd Floor Waterbury, CT 06702

34. City Code of Ordinances, Ethics and Conflict of Interest Code, Provisions.

The Person (the term "Person" shall herein be as defined in Section 38 of the City's Code of Ordinances) supplying the labor, services, equipment, materials, reports, plans, specifications, drawings, deliverables, incidentals, etc. under this Contract shall comply with all applicable

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Federal, State and Municipal statutes, regulations, charters, ordinances, rules, etc, whether or not they are expressly stated in this Contract, including but not limited to the following:

34.1. It shall be a material breach of this Contract, and, except as may be permitted by regulations or rulings of the City of Waterbury Board of Ethics it shall be a violation of the City's Code of Ordinances, for any Public Official, City Employee or Member of a Board or Commission who is participating directly or indirectly in the procurement process as set forth in the City's Code of Ordinances, including those participating in exempt transactions, to become or be the employee of any person contracting with the governmental body by whom the Official, Employee, or Board or Commission member is employed or is a member.

34.2. It shall be a material breach of this Contract, and it shall be a violation of the City's Code of Ordinances for any Person to offer, give, or agree to give any current or former Public Official, Employee or Member of a Board or Commission, or for such current or former Public Official, Employee or Member of a Board or Commission to solicit, demand, accept or agree to accept from another Person, a gratuity or an offer of employment in connection with any: decision; approval; disapproval; recommendation; preparation of any part of a program requirement or a requisition; influencing the content of any specification or procurement standard; or rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a Contract or Purchase Order, or to any solicitation or proposal therefore.

34.3. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for any payment, Gratuity, or offer of employment to be made as an inducement for the award of a subcontract or order, by or on behalf of a subcontractor, the prime Contractor or higher tier subcontractor or any Person associated therewith, under a Contract or Purchase Order to the City.

34.4. The value of anything transferred or received in violation of the City's Charter, Code of Ordinances, and/or regulations promulgated there under, by any Person subject to said Charter and/or Ordinances may be recovered by the City.

34.5. Upon a showing that a subcontractor made a kickback to the City, a prime Contractor or a higher tier subcontractor in connection with the award of a subcontract or order there under, it shall be conclusively presumed that the amount thereof was included in the price of the subcontract or order and ultimately borne by the City and will be recoverable hereunder from the recipient. In addition, said value may also be recovered from the subcontractor making such kickbacks. Recovery from one offending party shall not preclude recovery from other offending parties.

34.6. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for a Person to be retained, or to retain a Person, to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee; and every Person, before being awarded a City

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Contract, shall deliver to the City, on a City authored form, a representation that such Person has not retained anyone in violation of this subsection 34.6, the failure to deliver said form being a material breach of this Contract and a violation of the City's Code of Ordinances. Note, however, this subsection 34.6 shall not apply to full-time Employees who, as a condition of their employment, may be entitled to bonuses or other fees in accordance with their employment relationship.

34.7. The Person hereby expressly represents that he/she/it has complied with those sections of the City's Code of Ordinances requiring that said Person has (i) delivered to the City an affidavit, on a City authored form, stating that the Person and its affiliates have no delinquent taxes or other financial obligations owned to the City; (ii) filed the City authored financial disclosure statement form as set forth in the City's Code of Ordinances regarding disclosure of financial interests; (iii) delivered to the City a written acknowledgement, on a City authored form, evidencing receipt of a copy of the "Ethics and Conflict of Interest" ordinance for the City of Waterbury and hereby expressly represents that said Person is in full compliance with the entirety of said Code of Ordinances; and (iv) filed a current list of all taxable personal and real property as required by the State of Connecticut General Statutes. Any violation of this subsection 34.7 shall be deemed a material breach of this Contract and shall be a violation of the City's Code of Ordinances.

34.8. The definitions set forth in the City's Code of Ordinances shall be the primary source for interpretation of the forgoing subsections 34.1-34.7.

34.9. The Contractor is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, all relevant provisions of the City's Charter and all relevant provisions of the City's Code of Ordinances, including without limitation Chapters 93, titled "Discriminatory Practices", Chapter 38 titled "Centralized Procurement System", and Chapter 39 titled "Ethics and Conflict of Interest", of said Code as may be amended from time to time.

34.10 The Contractor hereby acknowledges receipt of a copy of the Chapters 38 and 39 of City's Ordinance regarding Procurement, Ethics, and Conflicts of Interest and has familiarized itself with said Code and hereby agrees to adhere to said Code. The text of Chapters 38 and 39 of said Code may be obtained from the Office of the City Clerk of web the City and on the internet at the City Clerk's site: https://www.waterburyct.org/content/9569/9605/9613/15125.aspx [click link titled "The City of Waterbury - Code of Ordinances (Rev. 12/31/19)." For Chapter 38, click on "TITLE III: ADMINISTRATION", then click on "CHAPTER 38: CENTRALIZED SYSTEM". PROCUREMENT For Chapter 39, click on "TITLE III: ADMINISTRATION", then click on "CHAPTER 39: ETHICS AND CONFLICTS OF INTEREST"].

34.11. The Contractor is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, the City's Ordinance Sections 34.15 through 34.99 entitled, "Ordinance Concerning the Hiring of Waterbury Residents on Certain

Publicly-Funded Construction Projects," and the State of Connecticut Legislature's Special Act No. 01-1.

34.12. Every Person who conducts business with, contracts, with or provides commodities or services to the City, is charged with notice of the extent of the powers and authority, and the limitations thereon, of the Public Officials and Employees of the City, as set forth in the charter of the City, the Code of Ordinances and any Regulations or Policies pertaining thereto. In particular, and without implying any limitation as to its applicability, it applies to all Persons who participate in the procedures pertaining to the Centralized Procurement System as set forth in Chapter 38, and the Ethics and Conflict of Interest provisions set forth in Chapter 39 of the Code of Ordinances.

34.13. INTEREST OF CITY OFFICIALS. No member of the governing body of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the project, to which this agreement pertains, shall have any personal interest, direct or indirect, in this agreement.

34.14. PROHIBITION AGAINST CONTINGENCY FEES. The Contractor hereby represents that it has not retained anyone to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage or contingency fee.

34.15. FREEDOM OF INFORMATION ACT NOTICE. Pursuant to State statute, in the event the total compensation payable to the Contractor set forth in Section 6 of this Contract is greater than \$2,500,000.00, the City is entitled to receive a copy of any and all Contractor records and files related to the performance of this Contract and those records and files are subject to the Freedom of Information Act ("the Act") and may be disclosed by the City pursuant to the Act.

35. Definitions. Whenever the following, words, terms, etc. appear in this Contract, the intent and meaning shall be as follows:

- **35.1** <u>Additional Work</u>: Work required by the City that involves a substantial addition to, deduction from or modification of the Contract Documents.
- **35.2** <u>Bid or Proposal</u>: The form on which the bidder is to submit a bid for the Work contemplated.
- 35.3 <u>Bidder</u>: A person, partnership, corporation or other business organization submitting a bid on the form for the Work contemplated.
- **35.4** <u>City</u>: The City of Waterbury, acting directly or through specifically authorized personnel.
- 35.5 <u>Construction Supervisor or Owner's Representative</u>: Jason Rosado, an employee of the City of Waterbury, or other City duly authorized person(s) as may be so designated in the absence of Jason Rosado.

- **35.6** <u>Contract Time</u>: The number of days as stated in the Contract to: (i) achieve Substantial Completion, (ii) Final Completion.
- 35.7 Equal: The recognized equivalent in substance and function; considering quality, workmanship, economy of operation, durability and suitability for purposes intended, and not constituting a change in the Work specified. Whenever the words "equal" or "equals" or words of like import are used, it shall be understood they mean "equal" in the opinion of the City.
- 35.8 <u>Final Completion</u>: The time at which the Project has progressed to the point where, in the opinion of the City, the Project is complete such that it is ready for final payment as evidenced by the City's, or its duly authorized City representative's, written recommendation of final payment. The terms "finally complete" and "finally completed" as applied to the Project refer to Final Completion.
- **35.9** <u>Notice to Proceed</u>: A letter from the City which shall state the date of execution of the Contract and specifically advise the Contractor to begin work on the Contract.
- **35.10** <u>Plans</u>: All drawings or reproductions of drawings pertaining to the construction of the work contemplated and its appurtenances.
- 35.11 <u>Project Engineer or Manager</u>: An employee of the City or a person, partnership, corporation r other business organization under contract with the City, commissioned to perform construction and administration and inspection duties during construction. For purposes of this Agreement, the Project Engineer or Manager is BL Companies. All references herein to Project Engineer or Manager, Architect, or Construction Manager, refer solely to BL Companies as the Project Engineer managing this project as so commissioned to perform construction administration and inspection duties during construction. (This project is jointly managed by BL Companies and the School Inspector's Office via the City's Construction Supervisor/Owner Representatives).
- 35.12 <u>Shop Drawings</u>: Drawings, diagrams, schedules, performance charts, brochures and other materials prepared by the Contractor or subcontractors, manufacturers or distributors which illustrate some portion of the work.
- 35.13 Specifications or Technical Specifications: The description, provisions and other requirements pertaining to the materials, methods and manner of performing the Project. Also herein referred to as "City of Waterbury, Board of Education, RFP #6760, Attachment F Scope of Services, General Description" including Division 01 General Requirements and Division 02 Exiting Conditions.

- **35.14** <u>Subcontractor</u>: A person, partnership, corporation or other business organization supplying labor and/or materials for work at the site of the Project to and under agreement with the Contractor.
- 35.15 <u>Substantial Completion</u>: The time at which, in the opinion of the Engineer, the Project (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Project (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Project mean Substantial Completion thereof.
- **35.16** <u>Substitution</u>: A replacement of specified material, device or equipment which is sufficiently different in substance, function, quality or workmanship to become the subject of a Change Order.
- 35.17 <u>Supplementary General Conditions</u>: An extension to the terms, conditions, and provisions set forth in this document as additional, material, provisions of this Contract.
- 35.18 <u>Work</u>: All plant, labor, materials, services, supplies, equipment and other facilities and items necessary for, or incidental to, the completion of the terms of the Contract.
- 35.19 Using Agency: School Inspector's Office, Department of Education

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto execute this Contract on the dates signed below.

WITNESSES:

CITY OF WATERBURY

Sign:_____ Print Name: By: ____

Neil M. O'Leary, Mayor

Sign:_____ Print Name:

Date:

Sign: <u>Welly M. Paupan</u> Print Name: Helly M. Paupa

SK MECHANICAL, LLC By: Print Name:

David St. Onyl Sign: Print Name

Its: <u>Member</u> (Title) Date: <u>38</u>0021

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THE CITY OF WATERBURY <u>MEMORANDUM</u>

From: Delinquent Tax Office

Date: 2/8/2021

To: Fjorela Cucllari- Accountant III Department of Education

Subject: Tax Clearance

As of this date, the records in the Tax Collector's Office indicate that the following *is not delinquent*.

SK Mechanical 266 Center St. Manchester, CT 06040

If you have any questions regarding this issue, do not hesitate to call our office at (203) 574-6815.

Very truly yours,

NJO/wmf

Nancy & Cleson

Nancy J. Olson, CCMC Deputy Revenue Collections Manager City of Waterbury

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #9.8

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve Amendment One to the Professional Services Agreement with Stanley Convergent Security Solutions, Inc.

Approved:

Rocco F. Orso

Memorandum

To: Board of Education

From: Chris Harmon, School Inspector, School Inspector's Office

Date: 9 March, 2021

Re: Amendment # 1 to Professional Services Agreement for Monitoring and Servicing of School Security Systems between the City of Waterbury and Stanley Convergent Security Solutions, Inc (CRT21-046)

The School Inspector's Office respectfully requests your approval of the above-referenced Amendment.

Under this Amendment #1, Stanley Convergent Security Solutions, Inc, will be providing their professional servicing of School Security Systems in 2 additional buildings which includes Former Convent Building & School Building at 67 Southmayd Road.

The total cost of Amendment #1 is \$ 8,452.4 which includes an additional of \$3,452.40 on monthly payments and \$ 5,000 of contingency and is funded by the General Fund of School Inspector's Office.

Accordingly, attached for your review and consideration are 3 copies of the proposed Amendment.

Thank you.

Chris Harmon

Amendment 1 to Professional Services Agreement for Monitoring and Servicing of School Security Systems between The City of Waterbury and Stanley Convergent Security Solutions, Inc.

This Amendment 1 to Professional Services Agreement for Monitoring and Servicing of School Security Systems between the City of Waterbury and Stanley Convergent Security Solutions, Inc. effective on the date signed by the Mayor, is by and between the City of Waterbury, 235 Grand Street, Waterbury, Connecticut 06702 (the "City") and Stanley Convergent Security Solutions, Inc., having an office at 30-A Progress Avenue, Seymour, CT 06483, a State of Delaware duly registered foreign corporation ("Vendor").

WHEREAS, the City and Vendor entered into a Professional Services Agreement, effective on July 14, 2020, for Monitoring and Servicing of School Security Systems ("Agreement"); and

WHEREAS, the City and Vendor desire to amend the Agreement to add monitoring services for two additional buildings, to increase the monthly monitoring rate accordingly and to increase the contingency.

NOW THEREFORE, THE CITY AND VENDOR AGREE AND COVENANT AS FOLLOWS:

1. Section 6 of the Agreement shall be revised to read as follows:

6. Compensation. The City shall compensate Stanley for satisfactory provision of all of the goods and services set forth in this Contract as follows in this Section 6.

6.1. Fee Schedule. The fee payable to Stanley shall not exceed TWO HUNDRED SEVENTY-FIVE THOUSAND EIGHT HUNDRED NINETY SEVEN DOLLARS and TWENTY-EIGHT CENTS (\$275,897.28), which shall include an owner controlled contingency of THIRTY THOUSAND DOLLARS (\$30,000.00), with the basis of payment being as follows:

6.1.1	Base payment for three-year term
	in an amount not to exceed
	Two Hundred Forty-Five Thousand
	Eight Hundred Ninety Seven Dollars
	and Twenty-Eight Cents\$245,897.28
6.1.2	Owner Controlled Contingency for
	three-year term in an amount not to exceed
	Thirty Thousand Dollars\$30,000.00

6.1.3 Total Compensation Two Hundred Seventy Five Thousand Eight Hundred Ninety Seven Dollars and Twenty-Eight Cents......\$275,897.28

6.2. Base Payment. The Base Payment of this Contract shall be paid to Stanley in accordance with monthly invoices as set forth below. The monthly rate of payment to Stanley shall be SIX THOUSAND SEVEN HUNDRED THIRTY-FOUR DOLLARS AND FIFTY-EIGHT CENTS (\$6,734.58) through April 30, 2021 and thereafter shall be SIX THOUSAND NINE HUNDRED EIGHTY ONE DOLLARS AND EIGHTEEN CENTS (\$6,981.18) beginning May 1, 2021.

6.3 Contingency. There shall be a contingency of Thirty Thousand Dollars (\$30,000.00) for the entire- three-year term of this contract for additional services such as emergency calls and repairs which shall be paid at the rate of One Hundred Sixty-Seven Dollars (\$167.00) per hour. Said Contingency shall be used at the sole discretion of the City and shall be encumbered as needed.

2. The list of buildings operated and maintained by the City of Waterbury, Board of Education and Cost Proposal as set forth in paragraph 1.1.2 of the Professional Services Agreement, effective on July 14, 2020 and as referenced on Attachment A to said Agreement shall be amended as per Exhibit A attached hereto.

3. All other terms, conditions, and provisions of the Agreement shall remain in full force and effect and binding on the parties hereto.

IN WITNESS WHEREOF, the parties hereto execute this Amendment 1 on the dates signed below.

The next page is the signature page.

WITNESS:	CITY OF WATERBURY
	By: Neil M. O'Leary, Mayor
	Date:
WITNESS:	STANLEY CONVERGENT SECURITY SOLUTIONS, INC.
	By: Michael Blum Its Assistant General Counsel
	Date:

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noor inspectors of	waterbury -	Sonitrol Alarm Monitoring & Service 3-Year R	enewai //1/2019 through t	0/30/2022
COUNT:				
111123026149				
111123020149				
NTRACT:				
111102614901				
INSTALLATION	RMR	SCHOOL	ADDRESS	COMMENTS
111123018145		Crosby High School Addition	300 PIERPONT RD	
111123000195		Crosby HS Broadcast Booth	300 PIERPONT RD	
111123000245		Crosby HS	300 PIERPONT RD	
111123038477		Rotella Magnet School	380 PIERPONT RD	
111123032558		Rotella Magnet School Audio Visual Wilby High School	440 PIERPONT RD	
111123029470 123135222800		Wilby High	568 BUCKS HILL RD 568 BUCKS HILL RD	
111123020872		Wilby Auditorium	460 BUCKS HILL RD	
111123020872		Wilby High School TV Studio	568 BUCKS HILL RD	
111123027430		Wilby High School Addition	560 BUCKS HILL RD	
111123016480		Wilby Northend Middle School	500 BUCKS HILL RD	
111123049953		Kennedy High School	422 HIGHLAND ST	
111123017552		Kennedy Addition Media Ctr.	422 HIGHLAND ST	
111123002138		Woodrow Wilson School	235 BIRCH ST	
111123008277		Enlightenment School	30 CHURCH ST	
111123011627		Chase School	80 WOODTICK RD	
111123012564		Maloney Magnet School	233 S. ELM ST	
111123012784		Sprague School	1443 THOMASTON AVE	
111123013013		Washington School	685 BALDWIN ST	
111123016698	\$74.22	Kingsbury School	220 COLUMBIA BLVD	
111123019178	\$124.85	Tinker School	809 HIGHLAND AVE	
111123019284	\$74.22	Driggs School	77 WOODLAWN TERR	
111123021314	\$74.22	Barnard School	11 DRAHER AVE	
111123021862	\$208.08	Westside Middle School	483 CHASE PKWY	
111123025383		Notre Dame School	30-A CHURCH ST	
111123027933		Generali School	3196 E. MAIN ST	
111123028833		Wallace Middle School	3465 E. MAIN ST	
111123031699		Driggs School	77 WOODLAWN TERR	
111123031937		Walsh School	29 ASHLEY ST	
111123000147		Hopeville School	2 CYPRESS ST	
111123035856		Westside Middle School Pool	483 CHASE PKWY	
111123036335		Wendall Cross School	1255 HAMILTON AVE	
111123027910 111123036631		St. Josephs School Bucks Hill School	29 JOHN ST	
111123036631		Bucks Hill School Modular Bldg.	330 BUCKS HILL RD 330 BUCKS HILL RD	
111123031525		Bunker Hill School	170 BUNKER HILL AVE	
111123038436	-	Notre Dame School - Convent	30-A CHURCH ST	
111123038430		State Street School	30 CHURCH ST	
111123046399		Maloney Magnet School	233 S. ELM ST	
111123046683		Regan School	2780 N. MAIN ST	
111123047131		School Inspectors Office	62 HARPER AVE	
111123049742		Arts Magnet School (WAMS)	16 S. ELM ST	
123133115500		Gilmartin	94 SPRING LAKE RD	
123133150200		Waterbury Enlightenment	30-A CHURCH ST	
123133969000		Washington School	635 BALDWIN ST	
123134088300	\$327.73	Jonathan Reed School	33 GRIGGS ST	
123135222500	\$267.90	Duggan School	952 BANK ST	
123143249800	\$499.39	Waterbury Career Academy	235 BIRCH ST	
123143121800		Carrington School	24 KENMORE AVE	
		Former Convent Building at 67 Southmayd Road	67 Southmayd Road	Add Per Addendu
	\$134.73	School Building at 67 Southmayd Road	67 Southmayd Road	Add Per Addendu
ONTHLY TOTAL	\$6,981.18			
		1	1	

Waterbury, Connecticut

COMMITTEE ON POLICY & LEGISLATION

Item #9.9

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Policy & Legislation recommends the Waterbury Board of Education approve revised Policy #4000.1 - Title IX (staff).

Approved:

Ann M. Sweeney

Waterbury, Connecticut

COMMITTEE ON POLICY & LEGISLATION

Item #9.10

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Policy & Legislation recommends the Waterbury Board of Education approve new Policy #5145.44 - Title IX (students).

Approved:

Ann M. Sweeney

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #11.1

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a Construction Contract with Creative Recreation, LLC, for Wendell Cross Elementary School Playground Construction – Playscape Equipment and Installation/Phase 4 of the Wendell Cross Construction Project.

Approved:

Rocco F. Orso



Waterbury Public Schools

236 Grand Street 🔶 Waterbury, Connecticut 06702 🔶 (203) 346-2340 🔶 Fax (203) 574-8010

Mr. William F. Clark, Esq. Chief Operating Officer

MEMORANDUM

Date:	March 4, 2021
To:	Waterbury Board of Aldermen
From:	William F. Clark, Chief Operating Officer
Subject:	Contract with Creative Recreation LLC. for two play Equipment at Wendell
	Cross.

The Waterbury Public Schools would like to contract with Creative Recreation, LLC. for designing, furnishing and installing two new play equipment and surfacing for children age group 2-5 and 5-12 as part of phase 4 of Wendell Cross Elementary School Construction Project-151-0295 EA/RR. The contract amount is not to exceed \$194,236 including an owner contingency of \$19,000.

The Office of School Construction Grants and Review (OSCG&R) has reviewed and approved the final plans and all necessary materials for phase 4 of 5 play equipment at Wendell Cross Elementary School, which allows us to proceed with the contract phase of said project.

The vendor selected for this project, Creative Recreation, LLC. is currently on the State of Connecticut DAS Procurement Division, and is the more suitable vendor to provide the play equipment and surfacing as they have recently done similar projects in other towns in coordination with the Newfield Construction Group, LLC, the construction manager at Risk hired by the City to manage Wendell Cross Elementary School Construction Project.

A copy of the contract will be provided by Corporation Counsel prior to approval of this item.

Please feel free to contact me should you have any questions. Thank you for your consideration.

CONSTRUCTION CONTRACT for Wendell Cross Elementary School Playground Construction Playscape Equipment and Installation Phase 4 of Wendell Cross Construction Project between City of Waterbury and Creative Recreation, LLC

THIS CONTRACT ("Contract" of "Agreement"), effective on the date signed by the Mayor, is by and between the CITY OF WATERBURY (the "City"), City Hall, 235 Grand Street, Waterbury, Connecticut 06702 and CREATIVE RECREATION, LLC (the "Contractor" or "Creative Recreation"), with its primary place of business located at 131-5 Day Street, Newington, Connecticut 06111 with its business mailing address at P.O. Box 330235, West Hartford, Connecticut 06133, a State of Connecticut duly registered domestic limited liability company; hereinafter collectively referred to as the "Parties" to this Agreement.

WHEREAS, as part of Phase 4 of the City's Wendell Cross Construction Project (State Project No. 151-0295 EA/RR), the City desires to obtain the Contractor's services for the design, fabrication, furnishing, installation and overall construction of two (2) Playscapes for playgrounds at Wendell Cross Elementary School pursuant to the terms set forth in this Agreement (the "Project"); and

WHEREAS, the State of Connecticut, Department of Administrative Services ("DAS") has issued a contract award number 17PSX0081, ("State Contract") for playground, recreation and park equipment; and

WHEREAS, pursuant to the State Contract, the awarded contractors shall also provide services to municipalities (also referred to therein as "client agencies") who are so authorized and choose to make purchases under and pursuant to the terms of the State Contract; and

WHEREAS, consistent with the State Contract and Contract Award No. 17PSX0081, the City elected to participate in the joint purchase of the services offered in the State Contract as is so authorized by the City of Waterbury Ordinance §38.130 "Cooperating Purchasing Authorized" which permits the City to participate in such joint purchase programs administered by the State of Connecticut; and

WHEREAS, the City desires to obtain the Contractors services for equipment, services and overall construction of the Wendell Cross Elementary School Playscapes as part of phase 4 of the Wendell Cross construction project, as outlined in the State Contract and this Agreement.

NOW THEREFORE, THE PARTIES AGREE AND COVENANT AS FOLLOWS:

1. Scope of Services. The Contractor shall furnish all of the labor, services, equipment, materials, supplies, transportation, and incidentals necessary to complete the Project as specified in this agreement (also referred to herein as "Contract") and such shall be completed in a satisfactory manner, as reasonably determined by the City. All labor, services, equipment, materials, supplies, transportation, and incidentals shall comply with (i) any and all applicable local, state and federal laws, statutes, ordinances, rules and regulations, including without limitation all notice requirements thereunder, and (ii) generally accepted professional standards.

1.1. The Project consists of Wendell Cross Elementary School Playground design and construction as part of Phase 4 of the Wendell Cross construction project, including but not limited to, designing, fabricating, site preparation, excavation, furnishing and installing playground equipment (Playscapes), concrete and rubberized safety surfacing, specifically IPEMA Certified Poured in Rubber Surfacing, and site restoration for two sets of playground equipment. The two sets of playground equipment shall include one designed and sized appropriately for children ages 2-5 and the other designed and sized appropriately for children ages 5-12. The two playground equipment shall be incompliance with the following publications and shall be inspected by Certified Playground Safety Inspector upon completion of the installation to ensure compliance with U.S. Consumer Product Safety Commission Publication Number 325 Public Playground Safety Handbook November 2010 and the American Society of Testing and Materials (ASTM) F1487-17 Standard Consumer Performance Specification for Playground Equipment for Public Use. A written audit/inspection report shall be provided to verify that the playground was installed to the above standards and Connecticut School Construction Standards and Guidelines. The installation of the play equipment and surfacing shall be done in coordination with the Owner's Construction Manager at Risk (CMAR) and the Site Coordinator who will also be responsible for initial site clearing and subsurface preparation. The design and layout of the playgrounds shall be developed to complement the theme of the site and building. All equipment provided and work performed shall be in full conformance with (i) this Agreement which shall control and prevail; (ii) the State of Connecticut, Department of Administrative Services ("DAS") Contract No. 17PSX0081 for Playground, Recreation and Park Equipment ("State Contract"); (iii) "Play Equipment, Wendell Cross Elementary School, 1255 Hamilton Avenue, Waterbury Connecticut, State Project No. 151-0295 EA/RR, Phase 4 of 5 – Play Equipment, PROJECT MANUAL' dated 1/1/2021, prepared by Friar Architecture Inc.; and as detailed and described in Attachment A, which includes the aforementioned documents. The Documents in Attachment A are hereby fully incorporated and made material provisions of this Contract. Attachment A shall consist of the following, which are attached hereto, are acknowledged by the Contractor as having been received, or otherwise hereby incorporated by reference as noted below, and all are made a part hereof:

1.1.1 State of Connecticut, Department of Administrative Services, Contract No. 17PSX0081 for Playground, Recreation and Park Equipment ("State Contract") (incorporated by reference);

- **1.1.2** Contract Award Supplement #4 to State of Connecticut, Department of Administrative Services, Contract Award No. 17PSX0081, consisting of 4 pages, dated June 2, 2020 (incorporated by reference);
- **1.1.3** PROJECT MANUAL (may also be referred to as General Conditions, General Requirements, or Technical Specifications): "Play Equipment, Wendell Cross Elementary School, 1255 Hamilton Avenue, Waterbury Connecticut, State Project No. 151-0295 EA/RR, Phase 4 of 5 Play Equipment, PROJECT MANUAL" dated January 1, 2021, prepared by Friar Architecture Inc., consisting of 123 pages (attached hereto);
- **1.1.4** PLAYSCAPE PLANS AND DETAILS (also referred to as Drawings): "Wendell Cross Elementary School, 1255 Hamilton Avenue, Waterbury Connecticut, PLAYSCAPE PLANS AND DETAILS, State Project No. 151-0295 EA/RR, Phase IV, dated January 1, 2021, prepared by Friar Architecture Inc., consisting of 9 pages (attached hereto);
- **1.1.5** Creative Recreation's Quotation #111120, dated November 11, 2020, consisting of 2 pages (attached hereto);
- **1.1.6** U.S. Consumer Product Safety Commission's "Public Playground Safety Handbook," Publication No. 325, 2010 Edition, consisting of 61 pages, available at: <u>https://www.cpsc.gov/s3fs-public/325.pdf</u>; (incorporated by reference);
- **1.1.7** American Society of Testing and Materials' (ASTM) F1487-17, "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," ASTM International, West Conshohocken, PA, 2017, <u>www.astm.org</u>, available at: <u>http://www.astm.org/cgibin/resolver.cgi?F1487</u>, (incorporated by reference);
- **1.1.8** State of Connecticut, Department of Administrative Services,' "Connecticut School Construction Standards and Guidelines," dated September 22, 2016, consisting of 182 pages, available at: https://portal.ct.gov/-/media/DAS/Office-of-School-Construction-Grants/Task-113---Office-of-School-Construction-Grants-and-Review/CT-Standards-and-Guidelines/CT-Standards-and-Guidelines-APPRVD-09-22-2016.pdf?la=en, (incorporated by reference);
- **1.1.9** Contractor's Certificate of Insurance (attached hereto);
- **1.1.10** Contractor's Performance Bond (attached hereto or otherwise incorporated by reference);
- **1.1.11** Contractor's Payment Bond (attached hereto or otherwise incorporated by reference);
- **1.1.12** Commission on Human Rights and Opportunities ("CHRO") Contract Compliance Documents with Bidder Contract Compliance documentation, dated February 22, 2021, consisting of 5 pages (attached hereto);
- **1.1.13** State of Connecticut Prevailing Wage Rate documentation dated March 9, 2021 and related Important Information document, consisting of 10 pages (attached hereto);
- **1.1.14** All applicable Federal, State and local statutes, regulations charter and ordinances (incorporated by reference);

- **1.1.15** Stockholder's Affidavit; Non-Collusion Affidavit; Debarment Certificate (incorporated by reference);
- **1.1.16** All permits and licenses (incorporated by reference); and
- **1.1.17** Any and all amendment(s) and Change Orders issued by the City after execution of agreement (incorporated by reference).

1.2. The entirety of **Attachment A** plus this executed instrument are together deemed the Contract Documents (hereinafter collectively referred to as "Contract Documents"). The City's record copy of the Contract Documents shall control and shall be effective and binding on the Contractor. In the event that any provision in the Contract Documents conflict with any other provision therein, the provision in the component part of the Contract Document first enumerated below shall govern over any other component part which follows it numerically.

- **1.2.1** Contract Amendment(s) and Change Orders
- **1.2.2** This Contract
- **1.2.3** Creative Recreation Quotation #111120
- **1.2.4** Federal, State, and Local laws, regulations, charter and ordinances
- **1.2.5** Project Manual (may also be referred to as General Conditions, General Requirements, or Technical Specifications)
- **1.2.6** Playscape Plans and Details (Drawings)

2. Representations Regarding Qualification and Accreditation. The Contractor represents that its employees are licensed to perform the scope of work set forth in this Contract. The Contractor further represents that its employees have the requisite skill, expertise and knowledge necessary to perform the scope of work required under the terms of this Contract, including any supplementary work and the City relies upon Contractor's representations.

2.1. Representations regarding Personnel. The Contractor represents that it has, or will secure at its own expense, all personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City, unless use of City employees or of personnel having a contractual relationship with the City is approved in writing. As set forth above, all the services required hereunder shall be performed by the Contractor or under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state or local law to perform such services.

2.2. Representations regarding Qualifications. The Consultant hereby represents that, to the extent required by Federal, State and Local statutes, regulations, codes, ordinances, and policies, that the Consultant and/or its employees be licensed, certified, registered, or otherwise qualified, the Consultant and all employees providing services under this Contract, are in full compliance with those statutes, regulations and ordinances. Upon City request, the Consultant shall provide to the City a copy of the Consultant's licenses, certifications, registrations, etc.

2.3. **Background Checks.** If applicable, the Contractor agrees to comply with any and all background check requirements as may be required by the State and/or City.

3. Responsibilities of the Contractor. The Contractor agrees to properly implement the services required in the manner herein provided. The Contractor shall, in addition to any other responsibilities set forth in this Contract and the Schedules and Attachments hereto, perform the following coincident with the performance of this Contract:

3.1. Due Diligence Obligation. The Contractor acknowledges its responsibilities to examine and to be thoroughly familiar with this Project, including, but not limited to the plans, specifications, drawings and any addenda thereto. The Contractor hereby warrants and represents that prior to the submission of its quotation it reviewed or was afforded the opportunity, by the City, to review all physical items, facilities, services and functions essential to the satisfactory performance of the services required ("Due Diligence") and thereby certifies that all such items facilities, services and functions are included in this Contract and thereby warrants that:

3.1.1 it conducted or had opportunity to conduct all due diligence prior to the submission of its quotation and, accordingly, any additional costs, services or products resulting from the failure of the Contractor to complete Due Diligence prior to submission of its quotation shall be borne by the Contractor. Furthermore, the Contractor had the opportunity to ask questions it saw fit and to review any responses from the City;

3.1.2 its failure or omission to make investigation and verification of data shall, in no way, be cause for future claim of ignorance of such data or conditions nor shall such failure to investigate and verify be the basis for any claim whatsoever, monetary or otherwise;

3.1.3 it is solely responsible for resolving any issues resulting from its failure to conduct due diligence and it shall assume any and all resulting costs it incurs during the Project;

3.1.4 it was responsible for specifying any changes and disclosing any associated new costs prior to submittal of its quotation. In the event the Contractor failed to disclose any such new cost prior to the submittal of its quote, the Contractor hereby covenants that it shall remain solely responsible for, and shall absorb, those non-disclosed costs;

3.1.5 it has familiarized itself with the nature and extent of the Contract Documents, Project, locality, and with all local conditions and Federal, State and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Project;

3.1.6 it has given the City written notice of any conflict, error or discrepancy that the Contractor discovered in and of the City's relevant documents o these Contract Documents or had the opportunity to do so prior to execution of this Agreement.

3.1.7. it agrees that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Project;

3.1.8. it has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Scope of Services which were utilized in the preparation of the plans and specifications;

3.1.9 it has made or caused to be made examinations, investigations, measurements and tests and studies of any applicable reports and related data as it deems necessary for ensuring performance of the Scope of Services at the Contract Price within the Contract Time and in accordance with the other terms and conditions of the Contracts; and certifies no additional examinations, investigations, tests, reports or similar data are or will be required by Contractor for such purposes; and

3.1.10 The Contractor shall not take advantage of any obvious error or apparent discrepancy in the Contract. Notice of any error or discrepancy discovered shall be given immediately in writing to the City, who shall make such corrections and interpretations as it may deem necessary for the completion of the Project in a satisfactory and acceptable manner.

3.2. Safety. Contractor shall perform all work in a safe manner in full compliance with local, state and federal health and safety regulations. Contractor shall immediately correct any dangerous condition caused by or resulting from its work. If it fails to correct, or to act diligently to correct, any condition which the City reasonably believes to be a hazard to persons or property, then immediately upon oral or written notice to any supervisory or similar personnel of Contractor, City may, but shall not be required to, correct same at Contractor's expense. City shall confirm in writing any oral notice given within five (5) business days thereafter.

3.3. Storage. In the event the Project site has insufficient, inadequate, and/or improper storage space, it shall be the responsibility of the Contractor to secure, provide and maintain at the Contractor's sole cost and expense (i) adequate off-site storage space for equipment, materials, incidentals, etc., and (ii) all associated delivery and transportation services. In either event, the Contractor shall assume full responsibility for equipment, materials, incidentals, etc. until both title and risk of loss pass to the City pursuant to Section 8 of this Contract.

3.4. Working Hours. To the extent the Contractor is required to be on City property to render the Contractor's services hereunder, the Contractor shall coordinate its schedule so that work on and at the Project site is performed during the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturday, Sunday and legal holidays unless more exactly specified elsewhere in this Contract or Attachment A or unless prior written permission is obtained from the City to work during other times. This provision shall not excuse the Contractor from timely performance under the Contract.

3.5. Cleaning Up. The Contractor shall at all times keep the Project site free from accumulation of waste materials or rubbish caused by Contractor's employees or subcontractors, and at the completion of the work shall remove all rubbish from and about the Project and all tools, scaffolding and surplus materials and shall leave the Project site "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the City may remove the rubbish and charge the cost to the Contractor.

3.6. Publicity. Contractor agrees not to deliberately disclose the fact that the City has entered into or terminated this Contract or disclose any of the terms of the Contract or use the City's name in connection with any publicity, unless the City gives prior written consent to such use of the City's name in each instance.

3.7. Standard of Performance. All Contractor labor, materials, supplies, components, equipment, reports, plans, specifications, drawings, deliverables, incidentals, etc., required to be furnished or delivered under this Contract shall conform in all respects with the requirements set forth in this Contract and shall meet or exceed those standards generally recognized in the Contractor's craft and trade in the State of Connecticut. City specified manufacturer and/or brand name substitution desired by the Contractor shall be made only with the prior written consent of an authorized representative of the City's Using Agency.

3.7.1 In carrying out the Project, the Contractor must employ such methods or means as will not cause any interruption of or interference with the work of any other contractor, nor with the normal routine of the institution or agency operating at the Project site.

3.8. **Contractor's Employees.** The Contractor shall at all times enforce strict discipline and good order among its employees, and shall not employ on the work any unfit person or anyone not skilled in the work assigned. The Contractor shall not, without the prior written approval of the City's Using Agency, substitute, terminate, replace or otherwise remove any Contractor employee expressly named, identified or required in this Contract.

3.9. Subsurface/Unknown Site Conditions. If Project site conditions are encountered which are (i) subsurface or otherwise concealed physical conditions or other conditions which differ materially from those indicated in the Contract Documents, or (ii) unknown conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent or common in construction activities of the character provided for in this Contract, then prompt notice by the observing party shall be given to the other party to this Contract before Project site conditions may be disturbed. The Contractor shall thereafter wait for written instructions from the City before proceeding with regard to such conditions.

3.10. Surveys. All surveys required under this Contract shall be performed by a State of Connecticut duly licensed land surveyor. Unless expressly stated to the contrary in Section 1 of this Contract and Attachment A, the Contractor shall perform all layout

work, all field measurements and all construction staking required, necessary or prudent for the satisfactory prosecution of the Contractor's obligations under this Contract.

3.11. Permits and Licenses. Unless expressly stated to the contrary in Section 1 of this Contract and Attachment A, the Contractor shall secure and obtain all permits and all licenses required, or necessary, or prudent for the performance of the Contractor's obligations under this Contract and for the City's occupancy, use, and operation of the Project.

3.12. Manufacturer's Directions. Where it is required in this Contract that materials, products, processes, equipment or the like be installed or applied in accord with manufacturer's directions, specifications or instructions, it shall be construed to mean that the said application or installation by the Contractor shall be in strict accord with printed instructions furnished by the manufacturer of the material concerned for use under conditions similar to those at the Project site. One (1) copy of such instructions shall be furnished to the City.

3.13. Review by the City. The Contractor shall permit the City and the City's duly authorized representatives and agents to review, at any time, all work performed under the terms of this Contract at any stage of the Project.

3.14. Records Maintenance. The Contractor shall maintain or cause to be maintained all records, books or other documents relative to charges, costs, expenses, fees, alleged breaches of the Contract, settlement of claims or any other matter pertaining to the Contractor's demand for payment.

4. **Responsibilities of the City and City Reservation of Rights.** Upon the City's receipt of Contractor's written request for specific information, the City will provide the Contractor with existing documents, data and other materials the City agrees are necessary and appropriate to the services to be performed by the Contractor hereunder and the City will endeavor to secure, where feasible and where the City agrees it is necessary and appropriate, materials or information from other sources requested by the Contractor for the purpose of carrying out the services under this Contract.

4.1. The City may, in its sole discretion, designate person(s) to act as the City's Project Engineer(s) and/or Manager(s) and the City may, in its sole discretion, define such person(s) authority and responsibilities.

4.2. The City reserves the right to (i) perform work related or unrelated to the Project with the City's own forces adjoining, adjacent to, or in the vicinity of, the Project site and/or (ii) let separate contracts related or unrelated to the Project for work and services adjoining, adjacent to, or in the vicinity of, the Project site. In such event, the Contractor shall afford all such parties reasonable opportunity for storage of materials and equipment and for the uninterrupted provision and delivery of such parties' work and/or services. The Contractor shall cooperate with such parties and in the case of a dispute, the decision of the City shall be complied with by all.

5. Contract Time. The Contractor shall Substantially Complete all work and services required under this Contract within ninety (90) consecutive calendar days of the City's written Notice to Proceed and shall reach Final Completion within one hundred twenty (120) consecutive calendar days of the City's written Notice to Proceed ("Contract Time").

5.1. Within one (1) week of the City's issuance of its written notice to proceed, and prior to the commencement of any work on the Project site, the Contractor shall submit for the City's written approval, a construction progress schedule. On a monthly basis, the Contractor shall deliver to the City a written status report setting forth an analysis and critique of the Contractor's compliance with said schedule.

5.2. Delay Damages

5.2.1 Time is and shall be of the essence for all Project Phase Completion Dates, Milestones, Substantial and Final Completion Date. The Contractor further agrees that the Project shall be prosecuted regularly, diligently and uninterruptedly and at such rate of progress as will insure full completion thereof within the Contract time stated above. It is expressly understood and agreed, by and between the Contractor and City, that the Phase Completion Dates, Milestones, Substantial and Final Completion Date are reasonable for the completion of the Project.

5.2.1.1 The Contractor shall pay to the City the sum of the greater of **Five Hundred Dollars (\$500.00)** per calendar day for each and every calendar day for which the Contractor is in default in completing the work beyond the Final Completion Date, Substantial Completion Date, Milestones and Phase Completion Dates, as set forth in Section 5, or the actual damages incurred by the City caused by the delay. The preceding sum is hereby agreed upon not as a penalty, but as delay damages for the delay that the City shall suffer due to such default.

5.2.1.2 The City shall have the right to recover all damages pursuant to any remedy at law or equity including but not limited to deducting the amount of any such damages from any monies due the Contractor under this Contract. The Contractor understands that if the entire Work or of any portion of the Work that the City has agreed to accept separately, if any, is not attained by the applicable completion dates as set forth in the entire Section 5, the City will suffer damages, which are difficult to specify accurately and ascertain. Delay damages based upon delay shall be assessed to compensate the City for all actual loss sustained by the delay, including, but not limited to, loss of use, increased cost of material or services to complete the project, loss of State funding, all other another actual expense, and all other damages allowed by law, including attorney's fees.

5.3 No Damage for Delay

In no event shall the Contractor be entitled to any compensation or recovery of any damages in connection with any Delay, including, without limitation, consequential damages, lost opportunity damages, attorney's fees or other, similar remuneration. The City's exercise of any of its rights or remedies under the Contract Documents, including without limitation, ordering changes in the Work, or directing suspension, rescheduling or correction of the Work, regardless of the extent or frequency of the City's exercise of these rights has been contemplated by the parties and shall not be construed as an exception.

6. Compensation. The City shall compensate the Contractor for satisfactory provision of all of the goods and services set forth in this Contract as follows in this Section 6. No claims for additional compensation will be considered for conditions made known to the Contractor prior to bidding. No claims for additional compensation will be considered on account of failure of the Contractor to completely inform itself as required herein above.

6.1. Fee Schedule. Subject to retainage, limitations, etc. set forth below in this Section 6, the fee payable to the Contractor shall not exceed One Hundred Ninety-Four Thousand, Two Hundred Thirty Six Dollars (\$194,236.00) (hereafter referred to as "Total Compensation") with the basis for payment being Contractor's Quotation #111120 set forth in Attachment A (which includes the CT DAS State Contract Discount of \$26,283.00 (Item #DAS)). Contractor's Quotation #111120, dated November 11, 2020, is attached hereto in Attachment A, and is summarized below:

6.1.1	\$201,519.00 (Item #s 714, Surface, Site, Install; i.e. base payment)
6.1.2	\$19,000.00 (Item # CF- Owner's Contingency)
6.1.3	- (\$26,283.00)(Item # DAS- CT DAS State Contract Discount)
	\$194,236.00

6.2. Retainage. At the City's sole discretion, it hereby reserves the right to withhold as retainage **five percent (5%)** of any payment (or monetary sum otherwise required by law) owed to the Contractor to be withheld from payments to the Contractor otherwise payable to the Contractor until such time as the Contractor's work and services to be provided under this Contact are fully completed and accepted in writing by the City. The retainage does not does not include additional sums that the City may withhold due to the Contractor's failure to comply with provisions of this Contract.

6.3. Limitation of Payment. Compensation to the Contractor is limited to those fees set forth in Section 6.1. of this Contract and is further limited to work (i) performed in fact, (ii) conforming with this Contract, and (iii) accepted in writing by a duly authorized City employee. Such compensation shall be paid by the City upon its review and approval of the Contractor's invoices for payment and review of the Contractor's work.

6.3.1 Funding. In the event this Contract is funded, in whole or in part, by Federal and/or State monies, grants, loans, etc, all City payment(s) shall fully comply with all relevant Federal and State statutes and regulations. In the event this Contract is 100% funded by Federal and/or State monies, grants, loans, etc., the aggregate sum of all City payments shall not exceed the aggregate sum of such funding.

6.3.2 The Contractor and its affiliates are hereby provided with notice that the City reserves the right, in the City's sole discretion, to offset, withhold, or otherwise reduce City payment(s) to the Contractor, in an amount equaling the sum or sums of money the Contractor and/or its affiliates is/are, or become delinquent or in arrears on, regarding the Vendor's and/or its affiliates real and personal property taxes and other payment obligations to the City.

6.4. Quote or Proposal Costs. All costs of the Contractor in preparing its quote for this Project shall be solely borne by the Contractor and are not included in the compensation to be paid by the City to the Contractor under this Contract or any other agreement.

6.5. Payment for Services, Materials, Appliances, Employees. The Contractor shall be responsible to the City for the suitability of services, materials and equipment furnished to comply fully with the requirements set forth in this Contract. The Contractor shall promptly pay all employees as their pay falls due, shall pay promptly as they fall due all bills for subcontractors, materials, supplies and services going into the work, and all bills for insurance, bonds, Worker's Compensation coverage, Federal and State Unemployment Compensation, and Social Security charges applicable to this Project. Before final City payment is made, the Contractor shall furnish to the City a sworn, notarized, affidavit stating that all of the foregoing payment obligations have been fully completed.

6.6. Liens. Neither the City's final payment nor any part of the retained percentage, if any, shall become due until the Contractor, if required by the City, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required, in either case, an affidavit that so far as the Contractor has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the City, to indemnify it against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the City all moneys that the City may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

6.7. Contractor's Certificate of Completion. Upon the Contractor's (i) completion of all Project milestones, and (ii) Substantial Completion of the Project, and (iii) Final Completion of the Project, the Contractor shall, in each instance, file with the City a written, notarized affidavit setting forth the amount of Project work performed. The City reserves the right to verify or challenge by any reasonable means the accuracy of said affidavit.

6.8. Final Payment. All prior estimates and City payments, including those relating to extra or additional work, retainage(s), and holdback(s), shall be subject to correction by this final payment which is throughout this Contract called "Final Payment". No payment, final or partial, shall act as a release to the Contractor or its surety from any Contractor obligation(s) under this Contract.

6.9. Clean Water Fund Project Requirements. In the event this Contract is funded in whole or in part, is reliant upon, or falls within the jurisdiction of the Clean Water Fund and its statutes, regulations and rules, the Contractor shall:

6.9.1 submit Applications for Payment in accordance with the following:

The City must receive the Contractor's Application for Payment by the City's or its designee's, review and recommendation for payment, by the fifteenth calendar day of the month to receive payment within the next 50 days. If not received by the fifteenth calendar day of the month, payment cannot be made until 50 days after the fifteenth calendar day of the subsequent month. The Contractor shall provide at the City's request, reasonable documentation to substantiate Contractor's Application for Payment.

6.9.2 Progress and Final Payments

The City will make progress payments on account of the Contract Price on the basis of the Contractor's Applications for Payment, monthly during construction as provided below. All progress payments will be on the basis of the progress of the Scope of Services as determined by the City, according to the schedule of values provided for in the Contract Documents, and approved by the City. Prior to Substantial Completion, progress payments will be limited to an amount equal to 95 percent of the value of the Scope of Services completed. Upon Substantial Completion, the City will pay the amount as specified in the Contract Documents.

7. Warranty of the Contractor. The Contractor warrants to the City that all materials, supplies, components, equipment, etc. furnished under this Contract shall be new and of good quality, except as otherwise expressly stated and permitted by the City elsewhere in this Contract. The Contractor warrants that none of its work shall be defective. The Contractor shall be liable to repair and install and/or replace without charge any service, component, equipment or part thereof which is defective or does not conform with this Contract within the greater of (i) three hundred sixty five (365) calendar days after the City delivers its written notice of its acceptance of the Project and statement therein establishing the final completion date, or (ii) that time period or date expressly stated elsewhere in this Contract or Attachment A.

7.1. The Contractor further warrants that all materials, supplies, services, components, equipment, reports, plans, drawings, deliverables, incidentals, etc., shall be free from any and all defects caused by faulty design, faulty material or poor workmanship. The Contractor shall supply to the City copies of any written manufacturer's warranties and guarantees. The Contractor's foregoing warranty obligations are in addition to, and not a limitation of, all manufacturer's warranties and guarantees in this contract or otherwise available to the City under applicable law.

8. Passing of Title and Risk of Loss.

8.1. City beneficial use of Project equipment, materials, site-work, etc. prior to the Contractor's final completion of the Project or prior to the City's final payment for the Project shall neither act to vest title in the City nor act to transfer risk of loss from the Contractor to the City. Said title and risk shall pass to the City upon the City's final payment for the Project.

8.2. Contractor and its insurer shall assume the risks of loss or damage to the equipment up to and including the date title passes, except that City shall be responsible for loss or damage caused by City's gross negligence.

8.3. After Project equipment, materials, etc. are delivered to the Project work-site and become operable or functional, the Contractor shall not thereafter remove any such equipment, materials, etc. from the Project work-site without securing the prior written consent of an authorized City Using Agency employee.

9. Indemnification.

9.1. The Contractor shall indemnify, defend, and hold harmless the City, City's Boards, and Board of Education, commissions, agents, officials and employees from and against all claims, suits, damages, losses, judgments, costs and expenses including attorney's fees arising out of or resulting from the delivery of the labor, services, equipment, materials, reports, plans, specifications, design, drawings, deliverables, incidentals, etc. provided that any such claims, suits, damages, losses, judgments, costs or expenses (i) are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting there from, (ii) are alleged to be caused in whole or in part by any willful, intentional, negligent, or reckless act or omission of the Contractor, its employees, any subcontractor or consultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder; (iii) enforcement action or any claim for breach of the Contractor's duties hereunder or (iv) claim for intangible loss(es) including but not limited to business losses, lost profits or revenue, regardless of whether or not it is caused in part by a party indemnified hereunder.

9.2. In any and all claims against the City, Board of Education or any of City's boards, agents, employees or officers by the Contractor or any employee of the Contractor , any subcontractor or consultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 9 above, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

9.3. The Contractor understands and agrees that any insurance required by this Contract, or otherwise provided by the Contractor , shall in no way limit the

responsibility to indemnify, defend, keep and hold harmless the City, the Board of Education, any of City's boards, agents, employees as provided in this Contract.

9.4. The Contractor expressly understands and agrees that any performance bond or insurance protection required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City and the City's boards, agents, employees or officers as provided herein.

9.5. Royalties and Patents. The Contractor shall, for all time, secure to the City the free and undisputed right to the use of any and all patented articles and methods used in the work and shall defend at Contractor's own expense any and all suits for infringement or alleged infringement of such patents, and in the event of adverse award under patent suits, the Contractor shall pay such awards and hold the City harmless in connection with any patent suits that may arise as a result of installations made by the Contractor and as to any award made thereunder.

9.6. In the event this Contract and/or the Contractor's, or its subcontractor, work and services provisioned hereunder is/are subject to the provisions of any Federal or State statute or regulations, or the City Charter or City Ordinance, the Contractor shall indemnify, defend and hold harmless the City from any fine, penalty or other amounts imposed on the City under said statutes, regulations, Charter or Ordinances, if caused by Contractor, or its subcontractor, omission or commission.

10. Contract Bonds. The Contractor shall furnish to the City, prior to the execution of this Contract by the City, both a performance bond and a payment bond, each bond written for a penal sum equaling the Section 6 "Total Compensation" amount in a form and with a surety acceptable to the City. The bonds shall continue in effect for the greater of (i) the warranty period set forth in Section 7 of this Contract, or (ii) 365 calendar days after the Final Completion Date referenced elsewhere in this Contract.

11. Contractor's Insurance.

11.1. The Contractor shall not commence work under this Contract until all insurance required under this Section 11 has been obtained by the Contractor and such insurance has been approved by the City. The Contractor shall not allow any subcontractor to commence work on any subcontract until all insurance required of any such subcontractor has been so obtained and approved by the City. Insurance shall be provided by insurers, satisfactory to the City and authorized to do business in the State of Connecticut, an "A-" Best's Rating and at least a Class V3 or better financial size category as shown in the most current A.M. Best Company ratings.

11.2. At no additional cost to the City, the Contractor shall purchase and maintain the insurance coverages set forth below which shall protect the City from claims which may arise out of or result from the Contractor's obligation under this Contract, whether such obligations are the Contractor's or subcontractor or person or entity directly or indirectly employed by said Contractor or subcontractor, or by any person or entity for whose acts said Contractor or subcontractor may be liable.

11.3. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this Contract and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 60 months.

11.4. The following policies with stated limits shall be maintained, in full force and effect, at all times during which the services are to be performed by the Contractor:

11.4.1 General Liability Insurance:

\$1,000,000.00 Each Occurrence

\$2,000,000.00 Aggregate

\$2,000,000.00 Products and Completed Operations Aggregate

Providing coverage to protect the City for all damages arising out of bodily injuries, sickness to or death of all persons in any one accident or occurrence and for all damages arising out of destruction of property in any one accident or occurrence.

11.4.2 Automobile Liability Insurance:

\$1,000,000.00 Combined Single Limit (CSL)

Providing coverage to protect the City with respect to claims for damage for bodily injury and or property damage arising out of ownership, maintenance, operation, use or loading and unloading of any auto including hired & non-owned autos.

11.4.3 Workers' Compensation: Statutory Limits within the State of Connecticut: Employers' Liability:

EL Each Accident \$500,000.00

EL Disease Each Employee **\$500,000.00**

EL Disease Policy Limit **\$500,000.00**

Contractor shall comply with all State of Connecticut statutes as it relates to workers' compensation.

11.4.4 Excess/Umbrella Liability Insurance:

\$1,000,000.00 Each Occurrence

\$1,000,000.00 Aggregate

Excess or Umbrella insurance coverage that follows form or sits over General Liability, Automobile Liability and Workers Compensation insurances.

11.4.5 Builder's Risk Insurance/Installation Floater Insurance: \$1,000.000 Each Occurrence

OR Limits Equaling the Value of the Project

"All Risk" Builders Risk insurance (also know as "course of construction") coverage with limits equal to or better than the maximum possible loss of all

materials of construction used or contemplated under this Contract, including all materials in transit and all materials in storage wherever stored and the value of any and all subsequent Contract changes. This insurance shall include the interests of the City, the Contractor and any and all subcontractors. If deemed necessary by the City's Risk Manager, this insurance shall also include coverage for the total value of the Project's constructed property and shall be valid until a certificate of occupancy is issued. Upon the issuance of said certificate, the City will assume responsibility for insuring said property.

11.5. Failure to Maintain Insurance: In the event the Contractor fails to maintain the minimum required coverage as set forth herein, the City may at its option purchase same, and offset the Contractor's invoices for the cost of said insurance.

11.6. Cancellation: The City of Waterbury shall receive written notice of cancellation from the Contractor at least thirty (30) calendar days prior to the date of actual cancellation, regardless of the reason for such cancellation.

11.7. Certificates of Insurance: The Contractor's General, Automobile, Builder's Risk and Excess/Umbrella Liability Insurance policies shall be endorsed to add the City and its Board of Education as an additional insured and provide waiver of subrogation on all policies except Builder's Risk and Pollution Liability. The insurance afforded the additional insured shall be primary and non-contributory insurance and the coverage and limits provided under the Contractor's policies shall not be reduced or prorated by the existence of any other insurance applicable to any loss the additional insured may have suffered. Prior to the execution of this Contract by the City, the Contractor shall furnish to the City, subject to City approval, certificate(s) of insurance and Additional Insured Endorsement and Waiver of Subrogation Endorsement verifying the above coverages, including the naming of the City of Waterbury, as follows: "The City of Waterbury and its Board of Education are listed as Additional Insured on a primary and contributory basis on all policies except Worker's Compensation and Professional Liability, All policies shall include a Waiver of Subrogation except Builder's Risk and Professional Liability." The City's information and identifying project information must be shown on the certificate of insurance to assure correct filing. The Contractor must supply replacement/renewal certificates at least 30 days prior to the expiration of the policy(ies). Said certificates shall contain a provision that coverage afforded under the policies shall not be cancelled or reduced for any reasons unless notice of than thirty (30) calendar days has been mailed to the City's Using Agency and a copy to the City's Office of Corporation Counsel, 235 Grand Street, Waterbury, CT 06702.

11.8. No later than thirty (30) calendar days after Contractor receipt, the Contractor shall deliver to the City a copy of the Contractor's insurance policies and endorsements and riders.

12. Conformance with Federal, State and Other Jurisdictional Requirements. By executing this Contract, the Contractor represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with all applicable statutes, acts, ordinances, guidelines, resolutions, orders, judgments, decrees, injunctions, rules,

and regulations of all government authorities applicable to performance by the Contractor of services hereunder, including those having jurisdiction over its registration and licensing to perform services hereunder; including, but not limited to, the following: EQUAL EMPLOYMENT OPPORTUNUTY; COPELAND ANTI-KICKBACK ACT, as supplemented in the Department of Labor Regulations (29 CFR, Part 3); DAVIS BACON ACT as supplemented by Department of Labor Regulations (29 CFR Part 5); Section 103 and 107 of the Contract Work Hours and Safety Standards Act, as supplemented by the Department of Labor Regulations (29 CFR Part 5); Section 103 and 107 of the Contract Work Hours and Safety Standards Act, as supplemented by the Department of Labor Regulations (29 CFR Part 5); the HOUSING and COMMUNITY DEVELOPMENT ACT of 1974, as amended; TITLE 31 and Section 12-430(7) of the State of Connecticut General Statutes. All applicable sections of the City Charter and Code of Ordinances are incorporated by reference made a part hereof.

12.1. Taxes-Federal, State and Local. The City is exempt from Federal Excise and Transportation, State and Local Sales and Use Taxes, including without limitation, taxes that would otherwise be imposed upon the Contractor for transactions required or necessitated hereunder between it and its subcontractors, suppliers, etc. The Contractor remains liable, however, for any applicable tax obligations it incurs. Moreover, the Contractor represents that the bid and pricing contained in this Contract do not include the amount payable for said taxes.

12.2. Labor and Wages-Federal and State. The Contractor and its subcontractors shall conform to Federal and State of Connecticut labor laws, and all other laws, ordinances, and legal requirements affecting the work in Connecticut.

12.2.1 The Contractor is aware of, and shall comply with, the provisions of Title 31, §53 of the Connecticut General Statutes, latest revision (the "Act"), concerning the payment of minimum wages for work on public facilities. The provisions of the Act are hereby incorporated by reference and made a part of this Contract. The Act provides that the Connecticut prevailing wage law applies to certain remodeling, refurbishing, alteration, repair and new construction. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Conn.Gen.Statute 31-53(i), shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

12.2.2 The Contractor is aware of, and shall comply with, the provisions of both the Federal Davis-Bacon Act and the Federal American Recovery and Reinvestment Act of 2009, the provisions of both acts hereby incorporated by reference and made a part of this Contract. The Federal Davis-Bacon Act provides that Federal wage rate laws apply to certain federally funded contracts.

The American Recovery and Reinvestment Act ("ARRA") provides that Federal wage rate laws apply to all ARRA funded contracts regardless of the contract's dollar value.

12.3. Compliance with Chapters 34, 38, and 39 of the Code of Ordinances of the City. By executing this Contract, the Contractor represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with the provisions of Chapters 34, 38, and 39 of the Code of Ordinances of the City and well as any other relevant provisions of the Charter and the Code of Ordinances.

12.4. Compliance with CONN. GEN. STAT. § 4a-60g, as amended by June 2015 Special Session Public Act 15-5.

12.4.1 Definitions – For purposes of this paragraph:

- i. "Small contractor" means any contractor, subcontractor, manufacturer, service company or nonprofit corporation (A) that maintains its principal place of business in the state, (B) that had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year prior to such application, and (C) that is independent. "Small contractor" does not include any person who is affiliated with another person if both persons considered together have a gross revenue exceeding fifteen million dollars.
- ii. "Minority business enterprise" means any small contractor (A) fifty-one per cent or more of the capital stock, if any, or assets of which are owned by a person or persons who (i) exercise operational authority over the daily affairs of the enterprise, (ii) have the power to direct the management and policies and receive the beneficial interest of the enterprise, (iii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, and (iv) are members of a minority, as such term is defined in subsection (a) of section 32-9n, or are individuals with a disability, or (B) which is a nonprofit corporation in which fifty-one per cent or more of the persons who (i) exercise operational authority over the enterprise, (ii) possess managerial and technical competence and experience directly related to the principal business activities of the enterprise, (iii) have the power to direct the management and policies of the enterprise, and (iv) are members of a minority, as defined in this subsection, or are individuals with a disability.
- **iii.** "Municipal public works contract" means that portion of an agreement entered into on or after October 1, 2015, between any individual, Contractor or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property,

which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, as amended by this act, financed by state funding in an amount equal to fifty thousand dollars or less.

12.4.2 The Contractor and subcontractor shall comply with the specific requirements of the State of Connecticut Set Aside Program, CONN. GEN. STAT. § 4a-60g, as amended by June 2015 Special Session Public Act 15-5, if the municipal public works contact awarded to the Contactor is funded in whole or in part by state funds.

12.4.3 The Contactor shall be subject to the following set-aside requirements if the municipal public works contact, is funded in whole or in part by the State of Connecticut, and is in excess of FIFTY THOUSAND DOLLARS (\$50,000.00), for the construction, rehabilitation, conversion, extension, demolition, or repairing of a public building or highway, or other changes or improvements in real property.

12.4.4 Set-Aside requirements – Any contractor awarded a municipal public works contract, on the basis of competitive bidding procedures, shall comply with the following Set –Aside requirements:

- i. set aside at least twenty-five per cent (25%) of the total value of the state's financial assistance for such contract for award to subcontractors who are small contractors, and
- **ii.** of that portion to be set aside in accordance with Subparagraph i. of this subdivision, reserve a portion equivalent to twenty-five per cent (25%) of the total value of the contract or portion thereof to be set aside for awards to subcontractors who are minority business enterprises.

12.4.5 Failure of the Contractor or subcontractor to comply with the State of Connecticut Set-Aside requirements shall be a material breach of this Contract.

13. Discriminatory Practices. In performing this Contract, the Contractor shall not discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, sexual orientation, gender identity or expression, age, religious creed, disability, national origin or ancestry, marital status, family status, prior psychiatric treatment, health care, military status or source of income or because of a handicap that is unrelated to the employee's or the applicant's ability to perform the duties of a particular job or position. Subcontracts with each subcontractor shall contain a provision requiring non-discrimination in employment as herein specified. This covenant is required pursuant to \$93.04 of the Code of Ordinances of the City and any breach thereof may be regarded as a material breach of this Contract. Said provisions with subcontractors shall require conformity

and compliance with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements.

13.1. Discrimination Because of Certain Labor Matters. No person employed on the work covered by this Contract shall be discharged or in any way discriminated against because such person has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or related to the labor standards applicable hereunder to its employer.

13.2. Equal Opportunity. In its execution of the performance of this Contract, the Contractor shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, sexual orientation, gender identity or expression, national origin or citizenship status, age or handicap. The Contractor agrees to comply with all local, state and federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements, and will require the same of all subcontractors

13.3. Affirmative Action.

13.3.1. Pursuant to CONN. GEN. STAT. § 4a-60, as amended by June 2015 Special Session Public Act 15-5, the following are required for every Municipal Public Works Contract:

(a) Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, sexual orientation, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;

(2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities; (3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

(4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, as amended by this act, 46a-68e, 46a-68f and 46a-86; and

(5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor as relate to the provisions of this section and section 46a-56, as amended by this act.

(b) If the contract is a public works contract, municipal public works contract or contract for a quasi-public agency project, the contractor agrees and warrants that he or she will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works or quasi-public agency project.

13.3.2. Pursuant to CONN. GEN. STAT. § 4a-60a, as amended by June 2015 Special Session Public Act 15-5, the following are required for every Municipal Public Works Contract:

(a) Every contract to which an awarding agency is a party, every contract for a quasi-public agency project and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;

(2) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

(3) The contractor agrees to comply with each provision of this section and with each regulation or relevant order issued by said commission pursuant to section 46a-56; and

(4) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and procedures of the contractor which relate to the provisions of this section and section 46a-56.

14. Good Jobs Ordinance

14.1. Conformance With An Ordinance Concerning The Hiring Of Waterbury Residents On Certain Publicly-Funded Construction Projects.

14.1.1 The Contractors and its Subcontractors shall comply with the specific requirements of "An Ordinance Concerning the Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects" (the "Good Jobs Ordinance"), as may be amended from time to time and as set forth in Chapter 34 of the Code of Ordinances of the City. While the principal provisions of the ordinance are summarized as set forth in paragraphs C-H below, the Contractor does hereby acknowledge that it has reviewed a copy of the Good Jobs Ordinance and that it has read the Ordinance and that Contractor is familiar with the obligations imposed on the Contractor and each Subcontractor by the Good Jobs Ordinance.

14.1.2 Failure of the Contractor or its Subcontractors to comply with the Good Jobs Ordinance shall be a material breach of this Agreement.

14.1.3 This paragraph shall apply to a Covered Project, as that term is defined in the Good Jobs Ordinance, in the City with a value of \$500,000.00 or greater and only to the extent permitted by federal and state law.

14.1.4 Definitions. For purposes of this paragraph:

- i. "Administrator" shall be defined as it is in the Good Jobs Ordinance.
- **ii.** "Apprentice" shall be defined as it is in the Good Jobs Ordinance.
- **iii.** "Basic Skilled Worker" shall be defined as it is in the Good Jobs Ordinance.
- iv. "Contractor" shall be defined as it is in the Good Jobs Ordinance.

- **v.** "Covered Project" shall be defined as it is in the Good Jobs Ordinance.
- vi. "Hiring Goal" shall be defined as it is in the Good Jobs Ordinance.
- vii. "Resident" shall be defined as it is in the Good Jobs Ordinance.
- viii. "Subcontractor" shall be defined as it is in the Good Jobs Ordinance and shall include the Contractor's direct subcontractor providing construction work and all lower tiered (level) providers of construction work.

14.1.5 Hiring Goals. If this Agreement requires the Contractor to perform work on a Covered Project, the Contractor and each Subcontractor shall have as its hiring goals:

- i. at least thirty percent (30%) of its total worker hours performed by City Residents, and
- ii. at least twenty-five percent (25%) of construction trade jobs shall go to Apprentices and/or Basic Skilled Workers, and
- **iii.** at least seventy percent (70%) of all "new hires" (as that term is defined in the Good Jobs Ordinance) shall be "economically disadvantaged" individuals (as that term is defined in the Good Jobs Ordinance), and
- iv. a minimum of five percent (5%) of the construction workforce labor hours will be local resident, minority artisans, and
- v. a minimum of five percent (5%) of the construction workforce labor hours will be women, and
- vi. a minimum of ten percent (10%) of the total work hours shall be allocated for minorities, or
- vii. as may otherwise be required by any superseding Federal or State employment discrimination prohibition laws.

14.1.6 Good Faith Efforts. The Contractor and each Subcontractor shall engage in Good Faith Efforts to comply with the Hiring Goals. For the purposes of this paragraph, the term "Good Faith Efforts" shall have the same meaning as it does in the Good Jobs Ordinance.

The Contractor and each Subcontractor shall individually implement Good Faith efforts to satisfy the Hiring Goals.

14.1.7 Action Plan and Pre-Construction Meeting. Not later than fourteen

(14) business days prior to the scheduled commencement date for construction, the Contractor shall submit a written plan-of-action to the City and to the Administrator of the Good Jobs Ordinance defining how the Contractor, and each Subcontractor, shall implement Good Faith Efforts to fulfill the Hiring Goals. Each plan-of-action shall include the anticipated number of job positions required for the Work. Not later than five (5) business day prior to the commencement date of construction, the Contractor must attend a mandatory "pre-construction" meeting with the City to review all plans-of-action and other relevant materials. No construction work shall proceed absent this pre-construction meeting.

14.1.8 Other Contractor Obligations. In addition to the foregoing, the Contractor shall ensure that all Subcontractor contracts and agreements expressly set forth and state as binding obligations therein, subject to appropriate party name change, the above Hiring Goals and Good Faith Efforts. The Contractor shall be accountable for, and liable to the City for, Contractor and each Subcontractor compliance with Hiring Goals and Good Faith efforts.

- i. The Contractor shall meet with the Administrator no less than four (4) weeks prior to the commencement of construction on a Covered Project and provide the Administrator with the number of job positions to be created by the project by trade and the qualifications by job tile.
- **ii.** The Contractor shall be required to produce Contractor and Subcontractor documentation that may be required under the provisions of the Good Jobs Ordinance or that the City or the Administrator reasonably believes will assist the City or the Administrator with their evaluation of Hiring Goals and Good Faith Efforts.
- iii. The Contractor shall deliver weekly certified payroll records to the City within five (5) working days of the end of each payroll period. Moreover, the Contractor shall require each Subcontractor to create weekly certified payroll records.
- **iv.** The Contractor's and each Subcontractor's payroll records shall include the person-hours, the residential address, race, gender, hiring date, and apprentice (job) classification of all personnel employed under this Agreement and all Contracts and Sub-Contracts thereunder. The Contractor and each Subcontractor shall mark their respective final payroll period records as being final and be signed by an authorized officer or employee.

14.2 Liquidated Damages Applicable To Section 14.1

14.2.1 If the City finds that the Contractor, or a Subcontractor, has failed to achieve Hiring Goals during any five (5) day work period (Monday through Friday), the City shall:

- **i.** issue a written notice to the Contractor specifying the matters constituting such failure and the time period within which Good Faith Efforts documentation must be delivered to the City for its evaluation.
- **ii.** if the Good Faith documentation is not provided or, if provided, it fails to demonstrate compliance with Good Faith Efforts, the Contractor shall, for each failure by the Contractor or a Subcontractor to achieve the Hiring Goals during a full five day work period, pay to the City one thousand dollars (\$1,000.00) as liquidated damages.

14.2.2 If the City finds that the Contractor, or a Subcontractor, has failed to deliver weekly certified payroll records to the City within five (5) working days of the end of each payroll period the Contractor shall, as liquidated damages pay one thousand dollars (\$1,000.00) to the City for each week of ongoing violation.

14.2.3 The City shall provide the Contractor with an invoice identifying all sums due the City, as liquidated damages, as a result of the Contractor or a Subcontractor's failure to comply with the Good Jobs Ordinance as set forth above.

14.2.4 No portion of any invoice submitted by a Contractor that is subject to liquidated damages shall be paid by the City until such time as all liquidated damages relating to that invoice have been paid to the City.

14.2.5 The foregoing liquidated damages provisions shall be expressly set forth, subject to appropriate party name adjustments, as material provisions in all Contracts that the Contractor has with Subcontractors and the Contractor is obligated hereunder to enforce compliance in such Contracts with Subcontractors.

14.2.6 Any payment of liquidated damages hereunder shall not preclude a later claim, nor any later finding of a breach, or any payment of additional damages related to such later claim.

15. Housing and Urban Development Section 3 Clause. In the event this Contract is funded, in whole or in part, through Housing and Urban Development assistance, 24 C.F.R. §135.38 may apply and the Contractor shall then be required to comply with the following (referred to as the "Section 3 clause"):

15.1. The work to be performed under this Contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted Projects covered by Section 3, shall, to the greatest extent feasible, be directed to low and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

15.2. The parties to this Contract agree to comply with HUD's regulations in 24 C.F.R.

part 135, which implement Section 3. As evidenced by their execution of this Contract, the parties to this Contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

15.3. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

15.4. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 C.F.R. part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 C.F.R. part 135. The Contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 C.F.R. part 135.

15.5. The Contractor will certify that any vacant employment positions, including training positions, that are filled (i) after the Contractor is selected but before the Contract is executed, and (ii) with persons other than those to whom the regulations of 24 C.F.R. part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 C.F.R. part 135.

15.6. Noncompliance with HUD's regulations in 24 C.F.R. part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

15.7. With respect to work performed in connection with Section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this Contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this Contract that are subject to the provisions of Section 3 and section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

16. Termination.

16.1. Termination of Contract for Cause. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner its obligations under this Contract, or if the

Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by either (i) giving written notice to the Contractor of a date certain by which Contractor shall, to the written satisfaction of the City, cure after which and without further action by any party, such termination shall automatically become effective and binding, or (ii) giving written notice to the Contractor specifying the effective date of such termination at least five (5) business days before the effective date of such termination.

16.1.1 In the event of a termination, all finished or unfinished documents, data, studies, reports, plans, specifications, drawings, supplies, services, etc. prepared by the Contractor under this Contract shall, at the option of the City, become the City's property, and the Contractor shall be entitled to receive just and equitable compensation for any satisfactory work completed for such.

16.1.2 Notwithstanding the above, the Contractor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Contract by the Contractor, and the City may withhold any payments to the Contractor for the purpose of setoff until such time as the exact amount of damages due the City from the Contractor is determined.

16.2. Termination for Convenience of the City. The City may terminate this Contract at any time for the convenience of the City, by a notice in writing from the City to the Contractor. If this Contract is terminated by the City as provided herein, the Contractor will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of the Contractor covered by this Contract, less payments of compensation previously made.

16.3. Termination for Non-Appropriation or Lack of Funding. The Contractor acknowledges that the City is a municipal corporation and that this Contract is subject to the appropriation and disbursement of funds by the City sufficient for this Contract for each budget year in which this Contract is in effect. The Contractor therefore agrees that the City shall have the right to terminate this Contract in whole or in part without penalty to the City in the event that sufficient funds to provide for City payment(s) under this Contract is not appropriated, not authorized, or not made available, or such funding has been reduced. In the event this Contract is subject, in whole or in part, to the appropriation and disbursement of Federal and/or State funds are not appropriated or are not disbursed to the City, the Contractor hereby agrees that the City shall have the right to terminate this Contract in whole or in part without penalty to the City shall have the right to terminate this contract in the City, the Contractor hereby agrees that the City shall have the right to terminate this Contract in whole or in part without penalty to the City shall have the right to terminate this Contract in whole or in part without penalty to the City.

16.3.1 Effects of Non-Appropriation. If funds to enable the City to effect continued payment under this Contract are not appropriated, authorized or otherwise made available by law, the City shall have the right to terminate this Contract without penalty at the end of the last period for which funds have been appropriated, authorized or otherwise made available by law by giving written notice of termination to the Contractor.

16.3.2 Effects of Reduced Levels of Funding. If funding is reduced by law, or funds to pay the Contractor for the agreed to level of the products, services and functions to be provided by the Contractor under this Contract are not appropriated, authorized or otherwise made available by law, the City may, upon seven (7) business days written notice to the Contractor, reduce the level of the products, services or functions in such manner and for such periods of time as the City may elect. The charges payable under this Contract shall be equitably adjusted to reflect such reduced level of products, services or functions and the parties shall be afforded the rights set forth in this Contract.

16.3.3 No Payment for Lost Profits. In no event shall the City be obligated to pay or otherwise compensate the Contractor for any lost or expected future profits.

16.4. Rights Upon Termination.

16.4.1 Termination for Cause. In the event the City terminates this Contract for cause, the Contractor shall relinquish to the City any applicable interest, title and ownership including, but not limited to, perpetual use of any proprietary rights in and to the products and deliverables delivered to, in possession of and properly invoiced and paid for by (except to the extent such invoiced amount is disputed) the City. With regard to third party products, the Contractor shall transfer all licenses which it is permitted to transfer in accordance with the applicable third party license. The City shall have no financial obligation to compensate the Contractor for such terminated products unless payment is otherwise approved by the City prior to such termination. The Contractor shall be liable for costs incurred by the City, including but not limited to reasonable attorney fees and all court awarded fees and costs incurred in terminating this Contract in whole or in part.

16.4.2 Termination for Lack of Funding or Convenience. In the event of termination by the City for lack of funding or convenience, the City shall pay the labor, services, equipment, materials, reports, plans, Contractor for all specifications, drawings, deliverables, incidentals, etc.(including any holdbacks) installed and delivered to the City as of the Termination Date and the Contractor shall relinquish to the City any applicable interest, title and ownership including, but not limited to perpetual use of any proprietary rights in and to said labor, services, equipment, materials, reports, plans, specifications, drawings, deliverables, incidentals, etc. delivered to, in possession of and paid for by the City (except to the extent any invoiced amount is disputed). The Contractor shall be required to exercise commercially reasonable efforts to mitigate damages. In the event of a termination for Lack of Funding or Convenience the City and the Contractor may negotiate a mutually acceptable payment to the Contractor for reasonable demobilization expenses. Said demobilization expenses, if any, shall be handled in accordance with the provision of this Contract pertaining to changes in the Project.

16.4.3 Assumption of Subcontracts. In the event of termination, the City shall have the right to assume, at its option, any and all subcontracts for products, services and functions provided exclusively under this Contract.

16.4.4 Delivery of Documents. In the event of termination, (i) the Contractor shall promptly deliver to the City, in a manner reasonably specified by the City, all documents and other tangible items furnished by, or owned, leased, or licensed by, the City, and (ii) the City shall pay the Contractor for all services performed and deliverables completed and accepted (pro-rated for deliverables partially completed) prior to the effective date of the termination (except to the extent any invoice amount is disputed).

17. Force Majeure. Neither the Contractor nor the City shall be held responsible for delays or be considered to be in breach of this Contract or be subject to liquidated damages when their respective obligations under this Contract are caused by conditions beyond either Party's control, including without limitation:

17.1. Acts of God, such as severe acts of nature or weather events including floods, fires, earthquakes, hurricanes, cyclones, or explosions;

17.2. war, acts of terrorism, acts of public enemies, revolution, civil commotion or unrest, riots, or epidemics;

17.3. acts of governmental authorities such as expropriation, condemnation, changes of law and order or regulations, proclamation, ordinance, or other governmental requirement;

17.4. strikes and labor disputes; and

17.5. certain accidents including but not limited to hazardous, toxic, radioactive or nuclear contamination spills, contamination, combustion or explosion, which prevent a Party from fulfilling their obligations or otherwise render performance under the Contract impossible.

Upon cessation of work for reason of force majeure delays, the Party(ies) whose obligations are affected shall use their best efforts to meet the schedule set forth in Section 5 of this Contract.

18. Subcontracting. The Contractor shall not, without the prior written approval of the City's Using Agency, subcontract, in whole or in part, any of the Contractor's services. Any subcontractor so approved shall be required to secure and maintain insurance coverage equal to or better than that required of the Contractor and shall name the City as an additional insured party and said subcontractors shall deliver to the City a certificate of insurance evidencing such coverages. All subcontractors shall comply with all federal, state and local, laws, regulations and ordinances but such requirement shall not relieve the Contractor from its requirement that all services provided hereunder shall comply with all Federal, State and local, laws, regulations and ordinances.

18.1. The Contractor shall be as fully responsible to the City for the acts and omissions of its subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by the Contractor.

18.2. The Contractor is responsible for and shall control activities of its subcontractors, and the subcontractors shall consult and cooperate with one another and other contractors working on the Project site. Each subcontractor shall furnish all necessary information to other subcontractors and shall lay out and install its own work so as to avoid any delays or interferences with the work of another. Any cost for changes, cutting and/or repairing, made necessary by failure to observe the above requirements shall be borne by the Contractor or subcontractor responsible for such failure or neglect.

18.3. The Contractor shall not, without the prior written approval of the City's Using Agency, substitute, terminate, replace or otherwise remove a subcontractor.

19. Assignability. The Contractor shall not assign any interest in this Contract, and shall not transfer any interest in the same (whether by assignment or novation) without the prior written approval of the City; provided, however, that claims for money due or to become due the Contractor from the City under this Contract may be assigned to a bank, trust, company, or other financial institution, or to a Trustee in Bankruptcy, without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.

20. Audit. The City reserves the right to audit the Contractor's books of account in relation to this Contract any time during the period of this Contract or at any time during the twelve month period immediately following the closing or termination of this Contract. In the event the City elects to make such an audit, the Contractor shall immediately make available to the City all records pertaining to this Contract, including, but not limited to, payroll records, bank statements and canceled checks.

21. Interest of City Officials. No member of the governing bodies of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the Project to which this Contract pertains, shall have any personal interest, direct or indirect, in this Contract.

22. Interest of Contractor. The Contractor covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in the Project or any parcel of land therein or any other interest which would conflict in any manner or degree with the performance of its services hereunder. The Contractor further covenants that in the performance of this Contract no person having any such interest shall be employed.

23. Entire Contract. This Contract shall constitute the complete and exclusive statement of the contract between the parties as it relates to this transaction and supersedes all previous agreements and understandings, whether written or oral, relating to such subject matter. Any amendment to this Contract must be in writing and agreed to and executed by the City and the Contractor, and must comply with the City's Charter and Code of Ordinances.

24. Independent Contractor Relationship. The relationship between the City and the Contractor is that of client and independent contractor. No agent, employee, or servant of the Contractor shall be deemed to be an employee, agent or servant of the City. The Contractor shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract.

25. Severability. Whenever possible, each provision of this Contract shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Contract, however, is held to be prohibited or invalid under applicable law, such provision shall be deemed restated to reflect the original intentions of the parties, as nearly as possible in accordance with applicable law, and if capable of substantial performance, the remaining provisions of this Contract shall be enforced as if this Contract was entered into without an invalid provision. If the ruling and/or controlling principle of law or equity leading to the ruling is subsequently overruled, modified or amended by legislation, judicial or administrative action, then the provision(s) in question as originally set forth in this Contract shall be deemed valid and enforceable to the maximum extent permitted by the new controlling principal of law or equity.

26. Survival. Any provisions of this Contract that impose continuing obligations on the parties shall survive the expiration or termination of this Contract for any reason.

27. Changes in the Project: Change Orders.

27.1. Requests for Change Orders. The City reserves the right on its own volition, or based upon a proposal for a Change Order submitted in written form with a thorough explanation by the Contractor, to request from time to time any changes to the requirements and specifications of this Contract and the products to be provided and the functions and services to be performed by the Contractor under this Contract. Such changes must be authorized by the City. The City will not approve of any change orders, deletions, additions, or additional work items to the Scope of Services or any change in the terms and conditions of this Contract except by means of a City authorized amended Scope of Services, applicable and restricted to those items set forth in §1, above, or Change Order issued as set forth in this section, except in the event of an emergency endangering life or property.

27.2. Procedures.

27.2.1 The Contractor's Response to a Change Request.

i. Within thirty (30) calendar days after receipt of a request by the City for any such change or such other period of time as the Parties may mutually agree to in writing, the Contractor shall submit to the City a proposal describing any changes in Contract Milestones or Contract completion dates, products, functions, timing of delivery, assignment of personnel, and the like, and any associated price adjustment. The Contractor's proposal shall describe, in detail, the basis for the proposed price adjustment, including the charges for any products required to implement the change request. **ii.** To the extent that additional cost or cost savings result from a change in required products, the Contractor shall obtain any additional products and provide them to the City at a negotiated price acceptable to the City and the Contractor. Similarly, if the change request is expected to result in a reduction in products required to perform the services, the Contractor's charges shall be reduced by the cost savings resulting from the products eliminated by the change request.

27.2.2 City's Acceptance of Change Request. If the City accepts the Contractor's proposal, the City shall issue a change order referencing the Contractor's proposal and both parties shall sign the change order. The Contractor shall not implement any change request until the City has issued a valid, properly executed, change order.

27.2.3 City's Rejection of Change Request. If the City does not accept the Contractor's proposal, the City may within two weeks of such non-acceptance: (i) withdraw its change request; or, (ii) modify its change request, in which case the procedures set forth above shall apply to the Contractor's response to the modified change request.

27.3. City Discretion. The City may, in its sole discretion, approve the proposed Change Order and shall forward same for additional signatures under the following conditions: (i) If it conforms to provisions of applicable laws, and (ii) if it is consistent with this Contract, and (iii) if the time of performance of this Contract will not be unreasonably delayed, (iv) the Final Completion date is not changed, (v) if the Change Order requires a change to the Final Completion date, such change has been authorized by an approved, executed, written Amendment to this Contract, and (vii) if the Change Order requires an increase in the price of the Contract, the City (1) has sufficient funds, and (2) if a budget transfer is required to cover the cost of the proposed Change Order, such transfer has secured the written approval of the Board of Aldermen and other required regulatory agencies.

27.4. Change Orders Governed by the Provisions of this Contract. All work performed under a Change Order is governed by the provisions of this Contract.

28. Conflicts or Disputes. This Contract represents the concurrence between the City and the Contractor and governs all disputes between them. In the instance of a conflict or dispute over issues not specifically referenced within the Contract, the following documents shall be used as historical documents, without regard to the order of precedence, to resolve such conflicts or disputes, as follows: (i) State of Connecticut, Department of Administrative Services Contract No. 17PSX0081; (ii) Contractor's Quotation #111120 dated November 11, 2020; (iii) Project Manual dated January 1, 2021, prepared by Friar Architecture, Inc.; (iv) Playscape Plans and Details (Drawings) dated January 1, 2021, prepared by Friar Architecture; and (v) the State of Connecticut, U.S. Consumer Product Safety Commission, and American Society for Testing ad Materials (ATSM) publications pertaining to school construction, playground safety, and

playground equipment materials and testing, respectively, as relates to this Project. Said historical documents are all attached hereto as part of **Attachment A**.

28.1. Procedure. This procedure supersedes all statements to the contrary occurring either in proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

28.2. Presumption. This Contract or any section thereof shall not be construed against any party due to the fact that the Contract or any section thereof was drafted by such party.

29. Disputes; Legal Proceedings; Waiver of Trial by Jury and Continued Performance. The Contractor agrees that its waives a trial by jury as to any and all claims, causes of action or disputes arising out of this Contract or services to be provided pursuant to this Contract. Notwithstanding any such claim, dispute or legal action, the Contractor shall continue to perform services under this Contract in a timely manner, unless otherwise directed by the City.

30. Binding Contract. The City and the Contractor each bind themselves, and their successors, assigns and legal representatives to the other party to this Contract and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Contract.

31. Waiver. Any waiver of the terms and conditions of this Contract by either of the parties hereto shall not be construed to be a waiver of any other term or condition of this Contract.

32. Governing Laws. This Contract, its terms and conditions and any claims arising there from shall be governed by the laws of the State of Connecticut.

33. Notice. Except as otherwise specifically prohibited in this Contract, whenever under this Contract approvals, authorizations, determinations, notices, satisfactions or waivers are required or permitted, such items shall be effective and valid only when given in writing signed by a duly authorized officer of the City or the Contractor, and delivered in hand or sent by mail, postage prepaid, to the party to whom it is directed, which until changed by written notice, are as follows:

Contractor:	Creative Recreation, LLC P.O. Box 330235 West Hartford, Connecticut 06133
City:	City of Waterbury Dept. of Education, School Inspector's Office Chase Municipal Building 236 Grand Street Waterbury, CT 06702
With a copy	to: City of Waterbury Office of the Corporation Counsel

235 Grand Street, 3rd Floor Waterbury, CT 06702

34. City Code of Ordinances, Ethics and Conflict of Interest Code, Provisions.

The Person (the term "Person" shall herein be as defined in Section 38 of the City's Code of Ordinances) supplying the labor, services, equipment, materials, reports, plans, specifications, drawings, deliverables, incidentals, etc. under this Contract shall comply with all applicable Federal, State and Municipal statutes, regulations, charters, ordinances, rules, etc, whether or not they are expressly stated in this Contract, including but not limited to the following:

34.1. It shall be a material breach of this Contract, and, except as may be permitted by regulations or rulings of the City of Waterbury Board of Ethics it shall be a violation of the City's Code of Ordinances, for any Public Official, City Employee or Member of a Board or Commission who is participating directly or indirectly in the procurement process as set forth in the City's Code of Ordinances, including those participating in exempt transactions, to become or be the employee of any person contracting with the governmental body by whom the Official, Employee, or Board or Commission member is employed or is a member.

34.2. It shall be a material breach of this Contract, and it shall be a violation of the City's Code of Ordinances for any Person to offer, give, or agree to give any current or former Public Official, Employee or Member of a Board or Commission, or for such current or former Public Official, Employee or Member of a Board or Commission to solicit, demand, accept or agree to accept from another Person, a gratuity or an offer of employment in connection with any: decision; approval; disapproval; recommendation; preparation of any part of a program requirement or a requisition; influencing the content of any specification or procurement standard; or rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a Contract or Purchase Order, or to any solicitation or proposal therefore.

34.3. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for any payment, Gratuity, or offer of employment to be made as an inducement for the award of a subcontract or order, by or on behalf of a subcontractor, the prime Contractor or higher tier subcontractor or any Person associated therewith, under a Contract or Purchase Order to the City.

34.4. The value of anything transferred or received in violation of the City's Charter, Code of Ordinances, and/or regulations promulgated there under, by any Person subject to said Charter and/or Ordinances may be recovered by the City.

34.5. Upon a showing that a subcontractor made a kickback to the City, a prime Contractor or a higher tier subcontractor in connection with the award of a subcontract or order there under, it shall be conclusively presumed that the amount thereof was included in the price of the subcontract or order and ultimately borne by the City and will be recoverable hereunder from the recipient. In addition, said value may also be

recovered from the subcontractor making such kickbacks. Recovery from one offending party shall not preclude recovery from other offending parties.

34.6. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for a Person to be retained, or to retain a Person, to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee; and every Person, before being awarded a City Contract, shall deliver to the City, on a City authored form, a representation that such Person has not retained anyone in violation of this subsection 34.6, the failure to deliver said form being a material breach of this Contract and a violation of the City's Code of Ordinances. Note, however, this subsection 34.6 shall not apply to full-time Employees who, as a condition of their employment, may be entitled to bonuses or other fees in accordance with their employment relationship.

34.7. The Person hereby expressly represents that he/she/it has complied with those sections of the City's Code of Ordinances requiring that said Person has (i) delivered to the City an affidavit, on a City authored form, stating that the Person and its affiliates have no delinquent taxes or other financial obligations owned to the City; (ii) filed the City authored financial disclosure statement form as set forth in the City's Code of Ordinances regarding disclosure of financial interests; (iii) delivered to the City a written acknowledgement, on a City authored form, evidencing receipt of a copy of the "Ethics and Conflict of Interest" ordinance for the City of Waterbury and hereby expressly represents that said Person is in full compliance with the entirety of said Code of Ordinances; and (iv) filed a current list of all taxable personal and real property as required by the State of Connecticut General Statutes. Any violation of this subsection 34.7 shall be deemed a material breach of this Contract and shall be a violation of the City's Code of Ordinances.

34.8. The definitions set forth in the City's Code of Ordinances shall be the primary source for interpretation of the forgoing subsections 34.1-34.7.

34.9. The Contractor is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, all relevant provisions of the City's Charter and all relevant provisions of the City's Code of Ordinances, including without limitation Chapters 93, titled "Discriminatory Practices", Chapter 38 titled "Centralized Procurement System", and Chapter 39 titled "Ethics and Conflict of Interest", of said Code as may be amended from time to time.

34.10 The Contractor hereby acknowledges receipt of a copy of the Chapters 38 and 39 of City's Ordinance regarding Procurement, Ethics, and Conflicts of Interest and has familiarized itself with said Code and hereby agrees to adhere to said Code. The text of Chapters 38 and 39 of said Code may be obtained from the Office of the City Clerk of the City and on the internet the City Clerk's web site: at https://www.waterburyct.org/content/9569/9605/9613/15125.aspx [click link titled "The City of Waterbury - Code of Ordinances (Rev. 12/31/19)." For Chapter 38, click on "TITLE III: ADMINISTRATION", then click on "CHAPTER 38: CENTRALIZED PROCUREMENT SYSTEM". Chapter 39, click For on "TITLE III:

ADMINISTRATION", then click on "CHAPTER 39: ETHICS AND CONFLICTS OF INTEREST"].

34.11. The Contractor is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, the City's Ordinance Sections 34.15 through 34.99 entitled, "Ordinance Concerning the Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects," and the State of Connecticut Legislature's Special Act No. 01-1.

34.12. Every Person who conducts business with, contracts, with or provides commodities or services to the City, is charged with notice of the extent of the powers and authority, and the limitations thereon, of the Public Officials and Employees of the City, as set forth in the charter of the City, the Code of Ordinances and any Regulations or Policies pertaining thereto. In particular, and without implying any limitation as to its applicability, it applies to all Persons who participate in the procedures pertaining to the Centralized Procurement System as set forth in Chapter 38, and the Ethics and Conflict of Interest provisions set forth in Chapter 39 of the Code of Ordinances.

34.13. INTEREST OF CITY OFFICIALS. No member of the governing body of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the project, to which this agreement pertains, shall have any personal interest, direct or indirect, in this agreement.

34.14. PROHIBITION AGAINST CONTINGENCY FEES. The Contractor hereby represents that it has not retained anyone to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage or contingency fee.

34.15. FREEDOM OF INFORMATION ACT NOTICE. Pursuant to State statute, in the event the total compensation payable to the Contractor set forth in Section 6 of this Contract is greater than \$2,500,000.00, the City is entitled to receive a copy of any and all Contractor records and files related to the performance of this Contract and those records and files are subject to the Freedom of Information Act ("the Act") and may be disclosed by the City pursuant to the Act.

35. Definitions. Whenever the following, words, terms, etc. appear in this Contract, the intent and meaning shall be as follows:

- **35.1** <u>Additional Work</u>: Work required by the City that involves a substantial addition to, deduction from or modification of the Contract Documents.
- **35.2** <u>Bid or Proposal</u>: The form on which the bidder is to submit a bid for the Work contemplated.
- **35.3** <u>Bidder</u>: A person, partnership, corporation or other business organization submitting a bid on the form for the Work contemplated.

- **35.4** <u>City</u>: The City of Waterbury, acting directly or through specifically authorized personnel.
- **35.5** <u>Construction Supervisor</u>: An employee of the City of Waterbury, or other City duly authorized person.
- **35.6** <u>Contract Time</u>: The number of days as stated in the Contract to: (i) achieve Substantial Completion, (ii) Final Completion.
- **35.7** <u>Equal</u>: The recognized equivalent in substance and function; considering quality, workmanship, economy of operation, durability and suitability for purposes intended, and not constituting a change in the Work specified. Whenever the words "equal" or "equals" or words of like import are used, it shall be understood they mean "equal" in the opinion of the City.
- **35.8** <u>Final Completion</u>: The time at which the Project has progressed to the point where, in the opinion of the City, the Project is complete such that it is ready for final payment as evidenced by the City's, or its duly authorized City representative's, written recommendation of final payment. The terms "finally complete" and "finally completed" as applied to the Project refer to Final Completion.
- **35.9** <u>Notice to Proceed</u>: A letter from the City which shall state the date of execution of the Contract and specifically advise the Contractor to begin work on the Contract.
- **35.10** <u>Plans</u>: All drawings or reproductions of drawings pertaining to the construction of the work contemplated and its appurtenances.
- **35.11** <u>Project Engineer or Manager</u>: An employee of the City or a person, partnership, corporation or other business organization under contract with the City, commissioned to perform construction administration and inspection duties during construction.
- **35.12** <u>Shop Drawings</u>: Drawings, diagrams, schedules, performance charts, brochures and other materials prepared by the Contractor or subcontractors, manufacturers or distributors which illustrate some portion of the work.
- **35.13** <u>Specifications or Technical Specifications</u>: The description, provisions and other requirements pertaining to the materials, methods and manner of performing the Project.
- **35.14** <u>Subcontractor</u>: A person, partnership, corporation or other business organization supplying labor and/or materials for work at the site of the Project to and under agreement with the Contractor.

- **35.15** <u>Substantial Completion</u>: The time at which, in the opinion of the Engineer, the Project (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Project (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Project mean Substantial Completion thereof.
- **35.16** <u>Substitution</u>: A replacement of specified material, device or equipment which is sufficiently different in substance, function, quality or workmanship to become the subject of a Change Order.
- **35.17** <u>Supplementary General Conditions</u>: An extension to the terms, conditions, and provisions set forth in this document as additional, material, provisions of this Contract.
- **35.18** <u>Work</u>: All plant, labor, materials, services, supplies, equipment and other facilities and items necessary for, or incidental to, the completion of the terms of the Contract.
- **35.19** <u>Using Agency</u>: School Inspector's Office in the Department of Education.

[Signature page follows]

IN WITNESS WHEREOF, the parties hereto execute this Contract on the dates signed below.

CITY OF WATERBURY

Sign:		
-	Name:	

WITNESSES:

Sign:_____ Print Name:

Date: _____

WITNESSES:

CREATIVE RECREATION, LLC

Sign:	By:
Print Name:	Print Name:

Sign: _____ Print Name:

int Name:

Its:_____(Title)

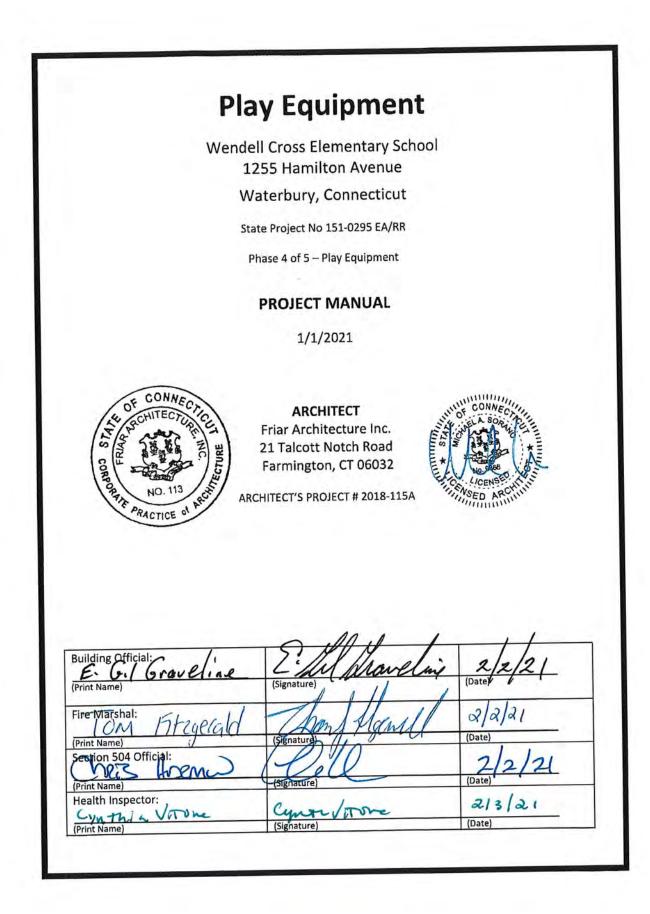
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ATTACHMENT A

- 1. State of Connecticut, Department of Administrative Services, Contract No. 17PSX0081 for Playground, Recreation and Park Equipment ("State Contract") (incorporated by reference);
- 2. Contract Award Supplement #4 to State of Connecticut, Department of Administrative Services, Contract Award No. 17PSX0081, consisting of 4 pages, dated June 2, 2020 (incorporated by reference);
- **3.** PROJECT MANUAL (as also may be referred to as General Conditions, General Requirements, or Technical Specifications): "Play Equipment, Wendell Cross Elementary School, 1255 Hamilton Avenue, Waterbury Connecticut, State Project No. 151-0295 EA/RR, Phase 4 of 5 Play Equipment, PROJECT MANUAL" dated January 1, 2021, prepared by Friar Architecture Inc., consisting of 123 pages (attached hereto);
- 4. PLAYSCAPE PLANS AND DETAILS (also referred to as Drawings): "Wendell Cross Elementary School, 1255 Hamilton Avenue, Waterbury Connecticut, PLAYSCAPE PLANS AND DETAILS, State Project No. 151-0295 EA/RR, Phase IV, dated January 1, 2021, prepared by Friar Architecture Inc., consisting of 9 pages (attached hereto);
- 5. Creative Recreation's Quotation #111120, dated November 11, 2020, consisting of 2 pages (attached hereto);
- 6. U.S. Consumer Product Safety Commission's "Public Playground Safety Handbook," Publication No. 325, 2010 Edition, consisting of 61 pages, available at: <u>https://www.cpsc.gov/s3fs-public/325.pdf</u>; (incorporated by reference);
- 7. American Society of Testing and Materials' (ASTM) F1487-17, "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," ASTM International, West Conshohocken, PA, 2017, <u>www.astm.org</u>, consisting of 71 pages, available at: <u>http://www.astm.org/cgi-bin/resolver.cgi?F1487</u>, (incorporated by reference);
- 8. State of Connecticut, Department of Administrative Services,' "Connecticut School Construction Standards and Guidelines," dated September 22, 2016, consisting of 182 pages, available at: <u>https://portal.ct.gov/-/media/DAS/Office-of-School-Construction-Grants/Task-113---Office-of-School-Construction-Grants-and-Review/CT-Standards-and-Guidelines/CT-Standards-and-Guidelines-APPRVD-09-22-2016.pdf?la=en, (incorporated by reference);</u>
- 9. Contractor's Certificate of Insurance (attached hereto);
- **10.** Contractor's Performance Bond (attached hereto or otherwise incorporated by reference);

- **11.** Contractor's Payment Bond (attached hereto or otherwise incorporated by reference);
- **12.** Commission on Human Rights and Opportunities ("CHRO") Contract Compliance Documents with Bidder Contract Compliance documentation, dated February 22, 2021, consisting of 5 pages (attached hereto);
- **13.** State of Connecticut Prevailing Wage Rate documentation dated March 9, 2021 and related Important Information document, consisting of 10 pages (attached hereto);
- **14.** All applicable Federal, State and local statutes, regulations charter and ordinances (incorporated by reference);
- **15.** Stockholder's Affidavit; Non-Collusion Affidavit; Debarment Certificate (incorporated by reference);
- **16.** All permits and licenses (incorporated by reference); and
- **17.** Any and all amendment(s) and Change Orders issued by the City after execution of agreement (incorporated by reference).



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	Drawing List	
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Wendell Cross Elementary School State Project No. 151-0295 EA/RR

COVER SHEET

DRAWINGS FOR REFERENCE ONLY

- C-3.0 SITE LAYOUT PLAN (FOR REFERENCE ONLY)
- C-4.0 SITE GRADING PLAN (FOR REFERENCE ONLY)
- C-4.1 SITE DRAINAGE PLAN (FOR REFERENCE ONLY)

PLAY EQUIPMENT

- PE1.1 PLAY AREA LAYOUT
- PE1.2 PLAY AREA SURFACING
- PE2.0 PLAY ATEA FOOTINGS
- PE3.1 ELEVATIONS
- PE4.1 PERSPECTIVES

END OF DRAWING LIST

GENERAL CONDITIONS FOR PLAYGROUND EQUIPMENT AND SURFACING

The following Instructions and General Conditions shall apply and govern all suppliers and contractors and their subcontractors in matters of furnishing and installing of playground equipment and surfacing for this project.

ARTICLE 1: CONTRACT DOCUMENTS

The contract of the parties includes the General Conditions, Certification and Representations, the Contract, Drawings, and Specifications. These documents are to be considered as one, and whatever is called for by one shall be as binding as if called for by all. Any discrepancies or questions as to quantities of any items listed in the specifications shall be immediately brought to the attention of the Consultant, for correction by addenda. Any such discrepancies determined by the Contractor and not corrected by addenda shall be resolved on the basis of furnishing the greater quantity without change in contract price.

ARTICLE 2: INTENT

It is the intent of these contract documents to include labor, materials, accessories, integration and services of every kind necessary to properly execute the work and to cover the terms and conditions of payment thereof, and to establish minimum acceptable requirements for equipment design and construction and contract performance to assure fulfillment of the educational purpose.

ARTICLE 3: QUALIFICATIONS

The Constructor must certify that they meet the following conditions:

- a. That the constructor has an existing supply relationship with a manufacturer adequate for and devoted to the production of the equipment which it proposes to furnish and has the necessary specialized support staff and tools to provide the proper service, integration, hardware and accessories.
- b. The constructor must have been engaged in the supplying of similar equipment as that specified for a period of not less than five (5) years and shall have a suitable organization to deliver and install the equipment, all in accordance with the Construction Documents, and the Constructor shall have completed five or more installations of the kind and size contemplated by the specification and proposal within the past two years which have proven satisfactory under similar conditions.
- c. The constructor must have financial and personnel resources of sufficient scope to assure prompt and satisfactory performance in the execution of the total conditions of the Construction Documents and in the production, delivery and installation of all equipment specified so as not to delay the progress of the work.
- d. Constructor must be an authorized factory distributor or manufacturer's representative for any item bid. Constructor must include in their submittal documentation evidencing this authorization. Constructor must be authorized manufacturer's warranty and service provider.

e. In addition, the authorized dealer information must provide warranty information offered by the manufacturer, and the constructor must provide at least one year warranty on parts and labor offered by manufacturer or dealer or as specified, whichever is of greater duration. Constructor must include in their bids written instructions regarding all steps necessary, by end users, to effect warranty repairs.

ARTICLE 4: MATERIALS, TOOLS, AND EMPLOYEES

Except as otherwise directed by the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, power, and such other items required to complete the work involved. All equipment and accessories shall be new, unused, and of the recent manufacture, unless otherwise noted. All installation work shall be properly managed and supervised by technicians or employees who are thoroughly trained and experienced in the work involved.

ARTICLE 5: ROYALTIES AND PATENTS

The Contractor shall pay all royalties and license fees on products furnished. He shall defend all suits and claims for infringement of any patent rights and shall save the Owner from loss or inconvenience resulting there from.

ARTICLE 6: PERMITS AND COMPLIANCE WITH CODES

The Contractor shall obtain and pay for all necessary permits and all equipment, appliances and work shall conform to applicable safety and fire codes. All equipment specified herein, and furnished to this project shall be designed and manufactured to meet Occupational Safety and Health Administration standards.

ARTICLE 7: PROTECTION OF WORK AND PROPERTY

The Contractor shall take all required precautions to protect his equipment against damage, theft, and deterioration on the site. He shall respect the work of others and any accidental damage incurred to the work of others shall be promptly repaired or replaced at the expense of the Contractor. All equipment shall be left in the proper location within the building and installed as required with all manufacturer's directions and maintenance manuals, either attached or delivered to the Owner's representative in duplicate.

ARTICLE 8: RESPONSIBILITY AND LIABILITY TO RELATED CONTRACTORS

The Contractor is cautioned that all other Contractors of all trades for the entire project bid work to conform to the Specifications and drawings issued for public bidding, and the Contractor shall be fully liable for any and all additional charges to the Owner resulting from changes required to accommodate any item of equipment not furnished in strict accordance to the specifications and other Bid Documents or as otherwise approved by the consultant.

ARTICLE 9: CHANGES IN EQUIPMENT OR WORK

The Architect, at the direction of the Owner, may order changes in the equipment or work in writing, the contract sum being adjusted accordingly. All changes for additional equipment or work must be submitted in advance to the architect for approval by owner, architect, and Office of School Construction Grants and Review.

ARTICLE 10: POSSIBLE DISCREPANCIES IN SPECIFICATIONS

Any inadvertent errors, omissions or discrepancies in the applicable specifications should be brought to the attention of the Consultant who shall then send written instructions to all bidders in order to effect the correction and clarification of the Project Documents. Failure of any bidder to receive any such addendum shall NOT relieve the bidder from any obligation under his bid as submitted.

For changes in the work the contractor is entitled to a maximum of 10% on the net cost for the overhead and profit for work performed by their forces and 5% for work performed by a subcontractor. For changes to the work a subcontractor is entitled to a maximum of 10% for work performed by their forces.

ARTICLE 11: GENERAL INSTRUCTIONS.

- (a) Any changes "or approved equals" to the specified products, manufacturer or design in any way must be approved by the Architect and Office of School Construction Grants and Review. The contractor is responsible for providing all materials and documentation required for such approval as well as the cost for all work required by the Architect or the City during approval process.
- (b) All prices to be per the State Contract
- (c) Prices must be based on delivery, specified installation, connection, training and documentation testing.
- (d) Contractor must clearly state the terms and conditions of the manufacturer's and/or dealer's warranty and guarantee

ARTICLE 12: CONTRACTOR'S RESPONSIBILITY FOR SPECIFICATIONS

Any measurements, calculations or estimates included herein are believed to be correct, but Contractor conduct a thorough examination of the project, since no allowance will be made because of any inaccuracy that inadvertently appears within the context of the Construction Documents. The failure of the contractor to acquaint themselves with conditions as they actually exist shall not relieve them from any obligations and responsibilities inherent within the Construction Documents.

ARTICLE 13: INSTALLATION

Installation is defined as the receiving, assembly and placement of all finished goods to their respective room and/or area, including delivery to the building, unpacking, assembly, setting in place, leveling, as may be required. Additionally, installation shall include miscellaneous wiring, connection, powering up, loading of software, configuration of images, applications and systems and demonstration of proper operation of the equipment. Trash removal is also included and shall consist of complete removal of all package, trash, boxes and related materials including the provision and removal of dumpsters. The dumpsters and all related costs, personnel, permits, fees, coordination with the project construction general contractor are also included.

Installation costs shall be included as part of the Total Contract Amount.

Warehousing: It shall be the responsibility of the Contractor to provide storage/warehousing for its products until its assigned installation time.

Trash and Dumpsters: This Contractor shall remove trash daily. Dumpsters will not be provided by the Owner. Trash shall be removed from the project daily. Dumpsters must be covered to contain trash at all times and emptied when full (not over filled). This contractor is to provide their own dumpsters and coordinate placement on the job with the project contact.

Cleaning: This Contractor shall pick up and dispose of all packing materials, scraps, waste and other trash.

The Contractor shall be responsible for its installation crew. The time of installation is stated in these Construction Documents. The Awarding Authority reserves the right to change the timetable due to unforeseen conditions.

All existing site amenities and buildings must be protected during installation. Any damage to the facility, as a result of the installation shall be the financial responsibility of and restored by this Contractor.

ARTICLE 14: OPERATING AND MAINTENANCE INSTRUCTIONS

Upon completion of furnishing and installation of Playground Equipment provide complete operating, maintenance and instruction/documentation for equipment to the architects for distribution to the Owner. These shall consist of sufficient demonstration and verbal instructions as well as brochures of instructions, to thoroughly acquaint the persons designated, with the equipment. Provide three (3) copies of Operating and Maintenance Instruction Manuals in printed form and bound into hard-covered loose-leaf binders, with pages set into plastic page covers. Each manual shall have index, page tabs, and be neatly edited in alphanumerical order to reflect the order of the contract documents, item by item.

Information in the manual shall be grouped by section of equipment. The entire contents shall be printed or typed and contain the following:

- 1. Complete operating instructions and recommendations as to parts to be used in or within the item. Step-by-step procedures shall be outlined.
- 2. Manufacturer's complete data sheets.
- 3. Complete cleaning instructions including recommended cleaning materials.

The time and place for instruction and demonstration shall be as designated by the Owner. Instruction manuals shall be provided at substantial completion.

ARTICLE 15: WARRANTY AND GUARANTEES

A. Special Project Warranty

Submit in writing a written warranty, executed by the Contractor, agreeing to repair or replace project components which fail in materials or workmanship within the specified warranty period set forth in paragraph B below or as specified for specific items and/or systems. This warranty shall be in addition to and not a limitation of other rights the Owner may have against the Contractor under these contract documents.

B. Guarantees

All fixtures, equipment, materials and workmanship furnished and installed under this contract shall be new and be guaranteed against defects under normal usage.

The Contractor shall be responsible for all defects, faulty materials and workmanship, which may develop or be found in any of the equipment furnished by him/her under this contract. Upon receipt of notice from the Owner, the Contractor shall immediately replace or repair and make good, without additional expense to the Owner, all such defective and faulty equipment during a period of not less than one (1) years from date of final acceptance and payment of the equipment, except when a specific guarantee for a longer period of time is elsewhere specified. This article notwithstanding, manufacturer's standard guarantee or warranties for longer periods of time shall remain in full force and effect.

For purposes of warranty and guarantees, final acceptance shall be the starting date of guarantee period, except for work items noted as incomplete or unsatisfactory. Warranty and guarantee of such incomplete or unsatisfactory work shall start on final correction and acceptance of such work.

ARTICLE 16: CONTRACTOR'S LIABILITY INSURANCE

The Contractor and its Subcontractors shall each maintain such insurance as will protect him from claims under Workmen's Compensation Acts and Public Liability Laws while his employees are on the Project property. Certificates of such insurance shall be submitted to the Awarding Authority. Personal injury limits shall be as provided in the contract form included in the Bid Documents.

ARTICLE 17: SAMPLES

On request, and without cost to the Awarding Authority, the Contractor shall submit such full size samples of the equipment which in the opinion of the Awarding Authority, Consultant and/or Architect are necessary to judge adequately the character, quality and construction of his product, and failure to comply within the time prescribed shall be deemed sufficient grounds for rejection of the bid.

Samples submitted by a resulting successful bidder may be impounded by the Awarding Authority for the period of the contract for comparison of materials delivered to the job site to assure they conform in every aspect to the approved samples submitted. Materials delivered that fail to conform to the approved samples shall be rejected.

ARTICLE 18: SHOP DRAWINGS

The Contractor shall promptly furnish within five (5) days after notification of award of contract complete one line and system interconnection drawings. Drawings shall clearly show the layout, configuration and interconnection of each item and/or system. Submit detailed cut sheets for each item clearly marked to show each specification item/model/part. Clearly show quantity of each item being provided.

The Contractor shall furnish detailed installation drawings and test results upon substantial completion of the installation. The installation drawings are to show the exact configuration of each installed item.

ARTICLE 19: EQUALITY OF MATERIALS

The words "or equal" are understood to follow all names of proprietary products, trade names, catalog numbers and detailed descriptions and shall be interpreted to mean any material, article, assembly or system, which in the opinion of the Owner is at least equal in quality, durability, appearance, strength, and design to the equipment specified and will perform at least equally the functions imposed by the general design. The words "or equal' shall not be construed to permit substantial departure from the detailed requirements of specifications. Any item believed to be "or equal" must be approved by the Office of School Construction Grants and Review at the contractor's expense.

ARTICLE 20: PAYMENTS

The Owner may approve the Contractor's invoices for payments of materials delivered and work completed of up to ninety five percent (95%) of the contract price upon initial review and approval of Consultant; the balance of five percent (5%) being withheld until final approval and acceptance of installation.

Applications for payment shall be submitted to the office of the consultant on the American Institute of Architects application for payment form, AIA G702. Submit the original and six copies. The office of the consultant will review the application for payment and forward to the owner with recommendations. Use AIA G703 backup sheets for additional and supporting information.

Prior to the submission of any applications for payment, submit a detailed scheduled of values for all aspects of the work, totaling the full value of the contract.

The successful bidder shall pass all decreases in equipment and/or software costs onto the owner, in full value.

Materials stored on behalf of this project may be invoiced for up to 80% of scheduled value as long as a valid certification of insurance for the entire value of stored equipment and a valid Transfer of Title is provided with the application for payment.

ARTICLE 21: SCHEDULE

Delivery and installation of the equipment shall occur as indicated. Exact dates and delivery procedures will be given to Contractor after signing of Contract Documents, and/or as required throughout the installation.

ARTICLE 22: WORK BY OWNER OR BY SEPARATE CONTRACTORS

- a. The owner reserves the right to perform work related to the project with the owner's own forces, and to award separate contracts in connection with other portions of the project or other work on the site under these or similar conditions of the contract.
- b. When separate contracts are awarded for different portions of the project or other work on the site, the term contractor in the contract documents in each case shall mean the contractor who executes each separate owner-contractor agreement.

- c. The owner will provide for the coordination of the work of the owner's own forces and of each separate contractor with the work of the contractor, who shall cooperate therewith as provided in Paragraph b.
- d. The contractor shall afford the owner, the construction manager and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall connect and coordinate the work with theirs as required by the contract documents.
- e. If any part of the contractor's work depends on proper execution or results upon the work of the owner or any separate contractor, the contractor shall, prior to proceeding with the work, promptly report to the designated representative of the owner, the consultant and construction manager any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the contractor to report shall constitute an acceptance of the owner's or separate contractor's work as fit and proper to receive the work, except as to defects, which may subsequently become apparent in such work by others.
- f. Any costs caused by defective or ill-timed work shall be borne by the party responsible therefore.
- g. Should the contractor wrongfully cause damage to the work or property of the owner, or to other work or property on the site, the contractor shall promptly remedy such damage.
- h. Should the contractor wrongfully delay or cause damage to the work or property of any separate contractor, the contractor shall, upon due notice, promptly attempt to settle with such other contractor by agreement, or otherwise to resolve the dispute. If such separate contractor sues the owner on account of any delay or damage alleged to have been caused by the contractor, the owner shall notify the contractor who shall defend such proceedings at the owner's expense, and if any judgment or award against the owner arises there from, the contractor shall pay or satisfy it and shall reimburse the owner for all attorneys' fees and court or arbitration costs which the owner has incurred.
- i. If a dispute arises between the contractor and separate contractors as to their responsibility for cleaning up as required, the owner may clean up and charge the cost thereof to the contractors responsible therefore as the construction manager shall determine to be just.

ARTICLE 30: REPORTING

The contractor will submit weekly written progress reports to the consultant by the end of the day every Thursday or on a day designated for this purpose. The reports may be submitted by fax or e-mail. Each report shall clearly state work completed during that week, overall project status, work planned for the following week and any questions or issues. The consultant will notify the contractor regarding the start date for this reporting requirement. Notification to the contrary not withstanding, the contractor will provide reports starting the week that the first order is placed and ending at receipt of full payment.

The contractor will ensure that their project manager for this project will be available and will meet with the consultant and other parties on a weekly basis. All efforts will be

made to establish a fixed weekly meeting time, but the contractor will remain flexible and will accommodate the owner's schedule.

ARTICLE 31: EQUAL OPPORTUNITY EMPLOYEMENT

Sec. 7-3 Contract Provisions Required Pertaining to Equal Opportunity in Employment

- A. Every Contract made by or on behalf of the Owner for the design, construction, lease, alteration or repair of any public building or public work, or for the purchase, manufacture, sale or distribution of materials, equipment or supplies shall contain provisions providing for equal opportunity in employment.
- B. Every contract for the construction, alteration or repair of any public building or public work shall contain the following provisions:
 - 1. The Contractor agrees and warrants that in the performance of this contract he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, sex, sexual orientation, mental retardation or physical disability, including but not limited to blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States, the State of Connecticut, or the Owner. The Contractor also agrees to provide the Owner with such information that they may request concerning the employment practices and procedures of the contractor as related to the provisions of this section.
 - 2. The aforesaid provision shall include, but not be limited to, the following: advertising, recruitment, layoff, termination, rates of pay or other forms of compensation, conditions or privileges of employment, selection for apprenticeship, selection or retention of subcontractors, or in the procurement of materials, equipment or services.
 - 3. The Contractor shall hereinafter post on the project site, in conspicuous places available for employees and applicants for employment, notices setting forth its nondiscrimination requirements.
 - 4. In all contracts between Contractor and any subcontractor or supplier either for work to be performed under a subcontract or the procurement of materials, equipment or services, each subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligation under this contract relative to non-discrimination, and each subcontractor or supplier, by his contracting agent, shall agree to and be bound by the terms of this contract.
 - 5. Nothing herein is intended to relieve any contractor from compliance with all applicable federal, state and municipal legislation or provision concerning equal employment opportunity, affirmative action, non-discrimination and related subjects during the term of its contract on this project.

ARTICLE 32: INSURANCE REQUIREMENTS

A. <u>GENERAL REQUIREMENTS</u>

The Contractor shall be responsible for maintaining insurance coverage in force for the life of the contract of the kinds and adequate amounts to secure all of the Contractor's obligations under this contract with an insurance company(ies) with an AM Best Rating of A- VIII or better licensed to write such insurance in the State of Connecticut and acceptable to the Owner.

The insurer shall provide the Owner with Certificates of Insurance signed by an authorized representative of the insurance company(ies) prior to the performance of this contract describing the coverage and providing that the insurer shall give the Owner written notice of at least thirty (30) days in advance of any termination, expiration, non-renewal or any and all changes in coverage.

Such insurance or renewals or replacements thereof shall remain in force during the Landscape Architect's responsibility under this contract.

At the Contractor own cost and expense, shall procure and maintain all insurances required and shall include the Owner as Additional Insured on all contracts, except Workers' Compensation and Professional Errors and Omissions coverage.

In order to facilitate this requirement for insurance, it is recommended that the Contractor forward a copy of these requirements to the Contractor's insurance representative(s).

B. SPECIFIC REQUIREMENTS

(1) <u>Workers' Compensation Insurance</u>

The Contractor shall provide statutory Workers' Compensation Insurance, including Employer's Liability with limits of:

\$100,000 Each Accident \$500,000 Disease, Policy Limit \$100,000 Disease, Each Employee

(2) <u>Commercial General Liability Insurance</u>

The Contractor shall carry Commercial General Liability insurance. A per occurrence limit of *\$1,000,000 combined single limit bodily injury and property damage is required.* The Aggregate limit will not be less than \$2,000,000. Any deviations from the standard unendorsed form will be noted on the Certificate of Insurance.

(3) <u>Business Automobile Liability Insurance</u>

The Contractor shall carry Business Automobile Liability Insurance. A per occurrence limit *of \$1,000,000 combined single limit bodily injury and property dam*-

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age is required. "Any Auto" (symbol 1 or equivalent) is required. Any deviations from the standard unendorsed form will be noted on the Certificate of Insurance.

(4) <u>Professional Liability Insurance</u>

The Contractor shall carry Professional Liability Insurance, in the amount of \$2,000,000 per claim/aggregate basis with a deductible no greater than \$75,000 and shall have a retroactive date, if any, prior to commencement of services on the project. The Owner may request to have the base policy supplemented with a rider on a project specific basis, with an additional \$3,000,000 per claim/aggregate. The Owner may request that coverage provided by the rider continue, on annual basis for a period of at least seven (7) years after substantial completion of the project.

(5) Excess Umbrella Liability Insurance

The Contractor shall carry excess umbrella liability insurance in the amount of at least \$5,000,000 overlaying employers liability, commercial general liability (including completed operations), and business automobile liability coverage.

C. <u>SUBCONTRACTOR REQUIREMENTS</u>

The Contractor shall require that any subcontractors and independent contractors hired by the Contractor carry sufficient amounts of insurance and to obtain Certificates of Insurance before subcontractors and independent contractors are permitted to begin work.

The Contractor shall require that Owner be included as Additional Insured on all subcontractors and independent contractors insurance before permitted to begin work.

The Contractor and all subcontractors and independent contractors and their insurers shall waive all rights of subrogation against the Owner, and their offices, agents, servants and employees for losses arising from work performed by each on this contract.

D. <u>OTHER DATA</u>

The OWNER reserves the right to amend amounts of coverage required and types of coverage provided based on work or service to be performed.

E. INDEMNIFICATION

The Contractor shall, at all times, defend, indemnify, protect and save harmless the City of Waterbury and their respective officers, agents and employees (collectively, the "Indemnitees") from and against any and all liabilities, actions, claims, damages, losses, judgments, workers' compensation payments, costs and expenses (including but not limited to attorneys' fees) arising out of injuries to the person including death, property damage or other damages sustained by any of the Indemnitees, Architect, or any other person, part or entity, to the extent any such injuries, damage or damages, are caused or alleged to have been caused in whole or in part by the acts, omissions, errors or negligence of Contractor or any of its officers agents representatives, employees or subcontractors. The expenses, covered by the foregoing indemnification shall include those to investigate, defend and settle any claim, judgment or payment of any legal liability. Upon demand of the Indemnitees, the Contractor shall immediately pay to the City of Waterbury the amount of any expenses incurred by any of the Indemnitees that is covered by the foregoing indemnification. The obligations of the Contractor under this indemnification shall survive the termination or expiration of this Agreement. The existence of insurance shall in no way limit the scope of this indemnification.

CURRENT PREVAILING WAGE RATES

COMPLYING WITH SECTION 31-53 CGS

SHALL BE INSERTED

PRIOR TO RELEASE FOR BIDDING

IF REQUIRED

ANNUAL ADJUSTMENT OF WAGE RATES

WILL BE ADJUSTED AS REQUIRED

PER SECTION 31-55a CGS

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Coordination with occupants.
 - 4. Work restrictions.
- B. Related Requirements:
 - 1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: New Construction of Wendell Cross Elementary School
 - 1. Project Location (new address): 1255 Hamilton, Waterbury, CT Use this address for deliveries.
- B. Owner: The City of Waterbury
- C. Architect: Friar Architecture inc., 21 Talcott Notch Rd., Farmington, CT (860) 678-1291.
- D. Play Equipment Manufacturer: Creative Recreation/Miracle, P.O. Box 330235, West Hartford, CT
- E. The Work consists of the following:

The following is the project scope for phase 4 of 5 of the aforementioned project: Installation of new play equipment and playground safety surfacing.

1.4 PURCHASE CONTRACTS

A. General: Owner will procure material and equipment to be incorporated into the Work through DAS approved state contract. Include costs for purchasing, receiving, handling, storage if required, and installation of material and equipment in the Contract Sum.

1.5 USE OF PREMISES

- A. General: Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits.
- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine constructions operations to building areas where work is required.
 - 2. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
 - 3. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

1.6 COORDINATION WITH OCCUPANTS

- A. Construction Manager and Owner Occupancy: CM and Owner may occupy site and building(s) during entire construction period. Cooperate with CM and Owner during construction operations to minimize conflicts and facilitate CM and Owner usage. Perform the Work so as not to interfere with CM and Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify CM and Owner not less than 72 hours in advance of activities that will affect CM and Owner's operations.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 7 a.m. to 6 p.m., Monday through Friday, unless otherwise indicated.

- C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:
 - 1. Notify Owner not less than two days in advance of proposed utility interruptions.
 - 2. Obtain Owner's written permission before proceeding with utility interruptions.
- D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Obtain Owner's written permission before proceeding with disruptive operations.
- E. Nonsmoking Building: Smoking is not permitted within the building or on school property.
- F. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.8 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 50division format and CSI/CSC's "MasterFormat" numbering system.
 - 1. Section Identification: The Specifications use Section numbers and titles to help crossreferencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
 - 2. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Sections include the following:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.

1.3 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
 - 2. Within 20 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.

- d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
- B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. Coordination Drawings.
 - 2. Administrative and supervisory personnel.
 - 3. Project meetings.
 - 4. Requests for Interpretation (RFIs).
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections include the following:
 - 1. Division 01 Section "Construction Progress Documentation" for preparing and submitting Contractor's Construction Schedule.
 - 2. Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 3. Division 01 Section "Closeout Procedures" for coordinating closeout of the Contract.

1.3 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.4 COORDINATION

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

- 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
- 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
- 3. Make adequate provisions to accommodate items scheduled for later installation.
- 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Preinstallation conferences.
 - 7. Project closeout activities.
 - 8. Startup and adjustment of systems.
 - 9. Project closeout activities.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work. Refer to other Sections for disposition of salvaged materials that are designated as Owner's property.

1.5 SUBMITTALS

A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.

- 1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:
 - a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
 - b. Indicate required installation sequences.
 - c. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.
- 2. Sheet Size: At least 8-1/2 by 11 inches, but no larger than 30 by 40 inches.
- 3. Number of Copies: Submit two opaque copies of each submittal. Architect will return one copy.
- 4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.
- B. Key Personnel Names: Within 15 days of starting construction operations, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.
 - 1. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone. Keep list current at all times.

1.6 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

1.7 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.

- B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Procedures for processing field decisions and Change Orders.
 - c. Procedures for RFIs.
 - d. Procedures for processing Applications for Payment.
 - e. Submittal procedures.
 - f. Preparation of Record Documents.
 - g. Use of the premises and existing building.
 - h. Work restrictions.
 - i. Owner's occupancy requirements.
 - j. Parking availability.
 - k. Office, work, and storage areas.
 - I. Equipment deliveries and priorities.
 - m. Progress cleaning.
 - n. Working hours.
 - 3. Minutes: Record and distribute meeting minutes.
- C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.
 - 1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
 - 2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:
 - a. Possible conflicts.
 - b. Time schedules.
 - c. Weather limitations.
 - d. Manufacturer's written recommendations.
 - e. Acceptability of substrates.
 - f. Protection of adjacent work.
 - 3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.

- 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
- 5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- D. Progress Meetings: Conduct progress meetings at regular intervals. Coordinate dates of meetings with preparation of payment requests.
 - 1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Review schedule for next period.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Status of submittals.
 - 2) Deliveries.
 - 3) Progress cleaning.
 - 4) Quality and work standards.
 - 5) Field observations.
 - 6) RFIs.
 - 7) Status of proposal requests.
 - 8) Pending changes.
 - 9) Status of Change Orders.
 - 3. Minutes: Record the meeting minutes.
 - 4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.8 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - 1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
 - 2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
 - 1. Project name.
 - 2. Date.
 - 3. Name of Contractor.
 - 4. Name of Architect.
 - 5. RFI number, numbered sequentially.
 - 6. Specification Section number and title and related paragraphs, as appropriate.
 - 7. Drawing number and detail references, as appropriate.
 - 8. Field dimensions and conditions, as appropriate.
 - 9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
 - 10. Contractor's signature.
 - 11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
 - a. Supplementary drawings prepared by Contractor shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
- C. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above.
 - 1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
 - 1. The following RFIs will be returned without action:
 - a. Requests for approval of submittals.
 - b. Requests for approval of substitutions.
 - c. Requests for coordination information already indicated in the Contract Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.

- e. Requests for interpretation of Architect's actions on submittals.
- f. Incomplete RFIs or RFIs with numerous errors.
- 2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.
- 3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.
- E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number.
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
 - 9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Startup construction schedule.
 - 2. Contractor's construction schedule.
 - 3. Construction schedule updating reports.
 - 4. Daily construction reports.
 - 5. Material location reports.
- B. Related Requirements:
 - 1. Section 013300 "Submittal Procedures" for submitting schedules and reports.
 - 2. Section 014000 "Quality Requirements" for submitting a schedule of tests and inspections.

1.3 INFORMATIONAL SUBMITTALS

- A. Format for Submittals: Submit required submittals in the following format:
 - 1. PDF electronic file.
 - 2. Three paper copies for any sheets larger that 11"x17" format.
- B. Startup construction schedule.
 - 1. Approval of startup construction schedule will not constitute approval of schedule of values for cost-loaded activities.
- C. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.
 - 1. Submit a working electronic copy of schedule, using software indicated, and labeled to comply with requirements for submittals. Include type of schedule (initial or updated) and date on label.
- D. Construction Schedule Updating Reports: Submit with Applications for Payment.

- E. Daily Construction Reports: Submit at weekly intervals.
- F. Material Location Reports: Submit at weekly intervals.

1.4 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's construction schedule with the schedule of values, list of subcontracts, submittal schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from entities involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

- A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of final completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- B. Activities: Treat each separate area as a separate numbered activity for each main element of the Work. Comply with the following:
 - 1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
 - 2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Section 013300 "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
 - 4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
 - 5. Punch List and Final Completion: Include not more than 30 days for completion of punch list items and final completion.

- C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.
 - 1. Products Ordered in Advance: Include a separate activity for each product. Include delivery date indicated in Section 011000 "Summary." Delivery dates indicated stipulate the earliest possible delivery date.
 - 2. Work Restrictions: Show the effect of the following items on the schedule:
 - a. Limitations of continued occupancies.
 - b. Use of premises restrictions.
 - 3. Work Stages: Indicate important stages of construction for each major portion of the Work, including, but not limited to, the following:
 - a. Submittals.
 - b. Purchases.
 - c. Fabrication.
 - d. Deliveries.
 - e. Installation.
 - 4. Construction Areas: Identify each major area of construction for each major portion of the Work. Indicate where each construction activity within a major area must be sequenced or integrated with other construction activities to provide for the following:
 - a. Temporary enclosure and space conditioning.
 - b. Substantial Completion.
- D. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and final completion.
- E. Upcoming Work Summary: Prepare summary report indicating activities scheduled to occur or commence prior to submittal of next schedule update. Summarize the following issues:
 - 1. Unresolved issues.
 - 2. Unanswered Requests for Information.
 - 3. Rejected or unreturned submittals.
 - 4. Notations on returned submittals.
 - 5. Pending modifications affecting the Work and Contract Time.
- F. Recovery Schedule: When periodic update indicates the Work is 14 or more calendar days behind the current approved schedule, submit a separate recovery schedule indicating means by which Contractor intends to regain compliance with the schedule. Indicate changes to working hours, working days, crew sizes, and equipment required to achieve compliance, and date by which recovery will be accomplished.

2.2 STARTUP CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Submit startup, horizontal, bar-chart-type construction schedule within seven days of date established for commencement of the Work.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line. Outline significant construction activities for first 30 days of construction. Include skeleton diagram for the remainder of the Work and a cash requirement prediction based on indicated activities.

2.3 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's construction schedule within 15 days of date established forthe Notice to Proceed. Base schedule on the startup construction schedule and additional information received since the start of Project.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.

2.4 REPORTS

- A. Daily Construction Reports: Prepare a daily construction report recording the following information concerning events at Project site:
 - 1. List of subcontractors at Project site.
 - 2. Approximate count of personnel at Project site.
 - 3. Material deliveries.
 - 4. Accidents.
 - 5. Meetings and significant decisions.
 - 6. Unusual events (see special reports).
 - 7. Stoppages, delays, shortages, and losses.
 - 8. Emergency procedures.
 - 9. Orders and requests of authorities having jurisdiction.
 - 10. Change Orders received and implemented.
 - 11. Construction Change Directives received and implemented.
 - 12. Substantial Completions authorized.
- B. Material Location Reports: At weekly intervals, prepare and submit a comprehensive list of materials delivered to and stored at Project site. List shall be cumulative, showing materials previously reported plus items recently delivered. Include with list a statement of progress on and delivery dates for materials or items of equipment fabricated or stored away from Project site. Indicate the following categories for stored materials:
 - 1. Material stored prior to previous report and remaining in storage.
 - 2. Material stored prior to previous report and since removed from storage and installed.
 - 3. Material stored following previous report and remaining in storage.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate final completion percentage for each activity.
- B. Distribution: Distribute copies of approved schedule to Architect, Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. Post copies in Project meeting rooms and temporary field offices.
 - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.
- B. Related Sections include the following:
 - 1. Division 01 Section "Payment Procedures" for submitting Applications for Payment and the Schedule of Values.
 - 2. Division 01 Section "Project Management and Coordination" for submitting and distributing meeting and conference minutes and for submitting Coordination Drawings.
 - 3. Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule and the Submittals Schedule.
 - 4. Division 01 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
 - 5. Division 01 Section "Closeout Procedures" for submitting warranties.
 - 6. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 7. Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.
 - 8. Divisions 02 through 49 Sections for specific requirements for submittals in those Sections.

1.3 DEFINITIONS

A. Action Submittals: Written and graphic information that requires Architect's responsive action.

1.4 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

- 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
- 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- B. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 - 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 3. Resubmittal Review: Allow 15 days for review of each resubmittal.
 - 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 21 days for initial review of each submittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

- i. Number and title of appropriate Specification Section.
- j. Drawing number and detail references, as appropriate.
- k. Location(s) where product is to be installed, as appropriate.
- E. Deviations: Encircle or otherwise specifically identify deviations from the Contract Documents on submittals.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
 - 2. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.
 - 1. Transmittal Form: Use AIA Document G810.
 - 2. On an attached separate sheet, prepared on Contractor's letterhead, record relevant information, requests for data, revisions other than those requested by Architect on previous submittals, and deviations from requirements in the Contract Documents, including minor variations and limitations. Include same label information as related submittal.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

1.5 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
 - 1. Submit electronic submittals directly to extranet specifically established for Project.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's product specifications.
 - b. Manufacturer's installation instructions.
 - c. Standard color charts.
 - d. Compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - 4. Submit Product Data before or concurrent with Samples.
 - 5. Number of Copies: Submit three copies of Product Data, unless otherwise indicated. Architect will return two copies. Mark up and retain one returned copy as a Project Record Document.
- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal of Architect's CAD Drawings are otherwise permitted.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Fabrication and installation drawings.
 - c. Design calculations.
 - d. Compliance with specified standards.
 - e. Relationship to adjoining construction clearly indicated.
 - f. Seal and signature of professional engineer if specified.
 - g. Wiring Diagrams: Differentiate between manufacturer-installed and fieldinstalled wiring.
 - 2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
 - 3. Number of Copies: Submit three opaque copies of each submittal, unless copies are required for operation and maintenance manuals. Submit five copies where copies are required for operation and maintenance manuals. Architect will retain two copies; remainder will be returned. Mark up and retain one returned copy as a Project Record Drawing.

- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section.
 - 3. Disposition: Maintain sets of approved Samples at Project site, available for qualitycontrol comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 - 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 - 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.

- E. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."
- F. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

- A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.
- B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
- C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 013300

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specific quality-assurance and -control requirements for individual construction activities are specified in the Sections that specify those activities. Requirements in those Sections may also cover production of standard products.
 - 2. Specified tests, inspections, and related actions do not limit Contractor's other qualityassurance and -control procedures that facilitate compliance with the Contract Document requirements.
 - 3. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. Related Sections include the following:
 - 1. Division 01 Section "Construction Progress Documentation" for developing a schedule of required tests and inspections.
 - 2. Divisions 02 through 49 Sections for specific test and inspection requirements.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.

- C. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.
- D. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- E. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.
- F. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- G. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.
- H. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.
- I. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.5 SUBMITTALS

- A. Reports: Prepare and submit certified written reports that include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.

1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

- 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.
- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

1.7 QUALITY CONTROL

- A. Quality-Control Plan, General: Submit quality-control plan within 10 days of Notice of Award, and not less than five days prior to preconstruction conference. Submit in format acceptable to Architect. Identify personnel, procedures, controls, instructions, tests, records, and forms to be used to carry out Contractor's quality-assurance and quality-control responsibilities. Coordinate with Contractor's construction schedule.
- B. Quality-Control Personnel Qualifications: Engage qualified full-time personnel trained and experienced in managing and executing quality-assurance and quality-control procedures similar in nature and extent to those required for Project.
 - 1. Project quality-control manager may also serve as Project superintendent.
- C. Submittal Procedure: Describe procedures for ensuring compliance with requirements through review and management of submittal process. Indicate qualifications of personnel responsible for submittal review.
- D. Testing and Inspection: In quality-control plan, include a comprehensive schedule of Work requiring testing or inspection, including the following:
 - 1. Contractor-performed tests and inspections including subcontractor-performed tests and inspections. Include required tests and inspections and Contractor-elected tests and inspections.
 - 2. Special inspections required by authorities having jurisdiction and indicated on the "Statement of Special Inspections."
 - 3. Owner-performed tests and inspections indicated in the Contract Documents.
- E. Continuous Inspection of Workmanship: Describe process for continuous inspection during construction to identify and correct deficiencies in workmanship in addition to testing and

inspection specified. Indicate types of corrective actions to be required to bring work into compliance with standards of workmanship established by Contract requirements and approved mockups.

F. Monitoring and Documentation: Maintain testing and inspection reports including log of approved and rejected results. Include work Architect has indicated as nonconforming or defective. Indicate corrective actions taken to bring nonconforming work into compliance with requirements. Comply with requirements of authorities having jurisdiction.

1.8 REPORTS AND DOCUMENTS

- A. Test and Inspection Reports: Prepare and submit certified written reports specified in other Sections. Include the following:
 - 1. Date of issue.
 - 2. Project title and number.
 - 3. Name, address, and telephone number of testing agency.
 - 4. Dates and locations of samples and tests or inspections.
 - 5. Names of individuals making tests and inspections.
 - 6. Description of the Work and test and inspection method.
 - 7. Identification of product and Specification Section.
 - 8. Complete test or inspection data.
 - 9. Test and inspection results and an interpretation of test results.
 - 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
 - 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
 - 12. Name and signature of laboratory inspector.
 - 13. Recommendations on retesting and reinspecting.
- B. Manufacturer's Technical Representative's Field Reports: Prepare written information documenting manufacturer's technical representative's tests and inspections specified in other Sections. Include the following:
 - 1. Name, address, and telephone number of technical representative making report.
 - 2. Statement on condition of substrates and their acceptability for installation of product.
 - 3. Statement that products at Project site comply with requirements.
 - 4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
 - 6. Statement whether conditions, products, and installation will affect warranty.
 - 7. Other required items indicated in individual Specification Sections.
- C. Factory-Authorized Service Representative's Reports: Prepare written information documenting manufacturer's factory-authorized service representative's tests and inspections specified in other Sections. Include the following:

- 1. Name, address, and telephone number of factory-authorized service representative making report.
- 2. Statement that equipment complies with requirements.
- 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
- 4. Statement whether conditions, products, and installation will affect warranty.
- 5. Other required items indicated in individual Specification Sections.
- D. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.9 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- C. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar in material, design, and extent to those indicated for this Project.
- F. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and, where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- G. Manufacturer's Technical Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to observe and inspect

installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.
- PART 2 PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.1 TEST AND INSPECTION LOG
 - A. Prepare a record of tests and inspections. Include the following:
 - 1. Date test or inspection was conducted.
 - 2. Description of the Work tested or inspected.
 - 3. Date test or inspection results were transmitted to Architect.
 - 4. Identification of testing agency or special inspector conducting test or inspection.
 - B. Maintain log at Project site. Post changes and modifications as they occur. Provide access to test and inspection log for Architect's reference during normal working hours.

3.2 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2. Comply with Contract Document requirements Division 01 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. See Division 1 Section "Execution Requirements" for progress cleaning requirements.
- C. See Divisions 2 through 28 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections.

1.2 DEFINITIONS

A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated, and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, occupants of Project, testing agencies, and authorities having jurisdiction.
- B. Water Service: Water from Owner's existing water system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.
- C. Electric Power Service: Electric power from Owner's existing system is available for use without metering and without payment of use charges. Provide connections and extensions of services as required for construction operations.

1.4 SUBMITTALS

A. Site Plan: Show temporary facilities, utility hookups, staging areas, and parking areas for construction personnel.

1.5 PROJECT CONDITIONS

A. Temporary Use of Permanent Facilities: Installer of each permanent service shall assume responsibility for operation, maintenance, and protection of each permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Lumber and Plywood: Comply with requirements in Division 6 Section "Miscellaneous Carpentry."
- B. Gypsum Board: Minimum 1/2 inch thick by 48 inches wide by maximum available lengths; regular-type panels with tapered edges. Comply with ASTM C 36/C 36M.

2.2 TEMPORARY FACILITIES

A. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations.

2.3 EQUIPMENT

A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. Water Service: Use of Owner's existing water service facilities will be permitted, as long as facilities are cleaned and maintained in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.

- 1. Where installations below an outlet might be damaged by spillage or leakage, provide a drip pan of suitable size to minimize water damage. Drain accumulated water promptly from pans.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities.
- C. Electric Power Service: Use of Owner's existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to Owner.
- D. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections, and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. Provide incombustible construction for offices, shops, and sheds located within construction area or within 30 feet of building lines. Comply with NFPA 241.
 - 2. Maintain support facilities until near Substantial Completion. Remove before Substantial Completion. Personnel remaining after Substantial Completion will be permitted to use permanent facilities, under conditions acceptable to Owner.
- B. Project Identification and Temporary Signs: Provide Project identification and other signs. Install signs where indicated to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
 - 1. Provide temporary, directional signs for construction personnel and visitors.
 - 2. Maintain and touchup signs so they are legible at all times.
- C. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements. Dumpsters shall be empted every Friday for the duration of the project.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

A. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.

- B. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft, and similar violations of security.
- C. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- D. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- E. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by Owner from fumes and noise.
 - 1. Construct dustproof partitions with 2 layers of 3-mil polyethylene sheet on each side. Cover floor with 2 layers of 3-mil polyethylene sheet, extending sheets 18 inches up the sidewalls. Overlap and tape full length of joints.
 - 2. Protect air-handling equipment.
 - 3. Provide walk-off mats at each entrance through temporary partition.
- F. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking in construction areas.
 - 2. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 3. Develop and supervise an overall fire-prevention and -protection program for personnel at Project site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures on a 24-hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.

- D. Termination and Removal: Remove each temporary facility 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.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.
 - At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 1 Section "Closeout Procedures."

END OF SECTION 015000

SECTION 015639 - TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.
- B. Related Sections:
 - 1. Section 015000 "Temporary Facilities and Controls" for temporary site fencing.

1.3 DEFINITIONS

- A. Caliper: Diameter of a trunk measured by a diameter tape at 6 inches above the ground for trees up to, and including, 4-inch size; and 12 inches above the ground for trees larger than 4-inch size.
- B. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.
- C. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and defined by a circle concentric with each tree with a radius 1.5 times the diameter of the drip line unless otherwise indicated.
- D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

1.5 INFORMATION SUBMITTALS

A. Qualification Data: For qualified arborist and tree service firm.

- B. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.
- C. Existing Conditions: Documentation of existing trees and plantings indicated to remain, which establishes preconstruction conditions that might be misconstrued as damage caused by construction activities.
 - 1. Use sufficiently detailed photographs or videotape.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

1.6 QUALITY ASSURANCE

- A. Arborist Qualifications: Certified Arborist as certified by ISA or licensed arborist in jurisdiction where Project is located.
- B. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed temporary tree and plant protection work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of the Work.

1.7 PROJECT CONDITIONS

- A. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.
 - 5. Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- B. Do not direct vehicle or equipment exhaust toward protection zones.
- C. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil: Natural or cultivated top layer of the soil profile or manufactured topsoil; containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade

of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and toxic and other nonsoil materials.

- 1. Obtain topsoil only from well-drained sites where topsoil is 4 inches deep or more; do not obtain from bogs or marshes.
- B. Protection-Zone Fencing: Fencing fixed in position and meeting one of the following requirements.
 - 1. Wood Protection-Zone Fencing: Constructed of two 2-by-4-inch horizontal rails, with 4by-4-inch preservative-treated wood posts spaced not more than 8 feet apart, and lower rail set halfway between top rail and ground.
 - a. Height: 4 feet.
 - 2. Plastic Protection-Zone Fencing: Plastic construction fencing constructed of highdensity extruded and stretched polyethylene fabric with 2-inch maximum opening in pattern and weighing a minimum of 0.4 lb/ft.; remaining flexible from minus 60 to plus 200 deg F; inert to most chemicals and acids; minimum tensile yield strength of 2000 psi and ultimate tensile strength of 2680 psi; secured with plastic bands or galvanized-steel or stainless-steel wire ties; and supported by tubular or T-shape galvanized-steel posts spaced not more than 8 feet apart.
 - a. Height: 4 feet.
 - b. Color: High-visibility orange, nonfading.
 - 3. Gates: Single swing access gates matching material and appearance of fencing, to allow for maintenance activities within protection zones; leaf width 36 inches.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Erosion and Sedimentation Control: Examine the site to verify that temporary erosion- and sedimentation-control measures are in place. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- B. For the record, prepare written report, endorsed by arborist, listing conditions detrimental to tree and plant protection.

3.2 PREPARATION

A. Locate and clearly identify trees, shrubs, and other vegetation to remain. Flag each tree trunk at 54 inches above the ground.

- B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.
- C. Tree-Protection Zones: Mulch areas inside tree-protection zones and other areas indicated by Landscape Architect.

3.3 TREE- AND PLANT-PROTECTION ZONES

- A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones before materials or equipment are brought on the site and construction operations begin in a manner that will prevent people from easily entering protected area except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility at vehicle intersections where fencing is located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.
 - 1. Posts: Set or drive posts into ground one-third the total height of the fence without concrete footings. Where a post is located on existing paving or concrete to remain, provide appropriate means of post support acceptable to Architect.
 - 2. Access Gates: Adjust to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.
- B. Protection-Zone Signage: Install protection-zone signage in visibly prominent locations in a manner approved by Architect. Install one sign spaced approximately every 20 feet on protection-zone fencing, but no fewer than four signs with each facing a different direction.
- C. Maintain protection zones free of weeds and trash.
- D. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Architect.
- E. Maintain protection-zone fencing and signage in good condition as acceptable to Architect and remove when construction operations are complete and equipment has been removed from the site.
 - 1. Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
 - 2. Temporary access is permitted subject to preapproval in writing by arborist if a root buffer effective against soil compaction is constructed as directed by arborist. Maintain root buffer so long as access is permitted.

3.4 EXCAVATION

A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 312000 "Earth Moving."

- B. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction and as required for root pruning.
- C. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

3.5 FIELD QUALITY CONTROL

A. Inspections: Engage a qualified arborist to direct plant-protection measures in the vicinity of trees, shrubs, and other vegetation indicated to remain and to prepare inspection reports.

3.6 REPAIR AND REPLACEMENT

- A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Architect.
 - 1. Submit details of proposed root cutting and tree and shrub repairs.
 - 2. Have arborist perform the root cutting, branch pruning, and damage repair of trees and shrubs.
 - 3. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
 - 4. Perform repairs within 24 hours.
 - 5. Replace vegetation that cannot be repaired and restored to full-growth status, as determined by Architect.
- B. Trees: Remove and replace trees indicated to remain that are more than 25 percent dead or in an unhealthy condition before the end of the corrections period or are damaged during construction operations that Architect determines are incapable of restoring to normal growth pattern.
 - 1. Provide one new tree(s) of 6-inch caliper size for each tree being replaced that measures more than 4 inches in caliper size.
 - a. Species: Species selected by Architect.
 - 2. Plant and maintain new trees as specified in Section 329300 "Plants."
- C. Soil Aeration: Where directed by Architect, aerate surface soil compacted during construction. Aerate 10 feet beyond drip line and no closer than 36 inches to tree trunk. Drill 2-inchdiameter holes a minimum of 12 inches deep at 24 inches o.c. Backfill holes with an equal mix of augered soil and sand.

Section 015639

3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove excess excavated material, displaced trees, trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 015639

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. Related Sections include the following:
 - 1. Division 01 Section "References" for applicable industry standards for products specified.
 - 2. Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.
 - 3. Divisions 02 through 32 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
- B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.4 SUBMITTALS

- A. Product List: Submit a list, in tabular from, showing specified products. Include generic names of products required. Include manufacturer's name and proprietary product names for each product.
 - 1. Coordinate product list with Contractor's Construction Schedule and the Submittals Schedule.
 - 2. Form: Tabulate information for each product under the following column headings:
 - a. Specification Section number and title.
 - b. Proprietary name, model number, and similar designations.
 - c. Manufacturer's name and address.
 - d. Supplier's name and address.
 - e. Installer's name and address.
 - f. Projected delivery date or time span of delivery period.
 - g. Identification of items that require early submittal approval for scheduled delivery date.
 - 3. Initial Submittal: Within 30 days after date of commencement of the Work, submit 3 copies of initial product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - a. At Contractor's option, initial submittal may be limited to product selections and designations that must be established early in Contract period.
 - 4. Completed List: Within 60 days after date of commencement of the Work, submit 3 copies of completed product list. Include a written explanation for omissions of data and for variations from Contract requirements.
 - 5. Architect's Action: Architect will respond in writing to Contractor within 15 days of receipt of completed product list. Architect's response will include a list of unacceptable product selections and a brief explanation of reasons for this action. Architect's response, or lack of response, does not constitute a waiver of requirement to comply with the Contract Documents.
- B. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use CSI Form 13.1A.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
- e. Samples, where applicable or requested.
- f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
- g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
- h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
- i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
- j. Cost information, including a proposal of change, if any, in the Contract Sum.
- k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
- I. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
- Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.
 - a. Form of Acceptance: Change Order.
 - b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.

- 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
- 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
- 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

- 1. Store products to allow for inspection and measurement of quantity or counting of units.
- 2. Store materials in a manner that will not endanger Project structure.
- 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
- 4. Store cementitious products and materials on elevated platforms.
- 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
- 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
- 7. Protect stored products from damage and liquids from freezing.
- 8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Refer to Divisions 02 through 49 Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 - 1. Provide products procured by the Owner through DAS approved state contract complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
 - 6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.
 - 7. Or Equal: Where products are specified by name and accompanied by the term "or equal" or "or approved equal" or "or approved," comply with provisions in Part 2 "Comparable Products" Article to obtain approval for use of an unnamed product.
- B. Product Selection Procedures:
 - 1. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
 - 2. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Architect will consider requests for substitution if received within 60 days after commencement of the Work. Requests received after that time may be considered or rejected at discretion of Architect.
- B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner

must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.

- 2. Requested substitution does not require extensive revisions to the Contract Documents.
- 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 4. Substitution request is fully documented and properly submitted.
- 5. Requested substitution will not adversely affect Contractor's Construction Schedule.
- 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
- 7. Requested substitution is compatible with other portions of the Work.
- 8. Requested substitution has been coordinated with other portions of the Work.
- 9. Requested substitution provides specified warranty.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Installation of the Work.
 - 2. Cutting and patching.
 - 3. Progress cleaning.
 - 4. Starting and adjusting.
 - 5. Protection of installed construction.
- B. Related Requirements:
 - 1. Section 017700 "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.3 DEFINITIONS

- A. Cutting: Removal of in-place construction necessary to permit installation or performance of other work.
- B. Patching: Fitting and repair work required to restore construction to original conditions after installation of other work.

1.4 INFORMATIONAL SUBMITTALS

- A. Cutting and Patching Plan: Submit plan describing procedures at least 5 days prior to the time cutting and patching will be performed. Include the following information:
 - 1. Extent: Describe reason for and extent of each occurrence of cutting and patching.
 - 2. Changes to In-Place Construction: Describe anticipated results. Include changes to structural elements and operating components as well as changes in building appearance and other significant visual elements.

- 3. Products: List products to be used for patching and firms or entities that will perform patching work.
- 4. Dates: Indicate when cutting and patching will be performed.
- 5. Utilities and Mechanical and Electrical Systems: List services and systems that cutting and patching procedures will disturb or affect. List services and systems that will be relocated and those that will be temporarily out of service. Indicate length of time permanent services and systems will be disrupted.
 - a. Include description of provisions for temporary services and systems during interruption of permanent services and systems.

1.5 QUALITY ASSURANCE

- A. Cutting and Patching: Comply with requirements for and limitations on cutting and patching of construction elements.
 - 1. Construction Elements: Do not cut and patch construction elements or components in a manner that could change their load-carrying capacity, which results in reducing their capacity to perform as intended, or that result in increased maintenance or decreased operational life or safety. Construction elements include but are not limited to the following:
 - a. Water, moisture, or vapor barriers.
 - b. Membranes and flashings.
 - c. Insulation.
 - d. Sprayed fire-resistive material.
 - e. Equipment supports.
 - f. Piping, ductwork, vessels, and equipment.
 - g. Roof Deck.
 - 2. Visual Elements: Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch exposed construction in a manner that would, in Architect's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
- B. Cutting and Patching Conference: Before proceeding, meet at Project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.
- C. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to quality and performance of in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Existing Conditions: The existence and location of utilities and construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of utilities and other construction affecting the Work.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine walls and windows for suitable conditions where products and systems are to be installed.
 - a. Comply with requirements of Section 085113 "Aluminum Windows".
 - 2. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Written Report: Where a written report listing conditions detrimental to performance of the Work is required by other Sections, include the following:
 - 1. Description of the Work.
 - 2. List of unacceptable installation tolerances.
 - 3. Recommended corrections.
- D. If deck surface is unsuitable for receiving new roofing or if structural integrity of deck is suspect, immediately notify Architect and Structural Engineer. Do not proceed with installation until directed by Architect.

3.2 PREPARATION

- A. Existing Utility Information: Furnish information to Owner that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents caused by differing field conditions outside the control of Contractor, submit a request for information to Architect according to requirements in Section 013100 "Project Management and Coordination."

3.3 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.4 CUTTING AND PATCHING

- A. Cutting and Patching, General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time, and complete without delay.
 - 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition.
- B. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during installation or cutting and patching operations, by methods and with materials so as not to void existing warranties.
- C. Temporary Support: Provide temporary support of work to be cut.
- D. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- E. Adjacent Occupied Areas: Where interference with use of adjoining areas or interruption of free passage to adjoining areas is unavoidable, coordinate cutting and patching with Owner and Architect.
- F. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.

- 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots neatly to minimum size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
- 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
- 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
- 4. Proceed with patching after construction operations requiring cutting are complete.
- G. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other work. Patch with durable seams that are as invisible as practicable. Provide materials and comply with installation requirements specified in other Sections, where applicable.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate physical integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will minimize evidence of patching and refinishing.
 - a. Clean piping, conduit, and similar features before applying paint or other finishing materials.
 - b. Restore damaged pipe covering to its original condition.
 - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture, and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - a. Where patching occurs in a painted surface, prepare substrate and apply primer and intermediate paint coats appropriate for substrate over the patch, and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats until patch blends with adjacent surfaces.
 - 4. Ceilings: Patch, repair, or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition and ensures thermal and moisture integrity of building enclosure.
- H. Cleaning: Clean areas and spaces where cutting and patching are performed. Remove paint, mortar, oils, putty, and similar materials from adjacent finished surfaces.

3.5 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F (27 deg C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - a. Use containers intended for holding waste materials of type to be stored.
 - 4. Coordinate progress cleaning for joint-use areas where Contractor and other contractors are working concurrently.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- F. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 015000 "Temporary Facilities and Controls." Dumpsters shall be emptied every Friday during the course of the project.
- G. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- H. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

I. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.6 STARTING AND ADJUSTING

A. Manufacturer's Field Service: Comply with qualification requirements in Section 014000 "Quality Requirements."

3.7 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. Related Sections include the following:
 - 1. Division 01 Section "Execution" for progress cleaning of Project site.
 - 2. Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
 - 3. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 4. Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.3 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 3. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys, and similar final record information.
 - 4. Complete startup testing of systems.
 - 5. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
 - 6. Complete final cleaning requirements, including touchup painting.

- 7. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.4 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment and Certified Payroll according to Division 01 Section "Payment Procedures."
 - 2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - 1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
 - 1. Organize list of spaces in sequential order.
 - 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

- 3. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Contractor.
 - e. Page number.

1.6 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.
- C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
 - g. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - h. Replace parts subject to unusual operating conditions.
 - i. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - j. Clean ducts, blowers, and coils if units were operated without filters during construction.
 - Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - I. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Maintenance manuals for the care and maintenance of products, materials, finishes, and systems and equipment.
- B. Related Sections include the following:
 - 1. Division 01 Section "Submittal Procedures" for submitting copies of submittals for operation and maintenance manuals.
 - 2. Division 01 Section "Closeout Procedures" for submitting operation and maintenance manuals.
 - 3. Divisions 02 through 49 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.3 DEFINITIONS

- A. System: An organized collection of parts, equipment, or subsystems united by regular interaction.
- B. Subsystem: A portion of a system with characteristics similar to a system.

1.4 SUBMITTALS

- A. Final Submittal: Submit one copy of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.
 - 1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

1.5 COORDINATION

A. Where operation and maintenance documentation includes information on installations by more than one factory-authorized service representative, assemble and coordinate information furnished by representatives and prepare manuals.

PART 2 - PRODUCTS

2.1 MANUALS, GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain the following materials, in the order listed:
 - 1. Title page.
 - 2. Table of contents.
 - 3. Manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address, and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.
- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
 - 1. If operation or maintenance documentation requires more than one volume to accommodate data, include comprehensive table of contents for all volumes in each volume of the set.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. If two or more binders are necessary to accommodate data of a system, organize data in each binder into groupings by subsystem and related components. Cross-reference other binders if necessary to provide essential information for proper operation or maintenance of equipment or system.

- b. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
- 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
- 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
- 4. Supplementary Text: Prepared on 8-1/2-by-11-inch (215-by-280-mm) white bond paper.
- 5. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.2 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern, and texture.
 - 4. Material and chemical composition.
 - 5. Reordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and the following:
 - 1. Inspection procedures.
 - 2. Types of cleaning agents to be used and methods of cleaning.
 - 3. List of cleaning agents and methods of cleaning detrimental to product.
 - 4. Schedule for routine cleaning and maintenance.
 - 5. Repair instructions.

- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

2.3 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including the following information for each component part or piece of equipment:
 - 1. Drawings, diagrams, and instructions required for maintenance, including disassembly and component removal, replacement, and assembly.
- D. Maintenance Procedures: Include the following information and items that detail essential maintenance procedures:
 - 1. Test and inspection instructions.
 - 2. Troubleshooting guide.
 - 3. Precautions against improper maintenance.
 - 4. Aligning, adjusting, and checking instructions.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
 - 1. Scheduled Maintenance and Service: Tabulate actions for daily, weekly, monthly, quarterly, semiannual, and annual frequencies.
 - 2. Maintenance and Service Record: Include manufacturers' forms for recording maintenance.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

- G. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.
 - 1. Include procedures to follow and required notifications for warranty claims.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.
- B. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.
 - 1. Engage a factory-authorized service representative to assemble and prepare information for each system, subsystem, and piece of equipment not part of a system.
 - 2. Prepare a separate manual for each system and subsystem, in the form of an instructional manual for use by Owner's operating personnel.
- C. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
 - 1. Prepare supplementary text if manufacturers' standard printed data are not available and where the information is necessary for proper operation and maintenance of equipment or systems.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
 - 2. Comply with requirements of newly prepared Record Drawings in Division 01 Section "Project Record Documents."
- E. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Product Data.
- B. Related Sections include the following:
 - 1. Division 01 Section "Closeout Procedures" for general closeout procedures.
 - 2. Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 3. Divisions 02 through 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.3 SUBMITTALS

- A. Record Drawings: Comply with the following:
 - 1. Number of Copies: Submit one set of marked-up Record Prints.
- B. Record Product Data: Submit one copy of each Product Data submittal.
 - 1. Where Record Product Data is required as part of operation and maintenance manuals, submit marked-up Product Data as an insert in manual instead of submittal as Record Product Data.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.

- 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Accurately record information in an understandable drawing technique.
 - c. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- 2. Content: Types of items requiring marking include, but are not limited to, the following:
 - a. Dimensional changes to Drawings.
 - b. Revisions to details shown on Drawings.
 - c. Locations and depths of underground utilities.
 - d. Revisions to routing of piping and conduits.
 - e. Revisions to electrical circuitry.
 - f. Actual equipment locations.
 - g. Locations of concealed internal utilities.
 - h. Field records for variable and concealed conditions.
- 3. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- 4. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- 5. Mark important additional information that was either shown schematically or omitted from original Drawings.
- 6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Drawings: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing Record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
 - 1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
- D. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.

- 2. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
- 3. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
 - 3. Note related Change Orders and Record Drawings where applicable.

2.3 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839

SECTION 017839 – DEMONSTRATION AND TRAINING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for instructing Owner's personnel, including the following:
 - 1. Demonstration of operation of systems, subsystems, and equipment.
 - 2. Training in operation and maintenance of systems, subsystems, and equipment.
 - 3. Demonstration and training video recordings.

1.3 QUALITY ASSURANCE

- A. Facilitator Qualifications: A firm or individual experienced in training or educating maintenance personnel in a training program similar in content and extent to that indicated for this Project, and whose work has resulted in training or education with a record of successful learning performance.
- B. Instructor Qualifications: A factory-authorized service representative, complying with requirements in Section 014000 "Quality Requirements," experienced in operation and maintenance procedures and training.

1.4 COORDINATION

- A. Coordinate instruction schedule with Owner's operations. Adjust schedule as required to minimize disrupting Owner's operations and to ensure availability of Owner's personnel.
- B. Coordinate instructors, including providing notification of dates, times, length of instruction time, and course content.
- C. Coordinate content of training modules with content of approved emergency, operation, and maintenance manuals. Do not submit instruction program until operation and maintenance data has been reviewed and approved by Architect.

PART 2 - PRODUCTS

2.1 INSTRUCTION PROGRAM

- A. Program Structure: Develop an instruction program that includes individual training modules for each system and for equipment not part of a system, as required by individual Specification Sections.
- B. Training Modules: Develop a learning objective and teaching outline for each module. Include a description of specific skills and knowledge that participant is expected to master. For each module, include instruction for the following as applicable to the system, equipment, or component:
 - 1. Basis of System Design, Operational Requirements, and Criteria: Include the following:
 - a. System, subsystem, and equipment descriptions.
 - b. Performance and design criteria if Contractor is delegated design responsibility.
 - c. Operating standards.
 - d. Regulatory requirements.
 - e. Equipment function.
 - f. Operating characteristics.
 - g. Limiting conditions.
 - h. Performance curves.
 - 2. Documentation: Review the following items in detail:
 - a. Emergency manuals.
 - b. Operations manuals.
 - c. Maintenance manuals.
 - d. Project record documents.
 - e. Identification systems.
 - f. Warranties and bonds.
 - g. Maintenance service agreements and similar continuing commitments.
 - 3. Operations: Include the following, as applicable:
 - a. Startup procedures.
 - b. Equipment or system break-in procedures.
 - c. Routine and normal operating instructions.
 - d. Regulation and control procedures.
 - e. Control sequences.
 - f. Safety procedures.
 - g. Instructions on stopping.
 - h. Normal shutdown instructions.
 - i. Operating procedures for emergencies.
 - j. Operating procedures for system, subsystem, or equipment failure.
 - k. Seasonal and weekend operating instructions.
 - I. Required sequences for electric or electronic systems.
 - m. Special operating instructions and procedures.
 - 4. Adjustments: Include the following:

- a. Alignments.
- b. Checking adjustments.
- c. Noise and vibration adjustments.
- d. Economy and efficiency adjustments.
- 5. Maintenance: Include the following:
 - a. Inspection procedures.
 - b. Types of cleaning agents to be used and methods of cleaning.
 - c. List of cleaning agents and methods of cleaning detrimental to product.
 - d. Procedures for routine cleaning
 - e. Procedures for preventive maintenance.
 - f. Procedures for routine maintenance.
 - g. Instruction on use of special tools.
- 6. Repairs: Include the following:
 - a. Diagnosis instructions.
 - b. Repair instructions.
 - c. Disassembly; component removal, repair, and replacement; and reassembly instructions.
 - d. Instructions for identifying parts and components.
 - e. Review of spare parts needed for operation and maintenance.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Assemble educational materials necessary for instruction, including documentation and training module. Assemble training modules into a training manual organized in coordination with requirements in Section 017823 "Operation and Maintenance Data."
- B. Set up instructional equipment at instruction location.

3.2 INSTRUCTION

- A. Facilitator: Engage a qualified facilitator to prepare instruction program and training modules, to coordinate instructors, and to coordinate between Contractor and Owner for number of participants, instruction times, and location.
- B. Engage qualified instructors to instruct Owner's personnel to adjust, operate, and maintain systems, subsystems, and equipment not part of a system.
 - 1. Architect will furnish an instructor to describe basis of system design, operational requirements, criteria, and regulatory requirements.
 - 2. Owner will furnish an instructor to describe Owner's operational philosophy.

- 3. Owner will furnish Contractor with names and positions of participants.
- C. Scheduling: Provide instruction at mutually agreed on times. For equipment that requires seasonal operation, provide similar instruction at start of each season.
 - 1. Schedule training with Owner with at least seven days' advance notice.
- D. Training Location and Reference Material: Conduct training on-site in the completed and fully operational facility using the actual equipment in-place. Conduct training using final operation and maintenance data submittals.
- E. Cleanup: Collect used and leftover educational materials and give to Owner. Remove instructional equipment. Restore systems and equipment to condition existing before initial training use.

END OF SECTION 017900

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
 - 1. Footings.
- B. Related Sections:
 - 1. Section 321000 "Playground Protective Surfacing" for poured in place playground surfacing.

1.3 DEFINITIONS

A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
 - 1. Location of construction joints is subject to approval of the Architect.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer.
- B. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Cementitious materials.
 - 2. Form materials and form-release agents.
 - 3. Steel reinforcement and accessories.
 - 4. Curing compounds.
 - 5. Bonding agents.
 - 6. Adhesives.
 - 7. Semirigid joint filler.
 - 8. Joint-filler strips.
 - 9. Repair materials.
- C. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
 - 1. Aggregates. Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
- D. Field quality-control reports.
- E. Minutes of preinstallation conference.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
 - Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician -Grade II.

- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- E. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 301, "Specifications for Structural Concrete,"
 - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
- F. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.
- G. Preinstallation Conference: Conduct conference at Project site.
 - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Concrete subcontractor.
 - e. Special concrete finish subcontractor.
 - 2. Review special inspection and testing and inspecting agency procedures for field quality control, cold- and hot-weather concreting procedures, curing procedures, forms and form removal limitations, steel reinforcement installation, concrete repair procedures, and concrete protection.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage. Avoid damaging coatings on steel reinforcement.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 1. Plywood, metal, or other approved panel materials.
 - 2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1 or better.

- b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
- c. Structural 1, B-B or better; mill oiled and edge sealed.
- d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch (19 by 19 mm), minimum.
- D. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.
- E. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- F. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that will leave no corrodible metal closer than 1 inch (25 mm) to the plane of exposed concrete surface.
 - 2. Furnish ties that, when removed, will leave holes no larger than 1 inch (25 mm) in diameter in concrete surface.
 - 3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

2.2 STEEL REINFORCEMENT

A. Galvanized Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed bars, ASTM A 767/A 767M, zinc coated after fabrication and bending.

2.3 REINFORCEMENT ACCESSORIES

- A. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating; compatible with epoxy coating on reinforcement and complying with ASTM A 775/A 775M.
- B. Zinc Repair Material: ASTM A 780, zinc-based solder, paint containing zinc dust, or sprayed zinc.
- C. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:

- 1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.
- 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.
- 3. For zinc-coated reinforcement, use galvanized wire or dielectric-polymer-coated wire bar supports.

2.4 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 - 1. Portland Cement: ASTM C 150, Type I or Type II.
 - a. Fly Ash: ASTM C 618, Class F or C.
- B. Normal-Weight Aggregates: ASTM C 33, coarse aggregate or better, graded. Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.
 - 1. Maximum Coarse-Aggregate Size: 1-1/2 inches (38 mm) nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M and potable.

2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.

2.6 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork.
- B. Semirigid Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 per ASTM D 2240.
- C. Bonding Agent: ASTM C 1059/C 1059M, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

- D. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
 - 1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- E. Dovetail Anchor Slots: Hot-dip galvanized-steel sheet, not less than 0.034 inch (0.85 mm) thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.7 REPAIR MATERIALS

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch (3.2 mm) and that can be feathered at edges to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by underlayment manufacturer.
 - 4. Compressive Strength: Not less than 4100 psi (29 MPa) at 28 days when tested according to ASTM C 109/C 109M.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch (6.4 mm) and that can be filled in over a scarified surface to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3.2 to 6 mm) or coarse sand as recommended by topping manufacturer.
 - 4. Compressive Strength: Not less than 3,000 psi (34.5 MPa) at 28 days when tested according to ASTM C 109/C 109M.

2.8 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash: 25 percent.
 - 2. Combined Fly Ash and Pozzolan: 25 percent.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 0.06 percent by weight of cement.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use water-reducing or admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.
 - 4. Use corrosion-inhibiting admixture in concrete mixtures where indicated.
- E. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.9 CONCRETE MIXTURES FOR BUILDING ELEMENTS

- A. Footings: Proportion normal-weight concrete mixture as follows:
 - 1. Minimum Compressive Strength: 3,000 psi (34.5 MPa) at 28 days.
 - 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 - 3. Slump Limit: 4 inches (100 mm), plus or minus 1 inch (25 mm).
 - 4. Air Content: 5.5 percent, plus or minus 1.5 percent at point of delivery for 1-1/2-inch (38-mm) nominal maximum aggregate size.
- 2.10 FABRICATING REINFORCEMENT
 - A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."
- 2.11 CONCRETE MIXING
 - A. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For mixer capacity of 1 cu. yd. (0.76 cu. m) or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.

- 2. For mixer capacity larger than 1 cu. yd. (0.76 cu. m), increase mixing time by 15 seconds for each additional 1 cu. yd. (0.76 cu. m).
- 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch (3.2 mm) for smooth-formed finished surfaces.
 - 2. Class B, 1/4 inch (6 mm) for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
 - 1. Install keyways, reglets, recesses, and the like, for easy removal.
 - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations and curing and protection operations need to be maintained.
 - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that supports weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
 - 2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

3.4 SHORES AND RESHORES

- A. Comply with ACI 318 (ACI 318M) and ACI 301 for design, installation, and removal of shoring and reshoring.
 - 1. Do not remove shoring or reshoring until measurement of slab tolerances is complete.
- B. In multistory construction, extend shoring or reshoring over a sufficient number of stories to distribute loads in such a manner that no floor or member will be excessively loaded or will induce tensile stress in concrete members without sufficient steel reinforcement.

C. Plan sequence of removal of shores and reshore to avoid damage to concrete. Locate and provide adequate reshoring to support construction without excessive stress or deflection.

3.5 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Zinc-Coated Reinforcement: Repair cut and damaged zinc coatings with zinc repair material according to ASTM A 780. Use galvanized steel wire ties to fasten zinc-coated steel reinforcement.

3.6 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
 - 2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches (38 mm) into concrete.
 - 3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 - 4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
 - 5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
 - 6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
 - 7. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

3.7 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
 - 1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
 - 1. Deposit concrete in horizontal layers of depth to not exceed formwork design pressures and in a manner to avoid inclined construction joints.
 - 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
 - 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches (150 mm) into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
 - 1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 - 2. Maintain reinforcement in position on chairs during concrete placement.
 - 3. Screed slab surfaces with a straightedge and strike off to correct elevations.
 - 4. Slope surfaces uniformly to drains where required.
 - 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.
- F. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.

- 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
- 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- G. Hot-Weather Placement: Comply with ACI 301 and as follows:
 - 1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

3.8 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.9 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with inplace construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- C. Equipment Bases and Foundations:
 - 1. Coordinate sizes and locations of concrete bases with actual equipment provided.
 - 2. Construct concrete bases 6 inches (150 mm) high unless otherwise indicated; and extend base not less than 6 inches (150 mm) in each direction beyond the maximum

dimensions of supported equipment unless otherwise indicated or unless required for seismic anchor support.

- 3. Minimum Compressive Strength: 3,000 psi (34.5 MPa) at 28 days.
- 4. For supported equipment, install epoxy-coated anchor bolts that extend through concrete base, and anchor into structural concrete substrate.
- 5. Prior to pouring concrete, place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
- 6. Cast anchor-bolt insert into bases. Install anchor bolts to elevations required for proper attachment to supported equipment.

3.10 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.
- C. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- D. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch (300-mm) lap over adjacent absorptive covers.
 - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies will not interfere with bonding of floor covering used on Project.

3.11 LIQUID FLOOR TREATMENTS

A. Sealing Coat: Uniformly apply a continuous sealing coat of curing and sealing compound to hardened concrete by power spray or roller according to manufacturer's written instructions.

3.12 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 - 1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.
- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches (50 mm) deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.13 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 (1.18-mm) sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch (13 mm) in any dimension to solid concrete. Limit cut depth to 3/4 inch (19 mm). Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 - 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.

- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
 - 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch (0.25 mm) wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 - 2. After concrete has cured at least 14 days, correct high areas by grinding.
 - 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 - 4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
 - 5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch (6 mm) to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
 - 6. Repair defective areas, except random cracks and single holes 1 inch (25 mm) or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch (19-mm) clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
 - 7. Repair random cracks and single holes 1 inch (25 mm) or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

3.14 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
- B. Inspections:

- 1. Steel reinforcement placement.
- 2. Steel reinforcement welding.
- 3. Headed bolts and studs.
- 4. Verification of use of required design mixture.
- 5. Concrete placement, including conveying and depositing.
- 6. Curing procedures and maintenance of curing temperature.
- 7. Verification of concrete strength before removal of shores and forms from beams and slabs.
- C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd. (4 cu. m), but less than 25 cu. yd. (19 cu. m), plus one set for each additional 50 cu. yd. (38 cu. m) or fraction thereof.
 - 2. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. (76 cu. m) or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
 - 3. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 - 4. Air Content: ASTM C 231, pressure method, for normal-weight concrete;one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 - 5. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F (4.4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each composite sample.
 - 6. Compression Test Specimens: ASTM C 31/C 31M.
 - a. Cast and laboratory cure two sets of two standard cylinder specimens for each composite sample.
 - b. Cast and field cure two sets of two standard cylinder specimens for each composite sample.
 - 7. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.
 - a. Test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.

- 8. When strength of field-cured cylinders is less than 85 percent of companion laboratorycured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
- 9. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa).
- 10. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- 11. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- 12. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.
- 13. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- 14. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

3.15 PROTECTION OF LIQUID FLOOR TREATMENTS

A. Protect liquid floor treatment from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by liquid floor treatments installer.

END OF SECTION 033000

PLAY EQUIPMENT SPECIFICATIONS - WENDELL CROSS 2-5

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-17 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-17.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), Pegasus (R), Perma-Guard (TM), Perseus (TM), Phyzics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull UPILift (R), Reflex (R), Relay Racer (R), Rock-tie (R), Rodeo Rocky (TM), Serpent Trek (TM), Sun Sparkle (TM), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Tunnder Tunnel (TM), Timber (R), Triple Play (TM), Tobdlers' Choice (R), Tots' Choice (R) Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typoon (TM), Versalok (R), View Groove (TM), Wardfle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tomado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM).

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Miracle Recreation Equipment Company warrants its products against structural failure due to defects in materials and workmanship for the warranty periods and material categories prescribed below.

1. LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT: Aluminum deck posts, steel deck posts, VersaLok (R) fastening system and associated fastening hardware.

2. LIMITED FIFTEEN (15) YEAR WARRANTY: All rigid steel playground components, decks, steps, and weldments, rotationally molded and sheet plastic components, plastic lumber, roof panels, and stainless-steel slides, except as otherwise specified below.

3. LIMITED TEN (10) YEAR WARRANTY: Fabric shade steel frames, and Shadesure ™ fabrics (Note Exception: Limited Five (5) Year Warranty on Shadesure ™ fabrics in colors Red, Yellow, Electric Purple, Zesty Lime, Cinnamon, and Olive.)

4. LIMITED EIGHT (8) YEAR WARRANTY:

- Fiberglass signage, accessible swing seats, precast PolyFiberCrete or precast concrete products.
- Play Terrain Synthetic Turf safety surfacing against deterioration of specified attenuation performance and appearance.
- Shade fabric and components against rot, UV deterioration and defects in materials and workmanship (Note Exception: Limited Three (3) Year Warranty for fabric in shades of red).

5. LIMITED FIVE (5) YEAR WARRANTY:

- Heavy duty diamond barrier mesh and Kidrox[™] Climbing Rocks.
- Miratherm[™] PVC coating against cracking or peeling.
- Park and Site Amenities (i.e. benches, tables, trash receptacles, etc.).
- Steel core cable nets and rope fittings and connections (Note Exception: Warranty does not cover normal wear and tear such as fraying or facing of cable coating).

6. LIMITED THREE (3) YEAR WARRANTY: Flexible belting, plastic border timbers and accessories, and electronic panel speakers, sound chips, and circuit boards.

7. LIMITED ONE (1) YEAR WARRANTY:

- GFRP (Glass Fiber Reinforced Polymer) Products, Slashproof Swing Seats, 360° Bucket Tot Swing Seats and Tuff Net no climbing mesh.
- Pool slide support structures, stairways, landings and railings.
- All other products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers and bearings, swivels, chains, whirls, springs and flexible components, and all high wear items, such as trolleys, cables, wheels, and bumper stops related to rail and cable ride products.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods and material categories, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle may elect to inspect the alleged defect at Buyer's site or at Miracle's facility. Buyer shall not return products to Miracle unless authorized by Miracle to do so. Authorized returns must be properly packaged and shipped prepaid and insured, at Buyer's expense. Upon verification of warranty coverage, Miracle may elect, in its sole discretion, to repair defective or non-conforming products, or replace them by delivering products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non -conforming part(s) or to install repaired or replacement part(s). By use of these limited warranties, Buyer accepts their terms and limitations, and waives any rights it would otherwise have to claim or assert that such warranties fail of their essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

LIMITATIONS: All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty period. Warranties extend only to the original Buyer/end user for products purchased from Miracle or a Miracle authorized reseller and are not transferrable.

Warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle maintenance and operational instructions.

Warranties specifically do not cover Miracle products:

- For cosmetic damage or flaws occurring under normal use, such as surface scratches, minor chips, hairline cracks, dents, marring, efflorescence, color fade (except for shade fabric as noted above), discoloration, corrosion, fraying, or warping of recycled plastic lumber;
- That have been modified, altered, or repaired by unauthorized third parties;
- That have not been used as designed or intended, or misused;
- To which non-Miracle parts have been added or substituted;
- That have been removed from their original location and re-installed elsewhere, without pre-approval by Miracle;
- Or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, environmental factors (such as wind-blown sand, salt spray, or airborne emissions from industrial sources), extreme weather (such as hail, flooding, lightning, tornados, sandstorms, earthquakes, or wind storms), and acts of God.

THE FOREGOING LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY FOR SELLER'S PRODUCTS, AND IS INLIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN LAW OR IN FACT. SELLER SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE, AND ANY IMPLIED WARRANTIES ARISING OUT OF COURSE OF DEALING OR PERFORMANCE OR TRADE USAGE. SELLER SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, SPECIAL, OR PUNITIVE DAMAGES, OR ANY LOSS OF REVENUE, PROFICT OR USE, ARISING OUT OF A BREACH OF THIS WARRANTY OR IN CONNECTION WITH THE SALE, INSTALLAITON, MAINTENANCE, USE, OPERATION OR REPAIR OF ANY PRODUCT. IN NO EVENT WILL SELLER BE LIABLE FOR ANY AMOUNT GREATER THAN THE PURCHASE PRICE OF A DEFECTIVE PRODUCT.

Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes" for specifications of items listed in bold type.

• KIDS' CHOICE MIRA-THERM2 DECKS: The deck models in the 714-50X-9 series shall consist of a (3) sided equilateral triangle deck: Model # 714-501-9. with a deck top surface area of 7 sq. ft. (1008 sq. in.); a (4) sided square deck: Model # 714-502-9, with a deck top surface area of 16 sq. ft. (2304 sq. in.); (4) sided (3) opening half hex decks: Model #s 714-503-9 and 714-504-9, with a deck top surface area of 21 sa. ft. (3024 sa. in.); (4) sided (6) opening rectangular decks: Model #s 714-508-9, 714-509-9 and 714-510-9, with a deck top surface area of 32 sq. ft. (4608 sq. in.); a (5) sided pentagon deck: Model # 714-512-9, with a deck top surface area of 23.8 sg. ft. (3427 sg. in.); an (8) sided octagon deck: Model # 714-519-9, with a deck top surface area of 60 sg. ft. (8640 sg. in.); (; and a (7) sided heptagon deck: Model # 714-517-9, with a deck top surface area of 55 sq. ft. (7,920 sq. in.). Model # 714-511-9 shall be an isosceles triangle split deck (single section) designed to serve as a step platform for lower deck heights: 18" or lower for 2-5 year olds, and 30" or lower for 5-12 year olds. All other Model #714-511-X9 split decks shall feature two triangular deck sections which shall be mounted between four posts at different heights so that a 6", 12", 18", or 24" (X) rise shall be formed along the hypotenuse between two posts. Models which rise greater than 6" shall contain a riser plate; models which rise greater than 12" shall also contain an arched enclosure assembly. The deck top surface area of split deck models shall be 8 sq. ft. each for both sections, or total 16 sq. ft. Riser plates shall be constructed of 11 ga. A-60 Galvannealed sheet; risers for 18" and 24" rises shall contain a rung and vertical supports of 1" tube, solid welded, all finished in Mira-Cote. The arch enclosure assembly accompanying models which rise 18" and 24" shall comprise top and bottom supports and an arched upright constructed of 1" pipe, drilled, formed and mashed, all solid welded, and vertical rungs of 1" tube, with plastic pipe plugs inserted in open ends, and finished in Mira-Cote. Decks shall be designed for maximum flexibility in height of deck surface, from 0" to (in 6" increments,) though 3', 5' and 6'-6" shall be considered standard heights. Decks shall be designed on a 48" center-to-center spacing on 5" deck posts, at equal or varied heights. All deck-to-post connections shall be made with a deck support clamp. All deck connections shall be made beneath deck with no exposed fasteners on deck perimeter. Decks with 8' wide open side shall be designed to attach to another deck with 8' wide open side at same deck height, or to a Model # 714-770-6 Flippopotamus Slide/Climber. All decks shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes (5/16" after dipping) at 5/8" apart center-to-center. The decking shall have 7 ga. by 2" flat steel braces and corner braces of 7 ga. steel. The entire assembly shall be solid welded prior to polyvinyl coating. Each assembly shall contain Versalok Fasteners and Fastener Style A hardware. All deck surfaces shall be coated in Mira-Therm2 or Mira-Therm2 PE.

• KIDS' CHOICE POSTS: STEEL POSTS: The steel posts each shall be constructed of 5" tube, 11 ga. with a 5" round end cap pressed into its top end. Post and end cap shall have a Mira-Cote finish.

• END CLIMBER shall be constructed of 1" pipe, formed, measuring 63" x 48" (except Tots' Choice models which shall be constructed of 1" tube, formed, measuring 63" x 42".) The entire assembly shall be solid welded.

• HONEYCOMB CLIMBERS (KIDS' CHOICE & TOTS' CHOICE) shall consist of handrails and a climber assembly which shall connect to the deck with a bracket. The Kids' Choice models shall feature an arched deck enclosure. The Tots' Choice models shall feature a handhold. The rails and archway of the Kids' Choice arched enclosure shall be constructed of 1" pipe, with vertical rungs of 3/4" x 1" oval tube, solid welded. The handhold on the Tots' Choice models shall be constructed of 1" tube. The handrails, which also serve as legs, shall be constructed of 1" pipe, drilled, with 3/8" aluminum inserts in the top ends. On Kids' Choice handrails for 5' and 6'-6" decks, a drilled stub of 1" pipe, 12 ga. is welded. The climber assembly shall consist of Honeycomb segments constructed of Rockite and rungs made of 1" pipe, drilled, with either plastic pipe plugs or threaded aluminum inserts factory-installed. The deck-climber bracket shall be constructed of 3" x 3" x 3/16" angle, 7 ga. black HR CQ steel and 780 series Plastisol resin. The enclosure or handhold, handrails, and fasteners shall have a Mira-Cote finish. The bracket shall have a Mira-Therm2 or Mira-Therm2 PE finish. The Honeycomb segments shall have molded-in color.

• ELECTRONIC PANELS shall be deck-mounting electronic activity panels are designed to enhance imagination and creative play. Panels play either music or animal noises to incorporate sound and learning into any playground theme. The panels shall be constructed of **Mira-Lene** with a design routed in the front and back. The rung brackets shall be constructed of **1" pipe** with bolting tabs of 11 ga. **A-60 Galvannealed** sheet, all solid **welded**. Each assembly shall contain three (3) "D" size alkaline batteries. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung brackets and clamps shall have a **Mira-Cote** finish.

• HALF-PANELS for below deck or freestanding installation shall feature two-color schemes, routed designs, and steering wheels, and when mounted at suggested heights, will permit wheelchair access. The Roller Racer models shall also feature an interactive ball game which user operates by turning a knob to raise and release enclosed balls into routed pathways (the balls then re-enter the lift mechanism). Half-panels shall be constructed of Mira-Lene with all corners rounded, measuring 36-1/2" x 15-1/2", except Calypso 2-Drum panel, which shall measure 36-1/2" x 20". Calypso 2-Drum panel shall also contain 2 rotational molded drums of low-density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized sheet steel with a Mira-Cote Rung brackets shall be constructed of 1" pipe (except Tots' Choice models which shall be 1" tube) with tabs of 11 ga. A-60 Galvannealed sheet, solid welded. The Roller Racer models shall be constructed as above and shall also have a clear polycarbonate cover fastened to enclose various contents. A black high-density polyethylene gear handle mounted outside the cover shall turn on a bronze bushing to drive a 1/4" thick polyethylene gear behind the cover, which shall carry 1/2" steel balls and release them in routed channels. The steering wheel shall be constructed of hugh-density polyethylene gear totational molding grade resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693 (b), D-638, D-790 and D-746. Resin's properties shall be there is the in routed channel. U.V. light stabilizers. Each assembly shall contain Fastener Style A hardware and Versalok Fasteners. Half-panels and steering wheels shall have molded-in color. Rung brackets and clamps shall have a Mira-Cote finish.

• IMAGINATION PANELS and Activity Panels shall be constructed of Mira-Lene and shall measure 36-1/2" x 40" with all corners rounded. The panels shall have routered designs, including themes of a space ship panel, general store counter, a barn wall panel, a barn door panel, a barn window panel, a bank teller window, a television front, a puppet stage, a window, a computer screen, a door, a park ranger, a fire truck, a police car, a train engine, a taxi cab, two airplanes (both containing two steering wheel assemblies, one also containing a clear polycarbonate window mechanically fastened to panel), a race car, an alphabet finger maze, an abstract finger maze, a calculator, a bus stop/bench, a rest stop/bench, jump height measurements for a 3' and 5' deck, a sign language alphabet, a Spanish-English translation, a Chinese-English translation, Braille alphabet with riddles, a drum panel, welcome and age appropriate messages, interconnected gears, gear-driven pistons, and sliding tiles. Rung brackets shall be constructed of 1" pipe and 11 ga. A-60 Galvannealed tabs solid welded (except Tots' Choice models which shall have brackets constructed of 1" tube and 11 ga. A-60 Galvannealed tabs solid welded.) The star brackets for the space ship panel shall be constructed of 11 ga. HRPO steel and powder coat painted. The steering wheel(s) on vehicle themed panels shall be constructed of a high-density blow molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. The Piston panel and Gear panel each shall contain a clear polycarbonate cover mechanically fastened over sets of 1/4" thick gears (drive gears not covered by window). The gears shall be constructed of high-density polyethylene, which shall turn on nylon bushings, except for the black nylon handles and drive gears which shall turn on bronze bushings. The piston panel shall also contain connecting rod and piston shapes of 1/4" thick high-density polyethylene. The reverse side of both panels shall contain routered text and/or designs. The Sliding Tile panel shall contain 15 movable, tongue-and-groove tiles with routed numerals to be constructed of 1/4" thick high-density polyethylene. The panels and steering wheel shall have molded in color with each panel assembly having a laminated, two-color scheme. Calypso drum panel shall contain 3 rotational molded drums of low-density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized steel sheet with a Mira-Cote finish. Each assembly shall include Fastener Style A hardware and Versalok Fasteners. Panels and steering wheels shall have color molded in, and rung brackets and clamps shall be finished in Mira-Cote.

• ACTIVITY PANEL INSERTS available for Kids' Choice, Tots' Choice and Tots' Choice Expansion. Inserts shall be constructed from a combination of 1/2" thick high-density polyethylene, 3/4" thick high-density polyethylene, 3/4" thick high-density polyethylene, 3/16" thick polycarbonate, linear low-density polyethylene caps and stainless-steel ball bearings. The inserts shall have interactive, sensory and inclusive play for kids of all abilities including funhouse insert, very buried insert, a-maze-ing insert, four-the-win insert, magical music insert, hypnotize insert and slide & solve insert.

• LOOKOUT TOWER/COMMAND POST shall be curved deck extensions/overhangs and enclosure components for deck systems, designed to stimulate imaginative play. Panels for both models shall be constructed of Rockite, with wall thickness approximately 1/4", formed to extend the deck surface in a semi-circle (approximately 40" long with a radius of 9-7/16") and also formed to serve as an enclosure. The panels shall have four 3/8" threaded inserts factory-installed along bottom of deck edge and a top rung of **1" pipe** inserted at the factory for field attachment to deck and posts respectively. The panels shall contain five 2" wide view slots evenly spaced, with all corners rounded. The steering wheel shall be constructed of a high-density blow-molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack or injection-molded polypropylene which shall contain U.V. light stabilizers. All Versalok Fasteners for deck and component attachment shall be aluminum alloy, and hardware shall be Fastener Style A. The Rockite panel shall have color molded in. The top rung and Versalok Fasteners shall have a Mira-Cote finish.

• MAGIC BALL POPPER PANEL shall contain a clear bubble on one side and on the other a clear sheet and steering wheel which shall turn an internal paddle and a quantity of multi-colored balls. The Magic Ball Popper Panel shall be constructed of Rockite measuring 36" x 38" x 15" with all corners rounded. One side shall contain a clear bubble as described above. The other side shall contain a window of clear polycarbonate sheet. Both shall be fastened to the panel at the factory using tamper-proof screws and flat washers. The window shall hold a steering wheel constructed of H.D.P.E. Black with mounting bracket of hot rolled steel strip, which shall drive a shaft of zinc coated cold finished steel round to be mounted to the bubble, facilitating turns of a paddle device of polyethylene inside the assembly. The paddle shall contain two 4" holes allowing for stirring, spinning, balancing and passage of 3" diameter polyurethane balls of several colors. All hardware shall be Fastener Style A. All Versalok Fasteners for deck and component attachment shall be aluminum alloy. The panels shall have molded-in color. The enclosure uprights and Versalok Fasteners shall have a Mira-Cote finish.

• ROCKITE BUBBLE PANEL/ROCKITE PANEL WITH HOLE/VIEW GROOVE PANEL/30 DEGREE LOOK-OUT PANEL shall be constructed of Rockite with all corners rounded. The 30-degree Look-Out panel shall have a molded in 30-degree extension. The enclosure shall consist of uprights and support bars, all constructed of **1" pipe**, drilled and formed (except Tots' Choice models which shall have an enclosure consisting of a top rail of **1" tube** with two tabs and two brackets of 11 ga. galvanized sheet, solid welded). The bubble shall be vacuum formed from clear polycarbonate sheet. The spherical bubble shall measure 24" in diameter and shall be attached to the panel in the factory using tamper proof screws and flat washers. The view groove panel shall have six 2" view slots evenly spaced at 5-1/4" with slant of 20 degrees from vertical. Horizontal rungs shall have a **Mira-Cote** finish. **Rockite** panels shall have color molded in.

 MIRA-THERM2 SQUARE TRANSFER POINTS shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid welded to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid welded. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed 1" pipe, including a welded upright of the same material. Tots' Choice deck enclosures shall be constructed of 1" pipe and a formed and welded upright of 1" tube. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be welded upper and lower handrails of formed 1" pipe. Closed handrails shall contain vertical uprights of 3/4" x 1" oval tube welded within. Swaged handrail extensions for field assembly to handrails shall be constructed of 1" pipe. A transfer deck handrail constructed of formed 1" pipe shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of 1-1/4" pipe, 10 ga. The "U"-shaped transfer step handrail shall be formed 1" pipe, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be 1" pipe with ends mashed and punched for field assembly to bottom step. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The stairs, bottom step, and transfer point deck shall be finished in Mira-Therm2 or Mira-Therm2 PE. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in Mira-Cote.

• CUPOLA FOR HEX ROOF shall be designed to cap the open top of standard "Roof for Hexagon Deck" models. Model # 714-862-6CF shall feature a flag pole with mounting brackets for a customer-provided flag (24" maximum height). The hexagonal, peaked cupola roof top halves, when fastened together, shall measure 31-5/8" wide by 13-1/2" high with a 51-degree slope. Each half shall be constructed of 14 ga. HRPO black, perforated with 3/16" holes spaced 1/2" apart center-to-center in a staggered pattern, and shall be punched and solid welded. The hexagonal soffit shall measure 31-1/2" O.D. (after bending to create bolting tabs on perimeter) with a 15" 1.D. opening, and shall be constructed of 11 ga. sheet, plasma cut and formed, with 3/8" weldnuts on its bottom side. Extension trusses each shall comprise a receiver of 4-11/16" O.D. by 3/16" thick tube with flange of 11 ga. **A-60 Galvannealed** sheet solid welded to a stub of 1-1/2" pipe capped by a 1-3/4" O.D. by 3/8" thick CRS threaded insert. Interior wall shall be constructed of 24 ga. 304 SS sheet and shall measure 9-1/4" high by 76-15/16" wide (laid flat), punched and formed. The flag pole mounting plate shall comprise an 8" high receiver of 2" Sch 40 pipe with 3/8" weldnuts and gussets of 11 ga. black sheet on a 19" O.D. plate of 7 ga. black, all solid welded. The 72" flag pole shall be constructed of

1-1/2" pipe with cross plates of 7 ga. black sheet, formed and punched, welded to its top end and links of 4/0 straight link coil chain solid welded to its side. When assembled, the top of the flag pole shall extend approximately 65-1/2" above the cupola's peak. The assembly shall contain Fastener Style A hardware.

Cupola top, soffit, extension trusses, flag pole, and flag pole mounting plate shall be finished in Mira-Cote. The interior wall shall have a stainless-steel finish.

• ROOFS WITH PERF STEEL, RECYCLED PLASTIC OR HYBRID PANELS with open tops for square, pentagon, heptagon hexagon and octagon decks shall offer superior durability in most environmental conditions. The steel roof panels shall be constructed of 16 ga. A-60 Galvannealed sheet perforated with 3/16" holes in a pattern, with a formed "lip" at the panel's top edge to provide additional stability during installation. A length of 1" pipe shall be welded to the panel bottom. The recycled roof panels shall be constructed of 100% post consumer recycled plastic and approximately 3/4" thick. A panel mount formed of 11 ga. G-90 galvanized shall be field assembled to trusses and roof panels. Roof truss assemblies shall be constructed of a roof mount stub of either 5" tube for Kids' Choice or 3-1/2" tube for Tots' Choice Expansion, solid welded at a 54-degree angle to truss of 5" tube containing bolting tabs on both sides of 11 ga. G-90 galvanized. 5" round end caps shall close open ends of trusses. All hardware shall be Fastener Style A. The steel roof panels and trusses shall have a Mira-Cote finish. The recycled panels shall have a natural finish. The panel mounts shall have a galvanized finish. Note that a hybrid model (with alternating recycled plastic and perf steel roof panels) is not available for heptagon or pentagon decks due to the odd number of panels.

• BUMP AND GLIDE SLIDES shall be double bedway, Rockite slides available for 4' and 5' decks, with one bedway mogul-style and the other groove-style. Each slide shall be constructed of Rockite with threaded fasteners incorporated for assembly. The dimensions shall be: bedway width, 16-1/4"; outside overall, 40"; inside rail width, 1-1/4"; outside rail widths, 1-1/2"; top of bedway to top of rail, 7-1/2" to 8-1/2"; bedway thickness, 4-1/2" to 5-1/2", and bedway length, approximately 8' (714-728-4) and 10' (714-728-5). The front and middle legs shall each consist of an upright and a top. The upright shall be constructed of **Rockite** with threaded fasteners incorporated for assembly in a "T" configuration. The canopy shall be constructed of **Rockite** with threaded fasteners incorporated for assembly. The canopy shall have an inside width of 39" and an outside width of 44" and shall be slanted at 37 degrees. It shall be field attached to the posts via clamps and a 41-1/2" rung of **1" pipe**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The **Rockite** slide and canopy shall have color molded in. The legs, rung, and clamps shall have a **Mira-Cote** finish.

• TYPHOON II SLIDES WITH DOMED WAVE HOOD shall be one-piece open bedway slides, with 6'-2" platform, domed wave hood and step or ramp assembly, designed for attachment to 4', 5' and 6'-6" decks. The slide bedway shall be constructed of 1/4" to 5/16" wall Rockite. The slide bedway shall be 30" wide with a 15" high side wall. The center post shall be constructed of 4-1/2" tube. The step assembly shall be constructed of 11 ga. steel sheet folded and perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, solid welded to stringers of 11 ga. black steel. The handrail assembly shall consist of a top and bottom rail and newel post formed, constructed of 1" pipe with infill of 3/4" x 1" oval tube. The step enclosure assembly shall be solid welded. Plastic pipe plugs shall close open ends. The deck enclosures shall consist of a vertical rail, and top and bottom rail, formed, constructed of 1" pipe with an upright of 3/4" x 1" oval tube, and 3/8" aluminum inserts in the rail ends for attachment to the step enclosures. The deck enclosure assemblies shall be solid welded. The slide hood shall be Rockite. The hood shall have molded-in view grooves for viewing children. The back-up plates used to connect the step assembly and the barrel shall be constructed of 1/4" x 1" x 4-1/2" flat steel. The front leg shall be constructed of 2" pipe and shall be attached to the slide hood shall be attached to the slide and slide hood shall be attached of 7 ga. sheet. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The Rockite slide and slide hood shall have a zinc plate finish.

• MIRA-THERM2 ATA STAIRS BETWEEN DECKS shall be stair assemblies, with spoked or open handrails, designed to connect decks of different heights. The steps shall be constructed of 7 ga. steel stringers with treads constructed of 11 ga. steel sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center, solid welded, with polyvinyl coating. The braces shall be constructed of 11 ga. black. The spoked handrails shall consist of a top and bottom rail and newel post, all of 1" pipe, and uprights constructed of 3/4" x 1" oval tube, all solid welded, with plastic pipe plugs inserted in open ends. Top rails shall have 3/8" aluminum inserts. The open handrails shall consist of a top and bottom rail and newel post of 1" pipe, all solid welded, with plastic pipe plugs inserted in open ends. Top rails shall have 3/8" aluminum inserts. The top deck enclosure shall consist of enclosure rails and an upright, both to be constructed of 1 "pipe, drilled and solid welded, with one end of upright mashed for field attachment to deck. The bottom deck enclosure shall consist of for shall be mashed on one end for field attachment to deck. Inserted in open ends will be plastic pipe plugs. The assembly shall include Fastener Style A hardware and Versalok Fasteners. The step assemblies shall be finished in Mira-Therm2 or Mira-Therm2 PE. The deck enclosures, handrails, and clamps shall be finished in Mira-Cote.

• MINI CITY PLAYHOUSES are designed to be enjoyed by children of all abilities, including autism, developmental delays and those that use mobility devices. Children can use their imagination, improve strength, agility and mobility. The steel frame shall be constructed from **2" square tubing**, 16-gage galvanized steel tubing, 1/4" steel plates. The steel frame (sensory garden wall, traffic light) shall be constructed from 12-gage and 14-gage galvanized steel. The steel roof/end walls shall be constructed from 12-gage galvanized steel plate. The stairs shall be constructed from 12-gage steel coated with durable, thermoplastic coating. The deck platform shall be constructed from 12-gage galvanized steel plate. The steel raw thuse shall be constructed from 14-gage galvanized steel, 8-gage galvanized steel, **1-1/4" pipe**, 13-gage galvanized steel tubing. The steel climber shall be constructed from **1-1/2" pipe**, 13-gage galvanized steel tubing, 8-gage and 1/4" steel plate. The plastic slide shall be **1/2" HDPE** bedway, **3/4" HDPE** sides. The platic steps/seat shall be **3/4" textured HDPE**. The plastic walls/ends/panels shall be **3/4" HDPE**. The plastic tire shall be rotationally molded LLDPE. The skylight (chattery) shall be 1/4" **Koda** XT. The skylight (playhouse, chattery) shall be **3/16"** screen printed Lexan. The castings shall be **319** aluminum. The finishes shall be in **Mira-Cote**. All fastening hardware shall be **3/8" Flextread**. The colored lenses shall be 1/8" acrylic colored panels with 3/16" Lexan covers.

• **RISK MANAGEMENT SIGN** is intended to inform the parents and children that adult supervision is recommended, along with smart play on the equipment in the play area. Sign shall be constructed of aluminum 3003-H14 .08" thick powder coated white with screen printed overlay. Steel frame shall be 2 3/8" OD 12 ga. galvanized steel tube. Extension Tube shall be 2.375 12GA GLV-IL X 24' tube round. Hardware use **Fastener Style A** hardware. Frame shall have a **Mira-Cote** finish.

Technical Data for Processes and Finishes of the Highlighted Items

• aluminum alloy conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either sand cast or die cast. Sand cast aluminum alloy is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. Die cast aluminum alloy is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.

• 4/0 straight link coil chain is trivalent zinc finish with a 670-pound working load limit. All chain shall be manufactured to ASTM A467-86A Class CS specifications.

• Mira-Therm2 coated chain is a welded chain with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are low carbon zinc plated steel with a polyvinyl chloride coating.

• Versalok Fasteners (R) are cast aluminum alloy. Each fastener consists of two die cast aluminum alloy "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast aluminum alloy, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast aluminum alloy, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using aluminum alloy sand cast header supports.

- 5" round end cap is die cast aluminum alloy.
- Fastener Style A is a corrosion resistant, 18-8, stainless steel, vandal resistant fastener.

• **fiberglass** components are sprayed-up isophthalic molding resin with fiberglass reinforcements. The resins and fiberglass are tested in accordance with ASTM D-790, D-38-0651 and D-638. All sprayed up fiberglass components have a **Gelcoat** finish which is molded in during the spray up process.

• Flextread is a .375" (.95cm) thick, 2-ply performance-woven mesh with a high-quality rubber/nitrile blend. Breaking strength of 21,120 lbs. (9579kg) per 12" width. Non-marking, odorless and textured for excellent grip when wet.

- Koda XT is a polycarbonate resin designed for exterior architecture and featuring superior impact strength, formability and high-temperature resistance.
- G-90 galvanized indicates that a coating of .90 ounces of zinc per square foot has been applied on each surface side.
- A-60 Galvannealed indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.

• **Mira-Cote** (TM) is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal parts. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247.

• Mira-Lene (TM) is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm3 per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.

• Mira-Therm2 PE is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthopthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.

• **Perma-Guard** (TM) is an acrylic polyurethane, two component ultra-violet radiation inhibited coating. Three U.V. inhibitors and antioxidants work synergistically to provide protection from all climate and environmental conditions. Perma-Guard's hard, smooth surface makes it impact resistant and able to withstand heavy traffic and abuse. Graffiti can be removed with a suitable solvent. For metal parts, Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. Perma-Guard is applied and either air-dried or baked-on in an oven at 180 degrees F to form a hard, smooth, durable finish.

• pipe sized tube is 1010 hot rolled, Flo-Coat, galvanized pipe manufactured from steel, cold formed and high frequency induction welded continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8.

• schedule 40 galvanized pipe consists of a hot dip process of coating the pipe inside and out with not less than 1.6 ounces per square foot with an average of 1.8 ounces per square foot. Schedule 40 pipe conforms to ASTM standards A-53.

- 1" pipe is GATOR GRIP embossed 14 ga., 1" pipe sized tube (1.315" OD; approx. 1-5/16" OD.)
- 1" pipe, 10 ga. is 10 ga., 1" pipe sized tube (1.315" OD; approx. 1-5/16" OD.)
- 1" pipe, 12 ga. is 12 ga., 1" pipe sized tube (1.315" OD; approx. 1-5/16" OD.)
- 1-1/4" pipe is 13 ga., 1-1/4" pipe sized tube (1.660" OD; approx. 1-11/16" OD.)
- 1-1/4" pipe, 10 ga. is 10 ga., 1-1/4" pipe sized tube (1.660" OD; approx. 1-11/16" OD.)
- **1-1/2" pipe** is 13 ga., 1-1/2" pipe sized tube (1.900" OD; approx. 1-7/8" OD.)
- 2" pipe is 12 ga., 2" pipe sized tube (2,197" OD approx.) galvanized
- 1-1/2" Sch 40 pipe is 1-1/2" schedule 40 galvanized pipe (1.875" OD; approx. 1-7/8" OD.)
- 2" Sch 40 pipe is 2" schedule 40 galvanized pipe (2.375" OD; approx. 2-3/8" OD.)
- 2-1/2" Sch 40 pipe is 2-1/2" schedule 40 galvanized pipe (2.875" OD; approx. 2-7/8" OD.)

• plastic pipe plugs are injection molded polypropylene containing U.V. light stabilizers.

• Rockite (R) (Rotational Molded Polyethylene) is a low-density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".

• **360 Degree Slashproof Tot Seat** is a flexible seat fabricated into a configuration of a wide strap under and through the bottom, a wide strap running completely around at the top, and two (2) interconnecting straps at the front and rear of the seat for complete enclosure of the small user. The exterior surface is blue EPDM rubber. Models with chain have two segments of **4/0 straight link coil chain** to suspend the swing from a swing frame header. The 360-degree tot seat is constructed of a one-piece die cut 0.020" thick, martinsitic spring steel insert with 70 durometer blue EPDM rubber, 1/4" thick, molded to the insert. The main seat strap is 5" wide, the back strap is 4" wide, and the front strap is 2" wide. The two (2) places where the straps are interconnected and form the suspension points for the seat are held by a clip and grommet system. The clip is 4" wide 16 ga. galvanized steel. There are two grommets per clip, each of which is 3/4" O.D. by 14 ga. wall galvanized steel tube, flared to securely attach the clip to the seat. The two (2) mounting triangles are secured to the seat by clips and are made from 3/8" steel round stock, formed and galvanized. For Model # 299-74, the lower 30" of the chain is finished in **Mira-Therm2**.

• 5" aluminum tube is a 5" O.D. (.125 wall) aluminum post that receives a five-stage oxidation wash prior to painting. This 6005-T5 alloy and temper extruded aluminum tube conforms to ASTM-B-221 and QQ-A-200/8 with yield strength of 35,000 p.s.i. and tensile strength of 38,000 p.s.i.

• 3/4" x 1" oval tube is 15 ga. wall. It is fabricated of 1008 hot rolled, Flo-Coat, galvanized tube manufactured from steel, cold formed and high frequency induction welded continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.

- 1" tube is 1" OD, 15 ga. fluted round tube. It conforms to ASTM A-500.
- 2-3/4" tube is 2-3/4" OD, 11 ga. round tube. It conforms to ASTM A-500
- 3-1/2" tube is 3-1/2" OD, 13 ga. round tube. It conforms to ASTM A-500.
- **4-1/2" tube** is 4-1/2" OD, 7 ga. **round tube**. It conforms to ASTM A-500.
- 5" tube is 5" OD, 13 ga. round tube. It conforms to ASTM A-500.
- 5" tube, 11 ga. is 5" OD, 11 ga. round tube. It conforms to ASTM A-500.

• welded refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18 ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.

• Specification Policy: Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.

PLAY EQUIPMENT SPECIFICATIONS – WENDELL CROSS 5-12

SAFETY STANDARDS & GUIDELINES All public playground equipment supplied shall meet all applicable provisions of the current "Handbook for Public Playground Safety" published by the Consumer Product Safety Commission (CPSC), and of ASTM F1487-17 "Standard Consumer Safety Performance Specification for Playground Equipment for Public Use," published by the American Society for Testing and Materials (ASTM). Products bearing the certification seal of the International Play Equipment Manufacturers Association (IPEMA) have received written validation of compliance with ASTM F1487-17.

TRADEMARKS Aquarius (R), Big Kahuna (R), Big Timber (R), Bongo (TM), Boulder Ridge (R), Bug Bites (R), Camel Back (TM), Center Stage (R), Chameleon (TM), Coil Curler (TM), Connexion (R), Dupli-Gator (R), Flex Jet (R), Flippo (TM), Flippopotamus (R), Fun Fone (TM), Fun Tunnel (R), Funnel Tunnel (TM), Funshades (TM), Gator Grip (R), Gemini (TM), Gravity (TM), Grizz-Lee Bear (R), Groove (TM), Groove II (R) Slide, Hang-A-Round (R), Interaxion (TM), JAX (R), Kidrox (R), Kids' Choice (R), Kids' Perch (TM), Libra (R), Linkz (TM), Loopz (TM), Mega Tower (R), Miracle (R), Miracle Recreation (R), Mira-Cote (R), Mira-Lam (TM), Mira-Lene (TM), Mira-Therm2 (TM), Mogul (TM), Mountain Trail (R), N-Dure Cycle (R), Nexus (R), Observation Deck (R), Offspring (TM), OrbX (R), Pegasus (R), Perma-Guard (TM), Perseus (TM), Phyzics (R), Play Cover (R), Play Terrain (R), Power Pedaler (TM), Pull UPILift (R), Reflex (R), Relay Racer (R), Rock-tie (R), Rodeo Rocky (TM), Serpent Trek (TM), Sun Sparkle (TM), Sun Sparkle (TM), Surfer (R), Tensile Tough (TM), Tensile Tower (TM), Tunnder Tunnel (TM), Timber (R), Triple Play (TM), Tobdlers' Choice (R), Tots' Choice (R) Tots' Choice (R) Expansion, Tots' Choice (TM) for Toddlers, Trim Timber (R), Triple Play (TM), Typoon (TM), Versalok (R), View Groove (TM), Wardfle Wall Walker (TM), Webscapes (R), Whirlwind (TM), Xcalator (R), and X-Cavator (TM) are trademarks of Miracle Recreation Equipment Company. Tomado (TM), Multi-Pondo (TM), and Pirouette (TM) are trademarks of HAGS (TM).

QUALITY SYSTEM CERTIFICATION The manufacturer's quality system is certified to ISO 9001 since December 1998.

PRODUCT CHANGES At Miracle Recreation Equipment Company, we strive for the utmost in quality and safety in our entire product line. Therefore, in order to honor this commitment to you, our customers, we reserve the right to make changes on any product released and/or published in our annual catalog and other promotional or technical literature.

WARRANTY

Miracle Recreation Equipment Company warrants its products against structural failure due to defects in materials and workmanship for the warranty periods and material categories prescribed below.

1. LIMITED WARRANTY FOR AS LONG AS YOU OWN THE PRODUCT: Aluminum deck posts, steel deck posts, VersaLok (R) fastening system and associated fastening hardware.

2. LIMITED FIFTEEN (15) YEAR WARRANTY: All rigid steel playground components, decks, steps, and weldments, rotationally molded and sheet plastic components, plastic lumber, roof panels, and stainless-steel slides, except as otherwise specified below.

3. LIMITED TEN (10) YEAR WARRANTY: Fabric shade steel frames, and Shadesure ™ fabrics (Note Exception: Limited Five (5) Year Warranty on Shadesure ™ fabrics in colors Red, Yellow, Electric Purple, Zesty Lime, Cinnamon, and Olive.)

4. LIMITED EIGHT (8) YEAR WARRANTY:

- Fiberglass signage, accessible swing seats, precast PolyFiberCrete or precast concrete products.
- Play Terrain Synthetic Turf safety surfacing against deterioration of specified attenuation performance and appearance.
- Shade fabric and components against rot, UV deterioration and defects in materials and workmanship (Note Exception: Limited Three (3) Year Warranty for fabric in shades of red).

5. LIMITED FIVE (5) YEAR WARRANTY:

- Heavy duty diamond barrier mesh and Kidrox[™] Climbing Rocks.
- Miratherm[™] PVC coating against cracking or peeling.
- Park and Site Amenities (i.e. benches, tables, trash receptacles, etc.).
- Steel core cable nets and rope fittings and connections (Note Exception: Warranty does not cover normal wear and tear such as fraying or facing of cable coating).

6. LIMITED THREE (3) YEAR WARRANTY: Flexible belting, plastic border timbers and accessories, and electronic panel speakers, sound chips, and circuit boards.

7. LIMITED ONE (1) YEAR WARRANTY:

- GFRP (Glass Fiber Reinforced Polymer) Products, Slashproof Swing Seats, 360° Bucket Tot Swing Seats and Tuff Net no climbing mesh.
- Pool slide support structures, stairways, landings and railings.
- All other products and components that are not specifically listed above, including, without limitation, all moving parts, such as swing hangers and bearings, swivels, chains, whirls, springs and flexible components, and all high wear items, such as trolleys, cables, wheels, and bumper stops related to rail and cable ride products.

BUYER'S REMEDY: If any products prove defective or non-conforming under normal use and within the above-prescribed warranty periods and material categories, Buyer must promptly notify Miracle in writing at 878 E. Hwy 60, Monett, MO 65708 USA. Miracle may elect to inspect the alleged defect at Buyer's site or at Miracle's facility. Buyer shall not return products to Miracle unless authorized by Miracle to do so. Authorized returns must be properly packaged and shipped prepaid and insured, at Buyer's expense. Upon verification of warranty coverage, Miracle may elect, in its sole discretion, to repair defective or non-conforming products, or replace them by delivering products or part(s) free of charge to the site. Miracle's limited warranties do not cover the cost of labor to remove defective or non -conforming part(s) or to install repaired or replacement part(s). By use of these limited warranties, Buyer accepts their terms and limitations, and waives any rights it would otherwise have to claim or assert that such warranties fail of their essential purpose. Buyer agrees that venue for any court action to enforce these limited warranties shall be in Barry or Greene Counties in the State of Missouri.

LIMITATIONS: All warranty periods begin on the date of Miracle's invoice. Repaired and/or replacement part(s) are warranted only for the balance of the original limited warranty period. Warranties extend only to the original Buyer/end user for products purchased from Miracle or a Miracle authorized reseller and are not transferrable.

Warranties apply only to Miracle products that are erected and installed in conformance with Miracle's installation instructions, and that are maintained and inspected in conformance with Miracle maintenance and operational instructions.

Warranties specifically do not cover Miracle products:

- For cosmetic damage or flaws occurring under normal use, such as surface scratches, minor chips, hairline cracks, dents, marring, efflorescence, color fade (except for shade fabric as noted above), discoloration, corrosion, fraying, or warping of recycled plastic lumber;
- That have been modified, altered, or repaired by unauthorized third parties;
- That have not been used as designed or intended, or misused;
- To which non-Miracle parts have been added or substituted;
- That have been removed from their original location and re-installed elsewhere, without pre-approval by Miracle;
- Or that have been damaged due to excessive wear and tear, vandalism, abnormal use, abuse, negligence, environmental factors (such as wind-blown sand, salt spray, or airborne emissions from industrial sources), extreme weather (such as hail, flooding, lightning, tornados, sandstorms, earthquakes, or wind storms), and acts of God.

THE FOREGOING LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY FOR SELLER'S PRODUCTS, AND IS INLIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, IN LAW OR IN FACT. SELLER SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE, AND ANY IMPLIED WARRANTIES ARISING OUT OF COURSE OF DEALING OR PERFORMANCE OR TRADE USAGE. SELLER SHALL NOT BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, SPECIAL, OR PUNITIVE DAMAGES, OR ANY LOSS OF REVENUE, PROFICT OR USE, ARISING OUT OF A BREACH OF THIS WARRANTY OR IN CONNECTION WITH THE SALE, INSTALLAITON, MAINTENANCE, USE, OPERATION OR REPAIR OF ANY PRODUCT. IN NO EVENT WILL SELLER BE LIABLE FOR ANY AMOUNT GREATER THAN THE PURCHASE PRICE OF A DEFECTIVE PRODUCT.

Consult Miracle's "Glossary of Technical Data for Materials, Processes and Finishes" for specifications of items listed in bold type.

• KIDS' CHOICE 6-12 OCTAGON MEGA TOWER comprises 6' and 12' octagonal decks on common posts with an enclosed center climber for ascending to upper level. Model requires a roof as well as barriers or other play components. Eight-sided decks shall consist of a center deck section (24" x 48" rectangle on both levels to create opening for ladder access) surrounded by four hexagon shaped deck sections to form a single octagon deck with a deck top surface area of 69.3 square feet. The deck length shall be 125.4" post to opposite post and 116" flat edge to flat edge. The deck frame shall be constructed with folded 11 ga. steel sheet forming 3" tall sides. Decking sheets shall be perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Each shall contain deck support members of 3/16" x 2" flat and decking supports of 1/4" x 1" flat. Each section shall be solid welded. Post assemblies shall be uncapped in readiness for roof attachment. A center climber shall comprise a ladder and enclosure assembly. The ladder shall be constructed of two 1-1/2" pipe side rails with seven horizontal 1" pipe rungs solid welded between them. Two vertical spokes of 3/4" x 1" oval tube shall be solid welded to bottom rung. Top ends of the rails shall contain 3/8" threaded inserts for field attachment to upper deck. Bottom end of ladder shall be a 7 ga. steel sheet punched mounting plate for field assembly shall be 17-1/16". The angle of ascent shall be 69 degrees. The enclosure assembly shall contain side three uprights of 1/4" x 1" oval tube, solid welded. The main enclosure shall have three uprights of 1" pipe, solid welded, in addition to oval uprights. Both enclosures shall be 66-5/16" from top of top rail to bottom runi. The assembly shall contain Yersalok Fastener Style A. The decks shall be finished in Mira-Cote.

• KIDS' CHOICE POSTS: STEEL POSTS: The steel posts each shall be constructed of 5" tube, 11 ga. with a 5" round end cap pressed into its top end. Post and end cap shall have a Mira-Cote finish.

• BRAIDED CLIMBER shall be a twisting, vertical climbing challenge rising to an 8' deck height with arch enclosure. Climber shall comprise two uprights with coped plugs inserted into top ends, and eight rungs. The uprights and rungs shall be constructed of 1" pipe, Gator Grip. Upright shall measure 174-1/16" in length and shall be solid welded to rungs. Top support shall be comprised of 1" pipe, Gator Grip, solid welded. The arch enclosure shall comprise top supports and an arched upright of 1" pipe and spoked infill of 1" tube, all solid welded. For models that have the Nature Arch enclosure, enclosure shall comprise two top supports and arched upright of 1" pipe solid welded. Brackets of 11 ga. galvanized sheet steel are stitch welded to the 1" pipe frame. Boards of 1" x 5.5" recycled plastic and wood composite are fastened to the frame with Fastener Style A hardware. All models shall contain Fastener Style A hardware.

• CURVED LOOP CLIMBERS/UPHILL CLIMBER shall be ground-to-deck climbers, or uphill climber may also be used as a deck-to-deck model, rising either 6' or 8'. The side rails shall be curved 1-1/2" pipe with blind fasteners inside top end, with curved rungs constructed of 1" tube, die formed and welded to side rails (*except Tots' Choice curved loop climber models which shall have side rails of curved* 1" pipe). The deck enclosure assembly for Kids' Choice models shall consist of top supports, a bottom support, an outer upright, and an arched upright, which shall be constructed of 1" pipe, formed, mashed and punched, and vertical rungs which shall be constructed of 3/4" x 1" oval tube with bolting tabs of 11 ga. sheet. The enclosure assembly for Tots' Choice models shall consist of top supports and an arched upright, which shall be constructed of 1" tube formed, mashed and punched. For all systems, the deck enclosure shall be solid welded. Loop climber and handholds shall have a Mira-Cote finish.

• VINE CLIMBERS AND TWISTED VINE CLIMBERS shall feature horizontal rungs on a vertical rail field-assembled to an arched entry deck enclosure. The rungs shall contain a routed leaf design and shall ascend the climber on opposite sides of the rail for Vine Climbers, or slightly offset to wind upward around the rail for Twisted Vine Climbers. The climber rail shall be constructed of 1-1/4" pipe, 10 ga. with mounting plate support tubes of 1" tube solid welded and mounting plates of 7 ga. galvanized also solid welded. Closing support stub ends shall be plastic pipe plugs. The rail's top end shall be swaged and shall have a threaded aluminum insert factory-installed. Leaf pads shall be constructed of **1" pipe**, drilled, formed and mashed, and vertical rungs constructed of **3/4" x 1" oval tube**, all solid welded. Kids' Choice arch enclosure for split decks shall consist of top rails, a receiver tube, an arched upright and outer upright, which shall be constructed of **1" pipe**, drilled, formed and mashed, and vertical and horizontal rungs constructed of **1" pipe**, drilled, formed and mashed, receiver tube constructed of **1.1-1/4" pipe** and vertical and horizontal rungs constructed of **1" tube**, all solid welded. The enclosure assembly shall be constructed of **1" pipe**, drilled, formed and mashed, receiver tube constructed of **1.1-1/4" pipe** and vertical and horizontal rungs constructed of **1" tube**, all solid welded. The enclosure assembly shall be solid welded. Brackets of **11** galvanized sheet steel are stitch welded to the **1" pipe** frame. Boards of **1.* x 5.5"** recycled plastic and wood composite are fastened to the frame with Fastener Style A hardware. The sleeve support shall be constructed of **1.1-1/4" pipe**, **10 ga**, solid welded to the arc. The leaf pads shall have color molded in.

• ELECTRONIC PANELS shall be deck-mounting electronic activity panels are designed to enhance imagination and creative play. Panels play either music or animal noises to incorporate sound and learning into any playground theme. The panels shall be constructed of **Mira-Lene** with a design routed in the front and back. The rung brackets shall be constructed of **1" pipe** with bolting tabs of 11 ga. **A-60 Galvannealed** sheet, all solid **welded**. Each assembly shall contain three (3) "D" size alkaline batteries. Each assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The rung brackets and clamps shall have a **Mira-Cote** finish.

• CYLINDER PANELS shall contain nine cylinders in rows and columns of three which spin independently of one another. Each cylinder shall contain two molded-in graphic images on opposite sides which may be aligned with other cylinders to complete a larger image, a series, a word, or an academic exercise. Kids' Choice models shall include enclosures. The panel shall be constructed of **Rockite** with all corners rounded and shall have cylinder assembly's factory-installed using tamper-proof hardware. The panel assemblies for the Tots' Choice above-deck models shall contain three mounting tabs of 11 ga. **A-60 Galvannealed welded** to the assembly for field attachment to decks. Each cylinder shall be constructed of **Rockite** with molded-in graphics on two "sides." Cylinder axles shall be constructed of **1" pipe**. Enclosures for Kids' Choice models shall each consist of a vertical upright and horizontal stub of **1" pipe** solid welded, drilled and formed. All **Versalok Fasteners** for deck and component attachment shall be **aluminum alloy**. All hardware shall be **Fastener Style A**. The **Rockite** panel and cylinders shall have color molded in. The **Versalok Fasteners**, enclosures and panel tabs shall have a **Mira-Cote** finish.

• FULL ENCLOSURE WITH SEAT (or without) for 14' level of Mega Tower 3-Level Deck shall be designed to fully enclose the area between deck posts, deck and roof (an approximate height of 6'). The enclosure shall comprise welded horizontal and vertical rungs and a seat assembly. The outer uprights, top, middle and bottom rungs and formed seat rails shall be constructed of 1" pipe. The outer uprights shall have mashed and punched bottom ends for field attachment to deck. The inner spokes shall be constructed of 3/4" x 1" oval tube. The seat rails shall have formed and punched bolting brackets of 3/16" x 1-1/4" HR flat. The 19" wide seat shall be constructed of formed 11 ga. sheet perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. When enclosure is assembled to deck, the seat surface shall be approximately 14" from the deck surface. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The enclosure assembly and clamps shall be finished in Mira-Cote. The seat shall be finished in Mira-Therm2 PE.

• IMAGINATION PANELS and Activity Panels shall be constructed of Mira-Lene and shall measure 36-1/2" x 40" with all corners rounded. The panels shall have routered designs, including themes of a space ship panel, general store counter, a barn wall panel, a barn door panel, a barn window panel, a bark teller window, a television front, a puppet stage, a window, a computer screen, a door, a park ranger, a fire truck, a police car, a train engine, a taxi cab, two airplanes (both containing two steering wheel assemblies, one also containing a clear polycarbonate window mechanically fastened to panel), a race car, an alphabet finger maze, an abstract finger maze, a calculator, a bus stop/bench, a rest stop/bench, jump height measurements for a 3' and 5' deck, a sign language alphabet, a Spanish-English translation, a Chinese-English translation, Braille alphabet with riddles, a drum panel, welcome and age appropriate messages. interconnected gears, gear-driven pistons, and sliding tiles. Rung brackets shall be constructed of 1" pipe and 11 ga. A-60 Galvannealed tabs solid welded (except Tots' Choice models which shall have brackets constructed of 1" tube and 11 ga. A-60 Galvannealed tabs solid welded.) The star brackets for the space ship panel shall be constructed of 11 ga. HRPO steel and powder coat painted. The steering wheel(s) on vehicle themed panels shall be constructed of a high-density blow molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection molded polypropylene which shall contain U.V. light stabilizers. The Piston panel and Gear panel each shall contain a clear polycarbonate cover mechanically fastened over sets of 1/4" thick gears (drive gears not covered by window). The gears shall be constructed of high-density polyethylene, which shall turn on nylon bushings, except for the black nylon handles and drive gears which shall turn on bronze bushings. The piston panel shall also contain connecting rod and piston shapes of 1/4" thick high-density polyethylene. The reverse side of both panels shall contain routered text and/or designs. The Sliding Tile panel shall contain 15 movable, tongue-and-groove tiles with routed numerals to be constructed of 1/4" thick high-density polyethylene. The panels and steering wheel shall have molded in color with each panel assembly having a laminated, two-color scheme. Calypso drum panel shall contain 3 rotational molded drums of low-density polyethylene resin. Each drum shall be attached to the panel through a cover plate constructed of 11 ga. galvanized steel sheet with a Mira-Cote finish. Each assembly shall include Fastener Style A hardware and Versalok Fasteners. Panels and steering wheels shall have color molded in, and rung brackets and clamps shall be finished in Mira-Cote.

• ACTIVITY PANEL INSERTS available for Kids' Choice, Tots' Choice and Tots' Choice Expansion. Inserts shall be constructed from a combination of 1/2" thick high-density polyethylene, 3/4" thick high-density polyethylene, 3/1" thick high-density polyethylene, 3/4" thick high-density polyethylene, 3/16" thick polycarbonate, linear low-density polyethylene caps and stainless-steel ball bearings. The inserts shall have interactive, sensory and inclusive play for kids of all abilities including funhouse insert, very buried insert, a-maze-ing insert, four-the-win insert, magical music insert, hypnotize insert and slide & solve insert.

• LOOKOUT TOWER/COMMAND POST shall be curved deck extensions/overhangs and enclosure components for deck systems, designed to stimulate imaginative play. Panels for both models shall be constructed of Rockite, with wall thickness approximately 1/4", formed to extend the deck surface in a semi-circle (approximately 40" long with a radius of 9-7/16") and also formed to serve as an enclosure. The panels shall have four 3/8" threaded inserts factory-installed along bottom of deck edge and a top rung of 1" pipe inserted at the factory for field attachment to deck and posts respectively. The panels shall contain five 2" wide view slots evenly spaced, with all corners rounded. The steering wheel shall be constructed of a high-density blow-molded polyethylene produced from high performance, U.V. stabilized resins with a comprehensive additive package. These resins shall be tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack of injection-molded polypropylene which shall contain U.V. light stabilizers. All Versalok Fasteners for deck and component attachment shall be aluminum alloy, and hardware shall be Fastener Style A. The Rockite panel shall have color molded in. The top rung and Versalok Fasteners shall have a Mira-Cote finish.

• ROCKITE BUBBLE PANEL/ROCKITE PANEL WITH HOLE/VIEW GROOVE PANEL/30 DEGREE LOOK-OUT PANEL shall be constructed of Rockite with all corners rounded. The 30-degree Look-Out panel shall have a molded in 30-degree extension. The enclosure shall consist of uprights and support bars, all constructed of **1"** pipe, drilled and formed (except Tots' Choice models which shall have an enclosure consisting of a top rail of **1"** tube with two tabs and two brackets of 11 ga. galvanized sheet, solid welded). The bubble shall be vacuum formed from clear polycarbonate sheet. The spherical bubble shall measure 24" in diameter and shall be attached to the panel in the factory using tamper proof screws and flat washers. The view groove panel shall have six 2" view slots evenly spaced at 5-1/4" with slant of 20 degrees from vertical. Horizontal rungs shall have a **Mira-Cote** finish. **Rockite** panels shall have color molded in.

• HANDHOLD FOR TRANSFER DECK, WALL ENCLOSURES, RECYCLED PLASTIC ENCLOUSRE, WIRE MESH ENCLOSURE, TREEHOUSE WALL AND ENCLOSURE WALL W/STEERING WHEEL shall be barrier assemblies. Model 714-811 Handhold for Transfer Deck, is a support rail to assist wheelchair users with access to a 12" to 18" transfer point deck. Model 714-816R Recycled Plastic Enclosure, Model 714-816 Wall Enclosure and Model 714-816-1 Wire Mesh Enclosure, are designed to be a barrier on any open side of a deck. Model 714-816-45 Wall Enclosure, Wide Side is designed to be a barrier on the hypotenuse of a right triangle (split) deck. Model 714-817 Treehouse Wall w/Seat is an enclosure with a PVC-dipped steel seat for use on 6-sided and 8-sided decks only. Model 714-900 Wall Enclosure w/Steering Wheel is designed to be a barrier designed to enhance imaginative play. The wall enclosure and wire mesh enclosure supports shall consist of a solid welded handrail assembly with top, side and bottom rails constructed of 1" pipe and spoked infill of 3/4" x 1" oval tube. Wire mesh shall be 3 ga. resistance welded at each intersection. The steering wheel mounting bracket shall be 7 ga. G-90 Galvanized sheet steel welded to the wall enclosure. The recycled plastic enclosure shall comprise a top and bottom rails constructed of 1" pipe and uprights constructed of 3-1/2 x 2-1/2" recycled plastic timbers. The wall enclosure with seat shall comprise a top and bottom rail and end uprights constructed of 3'-1/2 x 2-1/2" recycled plastic timbers. The wall enclosure with seat assembly shall comprise a frame of 1" pipe with bolting brackets of sheet 7 ga. black HR CQ and a factory-assembled 19" wide seat constructed of 11 ga. sheet, perforated with a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. The seat surface shall be approximately 14" from the deck surface. The steering wheel shall be constructed of a high density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive pack

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procedures D-1505, D-1248, D-1693(b), D638, D-790 and D-746. Resin's properties shall exhibit a balance of toughness, rigidity, environmental stress crack resistance, and excellent low temperature impact performance. Wall thickness shall be 1/8". The steering wheel hub cover shall be constructed of injection-molded polypropylene with U.V. light stabilizers. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The wall enclosure assemblies, handhold and clamps shall have a **Mira-Cote** finish. The seat shall be finished in **Mira-Therm**. The steering wheel and plastic timbers shall have color molded in.

• UPPER ENCLOSURE FOR TUBE SLIDE for 14' level of Mega Tower 3-Level Deck shall be designed to fully enclose the area between deck posts, deck and roof (an approximate height of 6'). The tube slide shall not be included in this assembly. The enclosure shall comprise welded horizontal and vertical rungs. The outer uprights and top and bottom rungs shall be constructed of 1" pipe. The inner spokes shall be constructed of 3/4" x 1" oval tube. The bottom rung shall be formed to accommodate the shape of a tube slide assembly's entry panel. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The enclosure assembly and clamps shall be finished in Mira-Cote.

 MIRA-THERM2 SQUARE TRANSFER POINTS shall be designed to assist disabled users gain access to and egress from a deck system. The stair assembly shall be constructed of 11 ga. steel stringers solid welded to 11 ga. steel sheet decking that is perforated in a staggered pattern of 3/8" diameter holes at 5/8" apart center-to-center. Approximate dimensions of stair assembly shall be 26" overall width, 14" deep step tread and 8" high step rise. The 26" square (approximate) transfer point shall be constructed of 11 ga. steel sheet folded to form approximately 3" high sidewalls. The decking shall be perforated as described above. It shall be reinforced with cross braces of 3/16" x 2" HR flat solid welded. The bottom step shall be constructed of 11 ga. steel sheet (with folded edges) perforated as described above. The step shall be approximately 26" wide by 14" deep by 6-1/2" high. Kids' Choice deck enclosures shall be constructed of formed 1" pipe, including a welded upright of the same material. Tots' Choice deck enclosures shall be constructed of 1" pipe and a formed and welded upright of 1" tube. Each deck enclosure assembly shall be drilled for field assembly of a stair handrail and shall have its bottom end mashed and punched for field assembly to deck. Stair handrail assemblies shall be welded upper and lower handrails of formed 1" pipe. Closed handrails shall contain vertical uprights of 3/4" x 1" oval tube welded within. Swaged handrail extensions for field assembly to handrails shall be constructed of 1" pipe. A transfer deck handrail constructed of formed 1" pipe shall be field assembled to one handrail newel upright and transfer point deck edge. Models designed for assembly to 5' and 6' or 6'-6" decks shall contain handrail sleeve supports constructed of 1-1/4" pipe, 10 ga. The "U"-shaped transfer step handrail shall be formed 1" pipe, drilled for field assembly to transfer point deck and bottom step. Its apex shall be 36-1/8" from finished grade. The rung leg shall be 1" pipe with ends mashed and punched for field assembly to bottom step. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The stairs, bottom step, and transfer point deck shall be finished in Mira-Therm2 or Mira-Therm2 PE. The deck enclosures, handrails, extensions, sleeves, leg and clamps shall be finished in Mira-Cote.

• CUPOLA FOR OCTAGON ROOF and Cupola with Flag Pole for Octagon Roof shall cap the open top of standard "Roof for Octagon Decks" models. Model # 714-862-8CF shall feature a flag pole with mounting brackets for a customer-provided flag (24" maximum height). The octagonal, peaked cupola roof top halves, when fastened together, shall measure 36-1/4" O.D. by 13-3/4" high with a 54-degree slope. Each half shall be constructed of 14 ga. HRPO black, perforated with 3/16" holes spaced 1/2" apart center-to-center in a staggered pattern, and shall be punched and solid welded. The octagonal soffit shall measure 33" O.D. (after bending to create bolting tabs on perimeter) with an 18" I.D. opening, and shall be constructed of 11 ga. sheet, punched and formed, with 3/8" weldnuts on its bottom side. Extension trusses each shall comprise a receiver of 4.6875" O.D. by 0.188" thick tube with flange of 11 ga. A-60 Galvannealed sheet solid welded to a stub of 1-1/2" pipe capped by a 1-3/4" by 3/8" thick CRS threaded insert. The interior wall shall be constructed of 24 ga. 304 SS sheet measuring 9-1/4" high by 76-7/8" wide (laid flat), punched and formed. The flag pole mounting plate shall comprise an 8" high receiver of 2" Sch 40 pipe with 3/8" weldnuts and gussets of 11 ga. black sheet on a 21-1/4" O.D. plate of 7 ga. black, all solid welded. The 72" flag pole shall be constructed of 1-1/2" pipe with cross plates of 7 ga. black sheet, formed and punched, welded to its op end and links of 4/0 straight link coil chain solid welded to its side. When assembled, the top of the flag pole shall extend approximately 65-1/2" above the cupola's peak. The assembly shall contain Fastener Style A hardware and Fastener Style B hardware. The cupola top, soffit, extension trusses, flag pole, and flag pole mounting plate shall be finished in Mira-Cote. The interior wall shall have a stainless-steel finish.

• ROOFS WITH PERF STEEL, RECYCLED PLASTIC OR HYBRID PANELS with open tops for square, pentagon, heptagon hexagon and octagon decks shall offer superior durability in most environmental conditions. The steel roof panels shall be constructed of 16 ga. A-60 Galvannealed sheet perforated with 3/16" holes in a pattern, with a formed "lip" at the panel's top edge to provide additional stability during installation. A length of 1" pipe shall be welded to the panel bottom. The recycled roof panels shall be constructed of 100% post consumer recycled plastic and approximately 3/4" thick. A panel mount formed of 11 ga. G-90 galvanized shall be field assembled to trusses and roof panels. Roof truss assemblies shall be constructed of a roof mount stub of either 5" tube for Kids' Choice or 3-1/2" tube for Tots' Choice Expansion, solid welded at 54-degree angle to truss of 5" tube containing bolting tabs on both sides of 11 ga. G-90 galvanized. 5" round end caps shall close open ends of trusses. All hardware shall be Fastener Style A. The steel roof panels and trusses shall have a Mira-Cote finish. The recycled panels shall have a natural finish. The panel mounts shall have a galvanized finish. Note that a hybrid model (with alternating recycled plastic and perf steel roof panels) is not available for heptagon or pentagon decks due to the odd number of panels.

• BIG TIMBER HOLLOW LOG SLIDE shall resemble natural wood in color, form and texture and shall contain molded-in graphics to enhance imaginative play. It shall be designed for assembly to 6'-6" deck systems and shall contain an entry panel. The entry panel and one-piece slide shall be constructed of Rockite with all corners rounded. The slide shall have 6" high side rails, an overall width of 25", and an 18" wide sliding surface. A rung of 1" pipe shall be field assembled to the entry panel for attachment to clamps and deck posts. The entry panel shall measure 38-15/16" wide by 42-5/8" high by 2-7/8" thick with an opening 18-5/8" wide by 28-13/16" high. The front leg shall comprise a length of 2" pipe solid welded to an 11 ga. A-60 Galvannealed mounting bracket. The assembly shall contain Versalok Fasteners and Fastener Style A hardware. The rung, clamps, and front leg shall be finished in Mira-Cote. The slide and entry panel shall have color and graphic images molded in.

Wendell Cross Elementary School State Project No. 151-0295 EA/RR • TUBE SLIDES FOR 12' DECK shall be 30" I.D. tube slides designed to exit a 12' high deck system such as the Mega Tower 2-Level Deck. Bedway length for Model

#714-742-12 (Right Turn) shall be 25'-11". Bedway length for Model #714-742-121 (Straight) shall be 21'-3". Bedway length for model #714-742-123R and # 714-742-123S ("S") shall be 22'-7". All pieces shall be **Rockite** with a 30" inner diameter. Tube-to-tube connections shall have a **Rockite** flange cover. Flange brackets shall be constructed of 7 ga. sheet. The bedway shall have no exposed internal fasteners. The exit section shall be constructed of double-wall **Rockite** with a 25" centerline radius. All slide pieces shall be constructed with a 1/4" to 3/8" wall thickness. The tube joints shall be externally flanged and overlapping, with a 1" wide flange. The slide entry panels shall be **Rockite** and shall measure 47" x 38" x 3" with a molded-in 30 degrees extension and shall be supported by a horizontal rung of **1" pipe**. Support legs of various lengths shall be die-formed of **1-1/4" pipe or 2" pipe**. Brackets shall be constructed of 7 ga. sheet. The front leg shall comprise an upright and a bolting plate. The upright shall be constructed of **2" pipe**. The bling plate shall be constructed of 11 ga. sheet **A-60 Galvannealed** measuring 7" x 7", **welded** to the upright. The Slide Warning sign shall comprise a

Mira-Lene sign panel and two support posts constructed of 2-3/8" OD tube, 12 ga. The assembly shall contain Versalok Fasteners and Fastener Style hardware. The slide assembly shall have color molded in. The support legs, front leg and clamps shall have a Mira-Cote finish.

• LOOP SEAT is an inventive way for kids to rest between play. The Loop Seat shall install between existing deck posts and is situated at a 45-degree angle to create a combination seat and back rest. The Loop Seat shall consist of two loop halves constructed of **2" pipe**, solid **welded** to each other to create one Loop Seat. Each loop half shall measure 32-5/8" in length and 14-13/16" in height. Two 4-3/8" stubs shall be solid **welded** to short sides of Loop Seat and shall be constructed of **2" pipe**. The assembly shall contain **Versalok Fasteners** and **Fastener Style A** hardware. The Loop Seat shall be finished in **Mira-Cote**.

• **RISK MANAGEMENT SIGN** is intended to inform the parents and children that adult supervision is recommended, along with smart play on the equipment in the play area. Sign shall be constructed of aluminum 3003-H14 .08" thick powder coated white with screen printed overlay. Steel frame shall be 2 3/8" OD 12 ga. galvanized steel tube. Extension Tube shall be 2.375 12GA GLV-IL X 24' tube round. Hardware use **Fastener Style A** hardware. Frame shall have a **Mira-Cote** finish.

Technical Data for Processes and Finishes of the Highlighted Items

• aluminum alloy conforms to the following: ASTM 356, ANSI 322, Chrysler MS 2417 and General Motors GM 4323-M. Parts or components constructed of aluminum alloy are either sand cast or die cast. Sand cast aluminum alloy is 319 with tensile strength of 27,000 p.s.i. and yield strength of 18,000 p.s.i. Die cast aluminum alloy is 383.1 with tensile strength of 45,000 p.s.i. and yield strength of 22,000 p.s.i.

• 4/0 straight link coil chain is trivalent zinc finish with a 670-pound working load limit. All chain shall be manufactured to ASTM A467-86A Class CS specifications.

• Mira-Therm2 coated chain is a welded chain with links sufficiently wide to allow them to pass one another freely, eliminating the tendency to kink. The links are low carbon zinc plated steel with a polyvinyl chloride coating.

• Versalok Fasteners (R) are cast aluminum alloy. Each fastener consists of two die cast aluminum alloy "half ring" pieces, which were designed to fasten onto the round posts by use of a male/female interlock. For 3-1/2" post, outside dimension of the completed fastener (joined "half-rings") is 5". For 5" post, outside dimension of the completed fastener is 6-1/2". *Rungs and components* connect to clamps on posts by means of die cast aluminum alloy, two-piece socket receptors which may be assembled to a previously-installed clamp ring and secured to the clamp and component by set screws (and tek screws in some cases). *Decks* connect to clamps on posts by means of die cast aluminum alloy, one-piece deck support castings. The clamp assembly and socket receptor have a **Mira-Cote** finish. Kids' Choice components with **2" pipe** mounting points attach to 5" posts using aluminum alloy sand cast header supports.

- 5" round end cap is die cast aluminum alloy.
- Fastener Style A is a corrosion resistant, 18-8, stainless steel, vandal resistant fastener.
- Fastener Style B is an all aluminum blind rivet or aluminum drive rivet with stainless steel pin. Both are corrosion resistant and vandal resistant fasteners.
- GATOR GRIP (TM) is a three-dimensional textured pattern exclusive to Miracle, embossed in steel to a depth of .014" to .017".
- G-90 galvanized indicates that a coating of .90 ounces of zinc per square foot has been applied on each surface side.
- A-60 Galvannealed indicates that a coating of .60 ounces of zinc per square foot alloyed with substrate steel has been applied on each surface side.

• Mira-Cote (TM) is a Super Durable formulation of a polyester powder coating finish that is applied to a thickness of 3-5 mil. This finish gives metal parts long term protection from chipping, fading and peeling. Miracle's finishing system washes the metal parts with detergent and etches the metal for optimum adhesion. The part is then rinsed clean with water. Next the part is coated with a non-chromic sealer and dried. The Mira-Cote powder is then applied electrostatically to the metal parts. The metal parts are then baked at a high temperature to fuse a hard, smooth durable finish to the metal. Mira-Cote has an impact value of 160 in. lbs., flexibility value of 180 degree-1/4" mandrel, shore hardness value H and a crosshatch adhesion of 100%. Mira-Cote is tested in accordance with ASTM D-792, D-523, D-2794, D-1737, D-3363, D-3359 (b), B117 and D-2247.

• Mira-Lene (TM) is compression-molded, 3/4" thick, high density polyethylene that has been specifically formulated for optimum U.V. stability and color retention. Compression-molded products have a density of .952 g/cm3 per ASTM D1505 and tensile strength of 3900 PSI per ASTM D638.

• Mira-Therm2 PE is a non-toxic copolymer polyethylene coating applied to a thickness of 1/16". Mira-Therm2 PE contains U.V. light stabilizers, anti-microbial additives and color pigments. Mira-Therm2 PE contains no orthopthalates or other banned substances. Mira-Therm2 PE is a proprietary brand of PE coating. Materials are tested in accordance with ASTM D-638, ASTM D-412, ASTM D-2240 and ASTM D-1004. Mira-Therm2 PE meets the FMVS 302 flammability rating, the requirements of California State Law and the 2008 CPSI Act.

- 1" pipe is GATOR GRIP embossed 14 ga., 1" pipe sized tube (1.315" OD; approx. 1-5/16" OD.)
- 1-1/4" pipe is 13 ga., 1-1/4" pipe sized tube (1.660" OD; approx. 1-11/16" OD.)
- 1-1/4" pipe, 10 ga. is 10 ga., 1-1/4" pipe sized tube (1.660" OD; approx. 1-11/16" OD.)
- 1-1/2" pipe is 13 ga., 1-1/2" pipe sized tube (1.900" OD; approx. 1-7/8" OD.)
- 2" pipe is 12 ga., 2" pipe sized tube (2.197" OD approx.) galvanized
- 2" Sch 40 pipe is 2" schedule 40 galvanized pipe (2.375" OD; approx. 2-3/8" OD.)
- plastic pipe plugs are injection molded polypropylene containing U.V. light stabilizers.

• Rockite (R) (Rotational Molded Polyethylene) is a low-density polyethylene produced from high performance, U.V. stabilized rotational molding grade resins with a comprehensive additive package. These resins are tested in accordance with ASTM testing procedures D-1505, D-1248, D-1693(b), D- 638, D-790 and D-746. Resin's properties exhibit a balance of toughness, rigidity, environmental stress crack resistance and excellent low temperature impact performance. Wall thickness of molded components is 3/16" to 1/4".

• 3/4" x 1" oval tube is 15 ga. wall. It is fabricated of 1008 hot rolled, Flo-Coat, galvanized tube manufactured from steel, cold formed and high frequency induction welded continuously. It conforms to ASTM A-135 and ASTM A-500 and is tested in accordance with ASTM E-8. The minimum mechanical properties of the tube are yield strength of 50,000 p.s.i. and tensile strength of 55,000 p.s.i.

- 1" tube is 1" OD, 15 ga. fluted round tube. It conforms to ASTM A-500.
- 3-1/2" tube is 3-1/2" OD, 13 ga. round tube. It conforms to ASTM A-500.
- 5" tube is 5" OD, 13 ga. round tube. It conforms to ASTM A-500.
- 5" tube, 11 ga. is 5" OD, 11 ga. round tube. It conforms to ASTM A-500.

• welded refers to welds that are made by certified welders, tested in accordance with AWS D1.1-94, structural welding code specifications for steel. Welds conform to AWS A5.17 ASME SFA-5.17 EML3K and AWS A-5.18ER70S-3 ASME SFA-5.18 ER70s-3 LE332- C and LE-559-L.

• Specification Policy: Specifications were current at the time of publication. Miracle Recreation Equipment Company has a policy of ongoing product improvement and therefore reserves the right to modify specifications or discontinue products without notice.

POURED-IN-PLACE RUBBER TPV SURFACING FOR PLAYGROUNDS

PART 1 – GENERAL

1.01 WORK INCLUDED

This work includes furnishing and installing the No Fault Safety Surface. The surfacing Manufacturer/installer shall be responsible for all labor, materials, tools, and equipment to perform all work and services for the installation of the surface.

1.02 DESCRIPTION OF SYSTEM & GENERAL CONDITIONS

No Fault Safety Surface shall be poured-in-place and trowelled to provide for a resilient, seamless rubber surface installed over the specified rigid base. No Fault Safety Surface is comprised of an SBR base mat and TPV colored cap, with both layers being mixed with a non-flammable, non-shrinking, one part moisture cured polyurethane adhesive as recommended by the Manufacturer and capable of bonding to concrete, asphalt or compacted stone. No Fault Safety Surface shall be stable and slip resistant to comply with, meet or exceed all requirements set forth in the Americans with Disabilities Act (ADA) and the American Standard Testing Methods (ASTM and Consumer Products Safety Commission (CPSC) for manufactured Safety Surfaces as detailed below.

1.03 QUALITY ASSURANCE

A. Applicable Standards

- 1. Impact Attenuation ASTM F 1292: Surfacing within playground equipment use zones shall meet or exceed the performance requirements of CPSC, ASTM F 1292 and/or CSA Z614-98 that a surface yield both a peak deceleration of no more than 200 g's and a Head Injury Criteria (HIC) value of no more than 1,000 for a head-first fall from the highest accessible portion of play equipment being installed as shown on drawings.
- 2. Coefficient of Friction ASTM D2047
- 3. Surface Frictional Properties & Skid Resistance ASTM E303
- 4. Permeability ASTM D2047
- 5. Flammability of Finished Floor Cover ASTM D2859
- 6. Accessibility of Surface Systems ASTM F1951
- 7. Tear Strength ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic
- 8. Tensile Strength ASTM D412 Standard Test Methods for Vulcanized Rubber Elastomers and Thermoplastic Elastomers: Tensile Strength must be equal to or greater than 80Psi.
- 9. Solar Reflective Index (SRI) ASTM C-1959 and E-903
- 10. IPEMA Certification Required
- B. Installer Qualifications
 - 1. All materials under this section shall be installed by the Manufacturer or its Certified Installers. The playground surfacing installation shall not be performed by anyone other than the product Manufacturer or its Certified Installers.
 - 2. The installation crew will include at least one member that has completed the OSHA 10 Hour Training course and received certification
- C. Contractor Pre-Qualifications
 - 1. All bidders must have a current Connecticut Contractor's License at or before the time of bid opening date.
 - 2. A list of twenty five (25) surfacing projects completed with a similar product. List shall include names of project representatives and respective telephone numbers. At least five (5) of these projects must be at least five (5) years old. This list shall also contain projects which require the same level of difficulty, size of project, type of project, e.g. color transitions and special graphics.
 - 3. All bidders must also submit Material Safety Data sheets (MSDS) and Product Data Sheets on all materials.

1.04 SUBMITTALS

- A. One original hard copy of the submittal package will be supplied with additional copies on individual CD's. Upon request only hard copies shall be supplied.
- B. Manufacturer's descriptive data and installation instructions.
- C. Manufacturer's details showing depths of wear surface and sub-base materials, anchoring systems and edge details.
- D. A list of all materials and components to be installed, including Manufacturer's name, storage requirements, and precautions, and shall state chemical composition and test results to which material has been subjected in compliance with these specifications.
- E. Test results to substantiate that the product meets or exceeds all ASTM & ADA requirements for each standard listed in Section 1.03 Quality Assurance. Test must be performed and certified by an independent laboratory.
- F. Copy of IPEMA Certification.
- G. Documentation of Contractor Pre-Qualification as stated in Section 1.03 Quality Assurance.
- H. Documentation of Insurance Requirements as stated in Section 1.03 Quality Assurance.
- I. Statement signed by the Manufacturer of the synthetic safety surfacing attesting that all materials under this section shall be installed by the Manufacturer or its Certified Installers.
- J. A listing of at least twenty five (25) installations where products similar to those proposed for use have been installed and have been in successful service for a minimum period of three (3) years. This list shall include Owner or purchaser, address of installation, date of installation, contact person, and phone number.
- K. Upon request, a sample specimen of safety surface proposed for this project.
- L. Upon request, a list of all organizations and affiliations of the company offering the product(s).

1.05 DELIVERY, STORAGE and HANDLING:

Materials and equipment shall be delivered and/or stored in accordance with the Manufacturer's recommendations.

1.06 PROJECT SITE CONDITIONS:

- A. Synthetic safety surfacing shall be installed on a dry subsurface, with no prospect of rain within the initial drying period, at temperatures recommended by the Manufacturer.
- B. Installation in weather condition of extreme heat, temperatures less than 40 degrees (F), and/or high humidity may impact cure time, and/or the structural integrity of the final product. Immediate surroundings of the site shall be reasonably free of dust conditions and poor particulate air quality will impact the final surface look.
- C. The Manufacturer's installation manager shall reserve the right to control the project schedule installation based on such factor without penalty to No Fault Sport Group, LLC.
- D. Safety surfacing shall be installed after the playground equipment is installed unless otherwise noted.
- E. Surface installation shall be coordinated by the project manager or designated individual of playground equipment and sub-base installation, with No Fault Sport Group's local production manager and in accordance with No Fault's sub-base requirements.

1.07 WARRANTY:

Surfacing shall maintain required impact attenuation characteristics for a period of three (3) years and guaranteed against defects in workmanship and material for a period of no less than five (5) years or as specified and agreed upon per contract.

PART 2 – PRODUCTS

Product shall be **No Fault Safety Surface** as manufactured and sold by No Fault Sport Group, LLC. No Fault Safety Surface shall consist of synthetic poured-in-place safety surfacing meeting the requirements of this specification and comprised of SBR, TPV and polyurethane binder. It shall be manufactured and installed by No Fault Sport Group, LLC (866-637-7678 <u>www.nofault.com</u>) and its certified installation crews.

NOTE – Other products will be allowed only if prior approved as per Section 2.02 Product Substitutions & Approved Equals
 2.01 MATERIALS

- A. Polyurethane Binder
 - 1. Polyurethane Binder for safety surfacing shall be specifically designed for use with rubber granule material for outdoor installations.
 - 2. No toluene diphenyl isocyanate (TDI) shall be used.
 - 3. No filler materials shall be used in urethane such as plasticizers and the catalyzing agent shall contain no heavy metals.
 - 4. Weight of polyurethane shall be no less than 8.5 lbs/gal (1.02 Kg/1) and no more than 9.5 lbs/gal (1.14 Kg/1)
 - 5. COLOR TINTED BINDER WILL NOT BE ALLOWED.
 - 6. Aromatic or Aliphatic Polyurethane Binder may be used.
- B. SBR (Impact Layer)
 - 1. Only 100% shredded styrene butadiene rubber may be used
 - 2. Strands of SBR may vary from 0.5 mm 2.0 mm in thickness by 3.0 mm 20 mm in length.
- C. TPV (Wear Surface)
 - 1. TPV material shall be angular granules with a Shore A Hardness of $6SA \pm 5$, a Tensile Strength equal to or greater than 3.0 Mpa, and an Elongation at Break greater than 400%.
 - 2. Size of TPV particles shall be not less than 1.00 mm, or greater than 4.0 mm across.
 - 3. STRAND, SHAVED, CHIPPED OR SHREDDED MATERIAL OF ANY TYPE IS NOT ACCEPTABLE.

2.02 PRODUCT SUBSTITUTIONS & APPROVED EQUALS

- A. <u>All product substitutions must be submitted for preapproval at least fourteen (14) days prior to bid opening date.</u> <u>A complete submittal package, as outlined in Section 1.03 Submittals, must be provided before a substitute product will be considered for preapproval. If the product submitted for preapproval cannot meet all requirements of the submittal package, it will not be considered.</u>
- B. Once all products submitted for substitution have been reviewed, a list of the approved substitutes will be circulated and made available to bidders.

PART 3 – EXECUTION

3.01 SUB-BASE REQUIRMENTS

- A. Owner or Owner's representative shall provide sub-surface in accordance with Manufacturer's recommendation for the project location and application.
- B. The base shall be concrete, asphalt, or compacted stone installed in accordance with Manufacturer's written specifications.
- C. The base shall have the specific <u>minimum</u> slope (2%) and shall vary no more than 1/8" when measured in any direction with a 10' foot straight edge. Verify that sub-surfacing drainage, <u>if required</u>, has been installed to provide positive drainage.
- D. Tolerance of concrete or bitumininous subsurface shall be within 1/8 inch (3.0 mm) in 10 feet (3050 mm). Tolerance of aggregate subsurface shall be within 3/8 inch (10mm) in 10 ft (3050 mm).
- E. Verify that aggregate subsurface has been fully compacted to 90- 95 percent or greater.
- F. Asphalt base shall be allowed to cure a minimum of fourteen (14) days and new concrete shall be allowed to cure a minimum of seven (7) days prior to commencement of surfacing.
- G. All sub-bases shall be approved by Owner or Owner's Representative prior to installation of the safety surface.
- H. Alternate sub-base material must have prior approval from Manufacturer.

3.02 PREPARATION

- A. Scheduling No Fault Safety Surface shall be installed after other sub-contractors are complete; the area is free from pedestrian traffic, and under the conditions as outlined in Section 1.06 Project Site Conditions.
- B. Cleaning The entire subsurface shall be clean, dry and free from any foreign and loose material.

3.03 INSTALLATION

- A. SBR Cushion Layer
 - 1. Polyurethane binder and SBR will be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations.
 - 2. Binder shall be not less than 14 percent (14%), nor more than 22 percent (22%), of the total weight of rubber, and shall provide 100 percent (100%) coating of the particles.
 - 3. The SBR and binder mixture will then be poured-in-place by means of screeding, and hand-trowelled to maintain a seamless application.
 - 4. Installation method shall use a measured screed rod 1/16" thicker than the required depth.
 - 5. Whenever practical, SBR cushion layer shall be installed in one continuous pour on the same day. When a second pour is required, fully coat the edge of the previous work with polyurethane binder to ensure 100 percent bond with new work. Apply adhesive in small quantities so that new SBR mixture can be placed before the adhesive dries.
 - 6. Total depth of the safety surface system throughout the playground equipment use zone shall be as required to meet the applicable critical fall height requirements or as specified by Owner or Architect. Therefore, thickness of the SBR cushion layer will be total depth less 3/8" or ½" (minimum required thickness of the TPV wear course layer).
 - 7. Edges Surface edges shall be flush with edge of adjacent area or tapered to provide safe transition. When connecting to a concrete curb or border the hardened edge shall be primed with adhesive.
 - 8. The SBR cushion layer surface shall be porous.
- B. TPV Wear Course Layer
 - 1. Polyurethane binder and TPV will be mixed on site in a rotating tumbler to ensure components are thoroughly mixed and are in accordance with manufactures recommendations.
 - 2. The polyurethane binder shall be not less than 20 percent (20%) of total weight of rubber used in the wear surface, and shall provide 100 percent (100%) coating of the particles.
 - 3. The TPV and polyurethane binder mixture will then be poured-in-place by means of screeding, and hand-trowelled to maintain a seamless application.
 - 4. Installation method shall use a measured screed rod 1/16" thicker than the required depth.
 - 5. The cap will have a minimum weight of 2.2 pounds per square foot for 3/8" and 2.9 pounds per square foot for ½".
 - 6. Thickness of wear surface shall be a minimum 3/8" or $\frac{1}{2}$ ".
 - 7. The wear layer shall be porous.
 - 8. If graphic designs and color transitions are used, they shall be full wear course depth. Color(s) to be determined by architect.
 - 9. Edges Surface edges shall be flush with edge of adjacent area or tapered to provide safe transition.
 - 10. Large Areas All areas in excess of 2,000 sq. ft. or that require adjacent color pours will have a cold joint or seam due to the nature of the installation process. Although seldom visible, large areas or adjacent colors require the No Fault Safety Surface material to be installed on separate days.
 - 11. Color: The wear course shall be a blend of 50% Black and 50% Standard Color (Terra Cotta Red, Tan, Blue or Green) chosen by the architect or Owner during the submittal process, unless otherwise stated on plans.

3.04 PROTECTION

A. The synthetic safety surface shall be allowed to fully cure in accordance with Manufacturer's instructions. The surface shall be protected by the Owner from all traffic during the curing period of 48 to 72 hours after surface installation is complete, or as instructed by the Manufacturer.

B. Surface installation crew shall be responsible for the protection of No Fault Safety Surface during the installation process. Owner or General Contractor shall be responsible for the protection of the surface during the crew's off hours and during the curing period upon completion of the installation.

3.05 CLEAN UP

- A. Manufacturer's installers shall not leave adhesive on adjacent surface or play equipment. Spills of excess adhesive shall be promptly cleaned.
- B. Manufacturer's installers shall properly dispose of all material and packing waste before leaving the job site.
- C. Owner or contractor shall be responsible for supplying a dumpster at job site for all waste associated with installation of the safety surface.

FOR INDIVIDUAL PROJECT SPECIFICATIONS OR OTHER INFORMATION INCLUDING FALL HEIGHT REQUIREMENTS PLEASE CONTACT NO FAULT SPORT GROUP, LLC 866-637-7678 (toll free) <u>WWW.NOFAULT.COM</u>

WENDELL CROSS ELEMENTARY **1255 HAMILTON AVENUE** WATERBURY, CT 06706 PLAYSCAPE PLANS AND DETAILS STATE PROJECT NO. 151-0295 EA/RR PHASE IV 1/1/2021

BUILDING COMMITTEE JASON VAN STONE, CHAIRMAN CATHERINE N. AWWAD KAREN E. HARVEY CHARLES PAGANO, VICE CHAIR **KAREN E. HARVEY** ANN M. SWEENEY ANN M. SWEENEY JASON VAN STONE







FRIAR ARCHITECTURE 21 TALCOTT NOTCH ROAD FARMINGTON, CONNECTICUT 06032

MAYOR

NEIL M. O'LEARY

SUPERINTENDENT OF SCHOOLS VERNA D. RUFFIN, Ed. D.

INDEX OF DRAWINGS

Y	SC	HO	OL

DRAWINGS FOR REFERENCE ONLY SITE LAYOUT PLAN C-3.0 SITE GRADING PLAN C-4.0 C-4.1 SITE DRAINAGE PLAN

PLAY EQUIPMENT

PE1.2

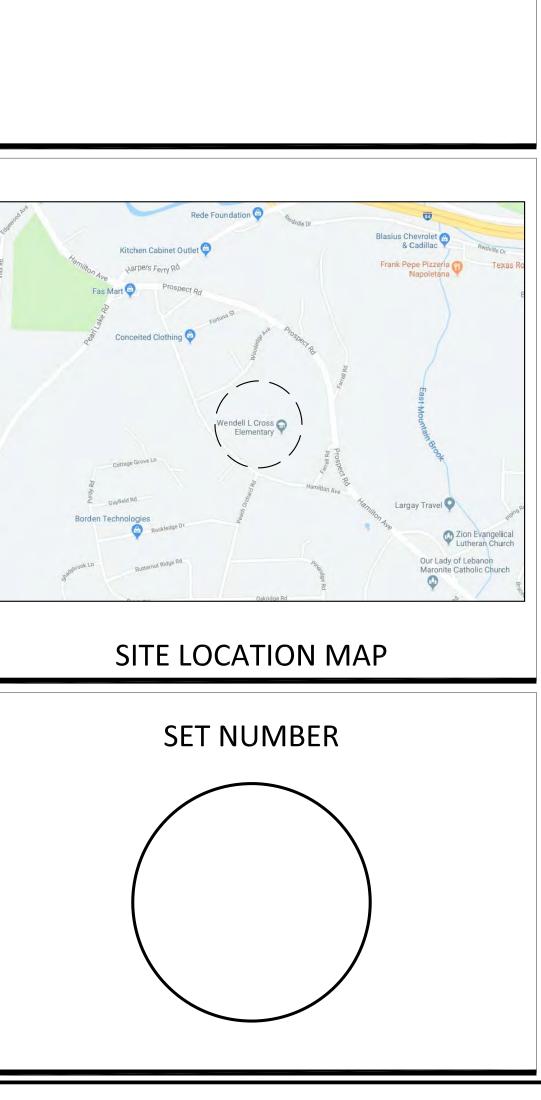
PE1.1 PLAY AREA LAYOUT PLAY AREA SURFACING FOOTING PLAN PLAY AREA ELEVATIONS PLAY AREA EQUIPMENT PERSPECTIVE

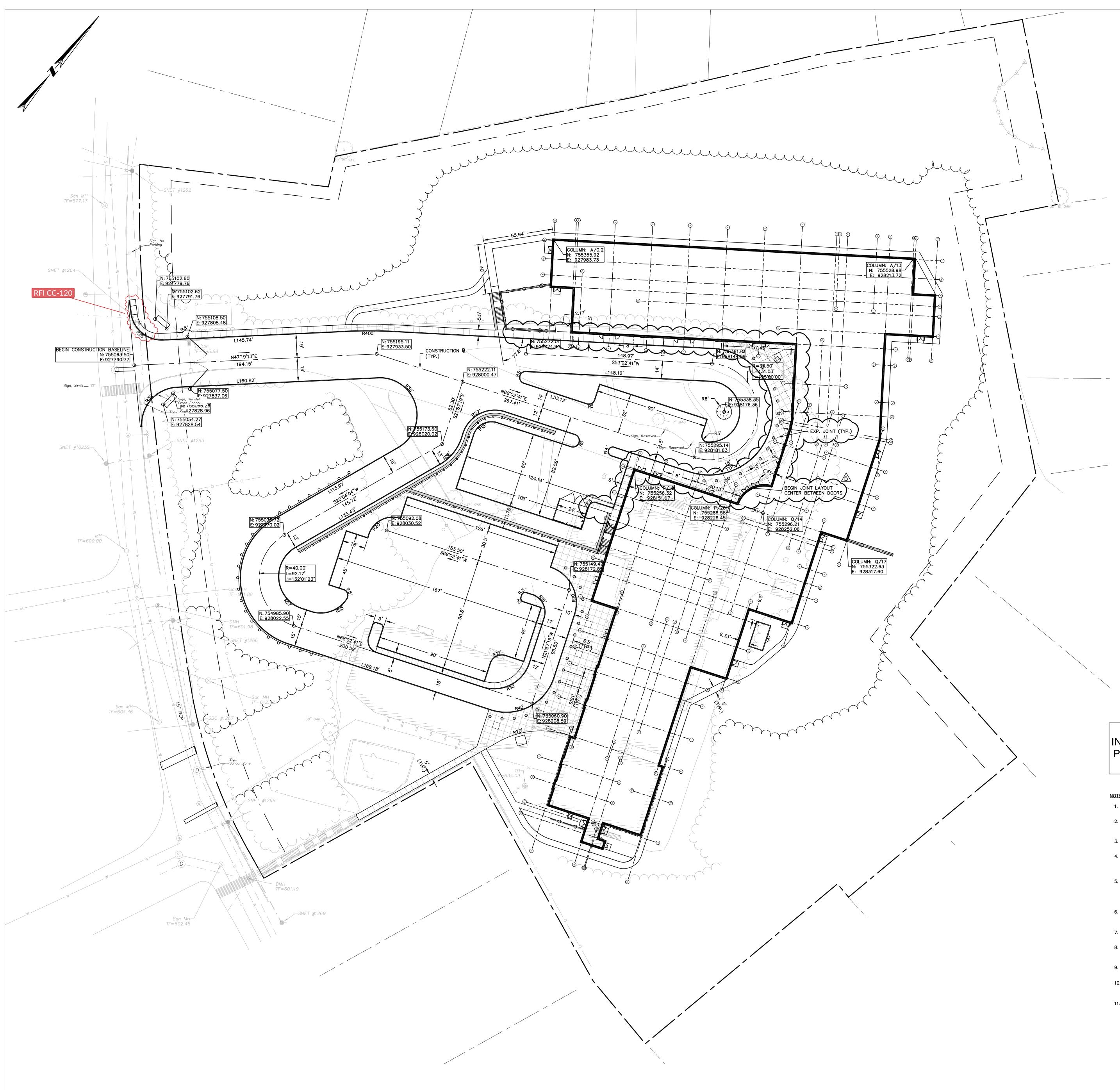
BUILDING OFFICIAL: E-Gil Graveline	E. Sul Showdine	2/2/21 IDATE
FIRE MARSHAL:	And Agrille	2)21/21
SECTION 504 OFFICIAL		2/2/21 [DATE]
HEALTH INSPECTOR:	BUCMATURE)	213b

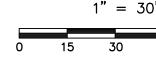
BOARD OF EDUCATION

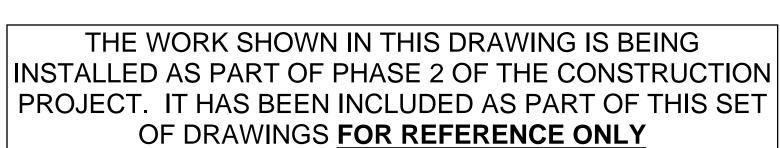
MAYOR NEIL M. O'LEARY CATHERINE N. AWWAD ELIZABETH C. BROWN JUANITA P. HERNANDEZ CHARLES E. PAGANO MELISSA SERRANO-ADORNO CHARLES L. STANGO THOMAS VAN STONE, SR.





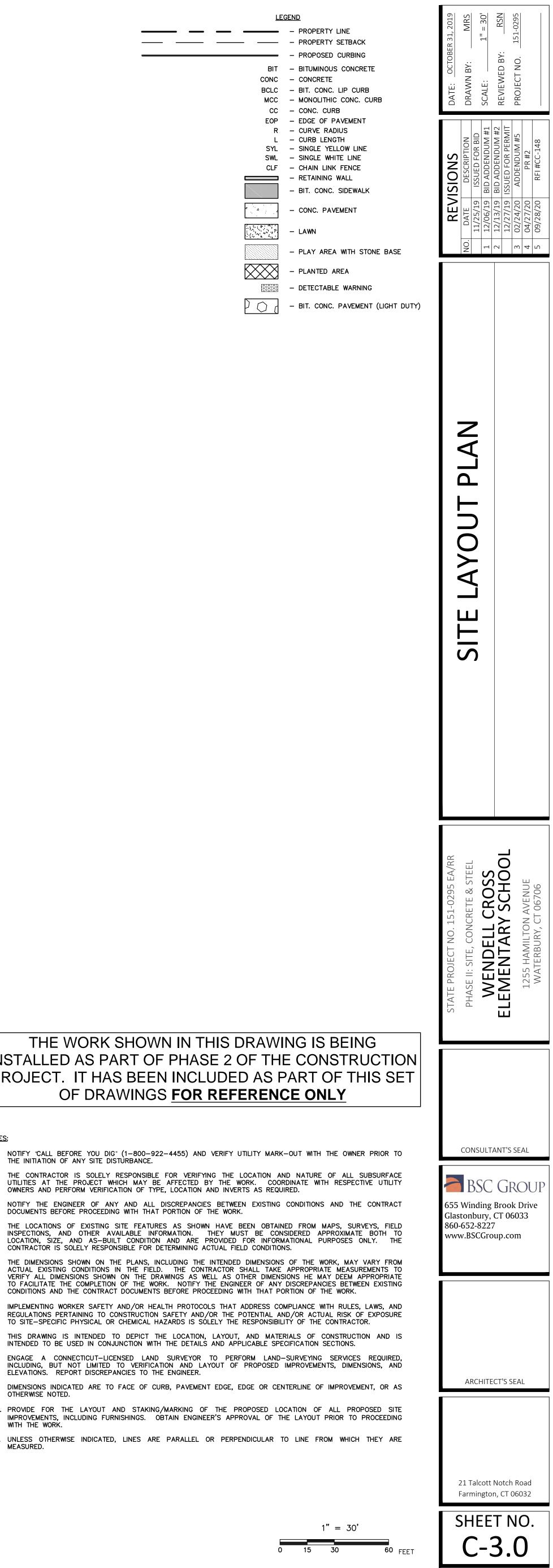


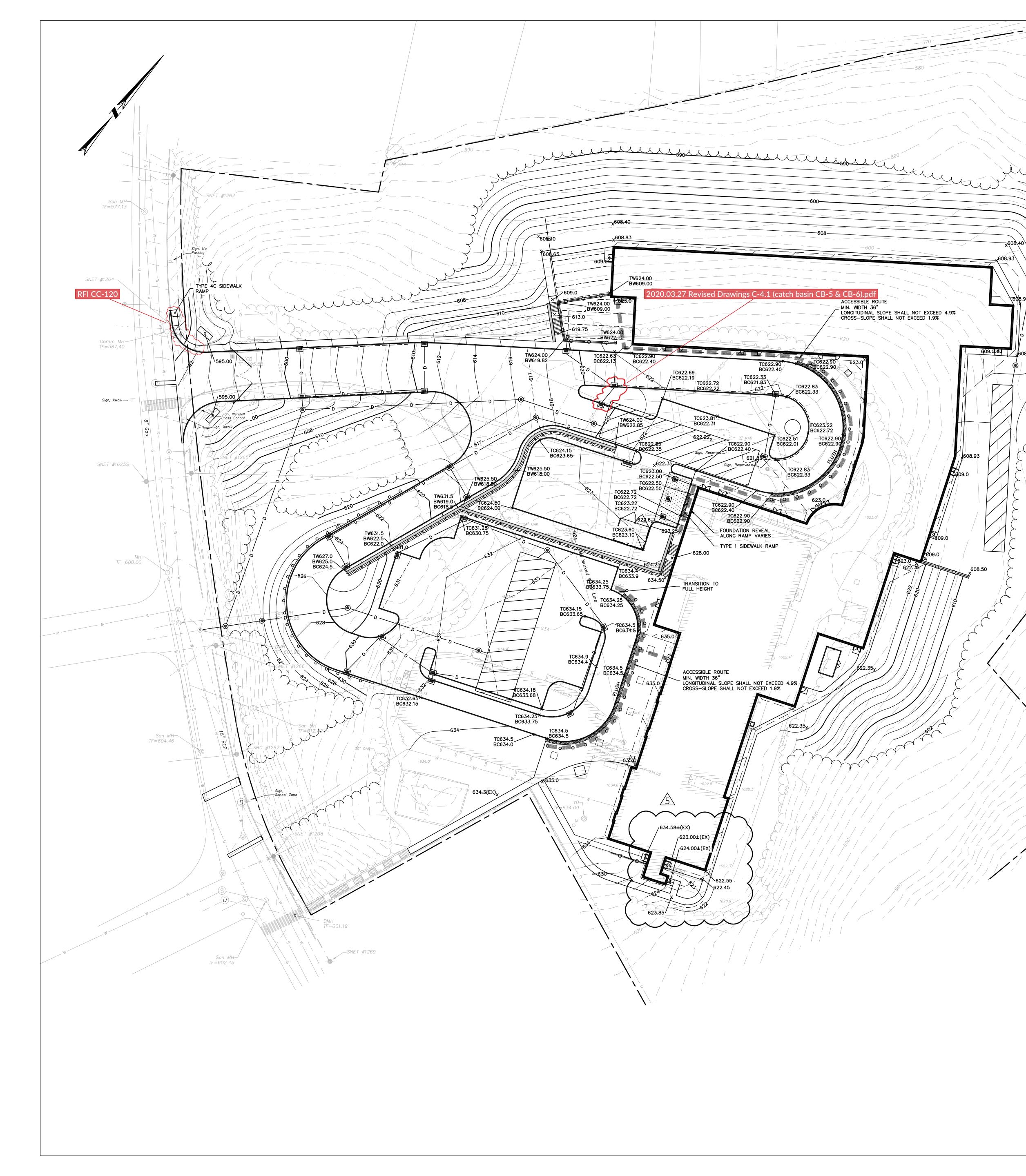


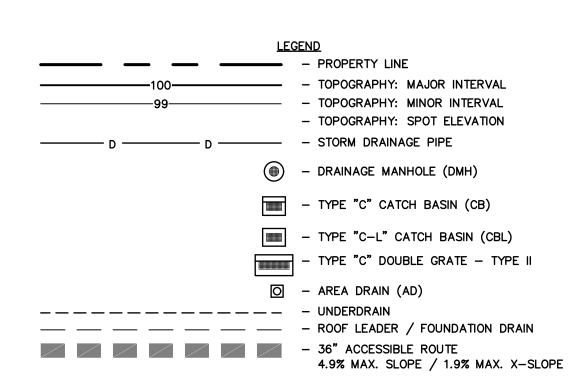


NOTES:

- 1. NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFYING THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
- 3. NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 4. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS, FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
- 5. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 6. IMPLEMENTING WORKER SAFETY AND/OR HEALTH PROTOCOLS THAT ADDRESS COMPLIANCE WITH RULES, LAWS, AND REGULATIONS PERTAINING TO CONSTRUCTION SAFETY AND/OR THE POTENTIAL AND/OR ACTUAL RISK OF EXPOSURE
- TO SITE-SPECIFIC PHYSICAL OR CHEMICAL HAZARDS IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. 7. THIS DRAWING IS INTENDED TO DEPICT THE LOCATION, LAYOUT, AND MATERIALS OF CONSTRUCTION AND IS
- INTENDED TO BE USED IN CONJUNCTION WITH THE DETAILS AND APPLICABLE SPECIFICATION SECTIONS.
- 8. ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF PROPOSED IMPROVEMENTS, DIMENSIONS, AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
- 9. DIMENSIONS INDICATED ARE TO FACE OF CURB, PAVEMENT EDGE, EDGE OR CENTERLINE OF IMPROVEMENT, OR AS OTHERWISE NOTED. 10. PROVIDE FOR THE LAYOUT AND STAKING/MARKING OF THE PROPOSED LOCATION OF ALL PROPOSED SITE
- WITH THE WORK. 11. UNLESS OTHERWISE INDICATED, LINES ARE PARALLEL OR PERPENDICULAR TO LINE FROM WHICH THEY ARE MEASURED.



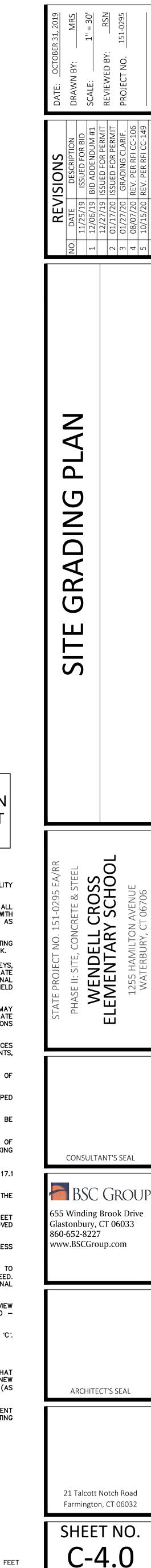


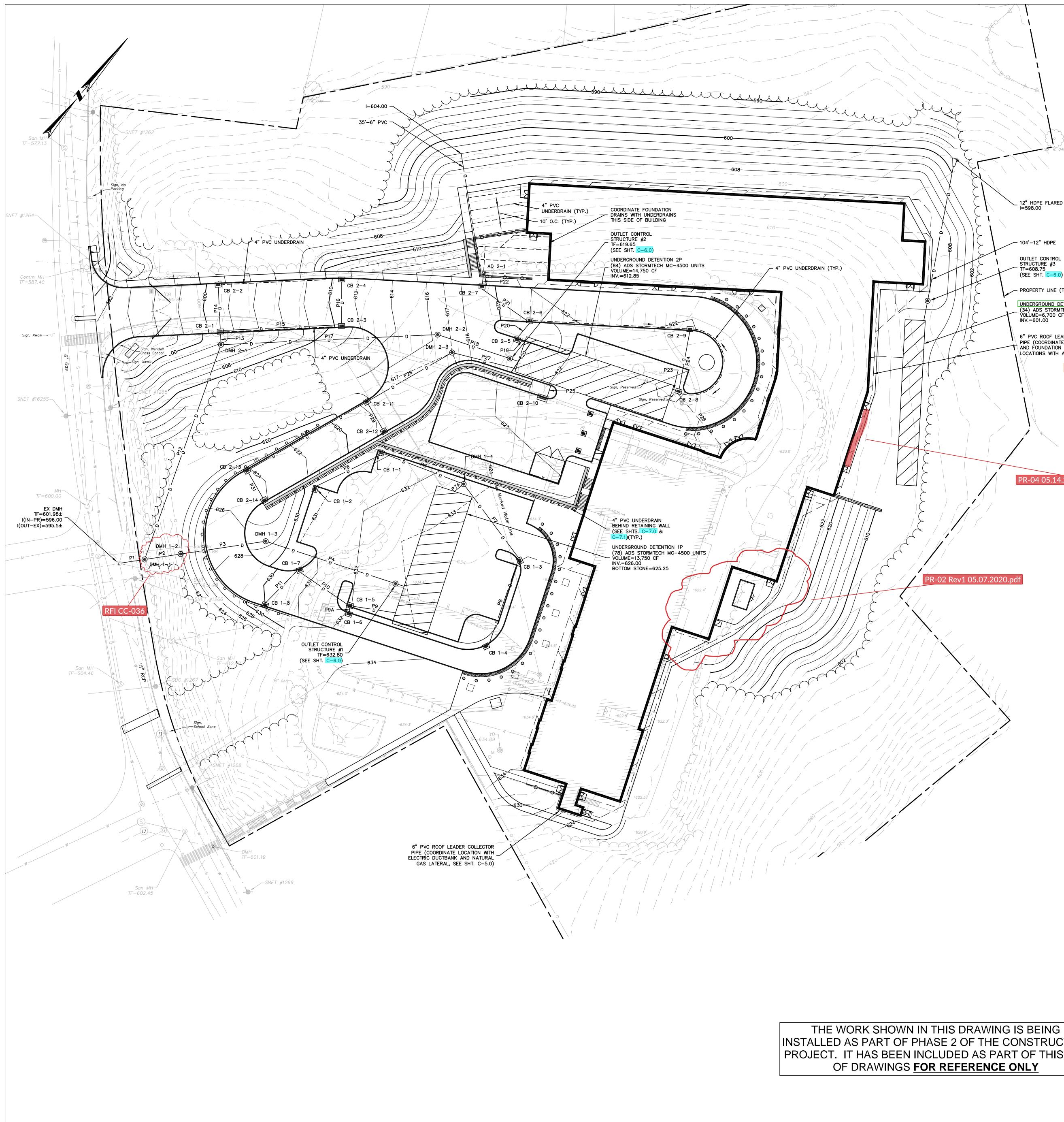


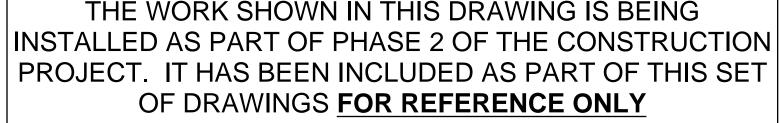
THE WORK SHOWN IN THIS DRAWING IS BEING INSTALLED AS PART OF PHASE 2 OF THE CONSTRUCTION PROJECT. IT HAS BEEN INCLUDED AS PART OF THIS SET OF DRAWINGS FOR REFERENCE ONLY

NOTES:

- 1. CONTRACTOR SHALL NOTIFY "CALL BEFORE YOU DIG" (1-800-922-4455) AND VERIFY UTILITY MARK-OUT WITH THE OWNER PRIOR TO THE INITIATION OF ANY SITE DISTURBANCE.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR VERIFICATION OF THE LOCATION AND NATURE OF ALL SUBSURFACE UTILITIES AT THE PROJECT WHICH MAY BE AFFECTED BY THE WORK. COORDINATE WITH RESPECTIVE UTILITY OWNERS AND PERFORM VERIFICATION OF TYPE, LOCATION AND INVERTS AS REQUIRED.
- 3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY AND ALL DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 4. THE LOCATIONS OF EXISTING SITE FEATURES AS SHOWN HAVE BEEN OBTAINED FROM MAPS, SURVEYS FIELD INSPECTIONS, AND OTHER AVAILABLE INFORMATION. THEY MUST BE CONSIDERED APPROXIMATE BOTH TO LOCATION, SIZE, AND AS-BUILT CONDITION AND ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL FIELD CONDITIONS.
- 5. THE DIMENSIONS SHOWN ON THE PLANS, INCLUDING THE INTENDED DIMENSIONS OF THE WORK, MAY VARY FROM ACTUAL EXISTING CONDITIONS IN THE FIELD. THE CONTRACTOR SHALL TAKE APPROPRIATE MEASUREMENTS TO VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS AS WELL AS OTHER DIMENSIONS HE MAY DEEM APPROPRIATE TO FACILITATE THE COMPLETION OF THE WORK.
- 6. ENGAGE A CONNECTICUT-LICENSED LAND SURVEYOR TO PERFORM LAND-SURVEYING SERVICES REQUIRED, INCLUDING, BUT NOT LIMITED TO VERIFICATION AND LAYOUT OF PROPOSED IMPROVEMENTS, DIMENSIONS, AND ELEVATIONS. REPORT DISCREPANCIES TO THE ENGINEER.
- 7. UNLESS OTHERWISE INDICATED, ALL DISTURBED AREAS SHALL BE RESTORED WITH SIX (6) INCHES OF LOAM, SEEDED, FERTILIZED, AND MULCHED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED.
- 8. COMPLY WITH CONNECTICUT BUILDING CODE FOR ALL SITE CONSTRUCTION, INCLUDING HANDICAPPED ACCESSIBILITY.
- 9. THE CROSS-SLOPE OF ANY SIDEWALK, WALKWAY, OR OTHER PEDESTRIAN SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).
- 10. ACCESSIBLE ROUTES SHALL COMPLY WITH CONNECTICUT BUILDING CODE. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).
- 11. RAMPS SHALL COMPLY WITH CT BUILDING CODE, REF. 2012 IBC SECTION 1010 AND ICC/ANSI A117.1 2009 CHAPTER 4, SECTION 405.
- 12. VERIFY ALL GRADES AND SLOPES PRIOR TO CONCRETE PLACEMENT. REPORT DISCREPANCIES TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 13. PROPOSED GRADES INDICATE DESIGN INTENT. VERIFY ELEVATIONS AND MAKE ADJUSTMENTS TO MEET FIELD CONDITIONS. DO NOT PROCEED WITH ANY ADJUSTMENT OR FIELD MODIFICATION UNTIL APPROVED
- BY THE ENGINEER. 14. GRADE TRANSITION BETWEEN TOPOGRAPHIC LINES AND SPOT GRADES SHALL BE UNIFORM UNLESS
- OTHERWISE INDICATED.
- 15. UNLESS OTHERWISE INDICATED, BLEND TRANSITIONS IN ELEVATION BETWEEN NEW WORK AND AREAS TO REMAIN AT A MAXIMUM SLOPE OF 1V: 2H AND RESTORE WITH FOUR (4) INCHES OF LOAM AND SEED. PROVIDE ADDITIONAL EROSION CONTROLS AS REQUIRED. COORDINATE WITH ENGINEER IF DIMENSIONAL CONSTRAINTS REQUIRE STEEPER SLOPES.
- 16. UPON REACHING PROPOSED SUBGRADE ELEVATIONS WITHIN THE FIELD, ENGINEER WILL REVIEW SUBGRADE PRIOR TO INSTALLATION OF DRAINAGE SYSTEM. SEE SPECIFICATION SECTION 31 2310 -EARTHWORK. 17. ALL CATCH BASINS AND SHALLOW DROP INLETS SET AGAINST CURBS SHALL BE CONNDOT TYPE "C"
- ALL OTHERS SHALL BE CONNDOT TYPE "C-L".
- 18. ALL UNDERDRAINS SHALL BE 6-INCH PVC. SEE SPECIFICATIONS.
- 19. THE TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) OF ALL UTILITY STRUCTURES THAT ARE TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE IN A FLUSH CONDITION. ALL NEW UTILITY STRUCTURES SHALL BE INSTALLED WITH TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) TO FINAL GRADE IN A FLUSH CONDITION.
- 20. AT THE CONCLUSION OF THE WORK, CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT MATERIAL FROM ALL PORTIONS OF THE STORM DRAINAGE SYSTEM, INCLUDING NEW WORK AND EXISTING WORK THAT REMAINS OR IS INCORPORATED INTO THE NEW SYSTEM.







PROPERTY LIN TOPOGRAPHY: MAJOR INTERVAL - TOPOGRAPHY: MINOR INTERVAL - TOPOGRAPHY: SPOT ELEVATION D D - STORM DRAINAGE PIPE - TYPE "C" CATCH BASIN (CB) -- TYPE "C-L" CATCH BASIN (CBL) - TYPE "C" DOUBLE GRATE - TYPE II -O – AREA DRAIN (AD) - ROOF LEADER / FOUNDATION DRAIN _____ - 36" ACCESSIBLE ROUTE 4.9% MAX. SLOPE / 1.9% MAX. X-SLOPE DRAINAGE STRUCTURE TABLE

	STR. #	STR. TYPE	TF ELEV.	INV. OUT	INV. IN	INV. IN
12" HDPE FLARED END	DMH 1-1	DMH	608.00	596.15	596.25 (ALL)	-
I=598.00	DMH 1-2	DMH	622.00	607.00	607.10	-
	DMH 1-3	DMH	627.50	615.50	623.98	-
	DMH 1-4	DMH	632.50	626.11	626.21 (ALL)	-
	CB 1-1	"С" СВ	630.75	626.85	626.95	-
✓ 104'-12" HDPE	CB 1-2	"С" СВ	630.50	627.50	-	-
104 - 12 HDPE	CB 1-3	"С" СВ	633.50	629.52	629.62	-
	CB 1-4	"С" СВ	633.50	630.50	-	-
U OUTLET CONTROL STRUCTURE #3	CB 1-5	"С" СВ	631.93	626.52	626.62 (W)	628.94 (S)
TF=608.75	CB 1-6	"С" СВ	632.00	629.00	-	-
(SEE SHT. C-6.0)	CB 1-7	"С" СВ	630.50	627.06	627.16	-
	CB 1-8	"С" СВ	630.00	627.50	-	-
PROPERTY LINE (TYP.) S 334000-1.0	DMH 2-1	DMH	602.25	597.97	598.07 (NW)	598.75 (NE)
UNDERGROUND DETENTION 3P	CB 2-1	"C" CB (4'S, HD)	601.00	598.14	598.24 (ALL)	-
(34) ADS STORMTECH MC-3500 UNITS	CB 2-2	"C" CB (4'S, HD)	601.00	598.50	-	-
VOLUME=6,700 CF INV.=601.00	CB 2-3	"C" CB (4'S, HD)	611.00	607.26	607.36	-
	CB 2-4	"C" CB (4'S, HD)	611.00	608.00	-	-
6" PVC ROOF LEADER COLLECTOR	DMH 2-2	DMH	616.25	611.65	611.75	-
PIPE (COORDINATE DOWNSPOUT	CB 2-5	"С" СВ	619.60	615.09	615.19	-
LOCATIONS WITH ARCH. PLANS)	GB 2-6		621 22	615.33	615.43	
8	CB 2-7	"C" CB	619.25	615.90	617.43	-
2020.01.17 BSC - Drainage Clarification.pdf	AD 2-1	AREA DRAIN	622.37	617.50	617.60 (6")	621.0 (4"UD)
2020.01.17 DBC Dramage clarification.pdf	CB 208	<u>∧ "C" 98</u>	621.75	61 ^{7.83}	617.93	<u> </u>
	CB 2-9	"C" CB	621.75	618.75		
	CB 2-10	"C" DBL – TYPE II	622.25	617.50	619.75	_
	DMH 2-3	DMH	617.00	613.90	614.00	_
	CB 2-11	"С" СВ	617.75	614.65	614.75 (ALL)	_
	CB 2-12	"С" СВ	617.75	615.25	-	-
	CB 2-13	"C" CB	624.14	620.60	620.70	-
	CB 2-14	"C" CB	624.14	621.14	-	-

RFI CC-07

TYPE, LOCATION AND INVERTS AS REQUIRED.

* 4'S, HD = 4-FOOT SUMP WITH HOOD

PIPE #	MATERIAL	DIA.	LENGTH	SLOPE (%
P1	RCP	18"	15'	1.00
P2	CORRUGATED HDPE	18"	24'	44.79
Р3	CORRUGATED HDPE	18"	62'	13.55
P4	HDPE	18"	101'	2.00
P5	HDPE	12"	64'	1.00
P6	HDPE	12"	55'	1.00
P7	HDPE	12"	69'	4.80
P7A	HDPE	12"	7'	1.57
P8	HDPE	12"	68'	1.29
P9	HDPE	15"	33'	2.00
P9A	HDPE	12"	3'	2.00
P10	HDPE	12"	44'	1.00
P11	RCP	12"	34'	1.00
P12	RCP	18"	172'	1.00
P13	RCP	15"	6'	1.17
P14	RCP	12"	32'	0.80
P15	RCP	12"	89'	10.13
P16	RCP	12"	32'	2.00
P17	HDPE	18"	163'	7.91
P18	HDPE	18"	55'	2.00
P19	HDPE	12"	4'	1.00
P20	HDPE	12"	14'	1.00
P21	HDPE	12"	42'	1.12
P22	PVC	8"	7'	1.00
P23	HDPE	12"	3'	2.00
P24	HDPE	12"	45'	1.82
P25	HDPE	12"	10'	2.00
P26	PVC	6"	61'	1.00
P27	HDPE	15"	49'	2.00
P28	HDPE	15"	72'	0.90
P29	RCP	12"	22'	2.27
P30	HDPE	12"	102'	5.74
P31	HDPE	12"	22'	2.00

NOTES:

FIELD CONDITIONS.

ENGINEER.

WITH THE WORK.

CONNDOT TYPE "C-L".

SYSTEM.

PR-04 05.14.2020 (Extend Sidewalk).pdf

1		

18. ALL UNDERDRAINS SHALL BE 4-INCH PVC UNLESS OTHERWISE INDICATED ON THE PLANS. SEE SPECIFICATIONS. 19. THE TOPS, RIMS, FRAMES, GRATES, AND COVERS (AS APPLICABLE) OF ALL UTILITY STRUCTURES THAT ARE TO REMAIN SHALL BE ADJUSTED TO MATCH FINAL GRADE IN A FLUSH CONDITION. ALL NEW UTILITY STRUCTURES SHALL BE INSTALLED WITH TOPS, RIMS,

8. COMPLY WITH CONNECTICUT BUILDING CODE FOR ALL SITE CONSTRUCTION, INCLUDING HANDICAPPED ACCESSIBILITY.

STEEPER THAN 1:20 (5%). THE CROSS SLOPE OF A WALKING SURFACE SHALL NOT BE STEEPER THAN 1:48 (2%).

PROCEED WITH ANY ADJUSTMENT OR FIELD MODIFICATION UNTIL APPROVED BY THE ENGINEER.

COORDINATE WITH ENGINEER IF DIMENSIÒNAL CONSTRAINTS REQUIRE STEEPER SLOPES.

DRAINAGE SYSTEM. SEE SPECIFICATION SECTION 31 2310 - EARTHWORK.

- FRAMES, GRATES, AND COVERS (AS APPLICABLE) TO FINAL GRADE IN A FLUSH CONDITION. 20. AT THE CONCLUSION OF THE WORK, CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT MATERIAL FROM ALL PORTIONS OF THE STORM DRAINAGE SYSTEM, INCLUDING NEW WORK AND EXISTING WORK THAT REMAINS OR IS INCORPORATED INTO THE NEW
 - 1" = 30'
 - 0 15 30

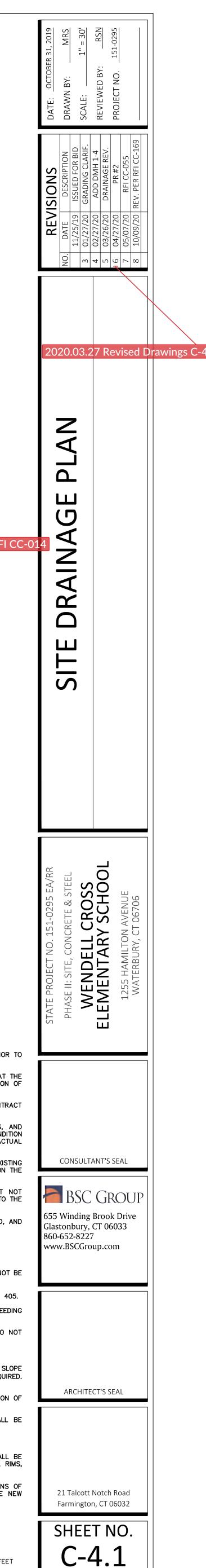


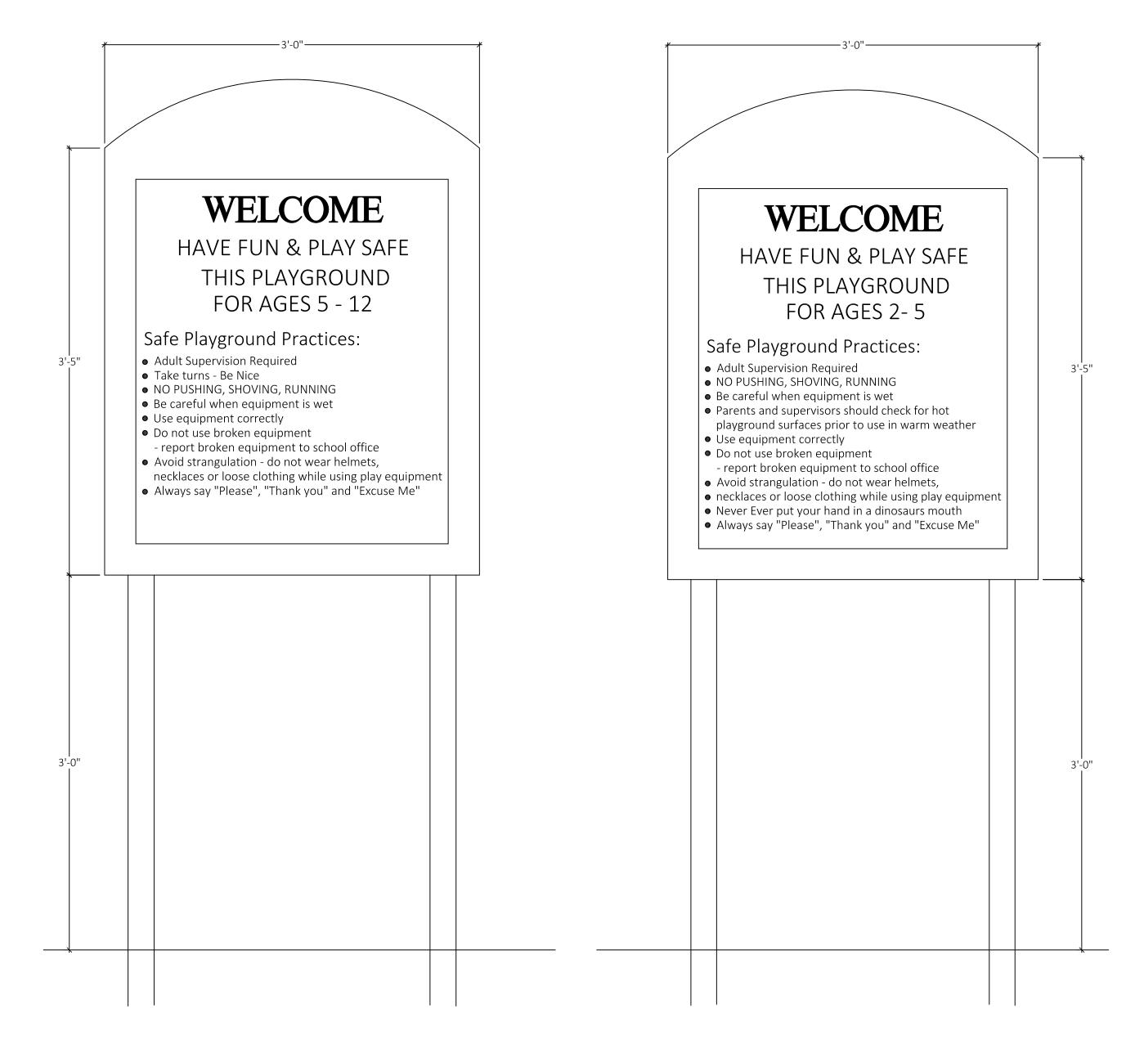
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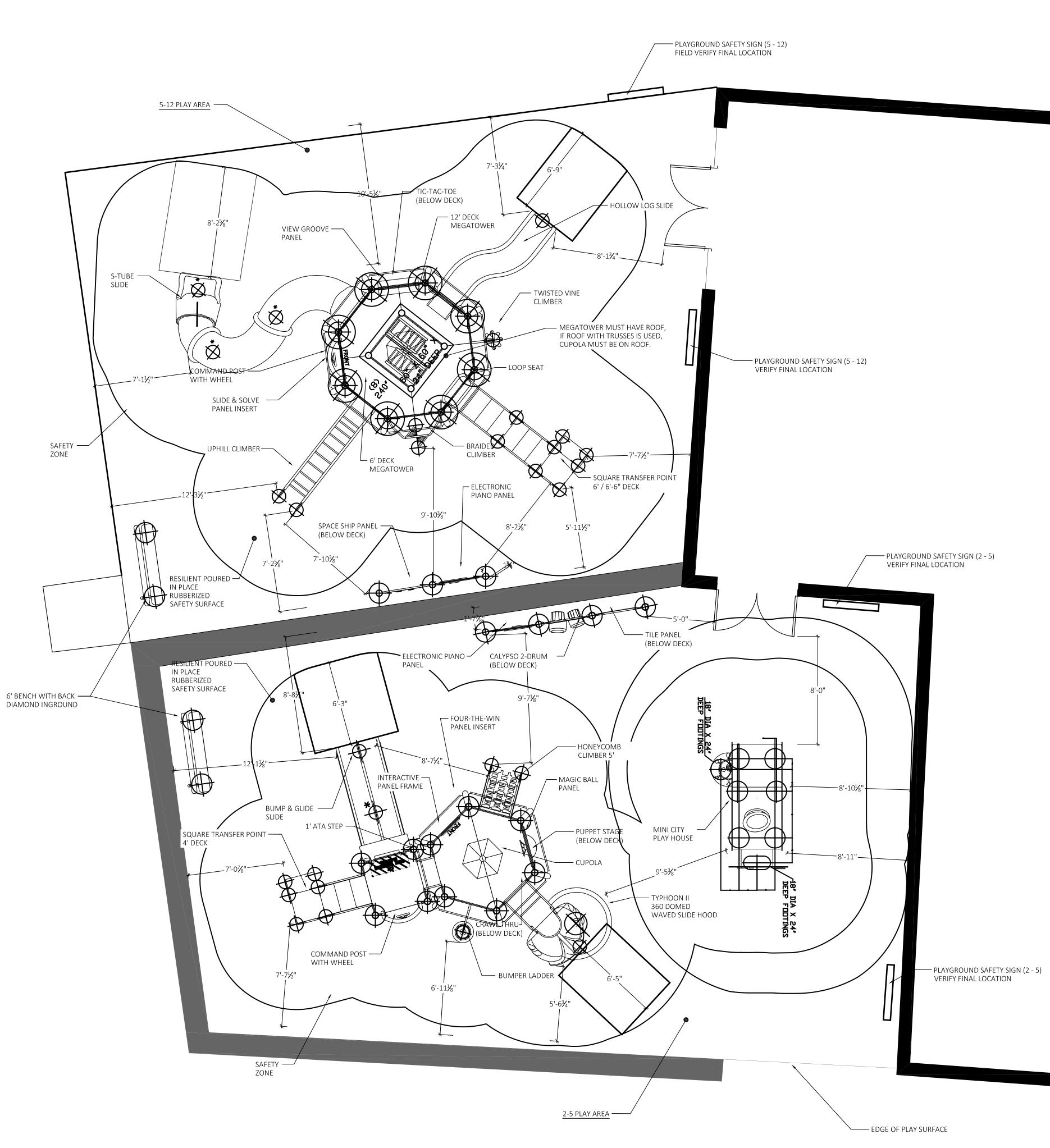


1 5-12 PLAYGROUND SAFETY SIGN SCALE: NOT TO SCALE

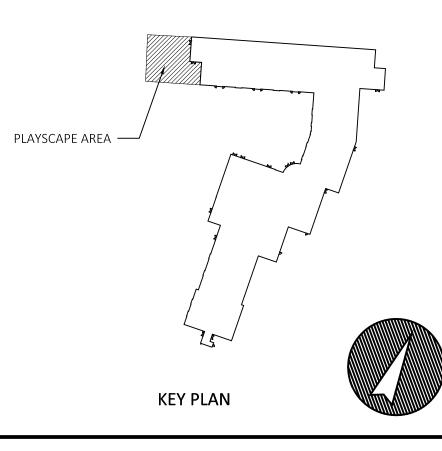
2 - 5 PLAYGROUND SAFETY SIGN SCALE: NOT TO SCALE

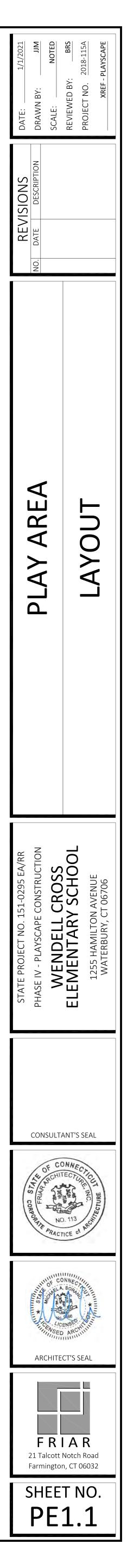
ACCESSIBILITY CHART

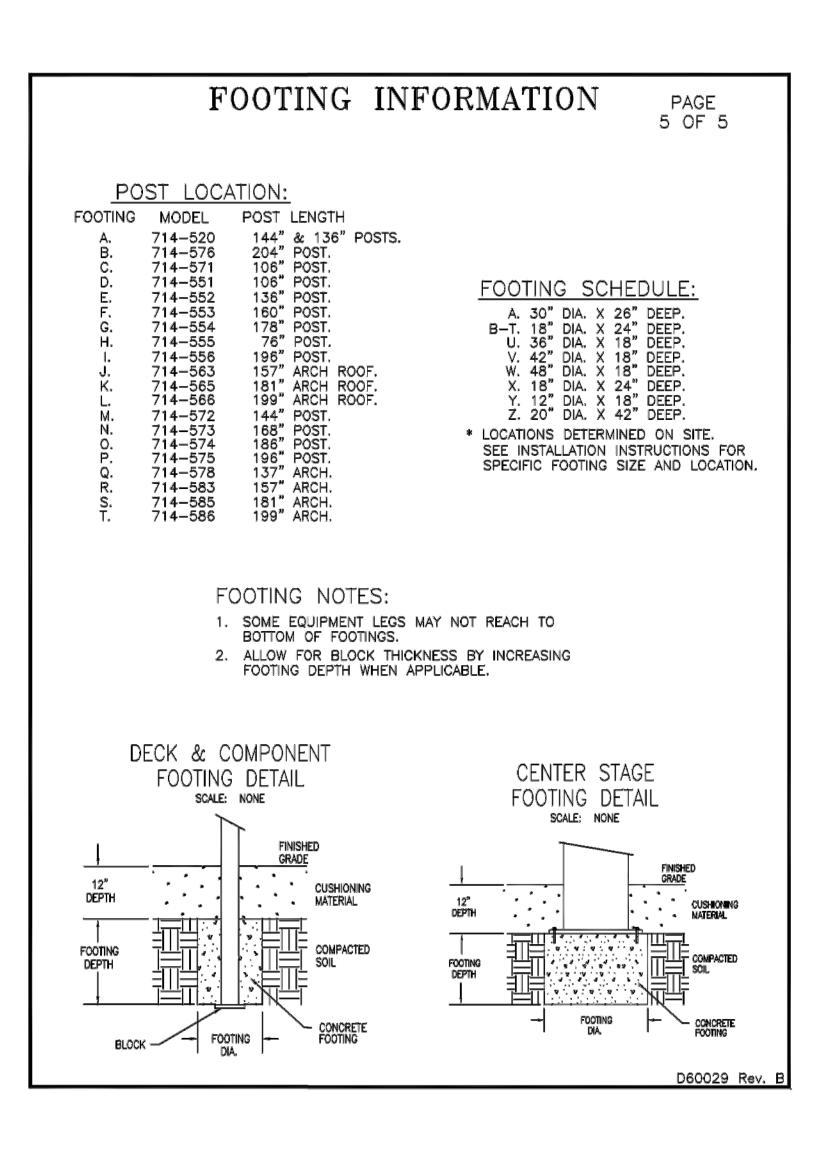
Age Group: 5-12						
Elevated Play Activities Total						
Elevated Play Activities Accessible By Transfer		Req'd:				
Elevated Play Activities Accessible By Ramp		Req'd:				
Ground Level Activity Type	: 3	Req'd:	2			
Ground Level Quantity	: 5	Req'd:				
		· · ·				
Description	Elev	ation	Acce	ess	Type of Play	Qty
30" ID "S" TUBE SLIDE LH (12' DECK)		/ated		one	SLIDE	1
BIG TIMBER HOLLOW LOG SLIDE (6'6"		/ated	Tran		SLIDE	1
DK)						-
BRAIDED CLIMBER (8' DECK)	Elev	/ated	Tran	sfer	CLIMBER	1
COMMAND POST W/WHEEL		/ated	Tran		MANIPULATIVE EQUIP	1
FULL ENCLOSURE W/SEAT		/ated	Tran		IMAGINATION PANEL	1
TWISTED VINE CLIMBER (6'6" DECK)		/ated	Tran		CLIMBER	1
UPHILL CLIMBER (6'6" & 8' DECK)		/ated	Tran		CLIMBER	1
ELECTRONIC PIANO PANEL (BELOW		ound		und	SOUND EQUIP	1
DECK)					_	
KC INTERACTIVE PANEL (BELOW DECK)	Gro	bund	Gro	und	MANIPULATIVE_EQUIP	1
LOOP SEAT	Gro	ound	Gro	und	IMAGINATION PANEL	1
SPACE SHIP PANEL (BELOW DECK)		bund		und	IMAGINATION PANEL	1
TIC-TAC-TOE PANEL (BELOW DECK)		bund		und	MANIPULATIVE_EQUIP	1
		Req'd				
Elevated Play Activities Total: Elevated Play Activities Accessible By Transfer Elevated Play Activities Accessible By Ramp:	: 7 0	Req'd	: 0			
Elevated Play Activities Total: Elevated Play Activities Accessible By Transfer Elevated Play Activities Accessible By Ramp: Ground Level Activity Type:	: 7 0 3	Req'd Req'd	: 0 : 2			
Elevated Play Activities Total: Elevated Play Activities Accessible By Transfer Elevated Play Activities Accessible By Ramp:	: 7 0	Req'd Req'd	: 0 : 2			
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Elevated Play Activities Total: Elevated Play Activities Accessible By Transfer Elevated Play Activities Accessible By Ramp: Ground Level Activity Type: Ground Level Quantity: Description 6'2" TYP II SLIDE 360 DEG DOMED WAVE (5' DK) BUMP & GLIDE SLIDE, ONE PIECE (4'	: 7 0 3 11 Elev Elev	Req'd Req'd Req'd	: 0 : 2 : 2 Acc Trar			
Elevated Play Activities Total: Elevated Play Activities Accessible By Transfer Elevated Play Activities Accessible By Ramp: Ground Level Activity Type: Ground Level Quantity: Description 6'2" TYP II SLIDE 360 DEG DOMED WAVE (5' DK) BUMP & GLIDE SLIDE, ONE PIECE (4' DECK)	: 7 0 3 11 Elev Elev	Req'd Req'd Req'd vation vated vated	: 0 : 2 : 2 Acc Trar	nsfer nsfer	SLIDE	1
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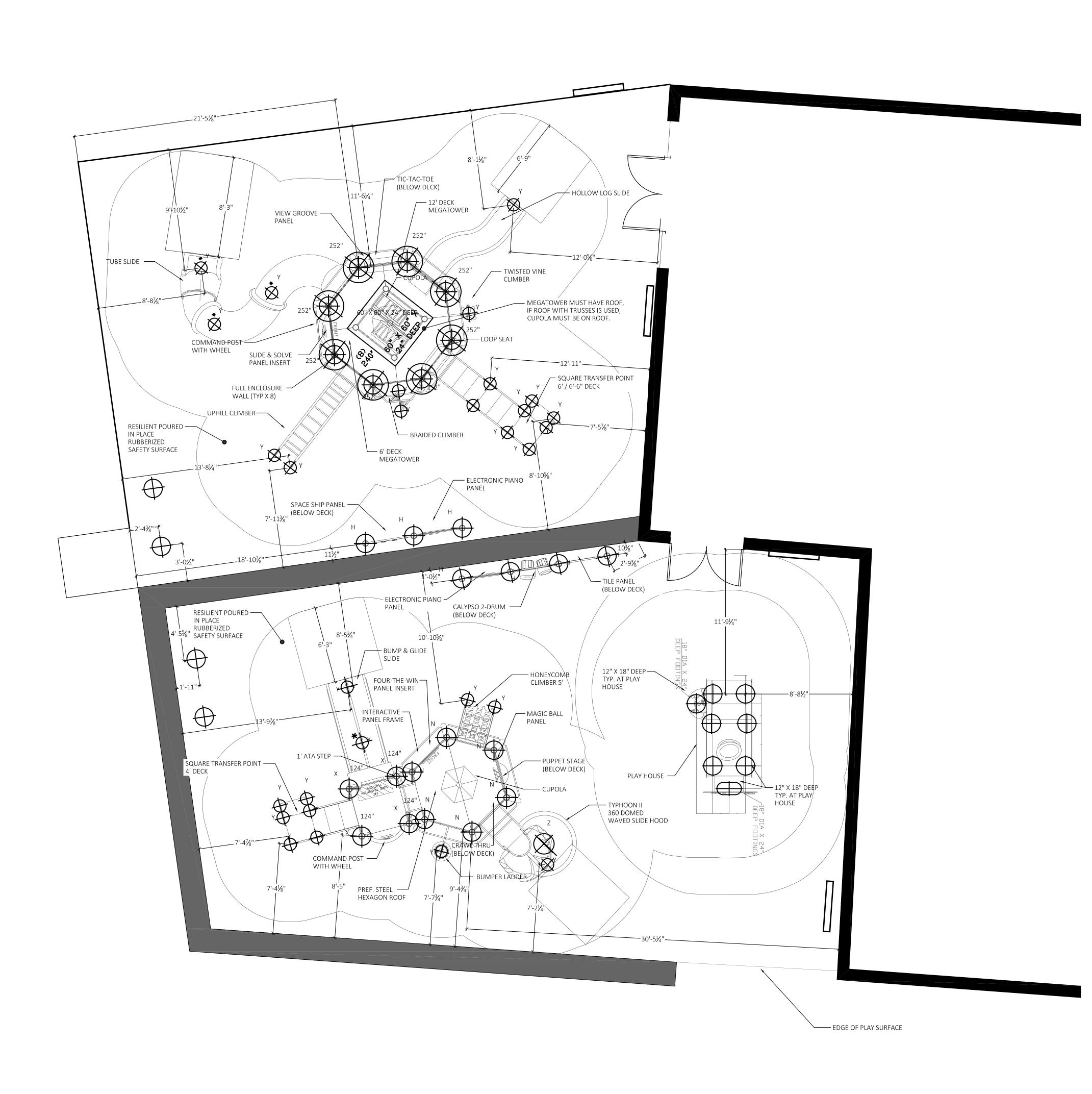


PLAY AREA LAYOUT SCALE: 1/4" = 1' - 0"

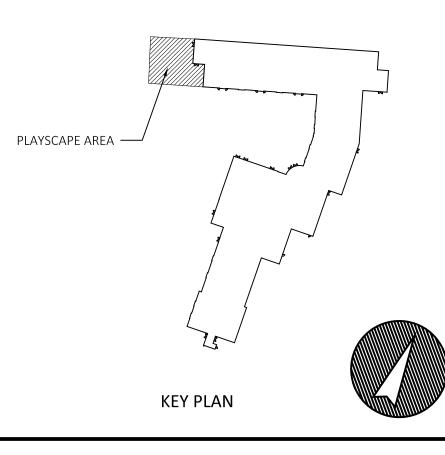


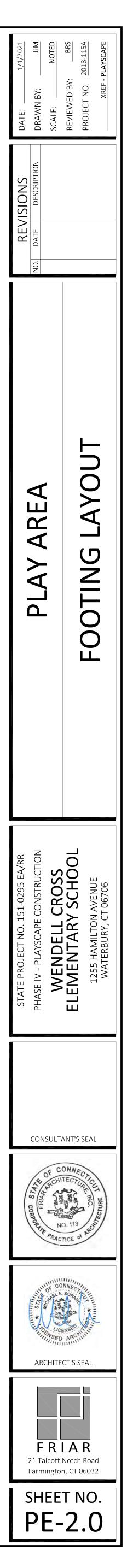


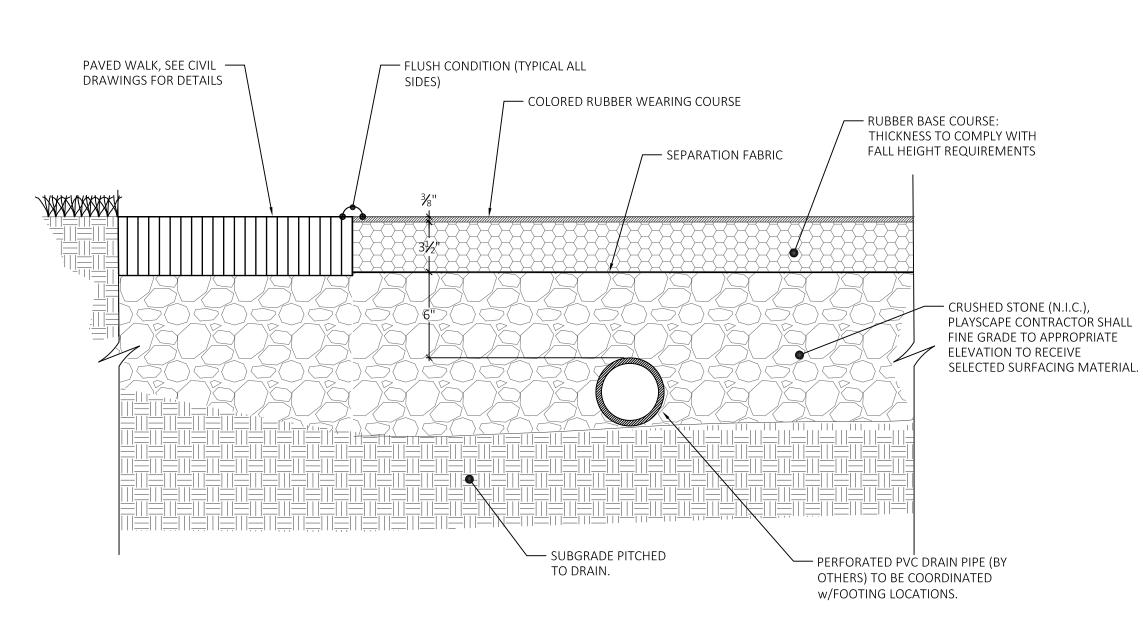












RESILIENT SAFETY SURFACE SCALE: NOT TO SCALE

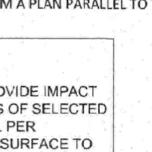
GENERAL NOTES

- 1. THE PLAY COMPONENTS IDENTIFIED ON THESE PLANS SHALL BE IPEMA CERTIFIED. THE USE AND LAYOUT OF THE COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF ASTMF1487 AND COMPLY WITH ALL APPLICABLE CPSC, ADA, AND ASTM STANDARDS.
- 2. THERE SHALL BE NO SHARP POINTS, CORNERS, OR EDGES ON ANY COMPONENTS OF THE PLAYGROUND EQUIPMENT THAT COULD CUT OR PUNCTURE CHILDREN'S SKIN. THE EXPOSED OPEN ENDS OF ALL TUBING NOT RESTING ON THE GROUND OR OTHERWISE COVERED SHALL BE COVERED BY CAPS OR PLUGS THAT CANNOT BE REMOVED WITHOUT THE USE OF TOOLS. ALL METAL EDGES SHALL BE ROLLED OR HAVE ROUNDED CAPPING. THERE SHALL BE NO SHARP EDGES ON SLIDES.
- 3. THERE SHALL BE NO PROTRUSIONS OR PROJECTIONS ON THE PLAYGROUND EQUIPMENT THAT COULD BE CAPABLE OF ENTANGLING CHILDREN'S CLOTHING.
- 4. THERE SHALL BE NO ACCESSIBLE PINCH, CRUSH, OR SHEARING POINTS ON THE PLAYGROUND EQUIPMENT THAT COULD CAUSE INJURY OR CATCH CHILDREN'S CLOTHING.
- 5. PLAYGROUND EQUIPMENT SHALL BE DESIGNED AND CONSTRUCTED SO THAT ACCESSIBLE OPENINGS IN PLAY EQUIPMENT AND STRUCTURES CANNOT PASS A SPHERE RANGING IN SIZE FROM 3.5" TO 9" IN DIAMETER.
- 6. THE DIAMETER OR WIDTH OF HANDRAILS SHALL BE 0.95 INCHES MINIMUM TO 1.55 INCHES MAXIMUM.
- 7. THE DIMENSIONS FOR ACCESS SLOPE, TREAD OR RUNG WIDTH, TREAD DEPTH, RUNG DIAMETER, AND VERTICAL RISE FOR RUNG LADDERS, STEPLADDERS, STAIRWAYS, AND RAMPS SHALL COMPLY WITH ASTM F1487 TABLE 2.
- 8. ALL GROUND LEVEL PLAY COMPONENTS DESIGNATED AS ACCESSIBLE SHALL COMPLY WITH THE REACH RANGE IN THE ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES; PLAY AREAS.
- 9. THE PLAYGROUND SAFETY SURFACING SHALL BE STABLE, FIRM, SLIP-RESISTANT, AND SHALL MEET OR EXCEED US CONSUMER PRODUCT SAFETY COMMISSION GUIDELINES FOR CRITICAL HEIGHT BASED ON ASTM F1292 IMPACT ATTENUATION TESTING FOR THE FALL HEIGHTS REQUIRED BY THE PLAY COMPONENTS INCLUDED IN THE DESIGN. SEE PRODUCT PAGES FOR CRITICAL FALL HEIGHTS FOR ALL PLAYGROUND EQUIPMENT. THE CONTRACTOR SHALL CONFIRM THE FINAL MAXIMUM FALL HEIGHT REQUIREMENTS AND APPROPRIATE SURFACING THICKNESS WITH THE PLAYSCAPE MANUFACTURER PRIOR TO CONSTRUCTION. FOR LOOSE FILL SURFACING MATERIALS, THE INITIAL FILL SHALL BE 25% GREATER THAN WHAT IS REQUIRED FOR THE SPECIFIED MAXIMUM FALL HEIGHT TO ACCOMMODATE COMPACTION/WEATHERING, SURFACING MATERIALS SHALL ALSO COMPLY WITH ASTM F1951.
- 10. PLAYGROUND SURFACE SLOPES SHALL NOT EXCEED 2% (1:48) IN ANY DIRECTION.
- 11. AFTER ASSEMBLY AND BEFORE USE, EQUIPMENT MUST BE THOROUGHLY INSPECTED BY AN INSPECTOR, HIRED BY THE OWNER. THE INSPECTOR MUST BE CPSI CERTIFIED OR EQUAL. 12. SLOPES ON ALL ACCESSIBLE ROUTES SHALL BE 1:20 OR LESS AND THE CROSS SLOPES SHALL
- NOT EXCEED 2% (1:48). CHANGES IN LEVEL SHALL NOT EXCEED ½", AND SLOPES SHALL NOT BE GREATER THAN 1:20 UNLESS A RAMP OR LIFT IS PROVIDED.
- BE 36 INCHES FOR RAMP-ACCESSIBLE ELEVATED PLAY COMPONENTS AND 24 INCHES FOR TRANSFER-ACCESSIBLE ELEVATED PLAY COMPONENTS.
- 14. THE SLIDE EXIT REGION SHALL BE AT LEAAST 11 INCHES LONG. THE SLIDE EXIT REGION SHALL BE NO MORE THAN 11 INCHES ABOVE THE PROTECTIVE SURFACING IF THE SLIDE IS NO MORE THAN 4 FEET HIGH. THE SLIDE EXIT REGION SHALL BE BETWEEN 7 INCHES AND 15 INCHES ABOVE THE PROTECTIVE SURFACING IF THE SLIDE IS OVER 4 FEET HIGHT. THE SLOPE OF THE EXIT REGION SHALL BE BETWEEN 0 AND -4 DEGREES AS MEASURED FROM A PLAN PARALLEL TO THE UNDERLYING SURFACE.

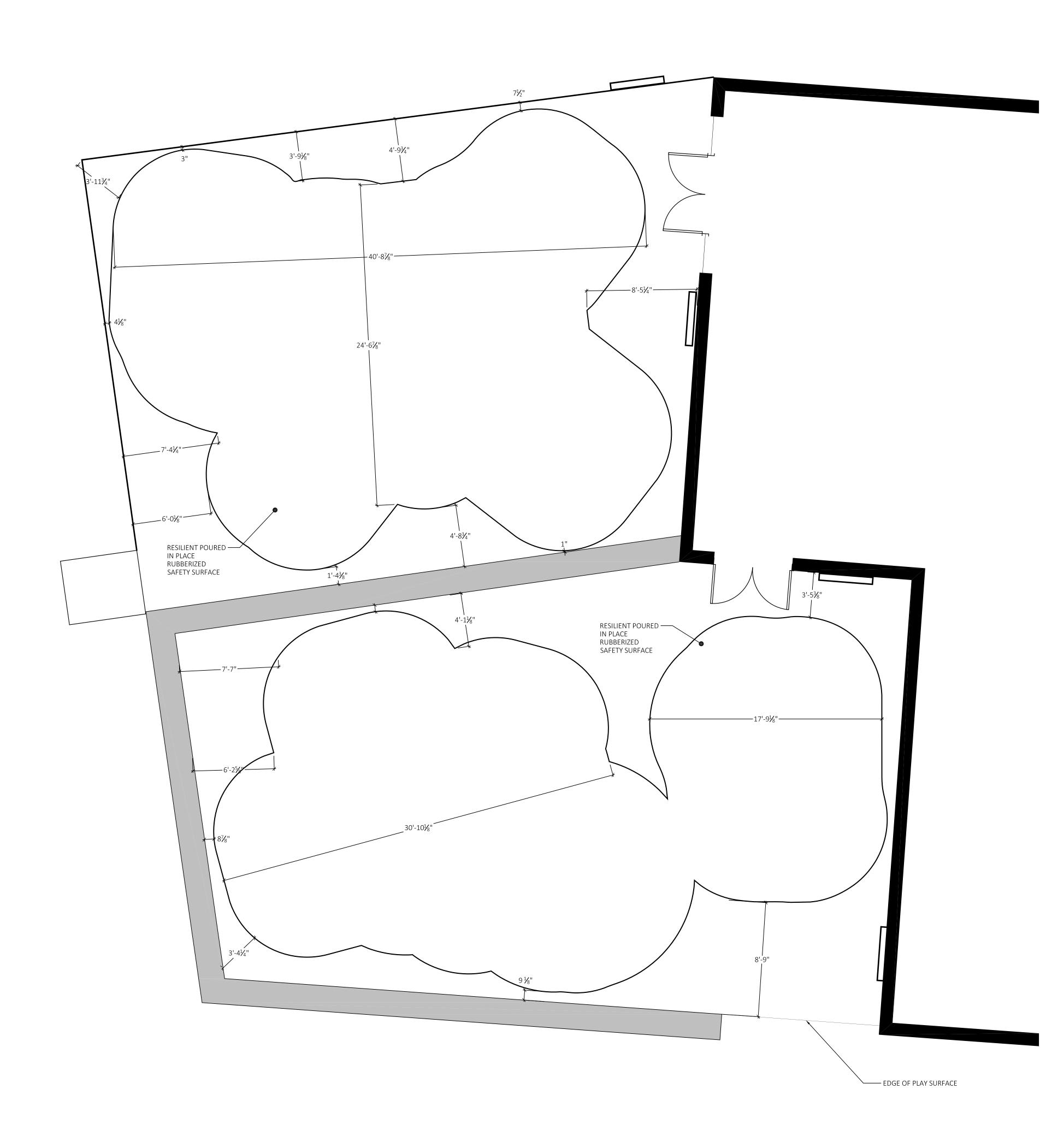
SURFACING:

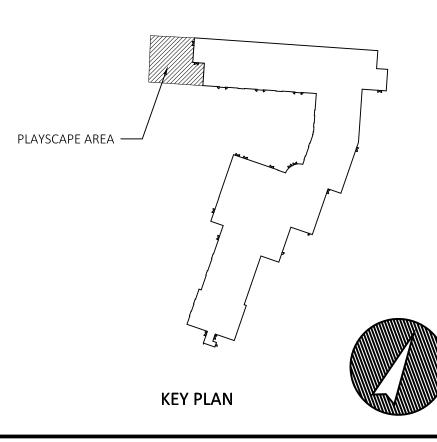
POURED IN PLACE RUBBER SAFETY SURFACING TO PROVIDE IMPACT RESISTANCE PER ASTM GUIDELINES FOR FALL HEIGHTS OF SELECTED PLAYGROUND EQUIPMENT. PREPARE SITE AND INSTALL PER MANUFACTURERS INSTRUCTIONS. SEE DETAIL BELOW. SURFACE TO MEET ADA PATH REQUIREMENTS.

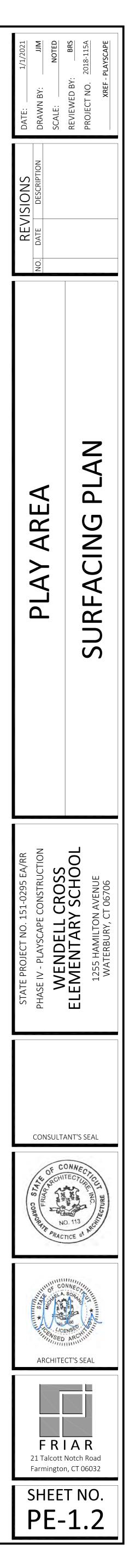
PLAY AREA SURFACING PLAN SCALE: 1/4" = 1 - 0"

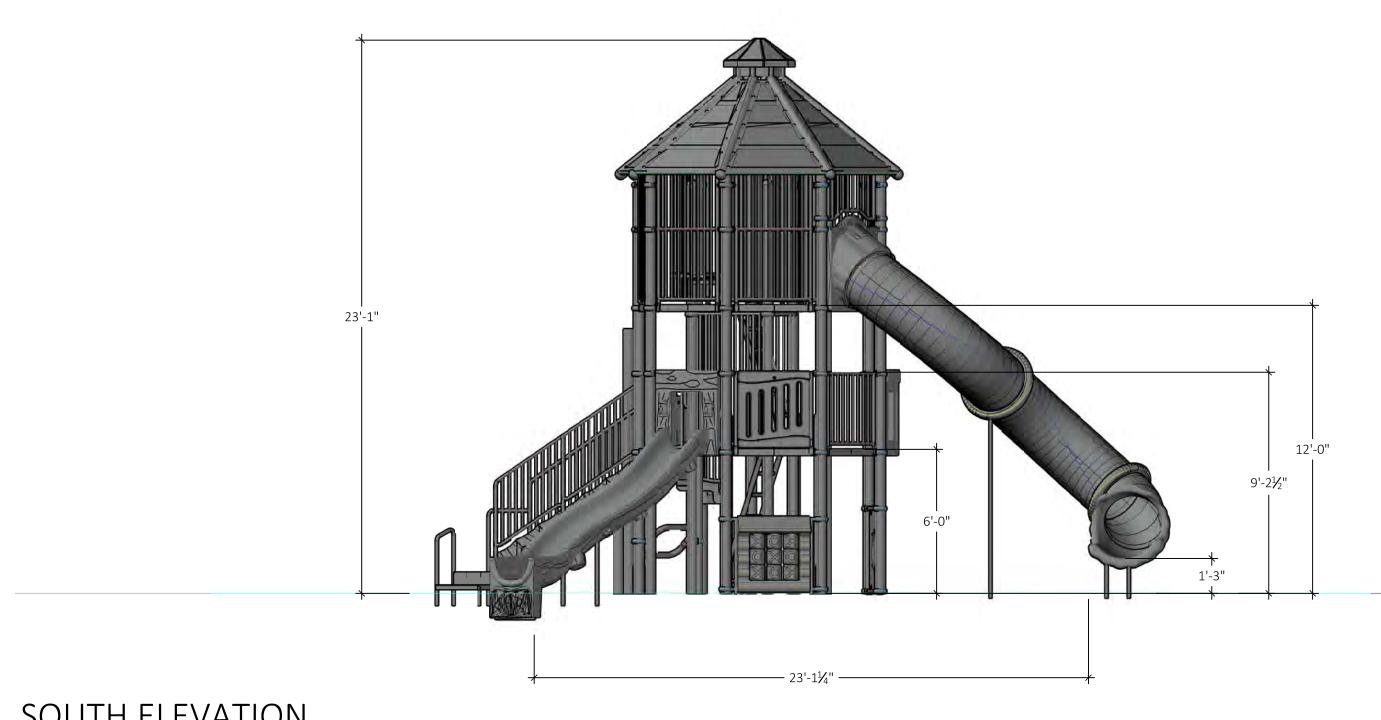


13. THE MINIMUM WIDTH OF THE ACCESSIBLE ROUTE THROUGH THE PLAY EQUIPMENT SHALL

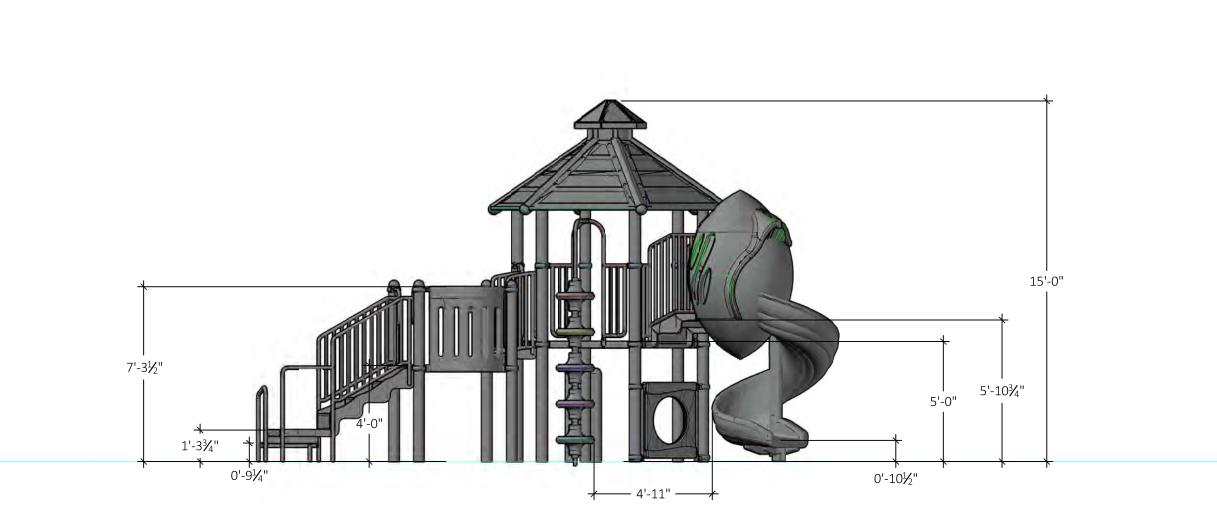






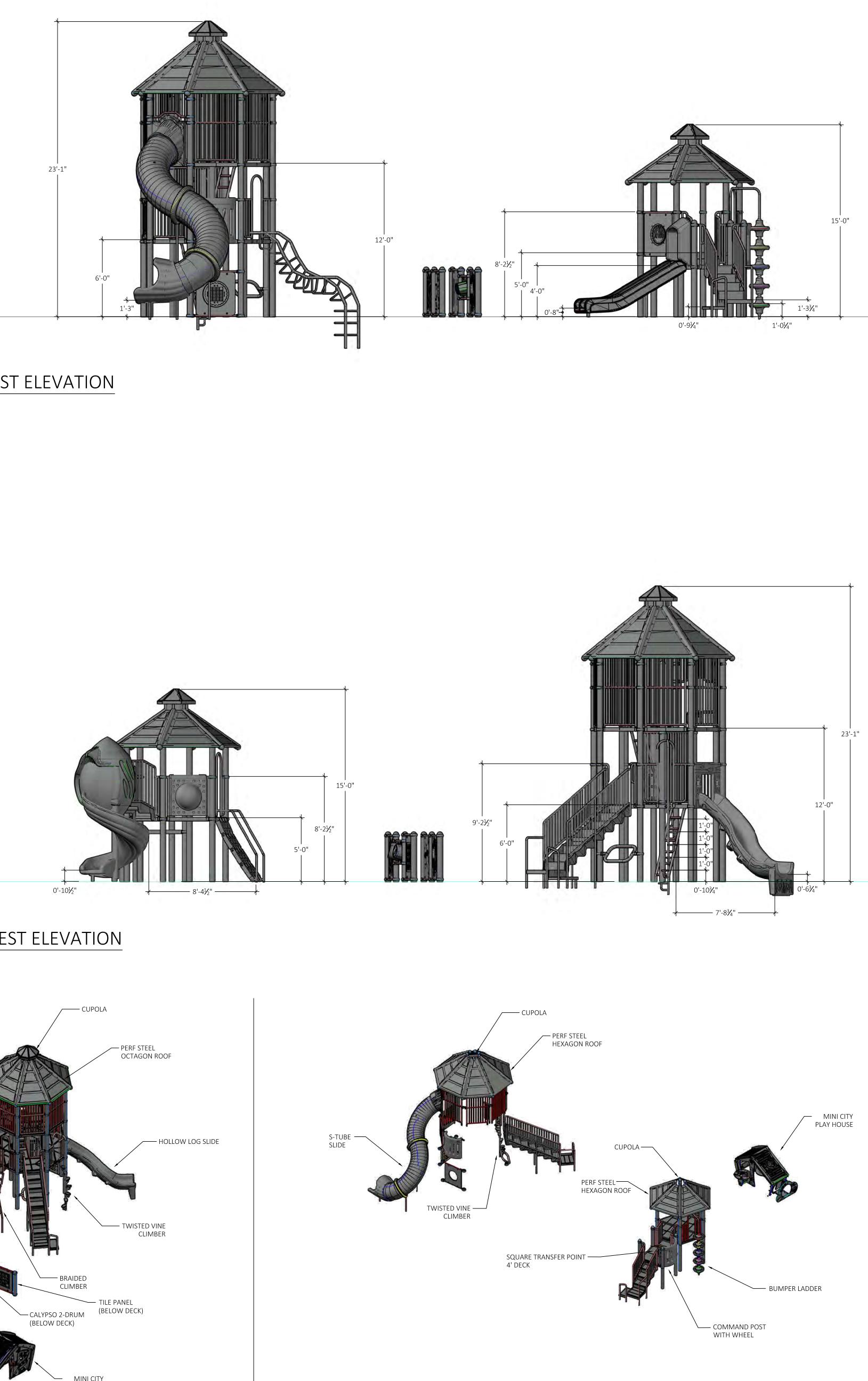


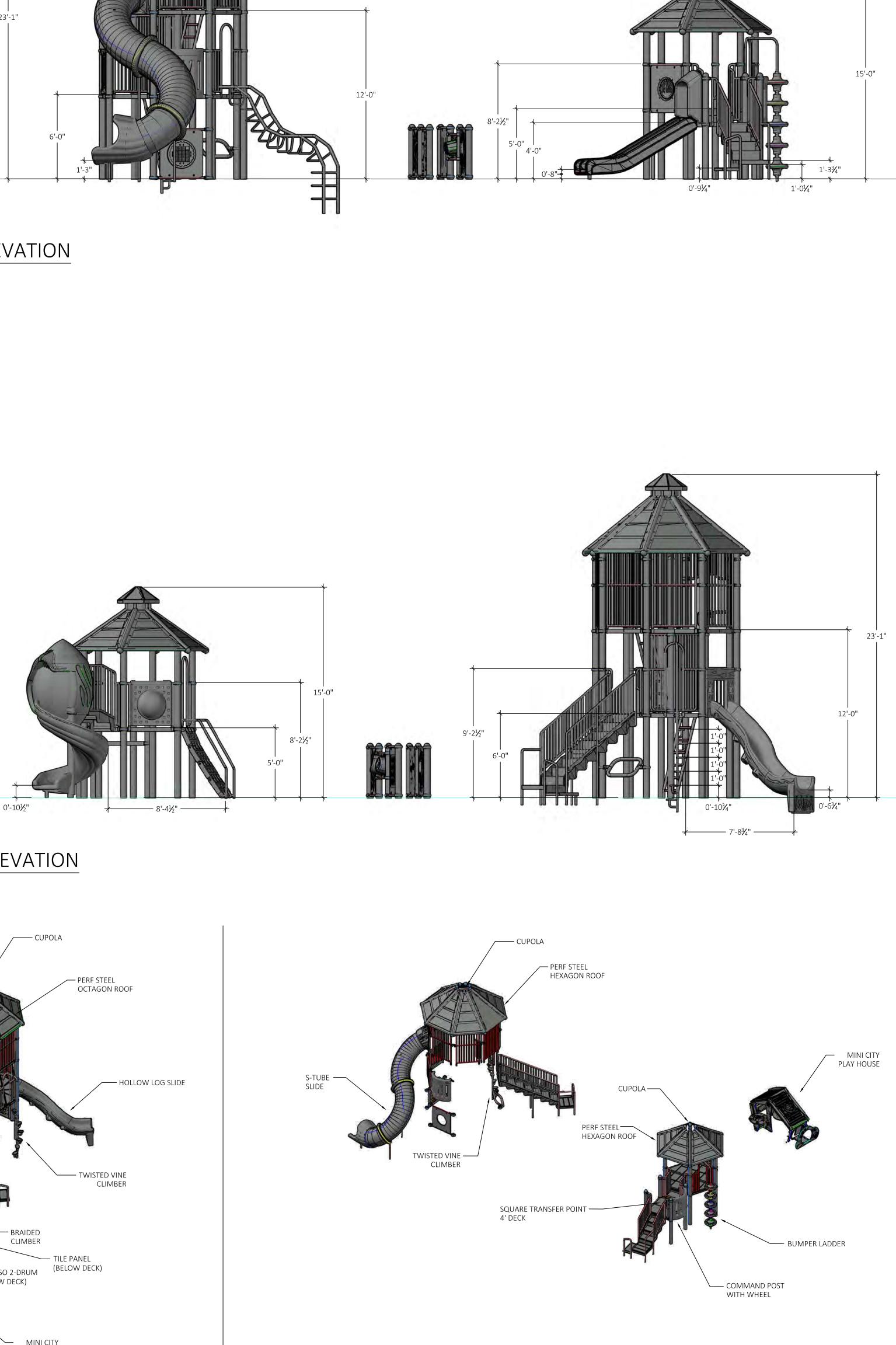
SOUTH ELEVATION

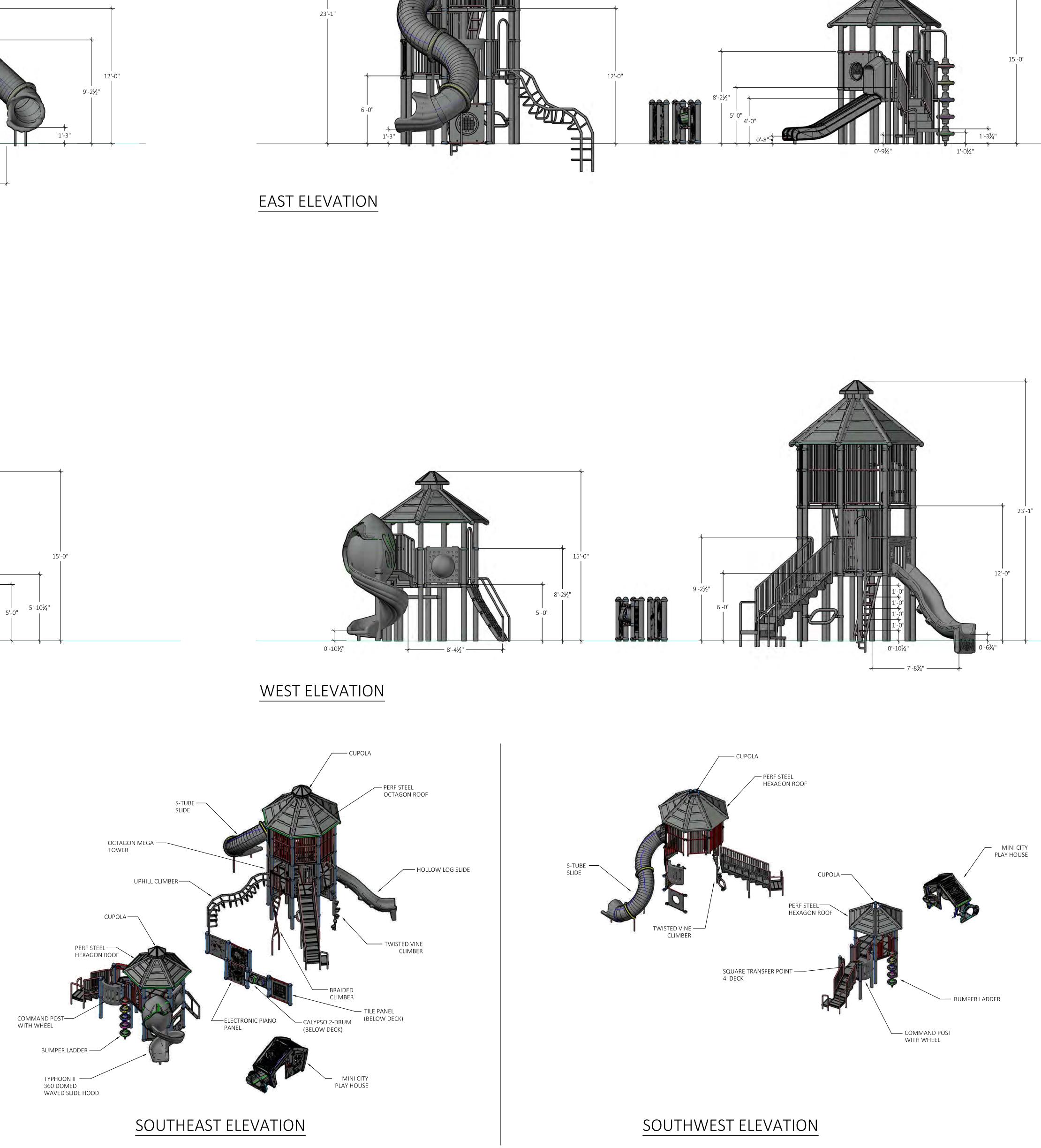


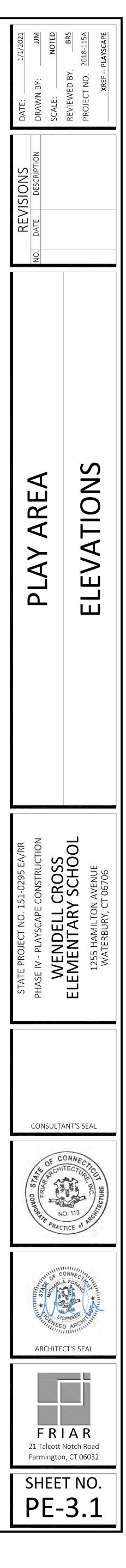
NORTH ELEVATION

PLAY AREA ELEVATIONS SCALE: 1/4" = 1' - 0"









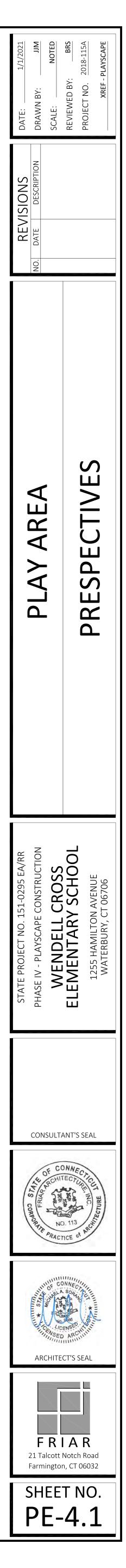


EQUIPMENT PERSPECTIVES

SCALE: NOT TO SCALE



EQUIPMENT PERSPECTIVES





QUOTATION #111120

To:

Friar Architecture Inc.	Date	11/11/20
21 Talcott Notch Road	Project	Wendell Cross Elementary School
Farmington, CT 06032	Phone	860.678.1291
Bryce Sens, AIA	Email	brs@friar.com
Bryce Sens, AIA	Email	brs@friar.com

We propose to furnish and install the following described materials:

Qty	Item #	OPTION I PLAYGROUND	Price Total
1	714	Miracle Recreation 2-5 & 5-12 Playgrounds	119,468.00
1	Surface	IPEMA Certified Poured In Place Rubber Surfacing 3280sf	44,920.00
1	Site	Prepare Site To Accept Rubber Safety Surfacing 3280sf	4,100.00
1	Install	Factory Authorized Installation (includes prevailing wages)	33,031.00
1	CF	Owners Contingency Fund	19,000.00
1	DAS	CT DAS State Contract Discount	-26,283.00
1	Total	Playground Total	194,236.00
Qty	ltem #	ADD ALTERNATE	Price Total
1	Play	Supplemental Equipment Package	60,000.00

PAYMENT TERMS: PURCHASE OF EQUIPMENT ONLY*

Government Agencies:

• Net 30 from original invoice with approved credit All others:

- Payment will be made directly to Miracle Recreation Equipment Company. An irrevocable letter of credit or completed credit application is required for new customers. Established customers must be in good standing.
- Tax exempt certificate is required with order, if applicable; otherwise taxes owed are the customer's responsibility.
- Cash in advance receives a 3% discount (equipment only).
- If paying by credit card, Miracle Recreation Equipment Company accepts Visa or MasterCard payments (cash in advance discount does not apply).
- Payment is due upon receipt of goods.

PAYMENT TERMS: PURCHASE AND INSTALLATION OF EQUIPMENT*

Government Agencies:

• Net 30 from original invoice with approved credit

All others: (three installments)

- All payments will be made to Creative Recreation LLC.
- Payment of 1/3 down on total invoice enters the order (irrevocable letter of credit required for new customer, established customer must be in good standing).
- Payment of 1/3 original invoice due at time of receipt of goods
- Balance due upon completion of installation with company check
- Tax exempt certificate required with order, if applicable; otherwise taxes are the customer's responsibility.
- Creative Recreation reserves the right to require 50% down on custom orders
- Cancellations are ONLY accepted with the approval of Creative Recreation. All cancellations will carry a minimum of 25% restocking charge.

*UNLESS OTHERWISE NOTED, quote does not include installation, supervision, prevailing wages, freight, freight surcharges, permits, state or local approvals, performance bond, engineering seals, testing, site preparation, removal of excess dirt, dumpster fee, borders, safety surfacing, *unloading, storage*, security, fencing, plumbing and landscaping. Payment due Creative Recreation for any additional items is customer's responsibility and must be included with final payment.

IF QUOTING INSTALLATION, PRICE ASSUMES:

- Normal soil conditions (must meet or exceed 2000PSF). Abnormal conditions include, but are not limited to stump dumps, ledge and underground springs.
- Easy ACCESS to site with trucks (Any re-seeding or repair required if trucks cross landscaping, sidewalks or grass areas are the responsibility of the customer unless otherwise noted.) Access to power and water.
- NO allowance for moving or repairing any underground utility lines such as electrical, telephone, gas, water or sprinkler lines that may be encountered during installation operations
- NO rock excavation. Any additional cost incurred as a result of hard rock conditions requiring extra equipment, or for utility removal or repair resulting in delay is the responsibility of the customer, unless these conditions are detailed on as built site drawings and initialed by all parties or are marked on the ground prior to quotation, fabrication and installation.

OWNER SITE PREPARATION AND MAINTENANCE ISSUES

Owner must provide safety fencing to be used by installer around the site. Desired small grade includes sod removal and flat/level surface with drainage. DO NOT INSTALL DRAIN ROCK OR SPREAD SAFETY SURFACE PRIOR TO INSTALLATION. Owner MUST call underground utilities prior to excavation and obtain all approvals/permits. Owner is responsible for keeping children off the playground for 72 hours to allow cement to set. It is the responsibility of the owner to maintain safety surfacing. It is suggested that the owner schedule regular safety and maintenance inspections of the equipment. Please note that this document is not intended to cover all owner responsibilities.

DELIVERY INFORMATION

Whenever possible, the customer will be given a 24 hour notice of delivery on a Miracle truck. Allow four to six weeks for delivery (or less) after receipt of order and deposit. Assistance is needed to unload (3 to 4 capable adults to assist the driver). Delivery point should be in close proximity to the construction site in a secured area. Equipment should be inventoried carefully after unloading. Any discrepancies should be noted on both copies of the freight bill and immediately brought to the attention of Creative Recreation. Visible damage to any piece of equipment should also be detailed on the freight bill. When inspecting, care should be given to minimize tearing of packaging. Packaging for any damaged product should NOT be discarded. If possible, damaged product should be returned in its original packaging. If concealed damage is found, contact Creative Recreation within one week of delivery to ensure that reporting procedures can be followed in a timely manner.

Quote good for 30 days, subject to review thereafter

approved in writing by an authorized official of the seller, will become a contract. Until so approved, it is not a contract and is not binding on the seller in any way. If buyer does not give acceptance within 30 days, this quotation is subject to possible price revision. Signature will not substitute for a Purchase Order if a Purchase Order is required by customer.	Gohn W. Hollerbach
Accepted By:	
Printed Name of Buyer	
	Approved by: John W. Hollerbach
Authorized Signature	Authorized Signature
Date:	Title: President Date: 11/11/2020

Unless otherwise provided as a special term, all shipments are F.O.B. seller's plant, Monett, MO. Allow at least four weeks for delivery upon receipt of order and any applicable deposit.



P.O. Box 330235 · West Hartford, Connecticut 06133 Tel 860.953.5336 · Fax 860.953.5337 · www.creativerec.com

CITY OF WATERBURY DEPARTMENT OF FINANCE – RISK MANAGEMENT CERTIFICATE OF INSURANCE REVIEW FORM

Contract Recipient or Vendor Name: Creative Recreation, LLC

Requesting Department: BOE

Department Contact: Rosh Maghfour

Description of Work To Be Performed: Install Playground at Wendell Cross

Estimated Contract Duration and End Date: 1 year

Date Reviewed: 3/4/21

Insurance Certificate Term: Until completion

Payment / Performance Bond: Westfield Insurance Company Verification of Existence of Fidelity and Surety in CT https://portal.ct.gov/-/media/CID/1_Lists/licencom.pdf

Certificate Meets Insurance Specifications: Yes

Insurance Carrier A.M. Best Rating: A-/7 or better

Comments:

Approved: Yes

Risk Manager or Authorized Designee

INCORPORATED IN: Pennsylvania.

Western National Mutual Insurance Company

(NAIC #15377)

BUSINESS ADDRESS: PO. BOX 1463, MINNEAPOLIS, MN 55440.

PHONE: (952) 835-5350.

UNDERWRITING LIMITATION b/: \$55,988,000.

SURETY LICENSES c,f/: AK, AZ, AR, CA, CO, DE, ID, IL, IN, IA, KS, KY, MD, MI, MN, MO, MT, NE, NV, NJ, NM, ND, OH, OK, OR, PA, RI, SD, TX, UT, WA, WI, WY.

INCORPORATED IN: Minnesota.

Western Surety Company

(NAIC #13188)

BUSINESS ADDRESS: 151 N. FRANKLIN ST., CHICAGO, IL 60606.

PHONE: (312) 822-5000.

UNDERWRITING LIMITATION b/: \$156,025,000.

SURETY LICENSES c,f/: AL, AK, AZ, AR, CA, CO, CT, DE, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OH, OK, OR, PA, PR, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY.

INCORPORATED IN: South Dakota.

Westfield Insurance Company

(NAIC #24112)

BUSINESS ADDRESS: P. O. Box 5001, Westfield Center, OH 44251 - 5001.

PHONE: (330) 887-0101.

UNDERWRITING LIMITATION b/: \$128,468,000.

SURETY LICENSES c,f/: AL, AK, AZ, AR, CO<mark>, CT, D</mark>E, DC, FL, GA, HI, ID, IL, IN, IA, KS, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, ND, NE, NV, NH, NJ, NM, NY, NC, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VT, VA, WA, WV, WI, WY.

INCORPORATED IN: Ohio.

Mantfield Matienal Incidence Commence

Westfield Insurance Company

Westfield Group® 1 Park Circle, PO Box 5001, Westfield Center, Ohio 44251-5001

Bond No. 091343J

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Conforms to Document A312™ - 2010 **Payment Bond** CONTRACTOR: SURETY: (Name, legal status and address) (Name, legal status and principal place of business) Westfield Insurance Company **CREATIVE RECREATION, LLC** 1 Park Circle, PO Box 5001 **131 DAY STREET** Westfield Center, OH 44251-5001 NEWINGTON, CT 06111 OWNER: (Name, legal status and addre WATERBURY PUBLIC S 236 GRAND STREET WATERBURY, CT 0670 CONSTRUCTION CONT Date: Description: FOUR THOUSAND, TWO HUNDRED THIRTY-SIX DOLLARS (\$194,236.00) (Name and location) INSTALL MIRACLE PLAYGROUND AND NO FAULT SAFETY SURFACING AT OSS SCHOOL, WATERBURY, CT BOND Date: (Not earlier than Construction Contract Date) Amount: ONE HUNDRED NINETY FOUR THOUSAND, TWO HUNDRED THIRTY SIX DOLLARS (\$194,236.00) Modifications to this Bond: None See Section 18 CONTRACTOR AS PRINCIPAL SURETY Company: CREATIVE RECREATION, LLC Company: Westfield Insurance Company (Corporate Seal) (Corporate Seal) Signature: Signature: Name Name M. E. KERIN ATTORNEY-IN-FACT and Title: and Title: (Any additional signatures appear on the last page of this Payment Bond.) (FOR INFORMATION ONLY - Name, address and telephone) AGENT or BROKER: **OWNER'S REPRESENTATIVE:** (Architect, Engineer or other party:) THE KERIN AGENCY, INC. P.O. BOX 330910 WEST HARTFORD, CT 06133 860-953-6881

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BD 5971 (10/2010)

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1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.

2 If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.

3 If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Section 13) of claims, demands, liens or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Construction Contract and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety.

4 When the Owner has satisfied the conditions in Section 3, the Surety shall promptly and at the Surety's expense defend, indemnify and hold harmless the Owner against a duly tendered claim, demand, lien or suit.

5 The Surety's obligations to a Claimant under this Bond shall arise after the following:

5.1 Claimants, who do not have a direct contract with the Contractor,

- .1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
- .2 have sent a Claim to the Surety (at the address described in Section 13).

5.2 Claimants, who are employed by or have a direct contract with the Contractor, have sent a Claim to the Surety (at the address described in Section 13).

6 If a notice of non-payment required by Section 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Section 5.1.1.

7 When a Claimant has satisfied the conditions of Sections 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:

7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and

7.2 Pay or arrange for payment of any undisputed amounts.

7.3 The Surety's failure to discharge its obligations under Section 7.1 or Section 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Section 7.1 or Section 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.

8 The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Section 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

9 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the

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BD 5971 (10/2010)

Owner's priority to use the funds for the completion of the work.

10 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to, or give notice on behalf of, Claimants or otherwise have any obligations to Claimants under this Bond.

11 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

12 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Section 5.1.2 or 5.2, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13 Notice and Claims to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16 Definitions

16.1 Claim. A written statement by the Claimant including at a minimum:

- .1 the name of the Claimant:
- .2 the name of the person for whom the labor was done, or materials or equipment furnished;
- .3 a copy of the agreement or purchase order pursuant to which labor, materials or equipment was furnished for use in the performance of the Construction Contract;
- .4 a brief description of the labor, materials or equipment furnished;
- .5 the date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract:
- .6 the total amount earned by the Claimant for labor, materials or equipment furnished as of the date of the Claim:
- .7 the total amount of previous payments received by the Claimant; and
- .8 the total amount due and unpaid to the Claimant for labor, materials or equipment furnished as of the date of the Claim.
- 16.2 Claimant. An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

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- 16.3 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.
- 16.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 Contract Documents. Al the documents that comprise the agreement between the Owner and Contractor.

17 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18 Modifications to this bond are as follows:

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(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL		SURETY		
Company:		Company:		
Signature: Name and Title: Address	(Corporate Seal)	Signature: Name and Title: Address	(Corporate Soal)	

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General Power of Attorney

POWER NO. 0623342 00

Westfield Insurance Co. Westfield National Insurance Co. Ohio Farmers Insurance Co. Westfield Center, Ohio

CERTIFIED COPY

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinafter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Dhio, do by these presents make, constitute and appoint M. E. KERIN, M. A. KERIN, JOINTLY OR SEVERALLY

and State of CT its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, of WEST HARTFORD place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings, or other instruments or contracts of • • • • • • • • • • • • • • •

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

GUARANTEE, OR BANK DEPOSITORY BONDS. and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY: "Be It Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and an behalf of the Company subjects to the following requirement.

and on behalf of the Company subject to the following provisions:

The Attorney-in-Fact. may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as it signed by the President and sealed and attested by the Corporate Secretary."

"Be it Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facelmile, and any power of attorney or certificate bearing facesimile signatures or facesimile seal shall be valid and binding upon the Company with respect to any bond or undertaking to which it is attached." (Each adopted at a meeting held on February 6, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their National Surety Leader and Senior Executive and their corporate seals to be hereto affixed this 11th day of JANUARY A.D., 2018 A.D., 2018 .



SS.:

WESTFIELD INSURANCE COMPANY WESTFIELD NATIONAL INSURANCE COMPANY **OHIO FARMERS INSURANCE COMPANY**

By Dennis P. Baus, National Surety Leader and Senior Executive

On this 11th day of JANUARY A.D., 2018 , before me personally came Dennis P. Baus to me known, who, being by me duly sworn, did depose and say, that he resides in Wooster, Ohio; that he is National Surety Leader and Senior Executive of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Seal Affixed State of Ohio County of Medina SS,;

County of Medina

Notarial



David A. Kotnik, Attorney at Law, Notary Public My Commission Does Not Expire (Sec. 147.03 Ohio Re de)

I, Frank A. Carrino, Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and C RMFRS INSURANCE COMPANY, co hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, exact Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power of by said torney are in full force and effect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this day of



BPOAC2 (combined) (06-02)

Westfield Insurance Company Westfield Group[®] 1 Park Circle, PO Box 5001, Westfield Center, Ohio 44251-5001

Bond No. 091343J

Performance Bond	ument A312™ - 2010					
CONTRACTOR: (Name, legal status and address) CREATIVE RECREATION, LLC	SURETY: (Name. legal status and principal place of business) Westfield Insurance Company					
131 DAY STREET	1 Park Circle, PO Box 5001 Westfield Center, OH 44251-5001					
NEWINGTON, CT 06111 OWNER: (Name, legal status and address)						
WATERBURY PUBLIC SCHOOLS						
236 GRAND STREET WATERBURY, CT 06702 DATE CONSTRUCTION CONTRACT						
Date: Amount: ONE HUNDRED NINETY FOUR THOUSAND, TY Description:	O HUNDRED THIRTY-SIX DOLLARS (\$194,236.00)					
(Name and location)	NO FAULT SAFETY SURFACING AT WENDELL CROSS					
BOND Date: (Not earlier than Construction Contract Date) Amount: ONE HUNDRED NINETY FOUR THOUSAND, TW Modifications to this Bond:	∕O HUNDRED THIRTY SIX DOLLARS (\$194,236.00) ☐ See Section 16					
CONTRACTOR AS PRINCIPAL Company: CREATIVE RECREATION, LLC (Corporate Seal)	SURETY Company: Westfield Insurance Company (Corporate Sear)					
Company: CREATIVE RECREATION, LLC	Company: Westfield Insurance Company					
Company: CREATIVE RECREATION, LLC (Corporate Seal) Signature:	Company: Westfield Insurance Company (Corporate Seal) Signature: Name M. E. KERIN and Title: ATTORNEY-IN-FACT					
Company: CREATIVE RECREATION, LLC (Corporate Seal) Signature:	Company: Westfield Insurance Company (Corporate Sear) Signature: Name M. E. KERIN and Title: ATTORNEY-IN-FACT					

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BD 5971 (10/2010)

1 The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Section 3.

- 3 If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after
 - .1 the Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Section 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner's notice. If the Owner's notice. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;
 - .2 the Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and
 - .3 the Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4 Failure on the part of the Owner to comply with the notice requirement in Section 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5 When the Owner has satisfied the conditions of Section 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain blds or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Section 7 in excess of the Balance of the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:

- .1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or
- .2 Deny liability in whole or In part and notify the Owner, citing the reasons for denial.

6 If the Surety does not proceed as provided in Section 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Section 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7 If the Surety elects to act under Section 5.1, 5.2 or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for

- .1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
- .2 additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Section 5; and
- .3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8 If the Surety elects to act under Section 5.1, 5.3 or 5.4, the Surety's liability is limited to the amount of this Bond.

9 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors and assigns.

10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.

11 Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions confirming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14 Definitions

14.1 Balance of the Contract Price. The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract. The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default. Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default. Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents. All the documents that comprise the agreement between the Owner and Contractor.

15 If this Bond is issued for an agreement between a Contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16 Modifications to this bond are as follows:

(Space is provided below for additional signatures of added parties, other than those appearing on the cover page.)

CONTRACTOR AS PRINCIPAL

Company:

(Corporate Seal)

Signature: Name and Tille: Address Signature; Name and Title; Address

SURETY

Company:

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(Corporate Seal)

2

General Power of Attorney

CERTIFIED COPY

POWER NO. 0623342 00

Westfield Insurance Co. Westfield National Insurance Co. Ohio Farmers Insurance Co. Westfield Center, Ohio

Know All Men by These Presents, That WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, corporations, hereinalter referred to individually as a "Company" and collectively as "Companies," duly organized and existing under the laws of the State of Ohio, and having its principal office in Westfield Center, Medina County, Ohio, do by these presents make, constitute and appoint M. E. KERIN, M. A. KERIN, JOINTLY OR SEVERALLY

of WEST HARTFORD and State of CT its true and lawful Attorney(s)-in-Fact, with full power and authority hereby conferred in its name, place and stead, to execute, acknowledge and deliver any and all bonds, recognizances, undertakings, or other instruments or contracts of

LIMITATION: THIS POWER OF ATTORNEY CANNOT BE USED TO EXECUTE NOTE GUARANTEE, MORTGAGE DEFICIENCY, MORTGAGE GUARANTEE, OR BANK DEPOSITORY BONDS.

and to bind any of the Companies thereby as fully and to the same extent as if such bonds were signed by the President, sealed with the corporate seal of the applicable Company and duly attested by its Secretary, hereby ratifying and confirming all that the said Attorney(s)-in-Fact may do in the premises. Said appointment is made under and by authority of the following resolution adopted by the Board of Directors of each of the WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY:

WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY: "Be it Resolved, that the President, any Senior Executive, any Secretary or any Fidelity & Surety Operations Executive or other Executive shall be and is hereby vested with full power and authority to appoint any one or more suitable persons as Attorney(s)-in-Fact to represent and act for and on behalf of the Company subject to the following provisions: The Attorney-in-Fact. may be given full power and authority for and in the name of and on behalf of the Company, to execute, acknowledge and deliver, any and all bonds, recognizances, contracts, agreements of Indemnity and other conditional or obligatory undertakings and any and all notices and documents canceling or terminating the Company's liability thereunder, and any such instruments so executed by any such Attorney-in-Fact shall be as binding upon the Company as if signed by the President and sealed and attested by the Corporate Secretary." "Be it Further Resolved, that the signature of any such designated person and the seal of the Company heretofore or hereafter affixed to any power of attorney or any certificate relating thereto by facsimile, and any cower of attorney or certificate barring facsimple signatures or facsimile.

power of attorney or any certificate relating thereto by facsimile, and any power of attorney or certificate bearing facsimile signatures or facsimile seal shall be valid and binding upon the Company with respect to any cond or undertaking to which it is attached." (Each adopted at a meeting held on February 8, 2000).

In Witness Whereof, WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY have caused these presents to be signed by their National Surety Leader and Senior Executive and their corporate seals to be hereto affixed this 11th day of JANUARY A.D., 2018



On this 11th day of JANUARY A.D., 2018, before me personally came Dennis P. Baus to me known, who, being by me duly sworn, did depose and say, that he resides in Wooster, Ohio; that he is National Surety Leader and Senior Executive of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and OHIO FARMERS INSURANCE COMPANY, the companies described in and which executed the above instrument; that he knows the seals of said Companies; that the seals affixed to said instrument are such corporate seals; that they were so affixed by order of the Boards of Directors of said Companies; and that he signed his name thereto by like order.

Seal Affixed State of Ohio

SS.:

County of Medina

Notarial



David A. Kotnik, Attorney at Law, Notary Public My Commission Does Not Expire (Sec. 147.03 Ohio Revis

, Frank A. Carrino, Secretary of WESTFIELD INSURANCE COMPANY, WESTFIELD NATIONAL INSURANCE COMPANY and Q INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney, ex Companies, which is still in full force and effect; and furthermore, the resolutions of the Boards of Directors, set out in the Power MERS by said név are in full force and offect.

In Witness Whereof, I have hereunto set my hand and affixed the seals of said Companies at Westfield Center, Ohio, this day of



Frank , Carrino Secretary

Frank A. Carrino, Secretary

BPOAC2 (combined) (06-02)

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74 Batterson Park Road									E-MAIL ADDRESS: amie@wdkinsurance.com					
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	Waterbury Public Schools								AUTHORIZED REPRESENTATIVE					
	236 Grand Street								AUTHORIZED REPRESENTATIVE					

Waterbury

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CT 06702

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES CONTRACT COMPLIANCE REGULATIONS NOTIFICATION TO BIDDERS

(Revised09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by Sections 4a-60 and 4a-60a of the Connecticut General Statutes; and, when the awarding agency is the State, Sections 46a-71(d) and 46a-81i(d) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at Section 46a-68j-21 through 43 of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by Sections 4a-60 and 46a-71(d) of the Connecticut General Statutes.

According to Section 46a-68j-30(9) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to "aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials." "Minority business enterprise" is defined in Section 4a-60 of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: "(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of Section 32-9n." "Minority" groups are defined in Section 32-9n of the Connecticut General Statutes as "(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4)Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . ." An individual with a disability is also a minority business enterprise as provided by Section 4a-60g of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of Section 46a-68j-21(11) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder's qualifications under the contract compliance requirements:

- (a) the bidder's success in implementing an affirmative action plan;
- (b) the bidder's success in developing an apprenticeship program complying with Sections 46a-68-1 to 46a-68-17 of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder's promise to develop and implement a successful affirmative action plan;
- (d) the bidder's submission of employment statistics contained in the "Employment Information Form", indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder's promise to set aside a portion of the contract for legitimate minority business enterprises. <u>See Section 46a-68j-30(10)(E) of the Contract Compliance Regulations</u>.

INSTRUCTIONS AND OTHER INFORMATION

The following <u>BIDDER CONTRACT COMPLIANCE MONITORING REPORT</u> must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to Sections 4a-60 and 4a-60a CONN. GEN. STAT., and Sections 46a-68j-23 of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder's good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) Definition of Small Contractor

Section 4a-60g CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision 4a-60g CONN. GEN. STAT.

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND **EXTRACTION:** This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), sheet metal workers, roofers. elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category..

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

	Asian or Pacific Islander- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the
Africa, or the Middle East.	Indian subcontinent, or the Pacific Islands. This area includes
Black(not of Hispanic Origin)- All persons having	China, India, Japan, Korea, the Philippine Islands, and
origins in any of the Black racial groups of Africa.	Samoa.
Hispanic- All persons of Mexican, Puerto Rican, Cuban,	American Indian or Alaskan Native- All persons having
Central or South American, or other Spanish culture or	origins in any of the original peoples of North America, and
origin, regardless of race.	who maintain cultural identification through tribal affiliation
	or community recognition.

BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART I - Bidder Information

Company NameCreative Recreation LLCStreet Address135 Day Street Ste 2City & StateNewington, CT 06111Chief ExecutiveJohn W. Hollerbach	Bidder Federal Employer Identification Number 571138009 Or Social Security Number
Major Business Activity (brief description) Manufacturers representative providing sales, service and construction of commercial park & playground equipment	Bidder Identification (response optional/definitions on page 1) -Bidder is a small contractor. Yes ✓ No -Bidder is a minority business enterprise Yes No (If yes, check ownership category) BlackHispanicAsian AmericanAmerican Indian/Alaskan NativeBerian PeninsulaIndividual(s) with a Physical Disability Female
Bidder Parent Company (If any)	- Bidder is certified as above by State of CT Yes \checkmark No
Other Locations in Ct. (If any)	

PART II - Bidder Nondiscrimination Policies and Procedures

1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes VNo	7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes √No
2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes \sqrt{No}	8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes \sqrt{No}
3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes√No	9. Does your company have a mandatory retirement age for all employees? Yes No⊥
4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes ✓No	10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes_No_NA
5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes V_No	11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes No NA ✓
 6. Does your company have a collective bargaining agreement with workers? Yes No√ 6a. If yes, do the collective bargaining agreements contain non-discrim ination clauses covering all workers? Yes No 	12. Does your company have a written affirmative action Plan? Yes ✓No If no, please explain.
6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of Ct? Yes No	13. Is there a person in your company who is responsible for equal employment opportunity? Yes No If yes, give name and phone number. John W. Hollerbach 860-953-5336

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

Miracle Recreation Equipment Company NoFault Safety Surfacing CT Allwaste Jp Management

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above?

PART IV - Bidder Employment Information

PART IV - Bidder Employment Information					Date	:					
JOB CATEGORY *	OVERALL TOTALS		HITE Hispanic	BLACK (not of Hispanic origin) HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE			
		Male	Female	Male	Female	Male	Female	Male	Female	male	female
Management		Х									
Business & Financial Ops											
Marketing & Sales			Х								
Legal Occupations											
Computer Specialists		Х									
Architecture/Engineering											
Office & Admin Support			Х								
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE		2	2								
Total One Year Ago		2	1								
	FORM	IAL ON THE J	OB TRAINEES (I	ENTER FIGUR	ES FOR THE SAM	IE CATEO	GORIES AS A	ARE SHOWN AF	BOVE)		
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

Yes No<u></u>

PART V - Bidder Hiring and Recruitment Practices

FART V - Diduel F	in ing a	nu Ree	i ultille lit i lactic	03		(rage 3)
1. Which of the following (Check yes or no, and re			are used by you?	2. Check (X) any of the below listed requirements that you use as a hiring qualification(X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service	Х			х	Work Experience	
Private Employment Agencies	Х			х	Ability to Speak or Write English	
Schools and Colleges	Х				Written Tests	
Newspaper Advertisement	Х			х	High School Diploma	
Walk Ins				Х	College Degree	
Present Employees					Union Membership	
Labor Organizations				х	Personal Recommendation	
Minority/Community Organizations	Х				Height or Weight	
Others (please identify)				Х	Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature) John Hollerbach	(Title)	(Date Signed)	(Telephone)
	President	2/22/2021	860-953-5336
0			

(Page 5)

Minimum Rates and Classifications for Heavy/Highway Construction

ID#: 21-20531

Connecticut Department of Labor Wage and Workplace Standards Division

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: Waterbury	Project Town: Waterbury
State#: Waterbury	FAP#: Waterbury

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Waterbury)

CLASSIFICATION	Hourly Rate	Benefits
1) Boilermaker	33.79	34% + 8.96
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	36.45	34.44
2) Carpenters, Piledrivermen	34.53	25.64
2a) Diver Tenders	34.53	25.64
3) Divers	42.99	25.64
03a) Millwrights	35.64	26.49
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	52.25	22.55
4a) Painters: Brush and Roller	35.62	22.55
4b) Painters: Spray Only	38.62	22.55
4c) Painters: Steel Only	37.62	22.55
4d) Painters: Blast and Spray	38.62	22.55
4e) Painters: Tanks, Tower and Swing	37.62	22.55

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Wa	terbury)	
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L- 1,2 V-1,2,7,8,9)	39.92	28.75+3% of gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	36.67	37.62 + a
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP- 1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8 B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)	44.63	32.95
LABORERS		
8) Group 1: Laborer (Unskilled), Common or General, acetylene burner, concrete specialist	31.0	22.15
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	31.25	22.15
10) Group 3: Pipelayers	31.5	22.15
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	31.5	22.15
12) Group 5: Toxic waste removal (non-mechanical systems)	33.0	22.15
13) Group 6: Blasters	32.75	22.15
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	32.0	22.15
Group 8: Traffic control signalmen	18.0	22.15
Group 9: Hydraulic Drills	29.3	18.90
LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	33.23	22.15 + a
13b) Brakemen, Trackmen	32.26	22.15 + a
CLEANING, CONCRETE AND CAULKING TUNNEL		

As of: March 9, 2021

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Wat	erbury)	
14) Concrete Workers, Form Movers, and Strippers	32.26	22.15 + a
15) Form Erectors	32.59	22.15 + a
ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:		
16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers	32.26	22.15 + a
17) Laborers Topside, Cage Tenders, Bellman	32.15	22.15 + a
18) Miners	33.23	22.15 + a
TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR:		
18a) Blaster	39.72	22.15 + a
19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge Tenders	39.52	22.15 + a
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	37.54	22.15 + a
21) Mucking Machine Operator	40.31	22.15 + a
TRUCK DRIVERS(*see note below)		
Two axle trucks	29.86	25.79 + a
Three axle trucks; two axle ready mix	29.97	25.79 + a
Three axle ready mix	30.03	25.79 + a
Four axle trucks, heavy duty trailer (up to 40 tons)	30.08	25.79 + a
Four axle ready-mix	30.13	25.79 + a
Heavy duty trailer (40 tons and over)	30.35	25.79 + a

Specialized earth moving equipment other than conventional type on- the road trucks and semi-trailer (including Euclids)	30.13	25.79 + a
POWER EQUIPMENT OPERATORS		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over, Tunnel Boring Machines. (Trade License Required)	42.45	25.30 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	42.11	25.30 + a
Group 3: Excavator/Backhoe under 2 cubic yards; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar);Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade License Required)	41.32	25.30 + a
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper)	40.91	25.30 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24	40.28	25.30 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	40.28	25.30 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	39.95	25.30 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24	39.59	25.30 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	39.17	25.30 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	38.71	25.30 + a
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	36.54	25.30 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	36.54	25.30 + a
Group 12: Wellpoint Operator.	36.48	25.30 + a

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Wat	erbury)	
Group 13: Compressor Battery Operator.	35.86	25.30 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	34.66	25.30 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	34.23	25.30 + a
Group 16: Maintenance Engineer/Oiler	33.54	25.30 + a
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	38.11	25.30 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	35.53	25.30 + a
**NOTE: SEE BELOW		
LINE CONSTRUCTION(Railroad Construction and Maintenance)		
20) Lineman, Cable Splicer, Technician	48.19	6.5% + 22.00
21) Heavy Equipment Operator	42.26	6.5% + 19.88
22) Equipment Operator, Tractor Trailer Driver, Material Men	40.96	6.5% + 19.21
23) Driver Groundmen	26.5	6.5% + 9.00
23a) Truck Driver	40.96	6.5% + 17.76
LINE CONSTRUCTION		
24) Driver Groundmen	30.92	6.5% + 9.70
25) Groundmen	22.67	6.5% + 6.20
26) Heavy Equipment Operators	37.1	6.5% + 10.70
27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Waterbury)

Welders: Rate for craft to which welding is incidental.

*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

**Note: Hazardous waste premium \$3.00 per hour over classified rate

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$4.00 premium in addition to the hourly wage rate and benefit contributions:

1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)

2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson

3) Cranes (under 100 ton rated capacity)

Crane with 150 ft. boom (including jib) - \$1.50 extra Crane with 200 ft. boom (including jib) - \$2.50 extra Crane with 250 ft. boom (including jib) - \$5.00 extra Crane with 300 ft. boom (including jib) - \$7.00 extra Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol. For those without internet access, please contact the division listed below.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

Project: Installation of Playground Equipment at Wendell Cross Elementary School (Waterbury)

~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

Important Information:

For use with Building, Heavy/Highway, and Residential

Welders: Rate for craft to which welding is incidental.

*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

**Note: Hazardous waste premium \$3.00 per hour over classified rate.

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$4.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)
- 2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson
- 3) Cranes (under 100 ton rated capacity)

Crane with boom including jib, 150 feet - \$1.50 extra. Crane with boom including jib, 200 feet - \$2.50 extra. Crane with boom including jib, 250 feet - \$5.00 extra. Crane with boom including jib, 300 feet - \$7.00 extra. Crane with boom including jib, 400 feet - \$10.00 extra.

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

• Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of one apprentice in a specific trade.

Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work

- The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.
- Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.
- The annual adjustments will be posted on the Department of Labor's Web page: www.ctdol.state.ct.us.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.
- All subsequent annual adjustments will be posted on our Web Site for contractor access.

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage.

- All Persons who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.
- All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)
- Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

LIMITED LIABILTY COMPANY RESOLUTION

I, _____, hereby certify that I am the duly authorized and acting Member / Manager (circle one) of ______, a limited liability company organized and existing under the laws of the State of______, do hereby certify that the following facts are true and were taken from the records of said LLC.

The following resolution was adopted at a meeting of the LLC duly held on the _____ day of _____, ____, ____.

"It is hereby resolved that ______is authorized to make, execute and approve, on behalf of this LLC, any and all contracts or amendments thereof".

And I do further certify that the above resolution has not been in any way altered, amended, or repealed and is now in full force and effect.

IN WITNESS WHEREOF, I hereunto set my hand and affix the company seal of said ______ LLC this _____ day of ______, 202__.

Manager/Member

BOARD OF EDUCATION

Waterbury, Connecticut

COMMITTEE ON FINANCE

Item #11.2

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Finance recommends the Waterbury Board of Education approve a contract with Connecticut Communications, LLC, for Voice Over IP Equipment and Services.

Approved:

Rocco F. Orso

Memorandum

To: Board of Aldermen/Board of Education

From: Will Zhuta, Director of IT, Department of Education Computer Technology Center

Date: March 16, 2021

Re: Board of Aldermen/Board of Education Approval Request Executive Summary - Contract for Voice over IP Equipment and services between the City of Waterbury and Connecticut Communications, LLC

The Department of Education Computer Technology Center respectfully requests your approval of the above-referenced contract for a term of 5 years in the amount of \$ 728,890.31 for Voice over IP Hardware and Services between the City of Waterbury, Board of Education and Connecticut Communications, LLC. The Board of Education approved the Agreement at its March 18, 2021 meeting.

This contract was initiated under the Request for Proposal process (RFP #6785). There were seven (7) bidders for this project with Connecticut Communications, LLC being the lowest and most responsible bidder.

This contract will allow on premise, end to end solution that will provide a consistent and intuitive user experience across all devices, including, but not limited to:

- A voice processing system (voicemail, automated attendant, & unified communications) that is easy to use for both callers and staff
- A centralized system management system which will facilitate changes to the system configuration at each site from other locations
- A solution that provides the capability to expand services of the telephone system
- A solution where the district can share equipment and services between facilities, reducing costs and duplication
- A solution that will replace outdated equipment which can no longer be supported
- A solution that can provide uninterrupted and continuous service to internal and external constituents
- A solution that can improve student and staff safety and the related internal and external communications required in an emergency situation

The total cost of the project is as follows:

Year 1 w/Equipment		\$ 455,935.24
Years 2 - 5 Maintenance Costs	\$31,100.02 /year (x4)	\$ 124,400.08
TOTAL w/Maintenance Costs Years 2-5		\$ 580,335.32
EDGE SIP Recurring via CT Comm	\$1,725.00 /month (x60)	\$ 103,500.00
TOTAL w/Maintenance Costs years 2-5 and EDGE Recurring		\$ 683,835.32
EDGE Non-Recurring	\$450.00	\$ 450.00
Owner Contingency – For handset and hardware changes or additions		\$ 44,604.99
TOTAL w/ Maintenance Costs, EDGE Recurring & Non-Recurring		\$ 728,890.31

Accordingly, attached for your review and consideration are the requisite number of copies of the proposed contract and Disclosure and Certification of Obligations Affidavit Regarding Outstanding Obligations Form plus a copy of the Tax Clearance issued by the Office of Tax Collections.

Please note further that one complete set of Documents, including Contract, Plans and Specifications, has been placed on file with the City Clerk's Office. A representative from the department will be present at the meeting should you have any questions.

AGREEMENT RFP No. 6785 for MITEL VOICE OVER IP (VoIP) SOLUTION between The City of Waterbury, Connecticut and Connecticut Communications, LLC ("CT COM")

THIS AGREEMENT ("Agreement" or "Contract"), effective on the date signed by the Mayor, is by and between the CITY OF WATERBURY (the "City"), City Hall, 235 Grand Street, Waterbury, Connecticut and Connecticut Communications, LLC (the "Contractor" or "CT COM"), located at 48 Ozick Drive, Durham, Connecticut, 06422, a State of Connecticut, duly registered limited liability company (jointly referred to as the "Parties" to this Agreement).

WHEREAS, CT COM submitted a proposal to the City responding to **RFP No. 6785** for Mitel or Cisco Voice over IP Solution; and

WHEREAS, the City selected CT COM to perform services regarding RFP No. 6785; and

WHEREAS, the City desires to obtain CT COM's services pursuant to the terms, conditions and provisions set forth in this Agreement (the "Project").

NOW THEREFORE, THE PARTIES AGREE AND COVENANT AS FOLLOWS:

1. Scope of Services. CT COM shall furnish all of the labor, services, equipment, materials, equipment, reports, plans, specifications, deliverables, incidentals, etc., necessary to complete the Project as specified in this Agreement and such shall be completed in a satisfactory manner, as reasonably determined by the City. All labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. shall comply with any and all applicable Local, State and Federal laws, statutes, ordinances and regulations and with generally accepted professional standards. CT COM shall make such revisions or modifications to its work, at its own cost and expense, as the City may require in order to be deemed complete.

1.1. The Project consists of and CT COM will provide, deliver, install, service and maintain a complete overhaul and replacement of the Department of Education's telecommunication phone system(s), i.e., a new District (or "Premise") Hosted Mitel Voice over (VoIP) communication system solution and will provide all operation manuals, instructions and required submissions. The Contractor will remove and replace the Department of Education's and Waterbury Public Schools' ("District" or City") current system(s) with a new "Mitel MiVoice Business Enterprise" Unified Communications Platform design solution for the District, consisting of 36 locations in the City including the Primary Data Center located within the Computer Technology Center ("CTC") at 236 Grand Street and as such locations/sites are detailed in Attachment A. The Project will be in collaboration with and under the direction of the

Director of Information Technology for the Department of Education. Contractor shall provide an overall on premise, end-to-end solution that will provide a consistent and intuitive user experience across all devices, including, but not limited to: a voice processing unified system; a centralized system management system; a solution with capability to expand services; a solution that enables the District to share equipment and services between facilities for efficiency purposes; replace outdated equipment; a solution that provides uninterrupted and continuous services to internal and external constitutes and that can improve staff and student safety and the related internal and external communications required in emergency situations. The overall Project shall be a turnkey solution to encompass the following: modification of the District's data network to support a VoIP telecommunications system utilizing QoS protocols as appropriate; gathering end-user information for programming in the replacement system; providing, programming, installing and connecting all equipment necessary to provide fully functioning communications system to meet the Districts needs and otherwise as required herein; providing, programming, installing, and connecting all equipment necessary to provide unique E911 ANI and ALI information for each District telephone; connection to public network telephone services (SIP ad POTS lines), test SIP services prior to cutover; conduct end-user and system administration training; conduct system "fail-over" testing, provide on-site "post-cutover" support; and removal and disposal of the existing telephone system after the new system is installed and approved. Additionally CT COM shall serve as the sole Contractor responsible for planning, coordinating with, and payment to the third party vendors, Mitel Networks, Inc. and Edge Communications, as is necessary to complete this Project as specified herein; this includes but is not limited to all facilitating all transactions required such as purchasing and ordering of necessary equipment, supplies, and services as well as honoring any and all guarantees, warranties and prices as detailed herein and in Attachment A. All products, work and services shall be provided as more particularly detailed and described in the City of Waterbury RFP No. 6785 and CT COM's Response thereto attached hereto as part of Attachment A which are hereby made material provisions of this Contract. Attachment A shall consist of the following, which are attached hereto, are acknowledged by CT COM as having been received, or are otherwise hereby incorporated by reference as noted below, and all are made a part hereof:

- **1.1.1** City of Waterbury Request for Proposal Number 6785, (excluding phone list and blank price sheets for each location site, incorporated herein by reference), consisting of 38 pages, attached hereto;
- **1.1.2** CT COM's Answers to: Question Request Letter for RFP #6785 Cisco or Mitel VoIP, dated December 17, 2020, consisting of 4 pages, attached hereto;
- **1.1.3** Addendum #2 to RFP No. 6785, dated November 10, 2020, consisting of 7 pages, attached hereto;
- **1.1.4** Addendum # to RFP No. 6785, dated October 26, 2020, consisting of 3 pages, attached hereto;

- **1.1.5** Revised Cost Proposal dated March 1, 2020, consisting of 3 pages, attached hereto;
- **1.1.6** CT COM's Response to City of Waterbury Request for Proposal Number 6785, dated November 18, 2020, (excluding Mitel Solution Overview, Mitel Equipment & Software Spec/Cut Sheets, included herein by reference) consisting of 134 pages, attached hereto;
- **1.1.7** Any and all amendment(s) and Change Orders, issued by the City after execution of Contract, incorporated by reference;
- **1.1.8** Stockholder's Affidavit; Non-Collusion Affidavit; Debarment Certificate, Commission on Human Rights and Opportunities ("CHRO")/Equal Employment Opportunity ("EEO") Compliance Documents, incorporated by reference;
- **1.1.9** Certificates of Insurance, incorporated by reference;
- **1.1.10** All applicable Federal, State and local statutes, regulations charter and ordinances, incorporated by reference;
- **1.1.11** All licenses, incorporated by reference.

1.2. The entirety of **Attachment A** plus this executed instrument are together deemed the Contract Documents (hereinafter collectively referred to as "Contract Documents"). The City's record copy of the Contract Documents shall control and shall be effective and binding on CT COM. In the event that any provision in the Contract Documents conflict with any other provision therein, the provision in the component part of the Contract Document first enumerated below shall govern over any other component part which follows it numerically:

- **1.2.1** This Agreement
- **1.2.2** CT COM's Answers to: Question Request Letter for RFP #6785, dated December 17, 2020
- **1.2.3** Addendum #2 to RFP No. 6785
- **1.2.4** Addendum #1 to RFP No. 6785
- **1.2.5** CT COM's Revised Cost Proposal
- **1.2.6** CT COM's Response to RFP No. 6785
- **1.2.7** City of Waterbury RFP No. 6785

2. CT COM Representations Regarding Qualification and Accreditation. CT COM represents that, to the extent required by law, its employees are licensed to perform the scope of work set forth in this Contract. CT COM further represents that its employees have the requisite skill, expertise and knowledge necessary to perform the scope of work required under the terms of this Contract, including any supplementary work and the City relies upon these.

2.1. Representations regarding Personnel. CT COM represents that it has, or will secure at its own expense, all personnel required to perform the services under this Contract. Such personnel shall not be employees of or have any contractual relationship with the City, unless use of City employees or of personnel having a contractual relationship with the City is approved by the City in writing. As set forth above, all the services required hereunder shall be performed by CT COM under its supervision and all personnel engaged in the work shall be fully qualified and shall be authorized or permitted under state or local law to perform such services.

2.2. Representations regarding Qualifications. CT COM hereby represents that, to the extent required by Federal, State and Local statutes, regulations, codes, ordinances, and policies, that CT COM and/or its employees be licensed, certified, registered, or otherwise qualified, CT COM and all employees providing services under this Contract, are in full compliance with those statutes, regulations and ordinances. Upon City request, CT COM shall provide to the City a copy of CT COM's licenses, certifications, registrations, etc.

3. Responsibilities of CT COM. All data, information, etc. given by the City to CT COM and/or created by CT COM shall be treated by CT COM as proprietary to the City and confidential unless the City agrees in writing to the contrary and shall be used solely for the purposes of providing services under this Contract. CT COM agrees to forever hold in confidence all files, records, documents and other information which may come into the Contractor's possession during the term of this Contract, except where a disclosure is expressly stated as a requirement of this Contract. Notwithstanding the foregoing, where a CT COM disclosure is required to comply with statute, regulation, or court order, CT COM shall provide prior advance written notice to the City of the need for such disclosure. CT COM agrees to properly implement the services required in the manner herein provided.

3.1. Use of City Property. To the extent CT COM is required to be on City property to render its services hereunder, CT COM shall have access to such areas of City property as the City and CT COM agree are necessary for the performance of CT COM's services under this Contract (the "Site" or the "Premises") and at such times as the City and CT COM may mutually agree. CT COM shall perform all work in full compliance with Local, State and Federal health and safety regulations. All work hereunder shall be performed in a safe manner. CT COM shall immediately correct any dangerous condition caused by or resulting from its work. If it fails to correct, or to act diligently to correct, any condition which City reasonably believes to be a hazard to persons or property, then immediately upon oral or written notice to any supervisory or similar personnel of CT COM, City may, but shall not be required to, correct same at CT COM's expense. City shall confirm in writing any oral notice given within five (5) business days thereafter.

3.2. Working Hours. To the extent CT COM is required to be on City property to render its services hereunder, CT COM shall coordinate its schedule so that work on the Premises is performed during those hours the City sets forth in a written notice to CT COM, unless written permission is obtained from the City to work during other times.

This condition shall not excuse CT COM from timely performance under the Contract. The work schedule must be agreed upon by the City and CT COM.

3.3. Cleaning Up. To the extent CT COM is required to be on City property to render its services hereunder, CT COM shall at all times keep the Premises free from accumulation of waste materials or rubbish caused by CT COM, its employees or subcontractors, and at the completion of the work shall remove all rubbish from and about the Project and all tools, scaffolding and surplus materials and shall leave the Premises "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the City may remove the rubbish and charge the cost to CT COM.

3.4. Publicity. CT COM agrees not to deliberately disclose the fact that the City has entered into or terminated this Contract or disclose any of the terms of the Contract or use the City's name in connection with any publicity, unless the City gives prior written consent to such use of the City's name in each instance.

3.5. Standard of Performance. All workmanship, services, materials or equipment, either at the Premises or intended for it, shall conform in all respects with the requirements of all this Contract, and shall be the best obtainable from the crafts and trades. In all cases, the services, materials, equipment, reports, plans, specifications, deliverables, workmanship, etc. shall be equal to or better than the grade specified, and the best of their kind that is obtainable for the purpose for which they are intended. The standard of care and skill for all services performed by CT COM shall be that standard of care and skill ordinarily used by other members of CT COM's profession practicing under the same or similar conditions at the same time and in the same locality. CT COM's services rendered hereunder shall be rendered completely and by qualified personnel in accordance with standard industry practice.

3.6. CT COM's Employees. CT COM shall at all times enforce strict discipline and good order among its employees, and shall not employ any unfit person or anyone not skilled in the work assigned.

3.7. Due Diligence Obligation. CT COM acknowledges its responsibilities to examine and to be thoroughly familiar with the City's proposal document, including, but not limited to the specifications, and any addenda thereto. CT COM hereby warrants and represents that prior to the submission of its proposal during the proposal process it reviewed or was afforded opportunity, by the City, to review all physical items, facilities, services or functions essential to the satisfactory performance of the services required ("Due Diligence") and thereby certifies that all such items facilities, services or functions are included in this Contract and thereby warrants that:

3.7.1 it conducted or had opportunity to conduct all Due Diligence prior to the submission of its proposal and, accordingly, any additional costs, services or products resulting from the failure of CT COM to complete Due Diligence prior to submission of its proposal shall be borne by CT COM. Furthermore CT COM had the opportunity during the proposal process to ask questions it saw fit and to review the responses from the City;

3.7.2 its failure or omission to make investigation and verification of data shall, in no way, be cause for future claim of ignorance of such data or conditions nor shall such failure to investigate and verify be the basis for any claim whatsoever, monetary or otherwise;

3.7.3 it is solely responsible for resolving any issues resulting from the failure to conduct Due Diligence and shall assume any costs that may result during the implementation of the Project, including, but not limited to, adherence to specifications and pricing for the Project.

3.7.4 it was responsible for specifying any changes and disclosing any new costs prior to the submittal of its proposal. Thus, in the event any changes or costs are disclosed by CT COM, or otherwise required, during the performance of its services, the sole responsibility for any modification, delay and cost of such changes shall reside with CT COM.

3.7.5 has familiarized itself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and Federal, State and Local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work;

3.7.6 has given the City written notice of any conflict, error or discrepancy that CT COM has discovered in the Proposal Documents; and

3.7.7 agrees that the Proposal Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

3.8. Reporting Requirement. CT COM shall deliver periodic, monthly, written reports to the City's Using Agency setting forth (i) the issue date of the report, (ii) the time period covered by the report, (iii) a brief description of the work and services completed by CT COM and/or delivered by CT COM during the time period covered by the report, (iv) expressed as a percentage of the total work and services required under this Contract, the percentage of the total work represented by the work and services described in subsection iii above, (v) expressed as a percentage of this Contract's Section 6 total compensation, the percentage of the total compensation represented by the work and services described in subsection iii above, (vi) CT COM's declaration as to whether the entirety of CT COM's work and services required in this Contract will be, or will not be, completed within the Contract's Section 6 total compensation amount, and (vii) any and all additional useful and/or relevant information. Each report shall be signed by the CT COM designated project manager.

NOTE: CT COM's failure to deliver any report required herein shall be deemed a material breach of this Contract, the City hereby reserving the right to exercise all available legal remedy(ies) to address said breach.

3.9. CT COM is additionally responsive for facilitating and making all payments to Edge Communications and Mitel Network, Inc.

4. **Responsibilities of the City.** Upon the City's receipt of CT COM's written request, the City will provide CT COM with all documents, data and other materials the City agrees are necessary and appropriate to the service to be performed by CT COM hereunder and the City will endeavor to secure, where feasible and where the City agrees it is necessary and appropriate, materials or information from other sources requested by CT COM for the purpose of carrying out the services under this Contract.

5. Contract Time.

5.1 CT COM shall begin all work and services and complete all work and services required under this Contract within five (5) years from the execution of this Contract by the Mayor. The installation of all equipment, programming, and all related tasks and services shall be completed within a maximum of 65 days from the Notice to Proceed or as otherwise may be agreed to in writing by the Parties. All maintenance and services shall continue for the duration of the 5-year contract. At all times during the contract, CT COM shall be responsible for and ensure continuity of telephone services and availability for all sites.

5.2. Time is and shall be of the essence for all Project milestones and completion dates for the Project. CT COM further agrees that the Work shall be prosecuted regularly, diligently and uninterruptedly and at such rate of progress as will insure full completion thereof within the Contract Time stated above. It is expressly understood and agreed, by and between CT COM and City, that the Contract Time is reasonable for the completion of the Work. CT COM shall be subject to City imposed fines and/or penalties in the event CT COM breaches the foregoing dates.

6. Compensation. The City shall compensate CT COM for satisfactory provision of all of the goods and services set forth in this Contract as follows in this Section 6.

6.1. Fee Schedule. The fee payable to CT COM shall not exceed Seven Hundred Twenty Eight Thousand, Eight Hundred Ninety Dollars and Thirty-One Cents (\$728,890.31) for the entire five (5) year term of this Contract as is summarized below and detailed in Attachment A:

6.1.1	Owner Contingency	\$44,604.99
6.1.2.	Year 1:	
	All Equipment & Installation;	
	Annual Maintenance Support (included Year One);	
	SIP DID Port (LNP) per Number (non-recurring);	
	SIP Trunk, DID, E911 (recurring)	
	Year One TOTAL	\$477,085.24

6.1.3	Year 2 Annual Maintenance Support	
	Edge SIP Trunk, DID, E911	
	Year Two TOTAL	\$51,800.02
6.1.4	Year 3	
	Annual Maintenance Support	
	Edge SIP Trunk, DID, E911	
	Year Two TOTAL	\$51,800.02
6.1.5	Year 4	
	Annual Maintenance Support	
	Edge SIP Trunk, DID, E911	
	Year Two TOTAL	\$51,800.02
6.1.6	Year 5	
	Annual Maintenance Support	
	Edge SIP Trunk, DID, E911	
	Year Two TOTAL	\$51,800.02
	CONTRACT TOTAL	\$728,890.31

6.2. Limitation of Payment. Compensation payable to CT COM is limited to those fees set forth in Section 6.1 above. Such compensation shall be paid by the City upon review and approval of CT COM's invoices for payment and review of the work, services, deliverables, etc. required in this Contract and review as may be further required by the Charter and Ordinances of the City. CT COM's invoices shall describe the work, services, reports, plans, specifications, deliverables, etc. rendered and the compensation sought therefore in a form and with detail and clarity acceptable to the City.

6.2.1 CT COM and its affiliates are hereby provided with notice that the City reserves the right, in the City's sole discretion, to offset, withhold, or otherwise reduce City payment(s) to CT COM in an amount equaling the sum or sums of money CT COM and/or its affiliates is/are, or becomes delinquent or in arrears on, regarding CT COM's and/or its affiliate's real and personal tax obligations to the City.

6.3. Review of Work. CT COM shall permit the City to review, at any time, all work performed under the terms of this Contract at any stage of the work. CT COM shall maintain or cause to be maintained all records, books or other documents relative to charges, costs, expenses, fees, alleged breaches of the Contract, settlement of claims or any other matter pertaining to CT COM's demand for payment. The City shall not certify fees for payment to CT COM until the City has determines that CT COM has completed the work in accordance with the requirements of this Contract.

6.4. Proposal Costs. All costs of CT COM in preparing its proposal for **RFP No. 6785** shall be solely borne by CT COM and are not included in the compensation to be paid by the City to CT COM under this Contract or any other Contract.

6.5. Payment for Services, Materials, Employees. CT COM shall be fully and solely responsible for the suitability, and compliance with the Contract, of all labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. furnished to the City under this Contract. CT COM shall promptly pay all employees as their pay falls due, shall pay promptly as they fall due all bills for labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc., going into the work, and all bills for insurance, bonds, Worker's Compensation coverage, Federal and State Unemployment Compensation, and Social Security charges applicable to this Project. Before final payment is made, CT COM shall furnish a legal statement to the City that all payments required under this subparagraph have been made.

6.6. Liens. Neither the final payment nor any part of the retained percentage, if any, shall become due until CT COM, if requested by the City, shall deliver to the City a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required, in either case, an affidavit that so far as CT COM has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed; but CT COM may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the City, to indemnify it against any lien. If any lien remains unsatisfied after all payments are made, CT COM shall refund to the City all moneys that the City may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

7. Passing of Title and Risk of Loss. Title to each item of equipment, material, reports, plans, specifications, supplies, services, etc. required to be delivered to the City hereunder shall pass to City upon City payment to CT COM for that item. CT COM and its insurer shall assume the risk of loss or damage up to and including the date title passes, except that City shall be responsible for loss or damage caused by City's negligence.

8. Indemnification.

8.1. The Contractor shall indemnify, defend, and hold harmless the City, City's Boards, and Board of Education, commissions, agents, officials and employees from and against all claims, suits, damages, losses, judgments, costs and expenses including attorney's fees arising out of or resulting from the delivery of the labor, services, equipment, materials, reports, plans, specifications, design, drawings, deliverables, incidentals, etc. provided that any such claims, suits, damages, losses, judgments, costs or expenses (i) are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting there from, (ii) are alleged to be caused in whole or in part by any willful, intentional, negligent, or reckless act or omission of the Contractor, its employees, any subcontractor or consultant, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder; (iii) enforcement action or any claim for breach of the Contractor duties

hereunder or (iv) claim for intangible loss(es) including but not limited to business losses, lost profits or revenue, regardless of whether or not it is caused in part by a party indemnified hereunder.

8.2. In any and all claims against the City or any of its boards, agents, employees or officers by the Contractor or any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 8.1, above, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

8.3. The Contractor understands and agrees that any insurance required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, defend, keep and hold harmless the City as provided in this Contract.

8.4. The Contractor expressly understands and agrees that any performance bond or insurance protection required by this Contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the City and the City's boards, agents, employees or officers as provided herein.

8.5. Royalties and Patents. The Contractor shall, for all time, secure to the City the free and undisputed right to the use of any and all patented articles and methods used in the work and shall defend at Contractor's own expense any and all suits for infringement or alleged infringement of such patents, and in the event of adverse award under patent suits, the Contractor shall pay such awards and hold the City harmless in connection with any patent suits that may arise as a result of installations made by the Contractor and as to any award made thereunder.

8.6. In the event this Contract and/or the Contractor's, or its subcontractor, work and services provisioned hereunder is/are subject to the provisions of any Federal or State statute or regulations, or the City Charter or City Ordinance, the Contractor shall indemnify, defend and hold harmless the City from any fine, penalty or other amounts imposed on the City under said statutes, regulations, Charter or Ordinances, if caused by Contractor, or its subcontractor, omission or commission.

9. CT COM's Insurance.

9.1. CT COM shall not commence work under this Contract until all insurance required under this Section 9 has been obtained by CT COM and such insurance has been approved by the City. CT COM shall not allow any subcontractor to commence work on any subcontract until all insurance required of any such subcontractor has been so obtained and approved by the City. Insurance shall be provided by insurers that are satisfactory to the City, authorized to do business in the State of Connecticut, that have at least an "A-" Best's Rating, and are in an A.M. Best financial size category of VII or higher. The A.M. Best classifications are based on the most current A.M. Best Company ratings or an equivalent City approved rating system.

9.2. At no additional cost to the City, CT COM shall purchase and maintain the insurance coverages set forth below which shall protect the City from claims which may arise out of or result from CT COM's obligation under this Contract, whether such obligations are CT COM's or subcontractor or person or entity directly or indirectly employed by said CT COM or subcontractor, or by any person or entity for whose acts said CT COM or subcontractor may be liable.

9.3. Each insurance policy shall state that the insurance company shall agree to investigate and defend the insured against all claims for damages, even if groundless. If any insurance required herein is to be issued or renewed on a claims made form as opposed to an occurrence form, the retroactive date for coverage shall be no later than the commencement date of this Contract and shall provide that in the event of cancellation or non-renewal, the discovery period for insurance claims ("Tail Coverage") shall be available for at least 60 months.

9.4. The following policies with stated limits shall be maintained, in full force and effect, at all times during which the services are to be performed by CT COM:

9.4.1 General Liability Insurance:

\$1,000,000.00 per occurrence

\$2,000,000.00 aggregate

\$2,000,000.00 products/completed operations aggregate

Providing coverage to protect the City for all damages arising out of bodily injuries, sickness to or death of all persons in any one accident or occurrence and for all damages arising out of destruction of property in any one accident or occurrence.

9.4.2 Automobile Liability Insurance:

\$1,000,000.00 combined single limit (CSL) each accident

Any auto, all owned and hired autos

Providing coverage to protect the City with respect to claims for damage for bodily injury and or property damage arising out of ownership, maintenance, operation, use or loading and unloading of any auto including, owned and hired autos.

9.4.3 Workers' Compensation: Statutory Limits within the State of

Connecticut. Employers' Liability: **\$500,000.00** EL each accident **\$500,000.00** EL disease each employee **\$500,000.00** EL disease policy limit CT COM shall comply with all State of Connecticut statutes as it relates to workers' compensation.

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9.5. Failure to Maintain Insurance: In the event CT COM fails to maintain the minimum required coverage as set forth herein, the City may at its option purchase same, and offset CT COM's invoices for the cost of said insurance.

9.6. Cancellation: The City of Waterbury shall receive written notice of cancellation from CT COM at least thirty (30) calendar days prior to the date of actual cancellation, regardless of the reason for such cancellation.

9.7. Certificates of Insurance: CT COM's General and Automobile Liability Insurance policies shall be endorsed to add the City and Board of Education as an additional insured and provide a waiver of subrogation on all lines of coverage except Professional Liability. The insurance afforded the additional insured shall be primary and non-contributory insurance and the coverage and limits provided under CT COM's policies shall not be reduced or prorated by the existence of any other insurance applicable to any loss the additional insured may have suffered. At the time CT COM executes this Contract, it shall furnish to the City, subject to City approval, certificate(s) of insurance and Additional Insured Endorsement and Waiver of Subrogation Endorsement verifying the above coverages, including the naming of the City of Waterbury, as follows: "The City of Waterbury and its Board of Education are listed as an Additional Insured on a primary and non-contributory basis on all policies except Workers Compensation. All policies shall include a Waiver of Subrogation." The City's request for proposal number must be shown on the certificate of insurance. CT COM must supply replacement/renewal certificates at least thirty (30) calendar days prior to the expiration of the policy(ies). Said certificates shall contain a provision that coverage afforded under the policies shall not be cancelled or reduced for any reasons unless notice of not less than thirty (30) calendar days has been mailed to the Office of Corporation Counsel, 235 Grand Street, Waterbury, CT 06702.

9.8. No later than thirty (30) calendar days after CT COM receipt, CT COM shall deliver to the City a copy of CT COM's insurance policies, endorsements, and riders.

10. Conformance with Federal, State and Other Jurisdictional Requirements. By executing this Contract, CT COM represents and warrants that, at all pertinent and relevant times to the Contract, it has been, is and will continue to be in full compliance with all applicable statutes, acts, ordinances, guidelines, resolutions, orders, judgments, decrees, injunctions, rules, and regulations of all government authorities applicable to performance by CT COM of services hereunder, including those having jurisdiction over its registration and licensing to perform services hereunder; including, but not limited to, the following: EQUAL EMPLOYMENT OPPORTUNITY ACT; COPELAND ANTI-KICKBACK ACT, as supplemented in the Department of Labor Regulations (29 CFR Part 3); DAVIS-BACON ACT as supplemented by Department of Labor Regulations (29 CFR Part 5); Section 103 and 107 of the Contract Work Hours and Safety Standards Act, as supplemented by the Department of Labor Regulations (29 CFR Part 5); the HOUSING and COMMUNITY DEVELOPMENT ACT of 1974, as amended; TITLE 31 and Section 12-430(7) of the State of Connecticut General Statutes. All applicable sections of the City Charter and Code of Ordinances are incorporated by reference and made a part hereof.

10.1. Permits, Laws, and Regulations. Permits and licenses necessary for the delivery and completion of CT COM's work and services shall be secured in advance and paid by CT COM. CT COM shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work and services as specified.

10.2. Taxes-Federal, State and Local. The City is exempt from Federal Excise and Transportation, State and Local Sales and Use Taxes, including without limitation, taxes that would otherwise be imposed upon CT COM for transactions required or necessitated hereunder between it and its subcontractors, suppliers, etc. CT COM remains liable, however, for any applicable tax obligations it incurs. Moreover, CT COM represents that the proposal and pricing contained in this Contract do not include the amount payable for said taxes.

10.3. Labor and Wages. CT COM and its subcontractors shall conform to the labor laws of the State of Connecticut, and all other laws, ordinances, and legal requirements affecting the work in Connecticut.

10.3.1 CT COM is aware of the provisions of Title 31, §53 of the Connecticut General Statutes, latest revision (the "Act"), concerning the payment of minimum wages and other payments or contributions established by the State of Connecticut Labor Commissioner for work on public facilities. The provisions of the Act are incorporated by reference and made a part of this Contract. The Act provides that the Connecticut prevailing wage law applies to certain remodeling, refurbishing, alteration, repair and new construction. The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in Conn .Gen. Statute 31-53(i), shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day.

10.3.2 CT COM is aware of, and shall comply with, the provisions of both the Federal Davis-Bacon Act and the Federal American Recovery and Reinvestment Act of 2009, the provisions of both acts hereby incorporated by reference and made a part of this Contract. The Federal Davis-Bacon Act provides that Federal wage rate laws apply to certain federally funded contracts. The American Recovery and Reinvestment Act ("ARRA") provides that Federal wage rate laws apply to all ARRA funded contracts regardless of the contract's dollar value.

11. Discriminatory Practices. In performing this Contract, CT COM shall not discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms,

conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, age, religious creed, gender identity or expression, disability, national origin or ancestry, marital status, family status, prior psychiatric treatment, health care, military status or source of income or because of a handicap that is unrelated to the employee's or the applicant's ability to perform the duties of a particular job or position. Subcontracts with each subcontractor shall contain a provision requiring non-discrimination in employment as herein specified. This covenant is required pursuant to §93.04 of the Code of Ordinances of the City and any breach thereof may be regarded as a material breach of this Contract. Said provisions with subcontractors shall require conformity and compliance with all Local, State and Federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements.

11.1. Discrimination Because of Certain Labor Matters. No person employed on the work covered by this Contract shall be discharged or in any way discriminated against because such person has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or related to the labor standards applicable hereunder to its employer.

11.2. Equal Opportunity. In its execution of the performance of this Contract, CT COM shall not discriminate and shall comply with applicable laws prohibiting discrimination on the grounds of race, color, religion, sex, gender identity or expression, veteran status, national origin or citizenship status, age, disability or handicap. CT COM agrees to comply with all Local, State and Federal laws, rules and regulations and Executive orders pertaining to discrimination and equal opportunity requirements, and will require the same of all subcontractors.

12. This Section Left Intentionally Blank.

13. Termination.

13.1. Termination of Contract for Cause. If, through any cause, in part or in full, not the fault of CT COM, CT COM shall fail to fulfill in a timely and proper manner its obligations under this Contract, or if CT COM shall violate any of the covenants, agreements, or stipulations of this Contract, the City shall thereupon have the right to terminate this Contract by giving written notice to CT COM of such termination and specifying the effective date thereof, at least two weeks before the effective date of such termination.

13.1.1 In the event of such termination, all finished or unfinished documents, data, studies, reports, specifications, deliverables, etc. prepared by CT COM under this Contract shall, at the option of the City, become the City's property, and CT COM shall be entitled to receive just and equitable compensation for any satisfactory work completed for such.

13.1.2 Notwithstanding the above, CT COM shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of this Contract by CT COM, and the City may withhold any payments to CT COM for the

purpose of setoff until such time as the exact amount of damages due the City from CT COM is determined.

13.2. Termination for Convenience of the City. The City may terminate this Contract for Convenience, with 30 days' written notice to CT COM, after two (2) years of Execution of this Contract by the Mayor. If this Contract is terminated by the City as provided herein, CT COM will be paid an amount which bears the same ratio to the total compensation as the services actually performed bear to the total services of CT COM covered by this Contract, less payments of compensation previously made.

13.3. Termination for Non-Appropriation or Lack of Funding. CT COM acknowledges that the City is a municipal corporation and that this Contract is subject to the full satisfaction of Paragraph 6 herein, requiring approval and receipt by the City of funds for this project through USF E-Rate funding, for each contact year and the appropriation of funds by the City sufficient for this Contract for each budget year in which this Contract is in effect. CT COM therefore agrees that the City shall have the right to terminate this Contract in whole or in part without penalty in the event sufficient funds to provide for City payment(s) under this Contract is not appropriated, not authorized or not made available pursuant to law, or such funding has been reduced pursuant to law.

13.3.1 Effects of Non-Appropriation. If funds to enable the City to effect continued payment under this Contract are not appropriated, authorized or otherwise made available by law, the City shall have the right to terminate this Contract without penalty at the end of the last period for which funds have been appropriated, authorized or otherwise made available by law by giving written notice of termination to CT COM.

13.3.2 Effects of Reduced Levels of Funding. If funding is reduced by law, or funds to pay CT COM for the agreed to level of the products, services and functions to be provided by CT COM under this Contract are not appropriated, authorized or otherwise made available by law, the City may, upon seven (7) calendar days written notice to CT COM, reduce the level of the products, services or functions in such manner and for such periods of time as the City may elect. The charges payable under this Contract shall be equitably adjusted to reflect such reduced level of products, services or functions and the parties shall be afforded the rights set forth in this Contract.

13.3.3 No Payment for Lost Profits. In no event shall the City be obligated to pay or otherwise compensate CT COM for any lost or expected future profits.

13.4. Rights Upon Cancellation of Termination.

13.4.1 Termination for Cause. In the event the City terminates this Contract for cause, CT COM shall relinquish to the City any applicable interest, title and ownership including, but not limited to, perpetual use of any proprietary rights in and to the documents, data, studies, reports, specifications, deliverables, etc.

provided to, in possession of, and properly invoiced and paid for by (except to the extent such invoiced amount is disputed) the City. With regard to third party products, CT COM shall transfer all licenses to the City which CT COM is permitted to transfer in accordance with the applicable third party license. The City shall have no financial obligation to compensate CT COM for such terminated documents, data, studies, reports, specifications, deliverables, etc. unless payment is otherwise approved by the City prior to such termination. CT COM shall be liable for costs incurred by the City, including but not limited to reasonable attorney fees and all court awarded fees and costs incurred in terminating this Agreement in whole or in part.

13.4.2 Termination for Lack of Funding or Convenience. In the event of termination of this Contract by the City for lack of funding or convenience, the City shall pay CT COM for all documents, data, studies, reports, specifications, deliverables, etc. (including any holdbacks), installed and delivered to the City as of the Termination Date and CT COM shall relinquish to the City any applicable interest, title and ownership including, but not limited to perpetual use of any proprietary rights in and to said documents, data, studies, reports, specifications, deliverables, etc. in possession of and paid for by the City (except to the extent any invoiced amount is disputed). CT COM shall be required to exercise commercially reasonable efforts to mitigate damages. In the event of a termination for Lack of Funding or Convenience the City and CT COM may negotiate a mutually acceptable payment to CT COM for reasonable demobilization expenses. Said demobilization expenses, if any, shall be handled in accordance with the provision of this Contract pertaining to Changes in the Work.

13.4.3 Termination by CT COM. CT COM may, by written notice to the City, terminate this Contract if the City materially breaches, provided that CT COM shall give the City thirty (30) calendar days prior written notice and an opportunity to cure by the end of said thirty (30) day period. In the event of such termination, CT COM will be compensated by the City for work performed prior to such termination date and CT COM shall deliver to the City all deliverables as otherwise set forth in this Contract.

13.4.4 Assumption of Subcontracts. In the event of termination of this Contract, the City shall have the right to assume, at its option, any and all subcontracts for products, services and functions provided exclusively under this Contract, and may further pursue completion of the work under this Contract by replacement contract or otherwise as the City may in its sole judgment deem expedient.

13.4.5 Delivery of Documents. In the event of termination of this Contract, (i) CT COM shall promptly deliver to the City, in a manner reasonably specified by the City, all labor, services, equipment, materials, reports, plans, specifications, deliverables, incidentals, etc. and other tangible items furnished by, or owned, leased, or licensed by, the City, and (ii) the City shall pay CT COM for all

services performed and deliverables completed and accepted (pro-rated for deliverables partially completed) prior to the effective date of the termination (except to the extent any invoice amount is disputed).

14. Ownership of Instruments of Professional Services. The City acknowledges CT COM's documents, data, studies, reports, specifications, deliverables, etc. created and to be created pursuant to this Contract, including electronic files, are Instruments of Professional Services. Nevertheless, the final Instruments of Professional Services, including, but not limited to documents, data, studies, reports, specifications, deliverables, etc. prepared for the City under this Contract shall become the property of the City upon City payment for that Instrument of Professional Services and the City reserves the right to use the Instruments of Professional Services.

15. Force Majeure. Neither the Contractor nor the City shall be held responsible for delays or be considered to be in breach of this Contract or be subject to liquidated damages when their respective obligations under this Contract are caused by conditions beyond either Party's control, including without limitation:

15.1. Acts of God, such as severe acts of nature or weather events including floods, fires, earthquakes, hurricanes, cyclones, or explosions;

15.2. war, acts of terrorism, acts of public enemies, revolution, civil commotion or unrest, riots, or epidemics;

15.3. acts of governmental authorities such as expropriation, condemnation, changes of law and order or regulations, proclamation, ordinance, or other governmental requirement;

15.4. strikes and labor disputes; and

15.5. certain accidents including but not limited to hazardous, toxic, radioactive or nuclear contamination spills, contamination, combustion or explosion, which prevent a Party from fulfilling their obligations or otherwise render performance under the Contract impossible.

Upon cessation of work for reason of force majeure delays, the Party(ies) whose obligations are affected shall use their best efforts to meet the their obligations set forth in Section 5 of this Contract.

16. Subcontracting. CT COM shall not, without the prior written approval of the City, subcontract, in whole or in part, any of CT COM's services. Any subcontractor so approved shall be required to secure and maintain insurance coverage equal to or better than that required of CT COM and shall name the City as an additional insured party and said subcontractors shall deliver to the City a certificate of insurance evidencing such coverages. All subcontractors shall comply with all Federal, State and Local, laws, regulations and ordinances but such requirement shall not relieve CT COM from its requirement that all work and services provided or required hereunder shall comply with all Federal, State and Local, laws, regulations and ordinances.

16.1. CT COM shall be as fully responsible to the City for the acts and omissions of CT COM's subcontractors, and of persons either directly or indirectly employed by them, as it is for the acts and omissions of persons directly employed by CT COM.

17. Assignability. CT COM shall not assign any interest in this Contract, and shall not transfer any interest in the same (whether by assignment or novation) without the prior written approval of the City; provided, however, that claims for money due or to become due CT COM from the City under this Contract may be assigned to a bank, trust, company, or other financial institution, or to a Trustee in Bankruptcy, without such approval. Notice of any such assignment or transfer shall be furnished promptly to the City.

18. Audit. The City reserves the right to audit CT COM's books of account in relation to this Contract any time during the period of this Contract or at any time during the twelve month period immediately following the closing or termination of this Contract. In the event the City elects to make such an audit, CT COM shall immediately make available to the City all records pertaining to this Contract, including, but not limited to, payroll records, bank statements and canceled checks.

19. Risk of Damage and Loss. CT COM shall be solely responsible for causing the timely repair to and/or replacement of, City property or item(s) intended to become City property hereunder, where the need for repair or replacement was caused by CT COM, by someone under the care and/or control of CT COM, by any subcontractor of CT COM, or by any shipper or delivery service. CT COM shall be solely responsible for all costs and expenses, including but not limited to shipping, delivery, insurance, etc. associated with the foregoing repair and replacement obligation. Further, CT COM shall be solely responsible for securing the City's written acceptance of all completed repairs and replacements required hereunder. The City hereby retains sole discretion to determine whether a repair or a replacement is the proper remedy.

20. Interest of CT COM. CT COM covenants that it presently has no interest and shall not acquire any interest, direct or indirect, in the project or any parcel of land therein or any other interest which would conflict in any manner or degree with the performance of its services hereunder. CT COM further covenants that in the performance of this Contract no person having any such interest shall be employed.

21. Entire Agreement. This Contract shall constitute the complete and exclusive statement of the contract between the parties as it relates to this transaction and supersedes all previous agreements and understandings, whether written or oral, relating to such subject matter. Any amendment to this Contract must be in writing and agreed to and executed by the City and CT COM.

22. Independent Contractor Relationship. The relationship between the City and CT COM is that of client and independent contractor. No agent, employee, or servant of CT COM shall be deemed to be an employee, agent or servant of the City. CT COM shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants and subcontractors during the performance of this Contract. It is the express intention of the parties hereto, and CT COM hereby agrees and covenants, that it and any and all third party(ies) and subcontractor(s)

retained by CT COM hereunder is/are not and shall not be deemed an employee of the City of Waterbury, but is/are and shall remain an independent contractor relative to the City and that nothing herein shall be interpreted or construed as creating or establishing the relationship of employer-employee between the City of Waterbury and CT COM or between the City of Waterbury and any third party(ies) or subcontractor(s). Thus, CT COM hereby covenants that it, its subcontractor(s) and third party(ies) shall not be entitled to the usual characteristics of employment, such as income tax withholding, F.I.C.A. deductions, pension or retirement privileges, Workers Compensation coverage, health benefits, etc. and that CT COM shall be solely and entirely responsible for its acts and the acts of its agents, employees, servants, representatives, subcontractors and third party(ies).

23. Severability. Whenever possible, each provision of this Contract shall be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Contract, however, is held to be prohibited or invalid under applicable law, such provision shall be deemed restated to reflect the original intentions of the parties, as nearly as possible in accordance with applicable law, and if capable of substantial performance, the remaining provisions of this Contract shall be enforced as if this Contract was entered into without an invalid provision. If the ruling and/or controlling principle of law or equity leading to the ruling is subsequently overruled, modified or amended by legislation, judicial or administrative action, then the provision(s) in question as originally set forth in this Contract shall be deemed valid and enforceable to the maximum extent permitted by the new controlling principal of law or equity.

24. Survival. Any provisions of this Contract that impose continuing obligations on the parties shall survive the expiration or termination of this Contract for any reason.

25. Contract Change Orders.

25.1. At the sole discretion of the City, a Change Order may be issued solely by the City to modify an existing party obligation set forth in this Contract where the scope of the Change Order is:

25.1.1 within the scope of the original Contract OR is made pursuant to a provision in the original Contract, AND

25.1.2 the Change Order monetary cost is charged solely against those funds encumbered for and at the time the Contract was originally executed by the City, that is those funds set forth in the original Contract as a not to exceed payment amount OR within the original Contract's contingency / allowance / reserve amount (if any is stated therein), AND

25.1.3 the Final Completion Date has not been changed.

25.2. Notwithstanding the foregoing subsection A, a Change Order shall not include:

25.2.1 an upward adjustment to a CT COM's payment claim, or

25.2.2 a payment increase under any escalation clause set forth in the original contract, or any Change Order, or any amendment.

25.3. That the work and/or services contemplated are necessary does not, in itself, permit a Change Order. Should the need for a Change Order arise, the request shall be reviewed, and if agreed to, approved by the City's Using Agency and any City designated representative(s). To be binding and enforceable, a Change Order shall thereafter be signed by both CT COM, any City designated representative(s), and a duly authorized representative of the City's Using Agency prior to CT COM's delivery of the services, etc. contemplated in said Change Order. All Change Orders are governed by the provisions of this Contract. Any contract change NOT fully complying with this Section 25 shall be effectuated solely by an amendment to this Contract complying with Section 38.073 of the City's "Centralized Procurement System" ordinance.

26. Conflicts or Disputes. This Contract represents the full and complete concurrence between the City and CT COM and governs all disputes between them. In the instance of a conflict or dispute over issues not specifically referenced within the Contract, the following documents shall be used as historical documents. Without regard to the order of precedence, to resolve such conflicts or disputes, the historical documents are (i) the City's aforementioned RFP No. 6785; (ii) CT COM's Response to RFP No. 6785; (iv) CT COM's Revised Cost Proposal; and (v) CT COM's Answer to Follow-Up Questions dated December 17, 2020

26.1. Procedure. This procedure supersedes all statements to the contrary occurring either in proposals or other prior agreements, oral or written, and all other communications between the parties relating to this subject.

26.2. Presumption. This Contract or any section thereof shall not be construed against any party due to the fact that the Contract or any section thereof was drafted by such party.

27. Disputes; Legal Proceedings; Waiver of Trial by Jury and Continued Performance. CT COM agrees that its waives a trial by jury as to any and all claims, causes of action or disputes arising out of this Contract or services to be provided pursuant to this Contract. Notwithstanding any such claim, dispute or legal action, CT COM shall continue to perform services under this Contract in a timely manner, unless otherwise directed by the City.

28. Binding Agreement. The City and CT COM each bind themselves, and their successors, assigns and legal representatives to the other party to this Contract and to the successors, assigns and legal representatives of such other party with respect to all covenants of this Contract.

29. Waiver. Any waiver of the terms and conditions of this Contract by either of the parties hereto shall not be construed to be a waiver of any other term or condition of this Contract.

30. Governing Laws. This Contract, its terms and conditions and any claims arising there from shall be governed by the laws of the State of Connecticut.

31. Notice. Except as otherwise specifically prohibited in this Contract, whenever under this Contract approvals, authorizations, determinations, notices, satisfactions or waivers are required or permitted, such items shall be effective and valid only when given in writing signed by a duly authorized officer of the City's Using Agency or CT COM, and delivered in hand or sent by mail, postage prepaid, to the party to whom it is directed, which until changed by written notice, are as follows:

CT COM:	Connecticut Communications, LLC 48 Ozick Drive Durham, Connecticut, 06422		
City:	c/o Compute	erbury, Dept. of Education er Technology Center, Director of IT treet, 3rd floor CT 06702	
With a	a copy to:	City of Waterbury Office of the Corporation Counsel 235 Grand Street, 3 rd Floor	

32. City Code of Ordinances, Ethics and Conflict of Interest Code, Provisions.

The Person (the term "Person" shall herein be as defined in Section 38 of the City's Code of Ordinances) supplying the documents, data, studies, reports, specifications, deliverables, etc. under this Contract shall comply with all applicable Federal, State and Municipal statutes, regulations, charters, ordinances, rules, etc. whether or not they are expressly stated in this Contract, including but not limited to the following:

Waterbury, CT 06702

32.1. It shall be a material breach of this Contract, and, except as may be permitted by regulations or rulings of the City of Waterbury Board of Ethics it shall be a violation of the City's Code of Ordinances, for any Public Official, City Employee or Member of a Board or Commission who is participating directly or indirectly in the procurement process as set forth in the City's Code of Ordinances, including those participating in exempt transactions, to become or be the employee of any person contracting with the governmental body by whom the Official, Employee, or Board or Commission member is employed or is a member.

32.2. It shall be a material breach of this Contract, and it shall be a violation of the City's Code of Ordinances for any Person to offer, give, or agree to give any current or former Public Official, Employee or Member of a Board or Commission, or for such current or former Public Official, Employee or Member of a Board or Commission to solicit, demand, accept or agree to accept from another Person, a gratuity or an offer of employment in connection with any: decision; approval; disapproval; recommendation; preparation of any part of a program requirement or a requisition; influencing the content

of any specification or procurement standard; or rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a Contract or Purchase Order, or to any solicitation or proposal therefore.

32.3. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for any payment, Gratuity, or offer of employment to be made as an inducement for the award of a subcontract or order, by or on behalf of a subcontractor, the prime CT COM or higher tier subcontractor or any Person associated therewith, under a Contract or Purchase Order to the City.

32.4. The value of anything transferred or received in violation of the City's Charter, Code of Ordinances, and/or regulations promulgated there under, by any Person subject to said Charter and/or Ordinances may be recovered by the City.

32.5. Upon a showing that a subcontractor made a kickback to the City, a prime CT COM or a higher tier subcontractor in connection with the award of a subcontract or order there under, it shall be conclusively presumed that the amount thereof was included in the price of the subcontract or order and ultimately borne by the City and will be recoverable hereunder from the recipient. In addition, said value may also be recovered from the subcontractor making such kickbacks. Recovery from one offending party shall not preclude recovery from other offending parties.

32.6. It shall be a material breach of this Contract and it shall be a violation of the City's Code of Ordinances for a Person to be retained, or to retain a Person, to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee; and every Person, before being awarded a City contract, shall deliver to the City, on a City authored form, a representation that such Person has not retained anyone in violation of this subsection 32.6, the failure to deliver said form being a material breach of this Contract and a violation of the City's Code of Ordinances. Note, however, this subsection 32.6 shall not apply to full-time Employees who, as a condition of their employment, may be entitled to bonuses or other fees in accordance with their employment relationship.

32.7. The Person hereby expressly represents that he/she/it has complied with those sections of the City's Code of Ordinances requiring that said Person has (i) delivered to the City an affidavit, on a City authored form, stating that the Person and its affiliates have no delinquent taxes or other financial obligations owned to the City; (ii) filed the City authored financial disclosure statement form as set forth in the City's Code of Ordinances regarding disclosure of financial interests; (iii) delivered to the City a written acknowledgement, on a City authored form, evidencing receipt of a copy of the "Ethics and Conflict of Interest" ordinance for the City of Waterbury and hereby expressly represents that said Person is in full compliance with the entirety of said Code of Ordinances; and (iv) filed a current list of all taxable personal and real property as required by the State of Connecticut General Statutes. Any violation of this subsection

32.7 shall be deemed a material breach of this Contract and shall be a violation of the City's Code of Ordinances.

32.8. The definitions set forth in the City's Code of Ordinances shall be the primary source for interpretation of the forgoing subsections 32.1-32.7.

32.9. CT COM is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, all relevant provisions of the City's Charter and all relevant provisions of the City's Code of Ordinances, including without limitation Chapters 93, titled "Discriminatory Practices", Chapter 38 titled "Centralized Procurement System", and Chapter 39 titled "Ethics and Conflict of Interest", of said Code as may be amended from time to time.

32.10. CT COM hereby acknowledges receipt of a copy of the Chapters 38 and 39 of City's Ordinance regarding Procurement, Ethics, and Conflicts of Interest and has familiarized itself with said Code and hereby agrees to adhere to said Code. The text of Chapters 38 and 39 of said Code may be obtained from the Office of the City Clerk of City and on the internet at the City Clerk's web site: the http://www.waterburyct.org/content/9569/9605/9613/default.aspx [click link titled "The City of Waterbury Code of Ordinances Current to 12/31/2015". For Chapter 38, click on "Title III: Administration", then click on "Chapter 38: Centralized Procurement System". For Chapter 39, click on "Title III: Administration", then click on "Chapter 39: Ethics and Conflicts of Interest"].

32.11. CT COM is hereby charged with the requirement that it shall have knowledge of, and shall fully comply with, the City's Ordinance Sections 34.15 through 34.99 entitled, "Ordinance Concerning the Hiring of Waterbury Residents on Certain Publicly-Funded Construction Projects" and the State of Connecticut Legislature's Special Act No. 01-1.

32.12. Every Person who conducts business with, contracts, with or provides commodities or services to the City, is charged with notice of the extent of the powers and authority, and the limitations thereon, of the Public Officials and Employees of the City, as set forth in the charter of the City, the Code of Ordinances and any Regulations or Policies pertaining thereto. In particular, and without implying any limitation as to its applicability, it applies to all Persons who participate in the procedures pertaining to the Centralized Procurement System as set forth in Chapter 38, and the Ethics and Conflict of Interest provisions set forth in Chapter 39 of the Code of Ordinances.

32.13. INTEREST OF CITY OFFICIALS. No member of the governing body of the City, and no other officer, employee, or agent of the City who exercises any functions or responsibilities in connection with the carrying out of the Project to which this Contract pertains shall have any personal interest, direct or indirect, in this Contract.

32.14. PROHIBITION AGAINST CONTINGENCY FEES. CT COM hereby represents that it has not retained anyone to solicit or secure a contract with the City upon an agreement or understanding for a commission, percentage, brokerage or contingency fee.

32.15. FREEDOM OF INFORMATION ACT NOTICE. Pursuant to State statute, in the event the total compensation payable to CT COM set forth in Section 6 herein is greater than \$2,500,000.00, the City is entitled to receive a copy of any and all CT COM records and files related to the performance of this Contract and those records and files are subject to the Freedom of Information Act ("the Act") and may be disclosed by the City pursuant to the Act.

[Signature page follows.]

IN WITNESS WHEREOF, the parties hereto execute this Contract on the dates signed below.

WITNESSES:

CITY OF WATERBURY

Sign:_____ Print Name:

Sign:			
Print	Name:		

Date: _____

WITNESSES:

CONNECTICUT COMMUNICATIONS, LLC

Sign: Print Name:	By: Print Name:	
	Its:(Title)	
Sign:		
Print Name:	Date:	

ATTACHMENT A

- **1.** City of Waterbury Request for Proposal Number 6785, (excluding phone list and blank price sheets for each location site, incorporated herein by reference), consisting of 38 pages, attached hereto;
- **2.** CT COM's Answers to: Question Request Letter for RFP #6785 Cisco or Mitel VoIP, dated December 17, 2020, consisting of 4 pages, attached hereto;
- **3.** Addendum #2 to RFP No. 6785, dated November 10, 2020, consisting of 7 pages, attached hereto;
- **4.** Addendum # to RFP No. 6785, dated October 26, 2020, consisting of 3 pages, attached hereto;
- 5. Revised Cost Proposal dated March 1, 2020, consisting of 3 pages, attached hereto;
- 6. CT COM's Response to City of Waterbury Request for Proposal Number 6785, dated November 18, 2020, (excluding Mitel Solution Overview, Mitel Equipment & Software Spec/Cut Sheets, included herein by reference) consisting of 134 pages, attached hereto;
- **7.** Any and all amendment(s) and Change Orders, issued by the City after execution of Contract, incorporated by reference;
- **8.** Stockholder's Affidavit; Non-Collusion Affidavit; Debarment Certificate, Commission on Human Rights and Opportunities ("CHRO")/Equal Employment Opportunity ("EEO") Compliance Documents, incorporated by reference;
- 9. Certificates of Insurance, incorporated by reference;
- **10.** All applicable Federal, State and local statutes, regulations charter and ordinances, incorporated by reference;
- **11.** All licenses, incorporated by reference.

Waterbury, Connecticut

COMMITTEE ON BUILDING & SCHOOL FACILITIES

Item #12.1

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee on Building & School Facilities recommends the Waterbury Board of Education approve Final Plans, Form SCG-042, for the Margaret M. Generali Elementary School Project, State Project 151-0306 RR.

Approved:

Ann M. Sweeney



REQUEST FOR REVIEW OF FINAL PLANS FORM SCG-042

STATUTORY REF.: C.G.S. Sections 10-282, 10-283, 10-291, 10-294, 10-292

DISTRICT NAME:	FACILITY NAME AND ADDRESS:	STATE PROJECT NUMBER:
City of Waterbury	Margaret M. Generali Elementary School	151-0306 RR
	3196 East Main Street Waterbury, CT 06705	PHASE NUMBER: 1 of 1

Estimated date* to begin construction June 26, 2021 Estimated date to complete construction August 25, 2021

* NOTE: Construction must begin within 2 years of grant commitment date to maintain grant eligibility.

Certification of Approval dates:		
	Final Plans & Prof. Cost Estimate	Site Approval (if applicable)
Local Board of Education	/ /	/ /
School Building Committee	/ /	/ /

We hereby certify that these **final plans and project manual(s)** as prepared for bidding and dated <u>Jun. 30, 2020</u>, and the **professional cost estimate**, completed in accordance with Level 3 of ASTM International Standard E1557, Standard Classification of Building Elements and Related Sitework-UNIFORMAT II for this project, dated <u>Jun. 30, 2020</u>, have been reviewed and approved for this project on the dates shown above.

For the Town or Regional Board of Education Charles E. Pagano Jr. Chairperson's Name (Type or print)	Signature	Date	**
For the School Building Committee:			
Ann M. Sweeney			**
Chairperson's Name (Type or print)	Signature	Date	

 For the Project Architect/Engineering Firm:

 Hibbard & Rosa Architects, L.L.C.

 Firm Name (Type or print)

 Signature

 (860) 961-2107

 Telephone No.

We hereby request a review of the final Project Plans, Project Manual, Ineligible and Limited Eligible Costs Worksheet (ICW) FORM SCG-4000, and professional cost estimate as noted above. Copies of all the above referenced documents are either attached, or available.

Dr. Verna D. Ruffin

Superintendent's Name (Type or print) Sig	nature	Date
---	--------	------

NOTE: NO PHASE OF THIS SCHOOL CONSTRUCTION PROJECT SHALL GO OUT TO BID, AND NO PURCHASE ORDER OVER \$10,000.00 SHALL BE ISSUED, UNTIL YOU HAVE RECEIVED WRITTEN NOTIFICATION FROM THE STATE DEPARTMENT OF ADMINISTRATIVE

PAGE 1 OF 2

FORM SCG-042 Request for Review of Final Plans

State Project No. 151-0306 RR

Project Name: Roof Replacement Margaret M. Generali Elementary School

Name of Contact Person:	Telephone:	Date:
Certifications of Local Approval:		
I certify that I have local jurisdiction over June 30, 2020 for the ab	r the State Building Code and that the pove referenced project comply with all	
Gil Graveline Local Building Official's Name	Signature	Date
I certify that I have local jurisdiction over June 30, 2020 for the ab	r the State Fire Safety Code and that to bove referenced project comply with all	
Thomas Fitzgerald		···
Local Fire Marshal's Name	Signature	Date
Cynthia Vitone	Signatura	
Local Health Official's Name	Signature	Date
I certify that I have local jurisdiction ove Accessibility Standards (UFAS). I furthe for the above referenced project comply	er certify that the plans and project m	anual dated <u>June 30, 2020</u>
Chris Harmon	Circolure	
Local Federal 504 Official's Name	Signature	Date
PROVIDED, PRIOR TO REASERVICES (DAS) FOR THIS	CEIVING APPROVAL-TO-BID BY THE ST	E OBTAINED, AND ARE REQUIRED TO BE ATE DEPARTMENT OF ADMINISTRATIVE CANNOT BE OBTAINED LOCALLY, PLEASE REVIEW (OSCG&R) FOR ASSISTANCE.
2.) THE OFFICE OF SCHOOL PROJECT MANUAL AND CO		(OSCG&R) APPROVED PROJECT PLANS,

3.) ORIGINAL SIGNATURES ARE REQUIRED ON THIS FORM. IF ORIGINAL SIGNATURES ARE NOT AVAILABLE AT THE PLAN REVIEW MEETING, MAIL OR OVERNIGHT DELIVER THIS COMPLETED FORM TO: The Office of School Construction Grants & Review 450 Columbus Blvd., Suite 1503 Hartford, CT 06103

Certifications of Local Approval:		
•	ver the State Building Code and tha	at the plans and project manual dated
June 30, 2020 for the	above referenced project comply wi	th all applicable building codes.
Gil Graveline		
Local Building Official's Name	Signature	Date
certify that I have local jurisdiction o	ver the State Fire Safety Code and	that the plans and project manual dated
June 30, 2020 for the	•	
Tom Fitzgerald		
Local Fire Marshal's Name	Signature	Date
I certify that I have local jurisdiction o June 30, 2020 for the		
Cynthia Vitone		
Local Health Official's Name	Signature	Date
	Signature	Dale
I certify that I have local jurisdiction of Accessibility Standards (UFAS). I fu for the above referenced project com	rther certify that the plans and proje	
Christopher Harmon		
Local Federal 504 Official's Name	Signature	Date

LIST OF DRAWINGS

	SHEEI
R <i>00</i> F	PLAN
R <i>00</i> F	DETAILS
	R <i>00</i> F R <i>00</i> F R <i>00</i> F R <i>00</i> F R <i>00</i> F R <i>00</i> F

ROOF REPLACEMENT FOR **GENERALI ELEMENTARY SCHOOL**

396 EAST MAIN STREET WATERBURY, CT

PREPARED FOR THE

CITY OF WATERBURY, CT

NEIL M. O'LEARY, MAYOR

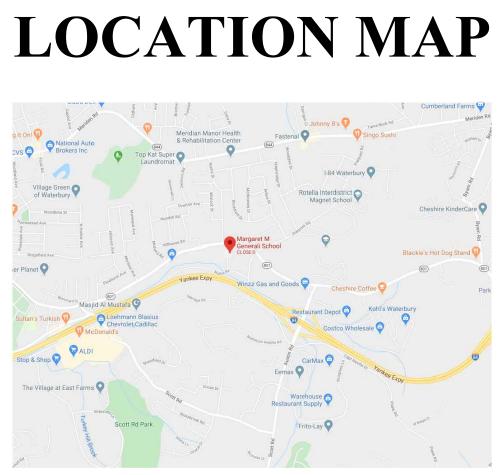


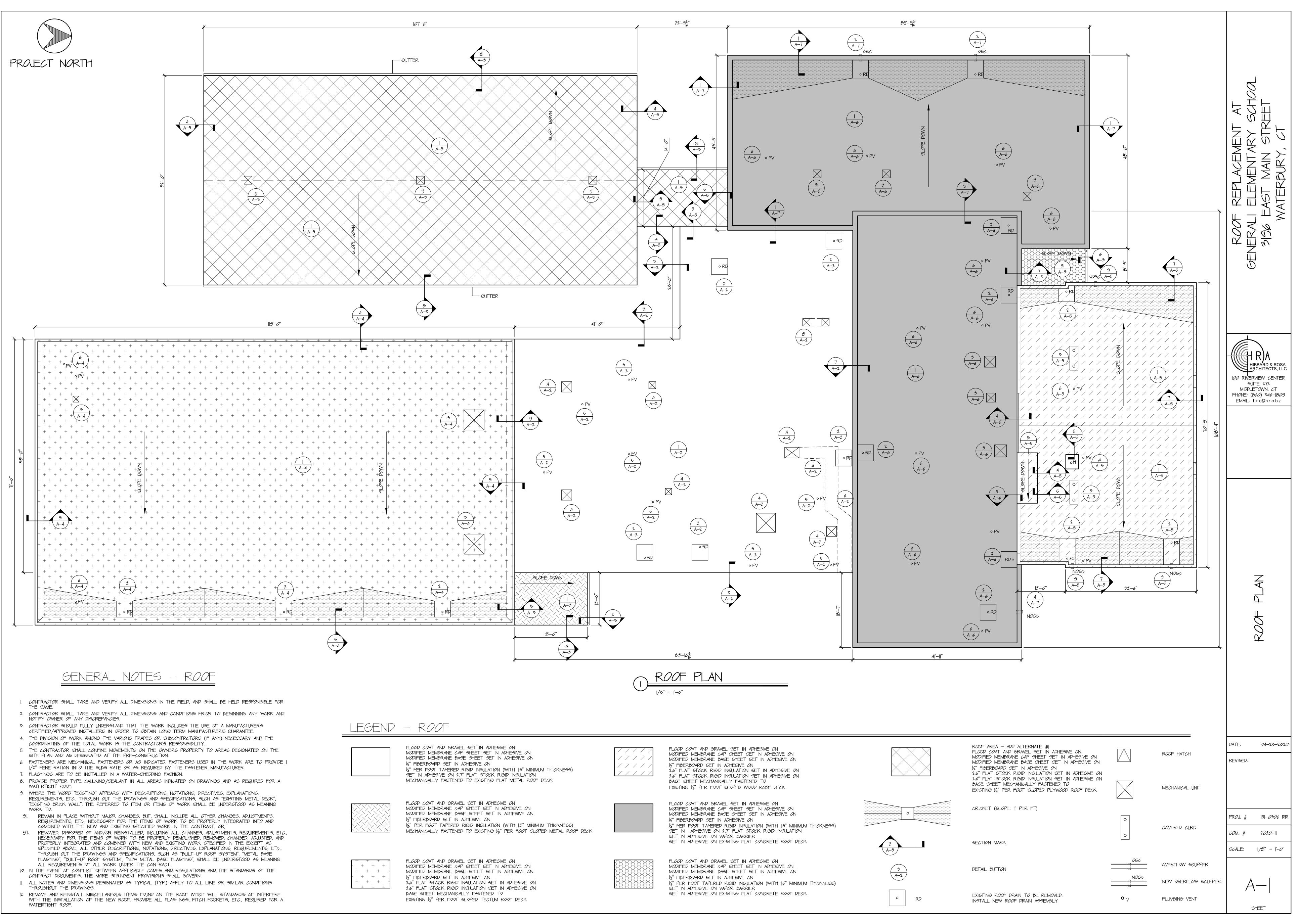
PREPARED BY

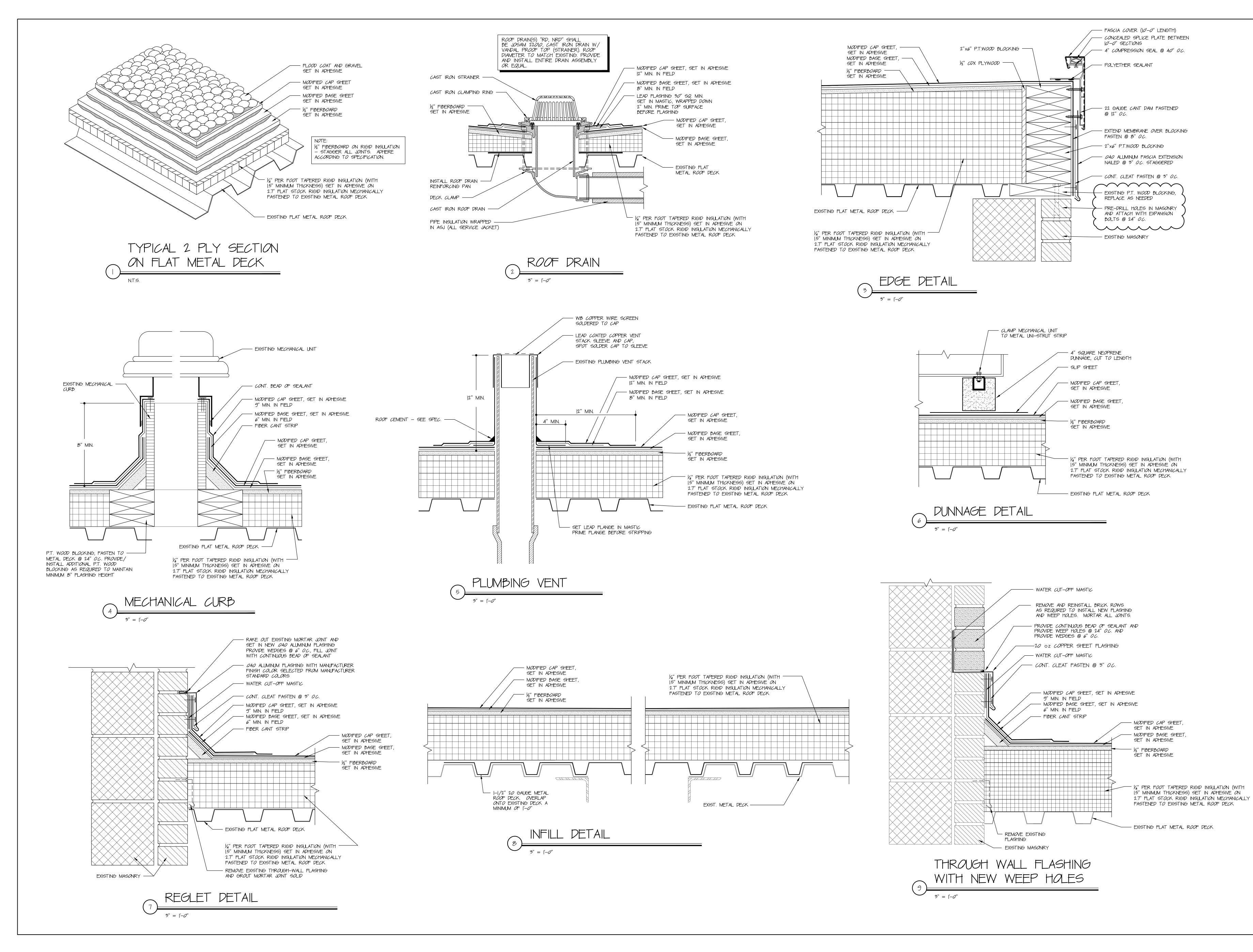
HIBBARD & ROSA ARCHITECTS, L.L.C. **100 RIVERVIEW CENTER SUITE 272** MIDDLETOWN, CONNECTICUT 06457 (860) 346-1809

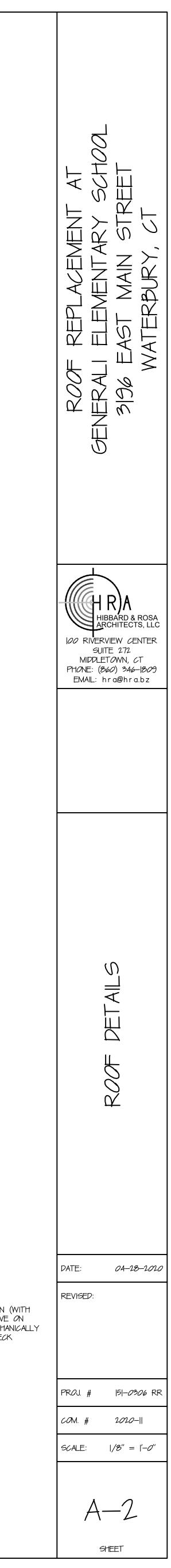
APRIL 28, 2020 COMM. NO. 2020-11 PROJECT NO. 151-0306 RR

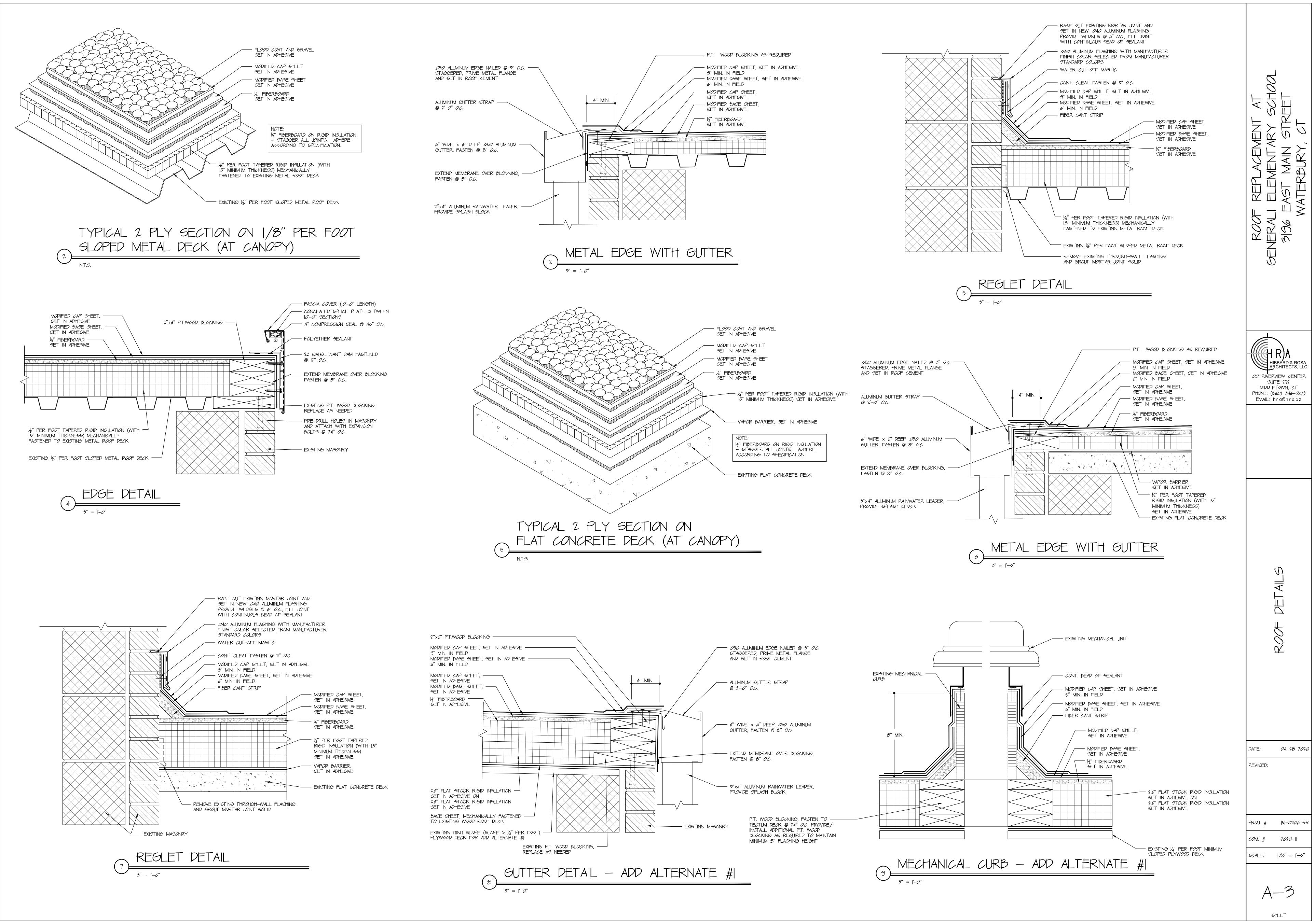


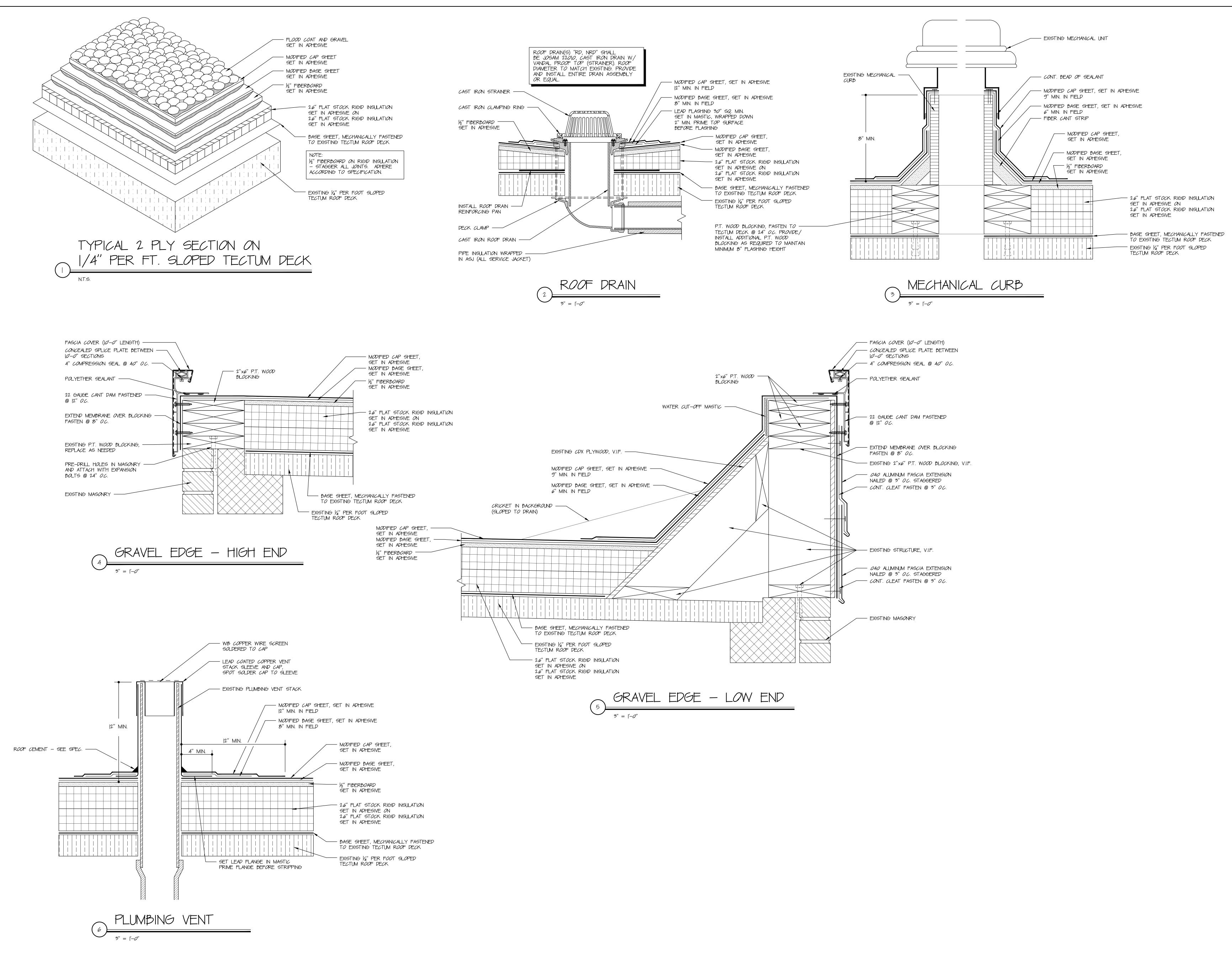


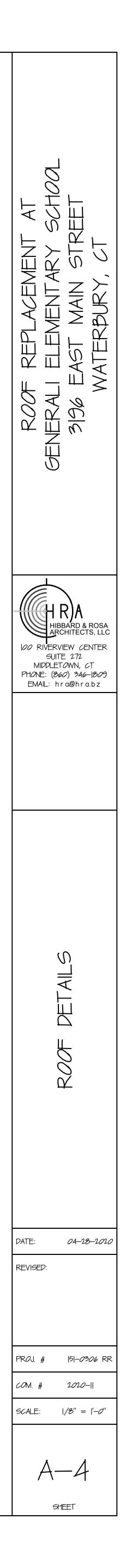


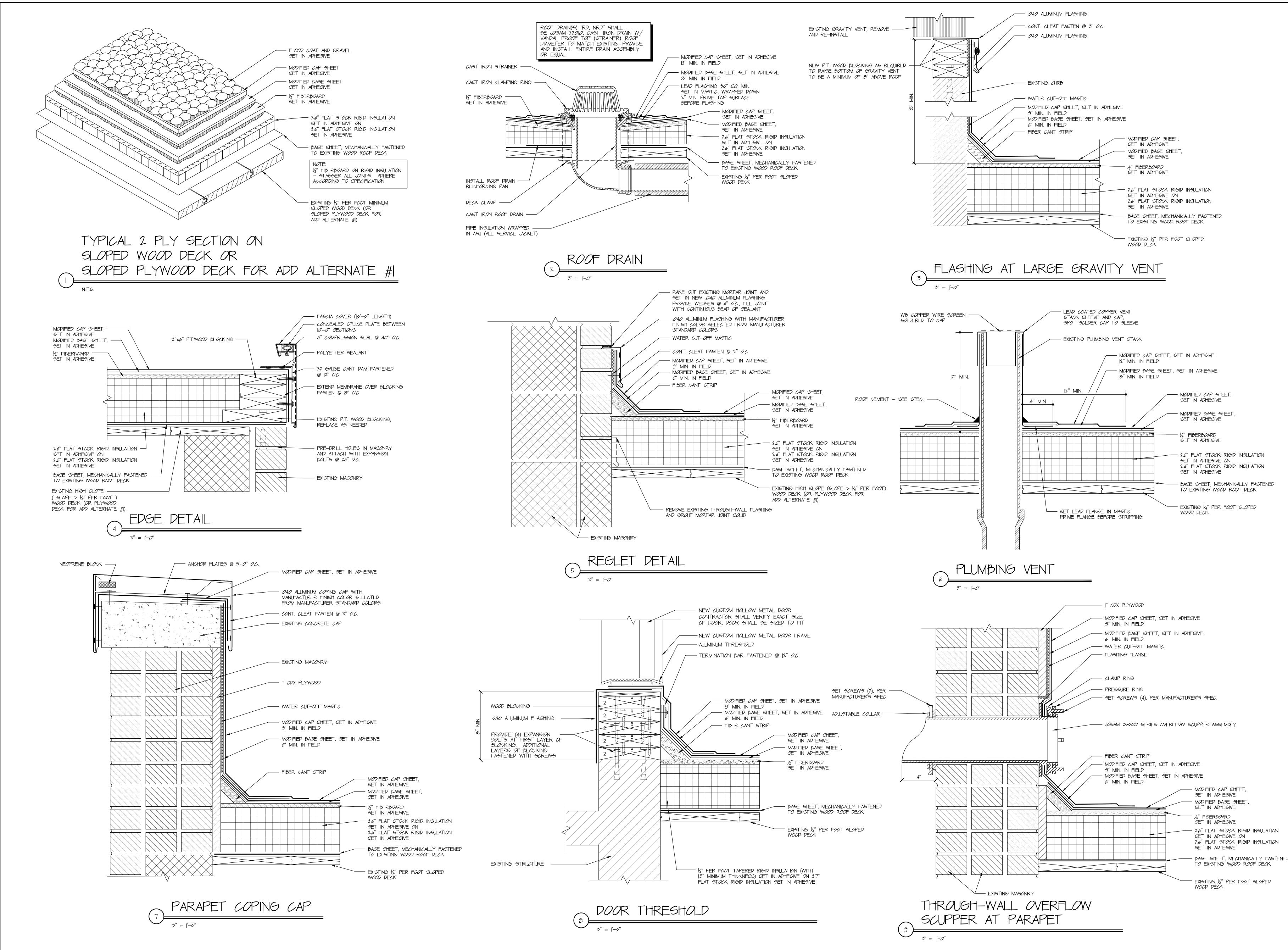


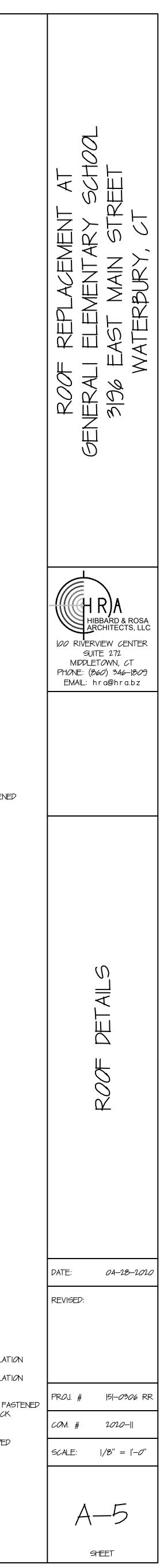


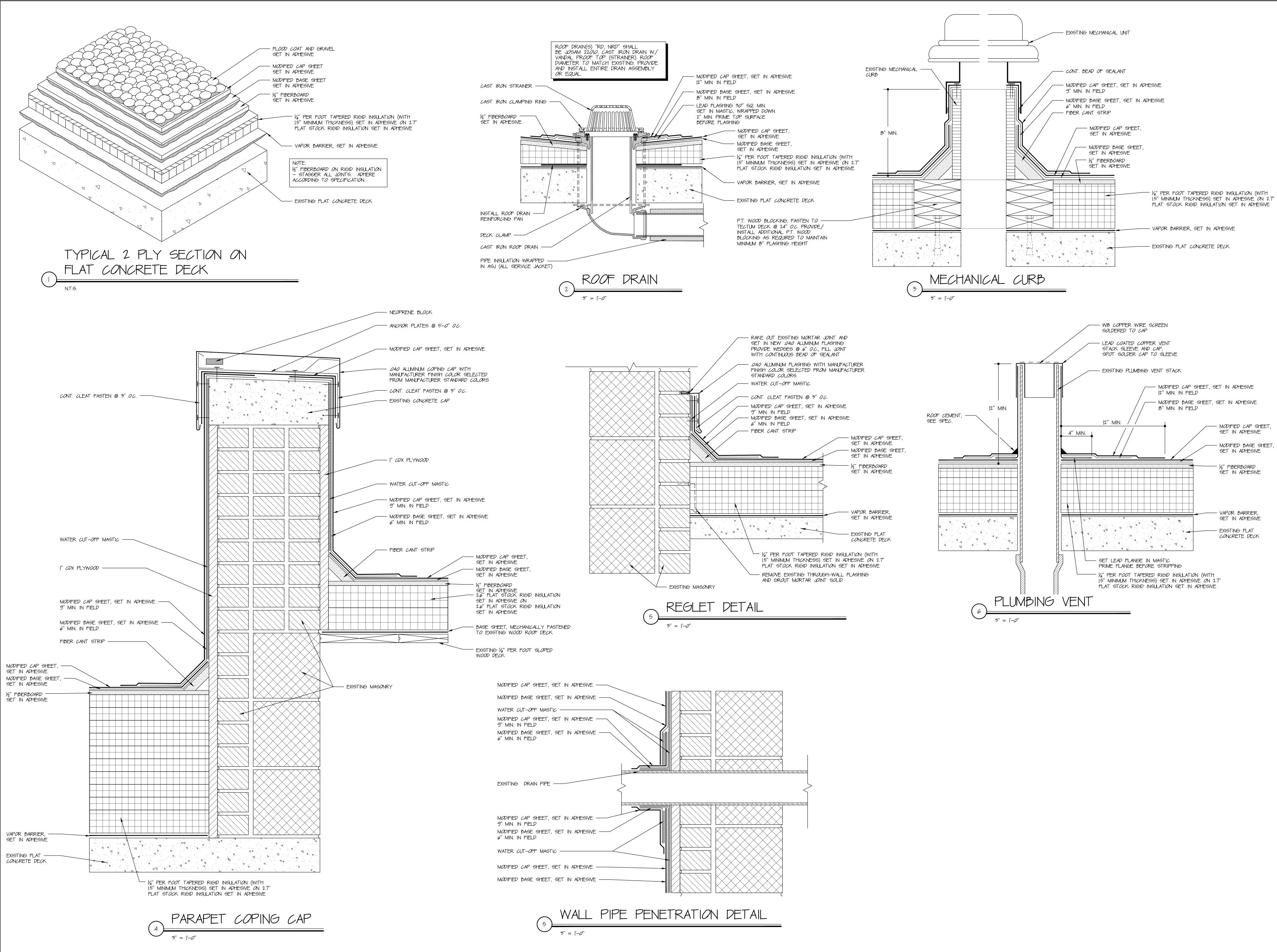


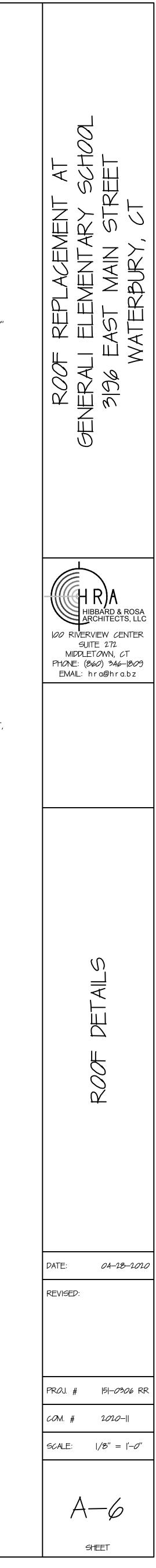


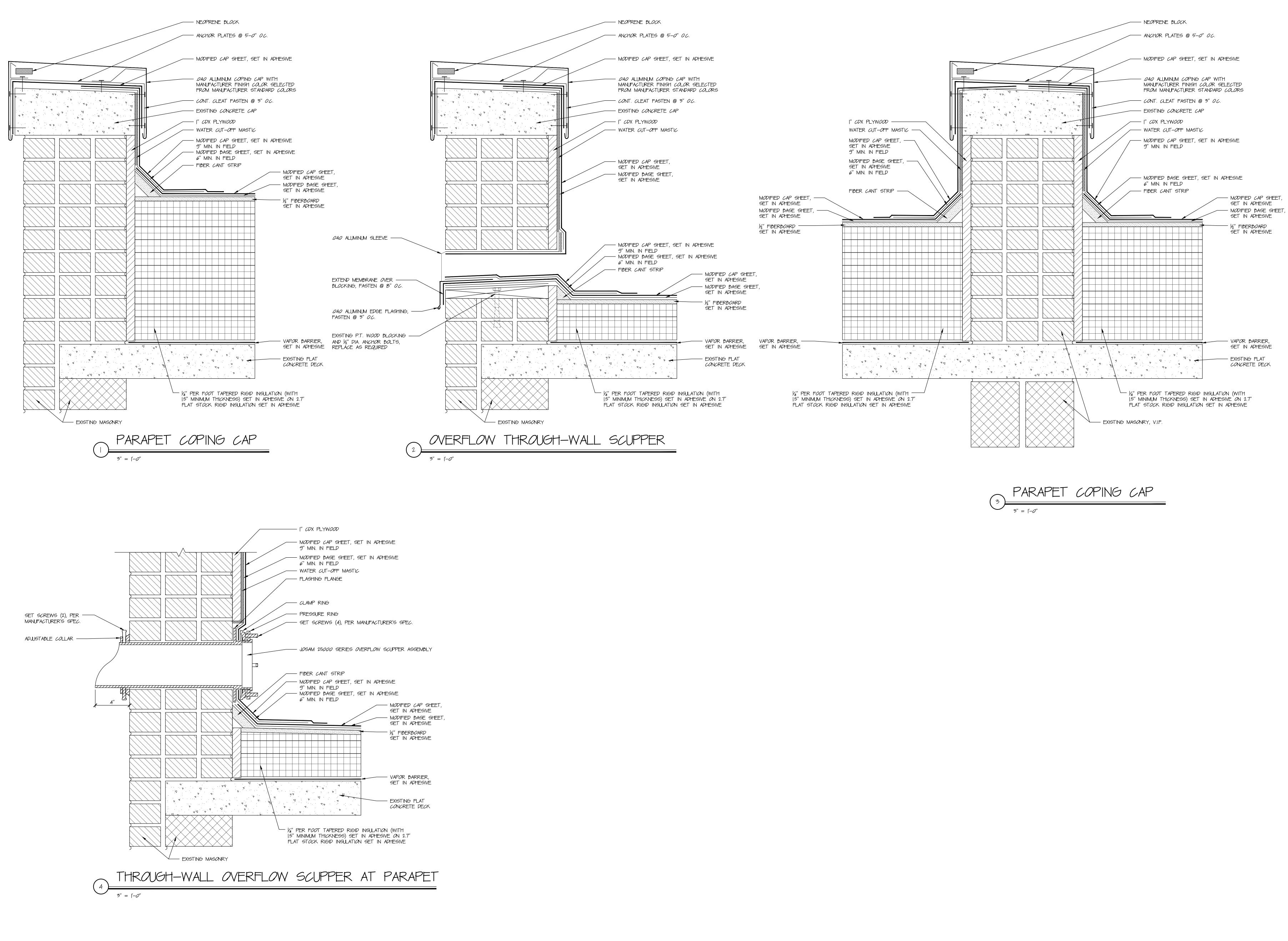




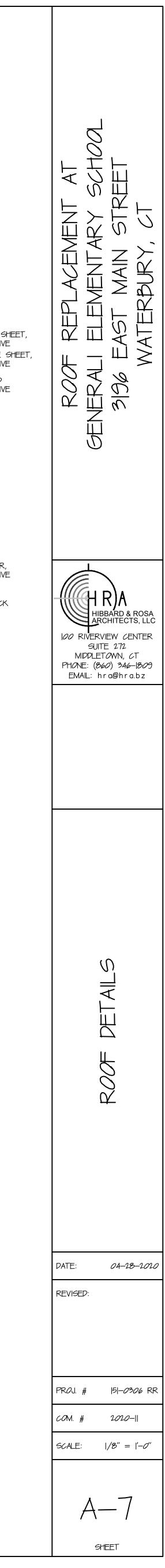








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SET IN ADHESIVE – EXISTING FLAT



Home Help

Connecticut Department of Administrative Services Office of School Construction Grants Public School Construction Cost Database

Grant Application Phase Cost Estimate

State Project #	EstNum000140				
LEA	Waterbury Public Schoo				
School Name	Margaret M Generali Ele				
Project Type					
Square Footage of Construction	32,195				
Grades	G1				
Enrollment Projections					
Reimbursement Rate			Cost/Square Feet		Ineligible Costs
Project Cost	\$1,200,000.00	of Project Costs	\$37.27		Project Ineligible \$47,758.00 Costs
All Soft Cost	\$10,340.00				Ineligible Soft Costs \$840.00
Construction Cost	\$1,189,660.00	of Construction Cost	\$36.95		Ineligible Construction \$46,918.00 Costs
Eligible Construction Costs	\$1,142,742.00	of Eligible Costs	\$35.49		
Consultants \$9,990.00	FF&E \$0.00	Fees \$350.00	Contingencies \$0.00	Acquisition \$0.00	

Construction Cost		Cost	Ineligibles
A. SUBSTRUCTURE	A10. Foundations	0.00	0.00
	A20. Basements	0.00	0.00
B. SHELL	B10. Super Structure	0.00	0.00
	B20. Exterior Enclosures	3300.00	0.00
	B30. Roofing	952950.00	0.00
C. INTERIORS	C10. Interior Construction	0.00	0.00
	C20. Stairs	0.00	0.00
	C30. Interior Finishes	0.00	0.00
D. SERVICES	D10. Conveying	0.00	0.00
	D20. Plumbing	33000.00	0.00
	D30. HVAC	0.00	0.00
	D40. Fire Protection	0.00	0.00
	D50. Electrical	2000.00	0.00
E. EQUIPMENT & FURNISHINGS	E10. Equipment	0.00	0.00
	E20. Furnishings	0.00	0.00
F. SPECIAL CONSTRUCTION AND DEMOLITION	F10. Special Construction	0.00	0.00
	F20. Selective Building Demolition	0.00	0.00
	F30. Abatement	0.00	0.00
X. GENERAL CONDITIONS, OFFICE OVERHEAD, &	X10. General Conditions	49557.00	0.00
PROFIT	X20. Overhead & Profit	99114.00	0.00

Z. ALLOWANCES	Z10. Design Contingency	0.00	0.00
	Z20. Inflation (Escalation) Allowance	0.00	0.00
	Z30. Construction Contingency	49739.00	46918.00
C-ft C-tt			
Soft Cost SITEWORK (beyond 5 ft from Building)	C1010 Site Cleaning	Cost	Ineligibles
S. SHEWORK (Beyond S it norm building)	G1010. Site Clearing	0.00	0.00
	G1020. Site Demolition & Relocation	0.00	0.00
	G1030. Site Earthwork	0.00	0.00
	G1040. Hazardous Waste Remediation	0.00	0.00
	G2010 Roadways	0.00	0.00
	G2020. Parking	0.00	0.00
	G2030. Pedestrian Paving	0.00	0.00
	G2040. Site Development	0.00	0.00
	G2045. Athletic Fields	0.00	0.00
	G2050. Landscaping	0.00	0.00
	G3010. Water Supply	0.00	0.00
	G3020. Sanitary Sewer	0.00	0.00
	G3030. Storm Sewer	0.00	0.00
	G3040. Heating Distribution	0.00	0.00
	G3050. Cooling Distribution	0.00	0.00
	G3060. Fuel Distribution	0.00	0.00
	G3090. Other Site Mechanical Utilities	0.00	0.00
	G4010. Electrical Distribution	0.00	0.00
	G4020. Site Lighting	0.00	0.00
	G4030. Site Communications & Security	0.00	0.00
	G4090. Other Site Electrical Utilities	0.00	0.00
	G9010. Service & Pedestrian	0.00	0.00
	G9020. Bleachers, Concession Stands, etc.	0.00	0.00
	G9090. Other Site Systems	0.00	0.00
SITE GENERAL CONDITIONS, OFFICE OVERHEAD,	Y1010. Site General Conditions	0.00	0.00
ROFIT, & ALLOWANCES	Y2010. Site Overhead & Profit	0.00	0.00
	Y3010. Site Design Contingency	0.00	0.00
	Y4010. Site Inflation (Escalation) Allowance	0.00	0.00
	Y5010. Trade Contractor Bond Costs	0.00	0.00
	Y3020. Site Construction Contingency	0.00	0.00
. CONSULTANTS	R1010. Architect/Engineer	9990.00	490.00
	R2010. Environmental	0.00	0.00
	R3010. Commissoning	0.00	0.00
	R4010. Geotechnical	0.00	0.00
	R5010. Cost Estimator	0.00	0.00
	R6010. Owners Rep	0.00	0.00
	R7010. CM Pre-Construction	0.00	0.00
	R8010. FF&E Coordinator	0.00	0.00
FF0 F	R9010. Legal	0.00	0.00
FF&E	S1010. FF&E	0.00	0.00
	S2010. Technology	0.00	0.00
	S3010. Playground Equipment	0.00	0.00
	S4010. Playground Surfacing	0.00	0.00
	S5010. Moving	0.00	0.00
FEES	T1010. District Bonding Fees	0.00	0.00
	T2010. Insurance Cost	0.00	0.00

	T3010. Town Staff Cost	0.00	0.00
	T4010. Town Permit Fees	0.00	0.00
	T5010. State Permit Fees	350.00	350.00
	T6010. Testing/Inspection Fees	0.00	0.00
	T7010. Printing & Mailing	0.00	0.00
	T8010. Other Costs	0.00	0.00
U. CONTINGENCIES	U1010. Owner Contingency	0.00	0.00
W. ACQUISITION COSTS W	W1010. Land/Building Purchase	0.00	0.00
	W2010. Swing Space/Portables	0.00	0.00
	W3010. Site Remediation	0.00	0.00
	W4010. Appraisals	0.00	0.00
	W5010. Land Survey	0.00	0.00
	W6010. Other Acquisition Costs	0.00	0.00

Save and Continue Save and Exit Signoff and Submit

Waterbury, Connecticut

COMMITTEE OF THE WHOLE

Item #13.1

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Committee of the Whole recommends the Waterbury Board of Education approve the Collective Bargaining Agreement (contract) between The Waterbury Board of Education and School Crossing Guards Association for the period of July 1, 2020 through June 30, 2023.

Approved:

Karen E. Harvey



Waterbury Public Schools

236 Grand Street ♦ Waterbury, Connecticut 06702 ♦ 203.575.3507 ♦ tshaw@waterbury.k12.ct.us

Tara L. Shaw Attorney at Law

MEMO

TO: Board of Education

FROM: Attorney Tara L. Shaw

DATE: March 11, 2021

RE: Successor Collective Bargaining Agreement with the School Crossing Guards

Enclosed please find a proposed successor Collective Bargaining Agreement ("contract") between the School Crossing Guards and the Waterbury Board of Education, which was negotiated pursuant to Connecticut General Statutes Section 7-467, *et seq.* (the Municipal Employee Relations Act). This memorandum represents a summary of the changes to the parties' contract as a result of a negotiated settlement between the parties.

Duration:

Article XII July 1, 2020 – June 30, 2023

Wages:

Article X <u>Section 1</u>. General Wage Increases

Year 1 (2020-21): \$0.50/hour increase

Projected payroll increase of \$12,500

Year 2 (2021-22): \$0.50/hour increase

• Projected payroll increase of \$12,500

Year 3 (2022-23): \$0.50/hour increase

Projected payroll increase of \$12,500

<u>Projected Cumulative Payroll Increase by Year 3</u> = \$37,500.

(Approximately \$17,000 of that increase would otherwise be legally required as the result of minimum wage increases that will take effect over the next 3 years).

Section 2. For the 2020-21 school year only, Crossing Guards will be paid for the remote inclement weather days.

• Projected cost of days = \$14,025

<u>Section 3</u>. equity adjustment on a go-forward basis for Crossing Guards employed for more than 10 years who are not currently earning the higher pay rate.

• Projected cost of equity adjustment = \$1,584/year

AGREEMENT

between

THE WATERBURY BOARD OF EDUCATION

and

SCHOOL CROSSING GUARDS ASSOCIATION

July 1, 2020 through June 30, 2023

ARTICLE I <u>RECOGNITION</u>

The Waterbury Board of Education, hereinafter referred to as the "Board", recognizes the School Crossing Guards Association, hereinafter referred to as the "Association" as the spokesperson for persons employed in the position of School Crossing Guard. Articles II through IX set for the terms and conditions of employment for all Association members. It is understood that the Association is not affiliated with any Municipal Union.

ARTICLE II MANAGEMENT RIGHTS

Section 1. Except as otherwise limited by an express provision of this Agreement, the Board reserves and retains, whether exercised or not, all lawful and customary rights, powers and prerogatives of pubic management. Such rights include, but are not limited to, the following:

- (a) the right to prescribe and enforce reasonable work rules for the maintenance of discipline and for the performance of work in accordance with the requirements of the Board, provided such rules are made known in a reasonable manner to the employees affected by them. Prior to the promulgation of new or modified rules and regulations, the Board shall meet with the Association to discuss them and shall give due consideration to the Association's recommendations concerning same. The City shall bargain over the impact, if any, of the Board's decision;
- (b) the right to assign work to employees (including the right to assign incidental duties that may not be specifically enumerated in employee's job specification);
- (c) the right to create job descriptions and revise existing job descriptions as deemed necessary;
- (d) the right to determine work schedules including the right to change the regular workweek, the length of the regular workday, the hours of work, work assignments, the beginning and ending time of each shift or assignment and the number of shifts to be utilized;
- (e) the right to establish the methods and process by which work is performed, including the right to select and to determine the number and types of employees required to perform operations;
- (f) the right to establish or continue policies, practices and procedures for the conduct of City business and, from time-to-time, to change or abolish such policies, practices or procedures, subject to the City's obligation to bargain over the impact, if any;
- (g) the right to layoff or otherwise relieve employees from duty for lack of work or other legitimate reasons;
- (h) the right to discontinue services, positions, operations or programs in whole or in part and

(i) the right to transfer or subcontract, in whole or in part, work performed by the bargaining unit if, in the sole judgment of the City, it can be done more economically, effectively or expeditiously as a result of such action.

ARTICLE III WORKING CONDITIONS

Section 1. Work Assignment. Whenever possible, employees with the highest seniority shall be afforded the opportunity to request a specific post that should happen to become available.

Section 2. Layoff. Whenever layoffs are necessary, employees with the lowest seniority shall be laid off first. If an employee is laid off and returns to employment within six (6) months of the date of layoff, then the employee shall be entitled to any increases that may have occurred during the period of layoff. If said employee returns to employment beyond six (6) months of the date of layoff, the employee shall be reinstated at the hourly rate of pay he received at the time of layoff and shall not be eligible for any wage increases that became effective during the layoff period.

ARTICLE IV LEAVES OF ABSENCE

Section 1. Unpaid Leave of Absence. Request for leaves of absence without pay for one (1) month or more must be accompanied by a Doctor's certificate.

ARTICLE V ATTENDANCE

Section 1. Absenteeism. Any employee that develops a record of frequent or habitual absences from duty will be subject to disciplinary action up to and including termination.

ARTICLE VI HOLIDAYS

Section 1. Holidays. Employees shall be entitled to the following paid holidays:Thanksgiving DayChristmas DayNew Year's DayMartin Luther King DayPresidents' DayMemorial Day

Section 2. Eligibility. To qualify for holiday pay, the employee must have received compensation for the last scheduled working day prior to, and the first scheduled working day subsequent to, the holiday.

Section 3. Scheduling of Holidays. The Board retains the right to schedule the celebration dates for the above-referenced holidays.

ARTICLE VII LEAVE TIME

Section 1. Funeral Leave. Each employee shall be entitled to one (1) paid day per school year. Effective July 1, 2017, each employee shall be entitled to two (2) paid funeral days per school year. Funeral leave shall not accrue from school year to school year.

Section 2. Sick Leave. Employees shall be provided with and use sick time pursuant to Public Act No. 11-52, entitled "An Act Mandating Employers Provide Paid Sick Leave to Employees."

Section 3. Personal Days. Each employee shall be entitled to two (2) paid personal days per school year to use as the employee wishes. The annual personal leave days shall be counted toward the annual sick leave to which an employee is entitled under the Public Act No. 11-52. If the need for the personal day is foreseeable, the employee must provide one-week advance notice of intent to use personal leave. If the need for personal time is not foreseeable, then the employee must give the employer notice as soon as practicable. Employees may elect to use personal time during a snow day when school is closed. In this instance, the employee must notify his/her supervisor no later than the next school day that he/she wishes to use a personal day to make up for the snow day. An employee shall not be entitled to a payout on accumulated sick and/or personal days for any reason.

There shall be no carryover of personal days or payouts of unused personal days. All accrued personal time must be used during the course of the school year or the employee will lose the accrued time.

ARTICLE VIII VACANCIES

Section 1. At the end of school year association meeting, all employees interested in transferring assignments during the course of the school year, shall indicate on the transfer list his/her interest in a new school assignment, naming the school desired. If an assignment becomes available, the most senior employee on the transfer list, who desired that assignment, shall be offered the position. If the offer is refused, the employee cannot request another assignment until the following end of school year association meeting.

ARTICLE IX SUMMER SCHOOL WORK

Section 1. At the end of school year association meeting, employees interested in working summer school for that year, shall sign the summer work availability sheet indicating their interest. Such sheet shall include name, phone number, and current school assignment. Preference for assignment will be given to employees currently assigned to the school offering summer work. Positions will be filled based upon need and seniority.

ARTICLE X WAGES

Section 1. General Wage Increases

CROSSING GUARDS HOURLY WAGE RATES

AS OF 5/30/2019	EFFECTIVE AND RETROACTIVE TO 7/1/2020	EFFECTIVE 7/1/2021	EFFECTIVE 7/1/2022
\$13.98	\$14.48	\$14.98	\$15.48
\$14.84	\$15.34	\$15.84	\$16.34

EFFECTIVE	EFFECTIVE	EFFECTIVE
7/1/2020	7/1/2021	7/1/2022
\$13.98	\$14.48	\$15.00

Bold indicates starting rate for new employees.

Section 2. For the 2020-21 school year only, the Board will compensate employees for the District's remote learning inclement weather days. Payment shall be completed prior to the end of the school year.

Section 3. Employees with 10 or more years of service on January 1, 2021 who are not earning the maximum contractual hourly rate for School Crossing Guards shall have their hourly wage rate adjusted effective on the first pay period after the successor contract is signed by the parties.

ARTICLE XI ENTIRE AGREEMENT

Section 1. The parties recognize that the Board retains all rights it had prior to the signing of this Agreement, except as such rights, whether exercised or not, have been specifically relinquished or abridged in this Agreement.

Section 2. The parties further recognize that if any provision of this Agreement is contrary to a specific practice existing prior to the date of the award of this Agreement, then the provision of this Agreement shall prevail.

Section 3. This Agreement represents the complete and full understanding of the parties with respect to rates of pay and other conditions of employment, which shall prevail during the term hereof, and any matters or subjects not herein covered have been satisfactorily adjusted, compromised or waived by the parties for the life of this Agreement.

ARTICLE XII DURATION

This Agreement shall be effective as of July 1, 2020, unless a different effective date is prescribed in this Agreement for any section or article of this Agreement and shall remain in effect through June 30, 2023.

IN WITNESS HEROF, the parties have hereunto caused their hands and seals to be signed this _____ day of _____, 2021.

CITY OF WATERBURY BOARD OF EDUCATION

BY: Dr. Verna D. Ruffin Superintendent of Schools

SCHOOL CROSSING GUARDS ASSOCIATION

BY:

Dennis Morrison President

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.1

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following appointments:

Moriarty, Shea – Middle School Athletic Director, effective immediately.

Respectfully submitted,

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.2

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following Maloney Magnet School's Before and After School Program appointments:

Kelly Lund – Teacher

Respectfully submitted,

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.3

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following Commissioner's Network/SIG Appointments:

NAME	SCHOOL	TITLE
Shortt, Katia	WMS	Science Instructional Tutor/SIG
Torres, Lianne	WMS	Math Instructional Tutor/SIG
Pelosi, Emily	WMS	After-school Math Teacher/Comm. Network
Meringer, Cynthia	WMS	After-school Math Teacher/Comm. Network
Banks, Melissa	WMS	Social Studies Tutor/SIG
Greene, David	WMS	ELA Instructional Tutor/SIG

Respectfully submitted,

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.4

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following grant funded appointments:

Name	Position/Location	FT/PT	Rate of Pay	Union	Effective
NeShanda Johnson	Behavior Counselor Wilby High School	FT	\$22.00	UPSEU 69	02/25/2021
Julianne Burdo	Grant Facilitator Rotella	FT	\$20.00	UPSEU 69	02/25/2021
Stephaniel Carlo	Secretary 2 WSMS	FT	\$16.18	UPSEU 69	02/25/2021
Rhiana Murphy	Parent Educator Reed Elementary	PT	\$15.12	Non BOE	03/04/2021
Pedro Silva II	Birth-3 Transition Coord./Early Childhood	FT	\$22.00	UPSEU 69	03/04/2021
Craig Everitt Jr	Network Specialist Maloney	FT	\$19.00	UPSEU 69	03/04/2021
Louis SantaBarbara	Classroom Aide Adult Education	PT	\$21.50	NonBOE	03/11/2021
Joan Kelly	Tutor Yeshiva K'Tana	PT	\$33.00	NonBOE	03/18/2021
Mary Simms	Tutor Holy Cross	PT	\$33.00	NonBOE	03/18/2021
Nicholas Napp	Extended Hours Tutor Carrington	PT	\$25.00	NonBOE	01/28/2021
Elizabeth Swartz	Extended Hours Tutor Regan	PT	\$25.00	NonBOE	2/09/2021

Respectfully submitted,

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.5

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following Extended School Hours (ESH) appointments:

SCHOOL	LAST NAME	FIRST NAME	ASSIGNMENT
Bunker Hill	Brayton	Katie	Teacher
Bunker Hill	Santulli	Nicole	Paraprofessional
Tinker	Wehry	Nina	Secretary
Tinker	Mastrianna	Catherine	Substitute Teacher
Tinker	Gannon	Danielle	Substitute Teacher
Tinker	Jones	Imani	Substitute Admin./or Substitute Teacher
Tinker	Sagendorf	Janet	Administrator
Duggan	DeFeo	Dawn	Teacher (replacing Maureen McCasland)
Duggan	Peters	Courtney	Substitute Teacher
Duggan	Ciarlo	Marion	Substitute Teacher

Respectfully submitted,

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.6

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following new teacher hires:

<u>Last</u>	<u>First</u>	<u>Assignment</u>		Effective
Bickley	Robert	Wilby	General Science	1/28/2021
Camacho	Reule	North End MS	Music (Chorus)	1/22/2021
Cassidy	Lauren	North End MS	Special Ed-ABA	1/4/2021
Coniku	Vistela	West Side MS	Math	3/11/2021
Cummings	Thomas	Wallace	SEL Counselor	3/11/2021
Kozma	Tarra	Waterbury Arts	Guidance Counselor	3/8/2021
Munoz	Trevor	Wallace	Social Studies	3/1/2021
Muro	Candida	Rotella	Gr 4	3/11/2021
Notchick	Maria	North End MS	English	3/11/2021
Pete	Latasha	Wallace	Math Gr 6-8	1/25/2021
Rivera	Kalyrin	Generali	Gr 1	2/18/2021
Weinstein	Irene	Tinker	Library Media	2/22/2021

Respectfully submitted,

BOARD OF EDUCATION

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.7

March 18, 2021

To the Board of Education Waterbury, CT

Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following resignations:

Alberstadt, Karyn – CHS ELA, effective 02/25/21. Carroll, Amy – Reed Special Education, effective 03/17/21. Nott, Timothy – Wilson BDLC, effective 03/03/21.

Respectfully submitted,

Dr. Verna D. Ruffin Superintendent of Schools

BOARD OF EDUCATION

Waterbury, Connecticut

SUPERINTENDENT'S NOTIFICATION TO THE BOARD

Item #14.8

March 18, 2021

To the Board of Education Waterbury, CT

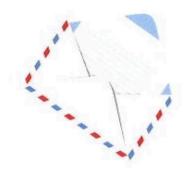
Ladies and Gentlemen:

The Superintendent of Schools notifies the Board of Education of the following retirements:

Glass, Rosalyn – KHS Vice Principal, effective 09/30/21. Quattrociocchi, Domenic – WAMS Social Studies, effective 06/30/21. Rek, Lori – WMS ELA, effective 06/30/21. Tasimi, Donika – Generali ESL, effective 08/31/21. Van Amburg, Sandra – Kingsbury Art, effective 03/31/21. Warhola, Gayle – WSMS Special Education, effective 03/22/21 (date correction). Williams, Richard – WMS Math, effective 06/30/21.

Respectfully submitted,

Dr. Verna D. Ruffin Superintendent of Schools



COMMUNICATIONS



For the period of March 3, 2021 through March 16, 2021



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 1, 2021

Arellys Cruz Velazquez 177 State Street, Bldg 1, Apt. 202 Meriden, CT 06450

Dear Ms. Cruz Velazquez:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021274) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Your first day reporting to your new department/supervisor will be March 4, 2021 at your regular scheduled time. Please call Sonia at 203-574-8035 with any questions you may have in regards to this position.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 1, 2021

Larissa Espinosa Acevedo 869 Bunker Hill Ave. Waterbury, CT 06704

Dear Ms. Espinosa Acevedo:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021271) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

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Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 1, 2021

Maria Talbot 69 Crestwood Ave. Waterbury, CT 06704

Dear Ms. Talbot:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021275) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Your first day reporting to your new department/supervisor will be March 4, 2021 at your regular scheduled time. Please call Sonia at 203-574-8035 with any questions you may have in regards to this position.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 1, 2021

Angela Rossi 185 Long Swamp Rd. Wolcott, CT 06716

Dear Ms. Rossi:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021268) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA - LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Your first day reporting to your new department/supervisor will be March 4, 2021 at your regular scheduled time. Please call Sonia at 203-574-8035 with any questions you may have in regards to this position.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 5, 2021

Donna Hassinger-Synott 114 Edin Ave., 1st Fl. Waterbury, CT 06706

Dear Ms. Hassinger Synott:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021272) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up to 19 hours</u> per week.

Your official start date was March 4, 2021.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely, Jennifer Palazzo

Human Resources Generalist

JP/sd



Connecticut Association *of* **Boards of Education**

Vincent A. Mustaro, Senior Staff Associate for Policy Services

PRESENTS POLICY HIGHLIGHTS

March 5, 2021, 2021

Volume 20 - Issue #18

<u>Teaching Controversial Content in the Classroom</u>: In a *Kappan* article. Wayne Journall of the University of North Carolina indicated that the teaching of controversial issues remains "tricky for teachers" based on three reasons. First, the open exchange of ideas is a hallmark of democratic classrooms. Second, students and parents have strong views on a range of topics. Lastly, there isn't enough time in the school day, or space in the curriculum, to debate every issue.

Journall states that "Being a curricular gatekeeper is especially challenging in the current era because some cable news pundits, talk-show hosts, and politicians are spreading scientifically dubious claims and outright falsehoods with great confidence, amplified on social media. Teachers have to contend with students and community members who sincerely believe information that isn't factual. When teachers attempt to broach contested issues in the classroom, they often find themselves having to address poor information, prejudices, or beliefs that cannot be objectively evaluated."

He indicated teachers have always had a responsibility, even more so in the current climate, "to turn classrooms into spaces where reason and inquiry trump ignorance and hyperbole." The need is cited for "clear and reasonable guidelines that explain why they will entertain some arguments but not others – including arguments that may be popular with some students and parents."

Source: "Taking a Reasoned Stance Against Misinformation," by Wayne Journell in *Phi Delta Kappan*, February 2021 (Vol. 102, #5, pp. 12-17).

Policy Implications: The courts usually leave to the schools issues pertaining to the curriculum. However, the courts will intervene when necessary to protect the legal rights of parents and students. Curriculum-related lawsuits usually result from disputes over content. While courts usually defer to schools, a board's curricular discretion, either to require content or to censor it, is limited.

The following is a listing of what schools are and are not permitted to do, based upon judicial decisions over time pertaining to controversial issues in the curriculum.

Schools may:

- 1. Require students to learn controversial content, even if such content may offend the ideological or religious sensibilities of some in the community.
- 2. Teach about religion.

- 3. Require values or character education. The fact that some secular values parallel religious tenets does not taint a program as establishing religion.
- 4. Hold or require activities based on cultural traditions or fantasy, as long as they do not border on religious ritual.
- 5. Teach about religious holidays.
- 6. Include religious music in a school music group's repertoire.
- 7. Restrict content based on legitimate pedagogical grounds. These include age appropriateness, professional acceptance, consistency with general educational objectives, or currency.
- 8. Require a teacher to teach content he/she finds objectionable.
- Discipline a teacher for violating curricular guidelines or common sense propriety. Academic freedom does not permit a teacher to show a R-rated movie to young students or be in violation of district policy.

Schools may not:

- 1. Make arbitrary curriculum decisions without rational reasons. A decision must be rationally related to a legitimate governmental purpose.
- 2. Ban academic content solely because it's controversial or offensive to the religious or family values of some community members. Courts have held that students have certain legal rights to receive information, even if controversial.
- 3. Engage in religious instruction. Promoting or denigrating religion is unconstitutional.
- 4. Fail to address abuses of discretion by teachers.
- 5. Teach religion in the guise of other subjects.
- 6. Hold activities, that border on religious practice.
- 7. Hold religious celebrations.

A school district should consider a policy which includes an "opt-out" procedure for students to be excused from certain classes. Such a policy is not required, but it can help ease controversies. Legally, an opt-out makes it more likely that a court will reject a challenge to an assignment.

The Every Student Succeeds Act (ESSA) requires districts receiving federal funds to adopt a local policy giving a parent the right to inspect any instructional material, regardless of format, used as part of the educational curriculum. Parents must be notified, at least annually at the beginning of the school year, of the existence of the policy. Policy #6162.51, Surveys of Students (Student Privacy) addresses this issue.

The policies listed below relate to the information contained in this discussion of controversial issues.

- 1. Policy #1312 "Public Complaints"
- 2. Policy #4118.21 "Academic Freedom"
- 3. Policy #6144 "Controversial Issues"
- 4. Policy #6144.1 "Exemption from Instruction"
- 5. Policy #6144.3 "Controversial Speakers"
- 6. Policy #6160 "Educational Resources and Material"
- 7. Policy #6161 "Equipment, Books and Materials"
- 8. Policy #6161.1 "Evaluation/Selection of Instructional Materials"
- 9. Policy #6177 "Use of Commercially Produced Video Recordings"

<u>Use of Tutoring to Address COVID Learning Loss Considered</u>: Equal-access tutoring "is among the most effective education interventions ever studied" and could make huge strides in erasing the COVID-19 learning slide, Brown University researchers report, noting that adding 30 minutes to the school day to accommodate a permanent tutoring system that could include peer tutors would be a key first step. Maryland, the Los Angeles Unified School District and the Minnesota Reading Corps are among those using tutoring programs.

An extensive and more "permanent" tutoring system is emerging as a leading and equity-based solution for U.S. schools attempting to help students recover from COVID learning loss. Equalaccess tutoring—which "is among the most effective education interventions ever studied"—can be scaled nationally, say associate professor Matthew A. Kraft and research program associate Grace T. Falken, both from Brown University.

The practice is more effective than nearly all other interventions in improving academic achievement but is only broadly available to students whose families can afford private tutoring, which now constitutes a \$47 billion industry in the U.S., they indicated.

Extending the school day by 30 minutes would be the first step in establishing a permanent tutoring system. This would allow math and English tutors the time to work with groups of two to four students, they say.

This system could also be driven by peer tutors. For example, high school students would tutor elementary school students as an elective course, college students could tutor middle school students as a federal work-study job, and recent college graduates could work with high school students as full-time tutors.

"There are many reasons to be optimistic that tutoring would have benefits beyond supporting students' academic development," Kraft and Falken write. "Positive, caring relationships with tutors might support students' social-emotional development, enhance their attachment to and attendance at school, and expose students to older peers who can serve as mentors."

Launching a tutoring system would require a "substantial investment" from the federal government. They believe providing tutoring for students in the nation's 20,000 lowest-performing schools could cost the federal government about \$10 billion a year. Further, expanding tutoring to all Title I schools would cost approximately \$16 billion, which is nearly twice the current federal spending for Title I schools.

Tutoring systems are already being fortified across the country. Maryland has allocated \$100 million toward tutoring while Los Angeles USD is paying teachers to tutor individual students outside of school.

Another <u>tutoring model</u> exists in the <u>Minnesota Reading Corps</u>, an initiative now expanding to 12 other states. The program trains AmeriCorps volunteers in reading science so they can tutor students from age 3 through grade 3 in one-on-one or small group settings.

Source: "Why tutoring is gaining momentum as a learning loss fix," by Matt Zalaznick, *District Administration Magazine*, online, January 5, 2021.

Policy Implications: As more school districts move toward the reopening of its schools to full in-person classes for students, increased attention will be given to implementing strategies to mitigate the learning losses suffered by students during the COVID-19 emergency. Tutoring is one of the means often cited.

Policy #4134, "Tutoring" pertains to this topic. This policy was developed in the time prior to the Pandemic. It will require revision in the plans implemented to remediate student learning loss due to the Pandemic. Policy #6172.2, "Remedial Instruction," also pertains to this issue. It also may require revision. Both policies are considered "optional" for inclusion in the district's policy manual.

<u>A U.S. Supreme Court Case to Watch with Policy Implications</u>: The Supreme Court will hear a case on whether schools may discipline students for Internet speech. That's at the heart of a case the U.S. Supreme Court has agreed to hear after sidestepping the issue several times in recent years.

The Court, in the 1969 landmark *Tinker* decision set the precedent which applies to student speech that occurs off campus long before the Internet. The issue is now urgent as schools use remote learning during the pandemic. The *Tinker* decision allowed room for school administrators to regulate speech that would disrupt the work and discipline of the school. The high court has narrowed student-speech rights in a series of cases since *Tinker*.

The new case, *Mahanoy Area School District v. B.L.*, addresses a situation in which a high school student was disciplined for an obscene message posted on Snapchat that impacted her membership on the cheerleading team.

The student and her parents allege that her removal violated the First amendment free-speech clause and that the school's rules were unconstitutionally overbroad and vague. The student won in a federal district court. That ruling stated that "*Tinker* does not apply to off-campus speech-that is, speech that is ... not reasonably interpreted as bearing the school's imprimatur." However, at the same time the federal district court acknowledged that five other federal appeals courts have ruled that *Tinker* can be applied to student off-campus speech when there is a sufficient connection to school.

Policy Implications: Stay tuned. The Supreme Court's ruling could potentially impact a number of policies pertaining to discipline, use of social media and off student grounds behavior.

Food for Thought:

"Optimism shouldn't be seen as opposed to pessimism, but in conversation with it. Your optimism will never be as powerful as it is in that exact moment when you want to give it up. The way we can all be hopeful is to not negate the feelings of fear or doubt, but to ask: What led to this darkness? And what can lead us out of the shadows?"

Source: Amanda Gorman in "Unity with Purpose," interviewed by Michelle Obama, in *Time*, February 15 & 22, 2021 (Vol. 197, 5-6, pp. 74-80)

Connecticut Association of Boards of Education ~ 81 Wolcott Hill Road, Wethersfield, CT 06109 ~ 860-571-7446



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 9, 2021

Elizabeth Lopez 61 Charter Oak Ave. Waterbury, CT 06708

Dear Ms. Lopez:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021270) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA - LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Your first day reporting to your new department/supervisor will be March 18, 2021 at your regular scheduled time. Please call Sonia Parra at 203-574-8035 with any questions you may have in regards to this position.

We have scheduled your orientation for Thursday, March 18, 2021 at 9:00 a.m. via zoom. Please refer to your email regarding instructions for the orientation via zoom. You must participate in this orientation session in order to work for the City.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 9, 2021

Carolyn Thorpe 418 Bucks Hill Rd. Waterbury, CT 06704

Dear Ms. Thorpe:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021269) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up</u> to <u>19 hours</u> per week.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Your first day reporting to your new department/supervisor will be March 11, 2021 at your regular scheduled time. Please call Sonia Parra at 203-574-8035 with any questions you may have in regards to this position.

We have scheduled your orientation for Thursday, March 18, 2021 at 9:00 a.m. via zoom. Please refer to your email regarding instructions for the orientation via zoom. You must participate in this orientation session in order to work for the City.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resource Generalist



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 10, 2021

Abigail Gyampo 3269 East Main St., Apt. 8H Waterbury, CT 06705

Dear Mr. Gyampo:

Welcome to employment with the City of Waterbury. Your name is being certified to the Department of Education for the position of Paraprofessional (Req. #2020565) at \$17.02 per hour. Please contact Darren Schwartz, Chief Academic Officer at (203) 574-8019 with any questions you may have in regards to this position.

We have scheduled your orientation for Thursday, March 18, 2021 at 9:00 a.m. via zoom. Please refer to your email regarding instructions for the orientation via zoom. You must participate in this orientation session in order to work for the City.

Your first day reporting to Wallace Middle School will be March 18, 2021 at your regular scheduled time.

At the orientation, we will provide you with a brief overview of the City, review its employment practices and complete all required paperwork. In addition, if you are an employee eligible for benefits, it is useful to bring the social security numbers and birth dates of your spouse and children in order to complete the insurance enrollment forms.

Please call us prior to the orientation session if you should have any questions regarding the process.

Your new probationary period in accordance with your applicable contract will be 6 months in duration. The department head will be responsible for executing your probationary evaluation no later than 6 months from your first day in your new position.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resources Generalist JP/sd cc Board of Education Dr. Ruffin, Supt. of Schools Darren Schwartz, CAO File



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 11, 2021

Genevieve Manfredi 8 Nina Court Waterbury, CT 06704

Dear Ms. Manfredi:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021514B) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up to 19 hours</u> per week.

Your official start date is March 18, 2021.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

SincereTy.

Tennifer Palazzo Human Resources Generalist

JP/sd



(203) 574-6761

<u>The City of Waterbury</u> Connecticut Department of Human Resources Office of the Civil Service Commission

March 11, 2021

Iris Lebron 298 Congress Ave., 1st Fl. Waterbury, CT 06708

Dear Ms. Lebron:

We are pleased to receive your acceptance of our offer of employment for the position of Food Service Worker for the Department of Education – Food Service (Requisition #2021514A) at \$13.91 per hour.

This is a <u>part-time</u> position working in the Waterbury School System <u>10 months</u> a year during school hours <u>up to 19 hours</u> per week.

Your official start date is March 18, 2021.

This position <u>does not provide health insurance benefits</u>. Please refer to the CSEA – LOCAL 2001 contract for other available fringe benefits by visiting our website at <u>www.waterburyct.org</u>.

Please call us prior to the orientation session if you should have any questions regarding the process.

We look forward to working with you.

Again, welcome to the City of Waterbury.

Sincerely,

Jennifer Palazzo Human Resources Generalist

JP/sd