RESOLUTION No. 23-263

Date of Adoption JUN 13 2023

Approved as to Form and Legality

WESLEY BRIDGES, ESQ., DIRECTOR OF LAW

Factual content certified by

WILLARD STANBACK, ACTING DIRECTOR OF HOUSING AND ECONOMIC DEVELOPMENT

Councilman /woman Jennifer C. Williams presents the following Resolution:

RESOLUTION ACCEPTING A BID AND AWARDING A CONTRACT TO CARROLL GROUP, INC., FOR THE DEMOLITION AND REMEDIATION OF VARIOUS STRUCTURES ON SANFORD STREET IN AN AMOUNT NOT TO EXCEED $545,317.00 PER BID 2022-49

WHEREAS, four (4) sealed bids were received on August 2, 2022 for demolition of city-owned vacant and abandoned structures for the City of Trenton, by and through the Department of Housing and Economic Development; and

WHEREAS, these structures, which consist of detached, semi-attached, and rowhomes, require no sidewall repairs, keeping the complexity and costs of the project to a minimum; and

WHEREAS, aside from the economic benefits of removing hazardous, vacant properties the reduction of urban blight in this neighborhood will be critical to redressing quality of life issues including crime, safety; and

WHEREAS, Carroll Group, Inc, having an address at, 4 Youngs Road, Hamilton, NJ 08619 is hereby accepted pursuant to N.J.S.A. 40A:11-4 as the lowest responsible bidder complying with the terms and specifications of BID2022-49 made pursuant to advertisement and on file in the Division of Purchasing; and

WHEREAS, a need exists for demolition services (the "**Work**") from Carroll Group, Inc., to demolish and backfill twenty (20) city-owned, abandoned, and hazardous structures due to the deterioration of structures past the point of financially feasible rehabilitation; and

WHEREAS, the twenty (20) properties are commonly known as: 17, 19, 26, 28, 30, 32, 34, 36, 38, 39, 40, 41, 42, 44, 46, 47, 48, 49, 51, and 54 Sanford Street in the City of Trenton, State of New Jersey; and

WHEREAS, funds in an amount not to exceed $545,317.00 have been certified to be available in the following grant account number: T-03-SP-65-6520-001; and

WHEREAS, the Work shall be completed within one hundred and twenty days (120) from the "Notice to Proceed".

RESOLUTION

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Trenton as follows:

1. The above recitals are incorporated by reference as if set forth at length herewith.

2. The Mayor and City Clerk are hereby authorized to execute a Contract between the City of Trenton and Carroll Group, Inc., having an address at 4 Youngs Road, Hamilton, New Jersey 08619 in an amount not to exceed $545,317.00 in accordance with New Jersey Housing and Mortgage Finance Agency requirements for construction services for the Neighborhood Redevelopment and Revitalization Pilot Program (the "**NRRPP**") for demolition and/or stabilization of twenty (20) city-owned vacant abandoned residential structures for the City of Trenton, by and through the Department of Housing and Economic Development for the purposes set forth herein above and in the manner prescribed by law.

3. This Contract is awarded pursuant to the authority set forth in the Local Public Contracts Law at N.J.S.A. 40A:11-4.

4. The Work shall be completed within one hundred and twenty (120) from the "Notice to Proceed".

5. A notice of this action shall be printed once in the official newspaper for the City of Trenton and the Resolution and Contract shall remain on file in the City Clerk's Office.

	Aye	Nay	Abstain	Absent		Aye	Nay	Abstain	Absent		Aye	Nay	Abstain	Absent
EDWARDS	✓				GONZALEZ	✓				FRISBY	✓			
FELICIANO	✓				HARRISON	✓								
FIGUEROA KETTENBURG	✓				WILLIAMS	✓								

This Resolution was adopted at a Meeting of the City Council of the City of Trenton on JUN 13 2023

President of Council

City Clerk

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Section 01 11 00
Summary of Work

PART 1 - GENERAL

1.1 DEFINED TERMS

Agreement: The Demolition Services Agreement by and between the Contractor and Owner.
Bid: The offer or construction/demolition proposal of the Contractor submitted on the prescribed form(s) setting forth the prices for the Work to be performed, but specifically excluding any terms that conflict with the Agreement, the SOW, or these Technical Specifications.
Bid Forms: The forms provided by the Owner/Construction Manager to the Contractor and other Bidders which must be executed and submitted as part of the Bid, including the Project Price Schedule.
Bidder: One who submits a Bid directly to the Owner.
Building Code Official: A State licensed building inspector with the City of Trenton who will perform all required demolition inspections.
Change Order: A written instrument, executed by the Owner and Construction Manager, as defined in the Agreement, the SOW or elsewhere in the Contract Documents. Refer to Bid Specifications, VI. Prepartion of Bid, Section D. Change Orders.
Competent Person: Used in reference to excavation safety, this term means a Contractor employee who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. The Competent Person is required to have completed a minimum of OSHA 10-Hour course for construction safety and shall meet the definition of a competent person as defined by the Contractor and CM's Health and Safety Plan and OSHA standards (29 CFR 1926.32).
Contractor: The entity who entered into the construction contract with the Trenton Department of Housing and Economic Development or agreement for a Project involving any construction, renovation, reconstruction, rehabilitation, alteration, conversion, extension, demolition, repair and/or other changes or improvements of any kind.
Construction Manager (CM): The entity who may act as the representative for the Owner. The CM will assume all duties and responsibilities and have the rights and authority assigned to the CM/Owner Representative in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents. The role of CM shall also include traditional Architect/Engineer services where appropriate.
Construction Milestones: Those activities and required completion dates provided on the Bid Forms or in the Agreement or the SOW that will be used to benchmark the progress of the Work.
Contract Documents: The documents issued by the Owner/Construction Manager that set the requirements for the Work and the procedures for submitting bids. The Contract Documents include the advertisement or Invitation to Bid, Scope of Work (SOW), these Performance/ Technical Specifications, Property Matrix, the Drawings, any addenda prepared by the Owner/Construction Manager either to these Performance/Technical Specifications or to the

Drawings, the Agreement, the SOW, Owner's safety requirements for Contractors, if provided to Contractor, and the Contractor's Bid including all Bid Forms.

Contract Price: The amount awarded by the Owner and deemed payable to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement and the SOW.

Contract Time: The period stated in the SOW to achieve Substantial Completion, Final Completion and Closeout.

Contractor: The person, firm, or corporation with whom the Owner has entered into the SOW to perform the Work specified in the Contract Documents.

Contractor's Engineer: A professional Licensed engineer either employed or subcontracted by the Contractor to provide engineering services for portions of the Work where a stamped design by a professional Licensed engineer is required.

Daily Construction Report (DCR): The Contractor's DCR is described in Technical Specifications Section 01 33 00.

Disturbed Areas: Areas that have been disrupted or otherwise changed from their pre-construction conditions by the Contractor's activities.

Drawings: The Drawings that show the scope, extent, and character of the Work to be furnished and performed by Contractor and that have been prepared or approved by the Owner/Construction Manager and are included within or referred to in the Contract Documents. Shop drawings are not Drawings as so defined.

Field Order: A written notice by either the Owner/CM responding to a Request for Information (RFI), clarifying Contract Documents, or directing Contractor to comply with the Work as detailed in the Contract Documents

Final Completion: A point in time on the Project when the Project is 100% complete and: (i) all requirements of the Contract Documents have been completed, (ii) all items on the Punchlist have been performed, (iii) all required inspections and items of work required by Owner/CM having Jurisdiction have been completed, including, without limitation, inspections by soil erosion agencies, DEP, etc.; and (iv) a Certificate of Occupancy, or a Certificate of Acceptance, as applicable, has been issued by the Building Code Official.

Health and Safety Plan (HASP): The document describing the health and safety requirements to which the applicable employees must adhere. The Contractor's HASP applies to all Contractor's employees and subcontractors, the CM's HASP applies to all CM's employees and all subcontractors and/or visitors of the CM.

Health and Safety Summary Report: The monthly report prepared by the Contractor and submitted to the CM as described in Section 01 33 00.

Impacted Materials: The fill or other materials that contain compound concentrations in excess of NJDEP Residential Direct Contact Soil Remediation Standards.

Imported Fill: The fill transported onto a Project Site from an off-site location for use in the performance of Work associated with a Project Site, including but not limited to, the backfilling of utility trenches and basements, construction or play areas and play fields, construction of engineered soil caps, changing the topographic elevation of a Project Site, or backfilling of excavations.

Licensed Site Remediation Professional (LSRP): A site remediation professional licensed by the New Jersey Department of Environmental Protection (DEP) and retained by the Owner in conjunction with this Project.

Non-Conforming: Any of the Work performed or any of the materials furnished or equipment supplied, or any of the finished Work in which such materials are used or such equipment is installed, are Not in strict conformity with the requirements of the Contract Documents or are

otherwise defective, the Work, materials and/or equipment shall be removed, repaired, replaced or otherwise brought into strict compliance with the requirements of the Contract Documents by and at the sole cost and expense of the Contractor.

Others: Responsible party other than the Contractor or the Contractor's subcontractors who is designated by the Owner to perform work at the Site.

OSHA – Occupational Safety and Health Administration that administers the Occupational Safety and Health Act of 1970.

Owner: Trenton Department of Housing and Economic Development.

Party Wall: A shared wall that separates two separately rented or owned units. Party walls are most commonly found in row homes and duplex houses in the city, where different tenants will share a common structure.

Progress Schedule: The Progress Schedule described in Section 01 33 00.

Project: The scope of Work described in the Contract Documents.

Project Limits: The boundaries of the area where the Work will occur. The Contractor should not perform any activities beyond the Project Limits without prior approval from the Owner/CM.

Project Plans: All Plans which are considered Contract Documents include: the Contractor's Site Operation Plan, Site Logistic Plan, Phasing Plans (if applied) and Health and Safety Plan (HASP) and the Construction Manager's Health and Safety Plan (HASP) and any other applicable plan related to the Work.

Project Price Schedule: The Bid Form on which the Contractor submits the prices to perform the Work, organized by Bid Item, and subsequently accepted in a final agreement, as signed by an officer of the Contractor and incorporated into these Technical Specifications.

Punchlist: The list of incomplete or defective Work to be performed or remedied by the Contractor to fully complete the Project. The Punchlist shall not include items that are necessary to be completed in order to secure a Temporary Certificate of Occupancy or Certificate of Acceptance.

Quality Assurance (QA): Observation and testing performed either by the CM or a third-party on behalf of the Owner for evaluating whether the Work complies with the requirements of the Contract Documents.

Quality Control (QC): Observation and testing activities performed by the CM to ensure that the Work complies with the Contract Documents.

Record Documents: Close-out documentation consisting of drawings, reports, and other submittals summarized in Section 01 33 00.

Record Drawings: Close-out drawings consisting of marked up Drawings, and other drawing submittals as listed in Sections 01 33 00.

Request for Information (RFI): A written notice by Contractor to receive clarification, direction or explanation from the Owner/CM regarding the Work.

Schedule of Values: An itemized list prepared by the Contractor that establishes the value allocated to the various portions of the Work and supported by such substantiating data as the Owner/CM may require. If accepted by the Owner/CM, this Schedule of Values shall be used as a basis for the Contractor's Invoices and only for this purpose.

Sidewall: A wall that forms the side of a structure, i.e. houses, buildings. Refers to Party Wall for further definition.

Supervisor's Accident / Injury Report (SAIR): Accident/ injury report(s) submitted by Contractor to Owner/CM within 24 hours after the accident and/or injury occurred.

Safety Data Sheet (SDS) and Material Safety Data Sheet (MSDS): Safety Data Sheet is Project site-specific safety data sheet that shall be maintained on-site by the Contractor for assigned

subcontractor employee review or any entity requesting review. The Contractor must submit, and require each subcontractor to submit, a copy of the SDS and MSDS for those compounds and/or materials to be used on-site in the Project. All SDSs and MSDSs shall be on file prior to those compounds and materials being allowed on-site.

Section: A numbered section of these Technical Specifications.

Secured Zone: The area(s) within which the Contractor will perform the Work and where Contractor has primary responsibility for operation, security and safety of materials, equipment and personnel.

Site: The portion of the individual Residential lots scheduled for demolition/lot restoration as described in the Contract Documents.

Site Operations Plan (SOP): A written work plan, submitted by the Contractor in accordance with the Contract Documents, that describes the means and methods, materials, and sequences of specific Work items. An outline of the SOP is provided in Section 01 33 00.

Site Safety and Health Officer (SSHO): A Contractor employee or subcontractor with proper safety training and responsibility for overseeing, inspecting, enforcing, documenting and reporting Contractor's implementation of the health and safety obligations in the Contractor's Health and Safety Plan, OSHA regulations, all applicable laws and regulations and the other related Contract Documents.

Statement of Work (SOW): The Statement of Work by and between Owner/Construction Manager and Contractor, to which these Technical Specifications are attached and pursuant to which Contractor will perform the Work, which is governed by the terms of the Agreement.

Soil Erosion and Sedimentation Control Plan (SESC): The document that describes Contractor requirements for soil erosion and sedimentation control. Compliance with the SESC measures is required. Requirements include use of best management practices, limiting disturbed areas, and inspection and maintenance of storm water controls.

Subcontractor: The Contractor to whom a Prime Contractor or other subcontractor subcontracts part of the SOW for which such Contractor or other subcontractor is responsible.

Substantial Completion: All Work at the Site is complete including all demolition, transportation and disposal, backfill, and rough grading with only fine grading, fence construction, demobilization, contract closeout, and ongoing maintenance activities remaining to be completed. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof. Additionally, the Project in the point in time when all the following have occurred: (i) all essential requirements of the Contract Documents have been performed so that the purpose of the Contract Documents is accomplished; (ii) a Certificate of Occupancy or Temporary Certificate of Occupancy has been issued by the Building Code Official; (iii) the Punchlist has been created; (iv) there are no material omissions or technical defects or deficiencies, as identified by the Owner/CM; and (v) the Project is one- hundred percent (100%) ready for occupancy or in accordance with its intended use.

Superintendent: The Contractor's Superintendent at the Site. Approved by the Owner/CM in writing. The Owner/CM can have the Superintendent removed if not performing his duties adequately.

Technical Performance Specifications: This document, consisting of written technical descriptions of materials, equipment, standards, workmanship, measurement, and payment as applied to the Work and certain administrative details, applicable thereto, including all Attachments, Schedules and other documents incorporated into these Technical Specifications by reference.

Work: The entire completed construction and the various separately identifiable parts thereof required to be furnished by the Contractor under the Contract Documents. Work includes, and is the result of, performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, performing or furnishing services or transportation, performing treatment, and furnishing documents, all as required by the Contract Documents.
Work Zones: Areas of the site where Work is conducted.

1.2 PROJECT DESCRIPTION

A. The purpose of this section is to clarify, but not in any way limit or intend to limit the scope of work shown in the Contract Documents. The enumeration of the following items shall in no way be construed to exclude other items of work, or areas of responsibility, which are called for in the Contract Documents.

B. The project described herein consists of the buildings and/or ancillary structures as listed in the Contract Documents. In addition to the building and/or ancillary structures, it is expected that some buildings and/or ancillary structures will have additional physical features such as driveways, sidewalks, sheds, etc. which will also need to be removed.

C. The objective of this scope of work is to demolish and remove all building materials related to each lot as well as all physical features identified on the individual lots in the Contract Documents. Each building and/or ancillary structure will also be restored by backfilling any basement holes, utility trenches, tree root holes, foundations, etc. to grade, and restoring with topsoil, seeding and hay mulch, or a DGA/RCA/crushed stone surface. Only clean fill in accordance with the specifications, and NJDEP Residential Direct Contact Soil Remediation Standards shall be imported for backfill to establish permanent stabilization for each site. It will be the Contractor's responsibility to provide and maintain all appropriate Soil Erosion and Sediment Control measures per the Mercer County Soil Conservation District.

1.3 SCOPE OF DEMOLITION

A. Provide all labor, materials, supplies, and equipment to demolish the existing building(s) and other site features as identified in the Contract Documents, and in these Technical Specifications.

B. The buildings/properties to be demolished are abandoned properties owned by the City of Trenton.

C. Prior to submission of the bid, Contractor acknowledges in writing that he or she has visited the site(s) and the building(s) that are to be demolished andis familiar with the conditions of the building(s) and accepts the building(s) as-is and can accomplish demolition of same.

D. Perform the work in accordance with all Federal, State and local regulations, including but not limited to The American National Standards Institute (ANSI) in its ANSI A10.6-1983—Safety Requirements for Demolition Operations and OSHA Standards for demolition:

- 29 CFR 1926.20 General Safety and Health
- 29 CFR 1926.100 Head Protection
- 29 CFR 1926.103 Respiratory Protection
- 29 CFR 1926.350 Gas Welding and Cutting

- 29 CFR 1926.451 Scaffolds
- 29 CFR 1926.501 Fall Protection
- 29 CFR.1926.503 Training
- 29 CFR 1926.850 Preparatory Operations
- 29 CFR 1926.851 Stairs, Passageways, and Ladders
- 29 CFR 1926.852 Chutes
- 29 CFR 1926.853 Removal of Material Through Floor Openings
- 29 CFR 1926.854 Removal of Walls, Masonry Sections, and Chimneys
- 29 CFR 1926.855 Manual Removal of Floors
- 29 CFR 1926.856 Removal of Floors, Walls, and Material with Equipment
- 29 CFR 1926.857 Storage
- 29 CFR 1926.859 Mechanical Demolition

E. Ensure that each building has been cleared and is unoccupied prior to conducting demolition activities.

F. Prior to beginning the work, Contractor shall provide a comprehensive Site-Specific Health and Safety Plan (SSHASP), including the name and resume of the designated Site Safety and Health Officer (SSHO).

G. The Contractor will submit a Dust Control Plan, before commencing demolition and debris removal.

H. The State Asbestos Code Official must be notified (609-633-2158) prior to the abatement work commenced. The Contractor/Sub-Contractor must be State Licensed in Asbestos Abatement.

I. Prior to the initiation of demolition activities, a Pre-Existing Damage Survey of adjacent surrounding areas of each property will be conducted by a representative of the Contractor and submitted to the Owner/Construction Manager prior to initiating demolition activities. The survey shall include written and photographic documentation in hard and digital format and will be made part of the project record. The Contractor shall take all necessary steps to avoid damage to the existing construction and surrounding buildings, streets, and structures. All damage from this Contractor's work shall be the responsibility of the Contractor. The Owner/Construction Manager, at their discretion, may have the damage repaired at the Contractor's expense. Otherwise, repair of any damage is to be made by the Contractor at no additional cost to the Owner.

J. Demolition work in any phase shall proceed continuously until it is demolished to a condition where further collapse cannot be expected. No wall, roof, column, or other part of any structure shall be left in an unstable or hazardous condition where collapse may possibly occur.

K. The Contractor shall provide all labor and materials required to perform daily cleaning and removals of debris, generated from his work and deposit in his own dumpsters.

L. Some of the structures are attached or semi-detached to adjacent structures to remain, which due to the close proximity of occupied structures often precludes the use of machines and require de-construction and stabilization of party walls, sidewalls, roofs and site-specific repair to the adjacent structures (see Contract Documents).

M. Some of the structures are free standing (single homes) which are suitable for machine/heavy equipment demolition.

N. The Contractor shall be responsible for all Party wall and/or sidewall conditions as a part of the demolition work, including, but not limited to: Protection of the party wall and/or sidewall to remain, establishing structural integrity of the wall and its ability to remain stable after building separation is completed, structural support of basement walls against cave in (during demolition, and after backfill of basement void), restoration of existing party wall and/or sidewall and associated features (roof, eaves, soffits, gutters, flashing, weatherproofing, siding, etc.). The Contractor will be responsible for all impacts to the adjacent structure and will satisfactorily repair any resulting damage at no additional cost to the City or Owner.

O. All building restoration work shall be performed "in kind" and will match as closely as possible the existing features/construction of the adjacent buildings to remain after party wall and/or sidewall separation.

P. Prior to commencing any demolition work, utilities disconnections will be verified with associated signoffs. All underground utilities shall be cut and capped at the property line or just beyond the valve. and Installed a marker at grade to aid in future relocation of each service. Also, remove all overhead service lines (electric, phone, communication/data, etc.).

Q. The Contractor shall submit verifications for sewer and public service disconnects prior to demolition.

R. The Contractor must submit a water/sewer capping inspection manifest from the Trenton Water-Sewer Department before a pre-back fill inspection can be performed.

S. The neighboring/adjoining properties must be notified by the Contractor before work commences. At the attached properties, the Contractor must take interior as well as exterior pictures before starting, to avoid false claims.

T. The Contractor assumes all liability. Failure to comply with the inspection process will force the Owner/CM to hold any payments due and to have the site re-excavated and re-tested for the required inspections at the Contractor's expense.

U. Prior to commencing any demolition work, each structure will undergo removal of universal wastes including but not limited to: PCB ballasts, mercury switches and thermostats, HVAC system fluids, cleaning chemicals, paints, etc., and abatement of Asbestos Containing Materials (ACM) in accordance with the provided ACM Survey and Report documents, as well as the Asbestos Technical Specifications. For structures designated as Imminent Hazards, or other structures for which no ACM Surveys or Hazardous Materials Reports are supplied, all potential ACMs and Hazardous Materials will be segregated and treated as ACM or hazardous materials.

V. All demolition work will be in accordance with the provided Performance Specifications.

W. All slabs are to be removed unless otherwise instructed by the Code Official.

X. All demolitions will require site restoration after the building and site features (if present) have been demolished. Site restoration shall require that the building/property be graded to allow for positive drainage/runoff of storm water from the site and shall include grading and seeding to prevent erosion from occurring on the property.

Y. The removal of other on-site structures and debris such as sheds, fences, concrete slabs, abandoned vehicles, trees may be required as part of the demolition scope of work on a case-by-case basis.

Z. Contractor shall verify ownership of all fences, trees, physical features on site before

demolition/removal, and confirm that they are not features owned by adjacent property owners.

AA. Prior to removal of trees, the Contractor will confirm with the Owner/CM that the tree is scheduled for removal. Prior to removal/replacement of concrete municipal sidewalks, the Contractor will verify with the Owner/CM that the sidewalk is scheduled for replacement.

BB. Fencing of the properties after the demolition of the building/property is completed will be required unless determined otherwise, by the Owner (see Contract Documents).

CC. All tasks, requirements, deliverables, etc. contained in the Contract Documents are the sole responsibility of the Contractor unless specifically assigned to others. Work to be performed by the Contractor includes, but is not limited to, the following:

1. Prepare all submittals described in the Contract Documents.
2. Obtain all insurance coverage required by Owner.
3. Prepare and implement a Contractor Health and Safety Plan (HASP).
4. Prepare and implement a Site Operations Plan.
5. Identify and obtain all construction-related permits needed for completion of the Work, except for those identified as the responsibility of others in the Contract Documents.
6. Abide by the provisions of all permits and provide coordination and adequate notice of any construction activity which will require an inspection.
7. Maintain a secured worksite by controlling access at all points of entry.
8. Provide clear pathways at all times for emergency vehicles to enter and exit the Site.
9. Install, operate, and maintain temporary facilities and controls, including:
   a. Perimeter security and chain link fencing.
   b. Storm water and erosion controls.
   c. Temporary construction entrances.
   d. Office and storage Trailers.
   e. Temporary water.
   f. Dust and Environmental controls, including on-site dust controls, dust abatement and odor abatement.
   g. Worker health and safety measures.
   h. Temporary sanitary facilities.
   i. Material management and loading areas and stockpiles.
   j. Signage, work area, and traffic controls.
   k. Excavated material management/loading areas.
   l. Site ingress and egress for all equipment, deliveries and operational requirements.
   m. Temporary Heat.
10. Perform utility location tasks as per Section 02 41 00.
11. Identify and protect existing utilities and Site features designated by the Owner/CM to remain after the Project is complete.
12. Properly abate and dispose of any structures, debris and waste material within the Project Limits. Import clean backfill material to fill in any voids left from demolition/removal and place, grade and compact to provide positive drainage offsite. Obtain any applicable permits, waivers, and certifications. Provide the Owner/CM with documentation of proper disposal.

13. Proper handling, packaging, documentation, transportation and disposal of all wastes.
14. Clear and grub only site vegetation, trees, and shrubs that directly impact the work to demolish and remove all designated building structures and site features.
15. Construct and maintain temporary stockpiles to contain demolished building materials for export from the site, and imported fill material to be used as backfill.
16. Patch and repair – or if necessary, replace – asphalt, concrete sidewalks, and/or access areas damaged by construction traffic over the course of the Work.
17. Reinstall or repair any Site features, utilities, and appurtenances that were designated by the Owner/CM to remain after the Work is complete but were either damaged or relocated by the Contractor during the performance of the Work.
18. Remove temporary facilities and controls at the conclusion of the Work.
19. Provide and perform any other equipment, Work, or submittals required to facilitate the items listed above and the Work described in the Contract Documents.
20. Implement all Soil Erosion and Sediment Control (SESC) requirements for this project in accordance with Specification Section 01 57 13. All SESC measures will be established and in place prior to commencement of any onsite work. All measures shall be properly maintained throughout the duration of work. At the completion of work, all permanent SESC measures shall remain in place and all temporary measures shall be removed.
21. The Contractor shall be responsible for demolishing/removing all existing structures and physical site features, above and below grade (including footings, foundations, and where applicable, slabs) as well as UST's and AST's, and cutting/capping existing utility lines (i.e. gas, water services, etc.) and installing a marker at grade for future relocation. Upon completion of the demo/removal phase, the Contractor will restore the entire lot by filling/grading and installing the specified ground surface stabilization measures which typically is either topsoil, grass seed, and hay mulch, or a DGA/RCA/crushed stone surface. Only clean fill in accordance with the specifications, and NJDEP Residential Direct Contact Soil Remediation Standards shall be imported for backfill. All proposed fill sources and material shall be approved by the Owner/CM and Construction Official prior to import to the site, and emplacement as backfill. All fill shall be free of any debris or rubbish from the demolition or other sources, wood, metal, masonry, concrete, asphalt paving debris, large stones or boulders, roots, stumps and inorganic materials, etc. No fill is to be placed if the ground is muddy, frozen, or affected by frost. All imported fill shall be placed and compacted in accordance with the plans and specifications and shall be tested for compaction by an independent Sub-Contractor to the Contractor in accordance with the specifications.Provide all necessary and appropriately sized equipment (including but not limited to excavators, rollers, dozers, generators, hydraulic hammers, hoses, etc.) to adequately perform the work within the stated project schedule and in accordance with the Contract Documents.
22. The Contractor shall undertake all work in a workman like manner, according to acceptable engineering standards, and in compliance with all Federal, State, and Local Codes, Standards, and Regulations. (This must pertain to all subject matters, not just hazardous materials).

23. The Contractor must be aware of the required inspections in all operations especially if there is sidewall repair/reconstruction.
24. Demobilization.
25. Project closeout documentations, including all waste manifests and dump tickets, imported fill tickets, and all applicable permits.

1.4 SCOPE OF UNDERGROUND/ABOVE-GROUND STORAGE TANK DECOMISSIONING AND REMOVAL

A. Each building has the potential for the presence of either an underground, or above-ground fuel storage tank. Where present and visible, one or the other was identified in the Contract Documents and shall be properly decommissioned and removed in accordance with all applicable laws and regulations, including New Jersey Department of Environmental Protection. Where not apparent, make all reasonable attempts to identify and locate any existing UST's / AST's, and remove in accordance with plans and specifications and all applicable laws and regulations. Structures with USTs will be so designated in the Determination for Base Scope of Work Table. Otherwise, it can be assumed that no USTs are existing.

B. All associated piping and appurtenances shall be removed along with each tank, prior to commencement of any building demolition work.

1.5 ASBESTOS ABATEMENT

A. Provide all materials, supplies, and equipment to remove the asbestos-containing materials, as identified in all attached specifications and/or work plans for the removal of Asbestos-Containing Materials, authored by the designated Architect/Engineer (A/E), as well as any and all other asbestos and asbestos-containing materials that may be located at the property whether or not specifically identified in the aforementioned documents. Should a property be deemed to be an imminent hazard preventing entry or for other properties where pre-demo surveys and abatement could not be accurately or safely accomplished, an ACM survey and corresponding specifications/work plans may not be available, in which case, the Contractor shall handle and dispose of all potential ACMs in the demolition debris as though it were ACM.

B. Contractor shall provide for all regulatory notification as required as well as associated fees.

C. Phasing of the work area shall be at the discretion of the Contractor but shall not affect the Owner's schedule.

D. Contractor shall attend weekly project meetings and shall identify an individual with fiduciary responsibilities to attend these meetings.

E. Contractor shall provide for the sources for temporary water and power. Contractor shall retain the necessary subcontractors to provide for existing utilities connections/disconnections.

F. Waste shall also be removed from the work area at the Contractor's discretion.

G. Contractor shall prepare the work area in accordance with New Jersey Department of Labor (NJDOL), New Jersey Department of Community Affairs (NJDCA) and United States Environmental Protection Agency (USEPA) requirements.

H. Upon approval of the Owner/Construction Manager, Contractor shall commence asbestos abatement activities. Abatement shall include the removal of all asbestos-containing materials and disposal of same as asbestos contaminated waste.

I. Contractor shall then perform gross removal and timely bagging of the materials in accordance with NJDOL regulations.

J. At the completion of "gross removal", Contractor Supervisor and Construction Manager shall inspect all work areas to verify that all ACM has been removed.

K. Satisfactory final air clearance results shall include all air samples collected in the restricted areas during the abatement and shall be deemed acceptable if all air sample results as analyzed via PCM are less than 0.010 fibers per cubic centimeter (f/cc). Areas above this standard shall be re-cleaned and tested until acceptable. Samples shall be collected during the abatement of the exterior flashings and shall also remain below the 0.010 f/cc requirement. The Contractor shall be responsible for all costs of the additional testing above and beyond standard requirements.

1.6 UNIVERSAL WASTE REMOVAL

A. Remove, containerize, transport and dispose of all hazardous, potentially hazardous and non-hazardous wastes.

B. Remove all residual waste material within any tanks, vessels, mechanical (HVAC) equipment, and boiler(s).

C. Drain all air conditioning fluids, transformer oils, and other fluids where applicable. Load all materials into the appropriate containers, properly prepared for transportation and disposal.

D. Remove and dispose of residual paints, cleaning and maintenance chemicals throughout the site(s).

E. Remove and dispose of residual PCB ballasts, mercury switches and thermostats and fluorescent bulbs throughout the site(s).

F. Protect all existing nearby storm water sewers, including piping, catch basins, and manholes. Precautions shall be made to ensure that demolition debris or dirt and residual product does not enter the storm water system.

G. Attention to environmental compliance is also a requirement for work on-site. In the event of Contractor owned equipment oil leaks (hydraulic or otherwise), or spills, work shall be immediately suspended until the leak on the equipment is fixed and the spill is properly cleaned up by the Contractor. In the event of a spill or leak, the Contractor shall immediately notify the Owner/Construction Manager. Any contractor spill or leak shall not affect the cost or schedule of the project.

1.7 BUILDING SEPARATION / SOFT DEMOLITION

A. Contractor to disconnect and cap any remaining utility connections per code regulations.

B. The building(s) may be attached to existing adjacent buildings that will remain, and must be protected during demolition. As such, heavy equipment/machinery will not be allowed when performing any soft demolition and building separation work adjacent to the existing buildings that will remain. Provide alternate means of performing the building separation / soft demolition work in the Contractors Site Operations Plan submittal.

C. Include all proposed means of support and protection of existing attached buildings necessary to assure the structural integrity of those adjacent walls, roofs, foundations, footings, etc. in the Site Operations Plan submittal.

D. The plans will identify those adjacent walls that will need to be protected/supported during any and all building demolition work (including building separation / soft demolition).

1.8 STRUCTURAL DEMOLITION PERMITS

A. Prior to commencing work, obtain all necessary permits for building demolition work. The Contractor is responsible for all fees and costs, including engineering costs, associated with the work. All construction work shall conform to New Jersey State Building Code and respective Codes of the City of Trenton.

B. Contractor shall obtain all permits, approvals and sign offs, including but not limited to:

- Full Demolition;
- Sewer, Water (Trenton Water Works – Department of Water & Sewer);
- Gas, Electric (PSE&G);
- Rodent Control (DOH);
- Asbestos (NJDOH);
- Boiler (DOB);
- Site Fence;
- Scaffolding Structure (if used); and
- Waste Transportation Routes (DOT)

1.9 EXISTING CONDITIONS

A. Neither the Owner, the Owners representative, nor CM are responsible for any interpretation or conclusions drawn by the Contractor from data or information provided in the Contract Documents.

B. Information regarding Site conditions is intended to assist the Contractor in preparing a Bid. The Owner/CM guarantee neither the accuracy of this information nor that this information is necessarily indicative of all conditions that may be encountered. Failure by the Contractor to understand and verify all existing conditions at or above the ground surface must not result in additional charges to the Owner. Failure by the Contractor to understand subsurface existing conditions that are accurately represented in the Contract Documents must not result in additional charges to the Owner. This includes the approximate number, type, and location of active and derelict subsurface utilities shown in the Contract Documents, and the presence of subsurface structures and foundations that can be reasonably inferred from the Contract Documents.

C. The Owner/CM's best understanding of the existing conditions for the Site is shown on the Drawings and described in the Contract Documents and is the result of limited site explorations and surveys. The conditions prevailed at the time the explorations and surveys were made. The Contractor must perform pre-construction surveys or explorations of the Site to determine current conditions at or above the ground surface prior to initiating the Work.

D. Evaluate the adequacy of municipal, State, and Federal highways, roads, bridges, railroads, and waterways to support the performance of the Work.

E. Prior to commencing Work, Contractor must verify the current condition of utilities and facilities at the Site. Protect existing utilities, structures, and facilities designated by the Owner/Construction Manager to remain at the Site after the Work is complete. Any damage caused by the Contractor, directly or indirectly, must be repaired or replaced in kind in a prompt manner as directed by the Owner/CM, at no additional cost to the Owner.

1.10 CONTRACT DOCUMENTS

A. The Contract Documents include these Technical Specifications, Drawings/Plans, figures, attachments, and addenda that are either included or referenced in the Request for Proposal package, or provided during the bidding and procurement period, and any subsequent approved Change Orders. In the case of a conflict between the Contract Documents, the more stringent requirement, as determined by the Owner/CM, controls. In the case of a conflict between the Contract Documents and the Agreement, the Agreement controls.
B. It is not the intent of the Contract Documents to show every pipe, wire, conduit, utility connection, detail, appurtenance, etc. that may be necessary to complete the Work. The scope is implied by indicating the minimum Performance acceptable for completion of the work, and actual utility's locations will be verified by the Contractor prior to commencement of work.
C. The organization and division of Work contained within the Contract Documents does not make the CM or the Owner an arbitrator to establish contract limits between the Contractor and any Subcontractor.
D. The Drawings include notes. Refer to the Drawings in conjunction with these Technical Specifications.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION 01 11 00

Division 01 00 00 – General Requirements

Section 01 32 00

Submittal

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Contractor's Construction Milestones schedule - Milestones schedule shown start and finish of each properties.

B. Section includes administrative requirements for obtaining the approval of Housing and Mortgage Finance Agency (HMFA) before, during and after performance of the work including the following:

1. Phase 1 Prior to Demolition
   a. Photos of before construction begin;
   b. Milestones schedule shown start and finish of each properties.

2. Phase 2 After the Completion of All Site Work
   a. Work Start & Complete Dates;
   b. Photos after work completed;
   c. Copy of Notice to Proceed;
   d. Contractor invoices of work performed;
   e. Copies of Certified Payroll verifying compliance with prevailing wage;
   f. All waste manifests/bills of lading together verifying appropriate waste disposal;
   g. Copies/scan of all building permits;
   h. Copy of Certificate of Acceptance; and
   i. Copies/Photos of Inspection Approvals (gas, sewer capping, etc.).

3. Phase 3 Payment by HMFA
   a. None

1.2 RELATED DOCUMENTS

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

1.3 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a

construction schedule consume time and resources.

1. Critical Activity: An activity on the critical path that must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.

C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

1.4 INFORMATIONAL SUBMITTALS

A. Format for Submittals: Submit required submittals in the following format:

1. PDF electronic file.

B. Contractor's Construction Schedule: Initial schedule, of size required to display entire schedule for entire construction period.

1.5 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 subcontractors, 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 commencement of the Work to date of Substantial 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 story or separate area as a separate numbered activity for each main element of the Work. Comply with the following:

1. 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.
2. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's construction schedule with submittal schedule.
3. Startup and Testing Time: Include no fewer than [fifteen] 15 days for startup and testing.
4. Substantial Completion: Indicate completion in advance of date established for Substantial Completion and allow time for the Owner and/or CM administrative procedures necessary for certification of Substantial Completion.
5. Punch List and Final Completion: Include not more than [thirty] 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. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
2. Work Restrictions: Show the effect of the following items on the schedule:
   a. Coordination with existing construction.
   b. Limitations of continued occupancies.
   c. Uninterruptible services.
   d. Partial occupancy before Substantial Completion.
   e. Use of premises restrictions.
   f. Provisions for future construction.
   g. Seasonal variations.
   h. Environmental control.
3. Work Stages: Indicate important stages of construction for each major portion of the Work.

D. 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.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE (GANTT CHART)

A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal, Gantt-chart-type, Contractor's Construction Schedule within (thirty) 30 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.

1. For construction activities that require three months or longer to complete, indicate an estimated completion percentage in [ten] 10 percent increments within time bar.

C. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using a network fragment to demonstrate the effect of the proposed change on the overall project schedule.

D. Initial Issue of Schedule: Prepare initial network diagram from a sorted activity list indicating straight "early start-total float." Identify critical activities. Prepare tabulated reports showing the following:

1. Contractor or subcontractor and the Work or activity.
2. Description of activity.
3. Main events of activity.
4. Immediately preceding and succeeding activities.
5. Early and late start dates.
6. Early and late finish dates.
7. Activity duration in workdays.
8. Total float or slack time.
9. Average size of workforce.
10. Dollar value of activity (coordinated with the schedule of values).

E. Schedule Updating: Concurrent with making revisions to schedule, prepare tabulated reports showing the following:

1. Identification of activities that have changed.
2. Changes in early and late start dates.
3. Changes in early and late finish dates.
4. Changes in activity durations in workdays.
5. Changes in the critical path.
6. Changes in total float or slack time.
7. Changes in the Contract Time.

2.3 REPORTS

A. Daily Construction Reports: Prepare and maintain a daily construction report recording the following information concerning events at Project site:

1. List of subcontractors at Project site.
2. List of separate contractors at Project site.
3. Approximate count of personnel at Project site.
4. Equipment at Project site.
5. Material deliveries.
6. High and low temperatures and general weather conditions, including presence of

rain or snow.
7. Accidents or observed safety concerns.
8. Meetings and significant decisions.
9. Unusual events.
10. Stoppages, delays, shortages, and losses.
11. Meter readings and similar recordings.
12. Emergency procedures.
13. Orders and requests of authorities having jurisdiction.
14. Change Orders received and implemented.
15. Construction Change Directives received and implemented.
16. Services connected and disconnected.
17. Equipment or system tests and startups.
18. Partial completions and occupancies.
19. Substantial Completions authorized.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's 4-Week Lookahead Schedule: At monthly intervals, update and distribute updated 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 the Owner, CM, 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 01 32 00

Division 01 00 00 – General Requirements

Section 01 33 00
Submittal Procedures

Part 1 – General

1.1 SUMMARY

A. This section summarizes the protocol and procedures for the preparation and delivery of required submittals.

1.2 GENERAL REQUIREMENTS

A. Submittals are required on the items as described individually in each Section of these Technical Specifications. Contractor to submit a submittal schedule outlining all submittals and timing of each.

B. Provide all submittals in appropriate electronic format (i.e., document file, drawing file, image file, etc.) directly to the Owner/CM. The Owner/CM will forward them to the appropriate party for review.

C. The Owner/CM reserves the right to request that any submittal be provided via paper copy. For all hardcopy submittals, provide three (3) copies unless otherwise directed.

D. Use a cover form for each submittal. The cover form must include Project title; Project number; Contractor; subcontractor or supplier; date; submittal number; submittal description/title; applicable Technical Specifications Section and/or Drawing number; submittal exclusions; special issues, etc.

E. Include calculations, drawings, shop drawings, plans, reports, records, photographs, videos, diagrams, and details with submittals where applicable to facilitate the review and/or approval.

F. Use the same units of weights and measures on submittals as are used in the Contract Documents.

G. Provide a statement that includes signature of entity responsible for preparing the submittal. An officer or other individual authorized to sign documents on behalf of that entity will sign certificates and certifications. Submittals requiring preparation by an engineer or surveyor must be signed and sealed by a Professional Engineer/Surveyor licensed to practice engineering in the jurisdiction where the Work is to be performed.

H. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of the completed Work.

I. Prepare submittals that are complete and in sufficient detail for ready determination of compliance with the contract requirements.

J. Resubmit based on Owner/CM's review, if requested. When performing a submittal revision, identify all changes made since previous submission. For each re-submittal allow the same number of workdays required for review as the original submittal.

K. Schedule submittals to expedite Work. Provide the Owner/CM a minimum of five (5) working days, excluding transmittal time, for review. Submittals with shorter review periods are indicated on the Submittal Summary Table.

1.3 SUBMITTAL REGISTER

A. Maintain a Submittal Register at the Site including the submittal number, description, date submitted, status, and date of approval/rejection.

1.4 SUBMITTAL REVIEW

A. The Owner/CM will review all submittals solely for determining whether the information contained in the submittal conforms to the design concept of the Contract Documents. The Owner/CM will pass to the Owner all applicable submittals for review and approval. The Owner or Owner/CM will return the submittals with the following classifications:

1. **Accepted** Work may proceed, no exceptions taken
2. **Furnish as Corrected:** Work may proceed subject to comments, resubmittal not required
3. **Revise and Resubmit:** Work may not proceed, resubmittal required for indicated items. Proceed with Work on other items subject to comments.
4. **Rejected:** Work may not proceed, resubmittal required, submittal unresponsive and/or not in conformance with Contract Documents.

B. Owner/CM's review is for the limited purpose of checking for conformance with the information given and the design concept expressed in the Contract Documents. Review is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions or quantities. Approval of a specific item does not constitute approval of an assembly of which the item is a component.

C. The Owner/CM's review and approval of the Contractor's submittals does not relieve the Contractor from complying with the requirements of the Contract Documents. The Contractor's responsibilities include but are not limited to: dimensions to be confirmed and correlated at the jobsite; fabrication processes and construction means, methods, techniques, sequences or procedures; coordination of the Work of all trades; and performing all work in a safe and satisfactory manner.

D. Owner/CM's review of submittals does not relieve the Contractor from responsibility for the subject of the submittal, including: errors or omissions in designs, details, calculations, analyses, test methods, materials, and its sole responsibility for means and methods of construction, and safe and successful construction of the Work.

1.5. PRE-CONSTRUCTION PERIOD SUBMITTALS

A. All submittals are subject to review and approval by the Owner/CM. Submittals will not be approved until the Owner/CM has determined that they meet the minimum requirements of these Technical Specifications. Claims for lost time or requests for extensions based on rejected pre-mobilization submittals will be denied.

B. Prepare and submit a Site-Specific Contractor's Health and Safety Plan (SSHASP).

C. Signed acknowledgement of Owner-specific safety requirements for Contractors, if such a document is included in the Agreement or otherwise provided to Contractor.

D. Contractor's initial baseline Progress Schedule, based on the Construction Milestones listed in the Contract Documents and per the requirements of Submittal Section 01 32 00.

E. Perform the pre-construction surveys listed below. The pre-construction surveys must include the entirety of the Project Limits and a buffer extending at least 50 feet beyond the Project Limits. Submit the findings of the pre-construction survey to the Owner/CM for review and approval prior to mobilization.
   1. Video and/or photographic documentation of the existing conditions of the Site and surrounding area. Do not enter onto private property without prior written approval from the property owner.
   2. Video and photographic documentation of the existing road conditions for all roads to be used for hauling by the Contractor or subcontractors.

F. Schedule of Permits:
   1. Submit a schedule of Contractor-required permits with approximate lead time. Indicate any action items or information required from the Owner/CM.
   2. Submit copies of all supplemental and/or recurring data required by the permits to the Owner/CM, as needed. Include documentation that the supplemental data was provided to the entity that issued the permit, according to the schedule required by the permit.
   3. Submit copies of fully executed permit applications and copies of issued permits to the Owner and Owner/CM.

G. Prepare and submit a Site Operations Plan (SOP), as described in detail, below.

1.6. SITE OPERATIONS PLAN (SOP)

A. A draft Site Operations Plan is not a required element of the bid. Some elements of the SOP will be required to meet permitting requirements. In addition, the following will be provided in lieu of an SOP:
   a. Detailed list of proposed Subcontractors, including haulers, material suppliers, etc. For each proposed Subcontractor, include company address and the name and telephone number for the individual who will serve as primary point-of-contact for that company.
   b. Provide applicable license or certification numbers for any Contractor or Subcontractor personnel identified to provide services for which licensure or certification is required.

   c. Construction Progress Documentation
      1. Baseline Construction Progress Schedule
      2. Template for Daily Construction Reports
      3. Template for four-week look-ahead schedules

Part 2 – Products

Not Applicable.

Part 3 – Execution

Not Applicable.

END OF SECTION 01 33 00

Division 01 00 00 – General Requirements

Section 01 41 00
Regulatory Requirements

Part 1 – General

1.1 SUMMARY

A. This section establishes responsibility for obtaining Project permits between the Owner/CM and the Contractor and makes clear the Contractor's obligation to abide by applicable laws and regulations in the performance of the Work.

B. ALL work shall comply with the requirements of the Building Code of the New Jersey Uniform Buidling Construction Code, The International Building Code New Jersy Edition (2018) or current updated pervision, and Local Building Codes, and other applicable Federal State and Local Regulations.

C. ALL work shall comply with all applicable Standards including OSHA, Local, State and Federal codes.

1.2 SUBMITTALS

A. Prior to mobilization, submit a Schedule of Permits including approximate lead time. Indicate any action items or information required from the Owner/CM.

B. Submit copies of all supplemental data required by permits with documentation that the supplemental data was provided to the entity that issued the permit according to the schedule required by the permit.

C. Submit copies of completed permit applications to the Owner/CM for review prior to submittal of the permit application to the regulatory entity.

D. Submit copies of fully executed permit applications and final permits to the Owner/CM as part of the Record Documents.

1.3 PERMITS AND APPROVALS

A. The following permits may be required to perform the Work, based on the Owner/CM's experience with similar jobs. This list is not intended to be exhaustive, and it is the Contractor's responsibility to determine what other permits, if any, are also required to perform the Work.

1. Local construction and demolition permits.
2. Permits for temporary connections to utilities.
3. Permits for temporary lane or road closures, if necessary.

B. Contractor must pay for and provide all licenses, governmental charges, bonds, letters of credit, and inspection fees associated with permits that are the Contractor's responsibility.

C. This Section may not describe all permits required for performance of the Work. Any permits not identified in this Section, or elsewhere in the Contract Documents, are the responsibility of Contractor.

1.4 Regardless of who is responsible for obtaining a permit, the Contractor is responsible for performing in accordance with the terms and conditions of all project permits under Laws AND Regulations.

A. The Contractor must comply with all local, state and federal laws and regulations applicable to performance of the Work. Except where otherwise expressly required by applicable laws and regulations, the Owner/CM will be responsible for monitoring Contractor's compliance with any laws or regulations.

B. If the Contractor performs any Work knowing or having reason to know that it is contrary to laws and regulations, Contractor will bear all claims, costs, losses, and damages caused by, arising out of, or resulting there from. However, it is not the Contractor's primary responsibility to make certain that the Contract Documents are in accordance with laws and regulations.

C. The State Asbestos Code Official must be notified (609-633-2158). The Contractor/Sub-Contractor must be State Licensed in Asbestos Abatement.

D. The contractor must submit a water/sewer capping inspection manifest from the Trenton Water-Sewer Department before a pre-back fill inspection can be performed.

E. The neighboring/adjoining properties must be notified before work commences. At the attached properties, the Contractor must take interior as well as exterior pictures before starting, to avoid false claims.

F. The Contractor assumes all liability. Failure to comply with the inspection process will force the Office to hold any payments due and to have the site re-excavated for the required inspections at the Contractor's expense.

G. The Contractor shall undertake all work in a workman like manner, according to acceptable engineering standards, and in compliance with all Federal, State, and Local Codes, Standards, and Regulations. (This must pertain to all subject matters, not just hazardous materials).

H. The Contractor must be aware of the required inspections in all operations especially if there is sidewall repair/reconstruction.

I. Set forth below are some of the laws and regulations applicable to the Project. The listing of specific laws and regulations in this Section is for information only. The fact that a law or regulation is not listed does not relieve the Contractor of its responsibilities for compliance.

1. Federal Laws and Regulations:

   a. Carriage by Public Highway (49 CFR 177). These Regulations prescribe federal Department of Transportation requirements that are applicable to the acceptance and transportation of hazardous materials by various carriers in motor vehicles.

   b. Occupational Safety and Health Administration (OSHA) Standards for Hazardous Waste Site Operations and General Construction Activities (29 CFR 1910.120, 1926). These Regulations protect the Health and Safety of on-site workers at construction sites.

Part 2 – Products

Not Applicable.

Part 3 – Execution

Not Applicable.

END OF SECTION 01 41 00

Division 01 00 00 – General Requirements

Section 01 50 00
Temporary Facilities and Controls

Part 1 – General

1.1 SUMMARY

A. The Work required under this section includes furnishing all labor, equipment, supplies, laboratory testing, materials, and performing all operations required to establish, maintain and remove temporary facilities and controls at the Site during the performance of the Work. Contractor must follow all current CDC guidelines and adjust same if the CDC make changes.

B. TEMPORARY UTILITIES

1. The Contractor is responsible for providing any and all necessary temporary utilities to perform the scope of work described within this section including but not limited to electric, water, lighting, power, street sweeping, snow removal, sanitary facilities, site security, construction trailers, etc.

1.2 SUBMITTALS

A. Prior to mobilization, submit a Site Operations Plan (SOP) as described in Submittal Section 01 33 00. The SOP must address elements of the temporary facilities and controls listed in this Section.

B. Prior to the start of any ground disturbing activities, submit copy of the NJ One Call (811 or 800-272-1000) ticket and confirmation of utility mark-out of all public and private utilities located at the Site.

C. Temporary Heat (if necessary)

1. The Contractor shall provide winter protection to the Project, including, but not limited to, providing temporary heat to maintain the Project buildings at a temperature of at least forty (40) degrees Fahrenheit or greater, as may be required for the construction activity.
2. Fire-Safety Program -Indicate locations of and supervision procedures for welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
3. Demonstrate plan for providing code-compliant temporary heat, ventilation, sanitary facilities, drinking water, and other services to all areas of the project.

1.3 ELECTRIC SERVICE

A. A licensed electrician must perform all electrical Work.

B. Contractor must provide electrical connections to all facilities and equipment that require electrical power for the performance of the Work.

C. A diesel-powered electrical generator may be used to power facilities/equipment for short term purposes in the event of problems with the regular electric service. In that

case, use a licensed electrician to perform all service connections and disconnections from the facilities/equipment and implement noise controls to muffle engine noise. Temporary generators may not run outside of normal work hours unless in full compliance with City of Trenton Fire Department requirements and including fire guards.

D. All electrical connections must meet appropriate National Electric Manufacturers Association (NEMA) ratings consistent with the intended service.

1.4 POTABLE WATER SERVICE

A. Contractor must provide, maintain, and pay for a suitable quantity of bottled potable drinking water for all on-site personnel. Furnish individual bottled water containers at locations near the Work being conducted, as necessary and prudent to keep workers supplied with drinking water. During summer months, provide the option of bottled water on ice at these locations.

1.5 SANITARY FACILITIES

A. Provide a sufficient number of portable toilets with hand sanitizers for Contractor and Subcontractor crews, Construction Manager, Owner, and visitors in accordance with usage ratings, or as otherwise directed by the Owner/CM.

B. Portable toilets and hand-sanitizing stations must be serviced per capacity requirements, and at minimum twice per week.

C. The portable toilets and hand sanitizing stations must be installed during mobilization and maintained in clean and sanitary condition until Substantial Completion.

D. Provide and maintain in clean, good working order, other personnel decontamination facilities required by the Contract Documents or the Contractor's HASP.

1.6 TRAFFIC CONTROL

A. Contractor must furnish, install, and maintain traffic control signs in accordance with requirements of the City or as otherwise deemed necessary by the Construction Manager for the safety of workers at the Site and the public.

B. Provide a dedicated flagger during trucking activities on adjacent roadways if deemed necessary either by the Owner/CM or by the City.

1.7 BARRICADES AND ENCLOSURES

A. Install the perimeter fence as shown on the Drawings or as otherwise directed by the Construction Manager.

B. To avoid damage to subsurface utilities, all fence post holes must be excavated using hydro-excavation soft-dig techniques. Do not direct-drive fence posts or mechanically auger fence post holes.

C. Repair or replace any Site fencing damaged by Contractor's activities.

1.8 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

A. Remove temporary utilities, equipment, facilities and controls, prior to submitting final application for payment.

B. Remove all materials, vehicles, rubbish, debris, and wastes from the Site prior to submitting final application for payment.

Part 2 – Products

Not Applicable.

Part 3 – Execution

3.1 EQUIPMENT LEFT ON SITE

A. Secure all vehicles and equipment left on the Site.

B. De-energize and lock all equipment left on the Site when not in use to prevent electrical/fire/explosive hazards.

C. Winterize any systems requiring freeze protection to avoid damage or failure.

D. Contractor is responsible for the security, operation, and maintenance of all equipment and systems at the Site.

E. Repair system failures in a timely manner such that the Progress Schedule is not affected.

3.2 SITE SECURITY/FIRE

A. Take security precautions as necessary to prevent any unauthorized access to the work area, and to control construction traffic to and from the Site.

B. If instructed by the Owner/CM, provide manned overnight security/fire watch services during all non-working hours, including weekends and holidays. Contractor may elect to provide a security guard even if not required by Owner/CM, but in that case it will be at Contractor's expense.

C. Security personnel, if necessary, employed during non-working hours must, at a minimum, meet the following requirements:

1. Be literate in the English language.
2. Be briefed on Site hazards.
3. Have access to a telephone.

D. Personnel assigned to perform Site security are not required to adhere to the training, certification, and medical monitoring program defined in Contractor HASP. However, security personnel must be briefed on all hazards present.

END OF SECTION 01 50 00

Division 01 00 00 – General Requirements

Section 01 57 13
Temporary Erosion and Sediment Controls

Part 1 – General

1.1 SUMMARY

A. The Work required under this section includes furnishing all labor, equipment, supplies, materials, and performing all operations required to establish, maintain and remove temporary erosion and sediment controls at the Site during the performance of the Work.

1.2. PERFORMANCE REQUIREMENTS

A. Implement the sediment and erosion control aspects of the Work in accordance with the most current edition of The Standards for Soil Erosion and Sediment Control in New Jersey.

B. Furnish and install all required sediment and erosion controls prior to the start of excavation Work, and maintain the controls for the duration of the Work.

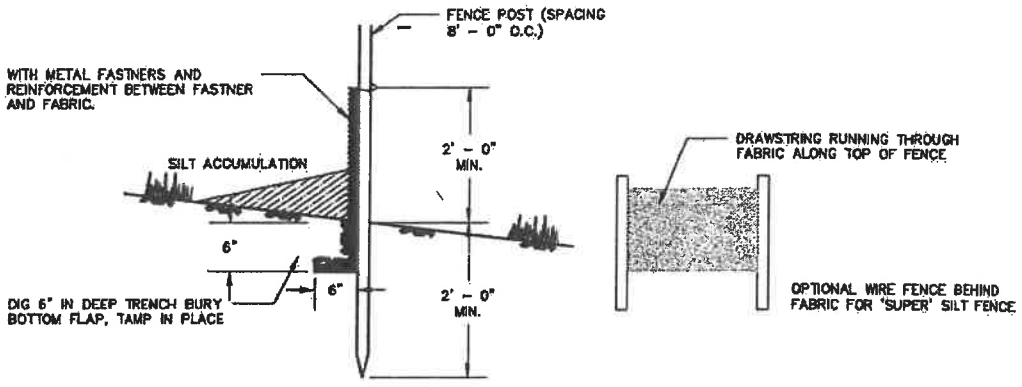
C. Implement best management practices to prevent sediment from leaving the work area. Prevent sediment from entering roadways, and/or any nearby bodies of surface water, etc.

D. In the event of federal, state, or local water pollution or wetlands law violations requiring mitigating action, any violations or penalties incurred by the Contractor's personnel, correct and pay for equipment or construction activities to remedy the violation. If corrections are not performed promptly or to the responsible agencies' satisfaction, the Owner reserves the right to perform the corrective Work and to deduct the costs of the corrective Work from the Contractor's invoice or retainage.

PART 2 - PRODUCTS

2.1. SILT FENCE

A. Silt fence must be as required by the NJ Soil Erosion and Sediment Control Standards.



SILT FENCE
NOT TO SCALE

PART 3 - EXECUTION

3.1. SITE GRADING FOR STORM WATER CONTROLS

A. Grade the ground surface as necessary to achieve flow patterns for effective storm water control and runoff.

B. Stabilize all soils disturbed during the Site preparation.

3.2. EROSION CONTROL STRUCTURES

A. Construct and maintain the erosion control structures as described on the Drawings and in the SESC. Relevant structures include but are not limited to: silt fences, hay bales, perimeter soil berms, and catch basin / curb inlet protection.

3.3. SURFACE WATER RUN-ON/RUNOFF CONTROL

A. Install temporary control measures as required to protect adjoining properties from surface drainage caused by construction operations.

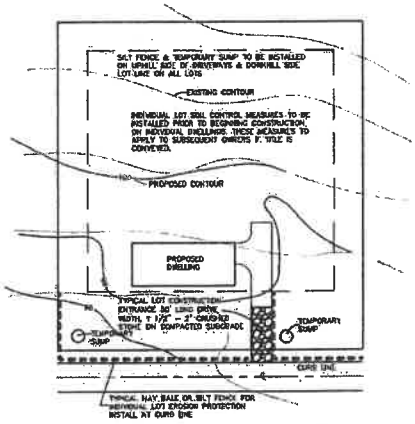
B. Prevent storm water from adjacent areas from entering the work areas.

C. Prevent surface water run-on/runoff from transporting sediment or impacted material off the Site.

D. All control measures necessary for storm water management are the Contractor's responsibility.

E. Where construction vehicle access routes intersect public roads, install and maintain wheel washes and construction entrances to minimize the transport of mud, soil and dust onto the public road. If soil, mud, or dust is transported onto a road surface, clean the road thoroughly immediately to the satisfaction of the Construction Manager. Remove soil from the roads by shoveling, sweeping or mechanical cleaning equipment. Transport sweepings to an on-site soil stockpile area. Do not street wash with water until the soil has been removed to the extent practical by sweeping.

F. Handle and dispose of all pollutants that are generated on the Site during demolition in a manner that does not negatively affect storm water runoff quality.



TYPICAL DETAIL FOR INDIVIDUAL LOT SOIL EROSION MEASURES
NOT TO SCALE

3.4. INSPECTION AND MAINTENANCE

A. Inspect and provide a report on all erosion and sediment controls at least once every seven days, regardless of rainfall, or as directed by the demolition permit requirements. Indicate deficiencies and corrective action.

B. Remove sediment deposits and place them in a location designated by the Owner/Construction Manager. Do not allow sediments to migrate off site.

C. Maintain erosion control structures as necessary, and replace damaged erosion control structures as needed or otherwise directed by the Owner/Construction Manager.

D. Immediately repair damage to erosion and sediment control systems.

3.5. REMOVAL AND DISPOSAL

A. At the conclusion of the Work, remove all installed elements of erosion control structures including impermeable liners, filter fabric, silt fence and wire reinforcement, hay bales, and support posts unless otherwise directed by the Owner/Construction Manager. Properly dispose of erosion control debris at an approved landfill.

B. Remove erosion and sediment control materials in such a way as to minimize ground disturbance and the potential for future erosion and/or sediment transport. Fill, compact, and stabilize all disturbed ground, including trenches associated with the removal of erosion and sediment controls, as directed by the Owner/Construction Manager.

END OF SECTION 01 57 13

Division 01 00 00 – General Requirements

Section 01 57 16
Temporary Pest/Rodent Control

PART 1 - GENERAL

1.1 SUMMARY

A. The Work required under this section includes furnishing all labor, equipment, supplies, materials, and performing all operations required to mitigate or eliminate any possibility of encountering rodents and/or pests inhabiting the existing dwellings or any other onsite structures or features including vegetation.

1.2 PERFORMANCE REQUIREMENTS

A. This Section specifies rodent control and general pest control requirements within construction, laydown, dump, and bordering areas. This work is to be performed prior to demolition, excavation, and site preparation as well as throughout construction, so that rodents (such as rats and mice) and other pests (such as cockroaches and flies) are not unduly attracted to, fostered or permitted to disperse from construction areas.

B. Furnish and install all necessary mouse and rat traps and any other appropriate controls prior to the start of demolition Work, and maintain the controls for the duration of the Work.

C. Implement best management practices to prevent attraction of any new rodent and/ or populations during the scheduled demolition work.

D. Use a fully Trained Licensed and Certified Rodent and Pest Control subcontractor experienced in identifying and controlling all rodent and/ or pest populations, and who uses industry standard humane methods and products.

E. Identify any other pests that would potentially create a health hazard such as wasps, ticks, etc. and provide necessary controls to mitigate potential exposure to dangerous or unhealthy encounters.

F. The Contractor will ensure that all orifices and penetrations within the zone of construction / renovation resulting from the construction activities are sealed to exclude pests and prevent their dispersal within the structure. In the case of adjacent to None City-owned properties, Contractor will further ensure that pre-existing penetrations are sealed to prevent passage of pests.

G. Abide by project specifications to ensure that the building's exterior perimeter (including roof, walls and foundation) is as pest-proof as practical during and upon completion of demolition.

H. The Contractor assumes responsibility for sanitation within the work zone and agrees to secure all food and food wastes on site in accordance with the requirements set forth within this document.

1.3 PERMITS

A. The Contractor will obtain and maintain appropriate permit(s) from city, state or federal agencies for pest control activities associated with this Work.

PART 2 - PRODUCTS

2.1 The Contractor will ensure that the pest control operator only apply pesticide formulations registered by the U.S. EPA and compliance with local and state regulations.

PART 3 - EXECUTION

3.1 METHODS OF CAPTURING RODENTS

A. Where live capture or kill traps are used, they must be checked regularly and any animals caught, and that are still alive must be killed humanely and legal means before disposal.

B. All methods used shall ensure the humane treatment of animals.

C. Only use traps designed to catch or kill your target animal.

3.2 DISPOSAL OF DEAD RATS AND MICE

A. Rats and mice (dead or alive) can carry infections that are dangerous to humans and other animals. If killed by rodenticides, carcasses are likely to carry residues of rodenticides that can present serious risks to wildlife scavengers or predators. Dispose of carcasses, bait stations and uneaten bait carefully and hygienically according to current codes, laws and regulations and the advice of rodenticide product labels.

3.3 SERVICE REPORTS AND CERTIFICATIONS

A. All service reports are to be signed and submitted by the rodent and pest control subcontractor and/or technician to the Construction Manager, Owner and Owner's representative(s). A printed copy shall be also provided to the Construction Manager, Owner and Owner's representative(s). Traditional handwritten notes on paper are discouraged.

END OF SECTION 01 57 16

Division 02 00 00 – Existing Conditions

Section 02 41 00
Building Demolition and Removals

Part 1 – General

1.0 REFERENCED SPECIFICATION SECTIONS
Section 01 11 00 Summary of Work (1.3 Scope of Demolition)
Section 01 41 00 Regulatory Requirements (1.4 Laws and Regulations)

1.1 DESCRIPTION

A. Contractor shall furnish all labor, materials, equipment and incidentals required for demolition, removals and disposal work shown, specified and necessary to complete the Work.

1. The work under this section includes, but is not limited to, demolition and removals of existing structures, materials, and equipment as necessary to perform the Work as shown and specified. The Work includes, but is not limited to, masonry, piping, utilities, mechanical, structural, plumbing, electrical, telephone, telecommunications, asphalt, concrete, basement and other elements as shown
and specified. The Contractor shall be responsible for identifying the need for, designing and implementing all temporary bracing and supports required to perform the Work safely and efficiently. Temporary bracing and supports shall be removed and disposed of by the Contractor when they are no longer required.
2. Concrete and asphalt pavement and concrete floor slabs shall be neatly saw cut through their entire depth prior to removal.
3. Remove existing concrete and asphalt debris piles and any other debris piles within the limits of Work.

B. Removal and Disposal of Asbestos-Containing Materials:

1. The Contractor shall provide all labor, equipment and materials necessary to remove and dispose of all asbestos-containing materials present in the areas of the Work. See applicable specification for abatement of Asbestos Containing Materials ("Section 02 82 00 Asbestos & Hazardous Building Materials Remediation").

C. Removal and disposal of Universal Wastes, including electrical and electronic equipment, fluorescent lamps and ballasts, PCB and mercury containing equipment as required as part of demolitions shall be performed by the Contractor in accordance with all applicable federal, state and local laws and regulations. See applicable specification for removal of Universal Wastes ("Section 02 82 00 Asbestos & Hazardous Building Materials Remediation").

1.2 GENERAL

A. It is the responsibility of the Contractor to visibly inspect the site prior to submittal of a bid to demolish.

B. It is the responsibility of the Contractor to file all the necessary applications and obtain all required permits before commencement of demolition operations.

C. It is the sole responsibility of the demolition Contractor to remove and dispose of all demolition debris, rubble, building materials, contents of the building and other debris not associated with the demolition in conformance with the County of Mercer Master Plan, The Mercer County Improvement Authority, and all applicable state and federal regulations, with regard to waste removal and disposal.

D. It is the responsibility of the demolition Contractor to obtain all prior approvals from the various City and state agencies prior to the issuance of a demolition permit and the commencement of demolition operations.

E. All bids shall be accompanied by a copy of the Bidders Certificate of Public Conveyance and Necessity issued by the New Jersey Board of Public Utility Commissioners, Department of Environmental Protection certificate number.

F. All backfilling shall be made with suitable on-site or imported materials which are not too wet for proper placement. Filling materials shall be free from vegetation, masses of roots or individual roots, wood, mulch, blacktop paving materials or other organic or undesirable matter of any nature. Inert material, such as brick, broken concrete or plaster, shall be allowed only by direction of the Building Code Official, by approved site plan or a report prepared by a licensed engineer. Imported material shall be certified as "clean" either by sourcing the material from a licensed quarry as virgin material, or by appropriate environmental testing and compliance with the NJDEP Residential Direct Contact Soil Remediation Standards.

G. Basement fills shall be placed and compacted. The fill shall be placed in layers not more than six inches thick, loose measurement, and mechanically compacted.

H. The site shall be graded so as to drain to the curb and away from adjacent properties.

I. All walls, foundations, footings, concrete pads, slabs and the like shall be demolished to a depth of not less than three feet below finished grade, or as directed by the Building Code Official.

J. All concrete floors, slabs or similar constructions that are not ordered removed shall be broken sufficiently to prevent the accumulation or holding of any water.

K. All underground tanks and piping shall be removed from the site, in compliance with federal, state and City regulations.

L. Any sidewalks damaged or removed during the demolition shall be replaced with sidewalks that comply with specifications of the City of Trenton Department of Public Works.

M. The Building Code Official shall have the authority to modify any one or more of the above standards if, in his/her judgment, the applicability of the particular standard would not be beneficial to the safety and integrity of any adjoining structures and if relaxation of the standards would not adversely affect the same.

N. In buildings undergoing partial demolition and in buildings to be re-occupied by persons other than workers wearing appropriate NIOSH-approved respiratory protection, all friable asbestos or asbestos-containing material that will become friable during demolition must be properly removed.

The removal of asbestos shall require a construction permit in accordance with *N.J.A.C. 5:23-8.5*. Additionally, a demolition permit must be obtained pursuant to N.J.A.C.5:23-2.

Asbestos abatement shall be done in accordance with all applicable provisions of this subchapter.

Air monitoring samples during the removal phase and final air samples after removal

shall be required for an asbestos abatement project.
The project will not be subject to Subchapter 8 if there will be no re-occupancy. However, licensed personnel and clearance is required to comply with Dept. of Labor.

O. In buildings undergoing full demolition and will not be re-occupied, the municipality will provide a notice of unsafe structure issued by the local Building Code Official as per N.J.A.C. 5:23-2.32(a). The Contractor must follow all requirements of 40 CFR Part 61 – National Emission Standards for Hazardous Air Pollutants, specifically Subpart 61 – Standard for Demolition and Renovation, specifically Subsections 61.145(a)(3), regarding project notification, procedures for asbestos emission control, proper wetting, asbestos waste handling, and supervisor/worker training requirements.

1.3 REFERENCES

A. American National Standards Institute (ANSI)—ANSI A10.6 "Safety and Health for Demolition Operations."
B. City of Trenton – Chapter 42 Building Construction - § 42-7 Demolition.
C. OSHA Standards 29 CFR 1926, Subpart T, Demolition

1.4 JOB CONDITIONS

A. Protection:
1. Contractor shall execute the demolition and removal Work to prevent damage or injury to adjacent structures to remain, existing building services, occupants thereof and adjacent features which might result from falling debris or other causes, and so as not to interfere with the use, and free and safe passage to and from adjacent structures.
2. Contractor shall provide temporary shoring, bracing and structural support as required to prevent movement, settlement, or collapse of existing structures and facilities to remain, and to prevent unexpected or uncontrolled movement or collapse of structure being demolished. The Owner assumes no responsibility for the actual condition of the existing structures and facilities or for the condition of structures and facilities adjacent to the Work.3. Closing or obstructing of roadways and passageways adjacent to the Work by the placement or storage of materials will not be permitted, and all operations shall be conducted within the limits of the project site and with minimum
interference to vehicular and pedestrian traffic.
4. Contractor shall erect and maintain barriers, lights, and other required protective devices.
5. Contractor shall repair damages caused by his operation to structures, facilities, etc. to remain at no additional cost to the Owner.
6. Contractor shall design, erect, install and maintain temporary partitions and enclosures required to eliminate dust, noise and debris from impacting adjacent properties, buildings and occupants.
7. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
8. The Work shall comply with the applicable provisions and recommendations of

the National Fire Protection Association.

9. Contractor shall exercise precautions for fire prevention. Burning of any kind shall not be permitted. Existing fire warning and prevention features shall be maintained by the Contractor in accordance with applicable codes, laws, regulations, and rules.
10. Existing structures on the site may not be structurally sound and may be unsafe for occupancy. Contractor shall enter structures at his own risk.

B. Scheduling:
1. Contractor shall carry out all operations so as to avoid interference with operations of the Owner and local utility companies and to minimize impact on nearby building occupants.
2. The Contractor shall be solely responsible for making all necessary arrangements and for performing all necessary work involving the discontinuance and disconnection of all utilities and services.
3. Any structures, equipment, utilities, facilities, etc., removed without proper authorization, shall immediately be replaced to the satisfaction of the Owner and Owner/CM at no cost to the Owner.

C. **Notification: At least 48 hours prior to commencement of any demolition or removal, Contractor shall notify the Construction Manager in writing of his or her proposed schedule therefore. No removals shall be started without the permission of the Owner/CM.**

D. Explosives: No explosives will be permitted for this Project.

1.5 PERMITS AND REGULATIONS

A. All demolition permits shall specify the quantity of materials to be recycled, where they will be taken and how they will be handled.

B. The Contractor shall prepare all submittals and obtain all necessary permits and approvals for the Work. The Contractor shall obtain permits and approvals, pay all fees, and maintain all insurance as required by federal, state and local agencies, for completion of the Work.

C. The Contractor shall perform all Work in strict compliance with all applicable requirements of governing and public agencies and authorities having jurisdiction.

D. The Contractor shall provide all required notifications to federal, state and local agencies prior to the Work.

E. Copies of all applications to regulatory agencies for permits, and approvals as well as notifications shall be transmitted to the OWNER/CM at the time of issuance by the Contractor.

PART 2—PRODUCTS

Not Used

PART 3—EXECUTION

3.1 GENERAL

A. Proceed with demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.

B. Disposal of Materials and Equipment:
   1. All materials and equipment removed shall become the property of the Contractor.
   2. Contractor shall dispose of all materials, equipment, debris, and all other items not to remain, off the site at approved disposal areas and in conformance with all applicable laws and regulations.

C. Pollution Controls:
   1. Use temporary enclosures or other suitable methods to limit the amount of dust and dirt rising and scattering into the air in accordance with the approved Health and Safety Plan (HASP). Comply with governing regulations pertaining to environmental protection. Methods of dust control shall be subject to review by the Owner/CM.
   2. Dirt and dust controls shall be applied before, during and after razing and before removal from the site.
   3. Clean adjacent structures, facilities, and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to conditions existing prior to the start of the Work.
   4. The Contractor shall survey the condition of adjacent structures and improvements to remain prior to the start of the Work. It shall be the Contractor's responsibility to create photographs and records of any prior settlement or cracking of structures, and the like, that may become the subject of possible damage claims. Contractor shall deliver to the Owner/CM prior to start of the Work a report documenting pre-existing conditions.

   5. The Contractor shall be responsible for supplying all photographic equipment for recording pre-construction conditions. Three sets of preconstruction photograph documents shall be assembled. Two shall be transmitted to the Owner/CM and one set shall be retained by the Contractor.

3.2 DISCONNECTION OF UTILITIES AND SERVICES

A. The Contractor shall provide and place temporary utility services necessary for completion of his work.

B. The Contractor shall notify each of the utility agencies owning or controlling any services or appurtenances which may be affected by the Work sufficiently in advance of demolition to permit ample time to perform necessary mark-outs of all above and underground utilities and any work as necessary. The Contractor is solely responsible for identifying and locating all aboveground, on ground and underground utilities within the limits of Work, both inside and outside the building footprint.

C. Prior to the issuance of a permit to demolish, the Contractor shall provide for the disconnection and termination of all water, sewer, gas, electric and telephone service facilities that are connected to the building, in conformance with the requirements of the City and the utility companies owning or controlling them. The Contractor shall notify the City and utility companies of the time any such disconnections need be made, and shall perform the work according to their standard practices and requirements and under their supervision, or arrange for its performance by their forces. The cost of any and all such utility work, including charges, if any, which may be made by the City or governmentally owned utility companies, shall be borne by the

demolition Contractor. NOTE: The Contractor shall seal all sewer lines at the curb prior to the commencement of demolition operations.

D. The Contractor shall, in all cases, provide all required notifications to the appropriate governmental agencies and utility agencies. The Contractor shall be responsible for all necessary arrangements with the utility companies and authorities. Excavations resulting from the removal of utilities shall be backfilled and pavement and landscaping shall be restored as shown on the Contract Documents and specified herein.

E. It shall be the responsibility of the Contractor to confirm that all work to be Performed by public and private utility companies prior to demolition has been performed. Prior to commencing work, the Contractor shall verify the location of all facilities with the utility companies. The Contractor shall exercise extreme caution in the area of existing utilities scheduled to remain to avoid damage or breakage, any utility line or service which is scheduled to remain and is cut off or interrupted by the Contractor's operation shall be restored at the Contractor's expense.

F. In the event that required work to be performed by the utility companies is delayed for any reason and it can be shown that such delay in time delayed the Contractor's operation, the Contractor shall be compensated solely through extension of the Contract time. The Contractor agrees that in such instance he shall have no other claims against the Owner and the Construction Manager other than extended time in which to complete the Work.

G. The Contractor shall remove pipes and cap disconnected services in accordance with the requirements of government authorities, the municipal authorities and the utility agencies. All capped utilities shall have a marker at grade.

H. Utilities which are removed and have been impacted by site contamination shall be decontaminated by the Contractor prior to removal from the site in accordance with applicable laws and regulations.

I. All the above described utility disconnection work shall be complete prior to commencement of any demolition work. The Contractor shall provide photographic evidence of all utility disconnects and locations of associated markers at grade.

3.3 REMOVAL OF MATERIALS COATED WITH LEAD-BASED PAINT

A. The Contractor shall observe and comply with all applicable provisions of the regulatory agencies having jurisdiction for notification and the testing, removal, monitoring, containment, labeling, off-site transport and disposal of lead-based paint and materials coated with lead-based paint, if required.

B. Certification of the treatment, removal and disposal of lead-based paint if required by the federal, state and local laws and regulations shall be filed with the appropriate agencies prior to commencement of demolition and removal work under this Contract. Copies of the certification, including manifests, shall be provided to the Consultant and Owner/CM.

3.4 STRUCTURAL DEMOLITION

A. All demolition shall be conducted in accordance with applicable federal, state and local laws and regulations, including safety and health standards.

B. Demolition shall proceed in an orderly fashion. Work on any one structure shall proceed continuously until it is demolished to a condition where further collapse cannot be expected. No wall, roof, column, chimney or other part of any structure

shall be left in an unstable or hazardous condition where collapse may occur. Shoring, bracing or such other means as may be necessary or which is ordered by the OWNER/CM to ensure the stability of any structure shall be provided by the Contractor in the event that any unstable or hazardous condition should arise throughout the life of the Contract. The Contractor shall provide interior and exterior shoring, bracing or other support to prevent movement, settlement, collapse and any damage to any structure to remain. All shoring, bracing, etc., shall be designed and certified by a Professional Engineer licensed to practice in the State of New Jersey and retained or employed by the Contractor.

C. The Contractor shall take precautions to protect public and adjacent properties from flying or falling debris. No blasting *or* burning will be permitted.

D. The Contractor shall demolish and remove all materials, structures and equipment as required to complete the Work. All sludges, liquids and gaseous materials shall be purged or removed and shall be tested, containerized, stored, labeled, transported and disposed of off-site in accordance with applicable federal, state and local laws and regulations.

E. The Contractor shall clean any exterior foundation to be left in place and apply appropriate gauge wire and install two (2) coats of stucco. In addition, the Contractor shall apply approved water proofing with membrane material. Approval must be obtained form the Construction Official.

F. The Contractor shall apply to the chimney and structures (i.e. hourse, building) in any party wall and/or sidewall approved gauge wire and two (2) coats of Stucco finish to the approved texture. All work performed shall be in accordance with all applicable codes and regulations. The Contractor shall then apply to party wall and/or sidewall ½-inch exterior grade plywood, fan fold insulation, Tyvek and vinyl siding including flashing at required areas for vinyl siding application. Stucco application shall be one wire lath application and two (2) stucco application scrathch and finish (where applicable) (MUST ALLOW APPROPRIATE CURING TIME)

G. The Contractor shall finish the roof line and chop or box gutters and any overhangs with appropriate frame primed and finished coated, including flashing at all required area.

H. The Contractor shall repair, replace or reinstall downspouts and / or overhangs or soffits as necessary.

I. The Contractor shall clean and clear cellar are completely where. The Contractor shall also break-up and remove concrete and / or concrete reinforced floor in the basement where applicable.

J. All cellar areas and those areas requiring fill shall be backfilled to established grade as directed or as existing site conditions warrant.

K. The Demolition Contractor shall be responsible to replace any and / or all portions of concrete, paved and / or brick sidewalks on the public way damaged or removed as a result of the demolition process.

L. The Contractor shall be responsible for removing all exterior entry structures to basements areas, all attached and / or detached sheds, accessory structures and garages as well as concrete and / or paved walkways, trees as directed, shrubbery, rubbish and debris within the demolition site.

M. The Contractor shall be responsible for any waste characterization analyses required by the disposal facility, and submit a set of copy to Owner/CM for record purpose. Materials, structures and equipment to be removed shall be tested, containerized, stored, labeled, transported and disposed of off-site in accordance with applicable federal, state and local laws and regulations.

3.5 CLEAN UP

A. Contractor shall remove from the site all debris resulting from the demolition operations as it accumulates. Upon completion of the work, all materials, equipment, waste, and debris of every sort shall be removed, and the premises shall be left clean, neat and orderly. Waste generated during demolition shall be removed from the site within five (5) business days of the time it is generated and disposed of off site at a legal approved licemnsed facility.Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 02 41 00

Division 02 00 00 –Existing Conditions

Section 02 81 00
Transportation and Disposal of Hazardous Materials

Part 1 – General

1.1 SUMMARY

A. This section includes transportation of asbestos abatement wastes, hazardous material wastes, demolished material and debris for off-site disposal. This work will be conducted by the Contractor.

B. The Contractor shall comply with applicable requirements of this Section.

C. The Contractor shall be solely responsible for proper loading of, and abiding by the load limits and weight limits for all vehicles leaving the Project site, and for any fines, taxes, penalties or judgments resulting from overweight or improperly loaded vehicles.

PART 2—PRODUCTS

NOT USED

PART 3—EXECUTION

3.1 PREPARATION FOR TRANSPORT

A. Contractor shall coordinate transportation work with abatement/demolition work to maintain demolition production rates for completion of the work in accordance with the Contractor's Site Operations Plan (SOP). Slowing or stopping of abatement/demolition work by Contractor for reason of lack of transportation or availability of shipping containers will not be acceptable.

B. Contractor shall ensure that wastes are properly prepared and loaded for shipment in accordance with all DOT regulations and disposal facility requirements, including an absence of free water.

3.2 MANIFESTS

A. The Contractor will prepare and sign manifests, and prepare necessary paperwork for transportation and disposal of impacted materials and debris. All manifests shall be provided to the Owner/CM as a pre-condition of payment.

3.3 TRANSPORTATION

A. The Contractor will coordinate transportation of waste off site.

3.4 DISPOSAL

A. All waste generated from the demolition/removal work described in the Specifications must go through the Mercer County Improvement Authority's waste flow control program. All Asbestos Containing Materials (ACM's) shall be managed/manifested as Hazardous Solid Waste which is ultimately landfilled at Tullytown/GROWS Landfill. Non-ACM construction debris will be managed and disposed through the Materials Recovery Facility (MRF) recycling transfer station.

B. Contact information for the Mercer County Improvement Authority (MCIA) are as follows:

1. Mercer County Improvement Authority Offices
   80 Hamilton Avenue, 2nd Floor
   Trenton, NJ 08611
   Email: mcianj.org
2. Mercer County Transfer Station
   1609 North Olden Avenue
   Ewing, NJ 08638
3. Tullytown/GROWS Landfill
   1000 New Ford Mill Road
   Morrisville. PA 19067

C. Transfer Station Dumping Procedure / New Accounts

1. All haulers must open an account with the Mercer County Improvement Authority (MCIA). Cash is NOT accepted at time of tipping. Accounts must be opened at the MCIA office at the following address: 80 Hamilton Ave 2nd Floor, Trenton, NJ, 08611. If you require directions, call (609) 278-8100
2. Every vehicle, excluding exempt vehicles under 9,000 lb. GVW, which hauls waste to the transfer station must be registered with the New Jersey Department of Environmental Protection (NJDEP). Consequently, an account cannot be open without a valid NJDEP number for each transportation vehicle. Also, haulers must present a valid NJDEP card to the scale-master at the time of tipping.
3. Fill out, "application for hauler account", and bring to the MCIA offices. Tell the receptionist that you wish to open a hauler's escrow account. Based upon the capacity of the vehicle(s), the type of waste(s), and the frequency of trips to the transfer station, a deposit amount will be computed. The minimum amount is $250.00. **Check or Money Order Only! Cash is NOT accepted!
4. When dumping at the transfer station, you must submit a "Waste Origin and Disposal Form" at the scale-house FOR EACH LOAD.

3.4 PERMITS

A. The Contractor shall obtain all required transportation permits for shipment of impacted materials and debris, including but not necessarily limited to, those identified in Section 3.3 C. Transfer Station Dumping Procedure / New Accounts.

END OF SECTION 02 81 00

Division 02 00 00 –Existing Conditions

Section 02 82 00
Asbestos Remediation

Part 1 – GENERAL

1.1 SCOPE OF WORK

A. Contractors are advised that this project includes the removal of asbestos-containing building materials from and/or demolition of structures containing ACBM within multiple existing dwellings (to be demolished) within the City of Trenton.

B. Provide for all regulatory notification as required, as well as associated fees, including USEPA per 40 CFR Part 61 (a)(3), NJ Department of Health & Human Services per NJAC 8:60 and NJ Department of Labor & Workforce Development per NJAC 12:120 – 7.2.

C. Phasing of the work area shall be at the discretion of the Contractor but shall not negatively affect the Owner's schedule.

C. Attend weekly project meetings and shall identify an individual with fiduciary responsibilities to attend these meetings.

D. Construct a separate remote decontamination facility at each individual property, or group of adjacent properties, in a location to be approved by Owner/CM.

E. Provide for the sources for water and power. Contractor shall retain the necessary subcontractors to provide for the connections/disconnections.

F. Provide for the de-energizing of the transformers and all electrical equipment for the required abatement.

G. Waste shall also be removed from the work area and disposed of off-site in accordance with all local, state and federal regulations. The timing of the removal/disposal shall be at the Contractor's discretion, but in no way shall it negatively impact the Owners schedule.

H. Prepare the work area in accordance with New Jersey State Department of Labor & Workforce Development (NJSDOL) and USEPA requirements, as well as all other authorities having jurisdiction.

I. Upon approval of the Owner/CM, Contractor shall commence asbestos abatement activities. Abatement shall include the removal of all asbestos-containing materials and disposal of same off-site as asbestos contaminated waste, in accordance with all local, state and federal regulations.

J. Perform gross removal and timely bagging of the materials in accordance with NJSDOL regulations and all other authorities having jurisdiction.

K. Where applicable, provide for the removal of fire doors intact and shall provide for the wrapping of fire doors with two layers of six (6) mil polyethylene plastic for proper disposal.

L. At the completion of "gross removal," Contractor Supervisor and third-party Asbestos Project Monitor (working for Owner/CM) shall visually inspect the work areas to ensure that all gross debris has been removed.

M. Satisfactory final air clearance results shall include all air samples collected in the restricted areas during the abatement and shall be deemed acceptable if all air sample results as analyzed via PCM are less than 0.010 fibers per cubic centimeter (f/cc). Areas above this standard shall be re-cleaned and tested until acceptable. Samples shall be

collected during the abatement of the exterior flashings and shall also remain below the 0.010 f/cc requirement. The Contractor shall be responsible for all costs of the additional testing above and beyond standard requirements.

1.2 ASBESTOS ABATEMENT QUANTITY SCHEDULE

A. The Contractor is directed toward any and all applicable Asbestos Survey Report(s), prepared by the Architect/Engineer, for Schedules of Asbestos Quantity.
NOTE: Contractors are advised that the quantities identified in the Asbestos Survey Report(s) are estimates only and the Contractor shall bear the burden of verifying all quantities.

1.3 DESCRIPTION

A. This specification/work plan covers the furnishing of all labor, materials, facilities, equipment, services, testing, appurtenances, permits and agreements necessary to perform the work required for asbestos abatement in accordance with federal EPA and OSHA regulations, as well as New Jersey State asbestos worker and company licensing codes and all other authorities having jurisdiction.

B. Description of Work: Contractor to provide the services as follows:
1. Worker training and personnel protective equipment.
2. Notifications, permits and approvals.
3. Work area isolation, protection and asbestos abatement as described and as required by applicable code.
   a. Work area isolation and protection as described herein and as required by applicable code.
   b. Furnish all labor, materials, services, and equipment necessary for demolition and removal of certain building components under environmental control procedures as described herein.
   c. Provide adequate protection of architectural surfaces and fixtures that are to remain undisturbed during the work. Proper clean-up, transport, and disposal of demolition and/or contaminated waste.
   d. Provide access, support and protection to all authorized visitors and inspectors.
   e. Provide Competent Person (as defined herein) on site at all times. No work will be allowed when Competent Person is not on site.
   f. Provide engineering controls to reduce, control, and isolate any airborne particulate caused by the work. Controls shall include, but not be limited to, work area isolation with plastic sheeting, construction of framed wooden barriers, blanking and modification of existing HVAC duct work, installation of HEPA air filtration devices, construction of personnel decontamination/change rooms, and cleaning of the work area.
   g. Complete decontamination of the work areas.
   h. Application of a lock down to all work area surfaces.

C. General sequence of the work shall be as follows:
1. Provide all required signage and permits in locations as required by New Jersey asbestos licensing codes.
2. Erect construction barriers and/or similar visual and safety barriers to prevent view of asbestos containment by general public.
3. Construct decontamination/change room and isolation barriers.

4. Supply temporary electrical panel for the work as necessary.
5. Install air filtration devices (AFD's) to obtain negative pressure in the work area as described herein.
6. Inactivate all supply and return HVAC into the work area. If HVAC to remain active to supply other areas, hard blank all supply and return outlets/inlets at the boundary of the work zone.
7. Construct all final barriers, isolation and seals.
8. Ensure work area under negative pressure via AFD's. Minimum negative pressure for work areas greater than 3,000 square feet is 0.05 inches WC.
9. Conduct abatement of asbestos containing materials as identified in Scope of Asbestos Abatement and any associated drawings, sketches, or floor Plans provided in the Asbestos Survey Report(s). CONRACTOR TO BRING TO IMMEDIATE ATTENTION OF BUILDING OWNER AND CONSTRUCTION MANAGER ANY CONFLICTS IN SCOPE OF WORK.
10. Contractor to completely clean the entire work area with wet wiping and HEPA vacuuming sequences as required by federal, state and local code.
11. Owner/CM to verify Contractor completion of work by visual inspection; owner/APM reserve the right to conduct final quality assurance air sampling and/or dust sampling.

D. The removal of asbestos shall require a construction permit in accordance with *N.J.A.C. 5:23-8.5*. Additionally, a demolition permit must be obtained pursuant to *N.J.A.C. 5:23-2*. Air monitoring samples during the removal phase and final air samples after removal shall be required for an asbestos abatement project and will be provided by the Owner. This project will not be subject to *N.J.A.C. 5:23-8* (Subchapter 8) as structures being demolished will not be re-occupied, however licensed personnel and clearance is required to comply with *N.J.A.C. 12-120 Asbestos Licenses and Permits* and *N.J.A.C. 8:60 Asbestos Licenses and Permits*.

1.4 DEFINITIONS

A. The following definitions shall apply to this project:

1. Abatement: shall mean any and all procedures physically taken to control fiber release from asbestos-containing materials. This includes removal, encapsulation, enclosure, and repair.
2. Aggressive Sampling: shall mean a method of sampling in which the individual collecting the air sample creates activity by the use of mechanical equipment during the sampling period to stir up settled dust and simulate activity in that area of the building.
3. AIHA: shall mean the American Industrial Hygiene Association, Falls Church, Virginia.
4. Airlock: shall mean a system for permitting entrance and exit while restricting air movement between a contaminated area and an uncontaminated area. It consists of two (2) curtained doorways separated by a distance of at least three feet (3') such that one passes through one (1) doorway into the airlock, arranged and utilized to prevent direct air flow-through.
5. Air Filtration Device (AFD): shall mean a commercially manufactured portable exhaust unit equipped with HEPA filters, which in combination with strategically placed makeup air, establish a general exhaust system and a work area under

negative pressure relative to surroundings. AFDs are NOT local exhaust equipment and are therefore ideally placed at the closest point of exhaust, utilizing minimal length of exhaust duct.

6. Air Sampling: shall mean the process of measuring the fiber content of a known volume of air collected during a specific period of time. The procedure utilized for asbestos follows the NIOSH Standard Analytical Method 7400, or the transmission electron microscopy (TEM) methods developed by the US EPA.
7. Amended Water: shall mean water to which a surfactant has been added.
8. Asbestos: shall mean any hydrated mineral silicate separable into commercially usable fibers, including but not limited to chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite, and actinolite.
9. Asbestos Code(s): shall mean federal, state, and local regulations for the inspection, management, and abatement of ACM, and any ancillary regulations, monitoring/oversight procedures, and licensing requirements associated with same.
10. Asbestos-Containing Material (ACM): shall mean asbestos or any material containing or assumed to contain as dictated by asbestos code, more than one percent (1%) asbestos by weight.
11. Asbestos-Containing Waste Material: shall mean asbestos-containing material or asbestos-contaminated objects requiring disposal.
12. Asbestos Inspector: shall mean a duly licensed individual approved to conduct building inspections, collect bulk samples of suspect ACM, and evaluate the condition of asbestos in a building or structure.
13. Asbestos Project: shall mean any form of work performed in connection with the alteration, renovation, modification, or demolition of a building or structure which will disturb (e.g., remove, enclose, encapsulate) asbestos at quantities regulated by the particular jurisdiction.
14. Asbestos Project Air Sampling Technician: a duly licensed individual authorized to perform air sample collection as required under Federal asbestos codes.
15. Asbestos Project Monitor: a duly licensed individual or entity as required by Federal asbestos code authorized to perform third party oversight of asbestos abatement activities.
16. Asbestos Supervisor: shall mean a duly licensed individual as required by State asbestos code who supervises the handlers during an asbestos project and ensures that proper asbestos abatement procedures as well as individual safety procedures are being adhered to.
17. Asbestos Worker: shall mean a duly licensed individual as required by State asbestos code who disturbs, removes, repairs, or encloses friable asbestos material.
18. Authorized Visitor: shall mean the building owner and his/her representative, utility representative, and any representative of a regulatory or other agency having jurisdiction over the project.
19. Building Owner: shall mean an individual or corporation who owns the title or deeds to a specific property.

20. Certified Industrial Hygienist (CIH): shall mean an individual with a minimum of five (5) years' experience as an industrial hygienist and who has successfully completed both levels of the examination administered by the American Board of Industrial Hygiene.
21. Certified Safety Professional (CSP): shall mean an individual having a bachelor's degree from an accredited college or university and a minimum of four (4) years' experience as a safety professional and who has successfully completed both levels of the examination administered by the Board of Certified Safety Professionals.
22. Clean Room: shall mean an uncontaminated area or room that is part of worker decontamination enclosure system with provisions for storage of workers' street clothes and protective equipment.
23. Clearance Air Monitoring: shall mean the employment of aggressive sampling techniques with a volume of air collected to determine the airborne concentration of residual fibers and shall be performed as the final abatement activity. Depending upon the size of regulated areas and ACM, clearance sampling and analysis will be as per NIOSH 7400 (PCM) or Transmission Electron Microscopy (TEM) as per 40 CFR Part 763.
24. Competent Person: shall mean a representative of the Contractor who has the ability to recognize potential health and safety hazards of the site and the authority to establish and maintain appropriate controls to protect the environment and workers.
25. Consultant (Environmental): shall mean representatives of the business entity acting as the representative of the owner responsible for management of the asbestos abatement.
26. Containment: enclosure maintained under negative pressure which establishes the boundaries of a regulated area in which asbestos abatement occurs
27. Contractor: shall mean workers, supervisors, officers, or any representatives of the business entity contracted to perform asbestos abatement.
28. Curtained Doorway: shall mean a device which consists of at least three (3) overlapping sheets of plastic over an existing or temporarily framed doorway. One (1) sheet shall be secured at the top and left side, the second sheet at the top and right side, and the third sheet at the top and left side. All sheets shall have weights attached to the bottom to ensure that the sheets hang straight and maintain a seal over the doorway when not in use.
29. (WORKER) Decontamination Enclosure System: shall mean a series of connected rooms, separated from the work area and from each other by air locks, for the decontamination of workers, materials, waste containers, and equipment, arranged and configured as per asbestos code(s).
30. Encapsulant (sealant)/Lockdown: shall mean liquid material which can be applied to asbestos-containing material and which temporarily controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant). This may also be used to seal surfaces from which ACM has been removed (lockdown).
31. Encapsulation: shall mean the coating or spraying of asbestos-containing material with a sealant.

32. Enclosure: shall mean the construction of airtight walls and ceilings between the ACM and the facility environment, or around surfaces coated with ACM.
33. Environmental Consultant: shall mean the business entity, licensed as an Asbestos Project Monitor under Federal asbestos code(s), who will be responsible for oversight of Contractor activities for compliance with these specifications, inspection of work areas for final acceptability, and collection of air samples during and at the end (clearance) of asbestos abatement.
34. Equipment Decontamination Enclosure System: shall mean a decontamination system for waste materials and equipment consisting of a wash room and holding area separated by an air lock and configured/utilized as per asbestos code(s).
35. EPA: shall mean the Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.
36. Equipment Room: shall mean a contaminated area or room that is part of the worker decontamination enclosure system with provisions for the storage of contaminated clothing and equipment.
37. Event: shall mean a circumstance in which the environmental controls, housekeeping, Contractor procedures and methods, barrier integrity, air monitoring data, pressure monitoring data, or similar events require temporary work stoppage and remedial measures by the Contractor.
38. Friable Asbestos Material: shall mean any asbestos or any ACM that can be crumbled, pulverized, or reduced to powder when dry, by hand or other mechanical pressure.
39. Glove bag Technique: shall mean a method for removing friable asbestos-containing material from heating, ventilation, and air conditioning (HVAC) ducts, short piping runs, valves, joints, elbows, and other non-planar surfaces in a non-contained work area. The glove bag assembly is a manufactured device consisting of a glove bag (constructed of at least six (6) mil transparent plastic), two inward-projecting long sleeve gloves, one inward-projecting water wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The glove bag is constructed and installed in such a manner that it surrounds the object or area to be decontaminated and contains all asbestos fibers released during the removal process.
40. Heating, Ventilating, and Air Conditioning System: shall mean air handlers, exhaust fans, and associated air conveyance components (HVAC)
41. HEPA Filter: shall mean a high efficiency particulate air filter capable of trapping and retaining 99.97 percent of particles (asbestos fibers) at 0.3 micrometers mass median aerodynamic equivalent diameter.
42. Holding Area: shall mean a chamber in the equipment decontamination enclosure located between the washroom and an uncontaminated area.
43. Homogeneous Work Area: shall mean a portion of the work area which contains one (1) type of asbestos-containing material and/or where one type of abatement is used.
44. Industrial Hygiene: shall mean that science and art devoted to the recognition, evaluation, and control of those environmental factors or stresses, arising in or from the workplace, which may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among worker or among the citizens of the community.

45. Industrial Hygienist: shall mean an individual having a college or university degree or degrees in Engineering, Chemistry, Physics or Medicine, or related Biological Sciences who, by virtue of special studies and training, has acquired competence in industrial hygiene. Such special studies and training must have been sufficient in all of the above cognate sciences to provide the abilities:
    a. To recognize the environmental factors and to understand their effect on people and their well-being;
    b. To evaluate, on the basis of experience and with the aid of quantitative measurement techniques, the magnitude of these stresses in terms of ability to impair people's health and well-being; and
    c. To prescribe methods to eliminate, control, or reduce such stresses when necessary to alleviate their efforts.
46. Large Asbestos Project: shall mean an asbestos project involving the disturbances (e.g. removal, enclosure, and encapsulation) of two hundred sixty (260) linear feet or more of friable asbestos-containing material or one hundred sixty (160) square feet or more of friable asbestos-containing material.
47. Minimum Exhaust Rate: shall mean volume flow rate in air changes per hour to exhaust a minimum of 8 work area volumes; the number of units required shall assume 75% of the exhaust rating on the AFDs.
48. Minor Asbestos Project: shall mean a project involving the disturbance (e.g., removal, enclosure, encapsulation, repair) of more than three (3) linear feet, but not more than twenty-five (25) linear feet of friable asbestos-containing material or more than three (3) square feet, but not more than ten (10) square feet of friable asbestos-containing material.
49. Movable Object: shall mean a unit of equipment or furniture in the work area that is not attached to a portion of building structure and can be removed from the work area.
50. Negative Air Pressure Equipment: see AFD.
51. NESHAPS: shall mean the National Emission Standards for Hazardous Air Pollutants.
52. NIOSH: shall mean the National Institute for Occupational Safety and Health CDC—NIOSH, 4676 Columbia Parkway, Cincinnati, OH 45226.
53. Non-Friable Organically Bound (NOB) Asbestos Material: shall mean non friable ACM that is embedded in of asphalt, vinyl or similar matrix (i.e., mastic, adhesive, vinyl asbestos floor tile, etc.).
54. Occupied Area: shall mean an area of the worksite where abatement is not taking place and where personnel or occupants normally function or where workers are not required to use personal protective equipment.
55. OSHA: shall mean the Occupational Safety and Health Administration, 200 Constitution Avenue NW, Washington DC 20210.
56. Person: mean any individual, partnership, company, corporation, association, firm, organization, governmental agency, administration, or department, or any other group of individuals, or any officer or employee thereof.
57. Personal Air Monitoring: shall mean a method used to determine employees' exposure to airborne fibers. The sample is collected outside the respirator in the worker's breathing zone.

58. Personal Protective Equipment (PPE): shall mean appropriate protective clothing, gloves, eye protection, footwear, headgear, and approved respiratory protection acceptable to the Department.
59. Phase Contrast Microscopy (PCM): shall mean air sampling and analysis conducted as per NIOSH 7400; daily quality assurance monitoring and certain clearance sampling is conducted as per NIOSH 7400. Criterion for acceptable conditions by this method is 0.01 fibers/cc.
60. Plasticize: shall mean to cover floors and walls with plastic sheeting as herein specified.
61. Removal: shall mean the stripping of any asbestos- containing materials from surfaces or components of a facility or taking out structural components in accordance with 40 CFR 61 Subparts A and M.
62. Respiratory Protection Standard: shall mean respiratory protection provided to workers in accordance with the Personal Protection Requirements of the OSHA and the Department.
63. Shop Drawing: Shop Drawing: shall mean a document submitted by the Contractor to document any proposed change in the Work Plan or procedures previously approved by the Owner. At minimum, shop drawings to be ruled diagrams, to scale and/or with dimensions, containing a title block with drawing identification, date, and initials/signature.
64. Shower Room: shall mean a room between the clean room and the equipment room in the worker decontamination enclosure with hot and cold running water controllable at the tap and arranged for complete showering during decontamination.
65. Small Asbestos Project: shall mean an asbestos project involving the disturbance (e.g. removal, enclosure, encapsulation) of more than twenty-five (25) and less than two hundred sixty (260) linear feet of friable asbestos-containing material or more than ten and less than one hundred sixty (160) square feet of friable asbestos-containing material.
66. Staging Area: shall mean the work area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.
67. Strip: shall mean to remove friable asbestos materials from any part of the facility.
68. Structural Member: shall mean any load-supporting member of a facility, such as beams and load-supporting walls, or any non-load-supporting member, such as ceiling and non-load- supporting walls.
69. Surfactant: shall mean a chemical wetting agent added to water to improve penetration.
70. Transmission Electron Microscopy (TEM): shall mean air sample collection and analysis as per 40 CFR Part 763 Subpart E used for clearance sampling. NOTE: Sample volumes shall be a minimum of 1800 liters and background asbestos shall be considered 30 structures/mm2.
71. Visible Emissions: shall mean any emissions containing particulate material that are visually detectable without the aid of instruments; one of the circumstances comprising an Event.
72. Washroom: shall mean a room between the work area and the holding area in the equipment decontamination enclosure system where equipment and waste containers are wet cleaned and/or HEPA vacuumed prior to disposal.

73. Wet Cleaning: shall mean the removal of asbestos fibers from building surfaces and objects by using cloths, mops, or other cleaning tools that have been dampened with water.
74. Work Area/Zone: shall mean designated rooms, spaces, or areas of the building or structure where asbestos abatement activities take(s) place.
75. Worker: shall mean asbestos worker and/or asbestos worker supervisor.
76. Worker Decontamination Enclosure System: shall mean that portion of a decontamination enclosure system designed for controlled passage of workers, and other individuals and authorized visitors, consisting of a clean room, a shower room, and an equipment room separated from each other and from the work area by airlocks and curtained doorways.
77. Work Site: shall mean premises where asbestos abatement activity is taking place, and maybe composed of one (1) or more work areas.

1.5 STANDARD OPERATING PROCEDURES

A. Develop and implement a written standard procedure for asbestos abatement to ensure maximum protection and safeguard of the workers, visitors, employees, general public, and the environment from exposure to contaminants. The standard operating procedure shall ensure:
   1. Tight security from unauthorized entry into the work space.
   2. Restriction of Contractor's personnel to the immediate work area and access/egress routes.
   3. Proper protective clothing and respiratory protection prior to entering the work area from the outside.
   4. Safe work practices in the workplace, including provisions for inter-room communications, exclusion of eating, drinking, smoking, or breaking the respiratory protection.
   5. Proper exit practices from the work space to the outside through the decontamination facilities.
   6. Removing asbestos (or presumed) contaminated building materials in ways that minimize release of particulates.
   7. Packing, labeling, loading, transporting, and disposing of asbestos contaminated material in a way that minimizes exposure to personnel and/or contamination of occupied spaces.
   8. Emergency evacuation for medical or safety reasons.
   9. Safety from accidents in the work area, especially from electrical shocks, lacerations/puncture wounds, or injury from falls.
   10. Provisions for effective supervision and monitoring for excessive airborne dust levels in the work area.
   11. Engineering systems that minimize exposure to airborne asbestos in the space.

B. Provide a Competent Person to provide continuous supervision of all work, and to be responsible for tasks as described in 1.14.

C. Provide appropriately trained and licensed asbestos workers/handlers and supervisors as required by asbestos codes(s).

1.6 NOTIFICATIONS, PERMITS, WARNING SIGNS, LABELS, AND POSTERS

A. Provide signs, labels, warnings, and posted instructions that are necessary to protect, inform and warn people of the hazard from exposure to airborne mold.

B. The Contractor shall be responsible for furnishing ALL permits, variances and notices required to successfully perform the work.

1.7 EMERGENCY PRECAUTIONS

A. Contractor to establish emergency and fire exits from the work area.

B. Contractor to provide list of all hazardous materials (i.e. solvents, strippers, cleaners, detergents, disinfectants, etc.) to be utilized and/or stored on site and their Material Safety Data Sheet (MSDS).

1.8 SUBMITTALS

A. Contractor shall submit to Owner/CM at least five (5) days prior to start of work, the following documentation:

1. A site-specific health and safety plan (HASP) signed by a Certified Industrial Hygienist, which shall identify specific processes, procedures, and methods to reduce and control potential hazards. THIS IS ANTICIPATED TO BE NO MORE THAN 10 PAGES AND IS NOT THE CONTRACTOR'S CORPORATE HEALTH AND SAFETY POLICY.
2. Identify (name and manufacturer) of expanding foam product(s) utilized to seal penetrations through structural/architectural surfaces prior to plasticizing.
3. Shop drawings showing locations of worker and waste decontamination systems, location of AFD exhaust, location of makeup air, and calculations of AFD's to establish at least 8 air volume exhaust rate (air changes per hour) for removal of surfacing materials (4 air changes per hour for ACM), pathway of waste out of the building, and waste container location.
4. Any proposed deviation from the requirements stated herein and/or original procedures or scope agreed upon by Owner/CM and the Contractor, shall be first submitted to owner as a proposal in shop drawings. Any change in Contractor cost resulting from such proposal shall be clearly indicated with the shop drawing submission.

B. Contractor shall be prepared to submit copies of progress logs showing the number of workers, supervisors, hours of work and tasks completed, and items associated with unseen conditions and/or required work beyond the project scope for weekly project meetings.

C. Any condition, item, or circumstance which may cause work outside of the project scope shall be brought to the immediate attention of the Owner (or designated Owner/CM) in writing. Any claim shall be accompanied with Contractor's daily log with relevant entries and assumptions used in formulating claim.

D. Post abatement (closeout) submittals shall be provided by the Contractor to include:

1. Project Log Book showing the dates and times of entrance and exit from Work Areas for all individuals, inspection requests/sign offs, and work progress logs.
2. Contractor closeout documentation as required by local, state and federal asbestos code to include daily narrative by Contractor's Supervisor of pertinent events to include (but not limited to) work stoppage due to elevated airborne fibers and/or failure of barriers or negative pressure system, differential pressure logs, daily negative pressure/barrier integrity inspections/testing, and daily

cleaning cycles of worker and waste decontamination enclosures.

1.9 APPLICABLE STANDARDS, GUIDELINES, AND PUBLICATIONS

A. Applicable (federal) OSHA standards are incorporated into this specification. These include but are not necessarily limited to:
   1. 29 CFR 1910.134/1926.103 Asbestos
   2. 29 CFR 1910.134/1926.103 Respiratory Protection
   3. 29 CFR 1910.1200/1926.59 Hazard Communication
   4. 29 CFR 1926.20 General Safety and Health
   5. 29 CFR 1926.21 Safety Training
   6. 29 CFR 1926.150-151 Fire Protection/Prevention
   7. 29 CFR 1926.301 Hand Tools
   8. 29 CFR 1910.331-335 Lock Out/Tag Out

B. Applicable (federal) EPA standards are incorporated herein. These include but are not necessarily limited to:
   1. 40 CFR Part 61 Sub Part M (National Emission Standard for Asbestos)
   2. 40 CFR Part 763 (Asbestos Hazard Emergency Response Act; AHERA)

C. Applicable state asbestos codes are incorporated herein. These include but are not limited to:
   1. N.J.A.C. 12-120 Asbestos Licenses and Permits
   2. N.J.A.C. 8:60 Asbestos Licenses and Permits
   3. N.J.S.A. 7:26 Transport and Disposal of Asbestos-Containing Materials

D. Industry reference standards are incorporated herein
   1. ANSI Z8.2-80 Practice for Respiratory Protection
   2. ANSI C2-81 Electrical Safety
   3. ASTM E 1368-05 Standard Practice for Visual Inspection of Asbestos Abatement Projects
   4. NFPA 70E Electrical Safety
   5. EPA 560 OPTS86-0011 A Guide to Respiratory Protection for the Asbestos Abatement Industry

E. Where a conflict in project specifications and applicable regulations occur, the most stringent shall apply.

1.10 OWNER/CONTRACTOR RESPONSIBILITIES

A. The Owner will ensure the work area as described herein is evacuated.

B. Owner to provide Contractor with a list of items that cannot be removed and need special attention.

C. If applicable, the Owner will stop all deliveries that may be scheduled to the work area while work is in progress.

1.11 USE OF BUILDING FACILITIES

A. The Contractor shall be responsible for obtaining all reasonably required amounts of water and electric power for completion of their work.

B. The Contractor shall provide, at his own expense, all necessary electrical and utility tie-ins, extensions, and construction materials, supplies, etc.

C. Contractor shall provide fire protection in accordance with all State and Local fire codes, as well as Owner's policy.

D. When temporary utility installations are no longer required, they shall be removed by the Contractor.

1.12 USE OF THE PREMISES

A. Work hours to be 7:00 AM - 4:30 PM, Monday through Friday. Additional and/or altered hours shall first be approved by the Owner. In all cases, work hours shall conform to City of Trenton code requirements. See Specifications for General Requirements, Section 01 14 00 Work Restrictions.

B. The Contractor shall confine his apparatus, the storage of materials, and supplies, and the operation of his workmen to limits established by law, ordinances, and the directions of the Owner. All flammable or combustible materials shall be properly stored to obviate fire and in areas approved by the Owner.

C. The Contractor shall assure that no exits from the building are obstructed, that appropriate safety barriers are established to prevent access, and that work areas are kept neat, clean, and safe.

1.13 PROTECTION AND DAMAGE

A. No materials or debris shall be thrown from windows or doors of the building. Building waste system shall NOT be used to remove refuse.

B. Debris shall be removed from the work site daily. Premises shall be left neat and clean after each work shift, so that work may proceed the next regular workday without interruption. Limited debris bag storage may take place within the work area when approved by the Owner/CM.

1.14 RESPIRATORY PROTECTION

A. Respiratory protection shall be worn by all individuals who may be exposed to airborne asbestos.

1. All respiratory protection shall be OSHA/NIOSH approved in accordance with the provisions of 29 CFR 1910.134. All respiratory protection shall be provided by the Contractor.
2. At minimum:
   a. Provide full face powered air purifying respirators with HEPA cartridges.
   b. Used disposable respirators and/or filters shall be disposed of at the end of each shift.
   c. Provide sufficient supply of respirators and filters for Construction Manager and authorized visitors and inspectors.

1.15 PERSONAL PROTECTIVE EQUIPMENT/PROTECTIVE CLOTHING

A. Provide for all workers, foremen, supervisors, and authorized visitors and inspectors, protective disposable clothing consisting of full-body coveralls. Provide a sufficient number for four (4) out fittings for all workers per shift.

B. Provide protective gloves to all workers, foremen, superintendents, (and authorized visitors and inspectors upon request). At minimum, disposable cotton work gloves to be worn by anyone handling asbestos or materials with asbestos dust/debris.

C. Provide hard hats as required by OSHA for all workers, and provide a minimum of 4 spares for inspectors, visitors, etc. Require hard hats to be worn at all times that work is in progress that may cause potential head injury. Provide hard hats of the type with plastic strap type suspension. Require hats to remain in the work area throughout the work.

D. Provide eye protection (goggles/safety glasses) as required by OSHA for all workers

involved in any activity which may potentially cause eye injury.

E. Hard hats and eye protection devices shall not be worn outside the work area.

F. Disposable protective clothing shall be discarded and disposed of as construction waste every time the wearer exits from the work space to the outside through the decontamination facility.

1.16 CONTRACTOR SUPERVISION

A. Contractor shall provide an experienced individual who meets the qualifications of a Competent Person to perform the designated functions as specified in 29 CFR 1926.1101 throughout the duration of the project. Such responsibilities include but are not limited to the following:

1. Monitor the set-up of the work area enclosure and continuously ensure its integrity through inspection and appropriate environmental monitoring.
2. Control entry and exit into the work enclosure.
3. Ensure that employees are adequately trained in, and implement the use of engineering controls, proper work practices, and proper personal protective equipment and decontamination procedures.

1.17 SITE MONITORING—OWNER/ASBESTOS PROJECT MONITOR (APM)

A. The Owner shall employ the services of an APM to monitor the progress and activity of the Contractor.

B. As well as perform the Inspections, project documentation, and air monitoring required by regulation, the APM shall evaluate the standard operating procedures, engineering control systems, respiratory protection and decontamination systems, packaging and disposal of waste, air quality in and around the work area and at the site, and any other aspects of the project which may affect the health and safety of the people and environment.

C. Contractor activities shall stop and conduct appropriate remediation, cleanup, repair of barriers, and reinstallation of environmental controls to pre-event conditions when any one of the following occur:

1. Drop in negative pressure (differential) below the minimum criterion (i.e., 0.02 inches w.c., 0.05 inches w.c.).
2. Visible breach in a containment barrier.
3. Visible dust from the work area.
4. Residue/debris tracked onto surfaces outside the containment/regulated area.
5. Air sample collected in areas outside a regulated area exceeding 0.01 fibers/cc.

1.18 FINAL QUALITY ASSURANCE (CLEARANCE)

A. APM shall conduct final inspection of work area after 24-hour notice from Contractor Visual inspection protocols shall follow ASTM 1368-05 and final acceptability shall be judged as dust free.

B. Clearance criteria by work zone are summarized in the following schedule:

Clearance Schedule

Work Area	Clearance Methodology/Criterion
During abatement (small projects; 10 square feet/25 linear feet or less of ACM, PACM or asbestos material, or projects involving vinyl floor tile, mastics, roofing and/or transite)	Phase Contrast Microscopy (PCM) Less than 0.01 fibers/cc
Post abatement (areas < 10,000 square feet)	Phase Contrast Microscopy (PCM) Less than 0.01 fibers/cc
Post abatement (areas > 10,000 square feet)	Transmission Electron Microscopy (TEM) Less than 70 s/mm^2

C. Prior to collection of air samples, aggressive surface/air agitation shall be conducted using forced air equipment against work area surfaces. Once air sampling is started, ongoing agitation shall be continued using one 10-inch floor fan per 10,000 cubic feet of work area volume.

D. Owner will be responsible for costs incurred by the Owner and/or CM and the associated laboratory
work. The Contractor incurs all costs incidental to the transportation of samples or materials. Any subsequent additional inspection/testing required due to limits exceeded during evaluation (inspection and/or sampling) shall be paid for by the Contractor.

N. When if evaluation (inspection and/or sampling) reveals that the Work does not comply with the requirements of the Contract Documents, or is defective, the Contractor shall bear any and all costs of such testing. The Contractor shall cooperate fully with, and shall give site access to, any firm or entity retained by the Owner/CM to provide testing services on the Project.

1.19 TAMPERING WITH TEST EQUIPMENT

A. All parties are hereby notified that any tampering, moving, handling, adjusting, or similar manipulation of testing equipment (to include differential pressure instrumentation) that alters the intent and integrity of sampling process is an attempt at falsifying reports and records under the OSHA Act. Each offense will be prosecuted under applicable state and federal codes to the fullest extent possible.

PART 2 – MATERIALS

2.1 GENERAL

A. Wetting agent shall be commercially available material specifically designed to penetrate and wet asbestos-containing materials.

B. Framing Materials and Doors: As required to construct temporary decontamination facilities and critical barriers. Lumber shall be rough grade, new, finished one side and fire retardant.

C. Fire Retardant Plastic Sheeting, minimum thickness 6 mil, as required; use black to obstruct view of abatement activities: Provide largest size possible to minimize seams.

D. Drums: Asbestos transporting drums, sealable and clearly marked with warning labels as required.

E. Plastic Bags: Sealable, asbestos disposal bags, min. 6 mil. thickness clearly marked with warning labels.
F. Signs: Asbestos warning signs for posting at perimeter of work area, as required.
G. Waste Container Bag Liners and Flexible Trailer Trays: One piece leak-resistant flexible tray with absorbent pad, as manufactured by Packaging Research and Design Corporation, Madison, WS 39130 or equal.
H. Tape: Provide tape which is of high quality with an adhesive which is formulated to aggressively stick to sheet polyethylene, as manufactured by Kendall Co., NASHUA Tape Products; or approved equal.
I. Spray Adhesive: Provide spray adhesive in aerosol cans which is specifically formulated to stick tenaciously to sheet polyethylene, as manufactured by 3M, NASHUA Tape Products, or approved or equivalent.
J. Flexible Duct: Spiral reinforced flex duct for air filtration devices.
K. Disposable Coveralls: DuPont Tyvek, or Kimberly Clark Duraguard, or approved equal.
L. Contamination Control Flooring: as manufactured by Jomac, Inc. of Warrington, Pennsylvania, or approved equal.

2.2 PRODUCTS, TOOLS, AND EQUIPMENT

A. Air Filtration Device (AFD): Air Filtration Devices shall be commercially manufactured equipped with High Efficiency Particulate Air (HEPA) filtration systems and shall be approved by and listed with Underwriter's Laboratory.
B. Scaffolding: All scaffolding shall be designed and constructed in accordance with OSHA (29 CFR 1926/1910) and New Jersey State code.
C. Transportation Equipment: Transportation Equipment, as required, shall be suitable for loading, temporary storage, transit and unloading of contaminated waste without exposure to persons or property. Any temporary storage containers positioned outside the building for temporary storage shall be metal, closed and locked.
D. Vacuum Equipment: All vacuum equipment utilized in the work area shall utilize HEPA filtration systems.
E. Vacuum Attachments: Soft Brush Attachment, Asbestos Scraper Tool, Drill Dust Control Kit.
F. Electric Sprayer: An electric airless sprayer suitable for application of encapsulating material, and approved by and listed with Underwriters Laboratory.
G. Wood/wood product sheathing and studs—fire retardant with sufficient thickness to withstand intended loads without deflection or failure:
H. Brushes: All brushes shall have nylon bristles.
I. Hand Power Tools: Shall be equipped with HEPA-Filtered local exhaust ventilation if used to drill out into or otherwise disturb ACM.
J. Other Tools and Equipment: The Contractor shall provide other suitable tools for the stripping, removal, encapsulation, and disposal activities including, but not limited to: hand-held scrapers, sponges, rounded-edge shovels, brooms, and carts.
K. Fans and Leaf Blower: Provide Leaf Blower (one leaf blower per floor) and one 20" diameter fan for each 10,000 cubic feet of work area volume to be used for aggressive sampling technique for clearance air testing.
L. Fire Extinguishers: Provide type "A" fire extinguishers for temporary offices and similar

spaces where there is minimal danger of electrical or grease-oil-flammable liquid fires. In other areas provide type "ABC" dry chemical extinguishers of NFPA recommended types for the exposure in each case. All fire extinguishers shall comply with the applicable recommendations of NFPA Standard 10, "Standard for Portable Extinguishers."

M. First Aid Kits: The Contractor shall maintain adequately stocked first aid kits in the clean room and the work area. The first aid kit shall be approved by a licensed physician for the work to be performed under this contract.

N. Electrical Service:
   1. General: Comply with applicable NEMA, NECA, and UL standards and governing regulations for materials and layout of temporary electric service.
   2. Power Distribution System: Provide circuits of adequate size and proper characteristics for each use. In general run wiring overhead, and rise vertically where wiring will be least subject to damage from operations.
   3. Temporary Lighting: All lighting within the work area shall be liquid and moisture proof and designed for the use intended.

PART 3 – EXECUTION

3.1 WORKER DECONTAMINATION ENCLOSURE SYSTEM

A. This worker decontamination enclosure system shall be located and constructed as per NJDCA asbestos code, with airtight fire-retardant wood stud and plywood framing with two layers of 6-mil. plastic sheeting throughout. It shall consist of a serial arrangement of rooms or spaces adjoining the work area and separated from the others by air locks.

B. The main entrance shall have a hinged plywood door with a clasp and padlock for security, and louvers to allow flow of makeup air through the system when the door is closed.

C. The decontamination areas are described below:
   1. Clean Room: In this room, persons remove and leave all street clothes and put on clean disposable coveralls. Approved respiratory protection equipment is also cleaned, stored and picked up in this area. CLEAN ROOM SHALL BE CONTINUOUSLY VACCUMMED, WET WIPED, AND ATTENDED BY DILIGENT HOUSKEEPING. Contamination control flooring shall be placed on the floor of this room and immediately outside of this room.
   2. Shower Room: Hot and cold water controlled at the tap must be provided. The floor of the shower room shall be covered with a waterproof seamless ¼" mat (neoprene, rubber, or equivalent) that extends a minimum of twelve inches up each wall. The Contractor shall provide a second rubber protection mat under the entire shower room.
   3. Equipment Room: Work equipment, footwear, and all other contaminated work clothing are left here. All areas between the Shower Room and work area shall be considered part of the Equipment Room.

D. There shall be no smoking, eating, or drinking in any contaminated areas (Shower Room, Equipment Room, and Work Area).

E. Work footwear shall remain inside the contaminated area until completion of the job and shall be thoroughly cleaned at that time. Warm outer clothing shall also remain in the work area.

F. Hot and cold water for showers controlled at each shower unit tap shall be provided for by the Contractor. Provisions shall be made to adequately dispose of shower water. All wastewater shall be disposed of as asbestos waste or filtered to five (5) microns and disposed of into a sanitary sewer system. Costs for testing efficiency of the filter shall be borne by the Contractor.

G. Contractor's electric installed for temporary lighting, heating, etc., in the decontamination enclosure system shall include outlets for required APM's air monitoring equipment with a minimum of two (2) outlets per work area.

3.2 PERSONNEL DECONTAMINATION

A. All individuals who will enter the work area shall remove street clothes, and put on clean overalls and respirator in change rooms.

B. Workers shall then proceed through shower area and equipment room to work area.

C. Exit from the work area is through the equipment room where clothing and non-disposable footwear is removed. All protective clothing is disposed.

D. The worker then proceeds immediately into shower room. Respiratory protection equipment shall be removed after worker has completely showered.

E. After showering, the worker moves to the clean room and dresses in either new coveralls for another entry, or street clothes if leaving.

F. Workers shall not eat, drink, smoke, and chew gum or tobacco in work area.

G. Work footwear shall remain inside work area (equipment room) until completion of the project and then disposed of or cleaned by washing in shower at the end of the project.

H. Contractor shall be responsible for assigning a worker to collect contaminated respirators, clean them, and re-filter them after each use.

I. Worker identification and entry/exit logs shall be maintained as part of the Contractor's closeout documentation.

3.3 MAINTENANCE OF DECONTAMINATION/CHANGE ROOM AND BARRIERS

A. All barriers and partitions constructed to isolate the work area from adjacent areas shall be inspected periodically throughout each shift by the Contractor's Competent Person.

B. Damage and defects in the decontamination/change room and/or barriers separating the work zone from other areas in the building shall be repaired immediately upon discovery.

C. If visible dust is observed outside the work area, or if damage occurs to barriers, work shall stop. The source of the dust release shall be located, the integrity of the barriers shall be restored, and any settled dust or residue outside the work area shall be wet wiped and HEPA vacuumed to a dust-free condition.

3.4 ISOLATION (CRITICAL) BARRIERS

A. Contractor to seal with two layers of 6 mil polyethylene taped securely in place, all diffusers, registers, grilles, etc. within the work area that are to be shut down. Install rigid hard barriers/blanks securely fastened in place (i.e., screws) for HVAC systems that are to remain active to service other areas of the building.

B. All doorways and entrances to the work area, other than the main access through the decontamination/change room shall be sealed with 2 layers of polyethylene sheathing, taped securely in place.

C. All polyethylene barriers and seals to be removed and substrate surfaces cleaned at the end of the work.

3.5 HVAC MODIFICATIONS AND WORK AREA VENTILATION

A. Any central and/or Owner operated HVAC units, fans, exhaust fans, supply and/or return air ducts, etc., situated in or traversing or servicing the work area shall be shut down or blanked if to remain active. Blanks shall be installed at the boundary of the work area, consist of sheet metal or plywood, and be securely fastened with screws and caulked into place. All shutdowns are to be coordinated with the Owner.

B. Portable, commercially manufactured AFD's, capable of moving large quantities of air through a HEPA filter capable of 99.97% efficiency at 0.3 microns must be installed in the work area.

C. Owner/CM reserves the right to request on-site certification of the HEPA filters and leak integrity of the AFD's, unless new AFD's are provided.

D. Contractor shall provide number of AFD's to guarantee no less than eight (8) complete air changes per hour, based upon the volume of the work area and an assumed exhaust capacity of 0.7 of that specified by the unit.

1. NEGATIVE PRESSURE CONTAINMENT SYSTEM IS GENERAL WORK AREA (NOT LOCAL) EXHAUST. AFD's shall be positioned as close to exhaust point as possible to minimize length of exhaust flex ducting.
2. Flex ducting path from the AFD to the exhaust point to be free of kinks and with a minimum of turns. No "S" or "U" configuration of flex duct is permitted.
3. Exhaust from AFD's shall terminate through a wooden manifold installed into a window frame or similar opening to the exterior environment.

E. The negative pressure system created by work area isolation, barriers, and AFD's must produce a minimum pressure differential of negative 0.05 inches w.c. for removal of surfacing materials (0.02 inches w.c. for other materials) as measured between the center of the work area and the adjacent space.

F. Makeup air shall be configured to provide three (3) manually damper controlled ports, installed either in hard work area isolation barriers or through hard barriers installed into window casing/frame at the opposite wall/surface from the location of the AFD's.

G. Contractor to continually adjust as necessary, volume flow rates (i.e., number of AFD's) and manual makeup air dampers to maintain velocity into work zone at 700 feet per minute, air velocity through the decontamination enclosure system at 100 feet per minute, and minimum negative pressure conditions (as dictated by type of ACM).

H. The Owner/CM reserves the right to test pressure differential and air volume capacity of AFD units to verify actual CFM exhausted from the work zone.

I. Upon loss of negative pressure or electric power, work activities in work area shall cease and shall not resume until negative pressure and/or electric power have been fully restored.

3.6 HVAC AND ELECTRIC POWER LOCKOUT

A. Prior to the start of any demolition or disturbance of building materials in the work area, where applicable, the Contractor shall employ skilled and licensed tradesmen for blanking of HVAC supply and/or return ductwork (that is to remain in operation) at the boundaries of the work area.

B. Mechanical equipment to be shut down shall conform to OSHA lock out tag out procedures (LOTO).

3.7 ASBESTOS REMOVAL PROCEDURES (General Procedures)

A. Removal operations will not begin until the work area has been inspected and approved by the Asbestos Project Monitor (APM). Engineering controls, warning signs, emergency egress routes, barriers, surface protection, make up air, decontamination enclosure systems, and negative pressure conditions as specified herein, and as required by state asbestos codes, must be established.

B. Notify APM prior to code required progress inspections at least 24 hours prior.

C. Contractor shall detach and clean removable components such as (but not limited to) electrical, heating and ventilating equipment) for access to conduct asbestos removal. These items shall be cleaned using decontamination procedures and disposed as construction debris or stored as indicated by the Owner.

D. Maintaining wet conditions and engineering controls, workers with respirators and personal protective equipment shall manually remove, detach, and/or disassemble asbestos-containing materials from building substrate as identified in the project scope of work in a manner consistent with state asbestos codes.

E. Removed asbestos-containing materials shall be continuously bagged/containerized so that debris does not accumulate on work area surfaces and to allow continuous sequencing of work.

F. Surfaces shall undergo cycles of cleaning, scraping, brushing, wiping, as necessary to ensure that all surfaces achieve a condition free of residual dust and/or debris.

G. Apply lock down.

H. Maintaining engineering controls and isolation, conduct inspection to verify completion of scope of work and all surfaces within work area are dust free.

I. Request final clearance inspections and sampling, providing sufficient power for air monitoring equipment and air moving devices (fans/blowers) as described herein.

J. Disassemble Work Area barriers and containment upon acceptable visual inspection and final air quality. Repeat cleaning and inspection in repeated cycles as necessary to achieve final clearance.

3.8 REMOVAL AND STORAGE OF CONTAMINATED WASTE

A. All routes through the building, elevators, stairways, etc. to be used for the transportation of contaminated wastes out of the Work Area shall be at the direction of the Owner/CM and/or Owner.

B. All contaminated waste shall be disposed of at the end of each work shift or at a time coordinated with the Owner. At no time shall be random removal of contaminated waste from the work site be allowed.

C. Building waste system shall NOT be used to remove refuse.

D. All waste material shall be double bagged using appropriately labeled 6 mil polyethylene bags, securely taped and knotted to provide effective seal.

E. Large sized items/material removed intact may be wrapped in minimum of two (2) layers of polyethylene sheeting and duct tape, sealing air and water tight with appropriate labels.

F. Asbestos materials and waste shall be stored in a securely locked dumpster or storage, at location approved by Owner.

3.9 DISPOSAL OF ASBESTOS WASTE

A. All asbestos materials, wastes, shower water, plastic disposable equipment and supplies shall be disposed of as contaminated waste, in accordance with the EPA regulation (40 CFR, Section 61.150) and state asbestos codes.

END OF SECTION 02 82 00

Division 02 00 00 – Existing Conditions

Section 02 82 90
Hazardous Building Materials Assessment (Universal Waste)

PART 1—GENERAL

1.1 GENERAL DESCRIPTION OF SCOPE OF WORK

A. The work covered by these specifications shall consist of furnishing all labor, materials, tools, and equipment necessary to collect, characterize, package, transport, and recycle/dispose of Universal Waste (UW), including mercury containing lamps and PCB containing electrical equipment.

B. Provide medical surveillance, personal exposure monitoring, training, and work site documentation as required by OSHA regulations.

1.2 REGULATIONS AND REFERENCE STANDARDS

A. General: All work shall be conducted in accordance with all applicable federal, state, and location regulations with which the Contractor and/or Subcontractor(s) are to be knowledgeable. Where a conflict exists between these specifications, regulatory requirements, and guidelines cited herein, the most stringent with regard to environmental health and safety shall apply.

B. Applicable OSHA regulations include but are not limited to:
   1. 29 CFR 1910.134 - Respiratory Protection.
   2. 29 CFR 1910.1200/91926.59 Hazard Communication
   3. 29 CFR 1926.20 General Health and Safety
   4. 29 CFR 1926.21 Safety Training
   5. 29 CFR 1910.120 Hazardous Waste Site Operations
   6. 29 CFR 1910.1000 Air Contaminants

C. Applicable EPA regulations include but are not limited to:
   1. 40 CFR Part 112 (oil pollution)
   2. 40 CFR Part 279 (used oil)
   3. 40 CFR 273 (Universal Waste)
   4. 40 CFR Part 261 (mercury lamps)
   5. 40 CFR Part 761 (PCB ballasts)

D. Applicable occupational health guidelines and recommendations include but are not limited to the ACGIH Threshold Limit Values (TLVs) 2012.

1.3 DEFINITIONS

A. ACGIH—American Conference of Governmental Industrial Hygienists, Cincinnati, Ohio; professional society of occupational and environmental health professionals and experts that publishes yearly updated exposure limits. ACGIH exposure limits (TLVs) are generally considered the most appropriate and best documented limits in the practice of industrial hygiene and are published in yearly ACGIH Threshold Limit Values and Biological Exposure Indices. The 2012 ACGIH TLVs shall be the published exposure standards applicable to the work.

B. American Industrial Hygiene Association (AIHA)—national professional organization for the practice of industrial hygiene (recognition, evaluation, and control of

occupational and environmental hazards); has established minimum education and experience requirements for professionals in the field.

C. Certified Environmental Trainer (CET)—an individual with knowledge and experience in environmental hazards, and who had demonstrated competence in the training of individuals as recognized by the National Environmental Training Association (NETA), Phoenix, Arizona 85016

D. Certified Industrial Hygienist (CIH)—shall mean an individual with a minimum of five years' experience as an industrial hygienist and who has successfully completed both levels of the certification examination administered by the American Board of Industrial Hygiene, Lansing, Michigan.

E. Competent Person— Used in reference to excavation safety, this term means the Contractor and/or Subcontractor's employee who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them. The Competent Person is required to have completed a minimum of the OSHA 10-Hour course for construction safety and shall meet the definition of a competent person as defined by the Contractor and CM's Health and Safety Plan and OSHA standards (29 CFR 1926.32).

F. Contractor— The entity engaged by the owner to conduct environmental abatement and demolition.

G. Construction Manager (CM) — The entity who may act as the representative for the Owner. The CM will assume all duties and responsibilities and have the rights and authority assigned to the CM/Owner Representative in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents. The role of CM shall also include traditional Architect/Engineer services where appropriate.

H. Filtering Face-piece Respirator—respirator in which the filtering media and face-piece are integrated; generically termed a "dust mask." For purposes of this specification, any filtering face-piece respirator must have an elastomeric material as the respirator/face seal, and an exhalation valve.

I. HEPA—high-efficiency particulate filters which are 99.97% efficient at removing particles with a mass median aerodynamic diameter of 0.3 micrometers.

J. Industrial Hygienist—individual(s) engaged by Contracto and/or Subcontractor to conduct air monitoring for their respective employees for compliance with requirements of this specification and/or OSHA regulations. Individual shall meet the qualifications of an industrial hygienist as defined by any state regulatory authority or the American Industrial Hygiene Association.

K. Integrated sampling—sampling for a contaminant over an extended period of time (usually a full shift) by a recognized/published OSHA or NIOSH analytical method, to be contrasted with real time instantaneous monitoring.

L. Lamp (UW Lamp)—tube portion of an electrical lighting device (visible, ultraviolet, or infra-red), including but not limited to fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps.

M. NIOSH—National Institute for Occupational Safety and Health, Cincinnati, Ohio; government agency that conducts research and provides a variety of industrial/environmental hygiene services to include publication of methods of sampling/analysis for evaluating for airborne contaminants and testing/approval for personal protective equipment.

N. Owner—City of Trenton Department of Housing and Economic Development.

O. PEL—(OSHA) regulated permissible exposure limit for a contaminant, as defined in 29 CFR 1910.1000.

P. Personal Protective Equipment (PPE)—shall mean appropriate protective clothing, gloves, eye protection, footwear, head gear, and approved respiratory protection.

Q. Perimeter Area—space outside of UW activity Work Areas, which will be inspected and/or monitored by the Owner/CM.

R. Shop Drawing—shall mean a document submitted by the Contractor and/or Subcontractor to document required site specific work plan, procedures, equipment, or methods, and/or proposed change in this specification or procedures previously approved by the Owner/CM. At minimum, shop drawing to be ruled diagram to scale and/or with dimensions containing a title block, drawing identification, date, and initials/signature.

S. Surrogate(s)—contaminant(s) most likely to be released from a particular operation or activity, that also serve as an indicator of the possible presence of other contaminants. Considered to be an acceptable industrial hygiene monitoring approach when several contaminants with varying toxicology may lead to mixed exposures, and/or the variety of possible contaminants makes sampling of all potential contaminants cumbersome.

T. Work Area—shall mean designated rooms, spaces, or areas where UW removal activities are taking place. Work Area enclosure shall have designated entrance/exit points.

U. TWA—the 8-hour time-weighted average exposure of a contaminant, calculated as described in 29 CFR 1910.1000 or in ACGIH Threshold Limit Values (TLV) and Biological Exposure Indices, 2012.

V. Universal Waste (UW)—batteries, pesticides, mercury containing equipment and lamps, and PCB containing equipment subject to the requirements of 40 CFR Part 273.

1.4 QUALITY ASSURANCE

A. Qualifications

1. Contractor: Contractor shall be able to demonstrate documented prior experience in collecting, management, temporary storage, packaging, transport, and disposal of UW.
2. Competent Person: Contractor shall provide evidence of experienced and trained Competent Person as defined in 29 CFR Part 1926.20 who will be on site continuously during the work. Individual shall be knowledgeable in administration and supervision of demolition and handling of UW., Competent Person shall have completed the 30-hour OSHA Hazards in Construction (Supervisor) course, with specialized additional training for UW, pesticides, PCBs, and mercury, and/or OSHA hazardous waste site worker training 29 CFR 1910.120.
3. Industrial Hygienist: individual conducting integrated personal exposure monitoring shall be qualified as an industrial hygienist as defined in the American Industrial Hygiene Association.
   Industrial Hygiene Analytical Laboratory: The name, address, and telephone number of the independent laboratory selected to analyze personal exposure samples as required by OSHA. Laboratory shall be accredited by the State of New Jersey as an environmental laboratory for the particular analysis, and proficient in the NIOSH/EPA Laboratory Accreditation program.

4. Environmental Laboratory: The name, address, and telephone number of the laboratory performing waste characterization analysis. Documentation shall be provided that the laboratory performing the analysis is accredited through the EPA Laboratory Accreditation Program and is currently proficient in the NIOSH/EPA quality assurance programs.
5. Biological Testing Laboratory: The name, address and telephone number of the laboratory used for blood/biological monitoring; the laboratory's listing by OSHA and the U.S. Public Health Service Center for Disease Control (CDC); and documentation that the laboratory is accredited /licensed in the State of New Jersey.

B. Respiratory Protection Devices: All respirators are to be approved for mercury vapor, PCB and particulates.

C. Medical Examination and Records: Provide documentation that employees performing UW activities described in this specification receive continued medical surveillance, including biological monitoring, as required by 29 CFR Part 1926.62, 29 Records shall be retained, at Subcontractor expense, in accordance with 29 CFR Part 1910.20.

D. Training: Training of workers shall be provided prior to the start of work, and shall meet the requirements of 29 CFR Part 1926.59. The project specific training shall be conducted by an independent third-party environmental trainer under the supervision of a Certified Industrial Hygienist (CIH) or Certified Environmental Trainer (CET).

E. Training shall include, but is not limited to
1. Specific nature of the operation which could result in exposure to UW, particularly mercury and PCB.
2. Purpose, proper selection, fitting, use and limitations of respirators.
3. Importance of skin protection, prohibition of eating, drinking, smoking, and applying cosmetics in Work Areas.
4. Work practices to include dust control and use of tackified mats to minimize tracking to adjacent areas.

F. Respiratory Protection Program
1. Furnish each employee required to wear a negative pressure respirator or other appropriate type with a respirator fit test at the time of initial fitting and at least every 12 months thereafter as required by 29 CFR Part1910.134.
2. Establish and implement a respiratory protection program as required by CFR Part 1910.134and submit to Owner/CM for review.

G. Licenses and Permits: Copies of licenses and permits as required by applicable Federal, state and local regulations shall be obtained before the start of work.

1.5 SUBMITTALS

A. Certifications: Prior to the start of work, submit required certifications, plans, programs, permits and licenses

B. Equipment List: Prior to the start of work submit list of equipment items to be used in the work, including brand names, model, capacity, performance characteristics, quantities and other pertinent information.

C. Certificates of applicable training for Supervisors, Competent Person, and laborers/technicians from the third part trainers.

D. Shop Drawing of Work Area set up indicating barrier location, worker entrance/exit points, and hand/face washing station.

E. Waste Transporter and Disposal Facility Permits, and Disposal Documents.

1. EPA hazardous waste generator identification number. Confirm that identification has been obtained by Owner, in the absence of an appropriate identification number, file appropriately on behalf of the Owner.
2. Name, address and telephone number of transporter who will be transporting the waste material generated during the UW activity.
3. Name, address and telephone number of disposal/recycling facility accepting the waste and the permit from the disposal/recycling facility documenting the facility is permitted to accept the wastes being delivered.
4. Copy of completed waste characterization (waste profile) forms, if required.
5. Copy of the completed and signed transportation and disposal documents at time of shipment for the disposal of generated waste.

F. Health and Safety Plan: Contractor's written Site-Specific Health and Safety Plan

G. Sampling and Laboratory Analysis Reports. Submit field sampling logs for all area air sample and waste samples taken, and submit copy of laboratory analysis reports and chain of custody records for all sample analysis.

1.6 POSTED WARNINGS AND NOTICES

The following regulations, warnings and notices shall be posted at the work site in accordance with 29 CFR Part 1926.59 and as required by other contaminant specific requirements.

A. Regulations: a copy of applicable federal, state, and local regulations shall be posted and maintained at the work site by the Contractor and/or Subcontractor.

B. Emergency Egress: Contractor and/or Subcontractor to provide floor plan/map of worker location, activity, and emergency escape routes in the work area, to be updated on a daily basis as conditions change. A copy shall be provided to the Owner for availability to emergency personnel.

C. Emergency Telephone Numbers: A list of telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, emergency squad, police and fire departments, government and Subcontractor representatives who can be reached 24 hours per day and professional consultants directly involved in the project.

1.7 EQUIPMENT AND MATERIALS

A. Respirators: Air-purifying respirators shall be approved by NIOSH for use with PCB, mercury vapor and particulates The Contractor and/or Subcontractor shall furnish, at no cost to personnel/employee, respirators to provide protection from airborne concentrations of hazardous materials.

B. Any filtering face-piece respirator must have an elastomeric material as the respirator/face seal, and an exhalation valve.

C. Respirator Cartridges: A sufficient supply of respirator cartridges shall be maintained at the work site to provide new cartridges to employees and authorized visitors, throughout the duration of the project. Cartridges shall be replaced according to the manufacturer's recommendations, when breathing becomes difficult, or if the cartridge becomes wet.

D. Protective Clothing

1. The Contractor shall furnish, at no cost to personnel/employee, equipment/clothing for protection from airborne dust generated from the work. An adequate supply of these items shall be available for worker and authorized visitor use. Workers and visitors shall not take protective clothing and equipment off the work site at any time. Protective clothing includes:

2. Coveralls (Whole Body Protective Coverings): Full-body disposable coveralls shall be worn by workers in the Work Area, and shall be terminated only upon approval of the Competent Person and Owner/CM.
3. Hard Hats: Head protection (hard hats) shall be provided as required by OSHA for workers and authorized visitors. Protective plastic-strap suspension hats shall be used. Hard hats shall be worn at all times that work is in progress. Hats shall remain in the work area until the project is completed. Hats shall be thoroughly cleaned, decontaminated and bagged before being removed from the work area at the end of the project.
4. Eye Protection: Fog-proof goggles for personnel engaged in UW operations shall be worn when the use of a full-face piece respirator is not required.

E. Expendable Supplies (as necessary)
1. Polyethylene Sheet and Bags: Polyethylene sheet and bags shall be minimum 6-mil thick. Bags shall have pre-printed labels, and 5-inch (minimum) long plastic ties, pointed and looped to secure the filled bags. Polyethylene sheets shall be in roll sizes to minimize seams.
2. Flame Resistant Polyethylene Sheet: Where a potential for fire exists, flame-resistant polyethylene sheets shall be provided. Polyethylene film shall conform to the requirements of NFPA 701.
3. Reinforced Polyethylene Sheet: shall be provided where high strength is required such as for Work Area enclosures. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between two layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

F. Vacuum Systems: HEPA filtered vacuum systems shall be used during cleanup of dust generated during UW activity.

1.8 STORAGE OF MATERIALS

A. Materials shall be stored in a place and manner, which protects them from damage and contamination. Materials shall be inspected at least once per shift to identify damaged or deteriorating items.

B. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered.

C. Stored materials shall not present a hazard or an inconvenience to workers, visitors and/or other employees, and locations shall be as approved by the Owner/CM.

PART 2—PRODUCTS (NOT APPLICABLE)

PART 3—EXECUTION

3.1 WORK PROCEDURES

A. Furnish all labor, materials, services, and equipment necessary for the removal of PCB containing lighting ballasts, mercury containing fluorescent lamps, and/or similar lamps, classified as UW.

B. Personnel Protection Procedures: Personnel shall wear and use protective clothing and equipment as specified.
1. Personal protective equipment shall be worn and used as described herein.
2. Drinking, eating, chewing tobacco and chewing gum, and applying makeup shall not be permitted in Work Areas.

C. Competent Person Responsibilities: The Competent Person shall be present throughout the UW removal and handling operations. In addition, the Competent Person shall:
   1. Ensure the work is performed in accordance with these specifications.
   2. Verify that workers have been trained as applicable regulation and as specified herein.
   3. Supervise and monitor Work Area continuously to ensure adequate dust control.
   4. Supervise and monitor installation of hand/face washing stations.
   5. Ensure that worker exposure air monitoring activities are in accordance with 29 CFR Part 1926 and 29 CFR 1910.1000.

D. Medical Surveillance: Medical surveillance shall be implemented in accordance with the accepted Contractor and/or Subcontractor's Respiratory Protection Plan and the requirements of 29 CFR Part 1926.

E. Engineering Controls and Work Area Isolation
   1. Work Area Containment Requirements: Physical boundaries shall be provided at the perimeter of Work Areas by installing caution tape.
   2. Designated entrance/exit point(s) for workers at the perimeter of the Work Area shall be identified and floor surface covered with tackified mats to minimize tracking of dust to adjacent areas.
   3. Hand/Face Wash Station: A hand/face washing station shall be provided at designated locations at the perimeter of the Work Area. The station shall be equipped with either hot/cold water with soap and/or disposable towelettes for personnel to wash exposed skin surfaces when removing disposable coveralls and respirators upon leaving the Work Area.

F. Temporary Utilities: Temporary equipment as necessary to provide adequate power, light, heat, and water shall be installed, as needed, to accomplish the UW work. The Contractor and/or Subcontractor shall maintain the security and maintenance of the utility system in the Work Areas. In the event of a failure of any utility system, the Owner will not be responsible for any loss of time or other expense incurred by the Contractor and/or Subcontractor.

3.2 UW WORK PRACTICES

A. Lamp /Tube Removal
   1. Remove lamps from fixture and carefully place intact lamps into appropriate containers (original transport boxes or equivalent).
   2. Store mercury containing lamps in DOT approved containers, and label for transport as per 40 CFR 273
   3. In the event of tube/lamp breakage, gently sweep debris (generating minimal dust) into double 6 mil polyethylene bags securely taped/secured, and dispose as UW.
   4. Vacuum any dust/debris released onto nearby surfaces with HEPA vacuum.

B. Ballasts
   1. Ballast removal waste classification shall be determined by the labeling. In the absence of a label stating "NO PCB," ballast is to be treated as PCB and containerized and disposed/recycled.
   2. For ballasts determined to be "NO PCB", confirm the presence/absence of diethylhexyl phthalate (DEHP) either by appropriate testing or documentation

from the manufacturer. If DEHP is absent, dispose as construction debris. If DEHP is present, dispose as hazardous.

3. In the event of PCB leaks or spill, isolate the area with caution tape and post sign: "PCB Spill Authorized Personnel Only," Mop/absorb liquids and dispose of all clean up absorbent and material and dispose as PCB.

C. Dust/debris generated as the work progresses shall not be allowed to accumulate on surfaces within the Work Area.

D. Alternative Work procedures, work sequence, and environmental controls

1. Any work procedure, work sequence, or environmental control other than specified herein which meets the intent of the specification may be submitted to the Owner/CM for approval.
2. Submission shall be in shop drawing format with adequate language, description, calculations, and cost or schedule impact (if any) for the Owner/CM to evaluate relative to the specifications.

3.3 ENVIRNOMENTAL MONITORING AND TESTING

A. Personnel Air Monitoring

1. The Owner/CM reserves the right to conduct personnel air monitoring to verify exposure monitoring results generated by the Competent Person.
2. Personal exposure monitoring to meet the Contractor and/or Subcontractor's OSHA requirements
shall be conducted under the direction and supervision of the Competent Person.

B. Visual Inspection shall be conducted by the Owner/CM to determine effectiveness of work practices, and environmental controls of the Contractor and/or Subcontractor

1. Visible dust from the Work Area escaping into the perimeter, or spilled liquids within or outside of the Work Area, shall result in temporary suspension of work and implementation of dust control (i.e., local HEPA exhaust, additional HEPA vacuuming, wetting/misting) and/or spill cleanup.
2. Tracking/accumulation of dust from the Work Area shall result in immediate change out of tackified mats and HEPA vacuuming wet wiping visible dust/debris from affected surfaces.

C. Perimeter area air monitoring during the work may be conducted by the Owner/CM at the direction of the Owner as described below.

1. The sampling will be a combination of real time particulate monitoring for respirable particulate as surrogates for UW contaminated dusts and/or vapors. Background testing will be conducted in the Work Area prior to actual removal of UW for reference.
2. Respirable particulate concentrations as revealed by real time instruments at greater than 2.0 mg/m3 (30-minute average) shall be indicative of inadequate environmental controls by the Contractor and/or Subcontractor, who shall immediately institute,
additional wetting, enclosure, and/or (HEPA) local exhaust ventilation as necessary.

D. Waste Sampling and Testing (Provided by the Contractor)

1. The Contractor shall conduct sampling, if applicable, for all debris and waste generated during the work for necessary classification for acceptance at an

appropriate disposal/recycling facility.

3.4 CLEAN-UP AND DISPOSAL

A. Cleanup

1. Daily: Surfaces in the Work Areas shall be maintained free of accumulations of dust and debris. Cleanup shall be via HEPA vacuuming (and wipe wiping if necessary); dry sweeping is only permitted for local cleanup of broken lamps.
2. At the completion of the UW work, the Competent Person shall conduct a thorough visual inspection that the scope of work has been completed and the Work Area is dust free. The cleanup of the Work Areas includes removal of any contaminated material, equipment or debris from the work area.
3. Waste bags shall not be overloaded, shall be securely sealed and stored in the designated area or storage dumpster/container until disposal.

B. Waste Storage, Sampling/Analysis and Disposal/Recycling (Provided by the Contractor and/or Subcontractor)

1. Contractor shall verify that the UW activity has an appropriate EPA generator identification number for use on the Hazardous Waste manifests. Contractor and/or Subcontractor shall advise the Owner if no generator identification number exists and file for same. Work shall not commence until the identification number has been obtained.
2. For lamp removal, provide notification to the EPA regional waste management authority, obtain an EPA identification number, and retain records of shipments for at least three years. Work shall not commence until the identification number has been obtained.

END OF SECTION 02 82 90

Division 31 00 00 –Earthwork

Section 31 22 00
Fill and Grading

Part 1 – General

1.1 SUMMARY

A. This Section includes placement, compaction, and grading of backfill materials.

B. The Contractor shall provide all materials, labor, and equipment necessary to perform backfilling, compaction, and grading as required to achieve rough and subsequently final grade. Final grade is as required to provide positive drainage offsite in accordance with current runoff directions, however, where possible, drainage should be directed toward the street.

1.2 REFERENCES

A. ASTM D698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (Standard Proctor).

B. ASTM D422 Method for Particle Size Analysis of Soils.

C. ASTM D1557 Test for Moisture-Density Relations of Soils Using 10-lb (4.5 Kg) Hammer and 18-inch (457 mm) Drop (Modified Proctor).

D. ASTM D2216 Laboratory Determination of Moisture content of Soil.

E. ASTM D2487, Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).

F. ASTM D2922, Standard Test Methods for Density of Soil and Soil-Aggregate In-Place by Nuclear Methods.

G. ASTM D3017, Standard Test Methods for Water Content of Soil and Soil-Rock In-Place by Nuclear Methods.

H. ASTM D4253 Test Method of Maximum Index Density and Unit Weight of Soils Using a Vibratory Table.

I. ASTM D4254 Test Methods for Minimum Index Density and Unit Weight of Soils and Calculations of Relative Density.

J. ASTM D4318 Test for Plastic Limit, Liquid Limit, and Plasticity Index of Soils.

1.3 SUBMITTALS

A. Within ten days after award of the contract, the Contractor shall submit to the Owner/CM a schedule detailing the sequence, and time of completion of all phases of work under this section.

B. At least two weeks in advance of the delivery of imported fill to the site, the Contractor shall submit to the Owner/CM the following geotechnical/soils laboratory test results for each type of imported backfill material to be used:

1. Moisture and Density Relationship: ASTM D1557.
2. Mechanical Analysis: AASHTO T-88
3. Plasticity Index: ASTM D 4318
4. Relative Density: ASTM D 2049

C. Together with the above test data, the Contractor shall submit to the

Owner/CM a 5-pound sample of each type of imported backfill material in an air tight container.

D. With each sample, the Contractor shall submit the name of each material supplier and specific type and source of each material. Any change in the source or material type throughout the job requires approval by the Owner/CM by submitting the information required in item A, B and C above. Imported fill shall be in conformance with all requirements of the NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) as set forth in N.J.A.C. 7:26D Remediation Standards, Table 1A – Residential Direct Contact Health Based Criteria and Soil Remediation Standards.

E. Environmental sampling frequency shall be in accordance with Table 2: Sampling Frequency Guide for Clean Fill, as found in the NJDEP Fill Material Guidance for SRP Sites document.

Table 2: Sampling Frequency Guide for Clean Fill

Proposed Volume	**Default Sampling Scheme without justification**	**Reduced Sampling Scheme with justification**
(Cubic Yards)	(Samples)	(Samples)
0 to 20	1	1
20.1 to 40	2	2
40.1 to 60	3	2
60.1 to 80	4	2
80.1 to 100	5	2
100.1 to 200	6	3
200.1 to 300	7	3
300.1 to 400	8	4
400.1 to 500	9	4
500.1 to 600	10	5
600.1 to 700	11	5
700.1 to 800	12	6
800.1 to 900	13	6
900.1 to 1,000	14	7
1,000.1 to 2,000	15	8
2,000.1 to 3,000	16	9
3,000.1 to 4,000	17	10
4,000.1 to 5,000	18	11
5,000.1 to 6,000	19	12
6,000.1 to 7,000	20	13
7,000.1 to 8,000	21	14
8,000.1 to 9,000	22	15
9,000.1 to 10,000	23	16
10,000.1 to 11,000 *	24	17

*With volumes greater than 10,000 cubic yards, the sampling rate is 1 per additional 1,000 cubic yards. The sampling frequency may be reduced with appropriate justification and does not require Department pre-approval. This includes departure from the default or reduced sampling frequencies.

E. All samples shall be analyzed using a NJDEP certified laboratory from either the New Jersey Environmental Laboratory Certification Program (NJ-ELCP) pursuant to N.J.A.C. 7:18 or accreditation in the New Jersey National Environmental Laboratory Accreditation Program (NJ-NELAP).

1.4 QUALITY CONTROL

A. The Contractor shall provide at least one supervisory person who shall be present at all times during backfilling and who is thoroughly familiar with the type of work being performed and its best methods for completion. This person shall have the authority to act on behalf of the Contractor.

B. The Contractor shall comply with any provisions of all applicable codes, regulations and standards.
Visual field confirmation and density testing of subgrade preparation and fill placement procedures shall be performed by the Contractor's independent subcontractor as part of the construction testing requirements.

C. Field Density/Compaction Tests:
1. In fill areas perform one Field Density/Compaction test for every 2,500 sq. ft. of surface area.
2. Field Density/Compaction tests shall be performed for each 12-inch lift after the placement and compaction of the initial two lifts (24 inches).

D. Non-conforming material brought to Site will be removed and disposed of at Contractor's expense. No payment will be awarded for non-conforming material, non-conforming material installation, equipment used to install non-conforming material or labor associated with the installation of non-conforming material.

1.6. PROJECT CONDITIONS

A. Work shall be performed in a manner that does not disturb existing utilities, structures, or other facilities not indicated to be removed within the project limits.

B. Install erosion control measures per the Drawings and/or regulatory agencies to protect adjacent properties and water resources from erosion and sediment damage.

C. Re-use of imported soil for backfill will not be accepted at this site. Only certified clean fill will be accepted for import as backfill.

D. Backfill shall meet New Jersey Department of Environmental Protection Residential Direct Contact Soil Remediation Standards (RDCSRS) and be free of extraneous debris or solid waste. Documentation of the quality of the fill shall be provided by either a certification stating that it is virgin material from a licensed commercial source or from a commercial fill source providing full analytical results to determine compliance with the NJDEP RDCSRS for Clean fill. The bill of lading shall document the source(s) of fill and include:
1. The name of the affiant and relationship to the source of the fill.

2. The location where the fill was obtained, including the street, town, lot and block, county and state and a brief history of the site which is the source of fill.
3. A statement that to the best of the affiant's knowledge and belief that the fill being provided is not contaminated pursuant to any applicable remediation standards and a description of the steps taken to confirm such.

PART 2—PRODUCTS

2.1 IMPORTED FILL AND CRUSHED STONE AGGREGATE

A. Fill, supplied by the Contractor from an off-site source, shall be clean, well graded granular soil which is non-expansive and non-collapsible, free of organic or other deleterious material and capable of being compacted to the densities hereinafter specified. New fill material shall be free draining, granular soil containing less than 15% silt, and shall have less than 20% by weight passing the #200 sieve. The portion passing the #200 sieve, shall be non-plastic common fill.

B. Crushed stone aggregate or Dense Graded Aggregate shall be natural or manufactured granular material, or a combination thereof, from a virgin source and free of soil particles larger than 1" diameter. Gradation analysis shall be in conformance with the City of Trenton Building Code Officer requirements.

B. A sample of any import fill material shall be provided to the Owner/CM or his representative along with laboratory testing results and shall obtain approval prior to moving material on site.

C. The Owner/CM reserves the right to test off-site fill material for conformance with these specifications.

PART 3—EXECUTION

3.1 PREPARATION

A. The Contractor shall backfill excavations as promptly as work permits, but not until the completion of the following:
   1. Removal of excavation support and backfilling of voids with satisfactory materials, as required.
   2. Removal of trash and construction debris.

B. Backfilling operations shall be conducted so that permanent structures will not be disturbed and so that the lines and grades are maintained. Backfill shall be placed only when compaction specification requirements can be achieved. Backfill shall not be placed when the excavation is excessively wet or the ground is frozen.

C. Verify that subgrade has been accepted by the Owner/CM.

3.2 PLACEMENT OF BACKFILL

A. The Contractor shall place approved backfill material in 12-inch maximum lifts, compacted to 95% of the Modified Proctor Test maximum dry density and within ± 3% of the optimum dry density (ASTM D 1557) to the rough grade elevations.

B. Fill shall be placed at moisture content adequate to allow effective compaction.

C. The Contractor shall minimize voids during placement.

D. The Contractor shall place backfill materials evenly adjacent to structures and pipes to the required elevations. The Contractor shall take care to prevent wedging action of the backfill against structures and conduits by carrying the material uniformly around the structure to approximately the same elevation in each lift.

E. "Bucket compaction" is not permitted.

F. The Owner/CM may approve a single "bridge lift" if the bottom of the excavation is soft. In that case the bridge lift maximum thickness is 24 inches (loose).

G. The Owner/CM reserves the right to reject fill that differs visually from the identified source materials and to request that the Contractor randomly re-test fill materials for conformance with these Technical Specifications. Remove fill that fails to meet the requirements.

3.3 SITE GRADING

A. Identify required site grades to ensure that final grade provides a positive drainage condition carrying stormwater safely offsite to the nearest Municipal storm drainage inlet. Sub-grade backfill shall be brought to final grade minus approximately 4" to allow for the installation of either topsoil or crushed stone as a final top course.

B. The Contractor shall shape and compact fill with uniform levels or slopes between existing grade points, and wherever possible assure that the property, after restoration, drains positively toward the street without disturbing more than the original limit of disturbance area required for the scope of demolition/removal work.

C. The Site must not be left with any low spots that accumulate water.

3.4 MAINTENANCE

A. The Contractor shall protect newly graded areas from traffic and erosion. The work shall be sequenced to minimize disturbance of completed areas.

B. Where completed areas are disturbed by subsequent project operations or adverse weather, the Contractor shall fill and reshape eroded areas until acceptance of the work.

C. Where topsoil and grass seeding is specified as the top course to final grade, and upon completion of all demolition/removal work (including demolition of existing foundations, footings, etc.) and after completion of backfill with clean fill and 4" of topsoil to final grade, the Contractor will stabilize all disturbed areas with seeding in accordance with the specifications. The Contractor shall also be responsible for maintenance of all site restoration work including but not limited to soil erosion and sediment control measures and establishment of a reasonable stand of grass until accepted by Owner/CM.

D. Where either crushed stone or a dense graded aggregate (DGA) is specified as the top course to final grade, and upon completion of all demolition/removal work (including demolition of existing foundations, footings, etc.) and after completion of backfill with clean fill and 4" of either crushed stone or DGA, no further maintenance will be required.

END OF SECTION 31 22 00

Division 32 00 00 – Exterior Improvements

Section 32 31 13
Chain Link Fence and Gates

Part 1 – General

1.1 SECTION INCLUDES

A. This section shall consist of furnishing and installing new fence and/or removing and salvaging existing fence and restoring the same in conformance with the lines and grades and requirements shown on the DRAWINGS. Wherever the materials to be removed are not in good condition, as judged by the OWNER/CM, or wherever CONTRACTOR has damaged the materials during the process of removal, equal or better quality fencing materials than the existing shall be furnished and installed by CONTRACTOR.

1.2 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Association of State Highway and Transportation Officials (AASHTO):
   a. M111M/M111, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
   b. M133, Standard Specification for Preservatives and Pressure Treatment Processes for Timber.
   c. M181, Standard Specification for Chain-Link Fence.
   d. M232M/M232, Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
   e. M281, Standard Specification for Steel Fence Posts and Assemblies, Hot-Wrought.
2. ASTM International (ASTM):
   a. A116, Standard Specification for Metallic-Coated, Steel-Woven Wire Fence Fabric.
   b. A121, Standard Specification for Metallic-Coated Carbon Steel Barbed Wire.
   c. A392, Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric.
   d. A491, Standard Specification for Aluminum-Coated Steel Chain-Link Fence Fabric.
   e. B211, Standard Specification for Aluminum and Aluminum-Alloy Bar, Rod, and Wire.
   f. F537, Standard Specification for Design, Fabrication, and Installation of Fences Constructed of Wood and Related Materials.
3. Federal Specification (FED): FCGS-02-1, Fencing, Wire and Post, Metal (Chain-link Fence Posts, Top Rails and Braces).

PART 2 PRODUCTS

2.1 MATERIALS

A. Chain Link Fabric: Chain link fabric and required fittings and hardware shall conform to the requirements of AASHTO M181 for the kind of metal, sizes of wire and mesh

specified. Zinc coating for steel fabric shall conform to ASTM A392, Class I and aluminum coating for steel fabric to ASTM A491, Class I.

B. Construction Fence: Construction fence shall have bright orange woven plastic mesh, and six feet (6') minimum in height.

C. Fence Posts:

1. Steel posts shall be galvanized in accordance with AASHTO M111M/M111. Fittings, hardware, and other appurtenances not specifically covered by the DRAWINGS and SPECIFICATIONS shall be standard commercial grade, and in accordance with current standard practice. Pipe material for fence posts shall conform to the requirements shown on the DRAWINGS and to the requirements of Class 1 Pipe, Grade A or Grade B, of FED FCGS-02-01.
5. Construction fence posts shall be studded steel tee posts.

H. Nails: All nails used for construction shall be galvanized.

PART 3 EXECUTION

3.1 REMOVAL OF EXISTING FENCE

A. All rails, braces, posts, and the like shall be removed and disposed of or salvaged by CONTRACTOR to allow construction of the PROJECT as described on the DRAWINGS.

3.2 REPLACEMENT OF FENCE

A. General:

1. Perform such clearing and grubbing as may be necessary to construct or replace the fence to the required grade and alignment as shown on the DRAWINGS.
2. At locations where breaks in a run of fencing are required, appropriate adjustments in fence alignment and/or post spacing shall be made to satisfy requirements or conditions encountered.

B. Posts and Rails: Posts shall be securely embedded into the ground to meet the proper alignment and elevations. Posts shall be embedded in concrete as shown on the DRAWINGS. Posts and rails shall be held in proper positions by secure bracing until such time as the concrete has set sufficiently to hold the posts. Materials shall not be installed on posts, or stress placed on bracing until the concrete has set sufficiently to withstand the stress. The complete fence shall be plumb and in straight alignment as shown on the DRAWINGS or as directed by OWNER/CM.

C. Replacement Fence: Fence shall be 6' high galvanized chain link fence with 2 ¼" mesh and 11-gauge wire. Terminal/End/Corner posts to be 2 7/8" diameter, Line posts to be 2 3/8" diameter. Top/Middle/Bottom rails to be 1 5/8" diameter. Post Caps to be dome style, Ties to be 11 ga. Aluminum. Terminal/Line Post footings shall be 36" deep by 12". Concrete footings to be 3,000 psi strength.

END OF SECTION 32 31 13

Division 32 00 00 – Exterior Improvements

Section 32 91 19
Seeding

Part 1 – GENERAL

1.1 DESCRIPTION

A. The Work under this section consists of the revegetation with seeded grasses. Furnish all labor, materials, equipment, tools, and transportation required to complete the WORK, and perform all operations in connection with and reasonably incidental to establishing, maintaining, and warranting the reseeded areas.

B. All Work shall be completed in accordance with these Specifications, the Drawings and Contract Documents, and in a manner consistent with accepted horticultural practices. All permits, licenses, and fees associated with any Work under this Contract are the responsibility of Contractor, unless otherwise noted.

C. The scope of this work applies only when topsoil and grass seed are the chosen final restoration surface, and will follow the installation of topsoil as described in Section 32 91 19.13.

1.2 REFERENCES

A. The following is a list of standards which may be referenced in this section:
   1. Association of Official Seed Analysts (AOSA).

1.3 SUBMITTALS

A. Submit statements of guarantee and/or certifications from vendors who supply seed, mulches, tackifiers, and fertilizers.

B. Furnish to Owner/CM a signed statement certifying that the seed furnished is from a lot that has been tested by a recognized laboratory for seed testing within six (6) months prior to the date of delivery.

C. Seed container labels shall be submitted to Owner/CM at the completion of Project.

D. Submit to Owner/CM the manufacturers guaranteed chemical analysis, name, trade name, trademark, and conformance to state law of all fertilizers and herbicides.

1.4 DELIVERY, STORAGE, AND HANDLING

A. All materials shall be furnished in original manufacturers shipping bags or containers and remain in these bags or containers until they are used. All materials shall be stored in a manner that will prevent them from coming into contact with precipitation, surface water, or any other contaminating substance.

B. Fertilizer: It shall be delivered in original, unopened containers, unless provisions are made and approved by Owner/CM for bulk deliveries to the site of the Work.

C. Herbicide: It shall be delivered in original, unopened containers, unless provisions are made and approved by Owner/CM for bulk deliveries to the site of the Work. All herbicides will be stored in a manner that satisfies local, State and Federal Guidelines for Herbicide Storage.

PART 2 - PRODUCTS

2.1 GENERAL

A. All materials used shall be new and without flaws or defects of any type, and shall be the best of their class and kind. Seeds shall be prepared for sale during the year of installation.

B. Any materials that have become wet, moldy, or otherwise damaged in transit or in storage shall not be used.

2.2 SEED

A. Seed shall be only that which is specified by CM (refer to Drawings). All seed shall be mixed by a wholesale seed supplier in order to obtain the specified mixture and application rate required by CM or. No species substitutions shall be permitted without prior approval of the CM.

B. All seed shall conform to all current State and Federal regulations and shall be subject to the testing provisions of the Association of Official Seed Analysts.

C. All seed and seed mixes shall be furnished in bags or containers clearly labeled to show the name and address of the supplier, the common, scientific, and variety name(s) of the seed(s), the lot number, point of origin, net weight, percent of weed content, and the guaranteed percentage of purity and germination.

D. All seed shall be guaranteed for purity and germination, free of noxious weed seed and supplied on a Pure Live Seed (PLS) basis.

2.3 FERTILIZER

A. All fertilizer shall be a standard commercial product of uniform composition, free flowing and conforming to applicable State and Federal laws.

B. No cyanamide compounds shall be permitted in fertilizers.

2.4 MULCH

A. The type of mulching material to be used shall be crimped weed-free straw. At least seventy percent (70%) of the mulch by weight shall be ten (10) inches or more in length. Mulch shall not contain any noxious weed, must, mold, cake, or decay. No hay may be used on the Project unless approved in advance by the CM.

2.5 ORGANIC TACKIFIER/BINDER

A. Organic tackifier/binder shall be applied in accordance with manufacturer specifications.

2.6 WATER

A. All water used on the Project shall be free of any substances harmful to plant germination and growth or to the environment in general. Contractor shall be responsible for furnishing and applying water that meets these requirements.

2.7 TOPSOIL

A. Topsoil shall meet the requirements of Section 32 91 19.13

PART 3 – EXECUTION

3.1 GENERAL

A. Contractor's Site Responsibilities: It shall be the responsibility of Contractor to locate and protect all utilities, structures, roadways, parking areas, fences, survey markers, and existing vegetation (such as, trees and shrubs) on all WORK sites. Any damage caused by Contractor and/or Subcontractors shall be immediately repaired or corrected by Contractor at no expense to Owner.

B. Timing of the Work: Seeding shall be completed as soon as practical after the completion of final grading. Contractor shall coordinate the actual start of the seeding operation with Owner/CM. Seeding shall occur between September 15 and April 15, unless otherwise permitted by the Owner/CM.

C. D. Performance of the Work: All Work is to be performed by personnel thoroughly familiar with proper and accepted methods for soil preparation, herbicide applications, fertilizing, seeding, and mulching. All Work is to be performed under the direct supervision of Contractor's superintendent, who shall be thoroughly familiar with the provisions of this Contract.

E. Project Monitoring: Contractor shall notify Owner/CM prior to the commencement of any Work under this section. Owner/CM shall monitor the progress of the Work throughout the Contract period, and shall assist in determining where soils samples, are to be collected. Owner/CM shall also collect samples of the seed used on the Project, and may collect samples of fertilizers, soil additives, water, or other materials as they deem necessary to ensure the Specifications are met.

3.2 SOIL/SEEDBED PREPARATION, SOIL AMENDMENTS

A. All ripping and tilling operations shall be done in a direction which follows the natural contour of the land on slopes of three to one (3:1) or less. Any irregularities in the ground surface resulting from soil preparation operations shall be corrected and sloped to drain.

B. Limit subgrade preparation to areas that shall be planted in the immediate future.

C. Prior to spreading salvaged topsoil and seeding, thoroughly till or rip to a depth of six (6) inches. The soils shall be worked until no clods greater than two (2) inches in diameter remain, unless directed otherwise by Owner/CM. Remove rocks and other objects three (3) inches or greater in any dimension.

D. Spread topsoil to depth required to meet grades and elevations shown on Drawings after light rolling and natural settlement.

E. Either mix soils with soil amendments and fertilizers before spreading or apply soil amendments or fertilizers on surface of spread topsoil and till thoroughly into top four (4) inches before planting. Mix soil amendments at the rate specified by the manufacturer. Delay mixing fertilizer if planting does not follow placing of planting soil within a few days.

F. Prior to seeding, grade the areas to be seeded to a smooth, even surface with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades. Soils shall meet grades as specified in Section 31 22 00 after light rolling and natural settlement. Limit fine grading to areas that can be planted in the immediate future.

G. Moisten prepared areas to be seeded prior to planting when soils are dry. Water thoroughly and allow surface to dry before seeding. Do not create muddy conditions. Restore prepared areas if eroded or disturbed after fine grading and before planting.

3.3 SEEDING

A. General: Contractor shall notify Owner/CM when seeding is to take place so seed tags from all mixtures can be supplied to the Owner/CM).

B. Broadcast Seeding:

1. Seed shall be uniformly broadcast at twice the specified PLS per acre and covered with soil to a depth of one-quarter (1/4) inch to one-half (1/2) inch by hand raking or harrowing by some other means acceptable to Owner/CM.
2. Broadcast seeding shall be accomplished using hand-operated "cyclone-type" seeders or rotary broadcast equipment. Broadcasting by hand shall be acceptable on small, isolated sites. Prior to hand broadcast seeding, divide the seed required into two portions. Apply the first half of the seed and then follow up by applying the second portion to ensure complete coverage by seed. When broadcast seeding, passes shall be made over each site to be seeded in a manner to ensure an even distribution of seed. When using hopper type equipment, seed shall be frequently mixed within the hopper to discourage seed settling and uneven planting distribution of species.
3. Broadcast seeding shall take place immediately following the completion of final seedbed preparation techniques and upon inspection and approval of Owner/CM. Broadcast seeding should not be conducted when wind velocities would prohibit even seed distribution.

3.4 FERTILIZATION

A. Commercial Fertilizer for Lawns: Commercial fertilizer shall be a complete fertilizer, part of the elements of which are derived from organic sources, and shall contain the following percentages by weight: nitrogen 20%; phosphoric acid 10%; potash 5%. It shall be uniform in composition, dry, free flowing, and shall be delivered to the site in the original unopened containers all bearing the manufacturer's guaranteed analysis.

3.5 MULCHING

A. Straw mulch shall be applied immediately after seeding has been completed with a mechanical spreader at a rate not less than one and one-half (1-1/2) tons per acre, and not more than two (2) tons per acre. Straw mulch shall then be anchored to the soil with a standard commercial crimper which shall crimp the fiber four (4) inches or more into the soil. Failure to apply designated mulch at the specified rate may result in the Owner/CM requiring the Contractor to remobilize and complete the specified Work at no additional cost to the Owner.

3.6 HERBICIDE/CHEMICAL APPLICATIONS

A. All noxious weed growth on the site shall be controlled by the Contractor during the construction period and until the final inspection by spot application of herbicides which have been pre-approved by the Owner/CM. Spot application of herbicides means detailed application of only the targeted weed species by wand or wick with a backpack applicator. No herbicides shall be permitted for general application

(broadcast) during a time when it would cause detrimental impact to germination or establishment of the seeded grasses.

B. Herbicides or other chemicals, if required, shall be applied using well-maintained spraying equipment by individuals working for Contractor who are appropriately licensed by any State and/or Federal agency having jurisdiction over such applications. It shall be the responsibility of Contractor and/ or Subcontractor to be knowledgeable of any and all current laws and regulations pertaining to herbicide and other chemical applications, and to advise Owner/CM immediately if any requests for these applications made by CM are inappropriate as they pertain to these laws and regulations. Herbicide application shall be conducted by trained weed control personnel who also can recognize the targeted weed species.

C. Herbicides and other chemicals shall not be applied during periods when wind or other physical conditions cause the herbicides or chemicals to be transported a distance of more than five (5) feet from the immediate area where they are being placed. It shall be the responsibility of Contractor to stop Work immediately and to notify the Owner/CM if any weather or other physical condition exists which would make the application of herbicides or other chemicals inappropriate.

D. All herbicides or other chemicals used (except solid fertilizers) shall be applied at a rate and strength, and by the method recommended by the manufacturer of the product being used. Failure to properly apply herbicides (spot treatment) may result in the Owner/CM requiring the Contractor to reseed the damaged area at no cost to the Owner.

3.7 FIELD QUALITY CONTROL

A. Final Acceptance:

1. When Work has been completed for the Project, Contractor and Owner/CM `shall inspect the site together and determine the total area of the Work, and whether or not the Work is complete and has been done in accordance with Contract Documents and Specifications. If mutual agreement cannot be reached on these issues, the determinations made by Owner/CM shall be final. Deficiencies in the Work, if any, shall be noted and a checklist of these deficiencies given to Contractor by CM. Contractor shall immediately correct any deficiencies listed on the checklist at no cost to Owner.
2. When all checklist items are completed to the satisfaction of Owner/CM, Owner/CM shall issue a Certificate of Final Acceptance. Contractor shall then submit these items for payment to Owner based on the original project bid prices and any change orders which have been agreed to and signed by both parties.

3.8 CLEANING

A. All Work sites shall be kept clean and free from all debris. At the conclusion of Work at any site, Contractor shall remove and haul from the site all excess materials, debris, and equipment. Any damage (for example, damaged fencing, damaged road surfaces, excessive tire furrows, mud tracked onto pavement) resulting from Contractor's activities shall be repaired by Contractor to Owner/CM's satisfaction at no expense to Owner.

END OF SECTION 32 91 19

Division 32 00 00 – Exterior Improvements

Section 32 91 19.13
Topsoil Placement and Grading

Part 1 – General

1.1 SECTION INCLUDES

A. This work consists of placing of topsoil upon backfilled and disturbed areas or in designated areas after grading operations are complete.

1.2 REFERENCES

A. The following is a list of standards which may be referenced in this section:
   1. ASTM International (ASTM):
   2. D2974, Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils.
   3. D5268, Standard Specification for Topsoil Used for Landscaping Purposes.

1.3 SUBMITTALS

A. Informational Submittals:
   1. Certified Topsoil Analysis Reports:
      a. Indicate quantities of materials required to bring onsite
      b. Provide certification of topsoil compliance with gradation requirements.
      c. Provide certification of topsoil compliance with chemical attribute requirements.
      d. Provide certification of topsoil compliance with minimum ammonium bicarbonate DPTA (chelate) extractable nutrient requirements.
      e. Provide certification of topsoil compliance with NJDEP Environmental Standards (NJDEP Residential Direct Contact Soil Remediation Standards).

1.5 SEQUENCING AND SCHEDULING

A. TOPSOIL
   1. Where so designated as the final surface condition, Topsoil shall be placed directly upon recently backfilled and/or disturbed areas whenever conditions and the progress of construction will permit.

PART 2 - PRODUCTS

2.1 MATERIALS

A. TOPSOIL
   1. Topsoil shall consist of natural, friable, sandy loam, native upland topsoil with characteristics as defined in Section 2.1 sub-section 3. Topsoil shall be obtained from pre-approved on-site collection areas or pre-approved imported materials from off site.

2. Topsoil shall have the following characteristics; resulting from a current agronomic and full textural class analysis of a topsoil sample collected from the actual soil proposed to be used. The results of the tests shall be submitted to the CM and must include sample date and reference the collection location.
3. Composition shall be in general accordance with ASTM D5268 subject to the following:
   a. Gradation

Texture Class	Percent of Total Weight	Average %
Sand (0.05-2.0 mm dia. range)	25 - 75	50
Silt (0.002-0.05mm dia. range)	15 - 40	27.5
Clay (< 0.002 mm dia. range)	15 - 30	22.5

   b. Chemical Attributes

Chemical Attribute	Range
pH	6.8 – 7.5
Organic Matter	1% - 3%
Salinity	EC<2 mmhos/cm

   c. Topsoil shall contain the following minimum ammonium bicarbonate DPTA (chelate) extractable nutrients.

Nutrient	Concentration
Nitrogen	5 ppm air dried basis
Phosphorous	5 ppm
Potassium	30 ppm
Iron (Fe)	5 ppm

2.2 SOURCE QUALITY CONTROL

A. Topsoil Analysis/Testing: Performed by county or state soil testing service or approved certified independent testing laboratory.

PART 3 - EXECUTION

3.1 TOPSOIL PLACEMENT

A. Do not place topsoil when subsoil or topsoil is frozen, excessively wet, or otherwise detrimental to the Work.

B. Topsoil shall be placed directly upon completed backfill or soil disturbance areas whenever conditions and progress of construction permit.

C. Approved topsoil shall be placed at locations and to the thickness as designated in the Contract Documents. Prior to final placement of topsoil, any areas compacted by construction activities shall be de-compacted to at least 85 Proctor by repeated ripping in rows twelve inches (12") or less, apart, to a depth of twelve

inches (12"). All subsoil areas, including any graded areas or cut slopes should be roughened with furrows four to six inches (4"-6") deep to key the topsoil into the subsoil.

D. Water shall be applied to the topsoil in a fine spray by nozzles or spray bars so the topsoil areas will not be washed or eroded.

E. Uniformly distribute topsoil to within 1/2 inch of final grades. Fine grade topsoil eliminating rough or low areas and maintaining levels, profiles, and contours of subgrade.

F. Material shall be free from objects larger than 1-1/2 inches maximum dimension including hard clods of heavy clay, shale, decomposed shale or other subsoil, noxious weed parts (roots, seeds, or shoots), grass, refuse, stumps, roots, brush, other foreign matter, hazardous or toxic substances, and deleterious material that may be harmful to plant growth or may hinder grading, planting, or maintenance.

G. Placed topsoil shall be stabilized immediately by:
   1. Preparing and seeding with the approved seed mixture and mulch;
   2. Maintain perimeter silt fence and/or straw wattles, as necessary;
   3. Roughening and application of 2500 pounds per acre hydromulch with 150 pounds per acre approved tackifier and later seeding and mulching, per the plans.

END OF SECTION 32 91 19.13

Carroll

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE SUMMARY BID FORM-

PER LOT TOTAL LUMP SUM BID VALUE FROM BID FORM	BASE BID TOTAL ($)
17 Sanford Street	29,139.—
19 Sanford Street	29,139.—
26 Sanford Street	26,650.—
28 Sanford Street	26,650.—
30 Sanford Street	26,650.—
32 Sanford Street	26,650.—
34 Sanford Street	27,768.—
35 Sanford Street	27,768.—
36 Sanford Street	27,768.—
37 Sanford Street	27,768.—
38 Sanford Street	29,139.—
39 Sanford Street	29,139.—
40 Sanford Street	29,139.—
41 Sanford Street	27,768.—
42 Sanford Street	29,139.—
44 Sanford Street	27,768.—
46 Sanford Street	27,768.—
47 Sanford Street	27,768.—
48 Sanford Street	27,768.—
49 Sanford Street	29,139.—
51 Sanford Street	7,600.—
54 Sanford Street	27,768.—
Contingency Cost (To be used as needed for unforeseen conditions, and only after receipt of approval by Construction Manager/Owner)	$ 5,000.00
GRAND TOTAL Six Hundred Thousand Eight Hundred Fifty Three (Written)	# 600,853.— (numerical)

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

PER LOT BID VALUE SHALL BE CORRESPONDED WITH THE BASE BID SUMMARY FORM.

17 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	-/-
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	1.— 29,136 ea.
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,139.—

19 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,138.—

26 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	26,647
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	26,650.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

28 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	26,647.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	26,656.—

30 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	26,647
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	26,650.—

32 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	26,647
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	26,656.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

34 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768

36 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

38 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,136.—

35. Sanford 27,768.— E.C.

37. Sanford 29,139.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

39 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,139.—

40 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,139.—

41 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

42 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,139.—

44 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

46 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

47 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768

48 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

49 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	29,136
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	29,139.—

CONSTRUCTION SERVICES FOR THE NEIGHBORHOOD REDEVELOPMENT AND REVITALIZATION PILOT PROGRAMFOR DEMOLITION OF VACANT ABANDONED STRUCTURES IN THE CITY OF TRENTON

BID 2022-49

-BASE **BREAKDOWN** BID FORM-

51 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	7597.—
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	7,600.—

54 Sanford Street

Base Bid Items	Lump Sum Costs ($)
a. Tree Removal / Shrub & Vegetation Clearing	1.—
b. Demolition and Final Surface Restoration (as described in the Contract Documents)	27,765
c. Restoration for Party-walls/Sidewalls (if applicable)	1.—
d. New Fencing (if required)	1.—
TOTAL BASE BID ($)	27,768.—

Contingency Cost (To be used as needed for unforeseen conditions, and only after receipt of approval by Construction Manager/Owner) $ 5,000.00

GRAND TOTAL Six Hundred Thousand Eight Hundred Fifty Three (Written) $ 600,853.— (numerical)

new jersey
department of community affairs
people places progress
division of local government services

LFN 2006-21

November 1, 2006

Local Finance Notice

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PROMPT PAYMENT OF CONSTRUCTION CONTRACTS P.L. 2006, c. 96

On September 1, 2006 Governor Corzine signed Senate Bill 1726 into law as P.L. 2006, c.96 of the Laws of 2006. Known as the "Prompt Payment" Law, Chapter 96 establishes timing standards for the payment of bills by both public and private sector organizations for a wide range of construction-related contractors. The "**default**" payment procedure in the law may conflict with existing procedures in some government agencies. The bill, however, provides alternate procedures for these local units (see Section III).

Codified as N.J.S.A. 2A:30A-1 et seq., the law took affect immediately upon signing. It affects construction-related contracts of all local units (municipalities, schools, counties, fire districts, local authorities, etc.) that **took effect after September 1, 2006**. Given that the law is currently in effect, immediate attention must be paid by all local units to ensure their interests are protected.

The law intends to ensure that contractors submitting bills for completed work are paid on a timely, established schedule, and that the full chain of subcontractors receive timely payment from their hiring contractor. When payments are not made pursuant to the schedule, the law allows contractors to receive interest on the outstanding balance and, under certain circumstances, to halt work without being subject to breach of contract clauses.

The law affects all contracts for "improvements" (defined below) regardless of dollar amount. This means it affects contracts for which public bidding is required as well as those **contracts under the bid threshold** that are traditionally authorized through solicitation of quotes.

This Local Finance Notice reviews the general provisions of the law. Section VI is a "to-do" list local units should consider in meeting the obligations of the law. Because local units have a wide range of policies regarding payment of bills, careful analysis and application of the law is warranted.

Local payment procedures should **immediately** be reviewed by the chief financial officer, purchasing agent, legal counsel, consulting engineers, and other staff as appropriate in order to develop local procedures to meet the requirements of the law.

I. Definitions

The law affects contracts for above and below ground "improvements" to real property and structures. The law defines the term "structure" to mean any part of a building and other improvements to real property. The law defines the term "improve" to mean the following:

- ...to build, alter, repair or demolish any structure upon, connected with, on or beneath the surface of any real property;
- to excavate, clear, grade, fill or landscape any real property;
- to construct driveways and private roadways on real property;
- to furnish construction related materials, including trees and shrubbery, for any of the above purposes;
- ...or to perform any labor upon a structure, including any design, professional or skilled services furnished by an architect, engineer, land surveyor or landscape architect licensed or registered pursuant to the laws of this State.

This is an expansive definition and includes **all** improvements to real property. Real property is defined as "real estate" – which includes publicly owned property – including traditional infrastructure: roads, bridges, underground utilities, rights-of-way, and easements.

In other words, the law affects contracts for improvements to any land (regardless of ownership or use) and its appurtenances.

With respect to local units, the law covers contracts with general or "prime contractors." While this term may have specific meaning for certain kinds of construction contracts under the Local Public and Public School Contracts Laws, for Prompt Payment purposes, it means any contractor that has contracted directly with a local unit for construction of improvements. It permits separate identification of "prime" contractors from any subcontractors working for the prime contractor – subs have their own rights to timely payment under the law. This Notice uses "prime contractor" and "contractor" interchangeably.

II. Billing Dates and Payment Cycles

While the law does not define the term "bill," local units should interpret the term as being the same as an invoice, voucher, warrant, or whatever term the local unit uses to describe the documents a vendor submits to request payment.

The law uses the phrase "periodic payment, final payment and retainage monies" as the types of bills that are submitted on a "billing date." In the case of a periodic billing, the law defines the "billing date" as the "date specified in the contract." This requirement implies that local units should establish a periodic billing date in contracts whenever a contract will have more than one payment.

The law does not define billing dates for final payments and payments of retainage. To avoid confusion, **local unit bid specifications and contracts should define billing date for final and retainage payments as "the date the bill is received by the local unit."** The Division's position is that a fixed billing date can not be set for final or retainage payments – bills must be processed as they are received.

Local units subject to the Local Public Contracts Law should also include payments required by N.J.S.A. 40A:11-16.2, in its periodic billing schedule. This section requires a monthly payment for construction projects in excess of $100,000. This provision does not apply to the Public School Contracts Law.

N.J.S.A. 40A:5-17 establishes procedures local units (except schools) must follow for payment of bills. The law requires governing bodies to approve all bills, unless the local unit adopts other procedures that permit payments without governing body approval. Many local units have used this authority to permit the chief financial officer to pay bills in between governing body meetings, and submit a list of bills paid at the following meeting for inclusion in the official minutes. Similarly, N.J.S.A. 18A:19-1 et seq. and associated rules at N.J.A.C. 6A:23-2.11(a)1 set forth procedures to be used by public schools.

Finally, the law uses the phrase "payment cycle" to describe when actual payment is made after the governing body has approved payment. While not directly required by the law, it is concluded that the law intends that contractors have some certainty of when they will receive payment. To meet this expectation, local units should formally adopt a payment cycle and provide the information to contractors so they know when payments will be made.

III. Required Procedures and Processes

N.J.S.A. 2A:30A-2a sets out two procedures: a **default**, covering **any public or private entity** that enters into a contract for described services; and an "alternate," specifically created for public entities where the governing body must vote to authorize the payment of bills.

The **default procedure** applies to local units that **do not require governing body approval** to authorize the payment of bills. It imposes the following payment process:

- If the contractor has performed in accordance with the contract; and
- The work has been approved and certified by the owner or the owner's "authorized approving agent,"
- The owner shall pay the bill not more than 30 calendar days after the billing date;
- Provided that the billing shall be deemed "approved" and "certified" 20 calendar days after the owner receives it, unless the owner provides, **before the end** of the 20-day period, a written statement of the amount withheld and the reason for withholding payment.

The **alternate procedure** for local units applies when local policies **require governing body** approval authorizing the payment of bills. In addition to ensuring the contractor has performed in accordance with the contract and that the work has been approved and certified by the owner or the owner's "authorized approving agent," the following provisions apply:

- The 20th calendar day deadline of the default procedure to approve and certify, or decide to withhold full or partial payment **is deferred** until **the public meeting following 20 calendar days of the billing date,** at which time the bill must be approved for payment or notice provided as to why the bill or any portion of it will not be approved.
- If the billing is approved, the 30-day payment requirement of the default is replaced by the requirement that the bill be paid in the payment cycle following the meeting.

- The law anticipates prompt and timely notice to the contractor of any denial of payment, its deficiency, and what is required to resolve it.
- The alternate procedure must be defined in bid specifications and contract documents to have effect.

Because the law allows the local unit to set the "billing date" by establishing a "periodic billing date" in the contract, the local unit can control when periodic bills are submitted, and to a degree the timing of the payment process. This date should be carefully coordinated with internal or external professionals with responsibility to review bills.

It is important to note the law uses the term "public meeting" as the time when bills are approved. This includes **any meeting** of the governing body that is open to the public, in addition to the traditional meetings where formal action is taken. This includes "workshop," "agenda," 48-hour notice, or special meetings (but not closed or executive sessions or emergency meetings). **It does not permit** a local unit to designate that bills will only be approved at public meetings where "formal action" is routinely taken. Local units must arrange their meeting agendas and internal review procedures to accommodate bill payment to take place at any meeting following an established billing date.

The payment cycle is independent of meetings – the law does not require that a meeting trigger its own payment cycle.

IV. Setting Dispute Resolution Policies

Subsection "f" of N.J.S.A. 2A:30A-2 provides that all contracts for improvements **shall** include a provision that disputes **may be** submitted to an alternative dispute resolution (ADR) procedure for bills (or portions) that are not approved. While not precisely drafted, it appears that the intent of the bill is to provide that either party may submit a claim to ADR.

This is consistent with N.J.S.A. 40A:11-50 that requires local units covered by the Local Public Contracts Law to include an ADR provision in all construction contracts (regardless of value), that covers the construction work, as well as related professional service (i.e., architect, engineer) contracts.

Considering these two elements, the law requires that all local units provide for an ADR process in their bid specifications and contracts for improvements that can be used by either party.

Local units can refer to Local Finance Notice AU-98-4 for details of N.J.S.A. 40A:11-50, a general explanation of the ADR process, and suggested ADR procedures. While that law does not pertain to them, local units that fall under the Public School Contracts Law or the County College Contracts Law may find the Notice instructive.

As a general approach to ADR, the Division recommends immediate communication between the parties as a first step, with discussions at successively higher levels in the organization, then the use of an outside mediator or arbitrator as attempts to resolve the matter before court action is taken. The specific steps and procedures are the local unit's decision and should be reflected in bid specifications and contracts.

The law specifically states that ADR provisions **do not apply** to disputes concerning the bid solicitation or award process or formation of contracts.

Local units that awarded contracts after September 1, 2006 that did not include Prompt Payment provisions in their contracts should work with their contractors to develop reasonable procedures or contract amendments that do not conflict with either the Prompt Payment Law or N.J.S.A. 40A:5-17.

If an amount is withheld, the local unit is obligated to take good faith action to resolve the matter. Failure to make a timely payment permits a contractor to add interest to unpaid amounts and can, barring a good faith effort to resolve the matter, result in a work stoppage.

If the local unit challenges the billing, it should reach a clear determination of what is not satisfactory, and act accordingly to accept or reject portions of the bill. The local unit must then provide prompt and timely notice to the contractor as to why the bill was rejected and what is necessary to cure the defect. Finally, the local unit must pay the undisputed portion of the bill. Denial of payment to an entire bill should occur when the circumstances warrant it.

Combining an ADR process with other policies, including documentation to address billing disputes, can lead to what the Prompt Payment law refers to as a "good faith effort to resolve the reason for the withholding." [N.J.S.A. 2A:30A-2(d)] Engaging in a good faith effort will reduce the possibility of a contractor stopping work due to the local unit's failure to make payment.

Without a good faith effort on the part of the local unit, a contractor can stop work and not be held liable for a breach of contract (See Section V). The local unit should include in its bid specifications, contracts, and if appropriate, purchase orders covered by Prompt Payment an explanation of its ADR policies.

V. Enforcement and Exceptions

The law has enforcement provisions a contractor can use when the contractor is not paid in full as required; either by 30 calendar days after submitting the bill or, in the alternate, after the payment date of the payment cycle following the meeting where the bill was to have been approved.

There are two enforcement provisions:

1. N.J.S.A. 2A:30A-2(c) permits contractors to charge interest when a bill is not paid in accordance with the schedule and notice has not been provided as to why a bill or portion of it was not paid.

   In this case, a contractor can charge interest at the prime rate[1] plus one percent from the day after the required payment date and ending on the day the check for payment is drawn. Thus, it is exceptionally important that if a bill is not fully paid in accordance with the local unit's established schedule, the contractor is notified in writing of the amount withheld and the reasons for the withholding. It is presumed that the written notice will contain information as to how the deficiency can be cured.

   If payment is not made in a timely manner and notice is not given, the contactor may be able to recover interest. Further, care should be taken and legal counsel consulted when deciding to withhold payment. Depending on the specific circumstances, a local unit could be responsible for paying interest, if the reason for withholding payment is found to be without merit.

[1] This web link leads to an explanation of the prime rate, how it is calculated, and the current figure. The prime rate at the time of debt is incurred should be maintained until the payment is made.

If such an interest payment becomes due, the local unit is required to appropriate the necessary funds from project reserves, contingency amount, or other account.

2. N.J.S.A. 2A:30A-2(d) permits the contractor to suspend work without penalty for breach of contract. This can be implemented by the contractor after providing seven calendar days written notice to the owner if:

   a. Payment was not made as required under the law; and,

   b. The contractor was not provided a written statement of the amount withheld and the reason for the withholding; and,

   c. The payor is not engaged in a good faith effort to resolve the reason for the withholding.

In any civil action brought to collect payments the action shall be conducted inside of New Jersey and the prevailing party shall be awarded reasonable costs and attorney fees.

It is important to note that the law exempts from its provisions any transportation project as defined in N.J.S.A. 27:1B-3, if that project receives federal funding and the application of this provision would jeopardize the funding because the owner could not meet the federal standards for financial management systems as outlined in 49 C.F.R. 18.20.

VI. Actions Local Units Should Take

Local units that authorize bills to be paid without governing body approval should review internal procedures and controls to ensure staff is prepared to meet the 20 day approval/30 day payment cycle deadlines. These controls can include establishing "periodic billing dates" in contracts.

If governing body approval **is required**, local units must immediately review their policies and develop procedures and internal controls to comply with the law.

Regardless of the method of bill payment, local units can consider several courses of action, with appropriate variations based on local practices:

1. **Review bill paying procedures, resolution, or ordinance.** N.J.S.A. 40A:5-17 sets forth the "normal" process for authorizing payment of bills (which requires governing body approval), but allows local units to adopt their own procedure. Local policies can establish different practices depending on the type of obligation being paid; i.e., a policy for construction contracts.

2. **Establish or define billing dates for contracts covered by Prompt Payment.** This can be done as a standard for all contracts, or established on a contract-by-contract basis in specifications. This should include the "periodic payment" date for contracts with more than one payment, and the "billing date" for all other contracts and payments (i.e., the date the bill is received by the local unit). This provision can also provide that if a fixed billing date is missed, the bill is deferred to the next cycle.

3. **Establish dates for the unit's "payment cycle."** The payment cycle should provide for a reasonable time for payment to be made after approval of bills. It should be consistent with other bills approved at the same time. It is in the local unit's interest to let their contractors know when they can expect payment.

4. **Review paper flow and contractual arrangements for review of bills.** This may involve amending contracts with professionals (i.e., engineers or architects) that review bills to set requirements for their timely review of bills. This also applies to training internal staff on new

procedures. In particular, finance staff should be trained to pay careful attention to incoming bills, and if appropriate, ensure logging, transmittal, and tracking of bills.

5. When governing bodies approve bills, **add "payment of bills" as a routine agenda item for all public meetings** to allow the governing body to approve or reject any bills or portion of one whenever they meet.

6. When a bill or portion of a bill is denied, immediately notify the contractor **in writing** of any denial of payment, its deficiency, and what is required to remedy the deficiency.

7. **Add a bill payment provision/schedule to bid specifications and contracts.** The law permits use of the alternate governing body approval practice **only** if it is reflected in bid specifications and contract documents. All bid specifications, contract documents, and purchase order "boilerplate" text (as appropriate to local circumstances) should be amended to describe the process used by the local unit for approval and payment of bills, including billing dates and payment dates.

8. **Update outstanding contracts and bid proposals.** The law does not apply to contracts for the improvement of structures awarded before the effective date of September 1, 2006. Local units may currently have outstanding bid advertisements or have received bids but not yet awarded contracts. In these cases, local officials should act, as appropriate to amend bid specifications through the addenda process, or work with legal counsel to amend pending or issued contracts to include the appropriate language, or work with contractors to otherwise meet the intent of the law.

9. **Review alternative dispute resolution provisions for construction contracts.** N.J.S.A. 40A:11-50 has required for several years that all construction contracts include an alternative dispute resolution process. Local units should carefully review their existing procedure in context of Prompt Payment and update it as appropriate.

VII. Conclusion

The Prompt Payment Law presents new challenges to local units in managing their payment procedures. Its immediate effect adds to that challenge. Local unit officials should act expeditiously to ensure they do not violate the law while they consider implementing long-term policies.

Local finance officials can use GovConnect to share information via the Discussion Forums. They can submit sample language to the Division for posting in the Chief Financial Officer, Authority, and Fire District Document Libraries.

As there are many variations on policies that can be adopted, the Division is not at this time recommending specific language for inclusion in bid specifications and contracts. Local units are urged to carefully review this Notice and the law to adopt practices that meet their needs, and the intent and spirit of the law.

Approved: Susan Jacobucci, Director

Table of Web Links

Page	Shortcut text	Internet Address
4	Local Finance Notice	Local Finance Notice AU-98-4
5	Prime Rate	Wall Street Journal Prime Rate

PROMPT PAYMENT STATUTORY REFERENCES

CHAPTER 96, P.L. 2006

AN ACT concerning the prompt payment of construction contracts and amending P.L.1991, c.133.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Section 1 of P.L.1991, c.133 (C.2A:30A-1) is amended to read as follows:

C.2A:30A-1 Definitions.

1. As used in this act:

"Billing" means, in accordance with the terms and definitions of the applicable contract, any periodic payment, final payment, written approved change order or request for release of retainage.

"Prime contractor" means a person who contracts with an owner to improve real property.

"Improve" means: to build, alter, repair or demolish any structure upon, connected with, on or beneath the surface of any real property; to excavate, clear, grade, fill or landscape any real property; to construct driveways and private roadways on real property; to furnish construction related materials, including trees and shrubbery, for any of the above purposes; or to perform any labor upon a structure, including any design, professional or skilled services furnished by an architect, engineer, land surveyor or landscape architect licensed or registered pursuant to the laws of this State.

"Structure" means all or any part of a building and other improvements to real property.

"Owner" means any person, including any public or governmental entity, who has an interest in the real property to be improved and who has contracted with a prime contractor for such improvement to be made. "Owner" shall be deemed to include any successor in interest or agent acting on behalf of an owner.

"Prime rate" means the base rate on corporate loans at large United States money center commercial banks.

"Real property" means the real estate that is improved upon or to be improved upon.

"Subcontractor" means any person who has contracted to furnish labor, materials or other services to a prime contractor in connection with a contract to improve real property.

"Subsubcontractor" means any person who has contracted to furnish labor, materials or other services to a subcontractor in connection with a contract to improve real property.

2. Section 2 of P.L.1991, c.133 (C.2A:30A-2) is amended to read as follows:

C.2A:30A-2 Payment to prime contractor, subsubcontractor, timely payment; exceptions; disputes; resolution.

2. a. If a prime contractor has performed in accordance with the provisions of a contract with the owner and the billing for the work has been approved and certified by the owner or the owner's authorized approving agent, the owner shall pay the amount due to the prime contractor for each periodic payment, final payment or retainage monies not more than 30 calendar days after the billing date, which for a periodic billing, shall be the periodic billing date specified in the contract. The billing shall be deemed approved and certified 20 days after the owner receives it unless the owner provides, before the end of the 20-day period, a written statement of the amount withheld and the

reason for withholding payment, except that in the case of a public or governmental entity that requires the entity's governing body to vote on authorizations for each periodic payment, final payment or retainage monies, the amount due may be approved and certified at the next scheduled public meeting of the entity's governing body, and paid during the entity's subsequent payment cycle, provided this exception has been defined in the bid specifications and contract documents.

b. If a subcontractor or subsubcontractor has performed in accordance with the provisions of its contract with the prime contractor or subcontractor and the work has been accepted by the owner, the owner's authorized approving agent, or the prime contractor, as applicable, and the parties have not otherwise agreed in writing, the prime contractor shall pay to its subcontractor and the subcontractor shall pay to its subsubcontractor within 10 calendar days of the receipt of each periodic payment, final payment or receipt of retainage monies, the full amount received for the work of the subcontractor or subsubcontractor based on the work completed or the services rendered under the applicable contract. In the case of ongoing work on the same project for which partial payments are made, the amount of money owed for work already completed shall only be payable if the subcontractor or subsubcontractor is performing to the satisfaction of the prime contractor or subcontractor, as applicable.

c. If a payment due pursuant to the provisions of this section is not made in a timely manner, the delinquent party shall be liable for the amount of money owed under the contract, plus interest at a rate equal to the prime rate plus 1%. Interest on amounts due pursuant to this section shall be paid to the prime contractor, subcontractor or subsubcontractor for the period beginning on the day after the required payment date and ending on the day on which the check for payment has been drawn. The provisions of this subsection c. shall not apply to any transportation project as defined in section 3 of P.L. 1984, c.73 (C.27:1B-3), if that project receives federal funding and the awarding agency has been notified by the federal government that it will be classified as a high risk grantee pursuant to 49 C.F.R. 18.12.

d. A prime contractor, subcontractor or subsubcontractor may, after providing seven calendar days' written notice to the party failing to make the required payments, suspend performance of a construction contract, without penalty for breach of contract, until the payment required pursuant to this section is made, if the contractor, subcontractor or subsubcontractor: is not paid as required by this section; is not provided a written statement of the amount withheld and the reason for the withholding; and the payor is not engaged in a good faith effort to resolve the reason for the withholding. The provisions of this subsection d. shall not apply to any transportation project as defined in section 3 of P.L. 1984, c.73 (C.27:1B-3), if that project receives federal funding and the application of this provision would jeopardize the funding because the owner could not meet the federal standards for financial management systems as outlined in 49 C.F.R. 18.20.

e. (1) The rights, remedies or protections provided by this section for prime contractors, subcontractors and subsubcontractors shall be in addition to other remedies provided pursuant to any other provision of State law. To the extent that the provisions of this section provide greater rights, remedies or protections for prime contractors, subcontractors and subsubcontractors than other provisions of State law, the provisions of this section shall supersede those other provisions.

(2) No provision of this section shall be construed as restricting in any way the rights or remedies provided by any other applicable State or federal law to an owner who is a resident homeowner or purchaser with respect to the real property being improved.

f. All contracts for the improvement of structures entered into after the effective date of P.L.2006, c.96 between owners, prime contractors, subcontractors or subsubcontractors shall provide that disputes regarding whether a party has failed to make payments required pursuant to this section may be submitted to a process of alternative dispute resolution. Alternative dispute resolution permitted by this section shall not apply to disputes concerning the bid solicitation or award process, or to the

formation of contracts or subcontracts. In any civil action brought to collect payments pursuant to this section, the action shall be conducted inside of this State and the prevailing party shall be awarded reasonable costs and attorney fees.

3. This act shall take effect immediately, but shall not apply to contracts for the improvement of structures entered into before the effective date.

Approved September 1, 2006.

40A:5-17. Approval and payment of claims and required general books of account

Approval and payment of claims and required general books of account. a. Approval of claims. The governing body shall approve or disapprove all claims. In the case of a county, other than a county which has adopted a form of government pursuant to the "Optional County Charter Law," P.L. 1972, c. 154 (C. 40:41A-1 et seq.), the governing body may, by resolution, designate one person who may approve claims between meetings of the governing body. The specified designee shall be chosen from the following positions: the certified financial officer, chief fiscal officer, county administrator, director of finance, treasurer or comptroller. Any approval by the designated person shall be presented to the county governing body at its next meeting for ratification, except that, prior to being paid, such vouchers shall be brought to the attention of the freeholder who has responsibility for the designee. The county governing body may establish a maximum dollar amount for which payment may be approved without prior approval of the governing body. Claims shall be approved or disapproved in the manner prescribed by rules made and promulgated by the bureau unless the governing body adopts an ordinance or resolution, as may be appropriate, in the case of a county, or an ordinance, in the case of a municipality, including the following provisions:

(1) Designating an approval officer with the title of certifying and approval officer;

(2) Prescribing the duties of the approval officer, including the making of certifications required by 40A:5-16b., ascertaining the existence of proper and sufficient appropriations for the payments to be made and determining that there is legal authority for the payments, evidenced by action of a purchasing department or agent or officer in respect to the goods or services ordered and the incurring of the expense therefor;

(3) Prescribing the procedure for approving and certifying to the proper officer claims for payments and drawing checks therefor;

(4) Prescribing the procedure for certifying approved claims to the governing body and regulating its action of approval or disapproval thereon.

b. Payment of claims. A resolution or an ordinance adopted pursuant to this section may also provide a method of disbursing moneys or payment of claims approved, but if it does not so provide the method shall be as follows:

(1) In the case of a county organized pursuant to the provisions of the "Optional County Charter Law" (P.L. 1972, c. 154; C. 40:41A-1 et seq.), by check issued upon the requisition of and signed by the chief executive officer and countersigned by the treasurer, and in all other counties by check issued upon requisition of the clerk of the board of chosen freeholders, signed by the county treasurer and countersigned by such other officer or officers as are designated by ordinance or resolution of the governing body;

(2) In the case of a municipality, by check drawn on the municipality, signed by the mayor or other chief executive officer and the municipal clerk and countersigned by such other officer or officers as are designated by ordinance.

c. Required general books of account. The bureau shall prescribe the kind and manner of keeping of general books of account for the financial officers of the local units and said officers shall be required to keep and maintain said books.

Amended by L. 1985, c. 127, s. 1, eff. April 12, 1985.

40A:11-16.2 Partial payments; deposit bonds.

1. Any contract, the total price of which exceeds $100,000.00, entered into by a contracting unit involving the construction, reconstruction, alteration, repair or maintenance of any building, structure, facility or other improvement to real property, shall provide for partial payments to be made at least once each month as the work progresses, unless the contractor shall agree to deposit bonds with the contracting unit pursuant to P.L.1979, c.152 (C.40A:11-16.1).

L.1979,c.464,s.1; amended 1999, c.440, s.25.

40A:11-50. Process of resolution for construction contract disputes

1. All construction contract documents entered into in accordance with the provisions of P.L.1971, c.198 (C.40A:11-1 et seq.) after the effective date of P.L.1997, c.371 (C.40A:11-50) shall provide that disputes arising under the contract shall be submitted to a process of resolution pursuant to alternative dispute resolution practices, such as mediation, binding arbitration or non-binding arbitration pursuant to industry standards, prior to being submitted to a court for adjudication. Nothing in this section shall prevent the contracting unit from seeking injunctive or declaratory relief in court at any time. The alternative dispute resolution practices required by this section shall not apply to disputes concerning the bid solicitation or award process, or to the formation of contracts or subcontracts to be entered into pursuant to P.L.1971, c.198 (C.40A:11-1 et seq.).

Notwithstanding industry rules or any provision of law to the contrary, whenever a dispute concerns more than one contract, such as when a dispute in a contract involving construction relates to a contract involving design, architecture, engineering or management, upon the demand of a contracting party, other interested parties to the dispute shall be joined unless the arbitrator or person appointed to resolve the dispute determines that such joinder is inappropriate. Notwithstanding industry rules or any provision of law to the contrary, whenever more than one dispute of a similar nature arises under a construction contract, or related construction contracts, upon the demand of a contracting party, the disputes shall be joined unless the arbitrator or person appointed to resolve the dispute determines that the disputes are inappropriate for joinder.

For the purposes of this section, the term "construction contract" means a contract involving construction, or a contract related thereto concerning architecture, engineering or construction management

L.1997, c.371.