SCOPE OF WORK

ELECTRICAL BUILDING #20 RENOVATIONS

DOT Fernwood Complex
West Trenton, Mercer County, N.J.

PROJECT NO. T0470-00

STATE OF NEW JERSEY

Honorable Chris Christie, Governor
Honorable Kim Guadagno, Lt. Governor

DEPARTMENT OF THE TREASURY

Andrew P. Sidamon-Eristoff, Treasurer

DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION

Steven Sutkin, Director
Richard Flodmand, Deputy Director
Raymond A. Arcario, Deputy Director

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TABLE OF CONTENTS

SECTION **PAGE**

I. OBJECTIVE

The objective of this project is to reprogram the interior and exterior spaces of the DOT Electrical Building #20, and make renovations that will provide more efficient administration, working, and storage areas for the traffic control devices that are assembled and tested in the building.

II. CONSULTANT QUALIFICATIONS

A. CONSULTANT & SUB-CONSULTANT PRE-QUALIFICATIONS

The Consultant shall be a firm pre-qualified with the Division of Property Management & Construction (DPMC) in the P001 Architectural Professional Discipline and have in-house capabilities or Sub-Consultants pre-qualified with DPMC in all other Engineering and Specialty Disciplines necessary to complete the project as described in this Scope of Work (SOW).

III. PROJECT BUDGET

A. CONSTRUCTION COST ESTIMATE (CCE)

The initial Construction Cost Estimate (CCE) for this project is $870,209.

The Consultant shall use their cost estimating experience to evaluate this SOW and provide in writing an independent CCE for this project with their technical proposal. The Consultant shall provide a detailed description identifying the development of the CCE.

B. CURRENT WORKING ESTIMATE (CWE)

The Current Working Estimate (CWE) for this project is $1,179,215.

The CWE includes the construction cost estimate and all consulting, permitting and administrative fees.

The CWE is the Client Agency's financial budget based on this project Scope of Work and shall not be exceeded during the design and construction phases of the project unless DPMC approves the change in Scope of Work through a Contract amendment.

C. COST ESTIMATING

All CCE under $750,000 may be prepared by the Consultant's in-house staff or their Sub-Consultant's staff during each design phase of the project. However, if the CCE is $750,000 or larger, the Consultant or Sub-Consultant providing the estimate must be pre-qualified with DPMC in the P025 Estimating/Cost Analysis Specialty Discipline.

All cost estimates shall be adjusted for regional location, site factors, construction phasing, premium time, building use group, location of work within the building, temporary swing space, security issues, and inflation factors based on the year in which the work is to be performed.

All cost estimates must be submitted on a DPMC-38 Project Cost Analysis form at each design phase of the project with a detailed construction cost analysis in CSI format (2004 Edition) for all appropriate divisions and sub-divisions. The Project Manager will provide cost figures for those items which may be in addition to the CCE such as art inclusion, CM services, etc. and must be included as part of the CWE. This cost analysis must be submitted for all projects regardless of the Construction Cost Estimate amount.

D. CONSULTANT'S FEES

The construction cost estimate for this project ***shall not*** be used as a basis for the Consultant's design and construction administration fees. The Consultant's fees shall be based on the information contained in this Scope of Work document and the observations made and/or the additional information received during the pre-proposal meeting.

IV. PROJECT SCHEDULE

A. SCOPE OF WORK DESIGN & CONSTRUCTION SCHEDULE

The following schedule identifies the estimated design and construction phases for this project and the estimated durations.

PROJECT PHASE	ESTIMATED DURATION (Calendar Days)
1. Program, Energy Savings, Hazardous Material Phase	**30**
• *Project Team, OES, DPMC Plan/Code Review & Comment*	14
2. Schematic Design Phase 25% (Minimum)	**30**
• *Project Team & DPMC Plan/Code Unit Review & Comment*	14
3. Design Development Phase 50% (Minimum)	**30**
• *Project Team & DPMC Plan/Code Unit Review & Comment*	14
4. Final Design Phase 100%	**30**
• *Project Team & DPMC Plan/Code Unit Review & Approval*	14
5. Permit Application Phase	**7**
• *Issue Permit*	
6. Bid Phase	**35**
7. Award Phase	**21**
8. Construction Phase	**180**

B. CONSULTANT'S PROPOSED DESIGN & CONSTRUCTION SCHEDULE

The Consultant shall submit a project design and construction bar chart schedule with their technical proposal that is similar in format and detail to the schedule depicted in **Exhibit 'A'**. The bar chart schedule developed by the Consultant shall reflect their recommended project phases, phase activities, activity durations.

The Consultant shall estimate the duration of the project Close-Out Phase based on the anticipated time required to complete each deliverable identified in Section XIV of this document entitled "Project Close-Out Phase Contract Deliverables" and include this information in the bar chart schedule submitted.

A written narrative shall also be included with the technical proposal explaining the schedule submitted and the reasons why and how it can be completed in the time frame proposed by the Consultant.

This schedule and narrative will be reviewed by the Consultant Selection Committee as part of the evaluation process and will be assigned a score commensurate with clarity and comprehensiveness of the submission.

C. CONSULTANT DESIGN SCHEDULE

The Project Manager will issue the Consultant's approved project schedule at the first design kickoff meeting. This schedule will be binding for the Consultant's activities and will include the start and completion dates for each design activity. The Consultant and Project Team members shall use this schedule to ensure that all design milestone dates are being met for the project. The Consultant shall update the schedule to reflect performance periodically (minimally at each design phase) for the Project Team review and approval. Any recommendations for deviations from the approved design schedule must be explained in detail as to the causes for the deviation(s) and impact to the schedule.

D. BID DOCUMENT CONSTRUCTION SCHEDULE

The Consultant shall include a construction schedule in Division 1 of the specification bid document. This schedule shall contain, at minimum, the major activities and their durations for each trade specified for the project. This schedule shall be in "bar chart" format and will be used by the Contractors as an aid in determining their bid price. It shall reflect special sequencing or phased construction requirements including, but not limited to: special hours for building access, weather restrictions, imposed constraints caused by Client Agency program schedules, security needs, lead times for materials and equipment, anticipated delivery dates for critical items, utility interruption and shut-down constraints, and concurrent construction activities of other projects at the site and any other item identified by the Consultant during the design phases of the project.

E. CONTRACTOR CONSTRUCTION PROGRESS SCHEDULE

The Contractor shall be responsible for preparing a coordinated combined progress schedule with the Sub-Contractors after the award of the contract. This schedule shall meet all of the requirements identified in the Consultant's construction schedule. The construction schedule shall be completed in accordance with the latest edition of the Instructions to Bidders and General Conditions entitled, "Article 9, Construction Progress Schedule" (No CPM).

The Consultant must review and analyze this progress schedule and recommend approval/disapproval to the Project Team until a satisfactory version is approved by the Project Team. The Project Team must approve the baseline schedule prior to the start of construction and prior to the Contractor submitting invoices for payment.

The Consultant shall note in Division 1 of the specification that the State will not accept the progress schedule until it meets the project contract requirements and any delays to the start of the construction work will be against the Contractor until the date of acceptance by the State.

The construction progress schedule shall be reviewed, approved, and updated by the Contractor of schedule, Consultant, and Project Team members at each regularly scheduled construction job meeting and the Consultant shall note the date and trade(s) responsible for project delays (as applicable).

V. PROJECT SITE LOCATION & TEAM MEMBERS

A. PROJECT SITE ADDRESS

The location of the project site is:

Department of Transportation
Fernwood Complex
1035 Parkway Ave & Lower Ferry Road, PO Box 600
West Trenton, New Jersey 08625-0600

See **Exhibit 'B'** for the project site plan.

B. PROJECT TEAM MEMBER DIRECTORY

The following are the names, addresses, and phone numbers of the Project Team members.

1. DPMC Project Manager:

Name:	Martin Conrad, Project Design Manager
Address:	Division Property Management & Construction
	20 West State Street, 3rd Floor
	Trenton, NJ 08625
Phone No:	(609) 984-1656
E-Mail No:	martin.conrad@treas.state.nj.us

2. Client Agency Representative:

Name:	James Henry, Project Engineer
Address:	Department of Transportation
	Bureau Facility Planning, Engineering, & Design
	1035 Parkway Avenue, PO Box 600
	West Trenton, NJ 08625-0600
Phone No:	(609) 530-3678
E-Mail No:	james.henry@dot.state.nj.us

VI. PROJECT DEFINITION

A. PROJECT BACKGROUND

The DOT Electrical Building #20 is a one story masonry and glass structure that houses approximately 25 personnel that store, assemble, test, and repair traffic signalization equipment. The building is approximately 60 years old and all of its equipment and systems have reached the end of their useful life. This project is intended to reprogram the interior spaces of the building to provide more efficient administrative, working, and storage areas for the work being performed in the facility and upgrade the building to realize the potential energy savings by installing new equipment, systems, and insulation.

This project is also intended to reprogram the exterior Storage Area of the building to provide for more efficient use of the existing storage space and for the storage and movement of vehicles through the space.

B. FUNCTIONAL DESCRIPTION OF THE FACILITY

The DOT Ewing Headquarters Fernwood Complex is the largest of the DOT facilities within the State. It provides workspace for approximately 1,950 employees and is comprised of 42 buildings ranging in age from 23 years to over 80 years old. The total square footage of the buildings in the complex is 861,274 square feet.

Electric and gas utilities are provided by the Public Service Electric and Gas Company. The Central Steam Plant houses two (2) 600 Hp Cleaver Brooks High Pressure Steam Boilers which provides heat to various buildings in the complex. The Plant also houses two (2) 700 Ton Trane Centrifugal Electric Chillers which provides chilled water for the air conditioning of the MOB, F&A, and E&O Buildings.

C. FUNCTIONAL DESCRIPTION OF THE BUILDING

The Electrical Building #20 is a one story masonry and glass structure built on a concrete slab approximately 60' wide x 260' long. It has exposed metal roof trusses and wood structural decking covered with a standing metal seam roof system. The roof has damaged areas that have been patched to prevent water infiltration.

The building contains numerous block wall offices, labs, workshops, stock rooms, and toilet rooms for the operating personnel. The main aisle and large storage bay is approximately 26' high and is open to the roof deck. The building is not insulated. See **Exhibit 'C'** for the existing building floor plan layout.

The building is heated with steam utilizing ceiling mounted fan coil units and the office areas are cooled in the summer with window air conditioners. The industrial steel sash windows are the predominant fenestration and in unsatisfactory condition. They are not weather stripped and do not tightly close due to rusting components. Ventilation is accomplished with two large window fans.

Material is stored in wire cages located on the floor and mezzanine areas located over the office, labs, of the building and overflow is located in a series of shipping containers or in the open adjoining fenced storage yard.

Lighting is provided with a combination of fluorescent and single pendant incandescent fixtures suspended from the ceiling. There are no fire detection or suppression systems in the building.

Traffic signalization equipment is shipped or received using DOT trucks that enter through bay doors located on each end of the building. Some trucks are parked in the main aisle of the building or in the yard between buildings #20 and #17 at night.

The storage yard is divided by an enclosed walkway that connects building #20 to the adjacent building #17. The steam supply line for building #17 is enclosed within the walkway structure. See **Exhibit 'C'**, 8 pages, for interior and exterior photographs of building #20.

VII. CONSULTANT DESIGN RESPONSIBILITIES

A. PROGRAM PHASE

This phase of the project is intended to review, develop, and document the detailed requirements of the project including, but not limited to the project goals and objectives, design objectives and limitations, building interior space requirements; programming operational spatial relationships and options for flexibility; need for special equipment, building interior and exterior upgrades, utility and system upgrades; site requirements; project schedule and cost evaluations.

1. Narrative Description of the Project:

Prepare a brief project summary that describes the design requirements necessary to renovate the Electrical Building #20 so that it will comply with the operational needs of DOT.

2. Data Gathering:

Obtain and review all available facility documentation that is related to this project such as reports, studies, surveys, equipment manuals, as-built design drawings, maintenance records, etc. The State does not attest to the accuracy of the information provided and accepts no responsibility for the consequences of errors by use of any information and material contained in the documentation provided.

It shall be the responsibility of the Consultant to verify the contents and assume full responsibility for any determination or conclusion drawn from the material used. If the information provided is insufficient, the Consultant shall take the appropriate actions necessary to obtain the additional information required for the project at no additional cost to the State.

All original documentation shall be returned to the provider at the completion of the project.

3. Building Condition Analysis:

Document and evaluate the physical condition of the building envelope including the interior and exterior structural components and architectural finishes to determine what can be reused and what shall be repaired or replaced based on life safety, code, handicap accessibility, and the age and condition of the items. See **Exhibit 'C'**, 8 pages, for various photographs of the interior and exterior areas of the building.

Document and evaluate the utilities and systems of the building to determine what can be reused and what shall be repaired or replaced based on their capacity, age, physical condition, code compliance, location, and compatibility with the new systems and equipment to be installed as part of this project. Utilities and systems shall include, but not be limited to: lighting, plumbing, electrical, fire protection, HVAC, sewer, water, gas, security, storage, data, and telecommunication. Develop an itemized list of recommended repairs, replacements, or provisions for new utilities or systems if they do not exist and their related costs. Determine if spare capacity should be provided with the utility and system upgrades.

4. Building Space Planning Analysis:

DOT employed the services of a Consultant to do a preliminary building programming and renovation analysis to determine the basic scope of work and construction cost for this project. Review the analysis recommendations listed below and the proposed building floor plan with the Project Team to ensure the information is still current. See **Exhibit 'E'** for the proposed Electrical Building #20 floor plan layout. The Consultant for this project may make changes to the recommendations identified below with the approval of the Project Team ensuring that there is no increase to the project construction cost. The items to review shall include, but not be limited to the following:

a. Vestibule Entrance: Provide a vestibule entrance to the new office area location in the building.
b. Supervisor's Office: Accommodate four (4) supervisor's work stations, file cabinets, and office equipment including voice and data. Note that all furniture, equipment, cabinets, etc. will be provided and moved by DOT personnel.
c. Regional Supervisor's Office: Provide a Regional Supervisor's office of an acceptable area for the functions to be performed and the State space design guidelines.
d. Training Room/Lunch Room: Provide a training room and lunch room to accommodate thirty (30) people. It shall include a kitchenette unit with a refrigerator/freezer, sink, microwave, and two burner cook top stove to be purchased and installed by the Contractor as part of this project. There are to be thirty (30) lockers along the walls to be provided and moved by DOT personnel.
e. Men's & Women's Toilet Rooms: Provide toilet rooms for the maximum anticipated male/female building population and that is designed to meet all Barrier Free and Energy Efficiency requirements.
f. Cabinet Assembly Room: Provide a cabinet assemble room of a minimum 500 square feet.
g. Testing Room: Provide a testing room of a minimum 400 square feet.
h. Data Reference Room: Provide a data reference room of a minimum of 400 square feet.

i. Warehouse: Provide an interior warehouse storage area of a minimum 11,000 square feet. A new 14' x 14' overhead door is required from the storage yard on the west side. The existing overhead door on the north side shall remain. See **Exhibit 'E'**. Man doors for Code required egress and access to the storage yard must be provided. The warehouse shall be subdivided into the following areas with wire mesh partitions:
   - Cabinet Storage of a minimum 1,400 square feet.
   - Eight (8) 400 square feet Storage Compartments.
   - Two (2) Storage Mezzanines: provide two storage mezzanines, one at the south end of the building over the office areas, and one over the floor space at the north end the building. They shall be steel framed with bar grate floor (north end), stairs, and loading gate.

j. Electrical Equipment & Furniture Inventory: Inventory all of the existing building electrical equipment, furniture, cabinets, workbenches, lockers, and any other item that is to be relocated to the new programmed spaces in the Electrical Building #20. The listing shall include their dimensioned sizes, special material handling requirements, power requirements, special receptacle requirements, BTU output, etc. This information will be used to locate the items on the new building floor plan, determine outlet types and locations, determine the lighting design, and size the electrical and HVAC systems.

k. Utility Capacities: Survey all of the building utilities to determine their capacities. Develop a table that identifies the maximum capacity rating of each existing utility, the available capacity remaining based on present usage, and the capacities anticipated for the new building renovations. Based on this information, determine the utilities that must be upgraded for this project and their related costs.

l. Utility Allowance: The Consultant shall estimate the costs associated with the potential upgrades to the building utilities and include this amount in their fee proposal line item entitled **"Utility Upgrade Design Allowance".** The balance of funds not used in this allowance shall be returned to the State at the completion of the project.

m. Metal Canopy: Provide a new pre-engineered metal canopy along Building #17. See **Exhibit 'F'** for the proposed canopy location. The canopy size shall be based on the approved truck parking design. The minimum clearance under the canopy shall be 15' and include exterior lighting. The canopy shall be used for parking of vehicles and include electrical outlets or heater blocks for the diesel powered vehicles.

n. Trailer: Building #29 is a trailer used as an inspector's office and shall be removed from the storage yard. See **Exhibit 'E'** for the trailer location. The trailer is on wheels and has phone and electric connections. There is no water or sanitary utilities connected to the trailer. The DOT has first salvage rights of the trailer.

o. Steam Pipe: The steam piping running between the Electrical Building #20 and Building #17 shall be relocated underground. The enclosed walkway between the buildings shall be removed.

p. Fence: A new 6' high chain link fence shall be constructed between Building #17 and Building #20 at each end for security. New 30' long sliding gates with locks shall be installed to provide access to the storage yard between the buildings.

q. Parking: Provide parking spaces with block heater outlets along Building #17. Review the elevations of the paved storage yard and patch, repair, or remove any obstructions to obtain a proper surface for vehicle traffic. See **Exhibit 'F'** for the parking spaces. Note that angled parking shall be considered to obtain the maximum number of spaces under the canopy. The DOT personnel will strip the paved area when the canopy is installed.

r. Exterior Storage Area: Reprogram the exterior storage area between Building #20 and Building #17 to provide for more efficient use of the stored materials and the movement of vehicles through the space.

5. Building Blocking Diagram:

Based on the building and site program analysis, prepare an updated blocking diagram identifying the location and allotted space for the building functions.

Prepare a detailed relocation and sequencing plan considering the building will be occupied during construction. The plan shall identify temporary storage spaces, personnel swing space, phased construction schedule identifying the order in which building areas are to be renovated, location and status of each subdivision during the project, strategies to minimize disruption to the DOT operation, and reduce the number of personnel relocations.

6. Building Program Report:

Provide a "Draft" Building Program Report describing the recommended building renovations including, but not limited to the following: dimensioned floor plans depicting main office areas, workstations, support and ancillary work areas, and the equipment and furniture locations. The report shall also include a listing, by subdivision, of all electrical and electronic equipment for the DOT operational requirements.

Provide a preliminary determination for recommended building renovations, utility and system upgrades or modifications, and a preliminary project construction cost estimate for each item and the project construction schedule.

Provide six (6) copies of the "Draft" Program Report in an 8½ " x 11" bound booklet that contains a Table of Contents, and an Executive Summary that provides the overall objective of the program, the observations made, and the justification for each recommendation or conclusion proposed to meet the goal of the project, and the preliminary project cost estimate and schedule.

Note that the renovations to the building shall be prioritized and some recommendations may need to be limited or postponed to enable the project to be completed within the funding available.

Make an oral presentation of the "Draft" Program Report to the Project Team members for review and approval.

After review by the Project Team, make all required corrections or changes and submit the "Final" Program Report. The final submission shall include six (6) bound copies of the report with reduced blocking and stacking diagrams, all documentation used to develop the report, and six (6) full size copies of the diagrams.

At the completion of this programming phase the Project Team will analyze the Program Report document and authorize the initiation of the design phase of the project.

B. ENERGY SAVINGS PHASE

1. New Equipment & Systems Energy Savings:

The Consultant shall identify the proposed energy savings for the new equipment and systems selected for the building renovation using the ASHRAE 90.1 building energy design standard criteria.

Calculate the projected cost savings; with supporting assumptions, for each item selected based on improved equipment efficiencies, material insulation values, reduced fuel and other utility costs, etc.

2. Energy Savings Report:

Prepare six (6) copies of an Energy Savings Report for distribution to the Project Manager and John Rhodes, Director, Office of Energy Savings. The report shall be an 8½" x 11" bound booklet that contains a Table of Contents and an Executive Summary that provides the overall objective of the project and the total annual savings of the new equipment and systems selected in both energy consumption and costs.

For each energy savings component, the report shall identify existing annual energy consumption and costs, and the anticipated annual energy consumption and cost savings for the proposed replacement equipment and systems.

Energy consumption shall be presented as follows:

a. Electric – KWh
b. Heating oil and diesel fuel – gallons
c. Natural gas – BTU's, therms or decatherms

All supporting documentation such as calculations, worksheets, compliance forms, fuel costs, manufacturer's technical data, catalog cuts, correspondence, meeting minutes, and any other data obtained shall be included in the report appendix for reference.

All cost data shall be in sufficient detail for each related division of the new CSI 2004 format and shall also be summarized on the DPMC 38 Cost Analysis form(s).

Also provide a preliminary project construction schedule for the installation of the new equipment and systems.

C. HAZARDOUS MATERIALS PHASE

1. Asbestos:

The Department of Transportation reports that asbestos has been abated from Buildings #17 and #20. The Consultant shall be responsible for reviewing all documentation to verify that no hazardous materials will be impacted by any proposed construction work for this project. The Consultant shall employ the services of a firm certified by DCA and pre-qualified with DPMC in the P038 Asbestos Safety Control Monitoring Specialty Discipline (ASCM). A list of DPMC pre-qualified firms may be obtained from: WWW.state.nj.us/treasury/dpmc/construction/consult_search.html.

This ASCM firm shall review the documentation, survey the buildings and, if deemed necessary, collect samples of the materials in all areas identified to be impacted by the construction work using the "AHERA PROTOCOL" and analyze them for the presence of asbestos. If present, the ASCM firm, under the direction of the Consultant, shall prepare asbestos abatement design documents which shall be incorporated in the project design documents prepared by the Consultant and will be bid as one package. The ASCM firm shall also be responsible for the submission of the design documents to the DCA Asbestos Control Group for review and approval.

The Consultant shall state in the design documents that after award of the construction contract, the principal Contractor shall complete the "Construction Permit Application", secure the asbestos permit from DCA, and pay for all associated fees.

DCA will issue the Certificate of Approval when the project is complete.

It shall be the responsibility of the principal Contractor to employ the services of a qualified asbestos sub-Contractor. The Consultant shall ensure that the scheduled asbestos removal has minimal impact on all construction activities and project schedules. The ASCM firm shall provide monitoring, testing, air samples, and all other required construction administration services during the asbestos abatement activities including submission of all Hazardous Waste Manifests to the DPMC Project Manager at the completion of the project.

2. Lead:

The Consultant shall employ the services of a firm pre-qualified with DPMC in the P065 Lead Paint Evaluation/Inspection Specialty Discipline. This firm shall collect random samples of paint, caulk, etc. in all areas identified to be impacted by the construction work and analyze them for the presence of lead.

If lead is detected, the design documents shall specify that all required construction safety procedures shall adhere to the "Federal Lead in Construction Standards". A lead paint abatement project will not be conducted.

The design documents shall also state that the Contractor shall be responsible for any and all air samples as may be required by OSHA, Federal Lead in Construction Standards, and other applicable standards for this work.

3. Miscellaneous Materials:

The Consultant shall employ the services of a firm pre-qualified with DPMC and having the capabilities to identify and locate all miscellaneous hazardous materials that may impact the construction work of this project. Miscellaneous hazardous materials may include, but not be limited to radon, PCBs, radioactive exit lights, mold, mildew, etc. If present, the firm shall prepare design documents that will identify the approved methods of removal or remediation and the procedures for their disposal. These documents shall be incorporated in the project design documents prepared by the Consultant and will be bid as one package.

Special Note: One firm may perform all of the tasks described above if they are pre-qualified with DPMC and have the license, certification, or approval required by the appropriate regulating authority to perform those tasks.

4. Reports:

The Consultant shall submit three (3) copies of the final "Hazardous Materials Survey Report" to the DPMC Project Manager. The report shall identify and locate all of the hazardous materials found at the project site and include copies of the test lab results for each material and a schematic plan showing their locations. All illustrative material, pictures, or drawings developed during the investigation shall be included for reference.

5. Hazardous Materials Allowance:

The Sub-Consulting firm(s) selected by the Consultant to conduct the hazardous materials tests, prepare the potential design documents, and provide construction administration services shall estimate all of the costs associated with their work and submit that amount to the Consultant prior to the proposal due date. The construction administration fee submitted shall reflect the costs associated with performing the work with the building occupied or unoccupied.

The Consultant shall enter the amount submitted by the Sub-Consulting firm(s) on the fee proposal line item entitled **"Hazardous Materials Allowance"** and attach a detailed cost breakdown sheet for use by the Project Team members during the proposal review and potential fee negotiations.

The cost breakdown sheet shall include, but not be limited to the following information:

a. Documentation review and initial survey.
b. Material sampling and testing.
c. Abatement specifications.
d. Construction Administration and Air Monitoring.

D. DESIGN PHASE

1. Thermal Insulation

a. Investigate alternatives to install insulation below the roof deck of the building.
b. Install insulation above all new hung ceilings in Office, Assembly, Toilet, and Testing Rooms.
c. Install insulation between wall finishes on exterior walls in Offices, Toilet, Assembly, and Testing Rooms.

2. Windows, Doors, and Hardware

a. Replace all existing steel sash windows. DOT has requested that the Kalwall window system be designated as one of the recommended window manufacturers in the specification.
b. Storage and Mechanical Rooms and Spaces to be replaced with aluminum curtain wall with insulated glazed translucent fiberglass sandwich panels.
c. Windows at Office, Assembly, Toilet, and Testing Rooms to be replaced with aluminum curtain wall with insulated spandrel panels above ceiling level and combination of fixed and operable insulated sash below ceiling.
d. Replace exterior man doors with steel insulating units.
e. Interior doors and frames shall be steel painted.
f. New sectional uplift doors shall be insulated and have chain hoist and motor operator.
g. All hardware and keying shall be coordinated into DOT system.

3. Interior finishes

a. All new partitions shall be constructed of unit masonry and be finished with epoxy paint.
b. Exterior walls in Office, Assembly, Toilet, and Testing Rooms shall have metal furring and gypsum board installed on exterior walls. Wall board shall be painted.
c. Install new hung ceilings in Office, Assembly, Toilet, and Testing Rooms.
d. Toilet rooms shall have ceramic tile floors, floor drains, and have Barrier Free design components.
e. Offices shall have carpet tile floors.
f. Training / Lunch Room and Assembly shall have vinyl floor covering.

4. Kitchenette:

a. Provide a Barrier-Free kitchenette unit with microwave, two burner cook top stove, sink, and full size refrigerator in Training / Lunch Room. Appliances shall be purchased and installed by the Contractor.

5. Special Construction:

a. Provide pre-engineered mezzanine with bar grate flooring, stairs, and rails in storage area.
b. Provide wire mesh partitioning in storage areas and at mezzanine level with lockable mesh doors.
c. Provide pre-engineered canopy structure between Building #20 and #17.

6. Plumbing:

a. New Barrier Free accessible male and female toilet rooms shall be designed for the building occupancy. Maximum anticipated occupancy is 27 male and 3 female.
b. Provide a floor drain(s) in each toilet room.
c. Investigate the size and capacity of the existing sanitary line and upgrade if required.
d. Provide new instantaneous hot water heaters for all fixtures.
e. Sink and toilet fixtures shall include water conservation devices.
f. Indicate the location of all equipment associated with plumbing and related piping components. Separate riser diagrams shall be shown for steam, sanitary drain and vent system, hot and cold water, HVAC, etc.
g. Drawings shall include equipment connection details, BTUH input, pipe sizes, water supply fixture units (WSFU), drainage fixture units (DFU), slope, valves, drainage points, area, distance, etc. as it relates with each riser.

7. HVAC

a. Relocate existing steam supply line and condensate lines that feed Building #17 to underground.
b. Modify existing heating in storage area to accommodate new layout. Provide new mechanical exhaust and ventilation system.
c. Office, Assembly, Toilet, and Testing Rooms shall be heated and cooled with new direct expansion cooling units with remote condensing units. Install steam coils for heating. Provide Code required mechanical ventilation and exhaust system. Provide new controls for HVAC units.
d. Provide signed & sealed heating & cooling load calculations to DPMC Design & Code Review Unit verifying the capacity of the HVAC equipment selected is adequate for the building.

8. Electrical

a. Modify existing electrical distribution system to accommodate new layout and equipment. Survey the panels, breakers, transformers, and any other appropriate electrical component to determine those that shall be replaced based on age, physical condition, location, or capacity.
b. Provide signed & sealed calculations to DPMC Design & Code Review Unit verifying the electrical supply to the building is adequate.
c. Provide phone and data outlets where required by the locations of the furniture and equipment.
d. Offices, Assembly, and Testing Rooms to have energy efficient parabolic lighting fixtures.
e. Provide power receptacles on exterior of building for diesel truck block heaters and exterior lighting under the new canopy.
f. Electrical drawings shall be provided for all lighting, power, communication, fire alarm, and any specialized electrical system. Riser diagrams shall identify all service equipment, feeders, panels, wire sizes, current demand factors, switch and panel schedules, etc.
g. Location, capacity, space requirements of all major items or equipment must be indicated. Indicate the size of the service equipment, transformers, circuit breakers, switchgear, main disconnect, etc. To accommodate and distribute power inside the building, a main electric service room shall be provided to house main circuit breakers (service disconnect) and an adjoining circuit breaker distribution switchboard.

9. Lighting:

a. Lighting design documents must identify lighting arrangements, types of fixtures, proposed light intensities, emergency and egress lighting. Provide a reflected ceiling plan showing all energy efficient lighting fixtures, grills and diffusers, and any fire protection device if provided. Provide all lighting panel schedules, light switching requirements and their locations.
b. Modify lighting in storage areas to proper level of lighting.
c. Provide timers and/or motion detectors for appropriate lighting and energy conservation.

10. Fire Detection System:

a. The fire detection system shall be designed in accordance with NFPA 72. It shall provide evacuation alarm tone signaling using horns to sound the alarm signals, and strobe lights as visual notification appliances. The system shall be intelligent device addressable, analog detecting, low voltage and modular, with digital communication techniques, in full compliance with all applicable codes and standards. It shall be UL listed and FM approved for Central Monitoring Station tie-in.
b. The system shall be installed, programmed, tested, and delivered to the owner in fully operational condition. The system shall include hardware, software, raceways and interconnecting wiring to accomplish the requirements of the State. The system must utilize a dialer for data transmission to the Edna Mahan Central Station and third party monitor.

c. The fire detection system must be tested after installation by an independent Testing Lab hired by the Contractor and the test must be witnessed and approved by the Department of Community Affairs (DCA). The Consultant shall provide ample notification time when arranging the test with DCA, DPMC, Contractor, and equipment manufacturers.
d. The fire detection system shall have a 3 year warranty on all parts and a 1 year free maintenance contract on all system components. There shall be a 3 year maintenance contract after the 1 year free maintenance agreement with a guaranteed maintenance cost for that 3 year period.

11. Fire Suppression System:

a. A fully engineered design of a sprinkler system shall be provided for selected locations of the building such as special operations rooms, storage areas over 100 square feet, etc. The design shall include, but not be limited to a scaled layout of the new sprinkler piping and all related system components.
b. The system layout shall be shown on the current interior floor plan of the building and coordinated with the ceilings, lighting, HVAC ductwork and diffusers, wiring conduit, and other obstructions. Identify the location of all walls, partitions, concealed spaces, closets, and bathroom areas. The design shall be in accordance with NFPA 13, Section 14.1.3 and the International Building Code (IBC).
c. Design documents shall include the pipe material, size and wall thickness, and center to center dimension of the sprinkler heads. All control valves, check valves, backflow preventers, line flushing valves, drain pipes, air compressors, jockey pumps, fire pumps, and test connections shall be shown. Details of the hanger type and location, sleeves, braces, and methods of securing the sprinkler system shall be provided including calculations that indicate they meet all seismic requirements.
d. A statement shall be included in the specification and on the drawings that states: "If the sprinkler Contractor prepares shop drawings that differ in design from those supplied by the Consultant, they shall submit them to DPMC Plan & Code Review Unit for approval prior to fabrication and installation of the system".
e. The specification shall indicate the type of system and the name of the desired manufacturer and two alternate manufacturers of the fire suppression system components proposed including, but not limited to: valves, hangers, sprinkler heads, alarms, meters, fire pump and jockey pump, etc.
f. Upon completion of the project, and prior to issuance of the Certificate of Approval, the Contractor shall test the complete fire suppression and detection system making adjustments as required to secure all necessary approvals. The Consultant shall identify the testing requirements in the specification including the hydrostatic test pressures, the test duration under pressure, and the amount of allowable leakage per hour.
g. All equipment testing shall be conducted in the presence of the Consultant and designated representatives of the DPMC, Client Agency, Contractors and DCA. The Consultant shall be responsible for the coordination and scheduling of all tests. All test results shall be collected and bound in a manual for reference.

h. Locate test/drain connections so that their discharge will not cause damage to the building or site. Provide splash blocks where test and drain connections are discharged to grade. All test stations shall be located in areas where testing does not affect occupants or programs, and water discharge does not pool or freeze.

12. Roofing:

Replace in kind all roofing sections that have been patched to prevent water infiltration.

13. Furniture & Equipment:

Show the location of all systems furniture, loose furniture, shelving systems, special millwork, copiers, communication equipment, data processing equipment, kitchenette equipment, storage cabinets, workbenches, and any other special equipment used by the DOT operation on the floor plan of the building.

Note that the furniture will be provided and installed by the Client Agency and is being shown on the drawing to determine the most efficient arrangement of the furniture on the floor and the appropriate locations for the electrical, voice and data outlet connections.

14. Demolition Drawing Detail:

The drawings shall identify all of the interior building materials, walls, ceilings, utilities, systems, and finishes to be removed, replaced and/or relocated in all areas of the building as part of this project. Indicate methods to temporarily cap, seal, bypass, shutdown, and make safe all of the building utilities and systems while the demolition work is being conducted in the building.

The design documents shall identify any special utility coordination and shutdown requirements needed to demolish the designated interior areas of the building.

Provide a note in the design documents that the DOT personnel will be responsible for the relocation of all furniture and equipment to the swing space areas and back to the finished reprogrammed areas when they are completed.

Ensure that the design documents identify the demolition coordination required to remove the structural components or finishes that contain asbestos or other hazardous materials and that must be removed and disposed by qualified Contractors under separate contract.

15. General Construction Requirements:

A note shall be added that states all materials including fixtures, equipment, debris, rubbish, etc. shall be removed as it accumulates, and not stored on the site.

Drawings shall identify the approved location of the dumpster(s), vehicle parking, material storage trailers, construction equipment, etc. and specify any safety and/or security measures required in those areas.

Identify any required construction barriers or other measures to be taken to protect equipment and personnel from construction dirt, dust and provide safety during any demolition work.

Address fire protection requirements during the demolition and include language that states open flames such as propane torches, flame cutting, and welding cannot be used on the construction site until a fire watch program has been submitted by the Contractor and approved by the Consultant and Project Team members.

Identify any special requirements for temporary utilities, utility shutdown coordination, etc., during the upgrades or replacement of the existing utilities.

16. Contractors Use of the Premises:

Develop a "Contractor's Use of the Premises" directive with the Project Team that will identify any special policies, procedures, security requirements, etc. that must be observed by the Contractors during all work conducted at the facility and include this information in Division 1 of the specification.

Develop procedures for personnel to access the project site and construction areas, and provide the names and phone numbers of approved escorts when needed.

17. Phased Construction:

The building will be occupied during construction. Develop a phased construction schedule with the Project Team so that the operation and activities performed in the building will not be disrupted. For example, the new canopy and rollup door shall be installed first so the trucks can be parked outside the building during the interior renovations. This schedule shall be included in the specification so the Contractor can address this requirement in their bid proposal.

18. Equipment Spare Parts List:

A spare parts list shall be prepared and items purchased as part of this project for all equipment and systems installed in the building.

19. Equipment Training:

Coordinate the training of the new equipment and systems installed in the building with Client Agency personnel and equipment vendors. Operation and maintenance manuals shall be issued that contains the operating procedures, parts lists, detailed drawings, catalog cuts, and maintenance procedures for all equipment installed in the building. The content of the manuals and training sessions, and the length of the training sessions shall be reviewed and approved by the Project Team members prior to the training seminar. The Contractor shall video tape the training sessions and make (3) copies of the tapes or CD's and submit them to DPMC for distribution.

E. GENERAL DESIGN OVERVIEW

1. Design Detail:

Section VII of this Scope of Work is intended as a guide for the Consultant to understand the overall basic design requirements of the project and is not intended to identify each specific design component related to code and construction items. The Consultant shall provide those details during the design phase of the project ensuring that they are in compliance with all applicable codes, regulating authorities, and the guidelines established in the DPMC Procedures for Architects and Engineers Manual.

The Consultant shall understand that construction documents submitted to DPMC shall go beyond the basic requirements set forth by the current copy of the Uniform Construction Code NJAC 5:23-2.15(e). Drawings and specifications shall provide detail beyond that required to merely show the nature and character of the work to be performed. The construction documents shall provide sufficient information and detail to illustrate, describe and clearly delineate the design intent of the Consultant and enable all Contractors to uniformly bid the project.

The Consultant shall ensure that all of the design items described in this scope of work are addressed and included in the project drawings and specification sections where appropriate.

It shall be the Consultant's responsibility to provide all of the design elements for this project. Under no circumstance may they delegate the responsibility of the design; or portions thereof, to the Contractor unless specifically allowed in this Scope of Work.

2. Specification Format:

The Consultant shall ensure that the project design specifications are formatted in the revised and expanded version of the Construction Specifications Institute (CSI) format entitled "Master Format 2004 Edition: Numbers and Titles."

The Consultant shall review all of the CSI Master Format 2004 specification sections listed and remove those that do not apply and edit those that remain so they are consistent and specific to this project scope of work.

F. PROJECT COMMENCEMENT

A pre-design meeting shall be scheduled with the Consultant and the Project Team members at the commencement of the project to obtain and/or coordinate the following information:

1. Project Directory:

Develop a project directory that identifies the name and phone number of key designated representatives who may be contacted during the design and construction phases of this project.

2. Site Access:

Develop procedures to access the project site and provide the names and phone numbers of approved escorts when needed. Obtain copies of special security and policy procedures that must be followed during all work conducted at the facility and include this information in Division 1 of the specification.

3. Project Coordination:

Review and become familiar with any current and/or future projects at the site that may impact the design, construction, and scheduling requirements of this project. Incorporate all appropriate information and coordination requirements in Division 1 of the specification.

4. Existing Documentation:

Obtain and review all available facility documentation that is related to this project such as reports, studies, surveys, equipment manuals, as-built drawings, maintenance records, utility energy data, etc. The State does not attest to the accuracy of the information provided and accepts no responsibility for the consequences of errors by the use of any information and material contained in the documentation provided. It shall be the responsibility of the Consultant to verify the contents and assume full responsibility for any determination or conclusion drawn from the material used. If the information provided is insufficient, the Consultant shall take the appropriate actions necessary to obtain the additional information required for the project at no additional cost to the State.

All documentation shall be returned to the provider at the completion of the project.

Copies of the following documents will be provided to each Consulting firm at the pre-proposal meeting to assist in the bidding process.

5. Scope of Work:

Review the design and construction administration responsibilities and the submission requirements identified in this Scope of Work with the Project Team members. Items such as: contract deliverables, special sequencing or phased construction requirements, special hours for construction based on Client Agency programs or building occupancy, security needs, delivery dates of critical and long lead items, utility interruptions or shut down constraints for tie-ins, weather restrictions, and coordination with other project construction activities at the site shall be addressed.

This information and all general administrative information; including a narrative summary of the work for this project, ***shall be included in Division 1*** of the specification. The Consultant shall assure that there are no conflicts between the information contained in Division 1 of the specification and the DPMC General Conditions.

6. Project Schedule:

Review and update the project design and construction schedule with the Project Team members.

G. BUILDING & SITE INFORMATION

The following information shall be included in the project design documents.

1. Building Classification:

Provide the building Use Group Classification and Construction Type on the appropriate design drawing.

2. Building Block & Lot Number:

Provide the site Block and Lot Number on the appropriate design drawing.

3. Building Site Plan:

Only when the project scope involves site work, or when the design triggers code issues that require site information to show code compliance, shall a site plan be provided that is drawn in accordance with an accurate boundary line survey. The site plan shall include but not be limited to the following as may be applicable.

a. The size and location of new and existing buildings and additions as well as other structures.
b. The distance between buildings and structures and to lot lines.
c. Established and new site grades and contours as well as building finished floor elevations.
d. New and existing site utilities, site vehicular and pedestrian roads, walkways and parking areas.

4. Site Location Map:

Provide a site location map on the drawing cover sheet that identifies the vehicular travel routes from major roadways to the project construction site and the approved access roads to the Contractor's worksite staging area.

H. DESIGN MEETINGS & PRESENTATIONS

1. Design Meetings:

Conduct the appropriate number of review meetings with the Project Team members during each design phase of the project so they may determine if the project meets their requirements, question any aspect of the contract deliverables, and make changes where appropriate. The Consultant shall describe the philosophy and process used in the development of the design criteria and the various alternatives considered to meet the project objectives. Selected studies, sketches, cost estimates, schedules, and other relevant information shall be presented to support the design solutions proposed. Special considerations shall also be addressed such as: Contractor site access limitations, utility shutdowns and switchover coordination, phased construction and schedule requirements, security restrictions, available swing space, material and equipment delivery dates, etc.

It shall also be the responsibility of the Consultant to arrange and require all critical Sub-Consultants to be in attendance at the design review meetings.

Record the minutes of each design meeting and distribute within seven (7) calendar days to all attendees and those persons specified to be on the distribution list by the Project Manager.

2. Design Presentations:

The minimum number of design presentations required for each phase of this project is identified below for reference:

a. Program, Energy, Hazardous Materials Phase: One (1) oral presentation at phase completion.
b. Schematic Phase: One (1) oral presentation at phase completion.
c. Design Development Phase: One (1) oral presentation at phase completion.
d. Final Design Phase: One (1) oral presentation at phase completion.

VIII.CONSULTANT CONSTRUCTION RESPONSIBILITIES

A. GENERAL CONSTRUCTION ADMINISTRATION OVERVIEW

This section of the Scope of Work is intended as a guide for the Consultant to understand their overall basic construction administration responsibilities for the project and does not attempt to identify each specific activity or deliverable required during this phase. The Consultant shall obtain that information from the current publication of the DPMC Procedures for Architects and Engineers Manual and any additional information provided during the Consultant Selection Process.

B. PRE-BID MEETING

The Consultant shall attend, chair, record and distribute minutes of the Contractor pre-bid meetings. When bidders ask questions that may affect the bid price of the project, the Consultant shall develop a Bulletin(s) to clarify the bid documents in the format described in the Procedures for Architects and Engineers Manual, Section 9.2 entitled "Bulletins." These Bulletins must be sent to DPMC at least seven (7) calendar days prior to the bid opening date. DPMC will then distribute the document to all bidders.

C. BID OPENING

The Consultant must attend the bid opening held at the designated location.

In the event that the construction bids received exceed the Consultant's approved final cost estimate by 5% or more, the Consultant shall redesign and/or set up sufficient approved alternate designs, plans and specifications for the project work, to secure a bid that will come within the allocation specified by the State without impacting the programmatic requirements of the project. Such redesign work and changes to plans, including reproduction costs for submission in order to obtain final approval and permits, shall be undertaken by the Consultant at no additional cost to the State.

D. POST BID REVIEW MEETING, RECOMMENDATION FOR AWARD

The Consultant; in conjunction with the Project Manager, shall review the bid proposals submitted by the various Contractors to determine the low responsible bid for the project. The Consultant; in conjunction with the Project Manager, shall develop a post bid questionnaire based on the requirements below and schedule a post bid review meeting with the Contractor's representative to review the construction costs and schedule, staffing, and other pertinent information to ensure they understand the Scope of the Work and that their bid proposal is complete and inclusive of all required to deliver the project in strict accordance with the plans and specifications.

1. Post Bid Review:

Review the project bid proposals including the alternates, unit prices, and allowances within seven (7) calendar days from the bid due date. Provide a bid tabulation matrix comparing all bids submitted and make a statement about the high, low, and average bids received. Include a comparison of the submitted bids to the approved current construction cost estimate. When applicable, provide an analysis with supporting data, detailing why the bids did not meet the construction cost estimate.

2. Review Meeting:

Arrange a meeting with the apparent low bid Contractor to discuss their bid proposal and other issues regarding the award of the contract. Remind the Contractor that this is a Lump Sum bid. Request the Contractor to confirm that their bid proposal does not contain errors. Review and confirm Alternate pricing and Unit pricing and document acceptance or rejection as appropriate.

Comment on all omissions, qualifications and unsolicited statements appearing in the proposals. Review any special circumstances of the project. Ensure the Contractor's signature appears on all post bid review documents.

3. Substitutions:

Inquire about any potential substitutions being contemplated by the Contractor and advise them of the State's guidelines for the approval of substitutions and the documentation required. Review the deadline and advise the Contractor that partial submissions are not acceptable. Submission after the deadline may be rejected by the State.

Equal substitutions that are proposed by the Contractor that are of lesser value must have a credit change order attached with the submittal (See Article 4 of the General Conditions). The State has the right to reject the submission if there is no agreement on the proposed credit. Contractor will be responsible to submit a specified item.

4. Schedule:

Confirm that the Contractor is aware of the number of calendar days listed in the contract documents for the project duration and that the Contractor's bid includes compliance with the schedule duration and completion dates. Particular attention shall be given to special working conditions, long lead items and projected delivery dates, etc. Review project milestones (if applicable). This could give an indication of Contractor performance, but not allow a rejection of the bid.

Review the submittal timeframes per the Contract documents. Ask the Contractor to identify what products will take over twenty-eight (28) calendar days to deliver from the point of submittal approval.

5. Performance:

Investigate the past performance of Contractor by contacting Architects and owners (generally three of each) that were listed in their DPMC pre-qualification package and other references that may have been provided. Inquire how the Contractor performed with workmanship, schedule, project management, change orders, cooperation, paper work, etc.

6. Superintendent:

Remind the Contractor that a full-time non-working superintendent is required per the General Conditions, who must be responsible to address Contract issues. (Article 4.3.2.).

7. Letter of Recommendation:

The Consultant shall prepare a Letter of Recommendation for contract award to Contractor submitting the low responsible bid within three (3) calendar days from the post bid review meeting. The document shall contain the project title, DPMC project number, bid due date and expiration date of the proposal. It shall include a detailed narrative describing each post bid meeting agenda item identified above and a recommendation to award the contract to the apparent low bid Contractor based on the information obtained during that meeting. Describe any acceptance or rejection of Alternate pricing and Unit pricing.

Comment on any discussion with the Contractor that provides a sense of their understanding of the project and any special difficulties that they see, and how they might approach those problems.

Attach all minutes of the Post bid meeting and any other relevant correspondence with the Letter of Recommendation and submit them to the Project Manager.

8. Conformed Drawings:

The Consultant shall prepare and distribute two (2) sets of drawings stamped "Conformed Drawings" to the Project Manager that reflect all Bulletins and/or required changes, additions, and deletions to the pertinent drawings within twenty-eight (28) calendar days of the construction contract award date.

Any changes made in Bulletins, meeting minutes, post bid review requirements shall also be reflected in the specification.

E. DIRECTOR'S HEARING

The Consultant must attend any Director's hearing(s) if a Contractor submits a bid protest. The Consultant shall be present to interpret the intent of the design documents and answer any technical questions that may result from the meeting. In cases where the bid protest is upheld, the Consultant shall submit a new "Letter of Recommendation" for contract award. The hours required to attend the potential hearings and to document the findings shall be estimated by the Consultant and the costs will be included in the base bid of their fee proposal.

F. CONSTRUCTION JOB MEETINGS, SCHEDULES, LOGS

The Consultant shall conduct all of the construction job meetings in accordance with the procedures identified in the A/E manual and those listed below.

1. Meetings:

The Consultant and Sub-Consultant(s) shall attend the pre-construction meeting and all construction job meetings during the construction phase of the project. The Consultant shall chair the meeting, transcribe and distribute the job-meeting minutes for every job meeting to all attendees and to those persons specified to be on the distribution list by the Project Manager. The Agenda for the meeting shall include, but not be limited to the items identified in the Procedures for Architects and Engineers Manual, Section 10.3.1, entitled "Agenda."

Also, the Consultant is responsible for the preparation and distribution of minutes within seven (7) calendar days of the meeting. The format to be used for the minutes shall comply with those identified in the "Procedures for Architects and Engineers Manual," Section 10.3.4, entitled, "Format of Minutes." All meeting minutes are to have an "action" column indicating the party that is responsible for the action indicated and a deadline to accomplish the assigned task. These tasks must be reviewed at each job progress meeting until it is completed and the completion date of each task shall be noted in the minutes of the meeting following the task completion.

2. Schedules:

The Consultant; with the input from the Client Agency Representative and Project Manager, shall review and recommend approval of the project construction schedule prepared by the Contractor. The schedule shall identify all necessary start and completion dates of construction, construction activities, submittal process activities, material deliveries and other milestones required to give a complete review of the project.

The Consultant shall record any schedule delays, the party responsible for the delay, the schedule activity affected, and the original and new date for reference.

The Consultant shall ensure that the Contractor provides a two (2) week "look ahead" construction schedule based upon the current monthly updated schedule as approved at the bi-weekly job meetings and that identifies the daily planned activities for that period. This Contractor requirement must also be included in Division 1 of the specification for reference.

3. Submittal Log:

The Consultant shall develop and implement a submittal log that will identify all of the required project submittals as identified in the design specification. The dates of submission shall be determined and approved by all affected parties during the pre-construction meeting.

Examples of the submissions to be reviewed and approved by the Consultant and Sub-Consultant (if required) include: shop drawings, change orders, Request for Information (RFI), equipment and material catalog cuts, spec sheets, product data sheets, MSDS material safety data sheets, specification procedures, color charts, material samples, mock-ups, etc. The submittal review process must be conducted at each job progress meeting and shall include the Consultant, Sub-Consultant, Contractor, Project Manager, and designated representatives of the Client Agency.

The Consultant shall provide an updated submittal log at each job meeting that highlights all of the required submissions that are behind schedule during the construction phase of the project.

G. CONSTRUCTION SITE ADMINISTRATION SERVICES

The Consultant and Sub-Consultant(s) shall provide construction site administration services during the duration of the project. The Consultant and Sub-Consultant(s) do not necessarily have to be on site concurrently if there are no critical activities taking place that require the Sub-Consultant's participation.

The services required shall include, but not be limited to; field observations sufficient to verify the quality and progress of construction work, conformance and compliance with the contract documents, or to attend/chair meetings as may be required by the Project Manager to resolve special issues.

A field observation visit may be conducted in conjunction with regularly scheduled construction job meetings, depending on the progress of work. The Consultant and their Sub-Consultant(s) shall submit a field observation report for each site inspection to the Project Manager. Also, they shall conduct inspections during major construction activities including, but not limited to the following examples: concrete pours, steel and truss installations, code inspections, final testing of systems, achievement of each major milestone required on the construction schedule, and requests from the Project Manager. The assignment of a full time on-site Sub-Consultant does not relieve the Consultant of their site visit obligation.

The Consultant shall refer to Section XIV. Contract Deliverables of this Scope of Work subsection entitled "Construction Phase" to determine the extent of services and deliverables required during this phase of the project.

H. SUB-CONSULTANT PARTICIPATION

It is the responsibility of the Consultant to ensure that they have provided adequate hours and/or time allotted in their technical proposal so that their Sub-Consultants may participate in all appropriate phases and activities of this project or whenever requested by the Project Manager. This includes the pre-proposal site visit and the various design meetings and construction job meetings, site visits, and close-out activities described in this Scope of Work. Field observation reports and/or meeting minutes are required to be submitted to the Project Manager within seven (7) calendar days of the site visit or meeting. All costs associated with such services shall be included in the base bid of the Consultant's fee proposal.

I. DRAWINGS

1. Shop Drawings:

Each Contractor shall review the specifications and determine the numbers and nature of each shop drawing submittal. Five (5) sets of the documents shall be submitted with reference made to the appropriate section of the specification. The Consultant shall review the Contractor's shop drawing submissions for conformity with the construction documents within fourteen (14) calendar days of receipt. The Consultant shall return each shop drawing submittal stamped with the appropriate action, i.e. "Approved", "Approved as Noted", "Approved as Noted Resubmit for Records", "Rejected", etc.

2. As-Built & Record Set Drawings:

The Contractor(s) shall keep the contract drawings up to date at all times during construction and upon completion of the project, submit their AS-BUILT drawings to the Consultant with the Contractor(s) certification as to the accuracy of the information prior to final payment. All AS-BUILT drawings submitted shall be entitled AS-BUILT above the title block and dated. The Consultant shall review the Contractor(s) AS-BUILT drawings at each job progress meeting to ensure that they are up to date. Any deficiencies shall be noted in the progress meeting minutes.

The Consultant shall acknowledge acceptance of the AS-BUILT drawings by signing a transmittal indicating they have reviewed them and that they reflect the AS-BUILT conditions as they exist.

Upon receipt of the AS-BUILT drawings from the Contractor(s), The Consultant shall obtain the original mylars from DPMC and transfer the AS-BUILT conditions to the original full sized signed mylars to reflect RECORD conditions within twenty-eight (28) calendar days of receipt of the AS-BUILT information.

The Consultant shall note the following statement on the original RECORD-SET drawings. "The AS-BUILT information added to this drawing(s) has been supplied by the Contractor(s). The (Architect) (Engineer) does not assume the responsibility for its accuracy other than conformity with the design concept and general adequacy of the AS-BUILT information to the best of the (Architect's) (Engineer's) knowledge."

Upon completion, The Consultant shall deliver the RECORD-SET original mylars to DPMC who will acknowledge their receipt in writing. This hard copy set of drawings and three (3) sets of current release AUTO CAD discs shall be submitted to DPMC and the discs shall contain all AS-BUILT drawings in both ".dwg" (native file format for AUTO CAD) and ".tif" (Tagged Image File) file formats.

J. CONSTRUCTION DEFICIENCY LIST

The Consultant shall prepare, maintain and continuously distribute an on-going deficiency list to the Contractor, Project Manager, and Client Agency Representative during the construction phase of the project. This list shall be separate correspondence from the field observation reports and shall not be considered as a punch list.

K. INSPECTIONS: SUBSTANTIAL & FINAL COMPLETION

The Consultant and their Sub-Consultant(s) accompanied by the Project Manager, Code Inspection Group, Client Agency Representative and Contractor shall conduct site inspections to determine the dates of substantial and final completion. The Project Manager will issue the only recognized official notice of substantial completion. The Consultant shall prepare and distribute the coordinated punch list, written warranties and other related DPMC forms and documents, supplied by the Contractor, to the Project Manager for review and certification of final contract acceptance.

If applicable, the punch list shall include a list of attic stock and spare parts.

L. CLOSE-OUT DOCUMENTS

The Consultant shall review all project close-out documents as submitted by the Contractors to ensure that they comply with the requirements listed in the "Procedure for Architects and Engineers' Manual." The Consultant shall forward the package to the Project Manager within twenty-eight (28) calendar days from the date the Certificate of Occupancy/Certificate of Approval is issued. The Consultant shall also submit a letter certifying that the project was completed in accordance with the contract documents, etc.

M. CLOSE-OUT ACTIVITY TIME

The Consultant shall provide all activities and deliverables associated with the "Close-Out Phase" of this project as part of their Lump Sum base bid. The Consultant and/or Sub-Consultant(s) may not use this time for additional job meetings or extended administrative services during the Construction Phase of the project.

N. TESTING, TRAINING, MANUALS, AND ATTIC STOCK

The Consultant shall ensure that all equipment testing, training sessions and equipment manuals required for this project comply with the requirements identified below.

1. Testing:

All equipment and product testing conducted during the course of construction is the responsibility of the Contractor. However, the Consultant shall ensure the testing procedures comply with manufacturers recommendations. The Consultant shall review the final test reports and provide a written recommendation of the acceptance/rejection of the material, products or equipment tested within fourteen (14) calendar days of receipt of the report.

2. Training:

The Consultant shall include in the specification that the Contractor shall schedule and coordinate all equipment training with the Project Manager and Client Agency representatives. It shall state that the Contractor shall submit the Operation and Maintenance (O&M) manuals, training plan contents, and training durations to the Consultant, Project Manager and Client Agency Representative for review and approval prior to the training session.

All costs associated with the training sessions shall be borne by the Contractor installing the equipment. A signed letter shall be prepared stating when the training was completed and must be accompanied with the training session sign-in sheet as part of the project close-out package.

3. Operation & Maintenance Manuals:

The Consultant shall coordinate and review the preparation and issuance of the equipment manuals provided by the Contractor(s) ensuring that they contain the operating procedures, maintenance procedures and frequency, cut sheets, parts lists, warranties, guarantees, and detailed drawings for all equipment installed at the facility.

A troubleshooting guide shall be included that lists problems that may arise, possible causes with solutions, and criteria for deciding when equipment shall be repaired and when it must be replaced.

Include a list of the manufacturer's recommended spare parts for all equipment being supplied for this project.

The Consultant shall ensure that the training session is videotaped by the Contractor and three (3) copies of the tapes or CD's shall be submitted with a transmittal memo to the Project Manager who will forward the material to the Client Agency for future reference and training.

A list of names, addresses and telephone numbers of the Contractors involved in the installations and firms capable of performing services for each mechanical item shall be included. The content of the manuals shall be reviewed and approved by the Project Manager and Client Agency Representative.

The Consultant shall include in the specification that the Contractor must provide a minimum of ten (10) "throwaway" copies of the manual for use at the training seminar and seven (7) hardbound copies as part of the project close-out package.

4. Attic Stock:

The Consultant shall determine and recommend whether "attic stock" should be included for all aspects of the project. If required, the Consultant shall specify attic stock items to be included in the project.

Prior to project close-out, the Consultant must prepare a comprehensive listing of all items for delivery by the Contractor to the Owner and in accordance with the appropriate specification/plan section. Items shall include, but not be limited to: training sessions, O&M manuals, as-built drawings, itemized attic stock requirements, and manufacturer guarantees/warranties.

O. CHANGE ORDERS

The Consultant shall review and process all change orders in accordance with the contract documents and procedures described below.

1. Consultant:

The Consultant shall prepare a detailed request for Change Order including a detailed description of the change(s) along with appropriate drawings, specifications, and related documentation and submit the information to the Contractor for the change order request submission. This will require the use of the current DPMC 9b form.

2. Contractor:

The Contractor shall submit a DPMC 9b Change Order Request form to the Project Manager within twenty (20) calendar days after receiving the Change Order from the Consultant. The document shall identify the changed work in a manner that will allow a clear understanding of the necessity for the change. Copies of the original design drawings, sketches, etc. and specification pages shall be highlighted to clarify and show entitlement to the Change Order.

Copies shall be provided of job minutes or correspondence with all relative information highlighted to show the origin of the Change Order. Supplementary drawings from the Consultant shall be included if applicable that indicate the manner to be used to complete the changed work. A detailed breakdown of all costs associated with the change, i.e. material, labor, equipment, overhead, Sub-Contractor work, profit and bond, and certification of increased bond shall be provided.

If the Change Order will impact the time of the project, the Contractor shall include a request for an extension of time. This request shall include a copy of the original approved project schedule and a proposed revised schedule that reflects the impact on the project completion date. Documentation to account for the added time requested shall be included to support entitlement of the request such as additional work, weather, other Contractors, etc. This documentation shall contain dates, weather data and all other relative information.

3. Recommendation for Award:

The Consultant shall evaluate the reason for the change in work and provide a detailed written recommendation for approval or disapproval of the Change Order Request including backup documentation of costs in CSI format and all other considerations to substantiate that decision.

4. Code Review:

The Consultant shall determine if the Change Order request will require Code review and shall submit six (6) sets of signed and sealed modified drawings and specifications to the DPMC Plan & Code Review Unit for approval, if required. The Consultant must also determine and produce a permit amendment request if required.

5. Cost Estimate:

The Consultant shall provide a detailed cost estimate of the proposed Change Order Request, as submitted by the Contractor, in CSI format (2004 Edition) for all appropriate divisions and sub-divisions using a recognized estimating formula. The estimate shall then be compared with that of the Contractor's estimate. If any line item in the Consultant's estimate is lower than the corresponding line item in the Contractor's estimate, the Consultant in conjunction with the Project Manager is to contact the Contractor by telephone and negotiate the cost differences. The Consultant shall document the negotiated agreement on the Change Order Request form. If the Contractor's total dollar value changes based on the negotiations, the Consultant shall identify the changes on the Change Order Request form accordingly.

When recommending approval or disapproval of the change order, the Consultant shall be required to prepare and process a Change Order package that contains at a minimum the following documents:

a. DPMC 9b Change Order Request
b. DPMC 10 Consultant's Evaluation of Contractor's Change Order Request
c. Consultant's Independent detailed Cost Estimate
d. Notes of Negotiations

6. Time Extension:

When a Change Order Request is submitted with both cost and time factors, the Consultant's independent cost estimate is to take into consideration time factors associated with the changed work. The Consultant is to compare their time element with that of the Contractor's time request and if there is a significant difference, the Consultant in conjunction with the Project Manager is to contact the Contractor by telephone and negotiate the difference.

When a Change Order Request is submitted for time only, the Consultant is to do an independent evaluation of the time extension request using a recognized scheduling formula.

Requests for extension of contract time must be done in accordance with the General Conditions Section 14.2.2.

7. Submission:

The Consultant shall complete all of the DPMC Change Order Request forms provided and submit a completed package to the Project Manager with all appropriate backup documentation within seven (7) calendar days from receipt of the Contractor's change order request. The Consultant shall resubmit the package at no cost to the State if the change order package contents are deemed insufficient by the Project Manager.

8. Meetings:

The Consultant shall attend and actively participate at all administrative hearings or settlement conferences as may be called by Project Manager in connection with such Change Orders and provide minutes of those meetings to the Project Manager for distribution.

9. Consultant Fee:

All costs associated with the potential Contractor Change Order Requests shall be anticipated by the Consultant and included in the base bid of their fee proposal.
If the Client Agency Representative requests a scope change; and it is approved by the Project Manager, the Consultant may be entitled to be reimbursed through an amendment and in accordance with the requirements stated in paragraph 10.01 of this Scope of Work.

IX. PERMITS & APPROVALS

A. REGULATORY AGENCY PERMITS

The Consultant shall comply with the following guidelines to ensure that all required permits, certificates, and approvals required by State regulatory agencies are obtained for this project.

1. NJ Uniform Construction Code Permit:

The Consultant shall complete the NJUCC permit application and all applicable technical sub-code sections with all technical site data listed. The Agent section of the application and certification section of the building sub-code section shall be signed. These documents shall be forwarded to the Project Manager who will send them to the Department of Community Affairs (DCA) and all permit application costs will be paid by DPMC from encumbered funds for the project.

The Consultant may obtain access and copies of all NJUCC Building, Fire, Plumbing, Electrical and Elevator permit applications at the following website: www.nj.gov/dca/codes

The project construction documents must comply with the latest adopted edition of the NJ Uniform Construction Code that is in effect at the Final Design Phase of this project.

All other required project permits shall be obtained and paid for by the Consultant in accordance with the procedures described in paragraph 2. below.

2. Other Regulatory Agency Permits, Certificates, and Approvals:

The Consultant shall identify and obtain all other State Regulatory Agency permits, certificates, and approvals that will govern and affect the work described in this Scope of Work. An itemized list of these permits, certificates, and approvals shall be included with the Consultant's Technical Proposal and the total amount of the application fees should be entered in the Fee Proposal line item entitled, **"Permit Fee Allowance."** See Section XIV. 6.4.8 for a preliminary list of Regulatory Agency approvals.

The Consultant may refer to the Division of property Management and Construction "Procedures for Architects and Engineers Manual", Section 6.4.8, which presents a compendium of State permits, certificates, and approvals that may be required for this project.
The Consultant shall determine the appropriate phase of the project to submit the permit application(s) in order to meet the approved project milestone dates.

Where reference to an established industry standard is made, it shall be understood to mean the most recent edition of the standard unless otherwise noted. If an industry standard is found to be revoked, or should the standard have undergone substantial change or revision from the time that the Scope of Work was developed, the Consultant shall comply with the most recent edition of the standard.

3. Prior Approval Certification Letters:

The issuance of a construction permit for this project may be contingent upon acquiring various prior approvals as defined by NJAC 5:23-1.4. It is the Consultant's responsibility to determine which prior approvals, if any, are required. The Consultant shall submit a general certification letter to the DPMC Plan & Code Review Unit Manager during the Permit Phase of this project that certifies all required prior approvals have been obtained.

In addition to the general certification letter discussed above, the following specific prior approval certification letters, where applicable, shall be submitted by the Consultant to the DPMC Plan & Code Review Unit Manager: Soil Erosion & Sediment Control, Water & Sewer Treatment Works Approval, Coastal Areas Facilities Review, Compliance of Underground Storage Tank Systems with NJAC 7:14 b, Pinelands Review, Compliance of Abandoned Wells with NJAC 7:9-9, Certification that all utilities have been disconnected from structures to be demolished, Board of Health Approval for Potable Water Wells, Health Department Approval for Septic Systems. It shall be noted that in accordance with NJAC 5:23-2.15(a)5, a permit cannot be issued until the letter(s) of certification is received.

B. BARRIER FREE REQUIREMENTS

The Consultant, in cooperation with the Client Agency Representative, shall assure that this project complies with the NJUCC Barrier Free Sub code where applicable.

C. STATE INSURANCE APPROVAL

The Consultant shall respond in writing to the FM Global Insurance Underwriter plan review comments through the DPMC Plan & Code Review Unit Manager as applicable. The Consultant shall review all the comments and modify the documents while adhering to the project's SOW requirements, State code requirements, schedule, budget, and Consultant fee.

D. PUBLIC EMPLOYEES OCCUPATIONAL SAFETY & HEALTH PROGRAM

A paragraph shall be included in the design documents, if applicable to this project that states:
The Contractor shall comply with all the requirements stipulated in the Public Employees Occupational Safety & Health Program (PEOSHA) document, paragraph 12:100-13.5 entitled "Air quality during renovation and remodeling". The Contractor shall submit a plan demonstrating the measures to be utilized to confine the dust, debris, and air contaminants in the renovation or construction area of the project site to the Project Team prior to the start of construction.

The link to the document is: http://www.state.nj.us/health/eoh/peoshweb/iaqstd.pdf

E. MULTI-BUILDING OR MULTI-SITE PERMITS

A project that involves many buildings and/or sites requires that a separate permit be issued for each building or site. The Consultant must determine the construction cost estimate for *each* building and/or site location and submit that amount where indicated on the permit application.

F. PERMIT MEETINGS

The Consultant shall attend and chair all meetings with Permitting Agencies necessary to explain and obtain the required permits.

G. MANDATORY NOTIFICATIONS

The Consultant shall include language in Division 1 of the specification that states the Contractor shall assure compliance with the New Jersey "One Call" Program (1-800-272-1000) if any excavation is to occur at the project site.

The One Call Program is known as the New Jersey Underground Facility Protection Act, N.J.S.A. 48:2-73 through N.J.S.A. 48:2-91, and N.J.A.C. 14:2-1.1 through N.J.A.C. 14:2-6.4.

H. CONSTRUCTION TRAILER PERMITS

If construction trailers are required for the project then the Consultant shall include language in the Supplemental General Conditions that states the Contractor(s) shall be responsible to obtain and pay for each construction trailer permit directly from the Department of Community Affairs. (General Contractor for Single Bid-Lump Sum All Trades contract, and each Contractor for Separate Bids & Single Bid contract).

DCA will allow a single permit application to cover more than one trailer per Contractor provided the building, plumbing, and electrical technical sub-code sections, as applicable, specify the correct numbers and costs. The trailers will not require a plan review.

DCA will inspect each construction trailer and issue a Certificate of Occupancy (CO) separate from the main building construction.

Storage trailers with no utility connections are exempt from this requirement.

I. SPECIAL INSPECTIONS

In accordance with the requirements of the New Jersey Uniform Construction Code, Bulletin 03-5 and as clarified further by the Department of Community Affairs, the Consultant shall be responsible for the coordination of all special inspections during the construction phase of the project.

1. Definition:

Special inspections are defined as an independent verification by a qualified person (special Inspector) rendered to the code official for **Class I buildings only**. The special inspector is to be independent from the Contractor and responsible to the building owner or owner's agent so that there is no possible conflict of interest.

2. Responsibilities:

The Consultant shall submit with the permit application, a list of special inspections and the firm(s) that will be responsible to carry out the inspections required for the project. The list shall be a separate document, on letter head, signed and sealed.

3. Special Inspections:

The following special inspections, as applicable to this project, shall be performed in accordance with Chapter 17 of the International Building Code, New Jersey Edition, as defined below.

a. Steel construction, in accordance with Section 1704.3.
b. Concrete construction, in accordance with Section 1704.4.
c. Masonry construction, in accordance with Section 1704.5.
d. Soils, in accordance with Section 1704.7.
e. Pile foundations, in accordance with Section 1704.8.
f. Seismic resistance for Design Category D buildings, in accordance with Section 1707.
g. Structural testing for isolation damping systems in seismic Design Category D buildings, in accordance with Section 1708.
h. A quality assurance plan for seismic resistance of seismic Design Category D buildings, in accordance with Sections 1705.1 and 1705.2.

Special inspectors shall be licensed in accordance with the requirements in the New Jersey Uniform Construction Code.

X. GENERAL REQUIREMENTS

A. SCOPE CHANGES

The Consultant must request any changes to this Scope of Work in writing. An approved DPMC 9d Consultant Amendment Request form reflecting authorized scope changes must be received by the Consultant prior to undertaking any additional work. The DPMC 9d form must be approved and signed by the Director of DPMC and written authorization issued from the Project Manager prior to any work being performed by the Consultant. Any work performed without the executed DPMC 9d form is done at the Consultant's own financial risk.

B. ERRORS AND OMISSIONS

The errors and omissions curve and the corresponding sections of the "Procedures for Architects and Engineers Manual" are eliminated. All claims for errors and omissions will be pursued by the State on an individual basis and resolved during the close-out phase of the project. The State will review each error or omission with the Consultant and determine the actual amount of damages, if any, resulting from each negligent act, error or omission.

C. ENERGY INCENTIVE PROGRAM

The Consultant shall review the Program Overview described on the NJ Smart Start Buildings website at: http://www.njsmartstartbuildings.com/ to determine if any proposed upgrades to the mechanical and/or electrical equipment and systems for this project will qualify for the "New Jersey Smart Start Building Energy Incentive Program".

The Consultant shall be responsible to complete the Smart Start Registration Form and the Application Forms, provide any applicable worksheets, manufacturer's specification sheets, calculations, attend meetings, and participate in all activities with designated representatives of the Smart Start Program and Utility Companies to obtain the entitled financial incentives and rebates for this project. All costs associated with this work shall be estimated by the Consultant and the amount included in the base bid of their fee proposal.

D. AIR POLLUTION FROM ARCHITECTURAL COATINGS

The Consultant shall include in the appropriate sections of the specification the requirement that all architectural coatings applied at the project site shall comply with the NJDEP Administrative Code Title 7, Chapter 27, Subchapter 23, entitled "Prevention of Air Pollution from Architectural Coatings".

Architectural coatings shall mean materials applied for protective, decorative, or functional purposes to stationary structures or their appurtenances, portable buildings, pavements, or curbs. The coating materials include, but are not limited to, paints, varnishes, sealers, and stains.

XI. ALLOWANCES

A. PERMIT FEE ALLOWANCE

The Consultant shall obtain and pay for all of the project permits in accordance with the guidelines identified below.

1. Permits:

The Consultant shall determine the various State permits, certificates, and approvals required to complete this project.

2. Permit Costs:

The Consultant shall determine the application fee costs for all of the required project permits, certificates, and approvals (excluding the NJ Uniform Construction Code permit) and include that amount in their fee proposal line item entitled **"Permit Fee Allowance"**. A breakdown of each permit and application fee shall be attached to the fee proposal for reference.

NOTE: The NJ Uniform Construction Code permit is excluded since it is obtained and paid for by DPMC.

3. Applications:

The Consultant shall fill out and submit all permit applications to the appropriate permitting authorities and the costs shall be paid from the Consultant's permit fee allowance provided. A copy of the application(s) and the original permit(s) obtained by the Consultant shall be given to the Project Manager for distribution during construction.

4. Consultant Fee:

The Consultant shall determine what is required to complete and submit the permit applications, obtain supporting documentation, attend meetings, etc., and include the total cost in the base bid of their fee proposal under the "Permit Phase" column.

Any funds remaining in the permit allowance account will be returned to the State at the close of the project.

B. UTILITY UPGRADE DESIGN ALLOWANCE

The Consultant shall estimate the costs associated with the potential upgrades to the building utilities and include this amount in their fee proposal line item entitled **"Utility Upgrade Design Allowance".** The balance of funds not used in this allowance shall be returned to the State at the completion of the project.

C. HAZARDOUS MATERIALS ALLOWANCE

The Sub-Consulting firm(s) selected by the Consultant to conduct the hazardous materials tests, prepare the potential design documents, and provide construction administration services shall estimate all of the costs associated with their work and submit that amount to the Consultant prior to the proposal due date. The construction administration fee submitted shall reflect the costs associated with performing the work with the building occupied or unoccupied.

The Consultant shall enter the amount submitted by the Sub-Consulting firm(s) on the fee proposal line item entitled **"Hazardous Materials Allowance"** and attach a detailed cost breakdown sheet for use by the Project Team members during the proposal review and potential fee negotiations.

XII. SUBMITTAL REQUIREMENTS

A. CONTRACT DELIVERABLES

All submissions shall include the Contract Deliverables identified in Section XIV of this Scope of Work and described in the DPMC Procedures for Architects and Engineers Manual.

B. CATALOG CUTS

The Consultant shall provide catalog cuts as required by the DPMC Plan & Code Review Unit during the design document review submissions. Examples of catalog cuts include, but are not limited to: mechanical equipment, hardware devices, plumbing fixtures, fire suppression and alarm components, specialized building materials, electrical devices, etc.

C. PROJECT DOCUMENT BOOKLET

The Consultant shall submit all of the required Contract Deliverables to the Project Manager at the completion of each phase of the project. All reports, meeting minutes, plan review comments, project schedule, cost estimate in CSI format (2004 Edition), correspondence, calculations, and other appropriate items identified on the Submission Checklist form provided in the A/E Manual shall be presented in an 8½" x 11" bound "booklet" format.

D. DESIGN DOCUMENT CHANGES

Any corrections, additions, or omissions made to the submitted drawings and specifications at the Permit Phase of the project must be submitted to DPMC Plan & Code Review Unit as a complete document. Corrected pages or drawings may not be submitted separately unless the Consultant inserts the changed page or drawing in the original documents. No Addendums or Bulletins will be accepted as a substitution to the original specification page or drawing.

E. SINGLE-PRIME CONTRACT

All references to "separate contracts" in the Procedures for Architects and Engineers Manual, Chapter 8, shall be deleted since this project will be advertised as a "Single Bid" (Lump Sum All Trades) contract. The single prime Contractor will be responsible for all work identified in the drawings and specifications.

The drawings shall have the required prefix designations and the specification sections shall have the color codes as specified for each trade in the DPMC Procedure for Architects and Engineers Manual.

The Consultant must still develop the Construction Cost Estimate (CCE) for each trade and the amount shall be included on the DPMC-38 Project Cost Analysis form where indicated. This document shall be submitted at each design phase of the project and updated immediately prior to the advertisement to bid.

XIII. SOW SIGNATURE APPROVAL SHEET

This Scope of Work shall not be considered a valid document unless all signatures appear in each designated area below.

The Client Agency approval signature on this page indicates that they have reviewed the design criteria and construction schedule described in this project Scope of Work and verifies that the work will not conflict with the existing or future construction activities of other projects at the site.

SOW PREPARED BY: Fred Stults 2/22/10
FRED STULTS, MANAGER — DATE
DPMC SCOPE DEVELOPMENT UNIT

SOW APPROVED BY: James Henry 02/24/10
JAMES HENRY, PROJECT ENGINEER — DATE
CLIENT AGENCY REPRESENTATIVE

SOW APPROVED BY: C. Martin Conrad 3/2/10
MARTIN CONRAD, PROJECT MANAGER — DATE
DPMC PROJECT MANAGEMENT GROUP

SOW APPROVED BY: Richard Flodmand 3/3/10
RICHARD FLODMAND, DEPUTY DIRECTOR — DATE
DIV PROPERTY MGT & CONSTRUCTION

XIV.CONTRACT DELIVERABLES

The following is a listing of Contract Deliverables that are required at the completion of each phase of this project. The Consultant shall refer to the DPMC publication entitled, "Procedures for Architects and Engineers," Volumes I and II, 2nd Edition, dated January, 1991 to obtain a more detailed description of the deliverables required for each item listed below.

The numbering system used in this "Contract Deliverables" section of the scope of work corresponds to the numbering system used in the "Procedures for Architects and Engineers" manual and some may have been deleted if they do not apply to this project.

PROGRAM STUDY

5.1 Project Schedule (Bar Chart Format)

5.2 Meetings & Minutes (Minutes within 5 working days of meeting)

5.3 Correspondence

5.4 Submission Requirements

5.4.8 Regulatory Approvals
5.4.9 Utility Availability (On Site & Public)
Sanitary Service
Storm Water
Domestic Water
Gas Service
Fire Service
Electric Service
Telephone Service
5.4.10 Diagrammatic Sketches/Drawings: 6 sets
5.4.11 Outline Specifications: 6 sets
5.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form
5.4.13 Bar Chart of Design and Construction Schedule
5.4.14 Oral Presentation of Submission to Project Team
5.4.15 SOW Compliance Statement
5.4.16 This Submission Checklist
5.4.17 Deliverables Submission in Booklet Form: 7 sets

SCHEMATIC DESIGN PHASE: 25% Complete Design Documents (Minimum)

6.1 Project Schedule (Update Bar Chart Schedule)

6.2 Meetings & Minutes (Minutes within 5 working days of meeting)

6.3 Correspondence

6.4 Submission Requirements

6.4.1 A/E Statement of Site Visit, As-Built Drawing Verification (if available)
6.4.2 Space Analysis & Program Requirements
6.4.3 Special Features Description: communications, security, fire protection, special structural features, etc.
6.4.4 Site Evaluation
6.4.5 Borings, Surveys, and Soils Analysis (provided with plan submission)
6.4.8 Regulatory Agency Approvals
- 6.4.8.1 NJ Department of Agriculture
  - (a) Soil Erosion (land disturbance over 5000 s.f.)
- 6.4.8.2 NJ Department of Community Affairs
  - (a) UCC Permit for Building Construction

6.4.9 Utility Availability for:
Sanitary Service
Storm Water
Domestic Water
Gas Service
Fire Service
Electric Service
Telephone Service
Cable Service

6.4.10 Drawings: 6 sets
Cover Sheet (See A/E Manual for format)
Site Plan
Site Utility Plan
Floor Plans
Elevations
Sections/Details
Structural Narrative
HVAC Narrative
Electrical Narrative

6.4.11 Specifications: 6 sets (See A/E Manual for format, include Division 1 and edit to describe the administrative and general requirements of the project)
6.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form

6.4.13 Bar Chart of Design and Construction Schedule
6.4.14 Oral Presentation of Submission to Project Team
6.4.15 SOW Compliance Statement
6.4.16 This Submission Checklist (See A/E Manual, Figure 6.4.16 for format)
6.4.17 Deliverables Submission in Booklet Form: 7 sets

6.5 Approval

6.5.1 Respond to Submission Comments

6.6 Submission Forms

Figure 6.4.10 Plan Review Record Sheet
Figure 6.4.12 Current Working Estimate/Cost Analysis
Figure 6.4.16 Submission Checklist

DESIGN DEVELOPMENT PHASE: 50% Complete Design Documents (Minimum)

7.1 Project Schedule (Update Bar Chart Schedule)

7.2 Meetings & Minutes (Minutes within 5 working days of meeting)

7.3 Correspondence

7.4 Submission Requirements

7.4.1 A/E Statement of Site Visit, As-Built Drawing Verification (if available)
7.4.2 Space Analysis & Program Requirements (if changed from Schematic Phase)
7.4.8 Regulatory Agency Approvals (See Section 6.4.8 for listing)
7.4.9 Confirm Utility Availability (On Site & Public)
Sanitary Service
Storm Water
Domestic Water
Gas Service
Fire Service
Electric Service
Telephone Service
Cable Service
Tank Locations & Sizes
7.4.10 Drawings: 6 sets
Cover Sheet (See A/E Manual for format)
Site Plan
Site Utility Plan

Floor Plans
Elevations
Sections/Details
Structural Drawings, Seismic Design Load Criteria
HVAC Drawings, Heating & Cooling Equipment Schedules
Economic Comparison of Proposed vs. Alternate Fueled System
Plumbing Drawings, Pipe Distribution & Riser Details, Fixture Schedule
Fire Protection Drawings, Hydraulic Calcs, Water Pressure & Flow Data
Electrical Drawings, Riser Diagram, Panel Schedules, Service Size, Lighting Design

7.4.11 Specifications: 6 sets (See A/E Manual for format, include Division 1 and edit to describe the administrative and general requirements of the project)
7.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form
7.4.13 Bar Chart of Design and Construction Schedule
7.4.14 Oral Presentation of Submission to Project Team
7.4.15 SOW Compliance Statement
7.4.16 This Submission Checklist (See A/E Manual, Figure 6.4.16 for format)
7.4.17 Deliverables Submission in Booklet Form: 7 sets

7.5 Approval

7.5.1 Respond to Submission Comments

7.6 Submission Forms

Figure 7.4.12 Current Working Estimate/Cost Analysis
Figure 7.4.16 Submission Checklist

FINAL DESIGN PHASE 100% Complete Construction Documents

This Final Design Phase may require more than one submission based on the technical quality and code conformance of the design documents.

8.1 Schedule (Update Bar Chart Schedule)

8.2 Meeting & Minutes (Minutes within 5 working days of meeting)

8.3 Correspondence

8.4 Submission Requirements

8.4.1 A/E Statement of Site Visit
8.4.8 Regulatory Agency Approvals (Include itemized list specific to this project)
8.4.10 Drawings: 6 sets
8.4.11 Specifications: 6 sets
8.4.12 Current Working Estimate in CSI Format & Cost Analysis 38 Form
8.4.13 Bar Chart of Design and Construction Schedule
8.4.14 Oral Presentation of this Submission to Project Team
8.4.15 Plan Review/SOW Compliance Statement
8.4.16 This Submission Checklist
8.4.17 Deliverables Submission in Booklet Form: 7 sets

8.5 Approvals

8.5.1 Respond to Submission Comments

PERMIT APPLICATION PHASE

This Permit Application Phase should not include any additional design issues. Design documents shall be 100% complete at the Final Design Phase.

8.6 Permit Application Submission Requirements

8.6.1 - 8.6.7: If all of the deliverables of these sections have been previously submitted to DPMC and approved there are no further deliverables due at this time
8.6.8 Regulatory Agency Approvals
(a) UCC Permit Application & Technical Sub-codes completed by A/E
8.6.9 Utility Availability Confirmation
8.6.10 Signed and Sealed Drawings: 6 sets
8.6.11 Signed and Sealed Specifications: 6 sets
8.6.12 Current Working Estimate/Cost Analysis
8.6.13 Bar Chart Schedule
8.6.14 Project Presentation (N/A this Project)
8.6.15 Plan Review/SOW Compliance Statement
8/6.16 Submission Checklist

8.7 Approvals

8.8 Submission Forms

Figure 8.4.12 Current Working Estimate/Cost Analysis
Figure 8.4.16 Submission Checklist (Final Review Phase)
Figure 8.6.12-a Bid Documents Checklist (Form DPMC -555)
Figure 8.6.12-b Bid Proposal Form (Form DPMC -3)
Figure 8.6.12-c Notice of Advertising (Form DPMC -31)
Figure 8.6.16 Submission Checklist (Permit Phase)
Figure 8.7 Bid Clearance Form (Form DPMC -601)

BIDDING AND CONTRACT AWARD

9.0 Bidding Phase Requirements

9.0.1 Original Drawings signed & sealed by A/E, one (1) set AUTOCAD Discs
9.02 One Unbound Specification Color Coded per A/E Manual Section 8.4.11
9.03 Bid Documents Checklist
9.04 Bid Proposal Form
9.05 Notice for Advertising

9.1 Chair Pre-Bid Conference/Mandatory Site Visit

9.2 Prepare Bulletins

9.3 Attend Bid Opening

9.4 Recommendation for Contract Award

9.4.1 Prepare Letter of Recommendation for Award & Cost Analysis

9.5 Attend Pre-Construction Meeting

9.6 Submission Checklist

9.7 Submission Forms

Figure 9.4.1 Cost Analysis
Figure 9.6 Submission Checklist

CONSTRUCTION PHASE

10.1 Site Construction Administration

10.2 Pre-Construction Meeting

10.3 Construction Job Meetings

10.3.1 Agenda: Schedule and Chair Construction Job Meetings
10.3.2 Minutes: Prepare and Distribute Minutes within 5 working days of meeting
10.3.3 Schedules; Approve Contractors' Schedule & Update
10.3.4 Minutes Format: Prepare Job Meeting Minutes in approved format, figure 10.3.4-a

10.4 Correspondence

10.5 Prepare and Deliver Conformed Drawings

10.7 Approve Contractors Invoicing and Payment Process

10.8 Approve Contractors 12/13 Form for Subs, Samples and Materials

10.10 Approve Test Reports

10.11 Approve Shop Drawings

10.12 Construction Progress Schedule

10.12.1 Construction Progress Schedule

10.13 Review & Recommend or Reject Change Orders

10.13.1 Scope Changes
10.13.2 Construction Change Orders
10.13.3 Field Changes

10.14 Construction Photographs

10.15 Submit Field Observation Reports

10.16 Submission Forms

Figure 10.3.4-a Job Meeting Format of Minutes
Figure 10.3.4-b Field Report
Figure 10.6 DPMC Insurance Form-24
Figure 10.6-a Unit Schedule Breakdown
Figure 10.6-b Monthly Estimate for Payment to Contractor DPMC 11-2
Figure 10.6-c Monthly Estimate for Payment to Contractor DPMC 11-2A
Figure 10.6-d Invoice DPMC 11
Figure 10.6-e Prime Contractor Summary of Stored Materials DPMC 11-3
Figure 10.6-f Agreement & Bill of Sale certificate for Stored Materials DPMC 3A
Figure 10.7-a Approval Form for Subs, Samples & Materials DPMC 12
Figure 10.7-b Request for Change Order DPMC 9b
Figure 10.9 Transmittal Form DPMC 13
Figure 10.10 Submission Checklist

PROJECT CLOSE-OUT PHASE

11.1 Responsibilities: Plan, Schedule and Execute Close-Out Activities

11.2 Commencement: Initiate Close-Out w/DPMC 20A Project Close-Out Form

11.3 Develop Punch List & Inspection Reports

11.4 Verify Correction of Punch List Items

11.5 Determination of Substantial Completion

11.6 Ensure Issuance of "Temporary Certificate of Occupancy or Approval"

11.7 Initiation of Final Contract Acceptance Process

11.8 Submission of Close-Out Documentation

11.8.1 As-Built & Record Set Drawings, 3 sets AUTOCAD Discs Delivered to DPMC
11.8.2 (a) Maintenance and Operating manuals, Warranties, etc.: 7 sets each
(b) Guarantees
(c) Testing and Balancing Reports
(d) Inspection Certificates
(f) Shop Drawings
(g) Letter of Contract Performance

11.8.3 Final Cost Analysis-Insurance Transfer DPMC 25
11.8.4 This Submission Checklist

11.9 Final Payment

11.9.1 Contractors Final Payment
11.9.2 A/E Invoice and Close-Out Forms for Final Payment

11.10 Final Performance Evaluation of the A/E and the Contractors

11.11 Ensure Issuance of a "Certificate of Occupancy or Approval"

11.12 Submission Forms

Figure 11.2	Project Close-Out Documentation List DPMC 20A
Figure 11.3-a	Certificate of Substantial Completion DPMC 20D
Figure 11.3-b	Final Acceptance of Consultant Contract DPMC 20C
Figure 11.5	Request for Contract Transition Close-Out DPMC 20X
Figure 11.7	Final Contract Acceptance Form DPMC 20
Figure 11.8.3-a	Final Cost Analysis
Figure 11.8.3-b	Insurance Transfer Form DPMC 25
Figure 11.8.4	Submission Checklist

XV. EXHIBITS

The attached exhibits in this section will include a sample project schedule, and any supporting documentation to assist the Consultant in the design of the project such as maps, drawings, photographs, floor plans, studies, reports, etc.

END OF SCOPE OF WORK

February 7, 1997
Rev.: January 29, 2002

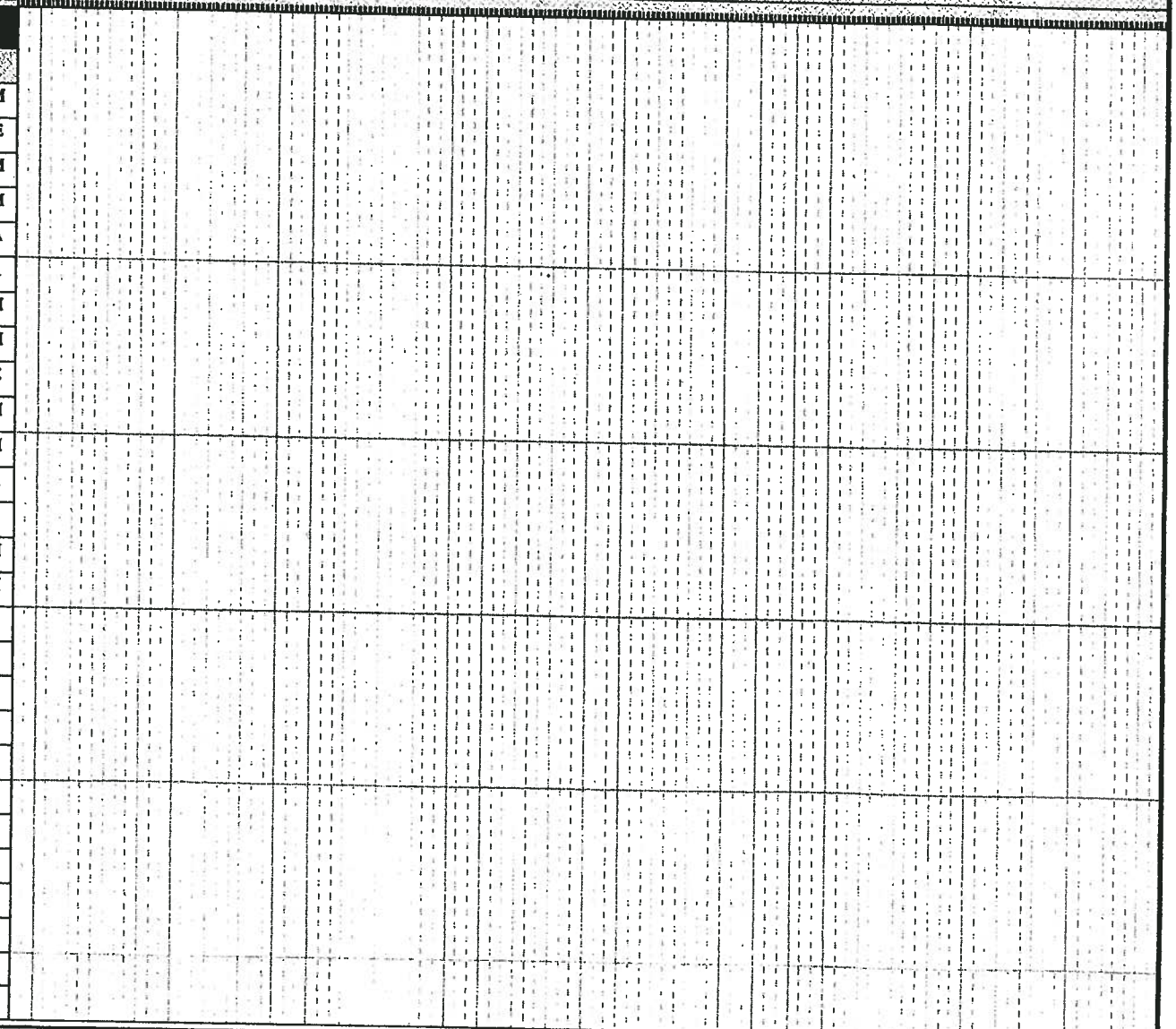
Responsible Group Code Table

The codes below are used in the schedule field "GRP" that identifies the group responsible for the activity. The table consists of groups in the Division of Property Management & Construction (DPMC), as well as groups outside of the DPMC that have responsibility for specific activities on a project that could delay the project if not completed in the time specified. For reporting purposes, the groups within the DPMC have been defined to the supervisory level of management (i.e., third level of management, the level below the Associate Director) to identify the "functional group" responsible for the activity.

CODE	DESCRIPTION	REPORTS TO ASSOCIATE DIRECTOR OF:
CM	Contract Management Group	Contract Management
CA	Client Agency	N/A
CSP	Consultant Selection and Prequalification Group	Technical Services
A/E	Architect/Engineer	N/A
PR	Plan Review Group	Technical Services
CP	Construction Procurement	Planning & Administration
CON	Construction Contractor	N/A
FM	Financial Management Group	Planning & Administration
OEU	Office of Energy and Utility Management	N/A
PD	Project Development Group	Planning & Administration

EXHIBIT 'A'

Activity ID	Description	Rspn
<PROJ>		
Design		
CV3001	Schedule/Conduct Predesign/Project Kick-Off Mtg.	CM
CV3020	Prepare Program Phase Submittal	AE
CV3021	Distribute Program Submittal for Review	CM
CV3027	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3022	Review & Approve Program Submittal	CA
CV3023	Review & Approve Program Submittal	PR
CV3024	Review & Approve Program Submittal	CM
CV3025	Consolidate & Return Program Submittal Comments	CM
CV3030	Prepare Schematic Phase Submittal	AE
CV3031	Distribute Schematic Submittal for Review	CM
CV3037	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3032	Review & Approve Schematic Submittal	CA
CV3033	Review & Approve Schematic Submittal	PR
CV3034	Review & Approve Schematic Submittal	CM
CV3035	Consolidate & Return Schematic Submittal Comment	CM
CV3040	Prepare Design Development Phase Submittal	AE
CV3041	Distribute D. D. Submittal for Review	CM
CV3047	Prepare & Submit Project Cost Analysis (DPMC-38)	CM
CV3042	Review & Approve Design Development Submittal	CA
CV3043	Review & Approve Design Development Submittal	PR
CV3044	Review & Approve Design Development Submittal	CM
CV3045	Consolidate & Return D.D. Submittal Comments	CM
CV3050	Prepare Final Design Phase Submittal	AE
CV3051	Distribute Final Design Submittal for Review	CM
CV3052	Review & Approve Final Design Submittal	CA
CV3053	Review & Approve Final Design Submittal	PR
CV3054	Review Final Design Submitl for Constructability	OCS



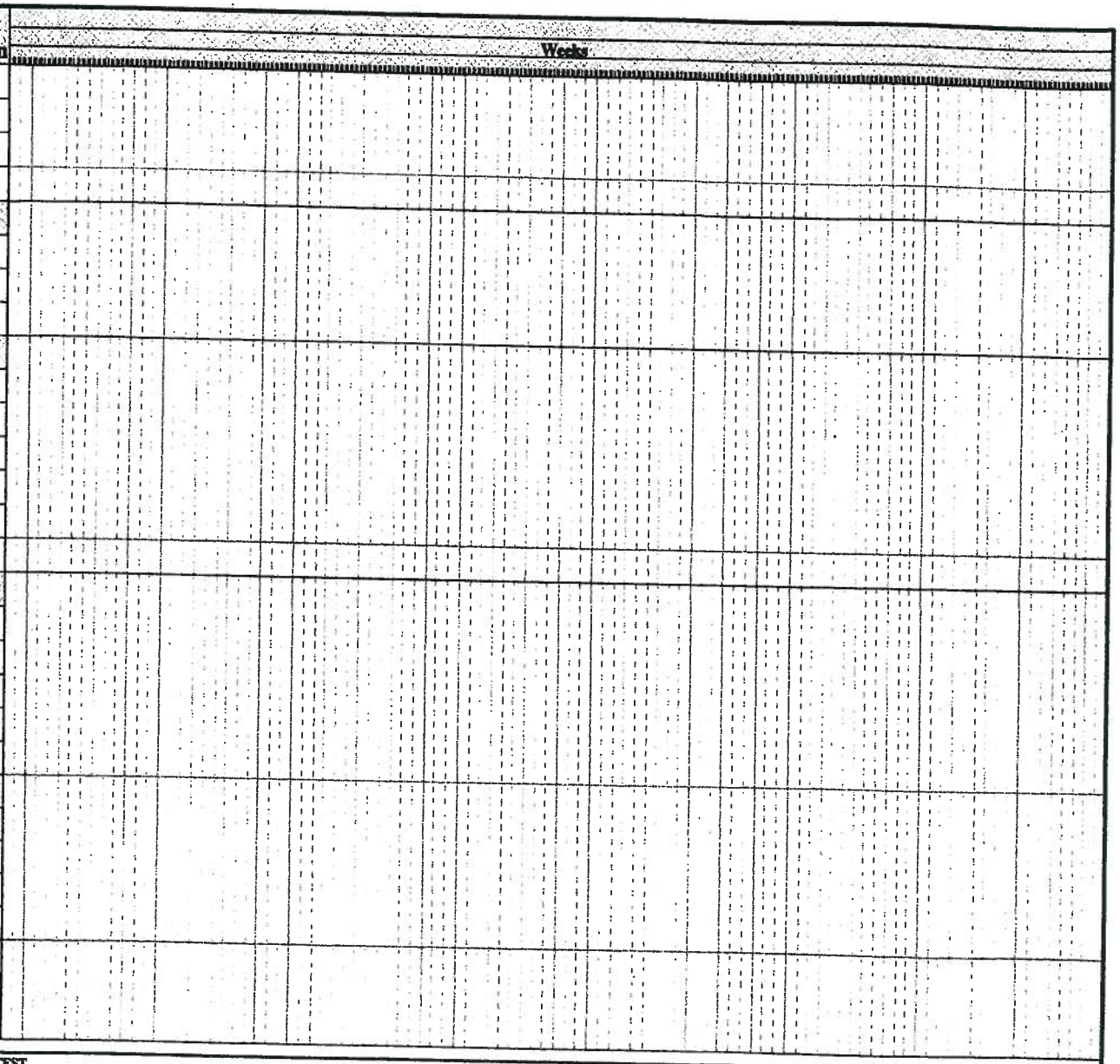
NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

DBCA - TEST

Bureau of Design & Construction Services
Routine Project

Exhibit "A"

Activity ID	Description	Rspn
CV3055	Review & Approve Final Design Submittal	CM
CV3056	Consolidate & Return Final Design Comments	CM
CV3060	Prepare & Submit Permit Application Documents	AE
CV3068	Prepare & Submit Bidding Cost Analysis (DPMC-38)	CM
Plan Review-Permit Acquisition		
CV4001	Review Constr. Documents & Secure UCC Permit	PR
CV4010	Provide Funding for Construction Contracts	CA
CV4020	Secure Bid Clearance	CM
Advertise-Bid-Award		
CV5001	Advertise Project & Bid Construction Contracts	CP
CV5010	Open Construction Bids	CP
CV5011	Evaluate Bids & Prep. Recommendation for Award	CM
CV5012	Evaluate Bids & Prep. Recommendation for Award	AE
CV5014	Complete Recommendation for Award	CP
CV5020	Award Construction Contracts/Issue NTP	CP
Construction		
CV6000	Project Construction Start/Issue NTP	CM
CV6001	Contract Start/Contract Work (25%) Complete	CON
CV6002	Preconstruction Meeting	CM
CV6003	Begin Preconstruction Submittals	CON
CV6004	Longest Lead Procurement Item Ordered	CON
CV6005	Lead Time for Longest Lead Procurement Item	CON
CV6006	Prepare & Submit Shop Drawings	CON
CV6007	Complete Construction Submittals	CON
CV6011	Roughing Work Start	CON
CV6012	Perform Roughing Work	CON
CV6010	Contract Work (50%+) Complete	CON
CV6013	Longest Lead Procurement Item Delivered	CON
CV6020	Contract Work (75%) Complete	CON



NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

Bureau of Design & Construction Services
Routine Project

Exhibit "A"

Activity ID	Description	Rspn	Weeks
CV6014	Roughing Work Complete	CON	
CV6021	Interior Finishes Start	CON	
CV6022	Install Interior Finishes	CON	
CV6030	Contract Work to Substantial Completion	CON	
CV6031	Substantial Completion Declared	CM	
CV6075	Complete Deferred Punch List/Seasonal Activities	CON	
CV6079	Project Construction Complete	CM	
CV6080	Close Out Construction Contracts	CM	
CV6089	Construction Contracts Complete	CM	
CV6090	Close Out A/E Contract	CM	
CV6092	Project Completion Declared	CM	

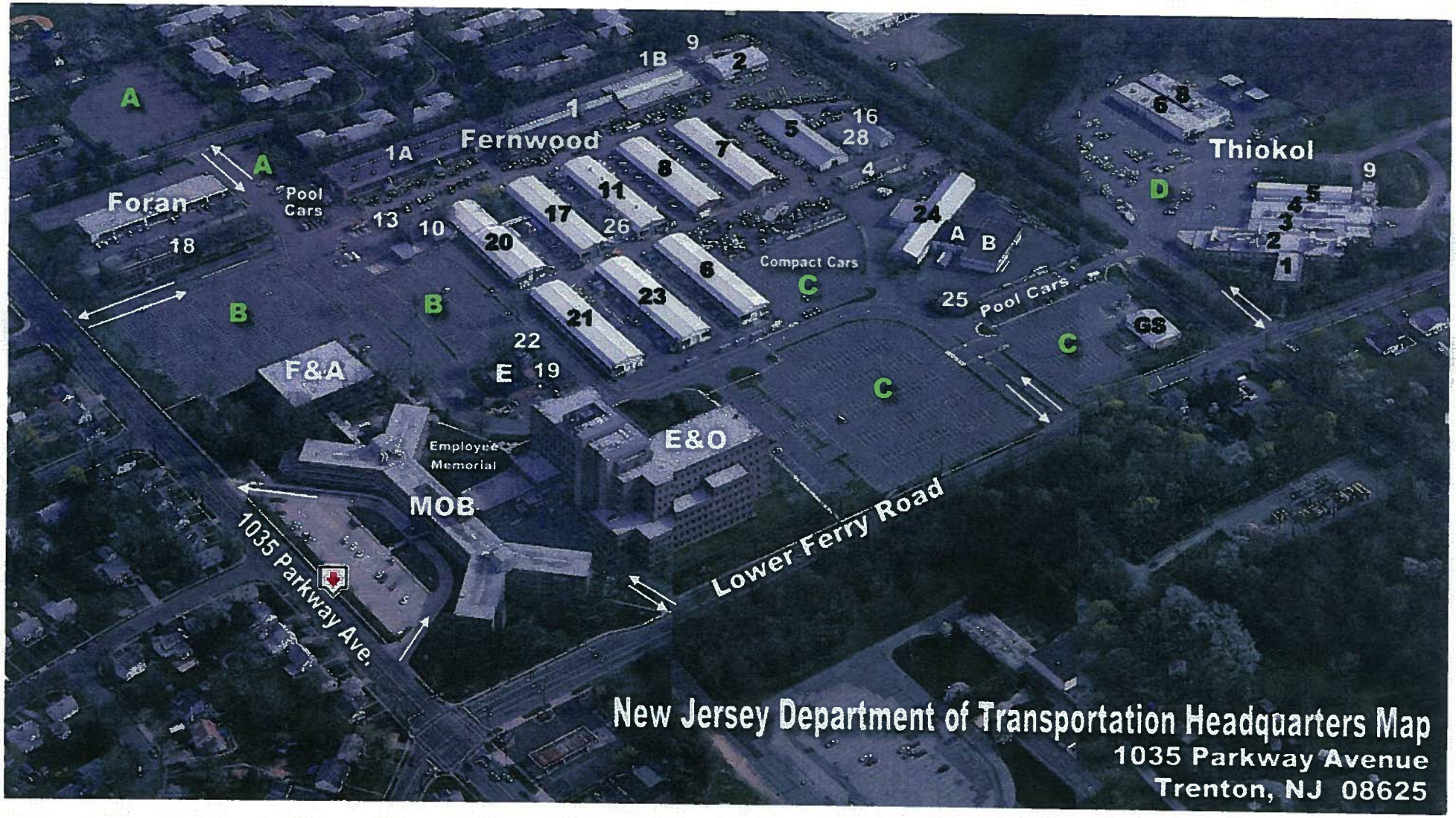
NOTE:
Refer to section "IV Project Schedule" of the Scope of Work for contract phase durations.

DBCA - TEST

Bureau of Design & Construction Services
Routine Project

Exhibit "A"

EXHIBIT "B"



Fernwood Complex

Building E - Central Steam Plant
Building 1 - Equipment Office/car & Truck Shop
Building 1A - Mower/Machine Shop
Building 1B - Storage
Building 2 - Plow Shop
Building 4 - Plant Maintenance Shop
Building 5 - Storage
Building 6 - Furniture Storage & Overhead Sign Crew
Building 7 - Equipment Receiving
Building 8 – Pavement Management/Records Storage
Building 9 – Vehicle Wash Building
Building 10 – Vehicle Gas & Natural Gas Stations
Building 11 – Inspection Shop
Building 13 – Guard House
Building 16 – Soils Building/Emergency Mgt. & Storage
Building 17 – Construction Shop
Building 18 – Vacant Building
Building 19 – Plant Maintenance
Building 20 – Central Electrical Operations/Radio Shop
Building 21 – Sign Shop
Building 22 – Switch Gear
Building 23 – Overhead Sign Crew
Building 24 – Warehouse Stock Room
Annex A – Department of Health
Annex B – Criminal Justice
Building 25 – Criminal Justice
Building 26 – Body Shop
Building 28 – BES Artifacts

Thiokol Complex

Building 1 – Vacant
Building 2 – Bituminous & Chemistry Labs
Building 3 – Materials Testing Lab
Building 4 – Physical Testing Lab
Building 5 – Storage
Building 6 – Accident Records/MVC/NJSP Fatal Unit
Building 8 – Print Shop
Building 9 – Concrete testing
GS – Geodetic Survey

MOB Main Office Building

E&O Engineering & Operations

F&A Finance & Administration

Map Created and Maintained by The Web Development Unit Division of IT

PHOTO 2

PHOTO 4

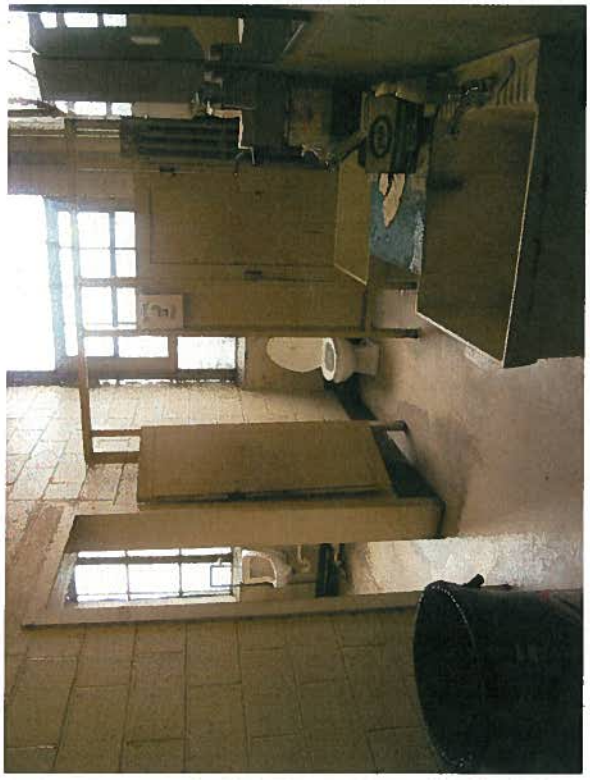


PHOTO 1

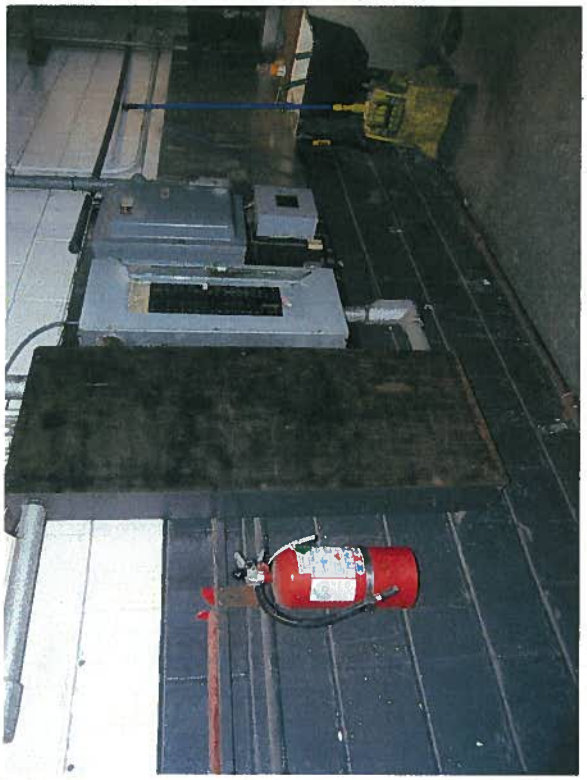


PHOTO 3

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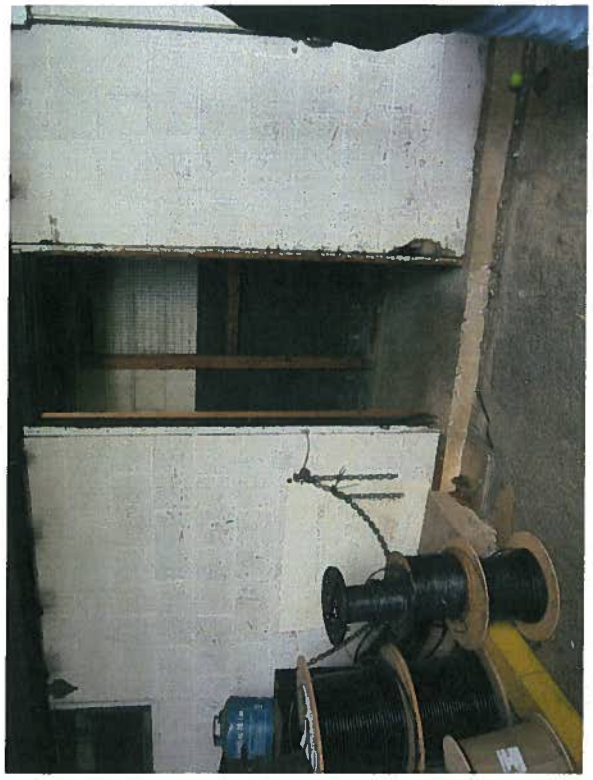

PHOTO 6

PHOTO 8

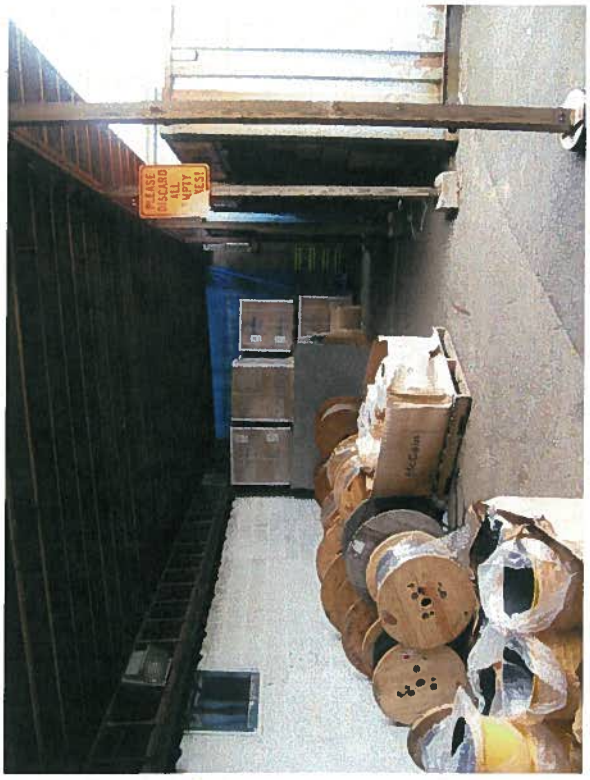

PHOTO 5

PHOTO 7

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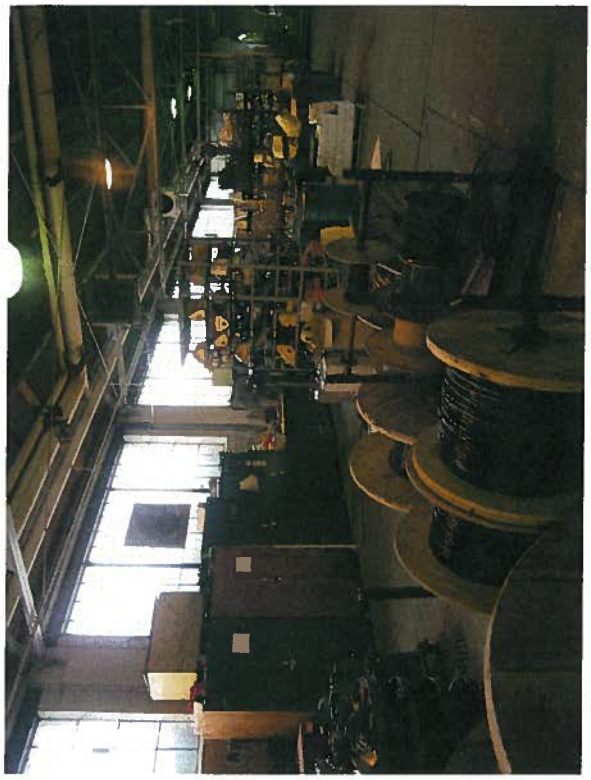


PHOTO 10

PHOTO 12

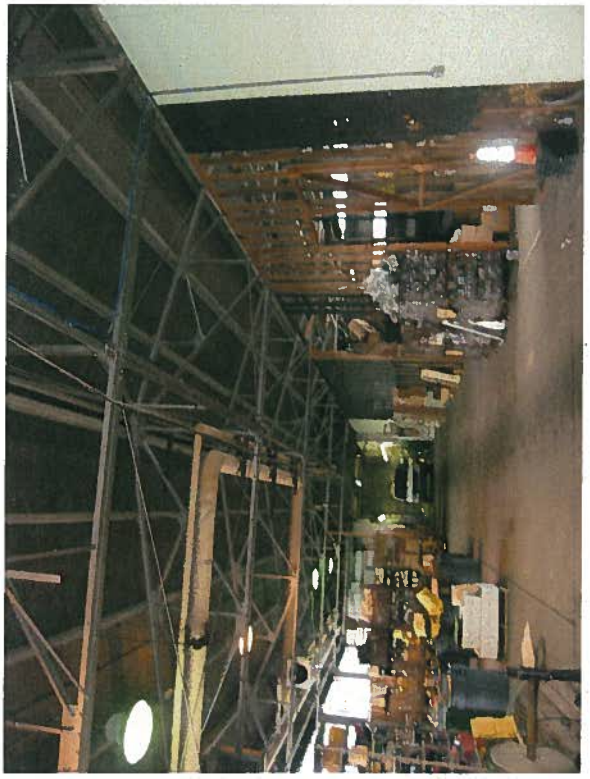


PHOTO 9

PHOTO 11

EXHIBIT 'C'

EXHIBIT 'C'

PHOTO 13

PHOTO 14

PHOTO 15

PHOTO 16

EXHIBIT 'C'

PHOTO 17

PHOTO 18

PHOTO 19

PHOTO 20

EXHIBIT 'C'

PHOTO 21

PHOTO 22

PHOTO 23

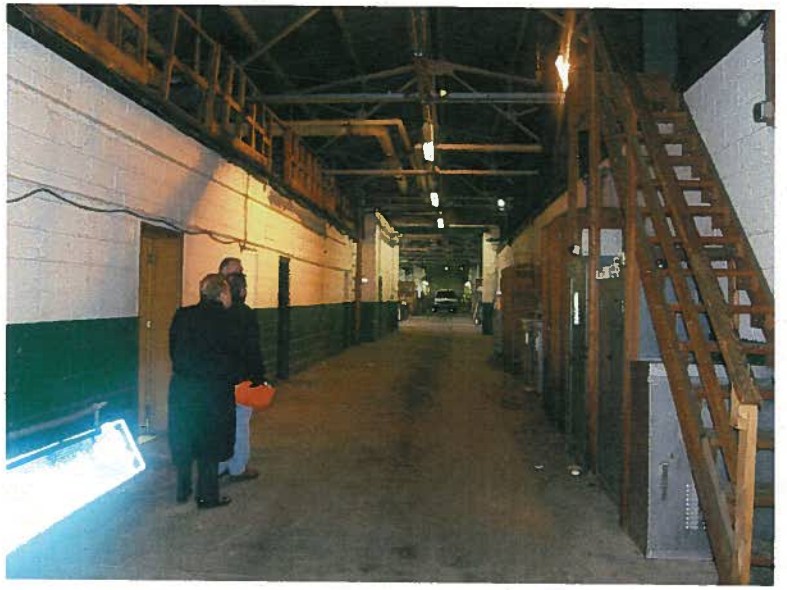


PHOTO 24

PHOTO 26

PHOTO 28

PHOTO 25

PHOTO 27

EXHIBIT 'C'

EXHIBIT 'C'

PHOTO 29

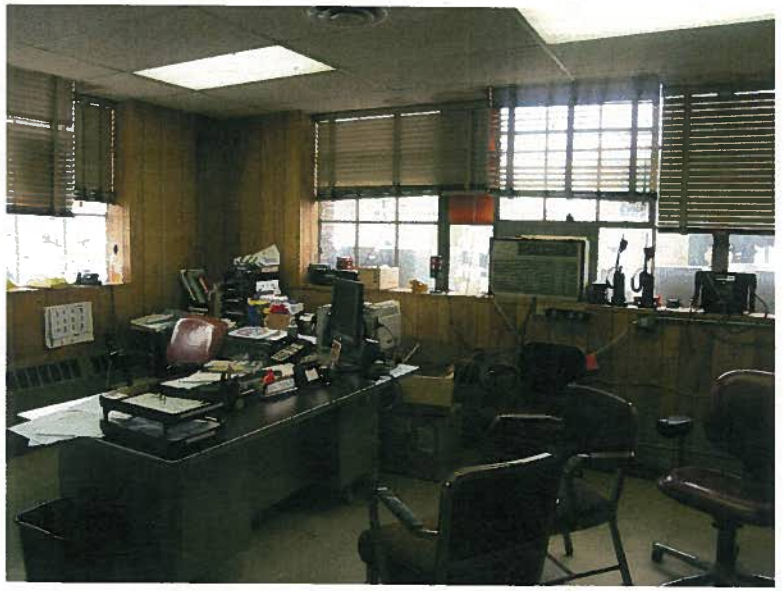


PHOTO 30

PHOTO 31

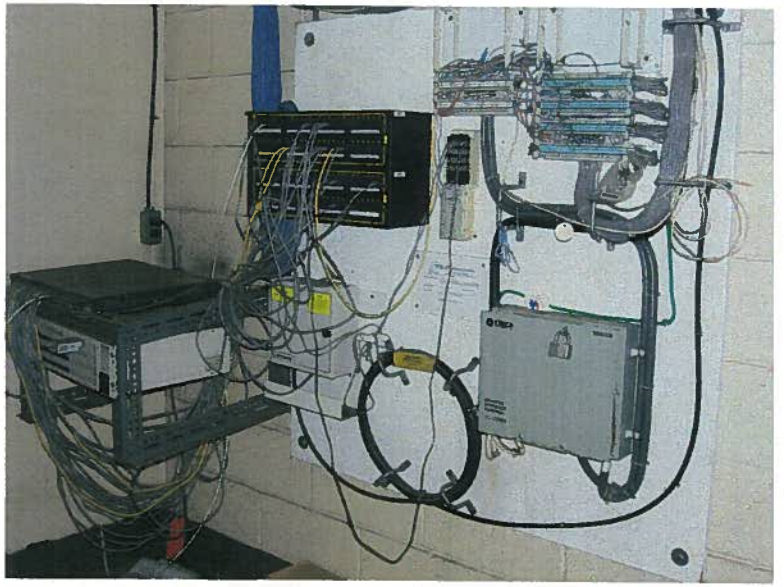


PHOTO 32

EXHIBIT 'D'

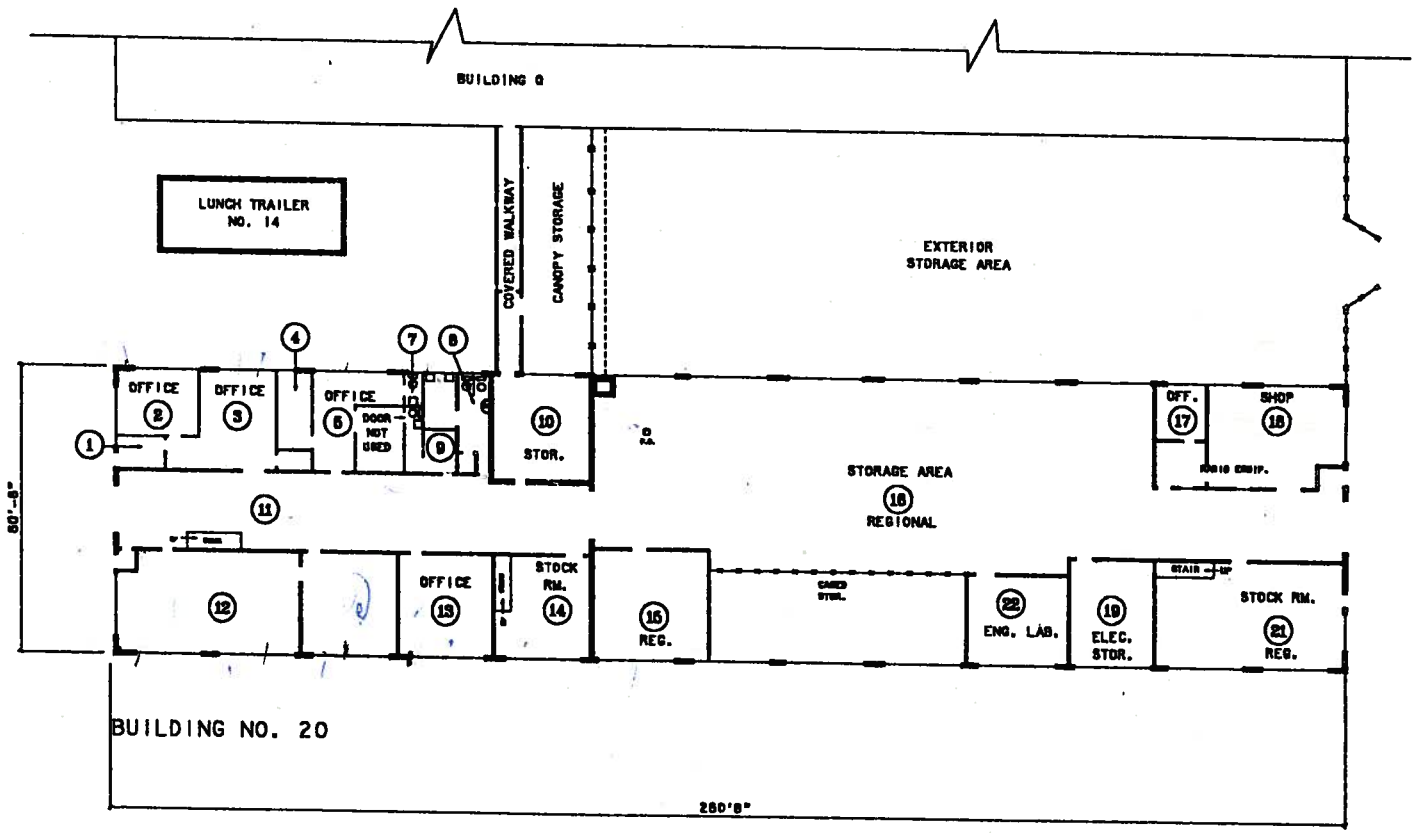
FAC. NO. 4350	FACILITY NAME: FERNWOOD

D.O.T. DEPARTMENT OF TRANSPORTATION

"BUILDING SURVEY" | PAGE NO.

SURVEY OF BUILDING: ELECTRICAL OFFICE/SHOP (20)

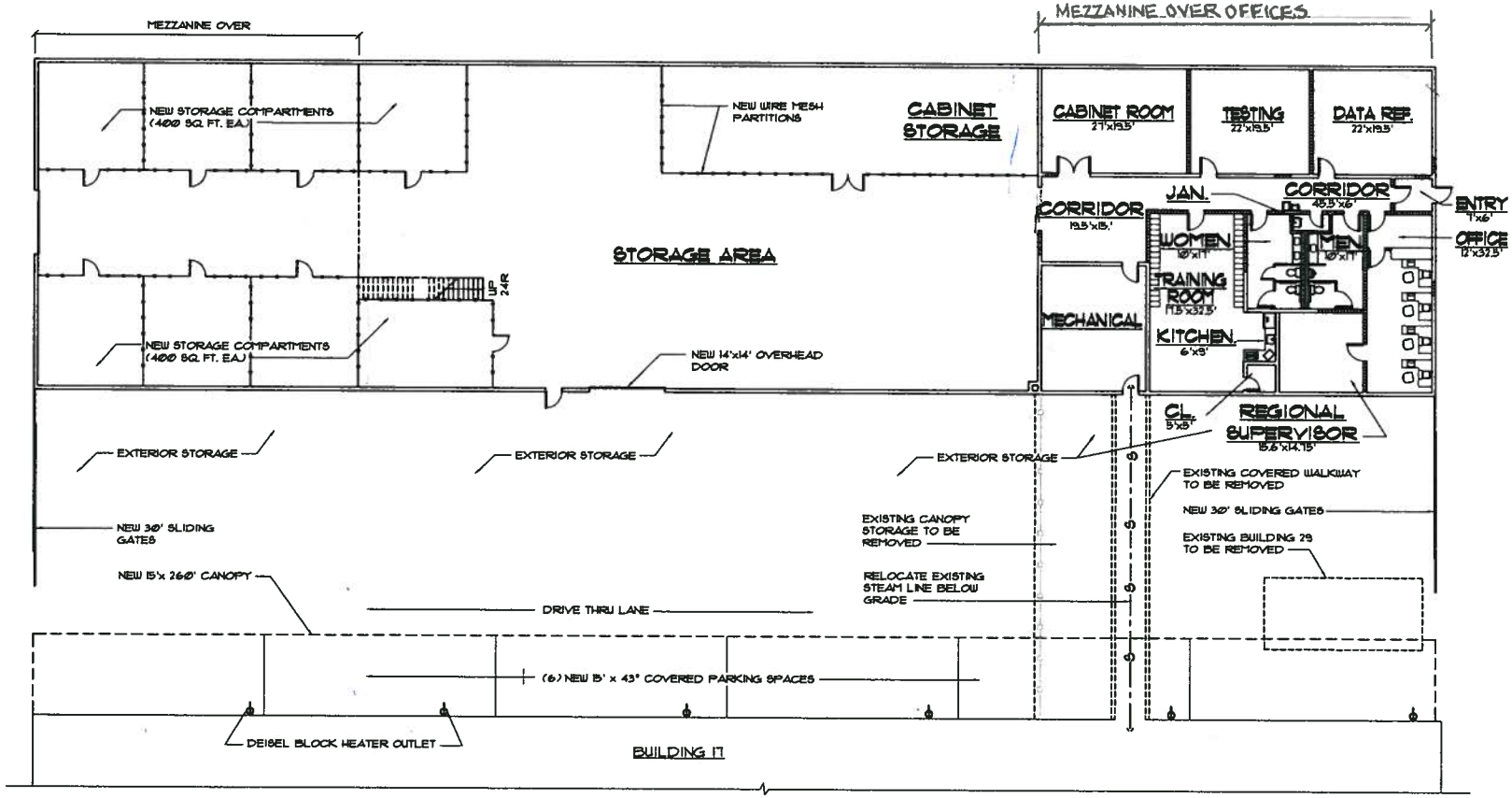
BUILDING DATA		
DATE OF FACILITY		N.I.
USE GROUP		S-1
OCCUPANCY		
	ALLOWABLE	52
FLOOR AREA REQ'D/OCCUPANT		300
FLOOR AREA	ACTUAL	15814
	ALLOWABLE	8400
ROOF AREA		18270
PERIMETER WALL AREA		9660
HEIGHT	ACTUAL	26'
	ALLOWABLE	30'
STORIES	ACTUAL	1
	ALLOWABLE	2
CONSTRUCTION CLASS		2C
CONSTRUCTION TYPE		MAS. STL. TRUSS
FIRE RATING	WALLS	2
	CEILING	0
	INT. COLUMNS	N/A
MEANS OF EGRESS:		
EXIT QUANTITY		5
CORR. LENGTH		N/A
CORR. FIRE RATING		N/A
DEAD END CORR.		N/A
HANDICAP ACCESSIBLE		N
SPRINKLER	REQUIRED	Y
	EXISTING	N
FIRE WALL SEPARATION		N
STAIRWELLS		Y
EMERGENCY EQUIP. REQ'D		N/A
TOILETS MEN	ACTUAL	3WC/2U/1GANG SINK
	REQUIRED	3WC/1U/2LAV
TOILETS WOMEN	ACTUAL	1WC/1LAV
	REQUIRED	4WC/2LAV
SHOWER M&F	ACTUAL	0
	REQUIRED	1M/1F



BUILDING FLOOR PLAN SCALE: N.T.S.

C350- 89

EXHIBIT 'E'



PROPOSED BUILDING 20 FLOOR PLAN

SCALE: 1/32" = 1'-0"

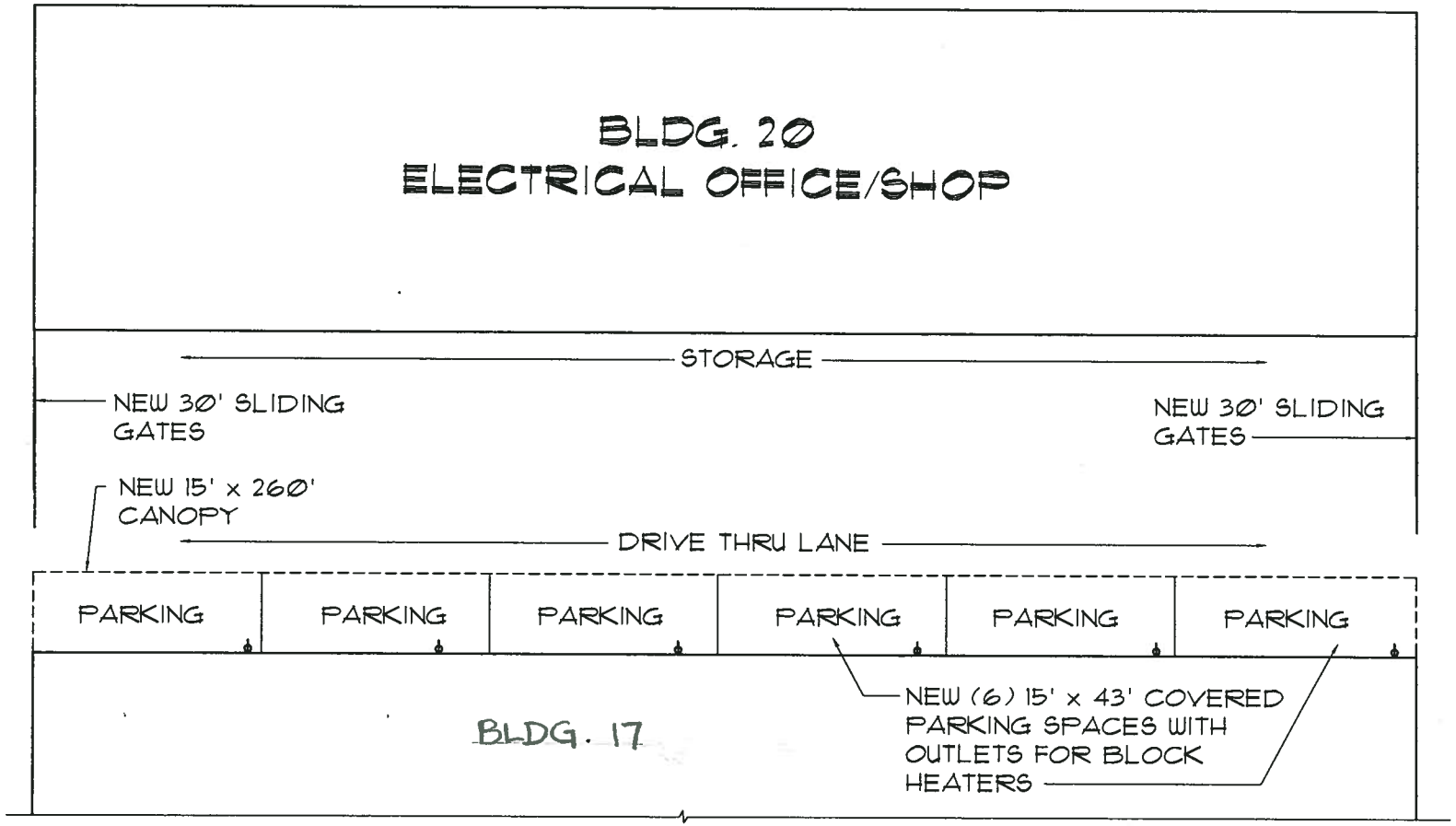
N

ALTERATION AND ADDITION
ELECTRICAL BUILDING No. 20
NEW JERSEY DEPARTMENT OF TRANSPORTATION
FERNWOOD COMPLEX
WEST TRENTON, MERCER COUNTY, N. J.

RONALD A. SEBRING ASSOCIATES, LLC
ARCHITECTURE PLANNING DESIGN

JUNE 19, 2008

EXHIBIT 'F'



SITE PLAN

SCALE: 1/32" = 1'-0"

ALTERATION AND ADDITION
ELECTRICAL BUILDING No. 20
NEW JERSEY DEPARTMENT OF TRANSPORTATION
FERNWOOD COMPLEX
WEST TRENTON, MERCER COUNTY, N. J.

RONALD A. SEBRING ASSOCIATES, LLC
ARCHITECTURE PLANNING DESIGN
JUNE 19, 2008