ADDENDUM

ADDENDUM NO. 1 OGS PROJECT NO. SA959

Construction Management Services Provide State Police Zone Headquarters Hempstead, NY

Date: March 25, 2015

NOTE: This Addendum forms a part of the RFP Documents. Insert it in the RFP Package. Acknowledge receipt of this Addendum as instructed in Section 1.04 of the RFP.

Questions and Answers numbered 1 through 16 from bidders follow as part of this document. A summary of these is as follows:

- 1. Clarification, no addendum.
- 2. Additional information, Addendum issued, see response.
- 3. Clarification, no addendum.
- 4. Clarification, no addendum.
- 5. Clarification, no addendum.
- 6. Clarification, no addendum.
- 7. Clarification, no addendum.
- 8. Additional information, Addendum issued, see response.
- 9. Additional information, Addendum issued, see response.
- 10. Clarification, no addendum.
- 11. Additional information, Addendum issued, see response.
- 12. Clarification, no addendum.
- 13. Clarification, no addendum.
- 14. Clarification, no addendum.
- 15. Clarification, no addendum.
- 16. Additional information, Addendum issued, see response.

Information is included in this addendum for reference from the program recommendations. This should provide an overview of the project for the purposes of this procurement. The design may differ from these recommendations. As such the information should not be a basis for the actual materials or systems to be specified in the Contract Documents have not yet been completed.



Contract Information		
Contract SA959+	Federal Id 35-2321289	
Question Number 1		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: Jacobs Project Management Co	Contact Name: Christine Oates	
Phone: 9172799164	Fax:	
Date Submitted: 3/16/2015 9:57:44 AM		
Date Accepted: 3/16/2015	Date Rejected:	
Question: In Section 2.02 of the RFP the positions that are listed do not match those positions provided for in the wage rate sheets. Wage Rate sheets provide positions for both pre-construction and construction while the list in Section 2.02 appears to only provide for construction phase. Please clarify which positions we should include in our staffing plan for both the pre-construction phase and the construction phase. Thank you.		
Current Assignment: CADM		
Response Date: 3/17/2015	Addendum Issued: No	
Response: All title listed in section 2/02 are listed in the wage rate sheets. Based on the anticipated procurement and project schedules(see question 2) pre-construction services will likely be minimal.		



Contract Information	
Contract SA959+	Federal Id 35-2321289
Question Number 2	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: Jacobs Project Management Co	Contact Name: Christine Oates
Phone: 9172799164	Fax:
Date Submitted: 3/16/2015 9:58:50 AM	
Date Accepted: 3/16/2015	Date Rejected:
Question: Please provide a project schedule that includes the design schedule and an anticipated construction schedule. Thank you	
Current Assignment: CADM	
Response Date: 3/17/2015	Addendum Issued: Yes
Response: The anticipated project schedule is as follows: Bid date 6/10/15, Award 7/8/15, (duration 720 days) Completion 7/7/17. Note: The project is in the design phase and the schedule is subject to change.	



Contract Information		
Contract SA959+	Federal Id 11-1445800	
Question Number 3		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: URS Corporation - New York	Contact Name: Mellanie Bennett	
Phone: 2126094478	Fax:	
Date Submitted: 3/19/2015 9:49:35 AM		
Date Accepted: 3/19/2015	Date Rejected:	
Question: Is there an exact address for the new facility? The RFP only states that it will be in Hempstead, NY.		
Current Assignment: CADM		
Response Date: 3/24/2015	Addendum Issued: No	
Response: The site is located in Hempstead, New York on an undeveloped area between the Meadowbrook Parkway and Merrick Avenue north of Hempstead Turnpike.		



Contract Information		
Contract SA959+	Federal Id 11-1445800	
Question Number 4		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: URS Corporation - New York	Contact Name: Mellanie Bennett	
Phone: 2126094478	Fax:	
Date Submitted: 3/19/2015 9:49:44 AM		
Date Accepted: 3/19/2015	Date Rejected:	
Question: Who is the design architect?		
Current Assignment: CADM		
Response Date: 3/19/2015	Addendum Issued: No	
Response: The architect of record is Peter Gisolfi Assoc. You are reminded that this procurement is in the restricted period and may only be discussed with Designated Contacts identified in the RFP.		



Contract Information	
Contract SA959+	Federal Id 11-1445800
Question Number 5	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: URS Corporation - New York	Contact Name: Mellanie Bennett
Phone: 2126094478	Fax:
Date Submitted: 3/19/2015 9:49:53 AM	
Date Accepted: 3/19/2015	Date Rejected:
Question: At what state of design is the project currently?	
Current Assignment: CADM	
Response Date: 3/19/2015	Addendum Issued: No
Response: 100% documents are under review by OGS and State Police. Documents are not available at this time	



Contract Information		
Contract SA959+	Federal Id 11-1445800	
Question Number 6		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: URS Corporation - New York	Contact Name: Mellanie Bennett	
Phone: 2126094478	Fax:	
Date Submitted: 3/19/2015 9:50:00 AM		
Date Accepted: 3/19/2015	Date Rejected:	
Question: When is the anticipated construction start date?		
Current Assignment: CADM		
Response Date: 3/19/2015	Addendum Issued: No	
Response: Refer to response to question 2.		



Contract Information		
Contract SA959+	Federal Id 11-1445800	
Question Number 7		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: URS Corporation - New York	Contact Name: Mellanie Bennett	
Phone: 2126094478	Fax:	
Date Submitted: 3/19/2015 9:50:08 AM		
Date Accepted: 3/19/2015	Date Rejected:	
Question: Could you please provide the Excel spreadsheet required for the Maximum Wage Rate Form?		
Current Assignment: CADM		
Response Date: 3/19/2015	Addendum Issued: No	
Response: This wage issued on March 10 with the RFP document and is available for download from the OGS website.		



Contract Information		
Contract SA959+	Federal Id 20-0953973	
Question Number 8		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: Hill International, Inc.	Contact Name: Theresa Woods	
Phone: 2122443700	Fax:	
Date Submitted: 3/19/2015 10:29:06 AM		
Date Accepted: 3/19/2015	Date Rejected:	
Question: Please confirm M/WBE Percentage as the sample contract differs from the RFP language. Is there a confirmed site location for the new headquarters? If so, can you please provide details on the location, size and acquisition status. Has an architect been selected? If so, is the design complete? What is the building construction type?		
Current Assignment: CADM		
Response Date: 3/19/2015	Addendum Issued: Yes	
Response: -MWBE Goals are 15% and 15% for total goal of 30%. Draft agreement will be revised by addendumSite identified in previous responseArchitect identified in previous responseConstruction type is 2B		



Contract Information	
Contract SA959+	Federal Id 27-5298729
Question Number 9	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: Elite Construction Company of NY, LLC	Contact Name: MICHAEL REED
Phone: 5165128983	Fax:
Date Submitted: 3/19/2015 10:29:27 AM	
Date Accepted: 3/19/2015	Date Rejected:
Question: In review of item D.2 Electrical/MEP Inspector, the job description notes "CCTV systems for prisons of similar size and type". Since this project is a State Trooper Facility, does this description pertain to this scope of work? Please clarify the experience of the inspector.	
Current Assignment: CADM	
Response Date: 3/24/2015	Addendum Issued: Yes
Response: Replace Section 2.03 D 2 with the following: Electrical/MEP Inspector shall possess a minimum of 3 years of experience on fire alarm and security systems in addition to 3 years experience on normal electrical installations.	



Contract Information	
Contract SA959+	Federal Id 27-5298729
Question Number 10	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: Elite Construction Company of NY, LLC	Contact Name: MICHAEL REED
Phone: 5165128983	Fax:
Date Submitted: 3/19/2015 10:41:55 AM	
Date Accepted: 3/19/2015	Date Rejected:
Question: On page 7, the location of the new State Police Zone Headquarters is in Hempstead, New York. In other correspondence, the facility is to be sited on the Meadowbrook Parkway. Please clarify the exact location of where the facility will be constructed.	
Current Assignment: CADM	
Response Date: 3/19/2015	Addendum Issued: No
Response: The site is located in Hempstead, New York on an undeveloped area between the Meadowbrook Parkway and Merrick Avenue north of Hempstead Turnpike.	



Design And Construction

Contract Information	
Contract SA959+	Federal Id 27-5298729
Question Number	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: Elite Construction Company of NY, LLC	Contact Name: MICHAEL REED
Phone: 5165128983	Fax:
Date Submitted: 3/19/2015 1:19:07 PM	
Date Accepted: 3/19/2015	Date Rejected:
Question: Based upon the staffing as noted on page 17, 5 full-time personnel are proposed to be assigned to the project. Depending on a person's experience and skill level, can they fulfill more than one staffing requirement? ie Project Engineer and Superintendent (MEP);	
Current Assignment: CADM	
Response Date: 3/24/2015	Addendum Issued: Yes
Response: Vendors may propose alternative staffing that the Selection Board may determine to be a benefit to the State in their evaluation in 4.04-2. The determination of cost competitiveness will not be impacted from this alternative, however it may be reflected during negotiation of the contract.	



Contract Information	
Contract SA959+	Federal Id 13-3779703
Question Number 12	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: HAKS Engineers, Architects and Land Surveyors, P.C.	Contact Name: Howard Chynsky
Phone: 2127471997	Fax: 2127471960
Date Submitted: 3/19/2015 3:57:40 PM	
Date Accepted: 3/19/2015	Date Rejected:
Question: What is the current stage of design, and is it possible to review any drawings?	
Current Assignment: CADM	
Response Date: 3/19/2015	Addendum Issued: No
Response: 100% documents are under review by OGS and State Police. Documents are not available at this time.	



Design And Construction

Contract Information	
Contract SA959+	Federal Id 13-3779703
Question Number	
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead	
Company Name: HAKS Engineers, Architects and Land Surveyors, P.C.	Contact Name: Howard Chynsky
Phone: 2127471997	Fax: 2127471960
Date Submitted: 3/19/2015 4:47:07 PM	
Date Accepted: 3/19/2015	Date Rejected:
receive 5 points and will then be reevaluated in the interview	naximum points for Personnel is 25. It then states that all proposals will (if shortlisted). Can you please clarify this language and whether the RFP will be used solely for evaluating the proposals or whether the well the presentation?
Current Assignment: CADM	
Response Date: 3/24/2015	Addendum Issued: No
	lidate information provided in the proposal. After the interview and based ubmitted material and may re-score the technical criteria items 1 thru 4."



Contract Information		
Contract SA959+	Federal Id 27-5298729	
Question Number 14		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: Elite Construction Company of NY, LLC	Contact Name: MICHAEL REED	
Phone: 5165128983	Fax:	
Date Submitted: 3/20/2015 8:16:11 AM		
Date Accepted: 3/20/2015	Date Rejected:	
Question: Based on the response to question 2 and the review of the proposed construction manager (CM) selection timeline, it appears that the selected CM will not have a role in Pre-Construction Services as listed on pages 8 & 9. Please clarify if a constructability review will be afforded to the CM prior to the release of construction documents in addition to the extent of other Pre-Construction Services to be rendered.		
Current Assignment: CADM		
Response Date: 3/24/2015	Addendum Issued: No	
Response: Based on the current schedule(s) the CM will have limited pre-construction role. In the event these schedules change, the CM pre-construction role may be expanded and include constructability review.		



Contract Information		
Contract SA959+	Federal Id 13-3779703	
Question Number 15		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: HAKS Engineers, Architects and Land Surveyors, P.C.	Contact Name: Howard Chynsky	
Phone: 2127471997	Fax: 2127471960	
Date Submitted: 3/24/2015 10:03:10 AM		
Date Accepted: 3/24/2015	Date Rejected:	
Question: The response to Question 1 states that the titles listed in Section 2.02 of the RFP are listed on the Wage Rate Sheets, and based on the anticipated procurement and project schedules preconstruction services will likely be minimal. However, since the Wage Rate Sheets list more titles than the RFP requires can you please confirm that proposals should only include the rates that are required by the RFP in Section 2.02?		
Current Assignment: CADM		
Response Date: 3/24/2015	Addendum Issued: No	
Response: Per Section 4.04 - 5 "Firms must complete the Maximum Wage Rate Form for Consultants provided in Excel file, WageRateForm.xls, in their entirety." For purposes of comparison and to allow for changes in staffing-should the need arise during while under contract- Firms must complete rates in all years of each title.		



Contract Information		
Contract SA959+	Federal Id 13-1974950	
Question Number 16		
CM Services – Provide Zone Headquarters-Troop L NYS Police Hempstead		
Company Name: LiRo Engineers, Inc.	Contact Name: Nancy Malicki	
Phone: 5169385476	Fax:	
Date Submitted: 3/24/2015 4:35:12 PM		
Date Accepted: 3/25/2015	Date Rejected:	
Question: Please clarify the evaluation criteria for the Firms Experience on page 30 of the RFP. In order to receive the maximum number points for this section, do we need to show all five (5) construction project experience in justice or law enforcement construction only, or do we present projects similar to this project's scope which includes offices, bedrooms, garage occupancies with locker rooms, etc.?		
Current Assignment: CADM		
Response Date: 3/25/2015	Addendum Issued: Yes	
Response: Per 4.04 - 1 "At least 3 of the projects shall be relavant to the project objective in the scope of services." (page 7 of the RFP) For reference additional project information from the Program Report recommendations has been included as part of Addendum 1.		

RECOMMENDED SCOPE OF WORK:

1. Site

The site is located in Hempstead, New York on an undeveloped area between the Meadowbrook Parkway and Merrick Avenue north of Hempstead Turnpike. The land is the property of the New York State Parks Recreation and Historical Preservation and is occupied and managed by the New York State Department of Transportation. The project area for the new State Police Zone Headquarters will be approximately (5) acres and will include the area needed for the installation of a new 8" water main originating on Merrick Avenue 3,600 feet north of the new building. Site development will be a major component of the new State Police Zone Headquarters. The site improvements will include a broad range of items, each of which is summarized below:

1.1. Parking

The new Police Zone Headquarters will have a total of (112) parking spaces and (60) spaces in the impound lot. Out of the (112) parking spaces, (27) spaces are allocated for the general public and visitors providing services to the facility (two of which are handicap accessible) and (85) parking spaces are allocated for troopers personal cars, cruisers and other vehicles used by the state police. 1.2. Impound Vehicle Lot

The new State police Zone Headquarter facility will include an impound/vehicle storage lot. The impound lot will be gated and secured with a (6) feet high perimeter chain link fencing lined with plastic slats for screening. To provide access to the impound/vehicle storage lot, a new automated, approximately (20) feet wide sliding gate, is proposed.

1.3. Waste Water Disposal System

The project site has an existing sewer line easement and pipe crossing it from north to south. The sewer line is a 60" dia. Reinforced Concrete Pipe (RCP) with varying invert depths of roughly (20) to (29) feet below the surface. The sewage from the new State Police Zone Headquarter will be piped with an 8" Standard Dimension Ration (SDR) 35 Polyvinyl Chloride (PVC) line about 400' south and connect to an existing manhole over the 60" sewer line. In an Environmental Assessment Form (EAF) prepared for the project by the Office of General Services (OGS) and dated 8/15/12 it was estimated that the project will have water usage of 1,600 gal/day. During the detailed design phase, the sewer system will be examined in more detail and the water usage and subsequent sewage quantity will be revised if necessary.

1.4. Water Services

The project site does not have municipal water service adjacent to it. There is a water main under Merrick Avenue which terminates approximately 3,600 feet north of the proposed building and there is a water main at the south side of Hempstead Turnpike about 800 feet south of the proposed building. Since the water service became a critical issue for the project a site meeting was held at the site on March 11th, 2014 to discuss the water service options. Present at the meeting were [NYSDOT], [Town of Hempstead Water Department] and

from [the Architect]. During the meeting the scope the two options, extending the main from the north and from the south were evaluated and discussed. Extending the water main from the north includes about 500 feet of trenching in Merrick Ave., clearing vegetation along the route, cutting and reconstructing chain link fences, performing horizontal drilling under Charles Lindbergh Boulevard Ramps and installing five hydrants along the route as per the request by Mike Walsh from the town of Hempstead Water Department. Extending the main form the south crossing the entire width of Hempstead turnpike, will require the following: extensive traffic maintenance and protection, the work will be done almost entirely at night, excavation for utilities location, large replacement of roadway and concrete base and horizontal drilling.

After reviewing the projected cost of the two options and the issues associated with their execution the team decided to proceed with the

north main option. The main will be extended from the north to the northeast corner of the project property where a Tee will be installed for possible future use by the Town of Hempstead. The main will split to a 6" diameter ductile iron pipe service for fire and a 2" service for domestic. The fire

service will go into a vault housing a double check valve and a detector check meter. The domestic service side will include a water meter in a meter manhole and a Reduced Pressure Zone (RPZ) device installed within a hot box. The domestic water meter may be installed in the hot box. Exact water service design requirements will be finalized with the Town of Hempstead Department of Public Works (DPW). One Hydrant will be installed in a location on the north side of the building. During the detailed design phase, pipe sizes, hydrants and all other items related to the water service will be examined in more detail and will be updated and revised as necessary.

1.5. Storm Water Management

Overall, the proposed improvements to the State Police Zone Headquarter project site will disturb approximately (5) acres including the areas accommodating the work related to the water main extension from the north. Of this disturbance, about 0.40 acres will be new impervious areas including the building, decorative pavements and sidewalks and the impound/vehicle storage lot. About 1.2 acres of additional paved areas will be pervious asphalt at the parking lots and access drives. As such, the project will be required to address water quality and quantity concerns. A State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-10-001) for Storm Water Discharge from Construction Activity will need to be filed for the amount of construction disturbance. A Storm water Management Report and Full Storm water Pollution Prevention Plan (SWPPP) with Post-Construction Storm water Control Plan will need to be developed. Runoff from new impervious areas will need to be treated for water quality using a pretreatment basin and quantity with a storm water infiltration basin designed in accordance with the NYSDEC Phase II Storm water Regulations.

[Geotechnical engineer] performed six test pits at the project site. The test pits were conducted in order to obtain the makeup of the soils and the percolation rate which will be the base for the design of the detention and infiltration system. The soil was found to be mostly sand and fine gravel. Four of the six tests yielded very favorable percolation results of more than 20 in/hr and the two test pits on the north side of the site revealed mostly debris underground so no percolation tests were done at these locations. During the detailed design phase the exact volume of the pretreatment basin and the infiltration basins (currently designed conservatively) will established and incorporated into the design.

1.6. Utilities

There are existing Public Service Electric and Gas Long Island (PSE&GLI) utility poles in Merrick Avenue which can be connected to for electrical service. There is also a National Grid gas line in Merrick Avenue which can be connected to in order to provide gas service for the proposed building. Load letters will be submitted to the utility companies to determine the required specifications for the transformer, electrical service and gas service.

1.7. SEQR

The anticipated project scope is an Unlisted Action, which requires the preparation of a Long Environmental Assessment Form and one was prepared by OGS in August 2012. This document may need to be revised to reflect any changes brought about by the current design. The New York State Police (NYSP) is the Lead Agency for the project and will be coordinating the review with the Office of Parks Recreation and Historic Preservation (OPRHP). NYSP will ensure that all of OPRHP comments and concerns are adequately addressed during the design.

2. Building

2.1. Entrance Lobby

At the lobby, there will be an electronically controlled entrance door leading into an area for the public to wait, a public toilet, and a Juvenile Interview Room. The lobby will be visible from the Uniform Command Desk via a bullet resistant glazed vision panel with a two-way communication

speaker. The main entrance door will contain a surveillance camera on the exterior.

2.2. Zone Command Offices

At the north wing of the prosed Zone Headquarters there will be offices for the Zone Command as well as the Command Post Classroom. The Zone Command Offices will serve the Zone Commander, Administrative Assistant, Zone Lieutenant, and Zone Sergeant's. There will also be a conference room, copy room, and public toilets and a pantry space serving the Zone Command. It was decided to centrally locate the public toilets and pantry so that they could serve both the Command Post Classroom and/or the Zone Command Offices. This was helpful in making the building layout more cost and energy efficient.

2.3. Uniform Patrol Squad Room

There will be a central squad room surrounded by Uniform Sergeant's Office, Uniform Command Desk, Uniform Command Officer, Uniform ID Room, Uniform Interview Room, Uniform Evidence Closet, and closets for file storage.

2.4. BCI Squad Rooms

It was decided that there would be two squad rooms within the BCI, One for the BCI and the other for the BCI Auto/VFW/CTIU. There would also be a BCI Wire Room, two interview rooms, an evidence closet, and a small break room.

2.5. Locker Rooms and Toilets

There will be three locker rooms, one each for Male and Female Uniform Patrol Troopers, and a third smaller locker room for Uniform Patrol Male Officers with its own toilet room. Immediately outside the locker rooms are two closets for storage of trooper's uniforms.

2.6. Bedroom Area

There will be three bedrooms and one additional flex space to be utilized as a bedroom or office space. The bedrooms have a separate bathroom with sink, toilet and shower stall, and have a separate exterior entrance door access.

2.7. Vehicle/Equipment Storage Space

The project team decided the vehicle/equipment storage space will contain three bays, two standard bays and one oversized for vehicles that are delivered on a flatbed to the facility for further investigation. Within this space there will also be a fire rated enclosed tire storage closet.

2.8. Sustainable Design Strategies & LEED Certification

The building will conform to LEED standards established by the United States Green Building Council (USGBC) and Executive Order No. 88 for 'green' buildings.

Executive Order No. 88 (EO88) requires that state agencies reduce energy use intensity by 20% per square foot by 2020, as compared to a 2010/2011 baseline. In addition to the requiring reduction of overall energy consumption, the executive order also recognizes energy losses that occur at generation, transmission and distribution, and encourages campuses to think of new ways to improve in these areas.

The building design is targeting a LEED Gold Certification Rating. The design will include systems to meet energy usage targets of 30% or 50% below the baseline energy code per section 201 of the American Clean Energy and Security Act of 2009 (H.R. 2454), dependent on payback analysis.

The design team conducted an Eco-charette with all project stakeholders to identify definite and potential LEED credits to be pursued in the design of the project. A copy of the LEED Scorecard is located in the appendix. The design team is working with PSEGLI, the local utility company, in identifying potential rebates and incentives that are available for this project.

3. Building Structure

The structure of the building will be concrete foundation and slab on grade, exterior masonry bearing walls, and cold frame steel trusses for the roof structure.

3.1. Footings

At the time of the writing of this report, site test borings and a geo-technical engineer's analysis had not been performed. The design team assumed adequate bearing capacity for poured-in-place

reinforced concrete mat footings based on sub-surface conditions encountered for an earlier project completed at Hofstra University which is located approximately a half a mile to the east of the proposed site. These assumptions will be confirmed once the subsurface borings and analysis is completed in June 2014. The Programming report will be updated accordingly.

3.2. Exterior Walls

The walls will be constructed of 8" nominal load bearing concrete masonry units with stainless steel horizontal reinforcement every other course. Masonry unit cells shall contain a #5 continuous vertical rebar @ 32" o.c.. Cells containing rebar shall be filled solid with non-shrink grout and vibrated. On the exterior there will be a masonry stone and/or brick veneer.

3.3. Roof Structure

The roof structure will consist of pre-engineered cold frame trusses and 1-1/2" metal decking. A one inch shaft liner will be applied to the underside of the trusses to provide a 1 Hour fire separation between the attic space and the occupied spaces below. An underlayment assembly below the aluminum standing seam roof panels will be applied on top of the metal decking. The assembly will consist of a layer of 5/8" dens deck sheathing, ½" CDX plywood, two layers of ice and water shield, and a layer of rosin paper.

4. Thermal & Moisture Protection Strategies

4.1. Slab on Grade

Below the entire 5" reinforced concrete slab there will be a layer of 3" rigid insulation with taped seams on top of a 10 mil. polyethylene vapor barrier on compacted grade. The thermal resistance value of the slab will be approximately R-15.

4.2. Exterior Masonry Walls

Within the 4" masonry wall cavity, there will be 3" of closed cell spray foam icynene insulation applied to the CMU and a 1" air space. The closed cell will provide thermal resistance while acting as a vapor and moisture barrier. On the interior face of the block there will be an additional 3" of closed cell insulation. The thermal resistance value of the wall construction will be approximately R-36.

4.3. Attic Floor Insulation

Insulation will be located at the lower chord of the trusses so that the attic will be unconditioned except for areas where there are enclosed HVAC fan rooms. Insulation shall be 8" of icynene closed cell spray foam insulation. The thermal resistance value of the attic floor will be approximately R-45.

4.4. Exterior Windows

The windows shall be wood windows clad with aluminum exterior trim. Glazing shall be Low-E insulated glass panels.

5. Interior Finishes

5.1. Flooring

Offices will receive carpet tile, corridors will receive porcelain tile or vinyl composition tile, bathrooms and locker rooms will receive porcelain tile, sealed concrete at the mechanical and service bay areas.

5.2. *Walls*

The walls will be painted gypsum board everywhere except at the bathrooms and service area. The bathrooms will receive tile from floor to ceiling, and the service area will be sealed block.

5.3. Ceilings

Suspended acoustical tile ceilings with recessed compact fluorescent light fixtures at all spaces except the locker bathrooms and mechanical/electrical rooms which will be painted type 'x' gypsum board.

5.4. Exterior Finishes

The exterior finishes will be a combination of stone veneer, brick veneer and aluminum wrapped eave boards. The roof will be a pitched standing seam metal roof with aluminum roof louvers.

Snow and ice railing will be installed on the roof above the garage doors and all building entrances.

6. Mechanical

6.1. Heating

- 6.1.1. *Option A Split System:* The heating source for the building consists of (2) two hot water boiler located in the mechanical equipment room. The boiler shall be gas-fired. Hot water shall be distributed throughout the building for perimeter radiation, cabinet heaters, unit heaters and air handling unit heating coils. Commercial enclosure fin-tube radiation shall be installed within the perimeter rooms cabinet heaters shall be provided in vestibule, unit heaters shall be provided in garage and mechanical spaces, and air handling units shall be provided with heating coils.
- 6.1.2. Option B Geothermal: The heating source for the building consists of Geo-Thermal closed earth loop. Condenser water from Geo-Thermal wells shall be circulated throughout the building for water source heat pumps. Water source heat pumps shall serve all occupied spaces and (2) two hot water boiler located in the mechanical equipment room. The boiler shall be gas-fired. Hot water shall be distributed throughout the building for cabinet heaters, unit heaters and preheat coils at heat. Cabinet heaters shall be provided in vestibule, unit heaters shall be provided in garage and mechanical spaces. Heat pumps serving locker rooms and occupied vestibules shall be provided with hot water preheat coils.

6.2. Air Conditioning

- 6.2.1. *Option A Split System:* The occupied areas of the building shall be air conditioned by air handling units, an air distribution system with a fully ducted return, and air-cooled condensing units located outdoors. The air handling units shall be located within an attic level mechanical space constructed above general spaces. The main building trusses shall be modified to accommodate the equipment and the supply and return air duct work will be run in the accessible above ceiling space. Variable air volume terminal units and controls shall be installed on the air handling unit supply air ductwork. Air side economizer with return air fans, outside air intake and relief. Outside air intake and relief louvers shall be located above roof level.
- 6.2.2. *Option B Geothermal:* The occupied areas of the building shall be air conditioned by Geo-Thermal closed earth loop with water source heat pumps. Condenser water from Geo-Thermal wells shall be circulated throughout the building to water source heat pumps. Water source heat pumps with supply and return air ductwork shall be located in space above the ceiling and below attic space. Outside air intake shall be ducted to each water source heat pump from intakes at roof level.

6.3. Exhaust Ventilation

Mechanical exhaust shall be provided for the bathrooms, janitor closet, and garage areas. 6.4. Controls

The building HVAC systems shall be monitored and controlled by a direct digital temperature control system. The system shall be programmed for temperature set points and occupancy ventilation air schedules.

6.5. Plumbing

Shall consist of vitreous china fixtures; automatic sensor flush valves and lavatory faucets; thermostatic mixing valves, if required; pantry countertop sinks; mop service sink; and water cooler. Gas fired domestic hot water heaters with recirculation pump shall be located in the mechanical equipment room. Freeze proof hose bibs shall be located at exterior of building. 6.6. Sprinklers

A wet-pipe sprinkler systems shall be installed in all heated areas of the building and mechanical rooms at attic level. The attic will not be provided with a sprinkler system. A dry sprinkler system shall be provided for the garage area.

7. Electrical

7.1. General Electrical Provisions

A service rated distribution board with overcurrent devices, power monitoring, and surge protection devices will be provided and distribute power to power panels and lighting panels for mechanical loads, lighting loads and equipment loads.

7.2. Lighting

Lighting will generally consist of LED and fluorescent fixtures throughout all spaces. Corridors will be provided with fluorescent fixtures. Corridor lighting will be on time control. Lighting control will consist of occupancy sensors and vacancy sensors throughout the building.

7.3. Power Outlets

Outlets for convenience, specific equipment, and for computer locations will be provided as based on furniture, equipment layouts and program use.

7.4. Telephone, Data, Security

Empty raceway systems will be provided for Telephone, Data, and Security suppliers

7.5. Exterior Lighting

Circuits for exterior lighting will be provided at all parking lot and storage areas.

7.6. Fire Alarm

A fire alarm devices and/or fire alarm system will be provided to meet current NYS Building code requirements.

7.7. Emergency Power

An outdoor 120/208 v, 3 phase, 4 w. natural gas generator with supply and emergency and standby power to life safety and other selected loads.

CODES AND REGULATORY REQUIREMENTS:

The new building may be classified as a Mixed Use Non-Separated occupancy. It is comprised of a Business

Group B and Storage S-2 with an accessory use of Residential R-1 for the four bedrooms. The accessory use is permissible since the area of the bedrooms is less than 10% of the total building footprint. Fire separations and direct egress to the exterior will be provided for each occupancy type.

The building will be constructed to comply with a Type IIB Construction (non-combustible). Since the building code requires that S-2 occupancy and the R-1 accessory use spaces be protected with fire sprinklers; the design team made a decision to provide fire sprinklers for the entire building since the initial

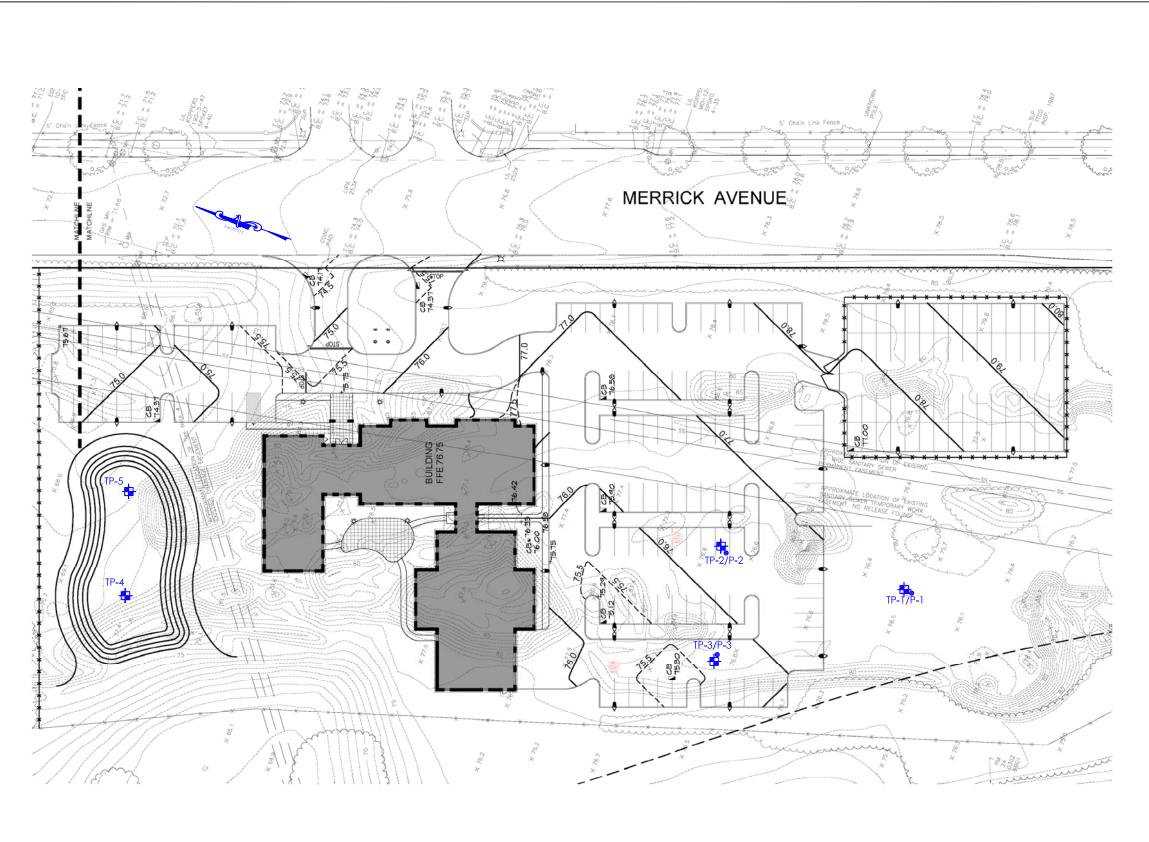
cost for providing a fire service line would be the same for a partial or entire building sprinkler system. The design team has had initial meetings and/or conversations with Donna Boyle of the Nassau County Department of Public Works (DPW); Mike Walsh of the Town of Hempstead Department of Water; PSEGLI, the local utility company, and the Town of Hempstead Building Department.

OPTIONS:

As discussed earlier, a closed loop geo-thermal system is being considered for this project in lieu of a conventional HVAC system. This alternate system would provide a more efficient and environmentally friendly heating and cooling system for the building. The additional construction cost of this add alternate is

approximately \$365,000 over the option proposed in this report. The annual energy savings of geothermal as compared with conventional systems is on the order of 30-40%. The payback period for a closed loop system customarily is 16-18 years. Although the geothermal system would be a benefit to the project, based on the initial eco-charrette, it is not a requirement in order to achieve a LEED Gold Certification for the building or meet the requirements of EO 88.

Select which contains 71.4% grout solids (400 lbs. sand per 50 lbs. of bentonite).



GENERAL NOTES:

- GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED BY PETER GISOLFI ASSOCIATES, ENTITLED "GRADING PLAN", DRAWING NO. L-300, DATED 03/31/14.
- TEST PIT AND PERCOLATION TEST LOCATIONS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
- 8. TEST PITS WERE PERFORMED BY TRAFICANTE CONTRACTING, INC. ON 20 JUNE 2014 UNDER THE FULL TIME INSPECTION OF CSA.
- 4. PERCOLATION TESTS WERE PERFORMED BY CSAON 20 JUNE 2014.
- 5. LOCATIONS ARE APPROXIMATE.

LEGEND:

- TEST PIT LOCATION

PERCOLATION TEST LOCATION

ROBERT B. SIMPSON, P.E. PROFESSIONAL ENGINEER

TEST PIT LOCATION PLAN

NEW YORK STATE OFFICE OF GENERAL SERVICES STATE POLICE ZONE HEADQUARTERS MERRICK AVENUE, NORTH OF HEMPSTEAD TURNPIKE EAST MEADOW, NEW YORK

DRAWN	SCALE
RHB	1" = 60'
CHECKED	DATE
RBS	23 JUNE 14
PROJECT NO.	DWG NO.
14-75	FIG -1
APPROVED	

CARLIN-SIMPSON AND ASSOCIATES 61 Main Street Sayreville, NJ 08872

Consulting Geotechnical and Environmental Engineers