

**CONECO ENGINEERS & SCIENTISTS, INCORPORATED  
SITE-SPECIFIC HEALTH & SAFETY PLAN**

**SOLAR CANOPY CARPORT SYSTEM CONSTRUCTION PROJECT  
COMMERCIAL PROPERTY – 500 MAMARONECK AVENUE  
HARRISON, NEW YORK**

PREPARER'S SIGNATURE: \_\_\_\_\_



DATE: February 9, 2023

**A. SITE DESCRIPTION**

PROJECT NUMBER: C2162.0

ADDRESS: 500 Mamaroneck Avenue, Harrison, New York

CROSS STREET: Union Avenue (north of Site entrance)

SITE USAGE: Commercial Property

PAST SITE USAGE: Municipal Incinerator

SURROUNDING AREA:

       Virgin Land                        X   Residential                        X   Parkland/School

  X   Commercial/Retail                             Industrial                             Other:   X  

PREPARER'S SIGNATURE: \_\_\_\_\_

DATE: February 9, 2023

Comments: This assessment represents the initial steps in hazard identification and risk assessment. It may not be all inclusive and is subject to change during the course of any project. Before the start of a job, site specific risks must be assessed, discussed and documented as part of the pre-construction meeting and/or job brief. All parties are encouraged to communicate and implement any safety suggestions that improve the safety of any exposed parties.

**CONECO ENGINEERS & SCIENTISTS, INCORPORATED**  
**HEALTH AND SAFETY PLAN**

**TABLE OF CONTENTS**

<b>1.0</b>	<b>INTRODUCTIONS.....</b>	<b>1</b>
1.1	Scope of Work .....	1
1.2	Site Description and History .....	1
<b>2.0</b>	<b>PROJECT PERSONNEL .....</b>	<b>2</b>
2.1	Roles and Responsibilities: .....	2
2.2	Qualifications .....	4
<b>3.0</b>	<b>HAZARD IDENTIFICATION AND RISK ASSESSMENT .....</b>	<b>4</b>
3.1	Chemical Hazards .....	4
3.2	Physical Hazards .....	9
3.3	Natural Phenomena & Weather Conditions .....	16
3.4	Biological Hazards .....	19
<b>4.0</b>	<b>COMMUNICATION .....</b>	<b>25</b>
4.1	Emergencies .....	25
4.2	Incident Reporting and Analysis .....	25
4.3	Safety Meetings and Job Briefings .....	25
4.4	Health and Safety Plan .....	26
<b>5.0</b>	<b>PERSONAL PROTECTIVE EQUIPMENT .....</b>	<b>26</b>
<b>6.0</b>	<b>SAFETY COMPLIANCE.....</b>	<b>28</b>
<b>7.0</b>	<b>ENVIRONMENTAL COMPLIANCE .....</b>	<b>28</b>
<b>8.0</b>	<b>GENERAL PROJECT WORK PLAN.....</b>	<b>28</b>
<b>9.0</b>	<b>ENVIRONMENTAL AIR MONITORING .....</b>	<b>28</b>
<b>10.0</b>	<b>DECONTAMINATION PROCEDURES.....</b>	<b>29</b>
<b>11.0</b>	<b>PLAN LIMITATIONS &amp; ACKNOWLEDGEMENT.....</b>	<b>31</b>

**FIGURES**

Figure 1 - Site Locus Map

Figure 2 - Plan of Site Area

Figure 3 - Project Work Area Plan

**APPENDICES**

Appendix A - Project Work Plan

Appendix B - Emergency Contact Information

Appendix C - Hospital Directions

## **CONECO ENGINEERS & SCIENTISTS, INCORPORATED**

### **HEALTH AND SAFETY PLAN**

#### **1.0 Introductions**

On behalf of Empire State Realty Trust (ESRT), Coneco Engineers & Scientists, Incorporated (Coneco) has prepared the following Health and Safety Plan (“HASP” or the “Plan”) detailing health and safety requirements during the installation of a Solar Canopy Carport System located at 500 Mamaroneck Avenue, Harrison, New York (the “Site”). A Site Locus Map is provided as Figure 1.

#### **1.1 Scope of Work**

The Project will involve the installation of thirteen (13) Solar Canopy Carport Units and associated transformers, switchboards, and panelboards. It is estimated that eight-five (85) foundations will be bored or excavated to accommodate the support posts for the canopy units. Foundations will be spaced roughly 20-30 feet apart. Foundation depth can range from 0-10 feet below grade. Foundation width (diameter) is typically 3 feet. Excavation will also occur at various areas of the Site to create trenches for installing electrical cables and other equipment.

Site features consisting of buildings, roadways, walkways, vegetative cover, soil cover, fountains, parking lots and rip rap are serving as engineering controls to prevent human contact or exposure to underlying soil that contain concentrations of polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB) and metals that are elevated with respect to human and ecological health standards. The proposed work described above will disturb or breach the features that restrict or ‘cap’ the underlying degraded soil. The underlying degraded soils are disbursed throughout the Site and upon discovery during this work, will be managed in accordance with the Environmental Management Plan by Bergmann Architects Engineers Planners (Bergmann). The restricted area, also the Site property boundary, is shown in Figure 2.

Coneco will provide health and safety oversight and communications with excavation contractors with respect to Dust Monitoring and soil management during excavation activities performed as part of the Project.

#### **1.2 Site Description and History**

The Site is located on the east side of Mamaroneck Avenue, approximately 2,000 feet south of Union Avenue in Harrison, Westchester County, New York. The Site is approximately 34.5 acres and is rectangular in shape and is occupied by a five-story office building and has approximately 985 feet of roadway frontage along Mamaroneck Avenue. A Site location Map is provided as Figure 1. The Site elevation ranges from approximately 60 feet above mean sea level (MSL) along Mamaroneck Avenue to 130 feet above MSL at the eastern property line.

The elevation of the Site rises gradually throughout the northern and southern parking areas, and then is mostly level across the eastern boundary. A seasonal wet area is in the northeastern portion of the property, immediately east of the northern parking area.

Approximately 14 acres of the Site have been improved with the construction of the office complex that consists of the parking areas and building footprint. The undeveloped portion of the property is located to the east of the office complex and serves as a buffer for the adjacent properties. Groundwater underlying the Site flows west to the Mamaroneck River.

Bedrock beneath the Site consists of Harrison Gneiss. Bedrock outcrops are present along the eastern and southern side of the Site. Depth to bedrock on the Site ranges from two feet to not more than fifteen feet below grade.

The Site receives its potable water from the municipal system. One bedrock well on the Site only supplies an operable decorative waterfall on the property. Septic waste is also handled by the municipal sewer system.

The Site was previously occupied by the Town of Harrison municipal incinerator. Based on review of available aerial photographs, the Site appears undeveloped until 1954. In a 1954 historical aerial photo the incinerator is visible on the Site. From 1954 until 1980, there were no major changes at the Site and the incinerator appears in all the aerial photographs. The building construction for the current commercial office began in 1983. Tenant occupancy began around 1986. The 1986 aerial photograph shows the office building on the Site under construction. The original Site topography has changed because of the 1983-1986 construction activities. Approximately 340,000 cubic yards of soil and rock were removed during the office building development. Material was only removed from the portion of the Site that is closest to Mamaroneck Avenue.

## **2.0 Project Personnel**

### **2.1 Roles and Responsibilities:**

This HASP is for the benefit and safety of employees of Coneco. Coneco will ensure that all Coneco employees on-site will have the skills and qualifications necessary to perform their job safely and effectively and in accordance with all regulatory requirements.

Brian McCarthy is the Project Manager and Health & Safety Officer for the Project. The Field Supervisor for the Project is Mike Bradley of Coneco. The Project field staff have completed the OSHA HAZWOPER 40-hour comprehensive health and safety training, which meets the requirements of 29 CFR 1910.120. The responsibilities of key project personnel are presented below.

### **Project Manager and Health & Safety Officer – Brian McCarthy (Coneco)**

The Project Manager and Health & Safety Officer, who has completed the 8-Hour HAZWOPER Supervisor course, is responsible for evaluating hazards anticipated at the Site, reviewing the Plan, and working with the Field Supervisor, and designated field staff to prepare this Plan to address identified and potential hazards. The Project Manager and Health & Safety Officer is also responsible for the following.

- Informing Project participants of safety and health hazards identified at the Site.
- Providing a copy of this Plan to Project participants and a copy to each subcontractor prior to the start of field activities.
- Ensuring that the project team is adequately trained and performs safety briefings in accordance with this Plan.
- Providing the resources necessary for maintaining a safe and healthy work environment for project personnel.
- Communicating project safety concerns to the Field Supervisor for determining corrective actions.
- Modifying this Plan, if necessary, and approving changes in health and safety procedures at the Site.
- Serve as the Competent Person and delegate other qualified employees as necessary to serve as a Competent Person. A Competent Person is defined by OSHA as an individual who can identify hazards and has the authority to take prompt corrective action.

### **Field Supervisor – Bill Cook (Coneco - Competent Person)**

The Field Supervisor has on-Site responsibility for verifying that Project members and all on-site personnel comply with the provisions of this HASP. The Field Supervisor has the authority to monitor and correct health and safety issues as noted on-Site and is responsible for the following.

- Reporting unforeseen or unsafe conditions or work practices at the Site to the Project Manager and Health & Safety Officer.
- Stopping operations that threaten the health and safety of the Project team or members of the surrounding community.
- Monitoring the safety performance of Site personnel to evaluate the effectiveness of health and safety procedures.
- Ensuring performance of air monitoring, as necessary, as prescribed in this HASP.
- Documenting field team compliance with this HASP by completing the appropriate forms contained in the Appendices of this document.
- Conducting daily tailboard safety meetings and assuring that Project personnel understand the requirements of this HASP.
- Limiting access to work areas on the Project to authorized personnel.
- Enforcing the “buddy system” as appropriate for Site activities.
- Performing periodic inspections to evaluate safety practices at the Site.

- Identifying the location and route to the nearby medical facility and emergency contact information and coordinating appropriate responses in the event of emergency.

### **Subcontractors**

Coneco will provide this Plan to any subcontractors for review prior to working at the Site. Subcontractors should observe the minimum safety guidelines applicable to work activities. Failure to do so may result in the removal of the subcontractor or any of the subcontractor's personnel from the Project Site. Subcontractors will follow all OSHA regulations (29 CFR 1910.120), as well as local and federal rules and Coneco contractor safety requirements.

## **2.2 Qualifications**

Prior to performing operations at this Site, all workers who are reasonably likely to be exposed to or come in direct contact with contaminated materials that exceed the New York State Department of Environmental Conservation, Division of Environmental Remediation 6 NYCRR PART 375 Restricted Use Soil Cleanup Objectives for a Commercial Site (effective December 14, 2006) or DER-10 Technical Guidance for Site Investigation and Remediation for allowable constituent levels for imported fill or soil (May 2010), shall receive OSHA HAZWOPER 40-hour comprehensive health and safety training for hazardous waste Site operations as required by OSHA 29 CFR 1926.65(e)(3)(i) and be enrolled in a medical surveillance program. A safety meeting ("tailboard briefing") will be conducted prior to each day's activities to outline upcoming operations and safety requirements for managing hazardous waste operations.

All on-site workers, including those in non-contaminated areas or those workers close to, but not in direct contact with contaminated materials, shall attend an initial Site orientation meeting and periodic briefings which includes training on hazard recognition, explanation of Site activities, procedure for obtaining safety supplies, identification of key safety personnel, explanation of decontamination procedures, and all aspects of the Health and Safety Plan. The training will be done by the field supervisor as part of the onsite Site-specific training.

## **3.0 Hazard Identification and Risk Assessment**

The following hazards have been identified and may be encountered during scheduled field activities.

### **3.1 Chemical Hazards**

The following substance(s) are known or suspected to be at the Project work area or in the vicinity:

Chemical Hazard Identification			
Substance	Specific Constituent	Maximum Anticipated Concentration	
		Soil (mg/kg)	
Polychlorinated biphenyls	1242	13	
Polycyclic Aromatic Hydrocarbons (PAHs)	Anthracene	90	
	Benzo(a)anthracene	120	
	Benzo(a)pyrene	120	
	Benzo(b)fluoranthene	100	
	Benzo(g,h,i)perylene	98	
	Benzo(k)fluoranthene	91	
	Chrysene	130	
	Dibenzo(a,h)anthracene	23	
	Fluoranthene	320	
	Indeno(1,2,3-cd)pyrene	80	
	Phenanthrene	340	
	Pyrene	280	
	Naphthalene	88	
	2-Methylnaphthalene	40	
	Acenaphthalene	54	
Metals	Dibenzofuran	57	
	Fluorene	82	
	Arsenic	31	
	Barium	1240	
	Cadmium	30.7	
	Chromium	194	
	Lead	20,600	
	Mercury	64.5	
	Copper	1490	
	Nickel	130	

Based on the depth of the proposed excavation activities, it is not anticipated that groundwater will be encountered during the Project.

Based on the type of chemical constituents present at the Site, the potential routes of exposure to excavation and/or utility repair workers include inhalation, dermal contact or accidental ingestion of impacted soil, and the possible introduction of contaminants through broken skin. Utilization of the appropriate personal protective equipment (PPE) and the safety practices described herein will serve to minimize the potential for worker exposure to impacted media while performing work.

Exposure limits have been established for a variety of chemicals to which workers may be exposed, including those listed above. The Occupational Safety and Health Administration (OSHA) refers to such limits as the Permissible Exposure Limit (PEL). Additional exposure guidelines include the National Institute for Occupation Safety and Health (NIOSH) Recommended Exposure Limit (REL) and the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV). Exposures that are considered Immediately Dangerous to Life or Health (IDLH) have also been

established for certain chemicals. The following sections provide information specific to known or suspected substances at or within the vicinity of the Site.

#### Polycyclic Aromatic Hydrocarbons (PAHs)

PAHs consist of a variety of chemical compounds that are often found in fossil fuels and tar deposits. PAHs are generally produced as the result of incomplete combustion of organic material including coal, oil, gasoline, and garbage. In their purest form, PAHs are solid and range in appearance from colorless to white or pale yellow-green; however, their appearance in the environment can vary. For specific PAH compounds identified at the Site, please refer to the Chemical Hazard Identification table above.

Short-term skin contact with PAHs can cause irritation, itching, and burning, which is greatly aggravated by sunlight. Eye contact can also cause irritation and burns. Inhaling PAHs irritates the nose, throat, and lungs causing coughing, wheezing, and/or shortness of breath, and hoarseness.

Several PAH compounds have been shown to cause cancer in animals exposed through consumption, inhalation, and dermal absorption, including cancer of the stomach, skin, lung, blood, spleen, pancreas, and mammary. Specific PAHs (including benzo(a)pyrene) have been shown to cause damage to the developing fetus, and there is limited evidence that they may damage the male and female reproductive system.

The following are exposure limits for PAHs (as coal tar pitch volatiles) in air:

- OSHA PEL: 0.2 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ )
- ACGIH TLV: 0.2  $\text{mg}/\text{m}^3$
- NIOSH REL: 0.1  $\text{mg}/\text{m}^3$
- IDLH: 80  $\text{mg}/\text{m}^3$

#### Polychlorinated Biphenyls (PCB)

PCBs are a group of man-made organic chemicals consisting of carbon, hydrogen, and chlorine atoms. PCBs gave no taste or smell and range in consistency from a light-colored oil to a black waxy solid. PCBs were used in hundreds of industrial and commercial applications including electrical and heat transfer equipment, plasticizers in paints and rubber products, pigments, dyes, copy paper, and several other applications.

PCBs for not readily break down in the environment. PCBs can exist in air, water, and soil. PCBs have been demonstrated to cause a variety of adverse health effects. They have been shown to cause cancer in animals as well as a number or serious non-cancer health effects in animals, including effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. Studies in humans support evidence for potential carcinogenic and non-carcinogenic effects of PCBs.



### Metals

Arsenic: Arsenic is an element and naturally occurring mineral found widely in the environment. Arsenic is a silver-gray or tin-white brittle, odorless metal that is notorious for its use as a poison. Arsenic is widely used commercially, a fact that increases the risk of overexposure.

Inorganic arsenic is generally more toxic than organic arsenic. Inorganic arsenic is found in industry, in copper chromated arsenate treated lumber, and in private well water in some parts of the country. Lead hydrogen arsenate was used, well into the 20th century, as an insecticide on fruit trees, and Scheele's Green (a copper arsenate) has even been recorded in the 19th century as a coloring agent in sweets. The application of most concern to the public is probably that of wood that has been treated with chromated copper arsenate (CCA). CCA timber is still widely used in many countries and was heavily used during the latter half of the 20th century as a structural and outdoor building material where there was a risk of rot or insect infestation in untreated timber. Bans on the use of CCA followed the publication of studies that showed leaching from treated wood into surrounding soil, though the most serious risk is presented by the burning of CCA treated wood.

Organic arsenic is found in many foods and particularly in some shellfish. The organic forms and amounts of arsenic found in seafood are generally considered to be nontoxic. Ingestion and inhalation are the most common routes of exposure to arsenic, and they are the routes that most commonly lead to illness. Dermal exposure may lead to illness, but to a lesser extent than ingestion or inhalation routes of exposure.

Breathing high levels of inorganic arsenic can cause a sore throat or irritated lungs. Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet. Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling. Arsenic is a known carcinogen. Arsenic at the Site is strongly associated with soil. Potential exposures to humans could include inhalation, skin contact, and ingestion of dust or dirt.

The following are exposure limits for inorganic arsenic in air:

- OHSA PEL: 0.010 mg/m<sup>3</sup>
- ACGIH TLV: 0.01 mg/m<sup>3</sup> TWA
- NIOSH REL: 0.002 mg/m<sup>3</sup> (15-minute ceiling limit)
- IDLH: 5 mg/m<sup>3</sup>

Chromium: Chromium is a naturally occurring element in rocks, animals, plants, soil, and volcanic dust and gases. Chromium occurs in the environment primarily in two valence

states, trivalent chromium (Cr III) and hexavalent chromium (Cr VI). The metal chromium is used mainly for making steel and other alloys. Chromium compounds, in either the Cr III or Cr VI forms, are used for chrome plating, the manufacture of dyes and pigments, leather and wood preservation, and treatment of cooling tower water. Smaller amounts are used in drilling muds, textiles, and toner for copying machines. Exposure may occur from natural or industrial sources of chromium.

The respiratory tract is the major target organ for Cr VI toxicity for acute (short-term) and chronic (long-term) inhalation exposures. Cr III is much less toxic than Cr VI. The respiratory tract is also the major target organ for Cr III toxicity, like Cr VI. Cr III is an essential element in humans. The body can detoxify some amount of Cr VI to chromium Cr III. Shortness of breath, coughing, and wheezing were reported from a case of acute exposure to Cr VI, while perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, and other respiratory effects have been noted from chronic exposure. Human studies have clearly established that inhaled Cr VI is a human carcinogen, resulting in an increased risk of lung cancer. Animal studies have shown Cr VI to cause lung tumors via inhalation exposure.

The following are exposure limits for chromium (as Cr VI) in air:

- OSHA PEL: 0.005 mg/m<sup>3</sup> (TWA)
- ACGIH TLV: 0.01 mg/m<sup>3</sup> (TWA)
- NIOSH REL: 0.0002 mg/m<sup>3</sup> (8-hour TWA)
- IDLH: 250 mg/m<sup>3</sup>

Lead: Lead poisoning occurs from inhalation or ingestion of lead. Exposure to lead results in damage to the nervous, urinary, and reproductive systems and inhibits synthesis of the molecule heme, which is responsible for oxygen transport in living systems. The adverse health effects associated with exposure to lead range from acute, relatively mild, perhaps reversible stages such as inhibition of enzyme activity, reduction in motor nerve conduction velocity, behavioral changes, and mild central nervous system (CNS) symptoms, to permanent damage to the body, chronic disease, and death.

The most frequent early symptoms of lead poisoning are anxiety, nervousness, irritability, and abnormal tiredness. A variety of aches, pains, loss of appetite, constipation, insomnia, headache, fine tremors, and muscle weakness are common. Muscle paralysis such as “wrist drop,” severe abdominal cramps, and discoloration of the teeth are characteristic of only the most severe cases. Anemia is frequently found if a blood test is performed. Any or all of these effects may occur after a few weeks of relatively heavy lead absorption, and they may last for many months after the exposure ceases.

The following are exposure limits for lead in air:

- OSHA PEL: 0.05 mg/m<sup>3</sup>
- ACGIH TLV: 0.05 mg/m<sup>3</sup>

- NIOSH REL: 0.05 mg/m<sup>3</sup>
- IDLH: 100 mg/m<sup>3</sup>

Mercury: Mercury is a heavy, silvery, odorless liquid metal. It is commonly used for gold recovery and in dental amalgams, thermometers, barometers, and other gauges, as well as in dry cell batteries.

Mercury can cause irritation to the skin and eyes upon contact. Inhaling mercury vapors can irritate the nose, throat, and lungs resulting in coughing, wheezing, and/or shortness of breath. Exposure can also cause a metallic taste in the mouth as well as nausea, vomiting, and abdominal pain.

Long-term exposure to mercury may affect fertility in both males and females and may also cause damage to the developing fetus in animals. Repeated exposure to mercury may cause bronchitis to develop with coughing, phlegm, and/or shortness of breath. Long-term exposure may also cause skin allergies. If an allergy develops, very low future exposures can cause itching and a skin rash. Long-term contact can cause the skin to turn gray, brown staining in the eyes, and may affect peripheral vision. Mercury exposure may cause damage to the kidneys.

Repeated exposure or a very high single exposure may result in mercury poisoning. Symptoms of mercury poisoning include tremors, difficulty remembering and concentrating, gum problems, increased salivation, and loss of appetite and weight. Mercury poisoning can also cause changes in mood or personality, which can at times become severe and result in hallucinations and psychosis.

The following are exposure limits for mercury in air:

- OSHA PEL: 0.1 mg/m<sup>3</sup>
- ACGIH TLV: 0.025 mg/m<sup>3</sup>
- NIOSH REL: 0.05 mg/m<sup>3</sup> (vapor), 0.1 mg/m<sup>3</sup> [C] (skin)
- IDLH: 10 mg/m<sup>3</sup>

### **3.2 Physical Hazards**

Potential physical hazards that may be encountered during scheduled field activities and actions to be taken to protect against the identified hazards are provided in the sections below.

#### **Driving & Traffic**

A significant amount of driving is required to get to, from, and between project sites. Safe vehicle maintenance and operation must be a priority. It requires knowledge of directions to (and conditions of) the site in advance, current and forecasted weather conditions, careful exiting and merging into traffic, anticipating the unexpected,

remaining alert to one's physical and mental condition, resisting distractions such as cell phone use, other car activities and contacting assistance when needed. Report all vehicle accidents/incidents to the Group Supervisor.

Driving in traffic is a common occurrence when traveling to and from a project site. The following basic guidelines should be observed when driving in traffic:

- Do not tailgate. Driving too aggressively can result in a rear end collision with the vehicle in front of you. Give yourself enough room to anticipate abrupt changes in the speed of the vehicles in front of you so that you have adequate distance to stop.
- Use your turning signals. The more notice you give drivers around you the safer you will be.
- Avoid cell phone use, both handheld and wireless, as phone conversations are serious distractions that are the cause of many vehicular accidents. As a regional company, Coneco performs work in several states throughout New England and New York. Employees should be aware of the individual State's laws governing cell phone use. Employee texting and internet use while operating a vehicle is strictly prohibited by CONECO. and is against the law in most states. If you need to use a cell phone, pull over in a safe location to make a call or wait to you arrive at your destination.
- Keep up with the traffic in front of you. Driving too slow in traffic can cause those around you to drive aggressively and/or erratically and could cause an accident.
- Keep noise levels from other sources to a minimum and do not wear headphones. Your ability to hear a warning from another vehicle (sounding of horn) may prevent you from being involved in an accident. Loud music is also distracting and should therefore be avoided.
- Watch your blind spots. Large trucks have blind spots around the front, side and back of the vehicle. Be aware of your position relative to large vehicles and be prepared to give the larger vehicle the right-of-way. Operators of small vehicles are far more likely to be injured than the operators of large vehicles in the event of an accident.
- Recognize inattentive drivers that are not paying attention to their driving and what is happening around them. Inattentive drivers are distracted, do not use turning signals, drive slowly in the passing lane and can create an emergency-braking situation. Consider distancing yourself from inattentive drivers.

If a vehicle collision or property damage event occurs, the Field Supervisor, or designee, will contact the Group Supervisor for appropriate action.

### **Slips, Trips and Falls**

Slipping hazards may exist due to uneven terrain, wet or slick surfaces, leaks, or spills. Tripping hazards may be present from elevation changes, debris, poor housekeeping or

tools and equipment. Some specific hazards may include climbing/descending ladders, scaffolding, berms, or curbing. Collectively, these types of injuries account for nearly 50 percent of all occupational injuries and accepted disabling claims. Prevention requires attention and alertness on the part of each worker, following and enforcing proper procedures, including good housekeeping practices, and wearing appropriate protective equipment.

### **Noise**

Noise may result primarily from the operation of heavy equipment, process machinery or other mechanical equipment. Hearing protection with the appropriate noise reduction rating (NRR) shall be worn in areas with high noise levels. A good rule of thumb to determine if hearing protection is needed is the inability to have a conversation at arm's length without raising voice levels. Personnel working within approximately 10 m (~33 ft) of operating equipment or power tools are recommended to don hearing protection. If loud noise is present or normal conversation becomes difficult, hearing protection in the form of ear plugs, or equivalent, will be required. Hearing protection will be provided by the Field Supervisor.

### **Heavy Equipment & Pinch Points**

Equipment, including earth-moving equipment, drill rigs, or other heavy machinery, will be operated in compliance with the manufacturer's instructions, specifications, and limitations, as well as any applicable regulations. The operator is responsible for inspecting the equipment prior to use each work shift to verify that it is functioning properly and safely.

The following precautions should be observed whenever heavy equipment is in use.

- PPE, including steel-toed boots, safety glasses, high visibility vests, and hard hats must be worn.
- Personnel must be aware of the location and operation of heavy equipment and take precautions to avoid getting in the way of its operation. Workers must never assume that the equipment operator sees them; eye contact and hand signals should be used to inform the operator of the worker's intent.
- Personnel should not walk directly behind, or to the side of, heavy equipment without the operator's knowledge. Workers should avoid entering the swing radius of equipment and be aware of potential pinch points.
- Nonessential personnel will be kept out of the work area.

### **Excavation & Trenching**

Coneco shall designate a competent person who will inspect excavations daily. If there is evidence that a cave-in or slide is possible, work will cease until the necessary safeguards have been taken. Excavated material will be placed far enough from the edge of the excavation (a minimum of 2 feet) so that it does not fall back into the opening or affect the integrity of the sidewall. At the end of each day's activities, open excavations will be

clearly marked and secured to prevent nearby workers or unauthorized personnel from entering them.

Trenching is a form of excavation made below the surface of the ground where its width is narrow in relation to its length. In general, the depth is greater than the width, but the width of a trench is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less, the excavation is also considered to be a trench. For trenches greater than 5 feet in depth, shoring and/or sloping shall be implemented to protect employees from cave-ins. Shoring is a structure such as a metal hydraulic, mechanical, or timber shoring system that supports the sides of an excavation and which is designed to prevent cave-ins. Sloping is a method of protecting employees from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation to prevent cave-ins. The angle of incline varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads. Based on the anticipated depth of excavation associated with the Project (i.e., 48 inches or less), it is not anticipated that shoring or sloping will be required.

### **Underground Utilities**

Reasonable efforts will be made to identify the location(s) of underground utilities (e.g., pipes, electrical conductors, fuel lines, and water and sewer lines) before intrusive soil work is performed. Coneco will first review all information provided by Power Flex to understand equipment, buried cable and overhead conductor layouts. The state underground utility notification authority (e.g., Dig-Safe, On-Target, Dig Alert, Blue Stake, etc.) will be contacted prior to the start of intrusive field activities in accordance with local notification requirements. In areas not evaluated or serviced by the underground utility notification authority, and a reasonable potential for underground utilities exists, one or more of the following techniques will be employed to determine the location of subsurface structures.

- Contracting the services of a qualified private utility locator.
- Having a survey of the subject area conducted by staff trained in the use of subsurface utility locating equipment.
- Subsurface testing (i.e., hand digging, vactoring, air-lancing or potholing) to the expected depth of probable utilities (not less than 5 feet).

If utilities cannot be located or if utilities not located are suspected to be present, subsurface activities (i.e., borings, excavation) will not be conducted before the location(s) or absence of underground utilities is confirmed. Typical subsurface location marks are as follows:

- Red – electrical,
- Yellow – gas/oil/steam,
- Blue – water,
- Green – sanitary/storm drains/culverts,

- Orange – telecommunications, and
- White – proposed excavation or boring.

Intrusive work should be limited to the area 3.3 feet (1 meter) on either side of the location marks. In some special cases such as fiber optics and high-pressure pipelines this area should be expanded to 16.5 feet (5 meters) on either side of the utility.

If an underground conduit is damaged during subsurface work, mechanized equipment will immediately be shut off and personnel will evacuate the area until the nature of the piping can be determined. Depending on the nature of the broken conduit (e.g., natural gas, water, or electricity), the appropriate local utility will be contacted.

### **Equipment Refueling**

The following procedures shall be implemented for refueling of vehicles and/or gas-powered equipment:

- Refuel only in pre-designated outdoor areas.
- Shut off vehicle engines or gas-powered equipment to refuel and when not in use.
- Do not smoke while refueling.
- Do not over-fill fuel tanks.
- Consider the ability to control a spill when pre-designating refueling area.
- Flammable fuels shall be stored in approved containers with proper labeling.

### **Tools - Hand & Power**

All tools issued by Coneco, or the designated contractor should be in a safe, operable condition with all pertinent safety equipment in place. The employee shall be held responsible for the inspection of tools issued for his/her use. All hand and power tools must be maintained in safe working condition. If the tools are unsafe, they must be identified, tagged, and removed from the site or work area. Any tools that are designed to have guards must always have those guards in place. All tools shall be kept in a neat and orderly fashion. When not in use, tools shall be returned to tool rooms, stored in suitable boxes or containers, or hung on racks. Cutting edges shall be protected and tools should not be placed where they will roll off benches or tables or move dangerously within the interior of a vehicle. Storage areas should be moisture free to prevent corrosion. Heavier tools shall be placed where they will not be tripped over and/or could fall.

The Field Supervisor shall be responsible for the safe condition of tools used by the employee, including tools which may be furnished by the employee. Always keep tools sharp and in good condition. Dull tools contribute to accidents. If tools cannot be repaired properly, do not do any temporary or makeshift repairs. Send tools to an outside shop or return to the office for repair or replacement. Keep hand tools off the top of ladders. Exercise extreme care in using hand tools to prevent their contact with live circuits or equipment.

Power tools are to be operated by authorized employees who have been trained or have previous experience in the field. All electric power operated tools shall either be of the approved double-insulated or grounded type. When adjusting or oiling any power tools, turn off and disconnect the power first. Wear proper clothing to prevent sleeves and other loose garments from being wound around the drill. The use of electric cords for hoisting or lowering tools shall not be permitted.

### **Fire Protection**

It shall be the Field Supervisor's responsibility to maintain the Site so that all combustible materials are removed at regular intervals during the Project. All oily or flammable or hazardous wastes shall be separated and disposed of in containers with covers. As fire hazards occur, necessary firefighting equipment shall be promptly provided.

Accessibility to all available firefighting equipment shall be always maintained. Firefighting equipment will be provided by Contractor and shall be conspicuously located with ownership clearly identified. All firefighting equipment shall be periodically inspected and shall be maintained in operating condition. Defective equipment shall be immediately repaired or replaced.

Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Approved metal safety cans shall be used for the handling and use of flammable liquids in quantities greater than one gallon, except that highly cohesive liquids may be used and handled in original shipping containers. Original containers or approved safety cans must be used for quantities of one gallon or more.

All on-site employees shall be trained in proper use of fire extinguishers through safety training sessions or tailboard safety meetings.

In the event of fire, the alarm will be sounded, and Site personnel will evacuate to a safe location (preferably upwind). The Field Supervisor, or designee, should contact the local fire department immediately by dialing 911. When the fire department arrives, the Field Supervisor, or designated representative, will advise the commanding officer of the location and nature of the fire and the existence of any hazardous materials stored on-Site. Only trained, experienced fire fighters should attempt to extinguish substantial fires at the Site. Site personnel should not attempt to fight fires, unless properly trained and equipped to do so. Site personnel should not attempt to fight a fire if it poses a risk to their personal safety.

Note that smoking is not permitted in controlled areas (i.e., exclusion or contamination reduction zones), near flammable or combustible materials, or in areas designated by the facility as non-smoking areas.

The Field Supervisor will designate evacuation routes and refuge areas to be used in the event of a Site emergency. Site personnel will stay upwind from vapors or smoke and up-gradient from spills. If workers are in an Exclusion or Contamination Reduction Zone at the start of an emergency, they should exit through the established decontamination



corridors, if possible. If evacuation cannot be done through an established decontamination area, Site personnel will go to the nearest safe location and remove chemically affected clothing there or, if possible, leave it near the Exclusion Zone. Personnel will assemble at the predetermined refuge following evacuation and decontamination. The Field Supervisor, or designated representative, will count and identify Site personnel to verify that all have been evacuated safely.

### **Materials & Equipment Handling/ Lifting**

It is important to avoid activities which may result in back injury, lifting and handling of materials and equipment shall be performed in an appropriate fashion so as to minimize the risk of injury.

The following actions are more likely to cause back injuries than others:

- Heaving lifting, especially repetitive lifting for an extended period of time.
- Twisting at the waist while lifting or holding a heavy load (a frequent motion when using a hand shovel).
- Reaching and lifting over your head, across a table or across the bed of a truck.
- Lifting or carrying an irregular or odd shaped object.
- Working in awkward, uncomfortable positions like kneeling or tasks that require you to bend over for long period of time.
- Slipping, tripping or falling while lifting or holding an object.
- Improper use of carrying equipment
- Overdoing it – attempting to pick up something that is too heavy to lift alone.

It is worth noting that the further you bend and the more you extend your arms, the more significant the risk of injury. To prevent injury, utilize carts, dollies and other lift-assist devices when available. To minimize the risk of injury, the following proper lifting procedures should be utilized:

- You cannot always avoid lifting so identify ways to reduce the amount of pressure placed on your back when you do so. Reduce the amount of weight lifted and consider taking several trips to reduce a single heavy load. Get assistance to lift heavy or awkwardly shaped objects.
- By bending at the knees, your spine stays in a better alignment, and you essentially take away the principle forces that cause injury to your back
- Instead of using your back like a crane, allow your legs to do the work.
- Take a balanced stance with your feet about a shoulder-width apart with one foot behind the object and the other next to it.
- Squat down to lift the object but keep your heels off the floor. Get as close to the object as you can and keep your back straight.
- Use your palms and not just your fingers to get a secure grip on the object. Make sure you can maintain a hold on the object without having to subsequently switch your grip.

- Keep a clear view and never carry a load in front of your face as it forces you to lean or twist and upsets your balance.
- Push a dolly or cart in a linear motion. Never pull as it forces you to twist at the waist.

### 3.3 Natural Phenomena & Weather Conditions

Natural Phenomena such as weather-related emergencies and acts of nature can affect employees' safety. Natural phenomena can occur with little or no warning. If an emergency arises because of natural phenomena, adhere to the contingency procedures outlined below. The following natural phenomena have been identified and may be encountered during scheduled field activities.

#### Sunburn

Working outdoors with the skin unprotected for extended periods of time can cause sunburn to the skin. Excessive exposure to sunlight is associated with the development of skin cancer. Field staff should take precautions to prevent sunburn by using sunscreen lotion, wearing hats and long-sleeved garments, and by identifying shaded areas and executing work to minimize exposure to direct sunlight.

#### Cold Stress

Adverse climate conditions, primarily cold, are important considerations in planning and conducting Site operations. Cold-related illnesses include hypothermia, frostbite, and trench foot, with severe hypothermia being the most dangerous. The effects of ambient temperature can cause physical discomfort, loss of efficiency, and personal injury, and can increase the probability of accidents. In addition to PPE, insulating cold-protective clothing will also be worn by workers in cold environments.

To reduce the possibility of cold-related illness, workers should be aware of signs and symptoms of cold-related illnesses, as well as first aid for these conditions. These are summarized in the table below.

Cold Stress		
Condition	Signs & Symptoms	Response
Trench Foot	Symptoms consist of tingling, itching, or burning sensation. Blisters may be present.	Soak feet in warm water, then wrap with dry cloth bandages. Drink a warm, sugary drink.

Cold Stress		
Condition	Signs & Symptoms	Response
Frostbite	The affected body part will be cold, tingling, stinging, or aching followed by numbness. Skin color turns red, then purple, then white, and is cold to the touch. There may be blisters in severe cases.	Do not rub the area to warm it. Wrap the area in a soft cloth, move the worker to a warm area, and contact medical personnel. Do not leave the worker alone. If help is delayed, immerse yourself in warm (maximum 105 °F), not hot, water. Do not pour water on the affected part. If there is a chance that the affected part will get cold again do not warm. Warming and re-cooling will cause severe tissue damage.
Mild Hypothermia	Symptoms include shivering, pale and cold skin, loss of coordination and slurred speech. Notable behavior includes stomping of feet to generate heat and fumbling with items in hand.	Remove to worker to warm area and instruct to stay active. Allow workers to remove wet clothes and replace them with dry clothes or blankets and to cover the head. To promote metabolism and assist in raising internal core temperature administer warm (not hot) sugary drink. Avoid drinking caffeine. Closely observe affected worker for more serious symptoms.
Severe Hypothermia	Mild hypothermia symptoms will worsen and shivering will stop. Workers may be unable to walk or stand; the person may become unconscious and could die.	Immediately contact emergency medical services by dialing emergency medical services. In addition to mild hypothermia responses above, cover all extremities completely, place very warm objects, such as hot packs or water bottles on the victim's head, neck, chest, and groin. Arms and legs should be warmed last. Treat the worker very gently and do not apply external heat to re-warm. Hospital treatment is required. Carefully follow instructions given by emergency medical services until help arrives.

## Heat Stress

Adverse climate conditions, primarily heat, are important considerations in planning and conducting Site operations. Heat-related illnesses range from heat fatigue to heat stroke, with heat stroke being the most serious condition. The effects of ambient temperature can cause physical discomfort, loss of efficiency, and personal injury, and can increase the probability of accidents. Protective clothing that decreases the body's ventilation can be an important factor leading to heat-related illnesses. Workers should be aware of signs and symptoms of heat-related illnesses, as well as first aid for these conditions. These are summarized in the table below.

To reduce the possibility of heat-related illness, workers should drink plenty of fluids and establish a work schedule that will provide sufficient rest periods for cooling down.

Personnel shall maintain an adequate supply of non-caffeinated drinking fluids on-Site for personal hydration.

Heat Stress			
Condition	Signs	Symptoms	Response
Heat Rash or Prickly Heat	Red rash on skin.	Intense itching and inflammation.	Increase fluid intake and observe affected worker.
Heat Cramps	Heavy sweating, lack of muscle coordination.	Muscle spasms, and pain in hands, feet, or abdomen.	Increase fluid uptake and rest periods. Closely observe affected worker for more serious symptoms.
Heat Exhaustion	Heavy sweating; pale, cool, moist skin; lack of coordination; fainting.	Weakness, headache, dizziness, nausea.	Remove workers to a cool, shady area. Administer fluids and allow workers to rest until fully recovered. Increase rest periods and closely observe workers for additional signs of heat exhaustion. If symptoms of heat exhaustion recur, treat as above and release worker from the day's activities after he/she has fully recovered.
Heat Stroke	Red, hot, dry skin; disorientation; unconsciousness	Lack of or reduced perspiration; nausea; dizziness and confusion; strong, rapid pulse.	Immediately contact emergency medical services by dialing emergency medical services. Remove the victim to a cool, shady location and observe for signs of shock. Attempt to comfort and cool the victim by administering small amounts of cool water (if conscious), loosening clothing, and placing cool compresses at locations where major arteries occur close to the body's surface (neck, underarms, and groin areas). Carefully follow instructions given by emergency medical services until help arrives.

### Lightning/Electrical Storms

Lightning can be unpredictable and may strike many miles in front of, or behind, a thunderstorm. Workers will therefore cease field operations at the first sign of a thunderstorm and suspend activities until at least 30 minutes after the last observed occurrence of lightning or thunder. For purposes of this HASP, signs of a thunderstorm will include any visible lightning or audible thunder. In the event of a thunderstorm, field personnel will take the following actions.

- Get inside a permanent building structure (not a shed or canopy) or fully enclosed metal vehicle (not a convertible or camper shell) with the windows fully up.
- If in a house or building, do not use the telephone or any electrical appliance that is connected to the building's electrical wiring.
- Stay away from tall, isolated objects, such as trees, drill rigs, telephone poles, or flag poles.
- Avoid large open areas, such as fields or parking lots, where a person is the relatively highest object.
- Stay away from lakes, ponds, railroad tracks, fences, and other objects that could transmit current from a distant lightning strike.
- If caught out in the open without time to escape or find shelter, seek a low area (if time permits), crouch down, and bend forward holding the ankles. Tuck the head so that it is not the highest part of the body, without letting it touch the ground. Under no circumstances lay down.

If a person is struck by lightning contact emergency medical services, even if he/she appears only stunned or otherwise unhurt as medical attention may still be needed. Check for burns, especially on your fingers and toes, and areas next to buckles and jewelry.

### 3.4 Biological Hazards

The following biological hazards have been identified and may be encountered during scheduled field activities.

☒ Bloodborne Pathogens

☒ Ticks

☒ Rodents and Mammals

☒ Poisonous Plants

☒ Reptiles/Snakes

☒ Venomous Insects

☒ Mosquitoes

☒ COVID-19 Pandemic

If any biological hazards are identified at the Site, workers in the area will immediately notify the FS and nearby personnel. Actions to be taken to protect against the hazards identified are provided in the sections below.

#### **Bloodborne Pathogens**

Bloodborne Pathogens are pathogenic microorganisms that are present in human blood, human blood components or products made from human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV). The purpose of the section is to provide mandatory guidelines to eliminate or minimize occupational exposure to these and other bloodborne pathogens.

OSHA concludes that exposure to bloodborne pathogens can be minimized or eliminated using a combination of engineering and work practice controls, protective clothing and equipment, training, medical surveillance, hepatitis B vaccination, signs and labels, and other provisions. This section outlines Coneco's method of compliance with the OSHA rule. Any questions regarding the policy should be directed to our HSO.

OSHA requires a listing of job classifications in which some employees may have occupational exposure. Job classifications in which employees in those jobs have reasonably anticipated skin, eye, mucous membrane contact with blood or other potentially infectious materials that may result from the performance of an employee's duties include all First Aid/CPR Certified Personnel, the Project HSO and the Field Supervisor. It should be noted that not all employees in these categories are expected to incur exposure to blood or other potentially infectious materials. Activities that pose an exposure risk are as follows:

- Bleeding Control with Spurting Blood
- Bleeding Control with Minimal Bleeding
- Manually Clearing Airway
- Rendering First Aid
- Rendering Cardiopulmonary Resuscitation (CPR)
- Decontamination Following Accidents/Injuries
- Vehicle/Equipment Accidents Where There Is Presence of Blood
- Rescue of Bleeding Employee
- Wound Care
- Epistaxis (Nosebleed) Control

Universal precautions shall be observed by personnel to prevent contact with blood or other potentially infectious materials. In accordance with the concept of Universal Precautions, personnel shall treat blood and other potentially infectious materials as though potentially infected with HBV, HIV, or other bloodborne pathogens, particularly when differentiation between body fluid types is difficult or impossible. To eliminate or minimize exposure, the following work controls shall be observed:

- Hand washing facilities/locations are readily accessible to all employees.
- Hand cleansers, in conjunction with paper towels or antiseptic towelettes, are also available. When hand cleansers or towelettes are used, hands will be washed with soap and running water as soon as possible.
- Employees will wash their hands immediately or as soon as feasible after removal of gloves or other PPE.
- Employees will wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

- Tasks such as eating, drinking, smoking, applying lip balm and handling contact lenses are prohibited in work areas where there is reasonable likelihood of occupational exposure.
- Equipment, other than PPE, which during the course of work could become contaminated with blood or other potentially infectious materials should be checked routinely.
- All equipment or environmental surfaces shall be cleaned and decontaminated after contact with blood or other infectious materials, with Zee medical body fluid disposal kit or like item.
- Appropriate PPE will be readily accessible. PPE consists of, but is not limited to, Latex or hypoallergenic gloves, eye protection, face shield and impervious clothing.
- PPE will be repaired or replaced as needed to maintain effectiveness.
- All employees who anticipate occupational exposure will put on the appropriate PPE prior to performing the task or procedure.
- If a garment is penetrated by blood or other potentially infectious materials, the garment will be removed immediately or as soon as feasible.
- All PPE will be removed prior to leaving the work area.
- Appropriate protective clothing will be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

Good housekeeping practices shall be followed to eliminate exposure to bloodborne pathogens. Work areas are to be maintained in a clean and sanitary condition. Appropriate written schedules for cleaning and methods of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area shall be developed and implemented when appropriate. All equipment, environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials using any sterilization or disinfection procedures or sterilizing agent or high-level disinfectant that will kill viruses if used as directed. Initial cleanup of blood or other potentially infectious materials shall be followed with the use of an approved hospital disinfectant chemical germicide; or with a solution of 5.25 percent sodium hypochlorite (household bleach) diluted between 1:10 and 1:100 with water. This is particularly effective in destroying the hepatitis B virus, if used properly.

Employees shall report all occurrences of occupational exposure as soon as feasible after the exposure. The Project HSO will initiate a post-exposure evaluation and follow-up process in response to reports of occupational exposure. Following the report of an exposure incident, Coneco will immediately offer the employee a confidential medical evaluation and testing, including a copy of the results and the healthcare professionals' written evaluation and/or opinion.

**Ticks**

Ticks may transmit diseases such as Lyme disease. Symptoms of Lyme disease include low-grade fever, headache, muscle pain, joint pain, and swollen lymph nodes. Avoid tick bites by wearing long sleeved shirt and long pants. Apply insect repellent to clothes and/or skin (if FDA approved for topical use). Check yourself daily for ticks. If there is evidence that ticks are present, tucking your pants into your socks can provide additional protection. It is worth noting that it is easier to spot a small tick on light colored clothing as opposed to a dark shirt or dark pair of pants.

**Rodents & Mammals**

Animals may potentially carry the rabies virus or disease causing agents. Do not attempt to feed or touch animals. Feces from some small mammals may contain diseases such as Hanta Virus. Avoid generating dust in the vicinity of rodent feces. In addition, animals such as dogs or wild predators (i.e., cougars or coyotes) may pose an attack hazard. Persons should slowly back away in a non-threatening manner if an encounter with a threatening animal occurs. In order to avoid such encounters, use the buddy system and make noise when working in areas where such animals may be present.

**Poisonous Plants**

Common examples of poisonous plants include poison ivy, poison oak, and poison sumac. Avoid contact with any suspect plants. Exposure can be avoided by wearing long sleeved shirt and long pants. Wash affected areas immediately upon exposure and consult the Site Safety Health and Safety Supervisor.

**Reptiles/Snakes**

Common indigenous examples include garter snakes, black racers, and timber rattlesnake. Avoid contact with snakes and other reptiles. Persons should slowly back away in a non-threatening manner if an encounter with a threatening reptile or snake occurs. In order to avoid such encounters, use the buddy system and make noise when working in areas where such reptiles and/or snakes may be present. If bitten, seek medical attention immediately.

**Venomous Insects**

Common examples include bees, fire ants, spiders and wasps. Avoid contact with insects and their hives, webs, mounds, etc. If stung, remove the stinger by gently scraping it out of the skin (do not use tweezers). If the worker is stung by an insect, immediately apply an ice pack to the affected area and wash area with soap and water and apply antiseptic. If an allergic reaction occurs, contact emergency medical services for appropriate treatment. Seek medical attention immediately if you are allergic to venomous stings such as bees or if anaphylaxis symptoms are present.



## **Mosquitoes**

Mosquitoes may transmit diseases such as West Nile Virus (WNV) and Eastern Equine Encephalitis (EEE).

WNV is a mosquito-carried virus that can cause illness ranging from a mild fever to more serious disease like encephalitis or meningitis. It was first identified in the United States in 1999. The majority of people who are infected with WNV (approximately 80%) will have no symptoms. A smaller number of people who become infected (approximately 20%) will have symptoms such as fever, headache, body aches, nausea, vomiting, and sometimes swollen lymph glands. They may also develop a skin rash on the chest, stomach and back. Less than 1% of people infected with WNV will develop severe illness, including encephalitis or meningitis. The symptoms of severe illness can include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness and paralysis. Persons older than 50 years of age have a higher risk of developing severe illness.

EEE virus particularly infects birds, often with no evidence of illness in the bird. Mosquitoes become infected when they bite infected birds. Although humans and several other types of mammals can become infected, they do not spread disease. The first symptoms of EEE are fever (often 103° to 106°F), stiff neck, headache, and lack of energy. These symptoms show up three to ten days after a bite from an infected mosquito. Inflammation and swelling of the brain, called encephalitis, is the most dangerous and frequent serious complication. The disease gets worse quickly and some patients may go into a coma within a week. There is no treatment for EEE. In Massachusetts, about half of the people identified with EEE died from the infection. People who survive this disease will often be permanently disabled. Few people recover completely.

## **COVID-19 Pandemic**

Coronaviruses are a large group of viruses; some cause illness in people and some occur in animals. Rarely, animal coronaviruses can evolve and infect people and then may spread between people. Human coronaviruses cause routine seasonal respiratory virus infections. Other coronaviruses, like SARS and MERS, can cause serious illnesses. Coronaviruses are respiratory viruses and are generally spread through respiratory secretions (droplets from coughs and sneezes) of an infected person to another person.

COVID-19 is a respiratory disease caused by the SARS-CoV-2 coronavirus that has not previously been seen in humans. Reported illnesses have ranged from mild symptoms to severe illness and death for confirmed COVID-19 cases. The virus has spread to many countries around the world, including the United States, and the World Health Organization has deemed COVID-19 to be a pandemic affecting all aspects of daily life, including travel, trade, tourism, food supplies, and financial markets. The more people who become contagious, the more widespread the disease becomes and the more rapid

the spread is. The United States Centers for Disease Control and Prevention (CDC) offers the following information and guidance on COVID-19:

- <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>

Site workers and visitors must comply with CDC guidance, which is provided at the above link and summarized below:

*Symptoms and Identification:*

Symptoms of COVID-19 infection may appear 2-14 days after exposure and include (but are not limited to):

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

Call your healthcare professional if you develop symptoms and have been in close contact with a person known to have COVID-19. Furthermore, the CDC recommends seeking immediate emergency medical care for any of the following COVID-19 emergency warning signs:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake.
- Bluish lips or face

*Prevention and Mitigation:*

- Wear a mask over your nose and mouth when in public where the COVID-19 Community Level is high, regardless of vaccination status. The mask should fit snugly but comfortably against the side of the face, be secured with ties or ear loops, include multiple layers of fabric, and allow for breathing without restriction.

- If you are not up to date on COVID-19 vaccines, stay at least 6 feet away from other people when indoors in public, especially if you are at higher risk of getting very sick with COVID-19.
- Wash your hands often using soap and warm water. If running water and soap are not available, use an alcohol-based hand sanitizer (minimum 60% alcohol content).
- Avoid touching your eyes, nose, and mouth.
- Clean objects that are frequently touched.
- Cover your mouth when you cough or sneeze.

The Project Manager will interview Project personnel daily about potential symptoms and exposures to COVID-19-positive individuals. Coneco expects employees to notify it as soon as possible of exposure or illness. Coneco expects employees who contract COVID-19 or have been exposed to others who have COVID-19, to stay home or in quarantine/isolation per CDC guidance, unless seeking medical attention.

#### **4.0. Communication**

All Site employees will discuss and report all safety issues and incidents with the Project Manager/Health & Safety Officer and the Field Supervisor. General person to person communication at the subject Site will be handled through face-to-face communication.

#### **4.1 Emergencies**

Site employees will use cellular phones for reporting all emergencies. Job site emergency information will be captured in the Pre-Job Brief at the start of the job with all contact information for fire, police, and hospitals documented. All site workers will be made aware of the location of the Pre-Job Brief prior to the start of work. Emergency contact information is provided in Appendix B. Hospital Directions are included in Appendix C.

#### **4.2 Incident Reporting and Analysis**

Coneco will investigate and report all work-related incidents including near misses, injuries/illnesses, vehicle damage, property and incidents that may result in adverse public impact, property damage, system interruption, and hazardous conditions.

#### **4.3 Safety Meetings and Job Briefings**

Site employees shall conduct job briefings daily for all employees to ensure safety compliance with all regulations. Job briefings will be performed prior to the start of work each day, when there is a significant change in work conditions, and when new workers arrive on-site. The job briefing shall clearly communicate:

- Specific daily tasks
- Mitigation and control of hazards
- Where to meet for a head count in an emergency.
- Roles of employees in an emergency
- Energized controls

On-Site personnel will comply with all Coneco safety requirements. Signed job briefs and documentation will be retained for a minimum of 30 days after the job is completed.

#### **4.4 Health and Safety Plan**

On behalf of Coneco, Coneco will cover the contents of the HASP with all employees before the start of the project and refer and review the plan with a daily tailboard.

### **5.0 Personal Protective Equipment**

PPE will be used at this Site to protect employees from chemical and physical hazards in compliance with 29 CFR 1926.65(b)(4)(ii)(C). This includes hazards associated with, but not limited to, excavation, heavy equipment usage, and routine Site tasks and operations. The purpose of PPE is to protect employees from hazards and potential hazards they are likely to encounter during Site activities. The amount and type of PPE used will be based on the nature of the hazard encountered or anticipated. Respiratory protection will be utilized when an airborne hazard has been identified using real-time air monitoring devices, or as a precautionary measure in designated areas.

PPE shall be selected and used to protect Site workers from the hazards and potential hazards they are likely to encounter. PPE requirements will be outlined in the daily job briefing. A PPE ensemble shall be assigned to each work task or operation. Dermal protection, primarily in the form of chemical-resistant gloves, coveralls, and boot covers, will be worn whenever contact with chemically affected materials (e.g., soil, groundwater, sediment) is anticipated, without regard to the level of respiratory protection required.

Based on an evaluation of the anticipated potential hazards, Level D PPE has been designated for all personnel working in the Project work area. Should respiratory protection be necessary based on the findings of ambient air monitoring, personnel working within the Exclusion Zone during Project activities shall instead wear Level C PPE.

Specific protection equipment and clothing materials required for this Project are presented below. ***Personnel must always be equipped to upgrade to Level C if necessary. Downgrading of the specified level of protection will not be made without authorization from the Project Supervisor or the Safety Supervisor.***

<b>Personal Protective Equipment (PPE)</b>			
<b>PPE Type</b>	<b>Specific Equipment</b>	<b>PPE Level</b>	
		<b>C</b>	<b>D</b>
1. Respiratory Protection (OSHA/NIOSH-Approved)	Full Face		
	Half Face	X	
2. Respirator Cartridge Type	Organic Vapor	X	
	Dust/Mist/Fume	X	
	Mercury Vapor		
	Other		
3. Coveralls	Standard TYVEK		
	Poly-laminated TYVEK		
	Saran TYVEK		
	FR Rated (8 cal. Minimum)		X
	Other		
4. Gloves	Inner PVC		
	Outer Neoprene - Latex	X	X
	Other (Work Gloves)	X	X
5. Boots	Rubber Sole, Steel toe, EH-Rated	X	X
	Disposable Outer		
6. Hard Hat	Hard Hat	X	X
7. Eye Protection	Safety Glasses with Side Shields or Chemical Splash Goggles	X	X
8. Ear Protection	Ear Plugs or Earmuffs with appropriate NRR (as needed)	X	X
9. Other (Specify)	N/A		

Site workers shall use hearing protection to protect against noise exposures equal to or exceeding an 8-hour time-weighted average sound level of 85 dBA, and when working within 10 meters of an operating excavator or heavy equipment. In areas where noise exposure meets or exceeds this level, noise will be listed as a physical hazard in the job briefing and hearing protection PPE for the tasks or operation in these areas is included as one of the control measures.

Workers using PPE at this Site shall have the proper training and fit testing, as applicable. PPE shall be inspected prior to, during, and after each use.

## **6.0 Safety Compliance**

Coneco will conduct random safety audits and inspections to ensure that compliance with all rules and regulations are being maintained by all employees on the job site. Safety compliance will be evaluated through daily inspections during the Project.

## **7.0 Environmental Compliance**

Coneco and its subcontractors will comply with applicable environmental regulations, permit conditions and restrictions. On behalf of ESRT Coneco will assist in monitoring environmental conditions during the project and ensure deficiencies and emergencies are handled appropriately.

## **8.0 General Project Work Plan**

Coneco will ensure that all its Site personnel abide by all safety and work requirements. Site employees will perform the work scope in a safe and timely order. Once the job is started the crew will work the required hours per day to safely complete the work on time, as detailed in Appendix A. Coneco is not responsible for the safety and work requirements of other onsite personnel not affiliated with Coneco and or its subcontractors.

## **9.0 Environmental Air Monitoring**

On behalf of ESRT ambient air monitoring will be conducted by Coneco during the performance of soil excavation activities and/or other construction activities involving the significant disturbance of soil within identified areas of concern. A photoionization detector meter will be used to screen for VOCs, and a TSI DustTrak will be utilized to monitor airborne particulates. The Coneco field staff will be properly trained in the use of the monitoring equipment and will calibrate the equipment before use each day.

Readings will be 15-minute averages taken hourly in both the work zone and perimeter locations during soil-disturbing activities, or more frequently if air quality measurements approach the action levels specified below. Monitoring will be done in the breathing zone (generally 4 to 5 feet above ground level) to evaluate working conditions. Air monitoring results will be used to evaluate whether there is a need to implement engineering controls and/or to modify the levels of worker protection. PPE modifications must be approved by both the Project Supervisor and the Safety Supervisor, and by a Certified Industrial Hygienist (CIH) if necessary. Work activities at the Site will be shut down if monitoring values exceed those specified below for Level C. Monitoring procedures and action levels are as follows:

Environmental Air Monitoring Action Levels				
Monitoring Device	Parameter	Measurement Location	Action Level	Response
Micro Tip PID	Volatile Organic Compounds (VOCs)	All waste and soil movement activities	<5 ppm	Proceed with work
			Low alarm (5 ppm)	Respiratory protection implemented
			5 ppm sustained. (over 15 minute ave)	Withdraw from area until below 5 ppm is sustained
			>25 ppm	Work activity is shutdown
DustTrak	Dust	Soil disturbance or intrusive activities	100 µg/m <sup>3</sup> (sustained for 15 minute ave)	Use wet methods if necessary

As noted above, dust/particulate monitoring will be conducted by Coneco using a TSI DustTrak field monitor. The monitoring location(s) will be selected based on the specific work area and wind direction. The action level for dust (measured as PM<sub>10</sub>) will be 100 micrograms per cubic meter (µg/m<sup>3</sup>) in accordance with 310 CMR 6.00 and the EPA National Ambient Air Quality Standard (NAAQS). If monitoring indicates that concentrations of dust or the other constituents of concern leaving the Site exceed this action level, adjustments will be made to the equipment and procedures to minimize both the on-Site and off-Site exposure. On-Site personnel will be issued a verbal notification (to be documented in daily field reports) to stop work if air monitoring shows that perimeter action levels for dust are exceeded. This project has a Community Air Monitoring Plan (CAMP) that must be adhered to and provides more explanation of the above table.

When a condition of dust exceedance occurs, either determined from visual observation or from results of instrument readings, on-Site personnel will stop work immediately and apply dust suppression measures, such as wetting down soils with water, to the active work areas. Following the application of dust suppression measures, Coneco will measure dust levels across the Site. Work may resume when readings decrease to less than the limits established by the baseline criteria.

## 10.0 Decontamination Procedures

Decontamination will be performed over the designated excavation areas. Workers, PPE, sampling equipment, and heavy equipment leaving the exclusion area will be inspected to determine the level of decontamination necessary to prevent the spread of potentially hazardous materials. Unnecessary equipment and support vehicles are to be left outside the designated Exclusion Zone so that decontamination will not be necessary.

Despite protective procedures, personnel may meet potentially hazardous compounds while performing work tasks. If so, decontamination needs to take place using an Alconox or TSP wash, followed by a rinse with clean water. Standard decontamination procedures for levels C and D are as follows.

- Equipment drops,

- Boot cover and outer glove wash and rinse,
- Boot cover and outer glove removal,
- Suit removal,
- Safety boot wash and rinse,
- Inner glove wash and rinse,
- Respirator removal,
- Inner glove removal, and
- Field wash of hands and face.

Site workers should employ only applicable steps in accordance with level of PPE worn and extent of contamination present. The Coneco field supervisor shall maintain adequate quantities of clean water to be used for personal decontamination (i.e., field wash of hands and face) whenever a suitable washing facility is not located in the immediate vicinity of the work area.

Disposable items will be disposed of in an appropriate container. Wash and rinse water generated from decontamination activities will be handled and disposed of properly. Non-disposable items (i.e., respirators) may need to be cleaned or sanitized before reuse. Each Site worker is responsible for the maintenance, decontamination, and sanitizing of their own PPE.

Used equipment may be decontaminated as follows.

- Remove adhered materials (i.e., dirt or mud) to increase the effectiveness of the decontamination process.
- An Alconox or TSP and water solution may be used to wash the equipment.
- The equipment will then be rinsed with methanol and deionized water until it is determined clean.



## 11.0 Plan Limitations & Acknowledgement

The preceding Site Health and Safety Plan has been prepared pursuant to 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response. It is not intended to cover any other OSHA General Industry Standards. It has also been prepared for the protection of Coneco's personnel and as preliminary information for use by Coneco subcontractors and other individuals involved in Site activities associated with the stated Project Scope. Coneco subcontractors and other involved individuals not employed by Coneco are responsible for providing their own Health & Safety Plans and ultimately their own safety while on the Site. Coneco will not be responsible for providing personal protection equipment for individuals other than Coneco personnel nor will Coneco be responsible or held liable for personal injury resulting from the direct actions, negligence, or lack of approved health and safety training on the part of individuals other than Coneco personnel.

***ALL SITE PERSONNEL HAVE READ THE ABOVE PLAN AND ARE FAMILIAR WITH ITS PROVISIONS.*** (Please sign in the appropriate space below)

Group Supervisor

---

Health & Safety Officer

---

Field Supervisor

---

Other Site Personnel

---

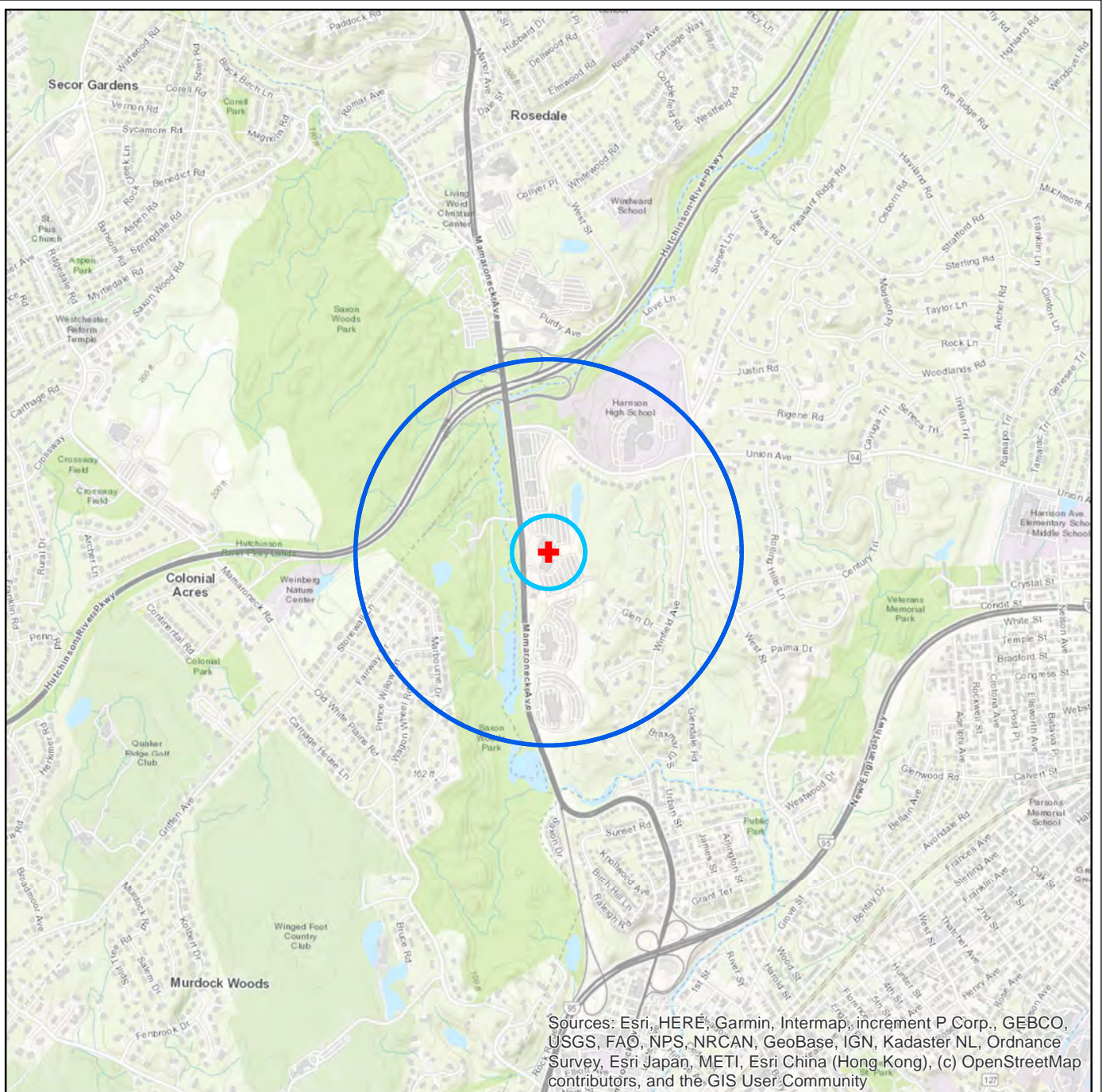
---

---

---

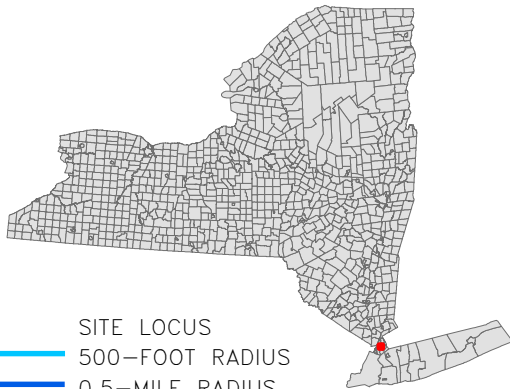
---

---



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

LATITUDE: 40.97719° LONGITUDE: -73.74185°  
UTM: 4,536,987 N 605,850 E (Zone 18)



SITE LOCUS

500-FOOT RADIUS

0.5-MILE RADIUS



## LOCUS MAP

500 MAMARONECK AVENUE  
HARRISON, NEW YORK

SCALE

1:25000

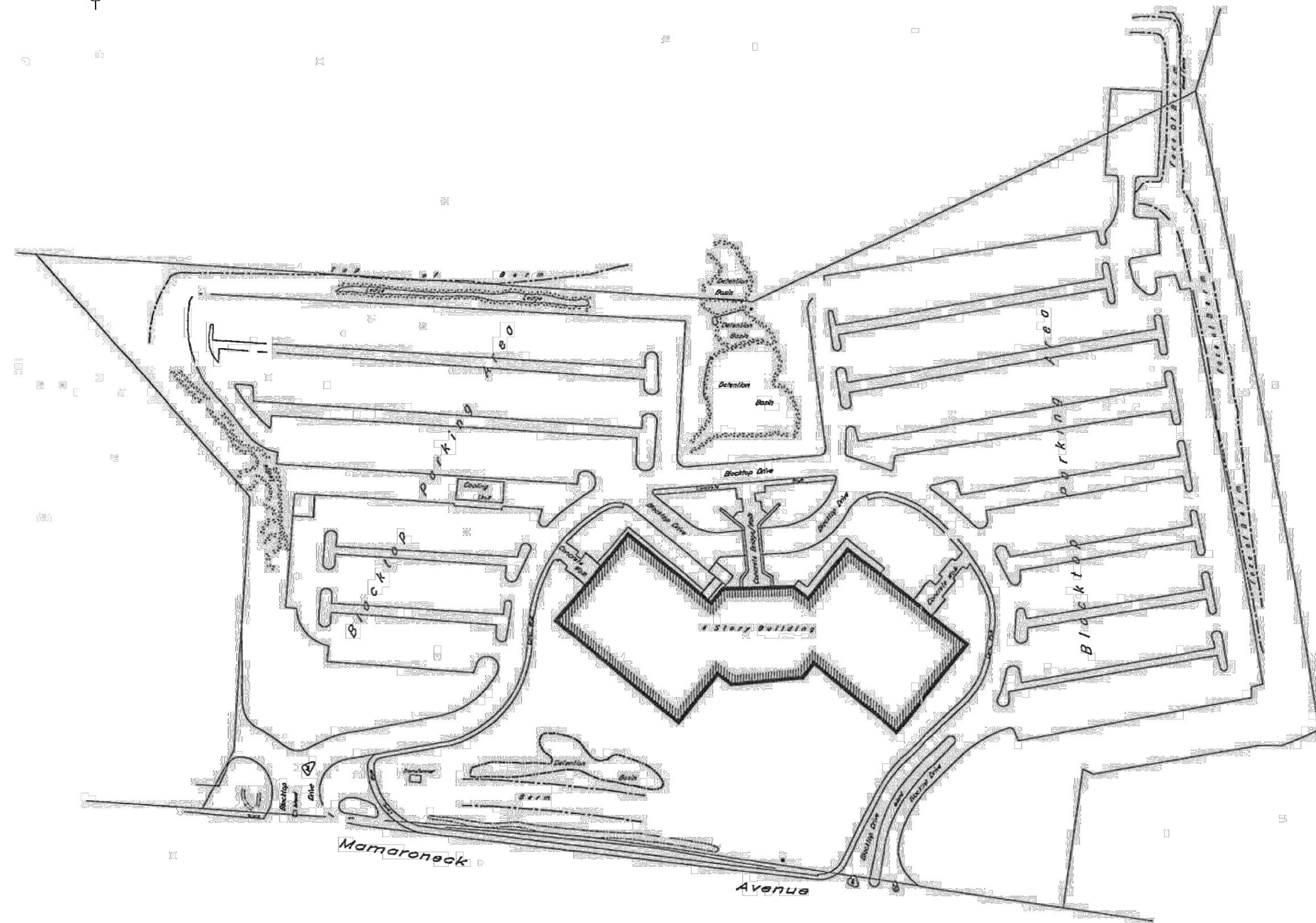
PROJECT NO.

2162.001


DRAWING NUMBER

FIGURE 1





125' 0 125' 250'



SCALE: 1" = 125'

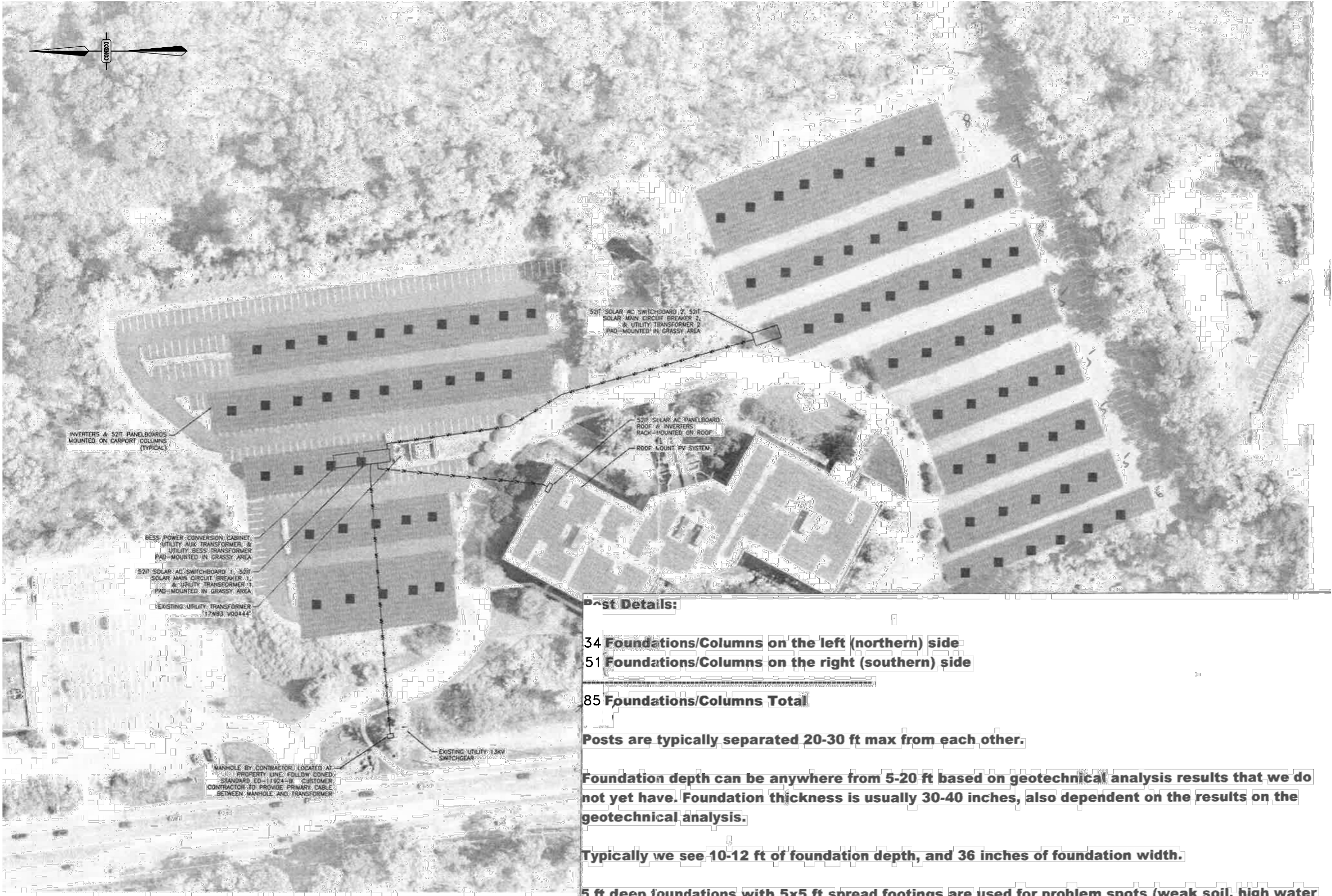
U:\Connecticut Projects\C2100-C2199\C2162.0 - Harrison,NY-500MamaroneckDr\Figures\C2162 - Figure 2 & 3.dwg



**CONECO**  
*Engineers & Scientists*

PHONE: 800-548-1395 WEBSITE: [www.coneco.com](http://www.coneco.com)





**Post Details:**

- 34 Foundations/Columns on the left (northern) side
- 51 Foundations/Columns on the right (southern) side
- 85 Foundations/Columns Total

Posts are typically separated 20-30 ft max from each other.

Foundation depth can be anywhere from 5-20 ft based on geotechnical analysis results that we do not yet have. Foundation thickness is usually 30-40 inches, also dependent on the results on the geotechnical analysis.

Typically we see 10-12 ft of foundation depth, and 36 inches of foundation width.

5 ft deep foundations with 5x5 ft spread footings are used for problem spots (weak soil, high water table, rocky, etc.).

REVISIONS

NO.	DATE	DESCRIPTION	DR/CK

DRAWING:

SOLAR ROOFTOP & CARPORT SYSTEM AT EMPIRE STATE REALTY TRUST

PROJECT:

500 MAMARONECK AVENUE  
HARRISON, NEW YORK

CONECO

Engineers & Scientists

PHONE: 800-548-3355  
WEBSITE: www.coneco.com

CHECK:

BM 1/26/23

DRAWN:

WCB 1/26/23

SCALE:

0.006483

PROJECT NO.

C2162

FIGURE NO.

3



## **Appendix A - General Project Work Plan**

### **Solar Canopy Carport System Construction Project Commercial Property 500 Mamaroneck Avenue, Harrison, New York**

#### **1. Mobilization**

- Preplan, secure, and organize equipment, tooling and manpower
- Review underground utility locations.
- Secure entry to site and stage equipment

#### **2. Pre-Plan and Site Indoctrination**

- Orientation meeting on-Site with crew and subcontractors. Review this safety plan and all safety procedures with Coneco employees and make available to other Site contractors.
- Review expectations and work rules

#### **3. Site Preparation**

- Visually inspect excavation locations before work is started.
  - Communicate any hazardous conditions as necessary.
- Inspect all equipment to be used by Coneco prior to use, note all deficiencies.
- Establish Site controls.

#### **4. Commence Work – Excavation / Soil Movement**

- Mobilize monitoring equipment.
- Conduct monitoring during excavation work.
- Decontaminate Coneco equipment.
- Demobilize at work location.

#### **5. Demobilization**

- Remove all equipment.
- Convene with all Coneco or Coneco Subcontractor prior to exiting Site.

## **Appendix B - Emergency Contact Information**

### **SAFETY AND HEALTH PLAN** **EMERGENCY CONTACT INFORMATION**

<b><u>Location:</u></b> Street: 500 Mamaroneck Avenue Town: Harrison, New York	
<b>Project Manager: Brian McCarthy (Coneco)</b>	
<b>Description of Work: Air monitoring at excavation areas for installation of Solar Canopy Foundations and associated electrical lines and equipment</b>	
<b>EMERGENCY CONTACT INFORMATION</b>	
<b>CONTACT NAME</b>	<b>TELEPHONE NUMBER</b>
<b>Commercial Point of Contact</b>	917-825-4192
<b><u>Local Emergency Services</u></b> Police Emergency 911 Fire Emergency 911	911
<b>Local Police      Non-Emergency Number</b>	914-967-5111
<b>Local Fire Dept.      Non-Emergency Number</b>	914-835-9871
<b>NYSDEC Emergency Response 24-Hour Line</b>	1-800-457-7362
<b>DigSafe® (Utility Clearance)</b>	811
<b><u>Nearest Hospital</u></b> Name: New York United Hospital Medical Center – Emergency Room Location: 406 Boston Post Road Port Chester, New York 10573 Directions: Refer to Appendix C	914-934-3000
<b>Primary Project Field Staff</b>	
<b>Project Manager &amp; Health &amp; Safety Supervisor</b> <b>Name: Brian McCarthy (CONECO)</b>	Office: 978-649-0002 Cell: 978-375-0014
<b>Field Supervisor</b> <b>Name: Bill Cook (Coneco)</b>	617-792-4330
<b>Other Project Staff</b>	
<b>ESRT Representative</b> <b>Name: Jeffery Duarte</b>	917-825-4192
<b>Power Flex Representative</b> <b>Name: Alan Ficik</b>	914-471-6022
<b>Coneco Project Manager</b> <b>Name: Brian McCarthy</b>	860-214-5309

## **Appendix C - Hospital Location Map**



500 Mamaroneck  
Ave, Harrison, NY 10

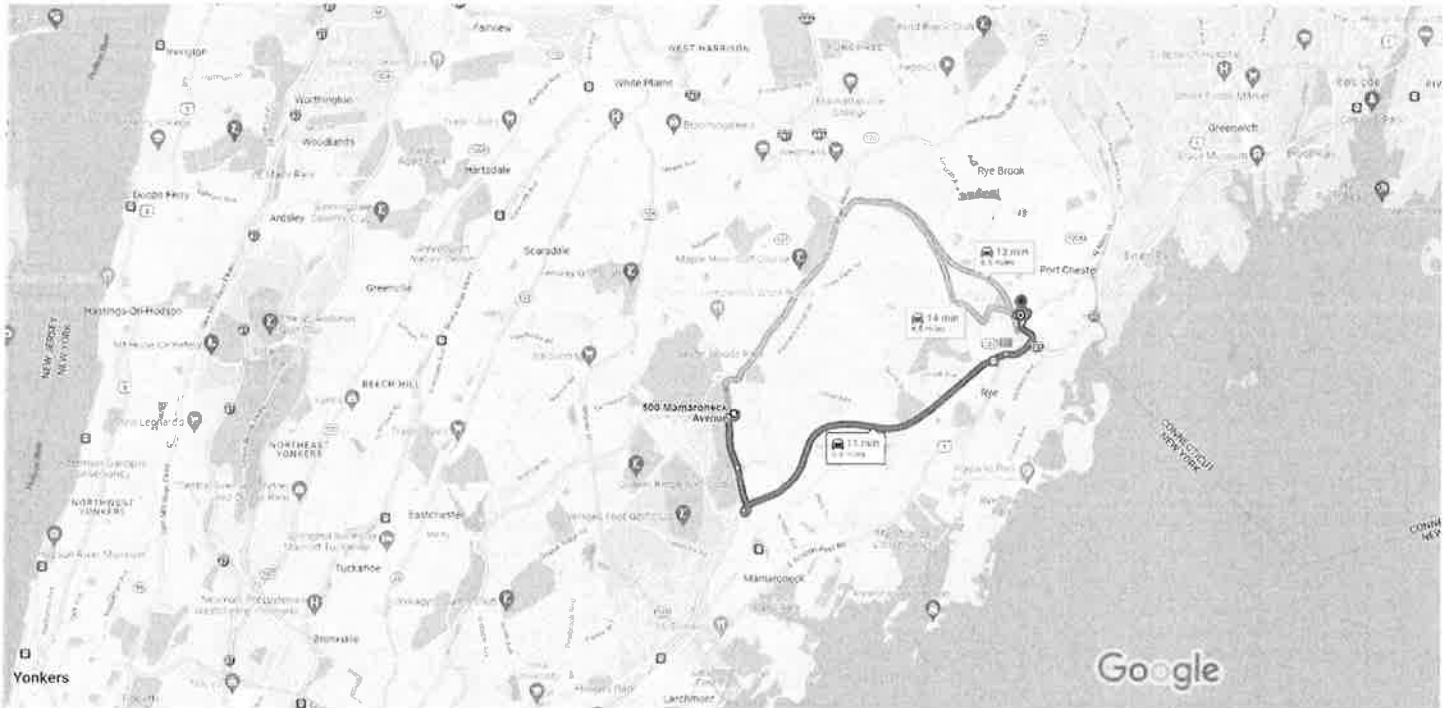
### **HOSPITAL DIRECTIONS:**

1. Start- 500 Mamaroneck Avenue (Site)
2. Go 1.2 miles south on Mamaroneck Ave and turn left onto Interstate 95 North.
3. Continue on 95 North for 4.5 miles and take exit 21.
4. Take exit ramp to High Street, make left on High Street for 0.5 miles to hospital.

Total Distance: 6.4 miles, Estimated Time: 12 minutes

### **HOSPITAL INFORMATION:**

**Name:** New York United  
**Hospital Medical Center –**  
**Emergency Room (914-934-3000)**  
**Location:** 406 Boston Post  
**Road**  
**Port Chester, New York 10573**



Map data ©2023 Google 1 mi

500 Mamaroneck Ave  
Harrison, NY 10528

### Get on I-95 N in Mamaroneck

- ↑ 1. Head south toward Mamaroneck Ave  
3 min (1.4 mi)
- ↩ 2. Turn left onto Mamaroneck Ave  
0.1 mi
- ↗ 3. Use the right lane to take the ramp onto I-95 N  
0.6 mi

### Continue on I-95 N to US-1 N/Boston Post Rd. Take exit 21 from I-95 N

- ↗ 4. Merge onto I-95 N  
5 min (4.5 mi)
  - ↘ 5. Take exit 21 to merge onto US-1 N/Boston Post Rd  
3.9 mi
- 0.6 mi

### Take High St to your destination



2 min (0.5 mi)

⬆ 6. Merge onto US-1 N/Boston Post Rd

135 ft

↩ 7. Turn left onto High St

0.1 mi

↪ 8. Turn right

262 ft

↪ 9. Turn right

ⓘ Destination will be on the right

0.3 mi

406 Boston Post Rd

Port Chester, NY 10573