

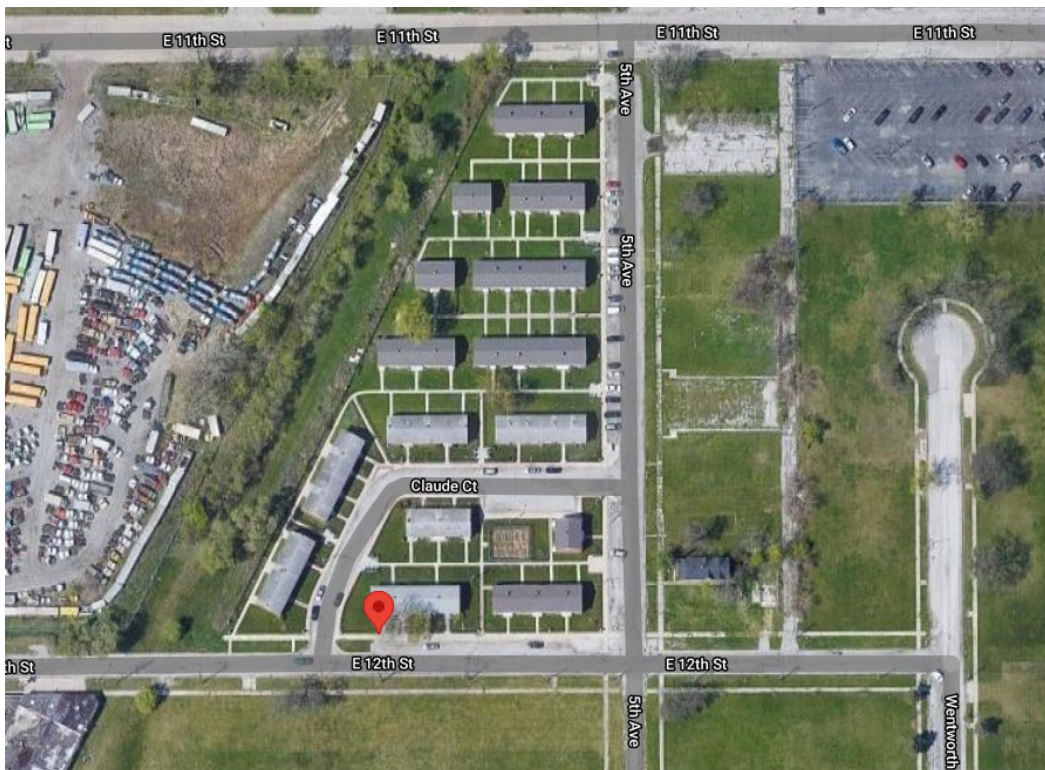
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## Remediation Design Project Manual

Sites: **Sunrise Apartments/John Mackler Homes**  
**1101-1133 Claude Court**  
**281-303 E. 12<sup>th</sup> Street**  
**1100-1140 5<sup>th</sup> Avenue**  
**Chicago Heights, Illinois 60411**

Date: **August 2, 2021**

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Prepared for: **The Housing Authority of Cook County**  
**175 W. Jackson Boulevard, Suite 350**  
**Chicago, IL 60604**

Prepared By:

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## **Drawings**

RD1.0	Remediation Drawing
RD2.0	Remediation Details
RD2.1	Remediation Notes

## **Available References (Not Attached)**

“Phase I Environmental Site Assessment & IHDA Checklist”, by Carnow, Conibear & Assoc., Ltd., dated October 31, 2016.

“Phase I Environmental Site Assessment & HUD 24 CFR Part 58 Environmental Assessment”, by Carnow, Conibear & Assoc., Ltd., dated January 29, 2021.

“Phase II Environmental Site Assessment”, by Carnow, Conibear & Assoc., Ltd., dated April 14, 2021.

## SECTION 01 50 00

### TEMPORARY FACILITIES AND CONTROLS

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

All terms and conditions of the Contract apply to this section.

##### 1.2 SUMMARY

- A. Description: Furnish, install and maintain temporary facilities and controls required for performance of the Work including, but not limited to, safety and health of public and personnel at project site, and public and private property and facilities.
  - 1. Take over and maintain any temporary facility or control existing in-place at project site. Accept and assure ownership and be responsible and assume liability for such temporary facility or control.
  - 2. Provide whatever means of temporary facilities and controls necessary for performance of the Work.
  - 3. Modify and extend temporary facilities and controls as necessary for the Work and as Work progress requires.
  - 4. Remove temporary facilities and controls after completion of the Work, except when such temporary facilities and controls are to remain in-place.

##### 1.3 QUALITY ASSURANCE

- A. Regulatory Requirements: Meet requirements of Federal, State and Local codes and regulations, including safety, health, energy and pollution regulations; of public authorities bearing on performance of the Work, of applicable utility companies, insurance companies and trade unions, and of applicable ANSI and NFPA Standards.
- B. Ownership: Materials, equipment and other facilities provided by Contractor for temporary facilities and controls shall remain property of Contractor, except as otherwise required.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. General: Product shall be option of Contractor as suitable for accomplishment of intended purpose, except as otherwise required.
- B. Condition: Products may be new and adequate in type, size, capacity and arrangement

for use intended, shall not create unsafe and unhealthy conditions and shall meet requirements of codes and regulations of public authorities bearing on performance of the Work, and applicable standards.

## 2.2 PROTECTION

- A. Ingress and Egress: Means of ingress and egress from project site shall not be impeded. Maintain a clear lane or traffic-way leading to and from construction areas, free of materials, equipment, tripping hazards and other conditions that present a safety hazard.
- B. Earthwork Hazards: Protect buildings, structures, utilities, sidewalks, pavements and other facilities from damages caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork, foundation Work or other substructure Work operations.
- C. Existing Utilities
  - 1. Before beginning any Work, Contractor shall investigate and inform himself of locations and extent of all utilities on and in vicinity of project site which may be encountered in performing the Work and shall take suitable care to protect and prevent damage and cessation of operation to such utilities from his operations.
  - 2. When performing Work adjacent to existing sewers, drains, water and gas lines; electric, telephone or telegraph conduits or cables; pole lines or poles, or other utility facilities, equipment or structures, which are to remain in operation, Contractor shall maintain such utility facilities, equipment and structures in place and protect from damage and cessation of operation and shall cooperate with applicable utility company and any other party owning, operating or maintaining such utility facilities, equipment or structures.
  - 3. Methods of protection shall be subject to approval of utility company and any other party owning, operating or maintaining such utility facility, equipment or structure.
  - 4. Damages:
    - a. Should existing utilities which are to remain in operation be damaged during construction operations, Contractor shall immediately notify utility company and any other party owning, operating or maintaining such utility.
    - b. Contractor shall be responsible for and shall repair or replace, as applicable, damages to any such utility facilities, equipment or structures caused by his acts, whether negligent or otherwise, or his omission to act, whether negligent or otherwise, and shall leave such utility facilities, equipment or structures in as good condition as existed prior to commencement of his operations as approved by utility company and any other party owning, operating or maintaining such utility. In addition, Contractor shall be responsible for any damages or liability which Housing Authority of Cook County may be held liable. Materials and methods of repair or replacement shall be subject to approval of utility company and other party owning, operating or maintaining such utility.
    - c. However, any such utility equipment or structures damaged as a result of any act, or omission to act, of Contractor, may, at option of applicable utility

company and any other party owning, operating or maintaining such utility facilities, equipment or structures damaged, be repaired or replaced by such applicable utility company or other party. In such event cost of repairs or replacement shall be responsibility of Contractor at no additional cost to Housing Authority of Cook County.

## 2.3 CONSTRUCTION AND ENCLOSURES

- A. General: Provide and maintain temporary or interim construction, enclosures and like items, required to assure:
  - 1. Safety and health protection of personnel and public.
  - 2. Protection of property, operations and contents thereof.
  - 3. Prevent entry of unauthorized persons.
- B. Control: Work shall be protected to prevent damage, defacement and contamination from temporary or interim construction provisions.
- C. Materials: Materials for temporary or interim construction and enclosures shall be as required.

## 2.4 CONSTRUCTION AIDS

- A. Apparatus, equipment and other construction aids shall meet codes, regulations and requirements of public and other authorities bearing on performance of the Work and requirements of insurance and union authorities.
- B. Shoring and Bracing:
  - 1. General: Provide and maintain temporary shoring and bracing as necessary to protect against movement or settlement of existing and new conditions, improvements or construction and for safety and health of personnel and public. Maintain shoring and bracing in a stable and safe condition.
  - 2. Control:
    - a. Establish requirements for shoring and bracing which shall meet codes, regulations and requirements of public and other authorities bearing on performance of the Work. Be responsible for adequacy and strength of shoring and bracing, and for damage and injury caused by insufficiency of shoring and bracing. Protect existing and new conditions and permanent Work from damage, defacement and loss of service resulting from shoring and bracing provisions.
    - b. Shoring and bracing shall be designed, certified, reviewed and inspected by licensed engineer of Contractor.

## 2.5 BARRIERS

- A. General: Provide and maintain barricades, fences, footways and other devices as

necessary to protect personnel and employees at project site, and public, against hazards on or adjacent to project and construction site. Temporary barriers shall remain in-place until completion of Work.

- B. All Barriers: Be responsible and assume liability for all temporary barriers, including any existing barriers remaining in-place at project site which may have been provided by the Housing Authority of Cook County or other separate contractors, and maintain in safe condition regardless of by whom provided.
- C. Signs and Lights: Provide signs, warning lights, signals, flags and illumination as necessary to alert persons to hazards, and to provide safe and adequate visibility in areas of hazards.
- D. Project Site Fence: Install and maintain temporary fence and gates at perimeter of project site as required to provide protection and security against intrusion of unauthorized entry onto project site premises. Dust screen shall be installed on new temporary construction fence and existing western boundary fence. Provide a minimum of 48 hour notice to Housing Authority of Cook County for removal of the temporary fence.

## 2.6 SECURITY

- A. General: Safeguard premises and the Work, and provide protection and security against intrusion or unauthorized entry onto project site premises.
- B. Guard Weapons: Any guard or watch personnel shall not carry or be armed with firearms or other weapons.

## 2.7 ROADS AND WALKS

- A. General: Provide and maintain temporary roads and walks at project site as required to facilitate execution of the Work.
- B. Roads and Walks: Provide and maintain roads, and walks as required to achieve all-weather ingress to and egress from project site, and access within and adjacent to project site as required to provide uninterrupted access to Work. Provide periodic top dressing with additional surfacing materials as conditions require.
- C. Road and Walk Exits: Provide and maintain stabilized road and walk areas at points of exits from project site. Maintain such areas as to prevent tracking or flowing of sediment carried from project site on feet of people or on wheels and other parts of vehicles and construction equipment onto public and private roads and walks or into drainage systems, prior to leaving project site.
- D. Drainage: Grade and provide drainage facilities to assure runoff of ground surface water and to avoid blockage of flow from adjacent areas.

## 2.8 CONTROLS

- A. General Cleaning:
1. Maintain Work areas in a reasonably neat and orderly condition and free from accumulations of waste materials and rubbish during construction period. Prevent accumulation of waste, which creates hazardous conditions. Store volatile waste substances in containers of type specifically intended for safe storage of such substances. Remove crates, cartons and other flammable waste materials. Do not permit materials, waste materials and rubbish to lie about that may be blown around premises by wind.
  2. Be responsible for cleaning and maintenance of Work areas. If premises are not maintained properly, Housing Authority of Cook County may have any accumulations of waste materials or trash removed, and charge cost to Contractor at no addition to Contract Sum.
  3. Remove all rubbish and waste of every kind from project site premises on a daily basis.
  4. Do not burn or bury rubbish and waste materials on project site premises. Do not dispose of waste materials, in storm or sanitary drains, waterways or on ground.
- B. Street and Walk Cleaning: Maintain public and private streets, walks and other property adjacent to project site free of materials, dirt, dust, debris and other substances resulting from Work. Prevent such substances from being spilled, dropped, tracked, washed or otherwise deposited onto such properties from personnel, vehicles and construction equipment leaving the project. Clean areas immediately after becoming contaminated and in such time to prevent such substances from affecting vehicular or pedestrian traffic, presenting a safety hazard, causing damage to property or entering drainage systems. Contractor shall provide street sweeper services throughout the duration of the project, as necessary. Contractor shall immediately respond to Housing Authority of Cook County request to provide additional street sweeping in the project area.
- C. Vehicle and Equipment Cleaning: Clean vehicles and construction equipment as required to remove materials, dirt, debris and other substances carried from project site on wheels or other parts of vehicles and construction equipment, prior to leaving project site. If washing is required, perform washing on a stabilized area. Runoff water from wash area shall not leave project site but shall be handled per requirements of Soil Erosion and Water Control, of this Section.
- D. Environmental Controls: Use temporary enclosures and other methods to limit dust and dirt rising and scattering in air to lowest practical level. Meet all governing regulations pertaining to environmental protection. Clean structures and improvements adjacent to the Work of dust, dirt and debris caused by the Work.
- E. Dust Control: Be cognizant of nuisance and inconvenience dust, dirt or refuse can cause to City, adjacent property owners and public. Provide means to control such problems. Perform the Work in a manner so as to affect control of dust.
- F. Noise Control: Be cognizant of nuisance and inconvenience noise generated from operating equipment or tools, Work operations and other similar sources can cause to City, adjacent property owners and public. Provide means to control such problems. Perform the Work in a manner so as to affect control of noise.

- G. Vibration Control: Work operations shall not cause vibrations detrimental to structures, facilities and operations of City. Perform Work so no vibration is transmitted through structures, equipment, mechanical and electrical appurtenances, and like items.
- H. Snow and Ice Control: Remove snow and ice which may impair progress of Work, be detrimental to workmen or impair access to and from point of delivery at project site, subject to no interference whatsoever to facilities and operations of Housing Authority of Cook County and to whatever direction Housing Authority of Cook County may give to Contractor.
- I. Soil Erosion and Water Control:
1. General: Control soil erosion, and control and remove water which interferes with properly performing the Work; to protect Work, facilities and surrounding areas from damage, and to maintain property and Work in working conditions and continuously free of standing water.
  2. Diversion Structures: provide dikes, berms, channels and similar means to minimize quantity of ground surface water draining into excavations.
  3. Water Removal:
    - a. Remove water from Work areas using dewatering methods, which do not cause damage to property or Work, including undercutting footings or soil changes detrimental to stability of subgrades and foundations.
    - b. Provide ample means and equipment with which to promptly remove and dispose of water from excavations or other parts of the Work. Provide and maintain pumps, sumps, suction and discharge lines and other dewatering system components, 24 hours a day, and qualified operators to maintain equipment as required. Provide adequate standby or back-up equipment.
    - c. Dispose of water removed from excavations or other parts of the Work in a suitable manner without damage to adjacent property or to the Work.
      - 1) Convey water removed from excavations and surface water to collecting or run off areas. Provide and maintain temporary diversions. Do not use trench excavations as temporary drainage ditches.
      - 2) Do not discharge water directly into sewers without first separating or filtering sediment, contaminants and pollutants from water by means of pre-settlement or like methods. Removal and disposal of water in contaminated soil areas shall be in compliance with City of Des Plaines and MWRDGC requirements.
      - 3) Drainage or discharge of removed water shall not be a nuisance or inconvenience to Housing Authority of Cook County, City of Des Plaines, adjacent property owners or public.
      - 4) Duration: Extent of dewatering system remaining in-place shall be such that system can be reactivated with only portable dewatering equipment such as pumps, and suction and discharge lines.
- J. Earthwork Control:
1. Excavation Stability:



- a. General: Provide stability of excavations as required to protect against movement or settlement of earth; loss of earth beneath pavements, slabs, foundation structures and like items; resultant movement or settlement of existing and new conditions, improvements or construction and of adjacent or adjoining property, and for safety and health of personnel and public. Maintain excavations in a stable and safe condition until completion of backfilling.
  - 1) Meet codes and regulatory requirements of public and other authorities bearing on performance of the Work.
  - 2) Take into consideration:
    - a) Angle of repose of earth material.
    - b) Vibration from vehicular traffic, equipment and construction operations.
    - c) Stress transferred to existing and new structure, improvements or construction.
  - 3) Maintain stability of excavations regardless of the time period excavations will be open. Carry down excavation stabilization as excavation progresses.
  - 4) Provide materials, such as sheeting, uprights, stringers and cross-braces, in good and serviceable condition for stability of excavations.
  
- b. Excavation Retention System: Provide excavation retention systems where sloping of excavation sides are not possible either because of inadequate earth stability, excavation depth, space restrictions or like conditions.
  - 1) Establish requirements for excavation retention systems that shall meet codes, regulations and requirements of public and other authorities bearing on performance of the Work. Be responsible for adequacy and strength of excavation retention systems, and for damage and injury caused by insufficiency of excavation retention systems. Protect existing and new conditions and permanent Work from damage, defacement and loss of service resulting from excavation retention system provisions.
  - 2) Excavation retention systems shall be designed, certified, reviewed and inspected by licensed engineer of Contractor.

2. Cold Weather Protection: Protect subgrades and excavated bottoms, where construction will be or is bearing on such surfaces, against freezing when the ambient air temperature is less than 35 degrees Fahrenheit.

K. Vermin Control: Prevent inroad and multiplication of vermin, including insects and rodents. If conditions prevail, employ a certified exterminator to rid premises of vermin. Treat existing conditions and construction meeting requirements of City and safety and health regulations of public authorities bearing on performance of the Work.

## 2.9 TRAFFIC REGULATIONS

A. Site Access: Vehicles delivering products for the Work, construction equipment and vehicles of construction personnel shall enter and exit project site only at designated

locations from public thorough fares.

B. Traffic-Ways:

1. Conduct operations to ensure minimum interference with public and private roads, walks and other occupied or used facilities adjacent to project site.
2. Do not close or obstruct public and private roads, walks and other occupied or used facilities adjacent to project site without permission from authorities having jurisdiction or City as applicable. Provide alternate routes around closed or obstructed traffic-ways or occupied or used facilities as required.

C. Parking: Control use of parking areas at project site for use by Contractor. Contractor parking shall not interfere with local residential and commercial facilities. Employee parking at or around site shall be sole responsibility of Contractor.

## 2.10 PROJECT SIGNS

A. General: No signs shall be displayed at project site, except as otherwise required or acceptable to Housing Authority of Cook County. Do not permit installation of unauthorized signs.

B. 911 Sign

1. Five "911" signs shall be furnished and erected by the Contractor at the project site in locations selected by the Housing Authority of Cook County. It is required that the temporary signs be maintained in good condition until the Work activities are complete.
2. Signs shall be attached to the temporary construction fence.

D. Other Signs: Provide following signs at project site as applicable for the Work:

1. Warning signs.
2. Directional signs.
3. Traffic Control Signs and barricades.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Consult with Housing Authority of Cook County, and review site conditions and factors which affect construction and temporary facilities, including adjacent properties and public facilities which may be affected by execution of the Work.
- B. Determine locations and extent of temporary facilities and controls required for expeditious accomplishment of the Work.
- C. Determine need for temporary access openings for entry, passage or installation of materials and equipment. Coordinate requirements for temporary access openings with installers of related Work. Any costs for modifications, replacement and removal

of the existing temporary fence shall be the responsibility of the Contractor and at no additional cost to the Housing Authority of Cook County.

### 3.2 GENERAL

- A. Comply with applicable requirements specified in other specification sections.
- B. Install Work in a neat and orderly manner.

### 3.3 MATERIAL STORAGE AND DISPOSAL

- A. Soil Storage:
  - 1. Maintain Stockpiles of soil and/or fill materials until required for backfill or removed for disposal. Place, grade and shape stockpiles for proper drainage and erosion control.
  - 2. Locate and retain fill materials away from edges of excavations.
- B. Disposal: Unsatisfactory excavated soil materials, trash, debris, waste materials and demolished materials shall become property of Contractor and shall be removed from project site premises on a daily basis. All disposal activities shall be done in a lawful manner meeting laws, regulations and requirements of public authorities bearing on performance of the Work.

**END OF SECTION**

**SECTION 02 26 11**  
**SUMMARY OF EXISTING SITE CONDITIONS**

**PART 1 - GENERAL**

1.1 RELATED DOCUMENTS

- A. Contract Drawings

1.2 APPLICABILITY

- A. This environmental summary is for information purposes only. Contractor shall become familiar with all site conditions prior to Work.

1.3 INTRODUCTION

- A. Related Work
  - 1. All Work

1.4 AVAILABLE ENVIRONMENTAL ASSESSMENT DOCUMENTS

- A. *Phase I Environmental Site Assessment & IHDA Checklist, Sunrise Apartments/John Mackler Homes, 1101-1140 Claude Court; 281-303 E. 12<sup>th</sup> Street; 1100-1124 5<sup>th</sup> Avenue, Chicago Heights, Illinois 60411* prepared by Carnow Conibear & Assoc., Ltd., October 31, 2016.
- B. *Phase I Environmental Site Assessment & HUD 24 CFR Part 58 Environmental Assessment, Sunrise Apartments/John Mackler Homes, 1101-1133 Claude Court; 281-303 E. 12<sup>th</sup> Street; 1100-1140 5<sup>th</sup> Avenue, Chicago Heights, Illinois 60411* prepared by Carnow Conibear & Assoc., Ltd., January 29, 2021.
- C. *Phase II Environmental Site Assessment, Sunrise Apartments/John Mackler Homes, 1101-1133 Claude Court; 281-303 E. 12<sup>th</sup> Street; 1100-1140 5<sup>th</sup> Avenue, Chicago Heights, Illinois 60411* prepared by Carnow Conibear & Assoc., Ltd., April 14, 2021.

1.5 SITE DESCRIPTION

- A. The site consists of 15 two-story residential buildings with a total of 65 rental units with no basements. The subject site is bounded to the north by E. 11th Street, beyond which is a steel company and a manufacturing company; to the east by 5th Avenue, beyond which is a residential home and a vacant lot; to the south by E. 12th Street, beyond which are vacant lots; and to the west by an abandoned railroad, beyond which is a scrap yard.

## 1.6 SITE HISTORY

- A. According to the most recent Phase I Environmental Site Assessment (ESA), performed in January 2021, the Site was vacant in 1911. By 1929, five small buildings were located on the Site. By 1950, the Site was occupied by nine residential dwellings, an unlabeled building, and D.G. Foundry Co. By 1959, portions of the Site appear to have been occupied by buildings similar to the current residential building layout. By 1962, the Site layout appeared similar to current sizes and layout of the residential buildings that currently occupy the Site.

## 1.7 ENVIRONMENTAL CONDITIONS

- A. A Phase I ESA and HUD 24 CFR Part 58 Environmental Assessment was issued by Carnow Conibear in January 2021. Recognized environmental conditions (RECs) identified in the Phase I ESA include the following:
1. Historical operation of the southwest corner of the subject site for metal casting.
  2. Potential migration of pesticide, herbicide, and creosote treatments from the historic railroad track adjacent to the west of the subject site.
  3. Migration of soil, groundwater, and/or soil vapor contamination onto the subject site as a result of industrial land uses including a scrap yard, furniture manufacturing, and steel fabrication on the north and west adjacent properties.
  4. Migration of soil, groundwater, and/or soil vapor contamination as result of multiple USTs and LUST incidents with unknown statuses on the north, west, and south adjacent properties.
- B. The Phase II ESA issued by Carnow Conibear in April 2021 included eleven soil borings. 22 soil samples were selected for analysis based on the results of field screening and field observations. One of the borings was converted to temporary monitoring wells during the investigation. No indication of a native groundwater aquifer was encountered. Analytical results were compared to TACO Tier 1 SROs based on residential, construction worker, and Class I and Class II groundwater exposure scenarios. The polynuclear aromatic hydrocarbons (PNAs) Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene and/or arsenic were identified in exceedance of the applicable Tier I ingestion SRO in surface and subsurface samples collected from multiple borings. Benzo(a)pyrene and mercury were identified in exceedance of the applicable Tier I SROs for the construction worker ingestion and inhalation exposure routes in surface samples collected from multiple borings. Benz(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene, and/or Lead were identified in exceedance of the applicable Tier I SROs for the Class I and Class II groundwater exposure route in surface samples collected from multiple borings.

## **PART 2 - PRODUCTS (Not Used)**

## **PART 3 - EXECUTION (Not Used)**

**END OF SECTION**

## **SECTION 31 21 02**

### **GEOTEXTILE**

#### **PART 1 – GENERAL**

##### 1.1 RELATED DOCUMENTS

All terms and conditions of the Contract apply to this section.

##### 1.2 APPLICABILITY:

- A. These environmental requirements apply to the Housing Authority of Cook County, Sunrise Apartments/John Mackler Homes project.

##### 1.3 INTRODUCTION

- A. Work Included: This specification is for the installation of the geotextile environmental barriers. The Contractor shall perform the work under this Section in accordance with all applicable local, county, state, and federal regulations. The work shall include the following:

1. Grading and rolling subgrade.
2. Supply, deliver and install geotextile materials in designated areas.
3. Provide copies of all daily reports and installation records.

- B. Related Work

1. Section 31 22 14 – Earthwork
2. Section 31 21 18.13 – Contaminated Soil, General Construction & Demolition Debris Disposal
3. Section 31 23 23 – Acceptance of Backfill & Top Soil

##### 1.4 SUBMITTALS

- A. The Contractor shall submit the Manufacturer's certificates confirming the materials compliance with or exceed the required specifications.

#### **PART 2 – PRODUCTS**

##### 2.1 GEOTEXTILE

- A. Geotextile fabric shall be nonwoven needle punched and shall comply with or exceed all the following physical properties:

Physical Property	Test Method	Value
Fabric Weight	ASTM D-5261	6.0 oz/yd <sup>2</sup> (min)
Grab Tensile Strength	ASTM D-4632	170 lbs (min)
Grab Elongation	ASTM D-4632	50 % (min)
Trapezoidal Tear	ASTM D-4533	70 lbs (min)
Puncture Strength	ASTM D-4833	90 lbs (min)

### **PART 3 – EXECUTION**

#### **3.1 SHIPPING AND HANDLING**

- A. The Contractor shall transport, unload, and store the geotextile fabric on site in accordance with the manufacturer’s recommended procedures.
- B. The Contractor shall be responsible to ensure that all geotextile fabric rolls are in good conditions at the time of installation. Damaged rolls should not be used at all times.
- C. Product labels shall be visible on all rolls such that they can clearly be seen.

#### **3.2 GEOTEXTILE INSTALLATION**

- A. The Contractor shall install the geotextile fabric in accordance with the manufacturer's specifications and instructions. Subgrade shall be free of protruding rocks, roots, etc. and shall be rolled smooth prior to placement of geotextile.
- B. Geotextile fabric shall be installed below all compacted bare soil areas across entire site. All seams shall be overlapped a minimum of 18 inches.
- C. Geotextile fabric shall at all time be protected from exposure to sunlight and moisture until installed and covered. During the construction, the geotextile fabric shall not be left exposed to direct sunlight for more than five days, nor to subject to direct travel on fabric by construction equipment.

#### **3.3 BACKFILLING**

- A. After geotextile installation, Contractor shall place imported backfill soils over the entire geotextile areas.
- B. Contractor shall only use a track mounted equipment to spread the backfill material across the geotextile.
- C. Backfill soils shall be relatively free of rocks, stones, sticks, roots, sharp objects, or debris larger than 3/4 inch in diameter.

- D. Import clean gravel as necessary to meet design grade. All imported fill shall be in compliance with Section 31 23 23 – Acceptance of Backfill, Top Soil & CU Structural Soil.
- E. The initial soil backfill utilized to cover the geotextile must be minimum 6 inches in thickness spread using track mounted skid steer or smaller bulldozers (Caterpillar D3 or similar). The remaining backfill can be placed with larger bulldozers. Spreading of the material should begin with the placement of a mound of fill such that as it covers the geotextile liner, it must ascend up the mound and then down the mound to inhibit the formation of wrinkles. The movement of fill must have this vertical descent to it as the fill is spread over the geotextile area, rather than spread horizontally to inhibit formation of wrinkles and avoid burying wrinkles in the fabric. A front end loader may be used to spread the fill out ahead of the path of the bulldozer to minimize spreading of the dirt and inhibit wrinkle formation.
- F. Contractor shall compact CA-6 backfill upon installation with smooth roller.

**END OF SECTION**



## SECTION 31 23 18.13

### CONTAMINATED SOIL, GENERAL CONSTRUCTION & DEMOLITION DEBRIS DISPOAL

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Contract Drawings

##### 1.2 APPLICABILITY

- A. These environmental requirements apply to all Housing Authority of Cook County (HACC) projects where materials existing on the site that will be removed. This specification section applies to Subtitle D Waste that does not meet the definition of the Clean Construction or Demolition Debris (CCDD), Uncontaminated Soil or Hazardous Waste.

##### 1.3 INTRODUCTION

- A. Description of Work: This specification is for the excavation, stockpiling, loading, hauling, removal, and disposal of Subtitle D Waste which includes soils, fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris from HACC projects. The locations of Subtitle D Waste on the project site shall be determined by the HACC, in consultation with the Environmental Consultant (EC), and are initially identified in the Contract Documents. The Contractor shall perform the work under this section in accordance with all applicable local, county, IEPA, USEPA, and OSHA regulations. The Work shall include the following:

1. Removal and disposal
  - a. Prior to excavation of any Subtitle D Waste, obtain authorization for ultimate disposition of materials from an open and active Subtitle D facility approved by the HACC's Designated Representative and EC. The Subtitle D facility shall be permitted to accept both Non-Hazardous Special Waste and Special Waste.
  - b. The waste characterization analytical must be sent to the EC for approval and to the HACC's Designated Representative for signature prior to sending the profile to the landfill. Contractor shall allow 5 working days to receive authorized signature from HACC's Designated Representative.
  - c. Perform the analytical testing required by the landfill for waste stream authorizations as necessary to secure all required disposal permits for all materials. All costs associated with collecting waste stream samples and performing analytical tests shall be at Contractor's own expense.
  - d. Obtain authorization from an open and active Permitted Subtitle D landfill indicating acceptance of materials at the facility. The Authorization must be signed by the owner of the open and active Permitted Subtitle D landfill

and state that the facility complies with all local zoning codes and all local, state, and federal rules and regulations, that all required laboratory analyses has been received by the facility, and that the facility has agreed to accept the waste materials. The Authorization shall further state that the waste materials are being accepted for permanent placement on site under the cap, and that the waste material will not be removed from the site unless required by a local, state or federal regulations.

- e. Prepare daily reports, transport manifests, weight tickets and receipts (as applicable) prior to starting any soil removal activities.
- f. Excavation of Subtitle D Waste to the depth required to complete the proposed site preparation/construction work activities as specified in the Contract Documents.
- g. Load and transport all materials to the approved open and active Permitted Subtitle D landfill into approved containers or vessels.
- h. Provide copies of all daily reports, signed transport/waste manifest, signed weight tickets, and disposal receipts (as applicable) to the HACC's Designated Representative and EC on a daily basis documenting proper disposal of the waste materials.
- i. Decontaminate areas where contaminated soil or contaminated liquid wastes were spilled. Containerize decontamination residuals for final disposition.

#### 1.4 DEFINITIONS

- A. Agency means Illinois Environmental Protection Agency (IEPA).
- B. Backfill means granular or cohesive material used to fill the excavation to design grade as referenced in design plans and specifications.
- C. CFR means Code of Federal Regulations
- D. Clean Construction or Demolition Debris (CCDD) means any of the following materials, alone or in combination, that (i) have been generated from construction or demolition activities and (ii) are *uncontaminated*:

broken concrete without protruding metal bars,  
bricks,  
rock,  
stone,  
reclaimed or other asphalt pavement

Uncontaminated soil which is comingled with any of the above materials is also considered CCDD. [415 ILCS 5/3.160(b)]

- E. CU Structural Soil means a uniformly blended mixture of crushed stone, clay, loam and hydrogel by weight consisting of approximately 83% crushed limestone (3/4 to 1.5 inch, highly angular with limited fines), 17% clay loam and hydrogel (1 oz. per 200 pounds of stone).

- F. Discharge Authorization (DA) is a written authorization issued by the MWRDGC giving permission to discharge wastewaters to its sewer system and sewage treatment facilities.
- G. DOT means Department of Transportation.
- H. Environmental Consultant (EC): The entity with overall responsibility for the environmental program, including design, organization, monitoring and development of the environmental program which includes investigations, assessments, designs, and supervision of remediation work.
- I. Fill means any earthen or non-earthen materials including but not limited to any sediment, granular or cohesive non-native earthen materials, cinders, ash, wood, and brick, concrete, and asphalt fragments, glass, and building debris encountered above naturally occurring undisturbed soils or bedrock in built-up areas.
- J. General Construction and Demolition (C&D) Debris means non-hazardous, uncontaminated materials resulting from construction, remodeling, repair, and demolition of utilities, structures, and roads as defined in Public Act 92-0574, the Environmental Protection Act, 415 ILCS 5 Section 3.160 and regulated under Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling. General Construction and demolition (C&D) debris may include soil, wall coverings, reclaimed asphalt pavement, rock, plaster, glass, non-hazardous painted wood, drywall, plastics, non-hazardous coated wood, non-asbestos insulation, bricks, wood products, roofing shingles, concrete, and general roof coverings.
- K. HACC's Designated Representative means the Housing Authority of Cook County person or entity designated as the official representative of the HACC in connection with a project.
- L. Housing Authority of Cook County (HACC) means the owner of the property and the authority ordering the work specified herein.
- M. IDOT means Illinois Department of Transportation.
- N. IEPA means Illinois Environmental Protection Agency.
- O. Manifest means the form provided or prescribed by IEPA and used for identifying name, quality, routing, and destination of non-hazardous special waste during its transportation from point of generation to the point of disposal, treatment, or storage.
- P. MWRDGC means the Metropolitan Water Reclamation District of Greater Chicago.
- Q. Open and active Permitted Subtitle D landfill means any open and active solid waste landfill facility in any state licensed and permitted to accept non-hazardous waste including both non-special waste soils and non-hazardous special waste soils, fill, general construction and demolition debris. If the landfill facility is located in Illinois, the landfill must be licensed/ open, active and permitted by the Illinois Environmental Protection Agency and other applicable local regulatory agencies as applicable. If the

landfill is located outside of Illinois, the landfill facility must be open, active and permitted by applicable state and local regulatory agencies.

- R. OSHA means Occupational Safety and Health Administration.
- S. Remediation Area means any area on site where underground storage tanks, non-special waste and/or non-hazardous special waste, or soil that does not meet most stringent Tier 1 SROs for residential properties is present.
- T. SDS means Safety Data Sheet, required by OSHA for any substances that are toxic, caustic, or otherwise potentially hazardous to workers.
- U. Soil means any granular or cohesive materials designated for removal as specified in the Architect drawings and specifications and includes soils that are determined to be non-special and special waste.
- V. Special Waste means any wastes as defined in Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling; Part 808: Special Waste Classifications; Subpart A: General Provisions; Section 808.110,

AND

Any wastes as defined in Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling; Part 809: Non Hazardous Special Waste Classifications; Subpart A: General Provisions; Section 809.103.

- W. SROs mean Soil Remediation Objectives for various exposure routes identified in 35 Illinois Administrative Code 742: Tiered Approach to Corrective Action Objectives (TACO).
- X. Storm water means water deposited at the site in the form of rain, snow or other natural weather event.
- Y. Subtitle D Waste means any soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris that permitted to be deposited into a Subtitle D landfill. Subtitle D Wastes do NOT meet the definition of Clean Construction or Demolition Debris or Uncontaminated Soil as defined in Section 3.160 of the Environmental Protection Act, TSCA Waste, or Hazardous Wastes.
- Z. TACO means TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO) per 35 Illinois Administrative Code 742.
- AA. Topsoil means soils placed to design grade and used to promote vegetative growth and which meets Topsoil criteria (percentages of organic matter, inorganic matter (silt, clay, and sand)), deleterious material, pH, and mineral and plant-nutrient content as referenced in the contract specifications and drawings.

- BB. Uncontaminated Soil means soil generated during construction, remodeling, repair or demolition of utilities, structures and roads that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment. [415 ILCS 5/3.160(c)]
- CC. USEPA means United States Environmental Protection Agency.
- DD. User or User Agency means the entity for which or on whose behalf the HACCC has undertaken to cause the Work to be performed.
- EE. Work means the obligations of the Contractor under the Contract Documents. Work includes, unless specifically excepted by the Contract Documents, the furnishing of all materials, labor, equipment, and supplies for the full performance and completion of the requirements of the Contract Documents. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.

## 1.5 SUBMITTALS

- A. Copies of the following submittals shall be prepared and submitted to the HACCC's Designated Representative and EC at Contractor's own cost and within ten (10) days prior to start of Work:
  - 1. Contractor's Site Specific Health and Safety Plan for all workers engaged in excavation, stockpiling, loading, hauling, removal, and disposal of any Subtitle D Wastes from the property. The plan shall comply with all OSHA requirements utilizing information obtained from existing environmental reports. The Work shall be performed under the direct supervision of a trained experienced site supervisor. The plan should at a minimum include the following:
    - a. Contact information of key personnel and alternates responsible for site safety.
    - b. Describe the risks associated with each operation conducted.
    - c. Describe chemical contaminants to be encountered by employees on work site and specific hazards if any to the workers as required by OSHA.
    - d. Type of personnel training and responsibilities and to handle the specific hazardous situations they may encounter.
    - e. Describe the protective clothing and equipment to be worn by personnel during various site operations.
    - f. Describe any site-specific medical surveillance requirements.
    - g. Describe the program for the periodic air monitoring, personnel monitoring, and environmental sampling if needed.
    - h. Describe the actions to be taken to mitigate existing hazards to make the work environment less hazardous.
    - i. Define site control measures including a site map.
    - j. Establish procedures for personnel and equipment and transporting trucks to ensure that impacted soils are not tracked off site on to non-impacted areas of the site.
    - k. Set forth the site Standard Operating Procedures (SOPs). SOPs are those activities that can be standardized (i.e., decontamination procedures and respirator fit testing).

- I. Set forth a Contingency Plan for the safe and effective response to emergencies.
2. Soil Management Plan outlining proposed excavation work sequences and procedures to separate each type of material to be removed from the site from clean materials. The Soil Management Plan shall show the locations of each type of material to be stored on site, location of clean materials to be stored at the site for reuse, and location of material to be stored on site for future disposal. The EC and the HACC must review and approve this plan. The Soil Management Plan shall also include information regarding concrete and brick recycling procedures and name and address of the concrete and brick recycling sites that will be used as part of this project.
3. Disposal Facility Information - Name, address and telephone number of the open and active permitted Subtitle D Landfill facility where Subtitle D Wastes are to be deposited. The Subtitle D facility shall be permitted to accept both Non-Hazardous Special Waste and Special Waste. This submittal must be made prior to removal of any materials from the site. This information should include, at a minimum, the following:
  - a. Facility Name and Address and Telephone Number.
  - b. Facility Contact.
  - c. Facility Identification Number issued by Illinois, U.S. EPA, or other state licensing agencies for Special Waste Disposal facility.
  - d. U.S. EPA Treatment/Disposal Site ID numbers (for liquid waste only).
  - e. State and/or Local Operational Permit Number(s) for the impacted Construction and Demolition Debris Disposal sites.
4. The Contractor shall fill out the waste profile, including the waste characterization laboratory results from analytical testing laboratory accredited in accordance with the Illinois Administrative Code, Title 35, Subtitle A Chapter II, Part 186, for the landfill and send it to the EC for approval. The EC will forward the waste profile to the HACC for signature. The Contractor shall assume this signature process will take five (5) business days to accomplish.
5. Waste Stream authorization and/or permit from the Subtitle D Landfill facility where Subtitle D Wastes are to be deposited prior to removal from the site. The authorization must be signed by the Subtitle D landfill facility representative and state that the facility complies with all local zoning codes and all local, State, and Federal rules and regulations, that all required laboratory analyses has been received by the facility, and that the facility has agreed to accept the waste materials. The Authorization shall further state that the wastes materials are being accepted for permanent placement on site, and that the waste material will not be removed from the site unless required by a local, state or federal Authority.
6. Operating licenses for Special Waste transporter(s), as applicable. Details of haul routes from site to the disposal/treatment facilities.

7. Air sampling data collected during the course of the Work, including OSHA compliance air monitoring.
8. Decontamination Plan outlining the decontamination procedures for equipment and vehicles utilized to excavate and remove Subtitle D Wastes from HACC property.
9. Ten (10) days prior to commencing Work, the Contractor shall provide the EC a Storm Water Management Plan and MWRDGC permit schedule. This plan shall stipulate provisions for dewatering, pumping, collection, temporary storage, and discharge or disposal of storm water, perched water and other liquids, contaminated and/or uncontaminated, at the site so as to facilitate water and soil removal as well as minimize disposal costs for contaminated fluids. Contractor shall manage and remove water from the excavation in accordance with the MWRDGC's requirements. The Contractor shall not discharge onsite water into the sewer system without procuring all required permits. The EC and the HACC must review and approve this plan.
10. Copy of the pumping permit from the local government prior to pumping any water into the sewer system.
11. Copy of the MWRDGC Discharge Authorization prior to discharging any contaminated water into the City sewer system.
12. Copies of Special Waste Hauler Licenses/Permits for each proposed transporter prior to removal of Subtitle D Waste that also meets definition of Special Waste from the site, pursuant to 35 IAC 809. Include current copy of IEPA and/or USEPA approval letter/permit, and details of haul route(s) from site to the disposal facilities.
13. Copies of Special Waste disposal manifests (as applicable), tracking receipts, and weight tickets to the EC on a daily basis. Manifests must be fully executed by the generator, transporter, and designated disposal facility. All applicable documents shall be presented in dated order with attached summary table and must be received by the HACC within ten (10) working days of off-site removal date(s).
14. Daily Reports/Logs summarizing excavation activities generating waste, locations of where the disposed materials derived, any temporary stockpile locations, transporter information, equipment, and labor. Contractor shall submit these records on monthly basis.

#### 1.6 SUBMITTAL REVIEW

- A. Review of submittals or any comments made does not relieve the Contractor from compliance with the requirements of the drawings and specifications. The purpose of this check is to review for general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions;

electing techniques of construction; coordinating the Work; and performing the Work in a safe and satisfactory manner.

- B. The Contractor must not begin any Work applicable to this section until all required submittals have been reviewed and accepted by the HACC's Designated Representative and EC.

#### 1.7 NOTIFICATIONS

- A. The Contractor shall notify the HACC's Designated Representative and EC no less than forty-eight (48) business hours prior to loading and transporting any materials from the site. No Subtitle D Wastes shall be removed from HACC sites unless EC is present. Soils removed from the site without presence of EC may be subject to retrieval by the Contractor at the request of HACC.

#### 1.8 RECORDKEEPING

- A. The Contractor shall provide documentation of labor, equipment, materials, tickets, manifests, and disposal laboratory analysis used for Subtitle D Waste removal, when requested by the HACC's Designated Representative or EC.

#### 1.9 COORDINATION OF WORK

- A. The Contractor shall coordinate and schedule the Work to cause the least possible disruption to the daily site activities, if any.
- B. The Contractor shall cooperate with and coordinate work progress with the HACC's Designated Representative, the EC, and any other contractors working on site. Excavated material shall be stockpiled near the excavation or at an area deemed suitable by the HACC's Designated Representative. The Contractor shall assist the HACC's Designated Representative or EC with its machinery and operator to inspect and obtain soil or fill samples, if necessary, from the open excavation(s) at no additional cost to the project.

#### 1.10 JOB CONDITIONS

- A. The Contractor shall perform all Work without creating an unsafe or hazardous condition, nuisance, or hinderance to operating conditions anywhere on site.
- B. All excavation, truck loading, grading, and backfilling operations will be conducted to ensure minimum interference with traffic. Roads, streets, walks, and other adjacent occupied and used facilities shall not be closed or obstructed without permission from the applicable governing agency and the User. Alternate routes around closed or obstructed traffic ways must be provided if required by the governing agency.



- C. Any damage caused to adjacent pavement, utilities, or facilities by earth work operations will be promptly replaced or repaired at no additional cost to the HACC and such work shall be performed to the satisfaction of the HACC.
- D. Contractor is responsible to maintain project site and adjacent areas and roadways in neat and orderly condition.

## **PART 2 - PRODUCTS**

### **2.1 REMOVAL OF SUBTITLE D WASTE**

- A. The Contractor shall furnish all necessary means, products, tools, and equipment required to remove Subtitle D Wastes from the site per Contract Documents.
- B. The Contractor shall also furnish all necessary means, products, tools, and equipment required to fulfill the scope of work described in the contract specifications and drawings. The Contractor, by submitting a bid for the Work, represents itself as knowledgeable and an expert in the performance of the Work, and includes all things usually and customarily necessary to provide a complete and finished job, whether specifically mentioned or not.
- C. The Contractor must have a complete plan for the entire process of Subtitle D Waste removal and disposal in accordance with the project requirements. Contractor must provide schedule of all Work activities in accordance with the approved construction schedule.

## **PART 3 - EXECUTION**

### **3.1 AUTHORIZATIONS**

- A. Obtain authorization from the open and active Permitted Subtitle D landfill owner where Subtitle D Wastes are to be deposited. The Authorization must be signed by the Permitted Subtitle D landfill and shall state that the landfill has received a copy of one or more laboratory analyses of representative sample(s) collected from the site by the Contractor and has agreed to accept the material. The Authorization shall further state that the landfill agrees to accept the material for permanent placement on their site and that the material will not be removed from their site unless required by a local, state or federal rules and regulations. The Authorization further shall state that the site complies with all local zoning codes, and local, state and federal laws, rules, and regulations.
- B. Obtain prior authorization from HACC's Designated Representative and EC to backfill excavations and utility lines. All backfill, CU Structural Soil, and topsoil shall comply with Specification Section 31 23 23 Acceptance of Backfill, Topsoil, and CU Structural Soil.

- C. Haulers for transportation shall hold a current, valid hauling permit for materials being transported off-site. Haulers shall hold, and present upon request, a current valid Commercial Driver's License (CDL). Non-hazardous special wastes must be hauled by an IDOT-approved, licensed, and permitted transporter and must be valid during transportation.
- D. Obtain prior authorization from HACC's Designated Representative on the Waste Profile at least (5) days in advance of removing waste materials.

### 3.2 MATERIAL SAMPLING

#### A. Subtitle D Waste Materials

1. The Contractor is responsible to notify the EC at least 48 hours prior to any waste characterization sampling activities.
2. The Contractor shall collect sufficient amount of representative sample(s) from each type of material being removed from the site for analytical testing to obtain authorization for the ultimate disposition of the materials. The Contractor is responsible to provide the proper collection, handling and transportation of the samples to the laboratory. The Contractor is responsible for acquisition of any required permits and payment of all fees.
3. The Contractor shall be responsible for obtaining liquid samples as needed for characterization for liquid disposal offsite or disposition onsite as applicable. The Contractor is responsible to the acquisition of any required disposal permits and the payment of any fees associated with liquid disposal.
4. The Contractor shall submit the solid and liquid samples (as applicable) to the laboratory and pay for the cost of analyzing the constituents required for the ultimate disposition of solids and liquids.
5. The EC may collect samples for laboratory analysis or field Photo-ionization Detector (PID) screening, or liquid samples for laboratory analysis (only if required by the HACC under special circumstance.) The Contractor shall provide the necessary equipment and manpower to assist the EC to collect materials to be sampled at no additional cost to the project.
6. The Contractor shall immediately notify the HACC's Designated Representative and EC if any materials, (solid or liquid) requiring special handling (i.e., stained soil, soil with odors, or liquids) are encountered in areas other than those identified in the contract drawings and referenced documents. No further work shall proceed in the area until approval is provided by the HACC's Designated Representative and EC.
7. All excavated soils, liquids, and other material shall be removed from the site in accordance with applicable specifications, and local, state and federal requirements and guidelines.

### 3.3 EXCAVATION

- A. Prior to starting any excavation work at the site, the Contractor shall perform survey and layout the site to designate remediation areas and depths.

- B. The Contractor shall perform excavation to the extent shown on the contract drawings, as necessary to complete the Work and/or as directed by the HACC's Designated Representative.
- C. All excavation shall be performed in accordance with the design drawings and local, state and federal requirements and guidelines.
- D. The Contractor shall coordinate all Subtitle D Waste removal from the site activities with the EC. The Contractor must provide a written notification to the EC and HACC's Designated Representative at least 48-hour prior to starting any excavation or removal activity from the site.
- E. All excavation, truck loading, grading, and backfilling operations will be conducted to ensure minimum interference with traffic. Roads, streets, walks, and other adjacent occupied and used facilities shall not be closed or obstructed without permission from the applicable governing agency and the HACC's Designated Representative. Alternate routes around closed or obstructed traffic ways must be provided if required by the governing agency.
- F. Secure, shore, and brace where sloping is not possible either because of space restrictions or stability of material excavated. Excavations shall be braced or sloped in compliance to the latest Occupational Safety and Health Administration (OSHA) requirements and shall comply with local codes, authorities having jurisdiction, and the City, and maintain same. Maintain sides and slopes of excavations in a safe condition until completion of backfilling. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross braces, in good serviceable conditions. Maintain shoring and bracing in excavations regardless of the time period excavations will remain open. Carry down shoring and bracing as the excavation progresses.
- G. In the event the Contractor causes contaminated materials to be discharged onto or come into contact with site surface materials including but not limited to soils; asphalt, concrete, bricks, and gravel, and the surface cannot be decontaminated, the surface materials shall be considered contaminated. The Contractor shall submit the sample(s) to the laboratory and pay for the cost of analyzing the constituents required for the ultimate disposition of such materials.
- H. Any damage caused to adjacent pavement, utilities, or facilities by earth work operations will be promptly replaced or repaired at no additional cost to the HACC and such work shall be performed to the satisfaction of the HACC's Designated Representative.
- I. The Contractor is responsible for keeping the soils/materials which are classified differently separated during excavation activities. If Contractor commingles soils/materials, the Contractor must properly dispose of the all commingled soils/materials at their own expense.
- J. If an underground storage tank (UST), drum or other unknown container is discovered during excavation activities, the Contractor must stop excavation work within 30 feet of the UST and immediately inform the HACC's Designated Representative, EC and Site Superintendent. The HACC's Designated Representative will assess the site conditions and work with Site Superintendent to control access to area and post appropriate

signage. The HACC's Designated Representative, in consultation with EC, will instruct the Contractor how to proceed with the Work. Contractor may be asked by the HACC's Designated Representative or EC to perform further limited excavation in the area in order to gather information on size and/or quantity of newly discovered item(s). Contractor shall perform this limited excavation work at no additional cost to the HACC.

### 3.4 LOADING

- A. The Contractor shall load Subtitle D Wastes directly from the site or from temporary stockpiles into hauling trucks for subsequent transportation and ultimate disposal.
- B. Conduct all excavation, truck loading, grading, and backfilling operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities. Do not close or obstruct roads, streets or walks without permission from the applicable governing agency and the HACC. Alternate routes around closed or obstructed traffic ways must be provided by Contractor if required by the governing agency.
- C. The Contractor shall maintain streets clean and free of mud, dust and dirt generated from their Work and operations.
- D. The Contractor is responsible for complying with State and local road/street weight limits.

### 3.5 DECONTAMINATION & HAULING

- A. The Contractor shall remove soils, dusts, rocks, etc. from the exterior of trucks, trailers, or other heavy equipment leaving the site before they leave the site.
- B. The Contractor shall clean the tractor-trailers or trucks that are loaded with materials for off-site placement/salvage by removing clinging soils, or rocks from the exterior of the equipment.
- C. The Contractor shall not create dust and shall maintain adequate dust suppression equipment on site if conditions warrant.
- D. The Contractor shall maintain streets clean and free of mud, dust and dirt. The Contractor shall provide a street sweeper for street maintenance, if requested by the HACC, at no additional cost to the project.
- E. The Contractor shall conduct Subtitle D Waste removal in a manner that ensures minimum interference with roads; streets, walks and other adjacent occupied and used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the applicable governing agency and HACC's Designated Representative. Provide alternate routes around closed or obstructed traffic ways if required by the governing agency.
- F. The Contractor shall clean and/or decontaminate equipment (tools, shovels, backhoes, pumps, hoses, etc.) with a jet washer or steam cleaner after completing work and prior

to starting work with different classifications of wastes, recycled materials, or clean fill, as applicable. All cleaning and/or decontamination residuals must be handled in accordance with applicable federal, state and local regulations at no additional cost to the HACC.

### 3.6 TRANSPORTATION

- A. The Contractor shall remove soils, dusts, rocks, etc. from the exterior of trucks, trailers, or other heavy equipment leaving the site before they leave the site. All loads shall be tarped prior to leaving site and remain tarped until at the receiving facility.
- B. All Subtitle D Wastes must be transported directly to the designated disposal facility from the site. Intermediate storage is not permitted.
- C. The Contractor shall provide completed manifests and/or other waste removal documentation that requires signature for shipment to the HACC's Designated Representative and EC a minimum of two (2) days prior to shipment, as applicable.
- D. The transporter shall present evidence of special waste hauling permits, as applicable, and CDL upon request by the HACC.
- E. The Subtitle D Wastes shall be transported by a hauler licensed in the State of Illinois to transport applicable waste materials.
- F. The Contractor shall have properly signed manifests or disposal documentation in hand prior to leaving the site with Subtitle D Wastes.

### 3.7 STOCKPILING

- A. Contractor may temporarily stockpile Subtitle D Wastes on site for a maximum of five (5) working days, unless otherwise approved by the HACC.
- B. The Contractor shall be responsible for keeping such stockpiles separated. If materials designated separately are commingled by Contractor, the Contractor shall dispose of such cross contaminated materials at his own expense. The Contractor will be responsible for all costs associated with the proper characterization, permitting, loading, transportation and disposal of cross contaminated waste materials.
- C. Acceptable locations for soil stockpiles shall be approved by the HACC's Designated Representative and it shall be in accordance with the City requirements. The maximum height of the stockpile shall not exceed 10 feet. The Contractor shall containerize or place special waste, non-hazardous waste, or hazardous waste soils on 6 mil plastic sheeting, covered with 6 mil plastic sheeting, and protect with 12-inch to 18-inch berms until subsequent loading, transportation, and disposal. Base sheeting shall overlap the dike/berm. Temporary staging within an area already designated as contaminated may be performed by Contractor without underlying plastic and berm as with written approval of EC.

- D. The Contractor shall not allow runoff from stockpiled Subtitle D Waste to enter storm drains or leave the site.

### 3.8 DUST CONTROL

- A. The Contractor shall control dust by all necessary means, including but not limited to covering trucks, stockpiles and open materials, watering haul roads, sweeping paved roads, and limiting the speed of all on-site vehicles. Dust control measures shall comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63.
- B. The Contractor shall prevent vehicles from tracking soil off site by all necessary means, including but not limited to construction of stone truck pads at site gates, and pressure washing vehicles and tires, as necessary.
- C. Contractor shall perform all necessary activities to keep roadways clean throughout each day and for the duration of the project. The Contractor shall provide a street sweeper for street maintenance, if requested by the HACCC, at no additional cost to the project.

### 3.9 LIQUID (WATER) MANAGEMENT

- A. The Contractor shall manage the Work so as not to accumulate storm water on the site during excavation.
- B. Prior to commencing Work, the Contractor shall provide a storm water management plan. This plan shall stipulate provisions for dewatering, pumping, collection, temporary storage, and discharge or disposal of storm water, perched water and other liquids, contaminated and/or uncontaminated, at the site to facilitate soil removal and minimize disposal costs for contaminated fluids.
- C. The Contractor shall ensure that contamination of water, perched water and previously uncontaminated water or perched water does not occur by preventing the contact of such liquid with materials that exceed 35 IAC 742 TACO Appendix B, Table A values for any of the 35 IAC 740 Appendix A Target Compound List (TCL) parameters. Earthen berms, plastic (polyethylene) sheeting, pumping, and other such means, as specified in the approved Storm Water Management Plan, may be used.
- D. If the Contractor, through negligence, allows storm water to contact materials that exceed applicable TACO values, the water must be properly characterized and disposed of in accordance with all local, state and federal regulations. The Contractor will be responsible for the additional costs incurred for characterization, storage, removal, transportation and disposal costs.
- E. Storm Water Run-on /Run-off, Groundwater, and Dewatering: Contractor shall manage and remove water from site excavation in accordance with the City and MWRDGC's requirements. The Contractor shall not discharge onsite water into the sewer without first obtaining all required permits in accordance with the following procedures:

1. If there is no evidence of water contamination as determined by the HACC's Designated Representative and EC, Contractor shall obtain applicable permit from the City.
2. If the HACC's Designated Representative or EC determined the presence of contaminated water at the site, Contractor shall collect and analyze representative water sample in accordance with MWRDGC Environmental Remediation Wastewater (ERW) Ordinance requirements. Contractor shall submit a copy of the analytical results to the HACC's Designated Representative and EC within seven (7) working days of sample collection.
3. If the analytical result of the water sample is below the maximum concentrations acceptable for discharge of ERW into sewerage system, the Contractor shall perform the following:
  - a. Secure a Special Discharge Authorization from the MWRDGC for discharging contaminated water into the sewer system.
  - b. Install and operate flow meters for measuring the volume of water discharged into the sewer system at each discharging manhole. Flow meters can be either installed on the settling tank, if used, or at each discharging manhole. The flow meter must meet the MWRDGC's requirements including a non-resettable totalizer and must be equipped with recorder charts. Totalizers must be read a minimum of once per week and a log of such readings, with the appropriate conversion factors, and recorder charts must be provided to the HACC's Designated Representative. The flow-measurement devices must be calibrated monthly and prior to its initial use. The accuracy of the device must be certified by a factory-authorized representative with documentation of this certification provided to the HACC's Designated Representative and submit to the MWRDGC.
  - c. Collect and analyze representative water samples on a monthly basis for the parameters required by the MWRDGC ERW special discharge authorization. Analytical results and sample collection, analysis and report certification shall be provided to HACC's Designated Representative and EC within 7 working days of sample collection.
4. If the analytical results of the water exceed the MWRDGC ERW ordinance requirements, Contractor shall a) install treatment system to reduce contaminant concentrations for discharge per above, or 2) Pump liquids into either a holding tank for future transportation and disposal at treatment facility, or pump directly into vacuum truck for disposal at a treatment facility. Contractor shall be responsible for all costs associated with installation of onsite treatment systems, pumping, onsite storage, transportation, and disposal.

### 3.10 DISPOSAL

- A. Solids - The Contractor shall provide copies of weight tickets and/or volume (cubic yards/tonnage) receipts from the Permitted Subtitle D landfill facility accepting the Subtitle D Waste materials to the HACC's Designated Representative and EC within five business days.

- B. Liquids - The Contractor shall provide copies of weight tickets and/or volume (gallons) receipts/manifests from the permitted treatment and/or disposal facility accepting Special Wastes to the HACC's Designated Representative and EC within five business days.
- C. Contractor shall provide copies of completed tracking tickets/manifests executed by the HACC's Designated Representative or EC, transporter and the permitted facility accepting the Subtitle D Waste materials to the HACC's Designated Representative or EC within five business days of off-site removal. Original manifests forwarded from the receiving facility to the Generator will not be available to Contractor. Contractor shall collect, organize by date, and submit transporter copy to the HACC's Designated Representative and EC. Submittal shall include summary table which identifies manifest number, date, transporter, and associated weight ticket or volume receipt, as applicable.

### 3.11 NOISE CONTROL

- A. The Contractor shall not start any work activities prior to the time specified in the City Noise Ordinance.
- B. The Contractor shall control the noise in accordance with the City Noise Ordinance or as directed by the HACC's Designated Representative during normal operating hours.

### 3.12 QUALITY CONTROL

- A. Visual inspections and damage repairs shall be made daily by the Contractor to assure that erosion, drainage and containment control measures are functioning properly.
- B. The Contractor shall take all necessary precautions to protect structures, equipment, pavement, walks and utilities against movement or settlement during the course of Work.
- C. Damage: The Contractor shall promptly replace or repair any damage caused to adjacent pavement, utilities or facilities by removal operations at no additional cost to HACC. Work shall be performed to the satisfaction of the HACC's Designated Representative.
- D. Submittal Timeframe Compliance: The Contractor shall ensure that all required submittals are in compliance with time frames specified.
- E. Utility Services: The Contractor shall maintain existing utilities and protect against damage during removal operations.

## END OF SECTION



## SECTION 31 23 23

### ACCEPTANCE OF BACKFILL, TOP SOIL & CU STRUCTURAL SOIL

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

- A. Contract Drawings

##### 1.2 APPLICABILITY

- A. These environmental requirements apply to all Housing Authority of Cook County (HACC) projects. This section applies for all demolition, construction and renovation projects that require the importation of backfill material. The materials specifically excluded from the requirements of this Section include Wood Mulch and Sod.

##### 1.3 INTRODUCTION

- A. Work Included: This specification is for the testing and approval of ALL imported Backfill, Top Soil and CU Structural Soil imported to a HACC project by the Contractor. The imported backfill is differentiated into two types for the purpose of this Specification:

1. Virgin Source Materials (Quarry Gravel)
2. Non-Virgin Source Materials (All Other Imported Backfill Materials).

- B. All imported source materials must meet the requirements presented in this Specification. No proposed imported material will be accepted for use prior to its pre-approval from the Environmental Consultant and Housing Authority of Cook County. The Contractor shall perform the work under this section in accordance with all local, state, and federal rules and regulations including but not limited to Illinois EPA, United States Environmental Protection Agency (USEPA), Illinois Department of Transportation, and Occupational Safety and Health Agency (OSHA) regulations.

##### 1.4 DEFINITIONS

- A. Agency means Illinois Environmental Protection Agency (IEPA).
- B. Backfill means any granular or cohesive material used to fill an excavation or bring property to design grade as specified in the Architect/Engineer drawings and specifications.
- C. Housing Authority of Cook County (HACC) means the owner of the property and the authority ordering the work specified herein.

- D. HACC's Designated Representative means the Housing Authority of Cook County person or entity designated as the official representative of the HACC in connection with a project.
- E. CU Structural Soil means a uniformly blended mixture of crushed stone, clay, loam and hydrogel by weight consisting of approximately 83% crushed limestone (3/4 to 1.5 inch, highly angular with limited fines), 17% clay loam and hydrogel (1 oz. per 200 pounds of stone).
- F. IEPA means Illinois Environmental Protection Agency.
- G. Environmental Consultant (EC) means the entity with overall responsibility for the direction and control of the environmental investigations, assessments, designs, and supervision of remediation work.
- H. Non-Virgin Source Materials means any backfill that does not meet the definition of Virgin Source Materials (Quarry Gravel)
- I. Target Compound List (TCL) means the parameters listed in 35 Illinois Administrative Code (Ill. Adm. Code) 740 Appendix A Target Compound List Tables A, B, C and D.
- J. Tiered Approach to Corrective Action Objectives (TACO): 35 Ill. Adm. Code 742.
- K. Top Soil means any soils placed to design grade and used to promote vegetative growth.
- L. User means the entity for which or on whose behalf HACC has undertaken to cause the Work to be performed.
- M. Virgin Source Materials (Quarry Gravel) means the gravel backfill which is mined directly from a natural geologic rock formation and produced and delivered directly from a quarry.
- N. Work means the obligations of the Contractor under the Contract Documents. Work includes, unless specifically excepted by the Contract Documents, the furnishing of all materials, labor, equipment, supplies, necessary for the full performance and completion of the requirements of the Contract Documents. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.

## 1.5 SUBMITTALS

- A. The Contractor shall ensure that submittals are provided in compliance with specified time frame(s) to avoid delays in Work. Contractor shall be responsible to coordinate approval of source materials per this specification with other required approvals per the architectural and engineering specifications and requirements.
- B. Virgin Source Materials (Quarry Gravel) Submittals
  - 1. Letter signed by authorized representative from the quarry on their letterhead indicating the material is being mined from natural geologic rock formation.

2. Daily reports and import tickets for all materials to EC or the HACC's Designated Representative on daily basis. Import tickets shall include source location and import date on each document.
- C. Non-Virgin Source Materials (All Other Imported Backfill Materials) Submittals
1. Select and perform historical and governmental database document research of source material location. Research shall include current and historical aerials, Sanborn Maps, and or topographic maps of the source location.
  2. Source location information shall include map of source site, latitude and longitude, the name and phone number of the owner of the source materials, and the location where the source materials are being derived from at the site.
  3. Sample collector information including name, company, address and telephone number of consultant/entity that performed sampling and their specific handling criteria for each sample collected from source location.
  4. Laboratory analysis data for TCL parameters from laboratory accredited in accordance with the Illinois Administrative Code, Title 35, Subtitle A Chapter II, Part 186. The date of collection shall be within 60 days of importing such material to a CHA project.
  5. Summary of Analytical Data. The report shall include a tabulation of sampling results compared to most stringent TACO Tier 1 remediation objectives for the TCL parameters.
  6. Daily reports and import tickets for all materials delivered to the site shall be provided to EC or the HACC's Designated Representative on daily basis. Import tickets shall include source name, location, and date of pickup on each document.
- D. Pre and Post Backfill Surveys for each Remediation Area.

## 1.6 SUBMITTAL REVIEW

- A. Review of submittals or any comments made does not relieve the Contractor from compliance with the requirements of the drawings and specifications. The purpose of this check is to review for general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions; electing techniques of construction; coordinating the Work; and performing the Work in a safe and satisfactory manner.

## 1.7 NOTIFICATIONS

- A. The Contractor shall notify HACC's Designated Representative and EC a minimum of 48 hours prior to sampling source Non-Virgin Source Materials. EC may visit source location to monitor sampling activities.
- B. The Contractor shall notify the HACC's Designated Representative and EC a minimum of 48 hours prior to transporting any Backfill, Top Soil and CU Structural Soil to the site. The EC may provide a representative onsite for field screening using a Photo-ionization Detector (PID).

## 1.8 RECORDKEEPING

- A. The Contractor shall provide documentation of labor, equipment, and materials used for importation of backfill when requested by the HACC's Designated Representative.

## PART 2 - PRODUCTS

### 2.1 BACKFILL, TOP SOIL, CU STRUCTURAL SOIL

- A. The Contractor shall supply only Backfill, Top Soil and CU Structural Soil that meets the project specified requirements as referenced in the Contract Documents.
- B. The Contractor shall be responsible to ensure that approval per this Specification AND approval per the applicable architectural/engineering specifications is provided by the HACC's Designated Representative prior to importing any backfill materials to a HACC project.

## PART 3 - EXECUTION

### 3.1 AUTHORIZATIONS

- A. The Contractor shall have written approval from the HACC's Designated Representative and EC prior to importing any Backfill, Top Soil, or CU Structural Soil to the HACC project.
- B. The Contractor shall not place Backfill, Top Soil or CU Structural Soil without approval of the HACC's Designated Representative. If the Contractor places Backfill, Top Soil or CU Structural Soil without obtaining approval from the HACC's Designated Representative, the Backfill, Top Soil or CU Structural Soil shall be excavated, if required, and replaced at the Contractor's expense.

### 3.2 MATERIAL SAMPLING (NON-VIRGIN SOURCE MATERIALS ONLY)

- A. The requirements of Section 3.2 only apply to Non-Virgin Source Materials.
- B. The Contractor shall collect sufficient amount of sample from source material(s) for analytical testing. Composite samples are not permitted for volatile organic samples.
- C. The Contractor shall collect representative samples in accordance with IEPA approved methods for TCL parameter laboratory analysis. All containers used shall be pre-cleaned to EPA standards. Samples shall be immediately placed in cooler with ice or ice packs and forwarded to laboratory. A chain of custody should be prepared for all samples.
- D. The Contractor shall verify that these materials do not exceed most stringent TACO Tier 1 remediation objectives for the TCL parameters.

- E. The Contractor shall prepare summary of the sample collection and data analysis. The report should include a tabulation of sampling results compared to the most stringent Tier 1 remediation objectives for residential properties. The sample collection date for any backfill shall be within 60 days of importing such material to a CHA project.
- F. The Contractor is responsible for payment of all Backfill, Top Soil and CU Structural Soil sampling, historical data and analytical fees.
- G. The EC may collect samples of Backfill, Top Soil or CU Structural Soil for laboratory analysis on behalf of the HACCC to verify source materials comply with specifications. Should results indicate exceedances of the most stringent TACO Tier 1 remediation objectives for the TCL parameters, Contractor shall be responsible for removal and replacement at no additional cost to the project.
- H. The EC may collect samples for field PID screening. The Contractor shall provide the necessary equipment and manpower to assist the EC to collect materials to be sampled at no additional cost to the project and in compliance with OSHA and all other Rules and Regulations.

### 3.3 SAMPLE FREQUENCY (NON-VIRGIN SOURCE MATERIALS ONLY)

- A. The requirements of Section 3.3 only apply to Non-Virgin Source Materials.
- B. Contractor shall provide a minimum of one sample for each type of Non-Virgin Source Material imported to CHA project.
- C. The Contractor shall provide one representative sample analyzed for TCL parameters per every 1,000 tons/500 cubic yards of material.
- D. The date of the collection of the source samples for laboratory analysis shall be within 60 days of importing such material to a HACCC project.
- E. The Contractor shall be responsible for all additional sampling and analysis to comply with specified analysis frequency and volume.
- F. The Contractor shall be responsible for additional TCL laboratory analysis of all individual components/amendments added to materials if not included in original representative sample analysis.

### 3.4 TRANSPORTATION AND DELIVERY

- A. Drivers shall hold, and present upon request, a current valid Commercial Driver's License (CDL).
- B. The Contractor is responsible for complying with State and local road/street weight limits.
- C. The Contractor must transport all materials in covered trailers.

- D. The Contractor shall place Backfill, Top Soil and CU Structural Soil to ensure minimum interference with roads, streets, walks and other adjacent occupied and used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the applicable governing agency and the HACC's Designated Representative. Provide alternate routes around closed or obstructed traffic ways if required by the governing agency.
- E. All Backfill, Top Soil, and CU Structural Soil shall be transported directly to the project Site from the approved source location. No off-site temporary storage is allowed.
- F. The Contractor shall provide and complete copies of all daily reports, weight tickets/delivery tickets (as applicable) for each load of Backfill, Top Soil, and CU Structural Soil to the HACC's Designated Representative and/or EC daily or as directed by the HACC's Designated Representative.

### 3.5 STOCKPILING

- A. The Contractor may stockpile source materials on-site. The location of the stockpile area shall be approved by the HACC's Designated Representative and it shall be in accordance with the City requirements. The maximum height of the stockpile shall not exceed 10 feet.
- B. The Contractor shall be responsible for keeping approved Backfill, Top Soil and CU Structural Soil separated from soils classified differently until final placement per the Contract Documents. If approved Backfill, Top Soil and CU Structural Soil comes in contact with these other soils prior to final placement, the materials will now be considered same as other classified materials, and the Contractor shall dispose of newly designated soils as contaminated and provide replacement materials per Contract Documents at his own expense. Disposal shall be to Subtitle D Landfill unless otherwise directed by EC. The Contractor will be responsible for sampling analysis costs associated with characterization of newly designated contaminated soil.

### 3.6 PLACEMENT

- A. All Backfill, Top Soil and CU Structural Soil shall be placed in accordance with the engineering/architectural and remediation plans, as applicable.
- B. The Contractor shall not place backfill material without approval of the HACC's Designated Representative and EC. If the Contractor backfills the excavation area without obtaining approval from the HACC's Designated Representative, the backfill materials shall be excavated, if required, at the Contractor's expense.
- C. Contractor shall perform surveys of all Remediation Areas prior to backfill and upon completion of backfill placement for depth verification. Surveys shall include one survey point for every 2500 square feet of area and no less than 3 points for any noncontiguous area under 2500 square feet. Surveys shall be performed by Illinois Licensed Surveyor and submitted within five working days of completion.

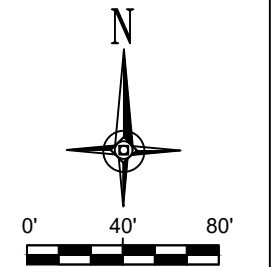
### 3.7 DUST CONTROL

- A. The Contractor shall control dust by all necessary means, including but not limited to covering trucks, stockpiles and open materials, watering haul roads, sweeping paved roads, and limiting the speed of all on-site vehicles.

### 3.8 QUALITY CONTROL

- A. The Contractor shall take all necessary precautions to protect structures, equipment, pavement, walks and utilities against movement or settlement during the course of work.
- B. Damages: Promptly replace or repair any damage caused to adjacent pavement, utilities or facilities by removal operations at no additional cost. Work shall be performed to the satisfaction of the HACC's Designated Representative.
- C. Utility Services: Maintain existing utilities and protect against damage during placement of backfill, top soil and CU Structural Soil.
- D. Visual Inspections: Perform visual inspections of each load of imported material to ensure that it is in conformance with the approved source and reject any material that has not been approved.
- E. Submittal Timeframe Compliance: Ensure that approved source data submitted is in compliance with time frames specified.
- F. Imported Material Inspections: Perform periodic checks of fill source locations to identify any change in material characteristics, as applicable.

**END OF SECTION**



ISSUANCE

MARK	DESCRIPTION	DATE
1	ISSUED FOR BID	08.02.21

CCA PROJECT NO: E161190075


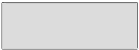

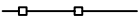


TITLE

REMEDIATION DRAWING

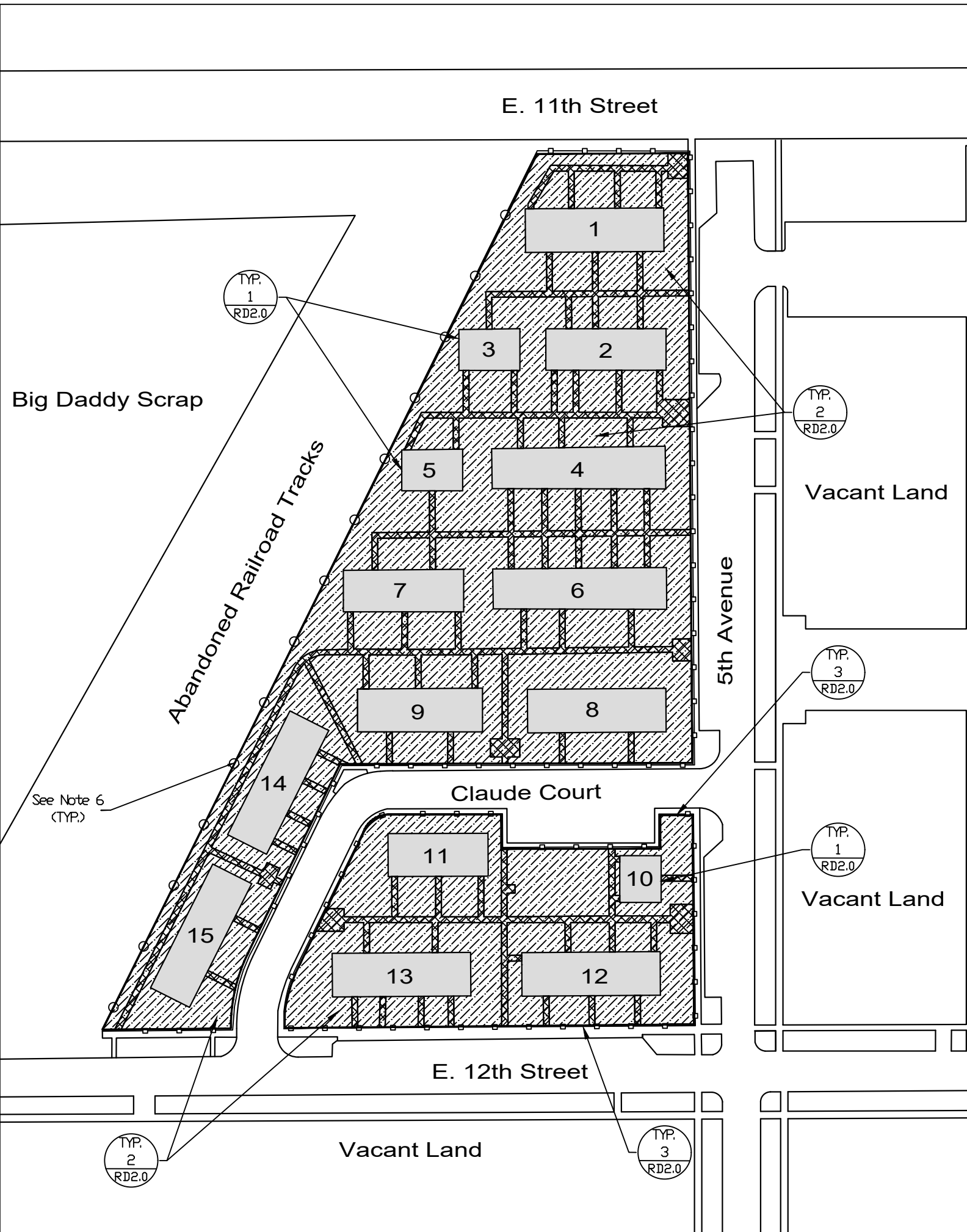
SHEET

**RD1.0**

**LEGEND - DEMOLITION:**

-  Property Boundary
-  Existing Concrete Slabs / Foundations To Remain
-  Existing Fence
-  Temporary Fence
-  Remove Concrete Walk and Base
-  Remediation Area - 12" Minimum Clean Fill underlain with Geotextile Fabric

BUILDING #	ADDRESS
1	1100, 1100A, 1102, 1104, 1104A 5th Ave.
2	1106, 1106A, 1108, 1108A 5th Ave.
3	1110A and 1111B 5th Ave.
4	1112, 1112A, 1114C, 1114, 1114B 5th Ave.
5	1116A and 1116C 5th Ave.
6	1118, 1118B, 1120A, 1120B, 1120C 5th Ave.
7	1122, 1122A, 1124, 1124A 5th Ave.
8	1101A, 1101B, 1103, 1103B, 1105A, 1105B, 1107A, 1107B Claude Ct.
9	1109, 1111, 1113, 1115 Claude Ct.
10	1138, 1140 Claude Ct.
11	1110, 1112, 1114, 1116 Claude Ct.
12	293, 295, 297, 299, 301, 303 E. 12th St.
13	281, 283, 285, 287 E. 12th St.
14	1117, 1119, 1121, 1123 Claude Ct.
15	1125, 1127, 1129, 1131 Claude Ct.



Big Daddy Scrap

E. 11th Street

TYP.  
1  
RD2.0

Abandoned Railroad Tracks

TYP.  
2  
RD2.0

Vacant Land

5th Avenue

TYP.  
3  
RD2.0

Claude Court

TYP.  
1  
RD2.0

Vacant Land

E. 12th Street

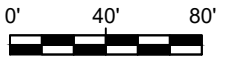
TYP.  
2  
RD2.0

Vacant Land

TYP.  
3  
RD2.0

See Note 6  
(TYP.)





ISSUANCE		
MARK	DESCRIPTION	DATE
1	ISSUED FOR BID	08.02.21

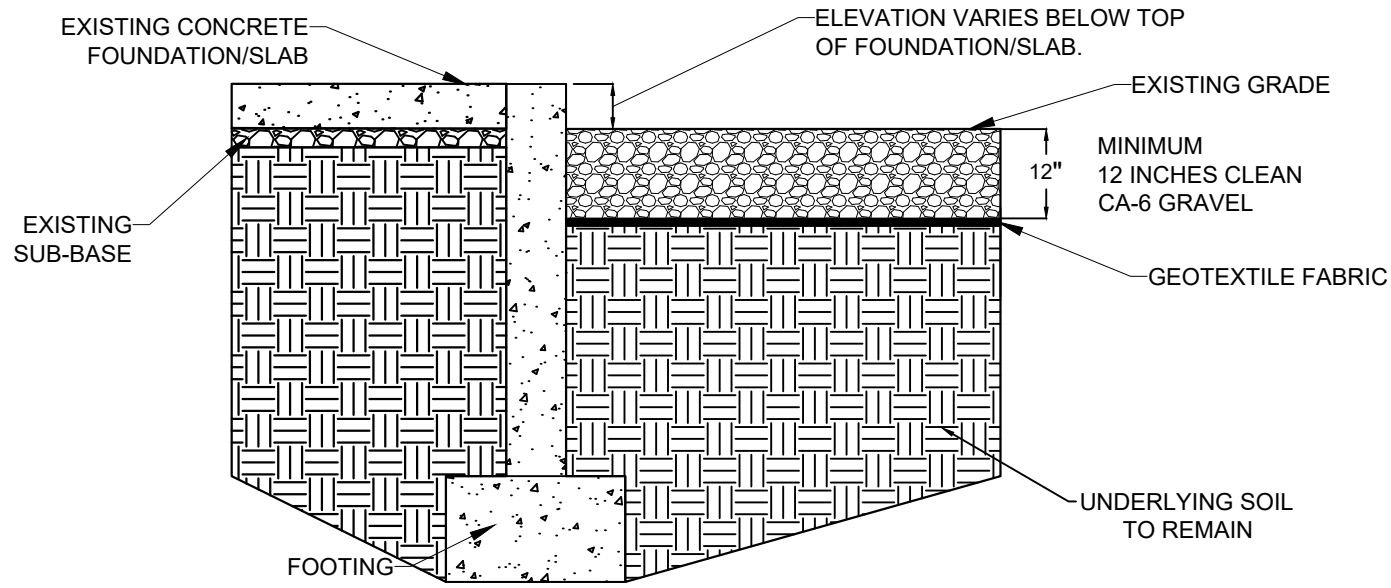
CCA PROJECT NO: E161190075

TITLE

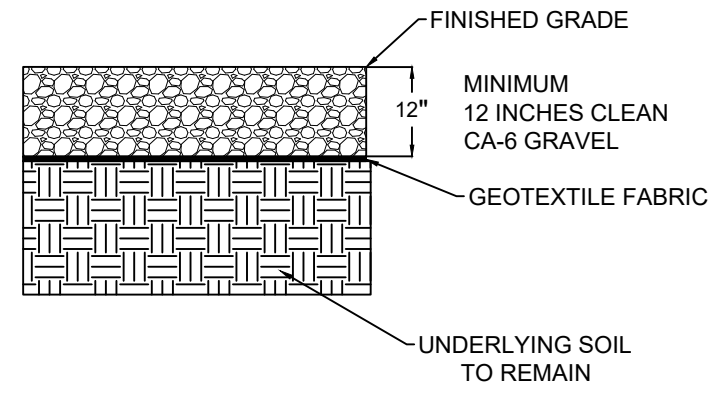
REMEDIATION DETAILS

SHEET

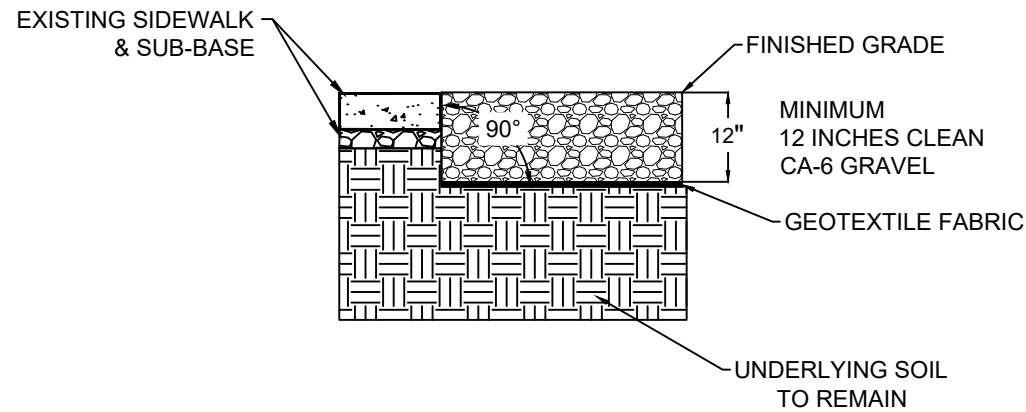
**RD2.0**



**1** **TYPICAL FOUNDATION WALL**  
NOT TO SCALE



**2** **TYPICAL LANDSCAPE AREA**  
NOT TO SCALE



**3** **TYPICAL SIDEWALK AREA**  
NOT TO SCALE

GENERAL NOTES:

- Contractor shall verify all dimensions and field conditions. All dimensions and details are taken from record drawings and are not guaranteed to be accurate. Contractor shall field verify the actual field dimensions.
- Contractor shall conduct a private utility locate and determine locations of utility lines within the work area prior to mobilization.
- Contractor shall prepare a Site Specific Health and Safety Plan in accordance with OSHA 29 CFR 1926.65. All site workers must adhere to the plan procedures and requirements.
- Contractor shall be responsible for obtaining all required permits and paying requisite fees for sidewalk closures as required. Contractor shall be responsible for any damage to the streets or roadways and associated structures and shall make repairs as necessary to the satisfaction of the Owner.
- Contractor shall indicate no parking allowed along 5th Avenue, Claude Court, and 12th Street in front of the Sunrise Apartments/Mackler Homes property during the duration of the work.
- Contractor shall trim back foliage and install screening along existing west fence.
- Contractor shall install temporary construction fence with screening around the demolition and remediation areas prior to the start of any work. Fences are to be maintained during the course of work. Temporary construction fence shall be supported and relocated as necessary by the contractor to facilitate complete remediation work up to sidewalks and property boundaries, as applicable.
- Contractor shall remove all temporary construction fences and temporary fences after all the work has finished.
- Contractor shall perform 25' x 25' grid survey(s) of all areas requiring a clean fill engineered barrier. Surveys shall be conducted and certified by a state of Illinois licensed surveyor. Contractor shall ensure that licensed surveyor's pre- and post-fill elevation measurements in each applicable barrier location (i.e., each area requiring a minimum depth of clean fill) are provided to environmental consultant within 48 hours of completion. The pre- and post-fill elevations will be submitted to the IEPA to document and verify engineered barriers.

DEMOLITION & REMEDIATION NOTES:

- Contractor shall grub and remove all vegetation within the demolition limits and properly dispose off-site.
- Contractor shall remove all sidewalks within the property boundary as indicated on plans.
- Clean concrete from sidewalks removed during excavation/demolition work can be transported to approved recycling facility. Concrete rubble commingled, mixed or cross contaminated with other soil/fill materials shall be handled in accordance with Specification 31 23 18.13.
- Contractor shall be responsible to dispose of all mixed/commingled or cross contaminated backfill or topsoil per Specification 31 23 18.13 at the Contractor's expense.

- Soil excavation shall be kept to the extent required to perform the proposed remediation work as specified in Contract Documents.
- All excavation, transportation and disposal of soil/fill shall be performed in accordance with Specification 31 23 18.13.
- All Soil/fill materials requiring offsite removal shall be classified as Special Waste or Non-Special Waste. Contractor's proposed disposal facility shall be permitted to accept **both** classifications of waste.
- Contractor shall not unitize any soil/fill materials excavated for construction at any other off-site property. All soils/fill that require removal off-site for construction shall be disposed of in accordance with Specification 31 23 18.13.
- All imported backfill used for the project shall be in accordance with Specification 31 23 23 and not exceed APPENDIX B, SECTION 742, TABLE A; TACO: 35 ILL. ADM. CODE 742 values for 35 ILL. ADM CODE 740 APPENDIX A TCL parameters.
- Contractor shall support and maintain curbs, sewer lines, and existing fence during all demolition and remediation work. Contractor shall be responsible for any damages to the adjacent or listed structures.
- Contractor shall verify that demolition contractor disconnected all electrical, water, and gas lines at property boundary prior to any excavation work.
- Gas and electrical utilities encountered within Remediation depth should be removed to full depth.
- Abandoned gas lines may be present throughout the site. Gas lines encountered during Remediation activities should be removed to full Remediation depth.
- Contractor shall not disturb or damage any adjacent property during work. If any adjacent property is damaged or disturbed the damage shall be remedied to the property owner's satisfaction at the Contractor's expense.
- Should a suspect UST be encountered, Contractor shall stop work within 30 feet of the suspect UST and notify Owner and Environmental Consultant immediately. Contractor shall provide equipment and manpower to assist in determining the size of the UST as directed by Environmental Consultant.
- All surfaces shall be returned to original grade. Finished conditions shall not cause any ponding onsite or significant runoff onto adjacent properties.
- All field equipment shall be decontaminated after use in the remediation area prior to use in handling imported clean fill or adjacent soil areas on the site.

GEOTEXTILE ENVIRONMENTAL BARRIER GENERAL NOTES:

- Contractor shall install 6 oz/yd<sup>2</sup> geotextile barriers throughout the site in accordance with Section 31 21 02.
- Contractor shall ensure that environmental barriers are not damaged during installation or backfilling activities. Any damaged areas shall be repaired per manufacturer's specifications.

DUTY TO INDEMNIFY

The Contractor shall defend, indemnify, hold harmless the Owner, Environmental Consultant, and their respective board members, representatives, agents and employees, in both individual and official capacities, against all suits, claims, damages, losses and expenses, including attorney's fees, caused by, growing out of, or incidental to the performance of work under the contract by the Contractor or it's subcontractors to the full extent as allowed by the laws of the State of Illinois and not beyond any extent which would render these provisions void or unenforceable. This obligation includes but is not limited to: The Illinois laws regarding structural work [IL. REV. STAT. CH 48, PAR 60 AT SEQ.] and regarding the protection of adjacent landowners [IL. REV. STAT. CH. 17-1/2 PAR. 51 ET. SEQ.]. In the event of any such injury [including death] or loss or damage, of claims therefore, or claims therefore, the contractor shall give prompt notice to the Owner.

**HOUSING  
AUTHORITY OF  
COOK COUNTY**

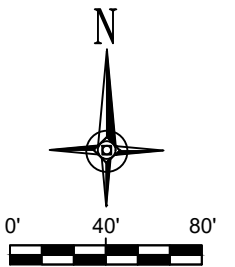


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www.ccahd.com

**SUNRISE APARTMENTS /  
JOHN MACKLER HOMES**

1101-1133 CLAUDE COURT,  
281-303 E. 12TH STREET,  
1100-1140 5TH AVENUE, CHICAGO  
HEIGHTS, ILLINOIS 60411



ISSUANCE

MARK	DESCRIPTION	DATE
1	ISSUED FOR BID	08.02.21

CCA PROJECT NO: E161190075

TITLE

REMEDIATION NOTES

SHEET

**RD2.1**