Analysis of Brownfields Cleanup Alternatives

Dominick Andujar Park
Erie and Point Streets
(Block 12, Lots 1, 3-9, 18-21 and Block 14, Lots 29-35 and 37)
Camden, New Jersey

Prepared by BRS, Inc. for the

The City of Camden
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City Hall
Camden, New Jersey

November 2020

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ATTACHMENTS

1 INTRODUCTION & BACKGROUND

Dominick Andujar Park is located at the intersection of Erie and Point Streets, comprising approximately 1.5 acres across Block 12, Lots 1, 3-9, 18-21 (the Northern Portion) and Block 14, Lots 29-35 and 37 (the Southern Portion) as described by the City of Camden for tax purposes. Dominick Andujar Park is a public park in North Camden owned by the City of Camden.

The City of Camden Redevelopment Agency (CRA) has contracted Brownfield Redevelopment Solutions, Inc. (BRS), to prepare this Analysis of Brownfields Cleanup Alternatives (ABCA) in support of EPA grant funding. The purpose of the ABCA is to:

- Identify reasonable brownfields cleanup alternatives considered for addressing the contamination identified at the site;
- Analyze the various factors influencing the selection of a preferred cleanup method, including effectiveness, implementability, costs, and sustainability;
- Select the preferred cleanup method, based on the analyses performed; and
- Provide community outreach and solicit public participation and comment on the remedial selection process prior to the final decision.

The CRA on behalf of the City will promote and facilitate community involvement with the environmental cleanup and site redevelopment project with the activities itemized below.

- The CRA will perform targeted outreach to notify communities of the availability of this ABCA. This includes fulfillment of the New Jersey Department of Environmental Protection community notification requirements (N.J.A.C. 7:26E-1.4). The CRA has published a notice of availability of the draft ABCA in the local newspapers with general circulation in the target community.
- The CRA has provided an opportunity for members of the public to comment on the ABCA in a public meeting. Additional details regarding the public notification process are presented in a *Community Relations Plan* for the site.
- The CRA has prepared written responses to the comments received and documented any changes made to the cleanup plans and to the ABCA as a result of the comments.

A Brownfields Cleanup Decision Memo will be prepared at the end of the public comment process, which will describe the cleanup options selected for the site. The ABCA and the Decision Memo will be included with the Administrative Record. The Administrative Record repository is available on the CRA website (http://camdenredevelopment.org).

The expected outcome of the Northern Portion of the site is Restricted Use, while the Southern Portion of the site will be Unrestricted Use as the Licensed Site Remediation Profession (LSRP) has determined that no active remediation activities are required on the Southern Portion.

1.1 Site Description and Previous Uses

The various tax parcels that comprise the park formerly operated as several industrial uses. These included boat building, bottling, and leather tanning, from prior to 1885 until the 1970s on the northern portion, and automotive repair operations from the 1920s until the 1990s on the southern portions.

1.2 Surrounding Land Use

The subject site is a park containing a baseball field, basketball court, and play area located in a mixed use industrial and residential portion of Camden, New Jersey. The subject site is bordered by residential properties on the eastern and western sides and enclosed by four (4) streets; Point Street to the west, Erie Street to the north, York Street to the south and North Front Street to the east. Block 12 and Block 14 are separated by an alley (North Street).

The Northern Portion of the park includes Block 12, Lot 1 with an approximately 0.56-acre baseball field and remaining unimproved vegetated land and debris from historic site operations (approximately 0.25 acres). Block 12, Lots 3-9 (approximately 0.15 acres), and Block 12, Lots 18-21 (approximately 0.02 acres) are all unimproved vegetated parcels. A stormwater basin overgrown with vegetation is also located on Block 12, Lots 3-9.

The Southern Portion of the park includes Block 14, Lots 29-35 and 37 with an approximately 0.45-acre playground and park on the western portion. The remaining 0.05 acres is unimproved vegetated land on the southeastern corner.

1.3 Project Goal (Reuse Plan)

The redevelopment activities for the property will be improvements for the open public space, green infrastructure and recreational ballfields. The park has been closed since the completion of Preliminary Assessment (PA) and Site Investigation (SI) activities were conducted on the site in 2019. As this is a priority site, the proposed work described below is being streamlined with assessment and remediation performed in parallel. All work has been and will continue to be overseen by the LSRP of record for the site. The Camden Redevelopment Agency has received EPA approval for the use of brownfield Revolving Loan Fund (RLF) monies to extend a subgrant to the City of Camden.

Before any site work can be done the LSRP of record needs to file the PA and SI reports with DEP. However, these reports can't be filed until the EPA subgrant funding can be used to clear up underground storage tank (UST) registration fees and other administrative online filing issues. The Analysis of Brownfields Cleanup Alternatives (ABCA) and Decision Memo (DM) needs to be in place before Camden Redevelopment Agency can use the EPA funding. This is the reason for submittal of an ABCA / DM prior to the completion (or even the beginning) of the remedial investigation that will further assess four (4) Areas of Concern (AOC) in the Northern Portion of the site. The Camden Redevelopment Agency has been approved for HDSRF funding for the additional remedial investigation work and does not believe that the additional assessment will impact remedy selection. The remediation of the Northern Portion of the site will be done in two phases: in Phase I, EPA subgrant funds will

be used to remediate known soil hot spots and the UST. In Phase II, Camden County will be addressing the historic fill AOC. It is anticipated that Phase II will NOT be using EPA subgrant funding.

No further action (site closure) with unrestricted use has been recommended for the Southern Portion of the park. EPA subgrant funds will be used to develop the Response Action Outcome document for the southern portion of the site.

1.4 Summary of Environmental Conditions

The former operations at the site were known to utilize hazardous substances and petroleum. A Preliminary Assessment (PA) inspection was completed in June 2018 and the PA Report was submitted to the Camden Redevelopment Agency (CRA) and EPA in July 2018. Subsequent assessment activities conducted on the site in 2019 using a CRA 2013 EPA Brownfield Assessment grant identified 18 "Areas of Concerns" or AOCs with potential to adversely impact soil and groundwater at the site. A total of 17 of the AOCs required further investigation. A Site Investigation (SI) was completed in August 2019 to investigate the 17 AOCs. All work has been and will continue to be overseen by the LSRP of record for the site.

Historic manufacturing and industrial operations began onsite prior to 1874 and continued until 1977. Operations included a tannery, a machine shop, boat building, chain manufacturing, and bottling works. The majority of the industrial operations were located on the northern portion of the site on Block 12, Lot 1. Fire destroyed the Allied Kid Company tannery in the 1970s and the buildings were demolished.

The general subsurface conditions on the northern portion of the site consist of 0.5 feet of topsoil over a layer of ash, brick, timbers, and glass, which extends to a depth of approximately 5 feet below grade. The source of the ash, brick, timber, and glass layer is presumed to be from the former buildings that were onsite. The buildings were demolished, and the debris was buried under a shallow layer of topsoil. The ash, brick, timber, and glass material is being classified as historic fill material. The historic fill material is impacted with lead, mercury, arsenic, dieldrin, beryllium, benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene. Aroclor 1254 (PCB) exceedances were identified in samples collected in the location of the former tannery. PCBs are considered a contaminant associated with historic fill in the geographic region where Andujar Park is located.

An approximately 10,000-gallon heating oil UST is located under the right field portion of the baseball field on Block 12, Lot 1. Stained soils and soils impacted with EPH ranging from 5,740 mg/kg to 28,700 mg/kg were identified adjacent to the UST. Individual contaminants related to the UST release include benzo(a)anthracene, benzo(a)pyrene, benzene, and 2-methylnaphthalene. Removal of the UST and petroleum impacted soils is necessary.

Elevated levels of hexavalent chromium were detected below the former tannery building. Hexavalent chromium is not typically associated with historic fill in Camden. Hexavalent chromium is a known contaminant from tannery operations. Additional remedial investigation for hexavalent chromium impacts is necessary.

Surficial soils in the area of the former coal storage yard are impacted with lead, mercury, cadmium, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenz(a,h)anthracene. Previous surficial samples returned elevated levels of dibenzo(a,h)anthracene, indeno(1,2,3- cd)pyrene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, arsenic, and PCBs. Additional surficial investigation of soils is necessary.

At this time, it is unknown if a groundwater investigation will be required. The outcome of additional assessment efforts will determine whether or not groundwater is contaminated and will require remediation. This may require revisiting the ABCA at a future time should EPA funding be used for groundwater remediation.

Additional remedial investigation and remedial action will be required for four (4) of these Areas of Concern (AOCs) on the Northern Portion of the park as discussed below.

- AOC 1: Regulated Heating Oil UST – Soil sampling results and observations from the investigation of AOC 1 indicate that a release of petroleum product has occurred from the UST. EPH concentrations are above the NJDEP 8,000 mg/kg threshold for free product. Individual contaminants of concern are consistent with petroleum associated with heating oil. It is unknown if the UST contained No. 2 heating oil or heavier petroleum distillates such as No. 4, 5, or 6 heating oils. Removal of the UST has been recommended. EPA subgrant funding will be used to perform the UST closure. A groundwater investigation has also been recommended as petroleum-impacted soils were encountered at the water table; however this will be performed using HDSRF funding.
- AOC 3: Historic Fill or any other Fill Material – Fill material consisting of brick, ash, timbers, and glass was encountered at several locations across the site. The fill material is most likely from the demolition of the former site buildings following a fire in the 1970s and is located below one to two feet of topsoil. The fill material is impacted with polycyclic aromatic hydrocarbons (PAHs) and metals. It has yet to be determined to what degree, if any, EPA subgrant funding will be used to address the historic fill AOC. This AOC will be addressed during Phase II of remediation efforts conducted by Camden County.
- AOC 8: Historic Site Operations – Chromium was detected at 2,230 mg/kg, which prompted analysis for hexavalent and trivalent chrome species. Hexavalent chromium analysis exhibited a result of 28.4 mg/kg, which exceeds the Non-Residential Direct Contact Soil Remediation Standard (NRDCSRS) of 20 mg/kg. Chromium is a known contaminant of concern at tannery remediation sites and not

typically considered a contaminant in historic fill material in the City of Camden. EPA subgrant funding may be used for hot spot soil removal/disposal.

- AOC 9: Former Coal Yard – Aluminum, cadmium, mercury, benzo(a)anthracene, and benzo(b)fluoranthene were detected above default Impact to Groundwater Soil Screening Levels (IGWSSL). Dibenz(a,h)anthracene was detected above Residential Direct Contact Soil Remediation Standards (RDCSRS). Lead and Benzo(a)pyrene were both detected above IGWSSL and RDCSRS. EPA subgrant funding may be used for hot spot soil removal/disposal.

1.5 Physical Setting

The site is flat. The elevation at the subject property is approximately 16 feet above mean sea level, according to the United States Geological Survey (USGS) 2014 Camden, NJ 7.5 Minute topographic quadrangle map. Soils at the subject site are identified as urban land. The parent material for soils at the subject site consist of surface covered by pavement, concrete, buildings and other structures underlain by disturbed and natural soil material.

The site is located within the Coastal Plain physiographic province of New Jersey. The dominant formation in this province is the Potomac Formation, which consists of fine to coarse grained sand, interbedded with white, red or yellow clay. According to NJ-GeoWeb, surficial geology consists of salt-marsh and estuarine deposits, as well as Cape May formation. Surficial geology generally consists of sand, silt, peat clay cobble gravel and pebble gravel. These deposits are generally from the late Pleistocene to Holocene eras.

NJ-GeoWeb identifies the subject property as underlain by the Potomac-Raritan-Magothy aquifer system. No surface water bodies are present on or adjacent to the Site. The closest water body is the Delaware River, which is located approximately 800 feet to the north and west of the site. Based on topography, groundwater is expected to flow in a northwesterly direction. Based on a review of boring logs, the shallow subsurface is generally characterized by brown sands and fill with groundwater encountered at approximately 8.5 to 9 feet below ground surface.

1.6 Exposure Pathways

In order for contaminants from a site to pose a human health or environmental risk, one or more completed exposure pathways must link the contaminant to a receptor (human or ecological). A completed exposure pathway consists of four elements:

- A source and mechanism of substance release;
- A transport medium;
- A point of potential human or ecological contact with the substance ("exposure point"); and
- An "exposure route", such as dermal contact, ingestion, etc.

Preliminary evaluation indicates the following potentially completed exposure pathways related to the site in its current condition (i.e., pre-remediation):

Direct contact with Soil. Soil might be handled by children, nearby residents, occasional on-site construction workers or trespassers. This exposure pathway will be mitigated immediately by implementation of the proposed cleanup activities, which include excavation and offsite disposal of certain contaminated soils and installation of a soil cap.

2 APPLICABLE LAWS AND CLEANUP STANDARDS

All site remediation to be performed under this grant would be conducted in accordance with the New Jersey Site Remediation Reform Act, N.J.S.A. 58:10C-1 et seq.; the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10B-12 and implementing regulations in the Administrative Requirements for the Remediation of Contaminated Sites, N.J.A.C. 7:26C; and the Technical Requirements for Site Remediation, N.J.A.C. 7:26E.The most current versions of the NJDEP Technical Guidance documents will be referenced, including:

- *Soil SI/RI/RA*
- *Ground Water SI/RI/RA*
- *Capping of Sites Undergoing Remediation,*

The reference remediation standards for soil will be NJDEP's published numeric values for Non-Residential Direct Contact Soil Remediation Standards (NRDCSRS), NJDEP's Residential Direct Contact Soil Remediation Standards (RDCSRS), and Impact to Groundwater Soil Remediation Standard (IGWSRS).

The reference remediation standards for groundwater will be the current version of Class II-A Groundwater Quality Criteria (GWQC) published in *Groundwater Quality Standards* (N.J.A.C 7:9C), should future assessment activities indicate the need for groundwater cleanup.

The effective implementation of the applicable laws and guidance will be managed and overseen by a Licensed Site Remediation Professional (LSRP) to be retained for the site. Any Response Action Outcome (RAO, i.e., NFA-equivalent) for the site will be issued by the LSRP. Project reports, RAOs, etc. will be submitted on behalf of the City to the NJDEP, which retains the authority to audit the project and/or review and potentially reject any documents submitted.

3 EVALUATION OF CLEANUP ALTERNATIVES

This section identifies various reasonable **Phase I** remediation alternatives that were considered in response to the environmental contamination issues at the **Northern Portion** of the site. The following potential remedial alternatives were considered:

Alternative No. 1) No action

Alternative No. 2) UST Removal with Hot Spot Soil Removal

Alternative No. 3) Site-wide Soil Removal.

The following evaluation criteria were considered in comparing the remedial alternatives.

A. Effectiveness in providing compliance with NJDEP regulations and increased protectiveness to public health and the environment;

B. Implementability of the considered alternative;

C. Cost of the considered alternative; and

D. Sustainability and resilience considerations.

3.1 Alternative No. 1 - No Action

If no environmental cleanup remedy were performed at this site:

- The site would remain out of compliance with NJDEP's regulations;
- The intended reuse of the site as open space and ballfields would not be possible. Currently, the park is closed due to the encountered contamination.

3.1.1 Effectiveness

The "no action" alternative is not effective in that it does not provide for compliance with NJDEP regulations and it fails to provide for the beneficial reuse of the site.

3.1.2 Sustainability and Resilience

The "no action" approach would not meet project remediation goals because the contamination would remain in place, untreated, and without a barrier. As such, the "no action" approach would present a continuing risk to the public. Based on this, evaluation of the approach with regards to other sustainability criteria is not relevant.

3.1.3 Implementability

The "no action" alternative is technically feasible, although the presence of untreated soil and groundwater contaminants would not be in compliance with NJDEP regulations.

3.1.4 Operation and Maintenance

Because there is no remedy implemented, there would also be no operation and maintenance requirements at the site.

3.1.5 Institutional Controls

As no action is taking place under this alternative, no institutional controls are proposed.

3.1.6 Cost

There would be no costs associated with this alternative.

3.2 Alternative No. 2 – UST Removal with Hot Spot Soil Removal (Northern Portion)

Prior to refurbishing the Northern Portion of the park, the City must perform a Remedial Investigation of four (4) Areas of Concern (AOCs) and then remediate observed soil and groundwater contamination. The work is being streamlined with assessment and remediation performed in parallel. The remedial investigation will delineate the hot spot soil areas and historic fill as well as assess the groundwater likely impacted from the leaking UST. HDSRF funding will be used for all further assessment and investigative work.

Under this alternative, the remedial action will include registering the UST for closure; removal of the UST; and remediation of petroleum impacted and other contaminated soils on the Northern Portion (approximately 0.81 acres with ballfield and former foundations).

Remediation is going to be taking place in two phases. EPA grant funds will be used for the Phase I, which is anticipated to consist of hot spot soil removal and UST removal.

Phase II of remediation will invovle emplacement of the cap to address historic fill in the Northern Portion of the site. This is being done in conjunction with the ballfield improvements at a later date. Camden County will be performing the capping work and use of EPA funding for this effort is not currently planned. This second, future phase of remediation will include an Engineering Control, recording of a deed notice. A virtual groundwater classification exemption area (CEA) as Institutional Controls may be conducted under either phase of remediation (to be determined).

This combination of remedies will prevent exposure to residual site contaminants. Further details of the remediation plan would include:

- The UST shall be removed from the excavation following cleaning activities. The UST shall be made unusable by cutting a hole through the metal top and hauled to a scrap facility for recycling.
- Approximately 350 tons of petroleum impacted soil will be removed and disposed of off-site and will include vacuuming and disposal of 3,000 gallons of oil, sludge and water from the tank interior.
- An unknown quantity of PCB and Hexavalent Chromium contaminated soil will be removed and disposed of off-site. This hot spot soil removal will address contaminated soil that needs to be addressed separately from the historic fill material.
- Groundwater encountered during tank and soil removal will be pumped from the excavation cavity to an onsite holding tank for characterization analysis and disposal off-site.
- Excavated soils will be sampled and characterized in accordance with the requirements of the designated disposal facility. The tasks will also include post-excavation sampling and analysis, and the emplacement of clean backfill.
- Restore site with topsoil and seed.

- In addition, an indefinite duration groundwater Classification Exception Area (CEA) may be established to prohibit groundwater use on the site (to be determined).

Selection of this alternative will result, upon completion of the Phase II remediation activities, in restricted future use of the site.

3.2.1 Effectiveness

The Institutional and Engineering Controls approach does not physically remove all site soil and groundwater contaminants. However, this alternative would effectively achieve project remediation goals by:

- Achieving technical and administrative compliance with the NJDEP site remediation regulations.
- Disruption of the pathway of contaminated fill material to the outside environment. Although the contamination still exists, the cap and CEA will significantly reduce the potential of human exposure.
- Providing notice of site environmental conditions to future site owners, occupants, and the general public by means of the Deed Notice.

3.2.2 Sustainability and Resilience

This criterion evaluates the degree to which the remedial alternative may reduce greenhouse gas discharges, reduce energy use, employ alternative energy sources, reduce volume of wastewater to be disposed, reduce volume of materials to be taken to a landfill, and/or allow for the reuse or recycling of materials during cleanup is considered, where applicable.

This alternative limits the excavation of site soil and transport by truck to offsite disposal facilities, thereby reducing the fossil fuel energy use, and associated greenhouse gas discharges associated with that task.

3.2.3 Implementability

Removal of petroleum, PCB, and hexavalent chromium impacted soil is a conventional means of addressing this type of contaminant. Cap placement as a type of remedy is a widely used and accepted practice for remediating the remaining fill impacted contaminated soils.

The City and/or its consultant will retain a contractor that is licensed, qualified, and OSHA-certified to perform work on hazardous materials sites. The deed notice and CEA, prepared in accordance with NJDEP guidance and template, are relatively routine administrative submissions.

3.2.4 Operation and Maintenance

Operation and Maintenance on the installed soil cap should include the following:

- Routine inspections;

- Vegetation maintenance (grass mowing and weed control); and
- Written O&M Plan that includes a discussion including but, not limited to; soil cover maintenance, reporting, maintenance agreement, a utility plan should future utilities or building be proposed at the Site, and fence maintenance (if applicable).

3.2.5 Institutional Controls

This alternative will require the following Institutional Controls:

- A Deed Notice as part of Phase II remediation efforts is required because contaminants above the RDCSRS are expected to remain below the soil cap. A Deed Notice is required to document the extent of contamination and the engineering controls and will be issued pursuant to N.J.A.C 7:26E-6.1(B).
- All required NJDEP permits, reporting, and inspection requirements.
- A CEA for groundwater, if deemed to be required upon completion of a groundwater investigation.

3.2.6 Cost

The costs for completing remediation under this approach were estimated using the following elements and assumptions:

1) Retain environmental engineering firm and LSRP, and LSRP review of previous reporting;
2) Project and Grant Management tasks, including public notification;
3) Prepare project specifications and bid documents;
4) Conduct procurement process;
5) UST Closure and Removal including dewatering activities;
6) Removal of approximately 350 tons of petroleum impacted soil and 3,000 gallons of oily water;
7) Removal of an to be determined quantity of contaminated soil associated with PCB and Hexavalent Chromium hot spot removals.
8) Procurement and testing of clean fill cap materials;
9) Site restoration, including vegetative cover;
10) Prepare Soil Remediation Permit;
11) Prepare Remedial Action Report and other regulatory reporting requirements;
12) Prepare Quality Assurance, and Health and Safety deliverables.

The estimated cost for this cleanup alternative is $257,058.00. The Camden Redevelopment Agency has requested USEPA brownfield Revolving Loan Fund (RLF) monies ($200,000) for remediation at the Andujar Park site, and to extend a subgrant to the City of Camden for the same. EPA subgrant funds, along with a pending State Hazardous Discharge Site Remediation Fund grant, will be used to remediate known soil hot spots and the UST.

3.3 Alternative No. 3 – Site-wide Soil Removal (Northern Portion of Park)

Under this alternative, the remedial action will pertain to the entire northern portion of the site. The Northern Portion includes Block 12, Lot 1 (baseball field, unimproved vegetated land and debris from historic site operations), 3-9, 18-21. Remedial activities will include registering the UST for closure; removal of the UST; and removal of petroleum and other historic fill and hot spot impacted soils. Approximately 11,325 tons of impacted soils will be removed, disposed of off-site and replaced with clean fill. Groundwater encountered during tank and soil removal will be pumped from the excavation cavity to an onsite holding tank for characterization analysis and disposal off-site.

Selection of this alternative is expected to result, upon completion, in unrestricted future use of the site. No engineered cap would be installed, as no contaminated materials would remain on site.

3.3.1 Effectiveness

This alternative would be immediately effective by removal of the UST, its contents and all contaminated soils. The remedial action should result in unrestricted future use of the site.

3.3.2 Sustainability and Resilience

The site-wide remediation alternative compares unfavorably to Alternative 2 (described in Section 3.2) with regard to sustainability metrics. The approach would result in increased energy use, greenhouse gas emissions, and landfill disposal volume.

This approach compares favorably to Alternatives 1 and 3 in resilience metrics, such as the continuing protectiveness of the remedy in light of reasonably foreseeable changing climate conditions and allows for no restrictions on future land use. This alternative would be ideal in that there would be unrestricted use of the site.

3.3.3 Implementability

This alternative is feasible and implementable. This approach will involve the work elements described in Section 3.2, with the exception of the emplacement of a clean soil cap, deed notice, and CEA. In addition, all excavated areas will be backfilled with clean soil.

3.3.4 Operation and Maintenance

This approach, upon successful implementation, would allow for unrestricted use of the site. No ongoing operation and maintenance of remedial systems would be required.

3.3.5 Institutional Controls

This approach, upon successful implementation, would provide for the removal of all contaminated soil from the site. No Deed Notice is required. As the current presence of petroleum impacted soil is the reason that a groundwater CEA is required under other scenarios, a CEA would not be required if the petroleum impacted soil is removed from the site.

3.3.6 Cost

To implement this strategy, groundwater monitoring wells would be fully abandoned and a total of approximately 11,325 tons of soil would be excavated, disposed, and replaced with clean fill. Total project costs for this alternative are estimated at $1,109,876.30.

3.4 Preferred Alternative

The preferred alternative is Alternative No. 2 – UST Removal with Hot Spot Soil Removal on the Northern Portion of the site. Soil excavation is a proven method, environmentally effective and productive for long term, community-wide use. Excavation equipment is readily available. Soil excavation and UST removal as proposed eliminates direct contact with contaminants and removes the source of petroleum impacted groundwater. Although limited contamination may still exist, the eventual cap and CEA (under Phase II) will significantly reduce the potential of human exposure. Future site owners, occupants, and the general public will be provided notice of site environmental conditions by means of the Deed Notice upon completion of Phase II remediation activities.

The first phase of the remedial remedy can be completed within the timeframe of the USEPA Brownfields RLF monies.

Attachment A
Site Location Map

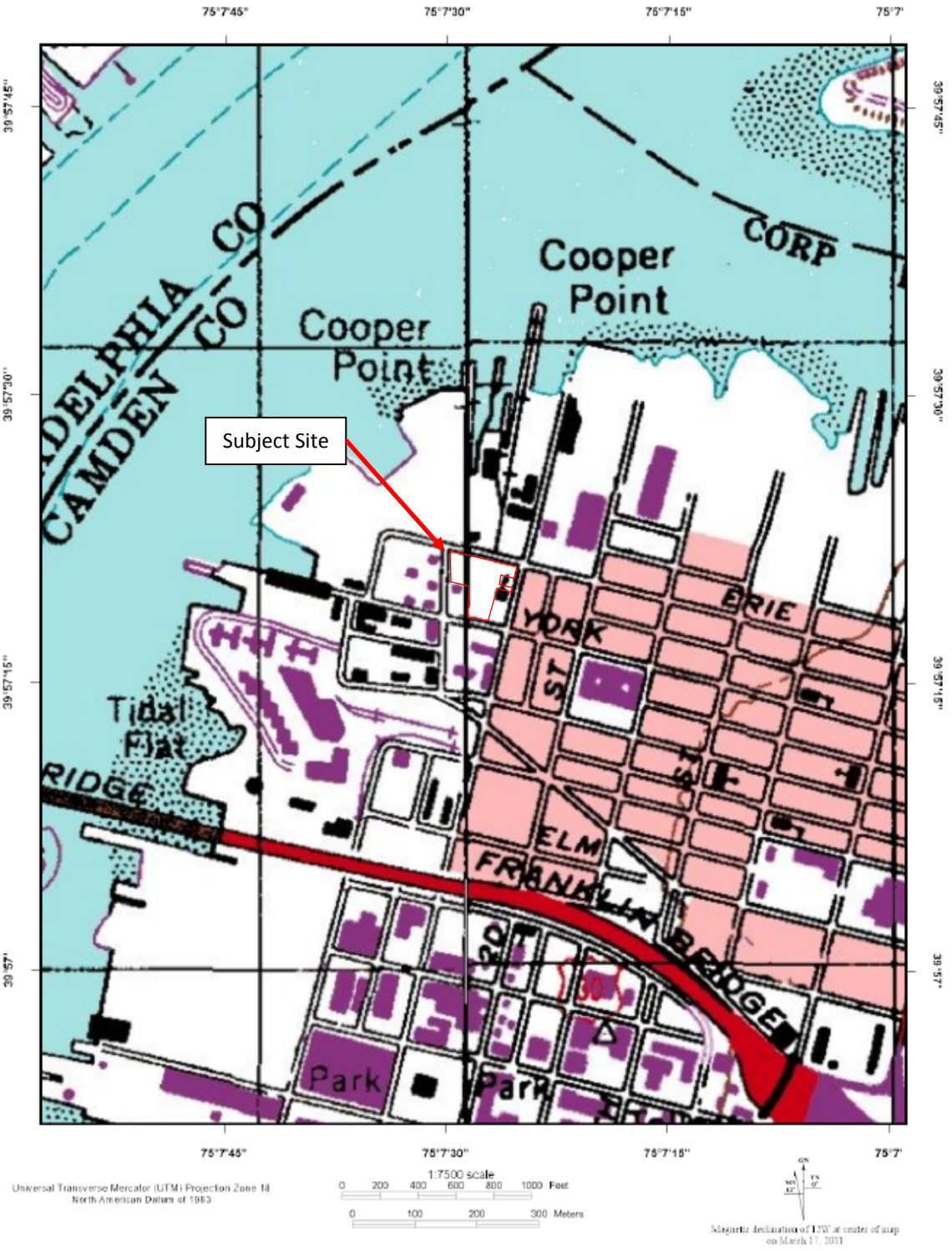

Figure 1.0:

Regional Site Location Map

Andujar Park
Erie and Point Street
Block 12, Lots 1, 3, 17 & 18
Block 14, Lot 29
Camden, Camden County, New Jersey 08102

TTI Environmental, Inc.
www.ttienv.com

SCALE	DRAWN BY	DATE
As Shown	USGS	6/2018
PROJECT	APP'D BY	DRAWING NO.
18-360	DD	1.0

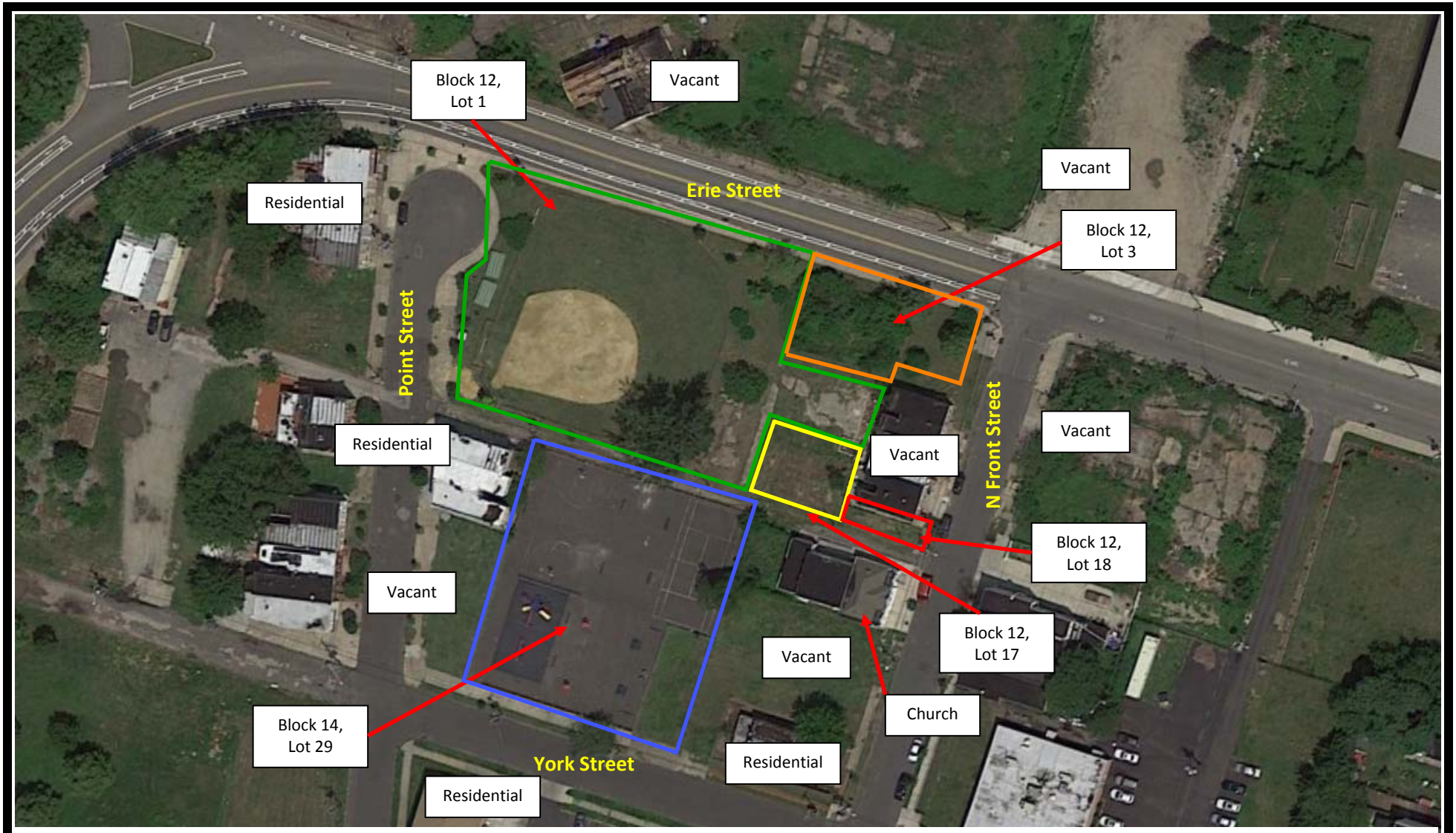

Figure 2.0:

Site Diagram

Andujar Park
Erie and Point Street
Block 12, Lots 1, 3, 17 & 18
Block 14, Lot 29
Camden, Camden County, New Jersey 08102

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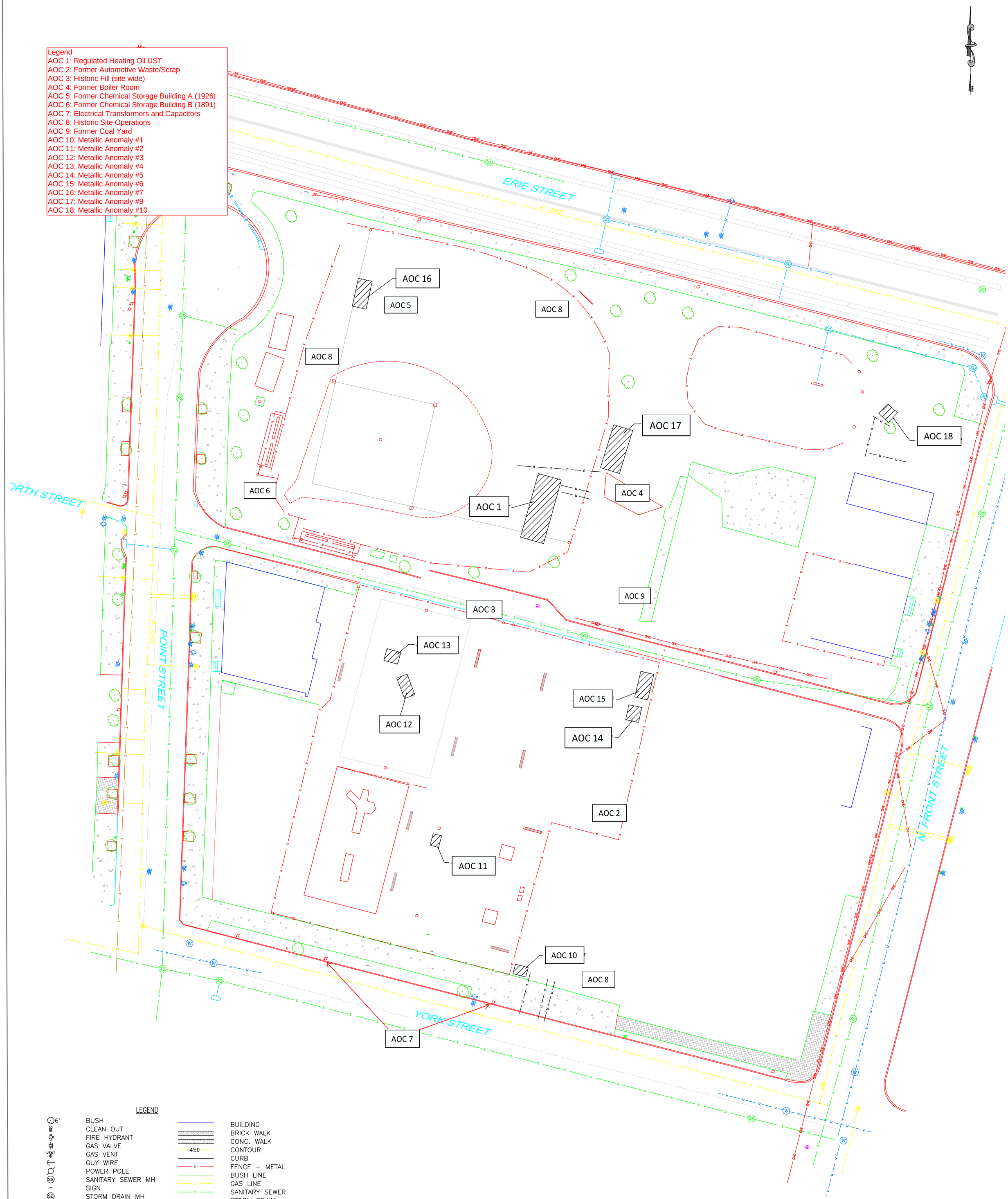
SCALE	DRAWN BY	DATE
As Shown	DD	6/2018
PROJECT	APP'D BY	DRAWING NO.
18-360	DD	2.0

Legend
AOC 1: Regulated Heating Oil UST
AOC 2: Former Automotive Waste/Scrap
AOC 3: Historic Fill (site wide)
AOC 4: Former Boiler Room
AOC 5: Former Chemical Storage Building A (1926)
AOC 6: Former Chemical Storage Building B (1891)
AOC 7: Electrical Transformers and Capacitors
AOC 8: Historic Site Operations
AOC 9: Former Coal Yard
AOC 10: Metallic Anomaly #1
AOC 11: Metallic Anomaly #2
AOC 12: Metallic Anomaly #3
AOC 13: Metallic Anomaly #4
AOC 14: Metallic Anomaly #5
AOC 15: Metallic Anomaly #6
AOC 16: Metallic Anomaly #7
AOC 17: Metallic Anomaly #9
AOC 18: Metallic Anomaly #10



LEGEND

6'	BUSH		BUILDING
	CLEAN OUT		BRICK WALK
	FIRE HYDRANT		CONC. WALK
	GAS VALVE	450	CONTOUR
VENT	GAS VENT		CURB
	GUY WIRE	x	FENCE – METAL
	POWER POLE		BUSH LINE
SS	SANITARY SEWER MH	G	GAS LINE
	SIGN	S	SANITARY SEWER
SD	STORM DRAIN MH	D	STORM DRAIN
T	TELEPHONE MH	T	TELEPHONE LINE
100	TRAVERSE	W	WATER LINE
8'	TREE	U	UNKNOWN UTILITY
MH	UNKNOWN MANHOLE		
W	WATER MANHOLE		
	WATER VALVE		

BC – BOTTOM OF CURB
EP – EDGE OF PAVEMENT
CONC – CONCRETE
INV – INVERT
PVMT. – PAVEMENT
TC – TOP OF CURB

NOTES:

This site plan was produced from data positioned by differential GPS measurments collected in the field. Due to the errors normally present in DGPS data, this document is not intended or represented to be of survey precision. Caution should be used in all field measurments based on this site plan.

As with any geophysical method, it must be stressed that caution be used during any excavation or intrusive testing in proximity of any anomalies indicated in this document The absence of detected signatures does not preclude the possibility that targets exist. The geophysical data and results presented in this site plan are based upon the application of scientific principles and professional judgements to certain facts with resultant subjective interpretations. Professional judgements expressed herein are based on the facts currently available within the limits of the existing data, scope of work, budget, and schedule.

Reliance or use by any such third party without explicit authorization in the document does not make said third party a third party beneficiary to Delta's contract with the client. Any such unauthorized reliance on or use of this document, including any of its information or conclusions, will be at the third party's risk. For the same reasons, no warranties or representations, expressed or implied in this document, are made to any such third party.

0 10 20 40 60
GRAPHIC SCALE IN FEET

PROJECT NO.
SHEET NO. 1 OF 1
DRAWING NO. 052918
SCALE 1" = 20'
DATE 05-29-18
CHECKED BY
DRAWN BY MIKE MESAROS

GEOPHYSICAL INVESTIGATION
ANDUJAR PARK, NORTH STREET AND FRONT STREET, CAMDEN, NJ
FOR
TTI ENVIRONMENTAL, INC.

DELTA Geophysics Inc.
738 Front Street, Catasauqua, PA 18032
Phone: (610) 231-73012

DATE	DESCRIPTION	REV.
	REVISIONS	

ATTACHMENT B

Summary of Public Comments and Responses

Summary of Public Meeting /Solicitation off Public Comments for the Cleanup of the Andujar Park Site

12 November 2020
5:30pm to 6:30pm
Via Zoom

Attendees:

Residents: Felicia Reyes-Morton (City Council Member), Shirley Izizarry, Eliot Rojas, Josie Ocasio, Lisa Medina, Deb Burgos, Amy Andujar
Trust for Public Land (TPL): Danielle Denk, Elizabeth Class-Maldanado
Coopers Ferry Partnership (CFP): Sarah Bryant, Brian Bauerle
Camden Redevelopment Agency: Olivette Simpson
NJDEP: Armando Alfonso
Camden County: Jeff Nash
NJ Tree Foundation: Meredith Brown
BRS: Michele Christina

Project Overview:
Project Overview was provided by Danielle Denk (TPL). Offer was made to conduct meeting in bilingual manner, but no one required translation services.

Phase I Construction – South Park Area:
Presentation by Danielle Denk (TPL). Prior community outreach/feedback regarding playground areas for the southern portion was summarized. The playground equipment, fitness equipment and recreation improvements were described. Construction mobilization timeframe options were presented and discussed. Consensus was to wait until next year after winter weather to start construction on the South Park Area.

Environmental Update:
Presentation by Michele Christina (BRS on behalf of CRA). Overview of assessment work conducted to date indicated that no active remediation required in south park area. North park area contains a large underground storage tank containing petroleum product, hot spot soil contamination from prior site operations (PCBs and chromium contamination) and historic fill. Additional assessment work will be conducted at the site to delineate contamination and assess whether there is a groundwater issue. Cleanup will be conducted in two Phases: first phase is to remove tank and hot spot soil contamination; second phase will be done later in conjunction with County's construction of the ballpark improvements. The second phase will involve constructing a soil cap over the historic fill to prevent exposure of park users.

Phase II – North Park Area
Presentation by Sarah Bryant (CFP). CFP has been hired by the County to assist with park improvements at seven Camden parks. A contract for design of the north park area will be awarded in December, with

a kick off likely to occur in January. Can't say for sure how long the design process will take, but its expected to be four to six months. During that time additional community meetings will be held to get ideas and feedback of what residents want to see at the park. A conceptual layout was shown based on prior feedback. Will be able to provide a construction timeline once the design work is further along.

Community Questions:

Community Question 1: Can you explain more about what is historic fill?

> Response: Historic fill is fill material that was usually brought into a site to backfill low areas, raise elevations, etc. Sometimes its material that is spread on site from a cycle of construction/demolition. It usually has low levels of contamination. Contamination from historic fill is usually not a result of site operations.

Community Question 2: Can you explain more about the groundwater?

> Response: Groundwater hasn't been sampled yet at the site, so we aren't sure if its contaminated. But shallow groundwater in the City usually is and requires something called a CEA to address it. This means that groundwater can't be used for drinking water (NO one is drinking water this shallow groundwater in the city), will be monitored as it naturally cleanups up and to make sure it isn't getting worse. We expect to see some groundwater contamination with the underground storage tank. Once that tank is removed along with some contaminated soil, the groundwater should start to cleanup. We'll know more once the additional assessment work is conducted.

Community Question 3: What is the timeframe for doing the assessment work?

> Response: The CRA is using two different funding sources to address the environmental issues: one is federal and one is state. We are hoping that the State funding gets approved at the December EDA board meeting. This would mean that you should see people out at the site collecting samples probably sometime in the spring.

Additional discussion and public comments occurred regarding the park use and improvements being made to other parks in the City. Residents supported the work and were interested in being involved in follow up meetings and discussions for park development. Dominick Andujar's mother was acknowledged and thanked for her attendance on the call.

A copy of the meeting presentation follows.

Hey North Camden!

Hola North Camden!

Your vision for Dominick Andujar Park is about to come true! Join us to learn more!

THE TRUST FOR PUBLIC LAND · Cooper's Ferry Partnership · camden county · Camden County Municipal Utilities Authority · Camden Redevelopment Agency

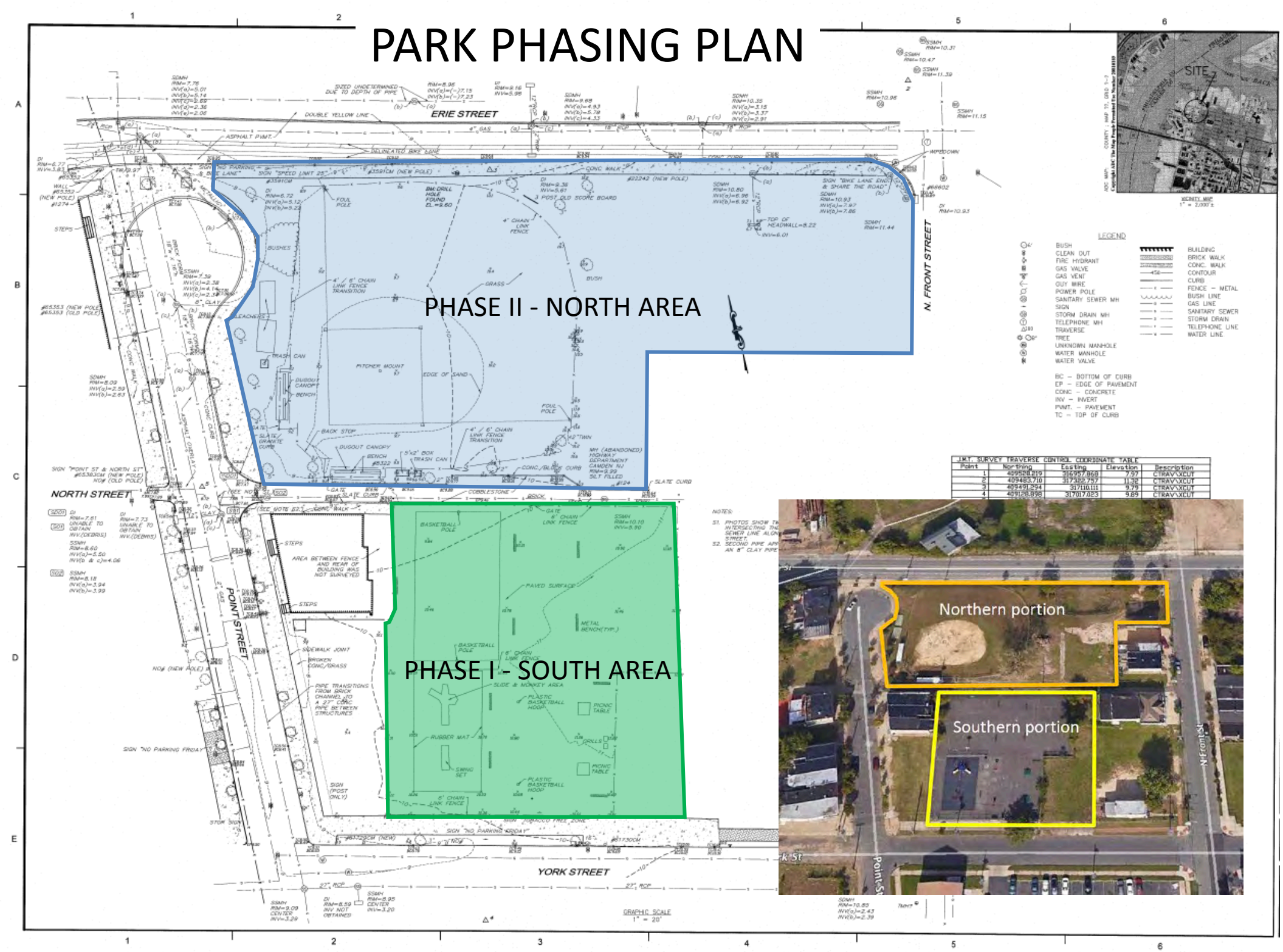
Dominick Andujar Park Community Meeting

Agenda

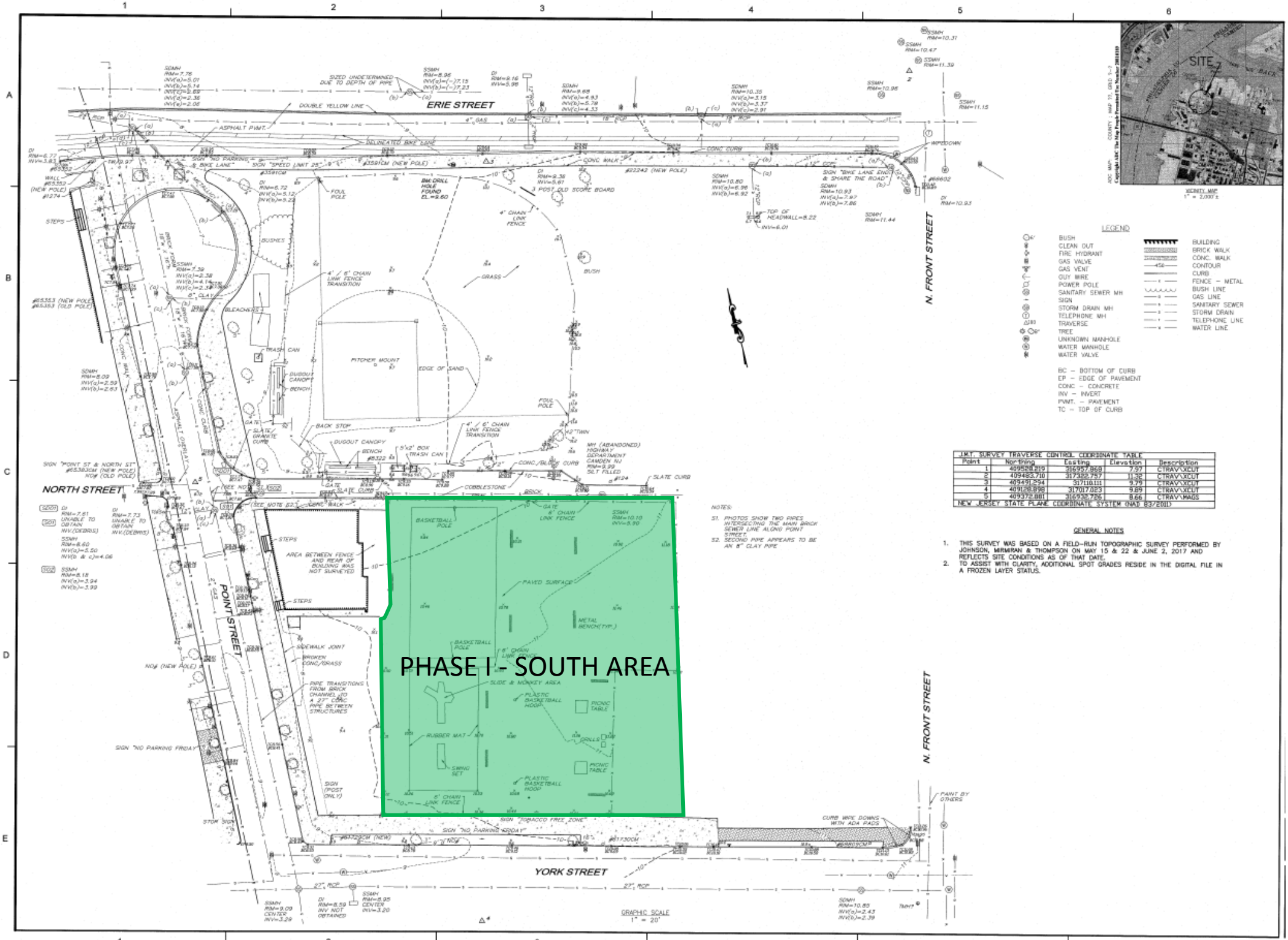
- Welcome + Introductions – Felisha Reyes, North Camden Little League
- Project Overview – Danielle Denk, TPL
- Phase I – South Park Area – Danielle Denk, TPL
- Environmental Update – Michele Christina, CRA
- Phase II – North Park Area – Sarah Bryant, Coopers Ferry Partnership
- Q + A

*Spanish Interpretation by Elizabeth Class-Maldonado, TPL

PARK PHASING PLAN



J.M.T. SURVEY TRAVERSE CONTROL COORDINATE TABLE				
Point	Northing	Easting	Elevation	Description
1	409588.219	316997.868	7.97	CTRAV\XCUT
2	409483.710	317322.757	11.38	CTRAV\XCUT
3	409491.294	317110.131	9.79	CTRAV\XCUT
4	409[illegible]	317017.023	9.89	CTRAV\XCUT



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4	409126.898	317017.023	9.89	CTRAV\XCUT
5	409372.881	316925.725	8.66	CTRAV\MAGS
NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83/2011)				

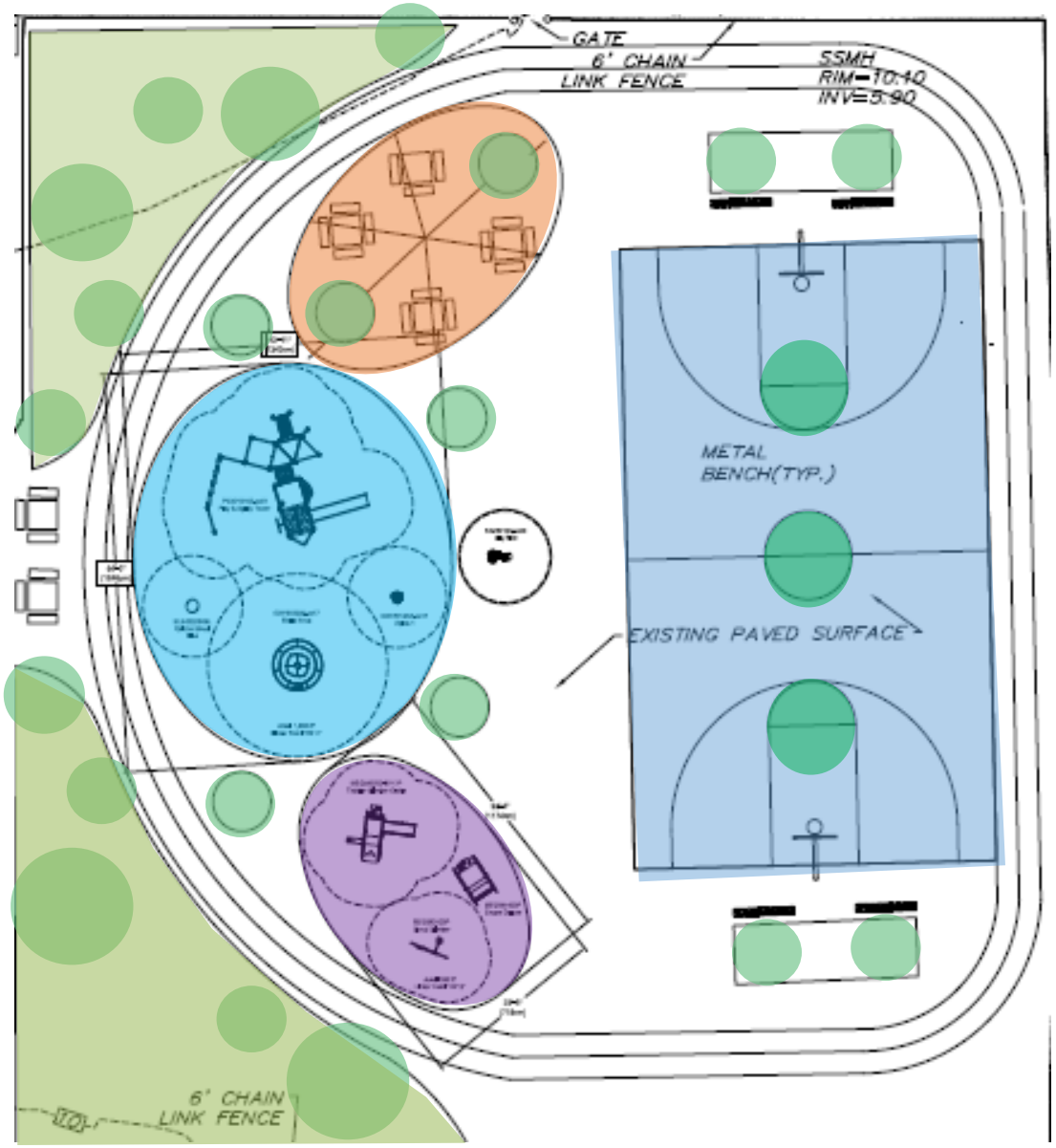
NOTES:

51. PHOTOS SHOW TWO PIPES INTERSECTING THE MAIN BRICK SEWER LINE ALONG POINT STREET. SECOND PIPE APPEARS TO BE AN 8" CLAY PIPE

GENERAL NOTES

1. THIS SURVEY WAS BASED ON A FIELD-RUN TOPOGRAPHIC SURVEY PERFORMED BY JOHNSON, MIRMIRAN & THOMPSON ON MAY 15 & 22 & JUNE 2, 2017 AND REFLECTS SITE CONDITIONS AS OF THAT DATE.
2. TO ASSIST WITH CLARITY, ADDITIONAL SPOT GRADES RESIDE IN THE DIGITAL FILE IN A FROZEN LAYER STATUS.

Dominick Andujar Park – Phase I (South Side)



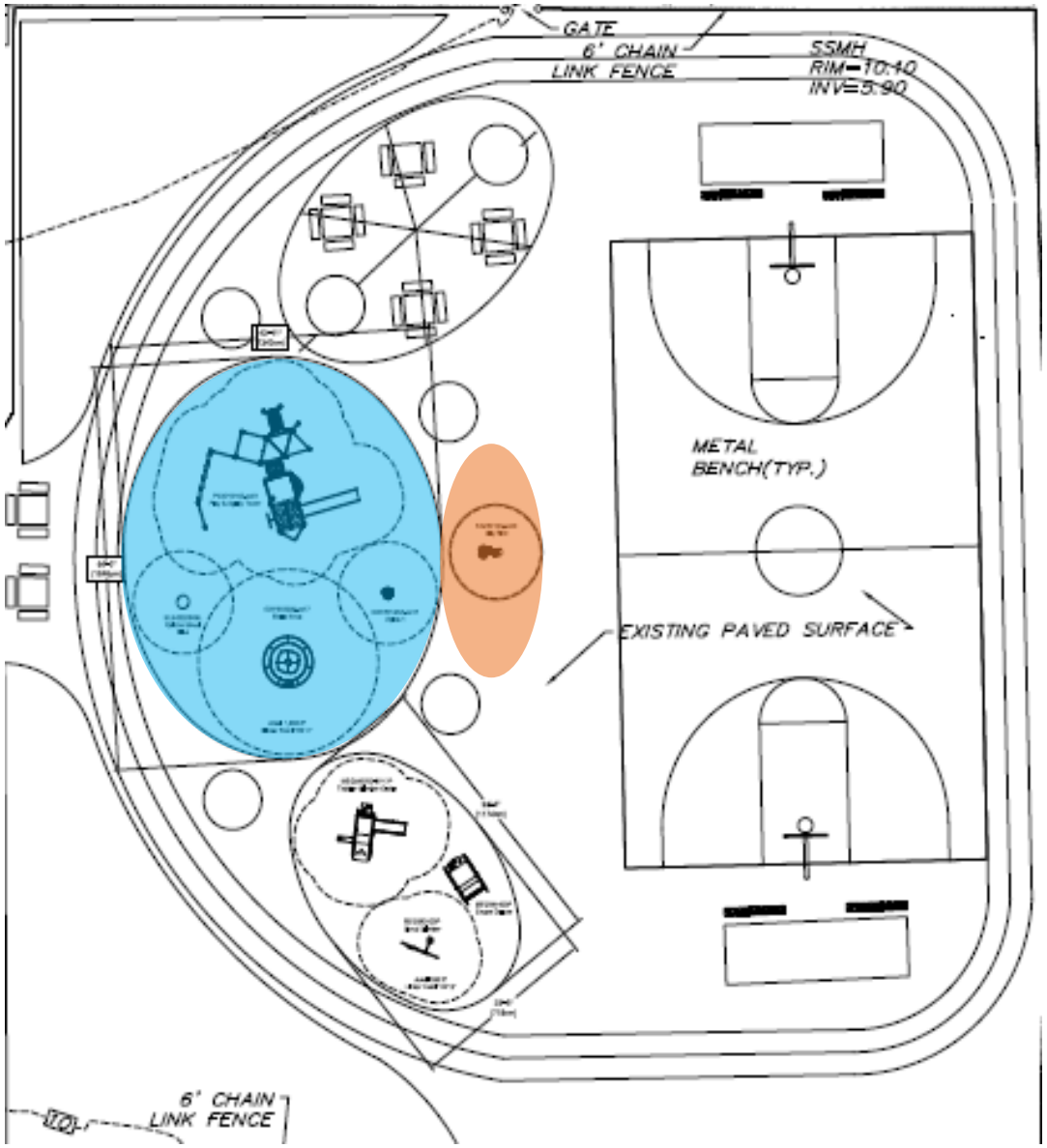
Based on community design vision, the South Park, Phase I, includes the following features:

- Playground for 5-12
- Playground for 2-5
- Fitness Bike
- Fitness track
- Basketball Court
- Shaded seating
- Picnic Area
- Trees

Raingardens, shown in green here, will come in Phase II. Phase II will also include:

- Softball/Tee Ball
- Soccer Field
- Walking Trails
- Raingardens

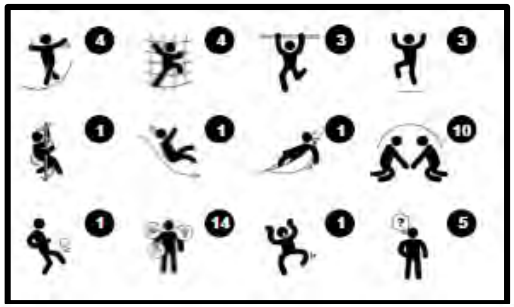
5-12 Play Area



5-12 Play Area

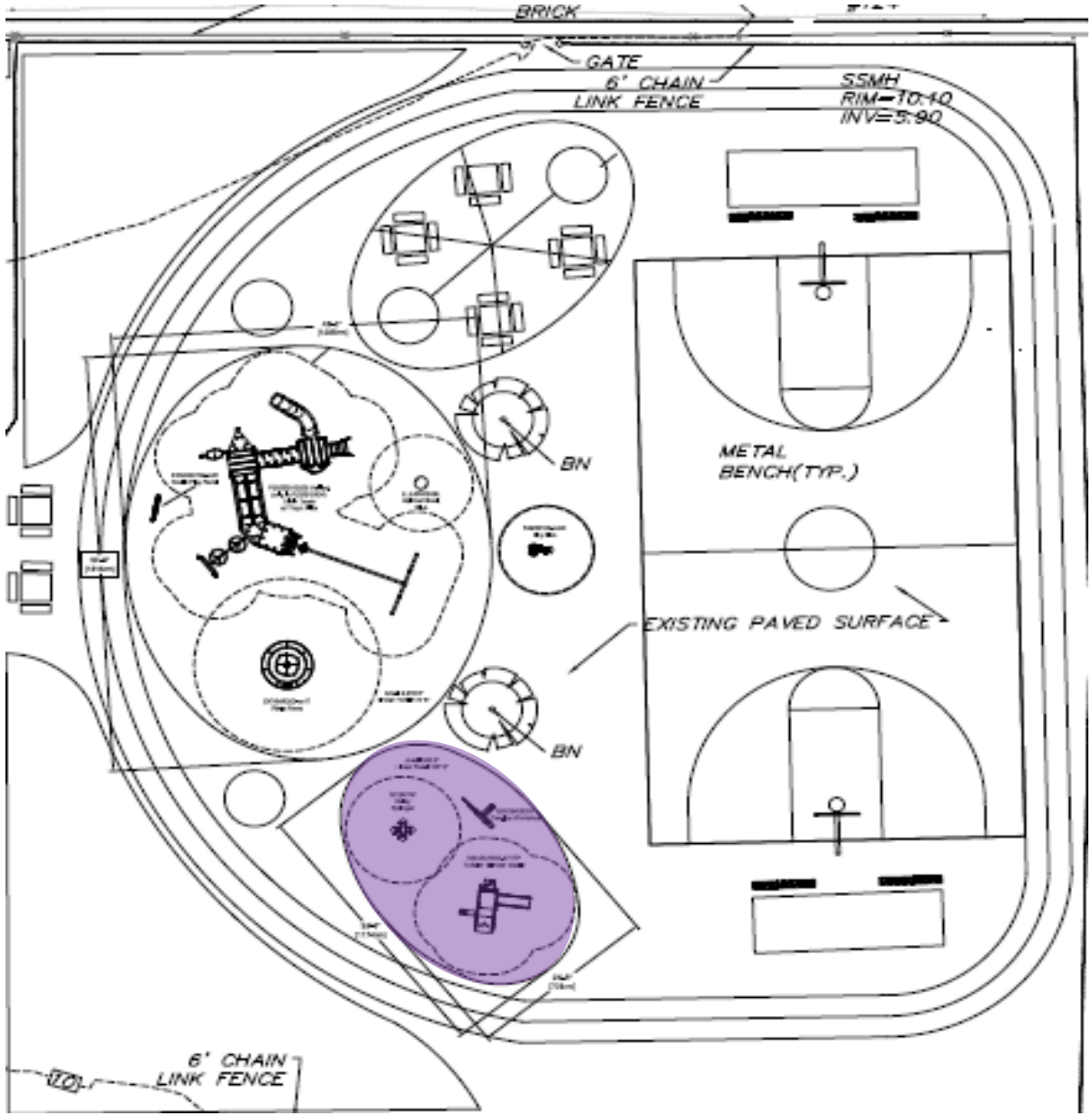
Hercules – Van Cortland

Lime Green
Dark Blue



Item no. PCX210100-0901	
General Product Information	
Dimensions LxWxH	17'11" x 21'9" x 12'7"
Age Group	5-12
Play Capacity	34 children
Color Options	

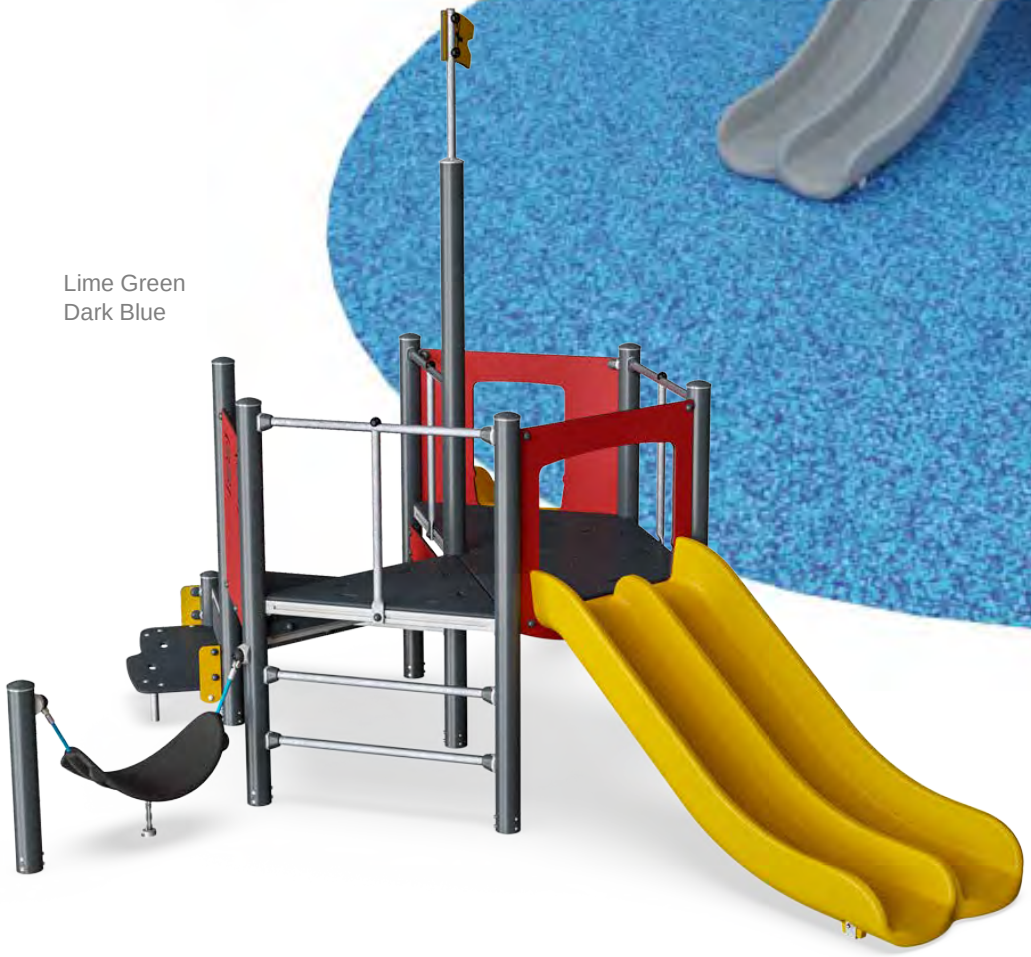
2-5 Play Area

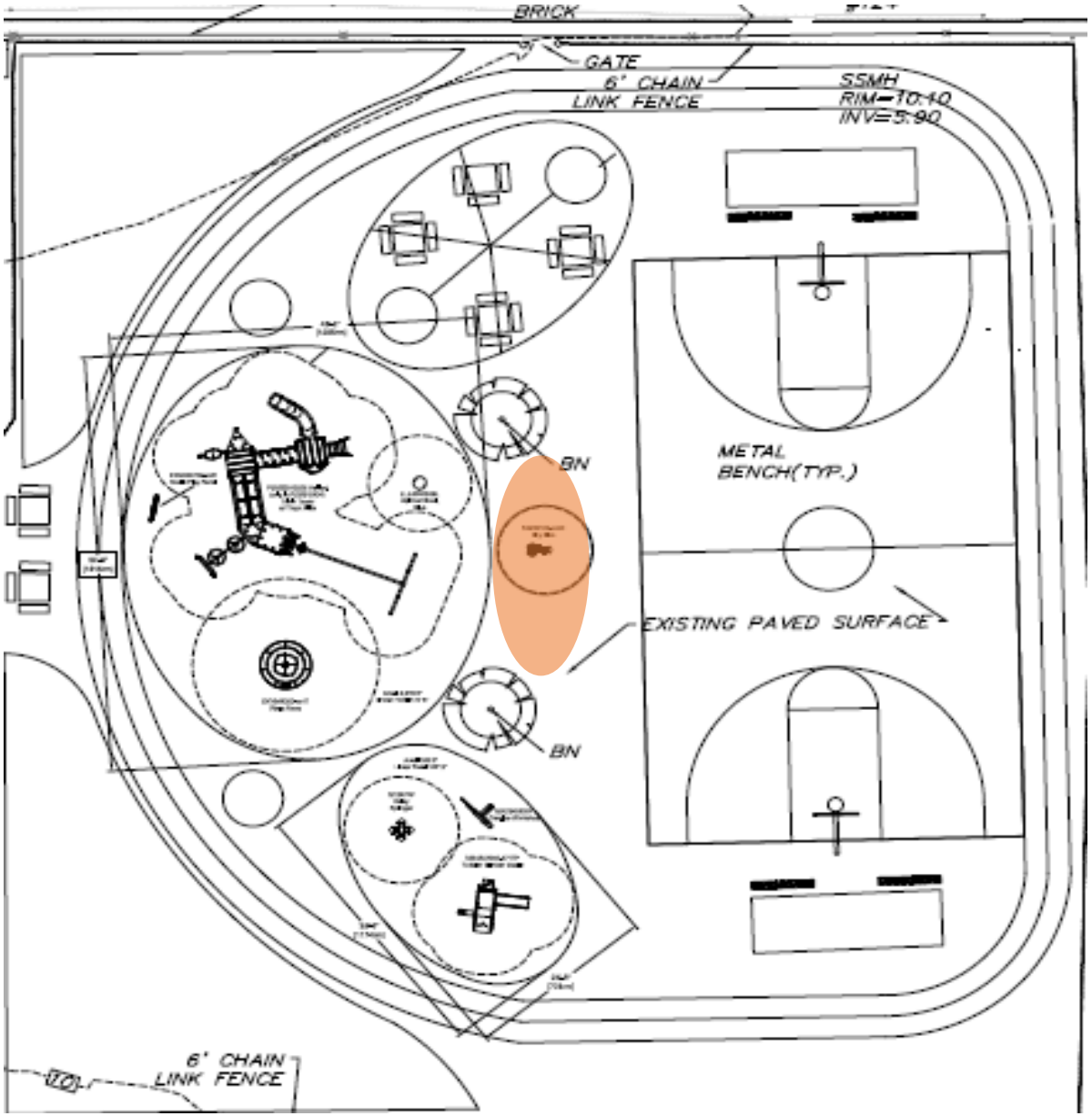

BRICK
GATE
6' CHAIN
LINK FENCE
SSMH
RIM=10.40
INV=5.90
BN
METAL
BENCH(TYP.)
EXISTING PAVED SURFACE
BN
6' CHAIN
LINK FENCE

2-5 Play Area

Mega Tower, Springer

Lime Green
Dark Blue




BRICK
GATE
6' CHAIN
LINK FENCE
SSMH
RIM=10.10
INV=5.90
BN
METAL
BENCH(TYP.)
EXISTING PAVED SURFACE
BN
6' CHAIN
LINK FENCE

Fitness Zone@

3 City Bikes

2 Cross Trainers

- Durable Construction
- Smartphone mounting
- Free Health Tracking App
- Feedback & Data for users
- Bluetooth

Phase 1 Construction Schedule

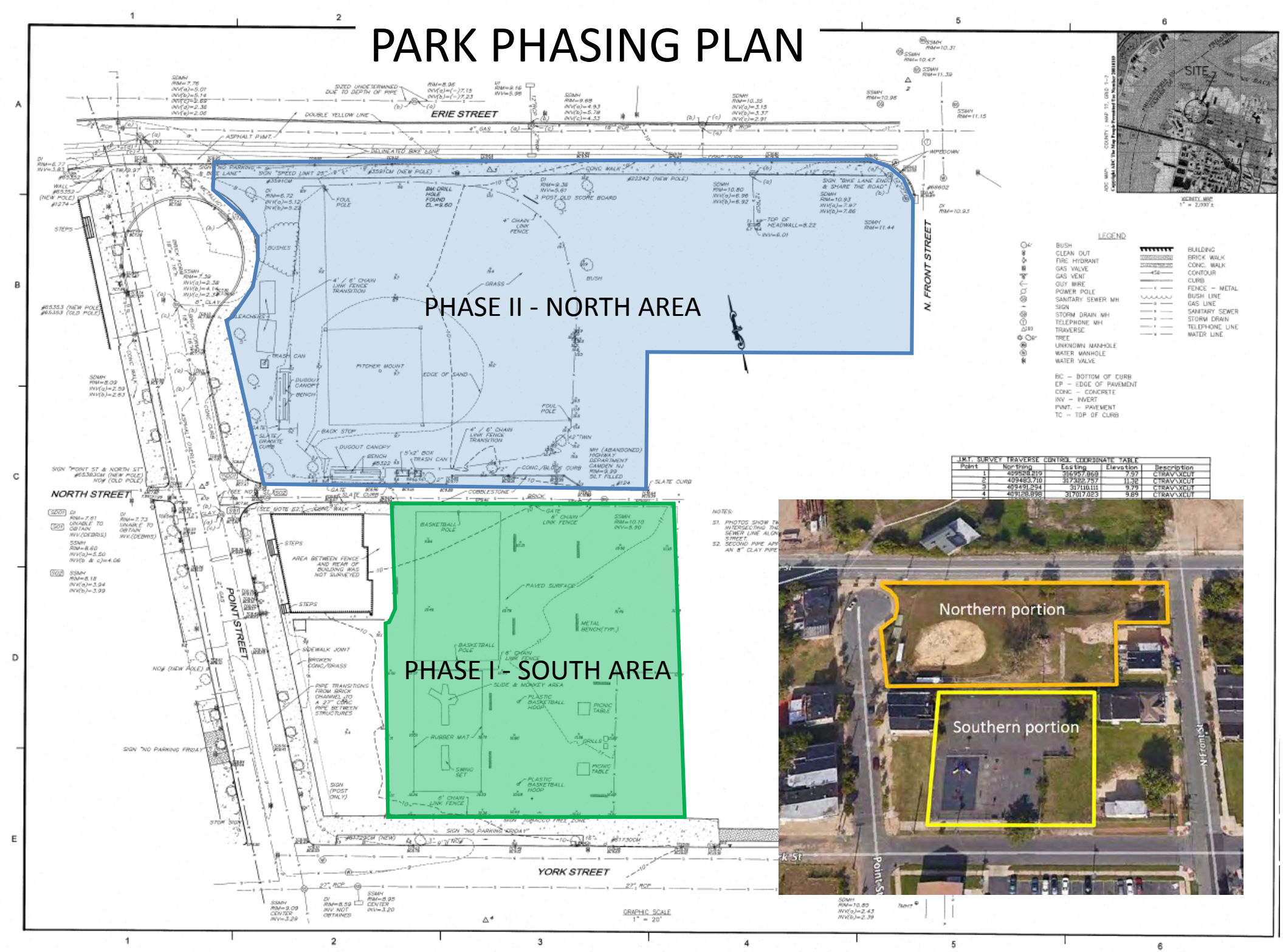
OPTION 1

- Mobilize in late November
- Construction lasts through April/May
- Disruption for 5+ months

OPTION 2

- Mobilize in February
- Construction lasts through April/May
- Disruption for 3+ months

PARK PHASING PLAN



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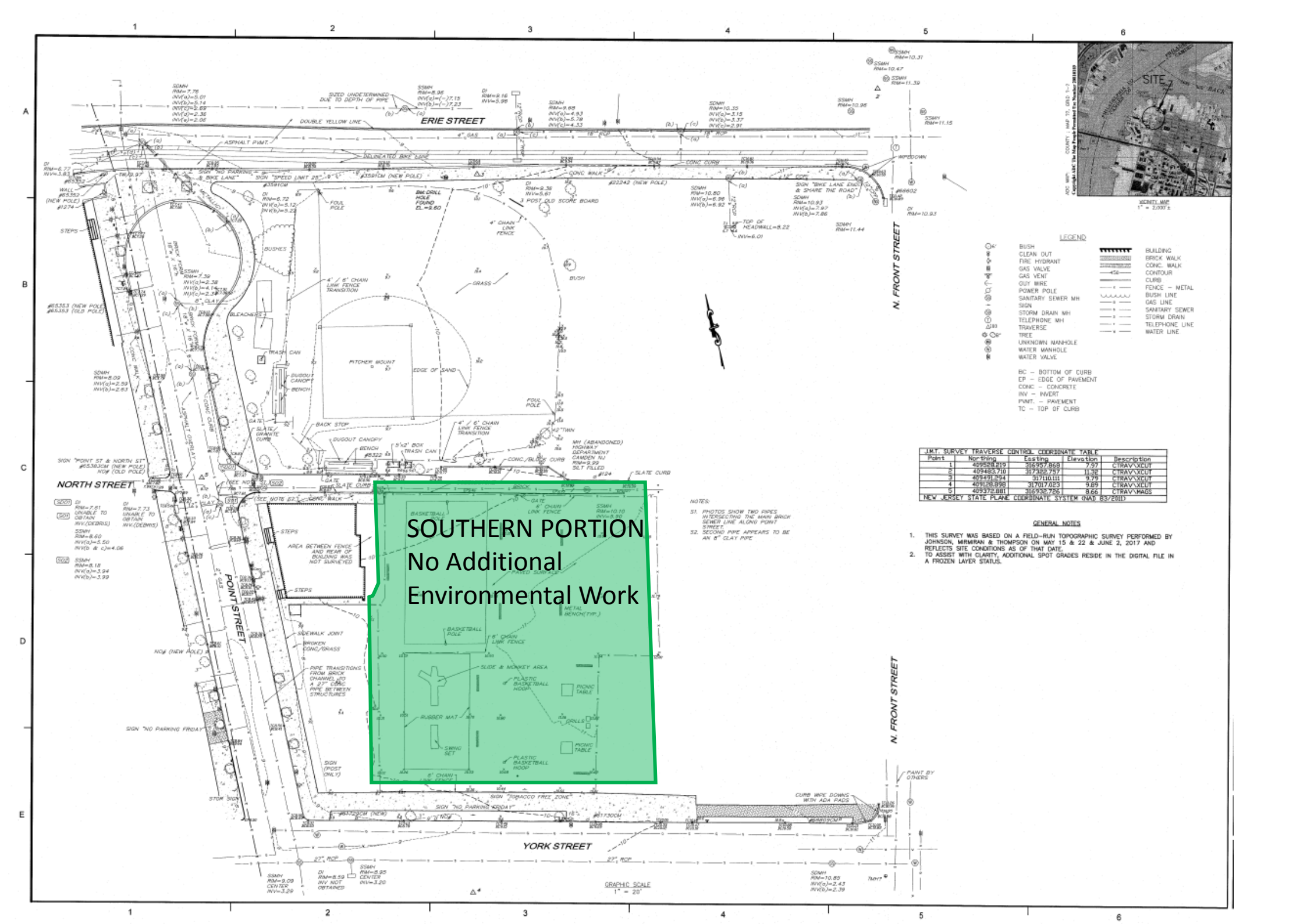

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3	409491.294	317110.111	9.76	CTRAV\XCUT
4	409128.898	317017.023	9.89	CTRAV\XCUT
5	409372.881	316935.786	8.66	CTRAV\MAGS
NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83/2011)				

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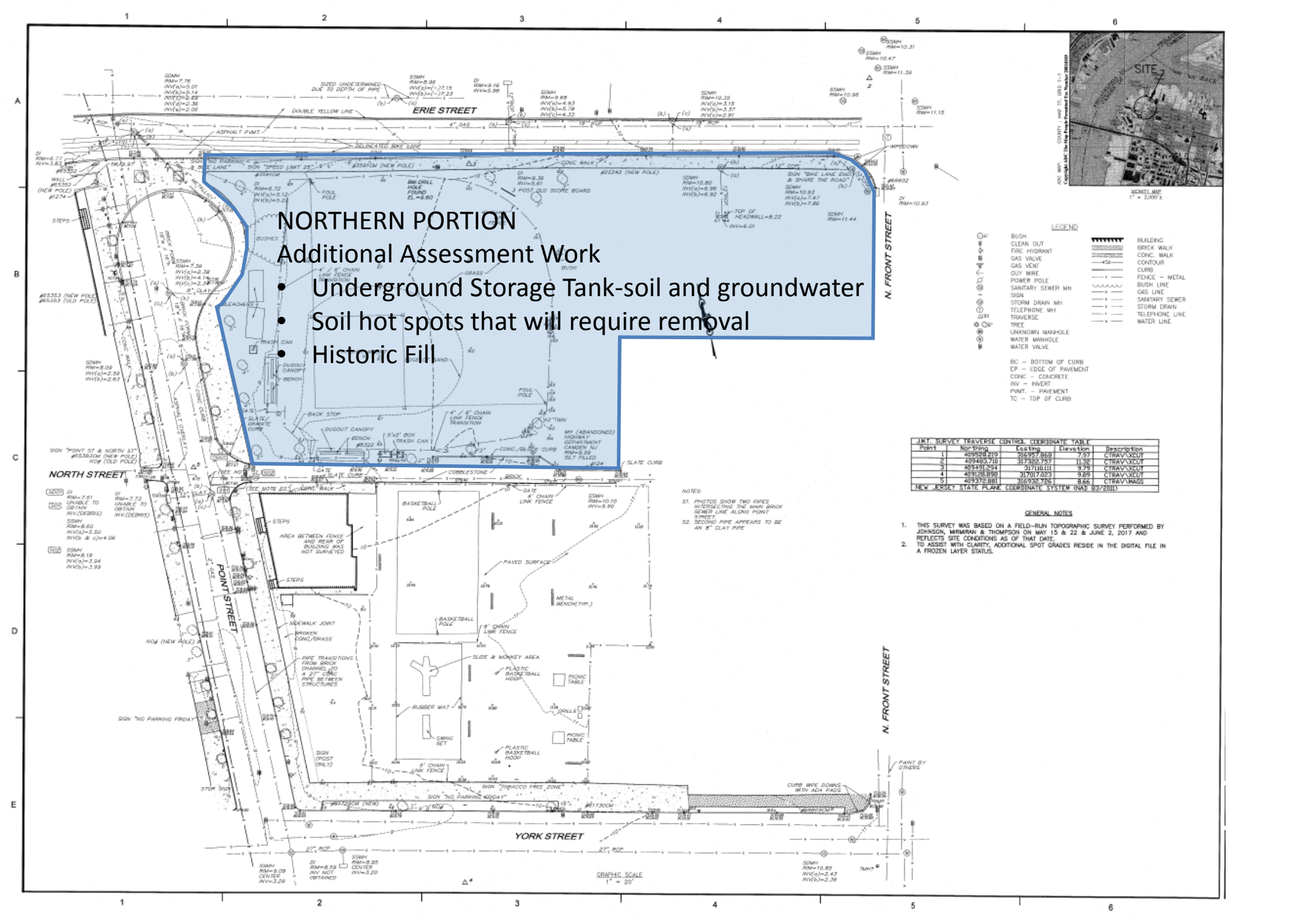

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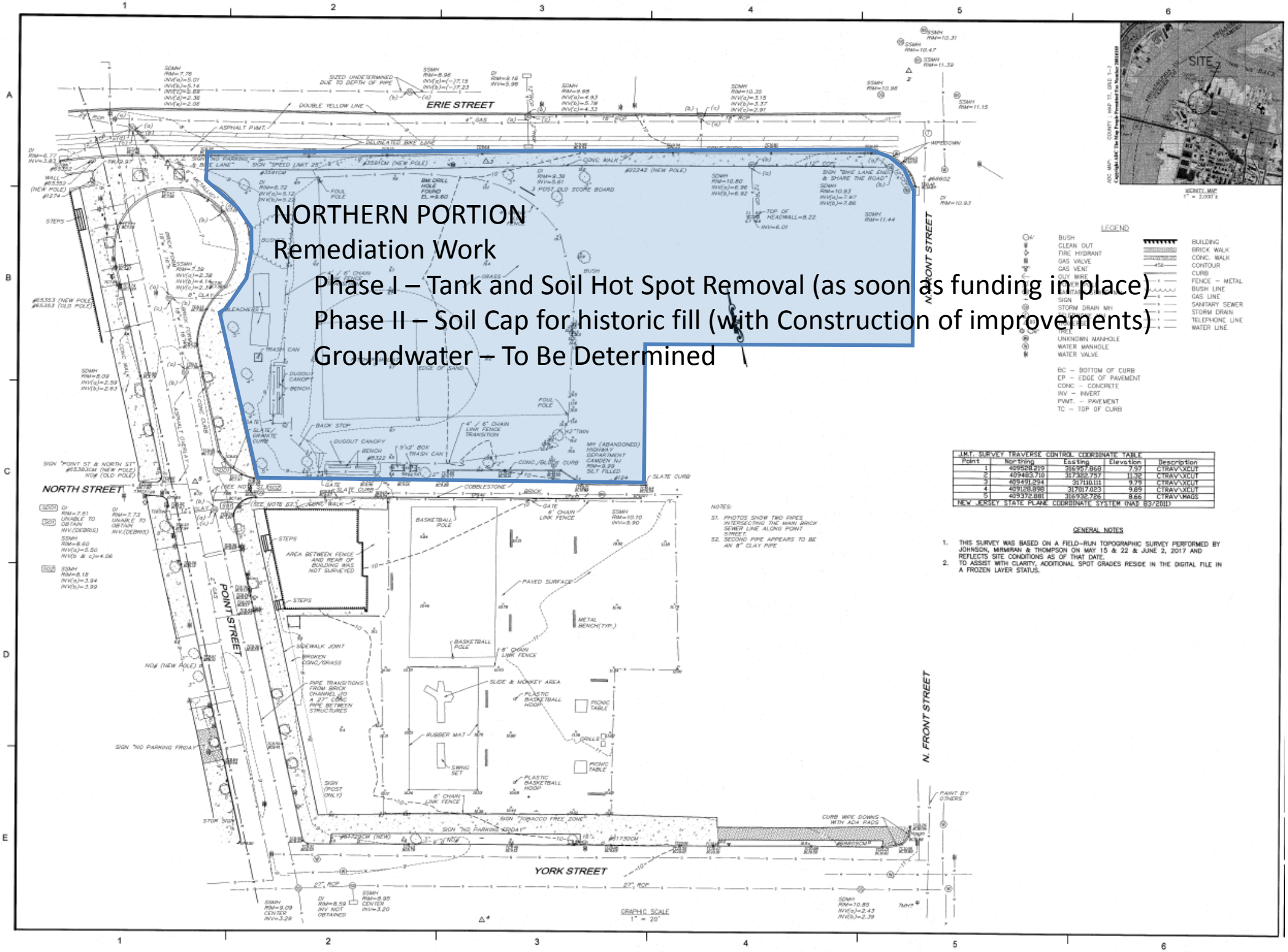

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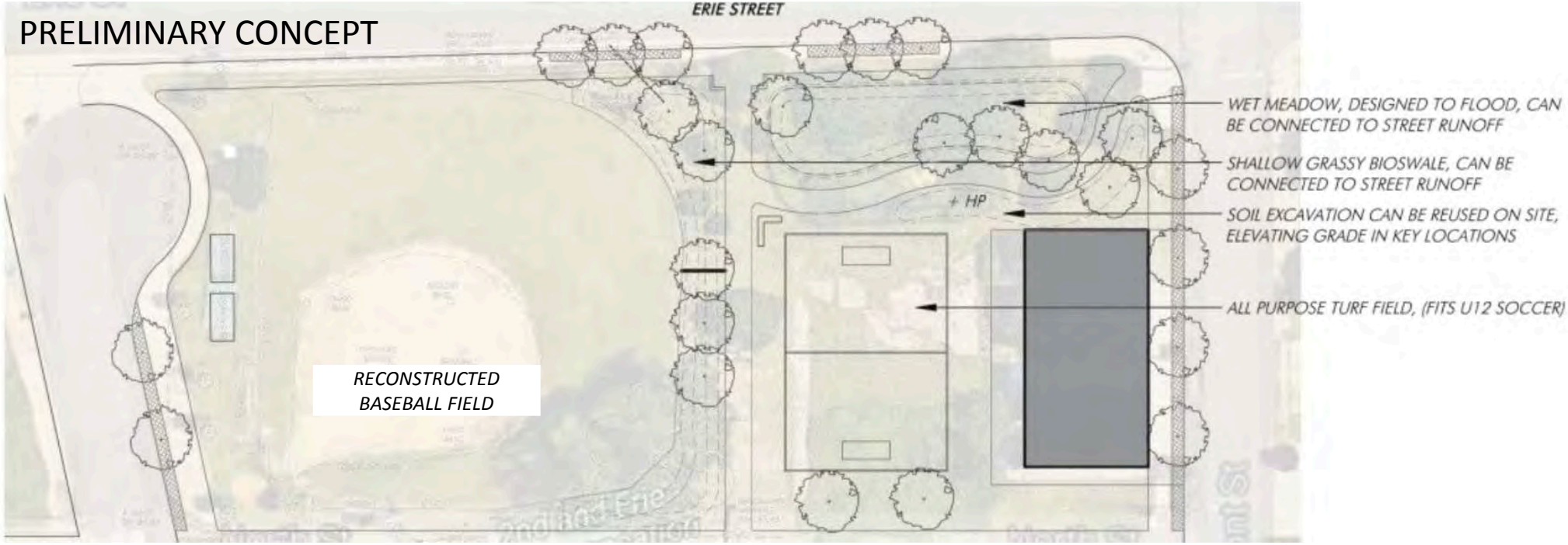
5	409372.881	316923.726	8.66	CTRAV\MAGS

NEW JERSEY STATE PLANE COORDINATE SYSTEM (NAD 83'2011)

Phase II- North Park Area- Update



Q + A


THE
TRUST
FOR
PUBLIC
LAND

Cooper's Ferry
Partnership


camden county

CAMDEN COUNTY

Camden
Redevelopment
Agency