445 Hutchinson Ave, Suite 820
Columbus, Ohio 43235
tel: 614 847-8340
fax: 614 847-1699

November 17, 2020

Ohio EPA, Division of Surface Water,
Attn: 401/IWP/Mitigation Section Manager
P.O. Box 1049, Columbus, OH 43216-1049

Subject: City of Columbus, Ohio Linview Park Project –General Isolated Wetland Permit Application

Dear Ohio EPA, Division of Surface Water:

On behalf of the City of Columbus, Ohio (OH), CDM Smith Inc. (CDM Smith) is pleased to submit this Isolated Wetland Permit Application associated with proposed impacts to one isolated 0.25-acre forested wetland (PFO1C). This isolated wetland is located in the North Linden neighborhood of Columbus, Ohio within a 6-acre undeveloped forested woodlot surrounded by dense urban residential development. The lot is bounded by Fern Place to the north, Berrell Avenue to the east, Denune Avenue to the south, and Fern Avenue to the west. The proposed isolated wetland impacts are necessary to improve stormwater management in this area while simultaneously allowing for the construction of the future Linview Park to promote public use and recreation.

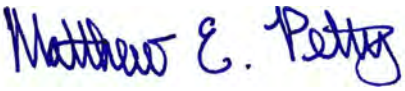
Wetlands were delineated on April 24, 2020, by CDM Smith wetland scientists within a six-acre area of investigation, including roughly five acres of the proposed park footprint and an adjacent buffer. Wetlands were delineated in conformance with the *2010 Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region* (Version 2.0) and were assessed via the *2001 Ohio Rapid Assessment Method for Wetlands* (Version 5.0). The proposed project site largely contains early successional deciduous forests occupying deep depressions and elevated terraces/mounds surrounded by maintained residential properties. The site has a history of disturbance, as evidenced by documented past land uses, historical fill and recent dumping of household trash and debris.

One aquatic resource, a 0.25-acre forested wetland (PFO1C), was identified within the project area in a deep depression in the center of the proposed park footprint. CDM Smith wetland scientists determined the wetland to be isolated as no connection or significant nexus to another waterbody was observed. These findings were documented in a wetland delineation report and submitted to the USACE in order to receive an approved jurisdictional determination . On June 30, 2020, the USACE returned the Approved Jurisdictional Determination agreeing with the assessment made by CDM Smith that the area of investigation contained 0.25-acre of one (1) wetland excluded per 328.3 (b)(1). Therefore, Wetland 1 is not considered a jurisdictional water of the United States. Further, the USACE recommended contacting the Ohio Environmental Protection Agency, Division of Surface Water to determine state permit requirements, if impacts are to occur.

As detailed in the Mitigation Plan (presented in Appendix E of this application package), of the 0.25-acre isolated forested (PF01C) wetland, it is anticipated that 0.22-acres of the wetland will be temporarily disturbed and 0.02-acres will be permanently disturbed as a result of the proposed project. Proposed impacts largely consist of dredge and fill needed to modify the wetland depression for adequate stormwater management and incorporation of public recreational amenities (e.g., walking paths) associated with park creation. Working with the project design team, CDM Smith wetland scientists were able to avoid or minimize many of the proposed impacts and incorporate wetland preservation, enhancement and creation into the park designs. In order to offset these disturbances, the design plan proposes preserving 0.01-acres of wetland habitat, creating 0.59-acres of new wetland habitat, and enhancing 0.22-acres of existing wetland habitat through the establishment of high-quality wetland plant species, which will include seeding and planting what is currently a highly degraded, sparsely vegetated concave surface with native species adapted to local growing condition.

Please take a moment to review the attached permit application, and do not hesitate to contact me at (614) 847-6829 if you need any additional information.

Very truly yours,



Matthew E. Petty, PWS, PMP
Senior Wetland Scientist
CDM Smith, Inc.

cc: Nick Domenick (City of Columbus)
Erin Stachler (CDM Smith)
File

Attachments

Appendix A: Application Form
Appendix B: United States Army Corps of Engineers Jurisdictional Determination
Appendix C: Wetland Delineation Report (Including Site Photographs and ORAM Form)
Appendix D: Description and Mapping of Isolated Wetland
Appendix E: Proposed Mitigation Plan

Appendix A

Application Form

General Isolated Wetland Permit Application (Level One)

(For impacts of ½ acre or less to Category 1 & 2 isolated wetlands)

Division of Surface Water 401/Stormwater Section

Section 1: Applicant and Agent Information		
	Applicant:	**Agent:**
Company/ Agency Name:	City of Columbus, Ohio	CDM Smith
Name of Contact:	Nicholas Domenick, P.E.	Matthew Petty, PWS
Title:	Project Manager	Senior Wetland Scientist
Technical Point of Contact:	Nicholas Domenick, P.E.	Matthew Petty
Address:	1250 Fairwood Avenue, Room 1021	445 Hutchinson Ave, Suite 820
City, State, Zip:	Columbus, OH 43206	Columbus, OH 43235
Phone Number(s):	614-645-4693	614-847-6829
Email Address:	NJDomenick@Columbus.gov	PettyME@cdmsmith.com

Section 2: Project Information

Project Name: City of Columbus, Ohio Linview Park Project

Has Pre-App. Coordination occurred? ☐ **YES** ☒ **NO** **Indicate the 401 reviewer:** Choose an item. **DATE:** Click here to enter a date.

Brief Project Description/Purpose: The project will involve the construction of a stormwater bioretention basin and a public park on the properties located within the 6-acre forested boundary described in greater detail below. The project plan proposes temporarily impacting 0.22-acres and permanently impacting 0.02-acres of the 0.25-acre isolated wetland identified within the project boundaries. All impacts will be offset with wetland enhancement (0.22-acres), preservation (0.01-acres), and the creation of new wetland habitat (0.59-acres)

Construction Timeframe (Provide ~start and end dates): October 2021 December 2022

Is any portion of the activity complete now? ☐ **YES** ☒ **NO** **Is this an "After-The-Fact" permit application?** ☐ **YES** ☒ **NO**

Coordinates (degree, minutes, seconds): 40°1' 23.5596" **N -** 82° 57' 24.8538" **W**

Project Address: **Street:** 6-acre forested land bounded by Fern Place to the north, Berrell Avenue to the east, and Denune Avenue to the south, and Fern Avenue to the west **City or Town:** Columbus

Zip Code: 43211 **Township:** **County:** Franklin

12 Digit HUC No.: 050600011602	**Watershed Name:** Bliss Run-Alum Creek-Big Walnut Creek	**Corps District:** Huntington

Other water related permits issued or required include:

- ☐ **Individual 404 Permit** – Public Notice #
- ☐ **Individual 401 WQC -** Choose an item. Click here to enter a date.
- ☐ **Nationwide Permit #** Choose an item. Choose an item. Click here to enter a date.
- ☐ **Section 9 Permit** -
- ☐ **Section 10 Permit** - Choose an item. Click here to enter a date.
- ☐ **NPDES Permit** – Choose an item. Choose an item. Click here to enter a date.
- ☐ **Oil & Gas Storm Water General Permit** - Choose an item. Click here to enter a date.
- ☐ **Permit to Install** – Choose an item. **:** Click here to enter a date.
- ☐ **ODNR** Choose an item. **Permit** - Choose an item. Click here to enter a date.
- ☐ **ODNR Coastal Permit** - Choose an item. Click here to enter a date.
- ☐ **Regional Permit -** Choose an item. Click here to enter a date.

Are there other aquatic resources on the project site (check all that apply)?

☐ Perennial Streams ☐ Intermittent Streams ☐ Ephemeral Streams ☐ Non-isolated Wetlands ☐ Lakes/Ponds

I have included the following in this submittal:

☒ Maps showing the project footprint & wetlands ☒ Wetland delineation ☒ Wetland categorization (including 10-page ORAM sheets)

☒ Check for applicable fees ☒ Site photographs ☒ Corps approved jurisdictional determination

☒ Mitigation proposal (including mitigation bank credits or in-lieu fee documentation if appropriate)

Section 3: Proposed Impacts

Wetland ID	ORAM Score	Category	Cat. Verified by Ohio EPA?	Ohio EPA Reviewer who Verified	Size (Acres)			Proposed Impacts (Acres)		
					Total	Forest	Non	Forest	Non	Total
Wetland 1	33.00	2	☐	Choose an item.	0.25	0.25		0.24		0.24
		1	☐	Choose an item.						
		1	☐	Choose an item.						
		1	☐	Choose an item.						
		1	☐	Choose an item.						
Wetland Acreage Totals					0.25	0.25	0.00	0.24	0.00	0.24
Totals – Category 1 Wetlands										
Totals – Category 2 Wetlands					0.25	0.25		0.24		0.24
Totals – Category 3 Wetlands										

Section 4: Proposed Wetland Mitigation (Check All That Apply)

☐ **Wetland Mitigation Bank** **Number of Forested Wetland Credits:** **Number of Non-Forested Wetland Credits:**

Wetland Mitigation Bank Name : Choose an item. **Proof of Reservation?** ☐

☒ **On-Site Permittee-Responsible Mitigation**

☒ **Restoration/Creation** Choose an item. **0.59 Acres** ☒ **Enhancement** Choose an item. **0.22 Acres**

☒ **Preservation** Choose an item. **0.01 Acres** ☐ **Other** **Acres**

☐ **Off-Site Permittee-Responsible Mitigation**

☐ **Restoration/Creation** Choose an item. **Acres** ☐ **Enhancement** Choose an item. **Acres**

☐ **Preservation** Choose an item. **Acres** ☐ **Other** **Acres**

☐ **In-Lieu Fee Program** **Number of Wetland Credits:**

ILF Sponsor: Choose an item. **Proof of Reservation?** ☐

Section 5: Fees

Are you exempt from fees? ☒ **YES** ☐ **NO** **(If YES, leave fee section blank)**

Application Fee = $ 200.00

Review Fee

Wetland Acres Impacted x $500 = $ 0

Total Fees ($200 Application Fee + Total Review Fees) due at the time of application submittal = $ 200

Standard Applicant - Is the fee cap ($5,000) exceeded? ☐ YES ☐ NO (If YES, maximum fees are $5,200)

Is this an After the Fact (ATF) application? ☐ YES ☐ NO (If YES, double the fees. Maximum fees of $10,000)

PLEASE MAKE FEE CHECK PAYABLE TO: "TREASURER, STATE OF OHIO"

Section 6: Applicant and Agent Signature			
I hereby designate and authorize the agent/consultant identified in Section 1 to act on my behalf in the processing of this permit application, and to furnish, upon request, supplemental information in support of the application:			
Applicant Name	*Rob Priestas, P.E.*	**Applicant Signature**	
Application is hereby made for a General Isolated Wetland Permit. I certify that the information provided on this form and all attachments related to this project are true and accurate to the best of my knowledge:			
Applicant Name	*Rob Priestas, P.E.*	**Applicant Signature**	
Agent Name	*Matthew Petty*	**Agent Signature**	Matthew E. Petty

Please submit the completed application package and fees to:
Ohio EPA, Division of Surface Water, Attn: 401/IWP/Mitigation Section Manager
P.O. Box 1049, Columbus, OH 43216-1049

Appendix B

United States Army Corps of Engineers Jurisdictional Determination

DEPARTMENT OF THE ARMY
HUNTINGTON DISTRICT, CORPS OF ENGINEERS
502 EIGHTH STREET
HUNTINGTON, WEST VIRGINIA 25701-2070

REPLY TO ATTENTION OF

June 30, 2020

Regulatory Division
North Branch
LRH-2020-456-SCR

APPROVED JURISDICTIONAL DETERMINATION

Mr. Nick Domenick
City of Columbus
1250 Fairwood Avenue, Room 1021
Columbus, Ohio 43206

Dear Mr. Domenick:

I refer to the report titled *Linview Park Improvements Request for Approved Jurisdictinal Determination Report,* dated June 3, 2020 and submitted on your behalf by CDM Smith, Inc. You have requested an approved JD for the aquatic resources located on the approximate 6-acre site. The property is located south of Fern Avenue, west of Berrell Avenue, north of Denune Avenue in Franklin County, Ohio (40.02321, -82.95690). Your JD request has been assigned the following file number: LRH-2020-456-SCR. Please reference this number on all future correspondence related to this JD request.

The United States Army Corps of Engineers' (Corps) authority to regulate waters of the United States is based on the definitions and limits of jurisdiction contained in 33 CFR 328, including the amendments to 33 FFR 328.3 (85 Federal Register 22250), and 33 CFR 329. Section 404 of the Clean Water Act (Section 404) requires a Department of the Army (DA) permit be obtained prior to discharging dredged and/or fill material into waters of the United States, including wetlands. Section 10 of the Rivers and Harbors Act of 1899 (Section 10) requires a DA permit be obtained for any work in, on, over or under a navigable water.

The Navigable Waters Protection Rule, which became effective on June 22, 2020, was followed in this verification of Section 404 jurisdiction for the features located within the AJD boundary. Based upon a review of the submitted report and additional information available to us, this office has determined the approved JD boundary contains 0.25 acre of one (1) wetland excluded per 328.3 (b)(1). Therefore, Wetland 1 is not considered a jurisdictional water of the United States. However, you should contact the Ohio Environmental Protection Agency, Division of Surface Water, at (614) 664-2001 to determine state permit requirements.

This jurisdictional verification is valid for a period of five (5) years from the date of this letter unless new information warrants revision of the delineation prior to the expiration date. This letter contains an approved JD for the subject site within the approved JD boundary. If you

object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the Great Lakes and Ohio River Division Office at the following address:

Appeal Review Officer
United States Army Corps of Engineers
Great Lakes and Ohio River Division
550 Main Street, Room 10524
Cincinnati, Ohio 45202-3222
Phone: (513) 684-2699
Fax: (513) 684-2460

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by. It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This determination has been conducted to identify the limits of the Corps' Section 404 jurisdiction for the particular site identified in this request. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are United States Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

A copy of this letter will be provided to the Ohio Environmental Protection Agency at Lazarus Government Building, Post Office Box 1049 Columbus, Ohio 43216-3669 and your agent, Mr. Nicholas Revetta with CDM Smith Inc. If you have any questions concerning the above, please contact Cecil Cox of the North Branch at 304-399-5274, by mail at the above address, or by email at cecil.m.cox@usace.army.mil.

Sincerely,

Laurie Moore

Laurie A. Moore
Regulatory Project Manager
North Branch

Encls
cc:
Nicholas Revetta (via email)

Appendix C

Wetland Delineation Report
(Including Site Photographs and ORAM Form)

Memorandum

To: *Nick Domenick, P.E. (City of Columbus)*

From: *Matt Petty, P.W.S., CDM Smith*
Nick Revetta, CDM Smith

Date: *May 21, 2020*

Subject: *Wetland Delineation Report, Linview Park, Columbus, Ohio*

1.0 Introduction

CDM Smith Professional Wetland Scientist (PWS), Matt Petty and Environmental Scientist, Nick Revetta, performed a wetland delineation and conducted a Phase I Indiana Bat/Northern Long-eared Bat Habitat Assessment throughout the 6-acre forested area bounded by Fern Avenue to the north, Berrell Avenue to the east, Denune Avenue to the south and Fern Avenue to the west (City of Columbus and Charles Edward Jr parcels) on April 24, 2020, for the purposes of guiding the permitting process prior to the proposed construction of a stormwater bioretention basin and a public park on these properties.

Wetlands were delineated in conformance with the *1987 Corps of Engineers Wetlands Delineation Manual* and the *2010 Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region* (Version 2.0) (USACE 1987, USACE 2010) and were assessed via the *2001 Ohio Rapid Assessment Method for Wetlands* (Version 5.0) (ORAM 2001). Potential suitable summer roosting habitat for listed bats was identified following the *2019 U.S. Fish and Wildlife Service Range-Wide Indiana Bat Survey Guidelines*.

2.0 Site Conditions

2.1 General Site Description

The project site is located in the Linden area of Franklin County, Columbus, Ohio, as depicted in **Figure 1.** According to the State of Ohio Department of Natural Resources (ODNR) Division of Geological Survey, the project area is located within the Interior Plains Major Division, Central Lowland Province, Till Plains Section, Columbus Lowland Physiographic Region. This physiographic region is characterized by lowland surrounded in all directions by relative uplands, having a broad regional slope toward the Scioto Valley, many larger streams and moderately low relief (ODNR 2020). U.S. Geological Survey (USGS) data, as depicted in **Figure 2**, depicts the forested area of investigation as containing an elevation between 840-850 feet above mean sea level.

The area of investigation is located within a 6-acre, early successional forested area south of Linview Avenue surrounded by urban/residential housing. Continued disturbance within this area is largely limited to illegal dumping of household trash and debris, which occurs throughout the property. The habitat within this 6-acre plot primarily consists of an urban hackberry upland forest containing elevated terraces comprised of small mounds likely resulting from historic disturbance, fill and earth moving. In addition, an isolated 0.25-acre silver maple-dominated forested wetland (PFO1C) containing standing water was observed in an isolated depression near the center of the forested area, as depicted in **Figure 3**. Site photographs are provided in **Appendix A**,

2.2 Site Hydrology

Hydrologic conditions, along with vegetation and soil characteristics identified during the site investigation, were used to delineate wetland areas. Twenty-four hours prior to the field delineation, a total of 0.10-in of precipitation fell which is consistent with the historic average of 0.11-in rainfall per day for this area. While significant rain events have the potential to inundate wetland and upland areas alike, the delineation was conducted during normal hydrologic conditions.

According to the Federal Emergency Management (FEMA) Flood Map Service Center, the project area is located within an Area of Minimal Flood Hazard (Zone X, 390170) (FEMA 2020). National Wetland Inventory (NWI) and USGS data do not identify any potential streams or wetlands within, or adjacent to, the project area.

As previously mentioned, and discussed in detail below in Section 2.4, one isolated 0.25-acre silver maple dominated forested wetland (PFO1C) containing standing water was observed within the project area. The water regime is best classified as seasonally flooded with surface water present for extended periods, especially early in the growing season, but is absent by the end of the growing season in most years. The dry season water table is variable ranging from being saturated to the surface to well below ground surface. This is consistent with previous surveys of the site in which surface waters are absent within wetland areas in late summer.

The forested wetland is located in an isolated depression. No connections to other waterways were identified and no water was observed discharging into or out of the wetland. No surface water inputs were observed discharging into the wetland from point sources (i.e. pipes, drains, streams, etc.) and no outlets from which water may exit the wetland were observed. It is likely that the surrounding urban neighborhood (consisting extensively of impervious surfaces) drains stormwater to this wetland, resulting in the observed inundation during times of consistent or heavy rain. That water then ponds to depths of greater than 24-inches and remains inundated for a prolonged period. In addition to standing surface water likely resulting from recent precipitation, additional primary and secondary wetland hydrologic indicators were observed within the delineated wetland area including the following: high water table, saturation, water marks, sparsely vegetated concave surface, water stained leaves, hydrogen sulfide odor and stunted or stressed plants.

2.3 Site Soils

Natural Resource Conservation Service (NRCS) soil mapping indicates that the area of investigation consists of BfA - Bennington-Urban land complex, 0 to 2 percent slopes, in its entirety (USDA-NRCS 2020). The report generated from the USDA NRCS Web Soil Survey detailing this information is located in **Appendix B**. These findings are common among developed urban areas. The surrounding urban neighborhood consists of pavement, concrete, buildings and other structures over disturbed and natural soil material, which are unlikely to support wetland habitats. Soil characteristics of the NRCS-mapped Bennington-Urban land complex, 0 to 2 percent slopes, soil type is summarized below in **Table 1**.

Table 1: NRCS Soil Survey Mapping Units and Component Soil Characteristics

Map Unit	Component and Percent	Drainage	Depth to Water Table (inches)	Flooding/ Ponding	Hydrologic Soil Group	Hydric
Bennington-Urban Land Complex, 0-2 percent slopes (BfA)	Bennington and similar soils 50%	Somewhat Poorly Drained	6-12	None/None	C/D	No
	Urban land (pavement, concrete, buildings and other structures underlain by disturbed and natural soil material 35%	N/A	N/A	N/A	N/A	N/A
	Aeric epiaquents, till substratum 9%	N/A	N/A	N/A	N/A	No
	Typic endoaquents, till substratum 6%	N/A	N/A	N/A	N/A	Yes

Source: Natural Resources Conservation Service, United States Department of Agriculture, Custom Soil Resource Report for Franklin County, OH; May 12, 2020.

Bennington and similar soils are the predominant soil type and consists of somewhat poorly drained and non-hydric silt loams, silty clay loams and clay loams associated with hillslopes, end moraines and ground moraines. These soils infrequently flood or pond but do typically support a high water table within one foot of the ground surface. Minor components within the till substratum of the urban soils include non-hydric aeric epiaquents typically found on hillslopes and moraines and hydric typic endoaquents typically found in concave areas at the toe of slopes. This mapping is consistent with historical urban disturbances of the property as a residential area and current observations of current land uses and soil observations.

Soils were examined at numerous locations during the site investigation in order to perform the wetland delineation and soil plugs were taken at various locations to ascertain the wetland-upland boundary based on the presence or absence of hydric soils. Detailed soil characteristics were documented at two wetland and two associated upland determination plot locations; the detailed soil profiles of which are provided on the determination plot data forms located in **Appendix C**. The wetland and upland soils observed are likely disturbed by historical fill placement and earth-moving activities. Hydric soil indicators that were encountered in wetland areas include hydrogen

sulfide (A4), depleted below dark surface (A11), depleted matric (F3), redox dark surface (F6) and redox depressions (F8).

2.4 Wetland Delineation and Wetland Habitat Types

An initial desktop delineation was conducted to identify likely stream and wetland locations within the environmental boundary by evaluating USGS mapping, NWI mapping and NRCS soils mapping. Within the area of investigation, NWI and USGS mapping did not identify any stream or wetland habitats as being present within the proposed project boundary.

Despite being a useful preliminary site evaluation tool, desktop delineations often significantly underestimate the total number/extent of streams and wetlands actually present or incorrectly characterize the type of wetland(s) present. Therefore, stream and wetland systems within the project area were delineated in the field.

The field delineation occurred on April 24, 2020, at the beginning of the growing season for Columbus, Ohio. Climatic conditions were typical for the season, with weather conditions being sunny with a high temperature of 66°F and a low of 47°F. Frost was not encountered, new growth was exhibited as recently occurring and many herbaceous and woody species were observed leafing out and germinating. The vegetation present was adequate to accurately identify to the species level and appeared generally consistent with the vegetation observed during the initial site reconnaissance that occurred on July 30, 2019.

Despite NWI and USGS mapping not indicating any wetland habitats as being present, the wetland delineation identified one isolated 0.25-acre forested wetland (PFO1C) within the area of investigation. In accordance with USACE Wetland Delineation protocols, the wetland boundary was established by identifying the margins where hydrophytic (wetland) plants, hydric soils and evidence of wetland hydrology were present. The wetland boundary was flagged with surveyor tape and recorded using a survey-grade Trimble GPS unit with sub-meter accuracy. While assessing the boundary, evidence of wetland vegetation and hydrology were visually identified continuously and hydric soils were investigated at least every 20 feet using a soil auger and spade to confirm the presence/absence of hydric soils. Characterization of the full soil profile was investigated at a depth of at least 20 inches (assuming no refusal or collapsed hole due to water/saturation) via digging a soil pit at the locations of the formal wetland and upland determination plots (**Appendix C**). The area of investigation and the delineated wetland boundaries are provided in **Figure 3.** Upon completion of the wetland delineation, the wetland was assessed following ORAM protocols which are reported in **Appendix D**.

The forested wetland identified contains a narrow wetland corridor that connects the larger eastern and western wetland depressions. While connected, these two primary depressions contain slightly different characteristics. Therefore, two formal wetland (and associated upland) determination plots were conducted, as detailed in the Wetland Determination Data Forms located in **Appendix C**.

Wetland Plot 1 was collected within the western portion of the forested wetland. Due to the presence of standing water – at times up to two feet deep – the only vegetation present were woody tree species in the canopy and sapling/shrub strata: eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*) and American elm (*Ulmus americana*). No vegetation was observed within the herb or woody vine strata. Of the four observed species, eastern cottonwood, silver maple and red maple were identified as dominant. The dominance test yielded 100% of dominants FAC or wetter and the prevalence index was 2.6, confirming the presence of hydrophytic vegetation.

The observed vegetation was indicative of a forested wetland habitat and the soil profile at the center of the plot was analyzed to determine the presence/absence of hydric soils. The soil profile from Wetland Plot 1 is provided below:

Depth	Matrix		Redox Features			
(inches)	Color (moist)	%	Color (moist)	%	Texture	Remarks
0 – 3”	10YR 3/1	100%			Silt Loam	High Organic Content
3 – 10”	10YR 3/1	80%	7.5 YR 5/6	20%	Loamy Clay	Small Rock Fragments
10 – 18”	10YR 4/1	60%	10YR 5/8 10 YR 2/1	30% 10%	Clay	MN Nodules Present

The hole where the soils were being collected collapsed before soils from a greater depth could be collected for analysis. The soil profile satisfied the conditions of the following hydric soil indicators: depleted below dark surface (A11), depleted matrix (F3), redox dark surface (F6) and redox depressions (F8).

Primary and secondary indicators of wetland hydrology within Wetland Plot 1 included the following: surface water, high water table, saturation, water marks, sparsely vegetated concave surface, water stained leaves and stunted or stressed plants. Surface water was recorded to a depth of 36”, the water table was encountered to a depth of 8” and saturation was present to the ground surface.

Wetland Plot 2 was completed within the eastern portion of the forested wetland. A second plot was completed due to the vegetation observed in this portion of the wetland consisting of a slightly thinner canopy and a much denser sapling/shrub stratum than the western portion of the forested wetland. In addition to tree species observed in Wetland Plot 1 (i.e., eastern cottonwood, silver maple, red maple and American elm), boxelder (*Acer negundo*) and riverbank grape (*Vitis riparia*) were also present in Wetland Plot 2. Of the species observed, silver maple, American elm and riverbank grape were identified as being dominant. The dominance test yielded 100% of dominants FAC or wetter and the prevalence index was 2.1, confirming the presence of hydrophytic vegetation.

The observed vegetation was indicative of a forested wetland habitat and the soil profile at the center of the plot was analyzed to determine the presence/absence of hydric soils. The soil profile from Wetland Plot 2 is provided below:

Depth (inches)	Matrix		Redox Features		Texture	Remarks
	Color (moist)	%	Color (moist)	%		
0 – 3"	10YR 2/1	100%			Silt Loam	High Organic Content
3 – 6"	10YR 3/1	75%	10YR 5/6	25%	Silty Mucky Loam	Hydrogen Sulfide Odor
6 – 12"	10YR 3/1	60%	10YR 5/6	40%	Silty Clay	
12 –14"	10YR 3/1	60%	10YR 5/6 7.5YR 5/8	20% 20%	Silty Clay	

The hole where the soils were being collected collapsed before soils from a greater depth could be collected for analysis. The soil profile satisfied the conditions of the following hydric soil indicators: hydrogen sulfide (A4), depleted below dark surface (A11), redox dark surface (F6) and redox depressions (F8).

Primary and secondary indicators of wetland hydrology within Wetland Plot 2 included the following: surface water, high water table, saturation, water marks, sparsely vegetated concave surface, water stained leaves, hydrogen sulfide odor, drainage patterns and stunted or stressed plants. Surface water was recorded to a depth of 12"; the water table was encountered to a depth of 8"; and saturation was present to the ground surface.

Upon completion of the delineation, the wetland was assessed following ORAM protocols, as reported in **Appendix D**. Following this protocol, the forested wetland scored 33 points, falling within the Category 1 – Category 2 Gray Zone and ultimately being listed as a Category 2 wetland.

In order to realize the goals of the project and provide sufficient stormwater management that satisfies the needs of the surrounding residential areas, construction of a bioretention basin is planned throughout the majority of the investigated area. Based on the findings described above, efforts should be taken to avoid and minimize impacts to this isolated forested wetland. A jurisdictional determination will be requested from USACE to confirm that the wetland is isolated and falls outside of USACE jurisdiction. If wetland impacts are necessary to complete project activities, additional permitting and mitigation will be required. Assuming the USACE concurs with the determination that the wetland is isolated, permitting and mitigation will fall under the jurisdiction of the Ohio Environmental Protection Agency (OEPA), most likely Level 1 Isolated Wetlands Permitting, with authorization granted under the Isolated Wetlands General Permit for Category 1 and Category 2 wetlands.

3.0 Indiana Bat Habitat Assessment

Potential suitable summer roosting habitats for Indiana and northern long-eared bats were surveyed and identified following the *2019 U.S. Fish and Wildlife Service Range-Wide Indiana Bat*

Survey Guidelines. A total of twelve suitable roosts were identified within the area of investigation, including eleven snags and one live sycamore (*Platanus occidentalis*). **Figure 4** presents the locations of suitable bat roosts and **Appendix E** contains the Phase 1 Summer Bat Habitat Assessment datasheet for the site.

While potential suitable summer roosts for listed bats were identified within the project area, the habitat on-site is not suitable for Indiana bats and northern long-eared bats due to a lack of suitable foraging areas within the project boundary or in the immediate vicinity. In addition, there are no flight corridors to the nearest suitable foraging habitat, Alum Creek Arlington Park, which is located approximately one mile to the east. Despite the absence of suitable summer bat habitat on site, it is recommended that any mature tree clearing occur during the winter clearing window of October 1 to March 31 to be conservative and protective of listed bat species.

Attached Documents:

Figure 1 – USGS Topographic Map
Figure 2 – USGS Contour Map
Figure 3 – Site Map
Figure 4 – Potential Bat Roosts

Appendix A – Site Photographs Log
Appendix B – USDA-NRCS Web Soil Survey Report
Appendix C – USACE Wetland Determination Data Forms
Appendix D – Ohio Rapid Assessment Method (ORAM) Form for Wetland Categorization
Appendix E – Phase 1 Summer Bat Habitat Assessment Datasheet

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FIGURES

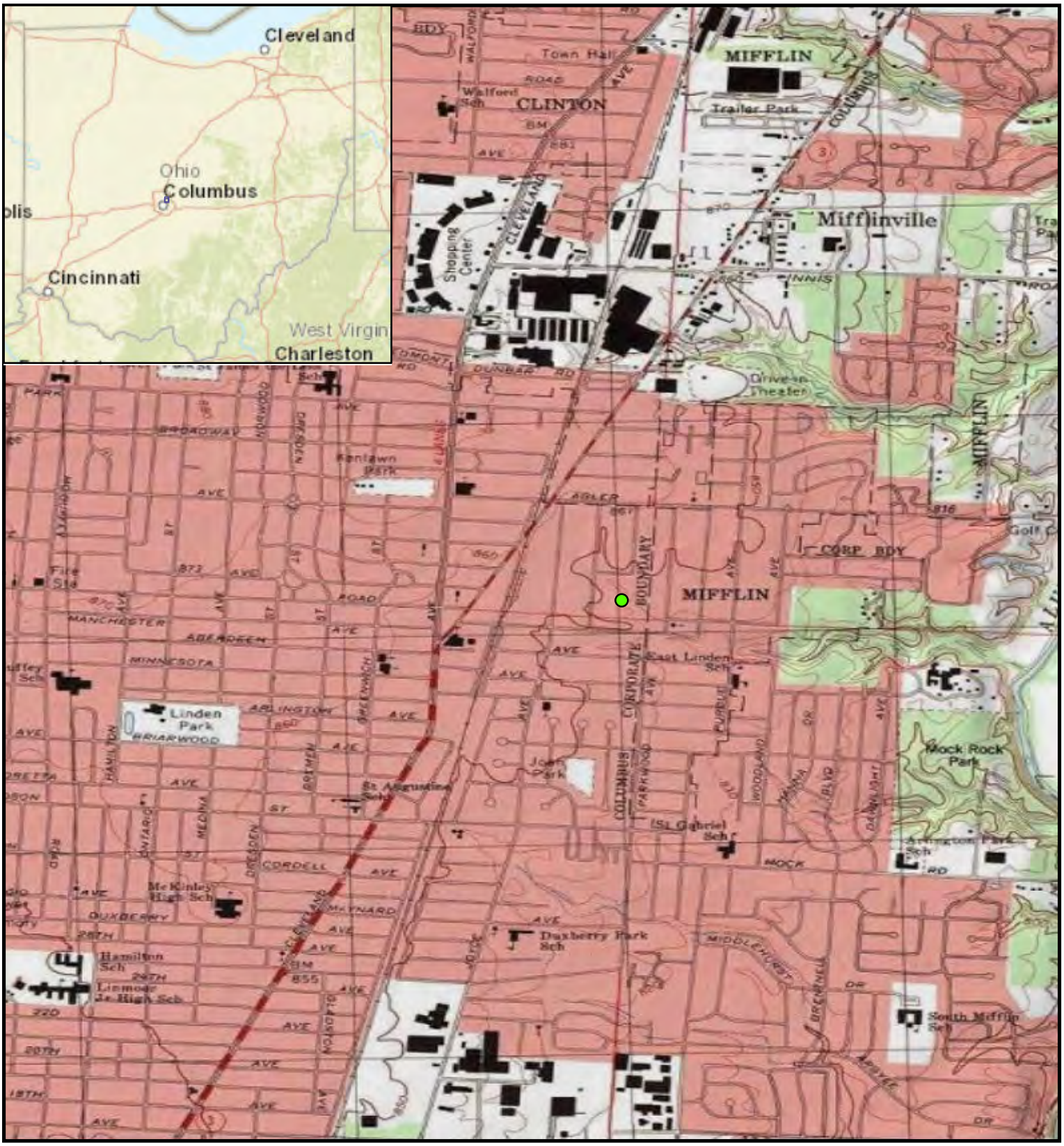


Figure 1. Topographic Map
Linview Park
Linden Area
Columbus, OH

CDM Smith

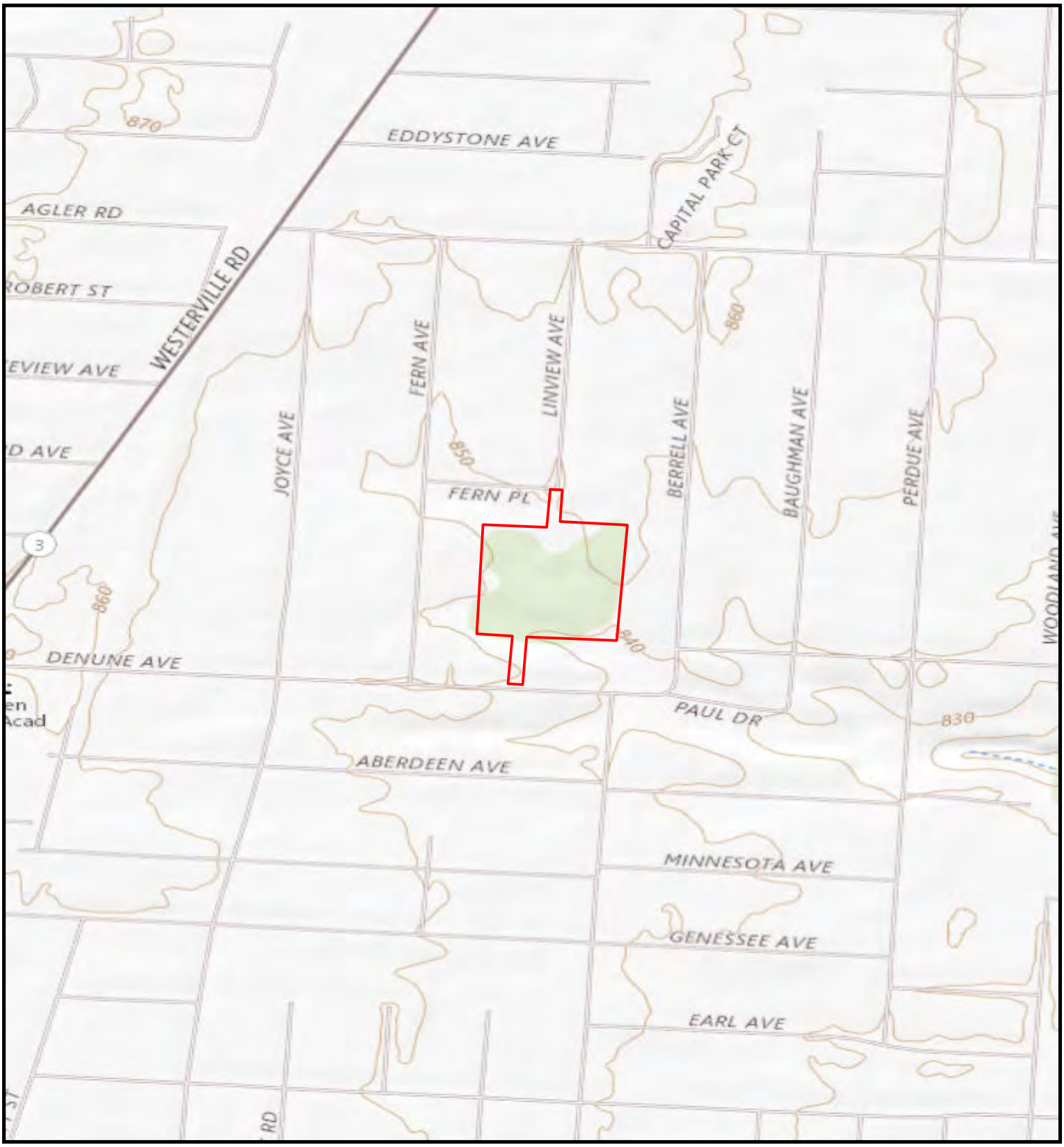


Figure 2. Contour Map
Linview Park
Linden Area
Columbus, OH

N

Area of Investigation

0 0.075 0.15 0.3 Miles

CDM Smith

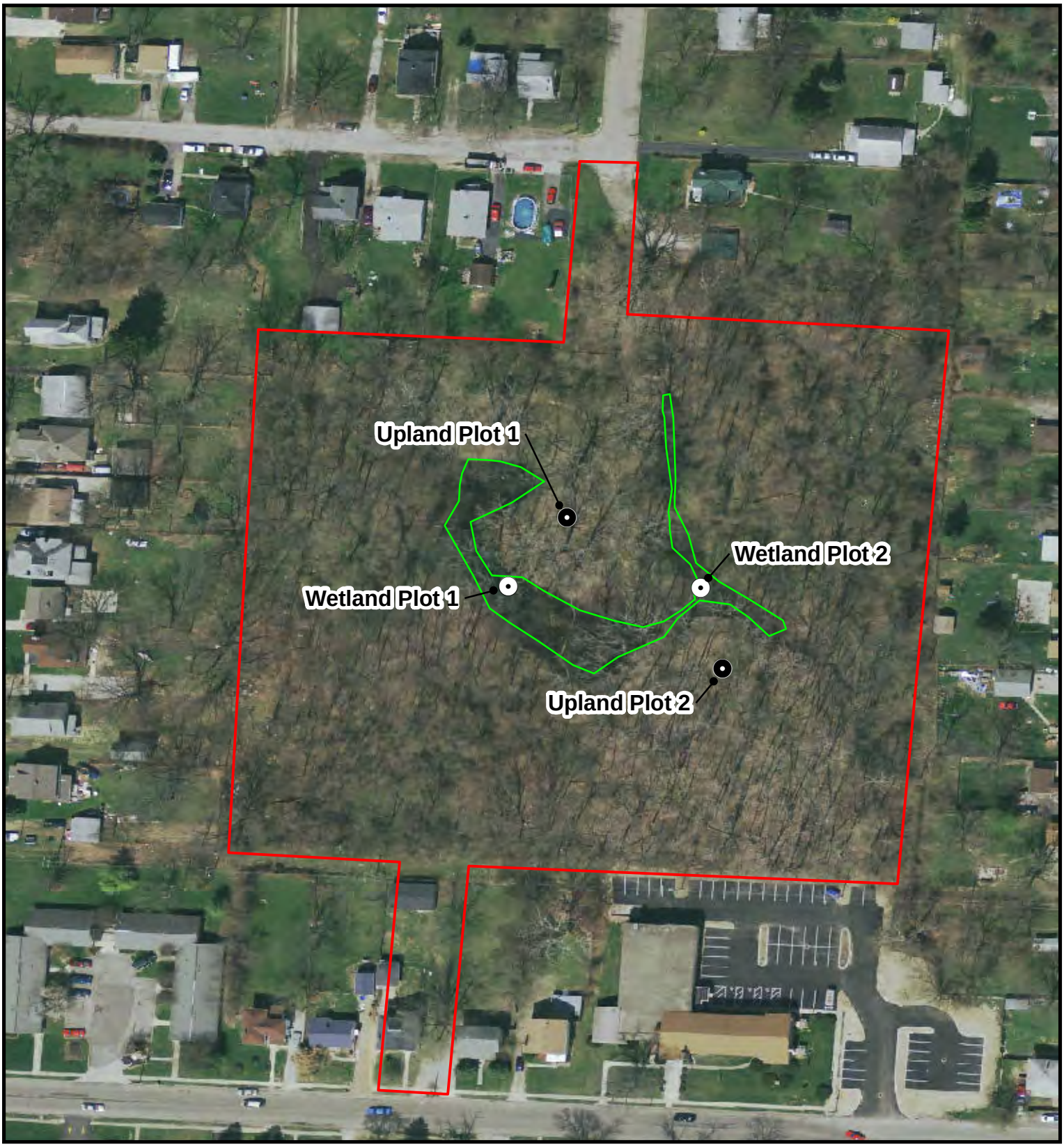


Figure 3. Site Map
Linview Park
Linden Area
Columbus, OH

Legend

- Upland Plots
- Wetland Plots
- Wetland Boundary
- Area of Investigation

0 0.0125 0.025 0.05 Miles

N

CDM Smith

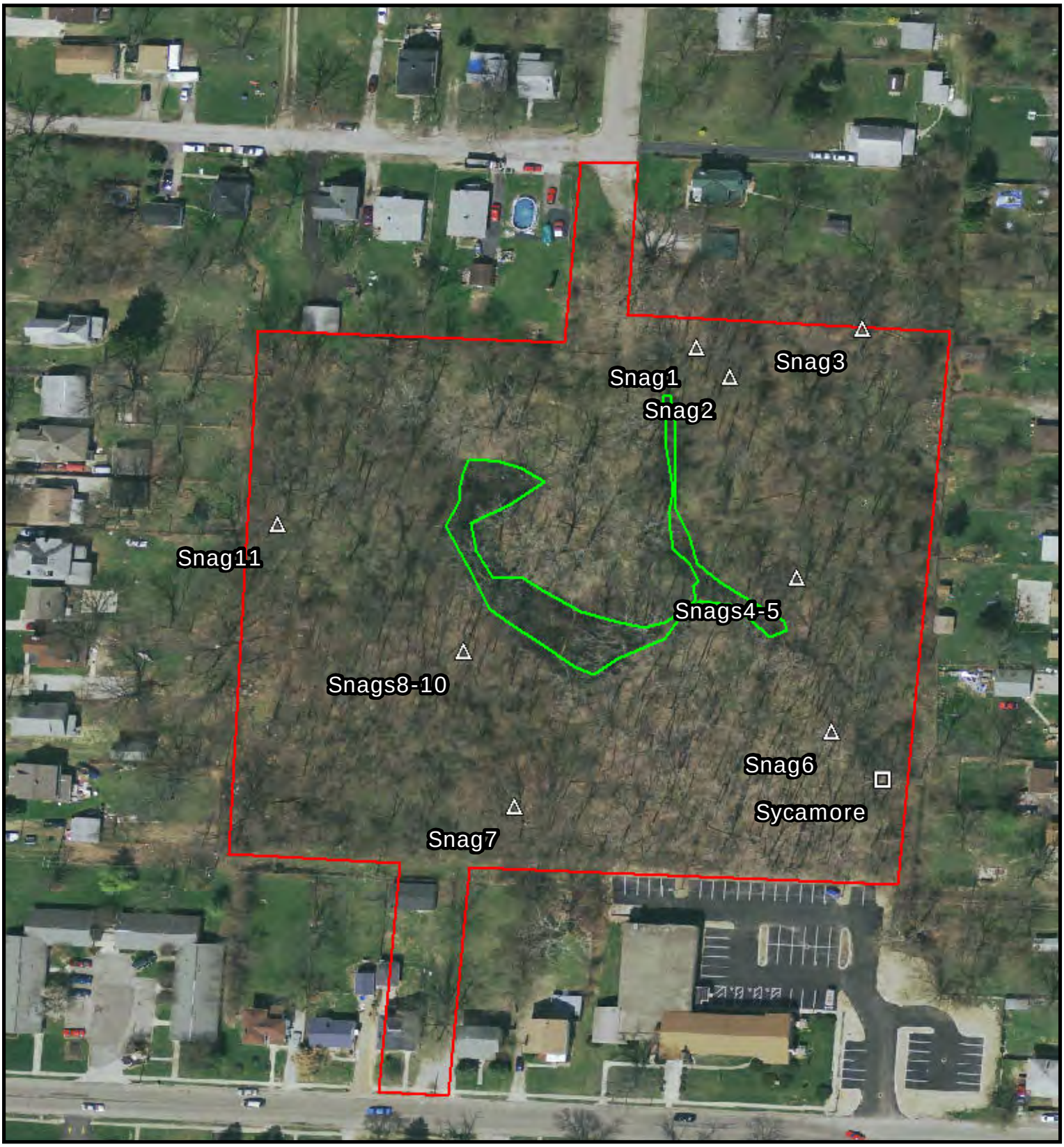


Figure 4. Potential Bat Roosts
Linview Park
Linden Area
Columbus, OH

Legend

- Snag
- Sycamore
- Wetland Boundary
- Area of Investigation

0 0.0125 0.025 0.05 Miles

N

CDM Smith

APPENDIX A

Site Photograph Log

Photograph Log

All Photographs Taken April 24, 2020

Photo 1. Location of Wetland Plot 1

Photo 2. View of Wetland Plot 1 facing south

Photo 3. View of Wetland Plot 1 facing east

Photo 4. View of Wetland Plot 1 facing west

Photo 5. View of Wetland Plot 1 facing north toward upland area

Photo 6. Location of Upland Plot 1

Photo 7. View of Upland Plot 1 facing north

Photo 8. View of Upland Plot 1 facing west toward wetland at lower grade

Photo 9. View of Upland Plot 1 facing south depicting wetland at lower grade

Photo 10. View of View of Upland Plot 1 facing east toward path passing through upland area

Photo 11. Location of Wetland Plot 2

Photo 12. View of Wetland Plot 2 facing east

Photo 13. View of Wetland Plot 2 facing north depicting narrow northeastern section of wetland

Photo 14. View of Wetland Plot 2 facing south

Photo 15. View of Wetland Plot 2 facing west

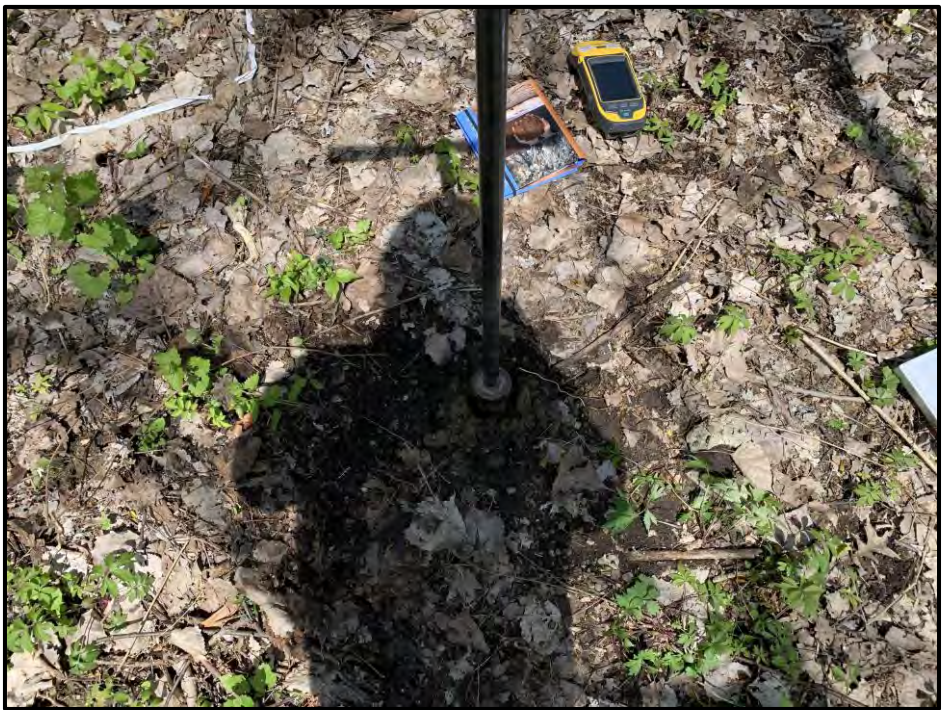


Photo 16. Location of Upland Plot 2

Photo 17. View of Upland Plot 2 facing north depicting wetland at lower grade

Photo 18. View of Upland Plot 2 facing south

Photo 19. View of Upland Plot 2 facing west

Photo 20. View of Upland Plot 2 facing east

Photo 21. Typical depiction of western portion of wetland, southeast of Wetland Plot 1

Photo 22. Typical depiction of western portion of wetland, northwest of Wetland Plot 1

Photo 23. Narrow northeastern section of wetland facing north

Photo 24. Typical depiction of western portion of wetland, photograph facing wide rounding southeastern extent of wetland area

Photo 25. Northeastern extent of wetland

Photo 26. Southeastern extent of wetland

Photo 27. Northwestern extent of wetland

Photo 28. Narrow wetland corridor connecting larger eastern and western wetland extents depicting path passing through corridor. Photograph facing southeast

Photo 29. Path passing through center of upland forested area facing south

Photo 30. Path passing through center of upland forested area facing north

Photo 31. Potential bat roost - Snag 1

Photo 32. Potential bat roost - Snag 2

Photo 33. Potential bat roost - Snag 3

Photo 34. Potential bat roost - Snags 4-5

Photo 35. Potential bat roost - Snag 6

Photo 36. Potential bat roost - Snag 7

Photo 37. Potential bat roost - Snags 8-10

Photo 38. Potential bat roost - Snag 11

APPENDIX B

USDA-NRCS Web Soil Survey Report

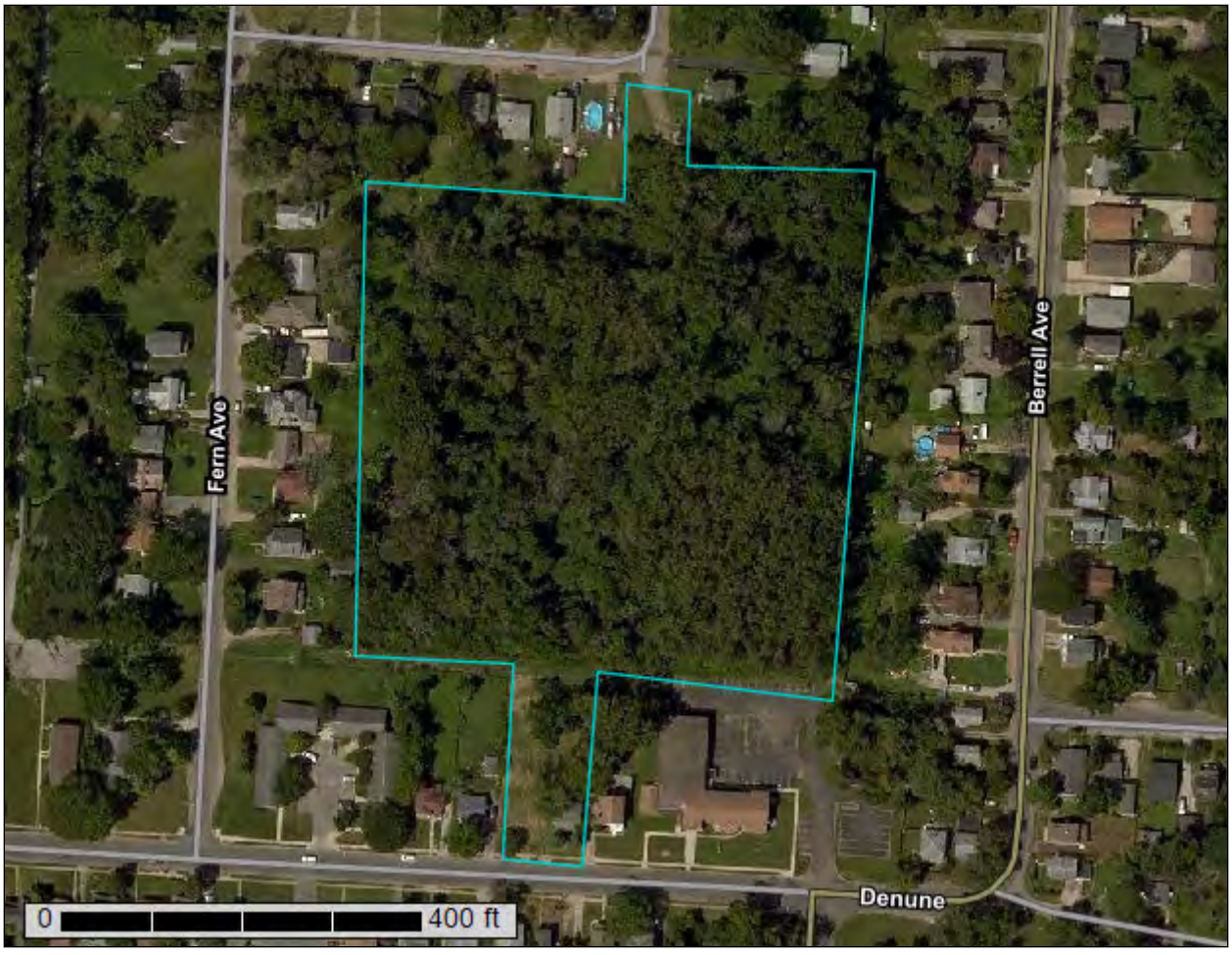
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Franklin County, Ohio



April 16, 2020

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,540 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Franklin County, Ohio
Survey Area Data: Version 18, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 4, 2014—Aug 27, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BfA	Bennington-Urban land complex, 0 to 2 percent slopes	7.5	100.0%
Totals for Area of Interest		**7.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Franklin County, Ohio

BfA—Bennington-Urban land complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2t6mc
Elevation: 800 to 1,000 feet
Mean annual precipitation: 34 to 42 inches
Mean annual air temperature: 48 to 54 degrees F
Frost-free period: 145 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Bennington and similar soils: 50 percent
Urban land: 35 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bennington

Setting

Landform: End moraines, ground moraines
Landform position (two-dimensional): Footslope, backslope, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Wisconsin loamy till derived from sandstone and shale

Typical profile

A - 0 to 10 inches: silt loam
Bt - 10 to 29 inches: silty clay loam
BCt - 29 to 42 inches: silty clay loam
C - 42 to 79 inches: clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 22 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Hydric soil rating: No

Description of Urban Land

Setting

Landform: Till plains

Minor Components

Aeric epiaquents, till substratum

Percent of map unit: 9 percent
Landform: Moraines
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Typic endoaquents, till substratum

Percent of map unit: 6 percent
Landform: Moraines
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

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APPENDIX C

USACE Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Linview Park City/County: Columbus Sampling Date: 4/24/2020

Applicant/Owner: City of Columbus State: OH Sampling Point: Wetplot1

Investigator(s): M. Petty, N. Revetta Section, Township, Range: Linden

Landform (hillslope, terrace, etc.): Isolated depression Local relief (concave, convex, none): Concave

Slope (%): <1% Lat: 40.023044 Long: -82.956777 Datum: WGS84

Soil Map Unit Name: Urban NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	
Hydric Soil Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Wetland Hydrology Present?	Yes X	No ____	

Remarks:

Deep, isolated depression within larger forested area. Depression largely un-vegetated due to depth of standing water - except for canopy and sub-canopy trees.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus deltoides	50	Y	FAC
2. Acer saccharinum	25	Y	FACW
3.			
4.			
5.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30'R)			
1. Acer rubrum	15	Y	FAC
2. Acer saccharinum	10	Y	FACW
3. Ulmus americana	5	N	FACW
4.			
5.			
	30	= Total Cover	
Herb Stratum (Plot size: 5'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	40	x 2 =	80
FAC species	65	x 3 =	195
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	105 (A)		275 (B)

Prevalence Index = B/A = 2.6

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- X 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (Include photo numbers here or on a separate sheet.)

Trees show adaptations to living in standing water (buttressed trunks).

SOIL

Sampling Point: Wetplot1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 3/1	100					Silt Loam	High organic content
3-10	10 YR 3/1	80	7.5 YR 5/6	20			Lmy clay	Small rock fragments
10-18	10 YR 4/1	60	10 YR 5/8	30			clay	Mn nodules present
			10 YR 2/1	10				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10)
- [x] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] 5 cm Mucky Peat or Peat (S3)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [x] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [x] Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- [ ] Coast Prairie Redox (A16)
- [ ] Dark Surface (S7)
- [ ] Iron-Manganese Masses (F12)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes [x] No [ ]

Remarks:

Wetland is in a deep depression that collects significant stormwater from nearby impervious surfaces and inundates depression soils for long periods. Hole collapsed due to standing water after reaching a depth of 18".

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [x] Surface Water (A1)
- [x] High Water Table (A2)
- [x] Saturation (A3)
- [x] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [x] Sparsely Vegetated Concave Surface (B8)
- [x] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] True Aquatic Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Gauge or Well Data (D9)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [ ] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [x] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes [x] No [ ] Depth (inches): <36"

Water Table Present? Yes [x] No [ ] Depth (inches): <8"

Saturation Present? (includes capillary fringe) Yes [x] No [ ] Depth (inches): Surface

Wetland Hydrology Present? Yes [x] No [ ]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

In areas without standing water, water table encountered at depths of 8" or shallower. Trees water marked and leaves water stained.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Linview Park | City/County: Columbus | Sampling Date: 4/24/2020

Applicant/Owner: City of Columbus | State: OH | Sampling Point: UpPlot1

Investigator(s): M. Petty, N. Revetta | Section, Township, Range: Linden

Landform (hillslope, terrace, etc.): Flat terrace | Local relief (concave, convex, none): None

Slope (%): 1% | Lat: 40.023220 | Long: -82.956626 | Datum: WGS84

Soil Map Unit Name: Urban | NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ___	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

Wetplot2 is the same large depressional wetland as Wetplot1, but with slightly different characteristics. The two wetland plots are connected via a narrow wetland corridor that crosses an existing path.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1. Celtis occidentalis	40	Y	FAC
2. Populus deltoides	25	Y	FAC
3. Quercus rubra	10	N	FACU
4.			
5.			
	75	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30'R)			
1. Celtis occidentalis	40	Y	FAC
2. Lonicera japonica	15	N	FACU
3. Aesculus hippocastanum	5	N	-
4.			
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 5'R)			
1. Alliaria petiolata	30	Y	FACU
2. Panicum virgatum	5	N	FAC
3. Geum canadense	5	N	FAC
4. Euonymus fortunei	<1	N	-
5.			
6.			
7.			
8.			
9.			
10.			
	40	= Total Cover	
Woody Vine Stratum (Plot size: 30'R)			
1.			
2.			
	0	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 75% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	115	x 3 =	345
FACU species	55	x 4 =	220
UPL species	0	x 5 =	0
Column Totals:	165 (A)		565 (B)

Prevalence Index = B/A = 3.4

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Urban hackberry upland forest.

SOIL

Sampling Point: UpPlot1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-8	10 YR 4/3	70					Silt Loam	Compact urban soils with
	10 YR 4/6	30						likely history of disturbance
8-16	10 YR 5/2	90					Lmy clay	"
	10 YR 4/6	10						
16-24	10 YR 4/3	50					Lmy clay	"
	10 YR 5/2	15						
	10 YR 4/6	35						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Linview Park | City/County: Columbus | Sampling Date: 4/24/2020

Applicant/Owner: City of Columbus | State: OH | Sampling Point: Wetplot2

Investigator(s): M. Petty, N. Revetta | Section, Township, Range: Linden

Landform (hillslope, terrace, etc.): Depression | Local relief (concave, convex, none): Concave

Slope (%): <1% | Lat: 40.023040 | Long: -82.956283 | Datum: WGS84

Soil Map Unit Name: Urban | NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ___	**Is the Sampled Area within a Wetland?** Yes X No ___
Hydric Soil Present?	Yes X	No ___	
Wetland Hydrology Present?	Yes X	No ___	

Remarks:

Wetplot2 is the same large depressional wetland as Wetplot1, but with slightly different characteristics. The two wetland plots are connected via a narrow wetland corridor that crosses an existing path.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer saccharinum	50	Y	FACW
2. Populus deltoides	10	N	FAC
3.			
4.			
5.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30'R)			
1. Acer saccharinum	40	Y	FACW
2. Ulmus americana	20	Y	FACW
3. Acer rubrum	5	N	FAC
4. Acer negundo	5	N	FAC
5.			
	70	= Total Cover	
Herb Stratum (Plot size: 5'R)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	0	= Total Cover	
Woody Vine Stratum (Plot size: 30'R)			
1. Vitis riparia	5	Y	FACW
2.			
	5	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	115	x 2 =	230
FAC species	20	x 3 =	60
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	135 (A)		290 (B)

Prevalence Index = B/A = 2.1

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

Silver maple dominated depressional wetland. Lack of herb stratum due to standing water and shading.

SOIL

Sampling Point: Wetplot2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	10 YR 2/1	100					Silt Loam	High organic content
3-6	10 YR 3/1	75	10 YR 5/6	25			Silty mucky loam	Hydrogen Sulfide Odor
6-12	10 YR 3/1	60	10 YR 5/6	40			Silty clay	
12-14	10 YR 3/1	60	10 YR 5/6	20			Silty clay	
			7.5 YR 5/8	20				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [X] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10)
- [X] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1)
- [ ] 5 cm Mucky Peat or Peat (S3)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Loamy Mucky Mineral (F1)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [X] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [X] Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- [ ] Coast Prairie Redox (A16)
- [ ] Dark Surface (S7)
- [ ] Iron-Manganese Masses (F12)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes [X] No [ ]

Remarks:

Hole collapsed due to standing water after reaching a depth of 14".

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [X] Surface Water (A1)
- [X] High Water Table (A2)
- [X] Saturation (A3)
- [X] Water Marks (B1)
- [ ] Sediment Deposits (B2)
- [ ] Drift Deposits (B3)
- [ ] Algal Mat or Crust (B4)
- [ ] Iron Deposits (B5)
- [ ] Inundation Visible on Aerial Imagery (B7)
- [X] Sparsely Vegetated Concave Surface (B8)
- [X] Water-Stained Leaves (B9)
- [ ] Aquatic Fauna (B13)
- [ ] True Aquatic Plants (B14)
- [X] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Gauge or Well Data (D9)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- [ ] Surface Soil Cracks (B6)
- [X] Drainage Patterns (B10)
- [ ] Dry-Season Water Table (C2)
- [ ] Crayfish Burrows (C8)
- [ ] Saturation Visible on Aerial Imagery (C9)
- [X] Stunted or Stressed Plants (D1)
- [ ] Geomorphic Position (D2)
- [ ] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes [X] No [ ] Depth (inches): <12"

Water Table Present? Yes [X] No [ ] Depth (inches): <8"

Saturation Present? (includes capillary fringe) Yes [X] No [ ] Depth (inches): Surface

Wetland Hydrology Present? Yes [X] No [ ]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Linview Park | City/County: Columbus | Sampling Date: 4/24/2020

Applicant/Owner: City of Columbus | State: OH | Sampling Point: UpPlot2

Investigator(s): M. Petty, N. Revetta | Section, Township, Range: Linden

Landform (hillslope, terrace, etc.): Slightly elevated terrace | Local relief (concave, convex, none): None

Slope (%): <1% | Lat: 40.022832 | Long: -82.956227 | Datum: WGS84

Soil Map Unit Name: Urban | NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes X No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ___	**Is the Sampled Area within a Wetland?** Yes ___ No X
Hydric Soil Present?	Yes ___	No X	
Wetland Hydrology Present?	Yes ___	No X	

Remarks:

Wetplot2 is the same large depressional wetland as Wetplot1, but with slightly different characteristics. The two wetland plots are connected via a narrow wetland corridor that crosses an existing path.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30'R)	Absolute % Cover	Dominant Species?	Indicator Status
1. Celtis occidentalis	35	Y	FAC
2. Acer saccharinum	25	Y	FACW
3. Quercus rubra	15	N	FACU
4. Prunus serotina	5	N	FACU
5.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 30'R)			
1. Celtis occidentalis	30	Y	FAC
2. Lonicera japonica	20	Y	FACU
3. Aesculus hippocastanum	5	N	-
4. Ulmus americana	5	N	FACW
5.			
	60	= Total Cover	
Herb Stratum (Plot size: 5'R)			
1. Alliaria petiolata	30	Y	FACU
2. Geum canadense	15	Y	FAC
3. Allium tricoccum	5	N	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	50	= Total Cover	
Woody Vine Stratum (Plot size: 30'R)			
1. Euonymus fortunei	5	y	-
2.			
	5	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 57% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	30	x 2 =	60
FAC species	80	x 3 =	240
FACU species	75	x 4 =	300
UPL species	0	x 5 =	0
Column Totals:	185 (A)		600 (B)

Prevalence Index = B/A = 3.2

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ___

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: UplPlot2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-6	10 YR 5/3	60					Silt Loam	
	10 YR 5/4	40						
6-10	10 YR 5/3	70	10 yr 7/6	5			Silt Loam	
	10 YR 5/4	25						
10-20	10 YR 5/3	70					Silt Clay	Trace gravel
	10 YR 5/4	30						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes ___ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): _____

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Elevated terrace with small mounds likely due to historic disturbance, fill, and earth moving.

APPENDIX D

Ohio Rapid Assessment Method (ORAM) Form for Wetland Categorization

Version 5.0	**Ohio Rapid Assessment Method for Wetlands 10 Page Form for Wetland Categorization**	
	Background Information Scoring Boundary Worksheet Narrative Rating Field Form Quantitative Rating ORAM Summary Worksheet Wetland Categorization Worksheet	Ohio EPA, Division of Surface Water Final: February 1, 2001

Instructions

The investigator is *STRONGLY URGED* to read the Manual for Using the Ohio Rapid Assessment Method for Wetlands for further elaboration and discussion of the questions below prior to using the rating forms.

The Narrative Rating is designed to categorize a wetland or to provide alerts to the Rater based on the presence or possible presence of threatened or endangered species. The presence or proximity of such species is often an indicator of the quality and lack of disturbance of the wetland being evaluated. In addition, it is designed to categorize certain wetlands as very low quality (Category 1) or very high quality (Category 3) regardless of the wetland's score on the Quantitative Rating. In addition, the Narrative Rating also alerts the investigator that a particular wetland *may* be a Category 3 wetland, again, regardless of the wetland's score on the Quantitative Rating.

It is *VERY IMPORTANT* to properly and thoroughly answer each of the questions in the ORAM in order to properly categorize a wetland. To *properly* answer all the questions, the boundaries of the wetland being assessed must be correctly identified. Refer to Scoring Boundary worksheet and the User's Manual for a discussion of how to determine the "scoring boundaries." In some instances, the scoring boundaries may differ from the "jurisdictional boundaries."

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories. The most recent version of this document is posted on Ohio EPA's Division of Surface Water web page at: http://www.epa.ohio.gov/dsw/wetlands/WetlandEcologySection.aspx

Background Information

Name: M. Petty, N. Revetta	
Date: 4/24/2020	
Affiliation: CDM Smith	
Address: 445 Hutchinson Ave, Suite 820, Columbus, OH 43235	
Phone Number: 614-847-6829	
e-mail address: pettyme@cdmsmith.com / revettanp@cdmsmith.com	
Name of Wetland: Linview Park - Wetland 1	
Vegetation Communit(ies): PFO1A - Forested - primarily dominated by Silver Maple and Eastern Cottonwood	
HGM Class(es): Depressional	
Location of Wetland: include map, address, north arrow, landmarks, distances, roads, etc. See attached figures	
Lat/Long or UTM Coordinate 40.023044, -82.956777	
USGS Quad Name NE Columbus	
County Franklin	
Township N/A	
Section and Subsection N/A	
Hydrologic Unit Code 05060001	
Site Visit 4/24/2020	
National Wetland Inventory Map Not shown	
Ohio Wetland Inventory Map Not shown	
Soil Survey BfA - Bennington-Urban land complex, 0 to 2 percent slopes	
Delineation report/map See attached report	

Name of Wetland: Linview Park - Wetland 1	
Wetland Size (acres, hectares): 0.25 acres	

Sketch: Include north arrow, relationship with other surface waters, vegetation zones, etc.

See attached figures

Comments, Narrative Discussion, Justification of Category Changes:

See attached report for detailed delineation metrics and discussions.

Wetland delineations and a bat habitat assessment were performed on the 5-acre forested area south of Linview Ave. (City of Columbus, SIJ Partnership LLC and Charles Edward Jr parcels) to guide permitting plans prior to the proposed development of a public park on these properties.

Final score : 33 **Category:**	Category 2

Scoring Boundary Worksheet

INSTRUCTIONS. The initial step in completing the ORAM is to identify the "scoring boundaries" of the wetland being rated. In many instances this determination will be relatively easy and the scoring boundaries will coincide with the "jurisdictional boundaries." For example, the scoring boundary of an isolated cattail marsh located in the middle of a farm field will likely be the same as that wetland's jurisdictional boundaries. In other instances, however, the scoring boundary will not be as easily determined. Wetlands that are small or isolated from other surface waters often form large contiguous areas or heterogeneous complexes of wetland and upland. In separating wetlands for scoring purposes, the hydrologic regime of the wetland is the main criterion that should be used. Boundaries between contiguous or connected wetlands should be established where the volume, flow, or velocity of water moving through the wetland changes significantly. *Areas with a high degree of hydrologic interaction should be scored as a single wetland*. In determining a wetland's scoring boundaries, use the guidelines in the ORAM Manual Section 5.0. In certain instances, it may be difficult to establish the scoring boundary for the wetland being rated. These problem situations include wetlands that form a patchwork on the landscape, wetlands divided by artificial boundaries like property fences, roads, or railroad embankments, wetlands that are contiguous with streams, lakes, or rivers, and estuarine or coastal wetlands. These situations are discussed below, however, it is recommended that Rater contact Ohio EPA, Division of Surface Water, 401/Wetlands Section if there are additional questions or a need for further clarification of the appropriate scoring boundaries of a particular wetland.

#	Steps in properly establishing scoring boundaries	done?	not applicable
Step 1	Identify the wetland area of interest. This may be the site of a proposed impact, a reference site, conservation site, etc.	X	
Step 2	Identify the locations where there is physical evidence that hydrology changes rapidly. Such evidence includes both natural and human-induced changes including, constrictions caused by berms or dikes, points where the water velocity changes rapidly at rapids or falls, points where significant inflows occur at the confluence of rivers, or other factors that may restrict hydrologic interaction between the wetlands or parts of a single wetland.	X	
Step 3	Delineate the boundary of the wetland to be rated such that all areas of interest that are contiguous to and within the areas where the hydrology does not change significantly, i.e. areas that have a high degree of hydrologic interaction are included within the scoring boundary.	X	
Step 4	Determine if artificial boundaries, such as property lines, state lines, roads, railroad embankments, etc., are present. These should not be used to establish scoring boundaries unless they coincide with areas where the hydrologic regime changes.	X	
Step 5	In all instances, the Rater may enlarge the minimum scoring boundaries discussed here to score together wetlands that could be scored separately.	X	
Step 6	Consult ORAM Manual Section 5.0 for how to establish scoring boundaries for wetlands that form a patchwork on the landscape, divided by artificial boundaries, contiguous to streams, lakes or rivers, or for dual classifications.	X	

End of Scoring Boundary Determination. Begin Narrative Rating on next page.

Narrative Rating

INSTRUCTIONS. Answer each of the following questions. Questions 1, 2, 3 and 4 should be answered based on information obtained from the site visit or the literature *and* by submitting a Data Services Request to the Ohio Department of Natural Resources, Division of Natural Areas and Preserves, Natural Heritage Data Services, 1889 Fountain Square Court, Building F-1, Columbus, Ohio 43224, 614-265-6453 (phone), 614-265-3096 (fax), http://www.dnr.state.oh.us/dnap . The remaining questions are designed to be answered primarily by the results of the site visit. Refer to the User's Manual for descriptions of these wetland types. Note: "Critical habitat" is legally defined in the Endangered Species Act and is the geographic area containing physical or biological features essential to the conservation of a listed species or as an area that may require special management considerations or protection. The Rater should contact the Region 3 Headquarters or the Columbus Ecological Services Office for updates as to whether critical habitat has been designated for other federally listed threatened or endangered species. "Documented" means the wetland is listed in the appropriate State of Ohio database.

#	Question	Circle one	
1	**Critical Habitat.** Is the wetland in a township, section, or subsection of a United States Geological Survey 7.5 minute Quadrangle that has been designated by the U.S. Fish and Wildlife Service as "critical habitat" for any threatened or endangered plant or animal species? Note: as of January 1, 2001, of the federally listed endangered or threatened species which can be found in Ohio, the Indiana Bat has had critical habitat designated (50 CFR 17.95(a)) and the piping plover has had critical habitat proposed (65 FR 41812 July 6, 2000).	YES Wetland should be evaluated for possible Category 3 status Go to Question 2	(NO) Go to Question 2
2	**Threatened or Endangered Species.** Is the wetland known to contain an individual of, or documented occurrences of federal or state-listed threatened or endangered plant or animal species?	YES Wetland is a Category 3 wetland. Go to Question 3	(NO) Go to Question 3
3	**Documented High Quality Wetland.** Is the wetland on record in Natural Heritage Database as a high quality wetland?	YES Wetland is a Category 3 wetland Go to Question 4	(NO) Go to Question 4
4	**Significant Breeding or Concentration Area.** Does the wetland contain documented regionally significant breeding or nonbreeding waterfowl, neotropical songbird, or shorebird concentration areas?	YES Wetland is a Category 3 wetland Go to Question 5	(NO) Go to Question 5
5	**Category 1 Wetlands.** Is the wetland less than 0.5 hectares (1 acre) in size and **hydrologically isolated** and either 1) comprised of vegetation that is dominated (greater than eighty per cent areal cover) by *Phalaris arundinacea, Lythrum salicaria,* or *Phragmites australis*, or 2) an acidic pond created or excavated on mined lands that has little or no vegetation?	YES Wetland is a Category 1 wetland Go to Question 6	(NO) Go to Question 6
6	**Bogs.** Is the wetland a peat-accumulating wetland that 1) has no significant inflows or outflows, 2) supports acidophilic mosses, particularly *Sphagnum* spp., 3) the acidophilic mosses have >30% cover, 4) at least one species from Table 1 is present, and 5) the cover of invasive species (see Table 1) is <25%?	YES Wetland is a Category 3 wetland Go to Question 7	(NO) Go to Question 7
7	**Fens.** Is the wetland a carbon accumulating (peat, muck) wetland that is saturated during most of the year, primarily by a discharge of free flowing, mineral rich, ground water with a circumneutral ph (5.5-9.0) and with one or more plant species listed in Table 1 and the cover of invasive species listed in Table 1 is <25%?	YES Wetland is a Category 3 wetland Go to Question 8a	(NO) Go to Question 8a
8a	**"Old Growth Forest."** Is the wetland a forested wetland and is the forest characterized by, but not limited to, the following characteristics: overstory canopy trees of great age (exceeding at least 50% of a projected maximum attainable age for a species); little or no evidence of human-caused understory disturbance during the past 80 to 100 years; an all-aged structure and multilayered canopies; aggregations of canopy trees interspersed with canopy gaps; and significant numbers of standing dead snags and downed logs?	YES Wetland is a Category 3 wetland. Go to Question 8b	(NO) Go to Question 8b

8b	**Mature forested wetlands**. Is the wetland a forested wetland with 50% or more of the cover of upper forest canopy consisting of deciduous trees with large diameters at breast height (dbh), generally diameters greater than 45cm (17.7in) dbh?	YES (O) Wetland should be evaluated for possible Category 3 status. Go to Question 9a	NO Go to Question 9a
9a	**Lake Erie coastal and tributary wetlands**. Is the wetland located at an elevation less than 575 feet on the USGS map, adjacent to this elevation, or along a tributary to Lake Erie that is accessible to fish?	YES Go to Question 9b	NO (O) Go to Question 10
9b	Does the wetland's hydrology result from measures designed to prevent erosion and the loss of aquatic plants, i.e. the wetland is partially hydrologically restricted from Lake Erie due to lakeward or landward dikes or other hydrological controls?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 9c
9c	Are Lake Erie water levels the wetland's primary hydrological influence, i.e. the wetland is hydrologically unrestricted (no lakeward or upland border alterations), or the wetland can be characterized as an "estuarine" wetland with lake and river influenced hydrology. These include sandbar deposition wetlands, estuarine wetlands, river mouth wetlands, or those dominated by submersed aquatic vegetation.	YES Go to Question 9d	NO Go to Question 10
9d	Does the wetland have a predominance of native species within its vegetation communities, although non-native or disturbance tolerant native species can also be present?	YES Wetland is a Category 3 wetland Go to Question 10	NO Go to Question 9e
9e	Does the wetland have a predominance of non-native or disturbance tolerant native plant species within its vegetation communities?	YES Wetland should be evaluated for possible Category 3 status Go to Question 10	NO Go to Question 10
10	**Lake Plain Sand Prairies (Oak Openings)** Is the wetland located in Lucas, Fulton, Henry, or Wood Counties and can the wetland be characterized by the following description: the wetland has a sandy substrate with interspersed organic matter, a water table often within several inches of the surface, and often with a dominance of the gramineous vegetation listed in Table 1 (woody species may also be present). The Ohio Department of Natural Resources Division of Natural Areas and Preserves can provide assistance in confirming this type of wetland and its quality.	YES Wetland is a Category 3 wetland. Go to Question 11	NO (O) Go to Question 11
11	**Relict Wet Prairies**. Is the wetland a relict wet prairie community dominated by some or all of the species in Table 1. Extensive prairies were formerly located in the Darby Plains (Madison and Union Counties), Sandusky Plains (Wyandot, Crawford, and Marion Counties), northwest Ohio (e.g. Erie, Huron, Lucas, Wood Counties), and portions of western Ohio Counties (e.g. Darke, Mercer, Miami, Montgomery, Van Wert etc.).	YES Wetland should be evaluated for possible Category 3 status Complete Quantitative Rating	NO (O) Complete Quantitative Rating

Table 1. Characteristic plant species.

invasive/exotic spp	fen species	bog species	0ak Opening species	wet prairie species
Lythrum salicaria	*Zygadenus elegans var. glaucus*	*Calla palustris*	*Carex cryptolepis*	*Calamagrostis canadensis*
Myriophyllum spicatum	*Cacalia plantaginea*	*Carex atlantica var. capillacea*	*Carex lasiocarpa*	*Calamogrostis stricta*
Najas minor	*Carex flava*	*Carex echinata*	*Carex stricta*	*Carex atherodes*
Phalaris arundinacea	*Carex sterilis*	*Carex oligosperma*	*Cladium mariscoides*	*Carex buxbaumii*
Phragmites australis	*Carex stricta*	*Carex trisperma*	*Calamagrostis stricta*	*Carex pellita*
Potamogeton crispus	*Deschampsia caespitosa*	*Chamaedaphne calyculata*	*Calamagrostis canadensis*	*Carex sartwellii*
Ranunculus ficaria	*Eleocharis rostellata*	*Decodon verticillatus*	*Quercus palustris*	*Gentiana andrewsii*
Rhamnus frangula	*Eriophorum viridicarinatum*	*Eriophorum virginicum*		*Helianthus grosseserratus*
Typha angustifolia	*Gentianopsis spp.*	*Larix laricina*		*Liatris spicata*
Typha xglauca	*Lobelia kalmii*	*Nemopanthus mucronatus*		*Lysimachia quadriflora*
	Parnassia glauca	*Schechzeria palustris*		*Lythrum alatum*
	Potentilla fruticosa	*Sphagnum spp.*		*Pycnanthemum virginianum*
	Rhamnus alnifolia	*Vaccinium macrocarpon*		*Silphium terebinthinaceum*
	Rhynchospora capillacea	*Vaccinium corymbosum*		*Sorghastrum nutans*
	Salix candida	*Vaccinium oxycoccos*		*Spartina pectinata*
	Salix myricoides	*Woodwardia virginica*		*Solidago riddellii*
	Salix serissima	*Xyris difformis*		
	Solidago ohioensis			
	Tofieldia glutinosa			
	Triglochin maritimum			
	Triglochin palustre			

End of Narrative Rating. Begin Quantitative Rating on next page.

Site: Linview Park - Wetland 1	**Rater(s):** M. Petty, N. Revetta	**Date:** 4/24/2020

Metric 1. Wetland Area (size).

max 6 pts.	subtotal
1	1

Select one size class and assign score.

- [ ] >50 acres (>20.2ha) (6 pts)
- [ ] 25 to <50 acres (10.1 to <20.2ha) (5 pts)
- [ ] 10 to <25 acres (4 to <10.1ha) (4 pts)
- [ ] 3 to <10 acres (1.2 to <4ha) (3 pts)
- [ ] 0.3 to <3 acres (0.12 to <1.2ha) (2pts)
- [X] 0.1 to <0.3 acres (0.04 to <0.12ha) (1 pt)
- [ ] <0.1 acres (0.04ha) (0 pts)

Metric 2. Upland buffers and surrounding land use.

max 14 pts.	subtotal
4	5

2a. Calculate average buffer width. Select only one and assign score. Do not double check.

- [ ] WIDE. Buffers average 50m (164ft) or more around wetland perimeter (7)
- [ ] MEDIUM. Buffers average 25m to <50m (82 to <164ft) around wetland perimeter (4)
- [X] NARROW. Buffers average 10m to <25m (32ft to <82ft) around wetland perimeter (1)
- [ ] VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)

2b. Intensity of surrounding land use. Select one or double check and average.

- [ ] VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
- [ ] LOW. Old field (>10 years), shrub land, young second growth forest. (5)
- [X] MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
- [ ] HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)

Metric 3. Hydrology.

max 30 pts.	subtotal
8	13

3a. Sources of Water. Score all that apply.

- [ ] High pH groundwater (5)
- [ ] Other groundwater (3)
- [X] Precipitation (1)
- [ ] Seasonal/Intermittent surface water (3)
- [ ] Perennial surface water (lake or stream) (5)

3b. Connectivity. Score all that apply.

- [ ] 100 year floodplain (1)
- [ ] Between stream/lake and other human use (1)
- [X] Part of wetland/upland (e.g. forest), complex (1)
- [ ] Part of riparian or upland corridor (1)

3c. Maximum water depth. Select only one and assign score.

- [X] >0.7 (27.6in) (3)
- [ ] 0.4 to 0.7m (15.7 to 27.6in) (2)
- [ ] <0.4m (<15.7in) (1)

3d. Duration inundation/saturation. Score one or dbl check.

- [ ] Semi- to permanently inundated/saturated (4)
- [ ] Regularly inundated/saturated (3)
- [X] Seasonally inundated (2)
- [ ] Seasonally saturated in upper 30cm (12in) (1)

3e. Modifications to natural hydrologic regime. Score one or double check and average.

- [ ] None or none apparent (12)
- [ ] Recovered (7)
- [ ] Recovering (3)
- [X] Recent or no recovery (1)

Check all disturbances observed

- [ ] ditch
- [ ] tile
- [ ] dike
- [ ] weir
- [X] stormwater input
- [ ] point source (nonstormwater)
- [ ] filling/grading
- [ ] road bed/RR track
- [ ] dredging
- [X] other *Housing/residential development

Metric 4. Habitat Alteration and Development.

max 20 pts.	subtotal
7	20

4a. Substrate disturbance. Score one or double check and average.

- [ ] None or none apparent (4)
- [ ] Recovered (3)
- [X] Recovering (2)
- [ ] Recent or no recovery (1)

4b. Habitat development. Select only one and assign score.

- [ ] Excellent (7)
- [ ] Very good (6)
- [ ] Good (5)
- [ ] Moderately good (4)
- [ ] Fair (3)
- [X] Poor to fair (2)
- [ ] Poor (1)

4c. Habitat alteration. Score one or double check and average.

- [ ] None or none apparent (9)
- [ ] Recovered (6)
- [X] Recovering (3)
- [ ] Recent or no recovery (1)

Check all disturbances observed

- [ ] mowing
- [ ] grazing
- [ ] clearcutting
- [X] selective cutting
- [ ] woody debris removal
- [ ] toxic pollutants
- [X] shrub/sapling removal
- [ ] herbaceous/aquatic bed removal
- [ ] sedimentation
- [ ] dredging
- [ ] farming
- [X] nutrient enrichment

subtotal this page
20

last revised 1 February 2001 jjm

*Significant residential trash present

Site: Linview Park - Wetland 1	**Rater(s):** M. Petty, N. Revetta	**Date:** 4/24/2020

20
subtotal first page

5 | 25
max 10 pts. | subtotal

Metric 5. Special Wetlands.

Check all that apply and score as indicated.

	Bog (10)
	Fen (10)
	Old growth forest (10)
x	Mature forested wetland (5)
	Lake Erie coastal/tributary wetland-unrestricted hydrology (10)
	Lake Erie coastal/tributary wetland-restricted hydrology (5)
	Lake Plain Sand Prairies (Oak Openings) (10)
	Relict Wet Prairies (10)
	Known occurrence state/federal threatened or endangered species (10)
	Significant migratory songbird/water fowl habitat or usage (10)
	Category 1 Wetland. See Question 1 Qualitative Rating (-10)

8 | 33
max 20 pts. | subtotal

Metric 6. Plant communities, interspersion, microtopography.

6a. Wetland Vegetation Communities.
Score all present using 0 to 3 scale.

	Aquatic bed
0	Emergent
1	Shrub
2	Forest
	Mudflats
1	Open water
	Other_____

6b. horizontal (plan view) Interspersion.
Select only one.

	High (5)
	Moderately high(4)
	Moderate (3)
2	Moderately low (2)
	Low (1)
	None (0)

6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add or deduct points for coverage

	Extensive >75% cover (-5)
	Moderate 25-75% cover (-3)
-1	Sparse 5-25% cover (-1)
	Nearly absent <5% cover (0)
	Absent (1)

6d. Microtopography.
Score all present using 0 to 3 scale.

0	Vegetated hummucks/tussucks
2	Coarse woody debris >15cm (6in)
1	Standing dead >25cm (10in) dbh
0	Amphibian breeding pools

Vegetation Community Cover Scale

0	Absent or comprises <0.1ha (0.2471 acres) contiguous area
1	Present and either comprises small part of wetland's vegetation and is of moderate quality, or comprises a significant part but is of low quality
2	Present and either comprises significant part of wetland's vegetation and is of moderate quality or comprises a small part and is of high quality
3	Present and comprises significant part, or more, of wetland's vegetation and is of high quality

Narrative Description of Vegetation Quality

low	Low spp diversity and/or predominance of nonnative or disturbance tolerant native species
mod	Native spp are dominant component of the vegetation, although nonnative and/or disturbance tolerant native spp can also be present, and species diversity moderate to moderately high, but generally w/o presence of rare threatened or endangered spp
high	A predominance of native species, with nonnative spp and/or disturbance tolerant native spp absent or virtually absent, and high spp diversity and often, but not always, the presence of rare, threatened, or endangered spp

Mudflat and Open Water Class Quality

0	Absent <0.1ha (0.247 acres)
1	Low 0.1 to <1ha (0.247 to 2.47 acres)
2	Moderate 1 to <4ha (2.47 to 9.88 acres)
3	High 4ha (9.88 acres) or more

Microtopography Cover Scale

0	Absent
1	Present very small amounts or if more common of marginal quality
2	Present in moderate amounts, but not of highest quality or in small amounts of highest quality
3	Present in moderate or greater amounts and of highest quality

33

End of Quantitative Rating. Complete Categorization Worksheets.

ORAM Summary Worksheet

		circle answer or insert score	Result
Narrative Rating	Question 1 Critical Habitat	YES (NO)	If yes, Category 3.
	Question 2. Threatened or Endangered Species	YES (NO)	If yes, Category 3.
	Question 3. High Quality Natural Wetland	YES (NO)	If yes, Category 3.
	Question 4. Significant bird habitat	YES (NO)	If yes, Category 3.
	Question 5. Category 1 Wetlands	YES (NO)	If yes, Category 1.
	Question 6. Bogs	YES (NO)	If yes, Category 3.
	Question 7. Fens	YES (NO)	If yes, Category 3.
	Question 8a. Old Growth Forest	YES (NO)	If yes, Category 3.
	Question 8b. Mature Forested Wetland	(YES) NO	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9b. Lake Erie Wetlands - Restricted	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 9d. Lake Erie Wetlands – Unrestricted with native plants	YES (NO)	If yes, Category 3
	Question 9e. Lake Erie Wetlands - Unrestricted with invasive plants	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
	Question 10. Oak Openings	YES (NO)	If yes, Category 3
	Question 11. Relict Wet Prairies	YES (NO)	If yes, evaluate for Category 3; may also be 1 or 2.
Quantitative Rating	Metric 1. Size		
	Metric 2. Buffers and surrounding land use		
	Metric 3. Hydrology		
	Metric 4. Habitat		
	Metric 5. Special Wetland Communities		
	Metric 6. Plant communities, interspersion, microtopography		
	TOTAL SCORE	33	Category based on score breakpoints *Wetland Score: Category 1 - Category 2 Gray Zone

Complete Wetland Categorization Worksheet.

Wetland Categorization Worksheet

Choices	Circle one		Evaluation of Categorization Result of ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 2, 3, 4, 6, 7, 8a, 9d, 10	YES Wetland is categorized as a Category 3 wetland	(NO)	Is quantitative rating score *less* than the Category 2 scoring threshold (*excluding* gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been over-categorized by the ORAM
Did you answer "Yes" to any of the following questions: Narrative Rating Nos. 1, 8b, 9b, 9e, 11	(YES) Wetland should be evaluated for possible Category 3 status	NO	Evaluate the wetland using the 1) narrative criteria in OAC Rule 3745-1-54(C) and 2) the quantitative rating score. If the wetland is determined to be a Category 3 wetland using either of these, it should be categorized as a Category 3 wetland. Detailed biological and/or functional assessments may also be used to determine the wetland's category.
Did you answer "Yes" to Narrative Rating No. 5	YES Wetland is categorized as a Category 1 wetland	(NO)	Is quantitative rating score *greater* than the Category 2 scoring threshold *(including* any gray zone)? If yes, reevaluate the category of the wetland using the narrative criteria in OAC Rule 3745-1-54(C) and biological and/or functional assessments to determine if the wetland has been under-categorized by the ORAM
Does the quantitative score fall within the scoring range of a Category 1, 2, or 3 wetland?	(YES) Wetland is assigned to the appropriate category based on the scoring range	NO	If the score of the wetland is located within the scoring range for a particular category, the wetland should be assigned to that category. In all instances however, the narrative criteria described in OAC Rule 3745-1-54(C) can be used to clarify or change a categorization based on a quantitative score.
Does the quantitative score fall with the *"gray zone"* for Category 1 or 2 or Category 2 or 3 wetlands?	(YES) Wetland is assigned to the higher of the two categories or assigned to a category based on detailed assessments and the narrative criteria	NO	Rater has the option of assigning the wetland to the higher of the two categories or to assign a category based on the results of a nonrapid wetland assessment method, e.g. functional assessment, biological assessment, etc, and a consideration of the narrative criteria in OAC rule 3745-1-54(C).
Does the wetland otherwise exhibit *moderate OR superior* hydrologic OR habitat, OR recreational functions AND the wetland was *not* categorized as a Category 2 wetland (in the case of moderate functions) or a Category 3 wetland (in the case of superior functions) by this method?	YES Wetland was undercategorized by this method. A written justification for recategorization should be provided on Background Information Form	(NO) Wetland is assigned to category as determined by the ORAM.	A wetland may be undercategorized using this method, but still exhibit one or more superior functions, e.g. a wetland's biotic communities may be degraded by human activities, but the wetland may still exhibit superior hydrologic functions because of its type, landscape position, size, local or regional significance, etc. In this circumstance, the narrative criteria in OAC Rule 3745-1-54(C)(2) and (3) are controlling, and the under-categorization should be corrected. A written justification with supporting reasons or information for this determination should be provided.

Final Category

Choose one	Category 1	Category 2	Category 3

*Wetland Score: Category 1 - Category 2 Gray Zone

End of Ohio Rapid Assessment Method for Wetlands.

APPENDIX E

Phase 1 Summer Bat Habitat Assessment Datasheet

APPENDIX A
PHASE 1 SUMMER HABITAT ASSESSMENTS

INDIANA BAT HABITAT ASSESSMENT DATASHEET

Project Name: Linview Park Date: 4/24/2020

Township/Range/Section: Columbus, OH - Linden area

Lat Long/UTM/ Zone: General location: 40.023044, -82.956777 Surveyor: M. Petty

Brief Project Description

Wetland delineations and a bat habitat assessment were performed on the 5-acre forested area south of Linview Ave. (City of Columbus, SIJ Partnership LLC and Charles Edward Jr parcels) to guide permitting plans prior to the proposed development of a public park on these properties.

Project Area

	Total Acres	Forest Acres	Open Acres
Project	5	95%	5%

	Completely cleared	Partially cleared (will leave trees)	Preserve acres- no clearing
Proposed Tree Removal (ac)		X	

Vegetation Cover Types

Pre-Project	Post-Project
Forested	Forested (50%) / Open (50%)

Landscape within 5 mile radius

Flight corridors to other forested areas?
No

Describe Adjacent Properties (e.g. forested, grassland, commercial or residencial development, water sources)
Dense urban residential development

Proximity to Public Land

What is the distance (mi.) from the project area to forested public lands (e.g., national or state forests, national or state parks, conservation areas, wildlife management areas)?
The nearest public park is Alum Creek Arlington Park - a 4.6-acre metro park located approximately one-mile east that provides some suitable foraging habitat along Alum Creek. The nearest non-metro park consisting of forested public land is likely Blackhand Gorge State Nature Reserve, approximately 37 miles east.

Use additional sheets to assess discrete habitat types at multiple sites in a project area
Include a map depicting locations of sample sites if assessing discrete habitats at multiple sites in a project area
A single sheet can be used for multiple sample sites if habitat is the same

Sample Site Description
Sample Site No.(s): 1

Water Resources at Sample Site				
Stream Type (# and length)	Ephemeral	Intermittent	Perennial	Describe existing condition of water sources: Intermittent/ephemeral stormwater pond
Pools/Ponds (# and size)	1 (0.25 acres)	Open and accessible to bats?		
		No		
Wetlands (approx. ac.)	Permanent	Seasonal		
	1 (0.25 acres)			

Forest Resources at Sample Site				
Closure/Density	Canopy (> 50')	Midstory (20-50')	Understory (<20')	1=1-10%, 2=11-20%, 3=21-40%, 4=41-60%, 5=61-80%, 6=81-100%
	5	5	5	
Dominant Species of Mature Trees	Eastern cottonwood, common hackberry, silver maple			
% Trees w/ Exfoliating Bark	0	0	<1%	*One 29.2" DBH Sycamore located in the project area
Size Composition of Live Trees (%)	Small (3-8 in)	Med (9-15 in)	Large (>15 in)	
	60	30	10	
No. of Suitable Snags		11		

Standing dead trees with exfoliating bark, cracks, crevices, or hollows. Snags without these characteristics are not considered suitable.

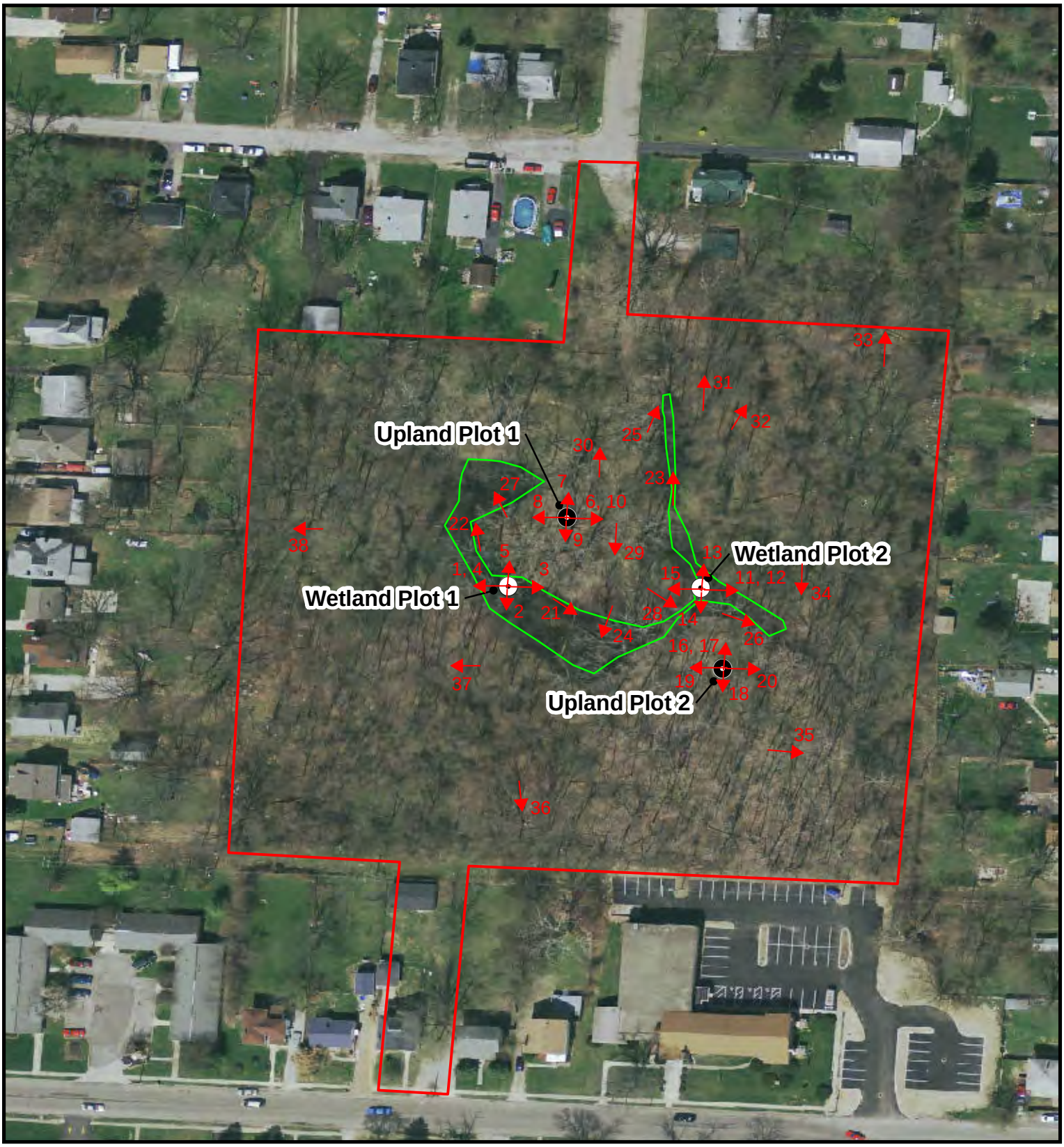
Partially suitable roosts*

IS THE HABITAT SUITABLE FOR INDIANA BATS? _____

Additional Comments:
* While potential roosts are present, primarily medium sized (9-15" DBH) snags with peeling bark and cavities, there are no suitable foraging areas nearby or flight corridors to nearby foraging areas. The site is a small forested area surrounded by dense residential development.

Attach aerial photo of project site with all forested areas labeled and a general description of the habitat

Photographic Documentation: habitat shots at edge and interior from multiple locations; understory/midstory/canopy; examples of potential suitable snags and live trees; water sources



Site Photograph Map
Linview Park
Linden Area
Columbus, OH

Legend

- Upland Plots
- Wetland Plots
- Wetland Boundary
- Area of Investigation

0 0.0125 0.025 0.05 Miles

N

CDM Smith

Appendix D

Description and Mapping of Isolated Wetland

City of Columbus, Ohio Linview Park Project
Wetland Description

As described in detail in the wetland delineation report (included as Appendix C in this application package), one isolated 0.25-acre forested wetland (PFO1C) was identified within the area of investigation. This isolated wetland contains two primary depressions/lobes that contain slightly different vegetation communities but remain connected through a narrow wetland corridor as one contiguous wetland. Therefore, two formal wetland (and associated upland) determination plots were conducted to best characterize this wetland habitat.

At the time of the delineation in April 2020, the western portion of this forested wetland contained several feet of standing water, and the only vegetation present were woody tree species in the canopy and sapling/shrub strata. The wetland plot analyzed within this portion of the wetland (Wetland Plot 1) was composed entirely of eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*) and American elm (*Ulmus americana*). No vegetation was observed within the herbaceous or woody vine strata. Of the four observed species, eastern cottonwood, silver maple, and red maple were identified as dominant.

Primary and secondary indicators of wetland hydrology within this portion of the wetland (Wetland Plot 1) included the following: surface water, high water table, saturation, water marks, sparsely vegetated concave surface, water stained leaves, and stunted or stressed plants. Surface water was recorded to a depth of 36"; the water table was encountered to a depth of 8"; and saturation was present to the ground surface. The soil profile satisfied the conditions of the following hydric soil indicators: depleted below dark surface (A11), depleted matrix (F3), redox dark surface (F6) and redox depressions (F8).

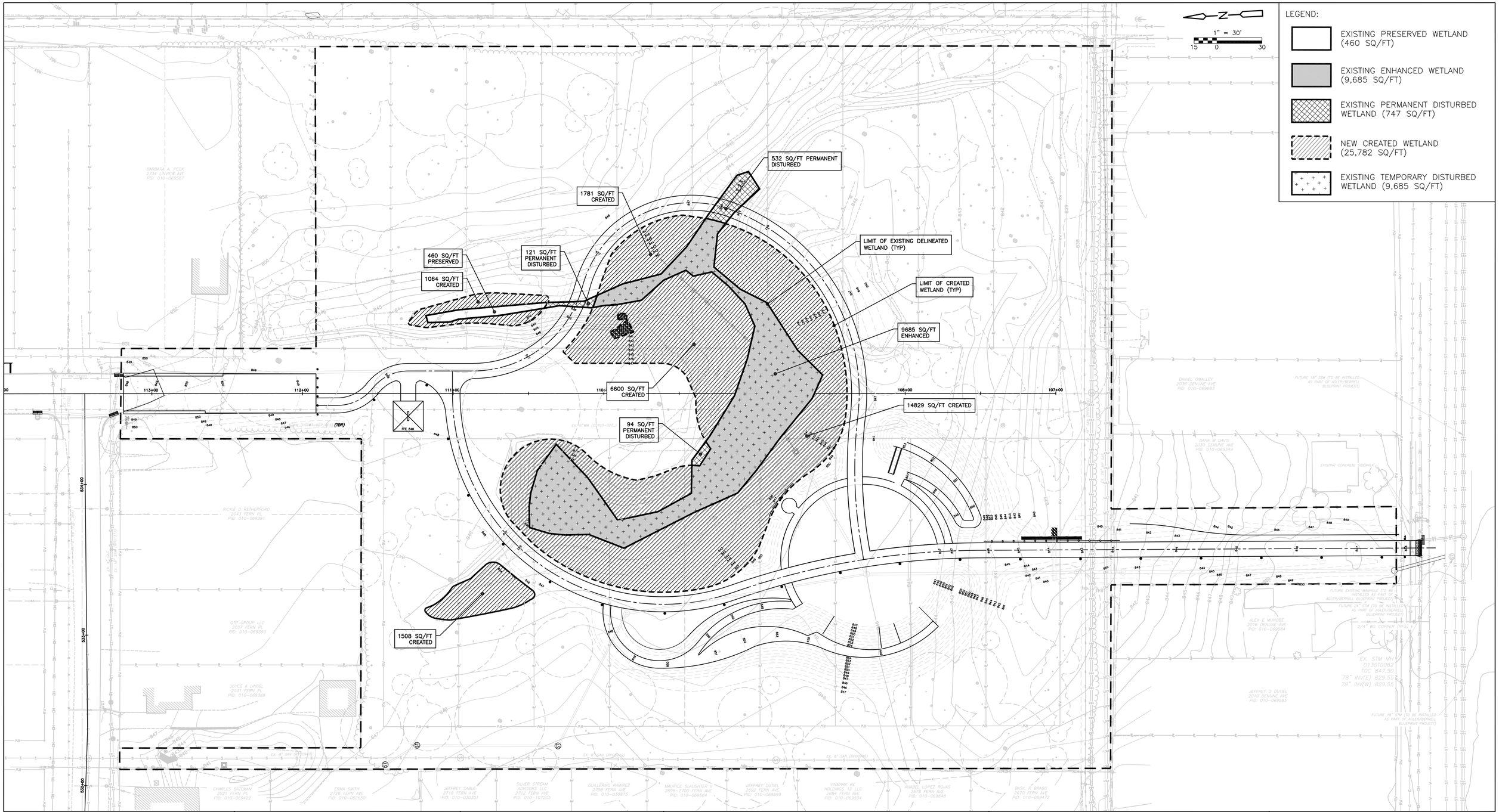
Wetland Plot 2 was completed within the eastern portion of the forested wetland and was conducted to describe differences in vegetation compared to the western portion (Wetland Plot 1), namely the presence of a slightly thinner canopy and a much denser sapling/shrub stratum than the western portion of the forested wetland. In addition to those tree species observed in Wetland Plot 1 (i.e., eastern cottonwood, silver maple, red maple, and American elm), boxelder (*Acer negundo*) and riverbank grape (*Vitis riparia*) were also present in Wetland Plot 2. Of the species observed, silver maple, American elm and riverbank grape were identified as being dominant.

Primary and secondary indicators of wetland hydrology within the eastern portion of the wetland (Wetland Plot 2) included the following: surface water, high water table, saturation, water marks, sparsely vegetated concave surface, water stained leaves, hydrogen sulfide odor, drainage patterns, and stunted or stressed plants. Surface water was recorded to a depth of 12"; the water table was encountered to a depth of 8"; and saturation was present to the ground surface. The soil profile

satisfied the conditions of the following hydric soil indicators: hydrogen sulfide (A4), depleted below dark surface (A11), redox dark surface (F6) and redox depressions (F8).

Upon completion of the delineation, the wetland was assessed in accordance with ORAM protocols in which the forested wetland scored 33 points, falling within the Category 1 – Category 2 Gray Zone. In accordance with ORAM classification procedures, the wetland was assigned to the higher category and ultimately was listed as a Category 2 wetland. The ORAM report is included as part of the wetland delineation report (included as Appendix C of this application package).

As depicted in the following figures and detailed in the Mitigation Plan (presented in Appendix E of this application package), of the 0.25-acres constituting the isolated PF01C wetland, it is anticipated that 0.22-acres of the wetland will be temporarily disturbed and 0.02-acres will be permanently disturbed as a result of the proposed project. In order to offset these disturbances, the design plan proposes preserving 0.01-acres of wetland habitat, creating 0.59-acres of new wetland habitat, and enhancing 0.22-acres of existing wetland habitat through the establishment of high-quality wetland plant species, which will include seeding and planting what is currently a highly degraded, sparsely vegetated concave surface with native species adapted to local growing conditions.



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PLANS PREPARED BY:

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WETLAND DELINEATION, PRESERVATION & CREATION PLAN

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

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				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD / CHK	CID / CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

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SCALE: HOR: 1"=30' VER: 1"=30'	SHEET 15 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

Appendix E

Proposed Mitigation Plan

City of Columbus, Ohio Linview Park Project Mitigation Plan

Current Land Use

The proposed project will occur within a 6-acre, previously disturbed and early successional forested area south of Fern Place surrounded by urban/residential housing. Continued disturbance within this area is largely limited to illegal dumping of household trash and debris, which occurs throughout the property. The habitat within this 6-acre plot primarily consists of an urban hackberry (*Celtis occidentalis*) upland forest containing elevated terraces comprised of small mounds likely resulting from historic disturbance, fill and earth moving operations. In addition, one isolated 0.25-acre forested wetland (PFO1C) containing standing water was observed in an isolated depression near the center of the forested area.

Wetland Description

As described in detail in the wetland delineation report (included as Appendix C in this application package), the isolated 0.25-acre wetland contains a narrow wetland corridor that connects larger eastern and western depressions. These two primary depressions contain slightly different vegetation communities as described in the provided wetland determination plot data sheets but remain connected as one contiguous wetland. The vegetation in the western portion of the wetland was composed entirely of woody tree species in the canopy and sapling/shrub strata and was dominated by eastern cottonwood (*Populus deltoides*), silver maple (*Acer saccharinum*), and red maple(*Acer rubrum*). The vegetation in the eastern portion of the wetland contained a thinner canopy and much denser sapling/shrub stratum dominated by silver maple, American elm and riverbank grape.

The forested wetland is located in an isolated depression. No connections to other waterways were identified and no water was observed discharging into or out of the wetland. No surface water inputs were observed discharging into the wetland from point sources (i.e., pipes, drains, streams, etc.), and no outlets from which water may exit the wetland were observed. It is likely that the surrounding urban neighborhood (consisting extensively of impervious surfaces) drains stormwater to this wetland, resulting in the observed inundation during times of consistent or heavy rain. Anecdotal evidence and observations by others during drier times of the year indicate that the wetland depression is dry (i.e., standing water is not present) for at least part of the year.

Proposed Wetland Impacts and Functional Losses

Although the 0.25-acre PFO1C wetland identified within the project area is isolated, disturbed, and comprises only a small area, the wetland still provides important biotic and hydrologic functions. Forested wetlands have been shown to provide habitat for wildlife, help regulate water flow during high precipitation events, retain or transform excess nutrients and trap sediments and heavy metals. This wetland specifically appears to aid in stormwater retention for the surrounding forested lot and the adjacent residential neighborhood during rain or flooding events.

Once the 0.25-acre isolated wetland within the project area was identified, efforts were made during the planning and design of the park to avoid and minimize the impacts to this wetland to the extent practicable, while still achieving the goals of the project. However, in order to realize the goals of establishing a public park and providing sufficient stormwater management that satisfies the needs of the surrounding residential areas, construction of a bioretention basin is required throughout the majority of the wetland area, as depicted in the attached figure. The basin has been designed to utilize the natural topography of the landscape in order to minimize any unnecessary impacts to the surrounding forest. During advanced design, the footprint of the basin and associated park features were adjusted to preserve mature trees, minimize permanent wetland impacts, and allow for expanded wetland enhancement and creation.

Of the 0.25-acres constituting the PF01C isolated wetland, it is anticipated that 0.22-acres of the wetland will be temporarily disturbed, and 0.02-acres will be permanently disturbed as a result of the proposed project. The proposed temporary and permanent wetland impacts are described below:

Impact Type	Impact Acreage
Wetland *Temporary* Disturbance	0.22
Wetland *Permanent* Disturbance	0.02
Total Impact	**0.24**

Permanent disturbances resulting in a direct loss of wetland area and functionality would occur in those wetland areas where fill would be placed as part of the construction for the stormwater bioretention basin and additional park amenities, as depicted in the attached Wetland Delineation, Preservation and Creation Plan. Those temporary disturbances, which constitute the majority of the wetland impacts, will be short-term and minor, and will occur during construction of the stormwater bioretention basin. It is important to note that mature trees will be protected during construction and preserved to the extent practicable; therefore, the wetland will retain canopy cover and forested wetland characteristics.

The implementation of the project is not anticipated to have adverse impacts to the chemical, geomorphological, cultural or aesthetic characteristics of the wetland. As the majority of the planned wetland impacts will be temporary and those that are permanent will be offset by the proposed mitigation measures described in detail in the section below, any adverse impacts to the biological and hydrologic regime of the wetland would be short-term and minor.

Proposed Wetland Mitigation and Functional Gains

In order to offset these disturbances, the design plan proposes preserving 0.01-acres of existing wetland habitat, creating 0.59-acres of new wetland habitat, and enhancing 0.22-acres of existing wetland habitat through the seeding and planting of high-quality wetland communities. Existing mature trees will be protected and preserved to the extent possible; therefore, promoting "like-for-like" in-situ mitigation for permanent and temporary project impacts. The locations of the proposed preservation, creation, and enhancement of wetland habitats are depicted in the attached Wetland Delineation, Preservation, and Creation Plan as well as the Planting Plan (Sheets 1 – 3).

As illustrated in the attached figures, while wetland preservation and enhancement will occur within the undisturbed and temporarily disturbed existing wetland areas, the majority of proposed wetland mitigation will consist of newly constructed wetlands built directly adjacent to the existing wetland footprint. While the existing wetland area naturally aids in stormwater retention, creating a bioretention basin and expanding the wetland footprint will better utilize the space in order to provide sufficient stormwater management for the proposed park and existing neighborhood.

Of the 0.22-acres of enhanced wetland habitats and 0.59-acres of new wetland habitats, mitigation will include seeding and planting with native wetland communities to improve wetland quality and condition compared to the existing sparsely vegetated concave surface. The vegetation that is proposed to be planted will be composed primarily of a Rain Garden Seed Mix and Basin Floor Seed Mix. The Rain Garden Seed Mix is comprised largely of Virginia wildrye (*Elymus virginicus*) and fox sedge (*Carex vulphinoidea*), while the Basin Floor Seed Mix is comprised largely of deertongue (*Panicum clandestinum*), fox sedge, and Virginia wildrye. Both seed mixes contain numerous other wetland species in addition to those listed above, as detailed in the attached Planting Plan (Sheets 1 – 3). The Planting Plan further outlines the variety of wetland plant species proposed to be planted throughout the site, the count of individuals, and the proposed planting locations.

In addition to those wetland communities that will be planted and seeded within the footprint of the multi-use wetland stormwater retention basins, numerous other wetland plants will be propagated throughout the project area to enhance and expand the existing northwestern extent of the wetland, enhance the wetland fringe throughout the site, and create a newly constructed wetland located along the southwestern portion of the project area. The enhancement will include seeding and planting throughout areas that are currently highly degraded and sparsely vegetated with native species adapted to local growing conditions. Wetland planting plan details are further provided in the Planting Plan (Sheets 1 – 3).

Mitigation Type	Acreage
Wetland Preservation	0.01
Wetland Enhancement	0.22
Wetland Creation	0.59
Total Mitigation	**0.82**

The proposed mitigation is anticipated to have a high likelihood of success at not only restoring the wetland functionality lost as a result of the proposed impacts, but by further improving upon those biologic and hydrologic functions that are currently present. The proposed mitigation measures are planned to expand upon the stormwater retention functionality of the wetland, while further enhancing the wetland boundary and fringe of the existing wetland areas by providing additional wetland habitats consisting of a high diversity of wetland plant species that can be utilized by a wide range of biota. Additionally, because the wetland mitigation areas will be primary components of a City of Columbus park, they will be sustainably monitored, maintained, and protected.

Additional best management practices to be implemented during construction are provided below.

Best Management Practices (BMPs)

In an effort to minimize the impacts to the wetland and surrounding area, the following BMPs will be implemented during construction:

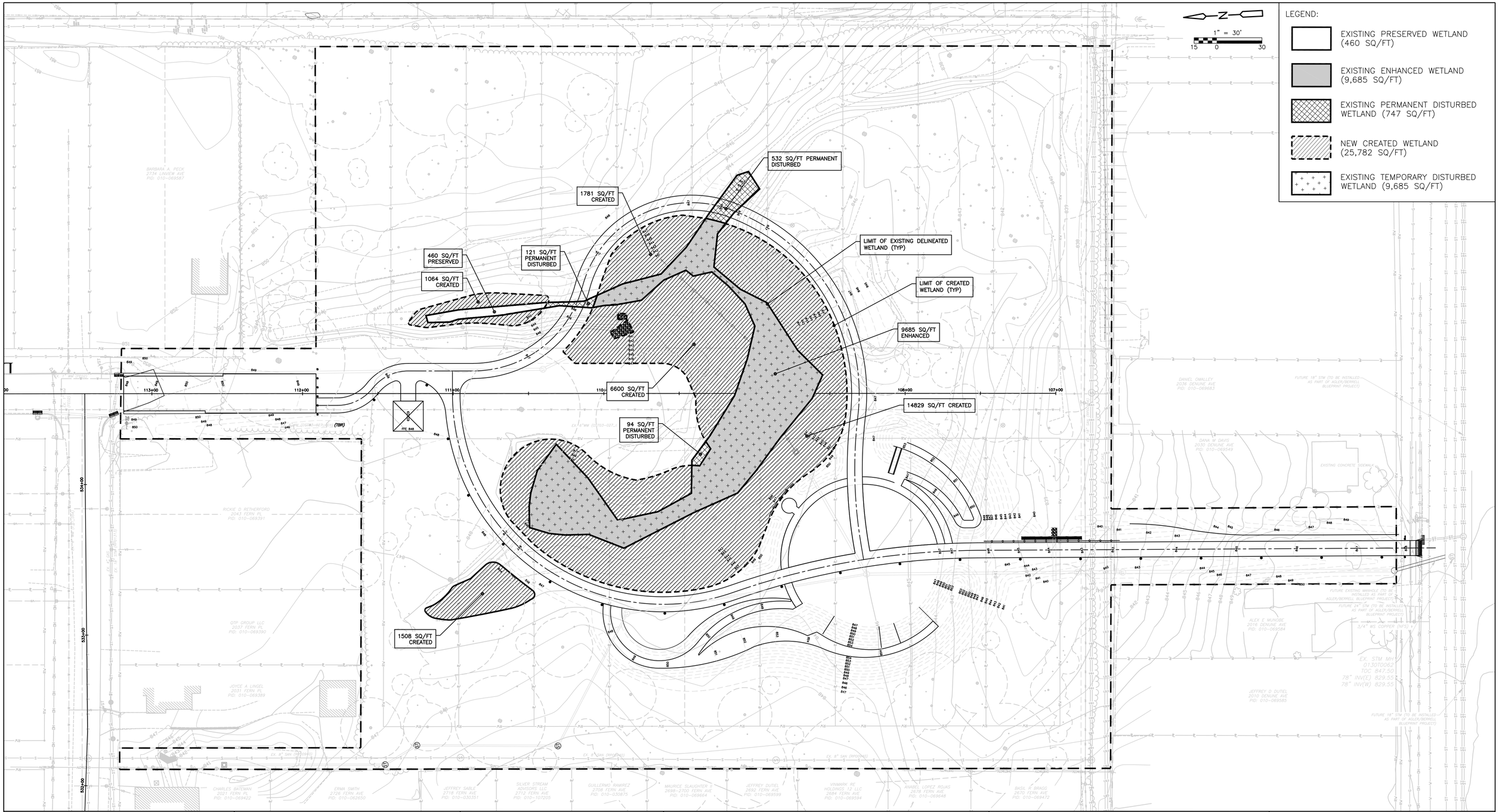
- Buffers between areas of soil disturbance and the wetland will be planted and maintained;
- Soil erosion BMPs such as silt fences, silt socks, sediment traps, erosion check screen filters, etc., to prevent the entry of sediment into wetland would be used;
- Any hazardous waste that is generated in the project area will be promptly removed and properly disposed;
- Equipment will be inspected for leaks of oil, fuels, or hydraulic fluids before and during use to prevent soil and water contamination;
- Measures to prevent or control spills of fuels, lubricants, or other contaminants from entering the wetland areas will be consistent with state and federal water quality standards;
- Actions will be taken to minimize effects on site hydrologic processes including stormwater runoff and sediment transport; and,
- Fill materials will be properly maintained and installed to avoid adverse impacts on aquatic environments.

More detailed construction details and BMPs are provided in the attached 90% design plans and will further be provided in the finalized construction specifications.

Summary

In summary, the proposed project is expected to permanently impact 0.02 acres and temporarily impact 0.22 acres of existing isolated forested wetland. To compensate for those impacts, the project will include 0.01 acres of preservation and 0.22 acres of enhancement of existing wetland habitats, and 0.59 acres of wetland creation. Therefore, the total mitigation area of 0.82 acres is roughly 3.5x the impact area, which is almost entirely composed of minor, temporary impacts. As such, the proposed in-situ mitigation efforts are expected to completely offset the proposed permanent and temporary impacts of the project, thereby eliminating the need for additional compensatory mitigation (e.g., mitigation bank, in-lieu fee, etc.). The extent of wetland protection, enhancement, and creation areas is significantly greater than existing wetland areas, and the preservation of mature trees ensures in-situ mitigation areas will retain their forested wetland character and functions. Additionally, the wetland enhancement and creation mitigation areas will include establishment of a robust wetland plant community to replace the sparsely vegetated and disturbed existing wetland area. Finally, the wetland mitigation areas will be protected in perpetuity within the larger City of Columbus park.

These mitigation measures are anticipated to occur as part of the construction of the Linview Park Project which, is planned to occur from October 2021 to December 2022.



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SCALE: HOR: 1"=30' VER: 1"=30'	SHEET 15 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

LANDSCAPE NOTES:

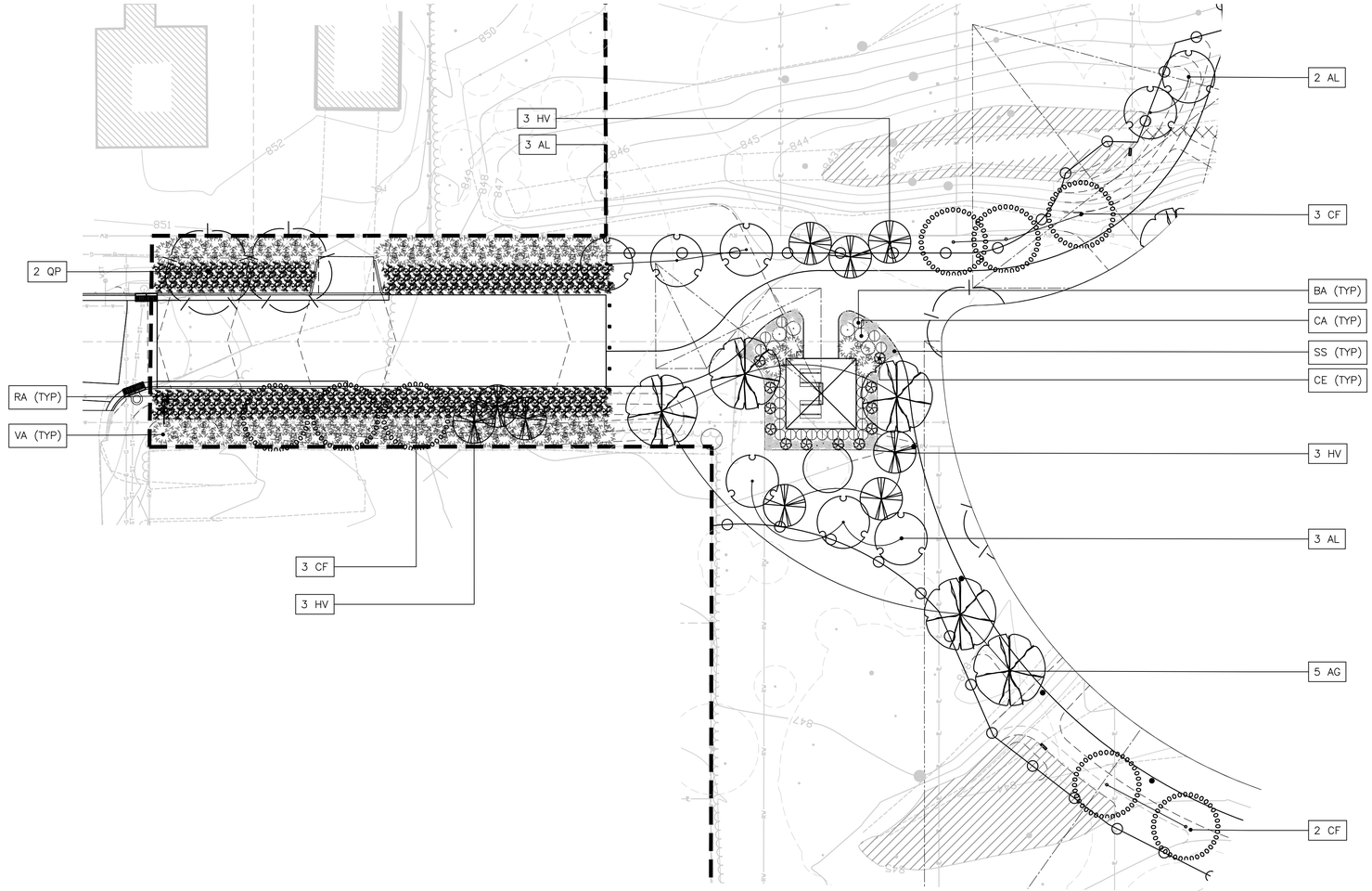
1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. A 3–INCH LAYER MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
5. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
7. ALL PLANT MATERIALS SHALL BE MAINTAINED AND GUARANTEED AS SPECIFIED PER CMSC 661 AND SS 1609.
8. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

PLANT MAINTENANCE NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE SEEDED AREAS. MULCHED BEDS AND PLANTINGS AS SPECIFIED IN CMSC SS 1609. THE CONTRACTOR SHALL SUPPLY WATERING FOR PLANTINGS DURING THE ESTABLISHMENT PERIOD.
2. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
3. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER WILL BE PROVIDED BY THE CONTRACTOR.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
6. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED PER CMSC SS 1609, LATEST EDITION.

PLANTING NOTES:

1. ALL TREES SHALL BE UNIFORM AND WELL–BRANCHED SPECIMENS.
2. ALL PLANTS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY The American Standards for Nursery Stock, LATEST EDITION
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.



TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES	ALTERNATE CULTIVAR
	AG	5	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B	–
	AL	3	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B	AMELANCHIER ARBOREA
	CF	6	CORNUS FLORIDA 'CHEROKEE BRAVE'	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CF (OTHER REGIONAL CULTIVAR)
	HV	9	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM	–
	QP	2	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B	–

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	CA	6	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	#3 CONT (2' O.C.)	–
	CE	12	CEANOTHUS AMERICANUS	NEW JERSEY TEA	#3 CONT (2' O.C.)	–
	RA	242	RHUS AROMATICA 'GRO LOW'	GROW LOW FRAGRANT SUMAC	#3 CONT (3' O.C.)	–
	VA	105	VIBURNUM ACERFOLIUM	MAPLELEAF VIBURNUM	#3 CONT (3' O.C.)	–

ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	SS	36	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	#2 CONT (2' O.C.)	–

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	BA	25	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	#2 CONT (1' O.C.)	–

FOR CONTINUATION OF PLANTING PLAN, SEE SHEETS 23 AND 24

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 1 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD / CHK	CID / CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=20' VER: 1"=20'	SHEET 22 OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.

LANDSCAPE NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. A 3–INCH LAYER MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
5. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
7. ALL PLANT MATERIALS SHALL BE MAINTAINED AND GUARANTEED AS SPECIFIED PER CMSC 661 AND SS 1609.
8. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

PLANT MAINTENANCE NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE SEEDED AREAS. MULCHED BEDS AND PLANTINGS AS SPECIFIED IN CMSC SS 1609. THE CONTRACTOR SHALL SUPPLY WATERING FOR PLANTINGS DURING THE ESTABLISHMENT PERIOD.
2. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
3. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER WILL BE PROVIDED BY THE CONTRACTOR.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
6. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED PER CMSC SS 1609, LATEST EDITION.

PLANTING NOTES:

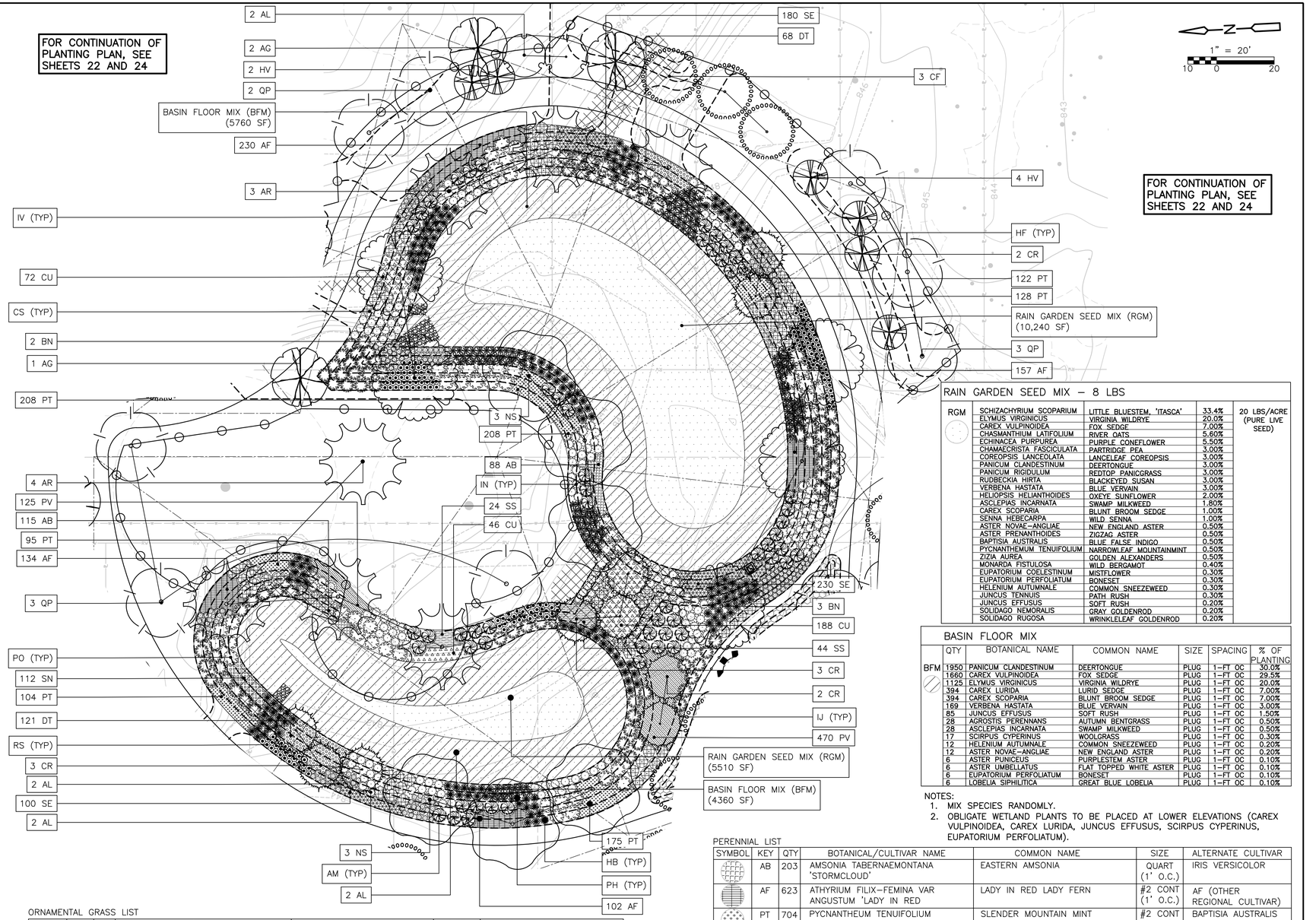
1. ALL TREES SHALL BE UNIFORM AND WELL–BRANCHED SPECIMENS.
2. ALL PLANTS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY The American Standards for Nursery Stock, LATEST EDITION
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.

TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES	ALTERNATE CULTIVAR
	AG	3	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B	–
	AL	2	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B	AMELANCHIER ARBOREA
	AR	7	ACER RUBRUM 'FRANKSRED'	RED MAPLE	2.5"–3" CAL	TREE FORM, B&B	AR (OTHER REGIONAL CULTIVAR)
	BN	5	BETULA NIGRA 'DURAHEAT'	RIVER BIRCH	2.5"–3" CAL	MULTISTEM, B&B	BN (OTHER REGIONAL CULTIVAR)
	CF	3	CORNUS FLORIDA 'CHEROKEE BRAVE'	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CF (OTHER REGIONAL CULTIVAR)
	CR	10	CORNUS RACEMOSA	PANICLED DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CORNUS FLORIDA
	HV	6	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM	–
	NS	6	NYSSA SYLVATICA	BLACK GUM	2"–2.5" CAL	TREE FORM, B&B	–
	QP	8	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B	–

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	AM	56	ARONIA MELANOCARPA 'VIKING'	VIKING BLACK CHOKEBERRY	#3 CONT (4' O.C.)	AM 'AUTUMN MAGIC'
	CS	75	CORNUS SERICEA 'FARROW' ARCTIC FIRE	FARROW ARCTIC FIRE DWARF DOGWOOD	#3 CONT (2' O.C.)	ITEA VIRGINICA 'SPIRCH' LITTLE HENRY
	HB	170	HYPERICUM KALMIANUM 'BLUE VELVET'	BLUE VELVET ST. JOHN'S WORT	#3 CONT (2' O.C.)	HK 'GEMO'
	IJ	86	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	#3 CONT (4' O.C)	ARONIA MELANOCARPA 'VIKING'
	IN	204	ILEX VERTICILLATA 'NANA'	NANA RED SPRITE WINTERBERRY	#3 CONT (3' O.C.)	ARONIA MELANOCARPA 'VIKING'
	IV	244	ITEA VIRGINICA 'SPRICH' LITTLE HENRY	LITTLE HENRY DWARF SWEETSPIRE	#3 CONT (3' O.C.)	CORNUS SERICEA 'FARROW' ARCTIC FIRE
	PO	52	PHYSOCARPUS OPULIFOLIUS 'SEWARD' SUMMER WINE	SUMMER WINE NINEBARK	#3 CONT (3' O.C.)	PO 'TINY WINE'



ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	CU	306	CAREX VULPINOIDEA	FOX SEDGE	#3 CONT (18" O.C.)	–
	DT	189	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	#2 CONT (18" O.C.)	–
	PH	162	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	#2 CONT (2' O.C.)	PANICUM VIRGATUM 'SHENANDOAH'
	SS	68	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	#2 CONT (18" O.C.)	–

RAIN GARDEN SEED MIX – 8 LBS

RGM	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM, 'ITASCA'	33.4%	20 LBS/ACRE (PURE LIVE SEED)
	ELYMUS VIRGINICUS	VIRGINIA WILDRYE	20.0%	
	CAREX VULPINOIDEA	FOX SEDGE	7.00%	
	CHASMANTHIUM LATIFOLIUM	RIVER OATS	5.60%	
	ECHINACEA PURPUREA	PURPLE CONEFLOWER	5.50%	
	CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	3.00%	
	COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	3.00%	
	PANICUM CLANDESTINUM	DEERTONGUE	3.00%	
	PANICUM RIGIDULUM	REDTOP PANICGRASS	3.00%	
	RUDBECKIA HIRTA	BLACKEYED SUSAN	3.00%	
	VERBENA HASTATA	BLUE VERVAIN	3.00%	
	HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER	2.00%	
	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1.80%	
	CAREX SCOPARIA	BLUNT BROOM SEDGE	1.00%	
	SENNA HEBECARPA	WILD SENNA	1.00%	
	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	0.50%	
	ASTER PRENANTHOIDES	ZIGZAG ASTER	0.50%	
	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	0.50%	
	PYCNANTHEMUM TENUIFOLIUM	NARROWLEAF MOUNTAINMINT	0.50%	
	ZIZIA AUREA	GOLDEN ALEXANDERS	0.50%	
	MONARDA FISTULOSA	WILD BERGAMOT	0.40%	
	EUPATORIUM COELESTINUM	MISTFLOWER	0.30%	
	EUPATORIUM PERFOLIATUM	BONESET	0.30%	
	HELENIUM AUTUMNALE	COMMON SNEEZEWEED	0.30%	
	JUNCUS TENNUIS	PATH RUSH	0.30%	
	JUNCUS EFFUSUS	SOFT RUSH	0.20%	
	SOLIDAGO NEMORALIS	GRAY GOLDENROD	0.20%	
	SOLIDAGO RUGOSA	WRINKLELEAF GOLDENROD	0.20%	

BASIN FLOOR MIX

	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	% OF PLANTING
BFM	1950	PANICUM CLANDESTINUM	DEERTONGUE	PLUG	1–FT OC	30.0%
	1660	CAREX VULPINOIDEA	FOX SEDGE	PLUG	1–FT OC	29.5%
	1125	ELYMUS VIRGINICUS	VIRGINIA WILDRYE	PLUG	1–FT OC	20.0%
	394	CAREX LURIDA	LURID SEDGE	PLUG	1–FT OC	7.00%
	394	CAREX SCOPARIA	BLUNT BROOM SEDGE	PLUG	1–FT OC	7.00%
	169	VERBENA HASTATA	BLUE VERVAIN	PLUG	1–FT OC	3.00%
	85	JUNCUS EFFUSUS	SOFT RUSH	PLUG	1–FT OC	1.50%
	28	AGROSTIS PERENNANS	AUTUMN BENTGRASS	PLUG	1–FT OC	0.50%
	28	ASCLEPIAS INCARNATA	SWAMP MILKWEED	PLUG	1–FT OC	0.50%
	17	SCIRPUS CYPERINUS	WOOLGRASS	PLUG	1–FT OC	0.30%
	12	HELENIUM AUTUMNALE	COMMON SNEEZEWEED	PLUG	1–FT OC	0.20%
	12	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	PLUG	1–FT OC	0.20%
	6	ASTER PUNICEUS	PURPLESTEM ASTER	PLUG	1–FT OC	0.10%
	6	ASTER UMBELLATUS	FLAT TOPPED WHITE ASTER	PLUG	1–FT OC	0.10%
	6	EUPATORIUM PERFOLIATUM	BONESET	PLUG	1–FT OC	0.10%
	6	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	PLUG	1–FT OC	0.10%

NOTES:
1. MIX SPECIES RANDOMLY.
2. OBLIGATE WETLAND PLANTS TO BE PLACED AT LOWER ELEVATIONS (CAREX VULPINOIDEA, CAREX LURIDA, JUNCUS EFFUSUS, SCIRPUS CYPERINUS, EUPATORIUM PERFOLIATUM).

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	AB	203	AMSONIA TABERNAEMONTANA 'STORMCLOUD'	EASTERN AMSONIA	QUART (1' O.C.)	IRIS VERSICOLOR
	AF	623	ATHYRIUM FILIX–FEMINA VAR ANGUSTUM 'LADY IN RED	LADY IN RED LADY FERN	#2 CONT (1' O.C.)	AF (OTHER REGIONAL CULTIVAR)
	PT	704	PYCNANTHEUM TENUIFOLIUM	SLENDER MOUNTAIN MINT	#2 CONT (1' O.C.)	BAPTISIA AUSTRALIS
	PV	595	POLYGONATUM BIFLORUM	SMOOTH SOLOMON'S SEAL	#2 CONT (1' O.C.)	CAREX PENSYLVANICA
	RS	173	RUDBECKIA FULGIDA 'GOLDSTURM'	GOLDSTURM CONEFLOWER	#2 CONT (18" O.C.)	ECHINACEA 'CHEYENNE SPIRIT'
	SE	510	SYMPHYOTRICHUM ERICOIDES 'SNOWFLURRY'	SNOWFLURRY HEATH ASTER	#2 CONT (1' O.C.)	PHLOX SUBULATA 'EMERALD BLUE'
	SN	240	SYMPHYOTRICHUM NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#2 CONT (1' O.C.)	SN 'VIBRANT DOME'

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 2 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
	RPD / CHK / CID / CON.DR.
	INDEX DETAIL / RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=20' VER: 1"=20'
SHEET 23 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

LANDSCAPE NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
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PLANT MAINTENANCE NOTES:

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5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
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PLANTING NOTES:

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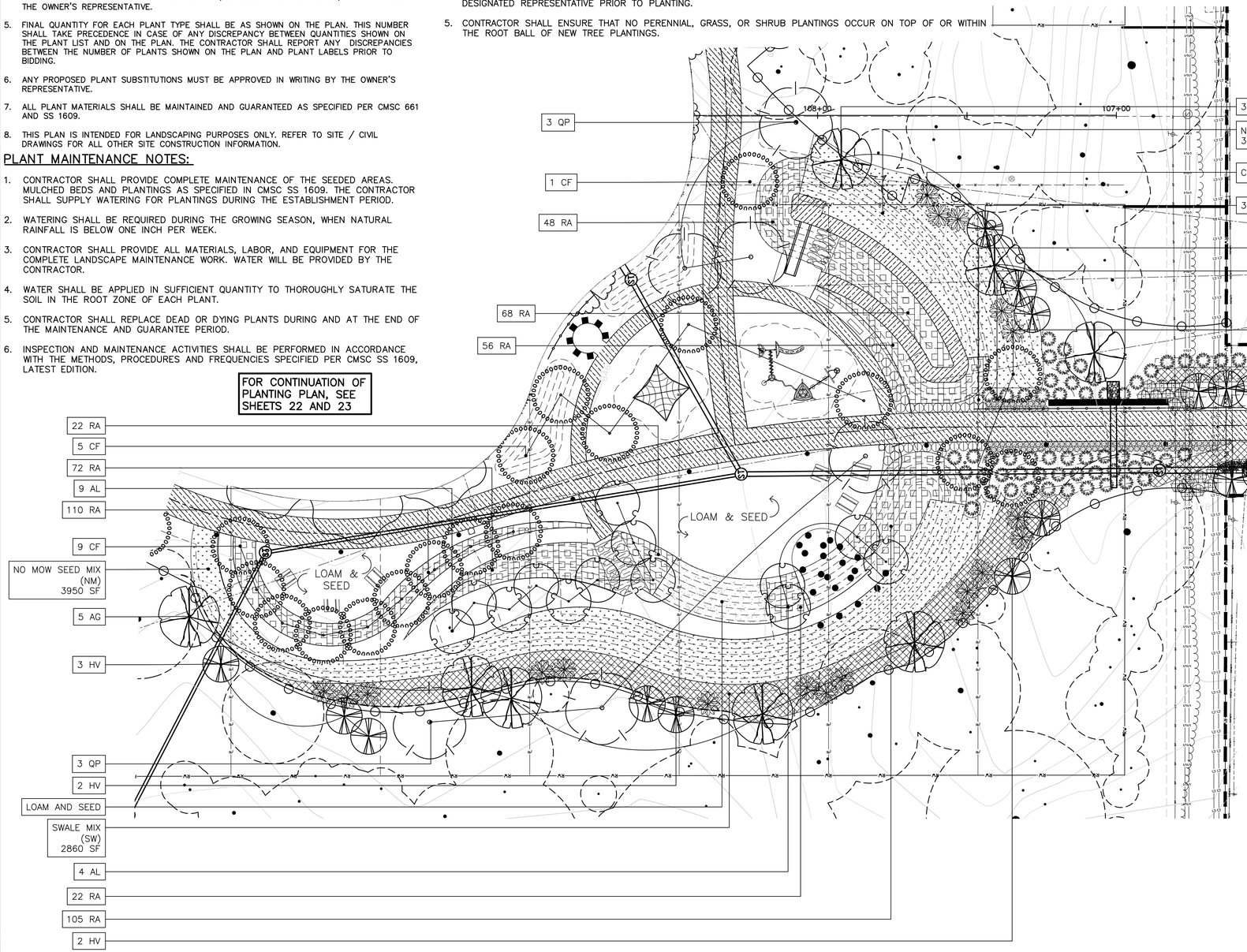
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.



SWALE MIX (MIX SPECIES RANDOMLY)						
	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	% OF PLANTING
SW	494	CAREX VULPINOIDEA	FOX SEDGE	#2	1–FT OC	20.0%
	494	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	#2	1–FT OC	20.0%
	494	IRIS VERSICOLOR	BLUE FLAG IRIS	#2	1–FT OC	20.0%
	494	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	#2	1–FT OC	20.0%
	494	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	#2	1–FT OC	20.0%

N

1" = 20'
10 0 20

SEED MIX (NO MOW SEED MIX)				
NM	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS	25.00%	250 LBS/ACRE (PURE LIVE SEED)
	FESTUCA RUBRA	CREEPING RED FESCUE	23.40%	
	FESTUCA RUBRA COMMUTATA	CHEWINGS FESCUE	23.40%	
	FESTUCA TRACHYPHYLLA	HARD FESCUE	23.40%	
	POA PRATENSIS	KENTUCKY BLUEGRASS	4.80%	

ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	PH	213	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	#2 CONT (2' O.C.)

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	BA	36	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	#2 CONT (3' O.C.)

TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES
	AG	8	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B
	AL	13	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B
	CF	17	CORNUS FLORIDA	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B
	HV	22	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM
	QP	6	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	CO	19	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	#3 CONT (3' O.C.)
	CS	103	CORNUS SERICEA 'FARROW' ARCTIC FIRE	FARROW ARCTIC FIRE DWARF DOGWOOD	#3 CONT (2' O.C.)
	HB	91	HYPERICUM KALMIANUM 'BLUE VELVET'	BLUE VELVET ST. JOHN'S WORT	#3 CONT (2' O.C.)
	IJ	81	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	#3 CONT (4' O.C)
	IV	101	ITEA VIRGINICA 'SPRICH' LITTLE HENRY	LITTLE HENRY DWARF SWEETSPIRE	#3 CONT (3' O.C.)
	RA	503	RHUS AROMATICA 'GRO LOW'	GROW LOW FRAGRANT SUMAC	#3 CONT (3' O.C.)

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 3 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD / CHK	CID / CON.DR.
		INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: 1"=20'	SHEET 24 OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.

CITY OF COLUMBUS

DIVISION OF SEWERAGE AND DRAINAGE

STORM SEWER IMPROVEMENT PLAN FOR

LINVIEW PARK PROJECT

CIP # 650870-100005

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF CONSTRUCTION OF A PARK AREA ON PARCELS OWNED BY THE CITY OF COLUMBUS. THE PARK WILL INCLUDE A BIORETENTION BASIN WITHIN THE PARK, A SHARED USE PATH AND COMMUNITY AMENITIES.

FEMA NOTE

ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (DATED 06/17/2008), THE SUBJECT PROJECT AREA SHOWN HERON LIES WITH ZONE "X", FIRM PANEL NO 39049C0189K.

SITE DATA

TOTAL PROJECT AREA:	6.12	ACRES
ESTIMATED DISTURBED AREA:	3.01	ACRES
PRE-DEVELOPED IMPERVIOUS AREA:	0.00	ACRES
POST-DEVELOPED IMPERVIOUS AREA:	0.34	ACRES

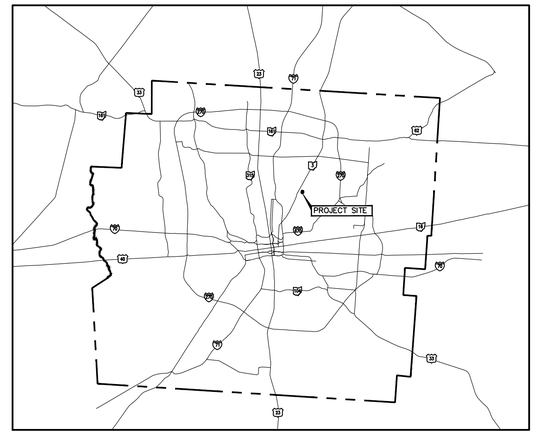
STANDARD CONSTRUCTION DRAWINGS

THE LATEST STANDARD SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF COLUMBUS, OHIO INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN THESE IMPROVEMENTS. THE STANDARD DRAWINGS LISTED ON THESE PLANS SHALL BE CONSIDERED A PART THEREOF:

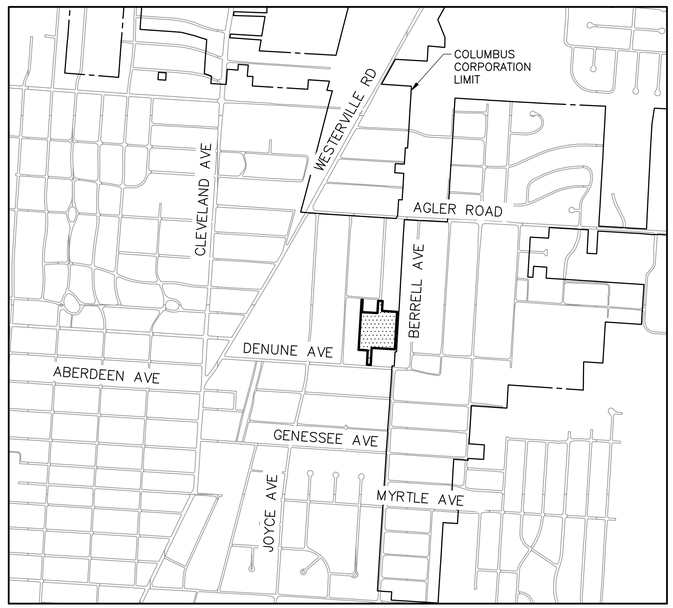
AA-S102	AA-S126	AA-S161	L-6310	2010
AA-S106	AA-S128	AA-S175	L-6311	2201
AA-S107	AA-S133B	L-1003	L-6312	2310
AA-S112	AA-S145	L-1004	L-6316A	
AA-S117	AA-S149	L-6306	L-6409	
AA-S119	AA-S150	L-6309A	L-6640	
AA-S125B	AA-S151	L-6309B	L-8502	
	AA-S154	L-6309E	L-9901	

GREEN INFRASTRUCTURE INSPECTION AND MAINTENANCE REQUIREMENTS

GREEN INFRASTRUCTURE FACILITIES CONSTRUCTED UNDER THIS PLAN SHALL BE MAINTAINED BY THE CITY OF COLUMBUS OR ITS AGENTS AFTER THE CONTRACT ESTABLISHMENT AND WARRANTY PERIODS HAVE BEEN SATISFACTORILY COMPLETED. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED IN THE CITY'S GREEN INFRASTRUCTURE MAINTENANCE PLAN, LATEST EDITION.



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

SHEET INDEX

OHIO Utilities Protection SERVICE
Click, Call or Tap Before You Dig
800-362-2764 OR 811
WWW.OUPS.ORG

90% DESIGN SUBMITTAL (OCTOBER 2020)

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699
STACHLEREE@CDMSMITH.COM

REGISTERED ENGINEER ____ NO. ____ DATE ____

APPROVALS:
SIGNATURES BELOW SIGNIFY ONLY CONCURRENCE WITH THE GENERAL PURPOSES AND GENERAL LOCATIONS OF THE PROJECT. ALL TECHNICAL DETAILS REMAIN THE RESPONSIBILITY OF THE ENGINEER PREPARING THE PLANS.

SEWER SYSTEM ENGINEERING MANAGER, DIVISION OF SEWERAGE AND DRAINAGE	DATE	ADMINISTRATOR, DIVISION OF POWER	DATE
ADMINISTRATOR DIVISION OF SEWERAGE AND DRAINAGE	DATE	ADMINISTRATOR DIVISION OF WATER	DATE
DIRECTOR, DEPARTMENT OF PUBLIC UTILITIES	DATE	CITY ENGINEER/ADMINISTRATOR, DIVISION OF DESIGN AND CONSTRUCTION	DATE
DIRECTOR, DIVISION OF PUBLIC SERVICE	DATE	DIRECTOR, DEPARTMENT OF RECREATION AND PARKS	DATE

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER		
	CONTRACTOR		
	INSPECTOR		
	AGREEMENT	COMPLETED	
RPD / CHK / CID / CON.DR.			
	INDEX DETAIL	RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: NO SCALE	SHEET 1 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

INLET RESTORATION/GREEN INFRASTRUCTURE FACILITY LOCATION

GI ID	LOCATION/ADDRESS	FACILITY TYPE	NORTHING/EASTING TO CONTROL STRUCTURE	PLAN AND PROFILE SHEETS	DETAIL SHEET	PLANTING PLAN SHEETS
LIN–1	SOUTH OF FERN PLACE, NORTH OF DENUNE AVE, WEST OF FERN AVE, EAST OF BERRELL AVE	REGIONAL BIORETENTION FACILITY	1840618.42, 737080.67	13 – 19	12	22–24

STAGING AND STORAGE AREAS NOTES:

1. STAGING AND STORAGE AREAS: STAGING AND STORAGE AREAS IS LIMITED TO THE DESIGNATED AREAS IN THE "LINVIEW PARK PROJECT AREA" AS SHOWN HEREIN THESE PLANS. CONTRACTOR SHALL FOLLOW REQUIREMENTS TO PROTECT TREES THAT WILL REMAIN IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION NOTES ON SHEET 8 AND THE TREE PROTECTION NOTES AND DETAILS ON SHEET 18. CONTRACTOR IS RESPONSIBLE RESTORE STORAGE AND STAGING AREAS TO PRE–CONSTRUCTION CONDITIONS INCLUDING BUT NOT LIMITED TO GRADING AND SEEDING AND FINAL STABILIZATION.

HAUL ROADS:

1. CONTRACTOR SHALL LIMIT CONSTRUCTION AND HAULING TRAFFIC TO THE APPROVED HAULING ROADS SHOWN. NO CONSTRUCTION TRAFFIC WILL BE PERMITTED ON OTHER ROADWAYS WITHOUT PRIOR APPROVAL FROM THE CITY.

PARKING:

1. CONTRACTOR EMPLOYEE PARKING SHALL BE RESTRICTED TO DENUNE AVE AND LINVIEW AVENUE. CONTRACTORS SHALL NOT PARK VEHICLES WITHIN THE "LINVIEW PARK PROJECT AREA".

MAINTENANCE OF TRAFFIC AND TEMPORARY TRAFFIC CONTROL:

1. ALL TEMPORARY TRAFFIC CONTROL (TTC) DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (CURRENT EDITION). NOTE: ALL DEVICES SHALL COMPLY, FOR CONDITION AND LOCATION, WITH THE CURRENT EDITION OF THE NCHRP 350 AND MASH CRASH TESTING GUIDELINES.

2. CONSTRUCTION OPERATIONS SHALL NOT BEGIN UNTIL ALL TRAFFIC CONTROL IS IN PLACE AND APPROVED BY THE DEPARTMENT OF PUBLIC SERVICE INSPECTOR. IF THE CONTRACTOR DOES NOT COMPLY WITH THE STANDARDS, INCLUDING THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS AND THE REMOVAL OF CONFLICTING TRAFFIC CONTROLS, THEIR PERMIT SHALL BE REVOKED AND ALL WORK SHALL BE TERMINATED. TEMPORARY PAVEMENT MARKINGS TO INCLUDE, BUT NOT BE LIMITED TO, CHANNELIZING LINES, EDGE LINES, AND CENTERLINES, SHALL BE INSTALLED AND MAINTAINED ON ALL CONSTRUCTION OPERATIONS LASTING A MINIMUM OF 14 CALENDAR DAYS OR AS DIRECTED BY THE TEMPORARY TRAFFIC CONTROL COORDINATOR OR THE PROJECT ENGINEER.

3. THE CONTRACTOR SHALL GIVE ADVANCE NOTIFICATION (WRITTEN AND VERBALLY) TO THE TEMPORARY TRAFFIC CONTROL COORDINATOR AT (614)645–0355 OR (614)645–5845, WRITTEN NOTIFICATION TO PAVINGTHEWAY@MORPC.ORG OR VERBAL TO (614)233–4200, AND THE SENIOR SERVICE PLANNER OF COTA AT (614)308–4373 OR FAX (614)275–5933, INFORMING THEM OF ALL UPCOMING MAINTENANCE OF TRAFFIC CHANGES. NOTIFICATION SHALL INCLUDE, BUT NOT BE LIMITED TO, WHAT, WHERE, WHEN, AND HOW PEDESTRIAN AND VEHICULAR TRAFFIC WILL BE AFFECTED, AND THE TEMPORARY TRAFFIC CONTROL PROCEDURES THE CONTRACTOR IS PLANNING TO USE. THE TYPE OF TRAFFIC CHANGE SHALL DETERMINE THE LENGTH OF ADVANCE NOTIFICATION REQUIRED:

TYPE OF CHANGE	ADVANCE NOTIFICATION NEEDED
DETOURS/ROAD CLOSURES	30–DAYS NOTIFICATION PRIOR TO CLOSURE
LANE CLOSURES LASTING 2 WEEKS OR MORE	2–WEEKS
LANE CLOSURES OF LESS THAN 2 WEEKS	3–DAYS
LANE CLOSURES OF 2 DAYS OR LESS	1–DAY

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND SAFE MOVEMENT OF PEDESTRIANS THROUGH, AROUND, AND DETOURED AWAY FROM THE CONSTRUCTION SITE. TRAFFIC CONTROL FOR PEDESTRIAN MOVEMENT SHALL BE AS PER CITY OF COLUMBUS CONSTRUCTION MATERIAL AND SPECIFICATIONS, CITY OF COLUMBUS STANDARD CONSTRUCTION DRAWINGS, AND FIGURES 6H–28 (TA–28) AND 6H–29 (TA–29) OF PART VI OF THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. WHEN NOT SHOWN ON A SIGNED PLAN, ALL SIDEWALK DIVERSIONS AND TEMPORARY MID–BLOCK CROSSINGS SHALL BE PRE–APPROVED BY THE PROJECT ENGINEER OR THE TEMPORARY TRAFFIC CONTROL COORDINATOR.

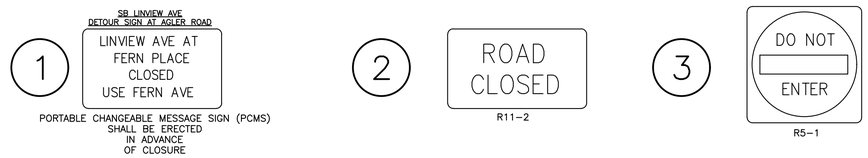
5. THE ROADWAY SHALL NOT BE OPENED TO NON–CONSTRUCTION TRAFFIC UNTIL THE CRITICAL PERMANENT TRAFFIC CONTROLS ARE IN PLACE, OR UNTIL TEMPORARY TRAFFIC CONTROLS APPROVED BY THE ENGINEER, ARE INSTALLED. THE CONTRACTOR ASSUMES ALL LIABILITY FOR THE PREMATURE REMOVAL OF TEMPORARY TRAFFIC CONTROLS.

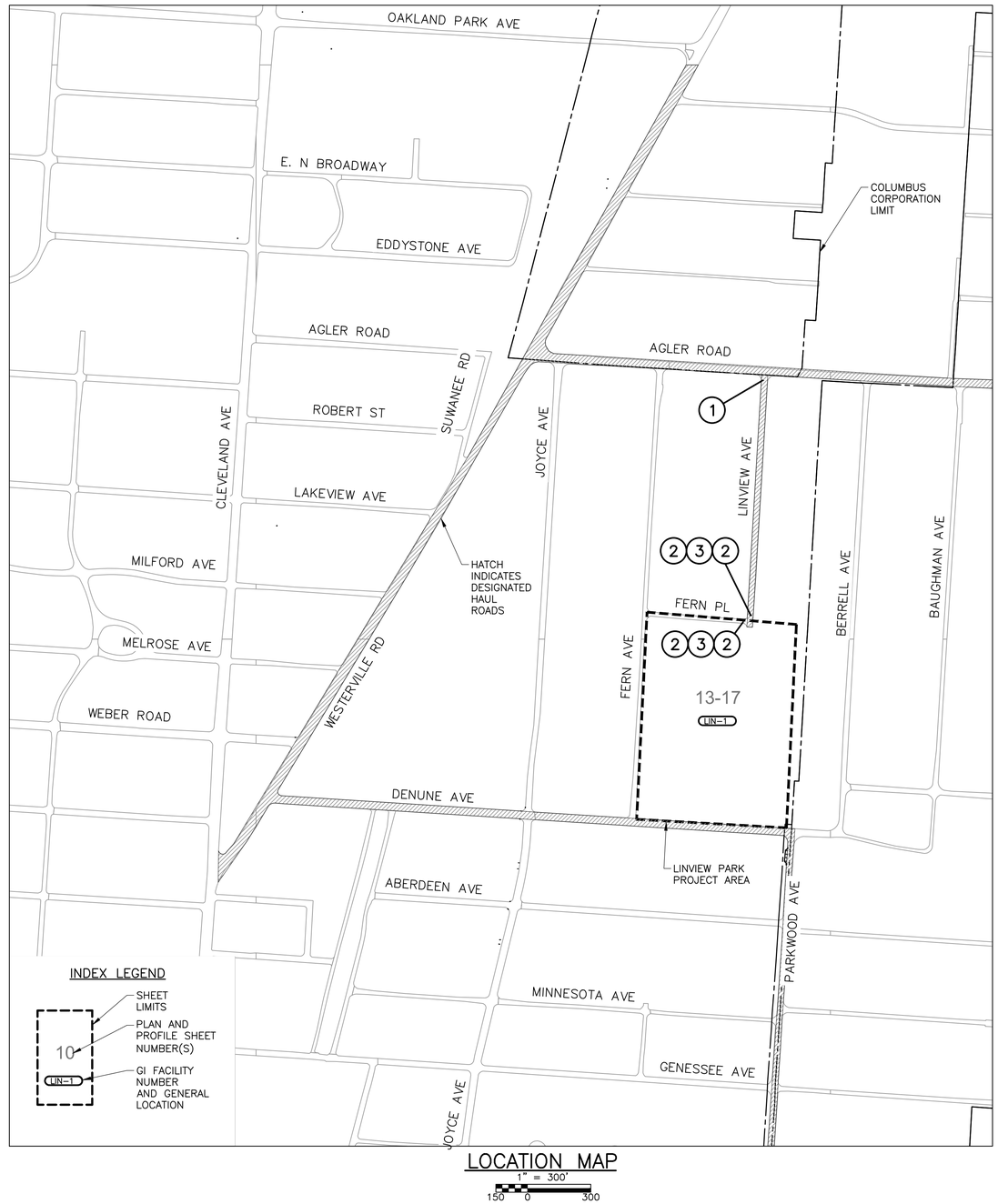
6. ITEM 614 – MAINTAINING TRAFFIC, LUMP SUM: ALL COSTS THAT CONSIST OF MAINTAINING AND PROTECTING VEHICULAR AND PEDESTRIAN TRAFFIC ACCORDING TO THE LATEST EDITION OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS, THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (OMUTCD), AND PER THE REQUIREMENTS DESIGNATED IN THE PLAN INCLUDING ALL LAW ENFORCEMENT OFFICER (LEO) AND FLAGGER HOURS SHALL BE INCLUDED IN THE LUMP SUM ITEM 614.

7. ALL TRENCHES WITHIN THE ROAD RIGHT–OF–WAY SHALL BE BACKFILLED OR SECURELY PLATED PER CITY OF COLUMBUS GENERAL POLICY ON STEEL PLATE USAGE DATED 11/15/2006 AND 2013 STD. DWG. 1441 DURING NON–WORKING HOURS. CONSTRUCTION AT LINVIEW AVE/FERN PL INTERSECTION SHALL BE CONSTRUCTED OVER ONE WEEKEND SUBJECT TO NOISE ORD. NO. 0544–03. THE CLOSURE SHALL NOT BE MADE BEFORE 7 PM FRIDAY.

8. AT LEAST 2 WEEKS PRIOR AND AGAIN 3 DAYS PRIOR TO CLOSURE OF LINVIEW AVE/FERN PL INTERSECTION, CONTRACTOR SHALL NOTIFY RESIDENT AT 2734 LINVIEW AVE TO NOTIFY THEM OF CLOSURE OF DRIVEWAY ACCESS TO DETACHED GARAGE DURING CONSTRUCTION OF PIPE BETWEEN CGIS 08 AND 09.

9. SEE SHEET 15 FOR





LOCATION MAP
1" = 300'
150 0 300

EASEMENT REFERENCE				REVISIONS		
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR	NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PROJECT SUMMARY AND MAINTENANCE OF TRAFFIC NOTES

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE:
SHEET 2 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

ITEM NO.	CMSC REF. NO.	BIORETENTION WORK – ITEM DESCRIPTION	TOTAL	UNIT
1	201	CLEARING AND GRUBBING	1	LUMP
2	201	TREE REMOVED, 6–INCH AS SHOWN ON SHEETS 13 AND 14	93	EACH
3	201	TREE REMOVED, 7–INCH AS SHOWN ON SHEETS 13 AND 14	45	EACH
4	201	TREE REMOVED, 8–INCH AS SHOWN ON SHEETS 13 AND 14	22	EACH
5	201	TREE REMOVED, 9–INCH AS SHOWN ON SHEETS 13 AND 14	8	EACH
6	201	TREE REMOVED, 10–INCH AS SHOWN ON SHEETS 13 AND 14	18	EACH
7	201	TREE REMOVED, 11–INCH AS SHOWN ON SHEETS 13 AND 14	7	EACH
8	201	TREE REMOVED, 12–INCH AS SHOWN ON SHEETS 13 AND 14	21	EACH
9	201	TREE REMOVED, 13–INCH AS SHOWN ON SHEETS 13 AND 14	4	EACH
10	201	TREE REMOVED, 14–INCH AS SHOWN ON SHEETS 13 AND 14	3	EACH
11	201	TREE REMOVED, 15–INCH AS SHOWN ON SHEETS 13 AND 14	7	EACH
12	201	TREE REMOVED, 16–INCH AS SHOWN ON SHEETS 13 AND 14	12	EACH
13	201	TREE REMOVED, 17–INCH AS SHOWN ON SHEETS 13 AND 14	4	EACH
14	201	TREE REMOVED, 18–INCH AS SHOWN ON SHEETS 13 AND 14	11	EACH
15	201	TREE REMOVED, 20–INCH AS SHOWN ON SHEETS 13 AND 14	9	EACH
16	201	TREE REMOVED, 22–INCH AS SHOWN ON SHEETS 13 AND 14	3	EACH
17	201	TREE REMOVED, 23–INCH AS SHOWN ON SHEETS 13 AND 14	2	EACH
18	201	TREE REMOVED, 24–INCH AS SHOWN ON SHEETS 13 AND 14	5	EACH
19	201	TREE REMOVED, 25–INCH AS SHOWN ON SHEETS 13 AND 14	3	EACH
20	201	TREE REMOVED, 26–INCH AS SHOWN ON SHEETS 13 AND 14	5	EACH
21	201	TREE REMOVED, 28–INCH AS SHOWN ON SHEETS 13 AND 14	1	EACH
22	201	TREE REMOVED, 30–INCH AS SHOWN ON SHEETS 13 AND 14	1	EACH
23	201	TREE REMOVED, 34–INCH AS SHOWN ON SHEETS 13 AND 14	1	EACH
24	201	TREE REMOVED, 38–INCH AS SHOWN ON SHEETS 13 AND 14	3	EACH
25	201	TREE REMOVED, 40–INCH AS SHOWN ON SHEETS 13 AND 14	3	EACH
26	201	TREE REMOVED, 44–INCH AS SHOWN ON SHEETS 13 AND 14	1	EACH
27	202	PAVEMENT REMOVED	62.3	SY
28	202	WALK REMOVED	113	SF
29	202	CURB REMOVED	15	LF
30	202	CURB AND GUTTER REMOVED	42.5	LF
31	202	CATCH BASIN OR INLET REMOVED	3	EACH
32	202	PIPE REMOVED, STM SEWER	71.9	LF
33	202	PIPE REMOVED, WATERLINE	617.5	LF
34	202	PIPE FILLED IN PLACE	186.6	LF
35	204	SUBGRADE COMPACTION	TBD	SY
36	207	PERIMETER FITLER FABRIC FENCE	2600	LF
37	207	INLET PROTECTION	6	EA
38	207	SEDIMENT BASINS AND DAMS	TBD	CY
39	207	STABILZIED CONTSTRUCTION ENTRANCE	TBD	CY
40	254	PAVEMENT PLANING, ASPHALT CONCRETE	147.44	SY
41	304	AGGREGATE BASE	TBD	CY
42	441	ASPHALT CONCRETE SURFACE COURSE TYPE 1 (448) PG64–22	TBD	CY
43	601	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	TBD	CY
44	604	MANHOLE, TYPE C AA–S102 WITH FRAME AND AA–S112 COVER	9	EACH
45	604	STANDARD CATCH BASIN (AA–S133A WITH AA–S141 FRAME AND GRATE)	1	EACH
46	604	DOUBLE CURB AND GUTTER INLET (AA–S125B WITH AA–S128 FRAME AND GRATE)	3	EACH
47	604	ENDWALL, 12–INCH (AA–S169)	TBD	EACH
48	608	CONCRETE WALK	113	SF
49	608	DETECTABLE WARNING TYPE D	1	EA
50	609	CURB, STRAIGHT 18"	15	LF
51	609	COMBINATION CURB AND GUTTER, CONCRETE	175.1	LF
52	614	MAINTAINING TRAFFIC	1	LUMP
53	616	WATER	TBD	MGAL
54	616	CALCIUM CHLORIDE	TBD	TON
55	623	CONSTRUCTION LAYOUT STAKES	1	LUMP
56	624	MOBILIZATION	1	LUMP
57	653	TOPSOIL, FURNISHED AND PLACED	TBD	CY
58	659	SEEDING AND MULCHING, CLASS 1	TBD	SY
59	659	COMMERCIAL FERTILIZER	TBD	SY
60	659	WATER	TBD	GALLONS
61	659	SEEDING AND MULCHING, CLASS 1	TBD	SY
62	662	LANDSCAPE WATERING	TBD	GAL
63	666	PRUNING EXISTING TREES, 6–INCH TO 60–INCH DIAMETER	TBD	EACH
64	801	CONCRETE BACKING CLASS COC 6	1.9	CY
65	802	6 INCH VALVE AND APPURTENANCES	1	EA
66	808	CUT AND CAP 6 INCH WATER MAIN (AND THRUST BLOCK PER L–7001)	1	EA
67	809	FIRE HYDRANT	1	EA
68	901	12–INCH SDR 35 STORM PIPE WITH TYPE I BEDDING AND ITEM 912 COMPACTED BACKFILL	600	LF
69	901	15–INCH SDR 35 STORM PIPE WITH TYPE I BEDDING AND ITEM 911 COMPACTED GRANULAR BACKFILL	45	LF
70	901	18–INCH SDR 35 STORM PIPE WITH TYPE I BEDDING AND ITEM 911 COMPACTED GRANULAR BACKFILL	343	LF
71	901	18–INCH SDR 35 STORM PIPE WITH TYPE I BEDDING AND ITEM 912 COMPACTEDBACKFILL	221	LF
72	901	24–INCH SDR 35 STORM PIPE WITH TYPE I BEDDING AND ITEM 912 COMPACTED BACKFILL	176	LF
73	901	14"X23" ELLIPTICAL STORM PIPEWITH TYPE 1 BEDDING AND ITEM 912 COMPACTED GRANULAR BACKFILL	26.5	LF
74	915	CLEANOUT	3	EACH
75	SS 1530	ASPHALT CONCRETE SURFACE COURSE TYPE 1 (448) PG64–22	TBD	CY
76	SS 1602	EXCVATION FOR GI FACILITIES	TBD	CY
77	SS 1602	SUBGRADE PREPARATION FOR GI FACILITIES	TBD	SY
78	SS 1603	TREE PROTECTION FENCING	4000	LF
79	SS 1604	BIORETENTION SOILS	TBD	CF
80	SS 1604	BIORETENTION MULCH	TBD	CF
81	SS 1604	EDGING, PVC	TBD	LF
82	SS 1609	GI PERIOD OF ESTABLISHMENT SEASON 2	1	LUMP
83	SS 1610	8–INCH PIPE UNDERDRAINS FOR GI, PERFORATED	162	LF
84	SS 1610	GREEN INFRASTRUCTURE AGGREGATE, TYPE 57 AGGREGATE	TBD	CY
85	SS 1610	GREEN INFRASTRUCTURE AGGREGATE, No. 8 AGGREGATE	TBD	CY
86	SPEC	WOOD BOLLARD PER SRD DWG 2310	7	EA
87	SPEC	REMOVABLE WOOD BOLLARD PER SRD DWG 2311	2	EA
87	SPEC	TYPE D NONWOVEN GEOTEXTILE PER CMSC 712.09	TBD	SY
88	SPEC	CONTROL STRUCTURE WITH WEIR	1	EACH
89	SPEC	SPLASH PAD PER DRAWING	3	EACH
90	SPEC	AESCULUS GLABRA OHIO BUCKEYE 2.5"–3" CAL	16	EACH
91	SPEC	AMELANCHIER LAEVIS SERVICEBERRY 2.5"–3" CAL	18	EACH
92	SPEC	ACER RUBRUM 'FRANKSRED' RED MAPLE 2.5"–3" CAL	7	EACH
93	SPEC	BETULA NIGRA 'DURAHEAT' RIVER BIRCH 2.5"–3" CAL	5	EACH
94	SPEC	CORNUS FLORIDA 'CHEROKEE BRAVE' FLOWERING DOGWOOD 2.5"–3" CAL	26	EACH
95	SPEC	CORNUS RACEMOSA PANICLED DOGWOOD 2.5"–3" CAL	10	EACH
96	SPEC	HAMAMELIS VIRGINIANA AMERICAN WITCH–HAZEL #7 CONT	37	EACH
97	SPEC	NYSSA SYLVATICA BLACK GUM 2"–2.5"	6	EACH
98	SPEC	QUERCUS PALUSTRIS PIN OAK 2.5"–3" CAL	16	EACH
99	SPEC	CEPHALANTHUS OCCIDENTALIS BUTTONBUSH #3 CONT	19	EACH
100	SPEC	CLETHRA ALNIFOLIA SWEET PEPPERBUSH #3 CONT	6	EACH
101	SPEC	CEANOTHUS AMERICANUS NEW JERSEY TEA #3 CONT	12	EACH
102	SPEC	RHUS AROMATICA 'GRO LOW' GROW LOW FRAGRANT SUMAC #3 CONT	745	EACH
103	SPEC	VIBURNUM ACERFOLIUM MAPLELEAF VIBURNUM #3 CONT	105	EACH
104	SPEC	SCHIZACHYRIUM SCOPARIUM LITTLE BLUESTEM #2 CONT	104	EACH
105	SPEC	BAPTISIA AUSTRALIS BLUE FALSE INDIGO #2 CONT	61	EACH
106	SPEC	ARONIA MELANOCARPA 'VIKING' VIKING BLACK CHOKEBERRY #3 CONT	56	EACH
107	SPEC	CORNUS SERICEA 'FARROW' ARCTIC FIRE FARROW ARCTIC FIRE DWARF DOGWOOD #3 CONT	178	EACH
108	SPEC	HYPERICUM KALMIANUM 'BLUE VELVET' BLUE VELVET ST. JOHN'S WORT #3 CONT	261	EACH
109	SPEC	ILEX VERTICILLATA 'JIM DANDY' JIM DANDY WINTERBERRY #3CONT	167	EACH
110	SPEC	ILEX VERTICILLATA 'NANA' NANA RED SPRITE WINTERBERRY #3 CONT	204	EACH
111	SPEC	ITEA VIRGINICA 'SPRICH' LITTLE HENRY LITTLE HENRY DWARF SWEETSPIRE #3 CONT	345	EACH
112	SPEC	PHYSOCARPUS OPULIFOLIUS 'SEWARD' SUMMER WINE SUMMER WINE NINEBARK #3 CONT	52	EACH
113	SPEC	CAREX VULPINOIDEA FOX SEDGE #3 CONT	306	EACH
114	SPEC	DESCHAMPSIA CESPITOSA TUFTED HAIR GRASS #2 CONT	683	EACH
115	SPEC	PANICUM VIRGATUM 'HEAVY METAL' HEAVY METAL SWITCH GRASS #2 CONT	375	EACH
116	SPEC	AMSONIA TABERNAEMONTANA 'STORMCLOUD' EASTERN AMSONIA #2 QUART	203	EACH
117	SPEC	ATHYRIUM FILIX–FEMINA VAR ANGUSTUM 'LADY IN RED LADY IN RED FERN #2 CONT	623	EACH
118	SPEC	PYCNANTHEUM TENUIFOLIUM SLENDER MOUNTAIN MINT #2 CONT	704	EACH
119	SPEC	POLYGONATUM BIFLORUM SMOOTH SOLOMON'S SEAL #2 CONT	595	EACH
120	SPEC	RUDBECKIA FULGIDA 'GOLDSTURM' GOLDSTRURM CONEFLOWER #2 CONT	173	EACH
121	SPEC	SYMPHYOTRICHUM ERICOIDES 'SNOWFLURRY' SNOWFLURRY HEATH ASTER #2 CONT	510	EACH
122	SPEC	SYMPHYOTRICHUM NOVAE–ANGLIAE 'PURPLE DOME' PURPLE DOME NEW ENGLAND ASTER #2 CONT	240	EACH
123	SPEC	PANICUM CLANDESTINUM DEERTONGUE PLUG	1950	EACH
124	SPEC	CAREX VULPINOIDEA FOX SEDGE PLUG	1660	EACH
125	SPEC	ELYMUS VIRGINICUS VIRGINIA WILDRYE PLUG	1125	EACH
126	SPEC	CAREX LURIDA LURID SEDGE PLUG	394	EACH
127	SPEC	CAREX SCOPARIA BLUNT BROOM SEDGE PLUG	394	EACH
128	SPEC	VERBENA HASTATA BLUE VERVAIN PLUG	169	EACH
129	SPEC	JUNCUS EFFUSUS SOFT RUSH PLUG	85	EACH
130	SPEC	AGROSTIS PERENNANS AUTUMN BENTGRASS PLUG	28	EACH
131	SPEC	ASCLEPIAS INCARNATA SWAMP MILKWEED PLUG	28	EACH
132	SPEC	SCIRPUS CYPERINUS WOOLGRASS PLUG	17	EACH
133	SPEC	HELENIUM AUTUMNALE COMMON SNEEZEWEED PLUG	12	EACH
134	SPEC	ASTER NOVAE–ANGLIAE NEW ENGLAND ASTER PLUG	12	EACH
135	SPEC	ASTER PUNICEUS PURPLESTEM ASTER PLUG	6	EACH
136	SPEC	ASTER UMBELLATUS FLAT TOPPED WHITE ASTER PLUG	6	EACH
137	SPEC	EUPATORIUM PERFOLIATUM BONESET PLUG	6	EACH
138	SPEC	LOBELIA SIPHILITICA GREAT BLUE LOBELIA PLUG	6	EACH
139	SPEC	CAREX VULPINOIDEA FOX SEDGE #2 CONT	494	EACH
140	SPEC	LOBELIA SIPHILITICA GREAT BLUE LOBELIA #2 CONT	494	EACH
141	SPEC	IRIS VERSICOLOR BLUE FLAG IRIS	494	EACH
142	SPEC	ASTER NOVAE–ANGLIAE NEW ENGLAND ASTER #2 CONT	494	EACH
143	SPEC	RAIN GARDEN SEED MIX	8	POUNDS
144	SPEC	SEED MIX (NO MOW SEED MIX)	38	POUNDS
145	SPEC	SHARED USE PATH PER DETAIL C ON SHEET 11 INCLUDING CURB RAMP AT DENUNE AVE	13592.8	SF
146	SPEC	CONCRETE DRVIEWAY APRON PER STD. DWG 2201 SHEET 1/6	1	EA
141	SPEC	SEGMENTAL BLOCK WALL PER DETAIL B ON SHEET 11	1	LUMP
142	SPEC	EROSION CONTROL MAT PER DETAIL A ON SHEET 11	5870.23	SY
143	SPEC	SURVEY COORDINATES (WATER)	1	LUMP

ITEM NO.	CMSC REF. NO.	PARK AMENITIES – ITEM DESCRIPTION	TOTAL	UNIT
144	SPEC	20'X20' SHELTER HOUSE WITH CONCRETE FOUNDATION	1	EACH
145	SPEC	FIBAR SAETY SURFACING WITH GRANULAR BASE AND SUBDRAIN	1	LUMP
146	SPEC	RUBBERIZED SAFETY SURFACING	650	SF
147	SPEC	PLAY EQUIPMENT	1	LUMP
148	SPEC	STONE DUST/GRAVEL PATHWAY WITH STONE SUBBASE	90	SY
149	SPEC	LIGHT FIXTURES	20	EACH
150	SPEC	LIGHTING CONDUIT	200	LF
151	SPEC	ELECTRICAL UTILITY CONNECTION	1	LUMP
152	SPEC	TRANSFORMER AND CABINET	1	LUMP
153	SPEC	EDUCATIONAL SIGNAGE	4	EACH
154	SPEC	WOOD SPLIT RAIL FENCE	100	LF
155	SPEC	WASTE RECEPTACLE ON CONCRETE PAD	3	EACH
156	SPEC	PICNIC TABLE ON CONCRETE PAD	8	EACH
157	SPEC	PARK BENCH ON CONCRETE PAD	6	EACH

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

ESTIMATED QUANTITIES

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE
SHEET 3 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

SUMMARY OF POST-CONSTRUCTION STORMWATER CONTROL FACILITIES								
FACILITY ID	CONTROL STRUCTURE	PLAN VIEW PAGE NUMBER FOR BMP	CONTROL FUNCTION	DRAINAGE AREA TO CONTROL FACILITY (AC)	FACILITY TYPE	GI SURFACE AREA (AC)	GI SURFACE AREA (SF)	MAINTENANCE AND OPERATION
LIN-1	LIN-1-CS	13-21	WATER QUALITY/WATER QUALITY	7.60	REGIONAL BIORETENTION	0.266	11,575	CITY

FACILITY ID	GI SURFACE AREA (SF)	SURFACE LAYER DEPTH (IN)	SOIL LAYER DEPTH* (IN)	GRAVEL LAYER DEPTH* (IN)
LIN-1	11,575	12	30	30

*APPROXIMATE DEPTH AT LOWEST GROUND ELEVATION. SEE DRAWING FOR PROFILES AND CROSS-SECTION INFORMATION

100-YEAR DETENTION TABLE			
LOCATION	100-YR VOLUME REQUIRED (AC/FT)	100-YEAR VOLUME PROVIDED (AC/FT)	REMARKS
LIN-1	0.79	1.185	*

* STORM WATER MANAGEMENT FACILITIES SHALL BE OWNED AND MAINTAINED BY:

CITY OF COLUMBUS DIVISION OF SEWERAGE AND DRAINAGE
1250 FAIRWOOD AVE
COLUMBUS, OH 43206
614-645-7175

DESIGN ENGINEER:
ERIN STACHLER, P.E.
CDM SMITH
445 HUTCHINSON AVE, SUITE 820
COLUMBUS, OHIO 43235
614-847-8340
STACHLEREE@CDMSMITH.COM

GREEN INFRASTRUCTURE INSPECTION AND MAINTENANCE REQUIREMENTS:

GREEN INFRASTRUCTURE FACILITIES CONSTRUCTED UNDER THIS PLAN SHALL BE MAINTAINED BY THE CITY OF COLUMBUS OR ITS AGENTS AFTER THE CONTRACT ESTABLISHMENT AND WARRANTY PERIODS HAVE BEEN SATISFACTORILY COMPLETED. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED IN THE CITY'S INSPECTION AND MAINTENANCE GUIDANCE FOR STORMWATER BMP'S (IMGM), LATEST EDITION.

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

POST CONSTRUCTION STORMWATER CONTROL FACILITIES TABLES

NOT FOR CONSTRUCTION

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
			RPD / CHK	CID / CON.DR.	
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: NO SCALE

SHEET 4 OF 28

CONTRACT DRAWING NO.
CC-18945

RECORD PLAN NO.

LOCATION MAP

1" = 300'

150 0 300

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

TRIBUTARY AREA MAP

NOT FOR CONSTRUCTION

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD / CHK	CID / CON.DR.
		INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE:	SHEET 5 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

GENERAL NOTES

1. EXISTING UTILITIES: THE IDENTITY AND LOCATION OF THE EXISTING UTILITY FACILITIES KNOWN TO BE LOCATED IN THE CONSTRUCTION AREA HAVE BEEN SHOWN ON THE PLANS AS PROVIDED BY UTILITY MAPS, FRANKLIN COUNTY AUDITOR'S GIS INFORMATION, FIELD INVESTIGATIONS AND/OR THE OWNER OF THE UNDERGROUND UTILITY. THE CITY OF COLUMBUS AND/OR THE ENGINEER ASSUMES NO RESPONSIBILITY AS TO THE LOCATION AND DEPTHS OF THE UNDERGROUND FACILITIES SHOWN ON THE PLANS.

   LOCATIONS, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES WHETHER SHOWN ON THE THE PLAN OR NOT.

   THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION OR ORDERING OF MATERIALS TO VERIFY THE HORIZONTAL AND VERTICAL EFFECT ON THE PROPOSED CONSTRUCTION. ALL CONFLICTS OR DIFFERENCES IN ELEVATION FROM WHAT IS SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE CITY REPRESENTATIVE AND THE ENGINEER IMMEDIATELY PRIOR TO STARTING CONSTRUCTION ON ANY PORTION OF THE PROPOSED WORK.

   WHERE PLANS PROVIDE FOR A PROPOSED SEWER TO BE CONNECTED TO, CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES, BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED SEWER. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID ITEM 901, STORM SEWER COMPLETE IN PLACE. THE CONTRACTOR SHALL DETERMINE IF ANY AERIAL UTILITIES REQUIRE RAISING, RELOCATION OR REMOVAL PRIOR TO CONSTRUCTION. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 901, STORM SEWER COMPLETE IN PLACE.

   PRIOR TO EXCAVATION, CONTRACTOR SHALL SUBMIT, FOR INFORMATIONAL PURPOSES, MEANS AND METHODS FOR SUPPORT OF UTILITIES AT ALL LOCATIONS WHERE THE STORM SEWER WILL CROSS AN EXISTING UTILITY 6" OR LARGER.

   THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS), 1-800-362-2764 AND THE OWNERS OF THE UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICE IN ACCORDANCE WITH SECTION 153.64 OF THE REVISED CODE.

   THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.

   THE UTILITY COMPANY SHALL RELOCATE PRIVATE UTILITIES WITHIN THE RIGHT-OF-WAY AT THEIR OWN EXPENSE. PUBLIC UTILITIES (WATERLINES, SEWERS, ETC) SHALL BE RELOCATED AS SHOWN IN THE CONTRACT DOCUMENTS.
   THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT, AND THE OWNERS DO SUBSCRIBE TO OUPS.

TELEPHONE FACILITIES:	AT&T GARY VAN-ALMSICK 111 NORTH 4TH ST, COLUMBUS, OHIO 43215 (614) 223-7276 OR (800) 572-4747
CABLE FACILITIES:	TIME WARNER CABLE (TWC) RAY MAURER 3760 INTERCHANGE ROAD COLUMBUS, OHIO 43204 (614) 481-5262
GAS FACILITIES:	COLUMBIA GAS OF OHIO MIKE SUCHAESKI 3350 JOHNNY APPLESEED COURT COLUMBUS, OHIO 43213 (614) 8182-2104
ELECTRICAL FACILITIES:	AMERICAN ELECTRIC POWER (AEP) ROD SLONEKER 850 TECH CENTER DRIVE GAHANNA, OHIO 43230 (614) 883-6817

   SEWERS: CITY OF COLUMBUS, DIVISION OF SEWERAGE AND DRAINAGE,
   1250 FAIRWOOD AVE, COLUMBUS OH 43208
   PHN: (614) 645-7102

   WATER: DIVISION OF WATER,
   910 DUBLIN RD, COLUMBUS OHIO 43215
   PHN: (614) 645-7788

   ELECTRIC: CITY OF COLUMBUS, DIVISION OF POWER
   3500 INDIANOLA AVE COLUMBUS, OHIO 43214
   PHN: (614) 645-7627

   THE FOLLOWING UTILITIES ARE LOCATED WITHIN THE WORK LIMITS OF THIS PROJECT, AND THE OWNERS DO NOT SUBSCRIBE TO A REGISTERED UNDERGROUND UTILITY PROTECTION SERVICE:

   CITY OF COLUMBUS SUPPORT SERVICES DIVISION – COMMUNICATIONS
   4211 GROVES ROAD COLUMBUS, OHIO 43232
   (614) 724-7047; RADIO ROOM: (614) 724-4006

   CITY OF COLUMBUS DEPARTMENT OF TECHNOLOGY
   1355 MCKINLEY AVE, BUILDING C COLUMBUS, OHIO 43222
   CONTRACTOR LINE: (614) 645-7756

   CITY OF COLUMBUS DEPARTMENT OF PUBLIC SERVICE
   TRAFFIC MANAGEMENT
   1820 E. 17TH AVE. COLUMBUS, OHIO 43219
   (614) 645-7393

2. STATIONING: PLANS CONTAIN TWO STATIONING; ONE FOR THE CENTERLINE OF THE STORM SEWER AND ONE FOR THE ROADWAY.

3. SPECIFICATIONS: THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMSC), 2018 EDITION, INCLUDING ALL REVISIONS AND SUPPLEMENTS IN EFFECT AT THE TIME OF SIGNATURE BY THE DIRECTOR OF PUBLIC UTILITIES, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS NOTED OTHERWISE.

   ANY MODIFICATIONS TO THE SPECIFICATIONS OR CHANGES TO THE WORK AS SHOWN ON THE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL BY THE ADMINISTRATOR OF THE DIVISION OF SEWERAGE AND DRAINAGE.

4. ADDITIONAL COMPENSATION: THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SERVICES, AND RELATED ACCESSORIES REQUIRED FOR A COMPLETE PROJECT AS SHOWN AND DESCRIBED IN THE PLANS AND SPECIFICATIONS. THE PRICE FOR ITEMS OF WORK OR MATERIALS SHOWN ON THE PLANS OR PROVIDED FOR IN THE SPECIFICATIONS OR SPECIAL PROVISIONS FOR WHICH NO SEPARATE UNIT PRICE IS GIVEN SHALL BE BID AS PER PLANS AND THE COSTS DISTRIBUTED AMONG THE VARIOUS BID ITEMS. SUBMISSION OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE BIDDER IS SATISFIED WITH THE PLANS AND CONDITIONS AS SHOWN. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COMPLIANCE WITH THE PLANS, SPECIFICATIONS, OR SPECIAL PROVISIONS.

5. PROJECT CONTROLS: HORIZONTAL AND VERTICAL CONTROL HAS BEEN ESTABLISHED FOR THE PROJECT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED SURVEYS TO COMPLETE THE PROJECT. THE CONTRACTOR SHALL PRESERVE BENCH MARKS, PROPERTY CORNERS, REFERENCE POINTS, STAKES AND OTHER SURVEY REFERENCE MONUMENTS OR MARKERS. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATIONS IF DAMAGED OR DESTROYED. RESETTING OF MARKERS SHALL BE PERFORMED BY PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF OHIO. THE CONTRACTOR SHALL CONFIRM THE INVERT ELEVATIONS OF ALL EXISTING MANHOLES, CATCH BASINS, OR OTHER SEWER STRUCTURES PRIOR TO THE START OF CONSTRUCTION.

6. NOTIFICATION: THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AT LEAST 48 HOURS IN ADVANCE OF ANTICIPATED START OF SEWER CONSTRUCTION:

DIVISION OF SEWERAGE AND DRAINAGE	(614) 645-7490
DIVISION OF WATER	(614) 645-7788
DIVISION OF FIRE	(614) 221-3132
DIVISION OF POLICE	(614) 645-6676
DIVISION OF DESIGN AND CONSTRUCTION	(614) 645-3182

   THE CONTRACTOR SHALL NOTIFY, IN WRITING, ALL ADJACENT LANDOWNERS A MINIMUM OF ONE WEEK IN ADVANCE OF WORK NEAR THEIR PROPERTY. THE CONTRACTOR SHALL CONTACT THE DIVISION OF SEWERAGE AND DRAINAGE FOR A SUGGESTED FORMAT FOR THE NOTICE.

7. PERMITS: WHEN EXCAVATING WITHIN COLUMBUS PUBLIC RIGHT-OF-WAY LIMITS, THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE CITY OF COLUMBUS, DEPARTMENT OF PUBLIC SERVICE – PERMIT OFFICE BETWEEN THE HOURS OF 7:30 AM AND 4:00 PM MONDAY THROUGH FRIDAY. (614) 645-7497; FAX (614) 645-1876; EMAIL: COLSPERMITS@COLUMBUS.GOV

8. NON-RUBBER TIRED VEHICLES: NO NON-RUBBER TIRED VEHICLES SHALL BE MOVED ON PUBLIC STREETS OR ROADS. THE TRANSPORTATION DIVISION MAY GRANT EXCEPTIONS WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING, AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE APPROPRIATE JURISDICTION.

9. SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS. TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY, IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

   THE CONTRACTOR SHALL FOLLOW THE OSHA REQUIREMENT FOR "CONFINED SPACE ENTRY," TITLE 29 OF THE CODE OF FEDERAL REGULATIONS, PART 1910.146 WHILE PERFORMING WORK INSIDE ANY MANHOLE OR OTHER PERMIT REQUIRED FOR CONFINED SPACE.

10. ELEVATION DATUM: THE ELEVATIONS SHOWN ON THESE PLANS ARE BASED ON THE UNITED STATES GEOLOGICAL SURVEY (USGS) NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988 UNLESS OTHERWISE NOTED. HORIZONTAL DATUM IS BASED ON THE STATE OF OHIO SOUTH ZONE PLANE COORDINATE SYSTEM AND THE NORTH AMERICAN DATUM (NAD) OF 1983. GROUND CONTOURS SHOWN ARE FROM THE CITY OF COLUMBUS LIDAR DATA.

11. BENCHMARKS: THE CONTRACTOR SHALL CAREFULLY PRESERVE BENCHMARKS, PROPERTY CORNERS, REFERENCE POINTS, AND STAKES. ANY BENCHMARK, PROPERTY CORNER OR SURVEY MARKER DAMAGED OR DISTURBED BY THE CONTRACTORS SHALL BE RESET BY AN OHIO REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

12. RIGHT-OF-WAY: IN ADDITION TO THE DIRECT REQUIREMENTS OF THE CONTRACT SPECIFICATIONS, THE CONTRACTOR SHALL OBSERVE AND CONFORM TO THE REQUIREMENTS OF ALL RIGHTS-OF-WAY INCLUDING EASEMENTS, COURT ENTRIES, AND RIGHTS OF ENTRY OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF THE APPLICABLE GOVERNING AGENCY. THE COST OF THE OPERATIONS NECESSARY TO FULFILL SUCH REQUIREMENTS SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE CONTRACT PER CMSC 105.05 UNLESS SPECIFIC PROVISION IS MADE IN THE CONTRACT SPECIFICATIONS FOR SUCH COST UNDER SPECIFIC ITEMS OF THE CONTRACT.

13. UTILITIES: THE LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE OBTAINED FROM THE OWNERS OF THE UTILITY AS REQUIRED BY SECTION 153.64 ORC. THE UTILITY LOCATIONS INDICATED ARE NOT NECESSARILY COMPLETE OR CORRECT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHOWN. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATION OF ANY NECESSARY UTILITY RELOCATION WITH THE UTILITY OWNER. THE UTILITY COMPANY SHALL RELOCATE PRIVATE UTILITIES WITHIN THE ROW AT THEIR OWN EXPENSE. PUBLIC UTILITIES (WATERLINES, SEWERS, ETC.) SHALL BE RELOCATED AS SHOWN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL EXPOSE UTILITIES AND STRUCTURES PRIOR TO THE CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION. THE CONTRACTOR SHALL CALL, TOLL FREE, THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) 72 HOURS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST 48 HOURS PRIOR TO WORK IN THE VICINITY OF THEIR UNDERGROUND LINES. THE COST OF UTILITY RELATED WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CMSC ITEM 901, UNLESS OTHERWISE SPECIFIED.

    WHERE PLANS PROVIDE FOR A PROPOSED SEWER TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES, BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED SEWER. THE LOCATIONS ARE NOTED THUS: EXPOSE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CMSC ITEM 901.

14. WATER, SANITARY, STORM, AND PRIVATE UTILITY SERVICE LINES: THE EXISTING WATER, SANITARY, STORM, AND PRIVATE UTILITY SERVICE LINES THAT ARE SHOWN ON THE PLANS HAVE BEEN LOCATED AS ACCURATELY AS POSSIBLE USING AVAILABLE INFORMATION (FIELD MARKED, TAP CARD RECORDS, PLAN LOCATION, USE OF VALVE BOXES, ETC.).

    RELOCATION OF AN EXISTING SANITARY OR WATER SERVICE LINE THAT IS IN PHYSICAL CONFLICT WITH THE NEW STORM SEWER AND ITS APPURTENANCES SHALL BE PAID FOR UNDER THE APPLICABLE "ITEM SPECIAL – SANITARY SERVICE RELOCATED/REPAIR" OR "ITEM 805 – _-INCH WATER SERVICE TAP RELOCATED".

    ANY DAMAGE TO AN EXISTING SANITARY OR WATER SERVICE LINE NOT IN PHYSICAL CONFLICT WITH THE NEW STORM SEWER AND ITS APPURTENANCES AND FOUND TO BE BEYOND 5 FEET OF ITS LOCATION SHOWN ON THE PLANS SHALL BE REPAIRED AND PAID FOR UNDER THE APPLICABLE "ITEM SPECIAL – SANITARY RELOCATED/REPAIR" OR "ITEM 805 – _-INCH WATER SERVICE TAP RELOCATED," RESPECTIVELY. ANY DAMAGE TO AN EXISTING SANITARY OR WATER SERVICE LINE NOT IN PHYSICAL CONFLICT WITH THE NEW STORM SEWER AND ITS APPURTENANCES AND WITHIN 5 FEET OF ITS LOCATION ON SHOWN ON THE PLANS SHALL BE RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.

    IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL OTHER UTILITY LINES AND INCLUDE THE COST OF CROSSING THESE LINES UNDER THE VARIOUS PAY ITEMS OF THIS CONTRACT. REQUESTS FOR EXTRA COMPENSATION FOR THE DELAY OR LOSS OF PRODUCTIVITY CAUSED BY THESE CROSSING WILL BE DENIED. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO THE SERVICE LINES AT HIS EXPENSE.

15. LISTED HYDRANT USAGE: THE CONTRACTOR MUST OBTAIN FROM THE DIVISION OF WATER A FIRE HYDRANT PERMIT PRIOR TO CONNECTION OF HIS WATER SUPPLY LINES TO ANY FIRE HYDRANT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (645-7330). THE CONTRACTOR SHALL PROVIDE THE NECESSARY GATE VALVES, BACKFLOW PREVENTERS, AND FLOW METER FOR EACH HYDRANT LOCATION. ALL EQUIPMENT, FITTINGS AND VALVES SHALL BE IN ACCORDANCE WITH DIVISION OF POWER AND WATER STANDARDS. THE CONTRACTOR SHALL PAY FOR WATER AT THE CURRENT CITY RATES.

16. DEWATERING: SHOULD WATER BE ENCOUNTERED, THE CONTRACTOR SHALL FURNISH AND OPERATE SUITABLE PUMPING EQUIPMENT OF SUCH CAPACITY TO ADEQUATELY DEWATER THE TRENCH PER CMSC ITEM 901.06. THE TRENCH SHALL BE SUFFICIENTLY DEWATERED SO THAT THE PLACEMENT OF BEDDING AND LAYING AND JOINING OF THE PIPE OR STRUCTURES IS MADE ON FIRM, DRY GROUND. THE CONTRACTOR SHALL CONVEY ALL TRENCH WATER TO A NATURAL DRAINAGE CHANNEL OR STORM SEWER WITHOUT CAUSING ANY DAMAGE TO THE PROPERTY BY UTILIZING PROPER EROSION AND SEDIMENT CONTROLS. DIRECT DISCHARGE OF SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS; THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES. THE COST OF ALL DEWATERING WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CMSC ITEM 901.

17. TRENCH BACKFILL: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF THE TRENCHES FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL INSPECTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CMSC ITEM 901.

18. CLEAN WATER CONNECTION TO SANITARY SEWERS: ROOF DRAINS, FOUNDATION DRAINS, DRAIN TILES, AND OTHER CLEAN WATER CONNECTION TO THE SANITARY SYSTEM ARE PROHIBITED.

19. DRIVEWAY REPLACEMENT: ASPHALT DRIVES SHALL BE REPLACED FROM THE FARTHEST EDGE OF TRENCH TO THE EDGE OF ROAD PAVEMENT OR TO THE CONCRETE DRIVE APRON, IF ONE EXISTS. CONCRETE DRIVES SHALL BE REPLACED BETWEEN NEAREST ADJACENT JOINTS IF JOINTS ARE WITHIN 4 FEET OF TRENCH EDGE. CONCRETE APRONS THAT ARE DISTURBED AND ARE LOCATED WITHIN THE LIMITS OF THE TRENCH SHALL BE REPLACED BETWEEN NEAREST JOINTS; MONOLITHIC APRONS SHALL BE REPLACED IN THEIR ENTIRETY.

20. CITY OF COLUMBUS PARK PROPERTY: THE CONTRACTOR SHALL CONTACT THE CITY FORESTER OF THE RECREATION AND PARKS DEPARTMENT (PHONE: (614) 645-3350) 24 HOURS PRIOR TO ANY CONSTRUCTION IN OR NEAR THE CITY OF COLUMBUS PARK PROPERTY (THIS PROJECT).

21. TREE PRESERVATION: ALL PUBLIC TREES WHETHER SHOWN OR NOT SHOWN ON THE PLANS ARE TO BE PRESERVED UNLESS APPROVAL TO REMOVE OR PRUNE IS GIVEN IN WRITING BY COLUMBUS RECREATION & PARKS/CITY FORESTER OR THEIR REMOVAL HAS BEEN DESIGNATED ON THE PLAN. TREES REMOVED BY EITHER OF THE TWO PRECEDING AUTHORITIES SHALL BE PAID FOR UNDER CMSC ITEM 201. CLEARING AND GRUBBING UNLESS OTHERWISE PROVIDED FOR BY UNIT PRICE BID UNDER ITEM 201. THE CONTRACTOR SHALL USE SPECIAL PRECAUTIONS TO AVOID DAMAGE TO ALL OTHER TREES. ALL TREES REMOVED SHALL INCLUDE STUMP REMOVAL TO EIGHTEEN (18) INCHES BELOW GRADE.

    ALL CLEARING AND GRUBBING DONE ON COLUMBUS RECREATION AND PARKS PROPERTY/RIGHT OF WAY SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR.

    HEAVY EQUIPMENT WILL NOT BE ALLOWED TO COMPACT THE SOIL OVER THE ROOT ZONE OF EXISTING PUBLIC TREES. RESTRICTED EQUIPMENT ACCESS ROUTES WILL BE ESTABLISHED BEFORE WORK IS BEGUN. TEMPORARY PAVING MATERIALS SUCH AS PLYWOOD, LUMBER OR RUBBER MATTING SPREAD OVER THE ROOT ZONE MAY BE REQUIRED TO PREVENT COMPACTION.

    FOR ANY TREES DESIGNATED FOR REMOVAL THAT MAY BE POTENTIAL INDIANA BAT HABITAT AREAS, REMOVAL SHALL ONLY OCCUR FROM OCTOBER 15 TO MARCH 31. IF THE CONTRACTOR PREFERS TO REMOVE THE TREES OUTSIDE OF THIS TIMEFRAME, A SURVEY MUST BE CONDUCTED ACCORDING TO THE UNITED STATES FISH AND WILDLIFE SERVICE AND BY A BIOLOGIST WITH ALL REQUIRED FEDERAL AND/OR STATE COLLECTION PERMITS TO DETERMINE THE PRESENCE OF ANY INDIANA BATS. THE DATA COLLECTED DURING THE SURVEY MUST BE PROVIDED TO THE CITY ACCORDING TO THE CONDITIONS OF THE PERMIT(S) AND ANY REGULATORY AUTHORITY REQUIREMENTS. IF NO BATS ARE PRESENT, THE TREE SHALL BE REMOVED WITHIN 24 HOURS OF THE SURVEY BEING CONDUCTED. IF BATS ARE FOUND TO BE PRESENT, THEN THE TREE SHALL REMAIN AND A PROTECTION AND ENHANCEMENT PLAN WILL BE REQUIRED.

    THE CONTRACTOR SHALL USE SPECIAL PRECAUTIONS TO AVOID DAMAGE TO ALL OTHER TREES. WHEN, IN THE OPINION OF THE ENGINEER AND THE CITY ARBORIST, TRUNKS OR BRANCHES WOULD BE ENDANGERED BY THE USE OF MECHANICAL DEVICES, HAND EXCAVATION WILL BE REQUIRED. UNLESS OTHERWISE SPECIFICALLY PROVIDED, THE COST OF TREE PROTECTION, REMOVAL, AND ANY REQUIRED REPLACEMENT SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS STORM PIPING ITEMS.

    ALL TREES, BRANCHES AND WOOD CHIPS REMOVED FROM PROJECT SHALL BE DELIVERED TO THE CITY OF COLUMBUS FOR BENEFICIAL USE. CONTRACTOR SHALL DELIVER TREES TO SOUTHERWESTERLY COMPOSTING FACILITY, 7000 JACKSON PIKE, LOCKBOURNE, OHIO 43137 BETWEEN 7 AM TO 3PM, MONDAY THROUGH FRIDAY. THIS REQUIREMENT MAY ONLY BE WAIVED IF APPROVED IN WRITING BY THE ENGINEER. CONTRACTOR SHALL SUBMIT SCALE TICKETS FROM COMPOSTING FACILITY TO ENGINEER. STUMPS, ROOTS AND DEBRIS SHALL BE DISPOSED OF ACCORDING TO OTHER CONTRACT ITEMS.

    PRUNING: BRANCHES OR GROWTH THAT INTERFERES WITH THE FREE CONSTRUCTION OF THE PROJECT MAY BE REMOVED FROM TREES/BUSHES THAT ARE TO BE SAVED BY THE USE OF PRUNING TOOLS WITH PRIOR APPROVAL FROM THE ENGINEER AND THE CITY ARBORIST. ALL PRUNING TOOLS USED AND METHODS EMPLOYED SHALL MEET THE APPROVAL OF THE ENGINEER. THE BRANCHES SHALL BE REMOVED WITH A GOOD CLEAN CUT MADE FLUSH WITH THE PARENT TRUNK OR IF HAVING A GOOD HEALTHY LATERAL BRANCH, THE CUT SHALL BE A GOOD CLEAN SLANTING CUT CLOSE TO AND BEYOND THE HEALTHY BRANCH. THE COST OF ALL WORK AND EXPENSES CONNECTED WITH TREE PRUNING SHALL BE INCLUDED IN THE PRICE BID FOR CMSC ITEM 201, CLEARING AND GRUBBING. NO EXTRA PAYMENT SHALL BE MADE.

    TREES DAMAGED OR DESTROYED THAT WERE NOT DESIGNATED FOR REMOVAL OR APPROVED BY THE ENGINEER FOR REMOVAL SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. IF SUITABLE REPLACEMENT CANNOT BE DETERMINED, COMPENSATION BY THE CONTRACTOR FOR UNAUTHORIZED TREE REMOVAL SHALL INCLUDE SUFFICIENT ADDITIONAL LANDSCAPING AS DETERMINED BY RECREATION AND PARKS AND THE CITY FORESTER.

    CONTRACTOR SHALL REFER TO THE CITY OF COLUMBUS EXECUTIVE ORDER 2015-01 FOR TREE PROTECTION AND REPLACEMENT.

    REFER TO ADDITIONAL TREE PROTECTION NOTES ON SHEET 18.

22. TREE PROTECTION: SUBMIT A TREE PROTECTION PLAN TO THE CITY DIVISION OF FORESTRY WITH A DRAWING OF ANY WORK LOCATED WITHIN THE DRIP LINE OF A PUBLIC TREE. PUBLIC TREES MUST BE PROTECTED AGAINST INJURY OR DAMAGE TO BRANCHES, TRUNKS, OR ROOTS FROM CONSTRUCTION AND EXCAVATION, AS DESCRIBED IN THE "BEST MANAGEMENT PRACTICES MANAGING TREES DURING CONSTRUCTION" A COMPANION PUBLICATION TO ANSI A300 PART 5.

23. SEEDING AND MULCHING: IN GENERAL, GRASSY AREAS WITHIN STREET OR HIGHWAY RIGHT-OF-WAY (OUTSIDE OF THE GI FOOTPRINT) WILL BE CONSIDERED URBAN IN CHARACTER AND SEEDED AS PER ITEM 659, CLASS 1 LAWN MIXTURE. USE OF WOOD FIBER MULCH IS REQUIRED FOR FINAL MULCHING, AND STRAW OR COMPOST MULCH WILL NOT BE PERMITTED. THE CONTRACTOR WILL ONLY BE PAID ONE TIME FOR EACH LOCATION OF FINAL SEEDING AND MULCHING. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY ADDITIONAL FINAL SEEDING AND MULCHING REQUIRED. PER STANDARD DRAWING L-6309 B AND D, PLACEMENT OF 6-INCHES OF TOPSOIL IS TO BE INCLUDED IN THE PRICE BID FOR "ITEM 659 SEEDING AND MULCHING".

    THE CONTRACTOR SHALL SEED AND MULCH ALL DISTURBED AREAS IN CONFORMANCE WITH CMSC ITEM 659. ANY DISTURBED AREAS OUTSIDE THE PROJECT LIMITS SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.

    THE CONTRACTOR SHALL WATER SEEDED AREAS AT A RATE OF 120 GALLONS PER 1,000 SQUARE FEET AS SOON AS THE SEED IS COVERED. THE CONTRACTOR SHALL WATER ALL SEEDED AREAS AT A RATE OF 120 GALLONS PER 1,000 SQUARE FEET EVERY OTHER DAY FOR FOUR WEEKS. WATERING SHALL BE PERFORMED IN THE MORNING BETWEEN 6:00 AM AND 10:00 AM AND SHALL BE APPLIED BY MEANS OF A HYDRO-SEEDER OR A WATER TANK UNDER PRESSURE WITH A NOZZLE THAT WILL PRODUCE A SPRAY THAT WILL NOT DISLODGE THE MULCHING MATERIAL. THE COST FOR WATER SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 659 SEEDING AND MULCHING.

    MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER ANY AREA IS SEEDED AND SHALL CONTINUE FOR A MINIMUM FOUR-WEEK ACTIVE GROWING PERIOD FOLLOWING THE COMPLETION OF ALL SEEDING WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT. IN THE EVENT THAT SEEDING OPERATIONS ARE COMPLETED TOO LATE IN THE FALL FOR ADEQUATE GERMINATION AND GROWTH OF GRASS, THEN MAINTENANCE SHALL CONTINUE IN TO THE FOLLOWING SPRING.

    MAINTENANCE SHALL INCLUDE RESEEDING, MOWING TO MAINTAIN A HEIGHT OF 3 INCHES, WATERING, WEEDING, FERTILIZING, AND RESETTING AND STRAIGHTENING OF PROTECTIVE BARRIERS. MAINTENANCE SHALL ALSO INCLUDE CHEMICAL TREATMENT AS REQUIRED FOR FUNGUS AND/OR PEST CONTROL.

    IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND MAINTAIN THE SEEDED AREAS. AFTER THE GRASS IN SEEDED AREAS HAS APPEARED, ALL AREAS AND PARTS OF AREAS THAT, IN THE OPINION OF THE CITY, FAIL TO SHOW A UNIFORM STAND OF GRASS FOR ANY REASON WHATSOEVER SHALL BE RESEEDED AND SUCH AREAS AND PARTS OF AREAS SHALL BE RESEEDED REPEATEDLY UNTIL ALL AREAS ARE COVERED WITH A SATISFACTORY GROWTH OF GRASS. RESEEEDING TOGETHER WITH NECESSARY GRADING, FERTILIZING, WATERING, AND TRIMMING, SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR.

23. DUST CONTROL: THE FOLLOWING ESTIMATED QUANTITIES ARE TO BE USED AS DIRECTED BY THE ENGINEER FOR COST CONTROL:

616	WATER	0.05 M GALLONS
616	CALCIUM CHLORIDE	0.05 TONS

24. NON-PERFORMANCE: IN THE EVENT THAT IT BECOMES NECESSARY FOR THE CITY TO PERFORM WORK OF AN IMMEDIATE NATURE (SUCH AS THE PLACEMENT OF BARRICADES OR REPLACEMENT OF SIGNS OR OTHER WARNING OR PROTECTIVE DEVICES) REQUIRED OF THE CONTRACTOR BY THIS CONTRACT BECAUSE OF FAILURE OR REFUSAL OF THE CONTRACTOR TO PERFORM SUCH WORK, THE CONTRACTOR SHALL REIMBURSE THE CITY AT THE RATE OF 2.5 TIMES THE ACTUAL COST OF LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO PERFORM SUCH WORK. IF THE CONTRACTOR REFUSES OR FAILS WITHIN A REASONABLE TIME TO PERFORM OR CAUSE THE PERFORMANCE OF SUCH WORK, THE CITY SHALL BE REIMBURSED BY THE CONTRACTOR IN THE AMOUNT PROVIDED HEREIN BY WAY OF A DEDUCTION FROM THE CONTRACTOR'S NET PAYMENT UNDER THE CONTRACT. REASONABLE TIME FOR ALL STREETS INVOLVED ON THIS CONTRACT IS 1 HOUR FROM THE TIME OF NOTIFICATION BY THE CITY.

25. CURBS: ALL CURBS DAMAGED OR REMOVED AS A RESULT OF CONTRACTOR'S OPERATIONS SHALL BE REPLACED USING THE SAME TYPE MATERIAL AND THE SAME DIMENSION AS THAT REMOVED. CLASS "C" CONCRETE, AS SPECIFIED UNDER THE CITY OF COLUMBUS (CMSC) ITEM 499, SHALL BE USED FOR ALL CONCRETE WORK.

26. MUD: TRACKING OR SPILLING OF MUD, DIRT, OR DEBRIS ON CITY STREETS IS PROHIBITED, AND SHALL BE CLEANED UP IMMEDIATELY BY THE CONTRACTOR. PAYMENT FOR CLEANING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 901, STORM SEWER COMPLETE IN PLACE.

27. SHEETING AND BRACING: THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN, INSTALLATION AND REMOVAL OF ALL SHEETING AND BRACING OR OTHER SYSTEM TO SUPPORT THE TRENCH WALLS. THE SHEETING AND BRACING SYSTEM OR ANY OTHER TRENCH SUPPORT SYSTEM SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF OHIO TO MINIMIZE THE WIDTH OF THE OPEN TRENCH AND TO ELIMINATE THE NEED FOR ANY UTILITY RELOCATION THAT MAY OTHERWISE BE REQUIRED AND TO PROVIDE THE MAXIMUM AMOUNT OF RIGHT-OF-WAY OR EASEMENT AREA AVAILABLE FOR MAINTAINING INGRESS AND EGRESS FOR THE PROPERTY OWNERS. COSTS FOR THE SHEETING AND BRACING OR OTHER TRENCH SUPPORT SYSTEM PROPOSED BY THE CONTRACTOR SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 901.

28. PIPE REMOVAL: ALL PIPE REMOVAL AND DISPOSAL SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF CMSC ITEM 202.04, "PIPE REMOVED." PAYMENT FOR PIPE REMOVAL AND DISPOSAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 901.

29. ABANDONMENT OF UNDERGROUND STRUCTURES: PROVISIONS FOR ABANDONMENT OF ANY UNDERGROUND STRUCTURE SHALL BE CONSIDERED AS WARRANTED. THE WORK SHALL CONFORM WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS AND SHALL INCLUDE PLUGGING/SEALING OF ANY OUTLET PIPES, PUMPING OUT AND DISPOSING OF CONTENTS, ALONG WITH THE PLACEMENT OF SUITABLE BACKFILL TO FILL THE STRUCTURE (AT 100% STANDARD PROCTOR DENSITY UNLESS OTHERWISE SPECIFIED BY THE SITE GEOTECHNICAL ENGINEER).

30. DEMOLITION: ALL DEBRIS, RUBBLE, UNUSABLE MATERIALS, AND ITEMS NOT SALVAGED BY THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF PROPERLY. THIS INCLUDES EXCESS OR UNUSABLE EXCAVATED SOIL.

31. TESTING: THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE TESTING AGENCY, AND ALLOW THE TESTING AGENCY FREE ACCESS TO THE WORK. THE OWNER SHALL RECEIVE A COPY OF ALL TEST REPORTS THE DAY THE TESTS ARE PERFORMED.

22. ALL SUBGRADE COMPACTION SHALL CONFORM TO CMSC ITEM 203 UNLESS OTHERWISE INDICATED. IF COMPACTION CANNOT BE OBTAINED, THE CONTRACTOR SHALL REMOVE THE UNSUITABLE SOIL AND REPLACE WITH SUITABLE SOIL OR GRANULAR MATERIAL. REMOVAL AND REPLACEMENT SHALL BE PERFORMED ONLY AS DIRECTED BY THE TESTING AGENCY AND SHALL BE ORDERED ONLY WITH PERMISSION FROM THE ENGINEER.

    AT ALL POINTS OF CROSSING WATER MAINS OR OTHER SEWERS, THE BACKFILL SHALL BE OF GRANULAR MATERIAL BETWEEN THE PIPES.

33. PAVEMENT CUTTING, SAWING AND EXCAVATION OPERATIONS: ALL PUBLIC AGENCIES AND PRIVATE CONTRACTORS PERFORMING PAVEMENT-CUTTING OPERATIONS ON CITY OF COLUMBUS STREETS AND ROADWAYS SHALL PROTECT THE ENVIRONMENT FROM DISCHARGES CREATED BY THEIR PAVEMENT CUTTING OPERATIONS. NOTE THAT COLUMBUS CITY CODE 1145 PROHIBITS NON-STORMWATER DISCHARGE INTO THE CITY OF COLUMBUS SEWER SYSTEM, CURB INLETS AND ANY PART OF ITS MS4 (MUNICIPAL SEPARATE STORM SEWER SYSTEM).

    THIS REQUIREMENT INCLUDES BUT IS NOT LIMITED TO WET OR DRY SAW-CUTTING, JACK HAMMERING, EXCAVATION EQUIPMENT USE, ETC. THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS SHALL RECOVER AND DISPOSE OF DETRITUS, POLLUTED WATERS, OR OTHER SUCH SMALL DISCHARGES RESULTING FROM THEIR PAVEMENT CUTTING OPERATIONS AND PROTECT ALL STORM SEWER INLETS FROM RECEIVING ANY DISCHARGES FROM THE CONSTRUCTION OPERATIONS. THE AGENCY OR CONTRACTOR RESPONSIBLE FOR EACH PAVEMENT CUTTING ACTIVITY SHALL BE SOLELY LIABLE FOR NOTICE OF VIOLATIONS (NOV/S) AND FINES ISSUES BY CITY OF COLUMBUS AND/OR STATE OF OHIO AUTHORITIES.

    EQUIPMENT, MATERIALS, AND METHODS BE PROVIDED BY THE RESPONSIBLE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR WORK CREWS PERFORMING THE PAVEMENT CUTTING ACTIVITY AND MADE AVAILABLE TO WORK CREWS FOR USE IN CLEANING UP DISCHARGES RESULTING FROM SUCH CUTTING ACTIVITIES AND PREVENTING RUNOFF. ALL WORK CREWS SHALL BE TRAINED TO EXERCISE AND EMPLOY EQUIPMENT, MATERIALS AND ENVIRONMENTAL PROTECTIVE MEASURES TO PREVENT POLLUTED DISCHARGES FROM ENTERING CITY OF COLUMBUS STORM SEWER SYSTEMS AND WATERS OF THE STATE OF OHIO.

    THE PUBLIC AGENCY AND/OR PRIVATE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT THE INLET PROTECTION IS ADEQUATE. THE MOST STRINGENCY PROJECT PLANS, NOTES AND/OR DRAWINGS INCLUDING THE STORMWATER POLLUTION PREVENTION PLAN (SWP3) OR SPILL PREVENTION/REMEDIATION PLAN SHALL APPLY TO ALL PAVEMENT CUTTING, SAWING OR EXCAVATION OPERATIONS.

34. PONDING: THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS TO ALL AREAS THAT HOLD WATER AFTER CONSTRUCTION. THESE AREAS INCLUDE SIDEWALK, CURB RAMPS AND PAVEMENT AREAS. AREAS OF PONDING CANNOT BE IDENTIFIED UNTIL AFTER ADEQUATE RAINFALL HAS OCCURRED AND REPAIR TO THESE AREAS WILL NOT OCCUR UNTIL AFTER SUCH TIME.

35. STORAGE OF EQUIPMENT AND MATERIALS: EQUIPMENT, MATERIALS, INCLUDING PIPE, SHALL NOT AT ANY TIME (WORKING OR NON-WORKING HOURS) BE STORED WITHIN THE RIGHT-OF-WAY OR WITHIN ONE HUNDRED (100) FEET OF ANY INTERSECTING STREET OR DRIVEWAY, WITHOUT PRIOR WRITTEN APPROVAL FROM THE CITY OF COLUMBUS. COMPLIANCE WITH THE REQUIREMENT ALONG WITH ADDITIONAL PROVISIONS OF THE CONTRACT SPECIFICATIONS SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR OF THEIR LEGAL RESPONSIBILITIES OR LIABILITIES FOR THE SAFETY OF THE PUBLIC.

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

GENERAL NOTES

NOT FOR CONSTRUCTION

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				
			OWNER	
			CONTRACTOR	
			INSPECTOR	
			AGREEMENT	COMPLETED
			RPD / CHK	CID / CON.DR.
			INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: NO SCALE	SHEET 6 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

SPECIAL NOTES

1. CLEAN WATER CONNECTIONS TO SANITARY SEWERS: ROOF DRAINS, FOUNDATION DRAINS, DRAIN TILES, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER ARE PROHIBITED.

2. STORMWATER FACILITIES: BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNER, THE ENGINEER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCES SHALL BE DETERMINED FROM FIELD OBSERVATIONS. THE ENGINEER SHALL KEEP RECORDS OF THE INSPECTION IN WRITING.

   ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED OR RECONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OR ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE OWNER. ALL EXISTING MANHOLES, CATCH BASINS, DRAINS, SEWERS, AND APPURTENANCES INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. THE CONTRACTOR SHALL CORRECT ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS TO THE SATISFACTION OF THE ENGINEER. THE ABOVE IS NOT APPLICABLE FOR STRUCTURES TO BE ABANDONED. THE CONTRACTOR SHALL REMOVE DEBRIS, SILT, ETC. FROM THE EXISTING MANHOLES AND CATCH BASINS THAT HAVE BEEN AFFECTED BY THE CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL MAINTAIN SERVICE IN EXISTING SEWERS DURING CONSTRUCTION.

3. EXISTING DRAINAGE SYSTEMS: IF THE CONTRACTOR ENCOUNTERS A PIPE OR CONNECTION TO THE STORM SEWER THAT IN THE ESTIMATE OF THE ENGINEER MAY BE AN ILLICIT CONNECTION FROM AN ON-SITE SEWAGE DISPOSAL SYSTEM, THE CONTRACTOR SHALL CALL COLUMBUS PUBLIC HEALTH AT (614) 645-6448 TO DETERMINE WHETHER THE PIPE MAY BE RECONNECTED TO THE CITY'S STORM SEWER SYSTEM.

4. LICENSED SEWER TAPPER REQUIREMENT: IT SHALL BE UNLAWFUL FOR ANY PERSON TO ENGAGE IN THE BUSINESS OF SEWER TAPPING AND SEWER BUILDING, OR TO OPEN OR TAP ANY SEWER IN ANY STREET, ALLEY OR ANY PUBLIC OR PRIVATE PLACE OR REHABILITATION OF ANY SEWER OR APPURTENANCES (INCLUDING MANHOLES, INLETS, AND SERVICE LATERALS) IN THE CITY OF COLUMBUS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH BUSINESS, AS INDICATED IN COLUMBUS CITY CODE SECTION 1131.01. UTILIZATION OF SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

5. CERTIFICATION OF PIPE AND STRUCTURES: ALL CONCRETE PIPE, STORM AND SANITARY STRUCTURES WILL BE STAMPED OR HAVE SUCH IDENTIFICATION NOTING THAT SAID PIPE, STORM AND SANITARY STRUCTURES HAVE BEEN INSPECTED BY THE DESIGNATED REPRESENTATIVE OF THE CITY OF COLUMBUS AND MEETS THEIR SPECIFICATIONS. PIPE AND STRUCTURES WITHOUT PROPER IDENTIFICATION WILL NOT BE PERMITTED FOR INSTALLATION.

6. GRADE CHANGES: IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING SEWER, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN SEWER SLOPE, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED SEWER WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS. IF IT IS DETERMINED THAT THE PROPOSED SEWER WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE ENGINEER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED SEWER WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

   GRADES AND ELEVATIONS SHOWN ON THE PLANS SHALL NOT BE REVISED UNDER ANY CIRCUMSTANCES WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE ENGINEER. INVERT ELEVATIONS SHALL NOT DEVIATE FROM PLAN ELEVATION BY MORE THAN 0.05 FOOT. FAILING TO MEET THE ABOVE REQUIREMENTS IS CAUSE FOR REJECTION OF THE AFFECTED SECTION OF SEWER.

7. END TREATMENT: IMMEDIATELY AFTER PLACEMENT OF ANY CONDUITS, THE CONTRACTOR SHALL CONSTRUCT THE END TREATMENTS REQUIRED BY THE PLANS AT BOTH THE OUTLET AND INLET ENDS. THIS SHALL INCLUDE HEADWALLS, CONCRETE, RIPRAP, ROCK CHANNEL PROTECTION, SODDING, ETC.

8. SUPPORT OF EXISTING BRICK SEWERS: THE CONTRACTOR SHALL SUPPORT THE EXISTING SEWERS DURING CONSTRUCTION OF MANHOLES AS NECESSARY, TO KEEP SEWERS IN OPERATION AND TO ASSURE A SOUND WATERTIGHT CONNECTION TO THE BASE OF THE MANHOLE UPON COMPLETION. ANY CHANGES TO THE MANHOLE FROM THE STANDARD TYPE SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR APPROVAL, WITH SUPPORTING CALCULATIONS SEALED BY A REGISTERED PROFESSIONAL ENGINEER. IN ANY LOCATIONS WHERE NEW SEWER PIPE IS TO BE CONNECTED TO AN EXISTING MANHOLE OR TO THE MAIN TRUNK, THE EXISTING BRICK SEWER SHALL BE KEPT SOUND TO THE EXTENT POSSIBLE FOR A DISTANCE OF 3 FEET OUTSIDE OF THE MANHOLE OR MAIN TRUNK AND A COLLAR OF REINFORCED CONCRETE PLACED TO CONNECT THE NEW CONCRETE SEWER TO THE BRICK. SHOP DRAWINGS FOR THE CONNECTION SHALL BE SUBMITTED FOR REVIEW PRIOR TO CONSTRUCTION.

9. SANITARY SEWER LATERAL CONNECTIONS: ANY LATERAL RECONNECTIONS MADE IN AN AREA OF PIPE REPLACEMENT SHALL BE PAID AS ITEM 915 – LATERAL RECONNECTION. THIS PAY ITEM SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO MAKE THIS SERVICE CONNECTION COMPLETE AND READY FOR SERVICE. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE SIZE AND NUMBER OF EXISTING OPEN LATERALS AND SUPPLYING THE PROPER MATERIALS.

10. EROSION AND SEDIMENT CONTROL: EROSION AND SEDIMENT CONTROL MEASURES ARE REQUIRED AS PART OF THIS PROJECT. THE EROSION AND SEDIMENT CONTROL MEASURES SPECIFIC TO THIS SITE MAY BE FOUND ON SHEETS 21–23 OF THIS PLAN. LAND-DISTURBING ACTIVITIES MUST COMPLY WITH ALL PROVISIONS OF THE DIVISION OF SEWERAGE AND DRAINAGE EROSION AND SEDIMENT CONTROL REGULATION. ALL LAND-DISTURBING ACTIVITIES SHALL BE SUBJECT TO INSPECTION AND SITE INVESTIGATION BY THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

    ALL EROSION SEDIMENTATION CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF COLUMBUS, PROJECT ENGINEER AND/OR THE OHIO EPA.

    IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY OF COLUMBUS TWO (2) WORKING DAYS PRIOR TO THE COMMENCEMENT OF INITIAL SITE LAND DISTURBANCE ON ANY SITE OF ONE (1) OR MORE ACRES. THIS INCLUDES SITE CLEARING, GRUBBING AND ANY EARTH MOVING. PRIMARY EROSION AND SEDIMENT CONTROL PRACTICES ARE MANDATED BY REGULATION TO BE IN PLACE FROM THE BEGINNING OF THE CONSTRUCTION ACTIVITY. PLEASE CONTACT STORMWATER MANAGEMENT DIVISION BY PHONE AT (614) 645-6700 AND RECREATION AND PARKS DEPARTMENT AT (614) 645-3350. DETAILS OF THIS REQUIREMENT MAY BE FOUND IN THE EROSION AND SEDIMENT CONTROL REGULATION (ADOPTED JUNE 1, 1994). FAILURE TO COMPLY MAY RESULT IN ENFORCEMENT ACTION AS DETAILED IN THE CITY OF COLUMBUS CITY CODE SECTION 1145.80.

    THE NPDES PERMIT HOLDER SHALL PROVIDE QUALIFIED PERSONNEL TO CONDUCT SITE INSPECTIONS ENSURING PROPER FUNCTIONALITY OF THE EROSION AND SEDIMENTATION CONTROLS. ALL EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSPECTED SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A $\frac{1}{2}$ INCH STORM EVENT OR GREATER THAT OCCURS OVER A 24 HOUR PERIOD. RECORDS OF THE SITE INSPECTIONS SHALL BE KEPT BY THE CONTRACTOR AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES IF REQUIRED.

    THIS PLAN MUST BE POSTED ON SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE SPECIFIC NUMBER) SHALL BE KEPT ONSITE AT ALL TIMES.

11. MAIL SERVICE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING MAIL SERVICE IN THE CONSTRUCTION AREA. PRIOR TO DISTURBING ANY MAIL BOXES, THE CONTRACTOR SHALL CONTACT THE POSTAL AUTHORITIES AND SHALL TEMPORARILY RELOCATE MAIL BOXES IN ACCORDANCE WITH POSTAL REQUIREMENTS. THE CONTRACTOR SHALL RESTORE MAIL BOXES TO THEIR FORMER CONDITION AND LOCATION. COST TO BE INCLUDE IN THE PRICE BID FOR VARIOUS ITEMS.

12. TRASH COLLECTION SERVICE: THE CONTRACTOR SHALL CONTACT THE CITY OF COLUMBUS, DIVISION OF REFUSE (614) 645-4729 FOR CURRENT COLLECTION DATE EACH WEEK PRIOR TO STARTING WORK AND BE RESPONSIBLE FOR MAINTAINING A 20 FOOT WIDE CLEAR AREA FOR TRASH CAN PLACEMENT IN THE FRONT OF EACH LOT FOR TRASH COLLECTION IN THE CONSTRUCTION AREA ON THE DESIGNATED TRASH PICK-UP DAY.

WATER LINE NOTES

GENERAL NOTES

1. THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, 2018 EDITION AND REVISIONS, INCLUDING ALL SUPPLEMENTS AND REVISIONS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN, UNLESS OTHERWISE NOTED.

WATER LINE NOTES – CONTINUED

GENERAL NOTES – CONTINUED

2. ALL WATER MAIN MATERIALS AND INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. ALL CITY OF COLUMBUS, DIVISION OF WATER STANDARD DRAWINGS SHALL APPLY TO THE PROJECT, UNLESS OTHERWISE NOTED.

3. FOR ANY EMERGENCIES INVOLVING THE WATER DISTRIBUTION SYSTEM, PLEASE CONTACT THE DIVISION OF WATER DISTRIBUTION MAINTENANCE OFFICE AT (614) 645-7788.

4. ALL BRASS FITTINGS ASSOCIATED WITH WATER WORK, INCLUDING REPAIRS TO THE EXISTING SYSTEM, SHALL CONFORM TO THE REVISED ALLOWABLE LEAD EXTRACTION LIMIT PER THE UPDATED NSF/ANSI 61 STANDARD. THE DIVISION OF WATER'S APPROVED MATERIALS LIST HAS BEEN UPDATED TO REFLECT THIS REQUIREMENT.

5. IT SHALL BE UNLAWFUL FOR ANY PERSON TO PERFORM ANY WORK ON CITY OF COLUMBUS WATER LINE SYSTEMS WITHOUT FIRST SECURING LICENSE TO ENGAGE IN SUCH WORK, AS INDICATED IN COLUMBUS CITY CODE SECTION 1103.02 AND 1103.06. THIS WORK INCLUDES ANY ATTACHMENTS, ADDITIONS TO OR ALTERATIONS IN ANY CITY SERVICE PIPE OR APPURTENANCES (INCLUDING WATER SERVICE LINES AND TAPS). THIS REQUIREMENT MAY BE MET BY UTILIZATION OF A SUBCONTRACTOR WHO HOLDS A CITY OF COLUMBUS WATER CONTRACTOR LICENSE OR A COMBINED WATER/SEWER CONTRACTOR LICENSE TO PERFORM THIS WORK. UTILIZATION OF A SUBCONTRACTOR MUST MEET THE LICENSING REQUIREMENTS OF CITY OF COLUMBUS BUILDING CODE, IN PARTICULAR SECTION 4114.119 AND 4114.529.

6. THE CONTRACTOR SHALL OBTAIN THE PROPER HYDRANT PERMIT(S), AND PAY ANY APPLICABLE FEES, FOR ANY APPROVED HYDRANT USAGE DEEMED NECESSARY FOR WORK UNDER THIS IMPROVEMENT. PERMITS MAY BE OBTAINED THROUGH THE DIVISION OF WATER PERMIT OFFICE (614) 645-7330. THE CONTRACTOR SHALL ADHERE TO ALL RULES AND REGULATIONS GOVERNING SAID PERMIT AND MUST HAVE THE ORIGINAL PERMIT ON SITE ANYTIME IN WHICH THE HYDRANT IS IN USE. COST TO BE INCLUDED IN THE VARIOUS BID ITEMS.

7. ALL WATER MAINS SHALL BE CLEANED AND FLUSHED, AND ANY WATER MAIN 12-INCH AND LARGER MUST BE PROPERLY PIGGED, IN ACCORDANCE WITH SECTION 801.13 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS.

8. ALL WATER MAINS SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.14 OF THE CITY OF COLUMBUS, CONSTRUCTION AND MATERIAL SPECIFICATIONS. 150 PSI OF PRESSURE SHALL BE MAINTAINED FOR AT LEAST TWO HOURS IN ANY TESTED SECTION.

9. ALL WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 801.15 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF AWWA C-651. WHEN THE WATER MAINS ARE READY FOR DISINFECTION, THE INSPECTOR SHALL SUBMIT A WRITTEN REQUEST FOR CHLORINATION OF THE MAINS THAT NEED DISINFECTED, THREE (3) SETS OF "AS-BUILT" PLANS (FULL SIZE SHEETS ONLY), THE AS-BUILT SURVEY COORDINATES, WATER SERVICE REPORTS, AND A PRESSURE TEST TO THE CITY OF COLUMBUS, DIVISION OF WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTION OF ALL WATER MAINS CONSTRUCTED UNDER THIS PLAN.

10. ANY SECTION OF WATER MAIN THAT IS LONGER THAN 20 FEET IN LENGTH SHALL BE CHLORINATED. HAND SWABBING METHODS WILL ONLY BE PERMITTED FOR SECTIONS LESS THAN OR EQUAL TO 20 FEET IN LENGTH. USE UNSCENTED HOUSEHOLD BLEACH FOR HAND SWABBING OF PIPE AND FITTINGS.

11. ONLY ONE CONNECTION TO AN EXISTING WATER LINE IS PERMITTED BEFORE DISINFECTION OF A NEW WATER LINE HAS BEEN COMPLETED. ALL OTHER CONNECTIONS MUST BE MADE AFTER THE LINE HAS BEEN DISINFECTED.

12. ALL WATER METERS ASSOCIATED WITH THIS PROJECT SHALL BE INSTALLED INSIDE THE PROPOSED STRUCTURE UNLESS A METER PIT IS APPROVED BY THE ADMINISTRATOR OF THE DIVISION OF WATER. ALL METER PITS MUST BE APPROVED PRIOR TO THE ISSUING OF ANY SERVICE PERMITS AND MUST CONFORM TO STANDARD DRAWING L-7103 FOR 5/8" THROUGH 1" METERS, OR L-6317 A, B, C, D, & E FOR 1-1/2" OR LARGER METERS.

13. NO SERVICE CONNECTION PERMITS SHALL BE ISSUED OR CONNECTIONS MADE TO ANY SERVICE TAPS UNTIL WATER MAINS HAVE BEEN DISINFECTED BY THE CITY OF COLUMBUS, DIVISION OF WATER. WHEN A 3-INCH, OR LARGER TAP IS TO OCCUR ON A 20-INCH OR LARGER WATER MAIN, THE CONTRACTOR SHALL NOTIFY THE DIVISION OF WATER OPERATIONS CONTROL CENTER AT (614) 645-7168 TWENTY FOUR (24) HOURS IN ADVANCE OF PERFORMING THE TAP.

14. WATER SERVICE BOXES SHALL BE PLACED ONE FOOT (1') FROM THE EDGE OF THE PROPOSED OR EXISTING SIDEWALK BETWEEN THE SIDEWALK AND THE CURB, OR 2 FEET INSIDE THE RIGHT-OF-WAY OR EASEMENT LINE WHEN NO SIDEWALK IS PRESENT OR PROPOSED. REFER TO STANDARD DRAWING L-9901 FOR ADDITIONAL INFORMATION.

15. ALL FIRE HYDRANTS TO BE INSTALLED IN THE CITY OF COLUMBUS SHALL BE PAINTED WITH THE COLOR "SAFETY ORANGE". THE FIRE HYDRANTS SHALL BE PROVIDED WITH TWO COATS IN A GLOSS ENAMEL OF THE "SAFETY ORANGE" COLOR FOR THE ENTIRE HYDRANT. THE TOPS OF THE FIRE HYDRANTS ARE NO LONGER REQUIRED TO BE PAINTED BLACK. AFTER INSTALLATION OF FIRE HYDRANTS, THE CONTRACTOR IS RESPONSIBLE TO APPLY TOUCH UP PAINT TO ANY DAMAGE TO THE FACTOR APPLIED HYDRANT PAINT. HYDRANTS WILL NOT BE ACCEPTED UNTIL ANY PAINT DAMAGE FROM SHIPPING OR INSTALLATION HAS BEEN REPAIRED. USE HYDRANT TOUCH UP PAINT IN ACCORDANCE WITH THE APPROVED MATERIALS LIST. THIS GENERAL NOTE SHALL SUPERSEDE THE CURRENT PAINT DESCRIPTION SPECIFIED IN ITEM 809.02 IN THE 2012 CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.

16. MAINTAIN EIGHTEEN (18) INCHES VERTICAL AND TEN (10) FEET HORIZONTAL SEPARATION BETWEEN ANY SANITARY OR STORM SEWER PIPING AND ALL PROPOSED WATER MAINS.

17. WHEN CROSSING THE EXISTING WATER MAIN, AND CONTROLLED DENSITY FILL (ITEM 613) IS TO BE USED AS BACKFILL, THE CONTRACTOR SHALL PROVIDE SIZE NO. 57 CRUSHED CARBONATE STONE (CCS) 1 FOOT BELOW TO 1 FOOT ABOVE THE EXISTING WATER LINE.

18. CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS OF THE OHIO ADMINISTRATION CODE CHAPTER 3745-83-02 WATER DISRUPTION OF SERVICE RULE. EXCAVATE PITS SUFFICIENTLY BELOW THE AREA TO BE CONNECTED TO IN ORDER TO MAINTAIN WATER LEVELS BELOW THE WATER MAIN. IF WATER FROM THE PIT ENTERS THE EXISTING MAIN, CONTACT DIVISION OF WATER IMMEDIATELY. ENSURE THAT SUFFICIENTLY SIZES PUMPS ARE UTILIZED TO REMOVE WATER FROM TRENCH AND BACKUP PUMPS ARE KEPT ON SITE FOR REDUNDANCY.

19. "SURVEY COORDINATES" SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND CENTERLINE ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS. THE SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, HORIZONTAL DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, AND CASING PIPE TERMINI. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT. THE CONTRACTOR SHALL HAVE A SURVEYOR'S ROD AND LEVEL AVAILABLE ON SITE AT ALL TIMES TO ALLOW FOR VERIFICATION OF RECORDED ELEVATIONS.

    ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2007) ADJUSTMENT, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM, SOUTH ZONE, WITH ELEVATIONS BASED ON NAVD 88 DATUM. ALL COORDINATES (NORTHING, EASTING, CENTERLINE ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N xxxxxx.xx, E xxxxxx.xx, C/L ELEV. xxx.xx). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT HORIZONTAL AND A TENTH OF A FOOT (0.10) OR LESS VERTICAL.

    THE COORDINATES SHALL BE DOCUMENTED TO THE ENGINEER IN DIGITAL SPREADSHEET FORM AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND CENTERLINE ELEVATION. COORDINATES SHALL BE SUBMITTED TO THE ENGINEER ON A BI-WEEKLY BASIS. COORDINATES SHALL BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION.

    LUMP SUM PAYMENT IS FULL COMPENSATION FOR ALL WORK INVOLVED IN OBTAINING AND DOCUMENTING THE SURVEY COORDINATES AS DESCRIBED IN THIS SPECIFICATION.

WATER SPECIAL NOTES

1. ALL WATER LINE VALVE BOXES, SERVICE BOXES, TEST STATIONS, PITOMETER TAP STRUCTURES, METER PIT COVERS, AND OTHER SURFACE UTILITY STRUCTURES WITH THE DISTURBED AREA SHALL BE ADJUSTED TO GRADE. ANY OF THESE STRUCTURES LOCATED WITHIN PAVEMENT, DRIVEWAYS, OR OTHER TRAVELED AREAS, WHETHER EXISTING OR PROPOSED, SHALL BE EQUIPPED WITH A TRAFFIC RATED, HEAVY DUTY VALVE BOX AND/OR COVER IN ACCORDANCE WITH THE STANDARD DRAWINGS. EXISTING WATER SERVICE BOXES TO REMAIN THAT ARE ENCOUNTERED WITHIN THE PROJECT LIMITS SHALL BE CLEANED OUT, CENTERED OVER THE CURB STOP, AND ADJUSTED TO THE PROPOSED GRADE.

2. RISER RINGS WILL NOT BE PERMITTED ON ANY NEWLY INSTALLED VALVE BOXES TO BRING VALVES TO FINAL GRADE. THE CONTRACTOR SHALL ENSURE THAT THE BOXES ARE INSTALLED AT THE CORRECT GRADE FOR FINAL PAVING OPERATIONS AND THAT THEIR PAVING CONTRACTOR INSTALLS PAVEMENT CORRECTLY AT LIDS DURING PAVING OPERATIONS. VALVE LIDS ARE NOT PERMITTED TO SET ABOVE FINAL GRADE AND SHALL BE A MAXIMUM OF 1/4" BELOW FINAL GRADE.

3. A MINIMUM OF 4 FEET OF COVER IS REQUIRED PRIOR TO PRESSURE TESTING ANY WATER MAIN. A SUFFICIENT AMOUNT OF BACKFILL SHALL BE INSTALLED TO PROVIDE THE ADEQUATE RESTRAINT IN AREAS WHERE REQUIRED.

4. WHERE INDICATED ON THE PLANS, THE EXISTING WATER MAIN SHALL BE ABANDONED; AND ANY EXISTING WATER SERVICES OFF THIS MAIN SHALL BE TRANSFERRED TO THE NEW WATER MAIN. PRIOR TO ABANDONMENT OF THE EXISTING WATER MAIN, THE PROPOSED WATER MAIN SHALL BE PIGGED (IF REQUIRED), TESTED, CHLORINATED, AND PUT IN SERVICE AND THEN THE EXISTING WATER SERVICES SHALL BE TRANSFERRED. THE CONTRACTOR SHALL MAINTAIN WATER SERVICES TO ALL PROPERTIES DURING CONSTRUCTION OF THE NEW WATER MAIN AND SHALL NOTIFY ALL CUSTOMERS AFFECTED BY THE TRANSFER OF SERVICES. TO ENSURE THAT ALL EXISTING SERVICES ARE TRANSFERRED TO THE NEW MAIN, NO WATER MAIN SHALL BE ABANDONED UNTIL THE NEW WATER MAIN HAS BEEN PUT IN SERVICE; ALL AFFECTED WATER SERVICES TRANSFERRED; AND THE EXISTING WATER MAIN TO BE ABANDONED HAS BEEN SHUT DOWN FOR 24 HOURS. ALL VISIBLE VALVE BOXES, FIRE HYDRANTS, AND SERVICE BOXES ON THE WATER MAIN TO BE ABANDONED, WHICH WILL NO LONGER BE IN SERVICE, SHALL BE REMOVED. ALL WATER MAINS TO BE ABANDONED SHALL BE MADE WATER TIGHT. THE REQUIRED SURFACE RESTORATION SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEM(S). THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO ALL AFFECTED PROPERTY OWNERS AT LEAST 24 HOURS, BUT NOT MORE THAN 72 HOURS PRIOR TO ANY TEMPORARY INTERRUPTION OF WATER SERVICE. INTERRUPTION OF WATER SERVICE SHALL BE HELD TO A MINIMUM AND SHALL BE APPROVED BY THE CITY.

5. FIRE HYDRANT RELOCATIONS SHALL CONFORM TO APPLICABLE SECTIONS OF ITEM 809 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. WORK SHALL CONSIST OF REMOVING THE EXISTING HYDRANT, INSTALLING NEW 6" PIPE AND FITTINGS REQUIRED TO LOCATE THE FIRE HYDRANT 2 FEET FROM BACK OF PROPOSED CURB OR 8 FEET OFF EDGE OF PAVEMENT, RESETTING HYDRANT AND BLOCKING AS REQUIRED. ALL 6" PIPE SHALL BE INSTALLED AT 4'-0" MINIMUM COVER. HYDRANT EXTENSIONS SHALL BE PROVIDED PER ITEM 810, AS REQUIRED. RELOCATED FIRE HYDRANTS SHALL BE ADJUSTED TO PROPER GRADE AND FACED IN THE PROPER DIRECTION. WHEN A HYDRANT IS RELOCATED FIFTEEN (15) FEET OR MORE FROM THE "TYPICAL HYDRANT SETTING" VALVE LOCATION (SEE L-6409 AND L-6337), AN ADDITIONAL VALVE SHALL BE INSTALLED, AND RESTRAINED, WITHIN TWO (2) FEET OF THE RELOCATED HYDRANT. PAYMENT IS TO BE INCLUDED UNDER ITEM 809. FIRE HYDRANT RELOCATED.

6. NO TWO (2) ADJACENT FIRE HYDRANTS SHALL BE TAKEN OUT OF SERVICE CONCURRENTLY.

7. THE CONTRACTOR SHALL NOTIFY THE DIVISION OF FIRE ALARM OFFICE, 221-3132, WHENEVER FIRE HYDRANTS ARE TAKEN OUT OF SERVICE AND PLACED BACK IN SERVICE.

8. RELOCATED FIRE HYDRANTS SHALL BE PUT BACK IN SERVICE AS SOON AS POSSIBLE.

9. THE CONTRACTOR SHALL COORDINATE HIS WORK SUCH THAT NO WATER CUSTOMER WILL HAVE THEIR SERVICE DISRUPTED MORE THAN TWO (2) TIMES THROUGHOUT THE DURATION OF THIS PROJECT.

10. IF A LEAD WATER TAP IS ENCOUNTERED AND IS NEITHER DAMAGED NOR PART OF A PLANNED RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL REPORT THE PRESENCE OF THE LEAD TAP TO THE DIVISION OF WATER DISTRIBUTION MAINTENANCE GROUP AT 614-645-7788.

    IF A LEAD TAP IS EITHER DAMAGED DURING CONSTRUCTION OR IS PART OF A PLANNED WATER TAP RELOCATION/REPLACEMENT, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS:
    a. IMMEDIATELY CONTACT LEW FLEMISTER, DIVISION OF WATER, (614-645-7028), TO REQUEST THE SHUT OFF OF THE EXISTING CURB STOP. IF LEW CANNOT BE REACHED, CONTACT THE DIVISION OF WATER DISTRIBUTION ENGINEERING OFFICE AT 614-645-7677 TO REQUEST THE SHUT OFF.
    b. CONTRACTOR SHALL EXPOSE THE OWNER'S SIDE OF THE WATER SERVICE TO CONFIRM THE MATERIAL. THE INSPECTOR SHALL BE PRESENT FOR THIS.
    c. IF THE CUSTOMER'S PRIVATE SERVICE MATERIAL IS LEAD, STOP WORK AND NOTIFY THE DIVISION OF WATER DISTRIBUTION ENGINEERING OFFICE (614-645-7677) IMMEDIATELY. IF THE MATERIAL IS NOT LEAD, THE CONTRACTOR SHALL REPLACE THE LEAD TAP (FROM EXISTING CORPORATION STOP TO CURB STOP) AND REINSTATE SERVICE TO THE CUSTOMER. PARTIAL REPAIRS OF THE LEAD TAP ARE NOT PERMITTED.
    d. REFER TO DIVISION OF WATER STANDARD DRAWINGS L-7102C AND L-9901 FOR INFORMATION ON WATER TAP RELOCATIONS, PLACING NEW CURB STOPS, AND RELOCATING CURB BOXES.

11. ANY WORK ON THE PRIVATE WATER SERVICE LINE (BETWEEN CURB STOP AND METER) WILL REQUIRE ADDITIONAL INSPECTION BY THE UTILITY METER SERVICES SECTION (FOR 2-INCH AND SMALLER LINES) OR THE UTILITY PERMIT OFFICE (FOR 3-INCH AND LARGER SERVICE LINES). FOR 2-INCH AND SMALLER WATER SERVICE LINES, CALL (614) 645-8276, AND FOR 3-INCH AND LARGER WATER SERVICE LINES, CALL (614) 645-8119, PRIOR TO 1:00 PM FOR SAME DAY INSPECTION.

DIVISION OF POWER NOTES

THE DIVISION OF POWER (DOP), CITY OF COLUMBUS, OHIO HAS FACILITIES THROUGHOUT THE SUBJECT IMPROVEMENT. THE CONTRACTOR IS HEREBY REQUIRED TO CONTACT THE DIVISION BY FAX (614) 645-7150 (FAX), FORTY-EIGHT (48) HOURS PRIOR TO CONDUCTING ANY ACTIVITY WITHIN THE CONSTRUCTION AREA. THE DOP DISPATCH OFFICE NUMBER IS: (614) 645-7627 (VOICE). ANY REQUIRED RELOCATION, SUPPORT, PROTECTION, OR ANY OTHER ACTIVITY CONCERNED WITH THE CITY'S STREET LIGHTING SYSTEM IN THE CONSTRUCTION AREA IS TO BE PERFORMED BY THE CONTRACTOR UNDER THE DIRECTION OF DIVISION OF POWER (DOP) PERSONNEL AND AT THE EXPENSE OF THE PROJECT. DOP SHALL MAKE ALL FINAL CONNECTIONS TO DOP'S EXISTING ELECTRICAL SYSTEM AT THE EXPENSE OF THE PROJECT. THE CONTRACTOR SHALL USE MATERIAL AND MAKE REPAIRS TO A CITY OF COLUMBUS STREET LIGHTING SYSTEM BY FOLLOWING THE DOP "MATERIAL AND INSTALLATION SPECIFICATIONS" (MIS) AND THE CITY OF COLUMBUS "CONSTRUCTION AND MATERIAL SPECIFICATIONS" (CMSC). ANY NEW OR REINSTALLED UNDERGROUND STREET LIGHT SYSTEM SHALL REQUIRE TESTING AS REFERRED TO IN SECTION 1001.18 OF THE CMSC. THE CONTRACTOR SHALL CONFORM TO THE DOP'S EXISTING CONDUCTOR SAFETY POLICY AND HOLD CARD SYSTEM (MIS-95), COPIES OF WHICH ARE AVAILABLE FROM DOP.

IF ANY ELECTRIC FACILITY BELONGING TO THE DOP IS DAMAGED IN ANY MANNER BY THE CONTRACTOR, ITS AGENTS, SERVANTS, OR EMPLOYEES, AND REQUIRES EMERGENCY REPAIRS, THE DOP SHALL MAKE ALL NECESSARY REPAIRS, AND THE EXPENSE OF SUCH REPAIRS AND OTHER RELATED COSTS SHALL BE PAID BY THE CONTRACTOR TO THE DOP, CITY OF COLUMBUS, OHIO.

RECREATION AND PARKS NOTES

CONTRACTOR SHALL CONTACT COLUMBUS RECREATION AND PARKS DEPARTMENT AT (614) 645-3307 THIRTY (30) CALENDAR DAYS PRIOR TO ANY WORK ON OR NEAR PARK PROPERTY. CONTRACTOR SHALL SUBMIT A WORK SCHEDULE AND COORDINATE ACCESS. SCHEDULED EVENTS BY COLUMBUS RECREATION AND PARKS SHALL TAKE PRECEDENCE AND CONTRACTOR WILL BE REQUIRED TO ADJUST WORK SCHEDULE AS NECESSARY FOR WORK ON PARK PROPERTY.

THE CONTRACTOR SHALL NOT STAGE/STORE ANY MATERIALS OR EQUIPMENT OUTSIDE THEIR WORK LIMITS IN COLUMBUS RECREATION & PARKS PROPERTY WITHOUT A PERMIT ISSUED BY COLUMBUS RECREATION & PARKS. PERMIT MUST BE POSTED ONSITE AT ALL TIMES.

ANY AND ALL PARK AREAS DISTURBED BY THE CONTRACTOR DURING THE COURSE OF THEIR WORK ACTIVITIES SHALL BE RESTORED TO LIKE OR BETTER CONDITIONS WITHIN THE TIME FRAMES NOTED IN THE APPROVED SCHEDULE AND SHALL BE TO THE SATISFACTORY OF THE OWNER COLUMBUS RECREATION & PARKS.

ENTRY INTO A CITY PARK OR PARKLAND FOR CONSTRUCTION OR ANY OTHER NON-DESIGN USE IS PROHIBITED UNLESS A MOU IS IN PLACE. UNLESS SPECIFIC PERMISSIONS ARE GRANTED BY COLUMBUS RECREATION & PARKS ACCESS TO, FROM, ON, OVER, UNDER, THROUGH, ACROSS OR OTHER RELATED NON-PARK OR NON-TRAIL USE OF THE TRAIL CORRIDOR/PARKLAND IS NOT GRANTED OR IMPLIED.

GREEN INFRASTRUCTURE – GENERAL CONSTRUCTION NOTES

INSPECTION AND MAINTENANCE REQUIREMENTS

GREEN INFRASTRUCTURE FACILITIES UNDER THIS PLAN SHALL BE MAINTAINED BY THE CITY OF COLUMBUS OR ITS AGENTS AFTER THE CONTRACT ESTABLISHMENT AND WARRANT PERIODS HAVE BEEN SATISFACTORILY COMPLETED. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED IN THE CITY'S INSPECTION & MAINTENANCE GUIDANCE FOR STORMWATER BMPS (IMGM), LATEST EDITION.

LANDSCAPING

ALL TREE RELATED WORK SHALL COMPLY WITH MOST RECENT CITY OF COLUMBUS TREE POLICY.

PARKING AND MATERIAL STORAGE UNDER DRIP LINE OF TREES WILL NOT BE PERMITTED AS NOTED EARLIER.

TREE PROTECTION SHALL BE REQUIRED FOR ALL CONSTRUCTION PROJECTS WHERE CONSTRUCTION ACTIVITY WILL OCCUR WITHIN THE DRIPLINE OR CIRCULAR CRITICAL ROOT ZONE (CRZ) AROUND THE TREE OR SHRUB UNLESS TREE IS DESIGNATED BY ENGINEER FOR REMOVAL. PROTECTION SHALL BE MAINTAINED THROUGHOUT THE FULL PERIOD OF CONSTRUCTION.

IMMEDIATELY AFTER INSTALLATION OF EACH PLANT, THE SOIL SHALL BE THOROUGHLY SATURATED WITH WATER, APPLY WATER SLOWLY SO AS TO PENETRATE THE ENTIRE ROOT SYSTEM. WATERING SHALL CONTINUE THROUGHOUT THE MAINTENANCE AND GUARANTEE PERIOD AS FREQUENTLY AS SEASONAL CONDITIONS REQUIRE UNTIL FINAL ACCEPTANCE OF WORK.

THE CONTRACTOR SHALL PROTECT PLANTS AGAINST DAMAGE PRIOR TO FINAL ACCEPTANCE OF THE WORK.

CONTRACTOR SHALL WEED ALL PLANTED AREAS, MAINTAIN THE SPECIFIED DEPTH OF MULCH SPECIFIED BY ADDING MULCH AS NEEDED, RESET PLANT MATERIALS THAT HAVE SETTLED TO PROPER GRADE, AND PRUNE SHRUBS TO REMOVE DEAD OR BROKEN BRANCHES DURING THE PLANT ESTABLISHMENT PERIOD.

PLANTS SHALL BE SET IN THE CENTER OF PITS, PLUMB AND STRAIGHT, IN ACCORDANCE WITH THE PLANTING DETAILS, USING GENTLE HANDLING TO AVOID DAMAGE TO THE PLANT, AND FACED TO GIVE BEST APPEARANCE AND RELATIONSHIP TO ADJACENT PLANTS AND STRUCTURES. PLANT TO SUCH DEPTH THAT THE FINISHED GRADE LEVEL OF PLANT, AFTER SETTLEMENT, WILL BE THE SAME AS THAT AT WHICH THE PLANT WAS GROWN.

EXCAVATE PLANT PITS TO MINIMUM DIMENSIONS SHOWN ON THE DRAWINGS. IF PLANT PITS ARE MECHANICALLY DUG, THE SIDES OF THE PIT SHALL BE BROKEN DOWN OR ROUGHENED WITH A SHOVEL OR OTHER HAND TOOL TO ELIMINATE SURFACE GRAZING.

CUT ALL POT-BOUND ROOTS OF CONTAINER PLANTS. REMOVE WIRE BASKET OF ROOT BALL.

REMOVE ANY PLATFORMS, WIRE AND SURPLUS BINDING FROM TOP AND SIDES OF BALL, CUT AND REMOVE BURLAP ROPE TIES FROM UPPER HALF OF ROOT BALL.

BACKFILLING: FILL PLANT PIT WITH SOIL MIX BY HAND, IN LAYERS NOT MORE THAN SIX (6) INCHES DEEP, AND WITH EACH LAYER THOROUGHLY SETTLED BY HAND TAMPING AND WITH WATER, AND FREE OF ALL VOIDS BEFORE NEXT LAYER IS PUT IN PLACE. PROVIDE EDGING MATERIAL AROUND ALL MULCHED AREAS USING MATERIALS SPECIFIED IN DRAWINGS.

STORAGE MEDIA

ALL AGGREGATES USED FOR STORMWATER FACILITIES TO BE CLEAN AND WASHED PRIOR TO DELIVERY TO SITE.

CONTRACTOR SHALL PROTECT FOOTPRINT OF BIORETENTION AREA FROM EQUIPMENT OPERATION, VEHICLE PASSAGE AND MATERIAL STORAGE THROUGH THE ENTIRE PERIOD OF CONSTRUCTION IN ACCORDANCE WITH GI SUPPLEMENTAL SPECIFICATION 1602 EARTHWORK FOR GREEN INFRASTRUCTURE PROJECTS.

CONSTRUCTION BIORETENTION AREAS AND ASSOCIATED PIPING SHALL NOT BEGIN UNTIL UPGRADIENT AND PARK AREAS CONTRIBUTING RUNOFF ARE STABILIZED.

CONSTRUCTION OF BIORETENTION FACILITY SHALL NOT COMMENCE UNTIL FINAL SITE ELEVATIONS HAVE BEEN ESTABLISHED, EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED, AND ALL UPSTREAM AREAS ARE FULLY STABILIZED.

SURFACE OF EXCAVATED BIORETENTION FACILITY SHALL BE SCARIFIED WITH BUCKET TEETH OR OTHER MEANS TO PROVIDE A CORRUGATED FINISH AND ALL LOOSE SOIL MATERIAL SHALL BE REMOVED PRIOR TO PLACEMENT OF AGGREGATE OR BIORETENTION SOIL.

ANY SEDIMENTATION IN EXCAVATIONS SHALL BE REMOVED AND THE SURFACE RE-SCARIFIED PRIOR TO PLACEMENT OF AGGREGATE OR BIORETENTION SOIL.

BIORETENTION MATERIALS SHALL NOT BE PLACED IF MATERIALS OR SUBGRADE SOILS ARE FROZEN OR WET.

PLACE AGGREGATE IN LAYERS NOT MORE THAN 6 INCHES IN LOOSE DEPTH, PLACE BY HAND OR WITH SMALL EQUIPMENT.

DO NOT COMPACT SUBGRADE LAYER WHILE PLACING AGGREGATE LAYER. DO NOT OVERLY COMPACT AGGREGATE LAYER.

PLACE BIORETENTION SOIL IN 8-INCH TO 12-INCH LIFTS. LIFTS SHALL BE LIGHTLY WATERED TO ENCOURAGE SETTLING. LIGHTLY SCARIFY PREVIOUSLY PLACED SURFACES PRIOR TO PLACING SUBSEQUENT LIFTS WITH THE TEETH OF A BUCKET OR OTHER MEANS APPROVED BY THE ENGINEER. MECHANICAL COMPACTION OF THE SOIL IS NOT PERMITTED. SETTLING OF SOIL BY WALKING ON SURFACE AND WORKING WITH HAND EQUIPMENT IS ACCEPTABLE. DO NOT USE COMPACTING EQUIPMENT OR ANY OTHER MEANS TO INDUCE SETTLING.

UNIFORMLY GRADE BIORETENTION SOIL TO A SMOOTH SURFACE AFTER THE BIORETENTION SOIL HAS RESTED FOR A 24-HOUR PERIOD. DO NOT OVERLY WORK OR COMPACT BIORETENTION SOIL.

PLACE MULCH WITHIN 24 HOURS OF PLACEMENT OF BIORETENTION SOIL MIXTURE. PLACE MULCH TO AN AVERAGE DEPTH OF 3 INCHES IN LOOSE DEPTH. PLACE BY HAND TAKING CARE NOT TO OVERLY COMPACT BIORETENTION SOIL MEDIA. CONTRACTOR SHALL REMOVE EXCESS MATERIALS, TOOLS, AND EQUIPMENT IMMEDIATELY AFTER COMPLETION OF BIORETENTION SOIL MIXTURE PLACEMENT AND FINAL GRADING.

ENGINEER SHALL VERIFY COMPLETION OF BIORETENTION CELL PRIOR TO PUTTING CELL INTO OPERATION.

GREEN INFRASTRUCTURE SUPPLEMENTAL SPECS

FOR GREEN INFRASTRUCTURE PLANTING, MAINTENANCE AND BIORETENTION REQUIREMENTS, REFER TO:

HTTPS://WWW.COLUMBUS.GOV/UTILITIES/PROJECTS/BLUEPRINT/GREEN-INFRASTRUCTURE-DESIGN-GUIDELINES-AND-SUPPLEMENTAL-SPECIFICATIONS/

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD		GRANTOR
	VOL.	PAGE	

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith

445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

GENERAL NOTES

NOT FOR CONSTRUCTION

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD	CHK	CID	CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: NO SCALE	SHEET 7 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

BOUNDARY AND MARKER SYMBOLS

SYMBOL	*DESCRIPTION*
——X——X——X——	FENCE
— — o — — o — — o — —	EX. GUARD RAIL

TRAVELED WAY SYMBOLS

SYMBOL	DESCRIPTION
	PAVED ROADWAY, SIZE AND TYPE
	PAVED ROADWAY W/ CURB, SIZE AND TYPE
○	SIGNS, SIGN WITH IDENTIFICATION

EX. UNDERGROUND/OVERHEAD UTILITY SYMBOLS

- G — GAS LINE
- W — WATER LINE
- WS — WATER SERVICE AND CURB STOP
- S — SANITARY SEWER
- ST — STORM SEWER
- DS — DOWNSPOUT
- E — UNDERGROUND ELECTRIC
- OH — OVERHEAD UTILITY
- RW — PROPERTY BOUNDARY/RIGHT-OF-WAY
- CENTERLINE

- SOIL BORING
- WATER VALVE/WATER SERVICE (CURB STOP)
- GAS SERVICE VALVE
- FIRE HYDRANT
- UTILITY POLE
- UTILITY POLE GUY WIRE
- LIGHT POLE
- (ST) EX. STORM MANHOLE
- EX. CURB AND GUTTER INLET
- EX. CURB INLET MANHOLE
- EX. CATCH BASIN
- (D) EX. DOWNSPOUT CURB OUTLET
- EX. YARD DRAIN
- (S) EX. SANITARY MANHOLE

PROPOSED WORK

- ST — STORM SEWER
- UD — UNDERDRAIN
- W — WATERLINE
- EDGE OF SIDEWALK
- CURB

- AGGREGATE
- CONCRETE
- BIORETENTION SOIL
- HARDWOOD MULCH

- (WS) WATER VALVE/WATER SERVICE (CURB STOP)
- FIRE HYDRANT
- CURB AND GUTTER INLET
- CURB INLET MANHOLE
- CATCH BASIN OR OVERFLOW STRUCTURE
- (ST) STORM MANHOLE
- TREE OR SHRUB (AS IDENTIFIED)

LANDSCAPE AND DRAINAGE SYMBOLS

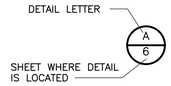
SYMBOL	DESCRIPTION
	BUILDING OR STRUCTURE FOOTPRINT
	TREE OR VEGETATION
	BUSHES
	EDGE OF WOODS
	RIVER, STREAMS, DITCHES
	DIRECTION OF FLOW FOR STORM SEWER
	DIRECTION OF FLOW FOR SWALE

SURFACE ELEVATION SYMBOLS

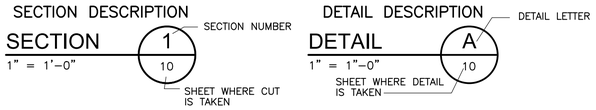
SYMBOL	FEATURE
820	EXISTING CONTOUR
820	PROPOSED CONTOUR
×865.7	SPOT ELEVATION
	SURVEYING BENCHMARK

SECTION CUT SYMBOLS

DETAIL CALL OUT SYMBOLS



SECTION AND DETAIL TITLES



GREEN INFRASTRUCTURE ID

- CGI1 — STRUCTURE ID
- JOY-1 — GREEN INFRASTRUCTURE FACILITY ID
- JOY-1-CS — GREEN INFRASTRUCTURE CONTROL STRUCTURE
- JOY-1-CO.1 — GREEN INFRASTRUCTURE CLEANOUT

ABBREVIATIONS

ABANDON	ABDN	FEET/FOOT	FT	PRECAST	PRCST
ADDITIONAL	ADDL	FIELD VERIFY	FV	PRE-FABRICATED	PREFAB
ADDRESS	ADDR	FIGURE	FIG	PROPOSED	PROP
ADJUST TO GRADE	ATG	FIRE HYDRANT	FH	POLYVINYL CHLORIDE	PVC
AMERICAN ELECTRIC POWER	AEP	FLOOD	FL	PAVEMENT	PVMT
AND	&	FRANKLIN COUNTY AUDITOR	FCA	PULL BOX	PB
APPROXIMATE (LY)	APPROX				
AS PER PLAN	A.P.P.	GALVANIZED	GALV	QUANITY/QUALITY	QTY
ASPHALT	ASPH	GAS (NATURAL)	G		
AT	@	GAS VALVE	GV	RADIUS	R, RAD
AVERAGE	AVG	GAS SERVICE	GS	RECORD PLAN	RP
		GRADE	GR	REFERENCE/REFER	REF
BACK OF CURB	B/C	GROUND	GRND	REINFORCED CONCRETE	RC
BASELINE	B/L			REINFORCED CONCRETE PIPE	RCP
BEARING	BRG	HARD WOOD	HDW	REINFORCED, ING	REINF
BETWEEN	BTWN	HEADWALL	HW	REMOVE	REM
BENCHMARK	BM	HORIZONTAL	HOR	REQUIRED	REQ'D
BITUMINOUS	BIT	HEIGHT	HT	REVISION	REV
BLACKTOP	BT			RIGHT-OF-WAY	R/W, ROW
BLOCK	BLK	INCH(ES)	IN	RIGHT	RT
BOTTOM	BOT	INSIDE DIAMETER	ID	ROAD	RD
BUILDING	BLDG	INSIDE FACE	IF	ROOF DRAIN	RD
		INSIDE	INS		
CAPACITY	CAP	INVERT	INV	SANITARY	SAN
CATCH BASIN	CB	IRON PIPE	IP	SCHEDULE	SCH
CENTER(ED)	CTR	IRON PIN FOUND	IPF	SERVICE LINE	SL
CENTERLINE	℄, CL, C/L	IRON PIN SET	IPS	SECTION	SEC
CENTRIFUGALLY CAST FIBERGLASS	CCF	IRON ROD	IR	SEWER	SWR
CHAMFER	CHAMF			SIDEWALK	SW
CITY OF COLUMBUS	COC	JOINT	JT	SIDEWALK TO BE REMOVED	SWTBR
CLEANOUT	CO	JUNCTION BOX	JB	SHEET	SHT
CLEAR	CLR			SOUTH	S
COLUMBUS	COL	LATERAL	LAT	SPRINKLER HEAD	SH
CONCRETE	CONC	LEFT	LT	SPRINKLER LINE	SPR
CONCRETE MASONRY UNITS	CMU	LIGHT POLE	LP	SQUARE	SQ
CONDUIT	CDT	LINEAL FEET	LF	STAINLESS STEEL	SST
CONIFEROUS TREE	CT	LONG	LG	STAINLESS STEEL PIPE	SSP
CONNECTION	CONN	LOCATION/LOCATED	LOC	STATION	STA
CONSTRUCTION	CONST	LUMP SUM	LS	STANDARD	STD
CONSTRUCTION AND MATERIALS SPECIFICATIONS – CITY OF COLUMBUS	CMSC	MAGNETIC	MAG	STONE MONUMENT BOUNDARY	SB
CONSTRUCTION JOINT	CJ	MANUFACTURED SYSTEM	MFD	STORM	STM
CONTROL POINT	CP	MANUFACTURING	MFG	STORM DRAIN	SD
CONTROL STRUCTURE	CS	MANUFACTURER	MFR	STRUCTURE (S. URAL)	STRUC
CONTROL	CTRL	MANHOLE	MH		
CUBIC FEET PER MINUTE	CFM	MATERIAL	MATL	TANGENCY	TAN
CUBIC FEET PER SECOND	CFS	MAXIMUM	MAX	TECHNICAL	TECH
CUBIC FOOT	CF	MILES PER HOUR	MPH	TELEPHONE	TEL
CURB AND GUTTER INLET	CGI	MINIMUM	MIN	TEMPORARY	TEMP
CURB INLET	CI	MISCELLANEOUS	MISC	THICK(NESS)	THK
		MONUMENT	MON	THREADED	THD
DECIDUOUS TREE	DT	MUNICIPAL ELECTRIC LIGHT & POWER	MELP	TIME WARNER CABLE	TWC
DEGREES	DEG			TO BE ABANDONED	TBA
DEMOLITION	DEMO	NORTH	N	TO BE LOWERED	TBL
DETAIL	DTL	NORTH AMERICAN VERTICAL DATUM	NAVD	TO BE LOCATED	TBL
DIAMETER	DIA	NOT TO SCALE	NTS	TO BE REMOVED	TBR
DISCHARGE	DISCH	NOT FIELD SURVEYED/LOCATED	NFS	TO BE REMOVED AND REPLACED	TBRR
DIVISION OF ELECTRIC	DOE	NOT IN CONTRACT	NIC	TOP FACE	TF
DO NOT DISTURB	DND	NUMBER	NO. OR #	TOP OF CURB/CONCRETE	TOC, T/C
DOWN	DN			TOP OF WALL	TOW
DOWNSPOUT	DS	OHIO DEPARTMENT OF TRANSPORTATION	ODOT	TRANSFORMER	XFMR
DRAIN	D, DRN	ON CENTER	OC	TYPICAL	TYP
DRAWING	DWG	OPENING	OPNG		
DRIVEWAY	DW	OPTION(AL)	OPT	UNDERDRAIN	UD
DUCTILE IRON	DI	OUTSIDE DIAMETER	OD	UNLESS NOTED OTHERWISE	UNO
DUCTILE IRON PIPE	DIP	OUTSIDE FACE	OF	UNDERGROUND	UG
		OVERHEAD ELECTRIC	OE, OHE	UNKNOWN	UNK
EACH	EA, Ea	OVERHEAD COMMUNICATIONS	OHC		
EACH FACE	EF	OVERHEAD UTILITY	OH	VERTICAL	VERT
EACH SIDE	ES			VOLUME	V
EASEMENT	ESMT	PAVEMENT	PAVT		
EAST	E	PERMANENT	PERM	WATER OR WIDTH OR WEST	W
EDGE OF PAVEMENT	EOP	PK NAIL SET	PKS	WATER LEVEL	WL
ELECTRIC(AL)	ELEC	POINT OF BEGINNING	POB	WATER MAIN	WM
ELEVATION	EL, ELEV	POINT OF CURVE	PC	WATER SERVICE (CURB STOP)	WS
EMERGENCY	EMERG	POINT OF INTERSECTION	PI	WITH	W/
ENGINEER	ENGR	POINT OF REVERSE CURVE	PRC	WITHOUT	W/O
EPOXY	EY	POINT OF TANGENCY	PT		
EQUAL(LY)	EQ	POWER POLE	PP	YARD	YD
EQUIVALENT	EQIV	PROPERTY LINE	PL, ℄	YEAR	YR
EQUIPMENT	EQUIP	PUSH ON	PO		
EROSION & SEDIMENT CONTROL PLAN	ESPCP				
ETCETERA	ETC				
EXISTING	EX, EXIST				

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

LEGEND AND ABBREVIATIONS

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE	SHEET 8 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

BENCHMARKS

ALL BENCHMARKS (BM) AND ELEVATIONS SHOWN IN THIS PLAN ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND WERE ATTAINED BY DYNOTEC, INC IN JULY 2015.

BM	NORTHING	EASTING	ELEV.	LOCATION DESCRIPTION
BM#2	736778.65	1839671.62	853.91	CHISELED 'X' ON SOUTH BOLT OF FIRE HYDRANT ON WEST SIDE OF JOYCE AVE AT DENUNE AVE.
BM#3	740152.06	1838595.74	874.95	CHISELED 'X' ON SW BOLT OF SIGNAL POLE ON SE CORNER OF OAKLAND PARK AVE AND CLEVELAND RD.
BM#4	739473.48	1839199.45	869.37	MAG SPIKE SET ON NORTH SIDE OF POWER POLE ON SOUTH SIDE OF INTERSECTION AT N. BROADWAY AND McKENDREE AVE
BM#5	739171.54	1838826.43	871.46	CHISELED 'X' ON RIM OF SANITARY MH ON THE SOUTH SIDE OF INTERSECTION OF EDDYSTONE AVE AND CLEVELAWN PL.
BM#6	738823.48	1838519.48	871.44	CHISELED 'X' ON WEST BOLT OF FIRE HYDRANT ON NE CORNER OF AGLER ROAD AND CLEVELAND RD.
BM#7	738383.25	1839391.94	863.30	CHISELED 'X' ON NE CORNER OF CATCH BASIN ON THE SW CORNER OF SUWANEE RD AND ROBERT ST.
BM#8	738124.17	1838460.34	865.75	CHISELED SQUARE ON TOP OF CURB ON NE CORNER OF CLEVELAND AVE AND LAKEVIEW AVE.
BM#9	737677.76	1839037.78	864.14	CHISELED 'X' ON EAST BOLT OF FIRE HYDRANT AT THE SW CORNER OF WESTERVILLE RD AND MILFORD AVE.
BM#10	737381.89	1838394.93	865.87	RR SPIKE FOUND ON WEST SIDE OF POWER POLE ON SE CORNER OF CLEVELAND AVE AND MELROSE AVE.
BM#11	737072.58	1838687.16	861.48	CHISELED 'X' ON SOUTH BOLT OF FIRE HYDRANT AT THE NW CORNER OF WESTERVILLE RD AND WEBER RD.
BM#12	737484.98	1841106.13	857.57	CHISELED 'X' ON NORTH BOLT OF FIRE HYDRANT ON THE EAST SIDE OF BERRELL AVE BETWEEN 2808 AND 2794.
BM#13	738117.93	1840666.81	856.43	CHISELED 'X' ON NORTH BOLT OF FIRE HYDRANT ON THE WEST SIDE OF LINVIEW AVE AT 2807 LINVIEW AVE.
BM#14	738230.63	1840211.14	855.79	CHISELED 'X' ON NORTH BOLT OF FIRE HYDRANT ON THE WEST SIDE OF FERN AVE BETWEEN 2329 AND 2837.

NOTE:

COORDINATES ARE SHOWN IN STATE PLANE GRID COORDINATES.
–PROJECT ADJUSTMENT FACTOR (PAF) = 1.00003782 (GRID TO GROUND)
–AVERAGE COMBINED GRID FACTOR (ACGF) = 0.99996218 (GROUND TO GRID)

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
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SURVEY REFERENCE

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY				OWNER			
				CONTRACTOR			
				INSPECTOR			
				AGREEMENT		COMPLETED	
				RPD	CHK	CID	CON.DR.
				INDEX DETAIL		RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: AS SHOWN	SHEET 9 OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.

			AS–BUILT	
STRUCTURE ID	NORTHING	EASTING	NORTHING	EASTING
MH01	1840491.17	736895.71		
MH02	1840493.04	736925.65		
MH03	1840510.12	737066.87		
MH04	1840567.63	737098.24		
CS05	1840584.21	737107.27		
HW06	1840665.73	737231.89		
MH07	1840649.34	737271.53		
CGI08	1840662.93	737552.68		
CGI09	1840636.96	737557.75		
CGI10	1840641.25	737608.18		
HW11	1840678.04	737230.82		
HW12	1840688.61	737273.81		
HW13	1840548.76	737274.28		
HW14	1840517.10	737308.37		
MH20	1840483.99	737226.01		
MH21	1840399.11	737276.99		
MH22	1840405.22	737370.41		
MH23	1840393.69	737392.20		
CB24	1840400.12	737498.89		
CO1	1840716.93	737188.58		
CO2	1840654.17	737123.90		
CO3	1840620.75	737127.23		

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
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COLUMBUS, OHIO 43235
TEL: (614) 847–8340
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STRUCTURE COORDINATE TABLE

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE

SHEET 10 OF 28

CONTRACT DRAWING NO.
CC–18945

RECORD PLAN NO.

EROSION CONTROL MAT NOTES

1. EROSION CONTROL MAT SHALL CONSIST IF BIODEGRADABLE NATURAL FIBER NETTING THAT COVERS AND IS ENTWINED IN A NATURAL ORGANIC MULCHING MATERIAL CONSISTING OF COCUNUT FIBER. THE MAT SHALL BE OF CONSISTENT THICKNESS WITH MULCHING FIBERS EVENLY DISTRIBUTED OVER ITS ENTIRE LENGTH AND WIDTH. MULCHING MATERIALS SHALL INTERLOCK OR ENTERTWINE TO FORM A DENSE LAYER WHICH RESISTS RAINFALL IMPACT AND SURFACE FLOWS ACROSS AND THROUGH THE MAT MATERIALS WHILE ALSO ALLOWING VEGETATION TO PENETRATE AND GROW THROUGH THE BLANKET. MATERIAL DEGRADATION RATE SHALL BE SUCH THAT IT WILL PROVIDE PROTECTION FOR THE INTENDED ONE (1) YEAR SERVICE LIFE OF THE MAT.
2. SUBMIT WITHIN 30 DAYS OF AWARD OF CONTRACT, TECHNICAL LITERATURE FOR ALL COMMERCIAL PRODUCTS INTENDED TO BE USED FOR THE INSTALLATION OF THE EROSION CONTROL MAT ALONG WITH THE MANUFACTURER'S WRITTEN CERTIFICATION THAT THE PRODUCTS WILL MEET PROJECT REQUIREMENTS AND THE INTENDED SERVICE LIFE OF THE MAT.
3. ESTABLISH AND MAINTAIN CONTINUOUS CONTACT BETWEEN THE ROLLED EROSION CONTROL MAT AND THE SOIL.
4. EXCAVATE INITIAL ANCHOR TRENCH 1'–0" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE INSTALLATION TO PREVENT UNDERMINING OF THE ROLLED EROSION CONTROL MAT.
5. EXCAVATE INTERMITTENT CHECK SLOT 6" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE INSTALLATION AT 25'–0" TO 30'–0" ALONG THE LENGTH OF THE ROLLED EROSION CONTROL MAT TO PREVENT LOOSE SOIL FROM BEING TRANSPORTED DOWNSTREAM BENEATH THE ROLLED EROSION CONTROL PRODUCTS.
6. EXCAVATE TERMINAL ANCHOR TRENCH 1'–0" DEEP AND 6" WIDE ACROSS THE WIDTH OF THE INSTALLATION TO ENSURE RUNOFF TRANSITIONS SMOOTHLY ONTO THE ROLLED EROSION CONTROL MAT WITHOUT SEPARATION FROM THE SOIL.
7. EXTEND ROLLED EROSION CONTROL MAT 2'–0" – 3'–0" ABOVE THE TOP OF BANK OF BASIN.
8. PROVIDE ANCHORING DEVICES IN ACCORDANCE WITH SECTION 671 OF ODOT CMS, OR AS RECOMMENDED BY MANUFACTURER.
9. ROLLED EROSION CONTROL MAT MUST BE PLACED ON ALL BASIN SLOPES AND BERMS.
10. THE LINING PRESENTED IN THE SCHEDULE ARE MINIMUM REQUIREMENTS BASED ON SHEAR STRESS REQUIREMENTS. UPGRADING TO HIGHER STRENGTH MATERIAL IS ACCEPTABLE AT SAME COST TO OWNER.
11. SEE MANUFACTURER'S INSTALLATION DETAILS FOR STAPLE PATTERNS, AND VEGETATIVE STABILIZATION SPECIFICATIONS FOR SOIL AMENDMENTS SEED MIXTURES, AND MULCHING INFORMATION.
12. KEEP ALL BASINS AND SIDE SLOPES FREE OF OBSTRUCTIONS SUCH AS FILL GROUND, FALLEN LEAVES AND WOODY DEBRIS, ACCUMULATED SEDIMENT, AND CONSTRUCTION MATERIALS/WASTES. KEEP BASIN SLOPES MOWED AND/OR FREE OF ALL WEEDY, BRUSHY OR WOODY GROWTH. IMMEDIATELY BACKFILL ANY UNDERGROUND UTILITIES RUNNING ACROSS/THROUGH THE BASIN AND REPAIR AND STABILIZE PER THE LANDSCAPE PLANS.
13. CONSTRUCT BASIN SLOPES, BERMS, AND FLOORS FREE OF ROCKS, TREE ROOTS, STUMPS OR OTHER PROJECTIONS THAT WILL IMPEDE NORMAL FLOW AND/OR PREVENT GOOD LINING TO SOIL CONTACT. INITIALLY OVER EXCAVATE TO ALLOW FOR THE PLACEMENT OF TOPSOIL.
14. EROSION CONTROL MAT SHALL BE INSTALLED ON ALL BASIN SIDE SLOPES AND FLOORS.

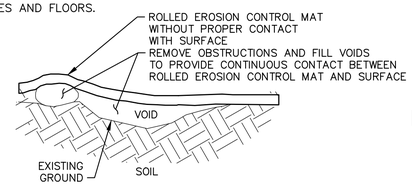


FIGURE 1 – INCORRECT
LACK OF CONTINUOUS CONTACT

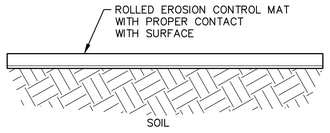
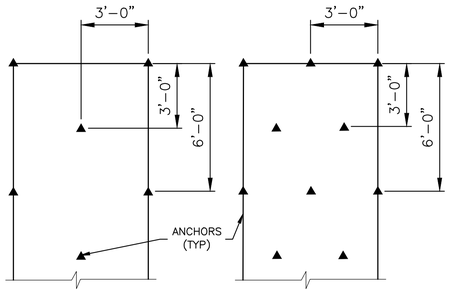


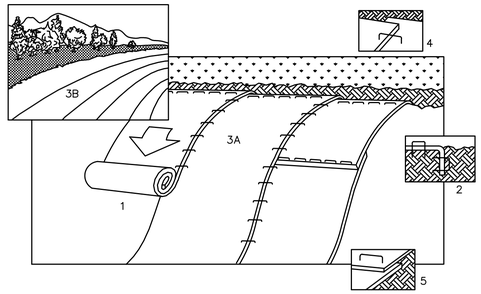
FIGURE 2 – CORRECT
CONTINUOUS CONTACT



ANCHOR PATTERN FOR SLOPES FLATTER THAN 3:1
PLACE 1 ANCHOR/SY

ANCHOR PATTERN FOR SLOPES BETWEEN 3:1 AND 2:1 (INCLUDING 3:1)
PLACE 1½ ANCHORS/SY

ANCHOR PATTERNS FOR SLOPES

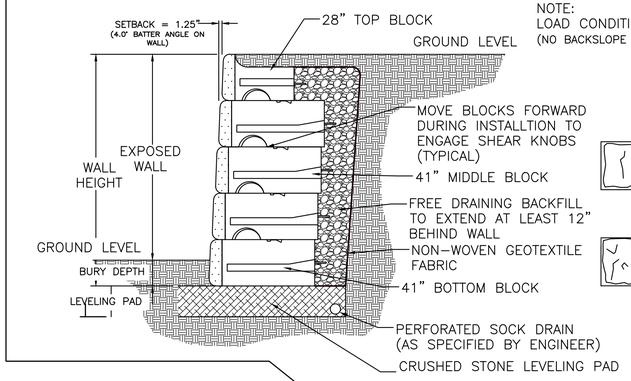


EROSION CONTROL MAT (ECM) APPLICATION
NOT TO SCALE

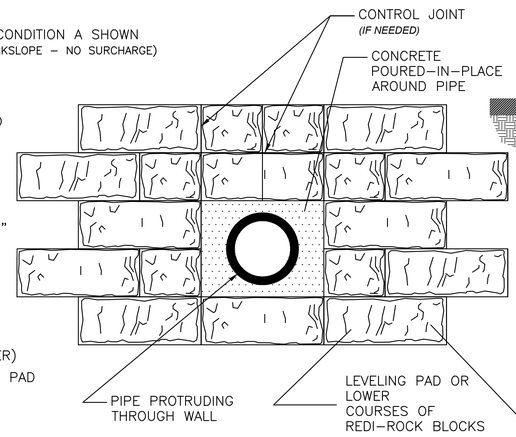
NOTE:
PROTECT BASIN INLET AREAS WITH ROCK AS INDICATED ON THE PLAN.
PROTECT BASIN SLOPES AND BASIN FLOOR WITH SOIL EROSION CONTROL MATTING.

EROSION CONTROL MAT NOTES:

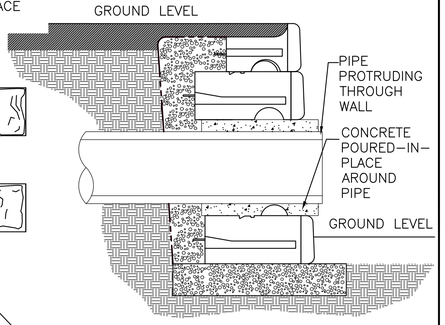
1. PREPARE SOIL BEFORE INSTALLING MAT, INCLUDING APPLICATION OF MULCH, FERTILIZER, AND SEED. INSTALL AND SECURE MAT IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT CMS SECTION 671.
2. BEGIN BY ANCHORING THE MAT IN 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE MAT DOWN ACROSS THE SLOPE AND/OR ACROSS BASIN FLOOR.
4. THE EDGES OF PARALLEL MATS MUST BE STAPLED WITH APPROXIMATELY 4" OVERLAP.
5. WHEN MATS MUST BE SPLICED, PLACE MATS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.



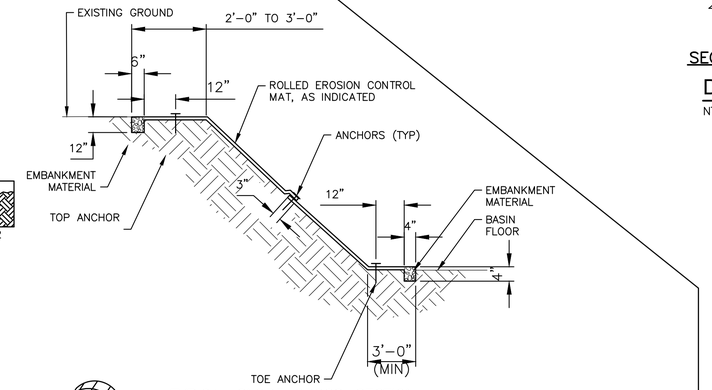
NOTE:
LOAD CONDITION A SHOWN
(NO BACKSLOPE – NO SURCHARGE)



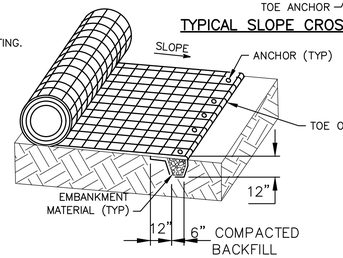
SEGMENTAL BLOCK WALL
DETAIL B
NTS 11



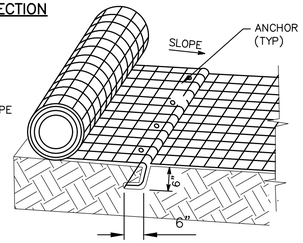
PIPE PENETRATION



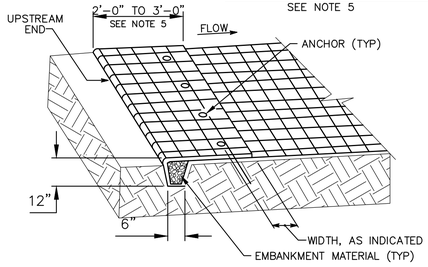
TYPICAL SLOPE CROSS–SECTION



INITIAL ANCHOR TRENCH
SEE NOTE 4

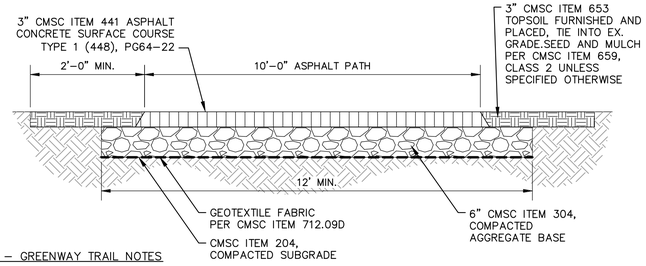


INTERMITTENT CHECK SLOT
SEE NOTE 5



TERMINAL ANCHOR TRENCH
SEE NOTE 6

EROSION CONTROL MAT
DETAIL A
NTS 11



SHARED USE PATH – GREENWAY TRAIL NOTES

1. WHERE NO SPECIFIC SLOPE IS PROVIDED ON THE PLANS, PATH SHALL MAINTAIN POSITIVE DRAINAGE – MAX 2% CROSS SLOPE.
2. ALL JOINTS SHALL BE SEALED USING HOT APPLIED JOINT SEALANT PER CMSC ITEM 409.
3. THE CONTRACTOR SHALL REPLACE SECTIONS OF THE TRAIL THAT ARE DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO THE CITY.
4. ALL TRAIL AREAS TO BE SWEPT FREE OF MUD, SNOW OR DEBRIS PRIOR TO OPENING TRAIL FOR USE. ANY TRAIL BERMS OR DISTURBED AREAS WITHIN PARKLANDS SHALL BE RESTORED TO ORIGINAL CONDITIONS. ANY DAMAGED SECTIONS OF TRAIL SHALL BE SAWCUT, REMOVED AND REPAVED PER THE DETAIL FOR THE FULL WIDTH OF THE TRAIL ALONG THE ENTIRE DAMAGED LENGTH. SAWCUT JOINTS SHALL BE HOT APPLIED JOINT SEALANT. NO PARTIAL ASPHALT PATCHES SHALL BE PERMITTED. FINAL TRAIL RESTORATION LIMITS SHALL BE FIELD VERIFIED BY THE INSPECTOR, PROJECT MANAGER AND CRPD REP PRIOR TO ANY REPAVING OR RECONSTRUCTION.

SHARED USE PATH – GREENWAY TRAIL DETAIL
DETAIL C
NTS 11

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
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TEL: (614) 847–8340
FAX: (614) 847–1699

CIVIL DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
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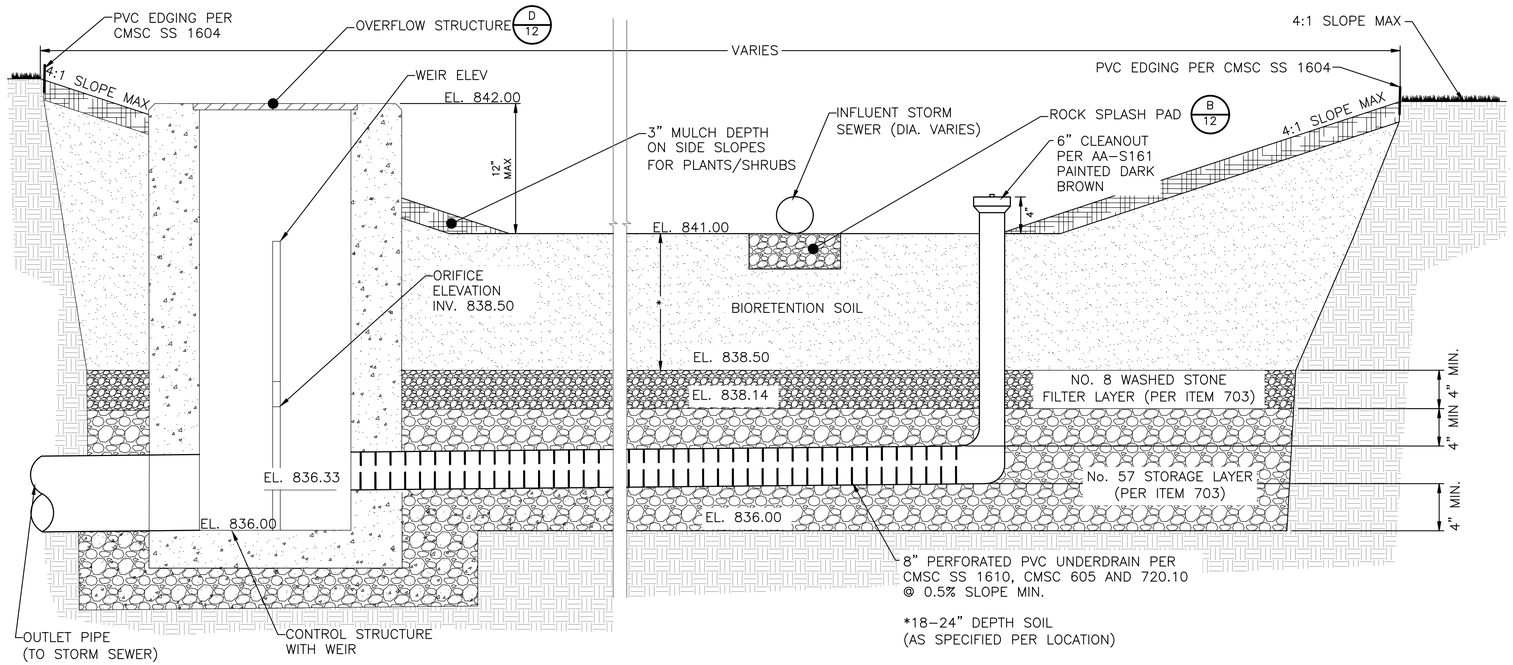
	INDEX DETAIL / RECORD FILE

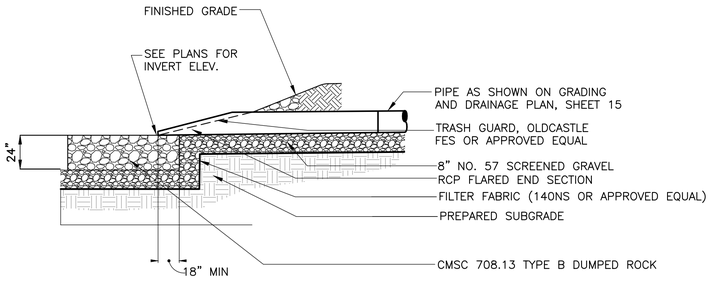
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NONE
SHEET 11 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

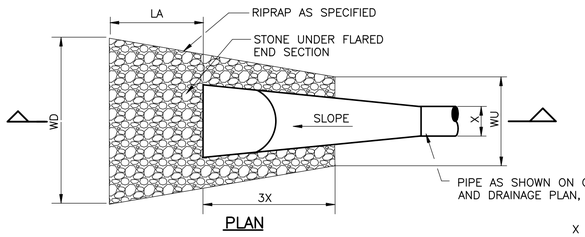


REGIONAL BIORETENTION BASIN

DETAIL A
NTS 12



SECTION

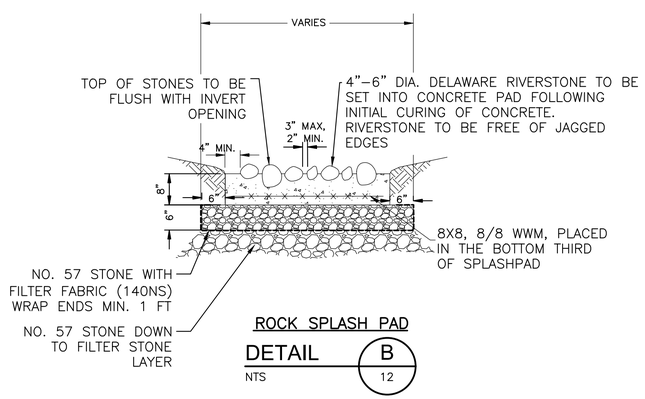


PLAN

	X	Wu	Wd	La
FE06	1.5'	5.0'	9.5'	10'

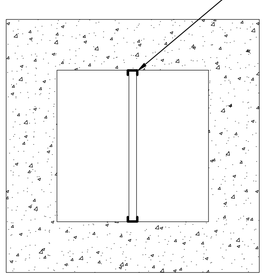
FLARED END SECTION & RIPRAP APRON

DETAIL C
NOT TO SCALE 12

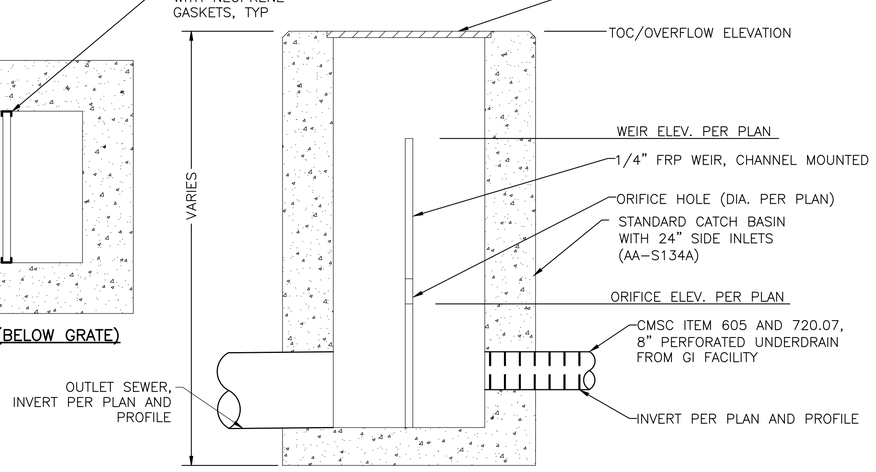


ROCK SPLASH PAD

DETAIL B
NTS 12



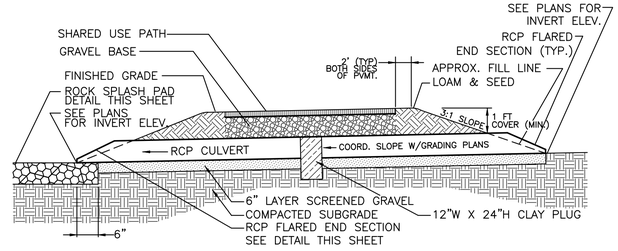
PLAN VIEW (BELOW GRATE)



REGIONAL AND RIGHT-OF-WAY FACILITY CONTROL STRUCTURE
(FACILITIES FER-1, DEN-1, ABE-1, PAR-1)

DETAIL D
NTS 12

REGIONAL GI WEIR/ORIFICE INFORMATION			
GI ID	ORIFICE SIZE	ORIFICE ELEV	WEIR ELEV
LIN-1	3"	838.50	841.00



RCP PIPE CULVERT

DETAIL E
NTS 12

NOTES:
1. STONE SHALL CONFORM TO CMSC 703.18.
2. SPLASH PAD SHALL BE CONSTRUCTED OF CMSC 499.03 TYPE COC 6 CONCRETE.
3. NO. 57 STONE UNDER CONCRETE SPLASH PAD SHALL EXTEND DOWN TO TOP OF NO. 8 FILTER LAYER
4. CENTERLINE OF SPLASH PAD SHALL BE DEPRESSED ALONG ENTIRE LENGTH TO CHANNELIZE FLOW IN THE CENTER OF THE PAD.

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

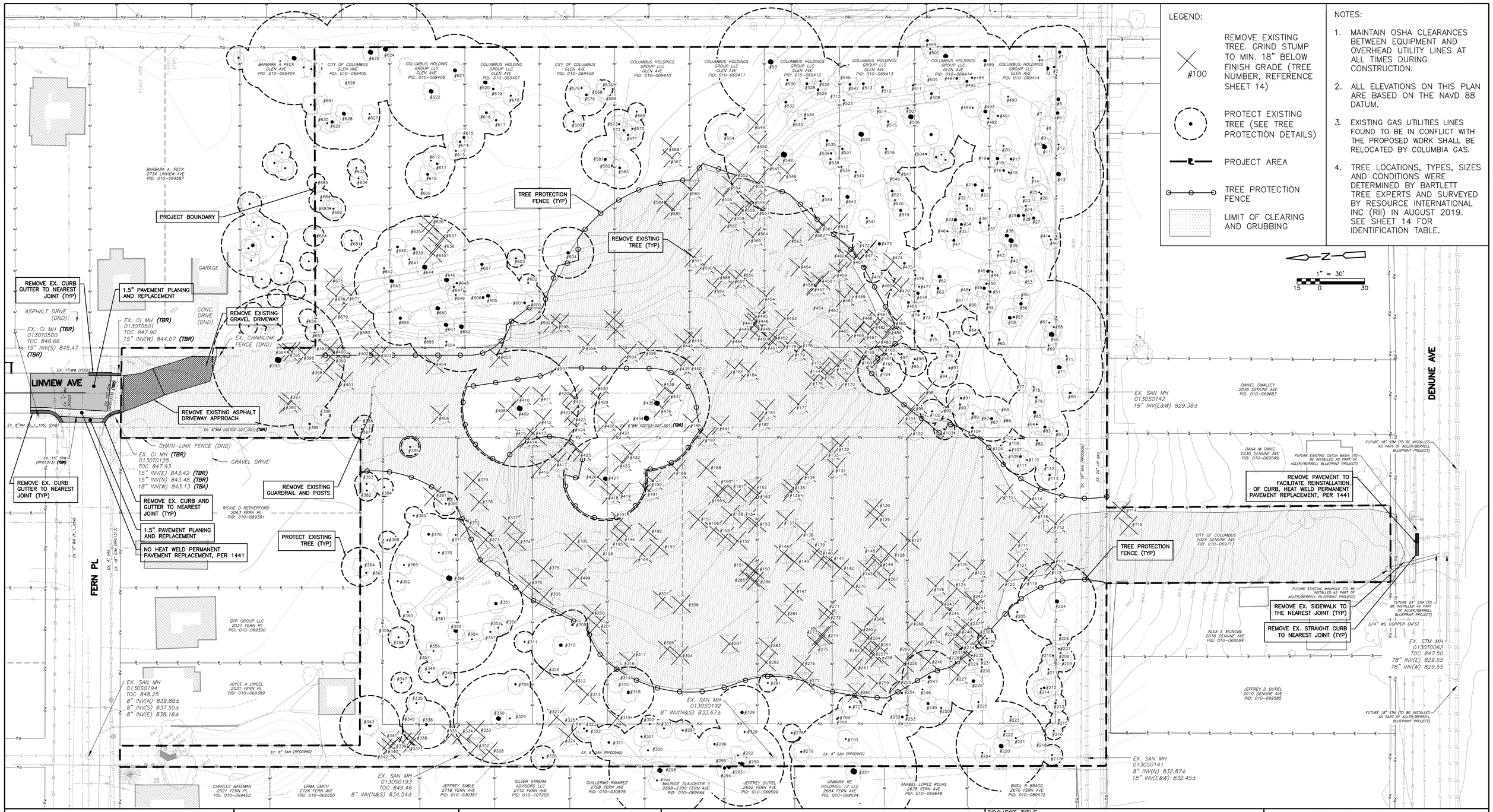
GREEN INFRASTRUCTURE DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD / CHK	CID / CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: AS NOTED
SHEET 12 OF 28
CONTRACT DRAWING NO. CC-18945
RECORD PLAN NO.



LEGEND:

- #100 — REMOVE EXISTING TREE. GRIND STUMP TO MIN. 18" BELOW FINISH GRADE (TREE NUMBER, REFERENCE SHEET 14)
- PROTECT EXISTING TREE (SEE TREE PROTECTION DETAILS)
- PROJECT AREA
- TREE PROTECTION FENCE
- LIMIT OF CLEARING AND GRUBBING

NOTES:

1. MAINTAIN OSHA CLEARANCES BETWEEN EQUIPMENT AND OVERHEAD UTILITY LINES AT ALL TIMES DURING CONSTRUCTION.
2. ALL ELEVATIONS ON THIS PLAN ARE BASED ON THE NAVD 88 DATUM.
3. EXISTING GAS UTILITIES LINES FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK SHALL BE RELOCATED BY COLUMBIA GAS.
4. TREE LOCATIONS, TYPES, SIZES AND CONDITIONS WERE DETERMINED BY BARTLETT TREE EXPERTS AND SURVEYED BY RESOURCE INTERNATIONAL INC (RII) IN AUGUST 2019. SEE SHEET 14 FOR IDENTIFICATION TABLE.

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

EXISTING CONDITIONS AND REMOVALS

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=30' VER: 1"=30'

SHEET 13 OF 28

CONTRACT DRAWING NO. CC-18945

RECORD PLAN NO.

Tree ID	Common Name	Genus	Species	DBH	Stems	Condition Class	Number of Replacement Trees
92	Ash–White	Fraxinus	americana	6	1	Dead	0
98	Maple–Norway	Acer	platanoides	7	1	Dead	0
99	Poplar–Eastern	Populus	deltoides	6	1	Dead	0
101	Hackberry	Celtis	occidentalis	7	1	Fair	1
102	Elm	Ulmus	sp.	8	1	Poor	1
115	Maple–Sugar	Acer	saccharum	7	1	Good	1
116	Walnut–Black	Juglans	nigra	26	1	Good	4
117	Catalpa–Northern	Catalpa	speciosa	7	1	Good	1
118	Catalpa–Northern	Catalpa	speciosa	13	1	Good	2
119	Maple–Silver	Acer	saccharinum	12	2	Poor	1
120	Elm–American	Ulmus	americana	6	1	Fair	1
121	Hackberry	Celtis	occidentalis	6	1	Good	1
123	Maple–Silver	Acer	saccharinum	8	1	Dead	0
124	Walnut–Black	Juglans	nigra	8	1	Fair	1
125	Maple–Silver	Acer	saccharinum	11	1	Dead	0
126	Hackberry	Celtis	occidentalis	6	1	Good	1
127	Mulberry–Red	Morus	rubra	13	1	Fair	2
128	Maple–Silver	Acer	saccharinum	6	1	Fair	1
129	Maple–Silver	Acer	saccharinum	6	1	Poor	1
130	Maple–Silver	Acer	saccharinum	6	1	Poor	1
131	Ash–White	Fraxinus	americana	22	1	Dead	0
132	Ash–White	Fraxinus	americana	16	1	Dead	0
133	Hackberry	Celtis	occidentalis	6	1	Good	1
134	Hackberry	Celtis	occidentalis	10	1	Good	1
135	Ash–White	Fraxinus	americana	12	1	Dead	0
136	Hackberry	Celtis	occidentalis	7	1	Good	1
137	Ash–White	Fraxinus	americana	24	2	Dead	0
138	Elm–American	Ulmus	americana	6	1	Poor	1
139	Ash–White	Fraxinus	americana	18	1	Dead	0
140	Ash–White	Fraxinus	americana	24	2	Dead	0
141	Elm–American	Ulmus	americana	8	1	Dead	0
142	Maple–Silver	Acer	saccharinum	8	1	Poor	1
143	Maple–Silver	Acer	saccharinum	12	1	Fair	1
144	Maple–Silver	Acer	saccharinum	15	1	Fair	2
145	Maple–Silver	Acer	saccharinum	6	1	Poor	1
147	Hackberry	Celtis	occidentalis	6	1	Good	1
148	Ash–White	Fraxinus	americana	16	1	Dead	0
149	Hackberry	Celtis	occidentalis	6	1	Good	1
150	Ash–White	Fraxinus	americana	16	1	Dead	0
152	Maple–Norway	Acer	platanoides	10	1	Good	1
153	Hackberry	Celtis	occidentalis	6	1	Fair	1
154	Elm–American	Ulmus	americana	9	1	Good	1
155	Elm–American	Ulmus	americana	9	1	Dead	0
156	Cherry–Black	Prunus	serotina	6	1	Dead	0
157	Ash–White	Fraxinus	americana	12	1	Dead	0
158	Hackberry	Celtis	occidentalis	6	1	Good	1
159	Ash–White	Fraxinus	americana	11	1	Dead	0
160	Boxelder	Acer	negundo	6	1	Fair	1
161	Ash–White	Fraxinus	americana	12	1	Dead	0
162	Cherry–Black	Prunus	serotina	6	1	Fair	1
163	Maple–Norway	Acer	platanoides	6	1	Good	1
166	Sycamore–American	Platanus	occidentalis	6	1	Fair	1
167	Walnut–Black	Juglans	nigra	13	1	Fair	2
168	Walnut–Black	Juglans	nigra	15	2	Poor	2
169	Pawpaw–Common	Asimina	triloba	10	1	Fair	1
170	Walnut–Black	Juglans	nigra	26	1	Fair	4
171	Elm	Ulmus	sp.	12	1	Fair	1
172	Hackberry	Celtis	occidentalis	8	1	Good	1
173	Maple–Silver	Acer	saccharinum	10	1	Fair	1
174	Poplar–Eastern	Populus	deltoides	16	1	Fair	2
175	Walnut–Black	Juglans	nigra	24	2	Good	3
176	Maple–Silver	Acer	saccharinum	14	1	Fair	2
177	Elm–American	Ulmus	americana	6	1	Poor	1
178	Poplar–Eastern	Populus	deltoides	28	1	Fair	4
179	Poplar–Eastern	Populus	deltoides	12	1	Dead	0
180	Poplar–Eastern	Populus	deltoides	22	1	Good	3
181	Elm–American	Ulmus	americana	6	1	Good	1
182	Elm–American	Ulmus	americana	6	1	Good	1
184	Maple–Silver	Acer	saccharinum	18	1	Good	2
185	Maple–Silver	Acer	saccharinum	20	1	Fair	3
186	Maple–Norway	Acer	platanoides	6	1	Good	1
187	Maple–Silver	Acer	saccharinum	24	1	Good	3
188	Oak–Northern Red	Quercus	rubra	22	1	Good	3
189	Poplar–Eastern	Populus	deltoides	40	1	Fair	5
190	Hackberry	Celtis	occidentalis	10	1	Fair	1
191	Poplar–Eastern	Populus	deltoides	38	1	Fair	5
192	Elm–American	Ulmus	americana	12	1	Poor	1
193	Elm–American	Ulmus	americana	6	1	Fair	1
194	Ash–Green	Fraxinus	pennsylvanica	11	1	Dead	0
195	Elm	Ulmus	sp.	8	1	Dead	0
196	Maple–Silver	Acer	saccharinum	18	1	Poor	2
197	Elm–American	Ulmus	americana	11	1	Dead	0
198	Hackberry	Celtis	occidentalis	6	1	Fair	1
200	Hackberry	Celtis	occidentalis	12	1	Good	1
201	Hackberry	Celtis	occidentalis	12	1	Good	1
227	Maple–Silver	Acer	saccharinum	6	1	Dead	0
228	Maple–Silver	Acer	saccharinum	7	1	Good	1
233	Maple–Silver	Acer	saccharinum	8	1	Fair	1

Tree ID	Common Name	Genus	Species	DBH	Stems	Condition Class	Number of Replacement Trees
234	Maple–Silver	Acer	saccharinum	6	1	Dead	0
236	Maple–Silver	Acer	saccharinum	10	1	Fair	1
237	Maple–Silver	Acer	saccharinum	6	1	Fair	1
239	Maple–Silver	Acer	saccharinum	7	1	Fair	1
240	Maple–Silver	Acer	saccharinum	8	1	Fair	1
241	Maple–Silver	Acer	saccharinum	11	1	Fair	1
242	Maple–Silver	Acer	saccharinum	7	1	Fair	1
243	Maple–Silver	Acer	saccharinum	7	1	Fair	1
244	Mulberry–Red	Morus	rubra	6	1	Good	1
245	Boxelder	Acer	negundo	6	1	Fair	1
246	Mulberry–Red	Morus	rubra	6	1	Poor	1
255	Ash–White	Fraxinus	americana	17	1	Dead	0
256	Ash–White	Fraxinus	americana	16	1	Dead	0
257	Maple–Silver	Acer	saccharinum	17	1	Good	2
258	Maple–Silver	Acer	saccharinum	7	1	Fair	1
259	Maple–Silver	Acer	saccharinum	6	1	Good	1
260	Maple–Silver	Acer	saccharinum	9	1	Good	1
261	Maple–Silver	Acer	saccharinum	6	1	Good	1
262	Maple–Silver	Acer	saccharinum	10	1	Good	1
263	Maple–Silver	Acer	saccharinum	7	1	Fair	1
264	Maple–Silver	Acer	saccharinum	7	1	Good	1
265	Maple–Silver	Acer	saccharinum	11	2	Good	1
266	Maple–Silver	Acer	saccharinum	6	1	Fair	1
267	Maple–Silver	Acer	saccharinum	9	1	Good	1
268	Maple–Silver	Acer	saccharinum	20	1	Good	3
269	Maple–Silver	Acer	saccharinum	23	1	Poor	3
270	Maple–Silver	Acer	saccharinum	12	1	Poor	1
271	Walnut–Black	Juglans	nigra	12	1	Dead	0
272	Elm–American	Ulmus	americana	8	1	Fair	1
273	Ash–White	Fraxinus	americana	12	1	Dead	0
274	Ash–White	Fraxinus	americana	17	1	Dead	0
275	Elm–American	Ulmus	americana	7	1	Poor	1
276	Maple–Sugar	Acer	saccharum	6	1	Good	1
277	Cherry–Black	Prunus	serotina	10	1	Poor	1
282	Hackberry	Celtis	occidentalis	6	1	Fair	1
283	Hackberry	Celtis	occidentalis	6	1	Poor	1
284	Ash–White	Fraxinus	americana	20	1	Dead	0
285	Elm–American	Ulmus	americana	6	1	Good	1
286	Cherry–Black	Prunus	serotina	6	1	Poor	1
287	Hackberry	Celtis	occidentalis	6	1	Poor	1
304	Mulberry–Red	Morus	rubra	7	1	Fair	1
306	Mulberry–Red	Morus	rubra	7	1	Fair	1
307	Walnut–Black	Juglans	nigra	18	1	Good	2
308	Ash–White	Fraxinus	americana	25	1	Dead	0
312	Cherry–Black	Prunus	serotina	6	1	Good	1
313	Cherry–Black	Prunus	serotina	8	1	Poor	1
315	Walnut–Black	Juglans	nigra	16	1	Dead	0
317	Walnut–Black	Juglans	nigra	12	1	Fair	1
319	Ash–White	Fraxinus	americana	24	1	Dead	0
324	Walnut–Black	Juglans	nigra	17	1	Dead	0
325	Elm–American	Ulmus	americana	16	1	Dead	0
327	Walnut–Black	Juglans	nigra	7	1	Good	1
328	Ash–White	Fraxinus	americana	20	1	Dead	0
331	Elm–American	Ulmus	americana	7	1	Fair	1
332	Boxelder	Acer	negundo	6	1	Poor	1
333	Elm–American	Ulmus	americana	6	1	Poor	1
334	Boxelder	Acer	negundo	6	1	Fair	1
335	Elm–American	Ulmus	americana	6	1	Fair	1
337	Ash–White	Fraxinus	americana	34	1	Dead	0
338	Maple–Norway	Acer	platanoides	6	1	Good	1
339	Maple–Norway	Acer	platanoides	6	1	Good	1
340	Walnut–Black	Juglans	nigra	15	1	Good	2
341	Maple–Norway	Acer	platanoides	7	1	Good	1
342	Boxelder	Acer	negundo	9	1	Fair	1
372	Boxelder	Acer	negundo	6	1	Fair	1
373	Maple–Norway	Acer	platanoides	6	1	Good	1
374	Walnut–Black	Juglans	nigra	20	1	Fair	3
375	Elm–American	Ulmus	americana	8	1	Fair	1
376	Maple–Norway	Acer	platanoides	6	1	Good	1
377	Boxelder	Acer	negundo	7	1	Fair	1
378	Poplar–Eastern	Populus	deltoides	40	3	Fair	5
379	Poplar–Eastern	Populus	deltoides	38	1	Fair	5
381	Ash–White	Fraxinus	americana	7	1	Dead	0
390	Hackberry	Celtis	occidentalis	7	1	Good	1
391	Hackberry	Celtis	occidentalis	8	1	Good	1
394	Elm–American	Ulmus	americana	7	2	Fair	1
395	Elm–American	Ulmus	americana	6	1	Fair	1
396	Elm–American	Ulmus	americana	7	1	Fair	1
397	Walnut–Black	Juglans	nigra	12	1	Fair	1
398	Hackberry	Celtis	occidentalis	6	1	Good	1
399	Hackberry	Celtis	occidentalis	6	1	Good	1
400	Elm–American	Ulmus	americana	6	2	Good	1
401	Walnut–Black	Juglans	nigra	10	1	Good	1
402	Hackberry	Celtis	occidentalis	8	1	Good	1
403	Hackberry	Celtis	occidentalis	7	1	Good	1
404	Maple–Silver	Acer	saccharinum	20	1	Good	3
406	Mulberry–Red	Morus	rubra	15	1	Poor	2
408	Hackberry	Celtis	occidentalis	6	1	Good	1

Tree ID	Common Name	Genus	Species	DBH	Stems	Condition Class	Number of Replacement Trees
410	Hackberry	Celtis	occidentalis	6	1	Good	1
411	Hackberry	Celtis	occidentalis	7	1	Good	1
412	Elm–American	Ulmus	americana	6	1	Poor	1
413	Elm	Ulmus	sp.	6	1	Good	1
414	Hackberry	Celtis	occidentalis	6	1	Good	1
415	Walnut–Black	Juglans	nigra	18	1	Fair	2
416	Maple–Silver	Acer	saccharinum	18	2	Fair	2
417	Ash–White	Fraxinus	americana	7	1	Dead	0
418	Hackberry	Celtis	occidentalis	6	1	Good	1
419	Boxelder	Acer	negundo	10	1	Fair	1
420	Hackberry	Celtis	occidentalis	7	1	Good	1
421	Hackberry	Celtis	occidentalis	6	1	Good	1
422	Hackberry	Celtis	occidentalis	6	1	Good	1
423	Hackberry	Celtis	occidentalis	7	1	Good	1
424	Hackberry	Celtis	occidentalis	7	1	Good	1
425	Hackberry	Celtis	occidentalis	11	1	Good	1
426	Elm–American	Ulmus	americana	8	1	Fair	1
428	Hackberry	Celtis	occidentalis	6	1	Good	1
429	Hackberry	Celtis	occidentalis	6	1	Good	1
430	Mulberry–Red	Morus	rubra	8	1	Fair	1
431	Ash–Green	Fraxinus	pennsylvanica	7	1	Dead	0
432	Hackberry	Celtis	occidentalis	6	1	Fair	1
433	Boxelder	Acer	negundo	9	1	Fair	1
436	Maple–Silver	Acer	saccharinum	6	1	Good	1
437	Hackberry	Celtis	occidentalis	6	1	Good	1
438	Hackberry	Celtis	occidentalis	7	1	Good	1
439	Hackberry	Celtis	occidentalis	6	1	Good	1
440	Elm–American	Ulmus	americana	7	1	Poor	1
441	Elm–American	Ulmus	americana	6	1	Fair	1
442	Hackberry	Celtis	occidentalis	6	1	Good	1
443	Maple–Silver	Acer	saccharinum	26	1	Fair	4
444	Maple–Silver	Acer	saccharinum	9	1	Good	1
445	Poplar–Eastern	Populus	deltoides	30	1	Good	4
446	Maple–Silver	Acer	saccharinum	12	1	Good	1
447	Poplar–Eastern	Populus	deltoides	14	1	Fair	2
448	Poplar–Eastern	Populus	deltoides	16	1	Good	2
449	Poplar–Eastern	Populus	deltoides	20	1	Fair	3
450	Poplar–Eastern	Populus	deltoides	15	1	Fair	2
451	Maple–Silver	Acer	saccharinum	7	1	Good	1
452	Maple–Silver	Acer	saccharinum	7	1	Good	1
453	Poplar–Eastern	Populus	deltoides	13	1	Fair	2
454	Boxelder	Acer	negundo	7	1	Poor	1
456	Elm	Ulmus	sp.	10	1	Fair	1
457	Hackberry	Celtis	occidentalis	9	1	Good	1
458	Walnut–Black	Juglans	nigra	7	1	Fair	1
459	Poplar–Eastern	Populus	deltoides	10	1	Good	1
460	Elm–American	Ulmus	americana	6	1	Good	1
461	Poplar–Eastern	Populus	deltoides	12	1	Good	1
462	Elm–American	Ulmus	americana	6	1	Good	1
465	Poplar–Eastern	Populus	deltoides	18	1	Fair	2
466	Boxelder	Acer	negundo	6	1	Poor	1
467	Maple–Silver	Acer	saccharinum	7	1	Poor	1
468	Poplar–Eastern	Populus	deltoides	7	1	Dead	0
469	Poplar–Eastern	Populus	deltoides	16	1	Fair	2
471	Hackberry	Celtis	occidentalis	6	1	Fair	1
472	Walnut–Black	Juglans	nigra	10	1	Fair	1
474	Walnut–Black	Juglans	nigra	6	1	Poor	1
479	Poplar–Eastern	Populus	deltoides	12	1	Fair	1
480	Sycamore–American	Platanus	occidentalis	6	1	Fair	1
481	Elm–American	Ulmus	americana	6	1	Good	1
482	Maple–Sugar	Acer	saccharum	6	1	Good	1
483	Maple–Silver	Acer	saccharinum	6	1	Fair	1
484	Poplar–Eastern	Populus	deltoides	16	2	Fair	2
485	Maple–Silver	Acer	saccharinum	6	1	Good	1
499	Hackberry	Celtis	occidentalis	15	1	Fair	2
542	Boxelder	Acer	negundo	7	1	Dead	0
546	Elm–American	Ulmus	americana	7	1	Good	1
547	Maple–Silver	Acer	saccharinum	12	1	Good	1
549	Ash–White	Fraxinus	americana	40	1	Dead	0
550	Ash–White	Fraxinus	americana	16	1	Dead	0
552	Elm	Ulmus	sp.	6	1	Fair	1
553	Elm	Ulmus	sp.	6	1	Good	1
554	Maple–Silver	Acer	saccharinum	14	1	Fair	2
555	Maple–Silver	Acer	saccharinum	20	1	Good	3
556	Poplar–Eastern	Populus	deltoides	15	1	Fair	2
557	Maple–Silver	Acer	saccharinum	10	1	Good	1
558	Poplar–Eastern	Populus	deltoides	25	1	Poor	4
559	Maple–Silver	Acer	saccharinum	7	1	Good	1
560	Poplar–Eastern	Populus	deltoides	18	1	Fair	2
561	Maple–Silver	Acer	saccharinum	18	1	Fair	2
562	Mulberry–Red	Morus	rubra	7	1	Poor	1
563	Elm	Ulmus	sp.	6	1	Fair	1
565	Cherry–Black	Prunus	serotina	10	1	Good	1
566	Cherry–Black	Prunus	serotina	6	1	Good	1
567	Ash–White	Fraxinus	americana	26	1	Dead	0
568	Ash–White	Fraxinus	americana	20	1	Dead	0
584	Elm–American	Ulmus	americana	6	2	Fair	1
585	Walnut–Black	Juglans	nigra	12	1	Good	1
588	Maple–Silver	Acer	saccharinum	8	1	Good	1

Tree ID	Common Name	Genus	Species	DBH	Stems	Condition Class	Number of Replacement Trees
589	Maple–Silver	Acer	saccharinum	26	1	Good	4
590	Maple–Silver	Acer	saccharinum	25	1	Fair	4
591	Maple–Silver	Acer	saccharinum	18	1	Fair	2
592	Poplar–Eastern	Populus	deltoides	38	1	Fair	5
593	Poplar–Eastern	Populus	deltoides	44	1	Fair	5
594	Hackberry	Celtis	occidentalis	6	1	Good	1
595	Boxelder	Acer	negundo	8	1	Fair	1
596	Boxelder	Acer	negundo	10	1	Fair	1
597	Boxelder	Acer	negundo	6	1	Fair	1
598	Walnut–Black	Juglans	nigra	16	1	Good	2
599	Boxelder	Acer	negundo	12	1	Fair	1
635	Elm–American	Ulmus	americana	7	1	Fair	1
636	Elm–American	Ulmus	americana	6	1	Fair	1
637	Elm–American	Ulmus	americana	6	1	Fair	1
638	Oak–Northern Red	Quercus	rubra	8	1	Good	1
645	Maple–Silver	Acer	saccharinum	6	1	Fair	1
653	Boxelder	Acer	negundo	18	1	Fair	2
675	Elm–American	Ulmus	americana	8	1	Poor	1
677	Elm–American	Ulmus	americana	7	1	Dead	0
678	Elm–American	Ulmus	americana	6	1	Dead	0
679	Elm–American	Ulmus	americana	6	1	Fair	1
680	Elm–American	Ulmus	americana	8	1	Good	1
705	Elm–American	Ulmus	americana	10	1	Dead	0
711	Walnut–Black	Juglans	nigra	23	1	Good	3
712	Boxelder	Acer	negundo	7	1	Fair	1
714	Unk	Unk	Unk	10	1	Fair	1
715	Unk	Unk	Unk	8	1	Fair	1
Total							344

NOTES:

1. TREE LOCATIONS, TYPES, SIZES AND CONDITIONS WERE DETERMINED BY BARTLETT TREE EXPERTS AND SURVEYED BY RESOURCE INTERNATIONAL INC (RII) IN AUGUST 2019. SEE SHEET 13 FOR TREE LOCATIONS. PRIOR TO REMOVING ANY TREES, TRESS SHALL BE MARKED AND CONFIRMED WITH BARTLETT TREE EXPERTS.

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

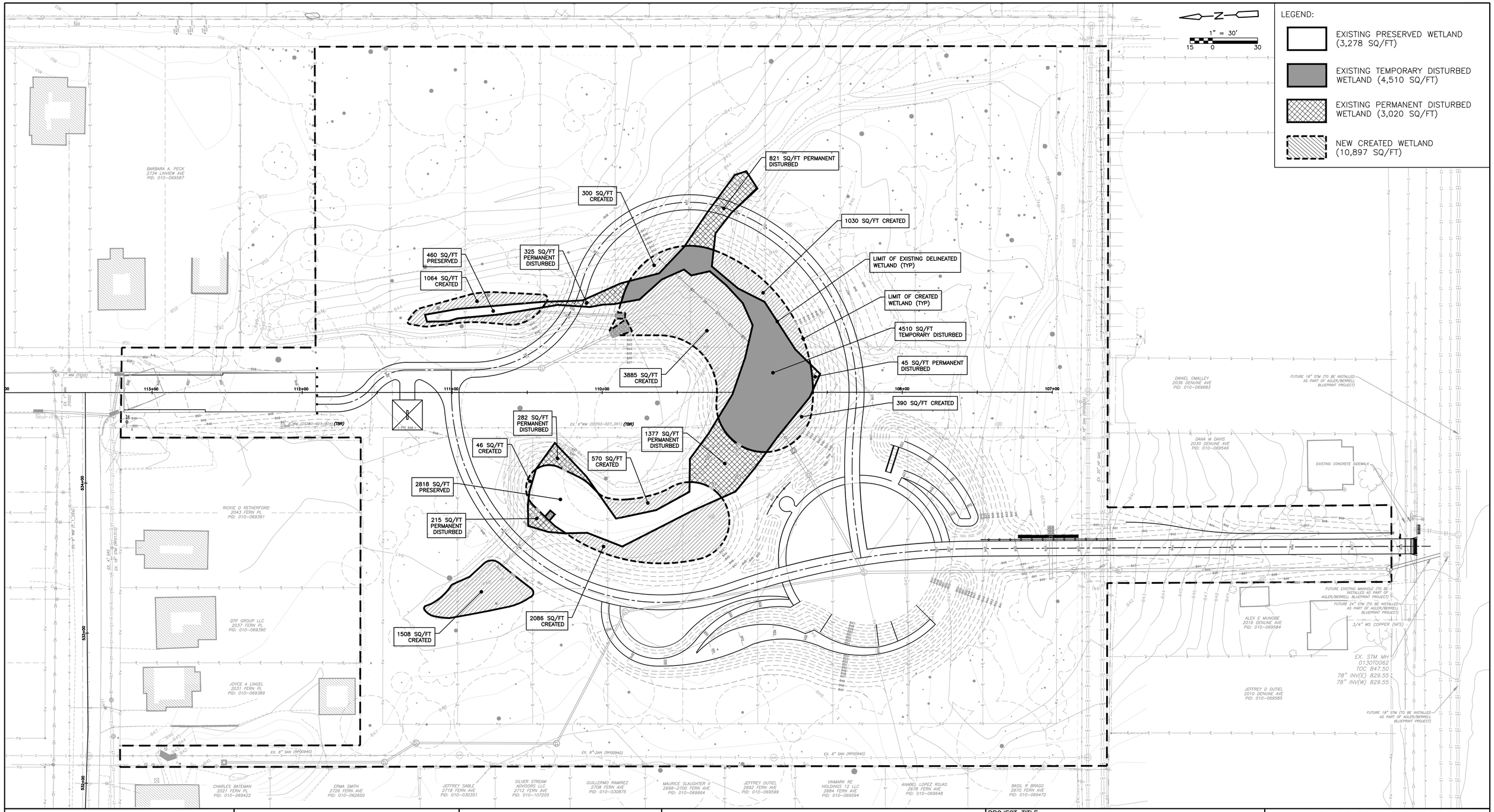
TREE REMOVAL INVENTORY

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY | OWNER | CONTRACTOR | INSPECTOR | AGREEMENT | COMPLETED | RPD | CHK | CID | CON.DR. | INDEX DETAIL | RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE | SHEET 14 OF 28
CONTRACT DRAWING NO. CC–18945 | RECORD PLAN NO.



EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

WETLAND DELINEATION, PRESERVATION & CREATION PLAN

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=30' VER: 1"=30'
SHEET 15 OF 28
CONTRACT DRAWING NO. CC-18945
RECORD PLAN NO.

NOTES:

1. MAINTAIN OSHA CLEARANCES BETWEEN EQUIPMENT AND OVERHEAD UTILITY LINES AT ALL TIMES DURING CONSTRUCTION.
2. ALL ELEVATIONS ON THIS PLAN ARE BASED ON THE NAVD 88 DATUM.
3. EXISTING GAS UTILITIES LINES FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK SHALL BE RELOCATED BY COLUMBIA GAS.
4. ANY EXISTING STORM INLETS IMPACTED BY CONSTRUCTION ACTIVITY WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD		GRANTOR
	VOL.	PAGE	

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

SITE LAYOUT PLAN

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD / CHK	CID / CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: HOR: 1"=30' VER: 1"=30'	SHEET 16 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

1" = 30'
15 0 30

NOTES:

1. MAINTAIN OSHA CLEARANCES BETWEEN EQUIPMENT AND OVERHEAD UTILITY LINES AT ALL TIMES DURING CONSTRUCTION.
2. ALL ELEVATIONS ON THIS PLAN ARE BASED ON THE NAVD 88 DATUM.
3. EXISTING GAS UTILITIES LINES FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK SHALL BE RELOCATED BY COLUMBIA GAS.
4. ANY EXISTING STORM INLETS IMPACTED BY CONSTRUCTION ACTIVITY WILL NEED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.

LEGEND:

- EROSION CONTROL MAT PER DETAIL A ON SHEET 11
- REMOVE EXISTING SIDEWALK TO NEAREST JOINT AND REPLACE PER STD DWG 2300, MATCH EXISTING ELEVATIONS
- NO HEAT WELD PERMANENT PAVEMENT REPLACEMENT, PER 1441
- 1.5" PAVEMENT PLANING AND ASPHALT REPLACEMENT
- REMOVE EX CURB AND GUTTER TO THE NEAREST JOINT AND REPLACE PER STD DWG 2010
- SHARED USE PATH PER DETAIL C ON SHEET 11

LINVIEW AVE
FERN PL
DENUNE AVE
A 13 BIORETENTION BASIN
B 12 ROCK SPLASH PAD
EROSION CONTROL MAT (TYP) B A
CONCRETE DRIVEWAY APRON PER STD DWG 2201 SHEET 1/6
EXISTING 60' ROW TO BE TRANSFERRED TO DPU OWNERSHIP
COMBINATION CURB AND GUTTER PER STD DWG 2010
DOUBLE CGI
COMBINATION CURB AND GUTTER PER STD DWG 2010
CGI08
DOUBLE CGI
STANDARD WOOD BOLLARD PER STD DWG 2310 (TYP 5)
SHARED USE PATH C 11
WETLAND
LIN ST
SHARED USE PATH C 11
PLAYGROUND. SEE SHEET 20 PLAYGROUND PLAN
ROCK SPLASH PAD B 12
SEGEMENTAL BLOCK WALL B 11
DOUBLE CGI
CGI09
CGI10
SIGN
PLUG EXISTING 6" WATER MAIN
NEW FIRE HYDRANT AND WATCH VALVE PER STD DWG L-6637A
CHAIN-LINK FENCE (DND)
REMOVABLE WOOD BOLLARD PER STD DWG 2310 (TYP 1)
SHELTERED PICNIC AREA WITH (2) PICNIC TABLES
COMBINATION CURB AND GUTTER PER STD DWG 2010
COMBINATION CURB AND GUTTER PER STD DWG 2010
B 12 ROCK SPLASH PAD
WETLAND
PHOTOVOLTAIC BOLLARD (TYP. OF 20)
C 11 SHARED USE PATH
SHARED USE PATH C 11
STANDARD WOOD BOLLARD PER STD DWG 2310 (TYP 2)
REPLACE SIDEWALK, SEE GRADING AND DRAINAGE PLAN FOR DETAIL
RAMP AND DETECTABLE WARNING PAD PER STD DWG 2310
SIGN
REMOVABLE WOOD BOLLARD PER STD DWG 2310 (TYP 1)
EXISTING CONCRETE SIDEWALK
FUTURE 16" STM (TO BE INSTALLED AS PART OF AGLER/BERRELL BLUEPRINT PROJECT)
FUTURE EXISTING MANHOLE (TO BE INSTALLED AS PART OF AGLER/BERRELL BLUEPRINT PROJECT)
FUTURE 24" STM (TO BE INSTALLED AS PART OF AGLER/BERRELL BLUEPRINT PROJECT)
3/4" WS COPPER (NFS)
EX. STM MH 013010062 TOC 847.50 78" INV(E) 829.55 78" INV(W) 829.55
FUTURE 18" STM (TO BE INSTALLED AS PART OF AGLER/BERRELL BLUEPRINT PROJECT)
EX. 8" SAN (RP00940)
EX. 6"WM (0ST03-027_001) (TBR)
N:737576.5801
E:1840643.7984
BARBARA A. PECK 2734 LINVIEW AVE PID: 010-069587
RICKIE D RETHERFORD 2043 FERN PL PID: 010-069391
QTP GROUP LLC 2037 FERN PL PID: 010-069390
JOYCE A LINGEL 2031 FERN PL PID: 010-069389
CHARLES BATEMAN 2021 FERN PL PID: 010-069422
ERMA SMITH 2726 FERN AVE PID: 010-062650
JEFFREY SABLE 2718 FERN AVE PID: 010-030351
SILVER STREAM ADVISORS LLC 2712 FERN AVE PID: 010-107205
GUILLERMO RAMIREZ 2708 FERN AVE PID: 010-030875
MAURICE SLAUGHTER II 2698-2700 FERN AVE PID: 010-069664
JEFFREY DUTIEL 2692 FERN AVE PID: 010-069599
VINMARK RE HOLDINGS 12 LLC 2684 FERN AVE PID: 010-069594
ANABEL LOPEZ ROJAS 2676 FERN AVE PID: 010-069648
BASIL R BRAGG 2670 FERN AVE PID: 010-069472
DANIEL OMALLEY 2036 DENUNE AVE PID: 010-069683
DANA M DAVIS 2030 DENUNE AVE PID: 010-069549
ALEX E MUNOBE 2016 DENUNE AVE PID: 010-069584
JEFFREY D DUTIEL 2010 DENUNE AVE PID: 010-069585

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

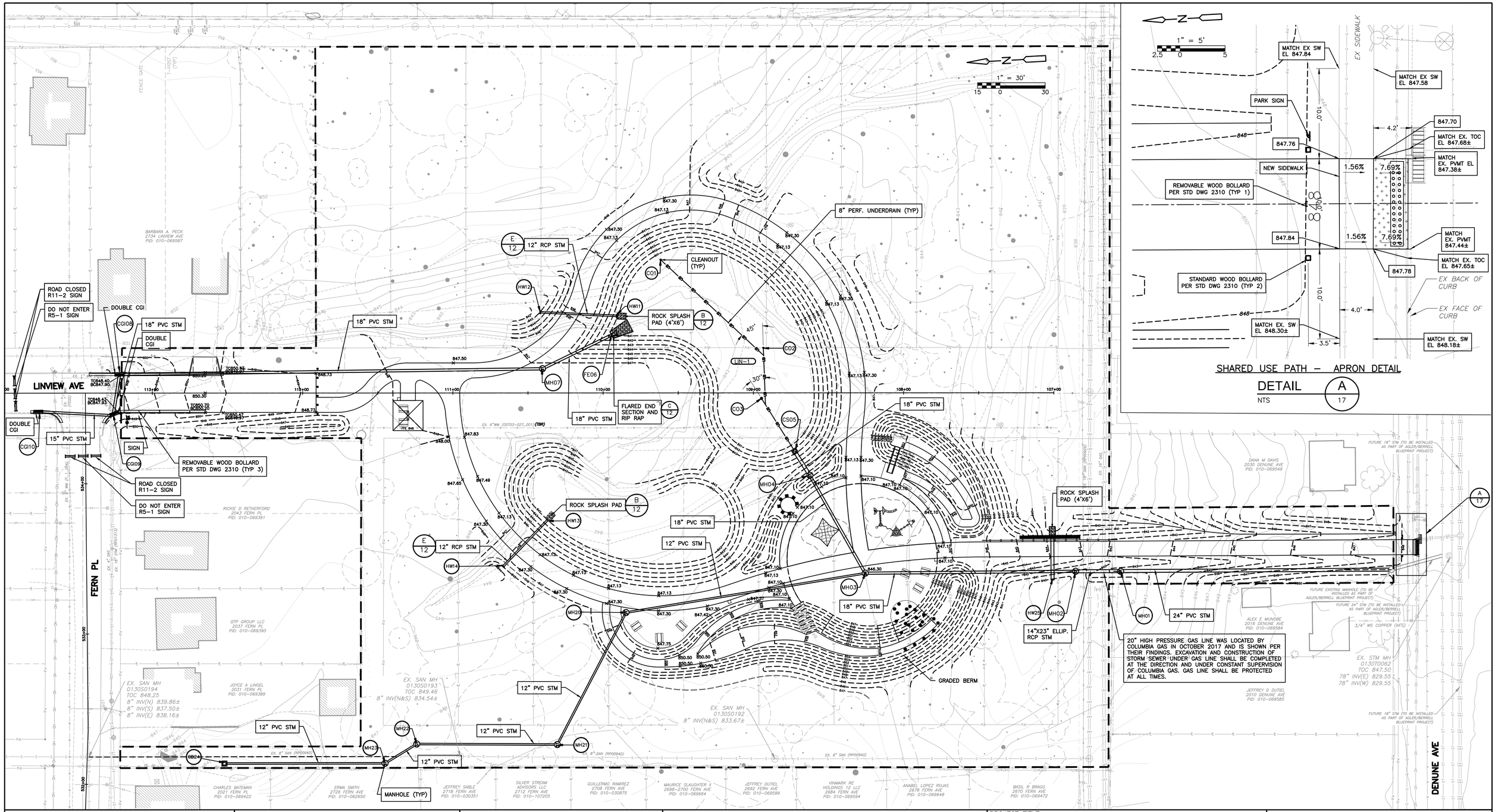
SITE MATERIALS PLAN

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
				RPD / CHK	CID / CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE:	HOR: 1"=30' VER: 1"=30'	SHEET	16A OF 28
CONTRACT DRAWING NO.	CC-18945	RECORD PLAN NO.	



SHARED USE PATH – APRON DETAIL

DETAIL A 17

NTS

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith

445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

GRADING AND DRAINAGE PLAN

PROJECT TITLE:

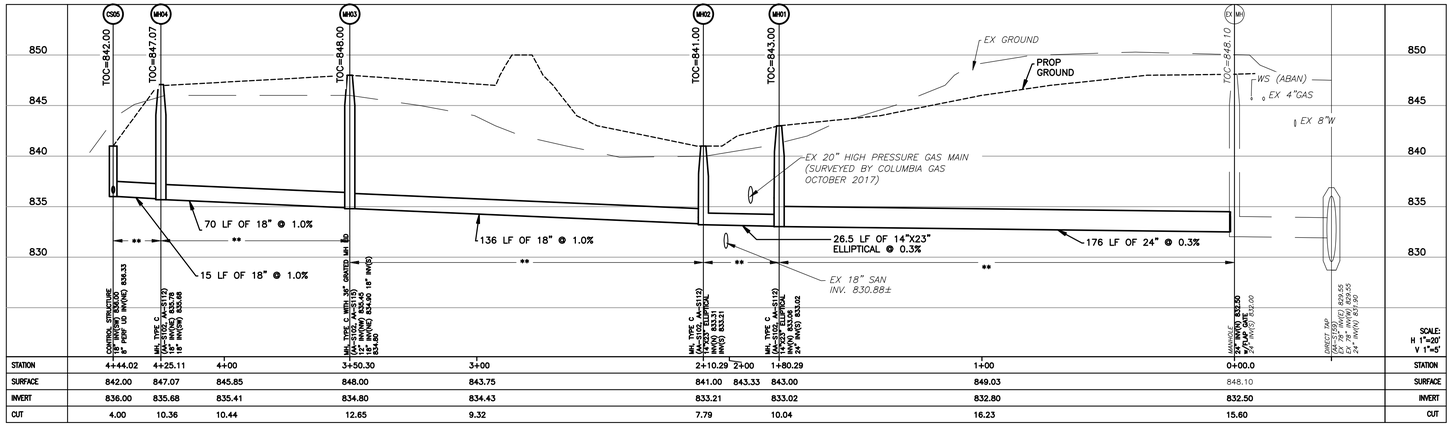
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY		OWNER	
		CONTRACTOR	
		INSPECTOR	
		AGREEMENT	COMPLETED
		RPD / CHK / CID / CON.DR.	
		INDEX DETAIL	RECORD FILE

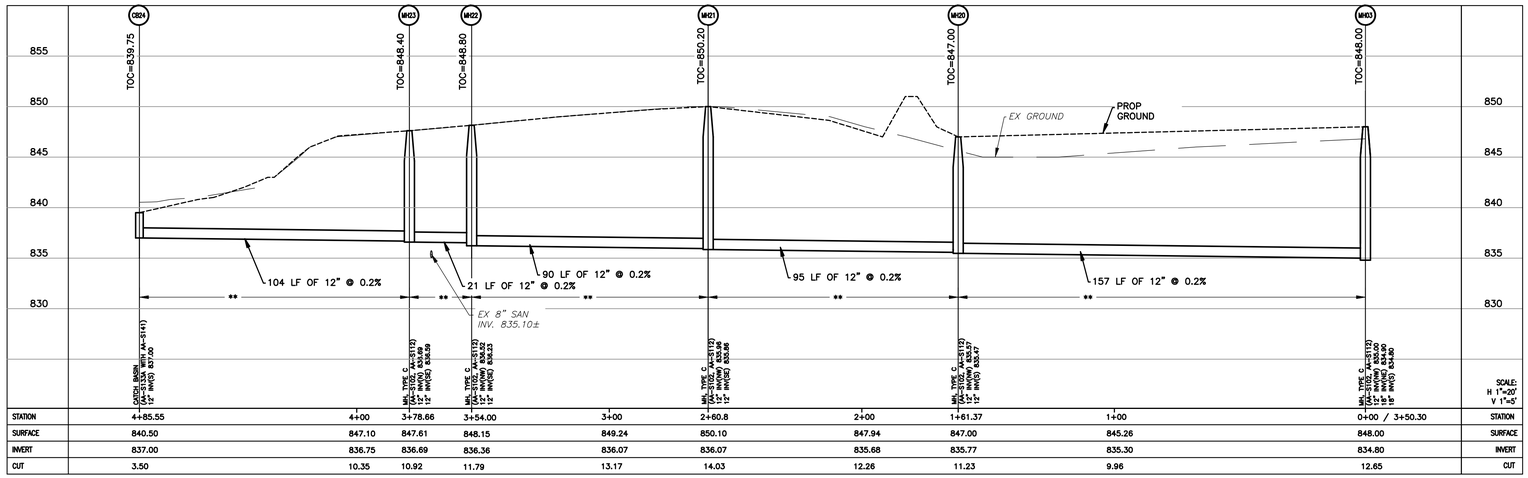
CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

DIVISION USE ONLY

SCALE: HOR: 1"=30' VER: 1"=30'	SHEET 17 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.



STATION	4+44.02	4+25.11	4+00	3+50.30	3+00	2+10.29	2+00	1+80.29	1+00	0+00.0	STATION
SURFACE	842.00	847.07	845.85	848.00	843.75	841.00	843.33	843.00	849.03	848.10	SURFACE
INVERT	836.00	835.68	835.41	834.80	834.43	833.21		833.02	832.80	832.50	INVERT
CUT	4.00	10.36	10.44	12.65	9.32	7.79		10.04	16.23	15.60	CUT



STATION	4+85.55	4+00	3+78.66	3+54.00	3+00	2+60.8	2+00	1+61.37	1+00	0+00 / 3+50.30	STATION
SURFACE	840.50	847.10	847.61	848.15	849.24	850.10	847.94	847.00	845.26	848.00	SURFACE
INVERT	837.00	836.75	836.69	836.36	836.07	836.07	835.68	835.77	835.30	834.80	INVERT
CUT	3.50	10.35	10.92	11.79	13.17	14.03	12.26	11.23	9.96	12.65	CUT

NOTES:

1. MAINTAIN OSHA CLEARANCES BETWEEN EQUIPMENT AND OVERHEAD UTILITY LINES AT ALL TIMES DURING CONSTRUCTION.
2. ALL ELEVATIONS ON THIS PLAN ARE BASED ON THE NAVD 88 DATUM.
3. 20" HIGH PRESSURE GAS LINE WAS LOCATED BY COLUMBIA GAS IN OCTOBER 2017 AND IS SHOWN PER THEIR FINDINGS. EXCAVATION AND CONSTRUCTION OF STORM SEWER UNDER GAS LINE SHALL BE COMPLETED AT THE DIRECTION AND UNDER CONSTANT SUPERVISION OF COLUMBIA GAS. GAS LINE SHALL BE PROTECTED AT ALL TIMES.

* COMPACTED GRANULAR BACKFILL PER CMSC ITEM 912
** BACKFILL PER CMSC ITEM 911
*** CONCRETE ENCASEMENT PER CMSC ITEM 910
\# WATERTIGHT JOINTS PER CMSC 901.15 AND PLACE TRENCH DAMS PER CMSC 901.11

1" = 30'
15 0 30

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

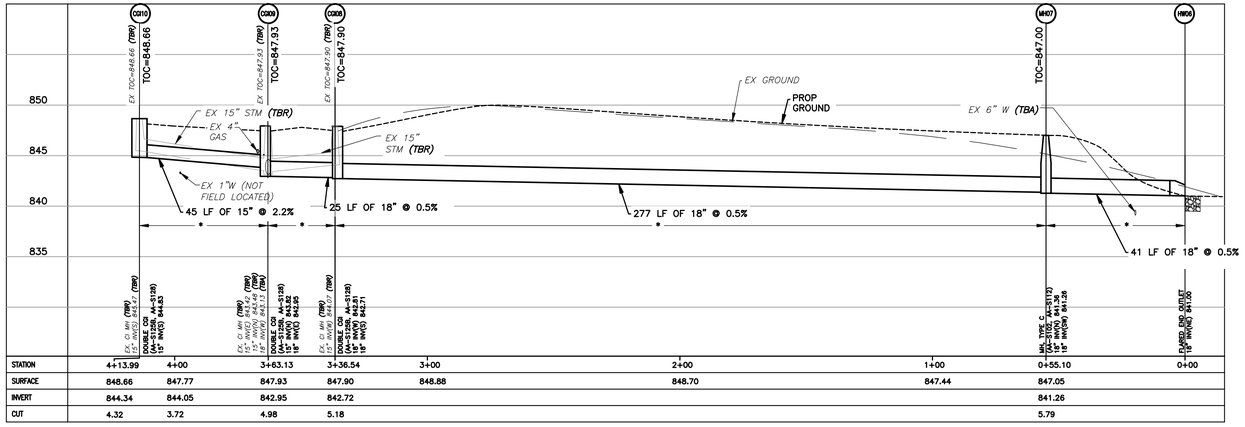
PROFILES

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

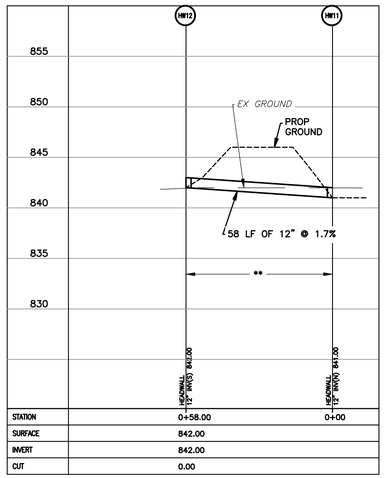
DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

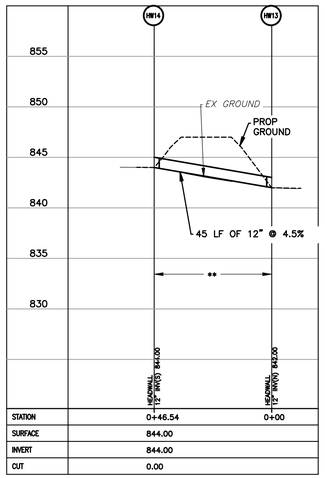
SCALE: HOR: 1"=30' VER: 1"= 4 '
SHEET 18 OF 28
CONTRACT DRAWING NO. CC-18945
RECORD PLAN NO.



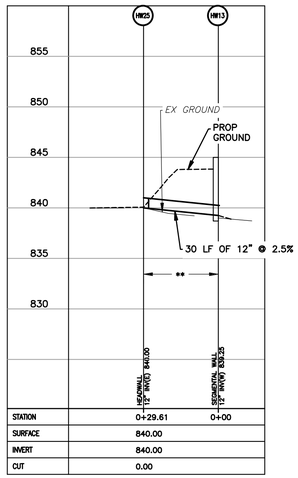
STATION	4+13.99	4+00	3+63.13	3+36.54	3+00	2+00	1+00	0+55.10	0+00
SURFACE	848.66	847.77	847.93	847.90	848.88	848.70	847.44	847.05	
INVERT	844.34	844.05	842.95	842.72				841.26	
CUT	4.32	3.72	4.98	5.18				5.79	



STATION	0+58.00	0+00
SURFACE	842.00	
INVERT	842.00	
CUT	0.00	



STATION	0+46.54	0+00
SURFACE	844.00	
INVERT	844.00	
CUT	0.00	



STATION	0+29.61	0+00
SURFACE	840.00	
INVERT	840.00	
CUT	0.00	

NOTES:

1. MAINTAIN OSHA CLEARANCES BETWEEN EQUIPMENT AND OVERHEAD UTILITY LINES AT ALL TIMES DURING CONSTRUCTION.
2. ALL ELEVATIONS ON THIS PLAN ARE BASED ON THE NAVD 88 DATUM.
3. EXISTING GAS UTILITIES LINES FOUND TO BE IN CONFLICT WITH THE PROPOSED WORK SHALL BE RELOCATED BY COLUMBIA GAS.

* COMPACTED GRANULAR BACKFILL PER CMSC ITEM 912
** BACKFILL PER CMSC ITEM 911
*** CONCRETE ENCASEMENT PER CMSC ITEM 910
\# WATERTIGHT JOINTS PER CMSC 901.15 AND PLACE TRENCH DAMS PER CMSC 901.11

1" = 30'
15 0 30

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
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TEL: (614) 847-8340
FAX: (614) 847-1699

PROFILES

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=30' VER: 1"= 4'
SHEET 19 OF 28
CONTRACT DRAWING NO. CC-18945
RECORD PLAN NO.

LEGEND:

- SHARED USE PATH
- WOOD FIBER SURFACING
- RUBBER TILE SAFETY SURFACING
- POURED IN PLACE RESILIENT SAFETY SURFACING
- LOAM AND SEED (TURF LAWN)
- MULCHED LANDSCAPE BED

MULCHED LANDSCAPE BED (TYP)

NATURAL STONE SEAT BLOCK (TYP OF 3) — A/20A

SLIDE

NATURAL CUT STONE CLIMBING STAIRS

AGE 2–5 PLAY EQUIPMENT

BENCH (TYP OF 2) — J/20A

MULCHED LANDSCAPE BED (TYP)

5–FT SHARED USE PATH

H/20A SPLIT RAIL FENCE

F/20A WOOD FIBER SURFACE

A/20A 2'X2'X18"H STONE SEAT BLOCK (TYP OF 7)

RUBBER TILE SAFETY SURFACING

SPLIT RAIL FENCE WITH HARDWARE CLOTH BACKING — H/20A

MULCHED LANDSCAPE BED (TYP)

NET CLIMBER PLAY STRUCTURE

WOOD FIBER SURFACE

WASTE RECEPTACLE (TYP OF 3)

D/20A WASTE RECEPTACLE (TYP OF 3)

WOOD FIBER PATH

E/20A PICNIC TABLES (TYP OF 3)

NATURAL CUT STONE CLIMBING STAIRS

MULCHED LANDSCAPE BED (TYP)

POURED IN PLACE RESILIENT PLAY SURFACING

MULCHED LANDSCAPE BED (TYP)

ROLLING/SLEDDING HILL (TURF GRASS SURFACE)

WOOD FIBER PATH

E/20A PICNIC TABLES (TYP OF 3)

MULCHED LANDSCAPE BED (TYP)

MULCHED LANDSCAPE BED (TYP)

POLE FOREST

WOOD FIBER TREE ALLEE PATH

WOOD FIBER PATH

1" = 10'

5 0 10

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:

CDM Smith

445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLAYGROUND PLAN

PROJECT TITLE:

LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY				OWNER		
				CONTRACTOR		
				INSPECTOR		
				AGREEMENT	COMPLETED	
				RPD / CHK	CID / CON.DR.	
				INDEX DETAIL	RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE

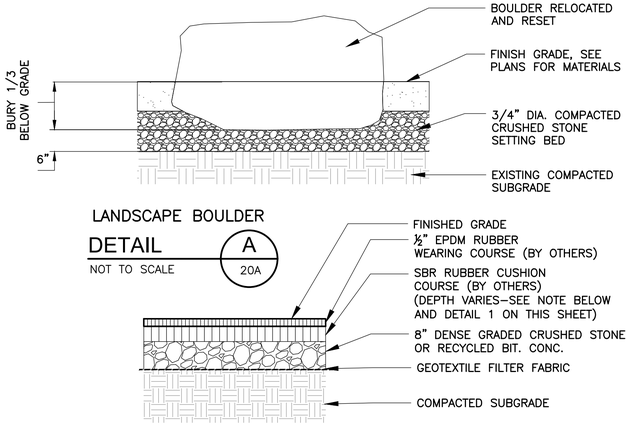
DIVISION USE ONLY

SCALE: NO SCALE

SHEET 20 OF 28

CONTRACT DRAWING NO. CC–18945

RECORD PLAN NO.

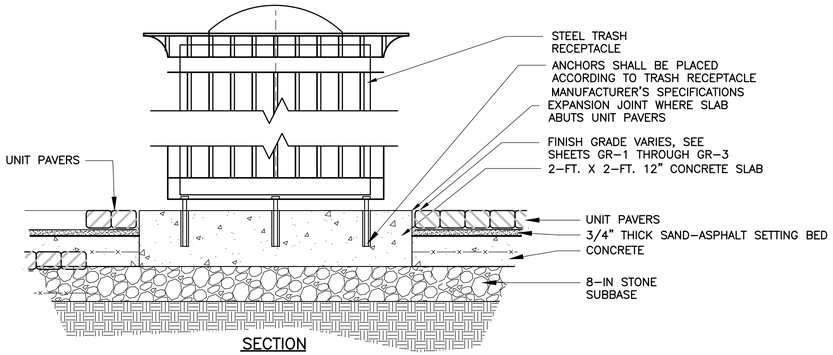


LANDSCAPE BOULDER

DETAIL A — NOT TO SCALE — 20A

POURED IN PLACE RESILIENT SAFETY SURFACING

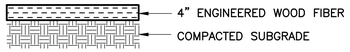
DETAIL B — NOT TO SCALE — 20A



SECTION

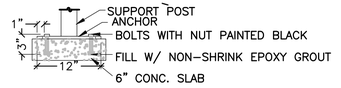
STEEL WASTE RECEPTACLE SLAB

DETAIL D — NOT TO SCALE — 20A



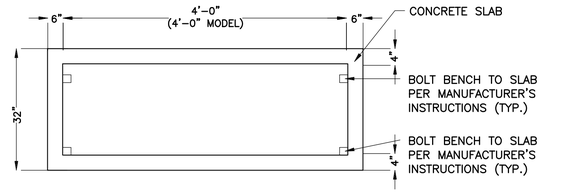
WOOD FIBER SURFACING

DETAIL F — NOT TO SCALE — 20A



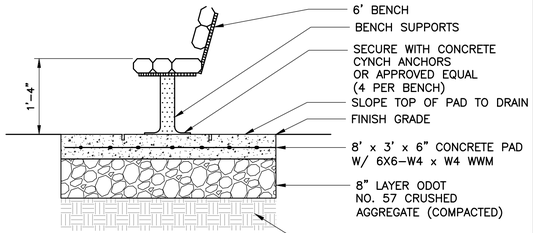
NOTES:
1.) ANCHOR PER MANUFACTURER'S INSTRUCTIONS
2.) ALL METAL TO BE FACTORY FINISHED, POLYESTER POWDER COATED, PAINTED BLUE.

SURFACE MOUNT



BENCH PAD

DETAIL I — NTS — 20A

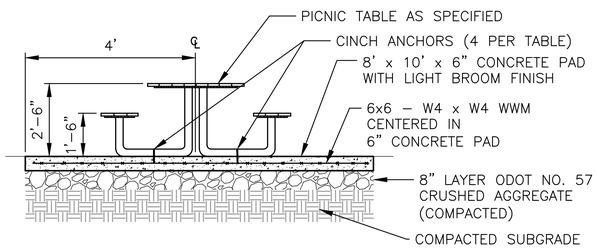


DIRECT MOUNT BENCH

DETAIL J — NTS — 20A

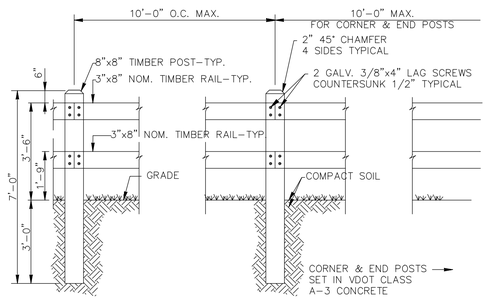
INTERPRETIVE SIGNAGE

DETAIL C — NOT TO SCALE — 20A



PICNIC TABLE ON CONCRETE PAD

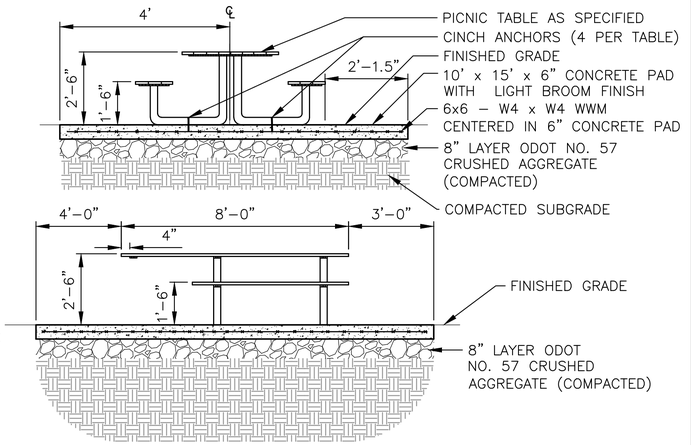
DETAIL E — NOT TO SCALE — 20A



NOTES:
(A) TIMBER POSTS SHALL BE 8"X8"X6' #1 SYP (SOUTHERN YELLOW PINE), S4S (SURFACE FOUR SIDES), GM (GRADE MARKED), CCA PRESERVATIVE TO 0.40 LB./CU. FT., PET (PRECISION END TRIM), CH4TE (2" CHAMFER AROUND TOP FOUR EDGES, LEAVING APPROXIMATELY 4" SQUARE ON POST
(B) TIMBER RAILS SHALL BE #1 SYP (SOUTHERN YELLOW PINE), S4S (SURFACE FOUR SIDES), GM (GRADE MARKED), CCA PRESERVATIVE TO 0.40 LB./CU. FT., DET (DOUBLE END TRIM), DOH (DEPARTMENT OF HIGHWAYS). TOP RAILS SHALL BE 3"X8"X10' AND BOTTOM RAILS SHALL BE 2"X8"10'.

SPLIT RAIL FENCE

DETAIL H — NTS — 20A



ACCESSIBLE PICNIC TABLE ON CONCRETE PAD

DETAIL K — NOT TO SCALE — 20A

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLAYGROUND DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY				OWNER			
				CONTRACTOR			
				INSPECTOR			
				AGREEMENT		COMPLETED	
				RPD	CHK	CID	CON.DR.
				INDEX DETAIL		RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

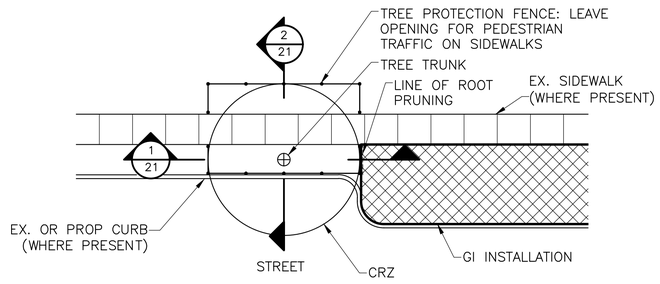
SCALE: NO SCALE	SHEET 20A OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.

TREE PROTECTION NOTES

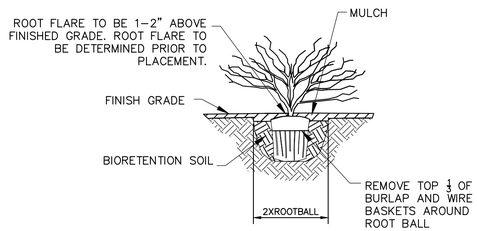
ABBREVIATIONS

- CRZ CRITICAL ROOT ZONE. CIRCULAR AREA AROUND A TREE EQUAL TO 1 FOOT OF RADIUS FOR EACH 1 INCH OF DBH OR THE LIMIT OF THE TREE CANOPY WHICHEVER IS GREATER.
- DBH DIAMETER BREAT HEIGHT. THE TRUNK DIAMETER MEASURED 4.5 FEET ABOVE THE GROUND AT THE TRUNK.
- GI GREEN INFRASTRUCTURE
- ISA INTERNATIONAL SOCIETY OF ARBORICULTURE

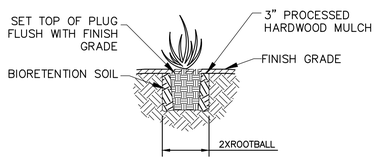
1. DETAIL A DESCRIBES THE COMMON SITUATION OF PROTECTING AN EXISTING TREE LOCATED IN A TREE LAWN. OTHER SITUATIONS MAY EXIST. REQUIREMENTS REGARDING ESTABLISHMENT OF THE CRZ, LOCATION OF FENCE, PRUNING AND EXCAVATION APPLY TO ALL TREES TO BE PROTECTED.
2. EXISTING TREES TO REMAIN SHALL BE PROTECTED AGAINST UNNECESSARY CUTTING; BREAKING OR SKINNING OF ROOTS; SKINNING AND BRUISING OF BARK; SMOTHERING BY STOCKPILING OF CONSTRUCTION MATERIALS OR EXCAVATED MATERIALS; EXCESS FOOT OR VEHICULAR TRAFFIC OR PARKING OF VEHICLES WITHIN THE CRZ.
3. EXCAVATION IS NOT ALLOWED WITHIN THE ESTABLISHED CRZ.
4. TREES TO REMAIN SHALL BE PROTECTED WITH A FENCE. FENCING SHALL REMAIN IN PLACE AND BE SECURED IN AN UPRIGHT POSITION DURING THE ENTIRE CONSTRUCTION PERIOD.
5. ALL TREES DESIGNATED FOR PRESERVATION SHALL BE PROTECTED WITH SUBSTANTIAL FENCE, FRAME OR BOX NOT LESS THAN FOUR FEET HIGH. AS A MINIMUM, TREE PROTECTION FENCING SHALL BE LOCATED TO PROTECT 75 PERCENT OF THE CRITICAL ROOT ZONE (CRZ) OR THE EDGE OF THE DRIP LINE, WHICHEVER HAS A WIDER DIAMETER SURROUNDING THE TRUNK. THE CRZ EQUALS ONE FOOT OF RADIUS FOR EACH 1 INCH OF DIAMETER BREAST HEIGHT (DBH). DBH IS MEASURED 4.5 FEET ABOVE THE GROUND. PROTECTION FENCING SHALL BE INSTALLED BEFORE COMMENCING SITE WORK OR PREPARATION WORK AND MAINTAINED THROUGHOUT THE FULL CONSTRUCTION PERIOD.
6. WOOD FENCE POSTS SHALL BE 2–INCH BY 4–INCH BY 6–FEET LONG. POSTS SHALL BE SPACED 12–FEET MAXIMUM. INSTALL POSTS A MINIMUM OF 2–FEET IN DEPTH. PROVIDE A 1–INCH BY 4–INCH WOOD STRINGER ALONG THE TOP OF THE PROTECTION ENCLOSURE. STRINGERS SHALL BE SECURED TO THE WOOD POSTS. ATTACH ORANGE NYLON OR POLYPROPYLENE TYPE FENCE TO THE POSTS TO FORM THE ENCLOSURE. METAL CHAIN LINK FENCING IS ALSO ACCEPTABLE. POSTS TO BE 6–FEET LONG AND DIAMETER TO BE 2–1/2–INCHES, METAL CHAIN LINK FENCING FABRIC SHALL BE 4 FEET IN HEIGHT.
7. PRUNE ROOTS FLUSH WITH THE EDGE OF THE CRZ BY CLEANLY CUTTING ALL ROOTS OVER 1 INCH TO THE DEPTH OF THE REQUIRED EXCAVATION. BEYOND THE LINE OF ROOT PRUNING EXPOSE ROOTS WITH A HYDRO–VACUUM OR AIR–SPADE TO THE DEPTH OF THE REQUIRED EXCAVATION. CLEANLY CUT ROOTS AS CLOSE TO EXCAVATION AS POSSIBLE.
8. CUT ROOTS WITH SHARP PRUNING INSTRUMENTS; DO NOT BREAK, TEAR, CHOP, OR SLANT THE CUTS. DO NOT USE A BACKHOE OR OTHER EQUIPMENT THAT RIPS, TEARS, OR PULLS ROOTS. DO NOT PAINT CUT ROOT ENDS.
9. COVER EXPOSED ROOTS WITH BURLAP AND WATER REGULARLY DURING CONSTRUCTION. COVER EXPOSED ROOTS WITH SOIL AS SOON AS POSSIBLE.
10. PRUNE BRANCHES OF TREES TO COMPENSATE FOR ROOT LOSS CAUSED BY DAMAGING OR CUTTING ROOT SYSTEM OR WHERE CONSTRUCTION EQUIPMENT MAY DAMAGE LOWER BRANCHES. DO NOT REMOVE MORE THAN 1/4 OF THE LIVE FOLIAGE OR BRANCHES. PRUNE TREES ACCORDING TO ANSI A300 (PART 1). CUT BRANCHES WITH SHARP PRUNING INSTRUMENTS; DO NOT BREAK OR CHOP. DO NOT APPLY PRUNING PAINT TO WOUNDS. ALL PRUNING SHALL BE PERFORMED BY AN ISA CERTIFIED ARBORIST.
11. FERTILIZE TREES PRIOR TO ROOT PRUNING. APPLICATION RATE, METHOD AND ANALYSIS SHALL BE DETERMINED BY AN ISA CERTIFIED ARBORIST.



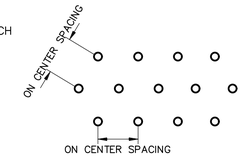
TREE PROTECTION – TREE LAWN TREES
DETAIL A 21
NTS



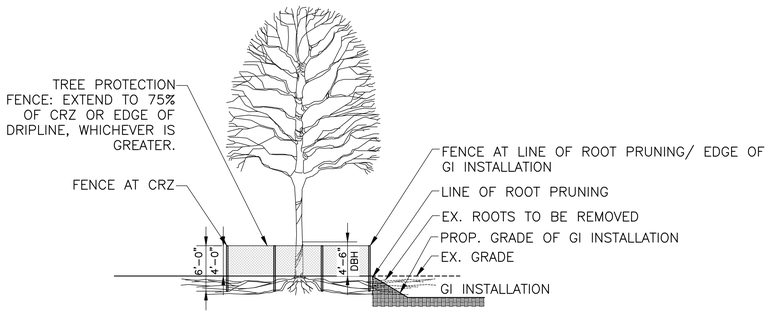
SHRUB PLANTING DETAIL
DETAIL B 21
NTS



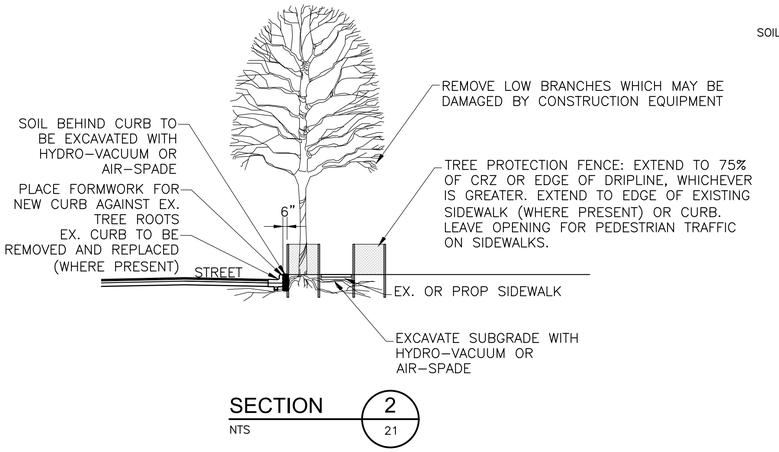
EMERGENT DETAIL
DETAIL C 21
NTS



PLANT SPACING
DETAIL D 21
NTS



SECTION 1
NTS 21



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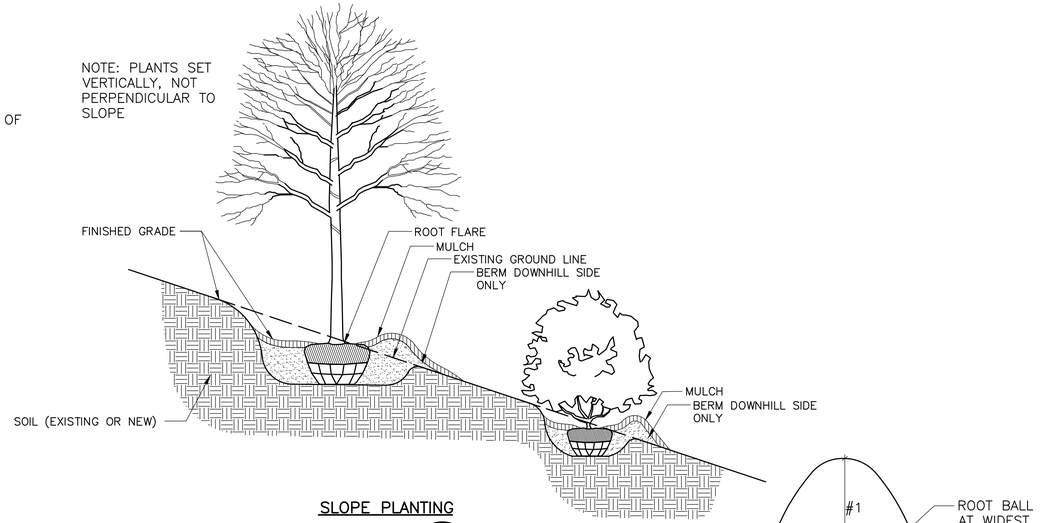
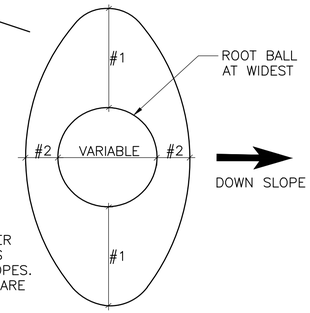
NTS 21



SLOPE PLANTING
DETAIL E 21
NTS



#1 = BALL DIAMETER
#2 = ⅓ BALL DIAMETER
NOTE: ELONGATED PITS MAY BE USED ON SLOPES. RECTANGULAR OR SQUARE PITS ARE ACCEPTABLE PROVIDED THEY ACCOMMODATE PLANTS SHOWN

ELONGATED SLOPE PIT
DETAIL F 21
NOT TO SCALE

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING AND TREE PROTECTION NOTES AND DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
	INDEX DETAIL / RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE	SHEET 21 OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.

LANDSCAPE NOTES:

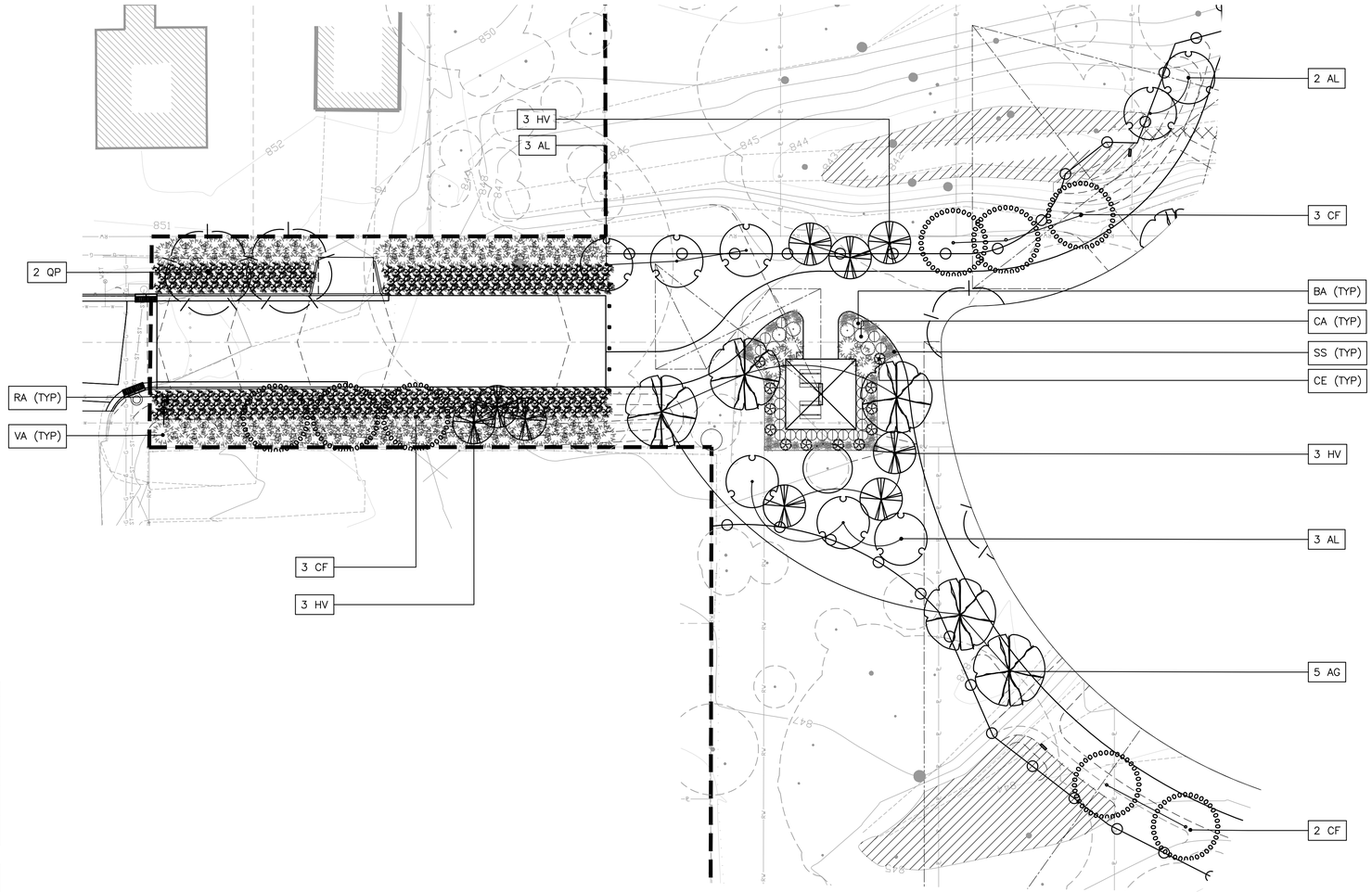
1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. A 3–INCH LAYER MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
5. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
7. ALL PLANT MATERIALS SHALL BE MAINTAINED AND GUARANTEED AS SPECIFIED PER CMSC 661 AND SS 1609.
8. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

PLANT MAINTENANCE NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE SEEDED AREAS. MULCHED BEDS AND PLANTINGS AS SPECIFIED IN CMSC SS 1609. THE CONTRACTOR SHALL SUPPLY WATERING FOR PLANTINGS DURING THE ESTABLISHMENT PERIOD.
2. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
3. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER WILL BE PROVIDED BY THE CONTRACTOR.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
6. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED PER CMSC SS 1609, LATEST EDITION.

PLANTING NOTES:

1. ALL TREES SHALL BE UNIFORM AND WELL–BRANCHED SPECIMENS.
2. ALL PLANTS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY The American Standards for Nursery Stock, LATEST EDITION
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.



TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES	ALTERNATE CULTIVAR
	AG	5	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B	–
	AL	3	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B	AMELANCHIER ARBOREA
	CF	6	CORNUS FLORIDA 'CHEROKEE BRAVE'	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CF (OTHER REGIONAL CULTIVAR)
	HV	9	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM	–
	QP	2	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B	–

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	CA	6	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	#3 CONT (2' O.C.)	–
	CE	12	CEANOTHUS AMERICANUS	NEW JERSEY TEA	#3 CONT (2' O.C.)	–
	RA	242	RHUS AROMATICA 'GRO LOW'	GROW LOW FRAGRANT SUMAC	#3 CONT (3' O.C.)	–
	VA	105	VIBURNUM ACERFOLIUM	MAPLELEAF VIBURNUM	#3 CONT (3' O.C.)	–

ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	SS	36	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	#2 CONT (2' O.C.)	–

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	BA	25	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	#2 CONT (1' O.C.)	–

FOR CONTINUATION OF PLANTING PLAN, SEE SHEETS 23 AND 24

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 1 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=20' VER: 1"=20'
SHEET 22 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

LANDSCAPE NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. A 3–INCH LAYER MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
5. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
7. ALL PLANT MATERIALS SHALL BE MAINTAINED AND GUARANTEED AS SPECIFIED PER CMSC 661 AND SS 1609.
8. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

PLANT MAINTENANCE NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE SEEDED AREAS. MULCHED BEDS AND PLANTINGS AS SPECIFIED IN CMSC SS 1609. THE CONTRACTOR SHALL SUPPLY WATERING FOR PLANTINGS DURING THE ESTABLISHMENT PERIOD.
2. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
3. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER WILL BE PROVIDED BY THE CONTRACTOR.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
6. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED PER CMSC SS 1609, LATEST EDITION.

PLANTING NOTES:

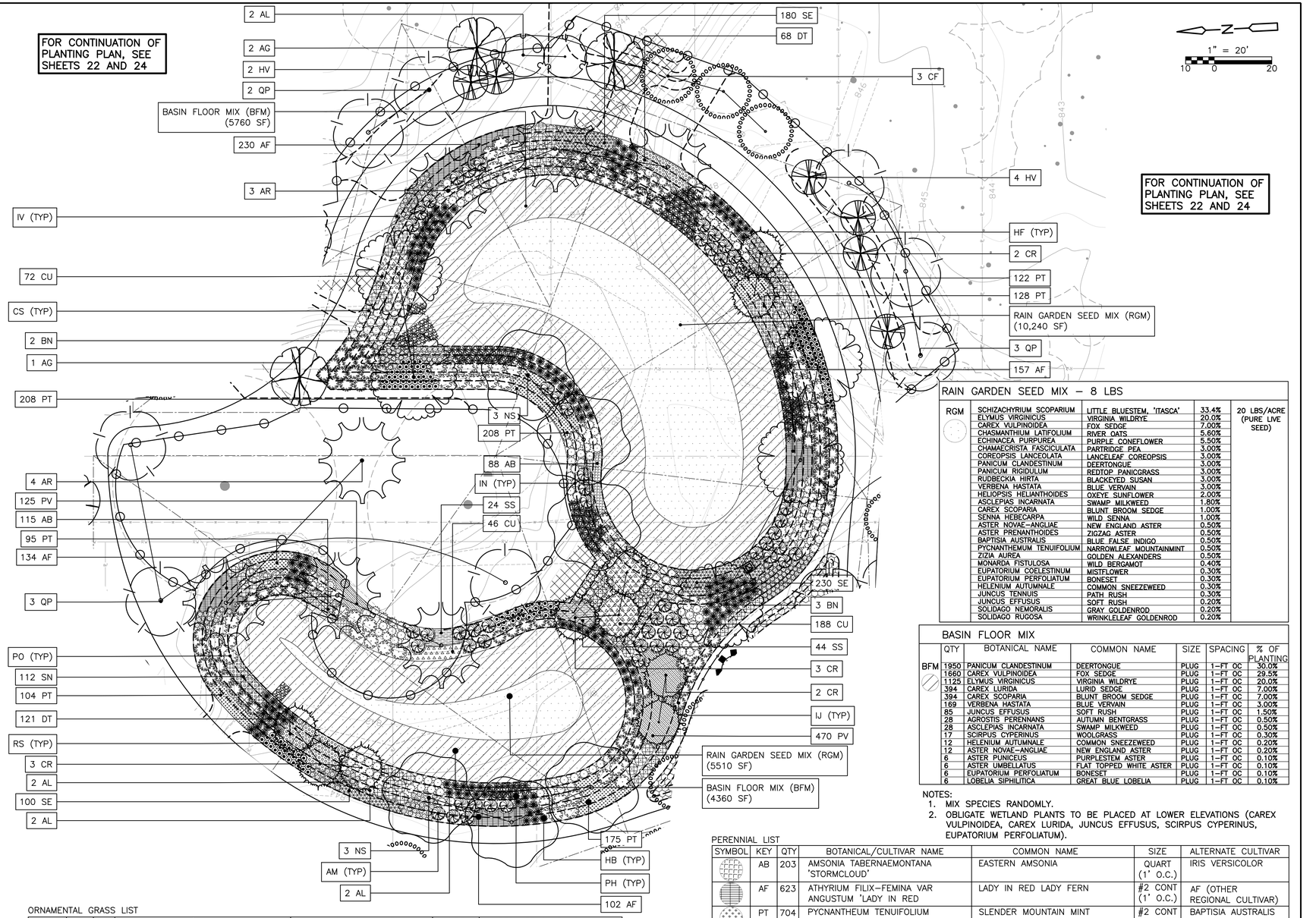
1. ALL TREES SHALL BE UNIFORM AND WELL–BRANCHED SPECIMENS.
2. ALL PLANTS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY The American Standards for Nursery Stock, LATEST EDITION
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.

TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES	ALTERNATE CULTIVAR
	AG	3	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B	–
	AL	2	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B	AMELANCHIER ARBOREA
	AR	7	ACER RUBRUM 'FRANKSRED'	RED MAPLE	2.5"–3" CAL	TREE FORM, B&B	AR (OTHER REGIONAL CULTIVAR)
	BN	5	BETULA NIGRA 'DURAHEAT'	RIVER BIRCH	2.5"–3" CAL	MULTISTEM, B&B	BN (OTHER REGIONAL CULTIVAR)
	CF	3	CORNUS FLORIDA 'CHEROKEE BRAVE'	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CF (OTHER REGIONAL CULTIVAR)
	CR	10	CORNUS RACEMOSA	PANICLED DOGWOOD	2.5"–3" CAL	TREE FORM, B&B	CORNUS FLORIDA
	HV	6	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM	–
	NS	6	NYSSA SYLVATICA	BLACK GUM	2"–2.5" CAL	TREE FORM, B&B	–
	QP	8	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B	–

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	AM	56	ARONIA MELANOCARPA 'VIKING'	VIKING BLACK CHOKEBERRY	#3 CONT (4' O.C.)	AM 'AUTUMN MAGIC'
	CS	75	CORNUS SERICEA 'FARROW' ARCTIC FIRE	FARROW ARCTIC FIRE DWARF DOGWOOD	#3 CONT (2' O.C.)	ITEA VIRGINICA 'SPIRCH' LITTLE HENRY
	HB	170	HYPERICUM KALMIANUM 'BLUE VELVET'	BLUE VELVET ST. JOHN'S WORT	#3 CONT (2' O.C.)	HK 'GEMO'
	IJ	86	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	#3 CONT (4' O.C)	ARONIA MELANOCARPA 'VIKING'
	IN	204	ILEX VERTICILLATA 'NANA'	NANA RED SPRITE WINTERBERRY	#3 CONT (3' O.C.)	ARONIA MELANOCARPA 'VIKING'
	IV	244	ITEA VIRGINICA 'SPRICH' LITTLE HENRY	LITTLE HENRY DWARF SWEETSPIRE	#3 CONT (3' O.C.)	CORNUS SERICEA 'FARROW' ARCTIC FIRE
	PO	52	PHYSOCARPUS OPULIFOLIUS 'SEWARD' SUMMER WINE	SUMMER WINE NINEBARK	#3 CONT (3' O.C.)	PO 'TINY WINE'



ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	CU	306	CAREX VULPINOIDEA	FOX SEDGE	#3 CONT (18" O.C.)	–
	DT	189	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	#2 CONT (18" O.C.)	–
	PH	162	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	#2 CONT (2' O.C.)	PANICUM VIRGATUM 'SHENANDOAH'
	SS	68	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	#2 CONT (18" O.C.)	–

RAIN GARDEN SEED MIX – 8 LBS

RGM	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM, 'ITASCA'	33.4%	20 LBS/ACRE (PURE LIVE SEED)
	ELYMUS VIRGINICUS	VIRGINIA WILDRYE	20.0%	
	CAREX VULPINOIDEA	FOX SEDGE	7.00%	
	CHASMANTHIUM LATIFOLIUM	RIVER OATS	5.60%	
	ECHINACEA PURPUREA	PURPLE CONEFLOWER	5.50%	
	CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	3.00%	
	COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	3.00%	
	PANICUM CLANDESTINUM	DEERTONGUE	3.00%	
	PANICUM RIGIDULUM	REDTOP PANICGRASS	3.00%	
	RUDBECKIA HIRTA	BLACKEYED SUSAN	3.00%	
	VERBENA HASTATA	BLUE VERVAIN	3.00%	
	HELIOPSIS HELIANTHOIDES	OXEYE SUNFLOWER	2.00%	
	ASCLEPIAS INCARNATA	SWAMP MILKWEED	1.80%	
	CAREX SCOPARIA	BLUNT BROOM SEDGE	1.00%	
	SENNA HEBECARPA	WILD SENNA	1.00%	
	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	0.50%	
	ASTER PRENANTHOIDES	ZIGZAG ASTER	0.50%	
	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	0.50%	
	PYCNANTHEMUM TENUIFOLIUM	NARROWLEAF MOUNTAINMINT	0.50%	
	ZIZIA AUREA	GOLDEN ALEXANDERS	0.50%	
	MONARDA FISTULOSA	WILD BERGAMOT	0.40%	
	EUPATORIUM COELESTINUM	MISTFLOWER	0.30%	
	EUPATORIUM PERFOLIATUM	BONESET	0.30%	
	HELENIUM AUTUMNALE	COMMON SNEEZEWEED	0.30%	
	JUNCUS TENNUIS	PATH RUSH	0.30%	
	JUNCUS EFFUSUS	SOFT RUSH	0.20%	
	SOLIDAGO NEMORALIS	GRAY GOLDENROD	0.20%	
	SOLIDAGO RUGOSA	WRINKLELEAF GOLDENROD	0.20%	

BASIN FLOOR MIX

	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	% OF PLANTING
BFM	1950	PANICUM CLANDESTINUM	DEERTONGUE	PLUG	1–FT OC	30.0%
	1660	CAREX VULPINOIDEA	FOX SEDGE	PLUG	1–FT OC	29.5%
	1125	ELYMUS VIRGINICUS	VIRGINIA WILDRYE	PLUG	1–FT OC	20.0%
	394	CAREX LURIDA	LURID SEDGE	PLUG	1–FT OC	7.00%
	394	CAREX SCOPARIA	BLUNT BROOM SEDGE	PLUG	1–FT OC	7.00%
	169	VERBENA HASTATA	BLUE VERVAIN	PLUG	1–FT OC	3.00%
	85	JUNCUS EFFUSUS	SOFT RUSH	PLUG	1–FT OC	1.50%
	28	AGROSTIS PERENNANS	AUTUMN BENTGRASS	PLUG	1–FT OC	0.50%
	28	ASCLEPIAS INCARNATA	SWAMP MILKWEED	PLUG	1–FT OC	0.50%
	17	SCIRPUS CYPERINUS	WOOLGRASS	PLUG	1–FT OC	0.30%
	12	HELENIUM AUTUMNALE	COMMON SNEEZEWEED	PLUG	1–FT OC	0.20%
	12	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	PLUG	1–FT OC	0.20%
	6	ASTER PUNICEUS	PURPLESTEM ASTER	PLUG	1–FT OC	0.10%
	6	ASTER UMBELLATUS	FLAT TOPPED WHITE ASTER	PLUG	1–FT OC	0.10%
	6	EUPATORIUM PERFOLIATUM	BONESET	PLUG	1–FT OC	0.10%
	6	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	PLUG	1–FT OC	0.10%

NOTES:
1. MIX SPECIES RANDOMLY.
2. OBLIGATE WETLAND PLANTS TO BE PLACED AT LOWER ELEVATIONS (CAREX VULPINOIDEA, CAREX LURIDA, JUNCUS EFFUSUS, SCIRPUS CYPERINUS, EUPATORIUM PERFOLIATUM).

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	ALTERNATE CULTIVAR
	AB	203	AMSONIA TABERNAEMONTANA 'STORMCLOUD'	EASTERN AMSONIA	QUART (1' O.C.)	IRIS VERSICOLOR
	AF	623	ATHYRIUM FILIX–FEMINA VAR ANGUSTUM 'LADY IN RED	LADY IN RED LADY FERN	#2 CONT (1' O.C.)	AF (OTHER REGIONAL CULTIVAR)
	PT	704	PYCNANTHEUM TENUIFOLIUM	SLENDER MOUNTAIN MINT	#2 CONT (1' O.C.)	BAPTISIA AUSTRALIS
	PV	595	POLYGONATUM BIFLORUM	SMOOTH SOLOMON'S SEAL	#2 CONT (1' O.C.)	CAREX PENSYLVANICA
	RS	173	RUDBECKIA FULGIDA 'GOLDSTURM'	GOLDSTURM CONEFLOWER	#2 CONT (18" O.C.)	ECHINACEA 'CHEYENNE SPIRIT'
	SE	510	SYMPHYOTRICHUM ERICOIDES 'SNOWFLURRY'	SNOWFLURRY HEATH ASTER	#2 CONT (1' O.C.)	PHLOX SUBULATA 'EMERALD BLUE'
	SN	240	SYMPHYOTRICHUM NOVAE–ANGLIAE 'PURPLE DOME'	PURPLE DOME NEW ENGLAND ASTER	#2 CONT (1' O.C.)	SN 'VIBRANT DOME'

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 2 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
	RPD / CHK / CID / CON.DR.
	INDEX DETAIL / RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: HOR: 1"=20' VER: 1"=20'
SHEET 23 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

LANDSCAPE NOTES:

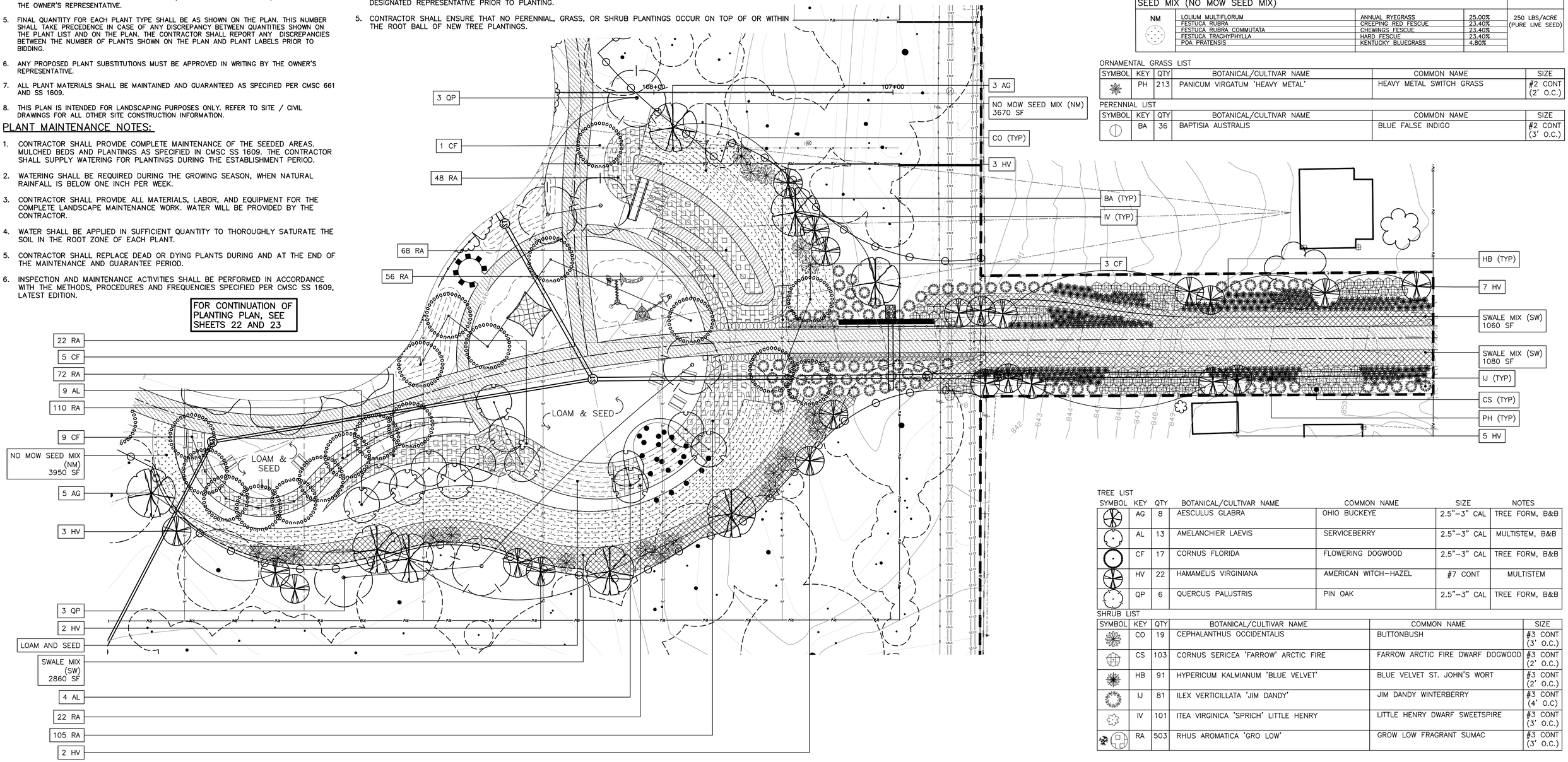
1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES AND NOTIFY OWNERS REPRESENTATIVE OF CONFLICTS.
2. NO PLANT MATERIALS SHALL BE INSTALLED UNTIL ALL GRADING AND SIDEWALK CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. A 3–INCH LAYER MULCH SHALL BE INSTALLED UNDER ALL TREES AND SHRUBS, AND IN ALL PLANTING BEDS, AS SHOWN ON THE PLANS, OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
4. ALL TREES SHALL BE BALLED AND BURLAPPED, UNLESS OTHERWISE NOTED, OR APPROVED BY THE OWNER'S REPRESENTATIVE.
5. FINAL QUANTITY FOR EACH PLANT TYPE SHALL BE AS SHOWN ON THE PLAN. THIS NUMBER SHALL TAKE PRECEDENCE IN CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND ON THE PLAN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND PLANT LABELS PRIOR TO BIDDING.
6. ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY THE OWNER'S REPRESENTATIVE.
7. ALL PLANT MATERIALS SHALL BE MAINTAINED AND GUARANTEED AS SPECIFIED PER CMSC 661 AND SS 1609.
8. THIS PLAN IS INTENDED FOR LANDSCAPING PURPOSES ONLY. REFER TO SITE / CIVIL DRAWINGS FOR ALL OTHER SITE CONSTRUCTION INFORMATION.

PLANT MAINTENANCE NOTES:

1. CONTRACTOR SHALL PROVIDE COMPLETE MAINTENANCE OF THE SEEDED AREAS. MULCHED BEDS AND PLANTINGS AS SPECIFIED IN CMSC SS 1609. THE CONTRACTOR SHALL SUPPLY WATERING FOR PLANTINGS DURING THE ESTABLISHMENT PERIOD.
2. WATERING SHALL BE REQUIRED DURING THE GROWING SEASON, WHEN NATURAL RAINFALL IS BELOW ONE INCH PER WEEK.
3. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR THE COMPLETE LANDSCAPE MAINTENANCE WORK. WATER WILL BE PROVIDED BY THE CONTRACTOR.
4. WATER SHALL BE APPLIED IN SUFFICIENT QUANTITY TO THOROUGHLY SATURATE THE SOIL IN THE ROOT ZONE OF EACH PLANT.
5. CONTRACTOR SHALL REPLACE DEAD OR DYING PLANTS DURING AND AT THE END OF THE MAINTENANCE AND GUARANTEE PERIOD.
6. INSPECTION AND MAINTENANCE ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE METHODS, PROCEDURES AND FREQUENCIES SPECIFIED PER CMSC SS 1609, LATEST EDITION.

PLANTING NOTES:

1. ALL TREES SHALL BE UNIFORM AND WELL–BRANCHED SPECIMENS.
2. ALL PLANTS SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY The American Standards for Nursery Stock, LATEST EDITION
3. ALL PLANTING BEDS AND SAUCERS SHALL HAVE A 3" DEEP LAYER OF MULCH AS SPECIFIED IN CMSC SS 1604.
4. ALL TREE AND PLANTING BED LOCATIONS SHALL BE STAKED IN THE FIELD FOR REVIEW BY THE OWNER'S DESIGNATED REPRESENTATIVE PRIOR TO PLANTING.
5. CONTRACTOR SHALL ENSURE THAT NO PERENNIAL, GRASS, OR SHRUB PLANTINGS OCCUR ON TOP OF OR WITHIN THE ROOT BALL OF NEW TREE PLANTINGS.



SWALE MIX (MIX SPECIES RANDOMLY)						
	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	% OF PLANTING
SW	494	CAREX VULPINOIDEA	FOX SEDGE	#2	1–FT OC	20.0%
	494	LOBELIA SIPHILITICA	GREAT BLUE LOBELIA	#2	1–FT OC	20.0%
	494	IRIS VERSICOLOR	BLUE FLAG IRIS	#2	1–FT OC	20.0%
	494	DESCHAMPSIA CESPITOSA	TUFTED HAIR GRASS	#2	1–FT OC	20.0%
	494	ASTER NOVAE–ANGLIAE	NEW ENGLAND ASTER	#2	1–FT OC	20.0%

SEED MIX (NO MOW SEED MIX)			
NM	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS	25.00%
	FESTUCA RUBRA	CREEPING RED FESCUE	23.40%
	FESTUCA RUBRA COMMUTATA	CHEWINGS FESCUE	23.40%
	FESTUCA TRACHYPHYLLA	HARD FESCUE	23.40%
	POA PRATENSIS	KENTUCKY BLUEGRASS	4.80%

250 LBS/ACRE (PURE LIVE SEED)

1" = 20'

ORNAMENTAL GRASS LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	PH	213	PANICUM VIRGATUM 'HEAVY METAL'	HEAVY METAL SWITCH GRASS	#2 CONT (2' O.C.)

PERENNIAL LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	BA	36	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	#2 CONT (3' O.C.)

TREE LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE	NOTES
	AG	8	AESCULUS GLABRA	OHIO BUCKEYE	2.5"–3" CAL	TREE FORM, B&B
	AL	13	AMELANCHIER LAEVIS	SERVICEBERRY	2.5"–3" CAL	MULTISTEM, B&B
	CF	17	CORNUS FLORIDA	FLOWERING DOGWOOD	2.5"–3" CAL	TREE FORM, B&B
	HV	22	HAMAMELIS VIRGINIANA	AMERICAN WITCH–HAZEL	#7 CONT	MULTISTEM
	QP	6	QUERCUS PALUSTRIS	PIN OAK	2.5"–3" CAL	TREE FORM, B&B

SHRUB LIST

SYMBOL	KEY	QTY	BOTANICAL/CULTIVAR NAME	COMMON NAME	SIZE
	CO	19	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	#3 CONT (3' O.C.)
	CS	103	CORNUS SERICEA 'FARROW' ARCTIC FIRE	FARROW ARCTIC FIRE DWARF DOGWOOD	#3 CONT (2' O.C.)
	HB	91	HYPERICUM KALMIANUM 'BLUE VELVET'	BLUE VELVET ST. JOHN'S WORT	#3 CONT (2' O.C.)
	IJ	81	ILEX VERTICILLATA 'JIM DANDY'	JIM DANDY WINTERBERRY	#3 CONT (4' O.C)
	IV	101	ITEA VIRGINICA 'SPRICH' LITTLE HENRY	LITTLE HENRY DWARF SWEETSPIRE	#3 CONT (3' O.C.)
	RA	503	RHUS AROMATICA 'GRO LOW'	GROW LOW FRAGRANT SUMAC	#3 CONT (3' O.C.)

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
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TEL: (614) 847–8340
FAX: (614) 847–1699

PLANTING PLAN
SHEET 3 OF 3

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL / RECORD FILE	

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: 1"=20'
SHEET 24 OF 28
CONTRACT DRAWING NO. CC–18945
RECORD PLAN NO.

EROSION AND SEDIMENT CONTROL SITE NARRATIVE

ENGINEER: ERIN STACHLER, P.E.
CDM SMITH
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(614) 847–8340
STACHLEREE@CDMSMITH.COM

OWNER: NICK DOMENICK, P.E.
CITY OF COLUMBUS
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
1250 FAIRWOOD AVENUE
COLUMBUS, OHIO 43206
(614) 645–4693
NJDOMENICK@COLUMBUS.GOV

PROJECT DESCRIPTION: THE PROJECT WILL INCLUDE CURB AND GUTTER INLET REPLACEMENT IN ORDER TO RESTORE AND INCREASE COLLECTION CAPACITY AND CONVEY THE FLOW TO A NEW GREEN INFRASTRUCTURE BIORETENTION FACILITY WHICH WILL PROVIDE WATER QUALITY/QUANTITY BENEFITS.

EXISTING SITE DESCRIPTION: CONSTRUCTION WILL TAKE WITHIN PUBLIC RIGHT–OF–WAY AND ON VACANT PARCELS OWNED BY THE CITY OF COLUMBUS.

TRIBUTARY RIVER: ALUM CREEK

ADJACENT AREAS: THE CONSTRUCTION AREAS ARE WITHIN SINGLE FAMILY AND MULTI–FAMILY RESIDENTIAL AREAS. A PROJECT AREA MAP IS SHOWN ON THE COVER PAGE.

DISTURBED ACRES: 3.01 ACRES (TOTAL).

SOILS: THE SOIL GROUP FOR THE PROJECT AREA IS BFA BENNINGTON. CONSTRUCTION WILL BE LOCATED IN RESIDENTIAL STREETS OR ON VACANT PARCELS THAT WERE OR PREVIOUSLY DEVELOPED.

CRITICAL AREAS: THE STORM SEWERS FROM THE PROJECT AREA ARE CONVEYED TO A DITCH WHICH OUTLETS TO ALUM CREEK JUST EAST OF THE PROJECT AREA. STREETS SHALL REMAIN CLEAR OF SEDIMENT AND DEBRIS FROM THE PROJECT IMPROVEMENT CONSTRUCTION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE TO CLEAR WHEELS OF DEBRIS AND SEDIMENT TO LIMIT THE EXISTING ROADWAYS FROM ADDITIONAL SEDIMENT.

EROSION & SEDIMENT CONTROL MEASURES: PROPOSED CONSTRUCTION WILL REQUIRE EROSION AND SEDIMENT RUNOFF PROTECTION BY USE OF SEDIMENT BASINS, CONTROL STRUCTURES, TEMPORARY SEEDING AND MULCHING, SEDIMENT FENCE AND INLET PROTECTION.

MAINTENANCE: MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL ITEMS SHALL BE IN ACCORDANCE WITH CMSC 207 AND THIS PLAN.

SEQUENCE OF CONSTRUCTION:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT CONTROL DEVICES AT ALL INLETS/BASINS THAT WOULD ACCEPT FLOWS FROM THE CONSTRUCTION AREA AND PERIMETER SILT FENCE PRIOR TO ANY CONSTRUCTION ACTIVITIES TAKING PLACE.
2. INSTALL CATCH BASINS, INLETS, STORM SEWER AND WATERLINE. DEWATER TRENCHES INTO FILTER SOCK AS NECESSARY.
3. EXCAVATE FOR GI FACILITY
4. INSTALL GI FACILITY UNDERDRAIN. BLOCK OUTLET CONNECTION TO CONVEYANCE SYSTEM. DEWATER TRENCH INTO FILTER SOCK AS NECESSARY.
5. INSTALL CONCRETE WASHOUT AREA (FOR AREAS WHICH REQUIRE INSTALLATION OF NEW CURBS, GUTTERS AND/OR WALLS)
6. INSTALL CONCRETE
7. COMPLETE INSTALLATION OF GI FACILITY AGGREGATES, SOILS, AND PLANTS. UNBLOCK UNDERDRAIN OUTLET.
8. CONTINUE WITH SITE WORK AND EARTH–MOVING OPERATIONS
9. FINISH SITE WORK AND STABILIZE SITE INCLUDING INSTALLING SEEDING AND MULCHING AS NECESSARY TO REESTABLISH DENUNDED AREAS.
10. AFTER THE SITE IS STABILIZED, REMOVE AND PROPERLY DISPOSE OF REMAINING EROSION AND SEDIMENT CONTROL DEVICES.
11. CLEAN ALL EXISTING INLETS AND CATCH BASINS TO REMOVE SEDIMENT AND DEBRIS ACCUMULATED DURING CONSTRUCTION.

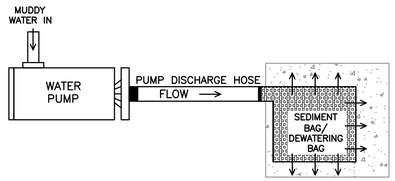
NOTE:

THE SWPPP MUST BE POSTED ON–SITE. A COPY OF THE SWPPP PLAN AND THE APPROVED EPA STORMWATER PERMIT (WITH THE SITE–SPECIFIC NOI NUMBER) SHALL BE KEPT ON–SITE AT ALL TIMES.

EROSION AND SEDIMENT CONTROL NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN THE OHIO EPA STORMWATER NPDES PERMIT FOR THIS PROJECT. PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL SUBMIT TO OEPA A CO–PERMITTEE NOTICE OF INTENT (NOI) AND OBTAIN COVERAGE UNDER OHIO EPA STORMWATER CONSTRUCTION GENERAL PERMIT AND PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SATISFYING THE REQUIREMENTS OF THE GENERAL PERMIT. SUBMIT COPIES OF THE NOI AND SWPPP TO THE CITY. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO ENSURE THE IMMEDIATE AVAILABILITY OF THE SWPPP ONSITE. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE TO PERFORM ALL UPDATES AND AMENDMENTS TO THE SWPPP AND A LETTER FROM THE OEPA GRANTING PERMIT COVERAGE SHALL BE MAINTAINED AT THE CONSTRUCTION SITE AT ALL TIMES FOR THE DURATION OF THE PROJECT.
2. DETAILS HAVE BEEN PROVIDED ON THE PLANS IN AN EFFORT TO HELP THE CONTRACTOR PROVIDE EROSION AND SEDIMENT CONTROL. THE DETAILS SHOWN ARE GENERAL IN NATURE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS USED TO COMPLY WITH EROSION CONTROL REQUIREMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR PROVIDING NECESSARY AND ADEQUATE MEASURES FOR PROPER CONTROL OF EROSION AND SEDIMENT RUNOFF FROM THE SITE ALONG WITH PROPER MAINTENANCE AND INSPECTIONS IN COMPLIANCE WITH THE NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY.
3. PRIOR TO CONSTRUCTION OPERATIONS IN A PARTICULAR AREA, ALL SEDIMENTATION AND EROSION CONTROL FEATURES SHALL BE IN PLACE, FIELD ADJUSTMENTS WITH RESPECT TO LOCATIONS AND DIMENSIONS MAY BE MADE BY THE ENGINEER.
4. THE REQUIREMENTS OF CMSC 207 AND 659 SHALL GOVERN THE CONSTRICTION OF THIS WORK, EXCEPT AS NOTED. THIS WORK SHALL CONSIST OF ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY FOR EROSION AND SEDIMENT CONTROL INCLUDING PERMANENTLY SEEDING DISTURBED AREAS.
5. ALL STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING FOR ALL SITES.
6. ALL TEMPORARY DIVERSIONS, SEDIMENT BASIN EMBANKMENTS AND EARTH STOCKPILES SHALL BE SEEDED AND MULCHED WITH TEMPORARY VEGETATIVE COVER WITHIN 7 DAYS AFTER GRADING. STRAW, HAY MULCH OR EQUIVALENT IS REQUIRED.
7. ALL CURB AND GUTTER INLETS SHALL BE PROTECTED WITH BEAVER DAMS. ALSO, INLETS (NON CURB AND GUTTER TYPE) SHALL BE PROTECTED WITH DANDY BAGS BY DANDY PRODUCTS OR APPROVED EQUAL AND CURB INLETS SHALL BE PROTECTED WITH TRUE DAMS BY TRUE DAMS OR APPROVED EQUAL WHICH WILL BE MAINTAINED AND MODIFIED AS REQUIRED WHILE CONSTRUCTION PROGRESSES.
8. ANY DISTURBED AREA NOT STABILIZED WITH SEEDING, SODDING, PAVING OR BUILT UPON BY NOVEMBER 1ST, OR AREAS DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER–SEEDED BY APRIL 15TH.
9. AT THE COMPLETION OF CONSTRUCTION, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.
10. ALL SOIL STOCKPILES, INCLUDING TRENCH EXCAVATION STOCKPILES, SHALL BE PROTECTED FROM EROSION BY PERIMETER CONTROL DEVICES SUCH AS EARTH OR STRAW BALE DIKES, OR SILT FENCES IN ACCORDANCE WITH THE EROSION AND SEDIMENT POLLUTION CONTROL PLAN. THESE PERIMETER CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. PAYMENT FOR THE OPERATIONS NECESSARY TO FULFILL SUCH REQUIREMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 207, FILTER FABRIC FENCE.
11. ALL DITCHES, DIVERSIONS, SEDIMENT BASINS/TRAPS, RIGHT–OF–WAY AREAS, AND AREAS DISTURBED DURING CONSTRUCTION SHALL BE SEEDED AND MULCHED, OR SODDED.
12. OTHER EROSION AND SEDIMENT CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL THEY ARE ORDERED REMOVED BY THE ENGINEER OR AS DIRECTED BY THE SEQUENCE OF CONSTRUCTION.
13. THE USE OF PORTABLE CONCRETE WASHOUT UNITS IS APPROVED (AND ENCOURAGED) FOR ALL CONSTRUCTION AREAS IN THE CITY OF COLUMBUS. THE EXACT LOCATION OF THE CONCRETE WASHOUTS SHALL BE FIELD LOCATED BY THE ONSITE PROJECT ENGINEER/CONTRACTOR.
14. THE USE OF STRAW WATTLES HAS PROVEN TO BE A VERSATILE AND EFFECTIVE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE, ESPECIALLY IN RESIDENTIAL SETTINGS. STRAW WATTLES MAY BE SUBSTITUTED FOR SILT FENCE.
15. THE USE OF COMPOST SOCKS AND COMPOST BLANKETS ARE APPROVED FOR USE ON ALL COLUMBUS SWPPP PLANS AND CONSTRUCTION SITES.
16. STRAW WATTLES OR COMPOST ROLLS SHALL BE A MINIMUM OF 12 INCHES IN DIAMETER.
17. AT THE REGIONAL BIORETENTION AREAS, INSTALL SLOPE PROTECTION ALONG ENTIRE PERIMETER OF BASIN FROM BOTTOM OF SIDE SLOPE TO TOP OF BANK PER CMSC 712.11 PRIOR TO INSTALLATION OF PLANTS, SHRUBS AND TREES.
18. UPPER BANK ABOVE NORMAL WATER ELEVATION SHOULD BE STABILIZED QUICKLY WITH STRAW BLANKETS, JUTTE MATTING OR SIMILAR GEO–TEXTILE.
19. ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION (WHETHER SHOWN ON SHEETS 50 AND 51 OR NOT) SHALL BE SUPPLIED WITH THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.
20. STREET CLEANING (ON AN AS–NEEDED BASIS) IS REQUIRED THROUGH THE DURATION OF THIS CONSTRUCTION PROJECT. THIS INCLUDES SWEEPING, POWER CLEANING AND (IF NECESSARY) MANUAL REMOVAL OF DIRT OR MUD IN THE STREET GUTTERS.
21. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATION AT THE DISCRETION OF THE CITY OF COLUMBUS AND/PR THE OHIO EPA.
22. DIRECT DISCHARGE OF A SEDIMENT LADEN WATER TO THE CITY'S SEWER SYSTEM OR A RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATIONS. THE CONTRACTOR WILL BE HELD LIABLE FOR THE VIOLATION AND SUBSEQUENT FINES.
23. THE PUMPING OR DIRECT DISCHARGE OF SEDIMENT–LADEN (MUDDY) WATER TO THE CITY'S SEWER SYSTEM OR RECEIVING STREAM IS A VIOLATION OF OHIO EPA AND CITY OF COLUMBUS REGULATION.
24. ALL INLETS RECEIVING FLOW FROM RUNOFF, PUMPING ACTIVITIES, OR OTHER DIRECT DISCHARGES SHALL BE FITTED WITH AN INLET PROTECTION DEVICE THAT IS PROPERLY SIZED AND SECURED TO REDUCE THE DISCHARGE OF SEDIMENT INTO THE STORM SEWER SYSTEM AND RECEIVING STREAM. INLET PROTECTION IS REQUIRED ON ALL INLETS RECEIVING DISCHARGE REGARDLESS OF WHETHER OR NOT THE INLET IS TRIBUTARY TO ANY DOWNSTREAM EROSION AND SEDIMENT CONTROLS.

    DISCHARGE HOSES USED DURING PUMPING ACTIVITIES SHALL BE FITTED WITH SEDIMENT BAGS THAT ARE PROPERLY SIZED PER MANUFACTURER'S RECOMMENDATIONS REGARDLESS OF WHAT OTHER SEDIMENT CONTROLS ARE IN PLACE FURTHER DOWNSTREAM. SEDIMENT BAGS MUST BE PROPERLY SECURED TO THE DISCHARGE HOSE AND PLACED OVER VEGETATED AREAS, WHERE FEASIBLE, DURING DISCHARGE. SEE THE DETAIL BELOW OF A TYPICAL SEDIMENT BAG INSTALLATION.



PERMANENT STABILIZATION

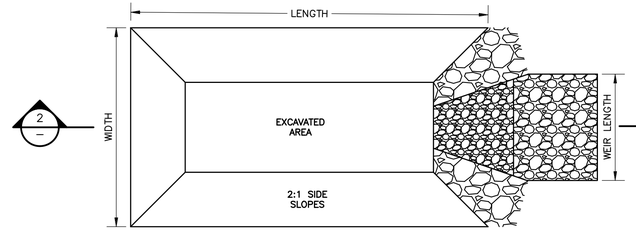
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY STABILZATION

AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE.	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA.
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

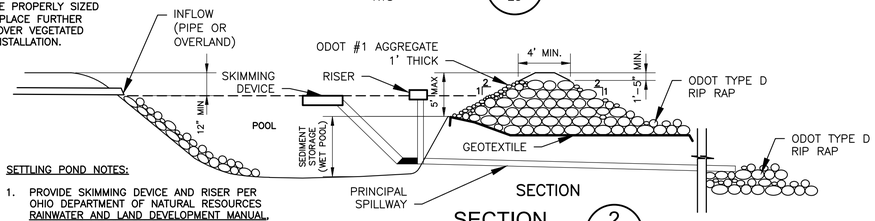
MAINTENANCE NOTES

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE SEDIMENT CONTROL FEATURES USED ON THIS PROJECT. THE SITE SITE SHALL BE INSPECTED AT A MINIMUM EVERY SEVEN DAYS AND WITHIN 24 HOURS OF A ONE–HALF INCH (0.5") OR GREATER RAINFALL EVENT. RECORDS OF THESE INSPECTIONS SHALL BE KEPT AND MADE AVAILABLE TO JURISDICTIONAL AGENCIES AS REQUESTED. ANY SEDIMENT OR DEBRIS WHICH HAS REDUCED THE EFFICIENCY OF A STRUCTURE SHALL BE REMOVED IMMEDIATELY. SHOULD A STRUCTURE OR FEATURE BECOME DAMAGED, THE CONTRACTOR SHALL REPAIR OR REPLACE AT NO ADDITIONAL COST TO THE OWNER.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED BY THE OWNER'S REPRESENTATIVE WEEKLY AND WITHIN 24 HOURS AFTER EACH RAINFALL TO ASSURE THAT THE MEASURES ARE FUNCTIONING ADEQUATELY.
3. SEDIMENT THAT IS COLLECTED SHALL BE DISTRIBUTED ON THE PROTECTED PORTION OF THE SITE AND STABILIZED. ALL STOCKPILES OF EARTH AND TOPSOIL WILL BE PROTECTED WITH TEMPORARY SEEDING OR OTHER MEANS TO PREVENT EROSION.
4. THE CONTRACTOR SHALL SWEEP LOCAL STREETS WITHIN 1/4 MILE OF EACH PROJECT SITE TO REMOVE SEDIMENT AND DEBRIS DEPOSITED FROM CONSTRUCTION ACTIVITIES. FREQUENCY OF STREET CLEANING SHALL BE AT A MINIMUM OF ONCE PER WEEK AND WITHIN 24 HOURS OF A SIGNIFICANT RAINFALL (GREATER THAN 0.5") UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. TEMPORARY AND PERMANENT ROADS, PARKING AREAS, AND DRIVES MAY REQUIRE PERIODIC TOP DRESSING WITH NEW GRAVEL. ADJACENT SEEDED AREAS SHOULD BE CHECKED PERIODICALLY TO ENSURE THAT A VIGOROUS STAND OF VEGETATION IS MAINTAINED. ROADSIDE DITCHES AND OTHER DRAINAGE STRUCTURES SHOULD BE CHECKED REGULARLY TO ENSURE THAT THEY DO NOT BECOME CLOGGED WITH SILT OR OTHER DEBRIS.



TEMPORARY SEDIMENT SETTLING POND PLAN

DETAIL B / 25 — NTS



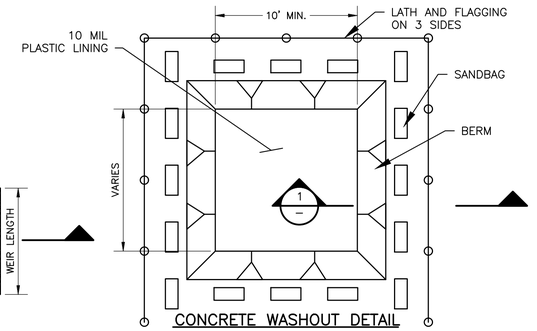
SETTLING POND NOTES:

1. PROVIDE SKIMMING DEVICE AND RISER PER OHIO DEPARTMENT OF NATURAL RESOURCES RAINWATER AND LAND DEVELOPMENT MANUAL, FIGURES 6.1.7 OR 6.1.8.

SECTION 2 / – — NTS

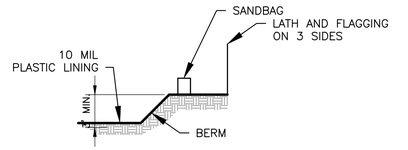
CONCRETE WASHOUT NOTES:

1. ACTUAL LAYOUT AND LOCATION SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE CITY.
2. PROVIDE A "CONCRETE WASHOUT SIGN" WITHIN 10 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. ABOVE GRADE WASHOUT FACILITIES AND PREFABRICATED WASHOUT CONTAINERS ARE ACCEPTABLE FOR USE AS LONG AS THEY MEET THE SAME DEPTH AND WIDTH REQUIREMENTS SHOWN. ABOVE GRADE SIDE SUPPORTS SHALL BE SUFFICIENTLY TO WITHSTAND EXPECTED WEIGHTS.
4. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 50 FT FROM SENSITIVE AREAS INCLUDING STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES.
5. CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
6. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHOULD BE BROKEN UP, REMOVED, AND DISPOSED OF PER APPLICABLE SOLID WASTE REGULATIONS. DISPOSE OF HARDENED CONCRETE ON A REGULAR BASIS.
7. PLASTIC LINING MATERIAL SHOULD BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
8. SOIL BASE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.
9. INSPECT AND VERIFY THAT CONCRETE WASHOUT IS IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
10. DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY CONTINUED PERFORMANCE AND CAPACITY (WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 12 INCHES).
11. DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND. DO NOT USE SANITARY SEWER.
12. PLACE A SECURE, NON–COLLAPSING, NON–WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
13. REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ON–SITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
14. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION



CONCRETE WASHOUT DETAIL

DETAIL A / 25 — NTS



SECTION

SECTION 1 / – — NTS

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847–8340
FAX: (614) 847–1699

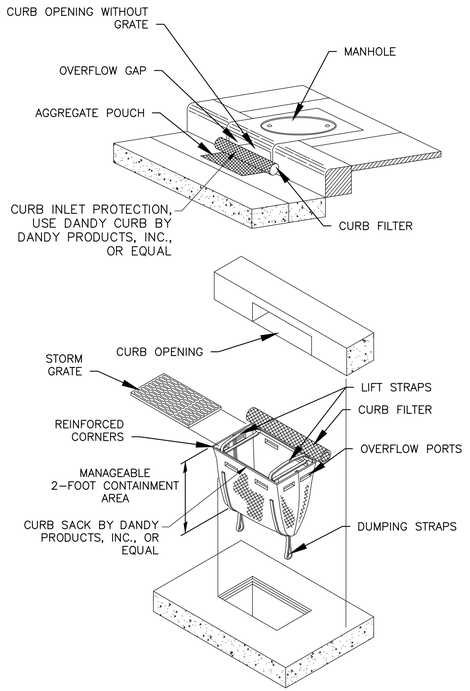
STORMWATER POLLUTION PREVENTION PLAN NOTES AND DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE	SHEET 25 OF 28
CONTRACT DRAWING NO. CC–18945	RECORD PLAN NO.



CURB AND GUTTER INLET PROTECTION NOTES

1. LOCATION: INLET PROTECTION SHALL BE USED ON EACH INLET IN THE PROJECT AREA. THE CONTRACTOR SHALL ALSO USE INLET PROTECTION TO PREVENT SEDIMENT FROM ENTERING INLETS OUTSIDE THE PROJECT AREA.
2. REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT.
3. AFTER STORM EVENT OF ½" OR GREATER AND AT REGULAR INTERVALS, LOOK INTO STORM GRATE FILTER BAG IF CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED.
4. TO EMPTY UNIT, SIMPLY LIFT THE UNIT USING LIFTING STRAPS AND REMOVE THE GRATE. TRANSPORT THE UNIT TO AN APPROPRIATE LOCATION FOR REMOVAL OF THE CONTENTS.

REFER TO EROSION AND SEDIMENT CONTROL PLAN FOR LOCATIONS OF INSTALLATION.

CURB AND GUTTER INLET AND CURB INLET PROTECTION

DETAIL A
NTS 26

FILTER FABRIC NOTES

FABRIC FILTER FENCE: THIS SEDIMENT BARRIER SHALL BE WOVEN, POLYPROPYLENE, ULTRAVIOLET RESISTANT MATERIAL SUCH AS MIRAFI 100X BY MIRAFI, INC. CHARLOTTE, NC OR EQUAL.

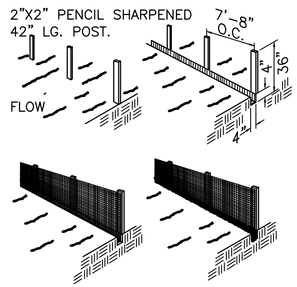
THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36" (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).

THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM OF A 6" OVERLAP, AND SECURELY SEALED.

STEEL POSTS SHALL BE A MINIMUM OF 5-FT IN LENGTH, 2½ INCH BY 2½ INCH BY ¼ IN ANGLE POST WITH SELF-FASTENING TABS AND A 5 INCH BY 4 INCH (NOMINAL) STEEL ANCHOR PLATE AT BOTTOM.

WELDED WIRE FABRIC SHALL BE 4 INCH BY 4 INCH MESH OF 12 GAUGE BY 12 GAUGE STEEL WIRE.

TIE WIRES FOR SECURING SILT FENCE FABRIC TO WIRE MESH SHALL BE LIGHT GAUGE METAL CLIPS (HOG RINGS), OR ½ INCH DIAMETER SOFT ALUMINUM WIRE.



FILTER FABRIC FENCE

DETAIL B
NTS 26

PREFABRICATED COMMERCIAL SILT FENCE MAY BE SUBSTITUTED FOR BUILT_IN_FIELD FENCE. PRE-FABRICATED SILT FENCE SHALL BE "ENVIROFENCE" BY MIRAFI INC., CHARLOTTE, NC OR EQUAL.

DRIVE METAL STAKES, 8-FEET ON CENTER (MAXIMUM) AT BACK EDGE OF TRENCHES. STAKES SHALL BE DRIVEN 2-FT (MINIMUM) INTO GROUND.

THE MANUFACTURER'S RECOMMENDATIONS SHALL BE FOLLOWED WITH REGARD TO SHIPPING, HANDLING, STORAGE, INSTALLATION, AND PROTECTION FROM DIRECT SUNLIGHT. THE GEOTEXTILE FABRIC WILL BE REJECTED IF IT HAS TEARS, PUNCTURES, FLAWS, DETERIORATION, OR DAMAGE INCURRED DURING MANUFACTURING, TRANSPORTATION, STORAGE, OR INSTALLATION. EACH ROLL SHALL BE LABELED OR TAGGED TO PROVIDE ADEQUATE PRODUCT IDENTIFICATION.

FILTER FABRIC FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS AND SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.

A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER PERMANENTLY STABILIZED.

THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.

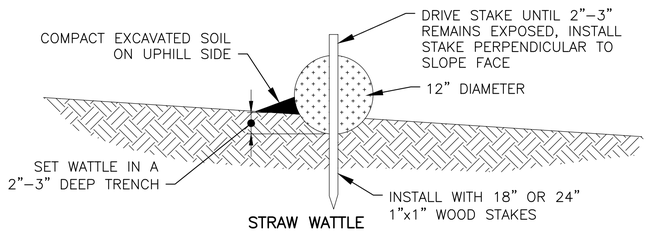
SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

MAINTENANCE: SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.



STRAW WATTLE

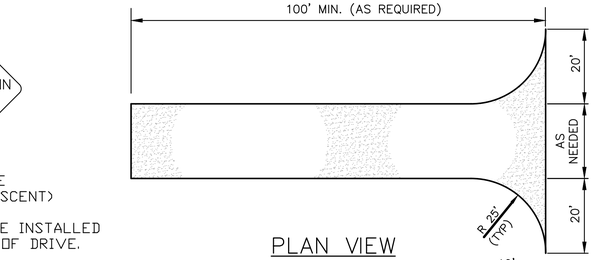
DETAIL C
NTS 26

STRAW WATTLE NOTES:

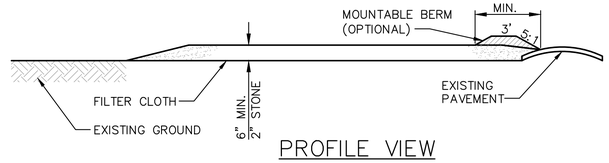
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD OVERLAP 24" - SHINGLE IN DIRECTION OF FLOW.
3. SECURE THE WATTLE WITH 18" OR 24" STAKES EVERY 3'-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2"-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKE SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.

48" BLACK/ORANGE (TYPE "H" FLUORESCENT)

NOTE: SIGNS TO BE INSTALLED 300' IN ADVANCE OF DRIVE.



PLAN VIEW



PROFILE VIEW

CONSTRUCTION SPECIFICATIONS:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - FIFTEEN (15) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTUCTION ENTRANCE

DETAIL D
NTS 26

INSTALLATION AND MAINTENANCE GUIDELINES

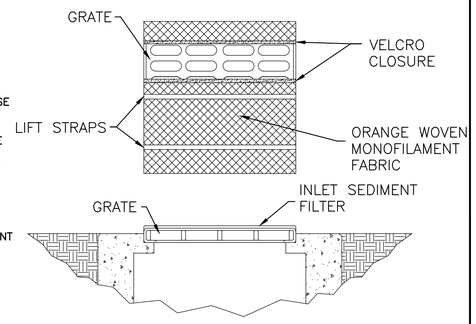
INSTALLATION

1. STAND GRATE ON END AND SLIDE THE SEDIMENT CONTROL BAG OVER THE GRATE.
2. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE.
3. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING STRAPS TO SUPPORT ENTIRE WEIGHT OF GRATE), PLACE THE GRATE INTO ITS FRAME.
4. BE CAREFUL NOT TO DAMAGE THE SEWN FABRIC UNIT WHEN INSTALLING.
5. REFER TO SHEETS 50 AND 51 FOR LOCATIONS OF INSTALLATION

MAINTENANCE

1. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH RAIN EVENT OR AS DIRECTED BY THE ENGINEER/INSPECTOR.
2. REMOVE THE SEDIMENT THAT HAS ACCUMULATED WITHIN CONTAINMENT AREA OF THE SEDIMENT CONTROL BAG AS NEEDED.
3. DISPOSE OF UNIT NO LONGER IN USE AT AN APPROPRIATE RECYCLING OR SOLID WASTE FACILITY.

NOTE: INLET SEDIMENT FILTER SHALL BE DANDY BAG OR A APPROVED EQUAL.



INLET SEDIMENT FILTER

DETAIL E
NTS 26

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

STORMWATER POLLUTION PREVENTION PLAN DETAILS

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
	INDEX DETAIL / RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE	SHEET 26 OF 28
CONTRACT DRAWING NO. CC-18945	RECORD PLAN NO.

NOTES:

1. AT THE REGIONAL BIORETENTION AREA, INSTALL SLOPE PROTECTION ALONG ENTIRE PERIMETER OF BASIN FROM BOTTOM OF SIDE SLOPE TO TOP OF BANK PER CMSC 712.11 PRIOR TO INSTALLATION OF PLANTS, SHRUBS AND TREES.

2. ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE SUBJECT TO FIELD MODIFICATIONS AT THE DISCRETION OF THE CITY OF COLUMBUS AND/OR THE OHIO EPA.

3. ANY EXISTING STORM INLETS IMPACTED BY THE NEW CONSTRUCTION ACTIVITY, WHETHER SHOWN ON THIS MAP OR NOT, SHALL BE PROVIDED THE APPROPRIATE INLET PROTECTION FOR SEDIMENT CONTROL.

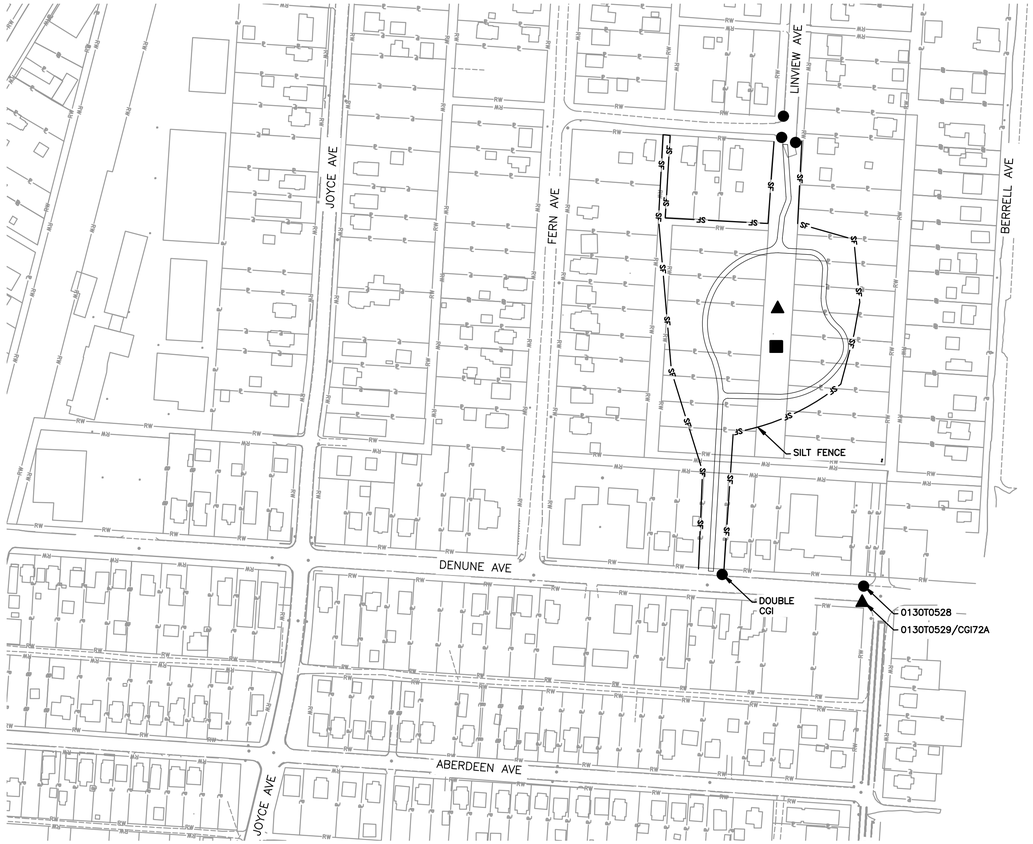
4. SETTLING POND AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED PRIOR TO COMMENCEMENT OF WORK. CONSTRUCTION OF A SETTLING POND WITH SKIMMER IS REQUIRED TO CAPTURE AND TREAT STORMWATER FLOWS FOR THIS AREA/INLET. FOLLOW THE SIZING CRITERIA PRESENTED IN THE OEPA CONSTRUCTION GENERAL PERMIT. THE SETTLING POND SHALL BE LOCATED ON THE REGIONAL BIORETENTION FACILITY PARCEL FOOTPRINT AND SHALL BE CONSTRUCTED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF SETTLING POND.

5. SEDIMENT PROTECTION SHALL REMAIN IN PLACE UNTIL UPSLOPE AREAS ARE STABILIZED AND INCOMING FLOWS ARE CLEAN.

6. IN ORDER TO PREVENT UNNECESSARY EROSION OF NEWLY GRADED SLOPES AND UNNECESSARY SILTATION OF DRAINAGE WAYS, THE CONTRACTOR SHALL INSTALL EROSION CONTROL MATTING AS SHOWN ON THE MATERIAL LAYOUT PLAN (DETAIL ON CIVIL DETAILS) AS SOON AS FINAL SLOPES ARE ESTABLISHED.

7. WITHIN 7 DAYS OF CLEARING AND GRUBBING, STABILIZE ALL INACTIVE CLEARED AND GRUBBED AREAS THAT ARE SCHEDULED TO REMAIN IDLE FOR MORE THAN 14 DAYS WITH CONSTRUCTION SEED AND MULCH IN ACCORDANCE WITH CMSC 207.03.

8. CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT EXISTING SURFACES, PAVEMENTS, RIP RAP, EDGING, PLANTING MULCH AREAS AND BEDS, FENCES AND GATES, AND SURFACE UTILITY STRUCTURES, BY PLACING A TEMPORARY COVER OR OTHER APPROVED METHOD ON TOP OF, OR OVER, PROTECTED AREAS PRIOR TO SEED APPLICATION OPERATIONS TO PREVENT SPILLAGE ONTO AREAS TO BE PROTECTED.



● CURB AND GUTTER OR CURB INLET PROTECTION

▲ DIVERSION TO SETTLING POND, SEE NOTE 4

■ SLOPE PROTECTION PER NOTE 1

1" = 150'
75 0 150

EASEMENT REFERENCE			
CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS		
NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
CDM Smith
445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
TEL: (614) 847-8340
FAX: (614) 847-1699

EROSION AND SEDIMENT CONTROL PLAN

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870-100705

DIVISION USE ONLY				OWNER	
				CONTRACTOR	
				INSPECTOR	
				AGREEMENT	COMPLETED
			RPD CHK	CID	CON.DR.
				INDEX DETAIL	RECORD FILE

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC UTILITIES
DIVISION OF SEWERAGE AND DRAINAGE
DIVISION USE ONLY

SCALE: NO SCALE
SHEET 26 OF 28
CONTRACT DRAWING NO. CC-18945
RECORD PLAN NO.

CONTRACTOR SUBMITTALS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE FOLLOWING SUBMITTALS EITHER AT THE PRECONSTRUCTION MEETING OR PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO:

DUE AT PRE–CONSTRUCTION MEETING
- PROJECT SCHEDULE
- SUB–CONTRACTOR AND SUPPLIER LIST
- EMERGENCY CONTACTS LIST
- STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

DUE PRIOR TO BEGINNING CONSTRUCTION
- CONSTRUCTION SEQUENCING PLAN
- ALL PERTINENT MATERIALS AS LISTED ON THE DIVISION OF WATER'S APPROVED MATERIALS LIST
- ANY SPECIAL MATERIALS OR ITEMS REQUIRED BY THE PROJECT SPECIFICATIONS (HORIZONTAL DIRECTIONAL DRILLING ITEMS, CURED IN PLACE PIPING ITEMS, TEMPORARY WATER MAIN ITEMS, ETC.)

PERMANENT PAVEMENT

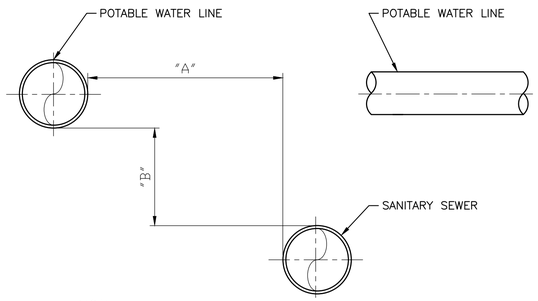
UNLESS OTHERWISE SHOWN ON THE PLANS, OR WHEN ORDERED BY THE ENGINEER, PERMANENT PAVEMENT REPLACEMENT SHALL BE PROVIDED, FOR ALL STREETS CUT BY THE CONTRACTOR, AS SPECIFIED UNDER ITEM 259 AND STANDARD DRAWING 1441, EXCEPT AS HEREIN MODIFIED. A QUANTITY OF 0.15 GALLONS OF TACK COAT SHALL BE APPLIED PER SQUARE YARD OF PAVEMENT RESURFACING (IF APPLICABLE TO THE PROJECT). LIMITING LINES FOR MEASUREMENT OF PERMANENT PAVEMENT SHALL BE THE DIAMETER OF THE WATER MAIN PLUS TWO FEET (D+2') FOR WATER MAINS LESS THAN OR EQUAL TO 36 INCHES IN DIAMETER. FOR WATER MAINS LARGER THAN 36 INCHES IN DIAMETER, LIMITING LINES FOR MEASUREMENT OF PERMANENT PAVEMENT SHALL BE THE DIAMETER OF THE WATER MAIN PLUS FOUR FEET (D+4'). TRENCH SHALL BE BACKFILLED TO THE TOP OF THE PAVEMENT SUBGRADE USING GRANULAR MATERIAL MEETING THE REQUIREMENTS OF ITEMS 304.02 OR 703.11. ALL PERMANENT PAVEMENT MARKINGS (STRIPING, RAISED PAVEMENT MARKERS, ETC.) DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR. UNLESS OTHERWISE PROVIDED IN THE CONTRACT, THE COST OF ALL SUCH WORK, WITH THE EXCEPTION OF HEAT WELDING, SHALL BE INCLUDED IN THE PRICE BID FOR ITEM SPECIAL – PERMANENT PAVEMENT. PAYMENT FOR HEAT WELDING PROCESS SHALL BE PAID FOR AS A SEPARATE BID ITEM UNDER ITEM SPECIAL – HEAT WELDING.

HEAT WELDING

WHERE REQUIRED BY THE PLANS AND SPECIFICATIONS, CONTRACTOR SHALL PERFORM HEAT WELDING AS PER STANDARD DRAWING 1441. PAYMENT WILL BE MADE ON A SQUARE YARDAGE BASIS.

SURVEY COORDINATES

"ITEM SPECIAL – SURVEY COORDINATES" SHALL INCLUDE ALL MATERIAL, EQUIPMENT, AND LABOR NECESSARY TO OBTAIN HORIZONTAL AND VERTICAL (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SURVEY COORDINATES FOR THE WATER MAIN IMPROVEMENTS. THE SURVEY COORDINATES SHALL BE OBTAINED FOR THE COMPLETED WATER MAIN CONSTRUCTION AND SHALL INCLUDE ALL VALVES, TEES, CROSSES, BENDS, HORIZONTAL DEFLECTIONS, PLUGS, REDUCERS, TAPPING SLEEVES, FIRE HYDRANTS, AIR RELEASES, CURB STOPS, AND CASING PIPE TERMINI. ADDITIONAL SURVEY COORDINATES ARE REQUIRED ON THE WATER MAIN EVERY 200 FEET WHERE NO FITTING OR OTHER WATER MAIN STRUCTURE IS BEING INSTALLED WITHIN THAT LENGTH OF THE IMPROVEMENT. ALL SURVEY COORDINATES SHALL BE REFERENCED TO THE APPLICABLE COUNTY ENGINEER'S MONUMENTS, AND SHALL BE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD 83) WITH THE (NSRS2007) ADJUSTMENT, WITH FURTHER REFERENCE MADE TO THE OHIO STATE PLANE SOUTH COORDINATE SYSTEM (GRID), SOUTH ZONE, WITH ELEVATIONS BASED ON NAVD 88 DATUM. ALL COORDINATES (NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION) SHALL BE REFERENCED TO THE NEAREST HUNDREDTH (N XXXXXX.XX, E XXXXXX.XX, C/L ELEV. XXX.XX). ALL SURVEY COORDINATES SHALL BE ACCURATE TO WITHIN 1.0 FOOT HORIZONTAL AND A TENTH OF A FOOT (0.10) OR LESS VERTICAL. THE COORDINATES SHALL BE DOCUMENTED TO THE ENGINEER IN SPREADSHEET FORM PROVIDED AND SHALL INCLUDE THE APPLICABLE ITEM, STATION, NORTHING, EASTING, AND CENTERLINE OF PIPE ELEVATION. COORDINATES SHALL BE SUBMITTED TO THE ENGINEER ON A BI–WEEKLY BASIS. COORDINATES SHALL ALSO BE REQUIRED TO BE SUBMITTED TO THE DIVISION OF WATER AS PART OF THE REQUEST FOR CHLORINATION. LUMP SUM PAYMENT IS FULL COMPENSATION FOR ALL WORK INVOLVED IN OBTAINING AND DOCUMENTING THE SURVEY COORDINATES AS DESCRIBED IN THIS SPECIFICATION.



NOTE:

IN CASES WHERE THE HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND POTABLE WATER LINE "A" IS LESS THAN 10 FEET, THE VERTICAL SEPARATION "B" SHALL BE AT LEAST 18 INCHES BETWEEN THE TOP OF THE SEWER AND THE BOTTOM OF THE WATER LINE.

SEPARATION REQUIREMENTS BETWEEN POTABLE WATER AND SANITARY SEWER

DETAIL A
NTS 26

WATERLINE COORDINATE TABLE

SHEET #	DESCRIPTION	NORTHING	EASTING	AS–BUILT NORTHING	AS–BUILT EASTING	AS–BUILT CL ELEVATION
16	PLUG EX. 6" W/L DOWNSTREAM OF NEW FH	737549.13	1840626.64			
16	6"X6" TEE, FIRE HYRDANT AND WATCH VALVE	737549.87	1840626.69			

EASEMENT REFERENCE

CITY NO	COUNTY RECORD VOL.	COUNTY RECORD PAGE	GRANTOR

REVISIONS

NO.	DESCRIPTION	APPROVAL DATE

PLANS PREPARED BY:
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445 HUTCHINSON AVE SUITE 820
COLUMBUS, OHIO 43235
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FAX: (614) 847–1699

WATERLINE NOTES, DETAILS AND COORDINATE TABLE

NOT FOR CONSTRUCTION

PROJECT TITLE:
LINVIEW PARK PROJECT
BLUEPRINT LINDEN PROJECT AREA
CIP# 650870–100705

DIVISION USE ONLY	OWNER
	CONTRACTOR
	INSPECTOR
	AGREEMENT / COMPLETED
RPD / CHK / CID / CON.DR.	
	INDEX DETAIL / RECORD FILE

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