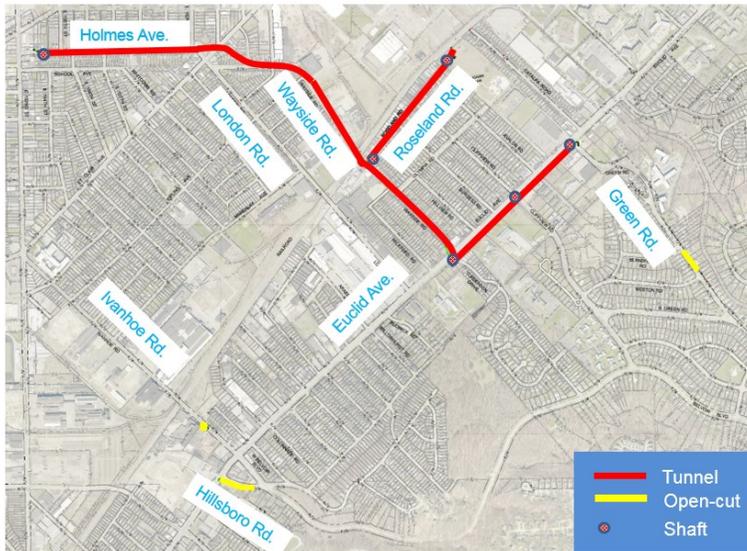


LONDON ROAD RELIEF SEWERS PROJECT

DESCRIPTION

The London Road Relief Sewers project (LNDN) is part of Project Clean Lake, a \$3B, 25-year program NEORSRSD began in 2011 designed to meet Clean Water Act standards and address water quality issues. The LNDN is a relief sewer project that the NEORSRSD will use to alleviate flooding due to insufficient sewer capacity and reduce the 4.5 Billion Gallons of wet weather combined sewer overflows (CSOs) released into Lake Erie and its tributaries in the Greater Cleveland area.

LNDN includes approximately 11,570 linear feet of relief sewers constructed via open-cut trenching or tunneled methods in the City of Cleveland and the City of East Cleveland. New junction chambers and diversion structures as well as modifications to existing flow regulator structures will reroute flow from undersized existing sewers to the new LNDN sewers. The general project alignment is shown in the map below.



| Project Phase | Year | | | | |
|---------------|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Design | | ■ | ■ | ■ | |
| Bidding | | | ■ | | |
| Construction | | | | ■ | ■ |

PROJECT BENEFITS

The LNDN system will reduce overflows to Nine Mile Creek and Green Creek from CSO 211, 212, 214 and 256, reduce CSO volume, and alleviate sewer surcharging, providing the following benefits:

- Improved water quality in Nine Mile Creek and Green Creek;
- A reduction in public health risks associated with CSOs;
- A cleaner Lake Erie for drinking water, boating, beach-going, and other recreational purposes; and
- Wet weather flooding relief.

CONSTRUCTION COST: \$39,660,000

STATUS: Construction Notice to Proceed: July 31, 2018

**PERMANENT SEWER
EASEMENT LNDN-PS10**

**TEMPORARY EASEMENT
LNDN-T14 & T15**

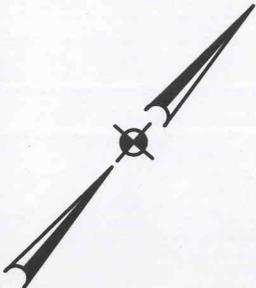
ACROSS PARCEL NO.
117-08-001 & 117-10-047

BEING PART OF SUBLot NO. 158 AS
SHOWN IN VAN DEBOE HAGER CO'S
EUCLID LAWN SUBDIVISION OF PART
OF
ORIGINAL EUCLID TOWNSHIP Lot No.
9, TRACT No. 10, AS RECORDED IN
V. 35, P. 28 CCMR AND
PART OF
ORIGINAL EUCLID TOWNSHIP Lot No.
50, TRACT No. 11 & THE GORE
TRACT
CITY OF CLEVELAND,
COUNTY OF CUYAHOGA,
STATE OF OHIO

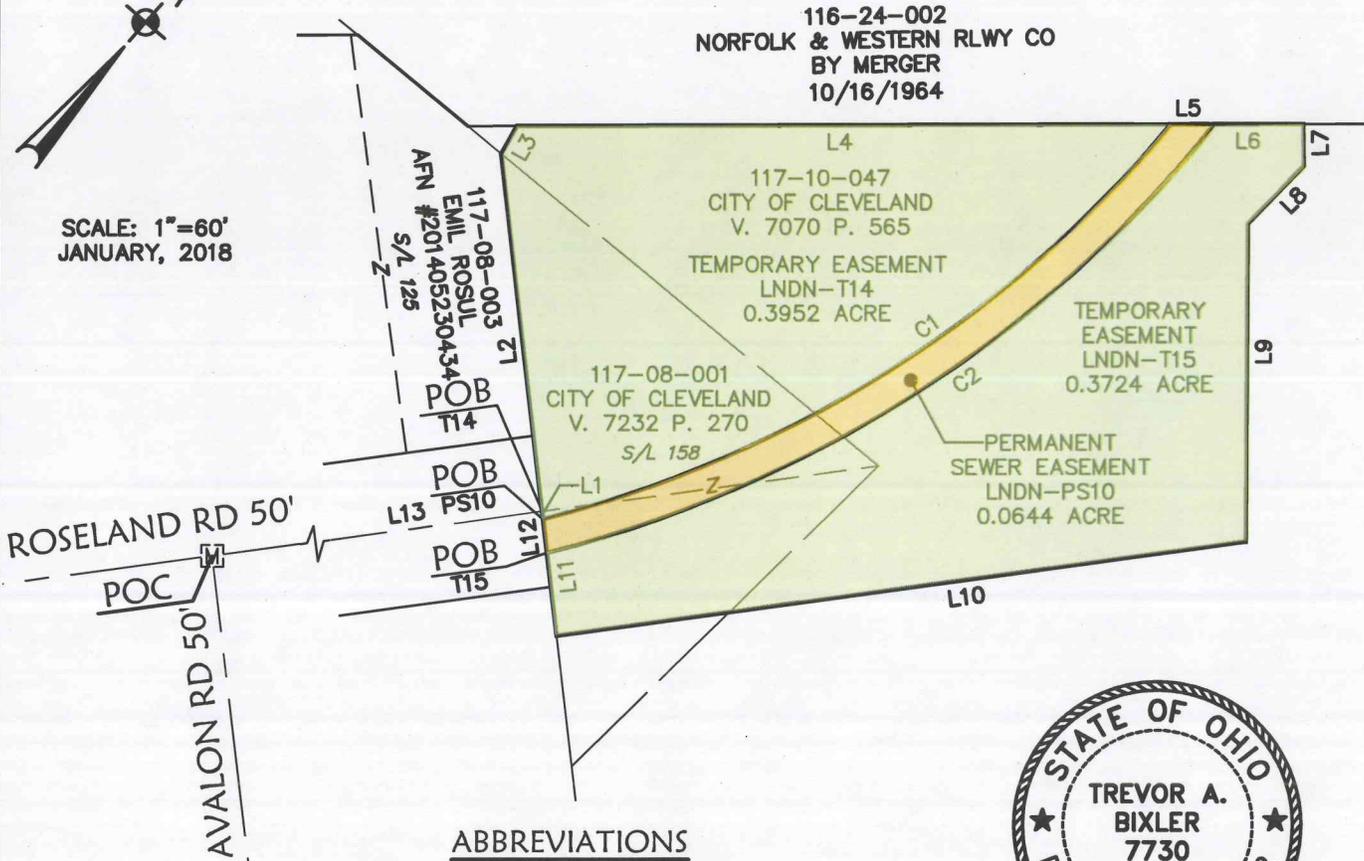
| LINE TABLE | | |
|------------|-------------|---------|
| LINE # | DIRECTION | LENGTH |
| L1 | S47°28'06"E | 2.56' |
| L2 | N47°28'06"W | 117.95' |
| L3 | N11°30'52"W | 10.42' |
| L4 | N49°04'29"E | 213.61' |
| L5 | N49°04'29"E | 14.22' |
| L6 | N49°04'29"E | 29.15' |
| L7 | S41°34'06"E | 13.65' |

| LINE TABLE | | |
|------------|-------------|---------|
| LINE # | DIRECTION | LENGTH |
| L8 | S03°19'31"W | 26.34' |
| L9 | S40°36'34"E | 104.14' |
| L10 | S41°23'41"W | 227.23' |
| L11 | N47°28'06"W | 27.38' |
| L12 | N47°28'06"W | 11.10' |
| L13 | N41°28'19"E | 215.07' |

| CURVE TABLE | | | | | |
|-------------|---------|---------|-----------|-------------|---------|
| CURVE # | LENGTH | RADIUS | DELTA | BEARING | CHORD |
| C1 | 246.08' | 394.50' | 35°44'22" | N16°56'00"E | 242.11' |
| C2 | 263.57' | 405.50' | 37°14'31" | S16°23'35"W | 258.96' |



SCALE: 1"=60'
JANUARY, 2018



ABBREVIATIONS
 AFN AUTOMATIC FILE NUMBER
 CCMR CUYAHOGA COUNTY MAP RECORDS
 POB POINT OF BEGINNING
 POC POINT OF COMMENCEMENT

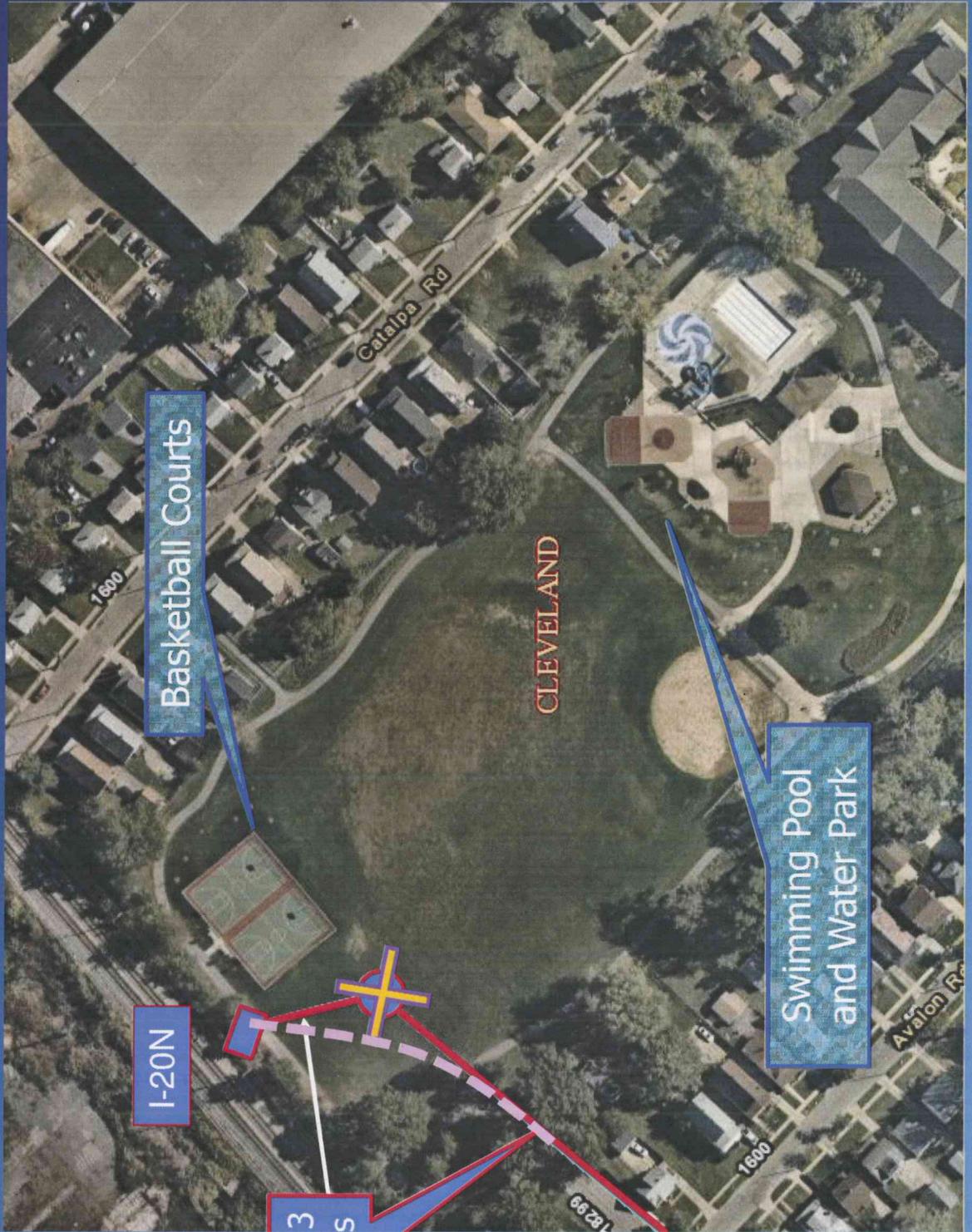


Trevor A. Bixler 1-9-19

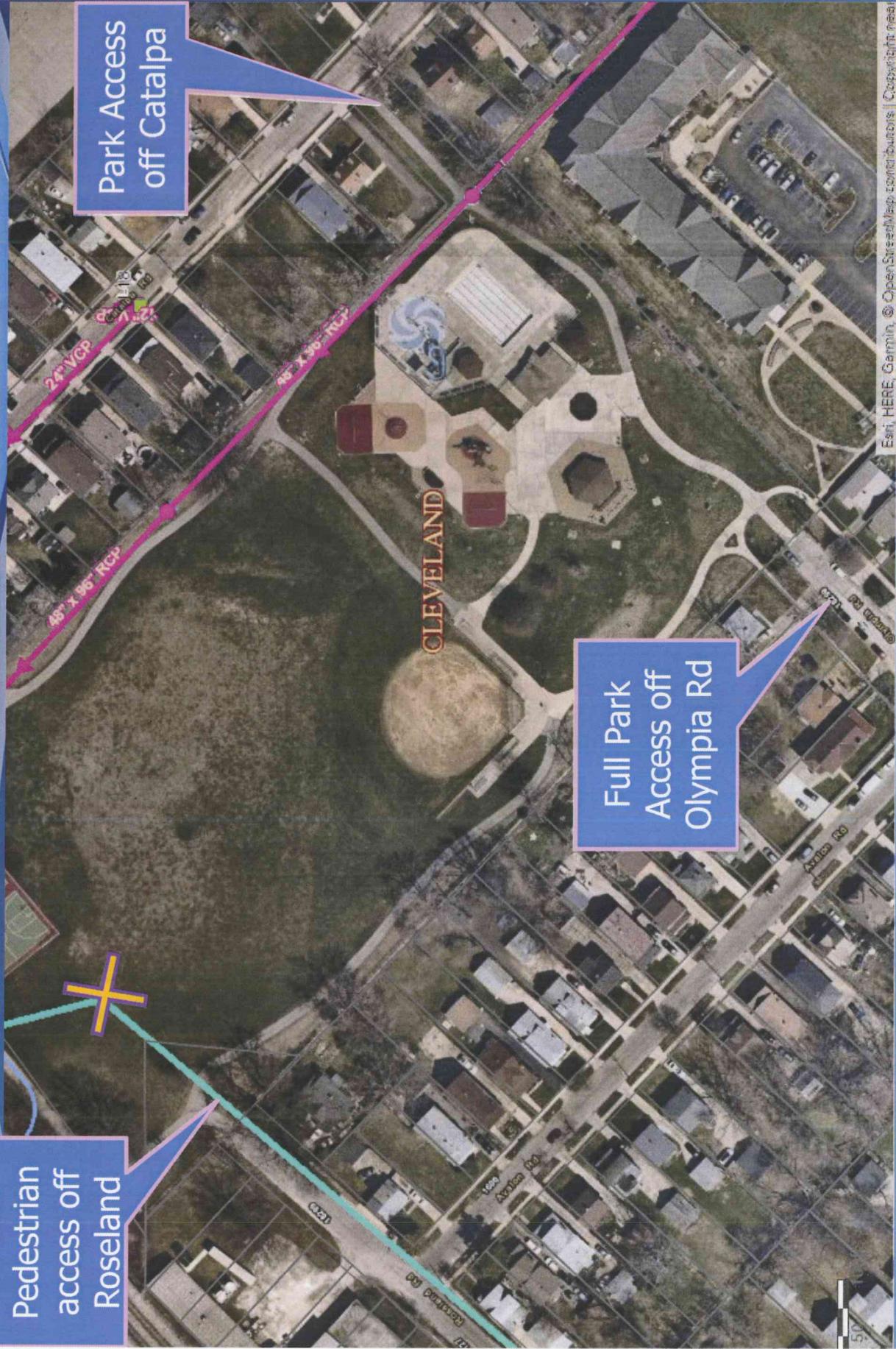
TREVOR A. BIXLER
PROFESSIONAL SURVEYOR, OHIO NO. 7730

KS KS Associates, Inc.
260 Burns Road, Suite 100
Elyria, OH 44035
P 440 365 4730
F 440 365 4790
www.ksassociates.com

Reach 3 -- Duggan Park



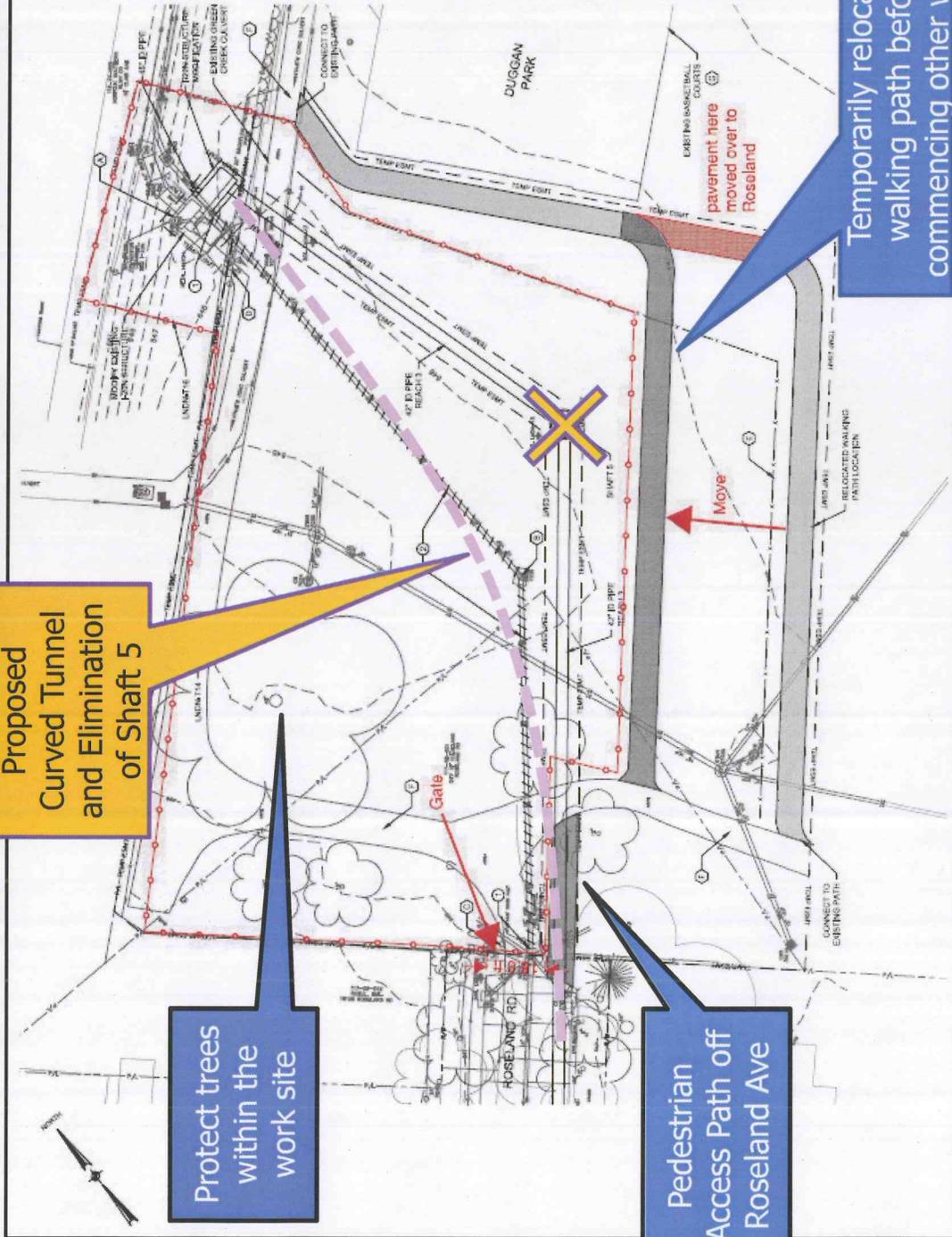
Limited
Pedestrian
access off
Roseland



Park Access
off Catalpa

Full Park
Access off
Olympia Rd

Modified Shaft 5 / Duggan Park Site



KEY PLAN

GENERAL SHEET NOTES

- SEE SITE RESTORATION DRAWING FOR REMAINING SURFACE EASEMENTS.
- PROTECT ALL TREES AND VEGETATION NOT SHOWN TO BE REMOVED. ALL REMOVALS SHALL BE APPROVED AND TO OBTAIN APPROVAL TO REMOVE ANY VEGETATION.
- SITE ACCESS AND CONSTRUCTION STAGING SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE CITY OF CLEVELAND.
- FOR WORK OUTSIDE THE SPIT OF WAY, WORK LIMITS SHALL COINCIDE WITH THE CASHEMOUNT LIMITS UNLESS INDICATED OTHERWISE.
- CONTRACTOR TO PROVIDE SIGN AT ROSELAND ROAD PARK. CONTRACTOR TO PROVIDE SIGN AT PARK ENTRANCE. SIGN USE ACCESS ON DUNBAR ROAD.
- CONTRACTOR TO NOTIFY EMERGENCY SERVICES AND THE DEPARTMENT THAT PARK ENTRANCE AT ROSELAND IS CLOSED.

SHEET KEY NOTES

- STRUCTURE LAYOUT WORK IS SHOWN ON THE PLAN. CIRCLES AT A LARGER SCALE IN COURTS SHOW EXISTING FEATURES MORE CLEARLY.
- ABANDON EXISTING MANHOLE BY REMOVING THE TOP 3 FEET OF MANHOLE STRUCTURE INCLUDING FRAME AND COVER, AND FILLING WITH CLWM.
- COORDINATE WITH NEIGHBOR FOR KEY TO OPEN BOLLARDS AT PARK ENTRANCE.
- REMOVE AND REPLACE EXISTING FENCE AND GATE AS NECESSARY TO PERFORM THE WORK AT STRUCTURE WORK.
- PROVIDE, MAINTAIN AND REMOVE AFTER WORK IS AHEAD IN COMPLETE, TEMPORARY CONSTRUCTION FENCE ALONG TEMPORARY WALKING PATH.
- CONTRACTOR IS REQUIRED TO RELOCATE, MAINTAIN AND REMOVE TEMPORARY WALKING PATH DURING CONSTRUCTION.
- CONTRACTOR SHALL NOT DETURB EXISTING BASKETBALL COURTS AND SHALL WORK WITHIN THE TEMPORARY EASEMENT LIMITS TO INSTALL, MAINTAIN AND REMOVE TEMPORARY WALKING PATH.

UTILITY KEY NOTES

- ABANDON EXISTING 18" VCP SEWER PER DEPT. CODES.
- ABANDON EXISTING 18" VCP SEWER BY FILLING WITH CLWM.

Temporarily relocate walking path before commencing other work.

Proposed Curved Tunnel and Elimination of Shaft 5

Protect trees within the work site

Pedestrian Access Path off Roseland Ave

CONFORMED CONTRACT DRAWINGS

DATE: 08/14/19
 PROJECT NO: 1422
 SHEET NO: 5 OF 10
 SCALE: AS SHOWN
 C: CIVIL
 M: MECHANICAL
 E: ELECTRICAL
 S: STRUCTURAL
 P: PLUMBING
 H: HYDRAULIC
 T: TRAFFIC

SHAFT 5 CIVIL SITE PLAN

LONDON ROAD RELIEF SEWERS PROJECT PROJECT 1422

Northeast Ohio Regional Sewer District

DATE: 08/14/19
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 PROJECT NO: 1422
 SHEET NO: 5 OF 10

SCALE: AS SHOWN

DATE: 08/14/19