



# City of North Royalton

Mayor Larry Antoskiewicz

## Planning Commission

David Smerek, Building Commissioner

Ian Russell  
PC Secretary

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### PUBLIC HEARING LEGAL NOTICE

Pursuant to North Royalton Codified Ordinance 1220.06, notice is given that the Planning Commission of the City of North Royalton, Ohio, will hold a meeting on **March 8, 2023** at 7:00 p.m. local time in the Council Chambers at City Hall, 14600 State Road, upon the following subject:

Frontier Land Group, on behalf of Michael Kinsey, is seeking preliminary site plan approval for a proposed detached single-family cluster development consisting of 20 sublots located at 8217 Ridgedale Drive, also known as PPN: 489-02-005, in Residential (R1-A) District zoning.

Plans, specifications, and other documentation are on file at the Building Division, City of North Royalton Service Center, 11545 Royalton Road, and on the City's website for review by interested parties.

You can view the meeting live by entering the following link on your phone or computer or you may attend the meeting in person at North Royalton City Hall.

Link: [www.northroyalton.org/PlanningCommission](http://www.northroyalton.org/PlanningCommission)

If you would like to be heard on the subject of this application but are not able to attend the meeting in person, please fill out and submit the Public Comment Form with any documents or photographs and return it to the Building Department no later than March 7th at 12:00 p.m. local time. The form is available on the Planning Commission page of the city website which can be found at the above link. PLEASE NOTE: THE PUBLIC COMMENT FORM MUST BE NOTARIZED IN ORDER TO BE READ INTO THE RECORD.

PLANNING COMMISSION  
NORTH ROYALTON, OHIO

Ian Russell  
Planning Commission Secretary  
11545 Royalton Road  
North Royalton, Ohio 44133





# City of North Royalton

Mayor Larry Antoskiewicz

Community Development, Building Division

Dan Kulchytsky, Building Commissioner

11545 Royalton Road, North Royalton, OH 44133

Phone: 440-582-3000



## CITY OF NORTH ROYALTON PLANNING COMMISSION APPLICATION

### 1. This request is made for the following property:

8217 Ridgedale Drive, North Royalton, OH 44133

Address

Name of Occupant, Business or Tenant (if applicable)

489-02-005

R1-A, Ward 1

Permanent Parcel Number

Zoning District and Ward

### 2. Property Owner of Parcel:

Michael B. Kinsey

Name

Name of Business (if applicable)

21111 W. Cameron Ridge Drive

281-758-5413

Address

Phone

Cypress, TX 77433

mbkinsey@emelp.com

City, State and Postal Code

Email (electronic mail)

### 3. This request is being made by the following responsible party (Owner / Authorized Representative):

Frontier Land Group

Name

Name of Business (if applicable)

25700 Science Park Drive, Suite 360

216-342-4348 x 102

Address

Phone

Cleveland, OH 44122

jrosen@frontierlg.com

City, State and Postal Code

Email (electronic mail)

### For Office Use Only

02/08/2023  
Date Application Submitted

03/08/2023  
Meeting Date Assigned

PC22-12.1  
Identification Number Assigned

Paid  
Application Fee

Paid - Tabbed 11/2/2022  
Payment Information (date, check number, cash, etc.)

I.R.  
Application Fee Received By

Other Application Fee Information



## CITY OF NORTH ROYALTON PLANNING COMMISSION APPLICATION

### 4. Narrative statement describing the project and its features:

Our goal is to develop a fee-simple single-family detached cluster development consisting of

20 sublots. This will be a for-sale community. Our intention is to situate the development in the Northeast

portion of the property as to preserve as much of the natural environmental factors existing on-site as possible.

The balance of the site will be conserved as open-space. It is early on in our analysis; however, we believe that

this will be more of a step-down/empty nester/lifestyle community.

### 5. Applicant's Plan Request: (please mark appropriate box)

#### Commercial / Industrial / Residential:

- ☐ Preliminary Site Plan Approval
- ☐ Final Site Plan Approval

#### Subdivision:

- ☐ Sketch Plan Approval
- ☒ Preliminary Site Plan Approval
- ☐ Final Site / Preliminary Plat Approval
- ☐ Final Plat / Dedication Approval

The Planning Commission or its agent(s) is hereby authorized to enter upon the property for which his approval is sought, without further notification, to inspect said property. Any such inspection shall be conducted between the hours of 9 a.m. and 5 p.m. on any day of the week, including weekends.

I further understand that any misrepresentation of data or facts or violations of the Ordinances of the City of North Royalton are cause for refusal, suspension or revocation of this license if issued.



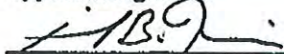
Mark Holz, Managing Member

2/6/2023

Applicant Signature

Printed Name and Title

Date



MICHAEL B. KINSEY

MARCH 22, 2022

Owner Signature

Printed Name and Title

Date



CITY OF NORTH ROYALTON PLANNING COMMISSION APPLICATION

6. Written Authority Form (complete this form if you are unable to be present at meeting).  
(submit original – do not fax or email)

I, MICHAEL B. KINSEY (name) of \_\_\_\_\_  
(company, if applicable), hereby certify that I/we are the OWNER  
(owner(s), executor(s), etc.) of 8217 RIDGEDALE ROAD (property address or  
permanent parcel number) and further verify that FRONTIER LAND GROUP (name  
of representative) is authorized to represent my/our interests and make decisions on my/our behalf  
when appearing before the North Royalton Planning Commission.

[Signature]  
Signature

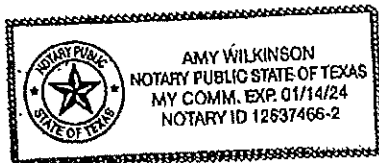
MARCH 22, 2022  
Date

Before me, a Notary Public in and for said county, personally appeared Michael Kinsey  
who acknowledged that he or she did sign the foregoing instrument and the same is his or her free  
act and deed.

In testimony whereof I have hereunto set my hand and official seal at Amerity Bank,  
TEXAS on this 22 day of March, 2022.

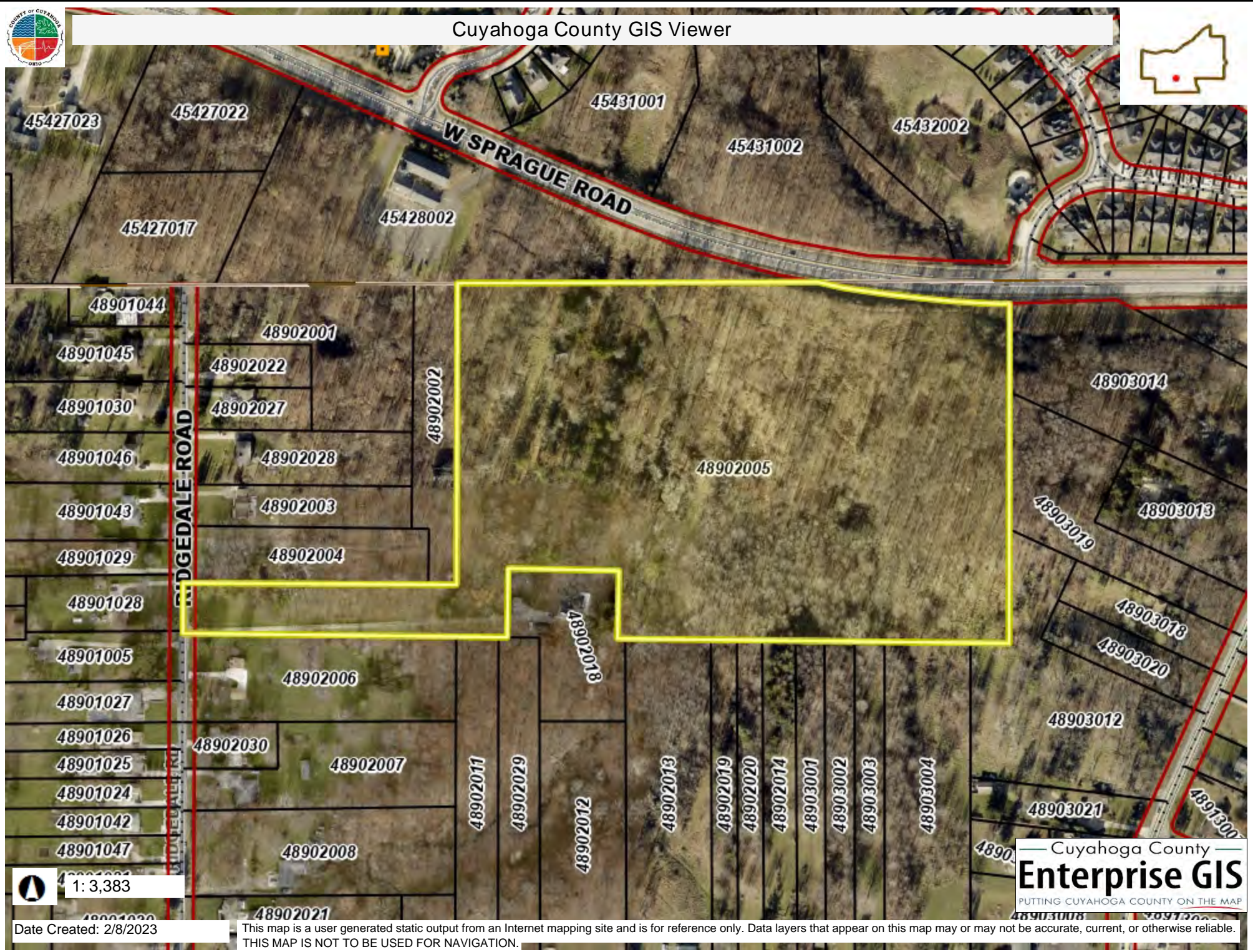
[Signature]  
Notary Signature

Seal:



State of ~~Ohio~~ TEXAS  
County of ~~Cuyahoga~~ HARRIS





1:3,383

Date Created: 2/8/2023

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.  
THIS MAP IS NOT TO BE USED FOR NAVIGATION.

Cuyahoga County  
**Enterprise GIS**  
PUTTING CUYAHOGA COUNTY ON THE MAP




# IMPROVEMENT PLANS FOR WOODLAND BEND SUBDIVISION

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

FEBRUARY 6, 2023

**DESIGNED BY:**



POLARIS ENGINEERING & SURVEYING, INC.  
34600 CHARDON ROAD - SUITE D  
WILLOUGHBY HILLS, OHIO 44094  
(440) 944-4433 (440) 944-3722 (Fax)  
www.polaris-es.com



**SITE MAP**

1"=500'



**VICINITY MAP**

N.T.S.



**DEVELOPED BY:**

FRONTIER LAND GROUP  
25700 SCIENCE PARK DRIVE, SUITE 360  
BEACHWOOD, OHIO 44122  
CONTACT: MARK HOLZ  
PHONE: (216) 214-2329  
E-MAIL: MARK@FRONTIERLG.COM

## APPROVALS

SEWER APPROVED BY O.E.P.A. BY LETTER DATED: \_\_\_\_\_, 20\_\_.

WATER APPROVED BY O.E.P.A. BY LETTER DATED: \_\_\_\_\_, 20\_\_.

APPROVED BY THE CITY OF NORTH ROYALTON, OHIO:

BY \_\_\_\_\_ DATE: \_\_\_\_\_  
JUSTIN HASELTON  
CITY OF NORTH ROYALTON ENGINEER

## DRAWING INDEX

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TITLE SHEET

CONTRACT No.

22057

SHEET OF

01 17

  
KEVIN T. HOFFMAN

2/6/23

P.E. #74831





GENERAL NOTES

A PRE-CONSTRUCTION CONFERENCE SCHEDULED BY THE WESTLAKE CITY ENGINEER SHALL BE HELD PRIOR TO THE START OF ANY WORK. IN ADDITION, THE CONTRACTOR SHALL PROVIDE 48 HOUR NOTICE TO THE WESTLAKE CITY ENGINEER PRIOR TO BEGINNING WORK TO ARRANGE FOR INSPECTION.

THE LATEST EDITION OF STANDARD SPECIFICATIONS OF THE CITY OF WESTLAKE CONSTRUCTION STANDARDS, INCLUDING ALL SUPPLEMENTAL SPECIFICATIONS AND STANDARD DRAWINGS, SHALL GOVERN THIS PROJECT.

ALL WORK CONTEMPLATED SHALL BE GOVERNED BY THE RULES, REGULATIONS AND SPECIFICATIONS OF THE CITY OF WESTLAKE ENGINEER AND AT ALL TIMES BE SUBJECT TO HIS DIRECT INSPECTION.

ALL CITY OF WESTLAKE STANDARD CONSTRUCTION DRAWINGS AND METHODS SHALL APPLY TO THIS PROJECT, TO INCLUDE ANY AMENDMENTS THERETO.

ALL WORK CONTEMPLATED UNDER THIS CONTRACT SHALL COMPLY WITH THE U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ACT.

STATIONING SHOWN HEREON IS ALONG THE CENTERLINE OF THE RIGHT OF WAY FOR STORM SEWERS, SANITARY SEWERS, WATER MAINS, AND PAVING WORK.

UTILITY CONTACTS

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITY FACILITIES ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF THE FIELD SURVEY IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATIONS OF THE EXISTING UTILITY OWNERS AND UTILITY PROTECTION SERVICE LISTED BELOW IN ACCORDANCE WITH SECTION 153.64 OF THE OHIO REVISED CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF THE EXISTING UTILITY OWNERS AND UTILITY PROTECTION SERVICE LISTED BELOW IN ACCORDANCE WITH SECTION 154.64 OF THE O.R.C. AND AS OUTLINED IN PROJECT SPECIFICATIONS. THE UTILITY OWNERSHIPS ARE AS FOLLOWS:

- OHIO UTILITIES PROTECTION SERVICE  
106 WEST RYEN ROOM 427  
YOUNGSTOWN, OHIO 44051  
PHONE: (800) 382-2764

CITY OF NORTH ROYALTON ENGINEERING DEPT.  
11545 ROYALTON ROAD  
NORTH ROYALTON, OHIO 44133  
PHONE: (440) 582-3001  
FAX: (440) 582-3089  
CONTACT: JUSTIN HASELTON, P.E.

THE ILLUMINATING COMPANY  
6895 MILLER ROAD, SUITE 101  
BRECKSVILLE OHIO 44141  
PHONE: (440) 546-8677  
(TIM DENZLER)

AT&T  
13630 LORAIN AVE-3rd FLOOR  
CLEVELAND, OHIO 44111  
PHONE: (216) 476-6037  
(SCOTT SALA)

COLUMBIA GAS OF OHIO  
3101 NORTH RIDGE ROAD, EAST  
LORAIN, OH 44065  
MIDDLEBURGH HEIGHTS, OHIO 44130  
PHONE: (440) 752-2849  
(JANINE MAYSON)

CITY OF CLEVELAND DIVISION OF WATER  
1201 LAKESIDE AVE-2ND FLOOR  
CLEVELAND, OHIO 44114  
PHONE: (216) 694-2444  
(FRED ROBERTS)
- CHARTER COMMUNICATIONS  
(SPECTRUM CABLE)  
1200 BROWNSTONE AVE.  
AKRON, OHIO 44310  
PHONE: (330) 572-4129  
(JIM NICHOLAS)

BREEZELINE  
105 BLAZE INDUSTRIAL PARKWAY  
BEREA, OH 44017  
PHONE: (440) 625-0305  
MOBILE: (440) 915-8254  
(TOM AUBRY)

OHIO OIL & GAS PRODUCERS UNDERGROUND  
PROTECTION SERVICE (OGPPUS)  
(800) 925-0988

STORM SEWER SPECIFICATIONS

- STORM SEWER  
PIPE ACCEPTABLE BY EASTLAKE CITY ORDINANCES INCLUDE
- IN RIGHT OF WAY: ADS SANITARY 18" STORM AND ADS 18" STORM DUAL WALL POLYPROPYLENE, AND REINFORCED CONCRETE PIPE (CLIV FOR 12" TO 15" AND CLIII FOR 18" AND ABOVE).
  - OUTSIDE RIGHT OF WAY: ADS N-12 HDPE STORM SEWER WITH SOIL-TIGHT JOINTS.

THE CONTRACTOR SHALL TEST ALL STORM SEWER PIPE PER ODOT SUPPLEMENTAL SPECIFICATIONS 942 AND 944 FOR DEFLECTION WITH A NINE (9) ARM MANDREL. MAXIMUM ALLOWABLE DEFLECTION SHALL BE 7.5% OF ITS BASE INSIDE DIAMETER WHEN MEASURED NOT LESS THAN 30 DAYS AFTER COMPLETION OF INSTALLATION.

DIRECT GRAVITY CONNECTION OF FOOTER DRAINS TO STORM SEWER IS NOT PERMITTED. REFER TO SUMP PUMP DETAIL SHEET 17.

SANITARY SEWER SPECIFICATIONS

SANITARY SEWER SPECIFICATIONS

- |                         |            |
|-------------------------|------------|
| - LESS THAN 5' OF COVER | CL 52 DIP  |
| - 4' TO 16' OF COVER    | PVC SDR 35 |
| - OVER 16' OF COVER     | PVC SDR 26 |

PVC PLASTIC PIPE AND FITTINGS SHALL HAVE A MINIMUM PIPE STIFFNESS OF 45 PSI AT 5% VERTICAL RING DEFLECTION PER ASTM D2412, AND SHALL CONFORM TO ASTM D3034, JOINTS SHALL CONFORM TO ASTM D3212 AND SHALL BE DESIGNED TO RETAIN THE GASKET TO PREVENT PULL OUT DURING THE MAKING OF THE JOINT.

EPA UTILITY NOTES:

- TEN FEET MINIMUM HORIZONTAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN WATER LINE AND SANITARY & STORM SEWERS.
- AT 18" MINIMUM VERTICAL SEPARATION (OUT-TO-OUT, CLEAR) WILL BE MAINTAINED BETWEEN THE WATER LINE AND SANITARY & STORM SEWERS AT ALL CROSSINGS.
- THE PROPOSED WATERLINE IMPROVEMENTS WILL PROVIDE A MINIMUM 35 PSI PRESSURE AT THE CURB STOP DURING NORMAL OPERATING CONDITIONS. A MINIMUM 20 PSI AT GROUND LEVEL SHALL BE MAINTAINED AT ALL POINTS IN THE DISTRIBUTION UNDER ALL CONDITIONS OF FLOW.
- BOOSTER PUMPS ARE NOT PERMITTED ON SERVICE CONNECTIONS.
- ALL WATER MAIN SHALL BE DISINFECTED IN ACCORDANCE WITH AWWA C651.
- WATERMAIN INSTALLATION AND TESTING SHALL BE IN ACCORDANCE WITH AWWA C600.
- PRECAST CONCRETE MANHOLES SHALL CONFORM TO ASTM C-478 WITH JOINTS PER ASTM C-443. PIPE CONNECTION TO MANHOLE SHALL BE MADE USING FLEXIBLE GASKET JOINTS PER ASTM C-923.
- SANITARY SEWER MANHOLE VACUUM TESTING SHALL CONFORM TO ASTM C-1244 SPECIFICATIONS.
- ALL SOLID WALL PLASTIC PIPE SHALL BE SUBJECT TO A MINIMUM 5% DEFLECTION TESTING. DEFLECTION TESTING SHALL CONFORM TO ASTM D-2122 SPECIFICATIONS. DEFLECTION TESTING SHALL BE PERFORMED AT LEAST 30 DAYS AFTER INSTALLATION.
- ALL SANITARY SEWER MUST HAVE PREMIUM JOINTS, AND THE ENTIRE SYSTEM MUST PASS AN INFILTRATION TEST AND EXFILTRATION TEST AFTER CONSTRUCTED HAS BEEN COMPLETED. THE MAXIMUM ALLOWABLE RATE OF INFILTRATION AND EXFILTRATION SHALL BE 100 GALLONS PER INCH DIAMETER OF THE SEWER PER MILE PER DAY.
- SANITARY SEWER BEDDING SHALL BE AS PER ASTM D-2321.
- ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

DESIGNERS, ENGINEERS, AND CONTRACTORS ARE TO ADHERE BY THE MOST CURRENT VERSION OF THE CLEVELAND WATER NOTES AND OTHER OCCUR BEFORE THESE DRAWINGS ARE SUBMITTED.

GENERAL

1. ALL WATER WORK REQUIRED, WHETHER SHOWN ON THE PLANS OR AS DIRECTED BY CLEVELAND WATER, SHALL BE AT THE EXPENSE OF THE PROJECT UNLESS OTHERWISE ASKED TO BY THE COMMISSIONER OF THE CLEVELAND DIVISION OF WATER.

2. THE INFORMATION SHOWN ON THE CLEVELAND DIVISION OF WATER'S SUMMARY OF WORK/CHANGE LETTER, STOP MAPS, AS-BUILT DRAWINGS, AND AS-BUILT VALVE FROM EXISTING AVAILABLE RECORDS, AND THEIR ACCURACY IS NOT GUARANTEED.

3. CALL THE INSPECTION AND ENFORCEMENT UNIT AT 216-644-2342 TO SCHEDULE. A RECONSTRUCTION MEETING AT LEAST 1 WEEK PRIOR TO STARTING CONSTRUCTION. THE OPERATION OF ANY VALVE ON ALTERATION OF ANY PART OF THE WATER SYSTEM BY CONTRACTORS OR THEIR EMPLOYEES IS PROHIBITED WITHOUT THE SUPERVISION OF THE CLEVELAND DIVISION OF WATER INSPECTOR. SEE ALSO NOTE 20 REGARDING ADDITIONAL ADVANCE NOTIFICATION REQUIRED IN AREAS SUBJECT TO CONTINUED LEAD SERVICE CONNECTION (ALL AREAS INSTALLED PRIOR TO 1954).

4. PRIOR TO REQUESTING CHLORINATION, THE CONTRACTOR SHALL SUPPLY THE CLEVELAND WATER INSPECTOR WITH REGIME DRAWINGS

CLEVELAND WATER NOTES FOR WATER MAIN INSTALLATION AND/OR REPLACEMENT

SHOWINGS CHANGES MADE FROM THE APPROVED DESIGN DRAWINGS AND ACTUAL MEASUREMENTS. CHLORINATION SHALL NOT OCCUR BEFORE THESE DRAWINGS ARE SUBMITTED.

5. FOR THE PURPOSES OF CHLORINATION AND BACTERIOLOGICAL TESTING OF THE WATER MAINS THE CONTRACTOR SHALL USE AND INSTALL, AT EACH OF THE CHLORINATION LOCATIONS SHOWN AND AT OTHER LOCATIONS DETERMINED BY CLEVELAND WATER, RUBBING / SAMPLING TAP SIZES ARE TO BE DETERMINED CLEVELAND WATER. CHLORINATION FITS SHALL BE 5/8 IN. (100" SQUARE AND ARE TO MEET OSHA STANDARDS. NO CUSTOMER TAPS SHALL BE INSTALLED PRIOR TO CHLORINATION.

6. A TWO YEAR WARRANTY, COMMENCING FROM THE DATE OF ACCEPTANCE OF THE FINAL CHLORINATION OF THE WATER MAIN INSTALLATION SHALL BE PROVIDED BY THE BUILDER/DEVELOPER AND/OR CONTRACTOR FOR ALL WATER MAINS AND SERVICE CONNECTION WORK PERFORMED BY THE CONTRACTOR, INCLUDING TAPS IF PERFORMED. SHOULD ANY LEAKS OCCUR AND REPAIRS BE REQUIRED DUE TO DEFECTIVE MATERIAL OR POOR WORKMANSHIP, A LETTER INDICATING THE COMMENCEMENT DATE AND END DATE OF THE WARRANTY SHALL BE FOR A DURATION OF TWO (2) HOURS WITH THE PRESSURE BEING MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE. SHOULD THE PRESSURE TEST FAIL THE CONTRACTOR SHALL FIND AND CORRECT THE DEFICIENCIES TO THE SATISFACTION OF CLEVELAND WATER AND REPEAT THE TWO (2) HOUR PRESSURE TEST.

7. USE BACKFILL MATERIAL AS SPECIFIED AND COMPACT SUFFICIENT IN THOSE AREAS WHERE EXISTING MAINS AND WATER SERVICE CONNECTIONS ARE EXPOSED (SEE CLEVELAND WATER STANDARD DETAIL STD 601)

8. ALL MATERIALS, INCLUDING BUT NOT LIMITED TO WATER MAINS, FIRE HYDRANTS, APPURTENANCES SHALL BE ENCASED WITH V. WATER APPURTENANCES, SHALL BE NEW AND UNUSED AND SHALL CONFORM TO THE MOST CURRENT CLEVELAND WATER SPECIFICATIONS. ALL MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH CLEVELAND WATER'S STANDARDS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING WATER MAINS AND APPURTENANCES THEREOF WHEN CONSTRUCTING OR CONNECTING THE NEW WATER MAIN. THIS SHALL INCLUDE LEAKED JOINTS IN EXISTING FITNESS WHICH MAY REQUIRE REPLACEMENT FITTINGS AT THE DISCRETION OF THE INSPECTOR IF IT IS DETERMINED THEY WERE DISTURBED, ALL REPAIRS TO DAMAGED EXISTING FACILITIES SHALL BE MADE BY THE CONTRACTOR, AT THE PROJECT'S EXPENSE. TO THE SATISFACTION OF CLEVELAND WATER.

10. ALL HYDROSTATIC PRESSURE TESTS SHALL BE DONE BY THE CONTRACTOR IN THE PRESENCE OF THE CLEVELAND WATER INSPECTOR. THE HYDROSTATIC TEST PRESSURE SHALL BE 75 PSI ABOVE THE STATIC PRESSURE PREVAILING AT THE SITE, BUT IN NO CASE LESS THAN 150 PSI. THE PRESSURE TEST SHALL BE FOR A DURATION OF TWO (2) HOURS WITH THE PRESSURE BEING MAINTAINED WITHIN 5 PSI OF THE REQUIRED TEST PRESSURE. SHOULD THE PRESSURE TEST FAIL THE CONTRACTOR SHALL FIND AND CORRECT THE DEFICIENCIES TO THE SATISFACTION OF CLEVELAND WATER AND REPEAT THE TWO (2) HOUR PRESSURE TEST.

WATER MAINS:

13. ALL PIPE, UNLESS OTHERWISE APPROVED BY CLEVELAND WATER, SHALL BE DUCTILE IRON, MINIMUM CLASS 52, CEMENT LINED HAVING FUSION JOINTS. ALL PIPE SHALL BE PROTECTED BY RUBBER RING GASKET AND INSTALLED AS PER THE MOST CURRENT REVISION OF AWWA C600.

14. ALL FITTINGS, UNLESS OTHERWISE CALLED FOR, SHALL BE APPROVED DUCTILE IRON, CLASS 52A, CEMENT LINED OR DUCTON BORED STEEL. COUPLER, ALL FITTINGS AND PIPE CONNECTED TO

FITNESS SHALL BE RESTRAINED USING A "RETIRED" MECHANICAL JOINT CONFORMING TO THE MATERIAL AND PERFORMANCE REQUIREMENTS OF ANSI/AWWA C-115/A21.11B AND ANSI/AWWA C-115/A21.11, OR COMPACT FITNESS IN ACCORDANCE WITH ANSI/AWWA C-155/A21.53, EXCEPT FOR ANCHOR TEEL, REDUCERS OR OTHER SPECIAL CIRCUMSTANCES WHEN BY CLEVELAND WATER, ALL FITTINGS ARE TO HAVE BELL ENDS.

15. ALL BOLTS AND NUTS ON ALL "RETIRED" MECHANICAL JOINTS SHALL HAVE FELD APPLIED ONE (1) COAT OF AUTOMATIC PAINTING.

16. WHERE SHOWN ON THE PLANS, OR WHEN OTHERWISE CALLED FOR, PIPE AND FITTINGS SHALL HAVE AN APPROVED "TYPE C" OR "TYPE B" BOLLERS RESTRAINED PUSH-ON JOINTS TO THE UNITS SHOWN ON THE DRAWINGS.

17. AT THE END OF EACH WORKDAY, THE CONTRACTOR SHALL PUSH ALL OPEN PIPE ENDS WITH WATER TIGHT PLUGS AS PER THE "PREVENTIVE" AND "CORRECTIVE" MEASURES DURING CONSTRUCTION" SECTION OF THE MOST CURRENT REVISION OF AWWA C-551 AS TO PREVENT THE INFILTRATION OR INTERFERENCE OF ANY FOREIGN OBJECTS OR MATERIALS. DATE STAMPED DIGITAL PHOTOS SHALL BE PROVIDED FOR EACH WORKDAY DEMONSTRATING THAT PROPER AWWA C-551 METHODS WERE USED TO PLUG ALL OPEN WATER MAIN ENDS. EACH PHOTO SHALL CLEARLY IDENTIFY THE STATION AT WHICH THE PIPE IS PLUGGED. THE STATIONING SHALL BE SHOWN BY THE USE OF A STATION MARKER PLACED AT THE PLUGGED PIPE END.

VALVES

19. ALL VALVES SHALL BE AN APPROVED MODEL. EXCEPT SEATED GATE VALVES AS PER THE MOST CURRENT VERSION OF AWWA C509 OR C515. VALVE OPERATING NUTS SHALL BE STAMPED (1 1/2" TO 2") FROM TOP TO BOTTOM. VALVES MORE THAN 10 YEARS OLD AT THE IN POINTS TO EXISTING MAINS SHALL BE REPLACED AT THE PROJECT'S EXPENSE UNLESS OTHERWISE DIRECTED.

LEAD SERVICE CONNECTIONS:

20. LEAD SERVICES: A MINIMUM OF 45 DAYS BEFORE THE PRECONSTRUCTION MEETING, CWD SHALL PROVIDE A NOTICE TO ALL AFFECTED CUSTOMERS THAT THEIR WATER SERVICE LINE WILL BE DISTURBED. A MINIMUM OF 75 DAYS PRIOR TO THE PRECONSTRUCTION MEETING, THE CONTRACTOR OR ENGINEER SHALL PROVIDE CWD (AND THE LOCAL MUNICIPALITY OF OUTSIDE THE CITY OF CLEVELAND) A LIST OF ALL CUSTOMER ADDRESSES THAT WILL BE AFFECTED BY THE WATER MAIN REPLACEMENT PROJECT. FAILURE TO PROVIDE A LIST OF CUSTOMER ADDRESSES IN A TIMELY MANNER MAY RESULT IN PROJECT DELAYS.

ANY CITY-OWNED LEAD SERVICE LINE ENCOUNTERED SHALL BE REPLACED WITH TYPE C DUCTILE IRON. IF ENCOUNTERED, THE CONTRACTOR SHALL PROVIDE A NOTICE TO ALL AFFECTED CUSTOMERS THAT THEIR WATER SERVICE LINE WILL BE DISTURBED. A MINIMUM OF 75 DAYS PRIOR TO THE PRECONSTRUCTION MEETING, THE CONTRACTOR OR ENGINEER SHALL PROVIDE CWD (AND THE LOCAL MUNICIPALITY OF OUTSIDE THE CITY OF CLEVELAND) A LIST OF ALL CUSTOMER ADDRESSES THAT WILL BE AFFECTED BY THE WATER MAIN REPLACEMENT PROJECT. FAILURE TO PROVIDE A LIST OF CUSTOMER ADDRESSES IN A TIMELY MANNER MAY RESULT IN PROJECT DELAYS.

AVAILABLE, CALL PATTON HALL AT (216) 664-2484, EXT. 73500 OR (216) 973-2721. CUSTOMERS WITH A CUSTOMER-OWNED LEAD SERVICE LINE SHALL NOT BE RECONNECTED TO THE NEW WATER MAIN WITHOUT EXPRESS WRITTEN APPROVAL FROM PATTON HALL, OR HIS APPROVED REPRESENTATIVE AT CWD.

AS PART OF THIS CONTRACT, THE CONTRACTOR SHALL OBTAIN EACH CUSTOMER TO REPLACE THE CUSTOMER'S HOUSE. IF THE REPLACEMENT IS NOT COVERED UNDER THE BID ITEMS, THE CONTRACTOR SHALL PROVIDE CWD (AND THE LOCAL MUNICIPALITY OF OUTSIDE THE CITY OF CLEVELAND) WITH A CHANGE ORDER AND COST ESTIMATES FOR THE CUSTOMER-OWNED LEAD SERVICE LINE REPLACEMENT. UPON APPROVAL FROM CWD (AND THE LOCAL MUNICIPALITY OF OUTSIDE THE CITY OF CLEVELAND), THE CONTRACTOR SHALL FURNISH A FORMAL PROPOSAL FOR THE REPLACEMENT OF THE CUSTOMER-OWNED LEAD SERVICE LINE, AS STATED ABOVE. CUSTOMERS WITH CUSTOMER-OWNED LEAD SERVICE LINES SHALL NOT BE RECONNECTED TO THE NEW WATER MAIN WITHOUT EXPRESS WRITTEN APPROVAL FROM PATTON HALL, OR HIS APPROVED REPRESENTATIVE AT CWD.

IN THE EVENT THAT A CWD WATERBORO QUANTITY IS SUCH THAT A CUSTOMER-OWNED LEAD SERVICE LINE IS NOT REPLACED, CWD SHALL SUPPLY THE CONTRACTOR WITH LEAD FITTINGS AND FITTERS THAT THE CONTRACTOR SHALL DISTRIBUTE TO EACH RESIDENCE WITHIN THE PROJECT AREA, INCLUDING TO ALL UNITS OF MULTIFAMILY HOUSING. BUILDING OWNERS SHALL BE FOUR-THROUGH EITHER TYPE LEAD FITTERS THAT ARE NSF/ANSI 55 CERTIFIED TO REMOVE

DATE: 04/26/2018 BY: PJA STD-013 (PAGE 1 OF 12)

CLEVELAND WATER NOTES FOR WATER MAIN INSTALLATION AND/OR REPLACEMENT

GENERAL SERVICE CONNECTIONS:

22. AS PART OF THE AS-BUILT SUBMISSION IN NOTE 12, THE CONTRACTOR SHALL PROVIDE A TABLE SHOWING ALL EXISTING CONNECTIONS, IDENTIFIED BY CLEVELAND WATER CONNECTION NUMBER, SHOWING THE FOUND CONNECTION MATERIAL FOR BOTH THE OUTSIDE AND OWNERSIDE CONNECTION, AS WELL AS THE NEW CONNECTION MATERIAL. FOR ALL CONNECTIONS REPAIRED, THE TABLE SHALL ALSO NOTE ANY REVISED CONNECTION MEASUREMENTS AND SIZES. A SAMPLE TABLE WILL BE PROVIDED. THE SUBMISSION SHALL BE IN MICROSOFT EXCEL FORMAT. CLEVELAND WATER SHALL REQUIRE THE DELIVERY AND ACCEPTANCE OF THIS TABLE BEFORE THE PRESSURE TEST AND CHLORINATION / DISINFECTION OF THE MAIN WILL BE INITIATED.

23. NEW WATER SERVICE CONNECTIONS LOCATIONS SHOWN ON THESE DRAWINGS ARE FOR REFERENCE ONLY AND ARE NOT PART OF THE WATER MAIN APPROVAL. THE SPECIFIC LOCATION FOR EACH CONNECTION WILL BE DETERMINED BY CLEVELAND WATER PRIOR TO THE TAPS BEING INSTALLED. ALL PERMITS FOR TAPS AND METERS FOR PARCELS ASSOCIATED WITH THE WATER MAINS INSTALLED ON THIS PROJECT ARE TO BE OBTAINED BY THE LAND OWNER OR SAID IMPROVEMENT PLANS. IT IS THE LAND OWNERS RESPONSIBILITY TO ARRANGE FOR OBTAINING PERMITS FOR ALL WATER SERVICE CONNECTIONS BEFORE ANY SERVICE CONNECTION WORK MAY PROCEED. ALL FEES CAN BE OBTAINED FROM THE CLEVELAND WATER PERMITS AND SALES SECTION AT 216-644-3330 PRIOR TO OR 216-644-2444 EXT. 2229.

ACCOUNTS SHALL BE INITIATED IN THE LAND OWNERS NAME AS PART OF THE PERMITTING PROCESS. ALL RESPONSIBILITIES ASSOCIATED WITH EACH WATER SERVICE, INCLUDING, THE OWNER SOE INSPECTIONS, METER SET/MAETER PIPING INSPECTION AND THE METER INSTALLATION SHALL BE THE RESPONSIBILITY OF SAID OWNER. METERS INSTALLATIONS WILL NOT BE AUTHORIZED TO BE INSTALLED UNTIL ALL INSPECTIONS HAVE BEEN COMPLETED. ESTIMATED BILLS MAY ENOLVE IF A HOME IS IDENTIFIED AS HAVING WATER SERVICE BUT NO METER HAS BEEN INSTALLED. IF NEW OWNERS, ONEY PARCELS ARE SOLD OFF AND TRANSFER TITLE, DO NOT CONTACT CLEVELAND WATER TO ESTABLISH ACCOUNTS IN THEIR NAME. ACCOUNTS AND THEIR ASSOCIATED BILLS WILL REMAIN IN THE NAME OF OUR LAST OWNER OF RECORD WHICH MAY BE THE DEVELOPER OR BUILDER. IT IS THE RESPONSIBILITY OF THE NEW OWNER TO TRANSFER ACCOUNTS INTO THEIR NAME WHEN THE PROPERTIES LEGALLY TRANSFER. UPON TRANSFER OF PROPERTY, SELLER OF PROPERTY MUST COMMUNICATE ALL UNCOMPLETED PORTIONS OF THE REFERENCED RESPONSIBILITIES TO THE NEW OWNER.

24. ONE HOUR SERVICE CONNECTIONS SHALL BE PERMITTED TO SERVICE NEW HOMES (AS SHOWN ON APPROVED WATER MAIN EXTENSION PLANS) BASED ON THE FOLLOWING CRITERIA:

- PEAK FLOW DEMANDS DO NOT EXCEED 25 GPM FOR AN INDIVIDUAL HOME/UNIT.

INCLUSIVE OF ALL USAGE (DOMESTIC AND/OR IRRIGATION).

- LENGTH OF ONE HOUR CONNECTION DOES NOT EXCEED 75 FEET AS MEASURED FROM THE MAIN TO THE POINT OF ENTRY INTO THE PROPOSED HOME/UNIT.


- THE CONNECTIONS DO NOT INCLUDE LIMITED AREA OR NEPA 130 SPRINKLER SYSTEMS.

ANY SERVICE REQUESTS DIFFERING FROM THE STATED CRITERIA SHALL REQUIRE THE SUBMITTAL OF A COMPLETE WATER SERVICE APPLICATION FOR EACH WATER SERVICE REQUESTED.

25. ALL CURB VALVE BOXES & METER VALVES WILL BE INSTALLED IN GRASS AREAS WHEN POSSIBLE. CURB VALVES SHALL BE PLACED APPROXIMATELY 2 FEET OFF THE CURB. CURB VALVES IN LANDSCAPES SHALL BE PLACED APPROXIMATELY 3 FEET OFF THE WATER MAIN. IF VALVE BOXES OR METER VALVES ARE INSTALLED OUTSIDE OF A DESIGNATED RIGHT OF WAY OR EASEMENT FOR THE PURPOSES OF WATER SUPPLY, A STANDARD CLEVELAND EASEMENT FOR A VALVE SHALL BE PROVIDED.

EMERGENCIES:

DATE: 04/26/2018 BY: PJA STD-013 (PAGE 2 OF 12)

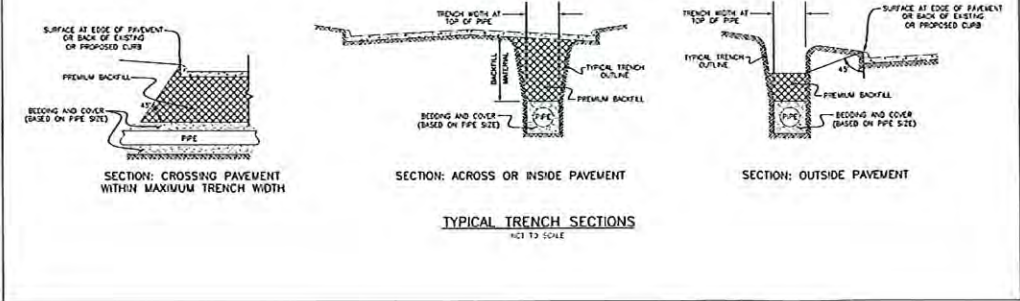


O.U.P.S. REFERENCE  
A-238-401-053

2 WORKING DAYS BEFORE YOU DIG CALL 8-1-1  
OHIO UTILITIES PROTECTION SERVICE NON-MEMBERS MUST BE CALLED DIRECT

EXISTING UNDERGROUND UTILITIES NOTE:  
THE SIZE AND LOCATION, BOTH HORIZONTAL AND VERTICAL OF THE UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED HEREON. VERIFICATION BY FIELD OBSERVATION HAS BEEN CONDUCTED, WHERE PRACTICAL. HOWEVER, POLARIS ENGINEERING & SURVEYING, INC. DOES NOT GUARANTEE THE COMPLETENESS NOR ACCURACY THEREOF.

NOTE: THIS SURVEY SUBJECT TO CHANGE UPON RECEIPT OF ANY ADDITIONAL AVAILABLE UNDERGROUND UTILITY INFORMATION.



REV. No.		DATE	BY		STATE OF OHIO KEVIN HOFFMAN 741831 REGISTERED PROFESSIONAL ENGINEER	DATE: 2/6/23 DRAWN: NMO SCALE: HOR. N/A VERT. N/A FOLDER: DWG/Proj. Engineering FILENAME: 22057 T.N.D. TAB: 02-General Notes BNDY. CHK: MPS BASE. CHK: KTH

WOODLAND BEND  
SUBDIVISION

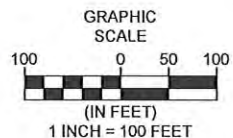
CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

POLARIS ENGINEERING & SURVEYING, INC.  
34600 CHARDON ROAD - SUITE D  
WILLOUGHBY HILLS, OHIO 44094  
(440) 944-4433 (440) 944-3722 (Fax)  
www.polaris-es.com

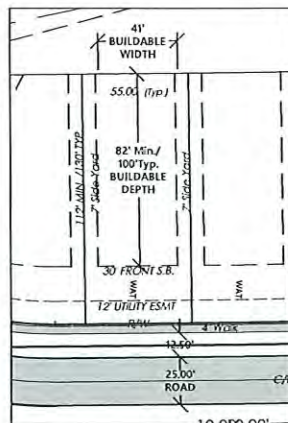
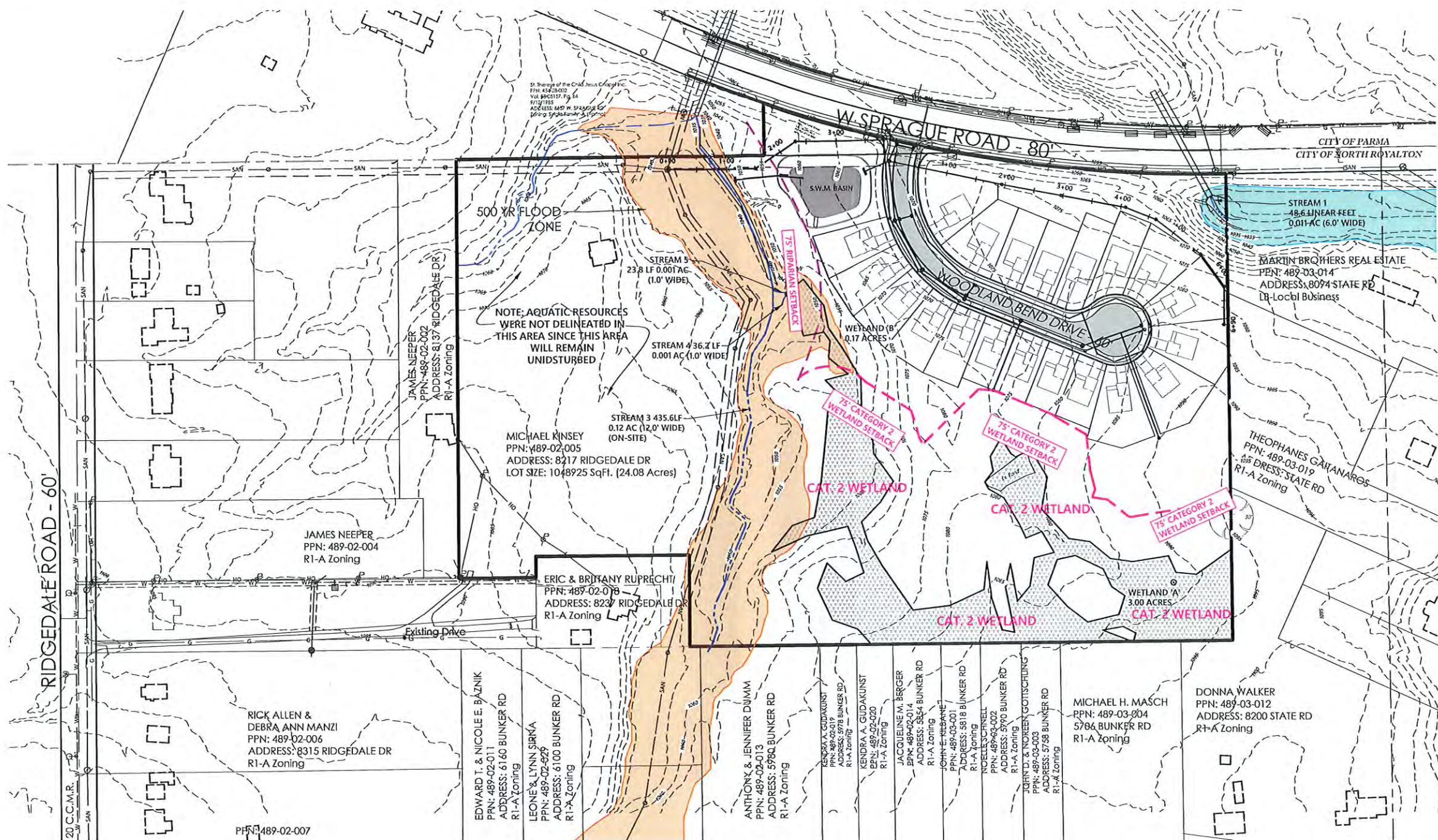
GENERAL NOTES

CONTRACT No.	
22057	
SHEET	OF
02	17



[illegible]

DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=100' VERT. 1"=100'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 03-Overall Site  
BNDY. CHK: MPS  
BASE. CHK: KTH



LOT DETAIL  
(1"=50')  
55' x 112' (Typ.)

CURRENT ZONING: R-1A  
 PROPOSED ZONING: R-1A CLUSTER W/ CONDITIONAL USE  
 PROPOSED SITE AREA = 23.53± ACRES IN N. ROYALTON (AFTER 2.14 AC. SPLIT)  
0.29± ACRES IN PARMA  
 23.82 ACRES

PROPOSED DWELLINGS: 20 CLUSTER UNITS

<u>CLUSTER LAND PLANNING CRITERIA (1270.33(d))</u>		
	<u>MINIMUM</u>	<u>PROVIDED</u>
DEVELOPMENT AREA	10 AC.	23.82 AC.
DENSITY	1.9 UNITS/AC.	0.88 UNITS/AC.
OPEN SPACE	50%	79% (18.82 AC.)
FRONT YARD	30' (FROM E.O.P.)	47.5' FROM E.O.P. (30' FROM R/W)
REAR YARD	50' FROM DEVELOPMENT PL	50' FROM DEVELOPMENT PL
PROPERTY LINE		
SIDE YARDS		
BTWN 1-STORY	10'	14'
BTWN 1&2 STORY	12'	14'
BTWN 2-STORY	14'	14'
BTWN SIDE & REAR WALL	35'	N/A
BTWN SIDE & DEVELOP. PL	50'	50'

MISC. LOT REQUIREMENTS  
1 CANOPY TREE TO BE PROVIDED PER LOT

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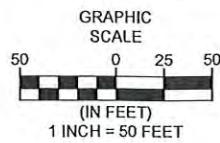
# OVERALL SITE PLAN

CONTRACT No.

22057

SHEET	OF
03	17





PARCEL CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING	TANGENT
C29	449.27'	2331.88'	11°02'20"	448.58'	S85°21'46"E	225.33'

**TOPOGRAPHIC CERTIFICATION:**

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS TOPOGRAPHY, INDICATED BY 1' CONTOURS, AND ELEVATIONS SHOWN HEREON, REPRESENT AN ACTUAL FIELD SURVEY MADE UNDER MY SUPERVISION ON THE 19TH DAY OF JANUARY, 2023, AND THAT THE ELEVATIONS WERE TAKEN AT APPROPRIATE INTERVALS AND THAT AS OF THAT DATE THEY EXISTED AS INDICATED HEREON. VERTICAL DATUM IS BASED ON NAVD83. TOPOGRAPHIC DATA BEYOND THE IMMEDIATE PROJECT AREA IS PER CUYAHOGA COUNTY GIS INFORMATION.

*Richard A. Thompson Jr.*

RICHARD A. THOMPSON, JR., P.S. #7363



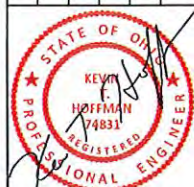
**WETLAND LEGEND**

	WETLANDS AVOIDED 2.72 AC.
	WETLAND IMPACT 0.45 AC.
	STREAM IMPACT (690.8 LF = 0.032 AC.)
	75' CAT II WETLAND SETBACK & STREAM RIPARIAN SETBACK

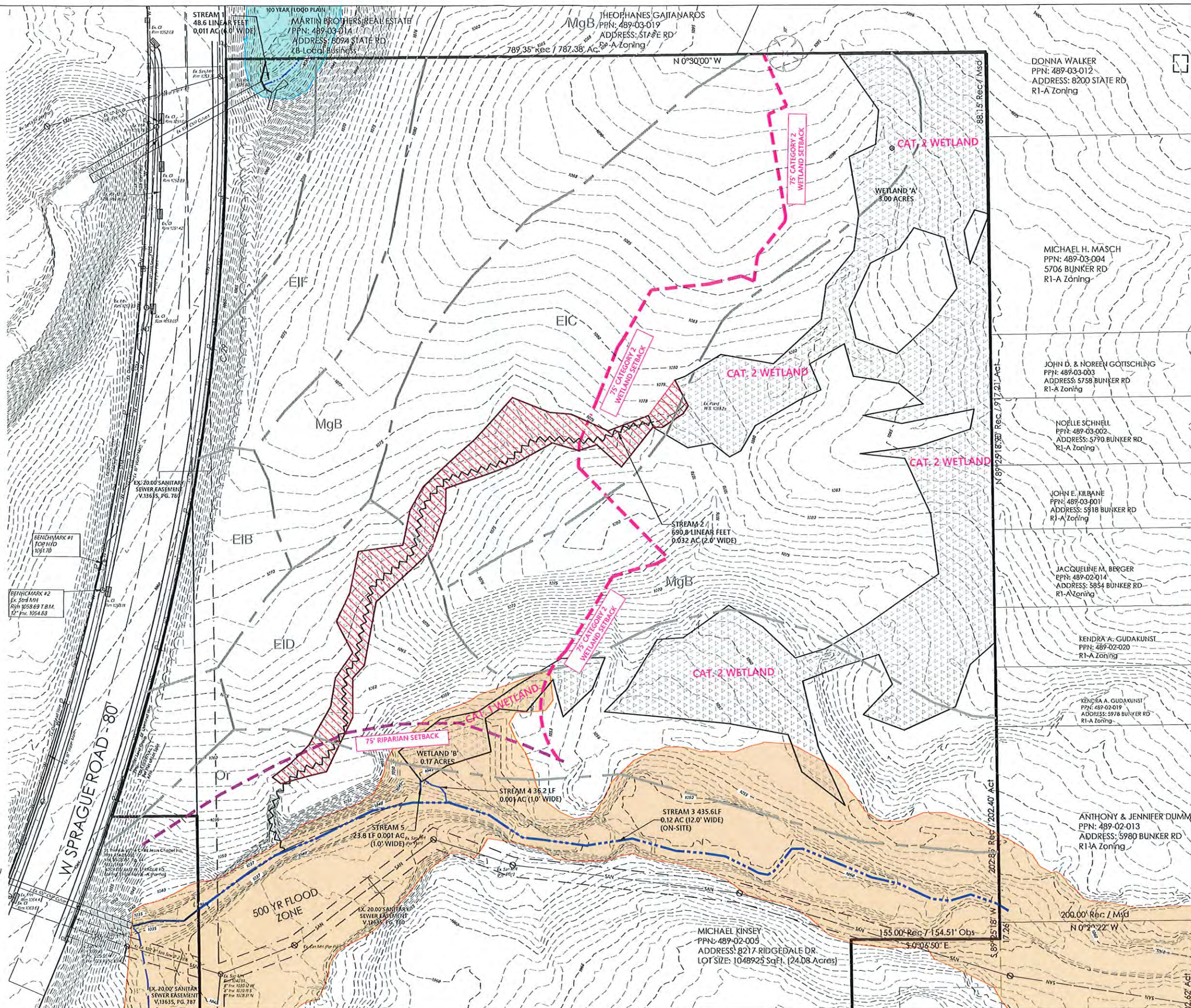
NOTE: STREAMS AND WETLANDS SHOWN ARE AS PER PRELIMINARY JURISDICTIONAL DETERMINATION FOR DEPARTMENT OF ARMY APPLICATION NO. 2022-00929 DATED 10/26/2022 AND AS DELINEATED BY HZW ENVIRONMENTAL CONSULTANTS.

**FLOODPLAIN LEGEND**

	100 YEAR FLOODPLAIN (PER F.I.R.M. 3903SC0301E, EIT, 12/3/2010)
	500 YEAR FLOODPLAIN (PER F.I.R.M. 3903SC0301E, EIT, 12/3/2010)



DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=50' VERT. 1"=50'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 04-Existing Conditions  
BNDY. CHK: MPS  
BASE. CHK: KTH



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(440) 944-4433 (440) 944-3722 (Fax)  
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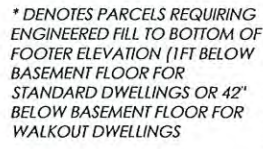
**EXISTING CONDITIONS**

CONTRACT No.

22057

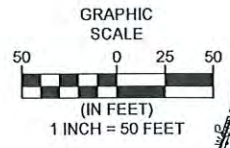
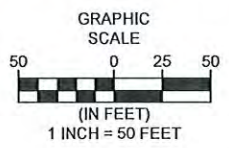
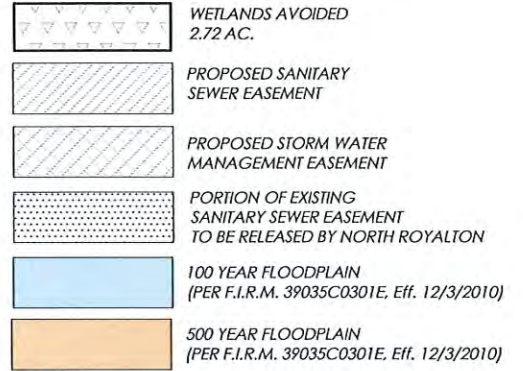
SHEET	OF
04	17



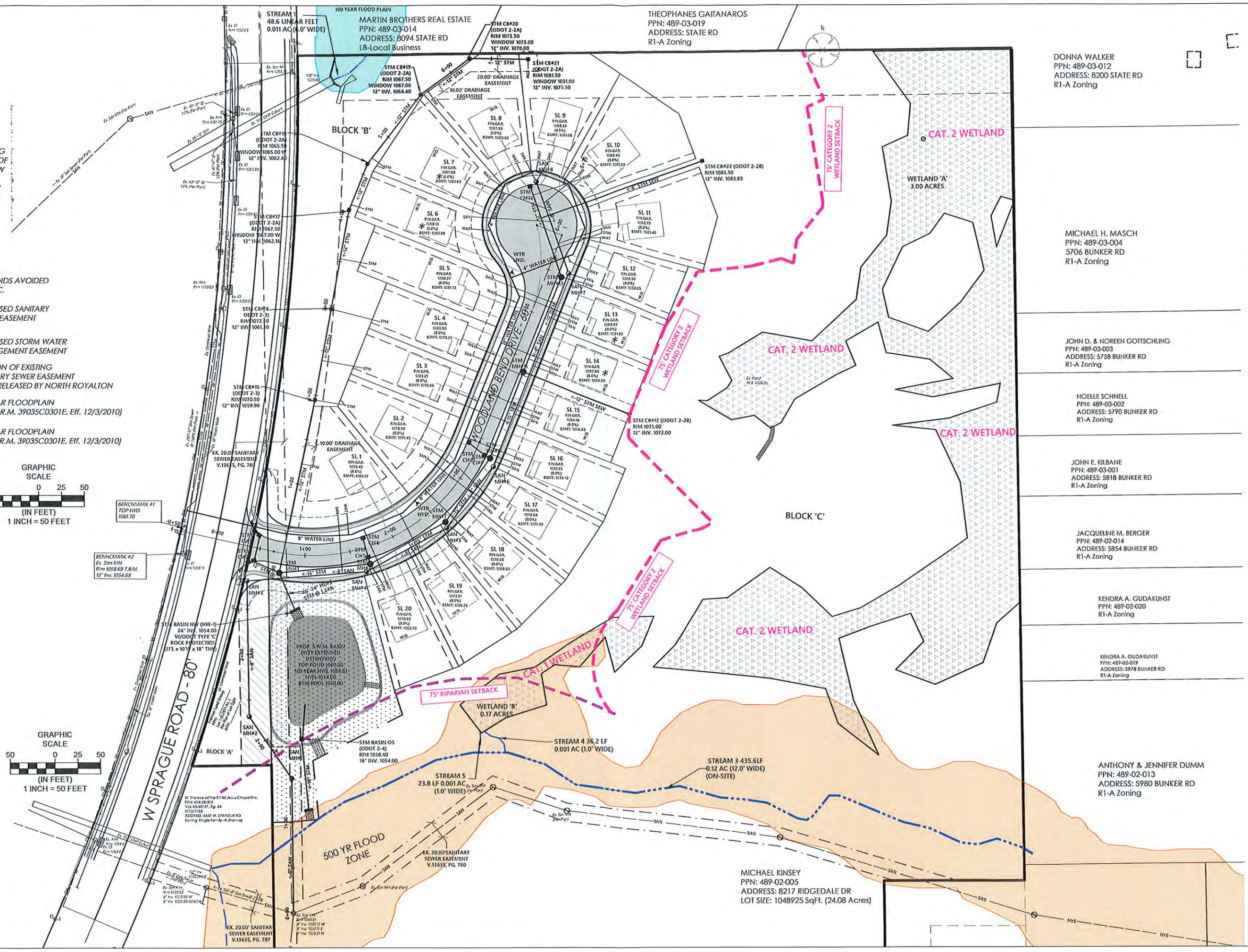


\* DENOTES PARCELS REQUIRING ENGINEERED FILL TO BOTTOM OF FOOTER ELEVATION (1FT BELOW BASEMENT FLOOR FOR STANDARD DWELLINGS OR 42" BELOW BASEMENT FLOOR FOR WALKOUT DWELLINGS)

HATCH LEGEND

[illegible]

DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR, 1"=50' VERT, 1"=50'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 05-Utility Plan  
BNDY. CHK: MPS  
BASE. CHK: KTH



ANTHONY & JENNIFER DUMM  
PPN: 489-02-013  
ADDRESS: 5980 BUNKER RD  
R1-A Zoning

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SUBDIVISION**

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## UTILITY PLAN

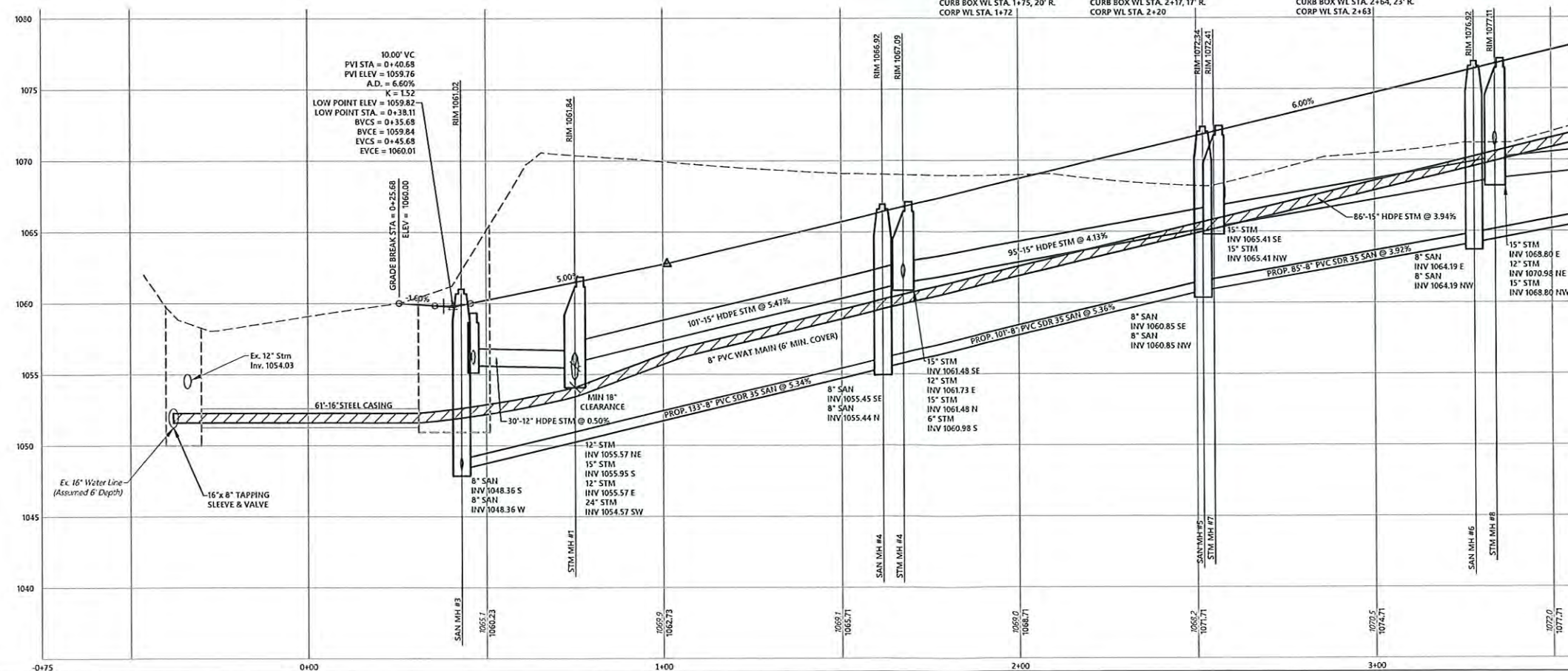
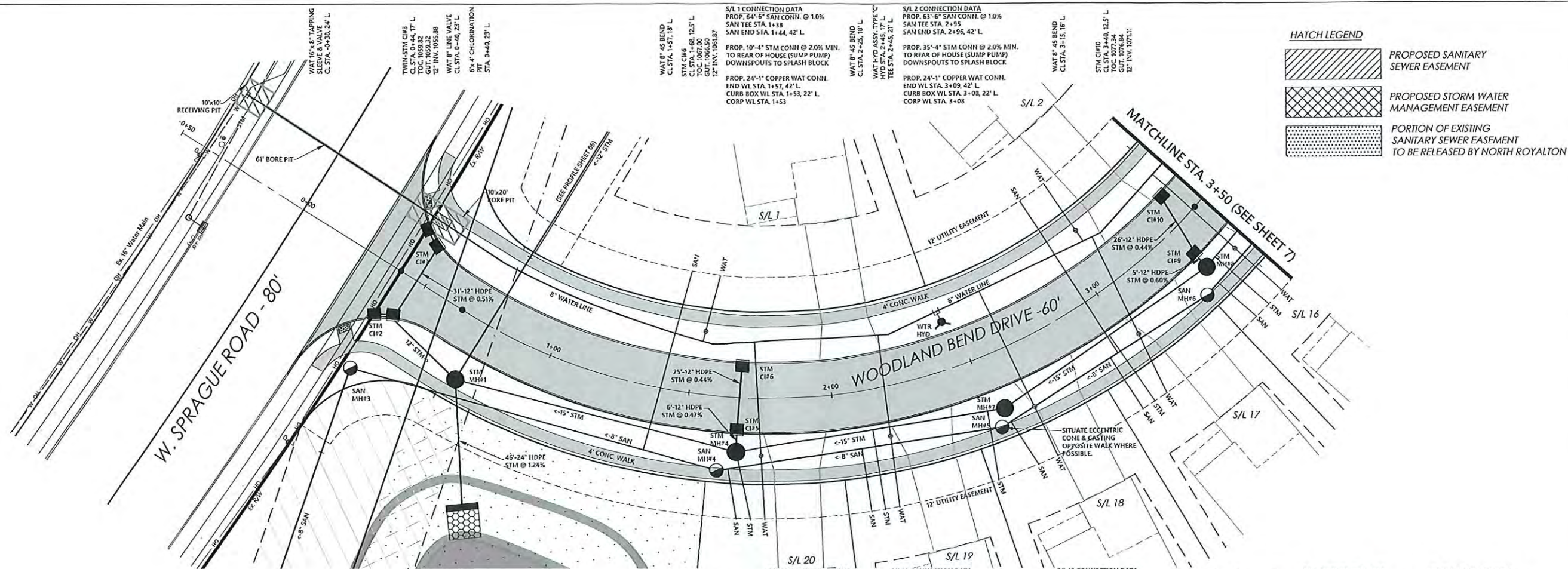
CONTRACT No.

22057

SHEET	OF
05	17

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO





DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=20' VERT. 1"=20'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 06-P&P  
BNDY. CHK: MPS  
BASE. CHK: KTH

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**PLAN & PROFILE**  
WOODLAND BEND STA. 0+00 to 3+50

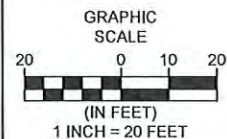
WOODLAND BEND STA. 0+00 to 3+50

CONTRACT No.

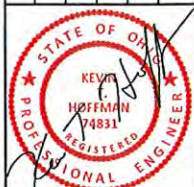
22057

SHEET	OF
06	17

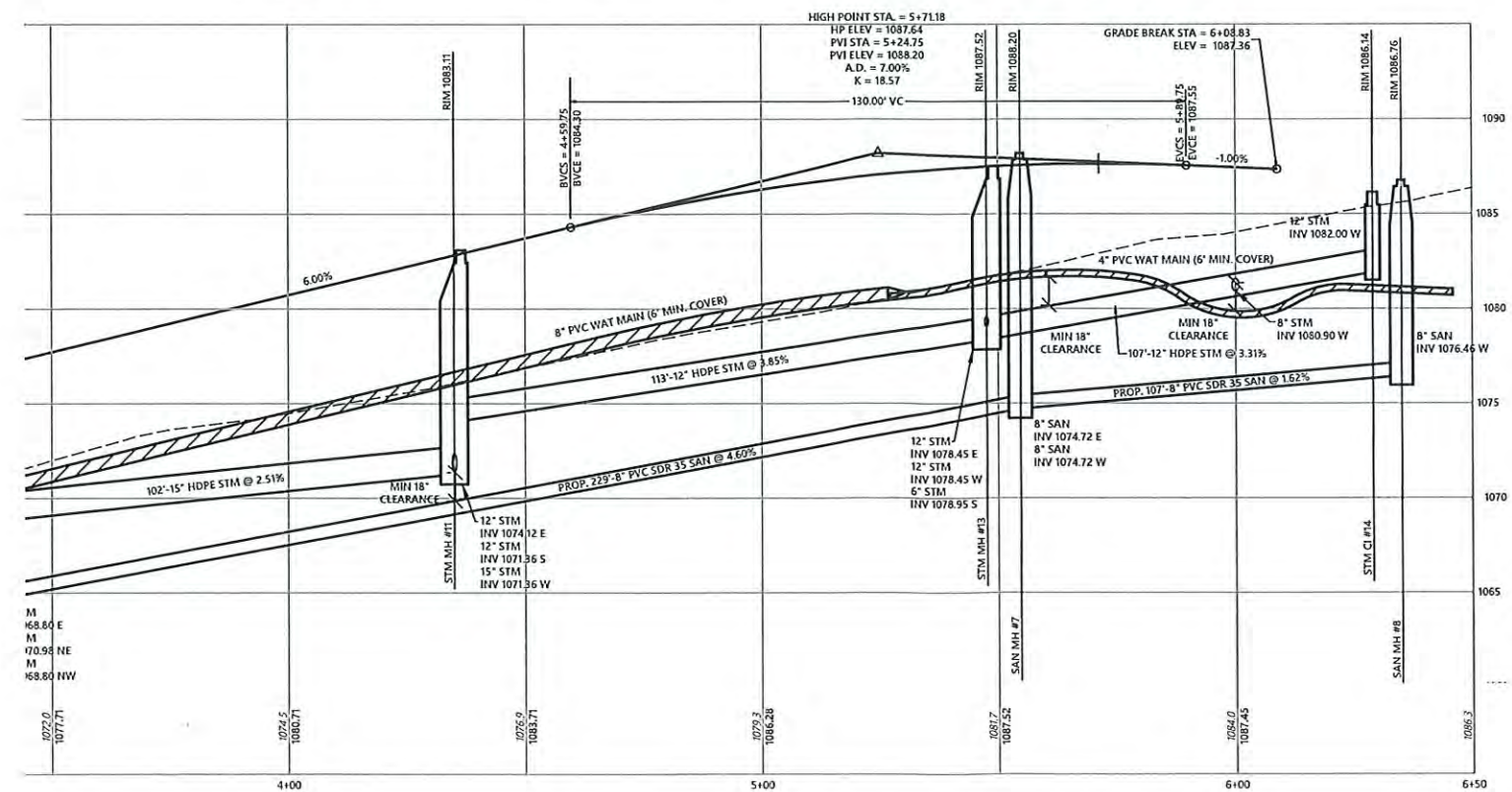
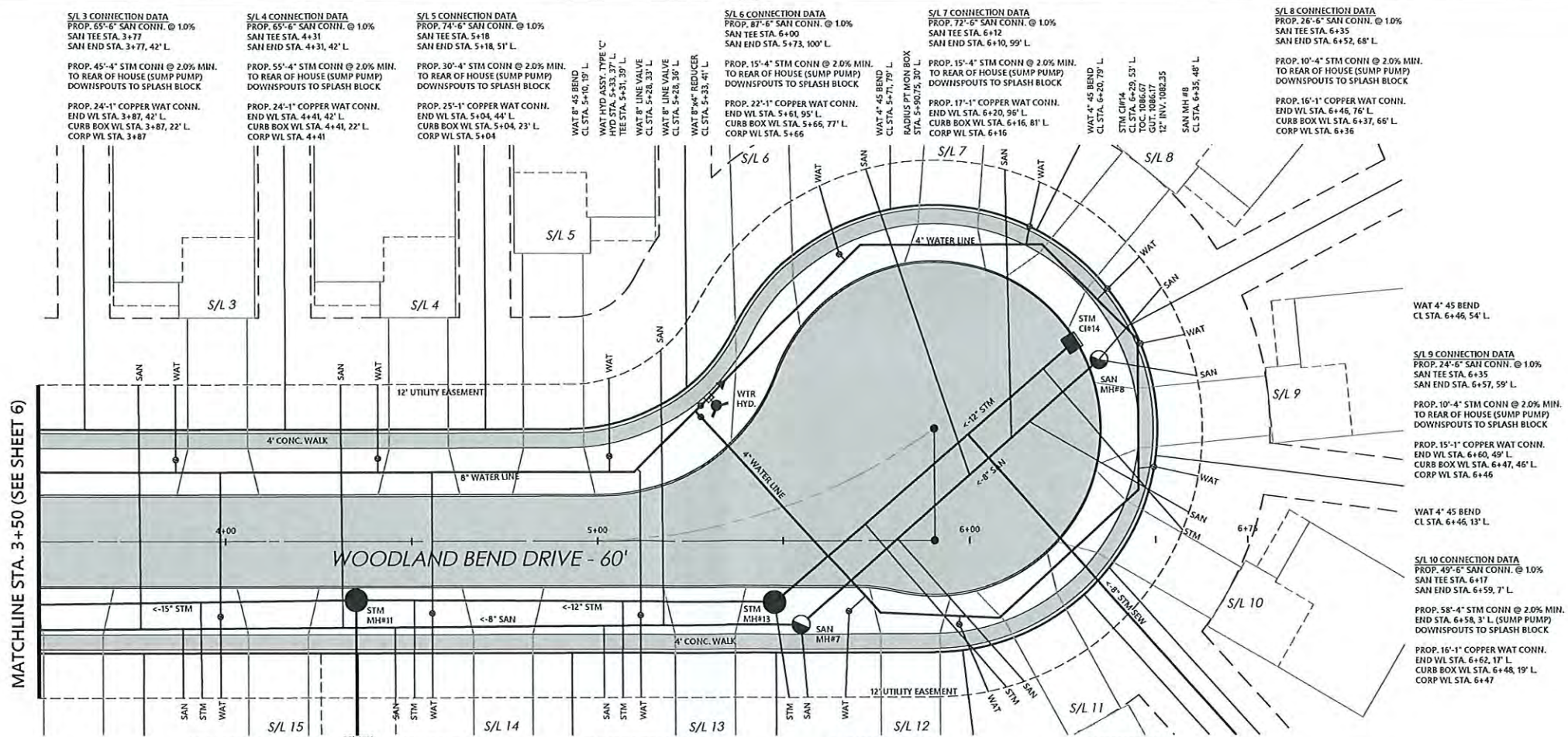




REV. No.		DATE	BY



DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=20' VERT. 1"=20'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 07-P&P  
BNDY. CHK: MPS  
BASE. CHK: KTH



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# PLAN & PROFILE

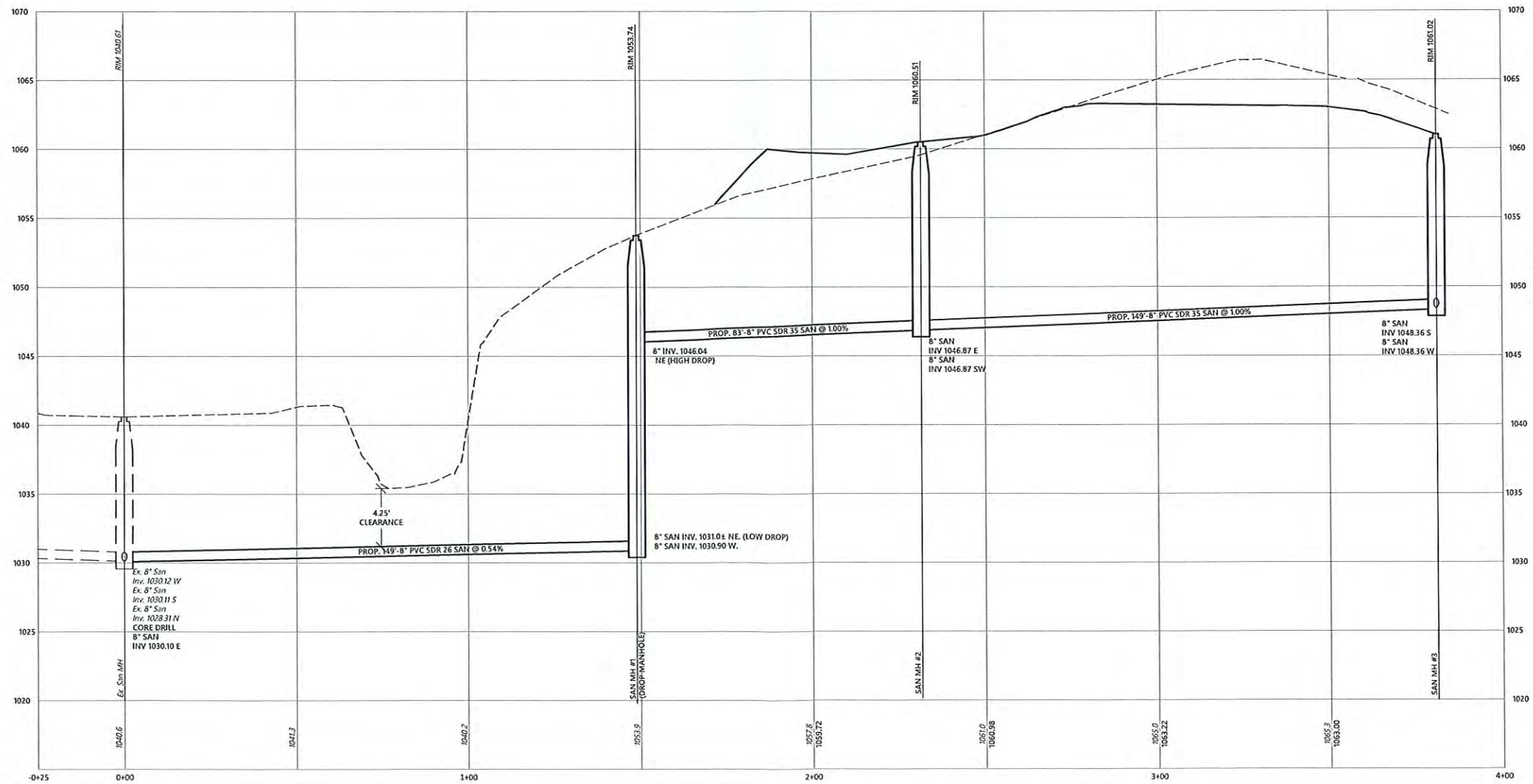
WOODLAND BEND STA. 3+50 to END

CONTRACT No.

22057

SHEET	OF
07	17





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# PLAN & PROFILE

## SANITARY SEWER

CONTRACT No.

22057

SHEET	OF
-------	----

08	17
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[illegible]

DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=20' VERT. 1"=20'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 08-Sanitary Profile  
BNDY. CHK: MPS  
BASE. CHK: KTH



Profile view of the proposed 102-inch HDPE storm sewer. The vertical axis shows elevation in feet (1045 to 1080), and the horizontal axis shows stationing (0+25 to 4+00). The profile includes the existing ground (dashed line), the proposed sewer invert (solid line), and the sewer structure (thick vertical lines). Key features include manholes at stations 0+00, 2+00, 3+00, and 4+00, and a catch basin at station 2+00. Slopes are indicated as 195'-12" HDPE STM @ 2.22%, 102'-12" HDPE STM @ 1.37%, and 111'-12" HDPE STM @ 0.78%. Invert elevations are provided for each manhole and catch basin.

Station	Structure	Invert Elevations (ft)
0+00	Manhole #1	12" STM: INV 1055.57 NE 15" STM: INV 1055.95 S 12" STM: INV 1055.57 E 24" STM: INV 1054.57 SW
2+00	Catch Basin #15	12" STM: INV 1059.90 E 12" STM: INV 1059.90 W
3+00	Manhole #16	12" STM: INV 1061.30 E 12" STM: INV 1061.30 W
4+00	Manhole #17	12" STM: INV 1062.16 E 12" STM: INV 1062.16 W

GRAPHIC SCALE

(IN FEET)  
1 INCH = 20 FEET

MATCHLINE STA. 4+25 (SEE ABOVE)

1067.7  
1066.00

1067.8  
1067.87

1069.6  
1066.00

1074.7  
1072.38

1078.9  
1076.00

1090

1085

1080

1075

1070

1065

1060

1055

5+00

6+00

7+00

7+50

55'-12" HDPE STM @ 0.44%

96'-12" HDPE STM @ 2.08%

67'-12" HDPE STM @ 0.33%

64'-12" HDPE STM @ 8.55%

12" STM  
INV 1062.40 SE  
12" STM  
INV 1062.40 W

12" STM  
INV 1064.40 SE  
12" STM  
INV 1064.40 NW

12" STM  
INV 1070.00 S  
12" STM  
INV 1070.00 NW

12" STM  
INV 1075.50 N

STM CB #18

STM CB #19

STM CB #20

STM CB #21

RIM 1065.50

RIM 1067.50

RIM 1075.50

RIM 1081.50

[illegible]

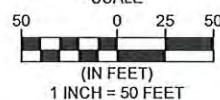
F





	WETLANDS AVOIDED 2.72 AC.
	PROPOSED SANITARY SEWER EASEMENT
	PROPOSED STORM WATER MANAGEMENT EASEMENT
	PORTION OF EXISTING SANITARY SEWER EASEMENT TO BE RELEASED BY NORTH ROYALTON
	100 YEAR FLOODPLAIN (PER F.I.R.M. 39035C0301E, Eff. 12/3/2010)
	500 YEAR FLOODPLAIN (PER F.I.R.M. 39035C0301E, Eff. 12/3/2010)

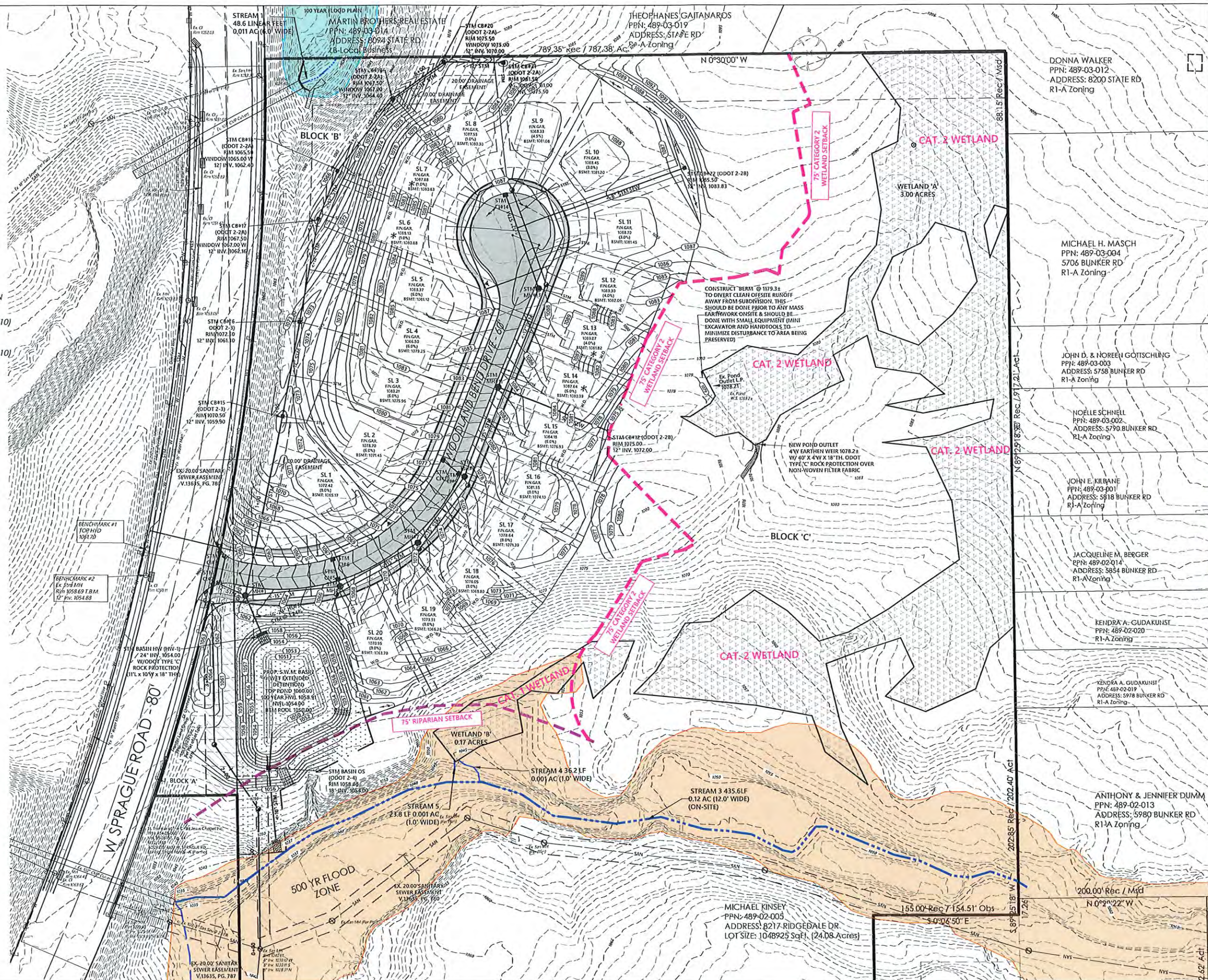
GRAPHIC  
SCALE

[illegible]

\* DENOTES PARCELS REQUIRING ENGINEERED FILL TO BOTTOM OF FOOTER ELEVATION (1FT BELOW BASEMENT FLOOR FOR STANDARD DWELLINGS OR 42" BELOW BASEMENT FLOOR FOR WALKOUT DWELLINGS)



DATE: 2/8/23 DRAWN: NMO  
SCALE: HOR. 1"=50' VERT. 1"=50'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility, SWP3, & Grading  
TAB: 10-Final Grading  
BNDY. CHK: MPS  
BASE. CHK: KTH



**WOODLAND BEND  
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CHARDON, OHIO 44024



# FINAL GRADING & S.W.M. PLAN

CONTRACT No.

22057

SHEET	OF
10	17

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

DONNA WALKER  
PPN: 489-03-012  
ADDRESS: 8200 STATE RD  
R1-A Zoning

MICHAEL H. MASCH  
PPN: 489-03-004  
5706 BUNKER RD  
R1-A Zoning

JOHN D. & NOREEN GOTTSCHLING  
PPN: 489-03-003  
ADDRESS: 5758 BUNKER RD  
R1-A Zoning

NOELLE SCHNELL  
PPN: 489-03-002  
ADDRESS: 5790 BUNKER RD  
R1-A Zoning

JOHN E. KILBANE  
PPN: 489-03-001  
ADDRESS: 5818 BUNKER RD  
R1-A Zoning

JACQUELINE M. BERGER  
PPN: 489-02-014  
ADDRESS: 5854 BUNKER RD.  
R1-A Zoning

KENDRA A. GUDAKUNST  
PPN: 489-02-020  
R1-A Zoning

KENDRA A. GUDAKUNST  
PPH: 459-02-019  
ADDRESS: 5978 BUNKER RD  
R1-A Zoning

ANTHONY & JENNIFER DUMM  
PPN: 489-02-013  
ADDRESS: 5980 BUNKER RD  
R1-A Zoning

200.00 Rec / Msd







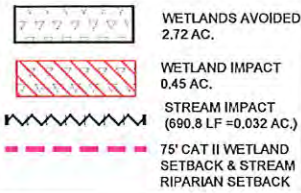
SWP3 Site Description

Previous Land Use: Vacant  
Development Type: Residential  
Total Site Acreage: 23.82 Ac.  
Total Site Disturbance: 6.25 Ac.  
Pre-Developed Impervious Area: 0 Ac. (0%)  
Pre-Developed Pervious Area: 23.82 Ac. (100%)  
Pre-Developed Curve Number: 72.4  
Post Developed Impervious Area: 2.01 Ac. (8%)  
Post Developed Pervious Area: 21.81 Ac. (92%)  
Post Developed Curve Number: 85.4  
Predominant Soil(s) & Hydraulic Group(s): Mahoning - Group D  
Ellsworth - Group C/D  
Orville - Group C/D  
Big Creek  
Cuyahoga River  
Yes, Wetlands and Streams as Shown on Plans

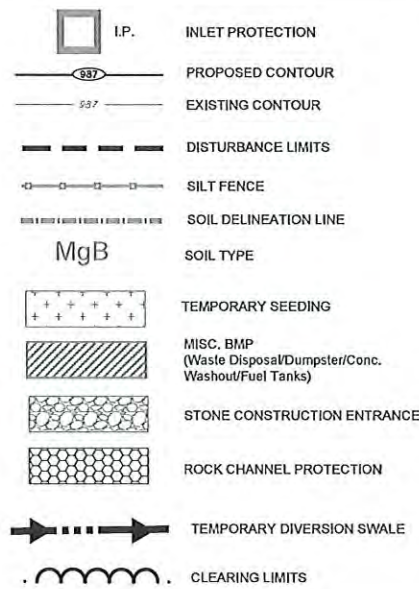
First Receiving Water Body:  
Subsequent Receiving Water Body:  
Water Resources w/in 200' of Site:

\* DENOTES PARCELS REQUIRING  
ENGINEERED FILL TO BOTTOM OF  
FOOTER ELEVATION (1FT BELOW  
BASEMENT FLOOR FOR  
STANDARD DWELLINGS OR 42"  
BELOW BASEMENT FLOOR FOR  
WALKOUT DWELLINGS

WETLAND LEGEND



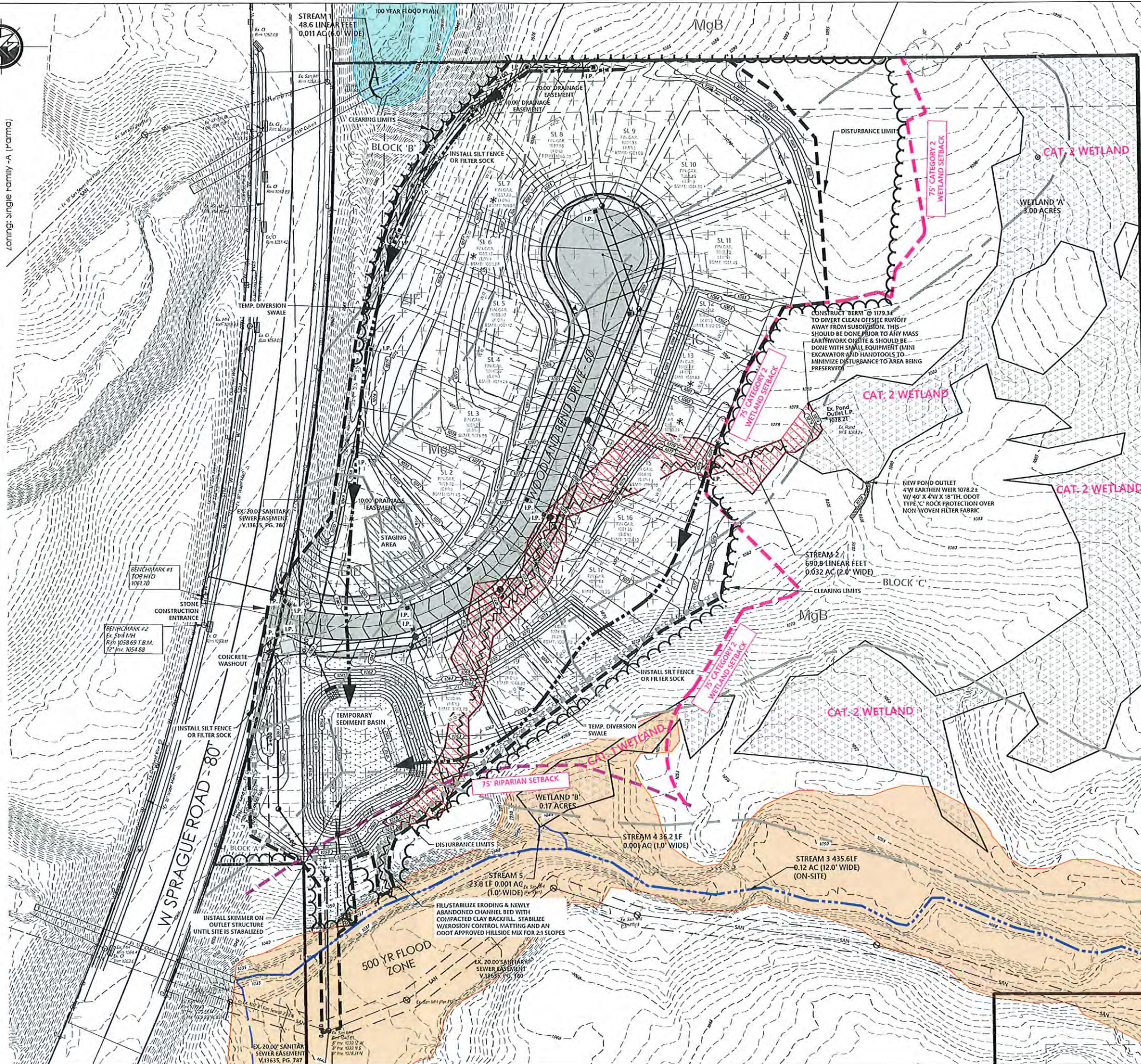
SWP3 LEGEND



HATCH LEGEND



Lotting: Single family - A (rural)



WOODLAND BEND  
SUBDIVISION

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

POLARIS ENGINEERING & SURVEYING, INC.  
34600 CHARDON ROAD - SUITE D  
WILLOUGHBY HILLS, OHIO 44094  
(440) 944-4433 (440) 944-3722 (Fax)  
www.polaris-es.com



MASS GRADING  
& SWP3 PLAN

CONTRACT No.

22057

SHEET OF

12 17



DATE: 2/6/23 DRAWN: NMO  
SCALE: HOR. 1"=50' VERT. 1"=50'  
FOLDER: DWG/Proj. Engineering  
FILENAME: Utility\_SWP3 & Grading  
TAB: 12-SWP3 Plan  
BNDRY CHK: MPS  
BASE CHK: KTH







1. Concrete wash water shall not be allowed to flow to streams, ditches, storm drains, or any other water conveyance and washout pits shall be situated a minimum of 100 (100) feet from them.
2. Field tie or other subsurface drainage structures within 10 ft. of the pump shall be cut and plugged.
3. Ensure a stable path is provided for concrete trucks to reach the washout area.
4. A highly visible sign that reads "Concrete Washout Area" shall be erected adjacent to the washout pit.
5. Surface runoff generated from upslope areas shall be diverted away from below-grade washout pits so as not to flow into them.
6. A single centralized washout area may be utilized for multiple subsites.

7. The washout pit must be inspected frequently to ensure the liner is intact.
8. Once 75% of the original volume of the washout pit is filled or if the liner is torn, the material must be removed and properly disposed of once it is completely hardened. Once the hardened concrete is removed, the liner must be replaced (if torn). A new pit must be constructed if the original structure is no longer suitable.

**Removal:**

9. Once the washout pit is no longer needed, ensure all washout material has completely hardened, then remove and properly dispose of all materials. If straw bales were used, they can be spread as much.

10. Prefabricated containers specifically designed for concrete washout collection may be used subject to prior approval by the Community Engineer. Follow the manufacturer's suggestions for installation, maintenance and removal procedures.

Abomasum (5.0 death)      Abomasum (5.0 death)

monocarbonate (left column)			monocarbonate (right column)		
# of concrete trucks expected to be washed out on site*	Width (ft)	Length (ft)	# of concrete trucks expected to be washed out on site*	Width (ft)	Length (ft)
3-3	3	5	2	3	3
4-5	4	4	3-4	4	4
6-7	5	5	5-6	5	5
8-10	6	6	7-8	6	6
11-14	7	7	9-11	7	7
			12-15	8	8

\*For small projects using a maximum of only one truckload of concrete or utilizing on-site mixing, rinaling of equipment may take place on the lot without a pit, provided it can be done a minimum of fifty (50) feet away from any water conveyances.

ABOVE-GRADE CONCRETE WASHOUT PIT

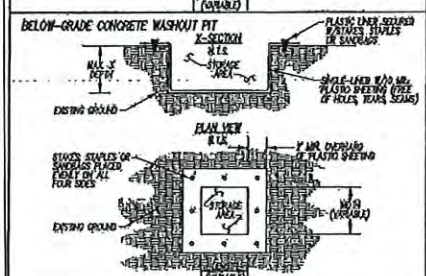
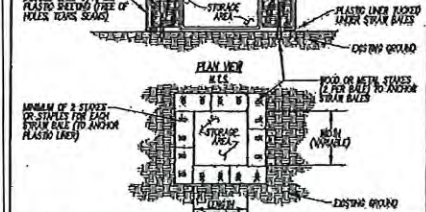
STRAW BALE

STRAP - 1/2" X 1/2" X 1/2"

NUT & WASHER

CROSS SECTION

STAPLES OR STRAPS TO ANOTHER PLASTIC LINER TO BALE



(Not to Scale)

12' Max.

Level surface  
No slope

ELEVATION

Flow

16' Min.

16' Min.

16' Min.

SECTION

Flat slope in front of barrier

Wings protect sides around abutment before filling

Trench to be backfilled and compacted

Joining sections of all fence

[illegible]

TEST PROPERTY	TEST VALUE	TEST METHOD
Minimum Tensile Strength	120 lbs (53.5 N)	ASTM D 6632
Minimum Elongation at 80 lbs	80%	ASTM D 6632
Minimum Puncture Strength	50 lbs (222 N)	ASTM D 6633
Minimum Tear Strength	40 lbs (180 N)	ASTM D 6533
Apparent Opening Size	ca 0.4 $\mu$ m	ASTM D 6791
Minimum Permeability	1715-2 sec-1	ASTM D 4491

1. **Wind protection** shall be constructed after bracing supports have been braced before the bridle becomes erect.
2. The north end of the bridle shall be constructed completely to the depth of at least 1 inch.
3. The wooden frame shall be constructed of 2x4s by which construction runs parallel. The 2x4s by which construction runs parallel (1) lie in the ground at the rear corner of the bridle and the top portion of 2x4s by 4x4s which construction runs parallel (2) lie in the ground at the front corner of the frame shall be at least 6 inches below adjacent road if possible water way to allow a safety ledge to traffic.
4. Wind mesh shall be of sufficient strength to support loads and shall be braced to the frame and shall be attached tightly around the frame and attached securely to the frame.
5. Ductile material shall have an equivalent strength of 30-40 ksi and be resistant to rusting. It shall be attached to the frame by means of a 1/2 inch diameter hole shall extend from the top of the frame to the 1/4 inch below the front bridle section. The ductile shall be secured to the back of the bridle in the ends of the bridle and not attached to the same post.
6. Hurdle shall be placed around the bridle in completed form and shall be attached to the frame with ductile using 1/2 inch wide straps.
7. A completed hurdle on a check frame shall be constructed in the back row below the bridle of the frame. The hurdle shall be attached to the frame and be at least 6 inches higher than the top of the frame.

2. Length—The <i>Constriction</i> sheath shall be as long as required to stabilize fully the fracture in hand but not less than 7.5 in. (approximately 54 in. metric) in total length.	6. Tying—The <i>Constriction</i> sheath shall be lashed to an adjacent limb with a minimum of 4 ties.
3. Laying—The <i>Constriction</i> sheath shall be laid so as not to create any folds or wrinkles.	7. Object's apex or surface shall be constructed under the sheath to be positioned to prevent further bone flexing so as to increase or prevent further bone healing from the fracture.
4. Thickness—The sheath layer shall be at least 1 inch thick for light duty fractures or at least 1.5 inches for heavy duty fractures.	8. Wedge Bar—A wedge bar shall be constructed as part of the <i>Constriction</i> sheath if needed to prevent further movement from the length of the <i>Constriction</i> sheath and to provide support.
5. Width—The sheath shall be at least 6 in. wide, but not less than the full width of the patient's forearm or upper arm.	9. Maintenance—The dressing of additional sheath shall be used in conditions deemed: lifted, moved, dropped, or otherwise damaged. The sheath shall be replaced when it is no longer effective or when it is damaged. When removed, it shall be replaced by a new sheath or removed by the medical personnel.
6. Security—A patient shall be held over the <i>Constriction</i> sheath prior to placing the sheath. It will be composed of strong inert polymeric resin and not made of the following ingredients:	10. Removal—The sheath shall be removed in place with the hand and/or the limb stabilized or reduced with a permanent medical appliance.

Minimum Tensile Strength	200 ksi.
Minimum Puncture Strength	80 psi.
Minimum Tear Strength	90 ksi.
Minimum Burst Strength	225 psi.
Minimum Elongation	20%
Equivalent Opening Size	$ES\leq 0.5$ mm.
Permeability	$1 \times 10^{-3}$ cm/sec.

The diagram illustrates the construction of a stepped slope stabilization system. The main view shows a cross-section of a slope with multiple steps. Key components labeled include:

- Erosion Stop Across Entire Width at Channel**: A horizontal barrier across the top of the slope.
- Positive Steps To Prevent Flow Along Edge of Leaking**: Steps designed to prevent water from flowing along the edge of the leaking material.
- Staple Every Outside Edge Every 3 Feet**: Staples used to secure the outer edges of the stabilizing material.

Four circular insets provide detailed views of specific construction details:

- Topsoil Fill**: Shows the application of topsoil over the stabilizing material.
- Base Layer 1 (Bottom) of Slope**: Shows the base layer of the slope, which is stabilized by staples.
- Base Layer 2 (Middle) of Slope**: Shows the middle layer of the slope, also stabilized by staples.
- Base Layer 3 (Top) of Slope**: Shows the top layer of the slope, stabilized by staples.

(Not to Scale)

Low water section  
Must raise the water  
but avoid Chalk Creek

1/2 mile

2 mile

CROSS SECTION

4' peak

1/2 mile

PROFILE

1. The stack doors shall be constructed of 4 x 4 inch dimension studs, placed on 16 inch spacing, completely covered with sheathing or plywood not less than 7/8 inch in thickness, but equivalent to sheathing with a gross shearing capacity of 2000 Lb. ft. and 4 or 4 x 4 inch studs. 1/2 inch.
2. Maximum height shall be not less than 12 feet.
3. The height of the stack doors shall be a minimum of 6 feet above the ground level to allow for wind action and snow from the ground level.
4. The base of the stack doors shall be constructed equivalent to 1 inch.
5. Spacing of stack doors shall be in a manner such that the base of the supports shall be at the same distance from the base of the discharges.
6. A liquid apron shall be constructed where stack doors are required to be in use for an extended period of time. A stone apron shall be constructed immediately downstream of the stack door to prevent flows from undermining the structure. The apron shall be 1 ft. thick and 18 inches high from the height of the stack door.
7. Stone placement shall be performed after the land has established by use for the number of stack doors 1 time from the inlet and extends across entire channel.
8. Stone aprons shall be a minimum of 25 ft.

**Installation**

1. Remove Drute
2. Install bag  
"Slip rings on top of casing"
3. Fastened gasket
4. Install threaded round wire into  
between gaskets & channel casing

**Subassemblies**

1. Remove the External Drute
2. Remove gasket
3. Bag can be channel several ways  
a) Pick up bag and turn it  
b) Draw/pull plastic out of bag  
c) Use chisel
4. Draw inner plastic out of bag or  
place with entire
5. Fastened bag
6. Fastened gasket
7. Fastened threaded round

**For Structures:**

(2A) (3A) (2B) (3B)

Available from:  
Proforma Systems  
P.O. Box 123  
Granville, OH 43031  
Tel 760-768-9150  
Fax 760-768-9155  
E-mail: [info@proforma.com](mailto:info@proforma.com)

[illegible]

**Instructions:**

1. Remove Grids
2. Initial lay
3. Wipe resin on top of coating
4. Reinforce grids

**Makeups:**

1. Remove grids
2. Resin and the observed inward wall
3. Pick up grid and stamp it
4. Smooth it out by hand
5. Wipe-out
6. Shifts from inside out of lay
7. Clean with roller
8. Reinforced grids
9. Reinforced grids

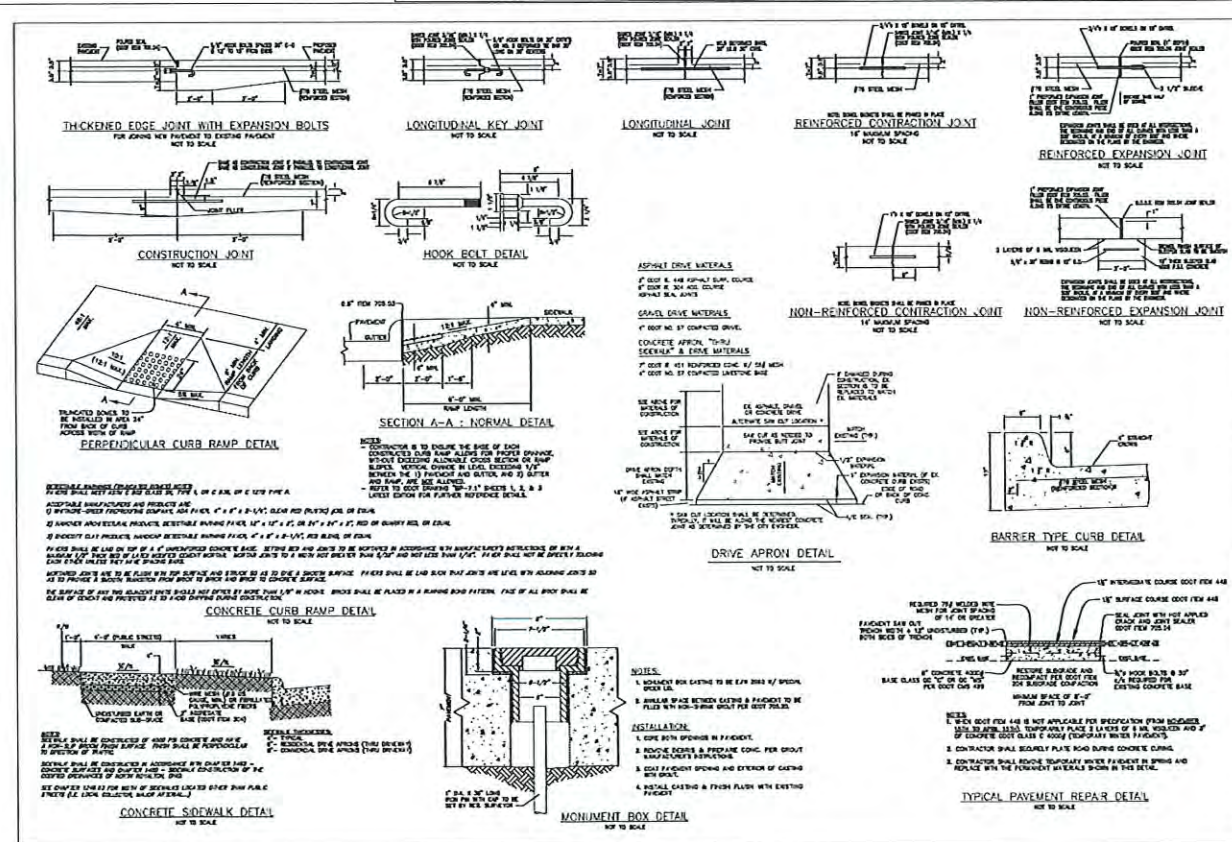
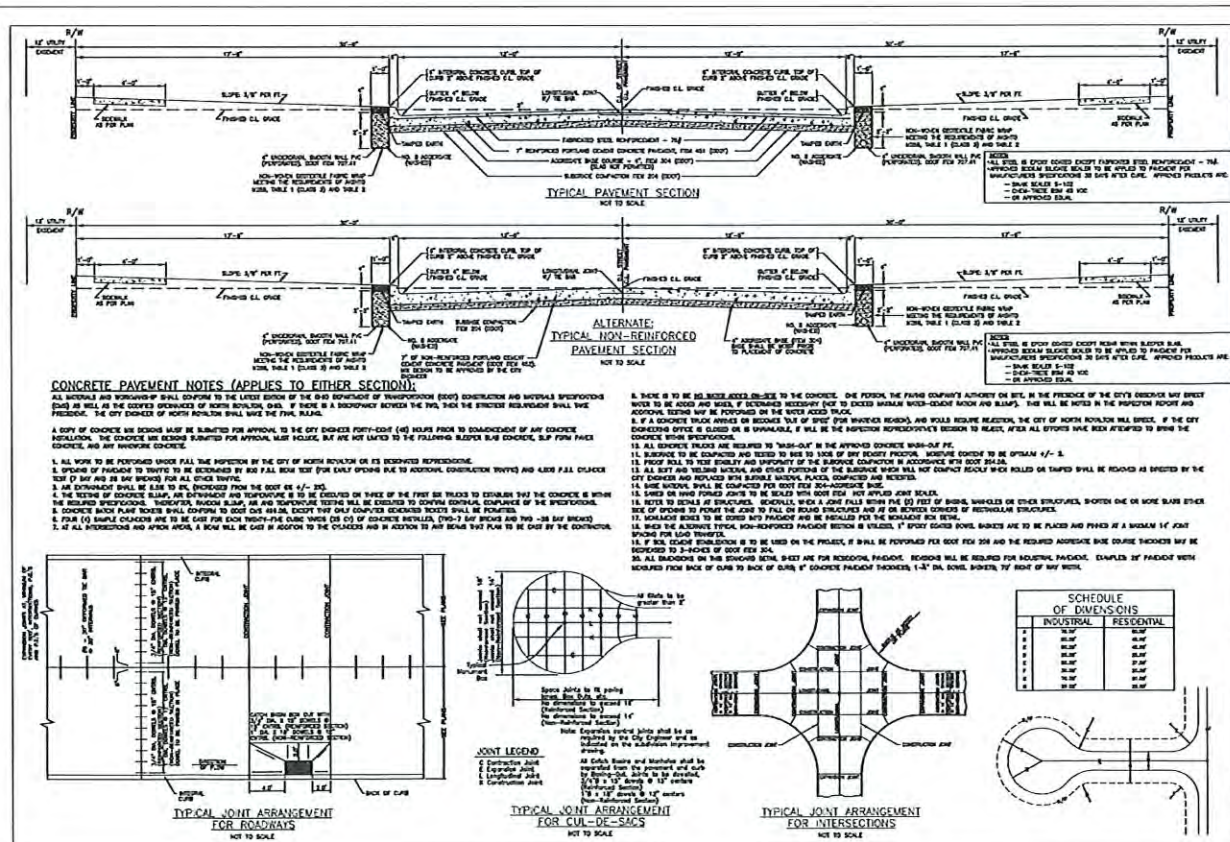
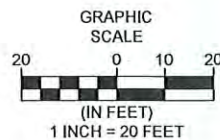
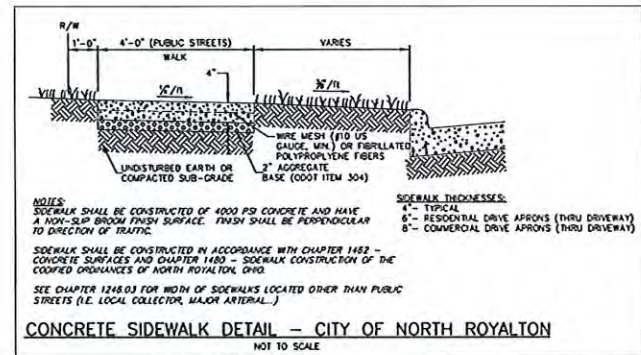
**For Structures:**

Products from:  
 TruForm Systems  
 P.O. Box 122  
 Orem, UT 84053  
 Tel: 740-788-9153  
 Fax: 740-788-9185  
 Email: info@truformsystems.com

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Inspection #	Name of Inspector	Date of Inspection	Rain Event	Type of Corrective Action Required
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2				
3				
4				
5				
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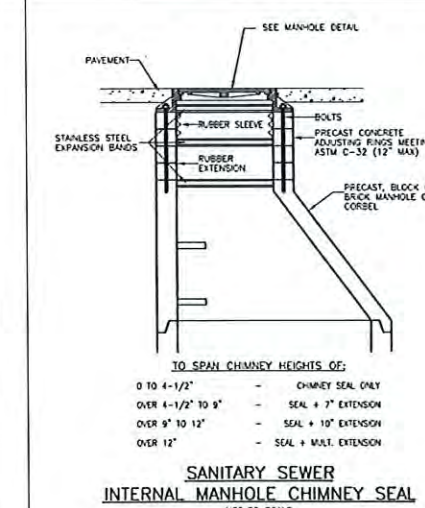
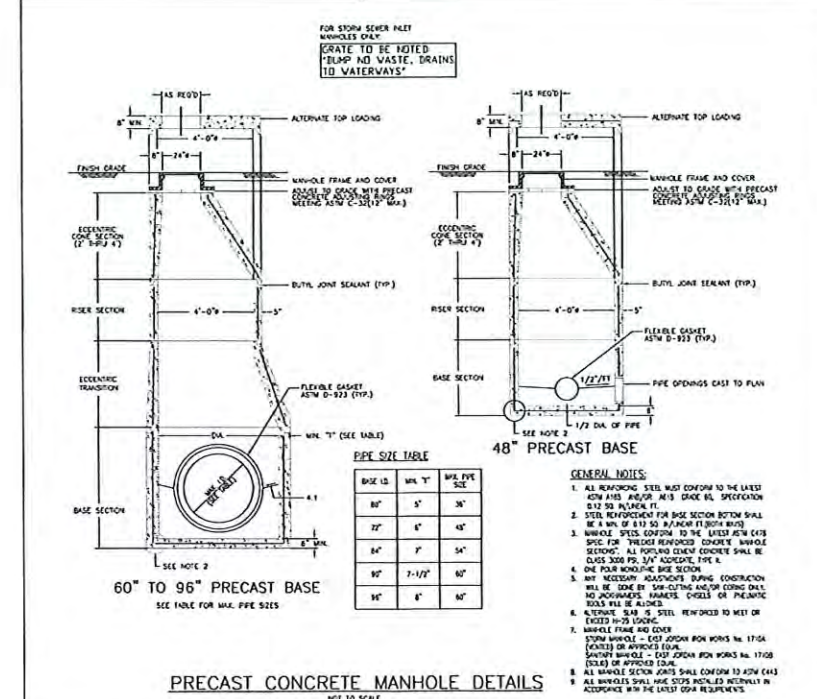
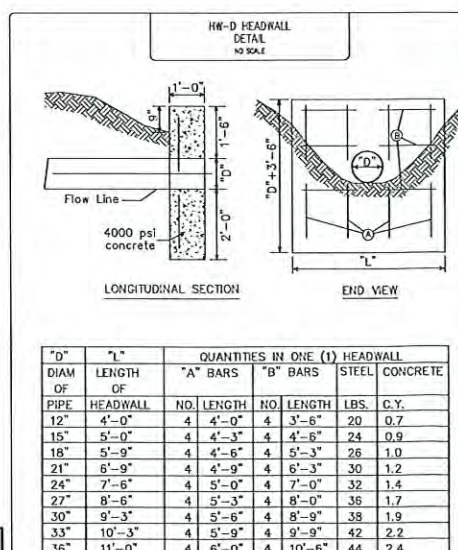
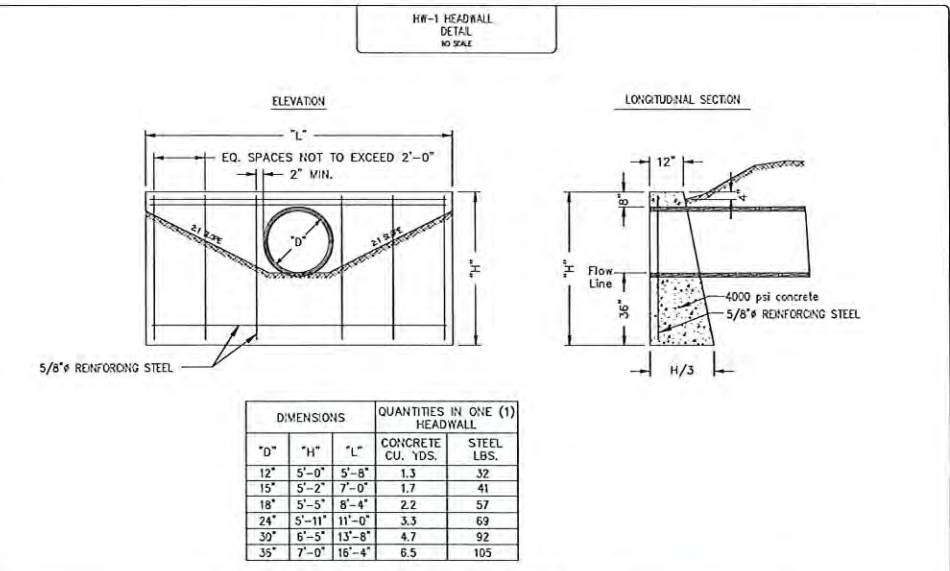
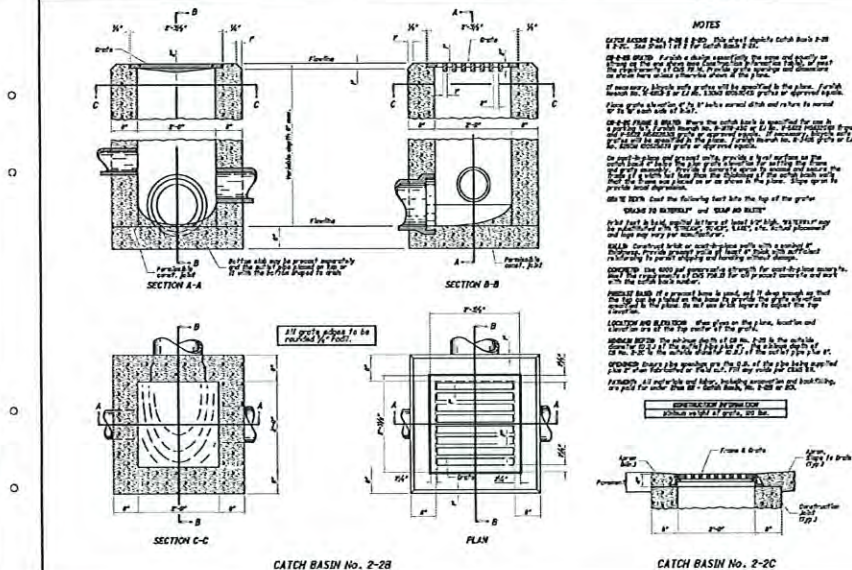
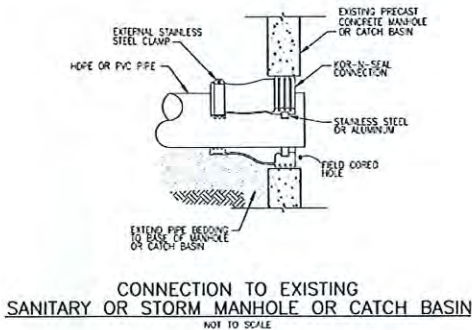
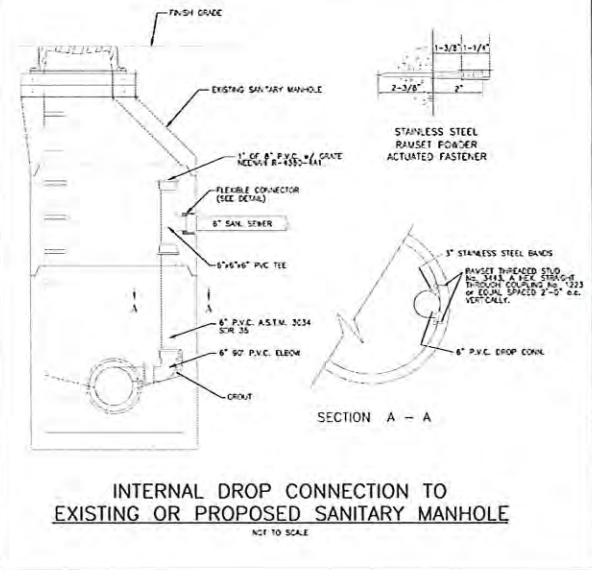
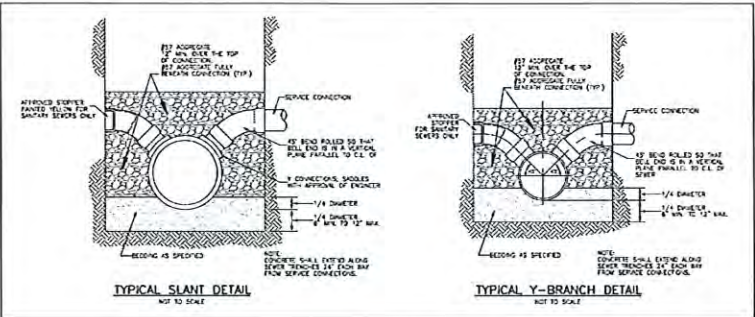
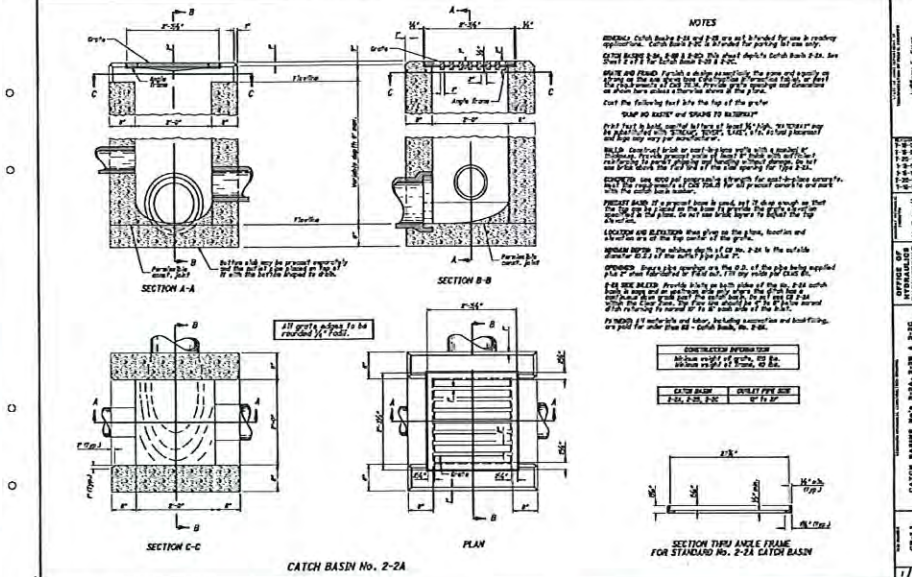
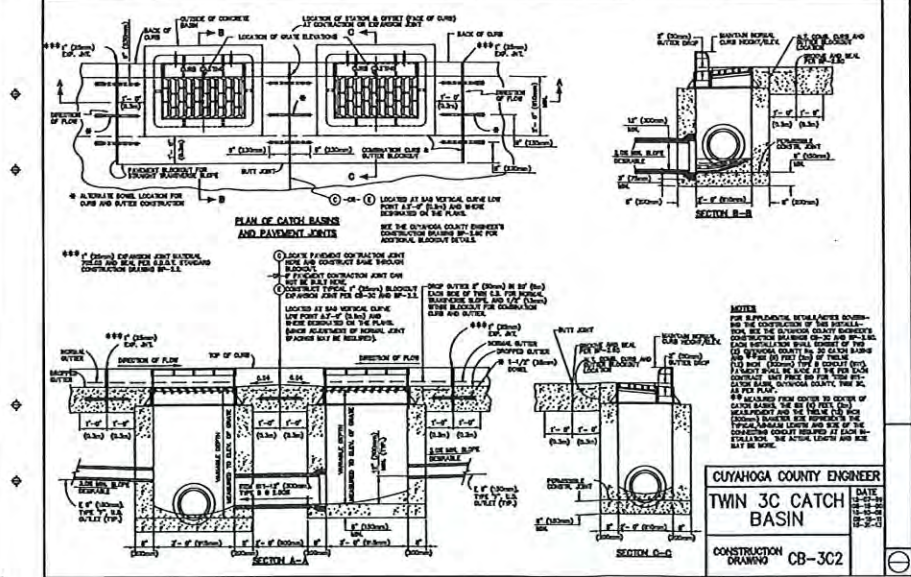
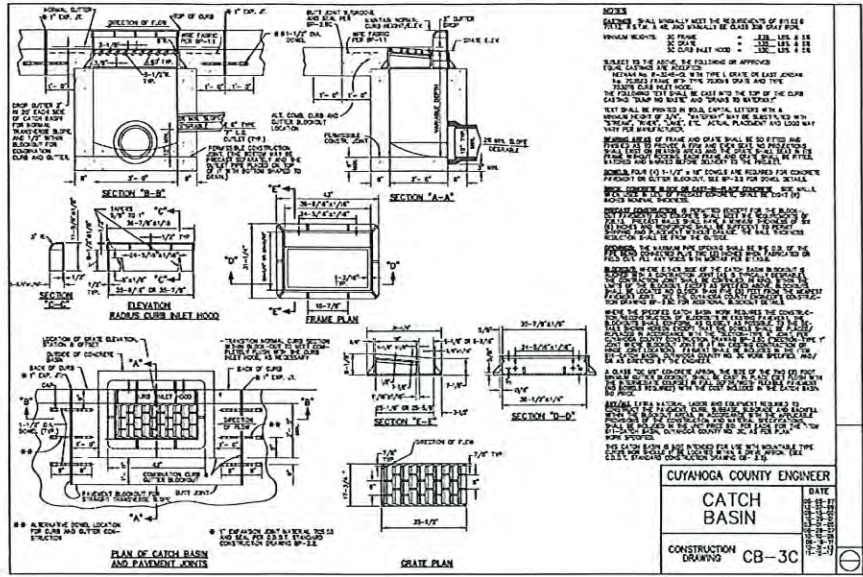
1. All work to be performed under FULL TIME inspection by the City of North Royalton or its designated representative.
2. Opening of pavement to traffic to be determined by 600 P.S.I. beam test (for early opening due to additional construction traffic) and 4,000 P.S.I. cylinder test (7 days and 28 days breaks) for all other traffic.
3. All concrete delivery tickets must identify the batch weights and contents and must conform to the specifications as outlined in ODOT 499.08, EXCEPT; the City of North Royalton will only accept concrete delivery batch tickets which have been generated from an automated and computerized concrete batching system. Hand written, computer typed or computer printed delivery tickets will not be accepted.
4. Air entrainment shall be 5.5% to 8% (Increased from the ODOT 6% +/- 2%).
5. The testing of concrete slump, air entrainment and temperature is to be executed on three of the first six trucks to establish that the concrete is within the required specifications. Thereafter, in addition to the required testing increments, random slump, entrained air content and temperature testing will be executed to confirm continual compliance of the specifications.
6. Four (4) sample cylinders are to be cast for each twenty-five cubic yards (25 CY) of concrete installed, (two-7 day breaks and two-28 day breaks).
7. At all intersections and apron areas, a beam will be cast in addition to the cylinders every twenty-five cubic yards (25 CY) installed in addition to any beams that plan to be cast by the contractor.
8. There is to be NO WATER ADDED ON-SITE to the concrete. One person, the Paving Company's authority on site, in the presence of the City's observer may direct water to be added and mixed, if determined necessary (not to exceed maximum water-cement ratio, air entrainment and slump). This will be noted in the inspection report and additional testing may be performed on the water added truck.
9. If a concrete truck arrives or becomes "out-of-spec", (for whatever reason), and would require rejection, the City of North Royalton Engineer will direct. If the City Engineering Office is closed or unavailable, it will be the inspection representative's decision to reject, after all efforts have been attempted to bring the concrete within specifications.
10. All concrete trucks are required to "wash-out" in the approved concrete wash-out pit or suitable self-contained container.
11. Sub grade to be compacted and tested to 98% to 100% of Dry Density Proctor. Moisture content to be optimum +/- 2.
12. When a joint falls within five (5) feet or, on contacts basins, manholes or other structures, shorten one or more slabs either side of opening to permit the joint to fall on round structures and at or between corners of rectangular structures, NOTE: All steels is epoxy coated.
13. All soft and yielding material and other portions of the subgrade which will not compact readily when rolled or tamped shall be removed as directed by the City Engineer and replaced with suitable material placed and compacted.
14. Sawed or hand formed joints to be sealed with ODOT Item 705.04, hot applied joint sealer.
15. If an existing underdrain (curb drain) is removed or disturbed, replacement shall conform to the following:  
4" underdrain, solid wall PVC (perforated), ASTM F-758. Non-woven geotextile fabric wrap meeting the requirements of AASHTO M288, Table 1 (class 3) and Table 2, 8" aggregate washed.

## PAVEMENT & INTERSECTION DETAIL

5	17
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CITY OF NORTH KOTAION - COTAHOGA COOUNTY - OHIO





REV. No.	DATE	BY	DATE	BY

DATE: 2/6/23 DRAWN: NMO

SCALE: HOR. N/A VERT. N/A

FOLDER: DWG/Proj. Engineering

FILENAME: 22057 T.N.D.

TAB: 16-Sewer Details

BN DY. CHK: MPS

BASE. CHK: KTH

# WOODLAND BEND SUBDIVISION

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

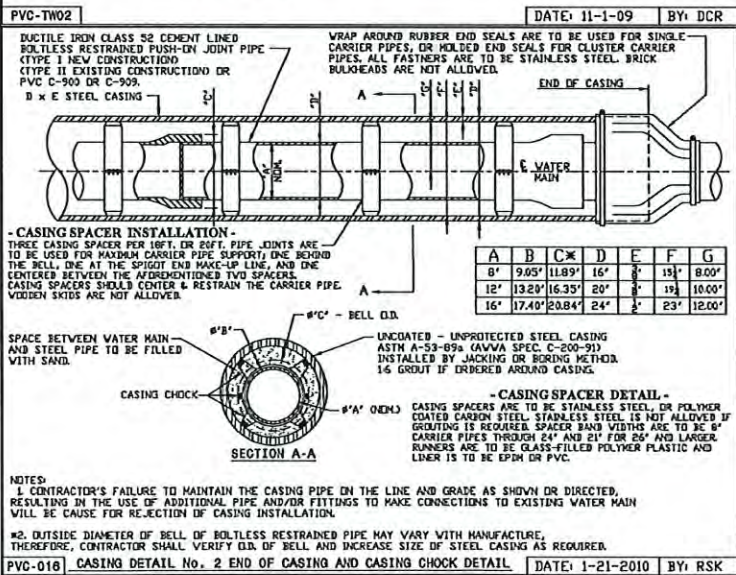
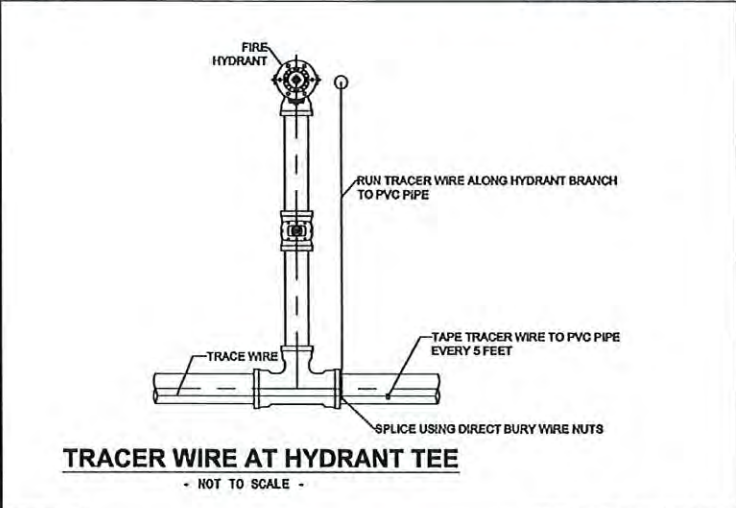
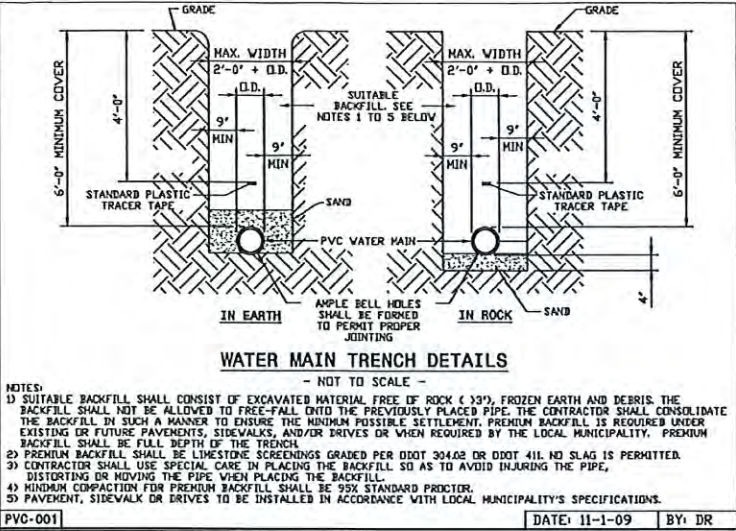
**POLARIS ENGINEERING & SURVEYING, INC.**  
34600 CHARDON ROAD - SUITE D  
WILLOUGHBY HILLS, OHIO 44094  
(440) 944-4433 (440) 944-3722 (Fax)  
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CONTRACT No.

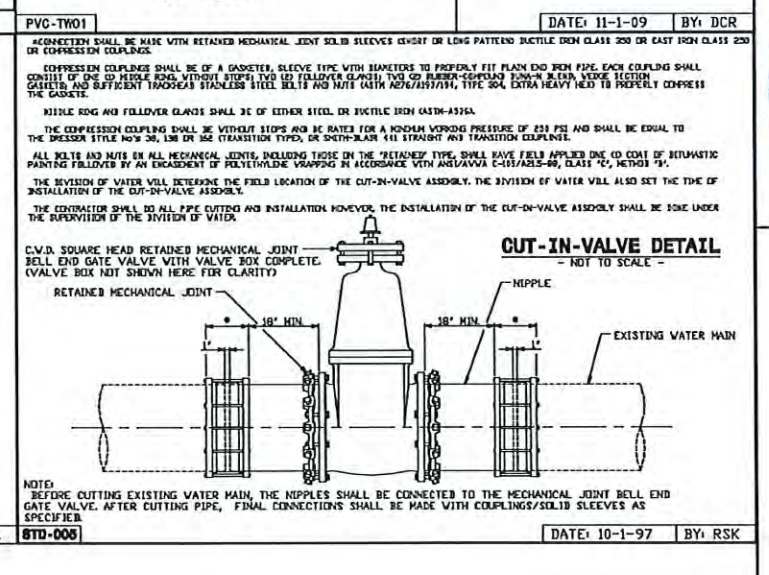
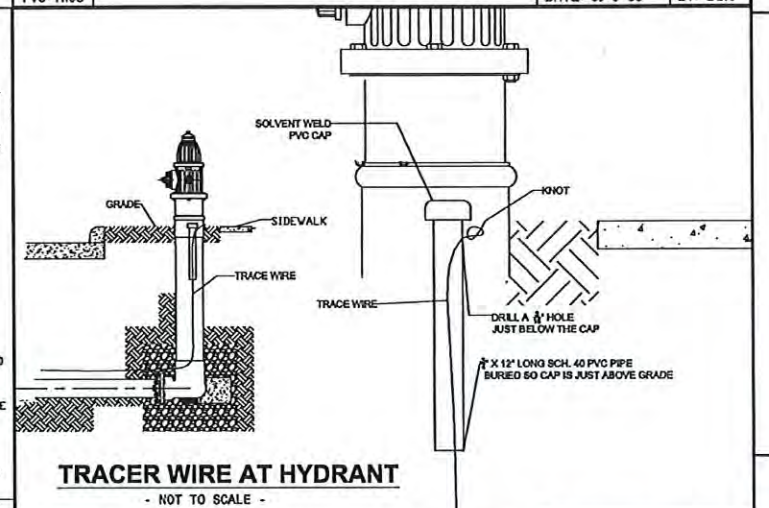
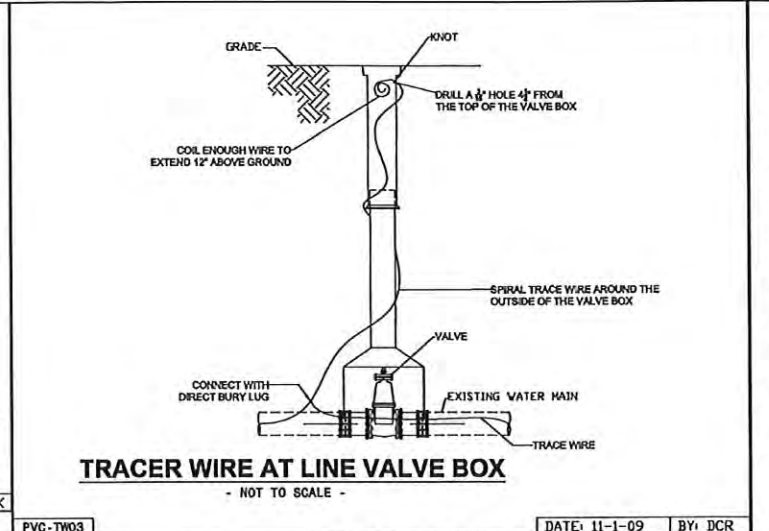
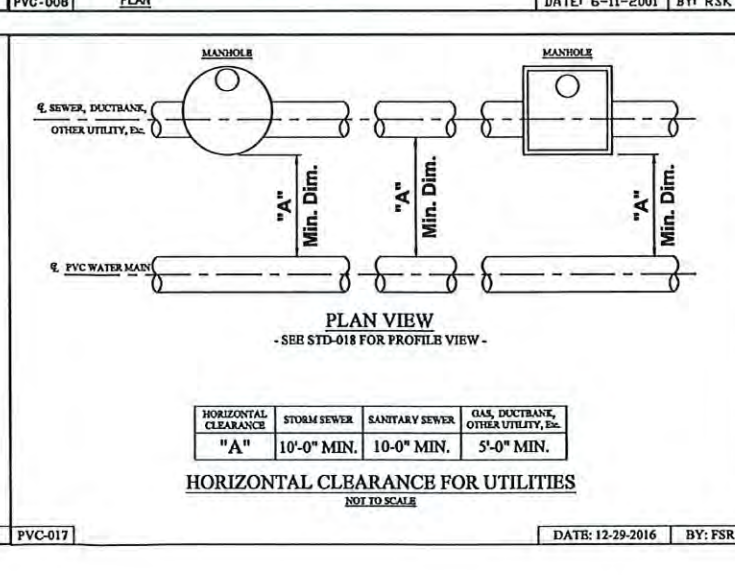
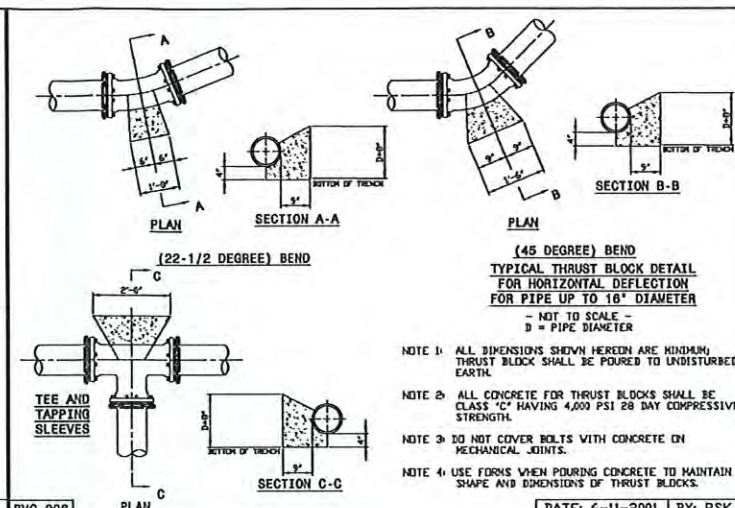
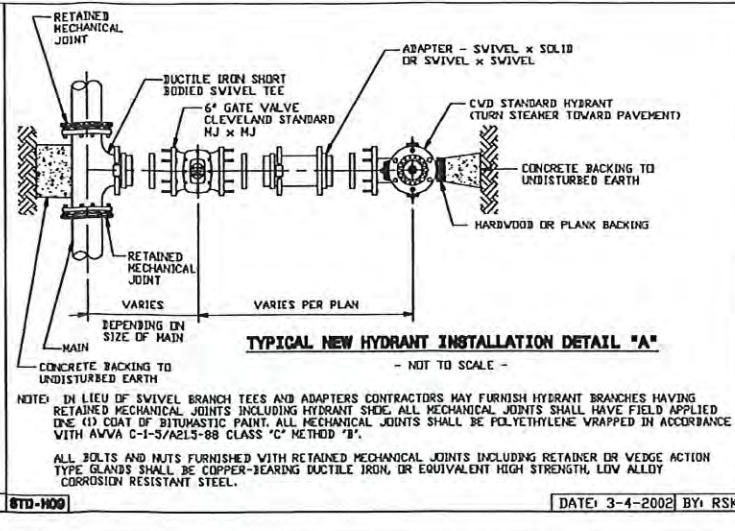
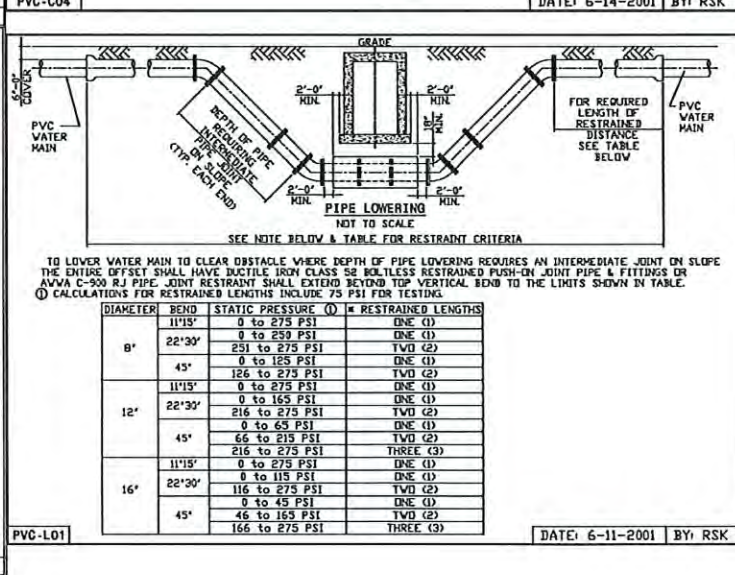
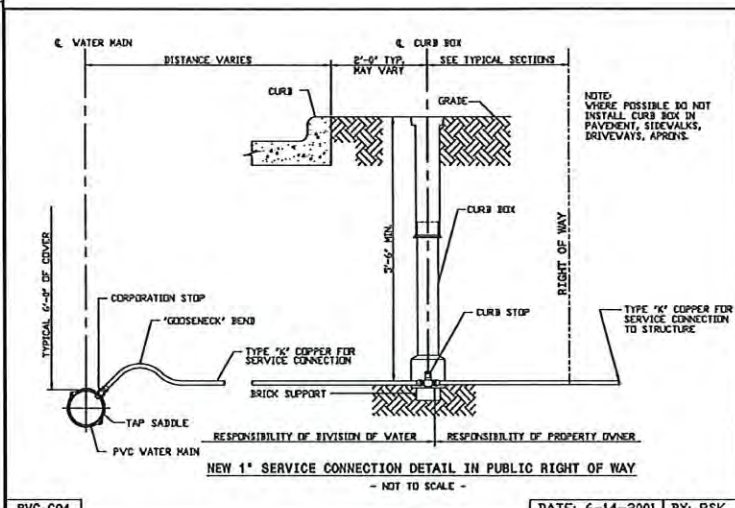
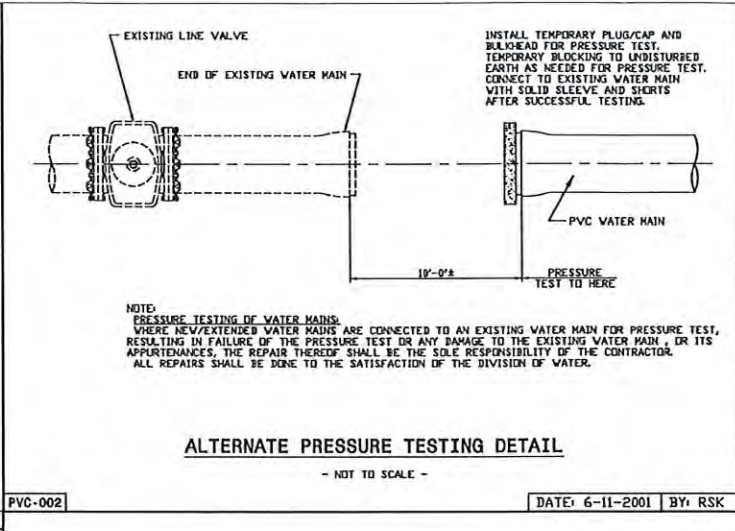
**22057**

SHEET 16 OF 17





REV. No.	DATE	BY	DESCRIPTION



WOODLAND BEND SUBDIVISION

CITY OF NORTH ROYALTON - CUYAHOGA COUNTY - OHIO

POLARIS ENGINEERING & SURVEYING, INC.

34600 CHARDON ROAD - SUITE D

WILLOUGHBY HILLS, OHIO 44094

(440) 944-4433 (440) 944-3722 (Fax)

www.polaris-es.com

CONTRACT No.

22057

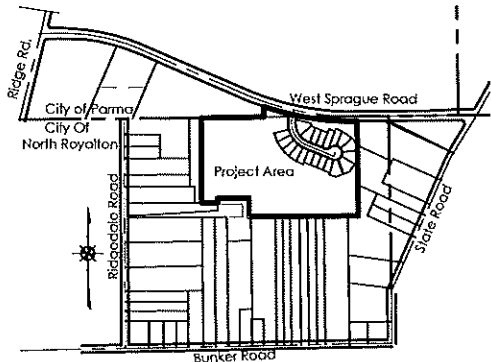
SHEET 17 OF 17



# WOODLAND BEND SUBDIVISION

Being a Subdivision of:

Part of P.P.N. 489-02-005 - In Original Royalton Township Lot 11, and part of  
PPN 454-28-002 In Original Parma Township Lot 42 - Ely Tract  
FEBRUARY 6, 2023



Vicinity Map Scale 1" = 800'

## ACCEPTANCE AND DEDICATION:

BE IT KNOWN THAT THE UNDERSIGNED, **MARK HOLZ**, AGENT FOR **FRONTIER LAND GROUP**, HEREBY CERTIFIES THAT THIS PLAT CORRECTLY REPRESENTS ITS WOODLAND BEND SUBDIVISION, A SUBDIVISION OF SUBLOTS 1 THROUGH 20 INCLUSIVE, AND BLOCKS A & B & C, AND DOES HEREBY ACCEPT PLAT OF SAME AND DEDICATE TO PUBLIC USE, AS SUCH, ALL STREETS SHOWN HEREON AND DESIGNATED AS WOODLAND BEND DRIVE - SIXTY (60) FEET WIDE, AND DOES HEREBY GRANT UNTO THE HOMEOWNERS ASSOCIATION WITHIN THE WOODLAN BEND SUBDIVISION BLOCKS A & B & C AND THE EASEMENTS SHOWN HEREON, SAID AREAS ARE NOT GRANTED FOR USE BY THE GENERAL PUBLIC, BUT ARE GRANTED FOR THE COMMON USE AND ENJOYMENT OF THE HOMEOWNERS WITHIN THE WOODLAND BEND SUBDIVISION, AS MORE FULLY PROVIDED IN "THE WOODLAND BEND SUBDIVISION DECLARATION OF COVENANTS AND RESTRICTIONS", AS RECORDED AS AFN \_\_\_\_\_ OF THE CUYAHOGA COUNTY RECORDS. THE TERMS AND CONDITIONS SET FORTH ARE HEREBY INCORPORATED BY REFERENCE AS THOUGH FULLY WRITTEN HEREIN AND EACH SUBLLOT OWNER SHALL BE ENTITLED TO THE BENEFITS AND SUBJECT TO THE OBLIGATIONS THEREOF.

THE UNDERSIGNED FURTHER AGREES THAT ANY USE OF IMPROVEMENTS MADE ON THIS LAND SHALL BE IN CONFORMITY WITH ALL EXISTING VALID ZONING, PLATTING, HEALTH OR OTHER LAWFUL RULES AND REGULATIONS INCLUDING THE APPLICABLE OFF-STREET PARKING AND LOADING REQUIREMENTS OF THE CITY OF NORTH ROYALTON, OHIO AND THE CITY OF PARMA, OHIO (FOR BLOCK 'A' ONLY) AND FOR THE BENEFIT OF THEMSELVES AND ALL OTHER SUBSEQUENT OWNERS OR ASSIGNS TAKING TITLE FROM OR UNDER OR THROUGH THE UNDERSIGNED.

IN WITNESS WHEREOF, **MARK HOLZ** AGENT FOR FRONTIER LAND GROUP, HAS HERETO SET ITS HAND

AT \_\_\_\_\_, OHIO, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_

SIGNED AND ACKNOWLEDGED IN THE PRESENCE OF:

STATE OF OHIO )  
COUNTY OF \_\_\_\_\_ )  
BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED THE ABOVE NAMED, \_\_\_\_\_ WHO ACKNOWLEDGED THAT THEY DID SIGN THE FOREGOING INSTRUMENT AND THAT THE SAME IS THEIR VOLUNTARY ACT AND DEED. IN TESTIMONY WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL AT \_\_\_\_\_, OHIO, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

NOTARY PUBLIC

THIS IS AN ACKNOWLEDGEMENT CLAUSE.  
NO OATH OR AFFIRMATION WAS ADMINISTERED  
TO THE SIGNER.

## MORTGAGE RELEASE:

BE IT KNOWN THAT \_\_\_\_\_, MORTGAGEE OF THE LAND INDICATED ON THIS PLAT DOES HEREBY JOIN IN THE ABOVE DEDICATION AND RELEASE FROM THE OPERATION AND LIEN OF THE MORTGAGE HELD BY IT, ON SAID PREMISES AS RECORDED IN DOCUMENT NO. \_\_\_\_\_, AND SHOWN WOODLAND BEND DRIVE - SIXTY (60) FEET WIDE, AND THE EASEMENTS HEREIN GRANTED AND RESERVED.

BY \_\_\_\_\_

STATE OF OHIO )  
COUNTY OF \_\_\_\_\_ ) SS:

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL AT \_\_\_\_\_ OHIO, THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

NOTARY PUBLIC

MY COMMISSION EXPIRES \_\_\_\_\_

THIS IS AN ACKNOWLEDGEMENT CLAUSE.  
NO OATH OR AFFIRMATION WAS ADMINISTERED  
TO THE SIGNER.

## SANITARY SEWER EASEMENTS

THE OWNERS OF THE WITHIN PLATTED LAND, DOES HEREBY GRANT UNTO THE CITY OF NORTH ROYALTON, **SANITARY SEWER EASEMENTS**, AS SHOWN ON THE PLAT, TO CONSTRUCT, PLACE, OPERATE, MAINTAIN, REPAIR, RECONSTRUCT, AND RELOCATE SUCH SANITARY SEWER CONDUITS AND APPURTENANCES. SAID EASEMENT RIGHTS SHALL INCLUDE THE RIGHT, WITHOUT LIABILITY THEREFORE, TO REMOVE ANY AND ALL FACILITIES NOT CONTEMPLATED IN THE RIGHTS CONVEYED TO GRANTEES BY THIS EASEMENT GRANT WITHIN SAID EASEMENT PREMISES, INCLUDING, BUT NOT LIMITED TO, IRRIGATION SYSTEMS, ELECTRICAL ANIMAL FENCES, TREES, AND LANDSCAPING INCLUDING LAWNS, FLOWERS OR SHRUBBERY AND LANDSCAPE LIGHTING WITHIN AND WITHOUT SAID EASEMENT PREMISES WHICH MAY INTERFERE WITH THE INSTALLATION, MAINTENANCE, REPAIR OR OPERATION OF SAID SANITARY SEWER FACILITIES, THE RIGHT TO OPERATE, INSTALL, REPAIR, AUGMENT, AND MAINTAIN SANITARY SEWERS WITHIN THE ABOVE DESCRIBED EASEMENT PREMISES, AND WITH THE RIGHT OF ACCESS, INGRESS AND EGRESS TO AND FROM ANY OF THE WITHIN DESCRIBED PREMISES FOR EXERCISING ANY OF THE PURPOSES OF THE RIGHT OF WAY AND EASEMENT GRANT.

FURTHERMORE, THE CITY OF NORTH ROYALTON, THRU ACCEPTANCE AND ADOPTION OF THIS PLAT, DOSE HEREBY PARTIALLY RELEASE A PORTION OF THE SANITARY SEWER EASEMENT THAT WAS GRANTED TO THE CITY IN VOLUME 13635, Pg. 781 OF THE CUYAHOGA COUNTY RECORDS. AREAS BEING RELEASED ARE AS DESCRIBED AND DELINEATED ON SHEET 2 OF THIS PLAT.

## DRAINAGE AND STORM WATER MANAGEMENT EASEMENTS:

THE OWNERS OF THE WITHIN PLATTED LAND, DOES HEREBY GRANT UNTO THE WOODLAND BEND HOMEOWNERS ASSOCIATION, **DRAINAGE & STORM WATER MANAGEMENT EASEMENTS**, AS SHOWN ON THE PLAT, TO CONSTRUCT, PLACE, OPERATE, MAINTAIN, REPAIR, RECONSTRUCT, AND RELOCATE SUCH DRAINAGE CONDUITS, SWALES, WATER QUALITY FEATURES, AND PONDS. SAID EASEMENT RIGHTS SHALL INCLUDE THE RIGHT, WITHOUT LIABILITY THEREFORE, TO REMOVE ANY AND ALL FACILITIES NOT CONTEMPLATED IN THE RIGHTS CONVEYED TO GRANTEES BY THIS EASEMENT GRANT WITHIN SAID EASEMENT PREMISES, INCLUDING, BUT NOT LIMITED TO, IRRIGATION SYSTEMS, ELECTRICAL ANIMAL FENCES, TREES, AND LANDSCAPING INCLUDING LAWNS, FLOWERS OR SHRUBBERY AND LANDSCAPE LIGHTING WITHIN AND WITHOUT SAID EASEMENT PREMISES WHICH MAY INTERFERE WITH THE INSTALLATION, MAINTENANCE, REPAIR OR OPERATION OF SAID DRAINAGE, THE RIGHT TO OPERATE, INSTALL, REPAIR, AUGMENT, AND MAINTAIN DRAINAGE WITHIN THE ABOVE DESCRIBED EASEMENT PREMISES, AND WITH THE RIGHT OF ACCESS, INGRESS AND EGRESS TO AND FROM ANY OF THE WITHIN DESCRIBED PREMISES FOR EXERCISING ANY OF THE PURPOSES OF THE RIGHT OF WAY AND EASEMENT GRANT. THE CITY OF NORTH ROYALTON MAY ASSESS THE HOMEOWNERS FOR ANY WORK OR MAINTENANCE TO THE DRAIN SYSTEM, SWALES, OR POND NOT PERFORMED BY THE HOMEOWNERS ASSOCIATION.

## UTILITY EASEMENT:

THE OWNERS OF THE WITHIN PLATTED LAND, DO HEREBY GRANT UNTO THE CITY OF NORTH ROYALTON AND TO UTILITIES INCLUDING BUT NOT LIMITED TO, FIRST ENERGY, AT&T, CHARTER COMMUNICATIONS, BREEZELINE, COLUMBIA GAS OF OHIO, THEIR SUCCESSORS AND ASSIGNS (HEREINAFTER REFERRED TO AS GRANTEES) A PERMANENT **UNDERGROUND UTILITY EASEMENT TWELVE (12) FEET** IN WIDTH UNDER, OVER AND THROUGH ALL SUBLOTS AS SHOWN HEREIN, PARALLEL WITH AND CONTIGUOUS TO ALL STREET LINES TO CONSTRUCT, PLACE, OPERATE, MAINTAIN, REPAIR RECONSTRUCT AND RELOCATE SUCH UNDERGROUND ELECTRIC AND COMMUNICATIONS CABLES, DUCTS, CONDUITS; AND SURFACE OR BELOW GROUND MOUNTED TRANSFORMERS AND PEDESTALS, CONCRETE PADS AND OTHER FACILITIES AS ARE DEEMED NECESSARY OR CONVENIENT BY THE GRANTEES FOR DISTRIBUTING ELECTRICITY, NATURAL GAS, AND COMMUNICATION SIGNALS FOR PUBLIC OR PRIVATE USE AT SUCH LOCATIONS AS GRANTEES MAY DETERMINE UPON, WITHIN, AND ACROSS THE EASEMENT PREMISES. SAID EASEMENT RIGHTS SHALL INCLUDE THE RIGHT TO REMOVE TREES AND LANDSCAPING INCLUDING LAWNS WITHIN AND WITHOUT SAID EASEMENT PREMISES, WHICH MAY INTERFERE WITH THE INSTALLATION, REPAIR, MAINTENANCE OR OPERATION OF SAID ELECTRIC AND COMMUNICATION FACILITIES, THE RIGHT TO INSTALL, REPAIR, AUGMENT AND MAINTAIN SERVICE CABLES OUTSIDE OF THE ABOVE DESCRIBED EASEMENT PREMISES AND THE RIGHT OF ACCESS, INGRESS AND EGRESS TO AND FROM ANY OF THE WITHIN DESCRIBED PREMISES FOR EXERCISING ANY OF THE PURPOSES OF RIGHT OF WAY AND EASEMENT GRANT. ALL SUBLOTS SHALL BE RESTRICTED TO UNDERGROUND UTILITY SERVICE.

GRANTED BY: \_\_\_\_\_ (OWNER)

THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_  
ACCEPTED BY FIRST ENERGY THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_  
RIGHT - OF - WAY DIVISION

ACCEPTED BY COLUMBIA GAS THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_  
RIGHT - OF - WAY DIVISION

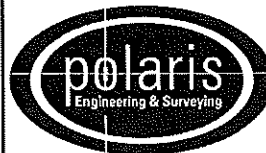
ACCEPTED BY AT&T THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_  
RIGHT - OF - WAY DIVISION

ACCEPTED BY WIDE OPEN WEST THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

BY: \_\_\_\_\_  
RIGHT - OF - WAY DIVISION

DATE: 2/6/23 DRAWN: MPS  
SCALE: HORIZONTALS VERT. 1"=80'  
FOLDER: DWG/Prof. Surveying  
FILENAME: Survey Base Record Plat  
TAB: 01-RECORD PLAT  
BNDY. CHK: MPS  
BASE. CHK: N/A



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## WOODLAND BEND SUBDIVISION

CITY OF NORTH ROYALTON - CITY OF PARMA  
CUYAHOGA COUNTY - OHIO

CONTRACT No.

22057

SHEET

1

OF

3

## CITY OF NORTH ROYALTON APPROVALS:

THE CITY COUNCIL  
THIS PLAT HAS BEEN ACCEPTED BY THE COUNCIL OF THE CITY OF NORTH ROYALTON, OHIO, FOR DEDICATION BY ORDINANCE NO. \_\_\_\_\_ ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

LEGISLATIVE DIRECTOR

PLANNING COMMISSION  
THIS PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION OF THE CITY OF NORTH ROYALTON, OHIO, ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

SECRETARY

CITY ENGINEER  
THIS PLAT HAS BEEN APPROVED BY THE ENGINEER OF THE CITY OF NORTH ROYALTON, OHIO, ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

JUSTIN HASELTON, CITY ENGINEER

## CITY OF PARMA APPROVALS:

THE CITY OF PARMA HEREBY ACCEPTS THE DEDICATION OF WOODLAND BEND DRIVE WITHIN THE CITY OF PARMA FOR PLATING PURPOSES ONLY. PERPETUAL MAINTENANCE & REPAIR OF ALL INFRASTRUCTURE LOCATED WITHIN THE WOODLAND BEND DRIVE RIGHT OF WAY LIMITS AND WITHIN THE CITY OF PARMA SHALL BE BY THE CITY OF NORTH ROYALTON. THIS INCLUDES BUT IS NOT LIMITED TO ALL PAVEMENT, SANITARY AND STORM SEWER SYSTEMS, WATER MAINS, AND RELATED APPURTENANCES TO THESE SYSTEMS.

THE CITY COUNCIL  
THIS PLAT HAS BEEN ACCEPTED BY THE COUNCIL OF THE CITY OF PARMA, OHIO, FOR DEDICATION BY ORDINANCE NO. \_\_\_\_\_ ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

LEGISLATIVE DIRECTOR

PLANNING COMMISSION  
THIS PLAT HAS BEEN APPROVED BY THE PLANNING COMMISSION OF THE CITY OF PARMA, OHIO, ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

SECRETARY

CITY ENGINEER  
THIS PLAT HAS BEEN APPROVED BY THE ENGINEER OF THE CITY OF PARMA, OHIO, ADOPTED THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20 \_\_\_\_.

CITY ENGINEER

## SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT I HAVE SURVEYED THE PREMISES AND PREPARED THE ATTACHED PLAT IN ACCORDANCE WITH THE PROVISIONS OF CHAPTER 4733-37 OF THE OHIO ADMINISTRATIVE CODE AND THE DIMENSIONS ARE IN FEET AND DECIMAL PARTS THEREOF, ALL OF WHICH ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. IRON MONUMENTS OR PINS AS INDICATED WERE FOUND OR SET AS SHOWN HEREON. THE TERM CERTIFY AS USED IN THIS STATEMENT IS UNDERSTOOD TO BE THE PROFESSIONAL OPINION OF THE SURVEYOR WHICH IS FORMULATED ON HIS BEST KNOWLEDGE, INFORMATION AND BELIEF, AND AS SUCH, IT DOES NOT CONSTITUTE A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OF TITLE AND IS SUBJECT TO ANY STATE OF FACTS REVEALED BY A EXAMINATION OF THE SAME. ALL IRON PINS SET ARE 5/8" X 30" LONG REBAR WITH A PLASTIC CAP STAMPED "POLARIS". BEARINGS REFER TO THE OHIO COORDINATE SYSTEM OF 1983 - NORTH ZONE 1986 ADJUSTMENT.

*Michael P. Spellacy* 2/6/2023  
MICHAEL P. SPELLACY P.S. #8169 DATE



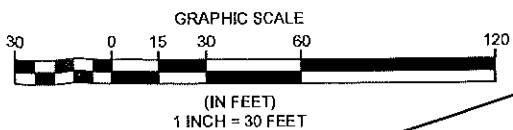


PARCEL CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING	TANGENT
C1	528.08'	2291.88'	13°12'06"	526.91'	N84°16'53"W	265.21'
C2	441.81'	2291.88'	11°02'42"	441.12'	N72°09'29"W	221.59'
C3	969.89'	2291.88'	24°14'48"	962.67'	S78°45'32"E	492.31'
C4	280.66'	200.00'	80°24'11"	258.19'	S27°52'55"E	169.02'
C5	151.92'	2331.88'	3°43'58"	151.90'	S77°58'37"E	75.99'
C6	29.88'	35.00'	48°54'44"	28.98'	S33°00'49"W	15.92'
C7	140.52'	170.00'	47°21'36"	136.55'	S15°07'22"E	74.55'
C8	86.88'	170.00'	29°16'51"	85.94'	S53°26'35"E	44.41'
C9	34.06'	50.00'	39°02'03"	33.41'	S87°36'02"E	17.72'

# BOUNDARY SURVEY LEGEND

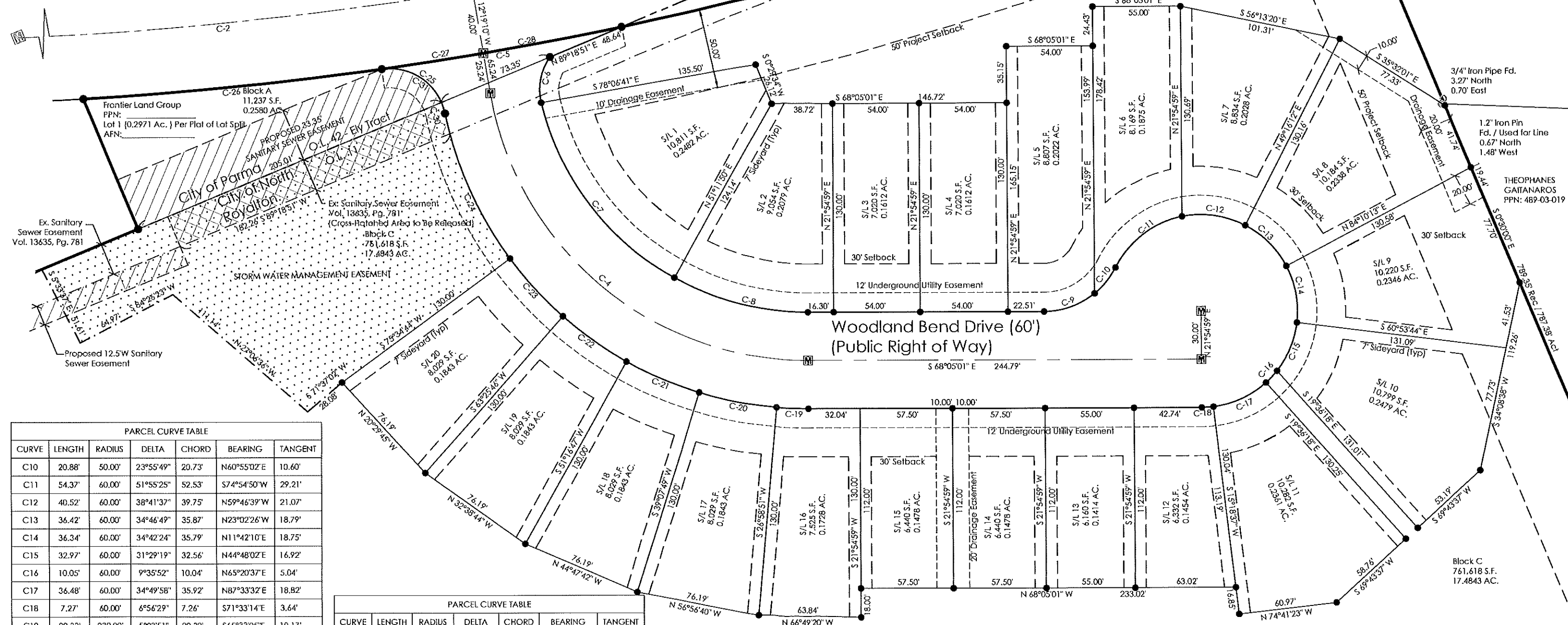
- 5/8" X 30" IRON PIN (ID: POLARIS) SET
- ⊙ IRON PIN FOUND AS NOTED
- IRON PIPE FOUND AS NOTED
- ⊞ MONUMENT BOX WITH 5/8" X 30" IRON PIN (ID: POLARIS) SET
- ⊞ MONUMENT BOX FOUND AS NOTED

- PROPOSED SANITARY SEWER EASEMENT
- PORTION OF EXISTING SANITARY SEWER EASEMENT TO BE RELEASED BY NORTH ROYALTON
- PROPOSED STORM WATER MANAGEMENT EASEMENT



W SPRAGUE ROAD - 80'

Per Right of Way Plans For Sprague Road Extension Cuyahoga County Engineer File No. M-4661



PARCEL CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING	TANGENT
C10	20.88'	50.00'	23°55'49"	20.73'	N60°55'02"E	10.60'
C11	54.37'	60.00'	51°55'25"	52.53'	S74°54'50"W	29.21'
C12	40.52'	60.00'	38°41'37"	39.75'	N59°46'39"W	21.07'
C13	36.42'	60.00'	34°46'49"	35.87'	N23°02'26"W	18.79'
C14	36.34'	60.00'	34°42'24"	35.79'	N11°42'10"E	18.75'
C15	32.97'	60.00'	31°29'19"	32.56'	N44°48'02"E	16.92'
C16	10.05'	60.00'	9°35'52"	10.04'	N65°20'37"E	5.04'
C17	36.48'	60.00'	34°49'58"	35.92'	N87°33'32"E	18.82'
C18	7.27'	60.00'	6°56'29"	7.26'	S71°33'14"E	3.64'
C19	20.33'	230.00'	5°03'51"	20.32'	S65°33'05"E	10.17'
C20	48.77'	230.00'	12°08'58"	48.68'	S56°56'40"E	24.48'
C21	48.77'	230.00'	12°08'58"	48.68'	S44°47'42"E	24.48'
C22	48.77'	230.00'	12°08'58"	48.68'	S32°38'44"E	24.48'
C23	48.77'	230.00'	12°08'58"	48.68'	S20°29'45"E	24.48'
C24	99.64'	230.00'	24°49'21"	98.87'	S2°00'36"E	50.62'
C25	52.85'	35.00'	86°30'42"	47.97'	N32°51'16"W	32.93'

PARCEL CURVE TABLE						
CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING	TANGENT
C26	186.92'	2331.88'	4°35'34"	186.87'	S73°48'51"E	93.51'
C27	63.90'	2331.88'	1°34'12"	63.90'	S76°53'44"E	31.95'
C28	88.02'	2331.88'	2°09'46"	88.02'	S78°45'43"E	44.02'
C29	449.27'	2331.88'	11°02'20"	448.58'	S85°21'46"E	225.33'
C30	7.23'	35.00'	11°50'02"	7.22'	N4°29'04"E	3.63'
C31	45.62'	35.00'	74°40'40"	42.46'	N38°46'17"W	26.70'

DATE: 2/8/23 DRAWN: MPS

SCALE: HOR: 1"= 30' VERT: 1"= 10'

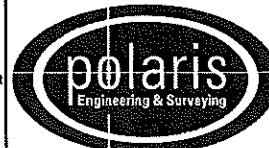
FOLDER: DWG/Proj. Surveying

FILENAME: Survey Base Record Plat

TAB: 02-RECORD PLAT

BNDY. CHK: MPS

BASE. CHK: N/A



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## WOODLAND BEND SUBDIVISION

CITY OF NORTH ROYALTON - CITY OF PARMA

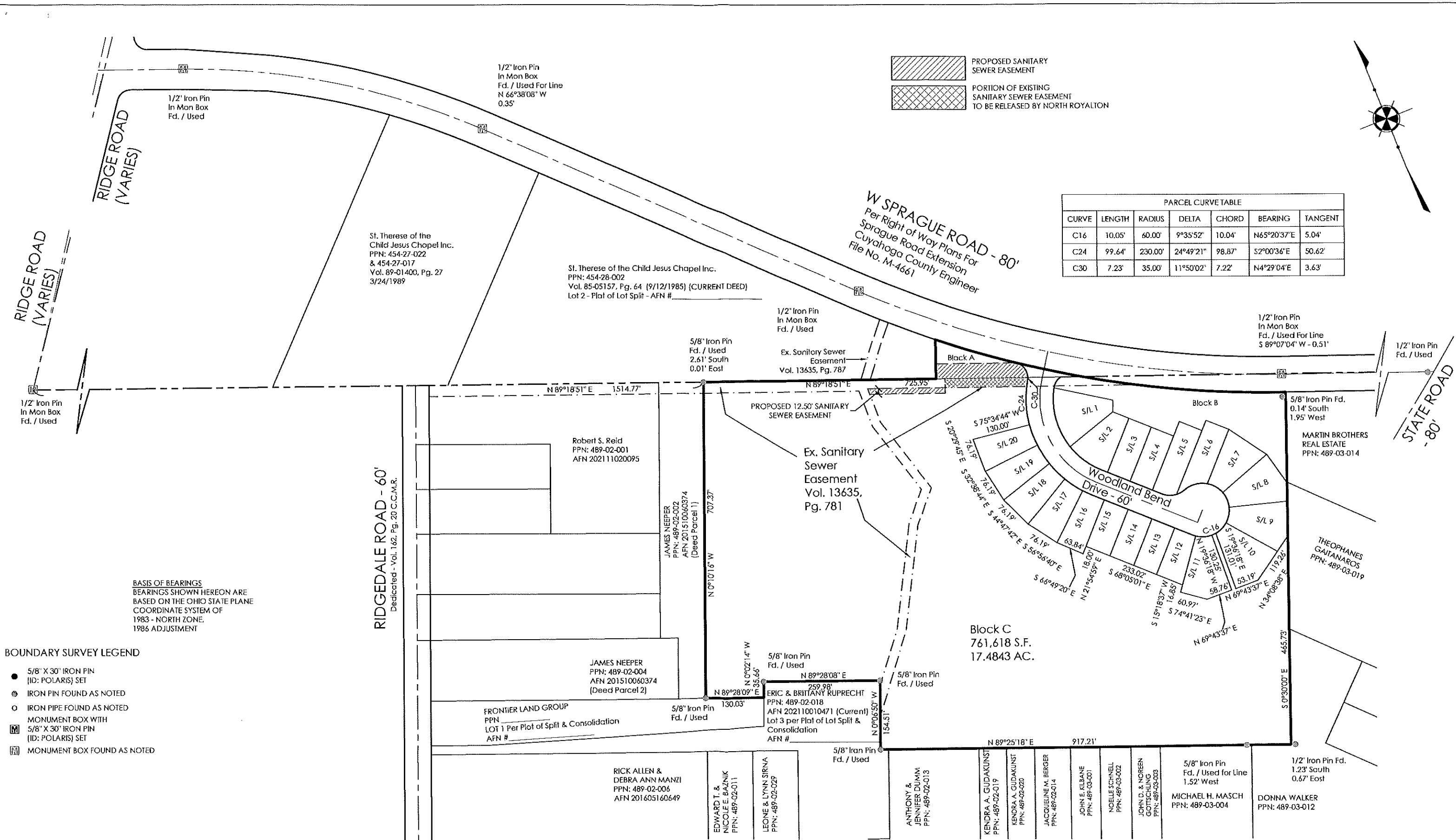
CUYAHOGA COUNTY - OHIO

CONTRACT No.

22057

SHEET 2 OF 3





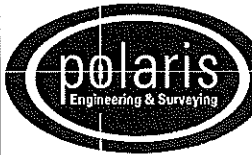
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C30	7.23'	35.00'	11°50'02"	7.22'	N4°29'04"E	3.63'

BASIS OF BEARINGS  
BEARINGS SHOWN HEREON ARE  
BASED ON THE OHIO STATE PLANE  
COORDINATE SYSTEM OF  
1983 - NORTH ZONE,  
1986 ADJUSTMENT

BOUNDARY SURVEY LEGEND

- 5/8" X 30" IRON PIN (ID: POLARIS) SET
- ⊙ IRON PIN FOUND AS NOTED
- IRON PIPE FOUND AS NOTED
- MONUMENT BOX WITH 5/8" X 30" IRON PIN (ID: POLARIS) SET
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SCALE: HOR. 1"=100' VERT. 1"=40'  
FOLDER: DWG/Proj. Surveying  
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SHEET OF

3 3