MAP PLAN AND ENGINEERING REPORT TO ESTABLISH A SEWER DISTRICT TO SERVE THE RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK

TOWN OF RICHFIELD
OTSEGO COUNTY, NEW YORK

PREPARED FOR:
County of Otsego Industrial Development Agency
242 Main Street
Oneonta, New York 13820

KEYSTONE ASSOCIATES
ARCHITECTS | ENGINEERS | SURVEYORS
58 Exchange Street • Binghamton, New York 13901
Telephone: (607) 722-1100 • Fax: (607) 722-2515
E-mail: info@keyscomp.com • Web: www.keyscomp.com

TABLE OF CONTENTS

TABLE OF CONTENTS

Section **Page**

APPENDICES

FIGURES

1. INTRODUCTION

1.1 Background

The project consists of the development of the Richfield Springs Eco-Industrial Business Park in the Town of Richfield, on property totaling 55.057 acres of land owned by the County of Otsego Industrial Development Agency of Oneonta, New York (IDA). The property is identified in general as Tax Map No. 24.00-18.31, a portion of the old railroad right-of-way formerly owned by Central N.Y. R.R. Corp. and a single family residence on Elm Street Extension (Tax Map No. 24-00-1-18.32). The property is intended to be subdivided into five (5) lot numbers and the residential property identified as an out parcel (Tax Map No. 24.00-1-18.32). Please refer to the Property Area Summary in the Appendix on Figure No. 3: Master Plan. Two (2) lots are being designed as manufacturing, identified as Lot No.'s 1 and 2, which total 11.717 acres. The use for the remaining property is as identified in the Property Area Summary mentioned above. Please refer to Figure No. 1 – USGS Location Map and Figure No. 2 – Tax Map, in the Appendix.

The proposed access road intersects NYS Route 28 approximately 525 feet southwest of the intersection of Union Street and NYS Route 28. This is also the approximate location of where the railroad tracks crossed NYS Route 28. The access road is approximately 1,100 feet long with 2-12' wide paved driving lanes, 4 foot shoulders on each side, roadside swales and culverts for drainage within a 66 foot wide right-of-way. The access terminates via a cul-de-sac southeast of the access point to Lot No. 2. Please refer to Figure No. 3 – Master Plan and Figure No. 4 – Park Plan and Access Road Profile, in the Appendix.

Wastewater from Lot No.'s 1 and 2 will flow by gravity via individual service laterals to an 8" gravity collection main located in the center of the access road. The effluent will flow northwest approximately 210 feet, then northeast to a sewage pump station. The effluent will be pumped southeast via a 4" force main along the old railroad right-of-way approximately 1,830 feet to Elm Street Extension, then approximately 820 feet along the northside of Elm Street Extension. Approximately 40 feet south of the Elm Street Extension Bridge crossing Ocquianis Creek, 125 feet of force main angles north and crosses under Ocquianis Creek via a directional bore and discharges to an existing manhole north of the creek. A sewer flow meter will be installed directly after the sewage pump station.

The IDA is interested in assisting the Town of Richfield in establishing a sewer district to provide sewer services to the Richfield Springs Eco-Industrial Business Park. The purpose of this report is to provide details to create the Town of Richfield Consolidated Sewer District.

2. SCOPE

The scope of this report is intended to present specific engineering information, property descriptions and construction and operational costs associated with the establishment of the sewer district to service the Richfield Springs Eco-Industrial Business Park. The total area proposed for the district is 11.717 acres out of the 55.057 acres owned by the IDA. The area consists of Lot No.'s 1 and 2 which are intended for business use. Since the infrastructure cost of the district formation will be the responsibility of the IDA, detailed financing and debt service charge calculations for infrastructure construction as it relates to the Town of Richfield are not included in this report. Please refer to Figure No. 5 –Sewer District Map and Figure No. 6 – Description of Town of Richfield Sewer District.

3. EXISTING DISTRICT

The wastewater collection system for the Village consists of approximately 189 sanitary sewer manholes, 45,148 feet of gravity sewer main, 3,353 feet of sewer force main and three (3) wastewater pump stations. Please refer to Figure No. 7 – Sewer System Map in the Appendix.

The Village of Richfield Springs Wastewater Treatment Plant (WWTP) is an activated sludge plant with a permitted average daily flow of 0.6 MGD. Treatment processes include screening, aeration, clarification and disinfection. Based on average daily flow records, the plant is treating approximately 200,000 gpd or 33% of its permitted capacity.

4. PROPOSED WASTEWATER FLOWS FROM PROPOSED DISTRICT

4.1 Wastewater Flow Origin

Utility demand will be from the businesses that will occupy Lot No.'s 1 and 2. As a result of multiple restrictions on the overall property involving wetlands and archaeological resources primarily, 11.717 acres out of the total 55.057 acres are able to be developed, as mentioned in the Introduction. Please refer to Figure No. 4 – Park Plan and Access Road Profile in the Appendix. The figure indicates the location of the lots, their individual acreage and the maximum development of building and parking. The type of businesses that may develop in this park are unknown therefore, the maximum building size is used to anticipate sewer demands.

4.2 Wastewater Flows

Wastewater Flows from the new district will be generated from the business activity developed on Lot No's. 1 and 2. As stated above these activities are unknown therefore, referencing Figure No. 4 and 135,000 s.f. of building area and referencing the 2014 NYSDEC Design Standards for Intermediate Size Wastewater Treatment Systems. For Wastewater Treatment 2014, the average daily wastewater flow is 13,500 gpd (9.4 gpm) (135,000 s.f. x 0.1 gals./day/SF). An additional 1,000 gpd was assigned to the water demand for manufacturing, assuming that all the use is directed to waste, which is conservative, the average daily flow is 14,500 gpd (10.1 gpm). A peaking factor of 4.3 is applied to the wastewater flow which equates to a peak flow of 43.3 gpm (14,500 gpd ÷ 24 hours/day ÷ 60 min./hr. x 4.3). The peak flow is used for the design of the sewage pump station, force main and the 391 feet of 8" SDR 35 gravity line.

The service laterals to the building are anticipated to be 6" SDR 35 PVC gravity lines. The pump station will contain two (2) pumps that will alternate and pump the wastewater along the old railroad bed to Elm Street Extension, then north across Ocquianis Creek to an existing manhole. The force main will consist of 2,775 feet of 4" SDR21 PVC. Four (4) access points for the force main are planned with two (2) air relief manholes. A flow meter manhole will be installed directly after the pump station. Please refer to Figure No. 3 – Master Plan.

As indicated above, the peak wastewater flow is calculated at 43.3 gpm. The 391 feet of 8" gravity sewer at a slope of 0.5 percent is capable of supporting 552 gpm (1.23 cfs.) at 3.54 ft/s. Each pump will be designed for a pumping rate capacity of 75 gpm with a total Dynamic Head of 54 feet to allow for future capacity with a high water use tenant in the park.

The Village of Richfield Springs Wastewater Treatment Plant has a permitted capacity of 600,000 gpd with a current average daily flow of 200,000 gpd, which is 33 percent of the permitted capacity. The increase in flow from the new district increases the average daily flow to 214,500 gpd and reflects an increase of approximately 7 percent. The increase in average daily flow reflects approximately 36 percent of the plants permitted capacity therefore, the increased wastewater flow demand is met by the system.

5. Proposed Operation and Maintenance Expenses

In accordance with financial data provided by the Village of Richfield Springs for the years 2018, 2019 and 2020, the average cost to operate the sanitary sewer system per year is $308,587.00. This cost includes administration, insurance, treatment plan operations, employee payroll and benefits and general operation and maintenance of the system. Village flow records at the treatment plant indicate an average of 200,000 gpd of effluent is treated. However, according to Village officials approximately only 25 percent of this volume is charged via sewer fees to the users. Therefore, the cost to the Village per 1,000 gallons is $17.95. The IDA received a matching $1.2 million dollar grant from the U.S. Department of Commerce Economic Development Administration (EDA) to fund the infrastructure costs for the park. The IDA will bond for their matching share and estimates the bonding cost to be $50,000.00 per year. The Village will fund the IDA's bond cost through the service charges.

As indicated above, the estimated average daily flow of effluent from the Industrial Park is 14,500 gpd. The Village's cost is $260.28 per day or $95,002.20 per year (14,500 gpd x $17.95/1,000 gal = $260.28 per day x 365 days/year = $95,002.20/year.) Including the bond cost increases the cost to the Village to approximately $397.27 per day or $145,002.20 per year.

6. Service Changes

In accordance with the "Village of Richfield Springs, Water/Sewer Rates for June 1, 2019," the rate for sewer is as follows, including a "monthly sewer line charge" (commercial) of $12.00.

0-1,000	$18.50
1,001-3,000	$19.55
3,001-7,000	$23.53
7,001+ gallons	$27.37

(1,000 gpd x $18.50 + 3,000 gpd x $19.55 + 7,000 gpd x $23.53 + 3,500 gpd x $27.37 ÷ 1,000 gal. + $12.00/month x 12 mo. ÷ 365 days/yr. = $338.05/day or $123,388.25/yr.).

Therefore, the total estimated fees to the Village for providing sewer services to the Richfield Springs Eco-Industrial Business Park is $338.05/day or $123,388.25/yr.

Obviously, the fee for sewer service will have to increased to cover the bond cost for infrastructure incurred by the IDA, plus a nominal profit for the Village.

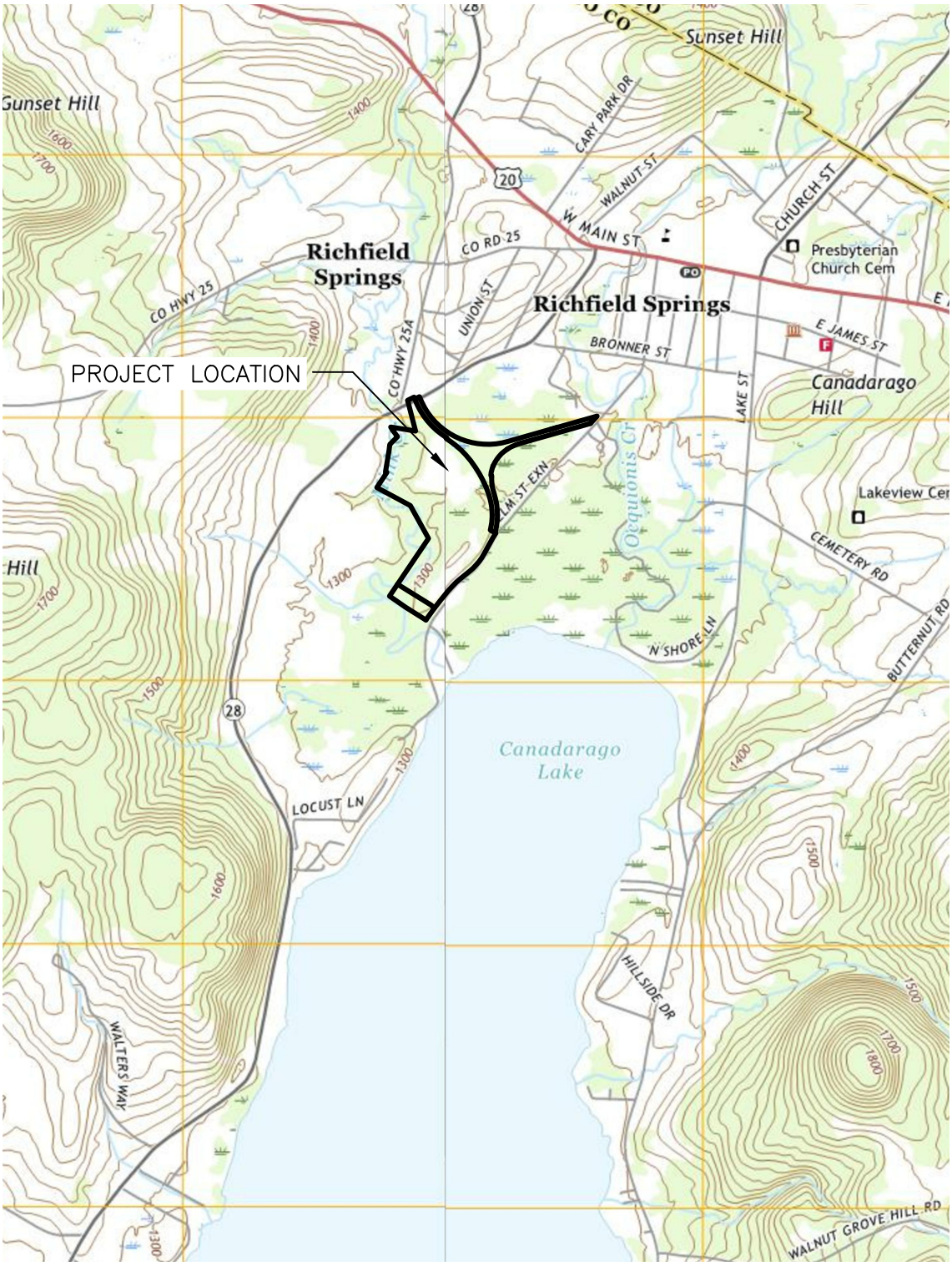
7. Summary

The estimated sewer fees imposed by the Village of Richfield Springs on the Richfield Springs Eco-Industrial Business Park exceeds the estimated increase in the sanitary sewer system operation and maintenance. Therefore, the creation of the Town of Richfield Sewer District to support the Business Park will not create a hardship or economic burden on the Town or Village and will contribute to the development of taxable property in the Town.

APPENDICES

FIGURES

FIGURE NO. 1
USGS LOATION MAP



QUAD NAME: SCHUYLER LAKE, NY 2019

SCALE: 1" = 2,000'

QUAD NAME: RICHFIELD SPRINGS, NY 2019

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

OTSEGO COUNTY IDA
RICHFIELD SPRINGS BUSINESS PARK

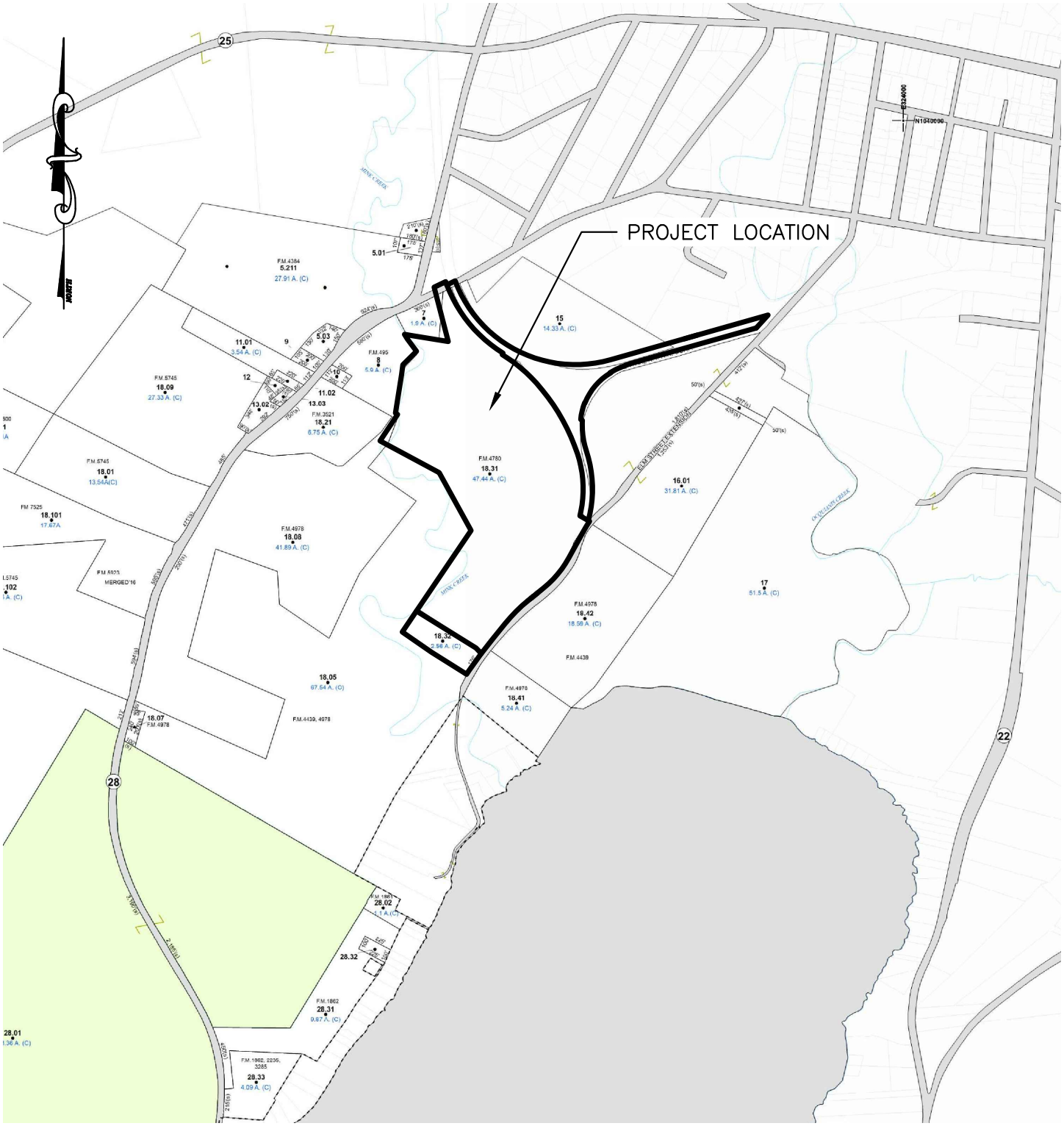
TOWN OF RICHFIELD
OTSEGO COUNTY NEW YORK STATE

KEYSTONE PROJECT #0552.04219

FIGURE NO. 1

USGS LOCATION MAP

FIGURE NO. 2
TAX MAP



SCALE: 1" = 1,000'

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

OTSEGO COUNTY IDA
RICHFIELD SPRINGS BUSINESS PARK

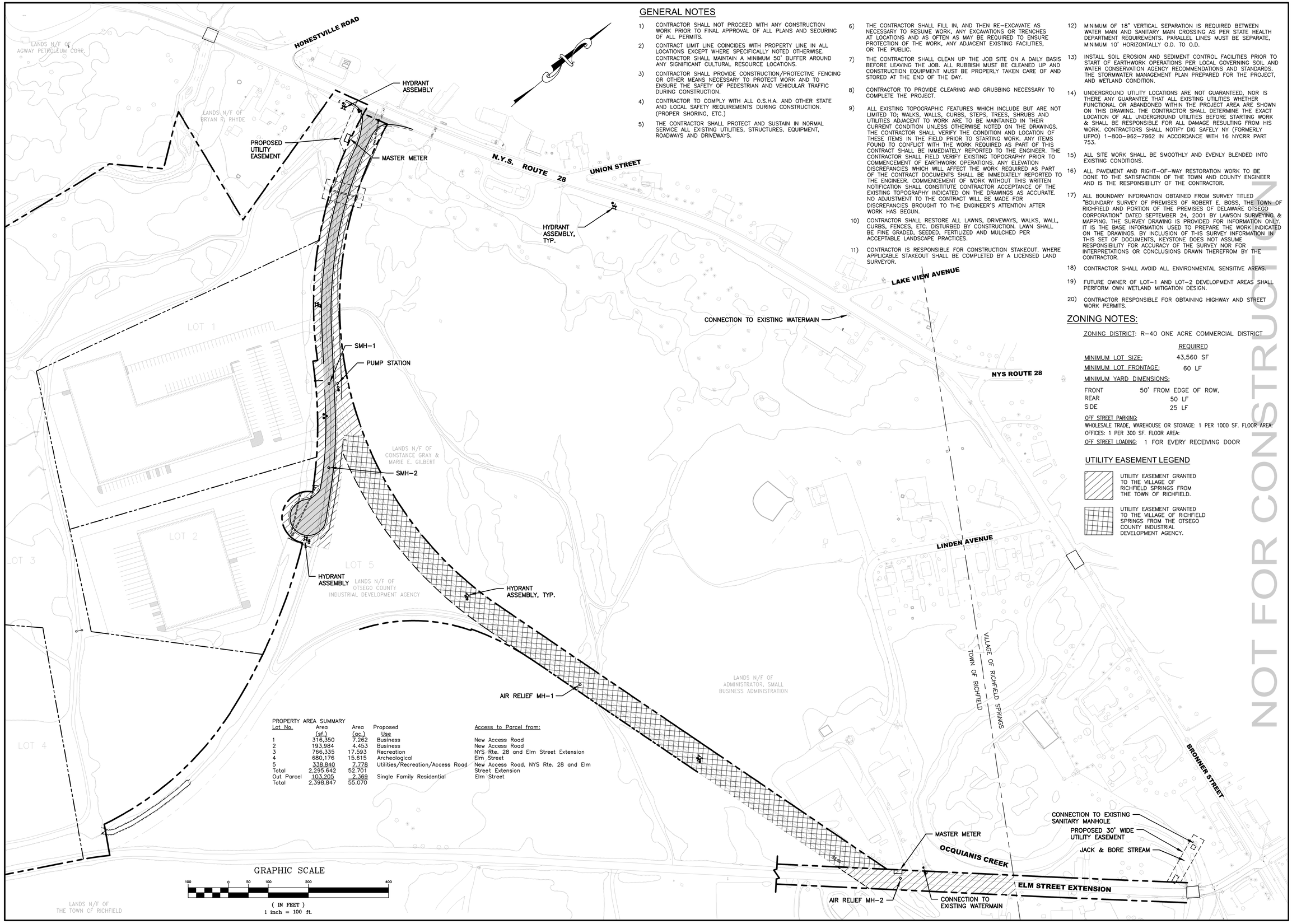
TOWN OF RICHFIELD
OTSEGO COUNTY NEW YORK STATE

KEYSTONE PROJECT #0552.04219

FIGURE NO. 2

TAX MAP

FIGURE NO. 3
MASTER PLAN



GENERAL NOTES

1) CONTRACTOR SHALL NOT PROCEED WITH ANY CONSTRUCTION WORK PRIOR TO FINAL APPROVAL OF ALL PLANS AND SECURING OF ALL PERMITS.
2) CONTRACT LIMIT LINE COINCIDES WITH PROPERTY LINE IN ALL LOCATIONS EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE. CONTRACTOR SHALL MAINTAIN A MINIMUM 50' BUFFER AROUND ANY SIGNIFICANT CULTURAL RESOURCE LOCATIONS.
3) CONTRACTOR SHALL PROVIDE CONSTRUCTION/PROTECTIVE FENCING OR OTHER MEANS NECESSARY TO PROTECT WORK AND TO ENSURE THE SAFETY OF PEDESTRIAN AND VEHICULAR TRAFFIC DURING CONSTRUCTION.
4) CONTRACTOR TO COMPLY WITH ALL O.S.H.A. AND OTHER STATE AND LOCAL SAFETY REQUIREMENTS DURING CONSTRUCTION. (PROPER SHORING, ETC.)
5) THE CONTRACTOR SHALL PROTECT AND SUSTAIN IN NORMAL SERVICE ALL EXISTING UTILITIES, STRUCTURES, EQUIPMENT, ROADWAYS AND DRIVEWAYS.
6) THE CONTRACTOR SHALL FILL IN, AND THEN RE-EXCAVATE AS NECESSARY TO RESUME WORK, ANY EXCAVATIONS OR TRENCHES AT LOCATIONS AND AS OFTEN AS MAY BE REQUIRED TO ENSURE PROTECTION OF THE WORK, ANY ADJACENT EXISTING FACILITIES, OR THE PUBLIC.
7) THE CONTRACTOR SHALL CLEAN UP THE JOB SITE ON A DAILY BASIS BEFORE LEAVING THE JOB. ALL RUBBISH MUST BE CLEANED UP AND CONSTRUCTION EQUIPMENT MUST BE PROPERLY TAKEN CARE OF AND STORED AT THE END OF THE DAY.
8) CONTRACTOR TO PROVIDE CLEARING AND GRUBBING NECESSARY TO COMPLETE THE PROJECT.
9) ALL EXISTING TOPOGRAPHIC FEATURES WHICH INCLUDE BUT ARE NOT LIMITED TO; WALKS, WALLS, CURBS, STEPS, TREES, SHRUBS AND UTILITIES ADJACENT TO WORK ARE TO BE MAINTAINED IN THEIR CURRENT CONDITION UNLESS OTHERWISE NOTED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE CONDITION AND LOCATION OF THESE ITEMS IN THE FIELD PRIOR TO STARTING WORK. ANY ITEMS FOUND TO CONFLICT WITH THE WORK REQUIRED AS PART OF THIS CONTRACT SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. THE CONTRACTOR SHALL FIELD VERIFY EXISTING TOPOGRAPHY PRIOR TO COMMENCEMENT OF EARTHWORK OPERATIONS. ANY ELEVATION DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED AS PART OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER. COMMENCEMENT OF WORK WITHOUT THIS WRITTEN NOTIFICATION SHALL CONSTITUTE CONTRACTOR ACCEPTANCE OF THE EXISTING TOPOGRAPHY INDICATED ON THE DRAWINGS AS ACCURATE. NO ADJUSTMENT TO THE CONTRACT WILL BE MADE FOR DISCREPANCIES BROUGHT TO THE ENGINEER'S ATTENTION AFTER WORK HAS BEGUN.
10) CONTRACTOR SHALL RESTORE ALL LAWNS, DRIVEWAYS, WALKS, WALL, CURBS, FENCES, ETC. DISTURBED BY CONSTRUCTION. LAWN SHALL BE FINE GRADED, SEEDED, FERTILIZED AND MULCHED PER ACCEPTABLE LANDSCAPE PRACTICES.
11) CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION STAKEOUT. WHERE APPLICABLE STAKEOUT SHALL BE COMPLETED BY A LICENSED LAND SURVEYOR.
12) MINIMUM OF 18" VERTICAL SEPARATION IS REQUIRED BETWEEN WATER MAIN AND SANITARY MAIN CROSSING AS PER STATE HEALTH DEPARTMENT REQUIREMENTS. PARALLEL LINES MUST BE SEPARATE, MINIMUM 10' HORIZONTALLY O.D. TO O.D.
13) INSTALL SOIL EROSION AND SEDIMENT CONTROL FACILITIES PRIOR TO START OF EARTHWORK OPERATIONS PER LOCAL GOVERNING SOIL AND WATER CONSERVATION AGENCY RECOMMENDATIONS AND STANDARDS. THE STORMWATER MANAGEMENT PLAN PREPARED FOR THE PROJECT, AND WETLAND CONDITION.
14) UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA ARE SHOWN ON THIS DRAWING. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK & SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM HIS WORK. CONTRACTORS SHALL NOTIFY DIG SAFELY NY (FORMERLY UFPO) 1-800-962-7962 IN ACCORDANCE WITH 16 NYCRR PART 753.
15) ALL SITE WORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS.
16) ALL PAVEMENT AND RIGHT-OF-WAY RESTORATION WORK TO BE DONE TO THE SATISFACTION OF THE TOWN AND COUNTY ENGINEER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
17) ALL BOUNDARY INFORMATION OBTAINED FROM SURVEY TITLED "BOUNDARY SURVEY OF PREMISES OF ROBERT E. BOSS, THE TOWN OF RICHFIELD AND PORTION OF THE PREMISES OF DELAWARE OTSEGO CORPORATION" DATED SEPTEMBER 24, 2001 BY LAWSON SURVEYING & MAPPING. THE SURVEY DRAWING IS PROVIDED FOR INFORMATION ONLY. IT IS THE BASE INFORMATION USED TO PREPARE THE WORK INDICATED ON THE DRAWINGS. BY INCLUSION OF THIS SURVEY INFORMATION IN THIS SET OF DOCUMENTS, KEYSTONE DOES NOT ASSUME RESPONSIBILITY FOR ACCURACY OF THE SURVEY NOR FOR INTERPRETATIONS OR CONCLUSIONS DRAWN THEREFROM BY THE CONTRACTOR.
18) CONTRACTOR SHALL AVOID ALL ENVIRONMENTAL SENSITIVE AREAS.
19) FUTURE OWNER OF LOT-1 AND LOT-2 DEVELOPMENT AREAS SHALL PERFORM OWN WETLAND MITIGATION DESIGN.
20) CONTRACTOR RESPONSIBLE FOR OBTAINING HIGHWAY AND STREET WORK PERMITS.

ZONING NOTES:

ZONING DISTRICT: R-40 ONE ACRE COMMERCIAL DISTRICT

	REQUIRED
MINIMUM LOT SIZE:	43,560 SF
MINIMUM LOT FRONTAGE:	60 LF
MINIMUM YARD DIMENSIONS:	
FRONT	50' FROM EDGE OF ROW,
REAR	50 LF
SIDE	25 LF

OFF STREET PARKING:
WHOLESALE TRADE, WAREHOUSE OR STORAGE: 1 PER 1000 SF. FLOOR AREA:
OFFICES: 1 PER 300 SF. FLOOR AREA:
OFF STREET LOADING: 1 FOR EVERY RECEIVING DOOR

UTILITY EASEMENT LEGEND

UTILITY EASEMENT GRANTED TO THE VILLAGE OF RICHFIELD SPRINGS FROM THE TOWN OF RICHFIELD.

UTILITY EASEMENT GRANTED TO THE VILLAGE OF RICHFIELD SPRINGS FROM THE OTSEGO COUNTY INDUSTRIAL DEVELOPMENT AGENCY.

PROPERTY AREA SUMMARY

Lot No.	Area (sf.)	Area (ac.)	Proposed Use	Access to Parcel from:
1	316,350	7.262	Business	New Access Road
2	193,984	4.453	Business	New Access Road
3	766,335	17.593	Recreation	NYS Rte. 28 and Elm Street Extension
4	680,176	15.615	Archeological	Elm Street
5	338,840	7.778	Utilities/Recreation/Access Road	New Access Road, NYS Rte. 28 and Elm Street Extension
Total	2,295,642	52.701		
Out Parcel	103,205	2.369	Single Family Residential	Elm Street
Total	2,398,847	55.070		

NOT FOR CONSTRUCTION

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keystonepc.com
www.keystonepc.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	REVISIONS AND RESUBMITTALS	DATE

OTSEGO COUNTY IDA
RICHFIELD SPRINGS ECO-INDUSTRIAL
BUSINESS PARK ROAD & UTILITY EXTENSION
OTSEGO COUNTY, NY
TOWN OF RICHFIELD

MASTER PLAN

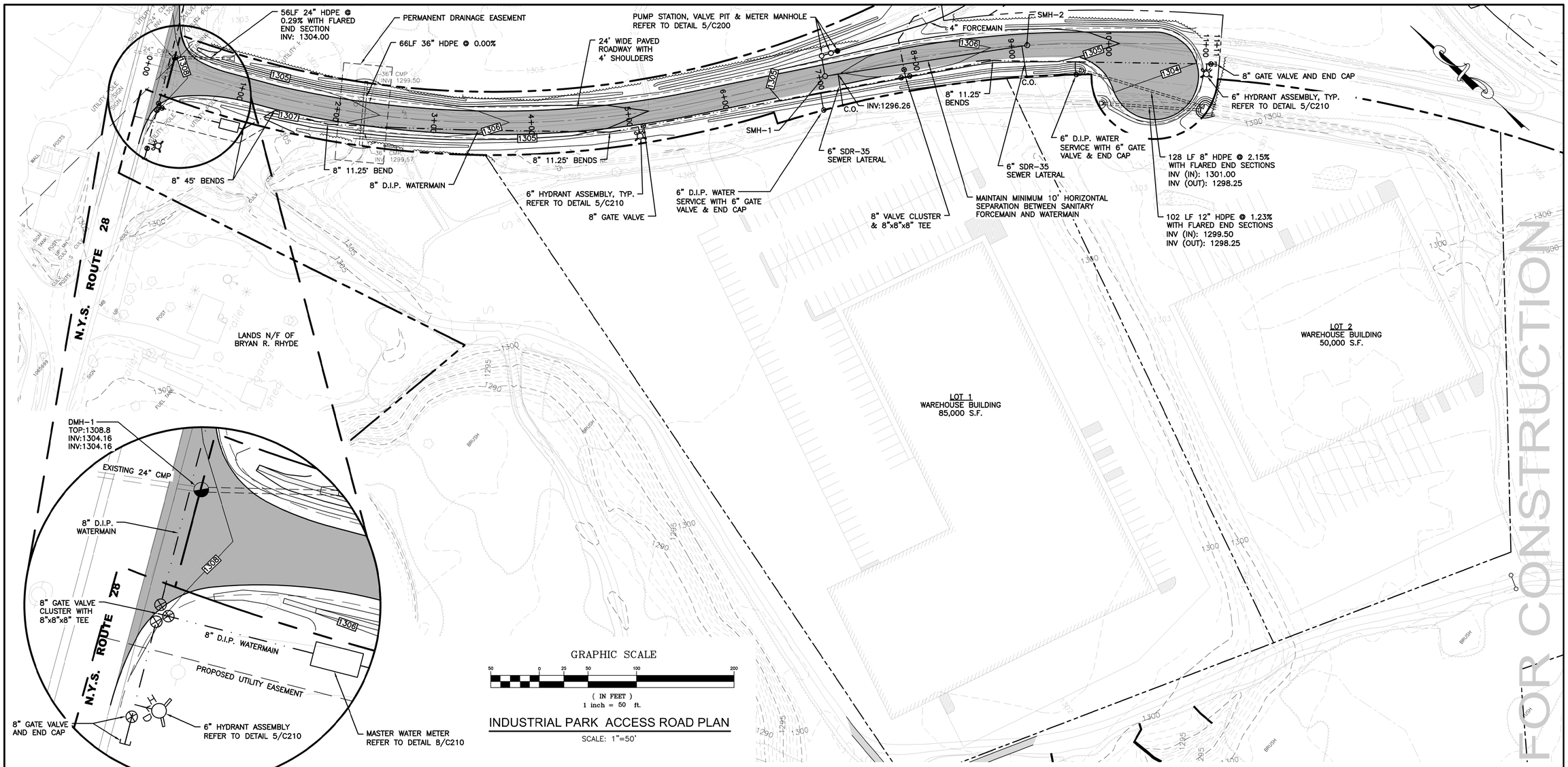
SHEET NO. **3**

PROJECT NO. 0552.04219.1

DATE: 02/15/21

CAD FILE NO. 0552.04219.1-Site

FIGURE NO. 4
PARK PLAN AND ACCESS ROAD PROFILE



INTERSECTION DETAIL

SCALE: 1"=20'

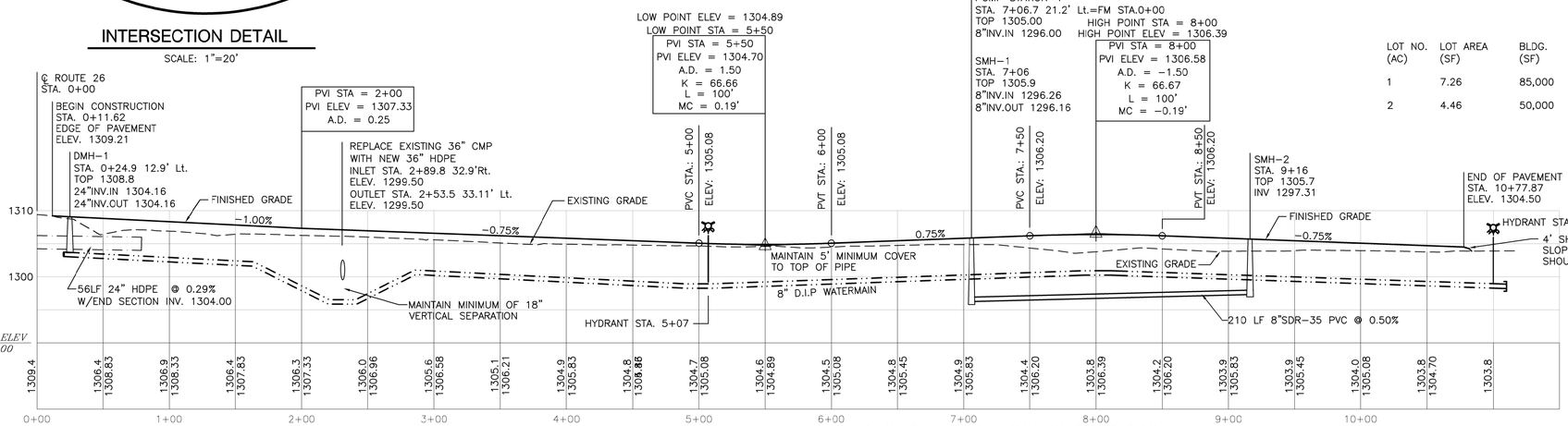
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

INDUSTRIAL PARK ACCESS ROAD PLAN

SCALE: 1"=50'



INDUSTRIAL PARK ACCESS ROAD PROFILE

SCALE: HORIZONTAL 1"=50'
VERTICAL 1"=10'

OFF STREET PARKING

LOT NO. (AC)	LOT AREA (SF)	BLDG. (SF)	WHOLESALE TRADE, WAREHOUSE, OR STORAGE (SF) @ 1/1000 SF	OFFICE (SF) @ 1/300 SF	PARKING REQUIRED	PARKING ACTUAL
1	7.26	85,000	80,000 (80)	5,000 (17)	97	154
2	4.46	50,000	50,000 (50)	5,000 (17)	67	15
				TOTAL	164	169

NOT FOR CONSTRUCTION

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

NO.	REVISIONS AND DESCRIPTIONS	DATE

OTSEGO COUNTY IDA
RICHFIELD SPRINGS ECO-INDUSTRIAL
BUSINESS PARK ROAD & UTILITY EXTENSION
TOWN OF RICHFIELD — OTSEGO COUNTY, NY

PARK PLAN AND ACCESS ROAD PROFILE

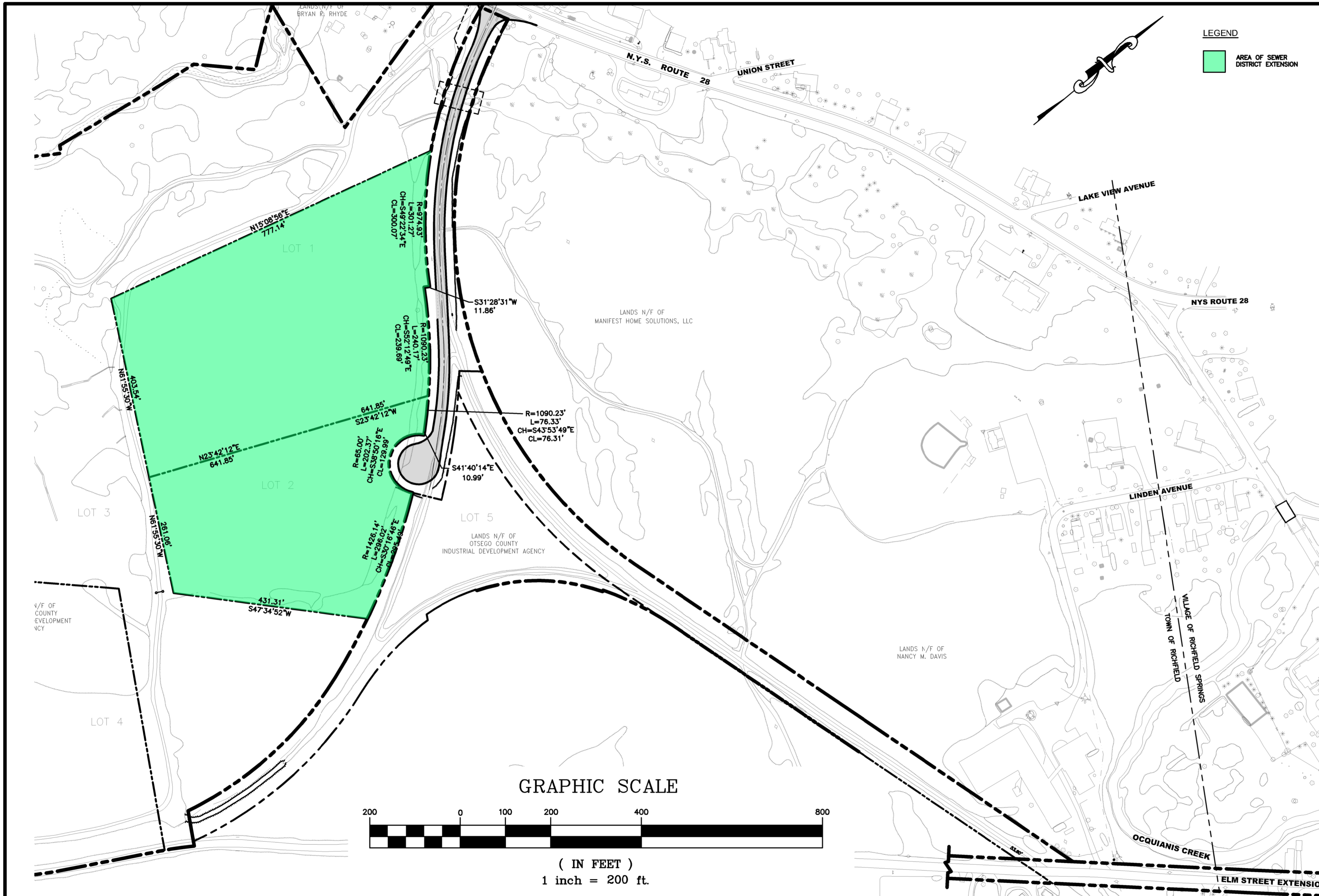
SHEET NO. **4**

PROJECT NO. 0552.04219.1

DATE: 02/15/21

CAD FILE NO: 0552.04219.1-PROFILE

FIGURE NO. 5
SEWER DISTRICT MAP



KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

OTSEGO COUNTY IDA
RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK ROAD & UTILITY EXTENSION
TOWN OF RICHFIELD — OTSEGO COUNTY, NY

SEWER DISTRICT MAP

SHEET NO. 5

PROJECT NO. 0552.04219.1

DATE: 02/15/21

FIGURE NO. 6
DESCRIPTION OF TOWN OF RICHFIELD SEWER DISTRICT

SURVEYOR'S DESCRIPTION
SEWER DISTRICT LOT #1
PORTION OF TM# 24.00-1-18.31
ELM STREET EXTENSION
TOWN OF RICHFIELD
OTSEGO COUNTY, NEW YORK STATE

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Richfield, County of Otsego, State of New York, being a portion of the property now or formerly of County of Otsego IDA (TM# 24.00-1-18.31), bounded and described as follows:

COMMENCING at a point on the centerline of NYS Route 28 at its intersection with the division line between another property now or formerly of the County of Otsego IDA (TM# 24.00-1-37) on the northeast and said County of Otsego IDA (TM# 24.00-1-18.31) on the southwest; thence generally southeasterly along said division line on a curve to the left having a radius of 974.93 feet, an arc length of 361.37 feet to the Point of Beginning, said curve being subtended by a chord having a bearing of S29°54'17"E and a length of 359.31 feet;

CONTINUING THENCE along the division lines between said County of Otsego IDA (TM# 24.00-1-37) and said County of Otsego IDA (TM# 24.00-1-18.31) the following three (3) courses and distances:

1) Continuing on a curve to the left having a radius of 974.93 feet, an arc length of 301.27 feet to a point, the last mentioned curve being subtended by a chord having a bearing of S49°22'34"E and a length of 300.07 feet;
2) S31°28'31"W, a distance of 11.86 feet to a point;
3) On a curve to the right having a radius of 1090.23 feet, an arc length of 240.17 feet to a point, the last mentioned curve being subtended by a chord having a bearing of S52°12'49"E and a length of 239.69 feet; thence through said County of Otsego IDA (TM# 24.00-1-18.31) the following three (3) courses and distances:
1) S23°42'12"W, a distance of 641.85 feet to a point;
2) N61°55'30"W, a distance of 403.54 feet to a point;
3) N15°08'56"E, a distance of 777.14 feet to the POINT OF BEGINNING.

The above described parcel contains 316,350 square feet or 7.262 acres, more or less.

Bearings are referred to True North at the 74°30' Meridian of West Longitude.

SURVEYOR'S DESCRIPTION
SEWER DISTRICT LOT #2
PORTION OF TM# 24.00-1-18.31
ELM STREET EXTENSION
TOWN OF RICHFIELD
OTSEGO COUNTY, NEW YORK STATE

ALL THAT TRACT OR PARCEL OF LAND situate in the Town of Richfield, County of Otsego, State of New York, being a portion of the property now or formerly of County of Otsego IDA (TM# 24.00-1-18.31), bounded and described as follows:

COMMENCING at a point on the centerline of NYS Route 28 at its intersection with the division line between another property now or formerly of the County of Otsego IDA (TM# 24.00-1-37) on the northeast and said County of Otsego IDA (TM# 24.00-1-18.31) on the southwest; thence generally southeasterly along said division line the following three (3) courses and distances: 1) On a curve to the left having a radius of 974.93 feet, an arc length of 662.64 feet to a point, said curve being subtended by a chord having a bearing of S38°45'27"E and a length of 649.96 feet; 2) S31°28'31"W, a distance of 11.86 feet to a point; 3) On a curve to the right having a radius of 1090.23 feet, an arc length of 240.17 feet to the Point of Beginning, the last mentioned curve being subtended by a chord having a bearing of S52°12'49"E and a length of 239.69 feet;

CONTINUING THENCE along the division lines between said County of Otsego IDA (TM# 24.00-1-37) and said County of Otsego IDA (TM# 24.00-1-18.31) the following four (4) courses and distances:

1) Continuing on a curve to the right having a radius of 1090.23 feet, an arc length of 76.33 feet to a point, the last mentioned curve being subtended by a chord having a bearing of S43°53'49"E and a length of 76.31 feet;
2) S41°40'14"E, a distance of 10.99 feet to a point;
3) On a curve to the left having a radius of 65.00 feet, an arc length of 202.37 feet to a point, the last mentioned curve being subtended by a chord having a bearing of S38°50'16"E and a length of 129.99 feet;
4) On a curve to the right having a radius of 1426.14 feet, an arc length of 296.02 feet to a point, the last mentioned curve being subtended by a chord having a bearing of S30°16'46"E and a length of 295.49 feet; thence through said County of Otsego IDA (TM# 24.00-1-18.31) the following three (3) courses and distances:
1) S47°34'52"W, a distance of 431.31 feet to a point;
2) N61°55'30"W, a distance of 261.06 feet to a point;
3) N23°42'12"E, a distance of 641.85 feet to the POINT OF BEGINNING.

The above described parcel contains 193.984 square feet or 4.453 acres, more or less.

58 Exchange Street
Binghamton, New York 13901
Phone: 607.722.1100
Fax: 607.722.2515
Email: info@keyscomp.com
www.keyscomp.com

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS AND SURVEYORS, LLC

OTSEGO COUNTY IDA
RICHFIELD SPRINGS ECO-INDUSTRIAL
BUSINESS PARK ROAD & UTILITY EXTENSION
TOWN OF RICHFIELD
OTSEGO COUNTY, NY

SEWER DISTRICT DESCRIPTION

SHEET NO.
6

PROJECT NO.
0552.04219.1

DATE
02/15/21

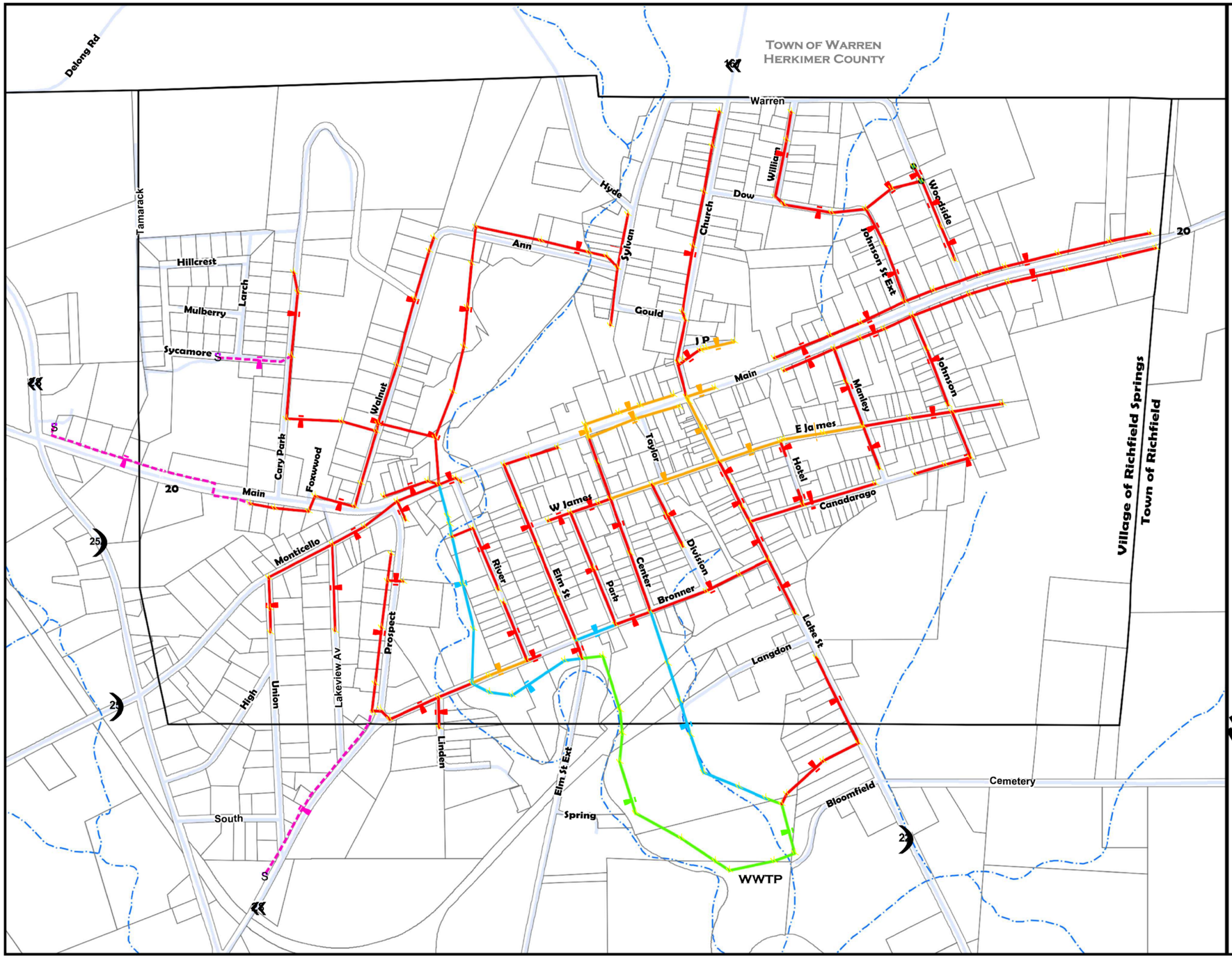
CAD FILE NO. 0552.04219.1–Site

FIGURE NO. 7
SEWER SYSTEM MAP

FIGURE X
SEWER SYSYEM MAP

VILLAGE OF RICHFIELD SPRINGS AND TOWN OF RICHFIELD JOINT COMPREHENSIVE PLAN

OTSEGO COUNTY, NEW YORK



LEGEND

- Municipal Boundary
- DEC Classified Stream
- Waterbody

Village of Richfield Springs Wastewater Collection System

- Sanitary Manhole
- Pump Station
- 1.5" - 2" Force Main
- 8" Gravity Sewer
- 10" Gravity Sewer
- 12" Gravity Sewer
- 15" Gravity Sewer

Note: Pipe locations are approximate, based on the 2010 Revised General Plan of the Village WW Collection System.

N

SCALE: 1" = 700'

Date: October, 2016
Sources: Otsego County 2015 Digital Tax Parcels
NYSDEC Classifed Streams, Waterbodies
General Plan WW Collection System, Lamont Engineers, Revised 11/11/2010

ELAN
Planning | Design | Landscape Architecture PLLC

DELAWARE ENGINEERING, DPC
CIVIL AND ENVIRO

KEYSTONE ASSOCIATES
ARCHITECTS, ENGINEERS & SURVEYORS, LLC

OTSEGO COUNTY IDA
RICHFIELD SPRINGS ECO-INDUSTRIAL BUSINESS PARK ROAD & UTILITY EXTENSION
TOWN OF RICHFIELD
OTSEGO COUNTY, NY

SEWER SYSTEM SCHEMATIC

SHEET NO.
7

PROJECT NO.
0552.04219.1

DATE:
02/15/21

CAD FILE NO.: 0552.04219.1-Site