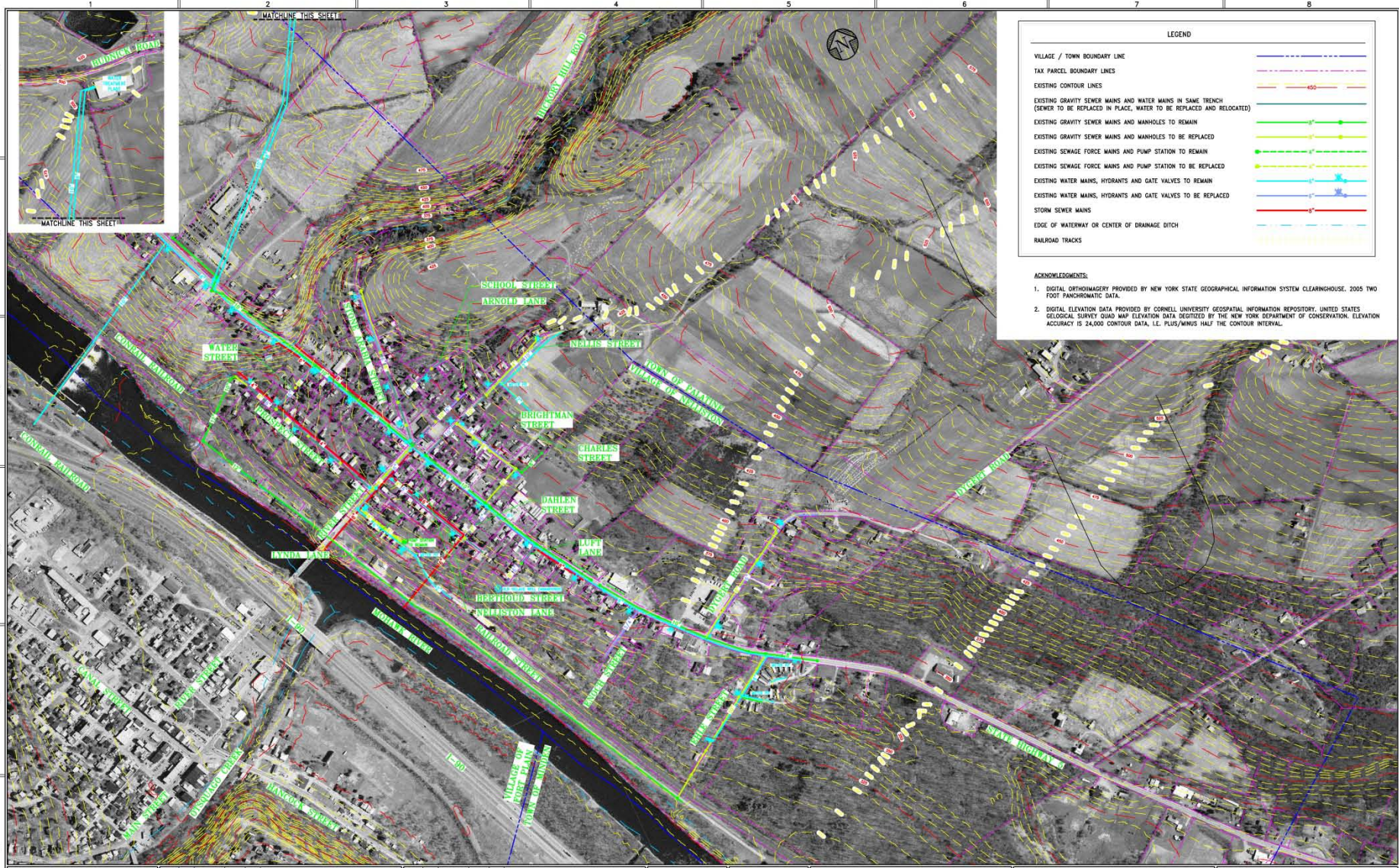


WATER SYSTEM EVALUATION

VILLAGE OF NELLISTON
MONTGOMERY COUNTY, NEW YORK



LEGEND	
VILLAGE / TOWN BOUNDARY LINE	
TAX PARCEL BOUNDARY LINES	
EXISTING CONTOUR LINES	
EXISTING GRAVITY SEWER MAINS AND WATER MAINS IN SAME TRENCH (SEWER TO BE REPLACED IN PLACE, WATER TO BE REPLACED AND RELOCATED)	
EXISTING GRAVITY SEWER MAINS AND MANHOLES TO REMAIN	
EXISTING GRAVITY SEWER MAINS AND MANHOLES TO BE REPLACED	
EXISTING SEWAGE FORCE MAINS AND PUMP STATION TO REMAIN	
EXISTING SEWAGE FORCE MAINS AND PUMP STATION TO BE REPLACED	
EXISTING WATER MAINS, HYDRANTS AND GATE VALVES TO REMAIN	
EXISTING WATER MAINS, HYDRANTS AND GATE VALVES TO BE REPLACED	
STORM SEWER MAINS	
EDGE OF WATERWAY OR CENTER OF DRAINAGE DITCH	
RAILROAD TRACKS	

- ACKNOWLEDGMENTS:**
- DIGITAL ORTHOPHOTOGRAPHY PROVIDED BY NEW YORK STATE GEOGRAPHICAL INFORMATION SYSTEM CLEARINGHOUSE. 2005 TWO FOOT PANORAMATIC DATA.
 - DIGITAL ELEVATION DATA PROVIDED BY CORNELL UNIVERSITY GEOSPATIAL INFORMATION REPOSITORY. UNITED STATES GEOLOGICAL SURVEY QUAD MAP ELEVATION DATA DIGITIZED BY THE NEW YORK DEPARTMENT OF CONSERVATION. ELEVATION ACCURACY IS 24,000 CONTOUR DATA, I.E. PLUS/MINUS HALF THE CONTOUR INTERVAL.

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ISSUE	REV.	LOCATION	DATE	APP.	REMARKS

SCALE	1"=300'
DRAWN	MKS
DATE	09/09/09
DESIGNED	JEH
CHECKED	MDH

VILLAGE OF NELLISTON
 WATER SYSTEM IMPROVEMENTS
 WASTEWATER SYSTEM IMPROVEMENTS
 MONTGOMERY COUNTY NEW YORK STATE

EXISTING UTILITIES

Lamont Engineers
 ENGINEERS - PLANNERS - FACILITY OPERATORS
 548 MAIN ST., COBLESKILL, N.Y. 12543 (518) 234-4028

PROJECT NO.	2009032	FILE NAME	BM_NELLISTON	SHEET NO.	1
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Service Area

- Village Boundaries
- Population: 622 (2000 Census)
- Service Connections: 257
 - 168 Single Family Houses
 - 73 Apartments
 - 16 Commercial/Institutional

Water Usage

Fort Plain Master Metering = 88,000 gpd

Village Master Metering = 48,000 gpd

Master Metering Discrepancy = 40,000 gpd

Existing Water System

- Source
 - Fort Plain
 - Surface Water w/ Slow Sand Filtration WTP
- Transmission & Distribution Mains
 - Gravity
 - Transmission (10" & 8")
 - Distribution (Mostly 6" w/ some 2" & smaller)
- Storage
 - WTP Clearwell
 - No Storage Tank

Existing Water System

- Deficiencies
 - Water Mains over Sewer Mains
 - Old cast iron – breakage & leaks
 - Portions of Village not served
 - No Distribution System Storage
 - Disinfection By-products
 - No Village Control over Source Cost

Existing Water System Budget

Town Tax on Water Main =	\$900
Purchase Cost (Fort Plain)=	\$112,000
Surcharge (Fort Plain) =	\$10,000
Personnel =	\$12,000
Equipment =	\$2,000
<u>Contract Work (Repairs)</u>	<u>\$15,000</u>
Total Water Budget	\$151,900

Total Payment to Fort Plain

Cost of Metering Discrepancy = \$112,000/yr

Surcharge Cost = \$10,000/yr

Potential Saving = \$122,000/yr

Opinion of Project Cost

New Well Source & Storage Tank

New Well Source (50,000 gpd) = \$550,000

New Storage Tank (150,000 gal) = \$275,000

Transmission Main = \$75,000

Water Mains Replacement = \$600,000

Contingencies = \$150,000

Non-construction = \$495,000

Total Project Cost = \$2,431,000

Opinion of O&M Cost New Groundwater Source

Pumping = \$3,500/yr

Disinfection = \$2,500/yr

Personnel = \$4,000/yr

Heating = \$1,200/yr

Misc. Electrical = \$300/yr

Total O&M Cost = \$11,500/yr

Capital Project Repayment

Usual Funding Source:

- Rural Development (RD)
- NYSEFC Drinking Water State Revolving Fund

Likely Funding Source:

- Rural Development
- Interest Rate: 3.75% for 38 yrs
- Project Repayment: \$106,803/yr

Equivalent Dwelling Units (EDU)

- What is an EDU?
- EDU Count = 268
- Existing Cost per EDU = \$567 (Estimated)
- Projected Cost Per EDU = \$562 (Estimated)

Questions