



**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT NAME: ELM FARM
PROJECT NO.: 2021-15
PROJECT LOCATION: SECTION 39, BLOCK 1, LOT 12.44
REVIEW DATE: 10 DECEMBER 2021
MEETING DATE: 16 DECEMBER 2021
PROJECT REPRESENTATIVE: PITINGARO & DOETSCH CONSULTING ENGINEERS

1. The applicant's representatives have provided updated NYSDEC Permits for Article 24 Wetlands and Section 401 Water Quality Certifications which are now valid until 14 April 2024.
2. The status of Orange County DPW review of the project should be determined.
3. Orange County 239 Referral was received on 2 October 2021. The County 239 review status that no significant intermunicipal or county line impacts would result from the project.
4. Security for Landscaping, Stormwater Management and Erosion and Sediment Control, water mains, sewer mains and roadways are required. The applicant's representative are requested to provide cost estimates for review. Town Board action on security is required.
5. Orange County Health Department approval for the Realty Subdivision has been extended with an expiration of 4 March 2023.
6. NYSDEC approval for the sanitary sewer system dated 12 March 2018 with a five year permit timeframe has been issued.
7. A City of Newburgh Flow Acceptance Letter dated 21 April 2005 has been issued for the project.
8. A Stormwater Facilities Maintenance Agreement must be executed for the project.
9. Permit coverage under the NYSDEC's Stormwater General Permit must be received.
10. During a previous Public Hearing for the project numerous residents identified the need for street lighting. A previous Resolution of Approval contained a condition that the applicant has agreed to install a street light at the intersections feeding into the subdivision.
11. Statue of the outside user Agreement for the project for sewage collection, conveyance and collection treatment, should be discussed.

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12. The project is subject to ARB having greater than 10 lots. ARB approval by the Planning Board is required.

Respectfully submitted,

MHE Engineering, D.P.C.



Patrick J. Hines
Principal

PJH/kbw



Steven M. Neuhaus
County Executive

Orange County Department of Planning

124 Main Street
Goshen, NY 10924-2124
Tel: (845) 615-3840
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Alan J. Sorensen, AICP
Commissioner

www.orangecountygov.com/planning
planning@orangecountygov.com

County Reply – Mandatory Review of Local Planning Action as per NYS General Municipal Law §239-1, m, &n

Local Referring Board: Town of Newburgh Planning Board **Referral ID #:** NBT35-21N
Applicant: Elm Farm Assoc. **Tax Map #:** 39-1-12.44
Project Name: Elm Farm Subdivision **Local File #:** 2021-15
Proposed Action: 52-Lot Residential Subdivision
Reason for County Review: Within 500 feet of County Route 86
Date of Full Statement: September 17, 2021

Comments:

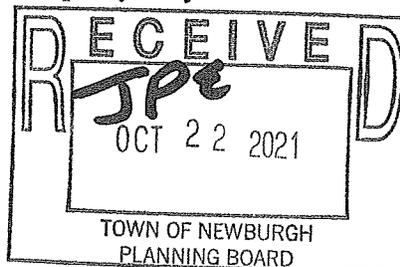
The Department has received the above referenced site plan for a 52-lot residential subdivision, storm water drainage plan, sewer service, water service, vehicular entrances and exits, and stormwater management basins in the R-2 Zoning District and has found no evidence that significant intermunicipal or countywide impacts would result from its approval. The Proposed Action involves the disturbance of the entire 47.21-acre project site, which presently consist of forest lands. We would like to offer the following advisory comments:

Forest and Tree Protection

1. It is our understanding this project has already received Preliminary Plat approval and that the applicant is seeking Final Plat approval. We recommend that the Planning Board use the Sketch Plan review process in the future to identify opportunities to modify project design to preserve existing forest or trees within the project or at least along the perimeter of the project site. Unfortunately, it appears too late in the review process to achieve this for the Proposed Action.

The presence of forested land aids in community adaptation and resilience to climate change. According to the New York State Forest Action Plan (2020), forests are the most productive terrestrial vegetation able to absorb carbon from carbon dioxide and have the greatest potential for keeping that carbon out of the atmosphere in the long term. Forest parcelization and fragmentation are two land use trends that cause several problems and result in degraded forest health. For these reasons, we recommend the Planning Board require applicants to complete a tree inventory demonstrating species and DBH (diameter at breast height) for all trees over 18". A tree survey would help to identify areas on the site where trees could be retained and incorporated into the project design.

We recommend that the Town to require the applicant compensate for the proposed tree loss by requiring the planting of trees on the project site as part the project development. In the event such trees cannot be planted on site, the municipality may have desirable locations, such as in local parks or along roadways.



Wetlands and Hydrogeology

2. The natural hydrology of the site should be maintained to the maximum extent possible to prevent permanent wetland disruption of the NYDEC and Federal wetlands on the parcel. Post construction wetland impacts could result from normal residential activities as well. Creating and maintaining lawns, disposing of yard waste into wetlands, and altering natural vegetation are examples of actions that would modify the wetland complex and its natural function. We recommend the applicant flag the wetland areas on the ground to minimize disturbance during construction. The site plan should be amended to reflect this requirement.

Stormwater

3. Increasing a watershed's impervious surface has many consequences. The most significant are the increases in stormwater runoff, flooding, streambed erosion, as well as surface and groundwater pollution. The applicant is proposing 10.84 acres of impervious surface; we recommend that the applicant include Low Impact Development (LID) techniques to decrease stormwater runoff. Examples of LID techniques include permeable pavement, rain barrels, rain gardens, open drainage swales, curb-less parking areas and drywells. Benefits of LID include a reduction in runoff, erosion, water quality degradation, and the need for conventional stormwater detention facilities. Groundwater recharge can also be enhanced and natural aquatic habits will be less impacted.

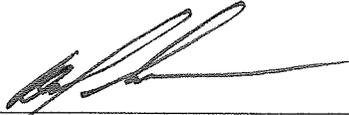
Transportation

4. A valid highway work permit from Orange County Department of Public Works is required for the entrance curb cut along County Route 86 (Fostertown Road), per Section 136 of the Highway Law.

County Recommendation: Local Determination

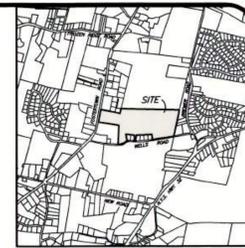
Date: October 1, 2021

Prepared by: Jessica Ridgeway, Planner



Alan J. Sorensen, AICP
Commissioner of Planning

As per NYS General Municipal Law 239-m & n, within 30 days of municipal final action on the above referred project, the referring board must file a report of the final action taken with the County Planning Department. For such filing, please use the final action report form attached to this review or available on-line at www.orangecountygov.com/planning.



LOCATION PLAN
SOURCE: TAX MAP
SCALE: 1" = 200'

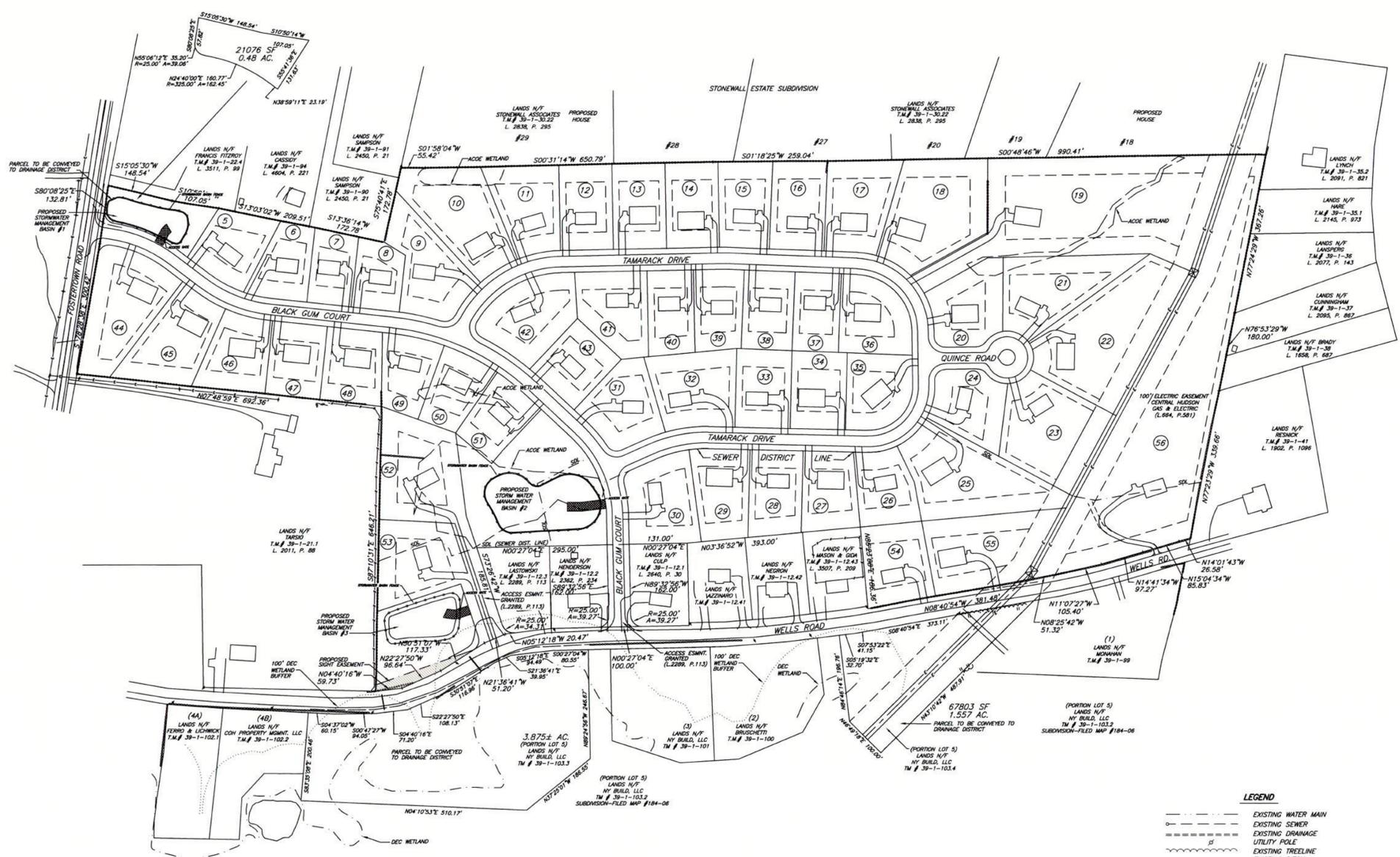


TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	PROPOSED
LOT AREA	15,000 SF	16,503 SF
LOT WIDTH AT BUILDING LINE	100'	100'
LOT DEPTH	125'	144.5'
FRONT YARD	40'	40'
REAR YARD	40'	4'
SIDE YARD(S)	15'/30'	15'/20'
MAXIMUM BUILDING HEIGHT	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%

NOTES:

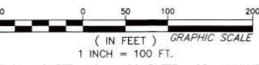
- TAX MAP NUMBER: 39-1-12.44
- AREA: 47.21± AC.
- ZONE: R-2
- TOTAL NUMBER OF LOTS: 52 (#5 - #56)
- BOUNDARY SURVEY BY: EUSTANCE & HOROWITZ, P.C.
- TOPOGRAPHIC SURVEY BY: ROBINSON AERIAL SURVEYS, INC., 12/17/99
- WATER AND SEWER SERVICE TO BE SUPPLIED BY THE TOWN OF NEWBURGH.
- ALL ELEVATIONS ARE BASED ON U.S.G.S. DATUM.
- FEDERAL WETLANDS FIELD DELINEATION: 12/11/12
- N.Y.S.D.E.C. WETLANDS DELINEATION: 6/05/00
- PROPOSED DENSITY: 1.10 LOTS/ACRE
- WATER MAIN INSTALLATION SHALL BE IN CONFORMANCE WITH PLANS AND SPECIFICATIONS APPROVED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE STANDARDS AND REQUIREMENTS OF THE TOWN OF NEWBURGH WATER DEPARTMENT.
- NO WATER MAIN CONSTRUCTION SHALL BE PERMITTED WITHOUT PRIOR APPROVAL OF THE TOWN OF NEWBURGH WATER DEPARTMENT. MATERIAL SPECIFICATIONS AND DESIGN DETAILS AS REQUIRED MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT FOR THEIR REVIEW AND APPROVAL PRIOR TO THE START OF WATER MAIN INSTALLATION.
- THIS SUBDIVISION WILL BE SERVED BY UNDERGROUND ELECTRIC, TELEPHONE AND TELEVISION CABLES AS WELL AS WATER MAIN AND STORM DRAINAGE PIPES. PRIOR TO EXCAVATION, CALL NYS D&S SAFE UNDERGROUND UTILITIES CENTER AT 1-800-962-7962, NEW YORK INDUSTRIAL CODE 5.3 REQUIRES NO LESS THAN 2 AND NO MORE THAN 10 WORKING DAYS NOTICE TO UTILITY COMPANIES PRIOR TO EXCAVATION.
- LOT 44 SHALL ONLY HAVE ACCESS TO INTERIOR SUBDIVISION ROAD.
- LOTS 10, 11, 19, 20, 21 CONTAIN FEDERAL WETLAND. THE DEED FOR EACH INDIVIDUAL LOT WITHIN THE SUBDIVISION THAT CONTAINS WATERS OF THE UNITED STATES, WHICH INCLUDES WETLANDS, SHALL CONTAIN A CLAUSE REQUIRING THAT THE LOT OWNER CONTRACT THE CORPS OF ENGINEERS TO DETERMINE IF ANY ADDITIONAL AUTHORIZATION IS REQUIRED PRIOR TO UNDERTAKING ANY JURISDICTIONAL ACTIVITIES. THIS DETERMINATION COVERS ONLY THE WORKS DESCRIBED IN THE PROPOSED PROJECT PLANS. ANY MAJOR CHANGES IN THE APPROVED PROJECT MAY REQUIRE ADDITIONAL AUTHORIZATIONS FROM NEW YORK DISTRICT.
- A PORTION OF THE DRIVEWAY SERVING LOTS 52 AND 53 AND STORMWATER MANAGEMENT BASIN #1 IS WITHIN N.Y.S.D.E.C. WETLAND BUFFER AREA. ANY PROPOSED CONSTRUCTION, GRADING, FILLING, EXCAVATING, CLEARING OR OTHER REGULATED ACTIVITY WITHIN THE FRESHWATER WETLAND OR ADJACENT 100 FEET, REQUIRES A PERMIT FROM THE N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION UNDER ARTICLE 24 OF THE ENVIRONMENTAL CONSERVATION LAW (FRESHWATER WETLANDS ACT) PRIOR TO COMMENCEMENT OF WORK.
- NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.
- THE PURCHASER OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES. THE PURCHASER SHALL ALSO BE ADVISED OF ANY ROUTINE OR SPECIAL MAINTENANCE PROCEDURES THAT MAY BE NECESSARY.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON DEVELOPMENT FACTS AND THE REALTY SUBDIVISION REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING THE LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST APPROVAL OF FINAL PLANS.
- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER & SEWER) SHALL NOT BE CHANGED.
- MAINTENANCE SECURITY AS DESCRIBED IN SECTION 157-11 SHALL BE MAINTAINED FOR A PERIOD OF AT LEAST TWO YEARS FROM THE DATE OF ACCEPTANCE OF THE STORMWATER MANAGEMENT FACILITIES.
- EXISTING TAX LOTS 39-1-12.1 AND 39-1-12.2 WILL HAVE DRIVEWAYS CONNECTED TO BLACK GUM COURT.
- PLOT PLANS FOR INDIVIDUAL LOTS, INCLUDING PROPOSED GRADING, MUST BE SUBMITTED WITH BUILDING PERMIT APPLICATIONS.

RECORD OWNER/SUBDIVIDER:

ELM FARM ASSOCIATES, LLC
6 OVERHILL LANE
NEWBURGH, NY 12550

LEGEND

- EXISTING WATER MAIN
- - - EXISTING SEWER
- - - EXISTING DRAINAGE
- - - UTILITY POLE
- - - EXISTING TREE LINE
- - - EXISTING DITCH
- - - FEDERAL WETLAND BOUNDARY
- - - NYS DEC WETLAND BOUNDARY
- - - 100' DEC WETLAND ADJACENT AREA
- - - SEWER DISTRICT LINE (S.D.L.)
- - - PROPOSED GUIDE RAIL
- - - 100 YEAR FLOOD LINE



EACH SHEET IS INCOMPLETE OR INVALID UNLESS ACCOMPANIED BY ALL THE SHEETS IN THE SET.

IT IS A VIOLATION OF NYS EDUCATION LAW SECTION 7209 FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR, OR ARCHITECT TO ALTER AN ITEM BEARING THE STAMP OR SEAL OF A LICENSED PROFESSIONAL IN ANY WAY IF AN ITEM IS ALTERED. THE ALTERING ENGINEER, LAND SURVEYOR, OR ARCHITECT SHALL AFFIX TO THE ITEM THEIR STAMP OR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CALL BEFORE YOU DIG!
NEW YORK INDUSTRIAL CODE REQUIRES DRILLING DAYS NOTICE BEFORE YOU DIG. WORK OR BLAST - STOP CALL
Underground Utilities Call Center
1-800-245-2828

NOTES:
NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 1.36 OF THE HIGHWAY LAW.

REV	DATE	DESCRIPTION	OWN	DES	BY	CHK	APP

DATE OF ISSUE: 2/11/15
DRAWN BY: JAP
DESIGNED BY: JAP
CHECKED BY: JAP
APPROVED BY: JAP

John Doetsch

Pitingaro & Doetsch
Consulting Engineers, P.C.
15 Industrial Drive, Suite 2, Middletown NY 10941
(845) 703-8140

OVERALL SUBDIVISION PLAN
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
1 OF 14



LOCATION PLAN
SOURCE: TAX MAP
SCALE: 1" = 2000'

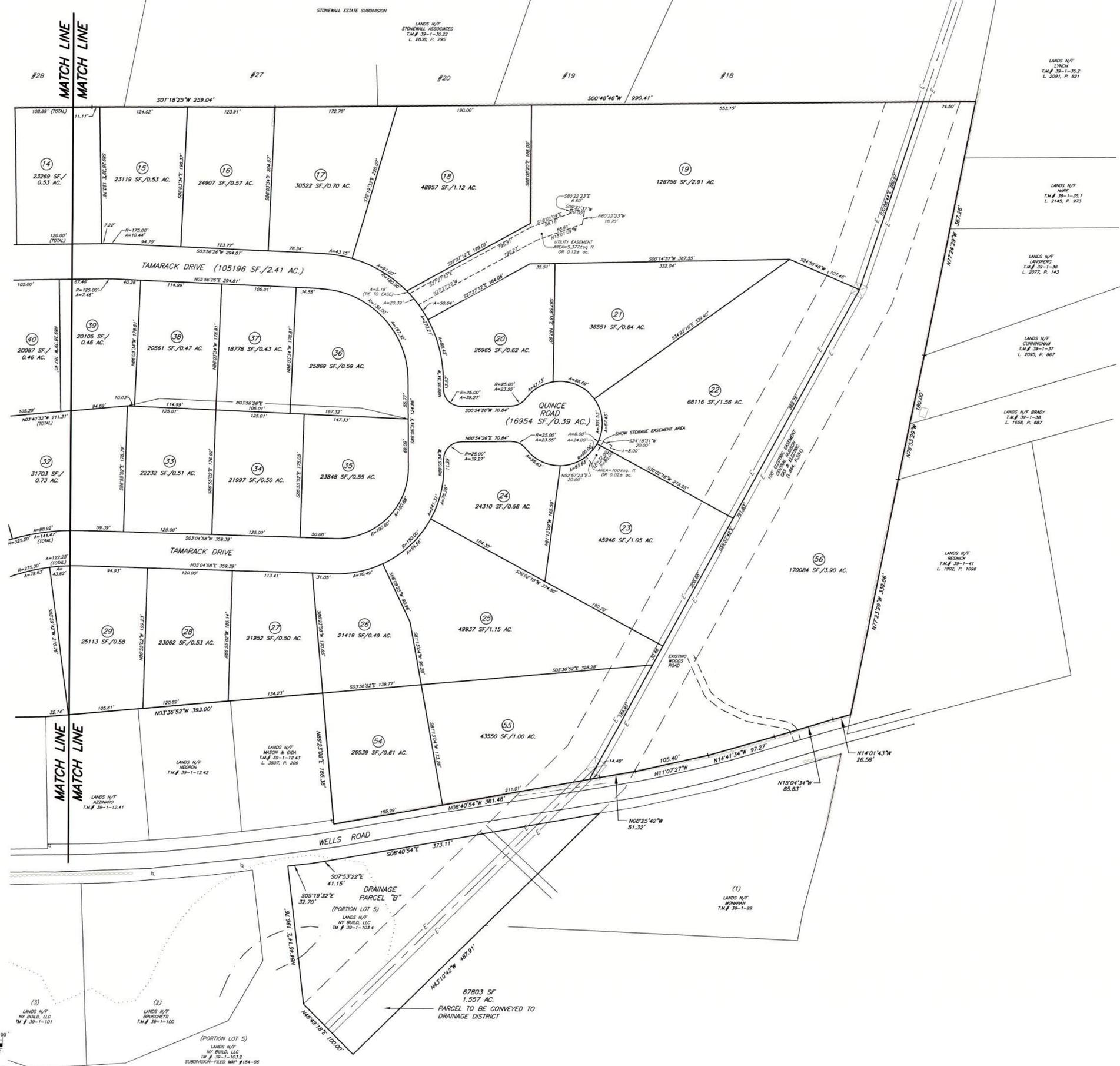
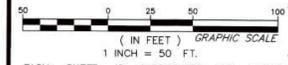


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FRONT YARD	40'	40'
REAR YARD	40'	47'
SIDE YARD(S)	15'/30'	15'/30'
MAXIMUM BUILDING HEIGHT	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%

RECORD OWNER/SUBDIVIDER:
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8 OVERDELL LANE
NEWBURGH, NY 12550



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NOTES:
NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	2/11/15	NEW YORK INDUSTRIAL CODE REQUIRES 21 WORKING DAYS NOTICE BEFORE YOU DIG, DRILL OR BLAST - STOP CALL				
2	2/11/15	DESIGNED BY JAP				
3	2/11/15	CHECKED BY JAP				
4	2/11/15	APPROVED BY JAP				

Pitingaro & Doetsch
Consulting Engineers, P.C.
15 Industrial Drive, Suite 2, Middletown NY 10941
(845) 703-8140

METES AND BOUNDS PLAN
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
2 OF 14

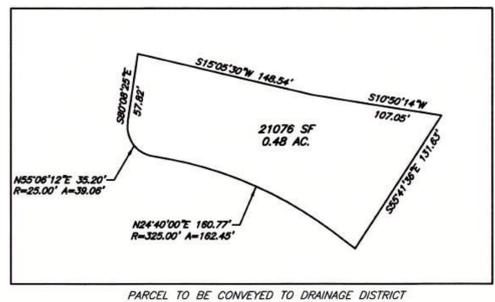
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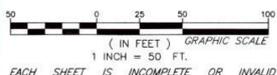
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MAXIMUM SURFACE COVERAGE	30%	<30%

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8 OVERDELL LANE
NEWBURGH, NY 12550



CALL BEFORE YOU DIG!
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2 WORKING DAYS NOTICE BEFORE YOU DIG.
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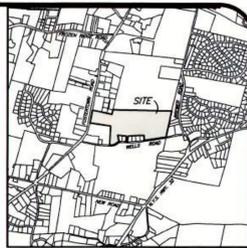
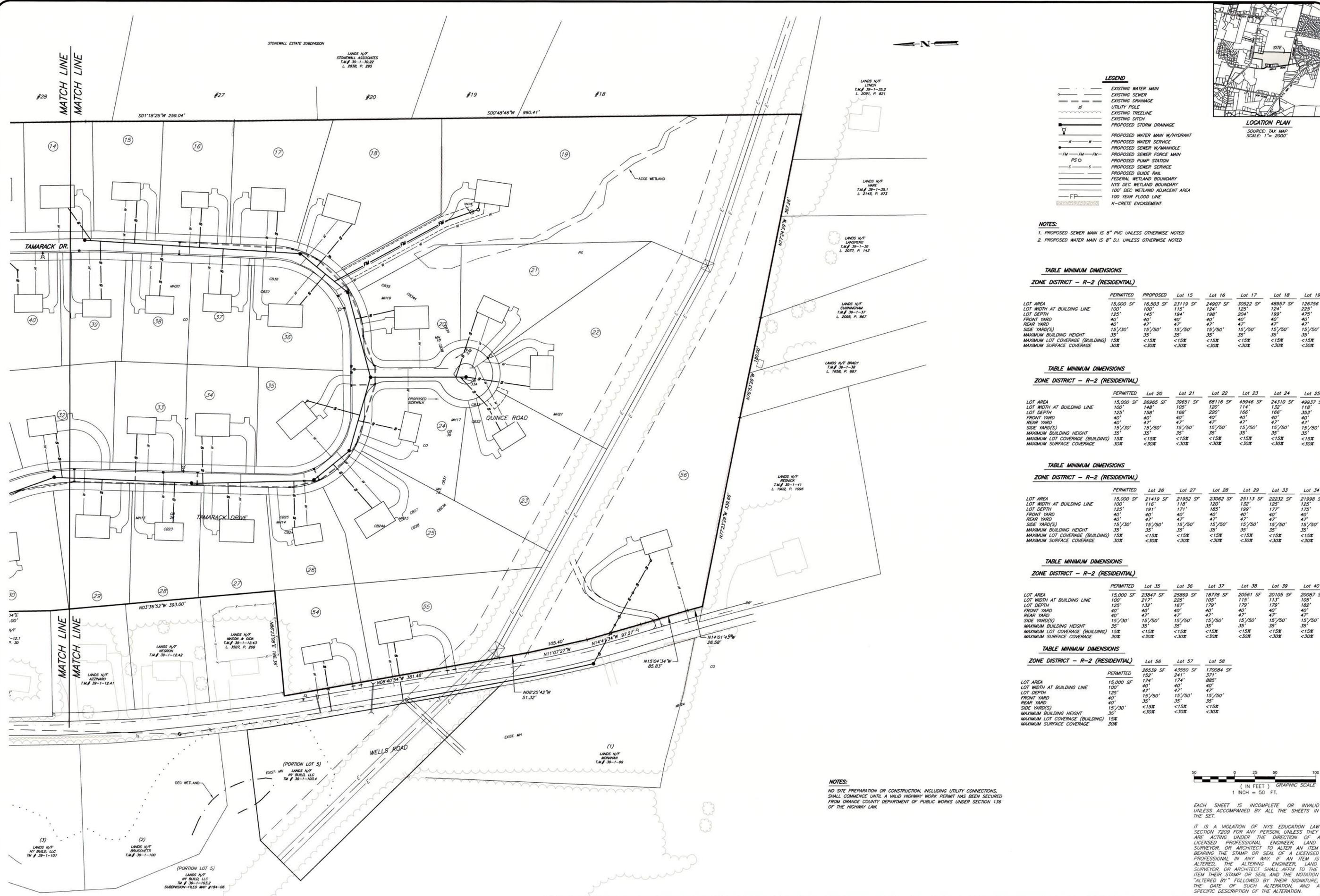
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METES AND BOUNDS PLAN
FOR
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LEGEND

- EXISTING WATER MAIN
- EXISTING SEWER
- EXISTING DRAINAGE
- UTILITY POLE
- EXISTING TREE LINE
- EXISTING DITCH
- PROPOSED STORM DRAINAGE
- PROPOSED WATER MAIN W/HYDRANT
- PROPOSED WATER SERVICE
- PROPOSED SEWER W/MANHOLE
- FM — FM — FM — PROPOSED SEWER FORCE MAIN
- PS — PROPOSED PUMP STATION
- PROPOSED SEWER SERVICE
- PROPOSED GUIDE RAIL
- FEDERAL WETLAND BOUNDARY
- NYS DEC WETLAND ADJACENT AREA
- 100' DEC WETLAND ADJACENT AREA
- 100 YEAR FLOOD LINE
- K-CRETE ENCASUREMENT

NOTES:
 1. PROPOSED SEWER MAIN IS 8" PVC UNLESS OTHERWISE NOTED
 2. PROPOSED WATER MAIN IS 8" D.I. UNLESS OTHERWISE NOTED

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	PROPOSED	Lot 15	Lot 16	Lot 17	Lot 18	Lot 19
LOT AREA	15,000 SF	16,503 SF	23,119 SF	24,907 SF	30,522 SF	48,957 SF	126,756 SF
LOT WIDTH AT BUILDING LINE	100'	100'	124'	125'	124'	124'	225'
LOT DEPTH	125'	145'	194'	198'	204'	199'	475'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 20	Lot 21	Lot 22	Lot 23	Lot 24	Lot 25
LOT AREA	15,000 SF	26,965 SF	36,651 SF	68,116 SF	45,946 SF	24,310 SF	4,993 SF
LOT WIDTH AT BUILDING LINE	100'	148'	105'	120'	114'	132'	118'
LOT DEPTH	125'	158'	168'	220'	166'	166'	353'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	40'	40'	40'	40'	40'	40'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 26	Lot 27	Lot 28	Lot 29	Lot 33	Lot 34
LOT AREA	15,000 SF	21,419 SF	21,952 SF	23,062 SF	25,113 SF	22,232 SF	21,988 SF
LOT WIDTH AT BUILDING LINE	100'	116'	118'	120'	132'	125'	125'
LOT DEPTH	125'	191'	171'	185'	189'	177'	175'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%

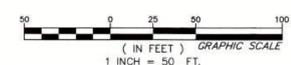
TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 35	Lot 36	Lot 37	Lot 38	Lot 39	Lot 40
LOT AREA	15,000 SF	23,847 SF	25,869 SF	18,778 SF	20,561 SF	20,105 SF	20,087 SF
LOT WIDTH AT BUILDING LINE	100'	217'	225'	105'	115'	113'	105'
LOT DEPTH	125'	132'	163'	179'	179'	179'	162'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 56	Lot 57	Lot 58
LOT AREA	15,000 SF	265,39 SF	43,550 SF	17,008 SF
LOT WIDTH AT BUILDING LINE	100'	152'	241'	371'
LOT DEPTH	125'	174'	174'	885'
FRONT YARD	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%

NOTES:
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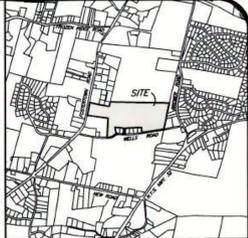
John Doetsch

Pitingaro & Doetsch
Consulting Engineers, P.C.
 15 Industrial Drive, Suite 2, Middletown NY 10941
 (845) 703-8140

SUBDIVISION PLAN
 FOR
 ELM FARM ASSOCIATES, LLC
 WELLS ROAD
 NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
4 OF 14

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 C:\Shared\Drawings\Engineering\Private\2018\180204 - Elm Farm\02 - Engineering\Conventional\Subdivision\12-0102-11-2015-1-Cspy.dwg 07/01/21 - 07:52AM



LOCATION PLAN
SOURCE: TAX MAP
SCALE: 1" = 2000'

NOTES:
1. PROPOSED SEWER MAIN IS 8" PVC UNLESS OTHERWISE NOTED
2. PROPOSED WATER MAIN IS 8" D.I. UNLESS OTHERWISE NOTED

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	PROPOSED	Lot 5	Lot 6	Lot 7	Lot 8	Lot 9	Lot 10
LOT AREA	15,000 SF	16,503 SF	23124 SF	18694 SF	18503 SF	16478 SF	32085	40429 SF
LOT WIDTH AT BUILDING LINE	100'	100'	142'	131'	100'	110'	141'	114'
LOT DEPTH	125'	145'	132'	170'	160'	120'	226'	226'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 11	Lot 12	Lot 13	Lot 14	Lot 30	Lot 31	Lot 32
LOT AREA	15,000 SF	27900 SF	23268 SF	23269 SF	23269 SF	29689 SF	26454 SF	31703 SF
LOT WIDTH AT BUILDING LINE	100'	113.3'	120'	120'	120'	159'	149'	171'
LOT DEPTH	125'	184'	194'	194'	194'	146'	131'	177'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

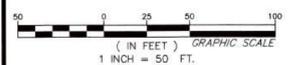
	PERMITTED	Lot 40	Lot 41	Lot 42	Lot 43	Lot 44	Lot 45	Lot 46
LOT AREA	15,000 SF	20087 SF	27270 SF	31909 SF	21389 SF	40864 SF	32454 SF	24042 SF
LOT WIDTH AT BUILDING LINE	100'	105'	163'	246'	136'	191'	125'	123'
LOT DEPTH	125'	182'	199'	141'	157'	234'	182'	168'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	47'	47'	47'	47'	47'	47'	47'
SIDE YARD(S)	15'/30'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'	15'/50'
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM SURFACE COVERAGE	30%	<30%	<30%	<30%	<30%	<30%	<30%	<30%

TABLE MINIMUM DIMENSIONS
ZONE DISTRICT - R-2 (RESIDENTIAL)

	PERMITTED	Lot 47	Lot 48	Lot 49	Lot 50	Lot 51	Lot 52	Lot 53
LOT AREA	15,000 SF	20942 SF	22205 SF	20142 SF	19725 SF	19794 SF	50420 SF	37752 SF
LOT WIDTH AT BUILDING LINE	100'	125'	168'	168'	167'	166'	190'	175'
LOT DEPTH	125'	47'	157'	157'	157'	157'	157'	157'
FRONT YARD	40'	40'	40'	40'	40'	40'	40'	40'
REAR YARD	40'	35'	35'	35'	35'	35'	35'	35'
SIDE YARD(S)	15'/30'	<15%	<15%	<15%	<15%	<15%	<15%	<15%
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE (BUILDING)	15%	<30%	<30%	<30%	<30%	<30%	<30%	<30%
MAXIMUM SURFACE COVERAGE	30%							

LEGEND

- EXISTING CONTOURS
- PROPOSED CONTOURS
- PROPOSED SPOT ELEVATION
- EXISTING WATER MAIN
- EXISTING SEWER
- EXISTING DRAINAGE
- UTILITY POLE
- EXISTING TREE LINE
- EXISTING DITCH
- PROPOSED STORM DRAINAGE
- PROPOSED RIPRAP
- PROPOSED WATER MAIN W/HYDRANT
- PROPOSED WATER SERVICE
- PROPOSED SEWER W/MANHOLE
- PROPOSED SEWER FORCE MAIN
- PROPOSED PUMP STATION
- PROPOSED SEWER SERVICE
- PROPOSED GUIDE RAIL
- FEDERAL WETLAND BOUNDARY
- NYS DEC WETLAND BOUNDARY
- 100' DEC WETLAND ADJACENT AREA
- 100 YEAR FLOOD LINE
- EXISTING TREES TO REMAIN (SEE SHEET 14 OF 14 FOR STREET TREE LOCATION)
- K-CRETE ENCASUREMENT



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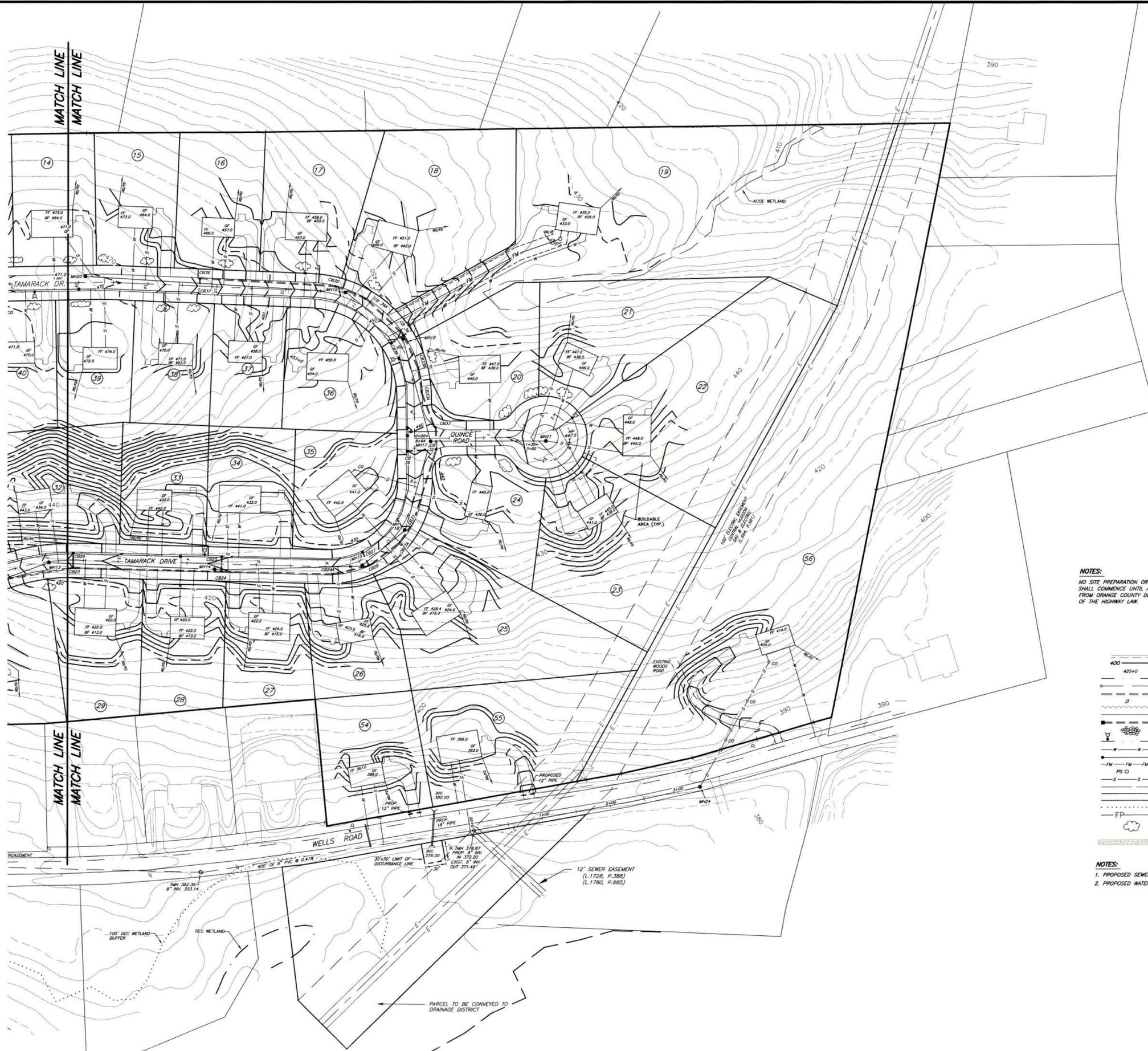
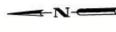
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SUBDIVISION PLAN
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

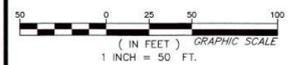
SHEET NO.
5 OF 14



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- LEGEND**
- EXISTING CONTOURS
 - PROPOSED CONTOURS
 - PROPOSED SPOT ELEVATION
 - EXISTING WATER MAIN
 - EXISTING SEWER
 - EXISTING DRAINAGE
 - UTILITY POLE
 - EXISTING TREE LINE
 - EXISTING DITCH
 - PROPOSED STORM DRAINAGE
 - PROPOSED RIPRAP
 - PROPOSED WATER MAIN W/HYDRANT
 - PROPOSED WATER SERVICE
 - PROPOSED SEWER W/MANHOLE
 - PROPOSED SEWER FORCE MAIN
 - PROPOSED PUMP STATION
 - PROPOSED SEWER SERVICE
 - PROPOSED GUIDE RAIL
 - FEDERAL WETLAND BOUNDARY
 - NYS DEC WETLAND BOUNDARY
 - 100' DEC WETLAND ADJACENT AREA
 - 100 YEAR FLOOD LINE
 - EXISTING TREES TO REMAIN (SEE SHEET 14 OF 14 FOR STREET TREE LOCATION)
 - K-CRETE ENCASUREMENT

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John Pittingaro

Pittingaro & Doetsch
Consulting Engineers, P.C.
 15 Industrial Drive, Suite 2, Middletown NY 10941
 (845) 703-8140

GRADING AND UTILITY PLAN
 FOR
 ELM FARM ASSOCIATES, LLC
 WELLS ROAD
 NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
6 OF 14

© Shared Drive Engineering Private 2019190204, Elm Farm 02, Engineering/Conventions/Subject/12-01002-11-2015, Copy 0m3 07/01/21, 07:52AM



60 LF 36" HDPE @ 2.7%
 GULLY PIPE TO BE INSTALLED
 IN ALIGNMENT WITH THE EXISTING
 DRAINAGE DITCH
 PROPOSED GULLY TO EXTEND 2 FT
 BEYOND TOE OF SLOPE AT BOTH ENDS
 DRAINAGE DITCH TO BE CLEARED
 AND GRADED ACROSS THE ENTIRE
 PROJECT FRONTAGE TO INSURE
 POSITIVE FLOW.

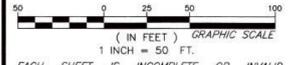
18" CONC
 PIPE
 INV. 405.89

36" CMP
 INV. 402.51

CB
 TO 401.71
 INV. 398.13
 INV. 396.10

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- LEGEND**
- 400 ——— EXISTING CONTOURS
 - 420+0 ——— PROPOSED CONTOURS
 - ——— PROPOSED SPOT ELEVATION
 - — — EXISTING WATER MAIN
 - — — EXISTING SEWER
 - — — EXISTING DRAINAGE
 - — — UTILITY POLE
 - — — EXISTING TREELINE
 - — — EXISTING DITCH
 - — — PROPOSED STORM DRAINAGE
 - — — PROPOSED STORM DRAINAGE
 - — — PROPOSED WATER MAIN W/HYDRANT
 - — — PROPOSED SEWER W/MANHOLE
 - — — PROPOSED SEWER FORCE MAIN
 - — — PROPOSED PUMP STATION
 - — — PROPOSED SEWER SERVICE
 - — — PROPOSED GUIDE RAIL
 - — — FEDERAL WETLAND BOUNDARY
 - — — NYS DEC WETLAND BOUNDARY
 - — — 100' DEC WETLAND ADJACENT AREA
 - — — 100 YEAR FLOOD LINE
 - — — EXISTING TREES TO REMAIN
 (SEE SHEET 14 OF 14 FOR
 STREET TREE LOCATION)
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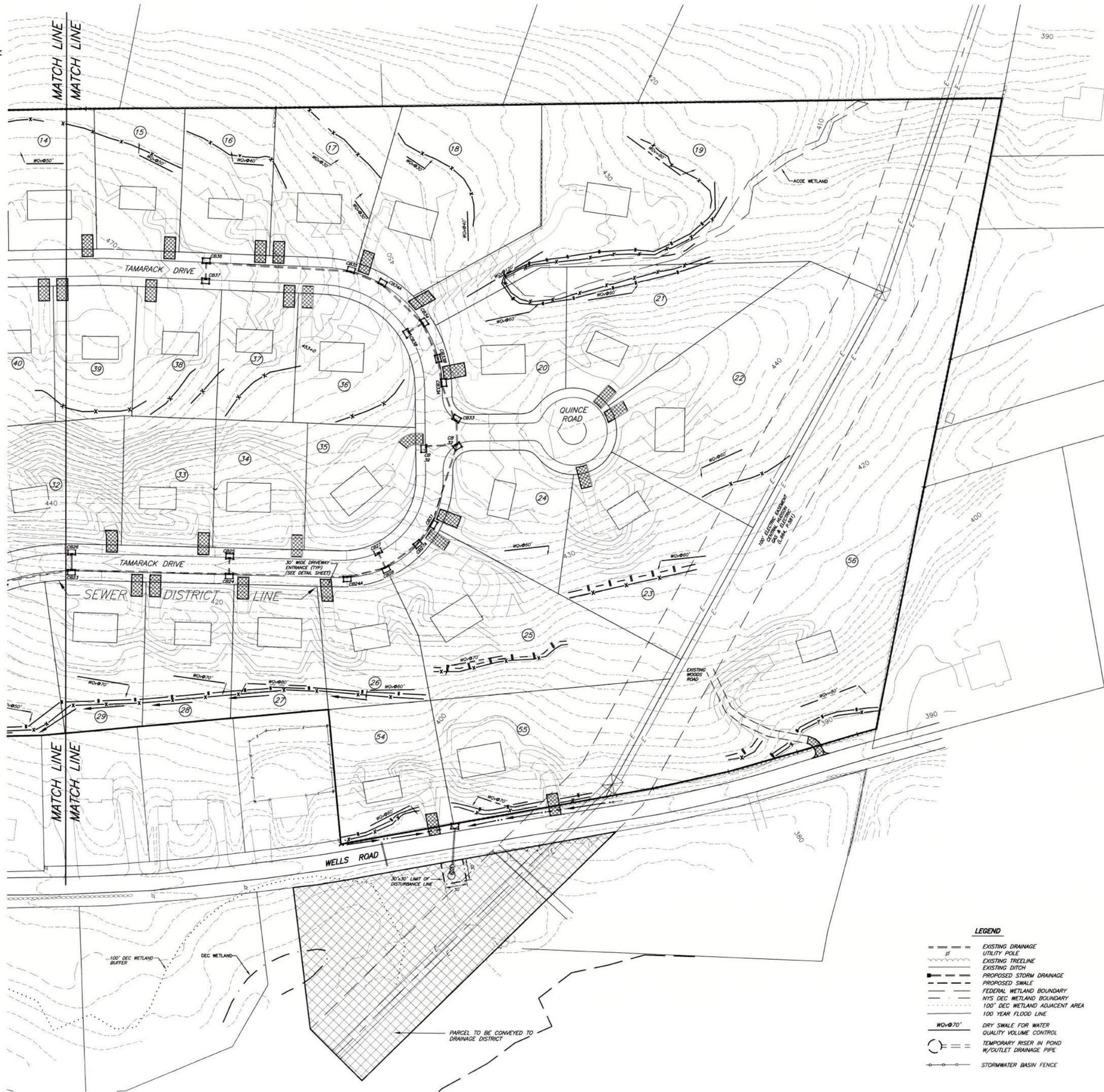
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GRADING AND UTILITY PLAN
 FOR
 ELM FARM ASSOCIATES, LLC
 WELLS ROAD
 NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
 7 OF 14

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EROSION CONTROL NOTES AND LEGEND

- ||— HAYBALE SILT BARRIER
 - |— FILTER CLOTH SILT BARRIER
 - SILT TRAPS, WHICH SHALL CONSIST OF SILT FENCE PLACED AROUND CATCH BASINS
 - |— TEMPORARY DIVERSION SWALE
 - |— PERMANENT DIVERSION SWALE
 - 10' 5" 6"-9" RIP-RAP STONE, 9"+/- DEEP, PERMANENTLY INSTALLED.
- TEMPORARY COVER OF RYE GRASS OR MULCH SHALL BE APPLIED ON ALL DISTURBED LAND LEFT BARE FOR MORE THAN 7-14 DAYS (1/2 LB. OF RYE GRASS PER 1000 S.F., OR 100 LBS. OF HAY OR STRAW PER 1000 S.F.)

LEGEND

- EXISTING DRAINAGE
- UTILITY POLE
- EXISTING TREELINE
- EXISTING DITCH
- PROPOSED STORM DRAINAGE
- PROPOSED SWALE
- FEDERAL WETLAND BOUNDARY
- NYS DEC WETLAND BOUNDARY
- 100' DEC WETLAND ADJACENT AREA
- 100 YEAR FLOOD LINE
- WOV#70' DRY SWALE FOR WATER QUALITY VOLUME CONTROL
- TEMPORARY RISER IN POND W/OUTLET DRAINAGE PIPE
- STORMWATER BASIN FENCE



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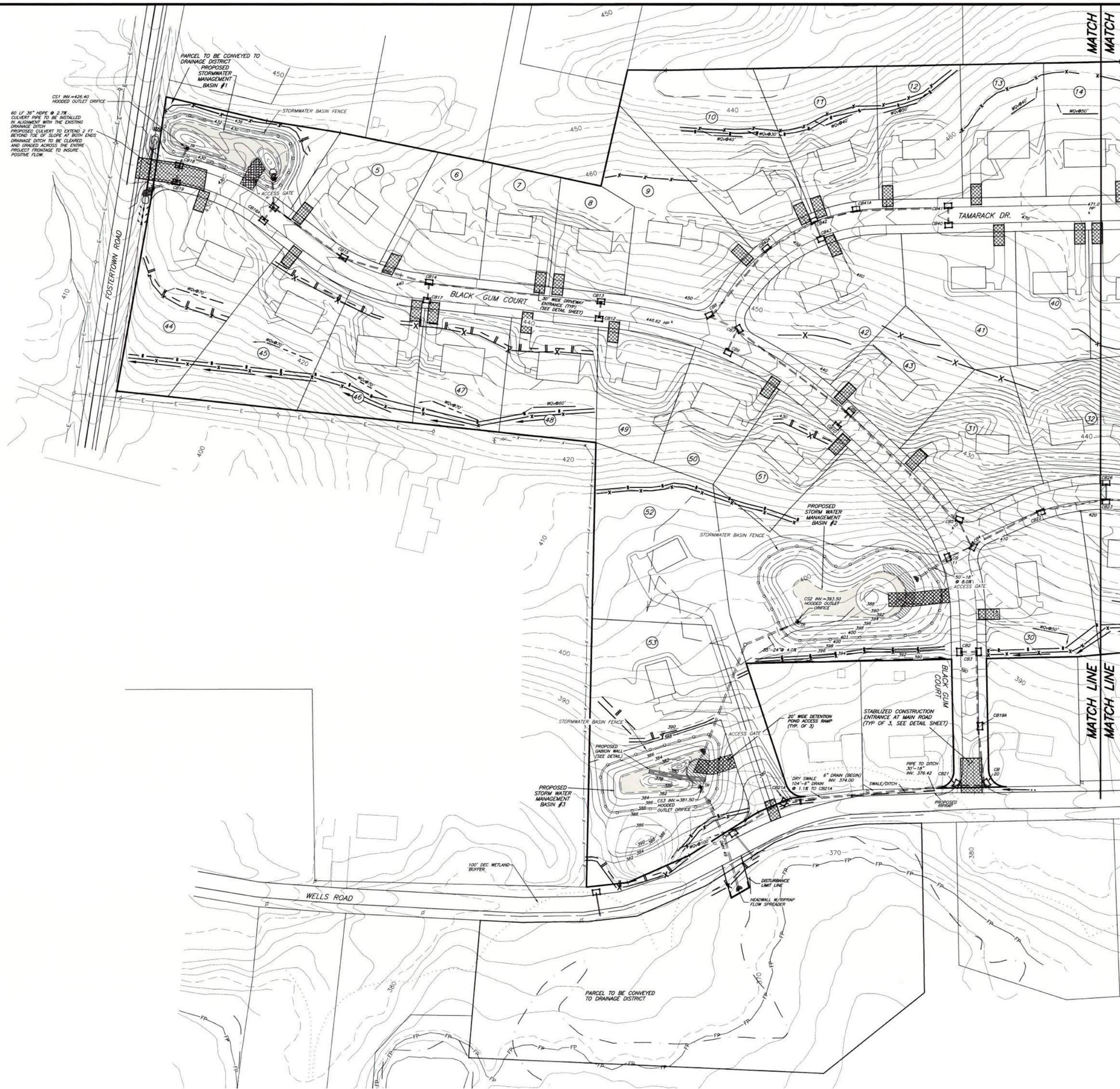
John C. Pittingaro

Pittingaro & Doetsch
Consulting Engineers, P.C.
15 Industrial Drive, Suite 2, Middletown NY 10941
(845) 703-8140

STORMWATER POLLUTION PREVENTION PLAN
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
8 OF 14

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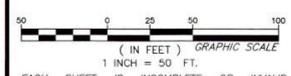
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 CULVERT PIPE TO BE INSTALLED
 IN ALIGNMENT WITH THE EXISTING
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 PROPOSED CULVERT TO EXTEND 2 FT
 BEYOND TOE OF SLOPE AT BOTH ENDS
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LEGEND

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- UTILITY POLE
- EXISTING TREELINE
- EXISTING DITCH
- PROPOSED STORM DRAINAGE
- PROPOSED SWALE
- FEDERAL WETLAND BOUNDARY
- NYS DEC WETLAND BOUNDARY
- 100' DEC WETLAND ADJACENT AREA
- 100 YEAR FLOOD LINE
- W/O @ 7' DRY SWALE FOR WATER QUALITY VOLUME CONTROL
- TEMPORARY RISER IN POND W/OUTLET DRAINAGE PIPE
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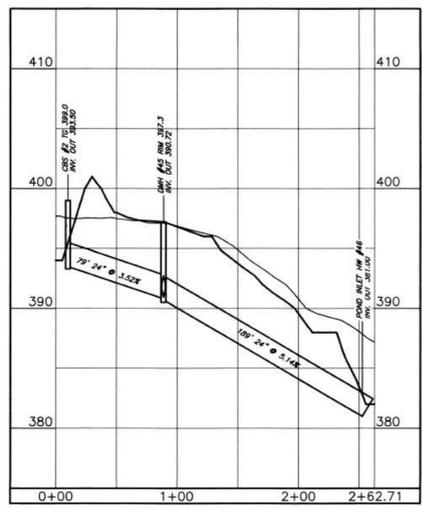
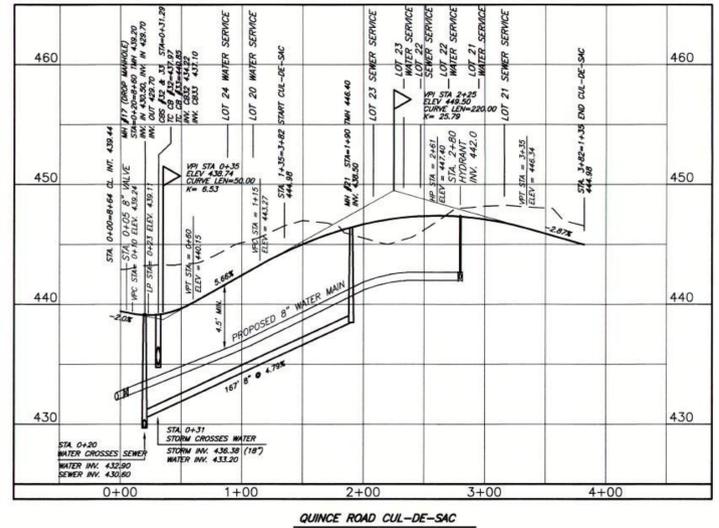
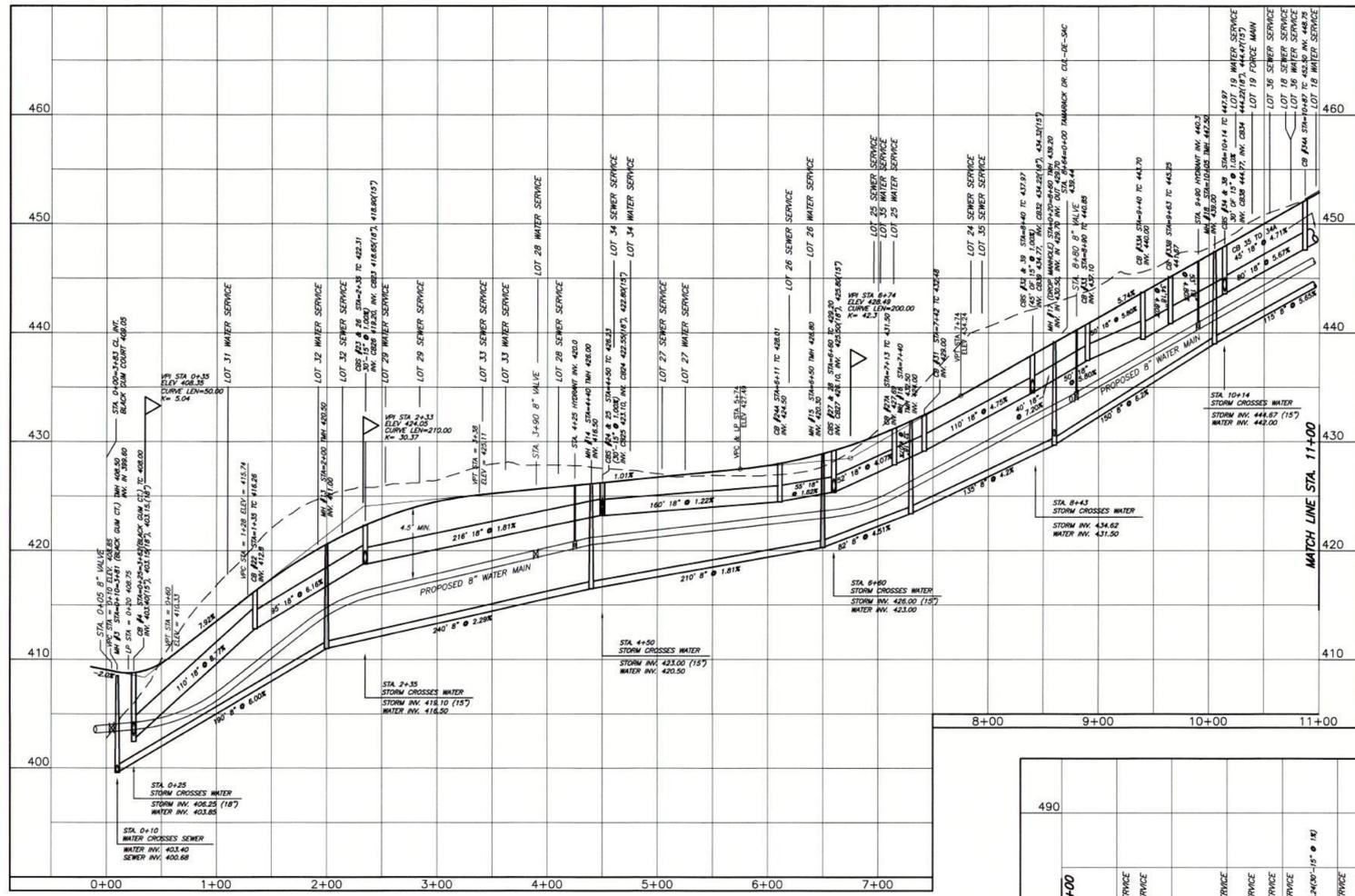
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John P. Doetsch

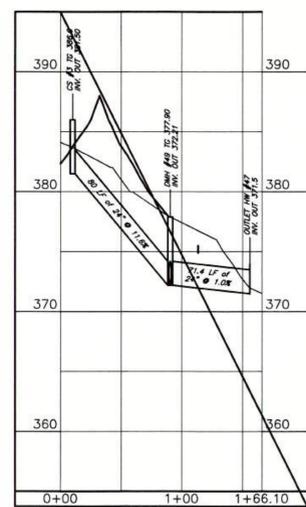
Pitingaro & Doetsch Consulting Engineers, P.C.
 15 Industrial Drive, Suite 2, Middletown NY 10941
 (845) 703-8140

STORMWATER POLLUTION PREVENTION PLAN
 FOR
 ELM FARM ASSOCIATES, LLC
 WELLS ROAD
 NEWBURGH, ORANGE COUNTY, NY

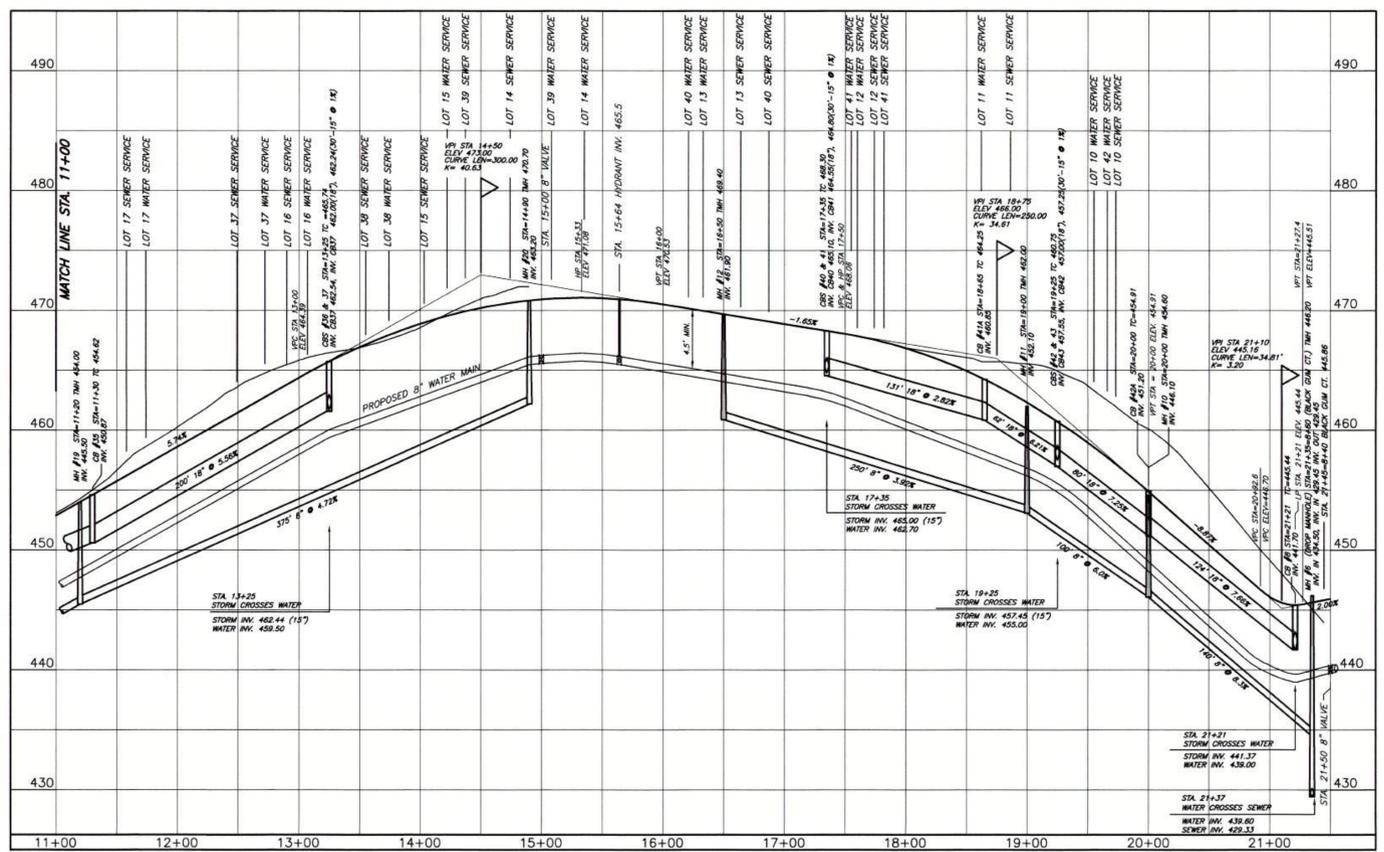
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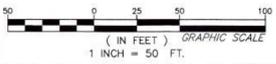
STORM WATER MANAGEMENT FROM
BASIN #2 TO BASIN #3
SCALE: VERT. 1"=5'
HORIZ. 1"=50'



STORM WATER MANAGEMENT FROM
POND #3 TO OUTFALL TO WETLANDS
SCALE: VERT. 1"=5'
HORIZ. 1"=50'



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CALL BEFORE YOU DIG!

NEW YORK INDUSTRIAL CODE REQUIRES 2 WORKING DAYS NOTICE BEFORE YOU DIG, DRILL OR BLAST - STOP CALL
Underground Utilities Call Center
1-800-245-2828

NOTES:

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REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

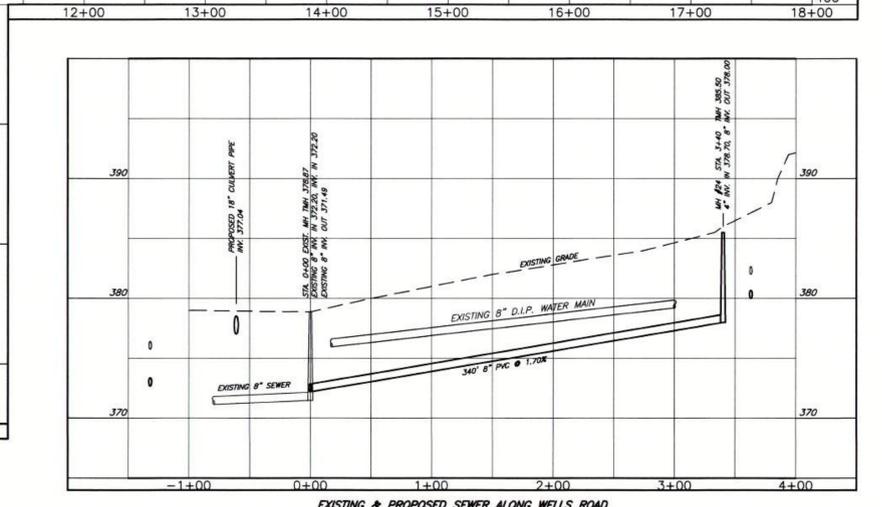
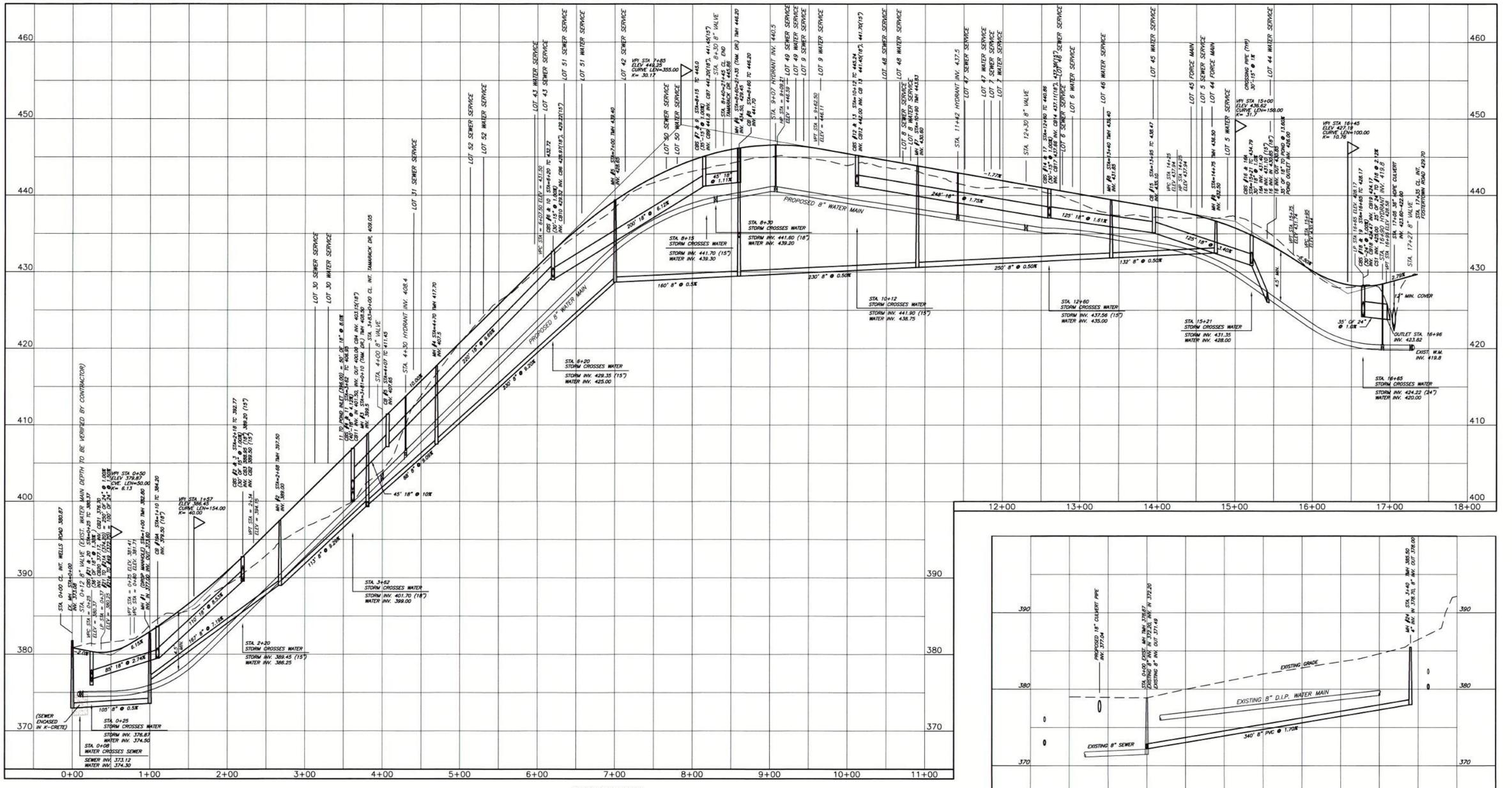
DATE OF ISSUE: 2/11/15
DRAWN BY: JAP
DESIGNED BY: JAP
CHECKED BY: JAP
APPROVED BY: JAP

John Doetsch

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Consulting Engineers, P.C.
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ROAD PROFILES
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

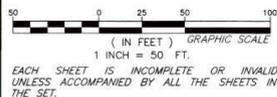
SHEET NO.
10 OF 14



STORM DRAINAGE

RCP - REINFORCED CONCRETE PIPE, TYPE III
CMP - CORRUGATED METAL PIPE, FULLY COATED PAVED INVERT
CPWP - CORRUGATED POLYETHYLENE PIPE ADS, N-12
UNLESS OTHERWISE NOTED

CBF	STATION	TOP CURB	INVERT	LENGTH	DA	PERCENT SLOPE
** TAMARACK DRIVE **	37	152.88	465.74	462.54	30'	1.8
38	151.25	465.74	462.00			
39	151.25	465.74	462.00			
40	151.25	465.74	462.00			
41	151.25	465.74	462.00			
42	151.25	465.74	462.00			
43	151.25	465.74	462.00			
44	151.25	465.74	462.00			
45	151.25	465.74	462.00			
46	151.25	465.74	462.00			
47	151.25	465.74	462.00			
48	151.25	465.74	462.00			
49	151.25	465.74	462.00			
50	151.25	465.74	462.00			
51	151.25	465.74	462.00			
52	151.25	465.74	462.00			
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91	151.25	465.74	462.00			
92	151.25	465.74	462.00			
93	151.25	465.74	462.00			
94	151.25	465.74	462.00			
95	151.25	465.74	462.00			
96	151.25	465.74	462.00			
97	151.25	465.74	462.00			
98	151.25	465.74	462.00			
99	151.25	465.74	462.00			
100	151.25	465.74	462.00			



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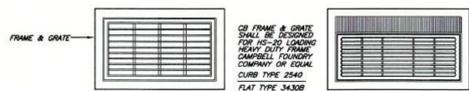
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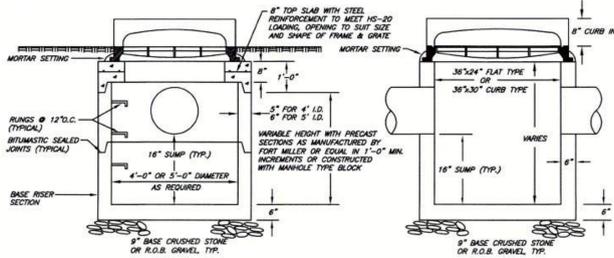
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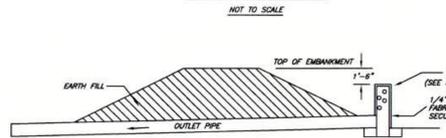
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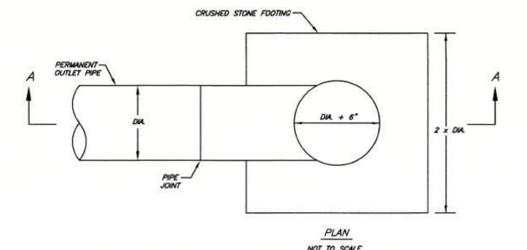
TYPICAL FRAMES & GRATES



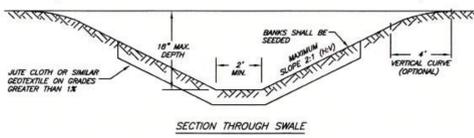
CATCH BASIN DETAIL



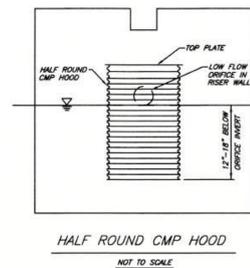
SEDIMENTATION TRAP WITH RISER



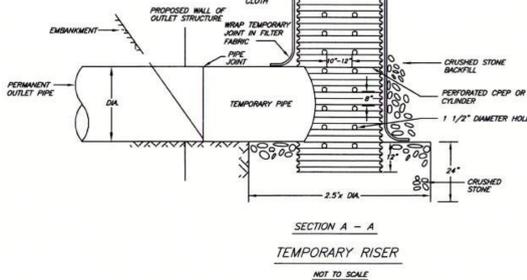
FILTER CLOTH SILT BARRIER



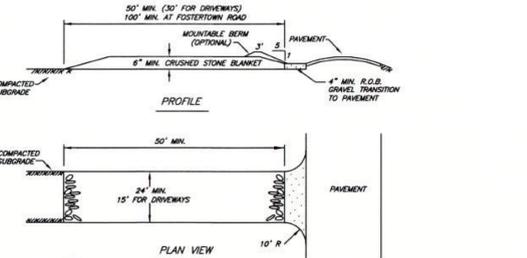
DIVERSION SWALE DETAIL



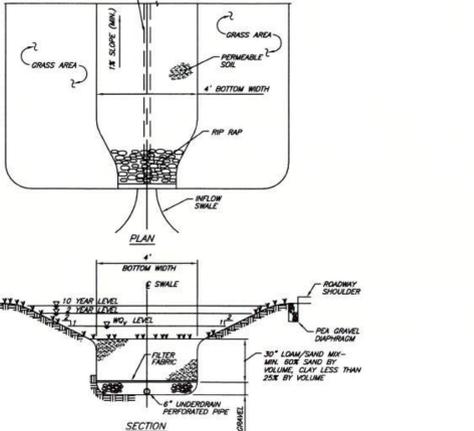
HALF ROUND CURB HOOD



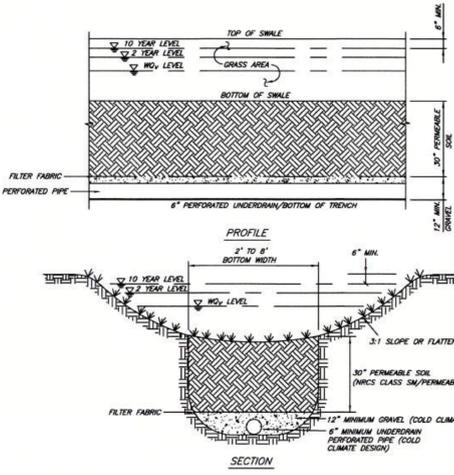
TEMPORARY RISER



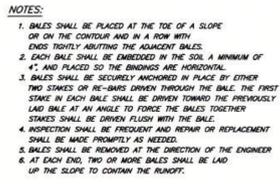
STABILIZED CONSTRUCTION ENTRANCE



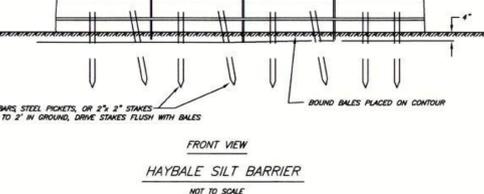
DRY SWALE DETAIL FOR ROADWAY AREAS



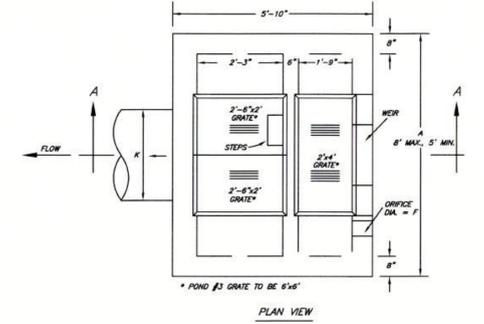
DRY SWALE SECTION FOR LAWN AREAS



HAYBALE SILT BARRIER

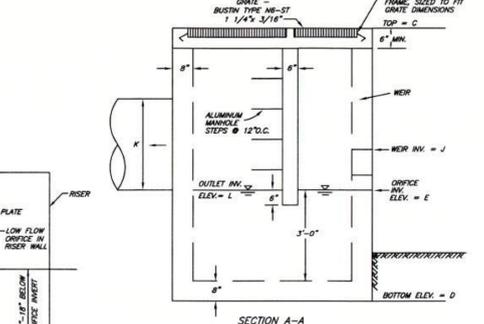


HAYBALE SILT BARRIER



CONTROL STRUCTURE DIMENSIONS

ITEM	DESCRIPTION	CS 1	CS 2	CS 3
A	STRUCTURE WIDTH	5'-0"	5'-6"	6'-0"
B	STRUCTURE HEIGHT	8'-0"	8'-2"	7'-2"
C	TOP GRATE ELEV.	429.30	399.00	388.00
D	STRUCTURE BOTTOM ELEV.	421.30	391.00	379.80
E	ORIFICE INVERT ELEV.	426.40	393.50	381.50
F	ORIFICE DIA. IN.	6"	6"	6"
G	WEIR CREST WIDTH	12"	12"	12"
H	WEIR TOP WIDTH	1'-0"	1'-0"	1'-0"
J	WEIR CREST INVERT ELEV.	428.50	398.50	383.00
K	OUTLET PIPE DIA. IN.	24"	24"	24"
L	OUTLET PIPE INVERT ELEV.	425.00	393.50	381.50



OUTLET CONTROL STRUCTURE FOR STORM WATER MANAGEMENT PONDS

OUTLET CONTROL STRUCTURE

FOR STORM WATER MANAGEMENT PONDS

NOT TO SCALE

ISOMETRIC VIEW

SECTION

GABION WALL DETAIL

NOT TO SCALE

SECTION

NOT TO SCALE

IMPLEMENTATION SCHEDULE

1. BUILD THE INITIAL STABILIZED CONSTRUCTION ENTRANCES FOR BLACK OAK CREEK AT FOSTERTOWN ROAD AND WELLS ROAD AS WELL AS ORANGE ROAD AT WELLS ROAD.
2. CONSTRUCT THE WELLS ROAD AND BELT FENCES AS NEEDED TO PROTECT OFF-SITE AREAS AND PROPOSED DISTURBED SITE AREAS FROM OFF-SITE WATER RUNOFF. ALSO, CONSTRUCT (TEMPORARY) DIVERSION SWALES.
3. CONSTRUCT THE STORM WATER MANAGEMENT BASINS, WITH TEMPORARY OUTLET RISERS AND THE (IMP-IMP) OUTLETS.
4. CONSTRUCT SECTIONS OF MAIN STREETS.
5. CONSTRUCT THE DRIVEWAY STABILIZED CONSTRUCTION ENTRANCE FOR EACH LOT AS DISCUSS/NOTED.
6. STABILIZE INITIAL SOIL DISTURBANCE AREAS WITHIN 7 TO 14 DAYS OF SOIL EXPOSURE.
7. CONSTRUCT CATCH BASINS, UTILITY PIPING AND OTHER UTILITIES.
8. CONSTRUCT THE HOUSES, DRIVEWAYS, E.T.C.
9. FINAL GRASS LAMIN AND OTHER AREAS; FINAL SEEDING AND APPOINTMENT.
10. REMOVE ANY CONSTRUCTION AND DEMOLITION DEBRIS FROM THE SITE.
11. CONSTRUCT THE WELLS ROAD DRIVEWAYS SHALL BE CONSTRUCTED ONLY AFTER MOST OF THE CONTRIBUTORY AREA IS STABILIZED.

TEMPORARY STABILIZATION OF EXPOSED SOILS

1. APPLICATIONS ON GRADED OR CLEARED AREAS, NOT IN FINISHED CONDITION, WHICH ARE SUBJECT TO EROSION WHERE SEEDING MAY NOT HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER, BUT WHICH CAN BE STABILIZED WITH A MULCH COVER.
2. SITE PREPARATION A. PRIOR TO MULCHING, INSTALL NEEDED DROSOLO CONTROL PRACTICES. B. FINAL GRADING IS NOT REQUIRED PRIOR TO MULCHING. C. LOOSEN THE SOIL IN COMPACTED OR CRUSTED AREAS TO AT LEAST 2" BEFORE MULCHING.
3. MULCHING APPLY UNWEIGHTED STRAW, HAY OR SALT HAY AT 2.0 TONS PER ACRE (20 LBS. PER 1000 SQ. FT.) AND ANCHOR IN PLACE WITH AN ANCHORING TOOL OR MULCH TIE-DOWN NETTING. MULCH MATERIALS SHALL BE RELATIVELY FREE OF WEED SEED. SPREAD STRAW OR HAY EVENLY.

SEEDING PERMANENT VEGETATIVE COVER

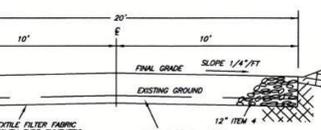
1. APPLICATIONS ON GRADED OR CLEARED AREAS WHICH ARE SUBJECT TO EROSION WHERE SEEDING WILL HAVE A SUITABLE GROWING SEASON TO PRODUCE AN EROSION RETARDANT COVER.
2. METHOD AND MATERIALS A. SITE PREPARATION GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDING. PREPARATION, SEEDING, MULCH APPLICATION, ANCHORING AND MAINTENANCE. B. SOW SEED LIGHTLY OVER THE AREA AS FOLLOWS: 1. LIME TOPSOIL TO PH 6.5 UNLESS THE NATURAL SOIL IS ABOVE PH 6.0. 2. APPLY FERTILIZER AT A RATES OF 100 LBS. PER ACRE FOR GRASS MIXTURE AREAS (LOW MAINTENANCE) APPLY 400 LBS. PER ACRE OF 10-10-20 OR EQUAL. 3. MIX THE LIME AND FERTILIZER WITH THE TOP 3" OF SOIL. PLANTING SITES SHALL BE REASONABLY SMOOTH, THE SOIL MOSTLY BUT NOT ENTIRELY FREE OF STONES, CLAY LUMPS, TRUNK COARSE PLANT PARTS AND STONES OVER 1-1/2" DIAMETER. C. SEEDING 1. DO NOT USE WET SEED OR SEED WHICH IS MOIST OR OTHERWISE DAMAGED IN TRANSIT OR STORAGE. 2. SOW SEED LIGHTLY A SPREADER OR SEEDING MACHINE. DO NOT SEED WHEN WIND VELOCITY EXCEEDS 3 MPH. DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. SEED AT A RATE OF 50 POUNDS PER ACRE. 3. RAKE SEED LIGHTLY INTO TOP 1/8" OF SOIL. ROLL LIGHTLY AND WATER THOROUGHLY WITH A FINE SPRAY. 4. PROTECT SEEDING AREAS AGAINST EROSION BY SPREADING STRAW MULCH AFTER COMPLETION OF SEEDING OPERATIONS. D. GRASS MIXTURES PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH TOLERANCE FOR PURITY AND GERMINATION ESTABLISHED BY OFFICIAL SEED ANALYSIS OF NORTH AMERICA. 2. SEEDING MIXTURE SHALL CONTAIN NOT LESS THAN: PERENNIAL RYE GRASS (10%) KENTUCKY BLUE GRASS (20%) ALTA FESCUE (10%)

STABILIZATION OF TOPSOIL STOCKPILE

1. ALL TOPSOIL STOCKPILES WILL BE COVERED WITH A POLYPROPYLENE FILM WEIGHTED DOWN WITH OLD TIRES OR APPROVED EQUAL. A HAYBALE SILT BARRIER SHALL BE CONSTRUCTED AROUND THE TOPSOIL STOCKPILE. ALL MATERIALS SHALL BE TIGHTLY TOGETHER.

PLANTING SPECIFICATION FOR STORM WATER DRY SWALE PRACTICES

- A. REED CANARY GRASS (PHALARIS ARUNDINACEA)
- B. SWITCHGRASS (Panicum VIRGATUM)
- C. BLUEJOINT (CALAMAGROSTIS CANADENSIS)
- D. ROUGH BENTGRASS (POA TRIVIALIS)
- E. GREENING BEARGRASS (CAESTRIS STOLONIFERA)
- F. MEADOW FOXTAIL (ALOPECURUS ARUNDINACEUS)
- G. ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)



SECTION

PROFILE

PLAN VIEW

NOT TO SCALE

SECTION

NOT TO SCALE

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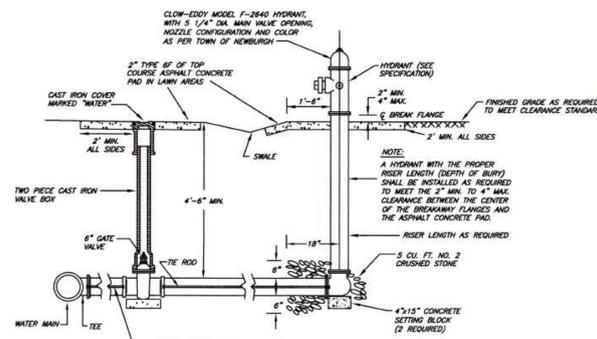
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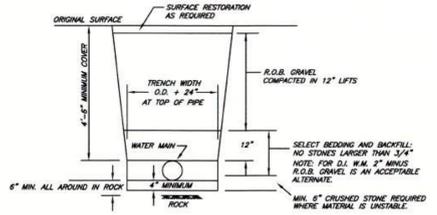
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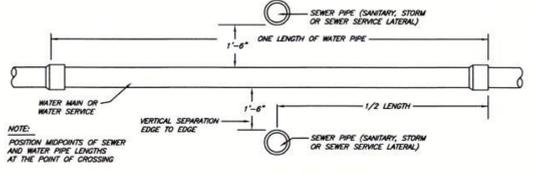
SHEET NO.
12 OF 14



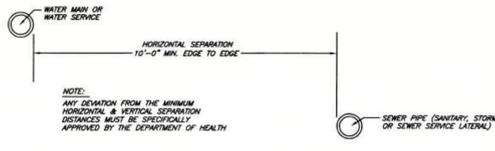
VALVE & HYDRANT DETAIL
NOT TO SCALE



WATER MAIN TRENCH DETAIL (OUTSIDE PAVEMENT)
NOT TO SCALE

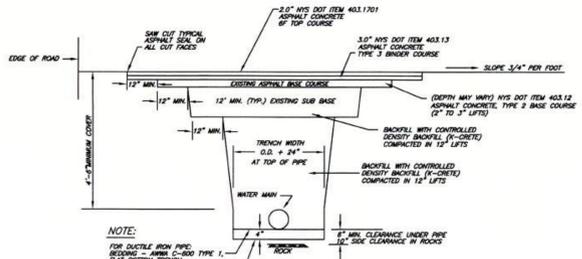


VERTICAL SEPARATION DETAIL
NOT TO SCALE

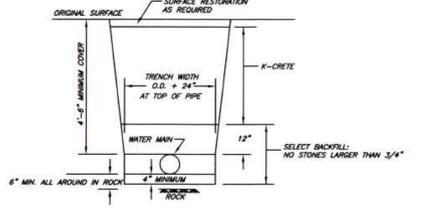


HORIZONTAL SEPARATION DETAIL
NOT TO SCALE

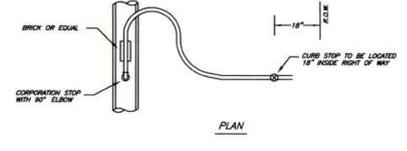
NOTES:
1. IF EVIDENCE OF GROUND WATER IS ENCOUNTERED, HYDRANT DRAIN HOLES SHALL BE PLUGGED.
2. ALL FIRE HYDRANTS WITH PLUGGED DRAIN HOLES ARE TO BE CONSPICUOUSLY MARKED INDICATING THAT THEY MUST BE PUMPED AFTER USE.



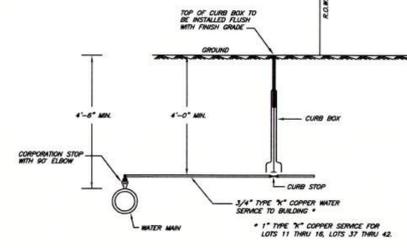
PAVEMENT REPLACEMENT DETAIL
COUNTY ROW ONLY
NOT TO SCALE



WATER TRENCH DETAIL
IN EXISTING TOWN ROADS
NOT TO SCALE

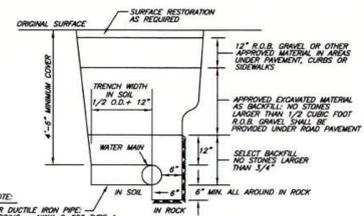


PLAN

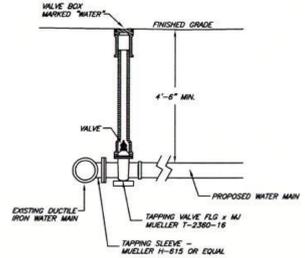


ELEVATION

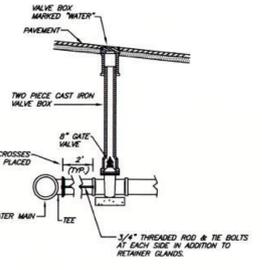
WATER SERVICE DETAIL
NOT TO SCALE



WATER MAIN TRENCH DETAIL
(IN PROPOSED PAVEMENT)
NOT TO SCALE



WATER MAIN TAPPING DETAIL
NOT TO SCALE



VALVE CONNECTION DETAIL
NOT TO SCALE

NOTES:
1. ALL GATE VALVES LOCATED ON TEES AND CROSSES SHALL HAVE A TWO FOOT SECTION OF PIPE PLACED BETWEEN THE M.I. TEE AND M.I. VALVE.

TEST PRESSURE AND THRUST RESTRAINT REQUIREMENTS *

150 PSI	8"
90' BEND	30'
45' BEND	15'
22 1/2' BEND	7 1/2'
11 1/4' BEND	3 3/4'
8" TEE BRANCH RUN	1 1/2'
END THRUST	3 3/4'

SOURCE: DPWA
USING TYPE 2 LAYING CONDITION, FLAT BOTTOM TRENCH; BACKFILL TO 1/2" PIPE, LOOSELY CONSOLIDATED.
SOIL: COH-DRW
* LINAL FEET OF RESTRAINED PIPE EACH SIDE OF BENDS.
* LINAL FEET ON BRANCH OF TEE.
* LINAL FEET FROM END CAP.
* USE FOR WATER MAIN INSTALLED BELOW THE 4.5' INVERT ELEVATION.

WATER SYSTEM NOTES

- CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL REQUIREMENTS SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF HEALTH AND THE TOWN OF NEWBURGH.
- ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CEMENT LINED, CLASS 52, DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.1-91 OR LATER REVISION FOR DUCTILE IRON PIPE. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.
- THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT PIPE WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EBRA IRON METAL SERIES 1100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINED JOINT PIPE IS ACCEPTABLE WITH THE APPROVAL OF THE WATER DEPARTMENT.
- ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT, CLASS 250 AND CONFORM TO ANSI/AWWA E110/A21.10-87 OR LATEST REVISION FOR DUCTILE AND CAST IRON FITTINGS OR ANSI/AWWA C151/A21.53-94 OR LATEST REVISION FOR DUCTILE IRON COMPACT FITTINGS.
- ALL VALVES SHALL BE RESILIENT WEDGE, MECHANICAL JOINT GATE VALVES CONFORMING TO ANSI/AWWA C200 OR LATEST REVISION SUCH AS MUELLER H-2800-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).
- TAPPING SLEEVE SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-815 OR EQUAL. TAPPING VALVE SHALL BE RESILIENT WEDGE GATE VALVES CONFORMING TO ANSI/AWWA C200, SUCH AS MUELLER MODEL T-2300-18 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.
- ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. CORPORATION STEPS SHALL BE MUELLER H-1500 FOR 3/4" AND 1" INCH MUELLER H-1500 OR B-2500 FOR 1 1/2" OR 2" INCH SIZES. CURB VALVES SHALL BE MUELLER H-1501-2 FOR 3/4" AND 1" INCH AND MUELLER B-2504 FOR 1 1/2" AND 2" INCH SIZES. CURB BODIES SHALL BE MUELLER H-1010 FOR 3/4" AND 1" INCH AND MUELLER H-1010 FOR 1 1/2" AND 2" INCH SIZES.
- ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.
- THE WATER MAIN SHALL BE TESTED, DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISINFECTING AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO PUTTING THE WATER MAIN IN SERVICE. SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.
- THRUST RESTRAINT SHALL BE PROVIDED BY THE TEE'S AND RETAINER GLANDS. THE LENGTH OF RESTRAINED PIPE SHALL BE DETERMINED BASED UPON WORKING PRESSURES, SOIL CONDITIONS AND DEPTH OF BURY ACCORDING TO DPWA STANDARDS. (SEE TABLE)
- PRESSURE AND LEAKAGE TESTS ARE REQUIRED AND SHALL BE DONE IN ACCORDANCE WITH AWWA C-600 STANDARDS.
- DISINFECTING OF ALL NEW WORK SHALL BE DONE IN ACCORDANCE WITH AWWA C-651 STANDARDS.
- ALL WATER MAINS SHALL BE 8", CLASS 52, DUCTILE IRON PIPE UNLESS OTHERWISE NOTED.
- WHENEVER CONSTRUCTION IS NOT IN PROGRESS, ANY OPEN END OF THE PIPE SHALL BE CLOSED WITH AN ANIMAL PROOF, WATERPROOF PLUG.
- LOTS 18, 44 AND 45 SHALL HAVE A SOLENOID VALVE INSTALLED ON THE WATER LINE AND INTERLOCKED WITH THE PUMP CHAMBER HIGH WATER ALARM SO THAT THE VALVE WILL CLOSE WHEN THE HIGH WATER ALARM IS ACTIVATED.

EACH SHEET IS INCOMPLETE OR INVALID UNLESS ACCOMPANIED BY ALL THE SHEETS IN THE SET.

IT IS A VIOLATION OF NYS EDUCATION LAW SECTION 2209 FOR ANY PERSON UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, LAND SURVEYOR OR ARCHITECT TO ALTER AN ITEM BEARING THE STAMP OR SEAL OF A LICENSED PROFESSIONAL IN ANY WAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER, LAND SURVEYOR OR ARCHITECT SHALL ADD TO THE ITEM THEIR STAMP OR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CALL BEFORE YOU DIG
NEW YORK INDUSTRIAL CODE REQUIRES 2 WORKING DAYS NOTICE BEFORE YOU DRILL OR BLAST - STOP CALL
Underground Utilities Call Center
1-800-245-2828

NOTES:
NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

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WATER DETAILS
FOR
ELM FARM ASSOCIATES, LLC
WELLS ROAD
NEWBURGH, ORANGE COUNTY, NY

SHEET NO.
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