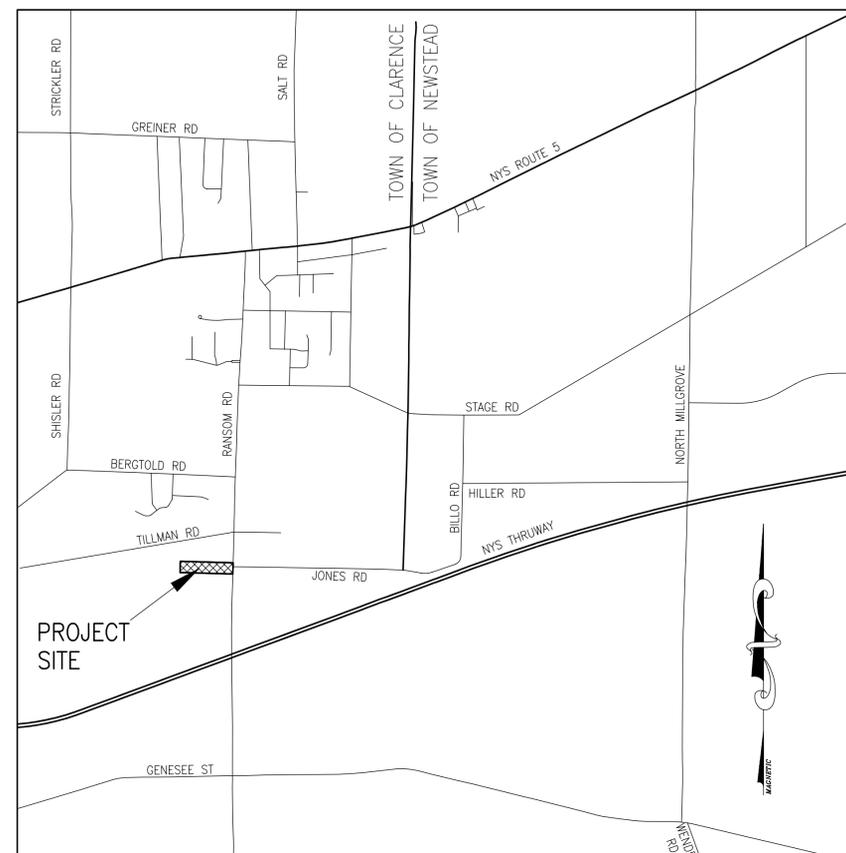


# RANSOM ROAD OPEN DEVELOPMENT AREA

TOWN OF CLARENCE, ERIE COUNTY, NEW YORK



LOCATION MAP

NOT-TO-SCALE

*NOTE:*  
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF CLARENCE STANDARD CONSTRUCTION SPECIFICATION AND/OR SUBJECT TO THE LATEST REVISIONS AS APPROVED BY THE TOWN ENGINEER.

SCHEDULE OF DRAWINGS:

SHEET	DWG.	DESCRIPTION
1	CS-1	COVER SHEET
2	---	TOPOGRAPHIC SURVEY (BY McINTOSH & McINTOSH, P.C.)
3	C-1	SITE PLAN
4	C-2	GRADING, DRAINAGE AND EROSION & SEDIMENT CONTROL PLAN
5	C-3	UTILITY PLAN
6	L-1	LANDSCAPE PLAN
7	D-1	MISCELLANEOUS DETAILS
8	D-2	MISCELLANEOUS DETAILS AND PRIVATE DRIVE & WATERLINE PROFILE
9	D-3	MISCELLANEOUS DETAILS

**OWNER:**

JOHN KAUSNER  
9105 CLARENCE CENTER ROAD  
CLARENCE, NEW YORK 14031

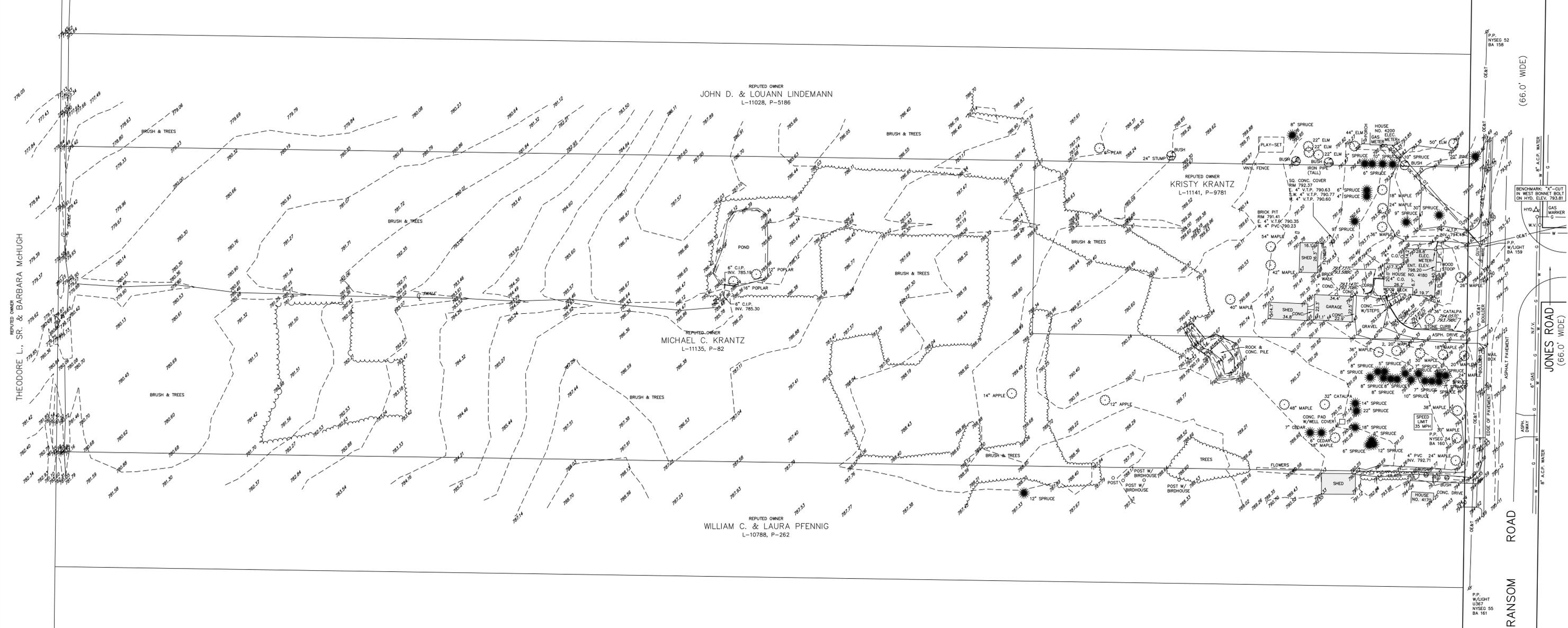
**CIVIL ENGINEER:**

METZGER CIVIL ENGINEERING, PLLC  
8560 MAIN STREET  
WILLIAMSVILLE, NEW YORK 14221

PHONE NO. (716) 633-2601  
FAX NO. (716) 633-2704



METZGER CIVIL ENGINEERING, PLLC



**NOTES**

- ELEVATIONS BASED UPON EXISTING BERNSTEN TOP SECURITY MONUMENT STAMPED CLARE, LOCATED ON THE SOUTH SIDE OF MAIN STREET AT TOWN PARK. ELEV. 743.20 (NAVD88)
- UNDERGROUND UTILITY INFORMATION SHOWN WAS DERIVED FROM RECORD PLANS SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES. THE PROPER UTILITY AUTHORITY SHOULD BE NOTIFIED PRIOR TO ANY CONSTRUCTION OR EXCAVATION AT THE SITE. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
- PROPERTY LINES AND/OR RIGHT OF WAY LINES SHOWN ARE APPROXIMATE IN LOCATION.
- FOR REFERENCE SEE TOWN OF CLARENCE TAX MAP 84.06-4-11.1 & 11.2.

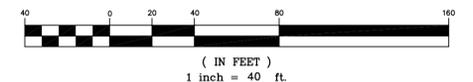
**OPERATING AUTHORITY FOR UTILITIES**

- TELEPHONE SERVICE----- VERIZON  
65 FRANKLIN STREET, 6th FLOOR  
BUFFALO, N.Y. 14202-4074 (716) 840-6221
- ELECTRIC SERVICE----- NEW YORK STATE ELECTRIC & GAS CORP.  
150 ERIE STREET  
LANCASTER, NY 14086 (716) 651-5216
- GAS SERVICE----- NATIONAL FUEL GAS CORPORATION  
6363 MAIN STREET  
WILLIAMSVILLE, N.Y. 14221 (716) 857-7401
- SANITARY SEWER SERVICE-----NONE
- WATER SERVICE----- ERIE COUNTY WATER AUTHORITY  
3030 UNION ROAD  
CHEEKTOWAGA, N.Y. 14225 (716) 684-1510
- STORM SEWER SERVICE----- ERIE COUNTY DEPARTMENT OF PUBLIC WORKS  
95 FRANKLIN STREET  
BUFFALO, N.Y. 14202 (716) 858-8300
- CABLE SERVICE----- TIME WARNER CABLE  
1700 COMMERCE PARKWAY  
LANCASTER, N.Y. 14086 (716) 686-4460

**LEGEND**

- OE— OVERHEAD ELECTRIC
- OT— OVERHEAD TELEPHONE
- OEA— OVERHEAD ELECTRIC & TELEPHONE
- G— GAS
- W— WATER
- P.P.— POWER POLE
- H.— HYDRANT
- O.W.V.— WATER VALVE
- O.C.O.— CLEAN OUT
- O.COND.— CONDUIT
- PL— PLANTED AREA
- O.G.M.— GAS METER

**GRAPHIC SCALE**



REVISION	

**McINTOSH & McINTOSH, P.C.**  
CONSULTING ENGINEERS, LAND SURVEYORS, PLANNERS  
LOCKPORT, NEW YORK BUFFALO, NEW YORK  
PHONE 434-9138 PHONE 625-8360

**TOPOGRAPHICAL MAP OF PART OF LOT-7, SEC.-1, TWP.-12, R.-6, HOLLAND PURCHASE**

**TOWN OF CLARENCE, ERIE COUNTY, NEW YORK**

JOB No. **8183** SCALE: **1" = 40'** DATE: **JUNE 21, 2013**

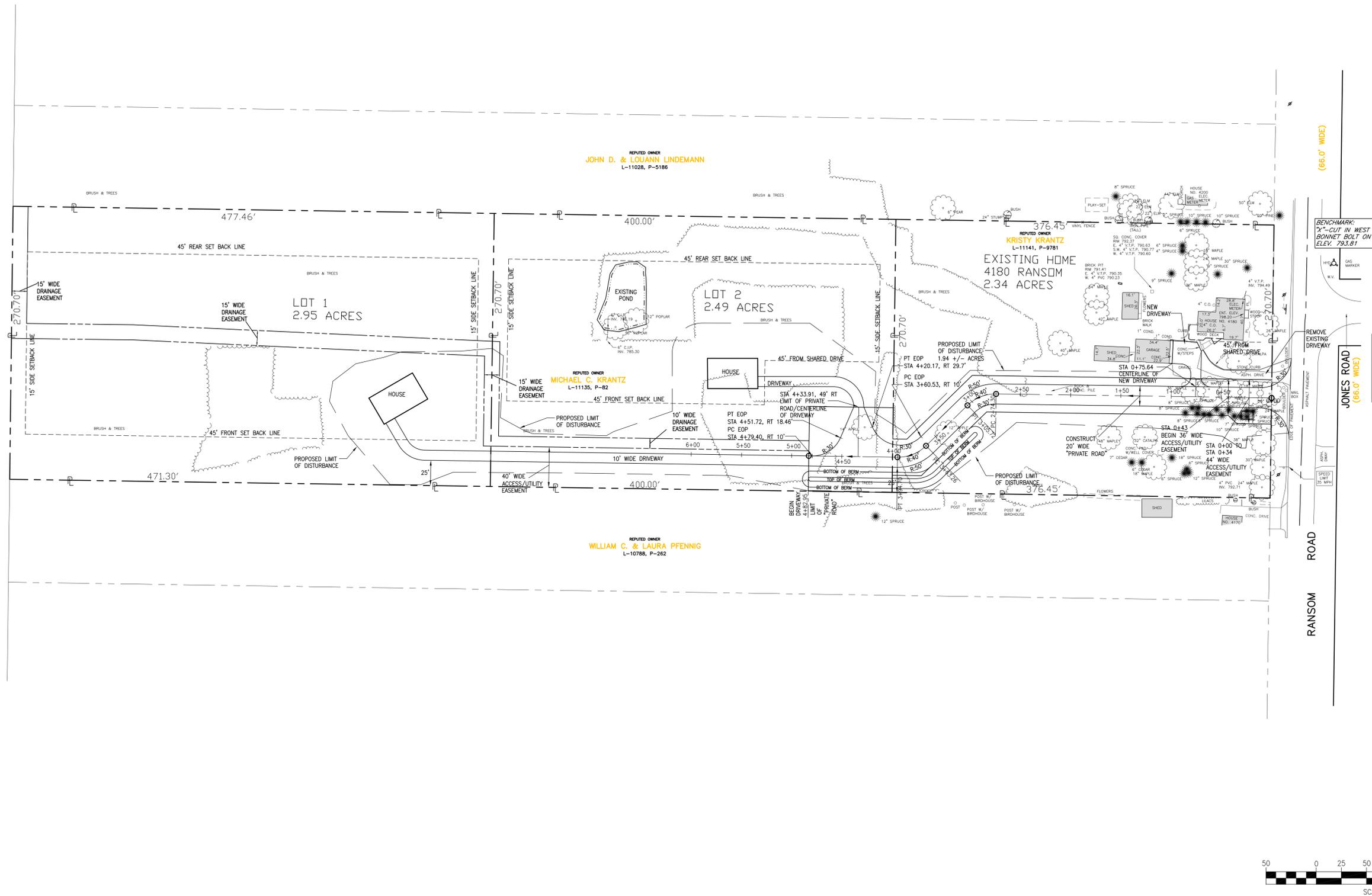
NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO THIS MAP IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

DRAWN: **JEM III**  
COMP: **JEM III**  
CAD FILE: **8183.DWG**  
CHECKED: **JEM III**

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P:\CE\818322-Ransom Rd CAD\818322-Development\818322.dwg, 1/17/2013 11:56:43 AM

REPORTED OWNER  
THEODORE L. SR. & BARBARA MCHUGH



BENCHMARK:  
"X"-CUT IN WEST  
BONNET BOLT ON HYD.  
ELEV. 733.81

REMOVE EXISTING DRIVEWAY

JONES ROAD (66.0' WIDE)

RANSOM ROAD

NOTE: PRIOR TO PERFORMING ANY WORK WITHIN THE RANSOM ROAD RIGHT-OF-WAY, CONTRACTOR SHALL OBTAIN HIGHWAY WORK PERMIT FROM ERIE COUNTY DEPARTMENT OF PUBLIC WORKS - DIVISION OF HIGHWAYS.

**NOTES**  
1) SURVEY INFORMATION PROVIDED BY McINTOSH & McINTOSH, P.C., JOB NO. 8183, DATED JUNE 21, 2013.  
2) THIS IS NOT A PROPERTY SURVEY.

DESIGNED BY:	PCC
DRAWN BY:	PCC
CHECKED BY:	ARH
CAD FILE:	M0532
NOTE:	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW
REVISIONS	DATE BY

**MCE METZGER CIVIL ENGINEERING, PLLC**

8560 MAIN ST.  
WILLIAMSVILLE, NY 14221  
PH: 716-633-2601  
FAX: 716-633-2704

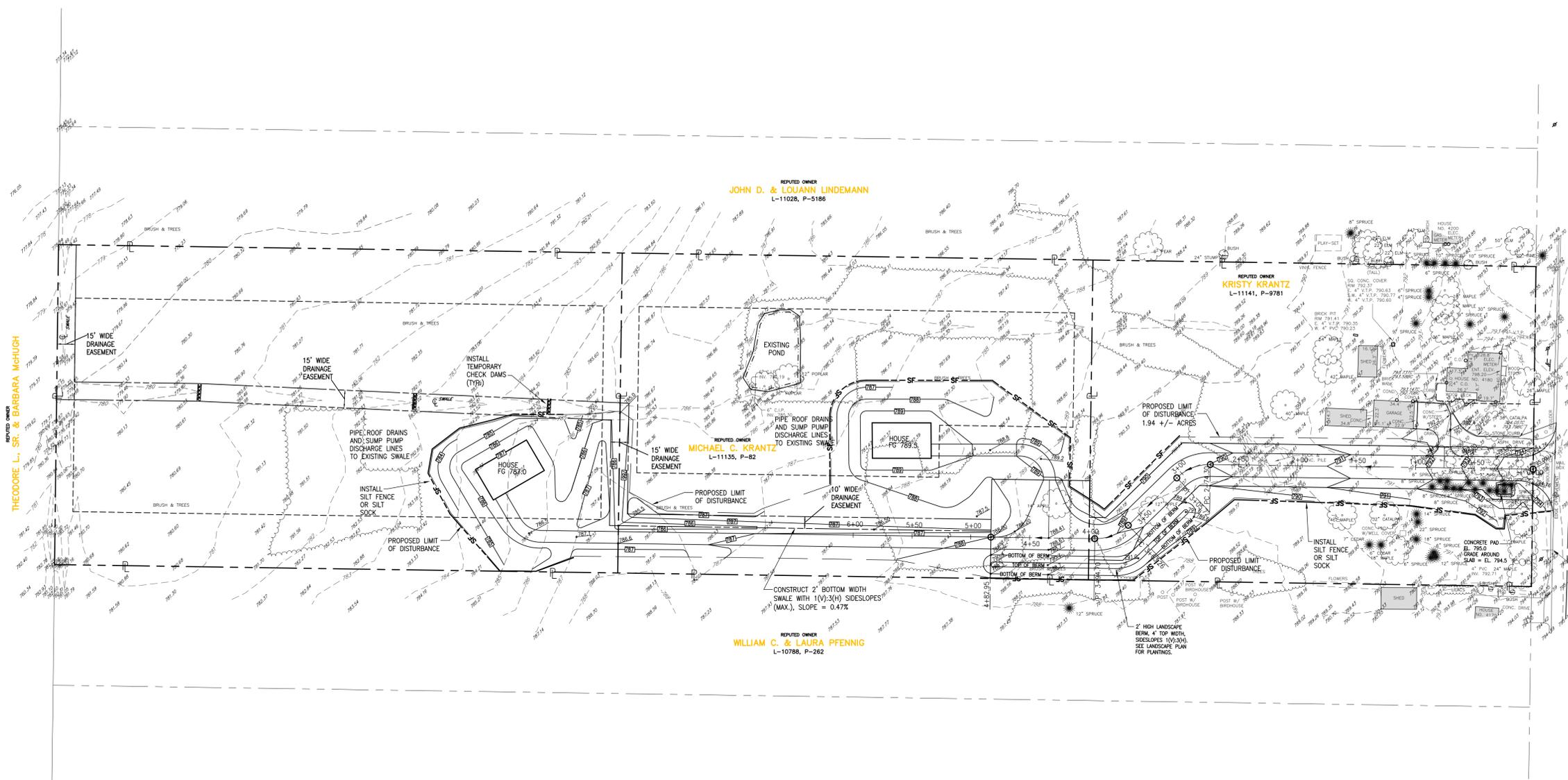
CIVIL ENGINEERING  
LAND PLANNING  
SITE DESIGN  
MUNICIPAL ENGINEERING

**RANSOM ROAD  
OPEN DEVELOPMENT AREA**

TOWN OF CLARENCE, ERIE COUNTY, NEW YORK

**SITE PLAN**

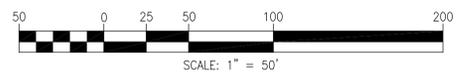
SCALE:	AS SHOWN
DATE:	OCTOBER 11, 2013
JOB NO:	M-0532
SHEET NO:	C-1 SHEET 3



BENCHMARK:  
"X"-CUT IN WEST  
CORNER BOLT ON HYD.  
ELEV. 793.91

NOTE:  
PRIOR TO PERFORMING ANY  
WORK WITHIN THE RANSOM  
ROAD RIGHT-OF-WAY,  
CONTRACTOR SHALL OBTAIN  
HIGHWAY WORK PERMIT  
FROM ERE COUNTY  
DEPARTMENT OF PUBLIC  
WORKS - DIVISION OF  
HIGHWAYS.

- CONSTRUCT 100' (MIN) LONG  
STABILIZED CONSTRUCTION ENTRANCE BY:
- 1) REMOVE EXISTING TOPSOIL
  - 2) PROOF ROLL EXISTING SUBGRADE TO FINISHED SUBGRADE ELEVATION
  - 3) INSTALL GEOTEXTILE FABRIC
  - 4) INSTALL 12" OF 2" BOC STONE TO 1" ABOVE FINISHED SUBGRADE ELEVATION
  - 5) ENTRANCE SHALL BE INSPECTED CONTINUOUSLY AND MAINTAINED SO THAT NO DIRT IS LEFT ON THE EXISTING ROAD
  - 6) REMOVE TOP 1" OF STONE AND COMPACT TO FINISHED SUBGRADE ELEVATION JUST PRIOR TO PAVING
  - 7) PAVE IN ACCORDANCE WITH ASPHALT PAVING DETAIL



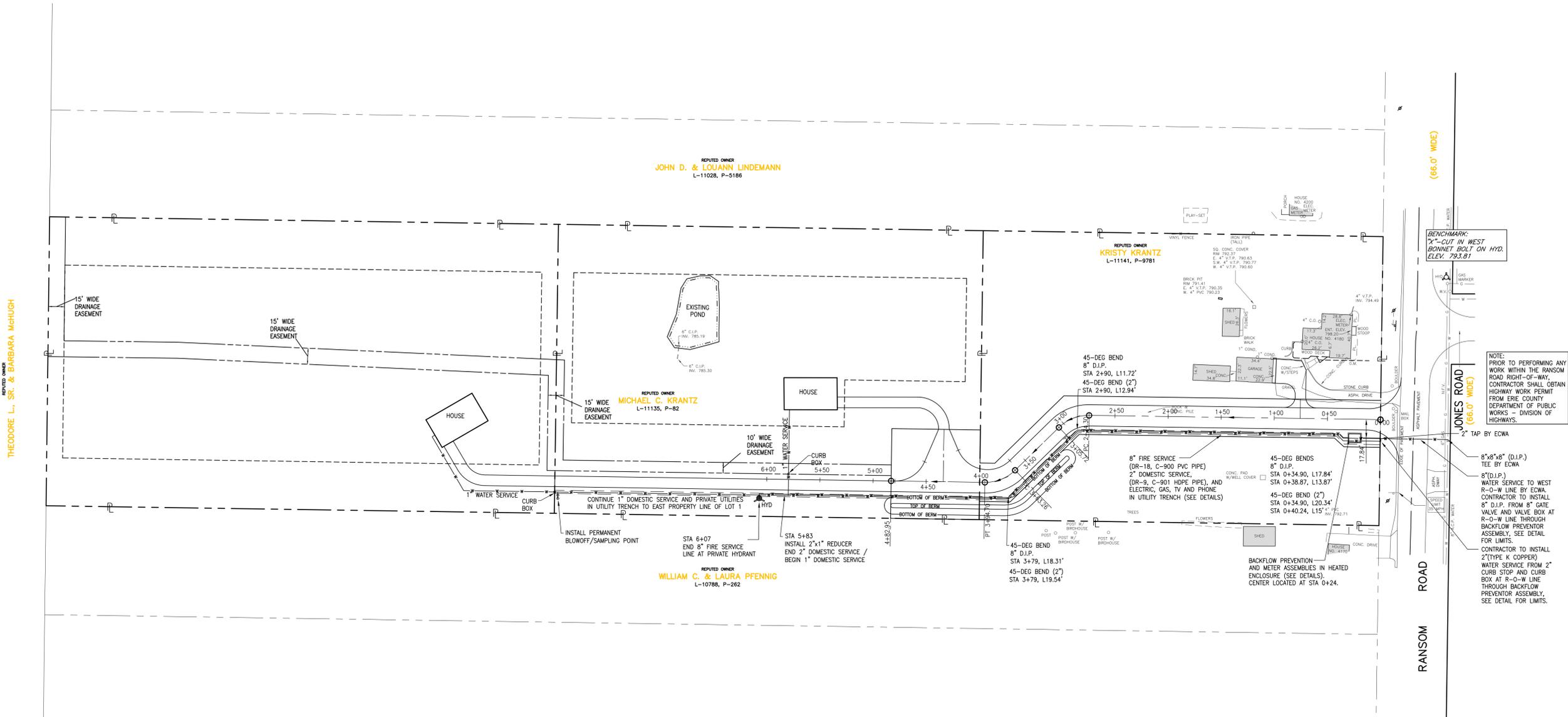
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REVISIONS	DATE BY

**MCE** METZGER CIVIL ENGINEERING, PLLC  
8560 MAIN ST. WILLIAMSVILLE, NY 14221  
PH: 716-633-2601 FAX: 716-633-2704  
CIVIL ENGINEERING LAND PLANNING SITE DESIGN MUNICIPAL ENGINEERING

**RANSOM ROAD  
OPEN DEVELOPMENT AREA**  
TOWN OF CLARENCE, ERE COUNTY, NEW YORK  
**GRADING, DRAINAGE AND  
EROSION & SEDIMENT CONTROL PLAN**

SCALE: AS SHOWN  
DATE: OCTOBER 11, 2013  
JOB NO: M-0532  
SHEET NO:  
**C-2  
SHEET 4**



**OPERATING AUTHORITY FOR UTILITIES**

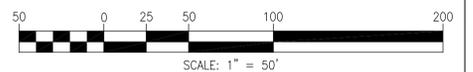
- (1) TELEPHONE SERVICE----- VERIZON  
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BUFFALO, N.Y. 14202-4074 (716) 840-6221
- (2) ELECTRIC SERVICE----- NEW YORK STATE ELECTRIC & GAS CORP.  
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6363 MAIN STREET  
WILLIAMSVILLE, N.Y. 14221 (716) 857-7401
- (4) SANITARY SEWER SERVICE -NONE
- (5) WATER SERVICE ----- ERIE COUNTY WATER AUTHORITY  
3030 UNION ROAD  
CHEEKTOWAGA, N.Y. 14225 (716) 684-1510
- (6) STORM SEWER SERVICE--- ERIE COUNTY DEPARTMENT OF PUBLIC WORKS  
95 FRANKLIN STREET  
BUFFALO, N.Y. 14202 (716) 858-8300
- (7) CABLE SERVICE----- TIME WARNER CABLE  
1700 COMMERCE PARKWAY  
LANCASTER, N.Y. 14086 (716) 686-4460

**NOTES**

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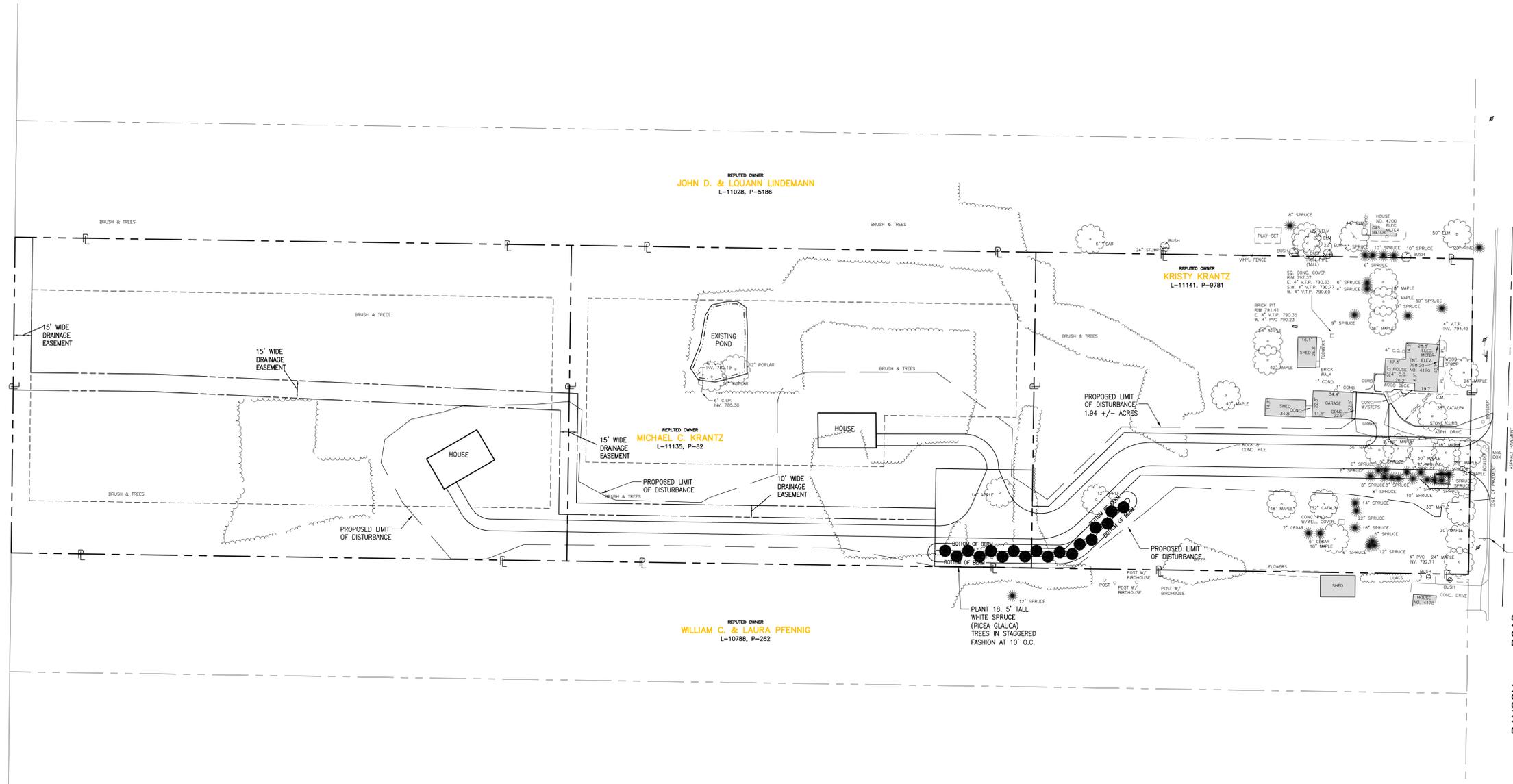
**PRIVATE UTILITY NOTES:**  
GAS, ELECTRIC AND TELEPHONE UTILITY SERVICES WILL BE DESIGNED BY EACH RESPECTIVE PRIVATE UTILITY COMPANY

**PRIVATE SEPTIC SYSTEM NOTES:**  
SANITARY SEWER SERVICE TO EACH HOME WILL BE SERVED BY A PRIVATE RESIDENTIAL SEPTIC SYSTEM WHICH IS TO BE DESIGNED IN ACCORDANCE WITH ERIE COUNTY HEALTH DEPARTMENT STANDARDS AND APPROVED DURING THE BUILDING PERMIT PROCESS.



<p><b>NOTES</b></p> <p>1) SURVEY INFORMATION PROVIDED BY McINTOSH &amp; McINTOSH, P.C., JOB NO. 8183, DATED JUNE 21, 2013.</p> <p>2) THIS IS NOT A PROPERTY SURVEY.</p>	<p>DESIGNED BY: PCC</p> <p>DRAWN BY: PCC</p> <p>CHECKED BY: ARH</p> <p>CAD FILE: M0532</p> <p>NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW</p>	<p><b>METZGER CIVIL ENGINEERING, PLLC</b></p> <p>8560 MAIN ST. WILLIAMSVILLE, NY 14221 PH: 716-633-2601 FAX: 716-633-2704</p>	<p>CIVIL ENGINEERING LAND PLANNING SITE DESIGN MUNICIPAL ENGINEERING</p>	<p><b>RANSOM ROAD OPEN DEVELOPMENT AREA</b></p> <p>TOWN OF CLARENCE, ERIE COUNTY, NEW YORK</p> <p><b>UTILITY PLAN</b></p>	<p>SCALE: AS SHOWN</p> <p>DATE: OCTOBER 11, 2013</p> <p>JOB NO: M-0532</p> <p>SHEET NO:</p> <p style="text-align: center; font-size: 1.2em;"><b>C-3 SHEET 5</b></p>
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REPORTED OWNER  
THEODORE L. SR. & BARBARA MCHUGH



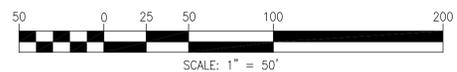
BENCHMARK:  
"X"-CUT IN WEST  
BONNET BOLT ON HYD.  
ELEV. 793.81

NOTE: PRIOR TO PERFORMING ANY  
WORK WITHIN THE RANSOM  
ROAD RIGHT-OF-WAY,  
CONTRACTOR SHALL OBTAIN  
HIGHWAY WORK PERMIT  
FROM ERIE COUNTY  
DEPARTMENT OF PUBLIC  
WORKS - DIVISION OF  
HIGHWAYS.

LANDSCAPE NOTES:

1. REASONABLE MEASURES MUST BE TAKEN TO PROTECT EXISTING TREES WHICH ARE TO BE PRESERVED FROM ALL TYPES OF ROOT TRUNK AND LIMB DAMAGE: INCLUDING BUT NOT LIMITED TO, RETAINING WALLS WHICH PREVENT FILLING ON TOP OF ROOTS OR EXCAVATING TREE ROOTS.
2. CONTRACTOR SHALL RESTORE ALL AREAS OF SOIL DISTURBANCE BY PLACING A MINIMUM OF FOUR INCHES OF TOPSOIL, SEEDING AND MULCHING, UNLESS GROUND COVER IS NOTED OTHERWISE.

GENERAL LAWN AREAS  
SEED MIX  
1) 60% KENTUCKY BLUEGRASS  
SEEDING RATE 5LBS/1,000 S.F.  
2) 20% PERENNIAL RYEGRASS  
SEEDING RATE 5LBS/1,000 S.F.  
3) 20% FINE FESCUE  
SEEDING RATE 5LBS/1,000 S.F.



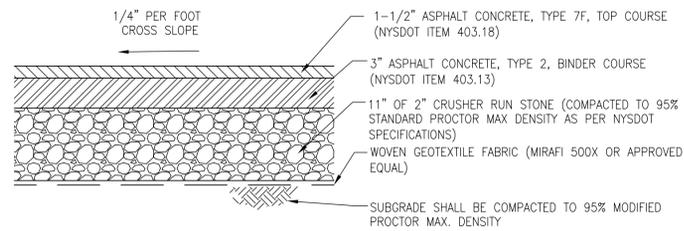
NOTES  
1) SURVEY INFORMATION PROVIDED BY McINTOSH & McINTOSH, P.C., JOB NO. 8183, DATED JUNE 21, 2013.  
2) THIS IS NOT A PROPERTY SURVEY.

DESIGNED BY:	PCC
DRAWN BY:	PCC
CHECKED BY:	ARH
CAD FILE:	M0532
NOTE:	UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW
REVISIONS	DATE BY

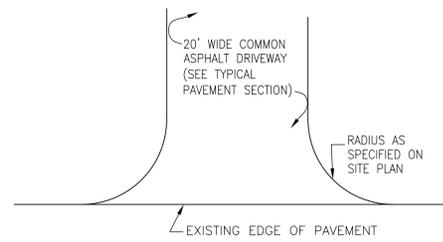
**MCE** METZGER CIVIL ENGINEERING, PLLC  
8560 MAIN ST. WILLIAMSVILLE, NY 14221  
PH: 716-633-2601 FAX: 716-633-2704  
CIVIL ENGINEERING LAND PLANNING SITE DESIGN MUNICIPAL ENGINEERING

RANSOM ROAD  
OPEN DEVELOPMENT AREA  
TOWN OF CLARENCE, ERIE COUNTY, NEW YORK  
LANDSCAPE PLAN

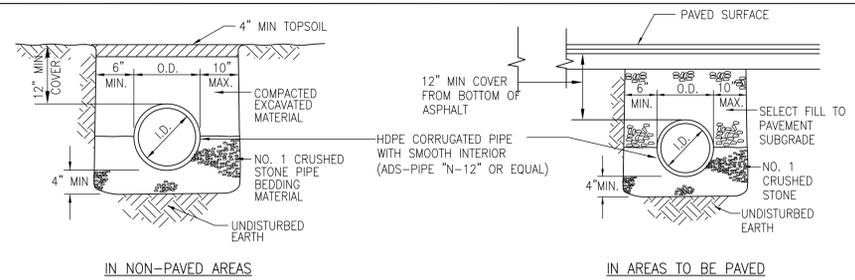
SCALE: AS SHOWN  
DATE: OCTOBER 11, 2013  
JOB NO: M-0532  
SHEET NO:  
L-1  
SHEET 6



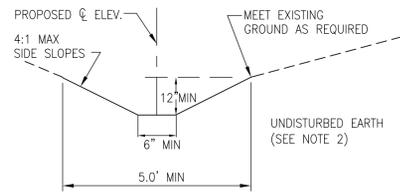
**TYPICAL PAVEMENT SECTION**  
N.T.S.



**PROPOSED PRIVATE DRIVEWAY**  
N.T.S.

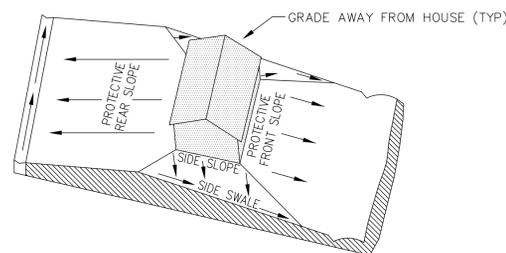


**STORM SEWER TRENCH DETAILS**  
N.T.S.

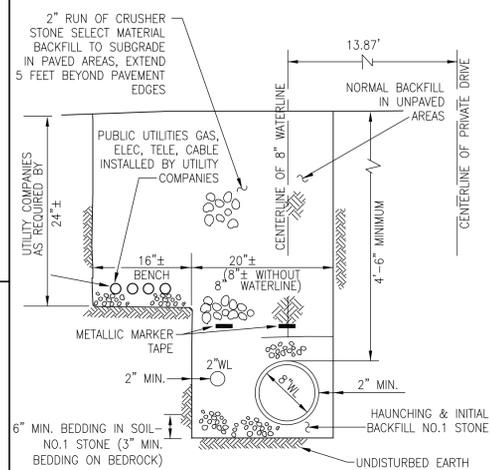


**NOTES:**  
1) USE DIMENSIONS SHOWN IN THIS DETAIL UNLESS INDICATED OTHERWISE ON THE GRADING PLAN.  
2) CONTRACTOR SHALL NOT OVER-EXCAVATE CHANNEL, SO AS TO, PREVENT EROSION.

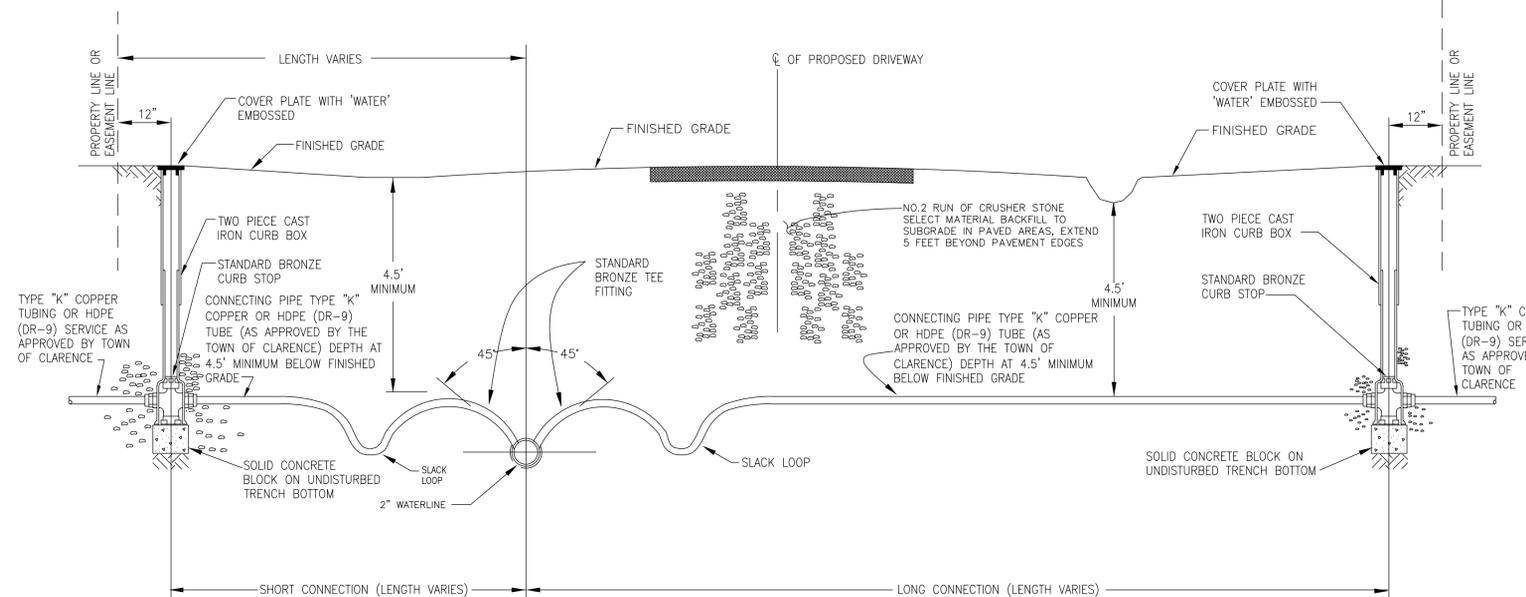
**TYPICAL SWALE/DITCH**  
N.T.S.



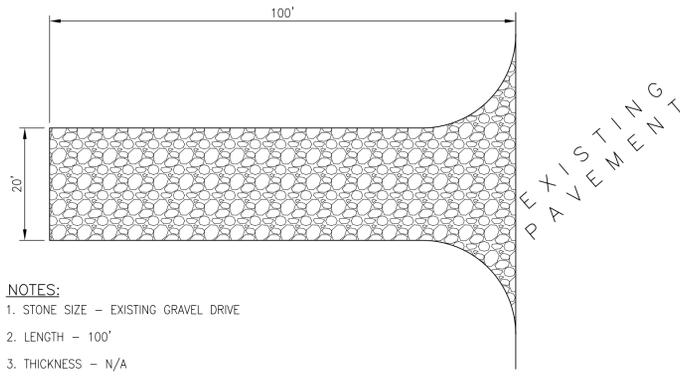
**GENERAL LOT GRADING (TYPE "B")**  
N.T.S.



**UTILITY TRENCH DETAIL**  
N.T.S.

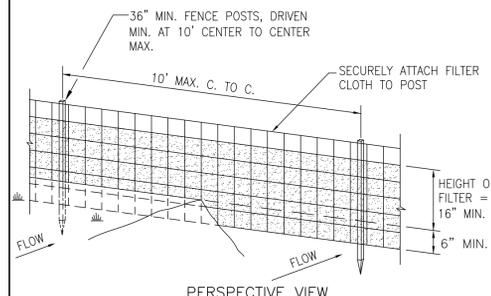
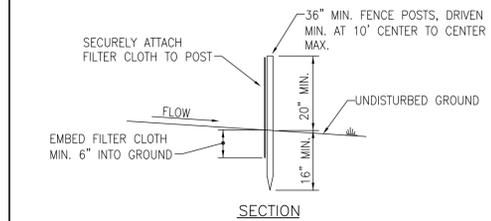


**WATERLINE SERVICE CONNECTION DETAIL**  
N.T.S.



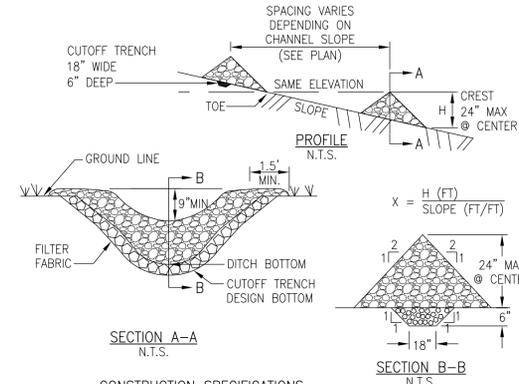
- NOTES:**
1. STONE SIZE - EXISTING GRAVEL DRIVE
  2. LENGTH - 100'
  3. THICKNESS - N/A
  4. WIDTH - 20' WIDE
  5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
  6. SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
  7. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**TEMPORARY STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
N.T.S.



- MATERIALS:**  
POSTS: STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD  
FENCE: WOVEN WIRE, 14 1/2 GA., 6" MAX. MESH OPENING  
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL  
PREFABRICATED UNIT: GEOFAB, ENVIRONFENCE OR APPROVED EQUAL.
- NOTES:**
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTIONS.
  3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

**SILT FENCE DETAIL**  
N.T.S.



- CONSTRUCTION SPECIFICATIONS**
- 1) STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
  - 2) SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
  - 3) EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
  - 4) PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
  - 5) ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

**TEMPORARY STONE CHECK DAM**  
N.T.S.

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DRAWN BY:	PCC				
CHECKED BY:	ARH				
CAD FILE:	DETAILS.DWG				
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REVISIONS		DATE	BY		

**ME METZGER CIVIL ENGINEERING, PLLC**

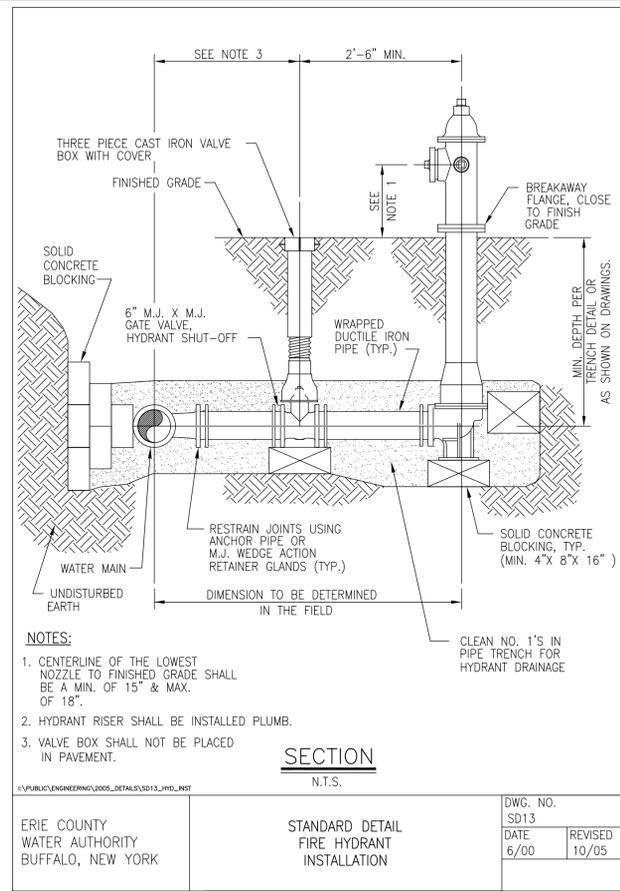
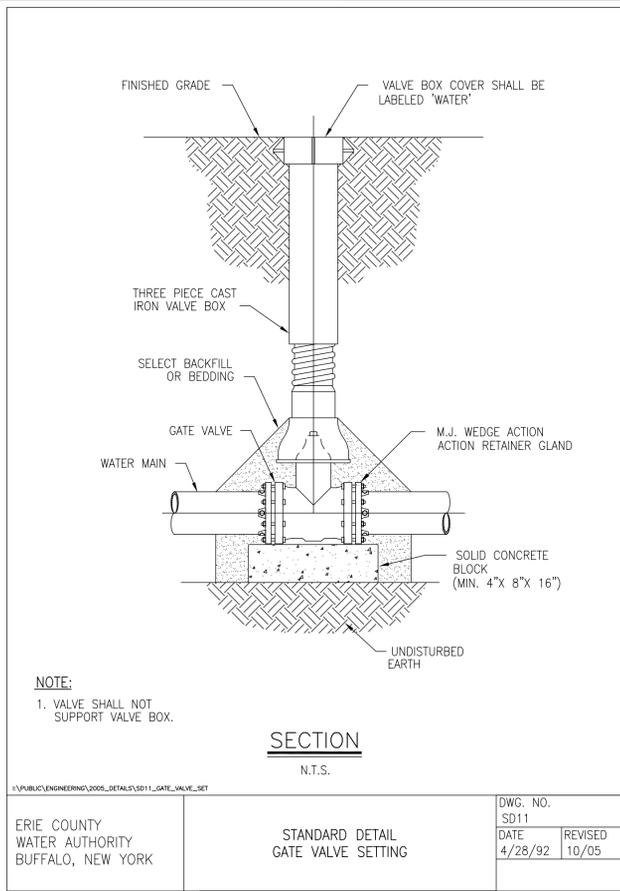
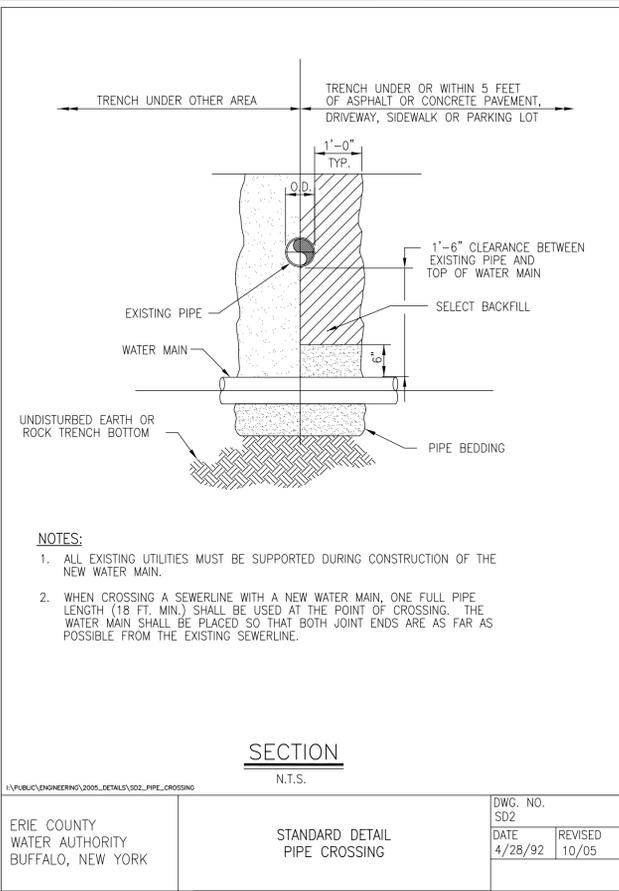
8560 MAIN ST.  
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CIVIL ENGINEERING  
LAND PLANNING  
SITE DESIGN  
MUNICIPAL ENGINEERING

**RANSOM ROAD  
OPEN DEVELOPMENT AREA**  
TOWN OF CLARENCE, ERIE COUNTY, NEW YORK

MISCELLANEOUS DETAILS

SCALE: NOT-TO-SCALE  
DATE: OCTOBER 11, 2013  
JOB NO: M-0532  
SHEET NO: D-1 SHEET 7



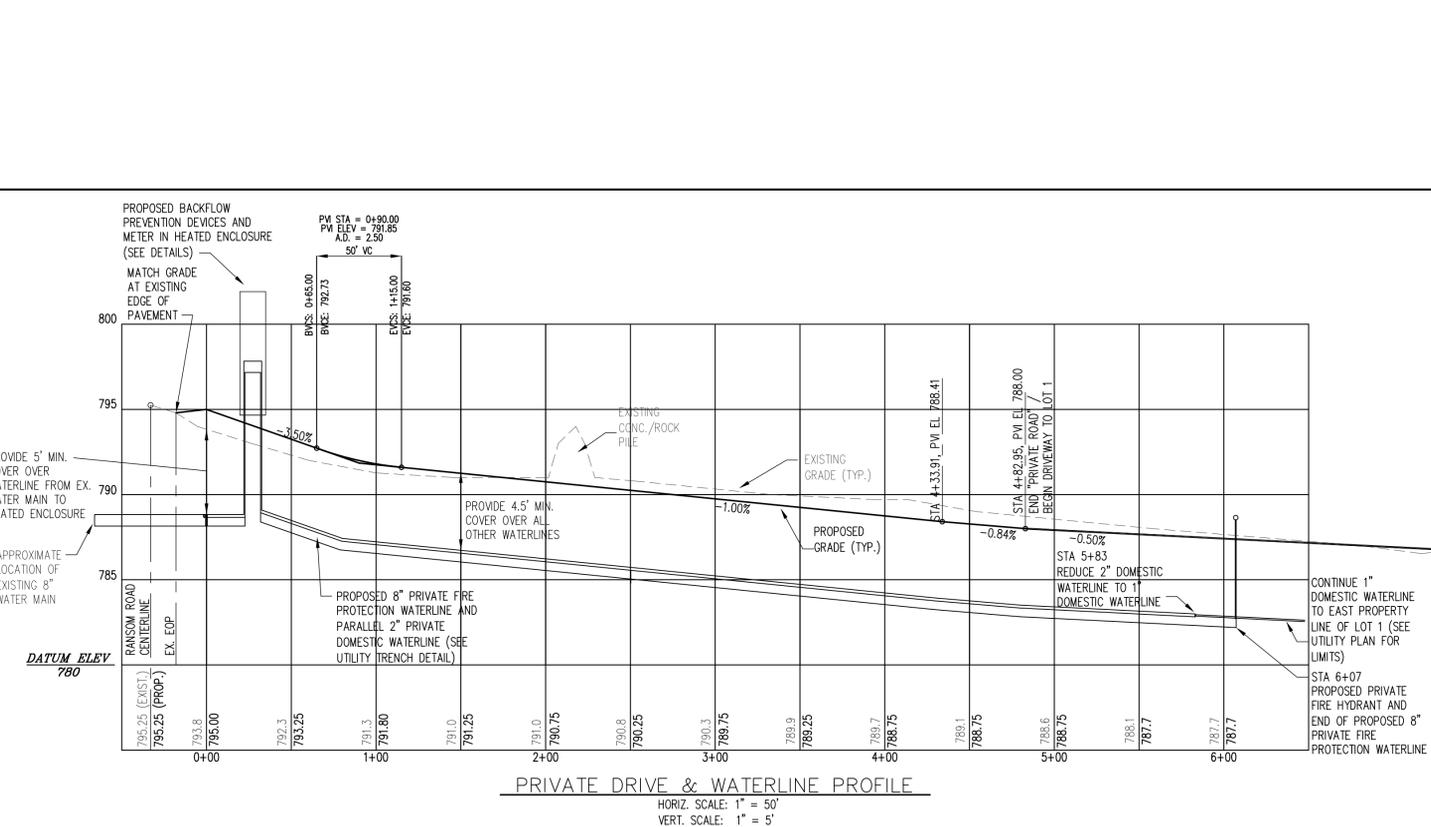
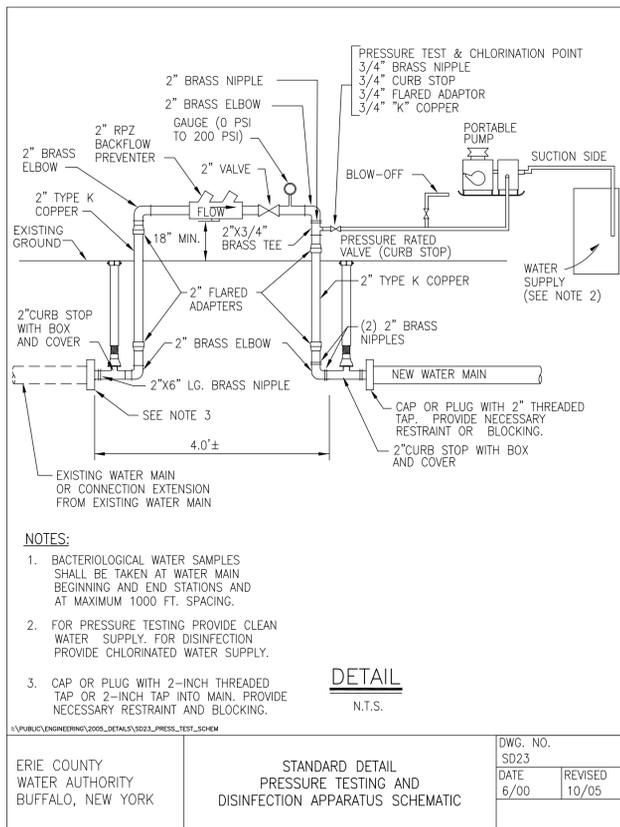
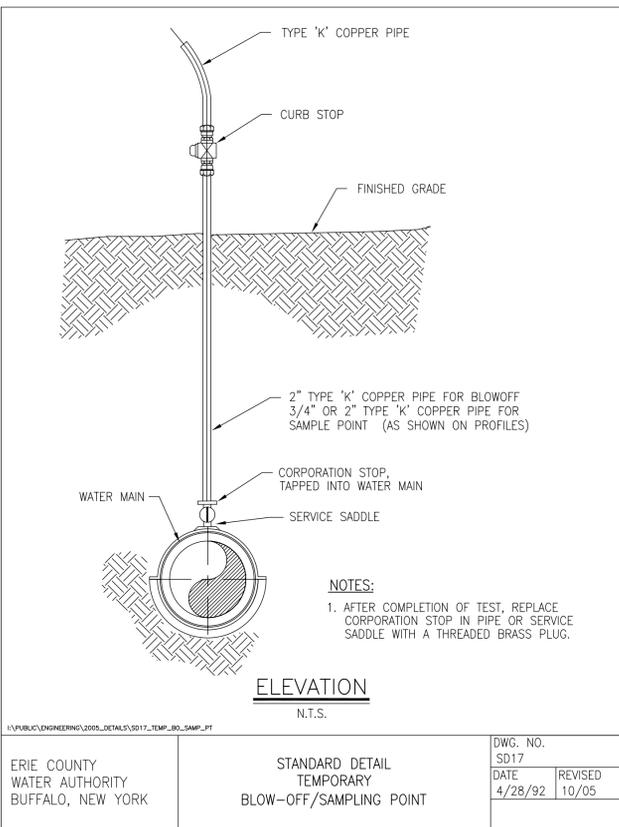
ERIE COUNTY WATER AUTHORITY DESIGN MANUAL (10-06)

**3.16 PRESSURE AND LEAKAGE TESTING PROCEDURE**

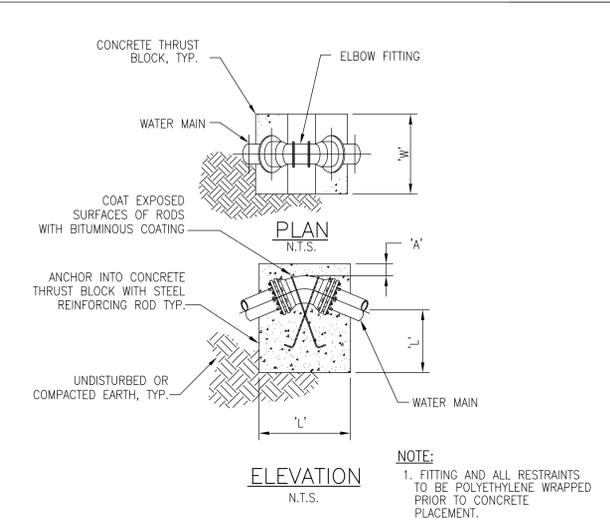
- A. ALL PIPELINES SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH THE METHODS DESCRIBED IN ECWA'S STANDARD SPECIFICATIONS AND AWWA STANDARD C600. REFER TO AWWA C600 FOR SPECIFIC CONDITIONS NOT COVERED IN THE ECWA SPECIFICATION.
- B. IN THE EVENT OF A CONFLICT BETWEEN ECWA STANDARD SPECIFICATION AND AWWA STANDARD C600, THE MORE STRINGENT OF ANY REQUIREMENT SHALL APPLY. THE METHODS DESCRIBED IN THE ECWA STANDARD SPECIFICATION APPLIES TO ALL PRESSURE WATER MAIN.
- C. THE ENGINEER SHALL CONSIDER THE FOLLOWING WHEN DETERMINING THE TEST PRESSURE:
1. TEST PRESSURE SHALL BE 170 PSI AT THE LOW POINT ALONG THE WATER MAIN FOR PIPE SIZES THROUGH 12 INCHES. TEST PRESSURE SHALL BE 150 PSI FOR PIPE SIZES 16 INCHES AND LARGER.
  2. THE TEST PRESSURE SHALL NOT EXCEED VALVE, PIPE OR THRUST-RESTRAINT PRESSURES.
  3. THE TEST PRESSURE SHALL NOT VARY BY MORE THAN (+ -) 5 PSI FOR THE DURATION OF THE TEST.

**3.17 DISINFECTION**

- A. ALL NEW OR REPAIRED WATER MAIN SHALL BE CLEANED, CHLORINATED, FLUSHED AND BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH THE METHODS DESCRIBED IN ECWA'S STANDARD SPECIFICATION. THIS SPECIFICATION IS BASED ON AWWA STANDARD C651, DISINFECTING WATER MAINS. REFER TO AWWA C651 FOR SPECIFIC CONDITIONS NOT COVERED. IN THE EVENT OF A CONFLICT BETWEEN THE ECWA STANDARD SPECIFICATION AND AWWA STANDARD C651, THE MORE STRINGENT OF ANY REQUIREMENT SHALL APPLY. EXISTING MAINS SHALL BE PROTECTED AT ALL TIMES FROM CROSS CONNECTIONS WITH WATER MAINS BEING CHLORINATED. CROSS CONNECTION PROTECTION SHALL BE ACHIEVED BY USE OF A REDUCED PRESSURE ZONE BACKFLOW PREVENTER (RPZ).
- B. LARGE DIAMETER TRANSMISSION MAINS MAY REQUIRE THE INSTALLATION OF TEMPORARY COMPONENTS TO ADEQUATELY PROVIDE FOR PROPER DISINFECTION AND DISPOSAL. THESE REQUIREMENTS SHALL BE INCLUDED ON THE DESIGN DRAWINGS.
- C. BACTERIOLOGICAL TESTING IS NOT REQUIRED FOR THE 8" FIRE LINE.



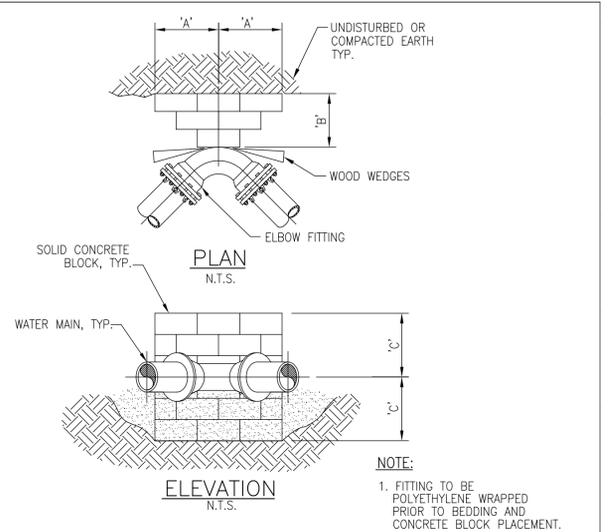
DESIGNED BY: PCC	DRAWN BY: PCC	CHECKED BY: ARH	CAD FILE: DETAILS.DWG	NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO THIS DRAWING IS A VIOLATION OF SECTION 7209, PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.	<p>8560 MAIN ST. WILLIAMSVILLE, NY 14221 PH: 716-633-2601 FAX: 716-633-2704</p> <p>CIVIL ENGINEERING LAND PLANNING SITE DESIGN MUNICIPAL ENGINEERING</p>	<p>SCALE: NOT-TO-SCALE</p> <p>DATE: OCTOBER 11, 2013</p> <p>JOB NO: M-0532</p> <p>SHEET NO:</p>
<p>ERIC COUNTY WATER AUTHORITY BUFFALO, NEW YORK</p>				<p>REVISIONS</p>	<p>PROJECT: RANSOM ROAD OPEN DEVELOPMENT AREA</p> <p>TOWN OF CLARENCE, ERIE COUNTY, NEW YORK</p> <p>MISCELLANEOUS DETAILS AND PRIVATE DRIVE &amp; WATERLINE PROFILE</p>	<p>D-2 SHEET 8</p>



**1. FITTING AND ALL RESTRAINTS TO BE POLYETHYLENE WRAPPED PRIOR TO CONCRETE PLACEMENT.**

DIMENSION SCHEDULE											
PIPE SIZE	PIPE TYPE	11.25' ELBOW			22.5' ELBOW			45' ELBOW			ROD Ø
		'A'	'W'	'L'	'A'	'W'	'L'	'A'	'W'	'L'	
6"			1.0'	1.0'		1.5'	1.0'		2.0'	1.5'	
8"			1.0'	1.0'		1.5'	1.0'		2.0'	1.5'	
12"			1.5'	1.0'		2.0'	1.5'		3.0'	2.0'	

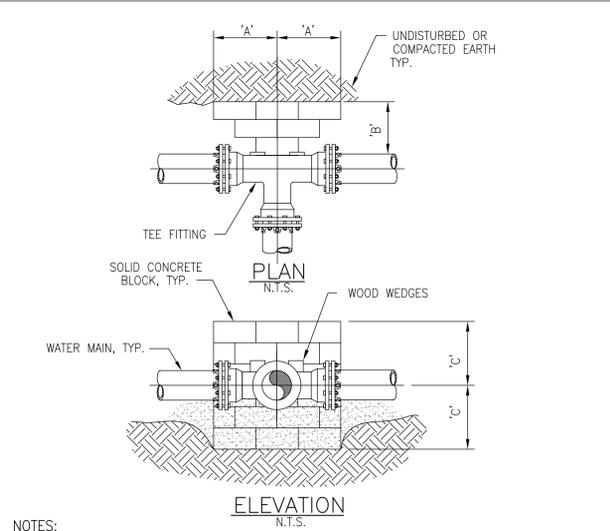
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK  
 STANDARD DETAIL THRUST BLOCKS FOR VERTICAL BEND  
 DWG. NO. SD8  
 DATE 4/28/92  
 REVISED 10/05



**1. FITTING TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.**

DIMENSION SCHEDULE												
PIPE SIZE	11.25' ELBOW	22.5' ELBOW	45' ELBOW	90' ELBOW	'A'			'B'			ROD Ø	
					'A'	'B'	'C'	'A'	'B'	'C'		
6"	0.6'	1.5'	0.6'	0.6'	1.5'	0.6'	0.8'	1.5'	0.6'	1.1'	1.5'	0.6'
8"	0.8'	1.5'	0.8'	0.8'	1.5'	0.8'	1.1'	1.5'	0.8'	1.2'	2.0'	1.0'
12"	0.9'	1.5'	0.9'	1.2'	2.0'	1.2'	1.3'	2.0'	1.3'	1.9'	2.0'	1.4'

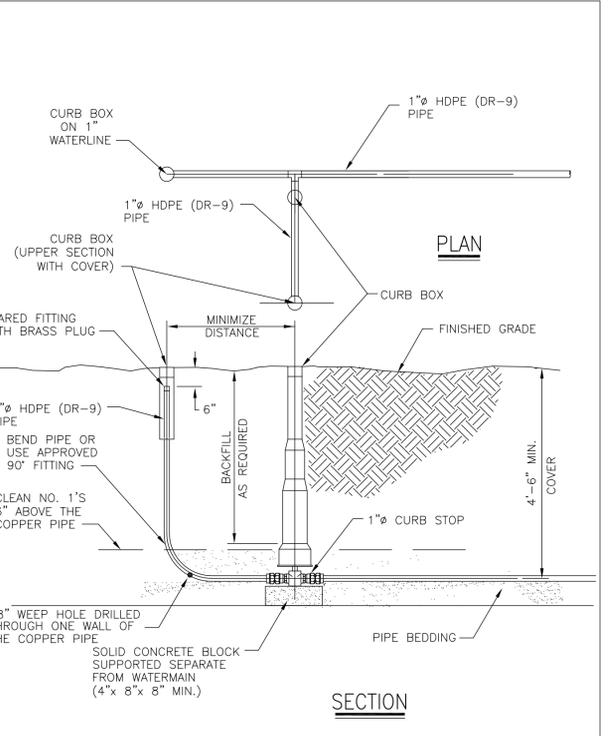
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK  
 STANDARD DETAIL THRUST BLOCKS FOR ELBOW FITTING  
 DWG. NO. SD6  
 DATE 4/28/92  
 REVISED 10/05



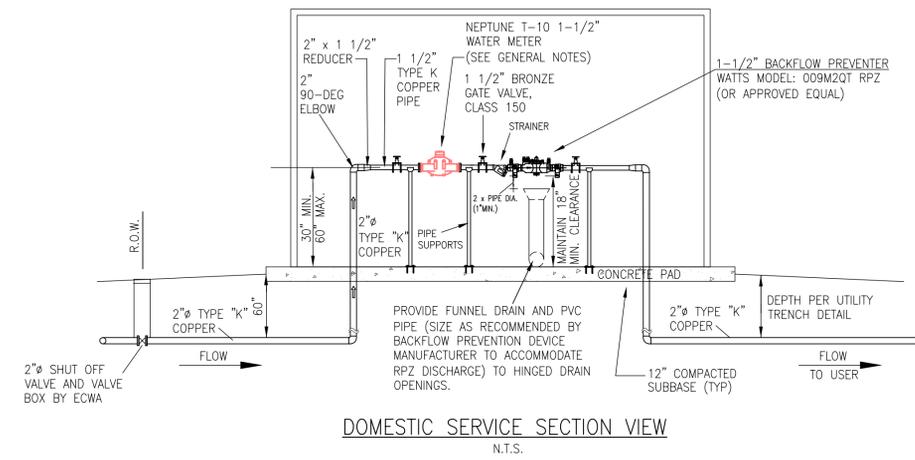
**1. THRUST BLOCK REQUIRED FOR TEES, HYDRANT LATERAL TEES AND TAPPING SLEEVE INSTALLATIONS.**  
**2. FITTING TO BE POLYETHYLENE WRAPPED PRIOR TO BEDDING AND CONCRETE BLOCK PLACEMENT.**

BRANCH TEE SIZE	DIMENSION SCHEDULE		
	'A'	'B'	'C'
6"	.8'	1.5'	.6'
8"	1.0'	1.5'	.8'
12"	1.4'	2.0'	1.5'

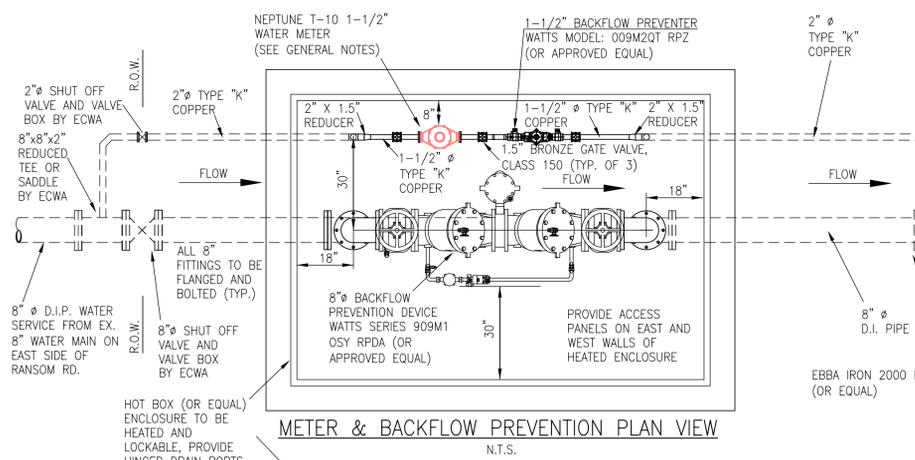
ERIE COUNTY WATER AUTHORITY BUFFALO, NEW YORK  
 STANDARD DETAIL THRUST BLOCKS FOR TEE OR "DEAD END" FITTING  
 DWG. NO. SD7  
 DATE 4/28/92  
 REVISED 10/05



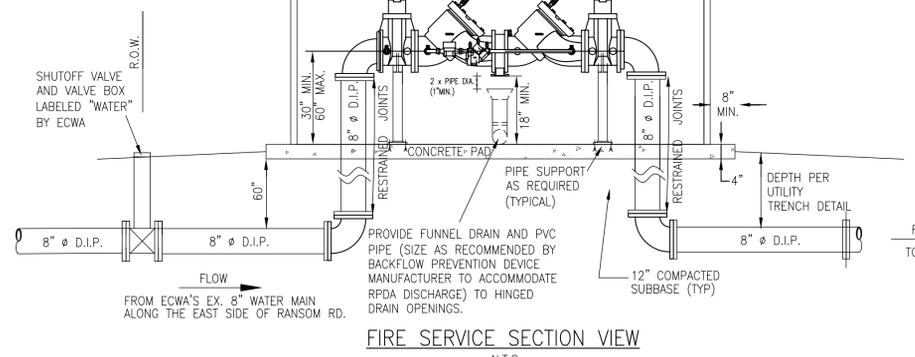
**PERMANENT BLOW-OFF/DISINFECTION/SAMPLING TAP**  
 N.T.S.



**DOMESTIC SERVICE SECTION VIEW**  
 N.T.S.



**METER & BACKFLOW PREVENTION PLAN VIEW**  
 N.T.S.



**FIRE SERVICE SECTION VIEW**  
 N.T.S.

- GENERAL NOTES:**
- SITE PREPARATION**
    - PROVIDE A 120V GROUND FAULT PROTECTED CIRCUIT TO THE BACKFLOW PREVENTION DEVICE. THE 120V OUTLET SHALL BE INSTALLED 6" MIN. ABOVE THE RPZ DISCHARGE OUTLET.
    - POUR A CONCRETE PAD 4" THICK AROUND THE BACKFLOW PREVENTION DEVICE IN ALL DIRECTIONS. THE CONCRETE SLAB SHALL EXTEND 8" BEYOND THE OUTSIDE DIMENSIONS OF THE HEATED ENCLOSURE.
  - INSTALLATION**
    - PLACE HEATED ENCLOSURE OVER BACKFLOW PREVENTION DEVICE ONTO PAD. ALL SECTIONAL BOXES SHOULD BE COMPLETELY ASSEMBLED BEFORE PROCEEDING.
    - ACCESS DOORS MUST BE PLACED ON SIDE OF BACKFLOW PREVENTION DEVICE THAT HAS THE TESTING VALVES.
    - DRILL ANCHOR BOLT HOLES FULL THROUGH THE BASE FLANGE AROUND THE PERIMETER OF THE HEATED ENCLOSURE. INSERT "RED HEAD" EXPANSION ANCHORS THROUGH HOLE INTO THE FOOTER OR PAD AND BOLT THE BOX DOWN FIRMLY, OR USE POURED IN PLACE, 8" LONG FULLY EMBEDDED ANCHOR BOLTS.
    - PLUG HEAT SOURCE INTO THE 120V CIRCUIT THAT HAS BEEN PROVIDED.
    - ALL ESCUTHEON COVERS (WHERE APPLICABLE) SHOULD BE SECURED TO THE HEATED ENCLOSURE, RAIN TIGHT.
    - MINIMUM CLEARANCE SHOWN ONLY APPLY DURING ACTUAL MAINTENANCE OPERATION. IF THE ENCLOSURE IS TOTALLY REMOVABLE OR PIVOTS ON HINGES AWAY FROM THE INSTALLATION, THE MIN. CLEARANCES DO NOT APPLY.
- MISCELLANEOUS NOTES:**
- MATERIALS USED, TYPE OF ENCLOSURE & LOCATION, AND MISCELLANEOUS APPURTENANCES, SHALL BE GOVERNED BY ERIE COUNTY WATER AUTHORITY SPECIFICATIONS AND LOCAL ORDINANCES.
  - ALL DUCTILE IRON PIPE SHALL BE THICKNESS CLASS 52 UNLESS SPECIFIED OTHERWISE.
  - ALL DUCTILE IRON FITTINGS SHALL BE CLASS 350 ANSI/AWWA C110/A21.01-82 UNLESS SPECIFIED OTHERWISE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND VERIFYING ALL LOCATIONS, DIMENSIONS AND ELEVATIONS SHOWN.
  - ENCLOSURE MUST HAVE HEAT & ACCESS PANELS POSITIONED TO FACILITATE TESTING/MAINTENANCE OF BACKFLOW PREVENTION DEVICE(S) AND/OR METER.
  - DIMENSIONS SHOWN FOR THE WATER METER ARE STANDARD FOR THE SIZE & MODEL SHOWN. ADEQUATE CLEARANCES IN THE HEATED ENCLOSURE MUST BE MAINTAINED ON ALL SIDES.
  - CLEARANCE DIMENSIONS SHOWN FOR THE BACKFLOW PREVENTION DEVICE(S) ARE NYSDOH STANDARDS.
  - BACKFLOW PREVENTION DEVICE(S) MUST BE PROPERLY SUPPORTED.
  - PRIOR TO THE PLACEMENT OF THE ENCLOSURE SHELL ON THE CONCRETE PAD, CONTACT ECWA METER SHOP A MINIMUM OF THREE (3) WORKING DAYS TO SCHEDULE THE INSTALLATION OF THE METER. TELEPHONE NO. 685-8226

DESIGNED BY: PCC  
 DRAWN BY: PCC  
 CHECKED BY: ARH  
 CAD FILE: DETAILS.DWG

**ME METZGER CIVIL ENGINEERING, PLLC**  
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CIVIL ENGINEERING  
 LAND PLANNING  
 SITE DESIGN  
 MUNICIPAL ENGINEERING

**RANSOM ROAD OPEN DEVELOPMENT AREA**  
 TOWN OF CLARENCE, ERIE COUNTY, NEW YORK

MISCELLANEOUS DETAILS

SCALE: NOT-TO-SCALE  
 DATE: OCTOBER 11, 2013  
 JOB NO: M-0532  
 SHEET NO: D-3 SHEET 9

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