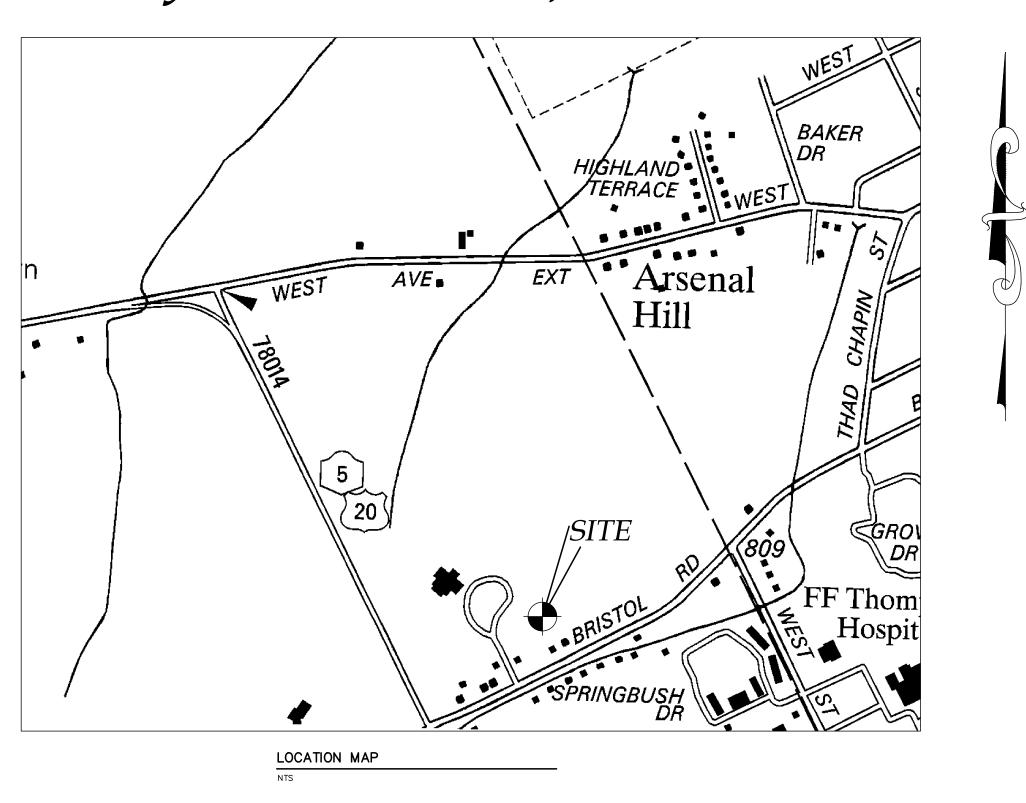
FINAL SUBDIVISION & SITE PLANS FOR:

# WILLIAM METROSE, LTD 11-LOT RESIDENTIAL CONSERVATION SUBDIVISION

5100 & 5150 BRISTOL ROAD
TOWN OF CANANDAIGUA
COUNTY OF ONTARIO
STATE OF NEW YORK

JANUARY 6, 2021





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# **Marks**Engineering

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PROPERTY OWNER:
WILLIAM E. METROSE
425 GARNSEY ROAD
FAIRPORT, NEW YORK 14450

PREPARED FOR: WILLIAM METROSE, LTD

**REVISIONS:** 

WILLIAM METROSE, LTD
BRISTOL ROAD
TOWN OF CANANDAIGUA
COUNTY OF ONTARIO
NEW YORK
JOB #19-094
01/06/2020

#### **UTILITY NOTES:**

- 1. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING SERVICE AND COORDINATE ALL WORK W/ UTILITY PROVIDERS. RELOCATE WATER AND SANITARY PIPING AS REQUIRED.
- 2. ELEC SERVICE AND COMMUNICATION SHALL MEET CURRENT NATIONAL ELECTRIC CODE.
- 3. SAFTEY BACKFILL ALL UTILITIES WITH CLEAN EXCAVATED SOIL. ENCASE IN 12" OF SAND IN SOIL CONTAINING STONES OR BEDROCK

#### **GRADING NOTES:**

- CUT AND FILL SLOPES SHALL NOT EXCEED 3 ON 1. 2. CONSTRUCTION SHALL CONFORM TO THE TOWN OF
- CANANDAIGUA AND NYS CODES AND STANDARDS 3. SITE SHALL BE GRADED SUCH THAT THERE IS POSITIVE DRAINAGE AT A MINIMUM OF 2% AWAY FROM ANY BUILDINGS,
- STRUCTURES, DRIVEWAYS, AND SEPTIC SYSTEM. 4. TOPSOIL SHALL BE STRIPED OF AREAS PLANNED FOR CONSTRUCTION AND REAPPLIED AFTER GRADING IS FINISHED. ANY UNUSED TOPSOIL SHALL BE HAULED OFF SITE.
- CONSTRUCTION SEQUENCE:
- 2. INSTALL SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE AND OTHER TEMPORARY CONTROLS.
- STRIP AND STOCKPILE TOPSOIL
- 4. EXCAVATE FOUNDATION AND ROUGH GRADE SITE.
- 5. BUILD FOUNDATION AND STRUCTURES
- 6. INSTALL UTILITIES
- BACKFILL FOUNDATION
- 8. RESPREAD TOPSOIL AROUND HOUSE, FINAL GRADE SEE AND MULCH 9. REMOVE TEMPORARY CONTROLS AFTER SITE STABILIZED WITH
- VEGETATION.

#### **EROSION AND SEDIMENT CONTROL NOTES:**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION DURING CONSTRUCTION. SILT FENCE SHALL BE INSTALLED AND MAINTAINED AS
- SOIL DISTURBANCES SHALL BE STABILIZED IMMEDIATELY. DISTURBED SOIL THAT WILL REMAIN LONGER THAN 14 DAYS SHALL BE TEMPORARILY STABILIZED WITHIN 7 DAYS. SOIL SHALL BE STABILIZED WITH NORTHERN GRASS SEED MIXTURE OR APPROPRIATE SEED MIXTURE FOR CONDITIONS. GRASS SEED SHALL BE INSTALLED PER MANUFACTURES SPECIFICATIONS. MULCH STRAW APPLIED AT A RATE OF 2 BALES / 1000 SQFT OR SEED MIXTURE TO PROTECT SITE UNTIL SEED GERMINATES. HYDRO-SEED MAY BE INSTALLED AS AN ALTERNATE.
- 3. CONTRACTOR SHALL INSPECT THE SITE DAILY FOR SIGNS OF EROSION, IF ANY EROSION OR SEDIMENTATION OCCUR CONTRACTOR SHALL IMMEDIATELY PROVIDE PROPER CONTROLS TO STABILIZE THE SITE, ENGINEER WILL RECOMMEND CONTROLS IF REQUIRED.
- 4. SLOPE GREATER THAN 4 ON 1 SHALL BE STABILIZED WITH JUTE FABRIC INSTALLED AS PER MANUFACTURES SPECIFICATIONS AS REQUIRED.
- 5. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN STALLED IN ACCORDANCE WITH NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENTATION CONTROLS.
- 6. INSTALL AND MAINTAIN TEMPORARY DIVERSION SWALES AS NEEDED TO CONTROL RUNOFF DURING CONSTRUCTION.
- 7. THE SITE SHALL BE COMPLETELY STABILIZED FOLLOWING CONSTRUCTION ACTIVITIES AND ALL TEMPORARY EROSION CONTROL DEVICES SHALL BE REMOVED AND DISPOSED OF PROPERLY.
- 8. CONCRETE TRUCK SHALL BE WASHED OUT INTO A SEALED CONTAINER OR DIKED AREA TO PREVENT CONTAMINANTS FROM DISCHARGING TO SURFACE WATERS.

#### **GENERAL NOTES:**

- THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES AND PROPERTY MARKERS. IT IS THE NYS LAW TO CALL NYS DIG SAFE FOR UFPO (811) PRIOR TO ANY EXCAVATION.
- 2. THE ROADWAY SHALL BE KEPT FREE OF DEBRIS DURING CONSTRUCTION. 3. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY CONTROL DEVICES. SUCH DEVICES (BARRICADES, FENCING, ETC.) SHALL BE IMPLEMENTED TO MINIMIZE RISK OF INJURY TO PEDESTRIANS AND WORKERS. CONSTRUCTION ACTIVITY SHALL BE CONDUCTED WITHIN COMPLIANCE WITH OSHA GUIDELINES.
- 4. PLANS ARE GRAPHIC REPRESENTATIONS OF WORK TO BE PERFORMED. THESE PLANS ARE TO INTENDED TO CONVEY ENGINEERING INFORMATION ONLY.
- 5. CONTRACTOR TO VERIFY ALL LOCATIONS, GRADES AND INVERTS AND
- NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF WORK. 6. ALL SPECIFIED MATERIALS ARE TO BE INSTALLED AS PER MANUFACTURES RECOMMENDATIONS OR INDUSTRY STANDARD.
- 7. ANY SYSTEM MODIFICATIONS OR DEVIATIONS FROM THE APPROVED PLANS, NYS BUILDING CODES, AND/OR LOCAL REGULATIONS REQUIRED BY SITE CONSTRAINTS, UNFORESEEN CONDITIONS OR GOVERNING AUTHORITIES WILL BE DONE AT THE RISK OF THE CLIENT.

#### DRIVEWAY, AND GRADING NOTES:

- 1. DRIVEWAY SHALL NOT EXCEED 10% TRAVERSING SLOPE AND 2% CROSS SLOPE.
- 2. DRIVEWAY SHALL BE MINIMUM 12 FEET IN WIDTH (RESIDENTIAL) OR 20' IN WIDTH (COMMERCIAL).
- 3. DRAINAGE SWALES SHALL HAVE A MINIMUM DEPTH OF 12" AND MINIMUM WIDTH OF 4'. SWALES SHALL HAVE A LINEAR SLOPE OF MINIMUM 2% (1' RISE PER 50' RUN) AND MAXIMUM SIDE SLOPE OF 1' RISE PER 3' RUN.
- 4. ALL WORK WITHIN RIGHT-OF-WAY SHALL BE PERMITTED BY HIGHWAY SUPERINTENDENT AND COORDINATE W/ INSPECTOR.

#### LANDSCAPING PLAN NOTES:

- 1.ONE YEAR GUARANTEE TO BE PROVIDED BY THE CONTRACTOR ON ALL PLANT MATERIAL FROM DATE OF FINAL ACCEPTANCE.
- 2. ALL EXISTING PAVEMENT, BASE STONE AND UNSUITABLE SUBGRADE MATERIAL IN PLANTING BEDS TO BE REMOVED TO PROVIDE DEPTH FOR SUITABLE PLANTING BACKFILL MATERIAL AS DIRECTED AND APPROVED BY THE ENGINEER.
- 3. ALL PLANTS SHALL MEET OR EXCEED THE REQUIREMENTS SET FORTH IN THE EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, ANSI Z60.1.
- 4. PLANTING BACKFILL MIXTURE TO CONSIST OF 4 PARTS TOPSOIL AND 1 PART PROVIDE 10 LBS. OF 5-10-5 FERTILIZER PER 1 CUBIC YARD OF PLANTING BACKFILL TO A MINIMUM DEPTH OF 2'-0".
- 5. LANDSCAPING CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND BONDS FOR ALL LANDSCAPING WORK IF REQUIRED BY THE TOWN OF CANANDAIGUA.
- 6. LANDSCAPING CONTRACTOR WILL INFORM THE ENGINEER/LANDSCAPE ARCHITECT ABOUT ENCOUNTERING ANY UNDERGROUND UTILITIES OR STRUCTURES NOT PREVIOUSLY IDENTIFIED OR FIELD LOCATED.
- 7. ALL SHRUB PLANTING BEDS TO RECEIVE 2" LAYER OF CLEAN, WASHED PEA GRAVEL MULCH ON PERMEABLE WEED BARRIER.
- 8. ALL PERMANENT LAWN AREAS ARE TO RECEIVE 6" OF TOPSOIL AND THE FOLLOWING LAWN SEED MIX: 65% KENTUCKY BLUEGRASS AT 2.5 LBS PER 1.000 S.F. 20% PERENNIAL RYEGRASS AT 1.0 LBS PER 1,000 S.F. 15% FINE FESCUE AT 0.6 LBS PER 1,000 S.F.

#### **SITE NOTES:**

- 1. THE CONSTRUCTION SITE IS NOT WITHIN 100' OF A WETLAND AS DELINEATED BY NYS DEC. THERE ARE NOT NYS DEC DELINEATED OR APPARENT WETLANDS ON THE PROPERTY AS SHOWN.
- 2. THE CONSTRUCTION SITE IS NOT WITHIN A 100 YEAR
- FLOODPLAIN AS DELINEATED BY FEMA. 3. WATER SUPPLY: PUBLIC WATER
- 4. NYS SPDES PERMIT IS NOT REQUIRED FOR THESE CONSTRUCTION ACTIVITIES, DISTURBANCE SHALL BE LESS THAN ONE ACRE. IF THE CONTRACTOR OR OWNER AT ANY TIME PLAN DISTURB GREATER THAN AN ACRE THE ENGINEER SHALL BE NOTIFIED.
- 5. ALL NEW OUTDOOR LIGHTING ON SHALL HAVE APPROPRIATE SHIELDS AND CUT-OFF TO LIMIT ILLUMINATION OF OTHER PROPERTIES. ALL LIGHTS SHALL BE DARK SKY COMPLIANT.
- 6. ELEVATION DATUM: NAVD 88 GEOID 12B

#### PHOSPHOROUS NOTES:

- 1. NO PHOSPHOROUS SHALL BE USED AT PLANTING TIME UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED BY A HORTICULTURAL TESTING LAB AND THE SOIL TESTS SPECIFICALLY INDICATE A PHOSPHOROUS DEFICIENCY THAT IS HARMFUL, OR WILL PREVENT NEW LAWNS AND PLANTINGS FROM ESTABLISHING PROPERLY.
- 2. IF SOIL TESTS INDICATE A PHOSPHOROUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT, PHOSPHOROUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL NYS DEC.

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#### STANDARD NOTES

- ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF
- ALL SWPPP'S ARE REQUIRED TO BE REVIEWED AND APPROVED BY THE TOWN CEO AND TOWN ENGINEER. THE TOWN MS4 SWPPP ACCEPTANCE FORM IS TO BE SIGNED AND INSERTED INTO THE PROJECT SWPPP PRIOR TO
- INTENT" (NOI). A COPY OF THE NYSDEC ACKNOWLEDGEMENT LETTER IS TO BE PROVIDED TO THE TOWN
- 5. A COPY OF THE PROJECT SWPPP IS TO BE PROVIDED TO THE TOWN DEVELOPMENT OFFICE, TOWN ENGINEER, AND A COPY IS TO REMAIN ONSITE DURING CONSTRUCTION AT ALL TIMES IN A MARKED AND ACCESSIBLE
- ANY MODIFICATIONS OR DEVIATIONS FROM THE APPROVED PLANS, CONSTRUCTION SEQUENCE, AND/OR SWPPP
- 7. THE OWNER IS REQUIRED TO PROVIDE DAILY ONSITE OBSERVATION BY A LICENSE PROFESSIONAL OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC). ALL SWPPP INSPECTIONS ARE TO BE IN A FORM ACCEPTABLE BY THE TOWN OF CANANDAIGUA AND FORWARDED TO OWNER, THE TOWN CEO, TOWN
- CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) DURING CONSTRUCTION ONCE PER WEEK (EVERY 7 DAYS) IF UNDER 5-ACRES OF DISTURBANCE AND TWICE PER WEEK (EVERY 7 DAYS) IF
- DEVELOPMENT IN THE CANANDAIGUA LAKE WATERSHED DISTURBING MORE THAN 5-ACRES AT ONE TIME, IS REQUIRED TO COORDINATE THE REGULAR SWPPP OBSERVATIONS REQUIRED BY THE LATEST GENERAL PERMIT WITH THE CANANDAIGUA LAKE WATERSHED INSPECTOR, THE WATERSHED PROGRAM MANAGER AND THE TOWN CODE ENFORCEMENT OFFICER.
- E CONTRACTOR SHALL COMPLETE CONSTRUCTION AND INSTALL EROSION CONTROL MEASURES IN ACCORDANCE WITH THE APPROVED CONSTRUCTION SEQUENCE UNLESS SPECIFIED OTHERWISE ON THE APPROVED DESIGN PLANS OR AT THE PRE -CONSTRUCTION MEETING.
- AS DIRECTED BY THE TOWN OF CANANDAIGUA.
- TERMINATION (NOT) HAS BEEN PROVIDED TO NYSDEC.
- THE APPROVED PLANS AND WITHIN THE PROJECT SWPPP.

- THE TOWN OF CANANDAIGUA AND THE APPROPRIATE WATER/SEWER AGENCIES, UNLESS OTHERWISE NOTED.
- A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO CONFORM WITH THE LATEST NYSDEC GENERAL PERMIT AND TO THE TOWN REQUIREMENTS REGARDING MAINTENANCE AND CONTROL OF STORM WATER QUALITY AND QUANTITY
- CONSTRUCTION.
- 4. THE OWNER IS RESPONSIBLE FOR IMPLEMENTING THE REQUIRED SWPPP, INCLUDING FILING OF THE "NOTICE OF DEVELOPMENT OFFICE AND TOWN ENGINEER PRIOR TO CONSTRUCTION.
- INCLUDING IMPLEMENTATION OF EROSION CONTROL MEASURES AND STORM WATER MANAGEMENT AREAS. SHALL BE APPROVED BY THE TOWN OF CANANDAIGUA AND DOCUMENTED WITHIN THE PROJECT SWPPP
- ENGINEER, AND A COPY PLACED WITHIN THE ONSITE PROJECT SWPPP. THE OWNER IS RESPONSIBLE FOR PROVIDING ONSITE SWPPP INSPECTIONS BY A LICENSE PROFESSIONAL OR A
- 5-ACRES OR MORE WITH RECEIPT OF A 5-ACRE WAIVER FROM THE TOWN OF CANANDAIGUA (MS4).
- 10. CONSTRUCTION SEQUENCE ALL PLANS ARE TO BE PROVIDED WITH A DETAILED CONSTRUCTION SEQUENCE.
- 11. DUST SHALL BE CONTROLLED DURING CONSTRUCTION BY THE CONTRACTOR TO MINIMIZE EFFECT ON THE ADJACENT PROPERTIES. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES AS NEEDED AND/OR
- 12. THE OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT, MAINTENANCE, CLEANING, REPAIR AND REPLACEMENT OF EROSION CONTROL MEASURES DURING SITE CONSTRUCTION AND UNTIL THE SITE IS FULLY STABILIZED, INSPECTED BY THE TOWN OF CANANDAIGUA, AND ISSUANCE OF THE NOTICE OF
- 14. ROOF LEADERS SHOULD BE CONNECTED TO STORM SEWERS WHERE POSSIBLE, UNLESS OTHERWISE SPECIFIED ON 20. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR UTILITY

16. UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF VEGETATION, THE STORM WATER MANAGEMENT

MIN-MINIMUM

MAX-MAXIMUM

CB-CATCH BASIN

DI-DRAINAGE INLET

15. NO SITE PREPARATION SHALL COMMENCE UNTIL A VISUAL INSPECTION BY THE TOWN OF CANANDAIGUA, CONFIRMS THE INSTALLATION OF PERIMETER SEDIMENT CONTROLS AND THE STABILIZED CONSTRUCTION

#### STANDARD NOTES (CONTINUED)

- 17. ALL SITE STABILIZATION IS TO BE IN ACCORDANCE WITH THE LATEST VERSIONS OF THE NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL AND THE NYSDEC GENERAL PERMIT REQUIREMENTS (WHERE APPLICABLE).
- 18. ADDITIONAL TEMPORARY AND PERMANENT SEEDING AND SITE STABILIZATION REQUIREMENTS:
- A. ALL DISTURBED AREAS INCLUDING TOPSOIL STOCKPILES AND STORMWATER MANAGEMENT FACILITIES ARE TO BE STABILIZED WITHIN SEVEN (7) DAYS AFTER COMPLETION.
- B. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE PROVIDED AS FOLLOWS:
- THE SURFACE TWO INCHES OF SOIL SHOULD BE LOOSENED BY DISKING, RAKING, OR BACK-BLADING WITH A BULLDOZER.
- FERTILIZE WITH 300 POUNDS PER ACRE (OR 7 POUNDS PER 1,000 SQUARE FEET) • NO PHOSPHORUS SHALL BE USED UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED BY HORTICULTURAL TESTING LAB AND THE SOIL TESTS SPECIFICALLY INDICATE A PHOSPHORUS DEFICIENCY THAT IS HARMFUL. OR WILL PREVENT NEW LAWNS AND PLANTINGS FROM ESTABLISHING PROPERLY.

• IF SOIL TESTS INDICATE A PHOSPHORUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT

PHOSPHORUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL NYSDEC REGULATIONS. • THE FOLLOWING SEED MIX SHALL BE USED:

SPRING/SUMMER/EARLY FALL	LBS/ACRE	LBS/1,000 SQ. ACRE
ANNUAL RYE GRASS PERENNIAL RYEGRASS	30 30	0.7 0.7
LATE FALL/EARLY WINTER		
CEREAL RYE	100	2.5

- SEED SHOULD HAVE A GERMINATION RATE OF AT LEAST 85 PERCENT AND MINIMAL INERT MATERIAL
- C. DISTURBED AREAS SHALL BE STABILIZED USING PERMANENT LAWN SEEDING MIX UPON COMPLETION OF

RADING AND CONSTRUCTION:		
	LBS/ACRE	LBS/1,000 SQ. ACRE
BIRDSFOOT TREFOIL OR COMMON WHITE CLOVER	8 OR 8	0.20 OR 0.20
TALL FESCUE	20	0.45
REDTOP OR RYEGRASS (PERENNIAL)	2 OR 5	0.05 OR 0.10

- SEEDING RATE: 6.0 POUNDS PER 1.000 SQUARE FEET
- . MULCH: STRAW OR WOOD FIBER MULCH USED WITH HYRDO SEEDING METHOD AT TWO TONS PER ACRE WITH
- FOR FALL OR EARLY WINTER, SEED WITH CERTIFIED "AROOSTOCK" WINTER RYE (CEREAL RYE) AT 100 POUNDS PER ACRE PERMANENT STABILIZATION FOR STEEP SLOPES GREATER THAN 3:1 SHALL INCLUDE JUTE MESH BLANKET AND CROWN VETCH SEED WITH PERENNIAL RYEGRASS.
- 19. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION.
- COMPANY RECORD PLANS. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CALL THE DIG SAFELY NEW YORK (UFPO) HOTLINE AT 1-800-962-7962 FOR STAKEOUT OF EXISTING UTILITIES. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS TO LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET THE EXISTING

#### STANDARD NOTES (CONTINUED)

- 21. THE HOMEBUILDER WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING INDIVIDUAL LOT EROSION & SEDIMENT CONTROL MEASURES, DURING HOUSE CONSTRUCTION. MEASURES TO BE MAINTAINED UNTIL FINAL LOT LAWN GRADING AND SITE IS FULLY STABILIZED AND INSPECTED BY THE TOWN OF CANANDAIGUA.
- 22. ANY ADDITIONAL EROSION OR SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE TOWN OF CANANDAIGUA OR A REPRESENTATIVE THEREOF SHALL BE PROVIDED BY THE OWNER AND INSTALLED BY THE
- 23. SEDIMENT CONTROL MEASURES ARE TO BE ESTABLISHED PRIOR TO COMMENCING EARTHWORK. SEDIMENT CONTROL MEASURES ARE TO BE MAINTAINED BY THE CONTRACTOR UNTIL UPSTREAM GROUND COVER HAS BEEN ESTABLISHED AND REMOVAL IS APPROVED BY THE TOWN OF CANANDAIGUA.
- 24. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING, REPLACING AND SUBSEQUENTLY REMOVING TEMPORARY EROSION & SEDIMENT CONTROL DEVICES.
- 25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ADJOINING PROPERTIES, ROADWAYS, DRAINAGE WAYS AND SINKS OF SILT ACCUMULATION AS NEEDED AND AS DETERMINED/REQUESTED BY THE TOWN OF

26. ANY FINAL GRADE DEVIATIONS OF HOUSE PAD ELEVATIONS MORE THAN 12 INCHES SHALL BE APPROVED BY

THE PLANNING BOARD

#### STORM SEWER NOTES

1. CATCH BASIN AND MANHOLE DIAMETERS SHALL BE AS FOLLOWS:

LARGEST PIPE SIZE	INSIDE DIAMETER
<u>IN STRUCTURE</u>	OF STRUCTURE
UP TO 24"	4'
27" TO 42"	5'
LARGER THAN 42"	SPECIAL STRUCTURE

- 2. STORM SEWER PIPING TO BE CORRUGATED SMOOTH BORE POLYETHYLENE PIPE IN ACCORDANCE WITH N.Y.S.D.O.T. ITEM 18903.97 AND AASHTO-M252 & M294.
- 3. LINING MATERIALS AND SPECIAL BACKFILL TO BE R.O.B. OR R.O.C. MATERIAL (N.Y.S.D.O.T. SECTION 304-2.02 TYPE 4), MEETING THE FOLLOWING GRADATIONS:

SIEVE SIZE	<u>% passing by we</u>
2"	100
1/4"	30-50
#40	5-40
#200	0-10

4. GRANUL 05-2.02 TYPE 1,

SIEVE SIZE	% PASSING BY WEIGH
1"	100
1/2"	30-100
1/4"	0-30
#10	0-10
<u>"</u> 20	0.5

5. RIP-RAP SHALL BE UNIFORMLY HARD, DURABLE, AND ANGULAR FIELD OR

AX. DIMENSION	% OF MIX
OF STONE	<u>BY WEIGHT</u>
18"-24"	20
12"-18"	50
8 <b>"</b> —12 <b>"</b>	20
477 077	4.0

LARGEST PIPE SIZE	INSIDE DIAMETER
IN STRUCTURE	OF STRUCTURE
UP TO 24"	4'
27" TO 42"	5'
LARGER THAN 42"	SPECIAL STRUCTURE

OILTE CILL	70 1 7 10 0 11 10 D 1 11 L
2"	100
1/4"	30-50
# <sup>4</sup> 0	5-40
#200	0-10
LAR FILTER MATERIAL TO BE N.Y.	S.D.O.T. SECTION 60

MEETING THE FOLLOWING GRADATIONS:

SIEVE SIZE	% PASSING BY WEIGHT
1"	100
1/2"	30-100
1/4"	0-30
# <sup>1</sup> 10	0-10
#20	0-5

QUARRED LIMESTONE WITH A MINIMUM DENSITY OF 150 LB/CF. THE RATIO OF THE MINIMUM DIMENSION TO THE MAXIMUM DIMENSION OF EACH PIECE TO BE AT LEAST 0.6. RIP-RAP SHALL BE COMPOSED OF A WELL GRADED MIXTURE OF PRIMARILY LARGER STONE SIZES WITH A SUFFICIENT MIXTURE OF SMALLER SIZES TO FILL THE VOIDS. UNLESS OTHERWISE NOTED IN THESE PLANS. SUPPLEMENTAL SPECIFICATIONS, OR UNLESS OTHERWISE DIRECTED, RIP-RAP SIZES SHALL BE AS FOLLOWS:

MAX. DIMENSION	% OF MIX
<u>OF STONE</u>	BY WEIGHT
18"-24"	20
12"-18"	50
8"-12"	20
4"-8"	10

NOTES KRBBAM

BAM

AS NOTEL SCALE: 19-094 IOB NO 01/06/202 DATE83 00-1-7 150 TAX MAP#:

DRAWING TITLE

DRAWN BY:

DESIGNED BY:

CHECKED BY

#### LEGEND

Iron pin or pipe found Benchmark **— — — — R.O.W. Jine** — Property line (/) Utility pole \_\_\_\_ \_ \_ \_ \_ \_ \_ \_ \_ \_ Easement line — — Centerline —— SWLE——— SWLE——— SWLE——— SWLE——— Drainage Light pole —— ×——— ×——— x——— *Fence Line* \_\_\_\_ Contour Line TEST HOLE PFRF-PFRFORATED

CO -CLEAN OUT

TW-TOP OF WALL

BC-BOTTOM OF CURB

R-RADIUS

**EXISTING** 

ARREVIATIONS:

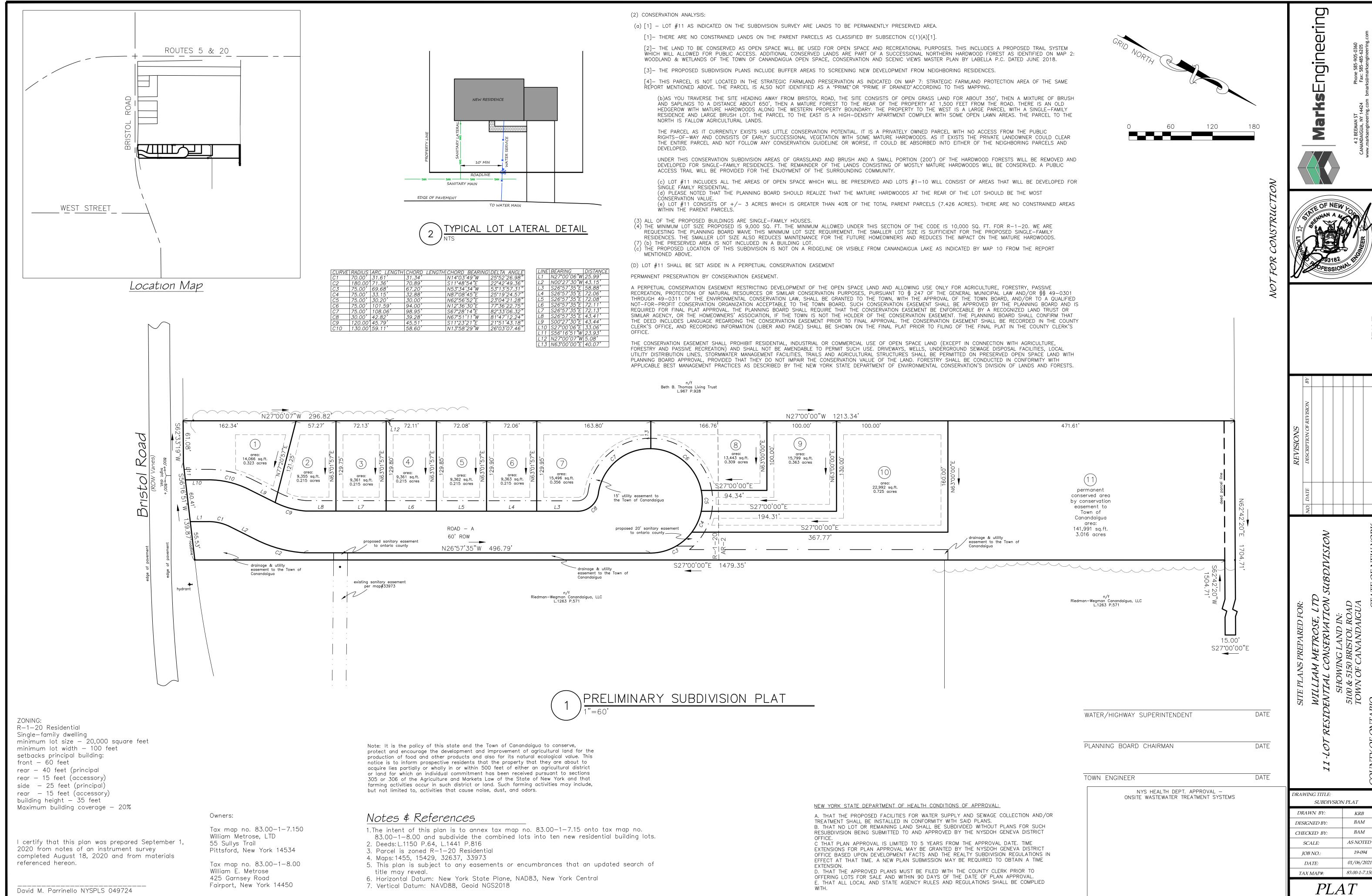
POLYETHYLENE PIPE

UG-UNDERGROUNI CONC-CONCRETE

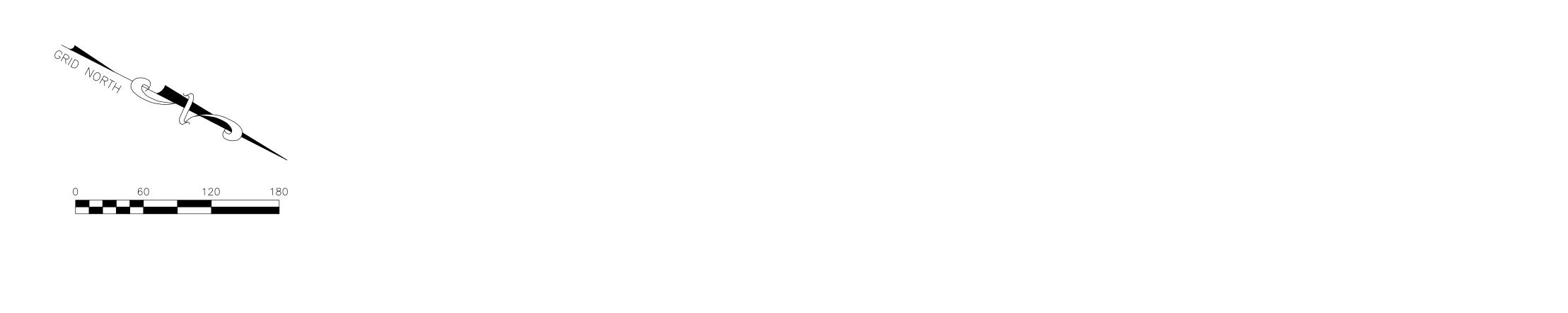
CPP-CORRUGATED POLYETHYLENE PIPE

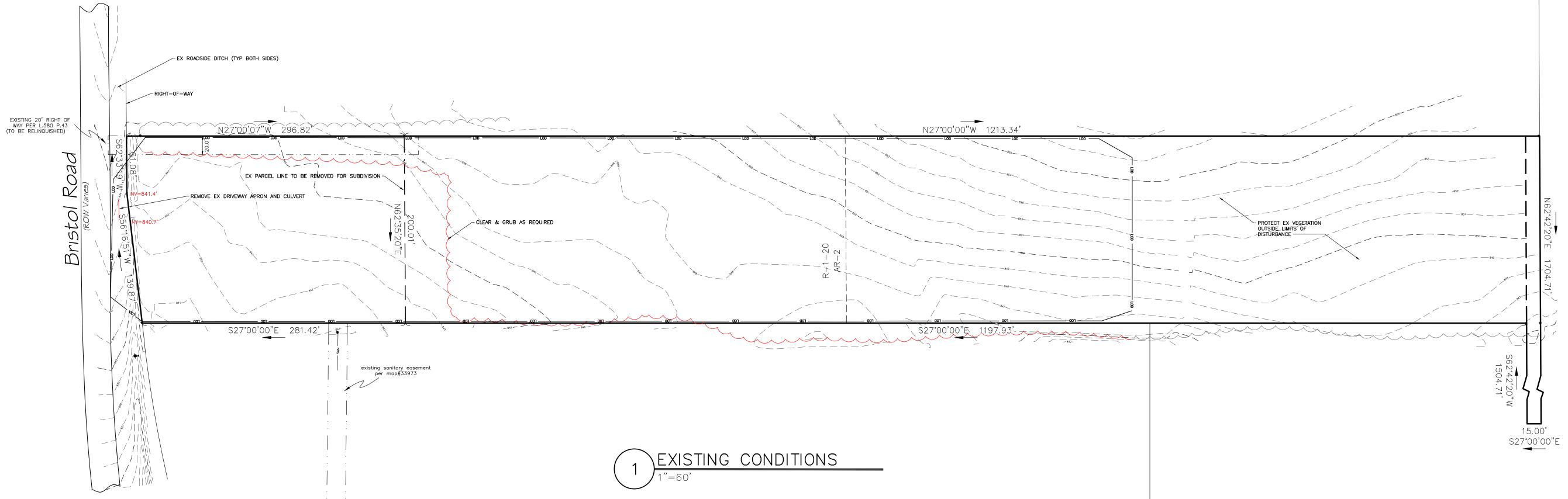
SICPP-SMOOTH INTERIOR CORRUGATED

FACILITIES SHALL BE CLEANED OF ACCUMULATED SILT.



SUBDIVSION PLAT KRBBAMBAMAS NOTED 19-094 01/06/2021





REFERENCES & NOTES

1. DEEDS: L.1150 P.64, L.1441 P.816

2. PARCEL IS ZONED R-1-20 RESIDENTIAL 3. MAPS: 1455, 15429, 32637, 33973

4. HORIZONTAL DATUM: NEW YORK STATE PLANE, NAD83, NEW YORK CENTRAL

5. VERTICAL DATUM: NAVD88, GEOID NGS2018

Iron pin or pipe found  Benchmark	EXISTI	LEGENI ING elec		PROPOSEDE/T	Utility Lines R.O.W. line Property line
Utility pole  Hydrant  Light pole  PERC DEEP	SWLE		SWLE X X	SWLE — X—	Easement line Centerline Drainage Fence Line Contour Line
ABBREVIATIONS: EX-EXISTING CPP-CORRUGATED POI O.CON CENTER SICPP-SMOOTH INTERI POLYETHYLENE PIPE UG-UNDERGROUND CONC-CONCRETE		CO —CLEAN TYP—TYPICAL R—RADIUS BC—BOTTOM TC—TOP OF TW—TOP OF BW—BOTTOM BS—BOTTOM	OUT  OF CURB  CURB  WALL  OF WALL	PERF—PERFORATED MIN—MINIMUM MAX—MAXIMUM INV—INVERT CB—CATCH BASIN MH—MANHOLE DI—DRAINAGE INLET	Comoun Earle

PREPARED FOR:			REVISIONS	
	NO. DATE	E	DESCRIPTION OF REVISION	BY
METROSE, LTD				
<i>ΟΝSERVATION SUBDIVISION</i>				
IG LAND IN:				
BRISTOL ROAD				
SANANDAIGUA				

DRAWING TITLE: EXISTING CONDITIONS

KRB BAM

BAM

AS NOTED 19-094

01/06/2021 83.00-1-7.150

DRAWN BY:

DESIGNED BY:

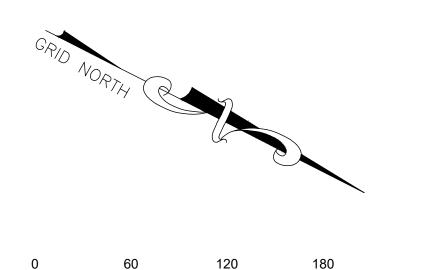
CHECKED BY:

JOB NO.:

MarksEngineering

	SITE DATA											
	REQUIRED	LOT 1	LOT 2	LOT 3	LOT 4	LOT 5	LOT 6	LOT 7	LOT 8	LOT 9	LOT 10	LOT 11
ZONING/USE - PRINCIPAL	CONSERVATION SUBDIVISION	SINGLE RESIDENTIAL	OPEN SPACE									
ZONING/USE - ACCESSORY	NA	ATTACHED GARAGE	NA									
FRONTAGE	72'	135.61'	89.20'	72.13'	72.11'	72.08'	72.06'	209.76'	101.59'	30.20'	33.15'	738.58'
AREA	9,000 SF	14,066 SF	9,355 SF	9,361 SF	9,361 SF	9,362 SF	9,363 SF	15,496 SF	13,443 SF	15,799 SF	22,992 SF	141,991 SF
FRONT SETBACK	60'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'
SIDE SETBACK	25'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'	10'
REAR SETBACK	40'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'	20'
BUILDING HEIGHT	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'	35'
BUILDING COVERAGE	20.00%	22%	32.3%	32.3%	32.3%	32.3%	32.3%	32.3%	21.8%	18.6%	30.4%	0%

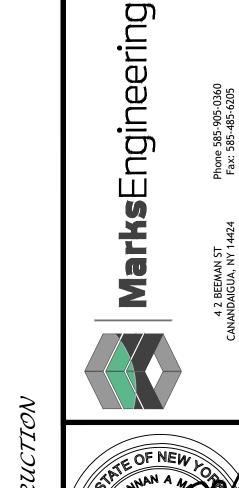
CONSERVATION SUBDIVISION ANALYSIS							
AREA	PERMITTED DESNITY	TOTAL UNITS					
150,518 SF	20,000 SF/ UNIT	8 UNITS					
172,964 SF	2 ACRES/ UNIT	2 UNITS					
323,482 SF		10 UNITS					
	AREA 150,518 SF 172,964 SF	AREA PERMITTED DESNITY  150,518 SF 20,000 SF/ UNIT  172,964 SF 2 ACRES/ UNIT					

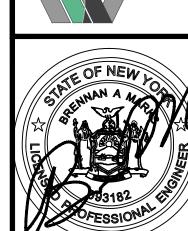


WATER/HIGHWAY SUPERINTENDENT

PLANNING BOARD CHAIRMAN

TOWN ENGINEER





SITE PLANS PREPARED FOR:

WILLIAM METROSE, LTD

YT RESIDENTIAL CONSERVATION SUBDIVISION
SHOWING LAND IN:
5100 & 5150 BRISTOL ROAD
TOWN OF CANANDAIGUA

DRAWING TITLE: SITE PLAN KRB BAMBAMAS NOTED 19-094

DRAWN BY: DESIGNED BY: CHECKED BY: JOB NO.: 01/06/2021 83.00-1-7.150 TAX MAP#: *C100* 

DATE

DATE

Bristol Road OPEN SPACE INFILTRATION BASIN LIMITS OF CLEARING ~10'W EX VEGETATIVE BUFFER HAMMOCKS OVERALL SUBDIVISION SITE PLAN

1"=60"

			LEC	END			
0	Iron pin or pipe found		EXISTING	elec	PRO	POSED	Utility Lines
<b>Q</b>	Benchmark		HE			<i>E/T</i>	R.O.W. line
Ø	Utility pole						Property line Easement line
<del>-</del>	Hydrant					- ——	Centerline
	Light pole	SWLE-	SWLE		SWLE	SWLE	Drainage
7		X_	X-		x	x	Fence Line
PEF TES	TO DEEP HOLE			—— <sub>99</sub> –			Contour Lir
	ABBREVIATIONS:		CO	-CLEAN OUT	PF	RF-PFRFORATED	

ABBREVIATIONS:

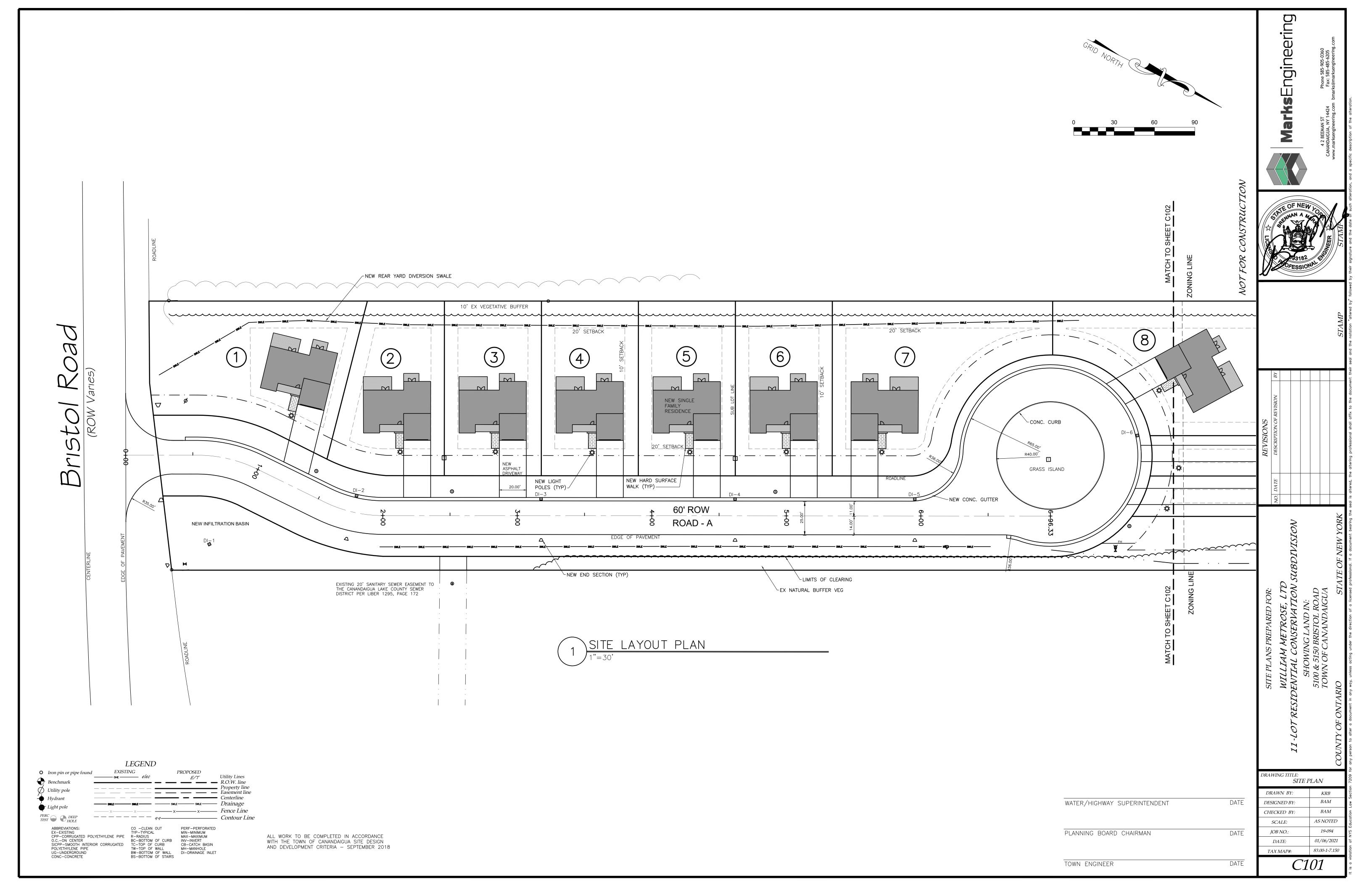
EX-EXISTING

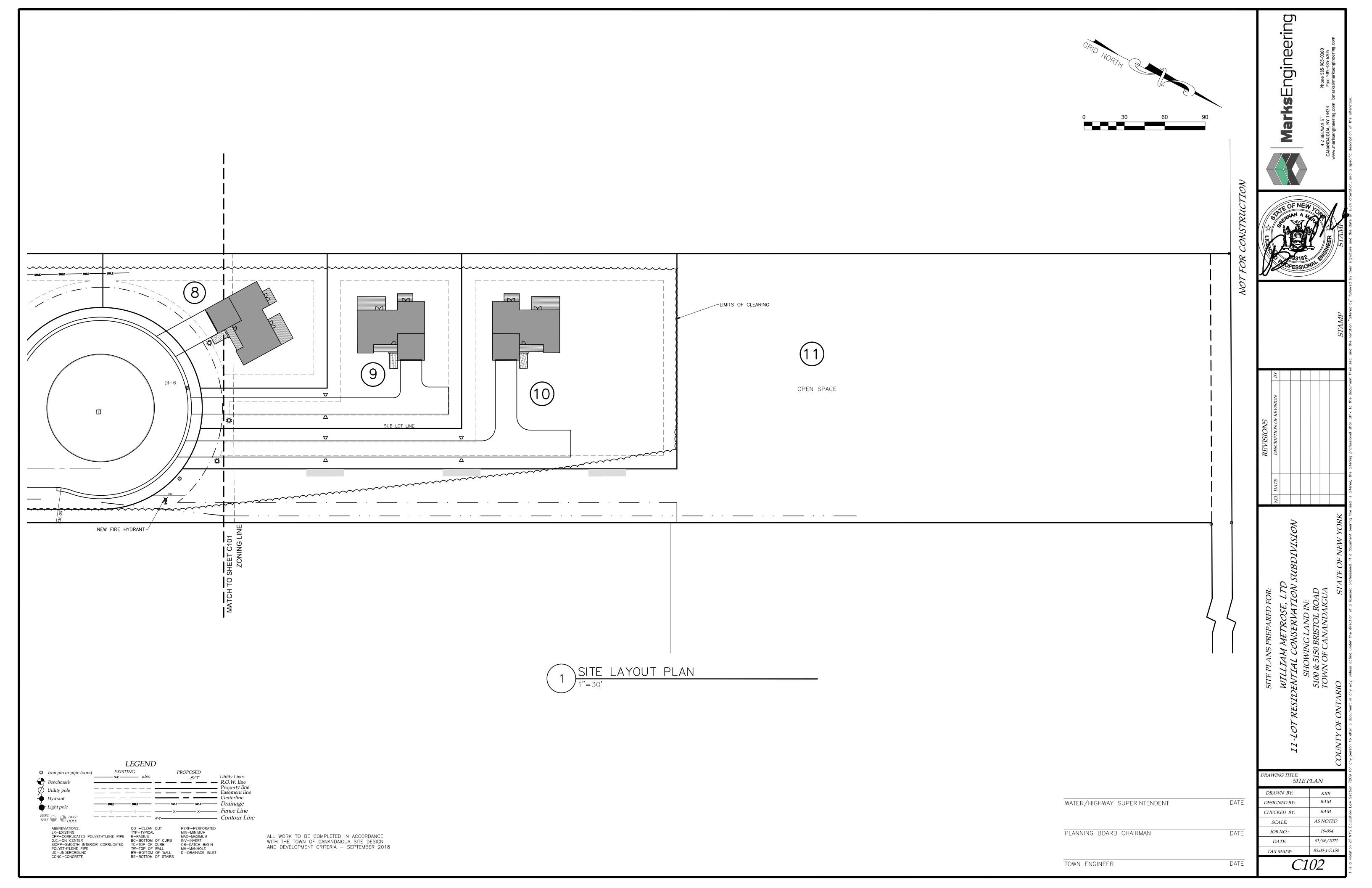
CPP-CORRUGATED POLYETHYLENE PIPE
SICPP-SMOOTH INTERIOR CORRUGATED
POLYETHYLENE PIPE
UG-UNDERGROUND

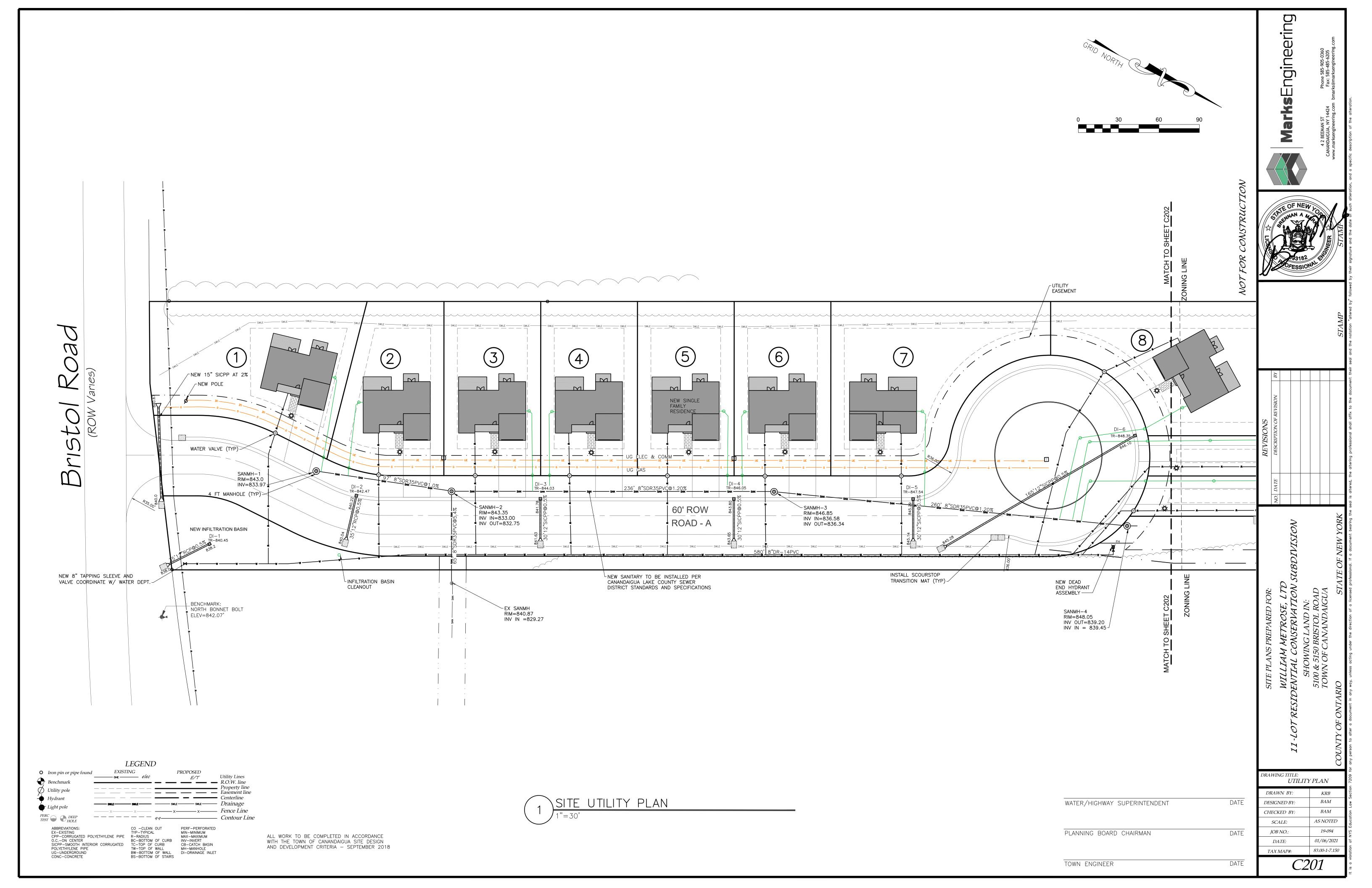
ABBREVIATIONS:

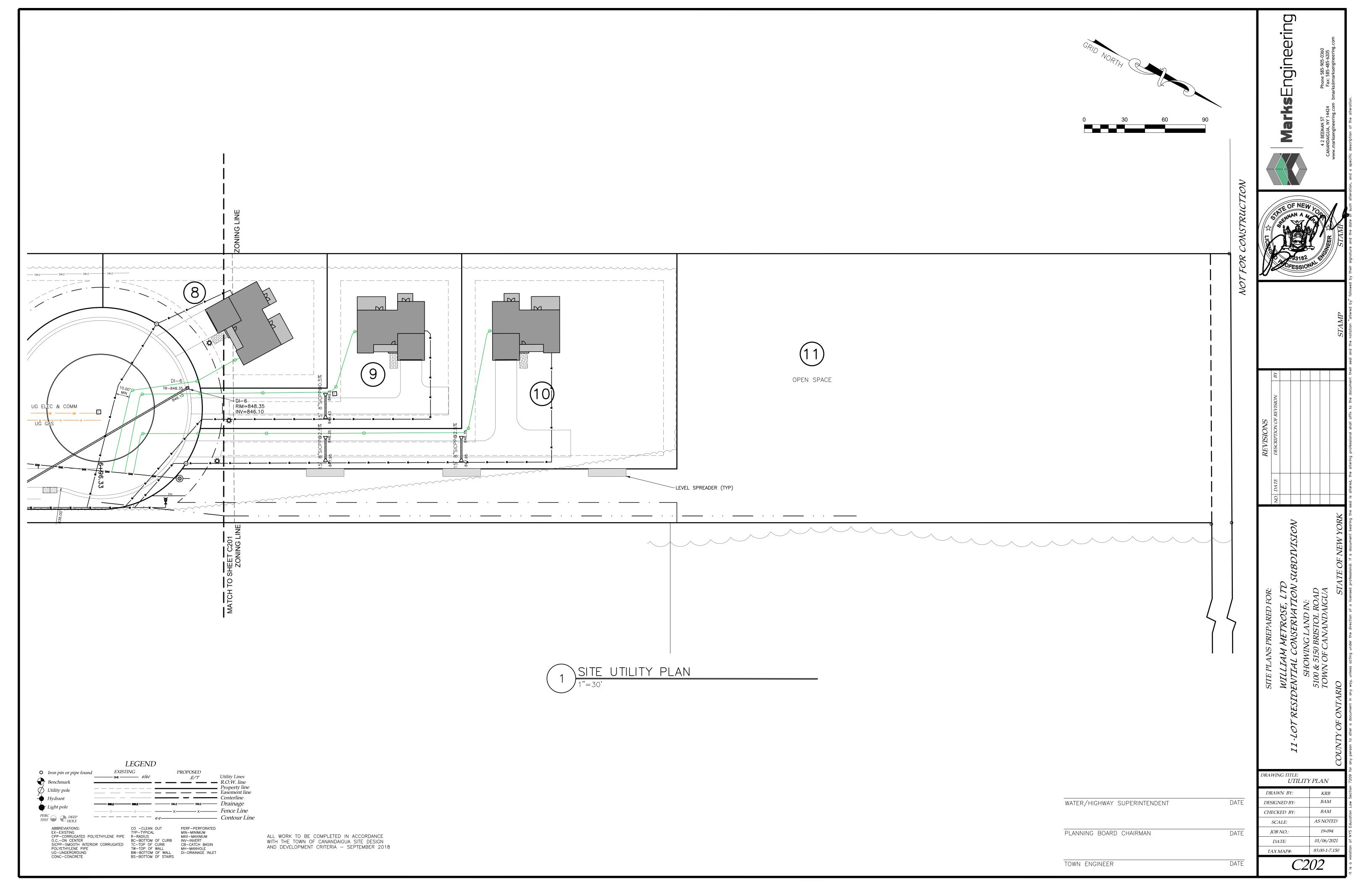
CO -CLEAN OUT
TYP-TYPICAL
MIN-MINIMUM
MAX-MAXIMUM
MAX

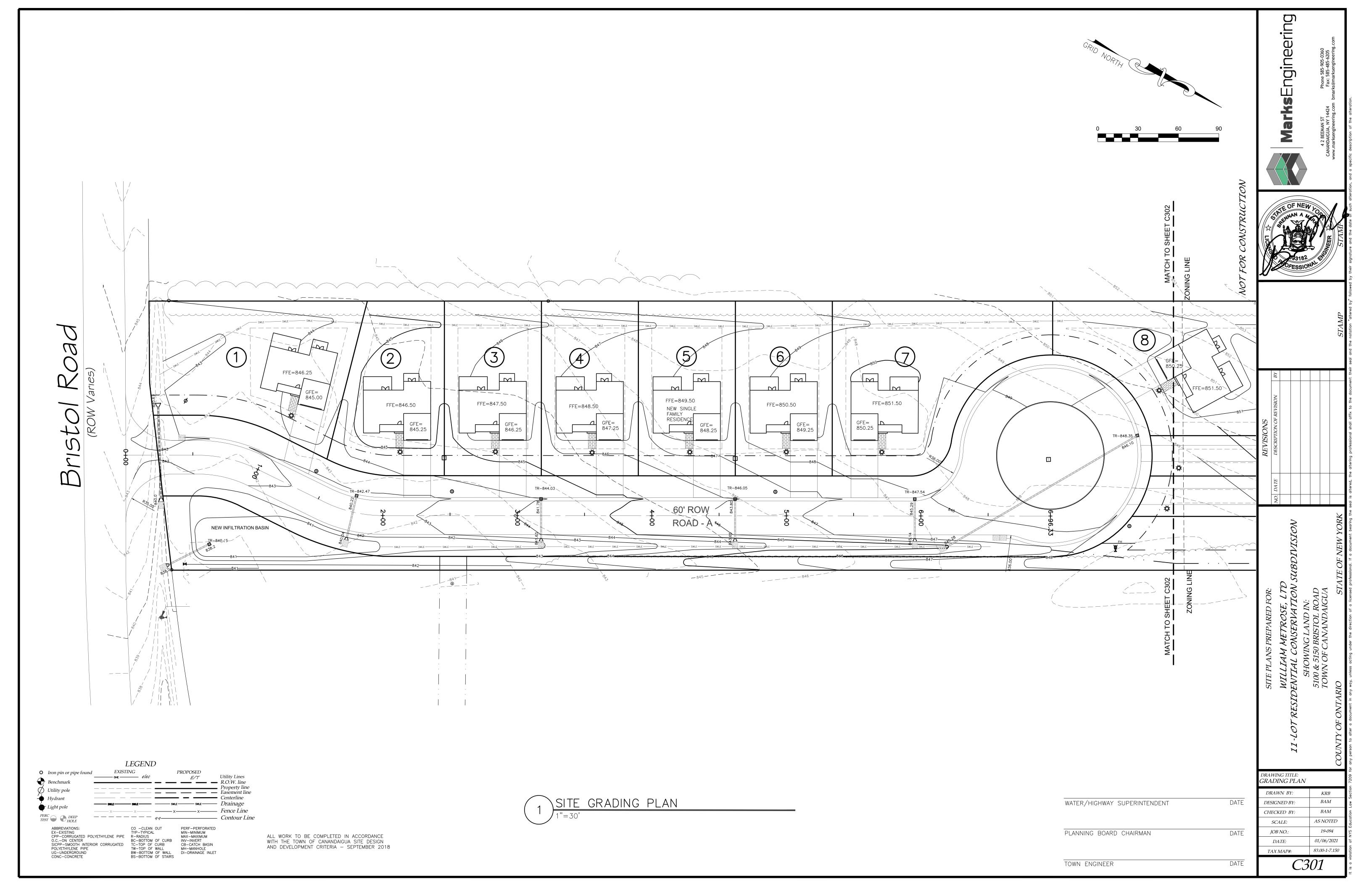
ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE TOWN OF CANANDAIGUA SITE DESIGN AND DEVELOPMENT CRITERIA — SEPTEMBER 2018

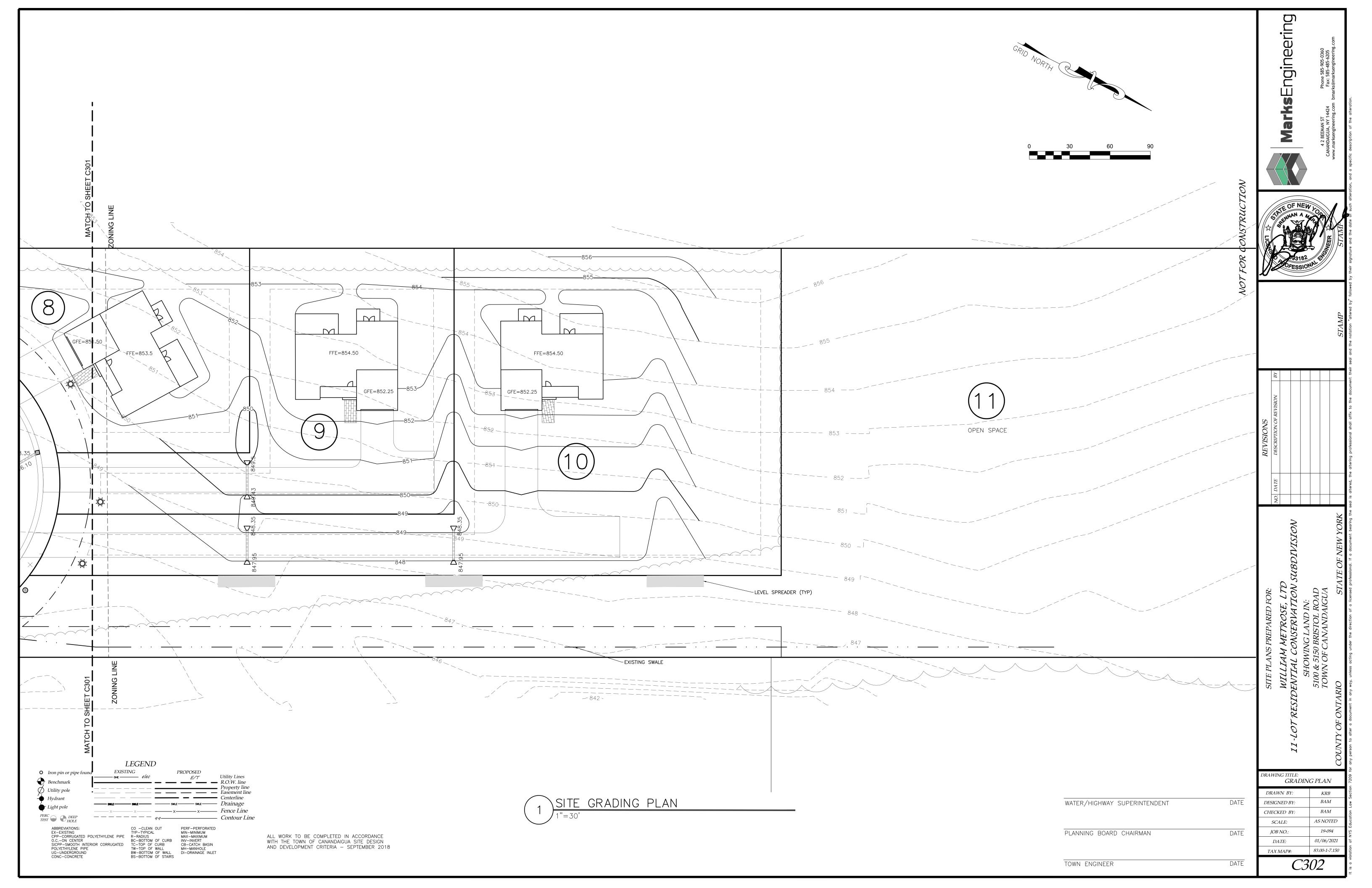


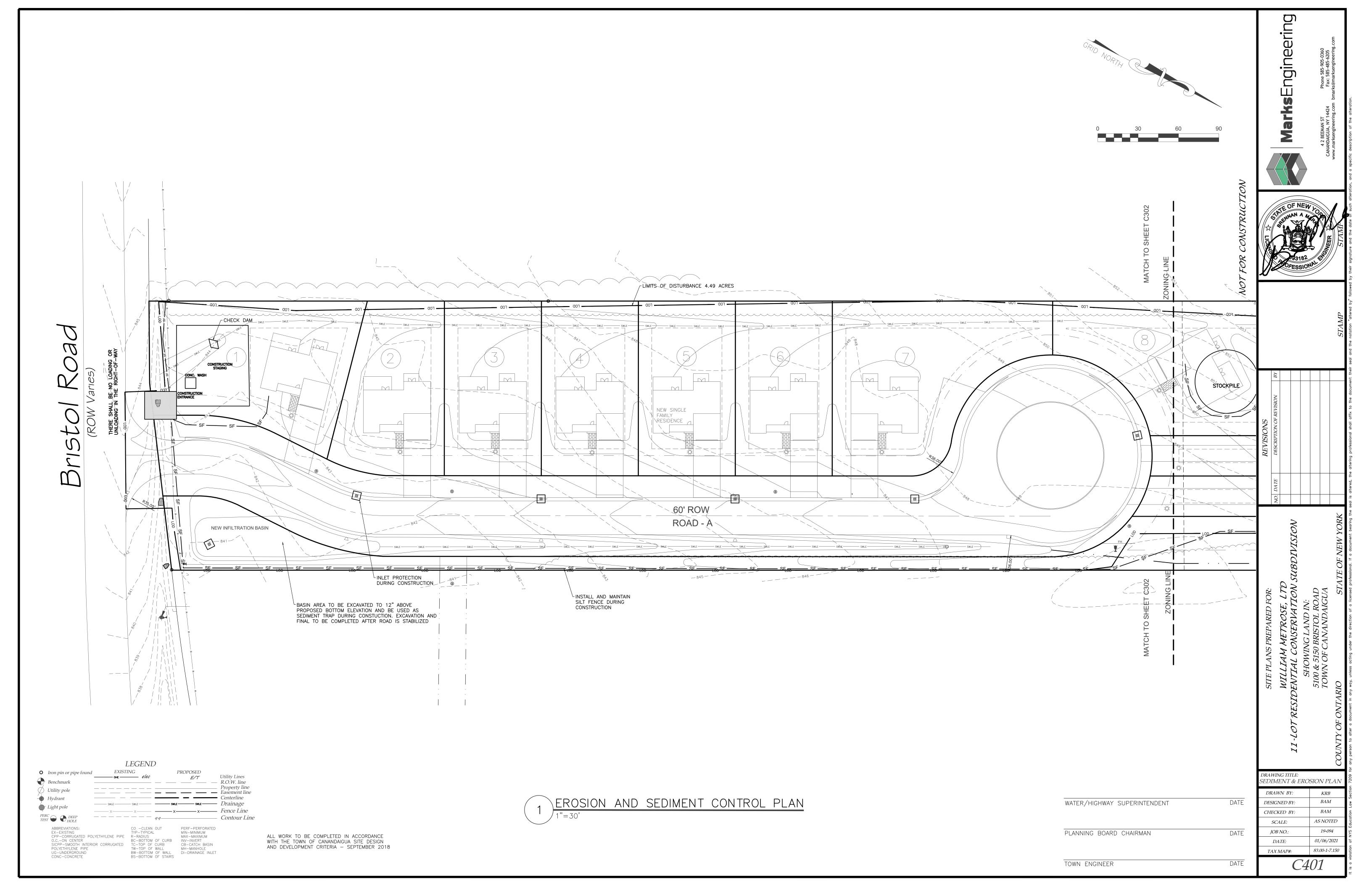


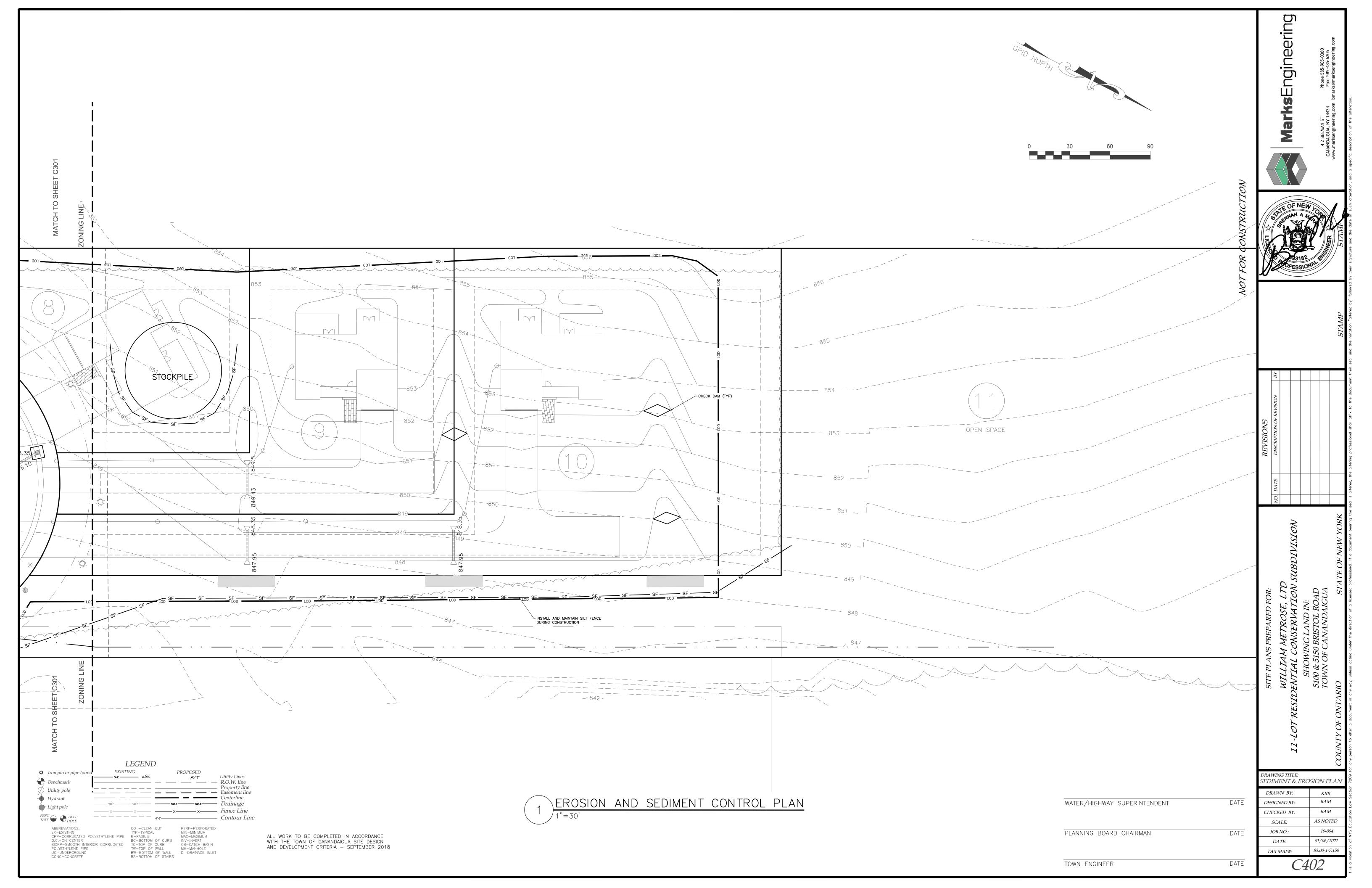


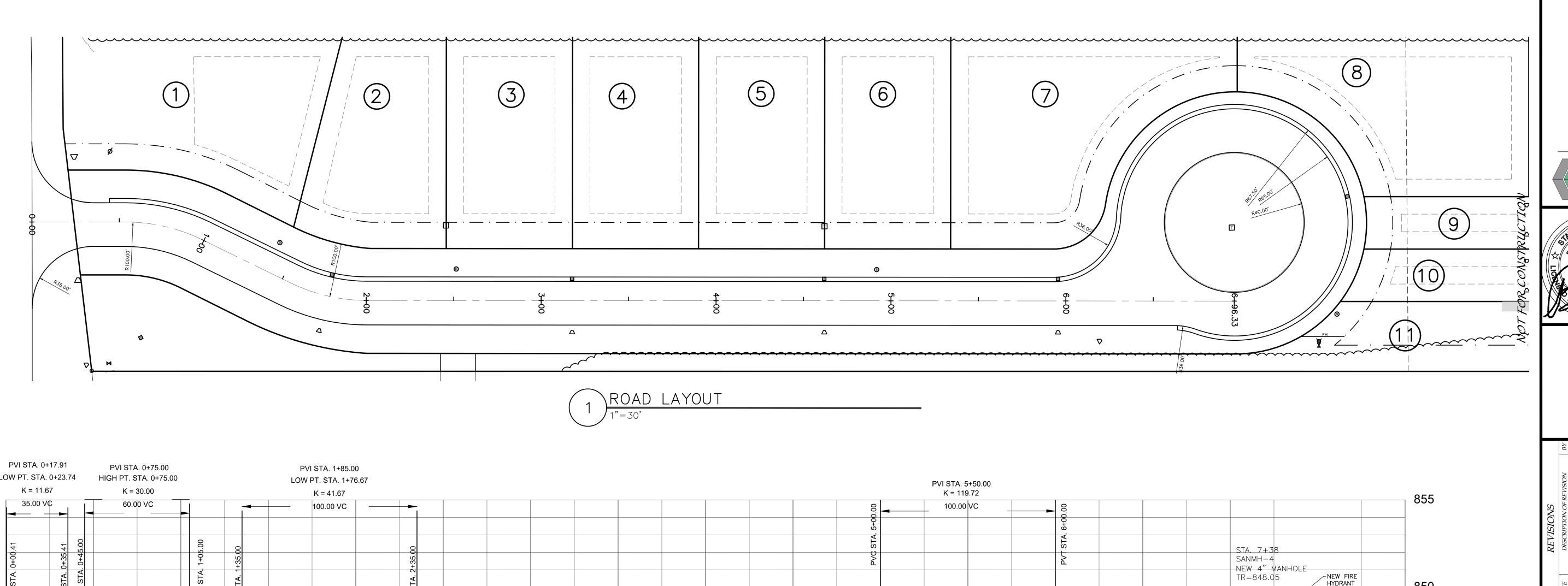


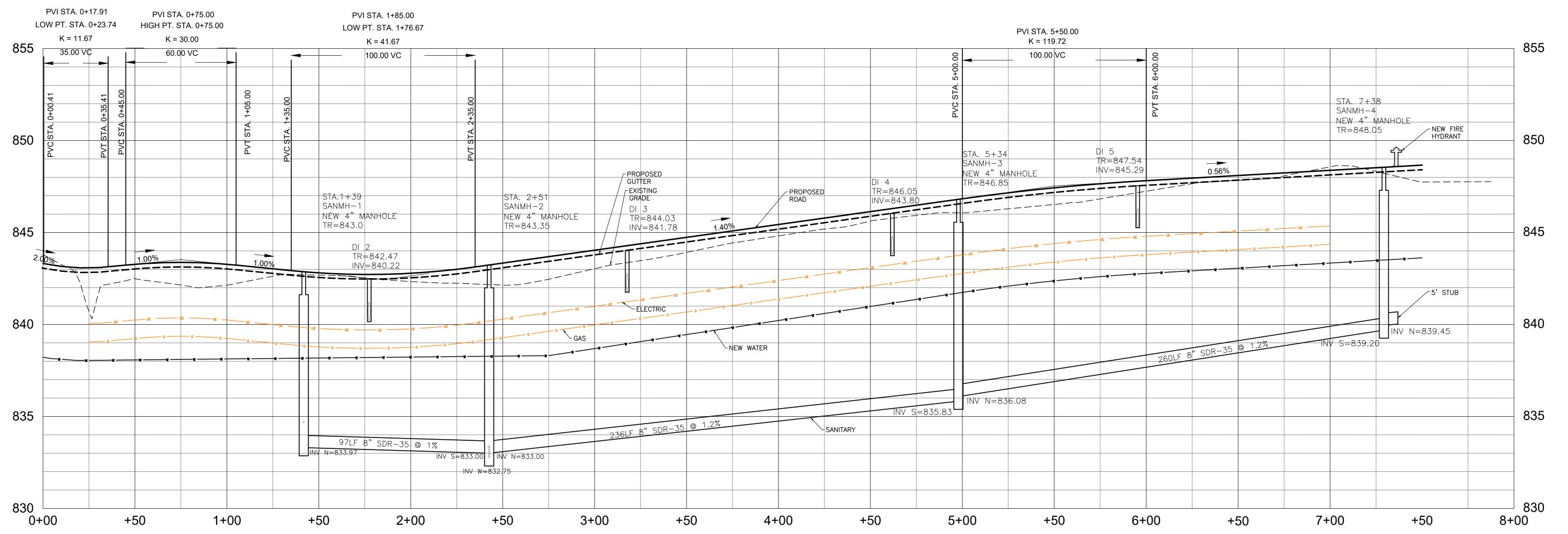












1 ROAD PROFILE

VERT: 1"=3" HORIZ: 1"=30"

PLANNING BOARD CHAIRMAN

DATE

PLANNING BOARD CHAIRMAN

DATE

TOWN ENGINEER DATE

	Diairr
DATE	DESIGN
	CHECK
	SCA
DATE	JOB I
	DA
	TAXM
DATE	

MarksEngineering

4 2 BEEMAN ST

A 2 BEEMAN ST

CANANDAIGUA, NY 14424
Fax: 585-905-0360





NO. DATE DESCRIPTION OF REVISION BY

NO. BATE DESCRIPTION OF REVISION BY

REVISION BY

SITE PLANS PREPARED FOR:

WILLIAM METROSE, LTD

OT RESIDENTIAL CONSERVATION SUBDIVISION

SHOWING LAND IN:

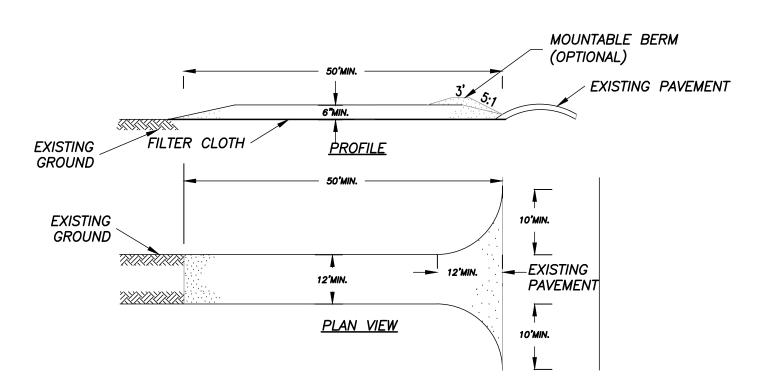
5100 & 5150 BRISTOL ROAD

TOWN OF CANANDAIGUA

DRAWING TITLE: ROAD PROFILE/ALIGNMENT					
DRAWN BY:	KRB				
DESIGNED BY:	BAM				
CHECKED BY:	BAM				
SCALE:	AS NOTED				
JOB NO.:	19-094				
DATE:	01/06/2021				
TAX MAP#:	83.00-1-7.150				

*C500* 

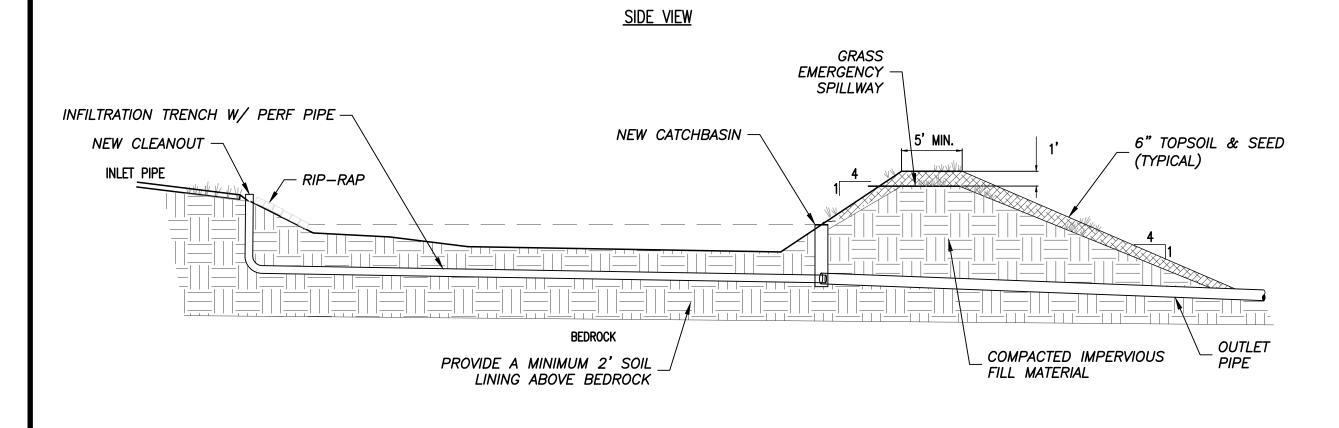
ALL WORK TO BE COMPLETED IN ACCORDANCE WITH THE TOWN OF CANANDAIGUA SITE DESIGN AND DEVELOPMENT CRITERIA — SEPTEMBER 2018



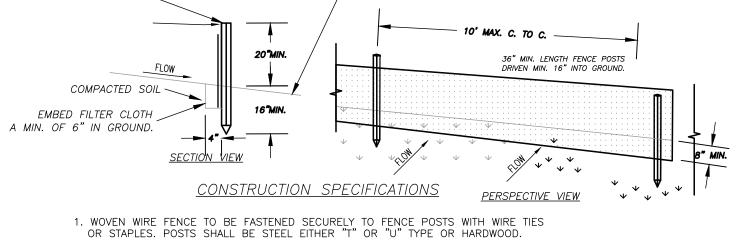
#### CONSTRUCTION SPECIFICATIONS

- 1. STONE SIZE USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE GARAGE LOT WHERE
- A 30 FOOT MINIMUM LENGTH WOULD APPLY). 3. THICKNESS - NOT LESS THAN SIX (6) INCHES
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF
- 6. 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. 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH





DETENTION/ INFILTRATION SYSTEM

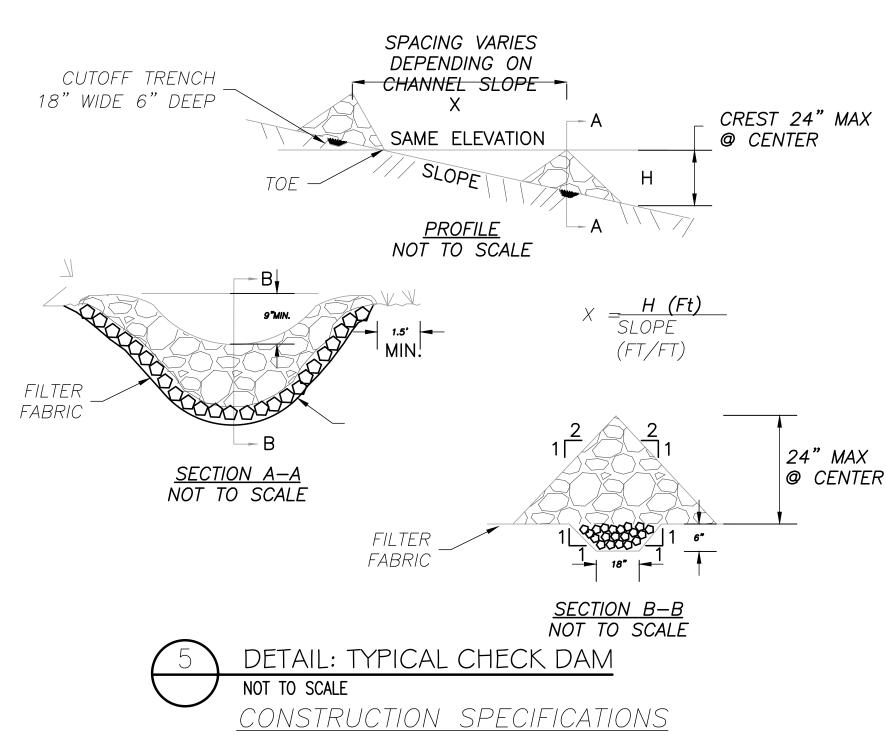


2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO

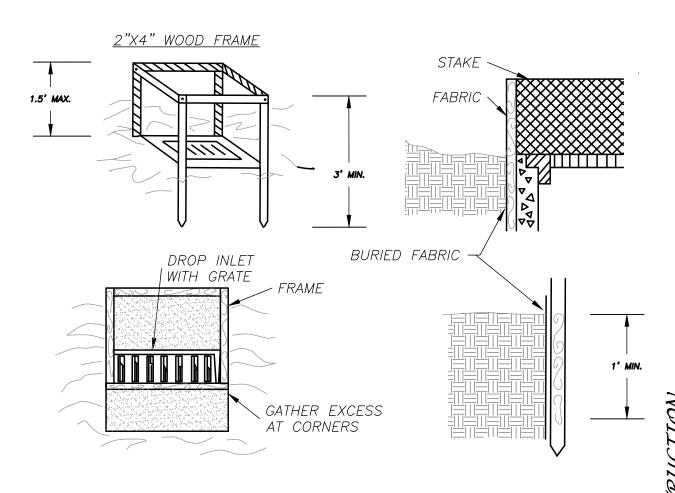
2"x2"x36" MIN. FENCE POST

- POSTS WITH STAPLES. 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIRONMENT, OR APPROVED EQUIVALENT.
- 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

TYPICAL SILT FENCE DETAIL



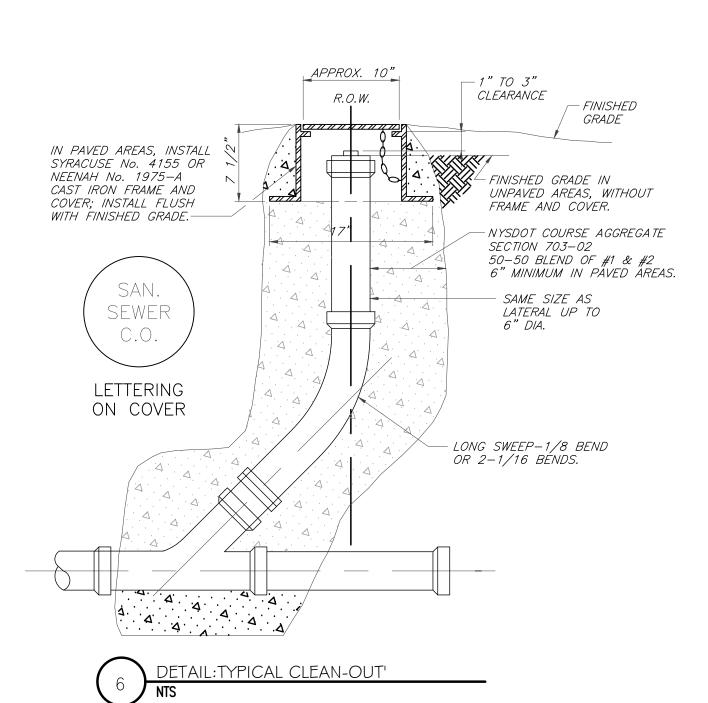
- 1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- 2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- 3. EXTEND THE STONE A MINIMUM OF 1.5 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. MAXIMUM DRAINAGE AREA 2 ACRES.



DETAIL: FILTER FABRIC INLET PROTECTION

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT-TERM APPLICATIONS.

- 2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- 3. STAKE MATERIALS WILL BE STANDARD 2x4 WOOD OR EQUIV. MINIMUM LENGTH OF 3 FEET.
- 4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- 5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- 6. A 2x4 WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.



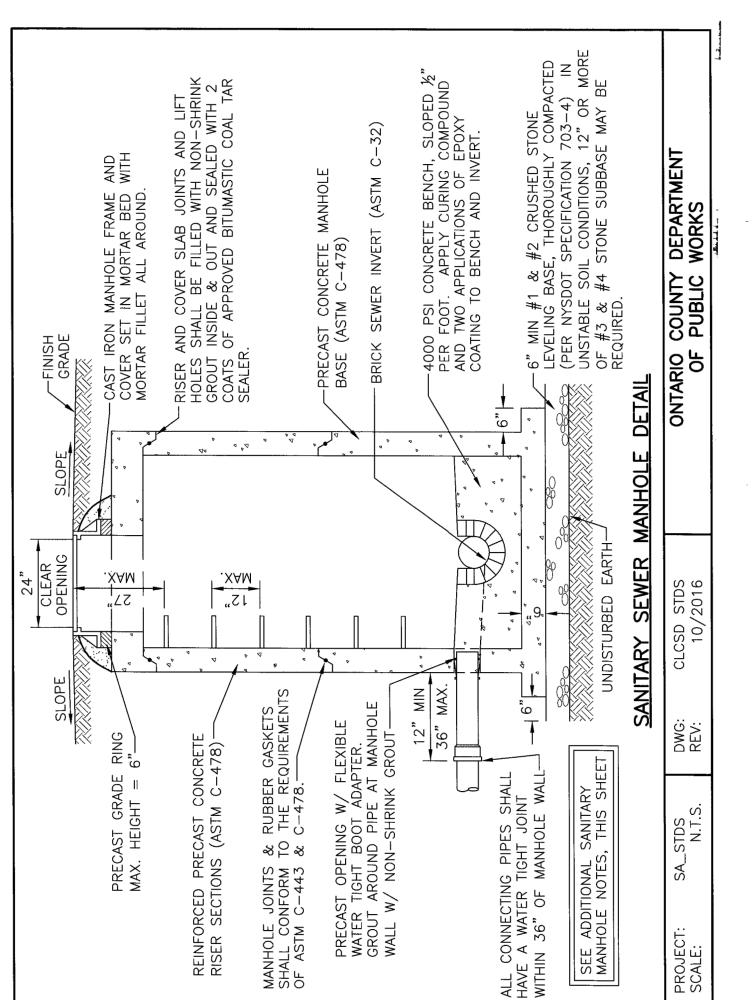
Engine(

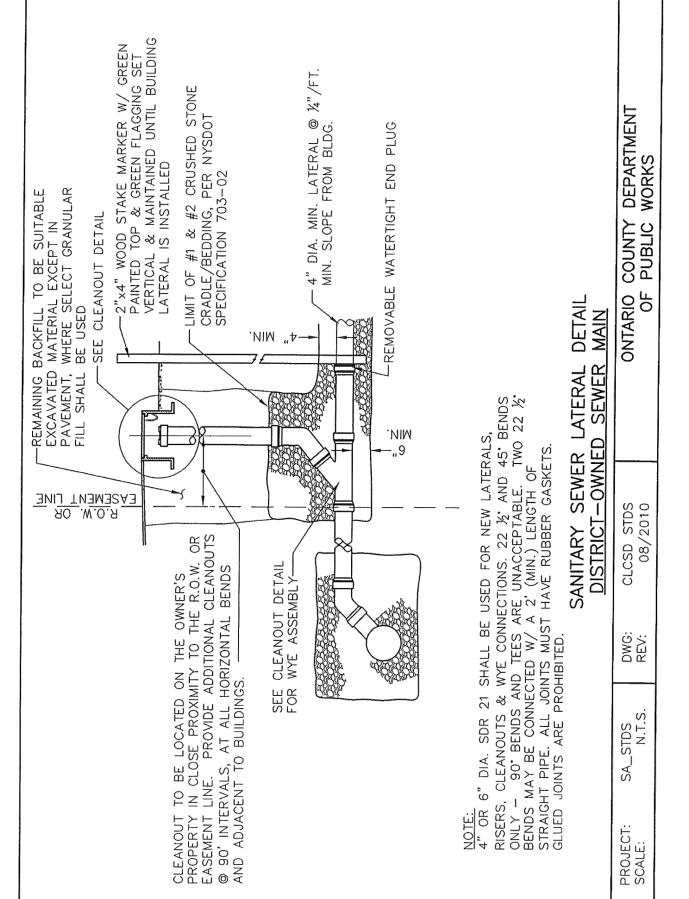




DRAWING TITLE: **DETAILS** KRB BAMDESIGNED BY: BAMCHECKED BY: AS NOTED SCALE: 19-094

01/06/2021 83.00-1-7.150 TAX MAP#: C501





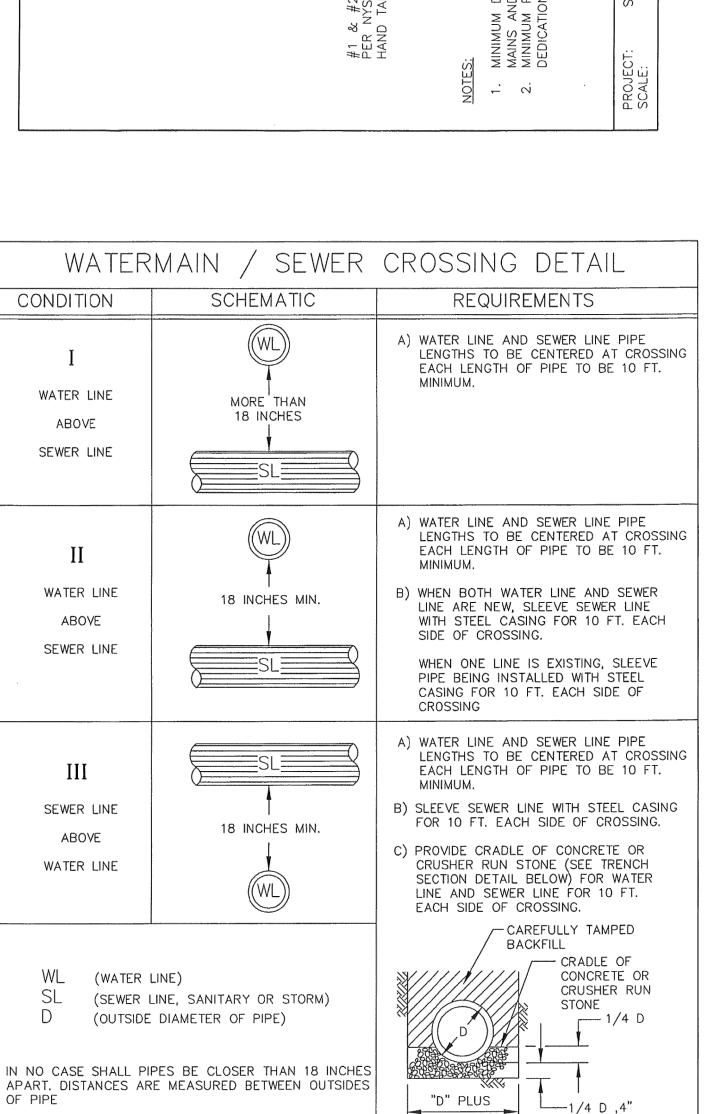
# 12. Lateral connections requiring openings in asbestos cement pipe will be designed, inspected and

# certified by the design engineer or representative thereof.

- 13. Any excavation not backfilled by the end of the workday shall be fenced, barricaded and
- 14. The contractor shall be responsible for the removal of existing sanitary mains, structures and appurtenances, if any, needed to complete the work.

#### RENOVATION PROJECTS ONLY

- 15. Existing laterals to be disconnected must be permanently plugged or capped at the easement or right of way line under the direction of Canandaigua Lake County Sewer District personnel. The location of the plug or cap shall be recorded for as-built drawing purposes.
- 16. Prior to demolishing an existing building, the contractor shall excavate, disconnect and abandon the lateral from the building to the point of disconnection (approximately 30' from the existing building) per District standards. A temporary plug shall be installed in the remaining portion of the existing sanitary lateral until it is tested and televised.
- 17. In order to determine whether an existing sanitary lateral is acceptable for connection to a new building, the lateral shall be televised in the presence of District personnel at the owner's
- 18. If an existing lateral is found to be acceptable and meet the minimum District requirements, it shall be temporarily re-plugged and backfilled with a witness stake in place, until connection to the new building can take place.
- 19. If a new sanitary sewer lateral is required, the existing lateral must be excavated, removed and capped at the easement or right of way line in accordance with District requirements.
- 20. If a new sanitary sewer lateral is required, the connection to the existing sanitary main shall be made per District standards.



COVER TYP.

## SANITARY LATERAL NOTES

#### **ALL PROJECTS**

- 1. All sanitary sewer construction and/or improvements shall be in accordance with the most recent standards and specifications of the Canandaigua Lake County Sewer District, N.Y.S. Department of Environmental Conservation, N.Y.S. Department of Health, the latest edition of Recommended Standards For Wastewater Facilities and any other agencies having jurisdiction.
- 2. No sanitary sewer-related work may be performed without first obtaining a written permit from the Canandaigua Lake County Sewer District.
- 3. District personnel shall be notified a minimum of 48 hours prior to beginning any sanitary sewer-related work.
- 4. The contractor shall locate, mark and preserve any right of way monuments or survey control in the area of construction.
- 5. Utility locations shown are approximate only. The contractor shall determine exact location of utilities, excavating to expose the utility, if necessary in the area of construction, before commencing construction. Contact U.F.P.O. at 1-800-962-7962 at least 72 hours prior to
- 6. Laterals shall be min. 4" dia. SDR-21 with elastomeric joints; for commercial establishments, laterals are to be 6" dia. SDR-21. Minimum depth of burial is four feet. Cleanouts shall be installed within 30 inches of the outside face of buildings, at all changes in horizontal alignment, at the right of way or easement line, and at spacing not to exceed 90 feet.
- 7. Sewer mains and laterals shall be located a minimum horizontal distance of ten feet from any existing or proposed watermain (as measured from the outside of the sewer/lateral to the outside of the watermain). In cases where the main or lateral crosses a watermain, the minimum vertical separation shall be eighteen inches (measured out-to-out). The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the watermain joints.
- 8. The contractor shall provide the District with shop drawings and material specifications that have been pre-approved by the design engineer before a permit will be issued.
- 9. The contractor is responsible for compliance with OSHA requirements in all aspects of
- 10. The contractor shall be responsible for maintaining sanitary flows at all times by methods acceptable to the District.
- 11. Floor drains in basements or garages are to be connected to the sanitary sewer. Floor drains do not include foundation or footer drains installed to intercept uncontaminated groundwater. All discharges to the sanitary sewer must comply with effluent limits of the Ontario County Sewer Use Law. Foundation and footer drains shall be constructed in a manner that prohibits groundwater from draining into the sanitary sewer pipe cradle.

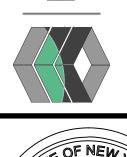
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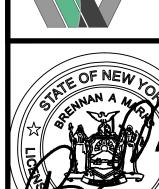
8 INCHES

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SHOWING LAND IN: 5100 & 5150 BRISTOL ROAD TOWN OF CANANDAIGUA

MarksEngineering





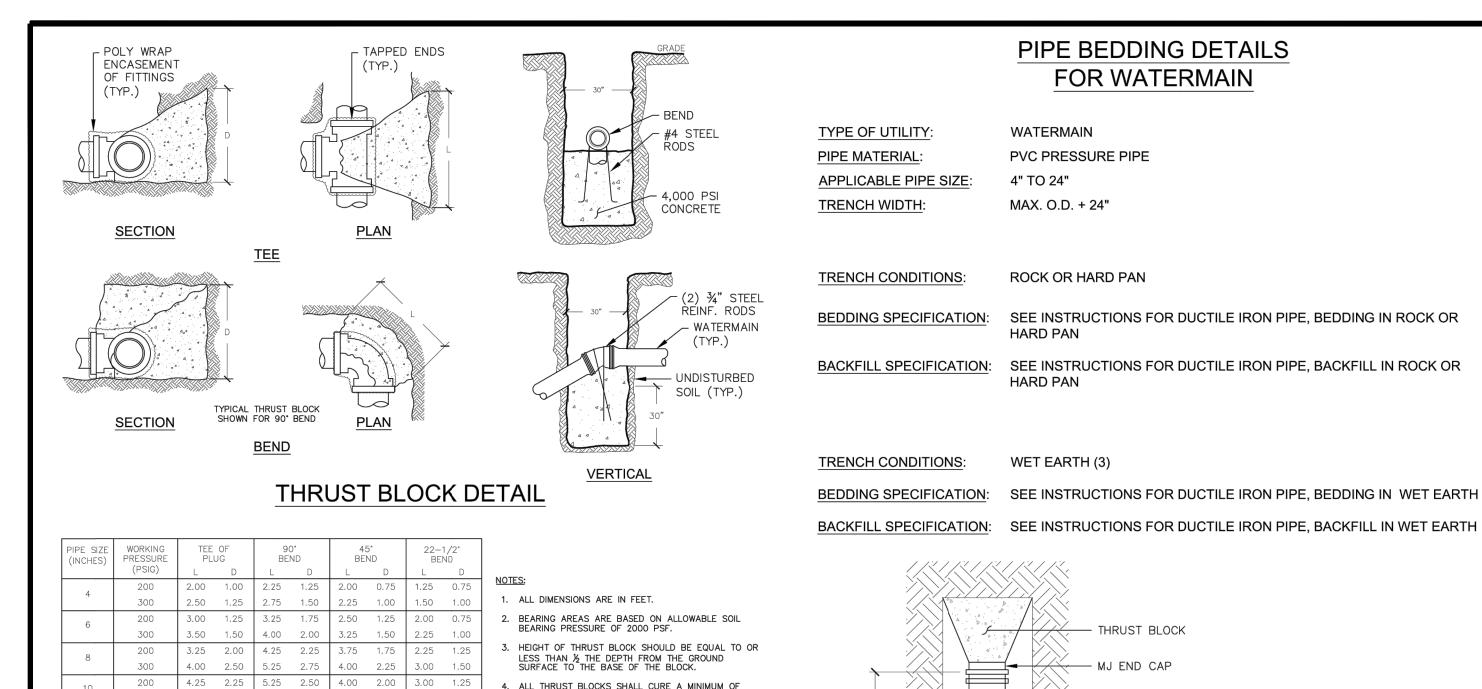
MAIN AND BEDDING DE

DRAWING TITLE **DETAILS** KRBBAMDESIGNED BY: CHECKED BY: AS NOTED SCALE: 19-094

TAX MAP#: 83.00-1-7.150

01/06/2021

C502



# WATERMAIN THRUST BLOCK SCHEDULE

5.50 2.50 6.50 3.00 5.00 2.50 4.00 1.50

5.25 2.50 6.00 3.25 4.50 2.25 3.25 1.75

6.25 3.25 7.50 4.00 5.50 2.75 4.25 2.00

5.50 3.25 7.25 3.50 5.25 2.50 3.25 2.00

10.25 5.00 9.00 4.25 6.50 3.00 5.00 2.25

6.5 3.50 8.25 4.00 5.50 3.25 4.50 2.25

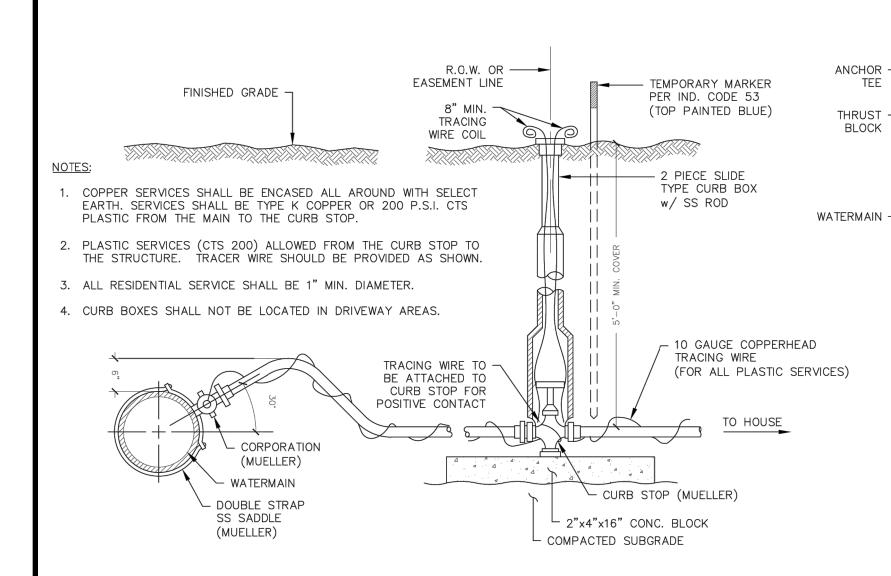
300 8.25 4.25 10.00 5.00 7.25 3.75 5.25 3.00

SEVEN (7) DAYS BEFORE ANY PRESSURE TESTS ARE

6. RESTRAINING RODS MAY BE USED IN LEIU OF THRUST

BLOCKS. METHOD TO USED SHALL BE APPROVED BY ENGINEER PRIOR TO PLACEMENT.

5. CONCRETE SHALL BE MINIMUM 3000 PSI.



#### TYPICAL WATER SERVICE

			TEST PRESSURE (P.S.I.)						
			200	225	250	275	300		
		PIPE DIA. (INCHES)	ALLOWABLE LEAKAGE (gal/hour)						
	D.I.P. PER 1,000 L.F. OF LINE	6	0.64	0.68	0.71	0.75	0.78		
		8	0.85	0.90	0.95	1.00	1.04		
		10	1.06	1.13	1.19	1.24	1.30		
		12	1.28	1.35	1.42	1.49	1.56		
		6	0.57	0.61	0.64	0.67	1.04		
	P.V.C.	8	0.76	0.81	0.85	0.90	0.94		
	PER 1,000 L.F. OF LINE	10	0.96	1.02	1.07	1.12	1.17		
		12	1.15	1.22	1.28	1.34	1.40		

- 1. TEST PRESSURE TO BE 200 P.S.I. OR 1.5 x WORKING PRESSURE, WHICHEVER IS
- 2. PRESSURE TESTS SHALL BE CONDUCTED SO THE PIPE SECTIONS ARE WITHIN 10 PSI OF THE TEST PRESSURE LOCATION.
- 3. PRESSURE TESTS SHALL BE CONDUCTED FOR A MINIMUM OF 2 HOURS.
- 4. LEAKAGE TESTS AT LINE PRESSURE SHALL BE CONDUCTED OVER A 24 HOUR

#### WATERMAIN PRESSURE TEST

#### PIPE BEDDING DETAILS FOR WATERMAIN

WATERMAIN TYPE OF UTILITY: PVC PRESSURE PIPE PIPE MATERIAL: APPLICABLE PIPE SIZE: 4" TO 24" TRENCH WIDTH: MAX. O.D. + 24"

**ROCK OR HARD PAN** TRENCH CONDITIONS:

BEDDING SPECIFICATION: SEE INSTRUCTIONS FOR DUCTILE IRON PIPE, BEDDING IN ROCK OR HARD PAN

BACKFILL SPECIFICATION: SEE INSTRUCTIONS FOR DUCTILE IRON PIPE, BACKFILL IN ROCK OR

TRENCH CONDITIONS: WET EARTH (3)

BEDDING SPECIFICATION: SEE INSTRUCTIONS FOR DUCTILE IRON PIPE, BEDDING IN WET EARTH

THRUST BLOCK MJ END CAP - UNDISTURBED SOIL

GATE VALVE 10 CU. YD. No. 2 CRUSHED GRAVEL STONE FOR WEEP DRAINAGE (ONLY IF ABOVE GROND WATER TABLE) 6" GATE VALVE (MUELLER) - HYDRANT (MUELLER) W/ SOLID CONC. BLOCK (8"x8"x16" MIN.) BELOW VALVE FOR SUPPORT

W/ SOLID CONC. BLOCK (8"x8"x16" MIN.) BELOW BARREL FOR SUPPORT

(MIN. 18" LAY LENGTH

BETWEEN HYDRANT

AND GATE VALVE)

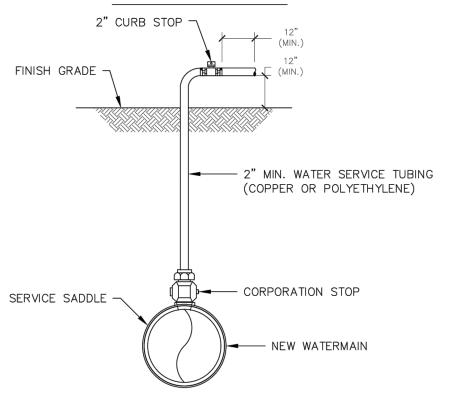
- 6"x12" MIN. ANCHOR L 6" ANCHOR PIPE

NOTES: 1. IF GROUND WATER IS ENCOUNTERED, THE WEEP HOLES MUST BE PLUGGED AND THE HYDRANT MARKED.

PIPE BOLTED TO

2. HYDRANTS SHALL BE PAINTED RED.

#### **END OF MAIN** HYDRANT UNIT



TEE

////

- 1. UPON NOTIFICATION FROM THE HEALTH DEPARTMENT THAT A SATISFACTORY WATER SAMPLE HAS BEEN OBTAINED, SHUT DOWN CORPORATION STOP AND REMOVE THE SERVICE TUBING.
- 2. IMMEDIATELY PRIOR TO PLACING THE WATER MAIN IN SERVICE THE CONTRACTOR SHALL REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY FACILITIES ( I.E. SAMPLING TAPS, ETC.) AND REPLACE WITH THREADED BRASS PLUGS.
- 3. FOR DISINFECTION\SAMPLING TAPS THAT ARE NOT NEEDED TO BLOW-OFF, 1" DISINFECTION\SAMPLING TAPS ARE ACCEPTABLE.
- 4. 1000 LF MAXIMUM DISTANCE BETWEEN SAMPLE TAPS UNLESS OTHERWISE SPECIFIED BY ENGINEER.

#### TEMPORARY DISINFECTION / SAMPLING TAP / BLOW-OFF

#### PIPE BEDDING DETAILS FOR WATERMAIN

WATERMAIN TYPE OF UTILITY: PVC PRESSURE PIPE PIPE MATERIAL APPLICABLE PIPE SIZE: 4" TO 24" TRENCH WIDTH: MAX. O.D. + 24"

TRENCH CONDITIONS: SELECT EARTH

BEDDING SPECIFICATION: THE TRENCH BOTTOM SHALL BE TRUE, EVEN, AND FREE FROM

STONES, LARGE DIRT CLODS, OR ANY FROZEN MATERIAL WITH ANY DIMENSION GREATER THAN 1/2". PIPE TO BE BEEDDED FROM BOTTOM OF TRENCH UP TO 12" ABOVE TOP OF PIPE WITH GRANULAR SAND MEETING THE STANDARDS OF NYSDOT SPEC. 703.03. DEPRESSIONS SHALL BE PROVIDED IN THE TRENCH BOTTOM FOR PIPE BELLS AT EACH JOINT AND TO ALLOW FOR WITHDRAWAL OF PIPE SLINGS. THIS IS TO ASSURE THAT THE PIPE BARREL LIES FLAT ON THE TRENCH BOTTOM.

BACKFILL SPECIFICATION: ALL BACKFILL MATERIAL SHALL BE FREE FROM CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS, ROCKS OR STONES, OR FROZEN MATERIAL AND ANYTHING HAVING A DIMENSION GREATER THEN 1/2" OR ANY OTHER MATERIAL THAT IN THE OPINION OF THE OWNER IS UNSUITABLE. SAFETY COVER MEASURING 12" DEEP SHALL BE PROVIDED ON TOP OF THE BEDDING MATERIAL AND SHALL MEET THE STANDARDS OF GRADATION FOR SELECT GRANULAR FILL (NYSDOT SPEC. 203.2.06. EXCAVATED MATERIAL MAY BE USED FOR BACKFILL PROVIDED THAT SUCH MATERIAL CONSISTS OF LOAM. CLAY, SAND, GRAVEL, OR OTHER MATERIALS THAT IN THE OPINION OF THE OWNER ARE SUITABLE FOR BACKFILLING EXCEPT WITHIN THE LIMITS OF DEDICATED ROADWAYS.

> BACKFILL BENEATH DEDICATED ROADWAYS TO BE FULL DEPTH TYPE 2 CRUSHER RUN STONE MEETING THE STANDARDS OF NYSDOT SPEC. 304.12.

THE BALANCE OF THE BACKFILL NEED NOT BE AS CAREFULLY SELECTED AS THE INITIAL MATERIAL. IT SHALL BE PLACED IN UNIFORM LAYERS IN SUCH A MANNER AS TO PROVIDE A UNIFORMLY DENSE BACKFILL LOAD ON THE PIPE AND AVOID UNFILLED SPACES IN THE BACKFILL. ROLLING EQUIPMENT SHALL NOT BE USED UNTIL A MINIMUM OF 18" OF BACKFILL MATERIAL COVER THE TOP OF THE PIPE.

\*\*REFER TO APPROPRIATE AGENCY FOR SANITARY SEWER BEDDING REQUIREMENTS\*\*

14 FT. 7 FT. 4 FT. 23 FT. 76 FT.

. RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN.

HORIZONTAL BEND RESTRAINT

ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS HORIZONTA

NOTES:

NOTES:

4. DEAD-END SERVICE CONSTITUTES CAPS, PLUGS, VALVES AND HYDRANTS.

1. ALL BENDS (DEGREE CHANGES) ARE CALCULATED AS VERTICAL. THE FIRST

12 X 10 BR. 20/17

BR.

RESTRAINED

**LENGTHS FOR** 

**REDUCING FITTINGS** 

RESTRAINED LENGTH (FEET) IS FOR THE HIGH-SIDE BENDS (Lhs) AND THE SECOND

RESTRAINED LENGTH (FEET) INDICATES THE LOW-SIDE BENDS (LIS), LENGTHS WERE

CALCULATED USING A CONSISTENT 5 FOOT DEPTH OF COVER FOR THE WATERMAIN

VERTICAL BEND RESTRAINT

 RECOMMENDED RESTRAINED LENGTHS FOR STRAIGHT TEES ASSUME A MINIMUM 10' LENGTH OF PIPE ATTACHED TO EACH SIDE OF THE RUN.
 BR. ONLY INDICATES RESTRAINT AT TEE BRANCH ONLY. STRAIGHT REDUCER UNOBSTRUCTED RESTRAINED LENGTHS OFFER THE OPTION OF RESTRAINING RECOMMENDED DISTANCES ON THE SMALL-END SIDE (FIRST RESTRAINED

LENGTH PROVIDED) OR THE LARGE-END SIDE (SECOND RESTRAINED LENGTH

8 40' 12 76' 14 97'

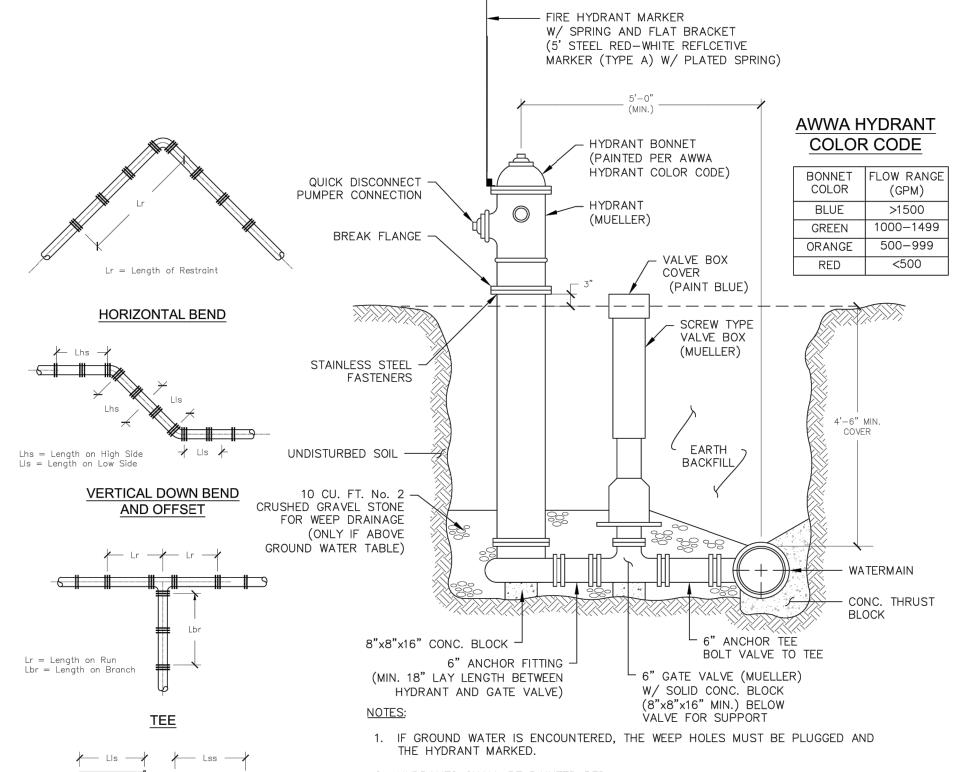
**RESTRAINED** 

LENGTHS

FOR VALVES

REQUIREMENTS CONDITION SCHEMATIC A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. WATER LINE ABOVE B) BACKFILL WITH COMPACTED CRUSHER MORE THAN 18" SEWER LINE RUN STONE. A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. WATER LINE B) WHEN BOTH WATER LINE AND SEWER ABOVE LINE ARE NEW, SLEEVE SEWER LINE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. C) WHEN ONE LINE IS EXISTING, SLEEVE PIPE BEING INSTALLED WITH STEEL CASING FOR 10 FT. EACH SIDE OF D) BACKFILL WITH COMPACTED CRUSHER RUN STONE. A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. SEWER LINE ABOVE B) SLEEVE SEWER LINE WITH STEEL WATER LINE CASING FOR 10 FT. EACH SIDE OF CROSSING. C) PROVIDE CRADLE OF CONCRETE OR CRUSHER RUN STONE (SEE TRENCH DETAIL BELOW) FOR WATER LINE AND SEWER LINE FOR 10 FT. EACH SIDE OF <u>NOTES</u> CAREFULLY TAMPED BACKFILL (WATER LINE) (SEWER LINE) (OUTSIDE DIAMETER OF PIPE) - CRADLE OF CONC. OR CRUSHER RUN STONE IN NO CASE SHALL PIPES BE CLOSER THAN 18" APART. DISTANCES ARE 1#4 D (4" MIN.)

#### WATERMAIN/SEWER CROSSING DETAIL



MEASURED BETWEEN OUTSIDES OF PIPE.

## MECHANICAL JOINT PIPE RESTRAINTS

Lls = Length on Large Side Lss = Length on Small Side

2. HYDRANTS SHALL BE PAINTED RED. HYDRANT UNIT WILLIAM METROSE, LTD FNTIAL CONSERVATION SHOWI 5100 & 515 TOWN OF

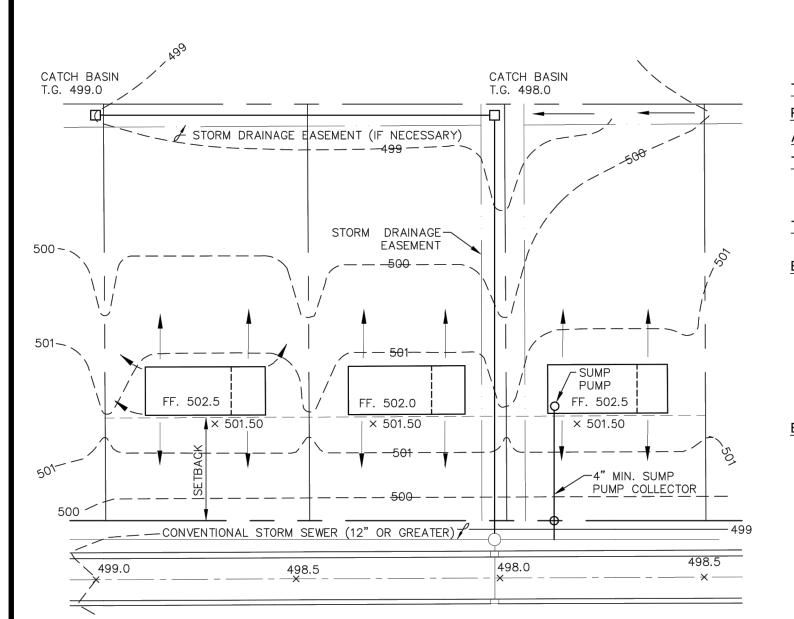
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DRAWING TITLE: **DETAILS** KRBBAMDESIGNED BY. BAMCHECKED BY: AS NOTED SCALE: 19-094 01/06/2021

83.00-1-7.150

C503

TAX MAP#:



## TYPICAL GRADING PLAN

**LEGEND** 

--502 -- ORIGINAL CONTOURS

-- 501-- PROPOSED CONTOURS

STORM SEWER & MANHOLE

CATCH BASIN

── FLOW ARROWS

× 498.50 SPOT ELEVATIONS

#### GALVANIZED RECTANGULAR -FRAME & GRATE (NYSDOT SIZE No. 9) - SET FRAME IN MORTAR SET 1/2" BELOW NORMAL GUTTER INVERT PAVEMENT CAST IN PLACE CONCRETE APRON 4000 PSI MIN. BACKFILL WITH CRUSHER RUN STONE CRUSHED STONE (NYSDOT SPEC 304-2.02, TYPE 2) IN UNDERDRAIN -12" LIFTS ON PAVEMENT & GUTTER SIDES. BACKFILL SHALL BE SELECT MATERIAL (NYSDOT SPEC 203-2.02) CATCH BASIN TO BE CONSTRUCTED ---OF PRECAST CONCRETE. COAT INSIDE IF OUTSIDE PAVEMENT & OUTSIDE WITH (2) COATS OF APPROVED BITUMÀSTIC COAL TAR SEALER. STORM LEAD CONC. BASE SUB-BASE FOR CATCH BASIN SHALL BE 6" OF THOROUGHLY COMPACTED #1 & #2 CRUSHED STONE MIXED EQUALLY (NYSDOT GRADATION TABLE 703-4)

#### CATCH BASIN DETAIL

#### PIPE BEDDING DETAILS FOR STORM LINES

TYPE OF UTILITY: STORM SEWER PIPE MATERIAL: PVC APPLICABLE PIPE SIZE: 4" TO 15" TRENCH WIDTH: MAX. O.D. + 24"

TRENCH CONDITIONS: SELECT EARTH

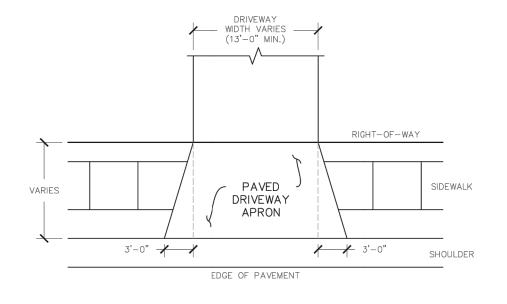
BEDDING SPECIFICATION:

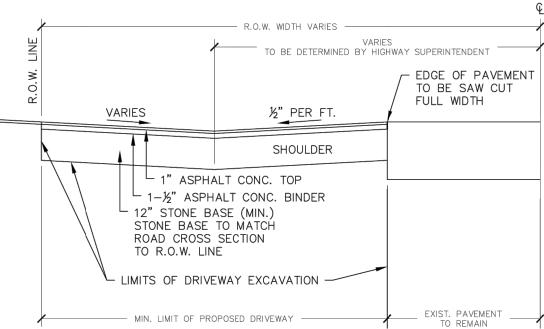
THE TRENCH BOTTOM SHALL BE TRUE, EVEN. AND FREE OF LARGE STONES, LARGE DIRT CLODS, AND ANY OTHER FROZEN MATERIAL AS APPROVED BY THE ENGINEER. A MINIMUM OF THREE (3) INCHES OF NO. 1 AND NO. 1A CRUSHED STONE MIXED EQUALLY (NYSDOT GRADATION TABLE 703-4) SHALL BE INSTALLED AND TAMPED TO PROVIDE SATISFACTORY BEDDING FOR THE PIPE WHICH IS FIRM AND GIVES CONTINUOUS SUPPORT OF THE PIPE BARREL. DEPRESSIONS SHALL BE HOLLOWED IN THE TRENCH BOTTOM FOR PIPE BELLS AT ALL JOINTS IN THIS GRANULAR LIFT.

BACKFILL SPECIFICATION: INITIAL BACKFILL FROM THE TOP OF THE PIPE BEDDING MATERIAL TO THE SPRING LINE OF THE PIPE SHALL CONSIST OF NO. 1 AND NO. 1A CRUSHED STONE (NYSDOT GRADATION TABLE 703-4) MIXED EQUALLY.

> FROM THE SPRING LINE OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE APPROVED SELECT BACKFILL MATERIAL, FREE OF LARGE STONES, DIRT CLODS, OR FROZEN MATERIAL WITH ANY DIMENSION GREATER THAN 1-1/2" SHALL BE INSTALLED.

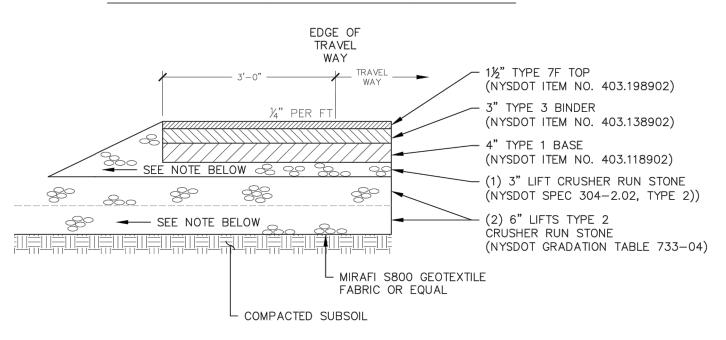
> THE REMAINDER OF THE BACKFILL MATERIAL NEED NOT BE AS CAREFULLY SELECTED AS THE INITIAL BACKFILL. LARGE STONES SHALL BE AVOIDED THAT COULD DAMAGE THE INSTALLED PIPE WHEN DROPPED OR WHEN FORCE THROUGH THE SOIL CUSHION OF THE INITIAL BACKFILL.





- 1. DRIVEWAYS FRONTING ON TOWN ROADS SHALL BE PAVED a MINIMUM OF 30 FEET EXTENDING FROM THE EDGE OF PAVEMENT TO R.O.W. UNLESS OTHERWISE INDICATED
- 2. THE APPLICANT SHALL NOTIFY THE HIGHWAY SUPERINTENDENT AT LEAST 48 HOURS PRIOR TO PERFORMING THE WORK TO SCHEDULE A FIELD INSPECTION.
- 3. A MAXIMUM 3% LEVELING AREA TO BE PROVIDED FOR THE FIRST 30 FEET FROM THE EDGE OF PAVEMENT.

#### TYPICAL DRIVEWAY APRON DETAIL



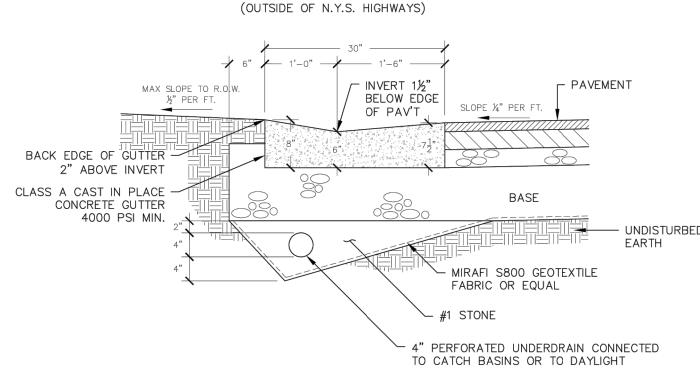
#### NOTES:

- 1. EXTEND SUBBASE TO SWALE PER APPENDICIES H-2.0, H-2.1, H-2.2
- 2. PROVIDE 4" UNDERDRAIN IF SUBBASE CANNOT DAYLIGHT

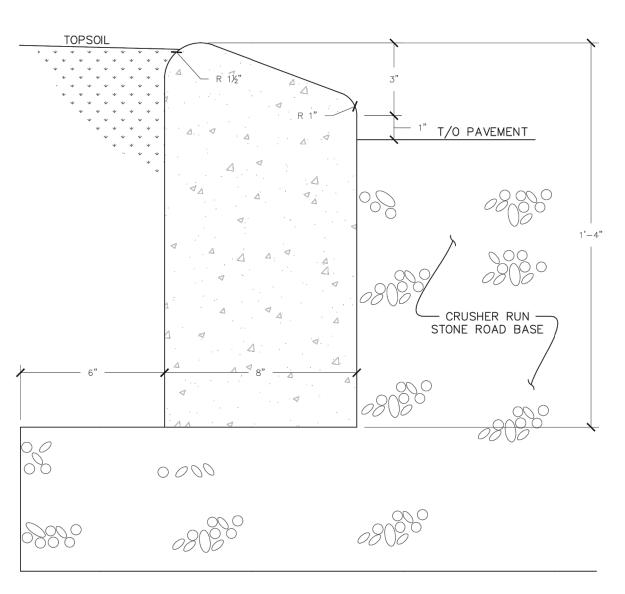
#### - TACK COAT ON EXISTING ASPHALT SURFACE GRADE MAX. PAY ITEM UNIT FOR HFMS 2H NYSDOT MATERIAL 4" MIN. TOPSOIL DESIGNATION SECTION 407 ├── ½ OD + 18" ── <mark>∤</mark> ON-SITE MATERIAL - EXISTING PAVEMENT GRADE -MINIMUM ASPHALT REPLACEMENT: SEE PAVEMENT CROSS SECTION DETAILS (PAVEMENT THICKNESS TO MATCH EXISTING) MINIMUM ASPHALT REPLACEMENT <u>OR DRIVEWAYS & PARKING AREAS:</u> PAYMENT LIMIT TOP (NYSDOT 402.098103) 2" BINDER (NYSDOT 402.258903) EXCAVATION TYPE 2 CRUSHER RUN LIMESTONE CONFORMING TO NYSDOT SPEC SECTION 703-4 (UNDER DEDICATED ROADWAYS) TYPE 4 GRAVEL MAY BE UTILIZED UNDER PARKING AREAS DETECTABLE 6" TRACER TAPE BURIED AT MANUF. RECOMMENDED DEPTH SELECT FILL FOR WATERMAIN INSTALLATIONS SAFETY COVER 10 GAUGE COPPERHEAD TRACER FROM SPOILS WIRE FIXED TO TOP OF PIPE (12" MIN.) CONFORMING TO NYSDOT SPEC. SECTION 703-06. ADDITIONAL BEDDING FOR UNSTABLE TRENCH CONDITIONS MAY BE REQUIRED A.O.B.E. PAVEMENT SECTION OPEN AREA SECTION

- SAW CUT EXISTING PAVEMENT

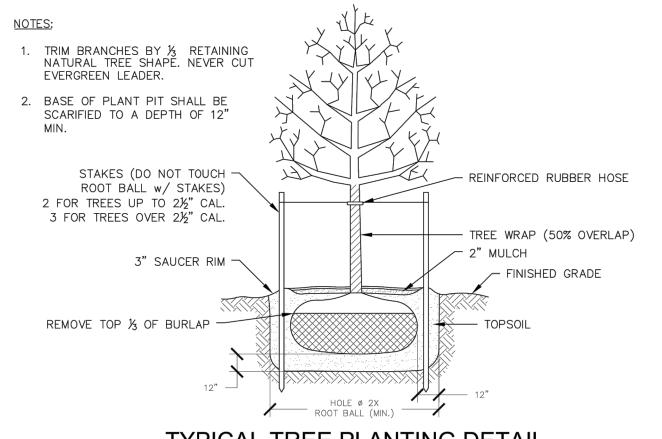
### PIPE BEDDING/ TRENCH DETAIL (WATER/STORM)



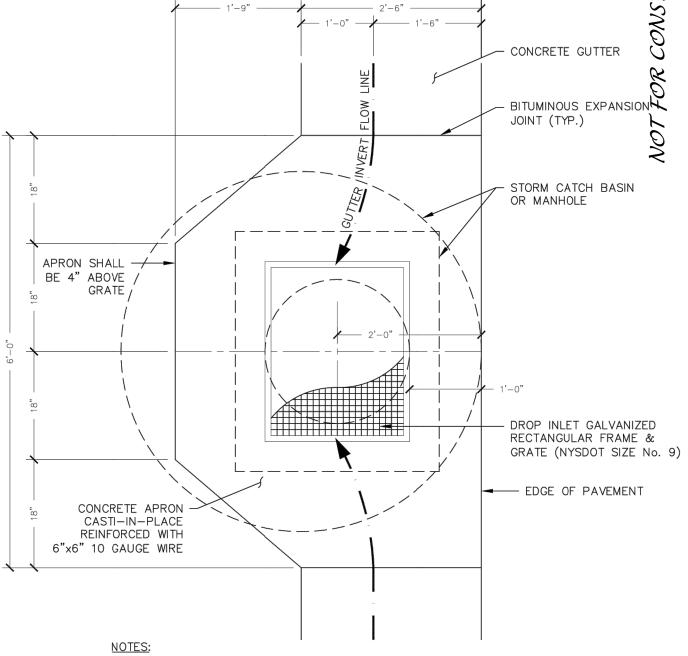
#### **GUTTER DETAIL**



#### CAST IN PLACE MOUNTABLE **CONCRETE CURB**

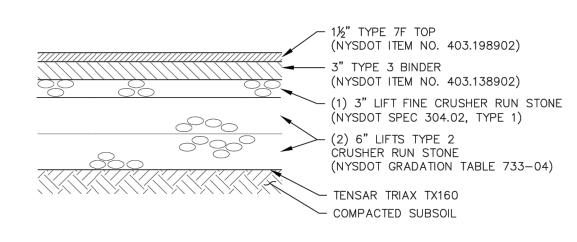


#### TYPICAL TREE PLANTING DETAIL



1. CATCH BASINS SHOULD NOT BE PLACED IN DRIVEWAY AREAS OR IN FRONT OF DRIVEWAY AREAS. 2. SPECIAL DESIGN MAY BE REQUIRED FOR STEEP GRADE SECTIONS.

#### **GUTTER AND CATCH BASIN APRON DETAIL**

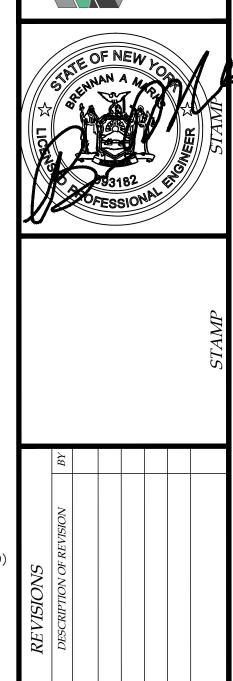


#### SUBDIVISION ROAD

#### NOTES:

- 1. ALL DEPTHS DIMENSIONS ARE COMPACTED THICKNESS.
- 2. PAVEMENT THICKNESS MAY VARY AS REQUIRED BY TOWN ENGINEER
- 3. UNDERDRAIN AS REQUIRED
- 4. IF THE SUBGRADE IS FOUND TO HAVE TOO HIGH A MOISTURE CONTENT OR PUMPING FINES, A LIGHTWEIGHT NON-WOVEN GEOTEXTILE IS TO BE USED DIRECTLY UNDER THE GEOGRID LAYER.

#### PAVEMENT CROSS SECTION



ngineering

SHC 5100 & S TOWN

DRAWN BY: KRB BAMDESIGNED BY: BAMCHECKED BY: AS NOTED SCALE. 19-094 IOB NO 01/06/2021 83.00-1-7.150 TAX MAP#: C504

**DETAILS** 

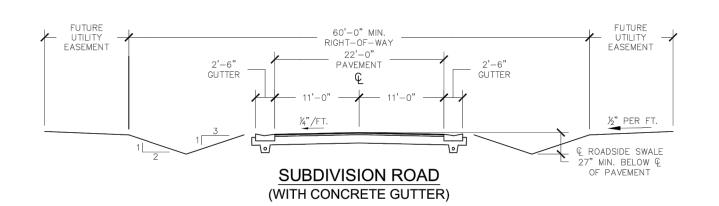
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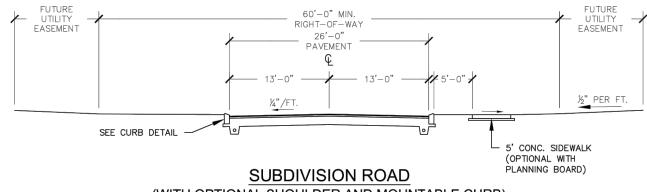
STABILIZED SHOULDER SECTION

#### CONSTRUCTION SPECIFICATIONS

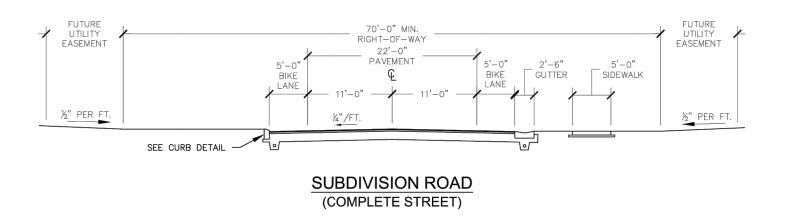
- 1. THE MATTING SHOULD BE A MINIMUM OF 4FT. WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES IN LENGTH.
- 2. ENSURE THAT THE LIP IS LEVEL TO UNIFORMLY SPREAD DISCHARGE.
- 3. THE LIP SHALL BE CONSTRUCTED ON UNDISTURBED SOIL NOT FILL.
- 4. A 20 FOOT TRANSITION SECTION WILL BE CONSTRUCTED FROM THE DIVERSION CHANNEL TO THE SPREADER TO SMOOTHLY BLEND THE DIFFERENT DIMENSION AND GRADES.
- 5. THE RUNOFF DISCHARGE WILL BE OUTLETED ONTO A STABILIZED VEGETATED SLOPE NOT EXCEEDING 10%.
- 6. SEED AND MULCH THE DISTURBED AREA IMMEDIATELY AFTER CONSTRUCTION.





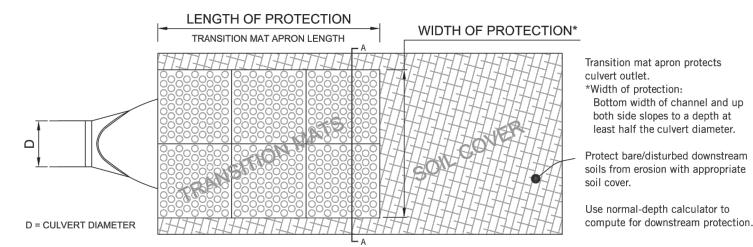


(WITH OPTIONAL SHOULDER AND MOUNTABLE CURB)

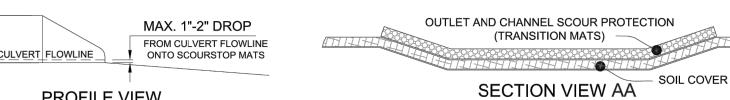


TYPICAL ROAD CROSS SECTIONS (SUBDIVISION)

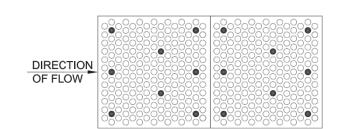
- 1. ScourStop mats must be installed over a soil cover: sod, seeded turf reinforcement mat (TRM), geotextile, or a combination thereof.
- 2. For steep slopes (>10%) or higher velocities (>10 ft/sec), sod is the recommended soil cover.
- 3. Follow manufacturer's **ScourStop Installation Guidelines** to ensure proper installation.
- 4. Install ScourStop mats at maximum 1-2" below flowline of culvert or culvert apron. (No waterfall impacts onto ScourStop mats.)
- 5. Performance of protected area assumes stable downstream conditions.



#### **CULVERT OUTLET PROTECTION - PLAN VIEW**

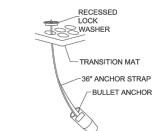


#### **PROFILE VIEW**



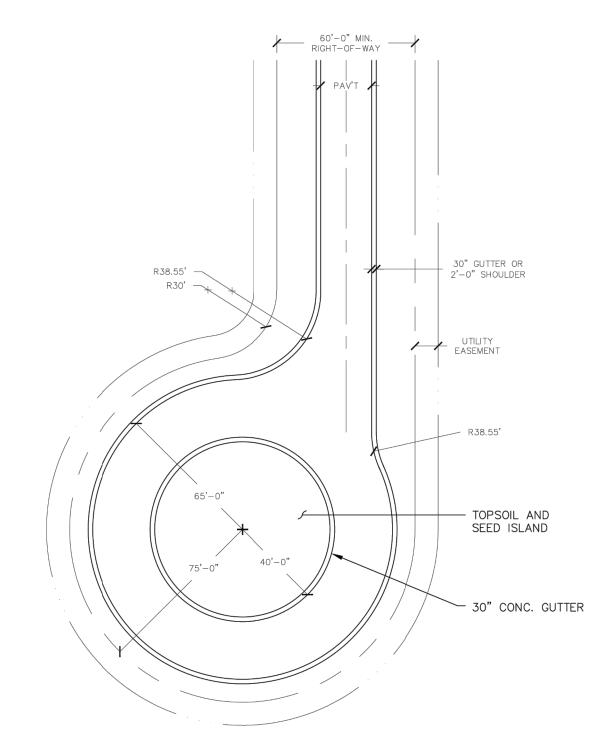
#### **ANCHOR PATTERN** Abut transition mats to end of culvert or culvert apron.

Adjacent mats abut together laterally and longitudinally. Minimum 8 anchors per mat. Extra anchors as needed for loose or wet soils. Extra anchors as needed for uneven soil surface.



#### ANCHOR ILLUSTRATION

Install anchors per ScourStop Installation Guidelines. Minimum depth 24" in compacted, cohesive soil. Minimum depth 30" in loose, sandy, or wet soil. Extra anchors as needed to secure mat tightly over soil cover.



OFFSET CUL-DE-SAC PLAN (WITH ISLAND)

MarksEngineering





DRAWING TITLE: **DETAILS** KRB

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