## LEGEND: EXISITNG ROOF LEADER LOCATION SEWER MANHOLE UNKNOWN MANHOLE GUY WIRE ANCHOR UTILITY POLE ELECTRIC BOX HYDRANT WATER VALVE ROUND DROP INLET ELECTRIC METER UTILITY POLE WITH LIGHT COMMUNICATION BOX OVERHEAD WIRES FENCE \_\_\_\_X \_\_\_\_ DROP INLET GAS METER UNKNOWN VALVE EXISTING WATER EDGE EXISTING PROPERTY LINE ---- 100-YEAR FLOOD LINE ——— 100-YEAR FLOODWAY LINE PROPOSED CLEANOUT PROPOSED HYDRANT PROPOSED WATER VALVE PROPOSED SANITARY MANHOLE PROPOSED RETAINING WALL ————— ST ————— PROPOSED CULVERT ----- PROPOSED UNDERDRAIN PROPOSED MINOR CONTOUR PROPOSED MAJOR CONTOUR PROPOSED SPOT ELEVATION EXISTING CATCH BASIN EXISTING UTILITY POLE PROPOSED CLEANOUT PROPOSED WATER SUPPLY LINE IMPERVIOUS SURFACE PROPOSED RIP RAP UTILITY CROSSING LOCATION PROPOSED ROOF LEADER PROPOSED WATER SERVICE LINE PROPOSED WATER SHUT-OFF VALVE

## INSPECTION SCHEDULE & LONG TERM MAINTENANCE OF STORMWATER STRUCTURES CATCH BASINS AND PIPING:

ALL CATCH BASINS SHALL BE INSPECTED AFTER EACH STORM EVENT FOR SEDIMENT ACCUMULATION, AND DEBRIS, AND REMOVE AS NECESSARY. WHEN SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN SUMP REACHES 1/2 OF THE SUMP DEPTH, IT SHALL BE REMOVED. ASSOCIATED PIPING SHALL BE INSPECTED ANNUALLY AND ACCUMULATED SEDIMENT SHALL BE REMOVED AS NEEDED. HYDRODYNAMIC DEVICES:

THE VORTEX UNITS SHALL BE INSPECTED QUARTERLY DURING THE FIRST YEAR OF OPERATION. THE MANUFACTURER RECOMMENDS THAT THE CDS UNITS BE INSPECTED BI-ANNUALLY (ONCE IN THE SPRING AND ONCE IN THE FALL). THE STRUCTURE SHALL BE VISUALLY INSPECTED FOR BLOCKAGES OR OBSTRUCTIONS IN THE INLET OR SEPARATION SCREEN. THE INSPECTION SHOULD ALSO QUANTIFY ACCUMULATION OF HYDROCARBONS, SEDIMENT AND TRASH WITHIN THE SYSTEM. INSPECTIONS AND MAINTENANCE SHALL BE PERFORMED BY QUALIFIED PERSONNEL WITH ADEQUATE TRAINING IN THESE TYPES OF UNITS. THE UNITS SHALL BE CLEANED BY VACUUM TRUCK ONCE A YEAR (EXCEPT FOR THE FIRST YEAR WHERE MORE FREQUENT CLEANINGS MAY BE REQUIRED).

# **INFILTRATION BASIN:**

THE INFILTRATION BASIN SHALL BE INSPECTED MONTHLY FOR SEDIMENT AND DEBRIS ACCUMULATION. INFLOW PIPES, OUTLET STRUCTURES AND SPILLWAYS SHOULD ALSO BE INSPECTED FOR SEDIMENT AND DEBRIS MONTHLY. ANY ACCUMULATED SEDIMENT OR DEBRIS SHOULD BE REMOVED AS NECESSARY. PLANTINGS SHALL BE INSPECTED MONTHLY FOR HEIGHT, FERTILIZER, QUANTITY AND UNAUTHORIZED INVASIVE OR INAPPROPRIATE SPECIES. AFTER STORM EVENTS, THE INFILTRATION BASIN DEWATERING DURATION SHOULD ALSO BE MONITORED. THE BASIN FLOOR SHALL BE MOWED AS REQUIRED; HOWEVER, THE GRASS HEIGHT SHALL NOT EXCEED 18". SEDIMENT SHALL BE CLEANED OUT OF THE INFILTRATION BASIN ANNUALLY.

#### **EXISTING UNDERGROUND UTILITY NOTES:**

1. CONTRACTOR SHALL DIG TEST PITS TO VERIFY LOCATION, SIZE AND PIPE MATERIAL OF EXISTING UNDERGROUND UTILITIES. IF ANY EXISTING UTILITIES ARE NOT IN THE LOCATION WHERE THEY ARE SHOWN ON THE PLAN, IT SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

## **GENERAL CONSTRUCTION NOTES:**

1. ALL OTHER UTILITIES (TELEPHONE, ELECTRIC, GAS, CABLE, ETC.) SHALL BE INCORPORATED PRIOR TO CONSTRUCTION. ALL SUCH UTILITY DESIGNS SHALL BE DEVELOPED IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANIES. 2. THE CONTRACTOR SHALL PERFORM A UTILITIES CALL-OUT PRIOR TO CONSTRUCTION TO VERIFY ALL UNDERGROUND UTILITY LOCATIONS BY CONTACTING UFPO @ 1-800-962-7962.

3. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND INVERTS OF ALL CATCH BASINS & STORM SEWER LINES, SANITARY MANHOLES & SEWER LINES, WATERLINES AND OTHER UNDERGROUND UTILITY LINES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOT ASSUME THAT ALL LOCATIONS AS SHOWN ON THE PLAN ARE CORRECT. INVESTIGATIVE TEST PITS MAY BE REQUIRED TO VERIFY LOCATIONS. 4. PIPE CONNECTIONS TO ALL CATCH BASINS SHALL BE MADE WATERTIGHT, WITH PARTICULAR ATTENTION BEING PAID TO CONNECTIONS LOCATED WITHIN 10 FEET OF SEWER MAINS (AND SERVICE LATERALS).

# **POST CONSTRUCTION NOTES:**

1. UPON COMPLETION OF CONSTRUCTION OF THE STORMWATER FACILITIES, AS-BUILT DRAWINGS OF ALL STORMWATER PRACTICES AND AN OPERATION AND MAINTENANCE PLAN MANUAL SHALL BE PROVIDED TO THE CITY OF BEACON.

#### WATER AND SEWER MAIN RELOCATION NOTES:

- 1. THE SECTIONS OF SEWER MAIN TO REMAIN IN-PLACE ON SITE SHALL BE TV INSPECTED AND CLEANED TO VERIFY THE CONDITION OF THE PIPE. THIS WORK SHALL BE COORDINATED WITH THE CITY ENGINEER AND SEWER DEPARTMENT. THE PIPES TO REMAIN IN-PLACE SHALL THEN BE SLIP-LINED BETWEEN EXISTING MANHOLE 11 TO PROPOSED SEWER MANHOLE 12, AND BETWEEN PROPOSED SEWER MANHOLE 14 AND EXISTING SEWER MANHOLE 15. 2. UPON COMPLETION OF CONSTRUCTION OF THE WATER AND SEWER FACILITIES, AS-BUILT DRAWINGS OF FINAL WATER AND SEWER MAIN LOCATIONS SHALL BE PROVIDED TO THE CITY OF
- 3. THE COMPLETED WATER MAIN EXTENSION AND SEWER MAIN RE-LOCATION SHALL BE CERTIFIED BY THE LICENSED PROFESSIONAL OBSERVING CONSTRUCTION TO THE CITY OF BEACON. 4. THE WATER AND SEWER MAINS SHALL BE DEDICATED TO THE CITY OF BEACON UPON ACCEPTANCE OF THE CERTIFICATION.

## **SNOW REMOVAL AND STORAGE NOTES:**

SNOW SHALL BE REMOVED WITHIN 8 HOURS AFTER A SNOW EVENT.

THE SITE OWNER WILL UTILIZE A LOADER TO MOVE SNOW TO THE AREAS DESIGNATED FOR SNOW STORAGE.

1. SITE CLEARING SHALL OCCUR BETWEEN OCTOBER 1ST THROUGH MARCH 31ST IN ACCORDANCE WITH NYSDEC REGULATIONS.

#### **ROCK REMOVAL NOTES:**

1. ROCK REMOVAL (IF NECESSARY) SHALL BE ACCOMPLISHED BY MECHANICAL METHODS AS MUCH AS POSSIBLE AND SHALL ONLY BE PERMITTED BETWEEN 8:00AM AND 5:00 PM ON ANY DAY WHICH ROCK REMOVAL IS PERMITTED.

ACCEPTABLE ROCK REMOVAL METHODS ARE RIPPING, HYDRAULIC HAMMER OR DRILLING HOLES WITH USE OF EXPANSIVE TOOLS AND/OR WEDGES. 3. IF MECHANICAL METHODS BECOME INEFFECTIVE DUE TO HARD ROCK, AND IT IS DETERMINED THAT BLASTING IS REQUIRED, IT SHALL BE BROUGHT TO THE ATTENTION OF THE CITY OF BEACON BUILDING DEPARTMENT. NO BLASTING SHALL COMMENCE UNTIL A BLASTING PROTOCOL IS SUBMITTED TO THE CITY OF BEACON BUILDING DEPARTMENT FOR REVIEW AND APPROVAL. 4. BLASTING PROTOCOL SHALL BE IN ACCORDANCE WITH \$111 OF THE CITY OF BEACON CODE.

# PRESSURE REDUCING VALVE AND BACKFLOW PREVENTION NOTES:

HYDRANT FLOW TESTS IN THE VICINITY OF THE PROJECT REVEALED STATIC PRESSURES RANGING FROM 88 PSI TO 100 PSI. THEREFORE PRESSURE REDUCING VALVES WILL BE REQUIRED AT ALL PROPOSED DOMESTIC WATER CONNECTIONS TO BUILDINGS. PRESSURE REDUCING VALVES (PRV) SHALL BE FURNISHED BY MUELLER OR WATTS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE.

SPECIFICATIONS FOR THE PROPOSED PRV SHALL BE PROVIDED TO THE CITY OF BEACON BUILDING DEPARTMENT PRIOR TO INSTALLATION. DOUBLE CHECK VALVES SHALL BE PROVIDED ON ALL SERVICE CONNECTIONS TO THE ON-SITE BUILDINGS. DOUBLE CHECK VALVES SHALL BE WATTS SERIES 909 OR APPROVED EQUAL ON DOMESTIC CONNECTIONS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE.

# **RETAINING WALL NOTES:**

1. ALL RETAINING WALLS SHOWN ON THIS PLAN SHALL BE DESIGNED BY A NEW YORK STATE LICENSED ENGINEER AND PLANS SHALL BE SUBMITTED TO THE BEACON BUILDING DEPARTMENT PRIOR TO CONSTRUCTION.

#### LOT LINE RE-ALIGNMENT NOTES:

PARCEL 6054-37-066670 (7-15 CREEK DRIVE) IS CONVEYING 14,700.76 SQFT, (0.337 AC.) TO THIS PARCEL 6054-37-037625 (23-28 CREEK DRIVE). THE RESULTANT AREA FOR PARCEL 6054-37-066670 (7-15 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±69,918.03 SQFT, OR ±1.605 AC. 3. THE RESULTANT AREA FOR PARCEL 6054-37-037625 (23-28 CREEK DRIVE) AFTER THE LOT LINE RE-ALIGNMENT IS ±136,953.88 SQFT, OR ±3.144 AC.

6. SPECIFICATIONS FOR THE PROPOSED DOUBLE CHECK VALVES SHALL BE PROVIDED TO THE CITY OF BEACON PRIOR TO INSTALLATION.

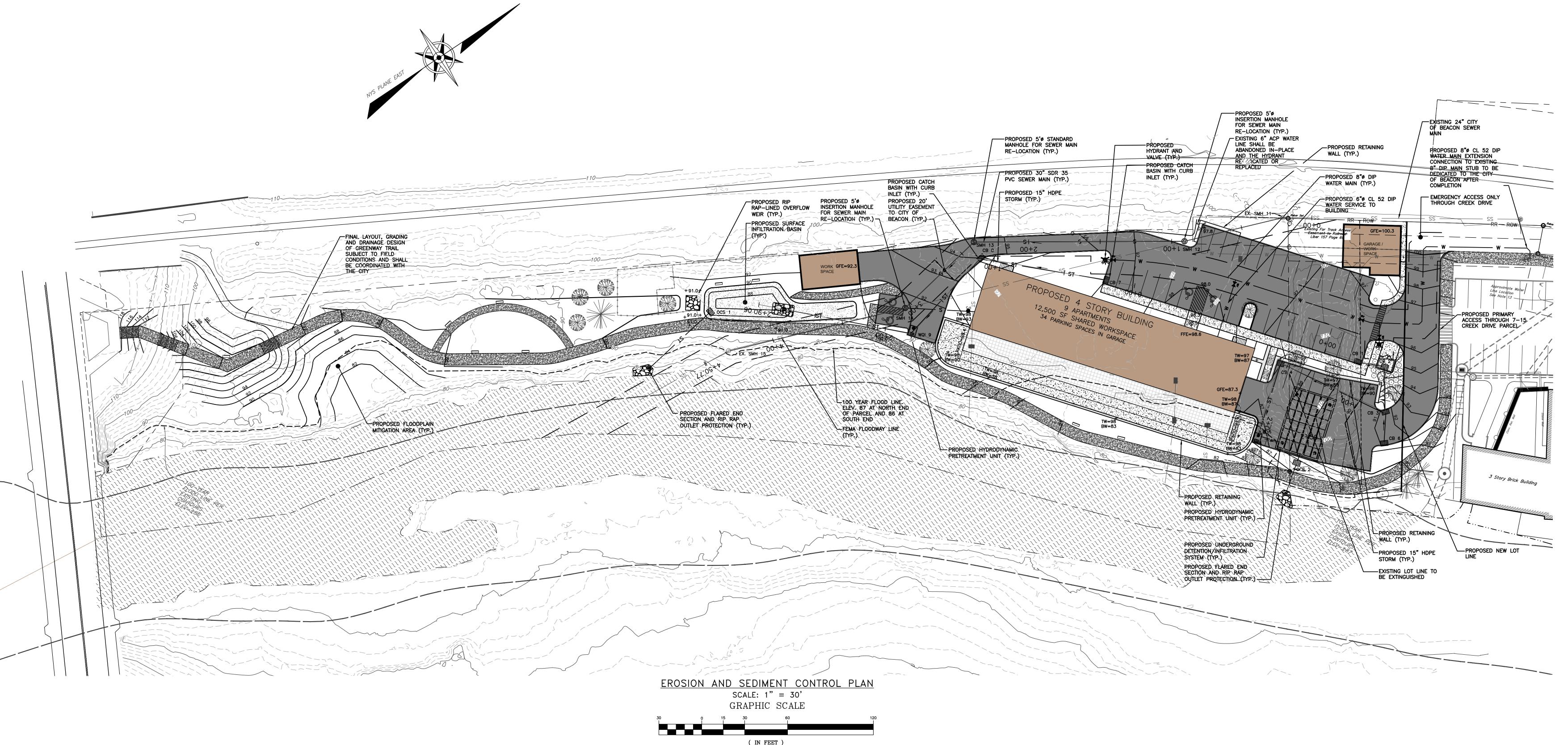
STORM SEV	WER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS	
CB1	RIM = 96.23 SUMP = 92.20 PIPE 1 INV OUT = 93.20	
CB2	RIM = 96.01 SUMP = 91.90 PIPE 1 INV IN = 93.00 PIPE 2 INV OUT = 92.90	
CB3	RIM = 91.39 SUMP = 86.70 PIPE 2 INV IN = 88.40 PIPE 6 INV IN = 87.80 PIPE 3 INV OUT = 87.70	
CB4	RIM = 86.93 SUMP = 82.90 PIPE 3 INV IN = 83.90 PIPE 4 INV OUT = 83.90	
CB6	RIM = 91.18 SUMP = 87.10 PIPE 6 INV OUT = 88.10	
WQI5	RIM = 86.96 SUMP = 82.20 PIPE 4 INV IN = 83.30 PIPE 5 INV OUT = 83.20	

STORM SEWER STRUCTURE TABLE			
STRUCTURE	STRUCTURE DETAILS		
CB7	RIM = 96.97 SUMP = 92.60 PIPE 7 INV OUT = 93.60		
CB8	RIM = 94.02 SUMP = 88.90 PIPE 7 INV IN = 91.00 PIPE 8 INV OUT = 89.90		
FES 10	RIM = 82.91 SUMP = ??? PIPE 9 INV IN = 88.00		
WQ19	RIM = 91.62 SUMP = 87.50 PIPE 8 INV IN = 88.60 PIPE 9 INV OUT = 88.50		

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE DETAILS
EX. SMH 11	RIM = 99.23 PIPE 10 INV OUT = 92.90
	RIM = 89.23
EX. SMH 15	PIPE 13 INV IN = 76.21
	RIM = 94.73 PIPE 11 INV IN = 87.00
3MIT 13	PIPE 12 INV OUT = 86.90
SMH 12	
SMH 14	RIM = 91.67 PIPE 12 INV IN = 81.90 PIPE 13 INV OUT = 81.60

STORM SEWER PIPE TABLE						
PE NAME	LENGTH	SIZE AND MATERIAL	SLOPE			
PIPE 7	89 LF	15" Ø CORR HDPE	2.91%			
PIPE 8	72 LF	15" Ø CORR HDPE	1.80%			
PIPE 9	89 LF	15" Ø CORR HDPE	0.56%			

SANITARY SEWER PIPE TABLE						
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOP			
PIPE 10	71 LF	24 inch PVC	4.25%			
PIPE 11	147 LF	24 inch PVC	1.83%			
PIPE 12	67 LF	24 inch PVC	7.51%			
PIPE 13	126 LF	24 inch PVC	4.28%			



1 inch = 30 ft.

DUTCHESS COUNTY DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH STANDARD NOTES FOR PROJECTS W/CENTRAL WATER & SEWER

THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE: "NEW YORK STATE DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS", NYSDEC "RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)."

"RECOMMENDED STANDARDS FOR WATER WORKS, (TEN STATES)." "NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION

POLICIES, PROCEDURES AND STANDARDS." "DUTCHESS COUNTY AND NEW YORK STATE SANITARY CODES."

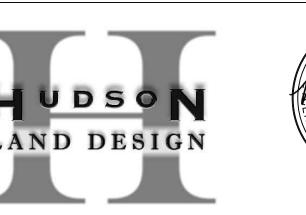
"DUTCHESS COUNTY ENVIRONMENTAL HEALTH SERVICES DIVISION CERTIFICATE OF APPROVAL LETTER." THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND WATER SUPPLY FACILITIES. UPON COMPLETION OF THE FACILITIES, THE FINISHED WORKS SHALL BE INSPECTED, TESTED, AND CERTIFIED COMPLETE TO THE OC EHSD BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SUPERVISING CONSTRUCTION. NO PART OF THE FACILITIES SHALL BE PLACED INTO SERVICE UNTIL ACCEPTED BY THE DC EHSD

APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF FIVE (5) YEARS FROM THE DATE OF APPROVAL FOLLOWING THE EXPIRATION OF SAID APPROVAL, THE PLAN(S) SHALL BE RE-SUBMITTED TO THE COMMISSIONER OF HEALTH FOR CONSIDERATION FOR RE-APPROVAL. RE-SUBMISSION OR REVISED SUBMISSION OF PLANS AND/OR ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF THE RE-SUBMISSION. NO CELLAR, FOOTING, FLOOR, GARAGE, COOLER OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE COLLECTION SYSTEM. ALL BUILDINGS SHALL BE CONSTRUCTED AT AN ELEVATION HIGH ENOUGH TO ENSURE GRAVITY FLOW TO THE SEWAGE COLLECTION SYSTEM.

ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORMWATER POLLUTION PREVENTION WATER QUALITY & QUANTITY CONTROL STRUCTURES, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS. THE DC EHSD SHALL BE NOTIFIED SIXTY DAYS PRIOR TO ANY CHANGE IN USE; USE CHANGES MAY REQUIRE RE-APPROVAL BY NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WATER SYSTEM SHALL NOT BE PLACED INTO SERVICE, UNTIL A "COMPLETED WORKS APPROVAL" IS ISSUED UNDER SECTION 5-1.22(D) OF PART 5 OF THE NEW YORK STATE SANITARY CODE (10NYCRR5). NO BUILDINGS ARE TO BE OCCUPIED AND THE NEW WASTEWATER COLLECTION SYSTEM SHALL NOT BE PLACED INTO SERVICE UNTIL, A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" IS ISSUED UNDER SECTION 19.7 OF ARTICLE 19 OF THE DUTCHESS

ALL SERVICE LINES ARE THE RESPONSIBILITY OF THE OWNER UP TO THE PROPERTY LINE. THE WATER AND SEWER COMPANIES SHALL BE RESPONSIBLE FOR ALL VALVES AND PIPES WHICH ARE NOT ON THE OWNER'S PROPERTY. THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS MAP, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

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GRADING AND UTILITY PLAN

23-28 CREEK ROAD CITY OF BEACON DUTCHESS COUNTY, NEW YORK

TAX ID: 6054-37-037625

JOB #: 2018:029 DATE: 10/23/2018 SCALE: SCALE: 1" = 30TITLE: GU-1SHEET: 7 OF 12

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209.2 OF THE NEW YORK EDUCATION LAW

BY NO. DATE DESCRIPTION DESCRIPTION REVISED FOR PLANNING BOARD SUBMISSION

CHECKED BY: DGK

**REVISIONS:** 

DRAWN BY: MAB

**REVISIONS:**