LEGEND: EXISITNG ROOF LEADER 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 REQUIRED TO VERIFY LOCATIONS. PROPOSED WATER VALVE 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). PROPOSED SANITARY MANHOLE PROPOSED RETAINING WALL ----- PROPOSED UNDERDRAIN PROPOSED ROOF LEADER PIPE PROPOSED MINOR CONTOUR PROPOSED MAJOR CONTOUR PROPOSED SPOT ELEVATION 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 EXISTING CATCH BASIN EXISTING UTILITY POLE PROPOSED CLEANOUT PROPOSED SEWER SERVICE LINE 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

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:

CHECKED BY: DGK

REVISIONS:

DESCRIPTION

BY NO. DATE

DRAWN BY: MAB

REVISIONS:

- 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.
- 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.

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

ROCK REMOVAL NOTES: 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:

DOUBLE CHECK VALVES SHALL BE PROVIDED ON ALL SERVICE CONNECTIONS TO THE ON-SITE BUILDINGS.

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 WATTS SERIES 909 OR APPROVED EQUAL ON DOMESTIC CONNECTIONS AND COORDINATED WITH THE MECHANICAL ENGINEERING CONSULTANT AS TO TYPE AND SIZE. 6. SPECIFICATIONS FOR THE PROPOSED DOUBLE CHECK VALVES SHALL BE PROVIDED TO THE CITY OF BEACON PRIOR TO INSTALLATION.

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.

STORM SEV	WER STRUCTURE TABLE		
STRUCTURE	STRUCTURE DETAILS		
CB1	RIM = 96.23 SUMP = 92.20 PIPE 1 INV OUT = 93.20		
CB2	RIM = 96.10 SUMP = 91.90 PIPE 1 INV IN = 93.00 PIPE 2 INV OUT = 92.90		
СВ3	RIM = 91.36 SUMP = 86.70 PIPE 2 INV IN = 88.40 PIPE 6 INV IN = 87.80 PIPE 3 INV OUT = 87.70		
CB4	RIM = 86.91 SUMP = 82.90 PIPE 3 INV IN = 83.90 PIPE 4 INV OUT = 83.90		
CB6	RIM = 91.14 SUMP = 87.10 PIPE 6 INV OUT = 88.10		
FES 18	RIM = 0.00 SUMP = ???		
WQI5	RIM = 86.96 SUMP = 82.20 PIPE 4 INV IN = 83.30 PIPE 5 INV OUT = 83.20		

FLARED END SECTION TABLE

SANITARY S	EWER STRUCTURE TABLE
STRUCTURE	STRUCTURE DETAILS
EX. SMH 11	RIM = 99.23 PIPE 11 INV OUT = 92.90
EX. SMH 15	RIM = 89.23 PIPE 14 INV IN = 76.21
SMH 13	RIM = 94.73 PIPE 12 INV IN = 87.00 PIPE 13 INV OUT = 86.90
SMH 12	RIM = 97.09 PIPE 11 INV IN = 89.88 PIPE 12 INV OUT = 89.70
SMH 14	RIM = 92.00 PIPE 13 INV IN = 81.90 PIPE 14 INV OUT = 81.20

DUTCHESS COUNTY DEPARTMENT OF BEHAVIORAL & COMMUNITY HEALTH

STORM SEWER STRUCTURE TABLE

STRUCTURE DETAILS

RIM = 96.97 SUMP = 92.60 PIPE 7 INV OUT = 93.60

RIM = 91.56 SUMP = 87.60 PIPE 8 INV IN = 88.70 PIPE 9 INV OUT = 88.60

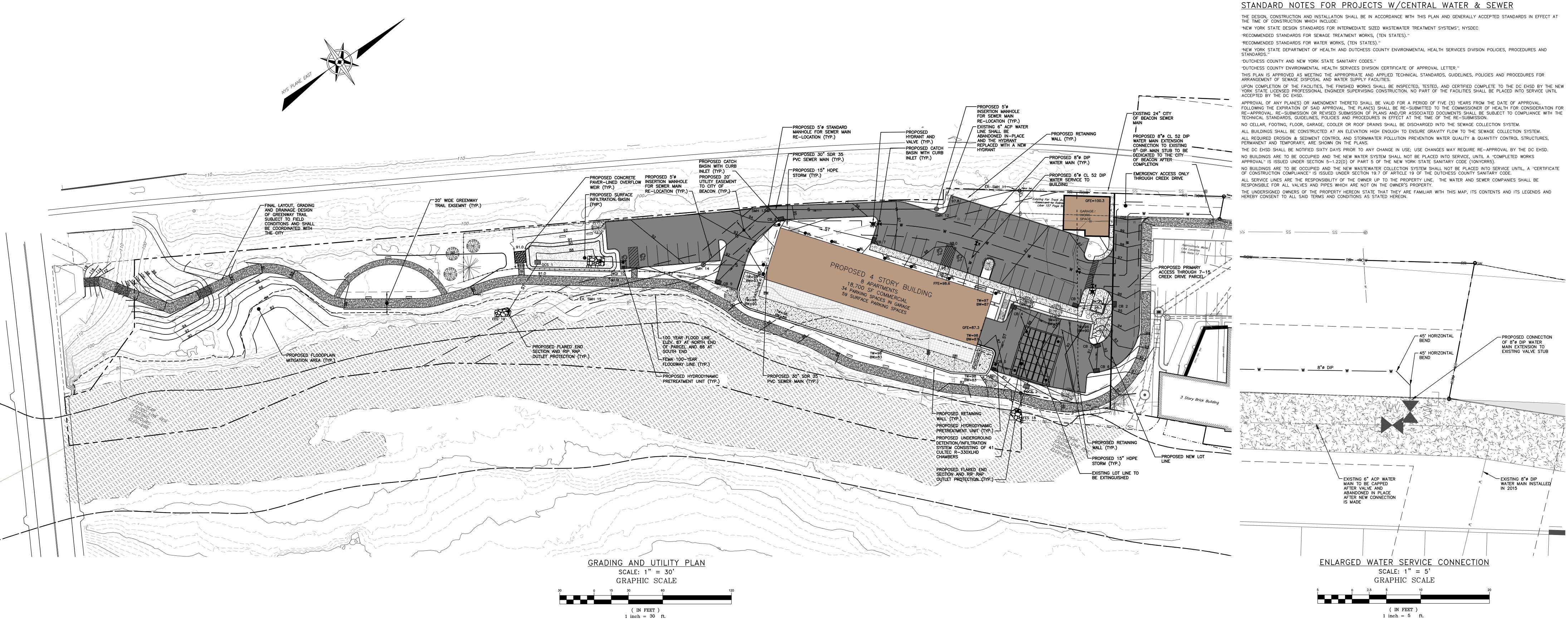
RIM = 91.52 SUMP = 87.10 PIPE 9 INV IN = 88.10 PIPE 10 INV OUT = 88.10

ST	ORM SE	WER PIPE TABLE	
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE
PIPE 1	19 LF	15" Ø CORR HDPE	1.08%
PIPE 2	31 LF	15" Ø CORR HDPE	14.61%
PIPE 3	81 LF	15" Ø CORR HDPE	4.67%
PIPE 4	57 LF	15" Ø CORR HDPE	1.05%
PIPE 5	17 LF	15" Ø CORR HDPE	1.18%
PIPE 6	22 LF	15" Ø CORR HDPE	1.37%
	-		

STORM SEWER PIPE TABLE					
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE		
PIPE 7	83 LF	15" Ø CORR HDPE	3.12%		
PIPE 8	79 LF	15" Ø CORR HDPE	1.52%		
PIPE 9	86 LF	15" Ø CORR HDPE	0.58%		
PIPE 10	16 LF	15" Ø CORR HDPE	0.62%		

SAN	SANITARY SEWER PIPE TABLE					
PIPE NAME	LENGTH	SIZE AND MATERIAL	SLOPE			
PIPE 11	71 LF	24 inch PVC	4.25%			
PIPE 12	147 LF	24 inch PVC	1.83%			
PIPE 13	74 LF	24 inch PVC	6.75%			
PIPE 14	117 LF	24 inch PVC	4.25%			

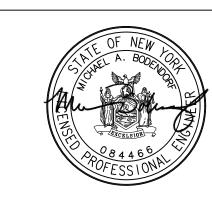
STRUCTURE STRUCTURE DETAILS FES 11 PIPE 10 INV IN = 88.00











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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: AS SHOW! TITLE: GU-1

SHEET: 7 OF 12

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