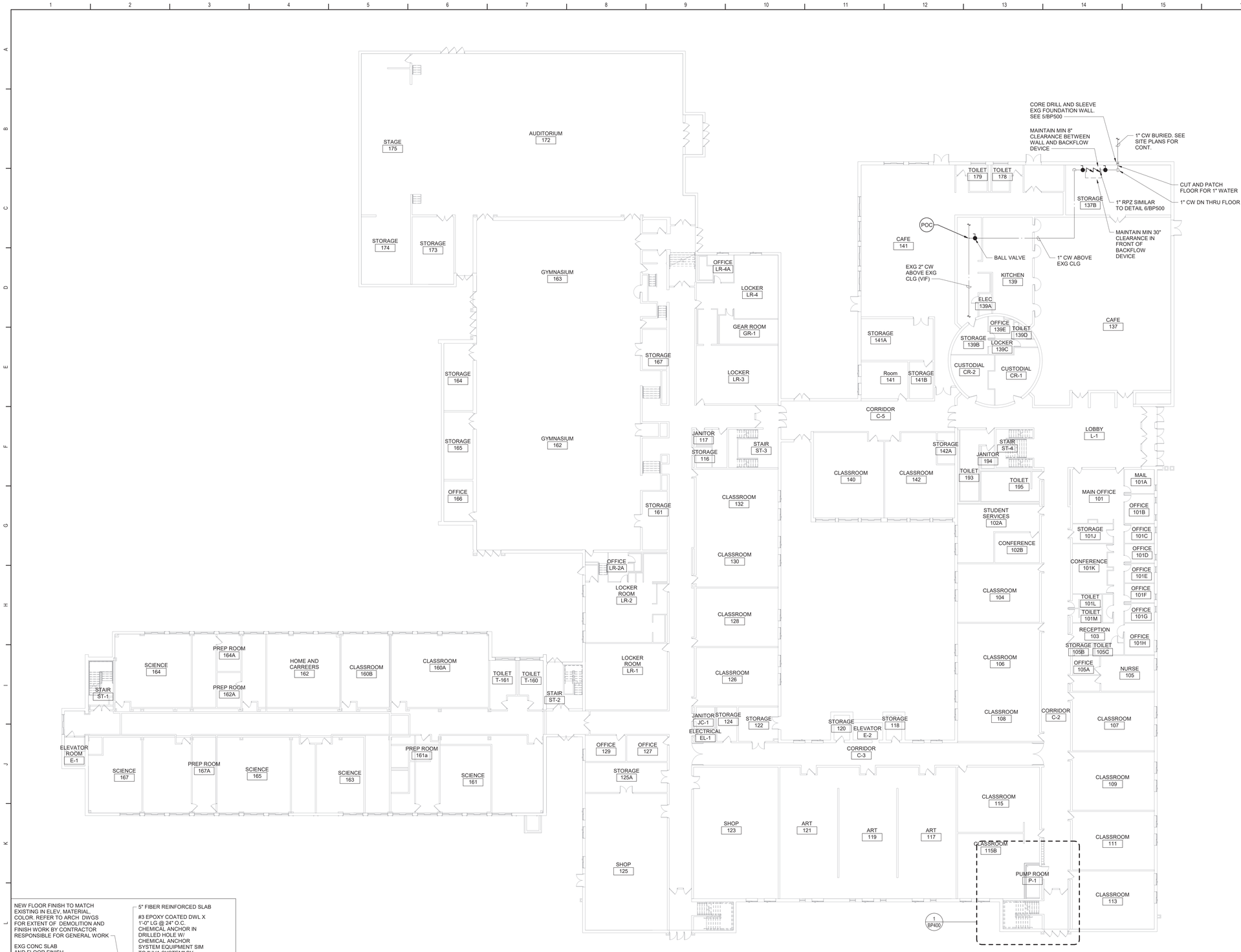
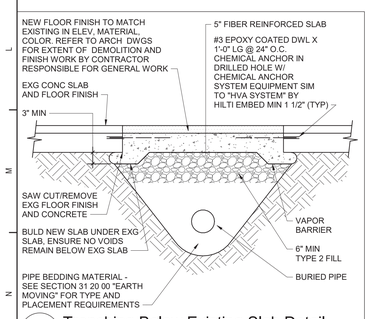
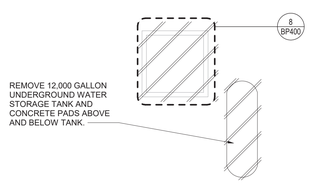


1 Second Floor Key Plan
1/16" = 1'-0"



2 Trenching Below Existing Slab Detail
NTS



General Notes

A. VERIFY ALL PIPING LOCATIONS, SIZES, AND ARRANGEMENTS IN FIELD PRIOR TO BID. NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES.

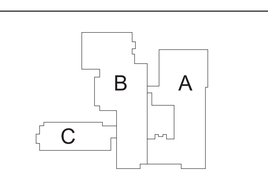
B. VERIFY IN FIELD INVERT AND DIRECTION OF FLOW IN EXISTING SOIL PIPE WHERE NEW SOIL PIPE IS TO BE CONNECTED TO EXISTING SOIL PIPE.

C. LEGALLY DISPOSE OF ALL DEMOLITION DEBRIS.

D. INCLUDE TRENCHING, CUTTING AND PATCHING OF FLOORS, WALLS AND CEILINGS, INCLUDING CEILING TILE REMOVAL AND REPLACEMENT, WHEN REQUIRED FOR PLUMBING WORK. PATCH ABANDONED OPENINGS AND DISTURBED FINISHES TO MATCH EXISTING. TAKE PRECAUTIONS TO PROTECT STRUCTURAL INTEGRITY OF FLOOR OR WALLS WHEN TRENCHING OR CUTTING.

E. MATERIALS FOR PLUMBING INSTALLATION SHALL BE NEW, UNLESS SPECIFICALLY NOTED OTHERWISE.

F. PROVIDE THROUGH PENETRATION FIRESTOPPING FOR FIRE RATED WALLS AND FLOORS. PENETRATIONS THROUGH EXISTING WALLS AND FLOORS ARE CONSIDERED TWO-HOUR PARTITIONS UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO "A" SERIES OR CODE COMPLIANCE DRAWINGS FOR LOCATION OF FIRE RATED WALLS AND FLOORS.



Key Plan
N.T.S.

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S.E.D. Control No. 48-01-01-06-0-006-013

Rev. No.:	Date:	Description:

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BID SET

Tetra Tech Engineers, Architects & Landscape Architects, P.C.

TETRA TECH ARCHITECTS & ENGINEERS

Mahopac Central School District
Mahopac, NY

Reconstruction To:
Mahopac Middle School

Second Floor Key Plan and Details

Drawn By:	Date:	Drawing Number:
DCG/ sef	08/21/20	BP050

Project No.:
121111-19002

WELL ABANDONMENT NOTES

LOCAL AND REGIONAL REGULATIONS

PRIOR TO CONDUCTING WELL DECOMMISSIONING, MUNICIPAL AUTHORITIES SHOULD BE CONTACTED TO DETERMINE IF THERE ARE LOCAL REGULATIONS REGARDING THIS ACTIVITY.

WRITTEN RECORDS

PROVIDE COMPLETE AND ACCURATE WRITTEN RECORDS OF DECOMMISSIONING OPERATIONS. THE INFORMATION TO BE RECORDED TO INCLUDE THE ORIGINAL WELL LOG AND/OR CONSTRUCTION RECORD, THE TYPE OF GROUTING MATERIAL USED, VOLUME OF MATERIAL USED, AND METHOD OF PLACING GROUTING MATERIAL INTO THE WELL. UPON DECOMMISSIONING THE WELL, THE RECORD OF SUCH ACTION TO BE TURNED OVER TO THE OWNER. OWNER WILL SEND TO THE BUREAU OF WATER RESOURCE MANAGEMENT, 625 BROADWAY, ALBANY, NY, 12233-3508.

REMOVAL OF OBSTRUCTIONS

REMOVE EQUIPMENT, MATERIALS, DEBRIS, AND OBSTRUCTIONS THAT MAY INTERFERE WITH SEALING OF THE WELL OR BORING. THIS MAY INCLUDE PUMPING EQUIPMENT, DROP PIPE, PACKERS, ETC. VERIFY IN FIELD EXACT WELL EQUIPMENT INCLUDING SCREENS, PUMPS, PIPING, TORX ARRESTORS, WIRING ETC.

DISINFECTION

DISINFECT WELL USING A SOLUTION OF CALCIUM HYPOCHLORITE, SUCH AS HTH, CONTAINING APPROXIMATELY 65% TO 75% AVAILABLE CHLORINE.

CASING

VERIFY THE DEPTH OF THE WELL. CASING WITH AN OPEN ANNULAR SPACE SHOULD BE EITHER GROUTED IN PLACE OR REMOVED. FOR BIDDING PURPOSES, WELL CASING IS ESTIMATED TO BE 6" DIAMETER AND GOES INTO THE GROUND 150 FEET.
WHERE CASING IS GROUTED IN PLACE, CASING SHOULD BE CUT OFF AND CAPPED NOT LESS THAN 5 FEET BELOW FINISHED GRADE, WHERE PRACTICABLE. FOR WELLS LOCATED IN A BUILDING, UPON COMPLETION OF GROUTING THE CASING SHOULD BE FILLED TO FLOOR LEVEL WITH NO LESS THAN 12 INCHES OF CEMENT. CASING SHOULD BE CUT OFF NOT MORE THAN 3 INCHES FROM FLOOR LEVEL. AFTER THE GROUT HAS CONSOLIDATED, THE TOP OF THE CASING TO BE CLOSED AND SEALED. STEEL CASINGS TO BE SEALED WITH A WELDED STEEL PLATE.

GROUTING OF THE WELL

THE ENTIRE CASING, INCLUDING RISER ANNULAR SPACES BETWEEN CASINGS TO BE FILLED WITH EITHER CEMENT SLURRIES OR BENTONITE.

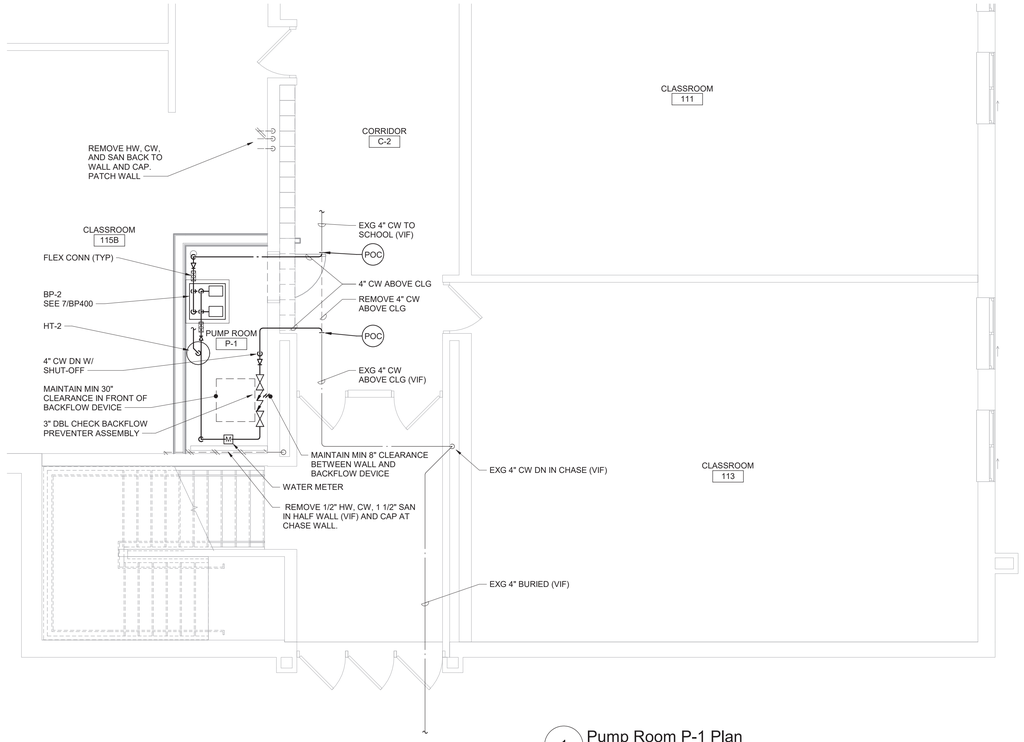
SLURRY MIXTURE AND PUMPING - WHEN A BENTONITE SLURRY, NEAT CEMENT SLURRY OR CONCRETE SLURRY IS USED, IT SHOULD BE PLACED INTO THE WELL UNDER PRESSURE VIA A TREMIE PIPE OF AT LEAST ONE INCH INSIDE DIAMETER. AT THE START OF OPERATIONS, THE TREMIE PIPE IS PLACED AT THE BOTTOM OF THE WELL TO AVOID SEGREGATION OR DILUTION OF SEALING MATERIALS. THE TREMIE PIPE TO BE SUBMERGED IN THE SLURRY AT ALL TIMES DURING SLURRY PLACEMENT. THE TREMIE PIPE MAY BE RAISED SLOWLY AS GROUT IS INTRODUCED TO THE CASING OR HOLE. PLACING OF GROUT TO BE CONTINUOUS UNTIL GROUT APPEARS AT THE TOP OF THE CASING, AT WHICH TIME THE TREMIE PIPE MAY BE REMOVED. IF THE TREMIE PIPE REMAINS AT THE BOTTOM OF THE WELL DURING GROUT EMPLACEMENT, REMOVE THE PIPE PRIOR TO GROUT HARDENING.

CEMENT SLURRIES - NEAT CEMENT OR CONCRETE SLURRIES SHOULD BE PREPARED BY ADDING CEMENT OR SAND-AND-CEMENT TO THE CALCULATED REQUIRED VOLUME OF CLEAN WATER. THE MATERIAL TO BE ADEQUATELY MIXED UNTIL IT IS FREE OF LUMPS, THEN IMMEDIATELY PUMPED INTO THE WELL WITHOUT DELAY.

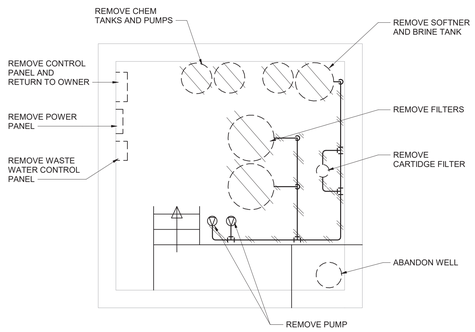
COARSE GRADE OR PELLETIZED BENTONITE - WHERE COARSE GRADE OR PELLETIZED BENTONITE IS USED, IT IS TO BE POURED SLOWLY INTO THE TOP OF THE WELL TO AVOID BRIDGING OF MATERIAL IN THE CASING OR BOREHOLE. PELLETS OR COARSE BENTONITE TO BE PLACED INTO THE WELL BY POURING AT AN EVEN RATE NOT TO EXCEED FIFTY POUNDS PER FIVE MINUTE INTERVAL. FINE BENTONITE PARTICLES WHICH ACCUMULATE IN THE BOTTOM OF THE SHIPPING CONTAINER ARE NOT BE USED. A WORK PIPE OR WEIGHTED DROP STRING TO BE PLACED IN THE WELL AND THE HEIGHT OF ACCUMULATED PLUGGING MATERIAL MEASURED AFTER EACH 50 POUNDS OF BENTONITE IS PLACED IN THE WELL. IF MEASUREMENT INDICATES THAT BRIDGING OF PLUGGING MATERIAL HAS OCCURRED, A WORK PIPE, DRILL RODS, OR OTHER WEIGHTED DEVICE TO BE RUN INTO THE CASING TO BREAK THE BRIDGE. THE PLUGGING OPERATION TO CONTINUE UNTIL THE BENTONITE APPEARS AT THE SURFACE. WATER IS THEN BE PLACED INTO THE CASING TO PROMOTE EXPANSION OF THE BENTONITE ABOVE THE STATIC WATER LEVEL.

ADDITIONAL SEALING RECOMMENDATIONS FOR WELLS OR BORINGS IN UNCONSOLIDATED MATERIALS.

IT IS RECOMMENDED THAT THE PORTION OF A WELL ADJACENT TO UNCONSOLIDATED MATERIAL BE FILLED WITH BENTONITE GROUT, HIGH SOLIDS BENTONITE GROUT, OR NEAT CEMENT GROUT. CONCRETE GROUT IS MOST APPROPRIATE FOR GROUTING IN THE DRY PORTION OF THE HOLE.



1 Pump Room P-1 Plan
1/4" = 1'-0"



8 Pump House Demolition Plan
1/4" = 1'-0"

Domestic Water Booster Pump Schedule

DWG LABEL	LOCATION	DESIGN MAKE AND MODEL	TOTAL CAPACITY	TOTAL DYNAMIC HEAD	MAX CONT OPERATING TEMP	INLET / OUTLET SIZE	RPM	HORSE POWER	FULL LOAD AMPS	VOLTAGE	PHASE	HERTZ	NOTES
			GPM	FEET	°F	NPS							
BP-2	PUMP ROOM P-1	GRUNDFOS HYDRO MULTI-B/E 2 CME10-2	100	110	104	2.5	3450	3	16.6	208	3	60	1, 2

NOTES:

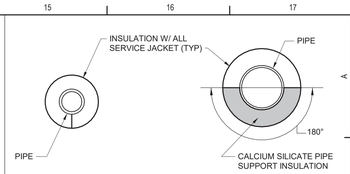
1. PACKAGED DUPLEX BOOSTER PUMP SYSTEM WITH VARIABLE FREQUENCY DRIVES AND DUPLEX CONTROL PANEL MOUNTED ON A SKID.
2. EACH PUMP SIZED FOR 75% OF TOTAL SYSTEM CAPACITY.

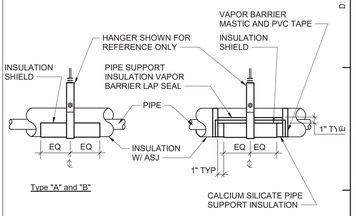
Hydropneumatic Tank Schedule

DRAWING LABEL	LOCATION	MAKE AND MODEL NUMBER	TOTAL STORAGE CAPACITY (GALLONS)	MAXIMUM ACCEPTANCE VOLUME - GALLONS	WATER SERVICE PRESSURE (PSI)	MAXIMUM ALLOWABLE PRESSURE (PSI)	DIAMETER (INCHES)	HEIGHT (INCHES)	CONNECTION (NPT)	NOTES
HT-2	PUMP ROOM P-1	JOHN WOOD NO. JAPR 20-602	15	39.7	60	150	12	33 1/2	1	1, 2

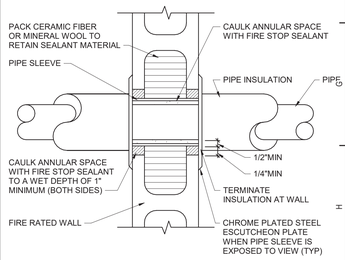
NOTES:

1. REPLACEABLE BUTYL BLADDER (FDA APPROVED).
2. ASME CONSTRUCTION.

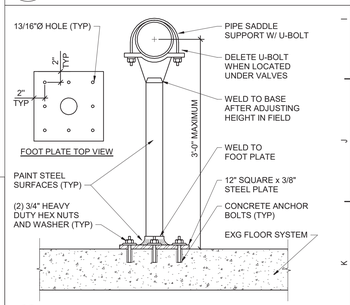




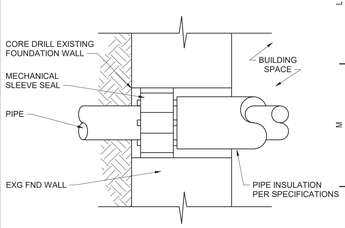
2 Insulated Piping Support Assemblies
NTS



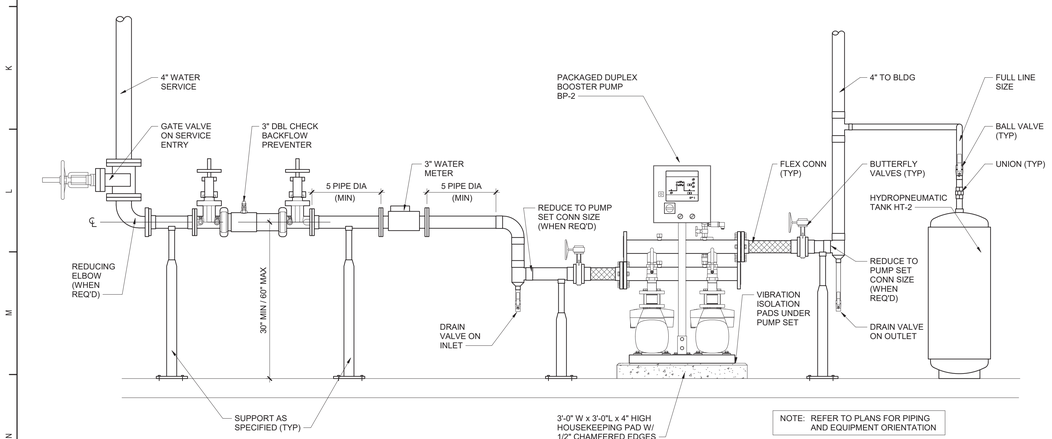
3 Fire Rated CMU Wall Pipe Sleeve Detail
NTS



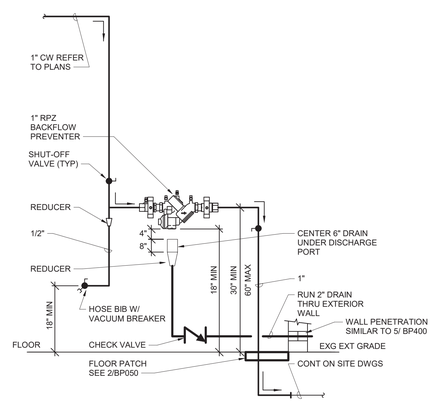
4 Pipe Stand Detail
NTS



5 Existing Foundation Penetration Detail
NTS



7 Duplex Booster Pump System Schematic
NTS



6 Yard Hydrant Backflow Preventer Detail
NTS

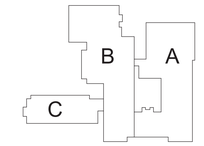
Plan Notes

A. REFER TO DRAWING NO. BP050 FOR GENERAL NOTES.

B. REMOVE PLUMBING FIXTURES INDICATED, INCLUDING ASSOCIATED PIPING, FASTENERS, SUPPORTS, ETC., BACK TO POINTS OF CONCEALMENT WITHIN OR BEHIND REMAINING WALLS, BELOW FLOORS OR ABOVE CEILINGS.

C. REPLACE OR RELOCATE PLUMBING FIXTURE INDICATED. MODIFY AND EXTEND EXISTING PIPING AS REQUIRED TO MEET FIXTURE MFR'S ROUGH-IN RECOMMENDATIONS AND TO MAKE CONNECTIONS. CONCEAL PIPING WITHIN OR BEHIND WALLS, BELOW FLOORS OR ABOVE CEILINGS. PATCH DISTURBED FINISHES TO MATCH EXISTING UNLESS SPECIFICALLY NOTED OTHERWISE. REFER TO "A" SERIES DWGS FOR EXACT LOCATION AND RIM ELEVATION OF NEW OR RELOCATED FIXTURES.

D. REMOVE ABANDONED ACCESSIBLE PIPING TO MAIN BRANCHES, STACKS OR RISERS AS REQUIRED TO ELIMINATE EXPOSED PIPING AND DEAD END PIPING RUNS LONGER THAN 1'-0". COORDINATE CONCEALMENT OF PIPING WITH FINAL CONSTRUCTION OF WALLS, FLOORS AND CEILINGS.



Key Plan
N.T.S.

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S.E.D. Control No. 48-01-01-06-0-006-013

Rev. No.:	Date:	Description:

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Tetra Tech Engineers, Architects & Landscape Architects, P.C.

BID SET

TETRA TECH
ARCHITECTS & ENGINEERS

Mahopac Central School District
Mahopac, NY

Reconstruction To:
Mahopac Middle School

Enlarged Plans, Details and Schedule

Drawn By:	Date:	Drawing Number:
DCG/ sef	08/21/20	BP400

Project No.: 121111-19002