

CHAPPAQUA CENTRAL SCHOOL DISTRICT

DISTRICT-WIDE CAPITAL IMPROVEMENTS -NEW CONSTRUCTION & ATHLETIC UPGRADES

66 Roaring Brook Rd Chappaqua, NY 10514

ISSUE FOR BID SEPTEMBER 16, 2024

DISTRICT-WIDE CAPITAL IMPROVEMENTS -NEW CONSTRUCTION & ATHLETIC UPGRADES

NYSED Project Control No. 66-10-04-06-0-015-023 66-10-04-06-7-052-001 66-10-04-06-7-027-002 (DEMO) 66-10-04-06-0-026-002 (DEMO)

66-10-04-06-0-036-007 KG+D Project No.

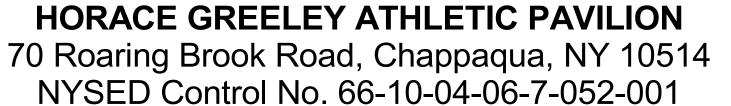
DESIGN TEAM

CONSTRUCTION DOCUMENTS

HORACE GREELEY HIGH SCHOOL

70 Roaring Brook Road, Chappaqua, NY 10514 NYSED Control No. 66-10-04-06-0-015-023







SEVEN BRIDGES MIDDLE SCHOOL 222 Seven Bridges Road, Chappaqua, NY 10514 NYSED Control No. 66-10-04-06-0-036-007

-J BRIDGE LOCATION ATHLETIC PAVILION, CONCESSION STAND DEMO & OBSERVATORY DEMO

LIST OF DRAWINGS

CODE COMPLIANCE

CODE COMPLIANCE

CIVIL C100-SB SEVEN BRIDGES MIDDLE SCHOOL SITE IMPROVEMENT PLAN SEVEN BRIDGE MIDDLE SCHOOL SITE DETAILS C301-SB C100-HG HORACE GREELEY HIGH SCHOOL SITE IMPROVEMENT PLAN

HORACE GREELEY HIGH SCHOOL SITE PART PLANS HORACE GREELEY HIGH SCHOOL SITE DETAILS HORAGE GREELEY HIGH SCHOOL SITE DETAILS C302-HG

STRUCTURAL

CC002

GENERAL NOTES & MATERIAL SPECIFICATIONS

HORACE GREELEY F-J BRIDGE PARTIAL FOUNDATION, FLOOR & ROOF PLAN

HGHS ATHLETIC PAVILION (FOR REFERENCE - DETAIL DRAWINGS & SPECIFICATIONS TAKE PRECEDENCE OVER ARTISTIC RENDERING

S210-HG

GENERAL NOTES & MATERIAL SPECIFICATIONS FIRST FLOOR SLAB-ON-GRADE & FOUNDATION PLAN

MEZZANINE & LOW ROOF FRAMING PLAN S103-AP ROOF FRAMING PLAN

FOUNDATION SCHEDULES & TYPICAL DETAILS FOUNDATION SCHEDULES & TYPICAL DETAILS ATHLETIC PAVILION FOUNDATION SECTIONS ATHLETIC PAVILION FRAMING SECTIONS S310-AP MASONRY SCHEDULE & TYPICAL DETAILS

ARCHITECTURAL

A301-HG HORACE GREELEY F-J BRIDGE PLANS

A302-HG HORACE GREELEY F-J BRIDGE ELEVATIONS & SECTIONS HORACE GREELEY F-J BRIDGE CEILING PLANS & DETAILS

ATHLETIC PAVILION PLANS A401-AP

ATHLETIC PAVILION PLANS & ELEVATIONS ATHLETIC PAVILION SCHEDULES & DETAILS

ATHLETIC PAVILION FLOOR PLANS

MECHANICAL

LEGEND, NOTES & ABBREVIATIONS ATHLETIC PAVILION FLOOR PLANS (NEW WORK)

SCHEDULES & DETAILS

ELECTRICAL

LEGENDS, NOTES & ABBREVIATIONS ATHLETIC PAVILION POWER & LIGHTING PLAN

ATHLETIC PAVILION SITE PLAN HORACE GREELEY F-J BRIDGE LIGHTING & FA PLAN

ATHLETIC PAVILION RISER & SCHEDULE

DETAILS

Sheet total: 37

PROJECT SCOPE DESCRIPTION

-300sf CONCESSION STAND (CS)

-265sf OBSERVATORY (OB)

NEW CONSTRUCTION HGHS ATHLETIC PAVILION -2,910sf FIELD RESTROOM, SNACK STAND & STORAGE BUILDING -RECONSTRUCTION OF F-J BRIDGE

SEVEN BRIDGES MIDDLE SCHOOL BASEBALL FIELD UPGRADES **ARCHITECT**

KG+D Architects, PC

285 Main Street Mount Kisco, NY 10549 phone: 914,666,5900

CIVIL ENGINEER

DTS Provident Design Engineering, LLP

One North Broadway White Plains, NY 10601 phone: 914.428.0010

STRUCTURAL ENGINEER

The Di Salvo Engineering Group, Inc

93 Lake Avenue, Suite 201 Danbury, CT 06810 phone: 203.490.4140

SYSTEMS ENGINEER

Barile Gallagher & Associates Consulting Engineers, PC

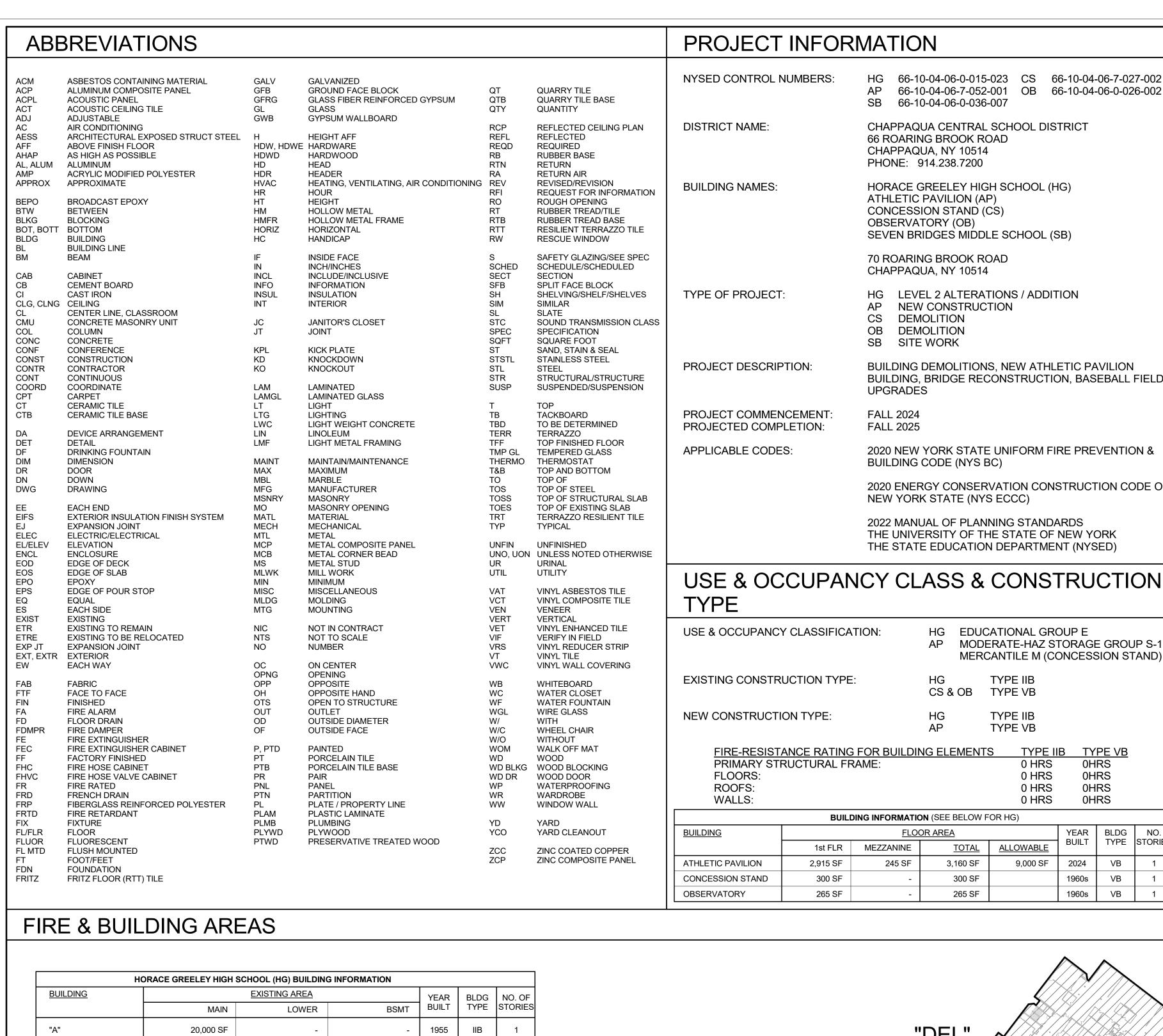
39 Marble Avenue Pleasantville, NY 10570 phone: 914.328.6060

SPECIFICATIONS CONSULTANT Sue McClymonds

200 Robb Road Amsterdam, NY 12010 phone: 518.843.4054

COVER

G000



FIRE & SMOKE PROTECTION FEATURES

ALL BUILDINGS ARE UNSPRINKLERED EXCEPT BUILDING "M" & GREENHOUSE

1 HOUR

FIRE-RESISTANCE <u>ASSEMBLY</u>

66-10-04-06-0-015-023 CS 66-10-04-06-7-027-002

66-10-04-06-7-052-001 OB 66-10-04-06-0-026-002

HG

SB 66-10-04-06-0-036-007

66 ROARING BROOK ROAD

CHAPPAQUA, NY 10514

ATHLETIC PAVILION (AP)

CONCESSION STAND (CS)

70 ROARING BROOK ROAD

AP NEW CONSTRUCTION

BUILDING CODE (NYS BC)

NEW YORK STATE (NYS ECCC)

HG

HG

BUILDING INFORMATION (SEE BELOW FOR HG)

245 SF

1st FLR MEZZANINE

2,915 SF

300 SF

265 SF

CS & OB

2022 MANUAL OF PLANNING STANDARDS

THE UNIVERSITY OF THE STATE OF NEW YORK

THE STATE EDUCATION DEPARTMENT (NYSED)

HG EDUCATIONAL GROUP E

TYPE IIB

TYPE VB

TYPE IIB

TYPE VB

TOTAL ALLOWABLE

300 SF

265 SF

0 HRS

0 HRS

9,000 SF

MODERATE-HAZ STORAGE GROUP S-1

MERCANTILE M (CONCESSION STAND)

UHKS

0HRS

2024 VB

1960s VB

1960s

YEAR | BLDG | NO.

BUILT | TYPE |STORIES

CHAPPAQUA, NY 10514

CS DEMOLITION

OB DEMOLITION

SB SITE WORK

UPGRADES

FALL 2024

FALL 2025

PHONE: 914.238.7200

OBSERVATORY (OB)

CHAPPAQUA CENTRAL SCHOOL DISTRICT

HORACE GREELEY HIGH SCHOOL (HG)

SEVEN BRIDGES MIDDLE SCHOOL (SB)

HG LEVEL 2 ALTERATIONS / ADDITION

BUILDING DEMOLITIONS, NEW ATHLETIC PAVILION

BUILDING, BRIDGE RECONSTRUCTION, BASEBALL FIELD

2020 NEW YORK STATE UNIFORM FIRE PREVENTION &

2020 ENERGY CONSERVATION CONSTRUCTION CODE OF

FIRE BARRIER 2 HOURS (NYS BC TABLE 508.4, 509, 707.3.10) (NYS BC 713.2, 1023.2, 3002.1, 3005.4) **(SED S104-2)

BOILER ROOMS* BASEMENTS** TRANSFORMER ROOMS INT EXIT STAIRWAYS ≥4 STORIES SHAFTS ≥4 STORIES

INT EXIT STAIRWAYS <4 STORIES SHAFTS <4 STORIES STORAGE ROOMS > 100SF **ELEVATOR SHAFT <4 STORIES ELEV MACHINE ROOM <4 STORIES**

RATED FLR/CEILING ASSEMBLIES

FIRE PUMP ROOM

LOCATION

FIRE PARTITION 1 HOUR (UNSPRINKLERED) CORRIDOR & SMOKE STOPS

HORIZONTAL SEPARATION 2 HOUR

*** SEE DWG CC001 FOR FIRE-RESISTANCE-RATED CONSTRUCTION LOCATIONS ***

ACCESSIBILITY

ACCESSIBILITY INFORMATION

ACCESSIBLE ROUTE ACCESSIBLE EXITS / ENTRANCES PARKING FACILITIES TOILET FACILITIES EVERY FLOOR WORKSTATIONS IN ALL CLASSROOMS **SIGNAGE**

SITE PLAN N/A THIS PROJECT N/A THIS PROJECT **SPECIFICATIONS VERTICAL ACCESS / ELEVATOR** DOOR APPROACH CLEARANCES DOOR HARDWARE

N/A THIS PROJECT **FLOOR PLANS SPECIFICATIONS**

ENERGY CONSERVATION CODE COMPLIANCE

COUNTY **CLIMATE ZONE:**

OPAQUE THERMAL ENVELOPE REQUIREMENTS: ROOF - INSULATION ENTIRELY ABOVE DECK WALLS. ABOVE GRADE - MASS WALLS, ABOVE GRADE - METAL FRAMED WALLS. BELOW GRADE - MASS FLOORS - MASS

SLAB-ON-GRADE FLOORS - UNHEATED **OPAQUE DOORS - SWINGING**

ENVELOPE FENESTRATION: FIXED FENESTRATION OPERABLE FENESTRATION ENTRANCE DOOR SHGC - PF < 0.2

<u>DWG SHOWN</u>

CC001, FLOOR PLAN

CC001, FLOOR PLAN

TABLE C402.1.3-4 R-30ci R-9.5ci, U-0.104 MAX R-13 + R-7.5ci R-7.5ci R-10ci R-10 FOR 24" BELOW

ADDITIC

WESTCHESTER COUNTY

TABLE 402.4 U-0.38 U-0.45 U-0.77 U-0.36

UNIFORM SAFETY STANDARDS FOR SCHOOL CONSTRUCTION AND MAINTENANCE PROJECTS

THE OCCUPIED PORTION OF THE EXISTING SCHOOL BUILDING SHALL ALWAYS COMPLY WITH THE MINIMUM REQUIREMENTS NECESSARY TO MAINTAIN A CERTIFICATE OF OCCUPANCY.

ALL SCHOOL AREAS TO BE DISTURBED DURING RENOVATION OR DEMOLITION HAVE BEEN OR WILL BE TESTED FOR LEAD AND

GENERAL SAFETY AND SECURITY STANDARDS FOR CONSTRUCTION PROJECTS

- ALL CONSTRUCTION MATERIALS SHALL BE STORED IN A SAFE AND SECURE MANNER FENCES AROUND CONSTRUCTION SUPPLIES OR DEBRIS SHALL BE MAINTAINED.
- GATES SHALL ALWAYS BE LOCKED UNLESS A WORKER IS IN ATTENDANCE TO PREVENT UNAUTHORIZED ENTRY. DURING EXTERIOR RENOVATION WORK, OVERHEAD PROTECTION SHALL BE PROVIDED FOR ANY SIDEWALKS OR AREAS IMMEDIATELY BENEATH THE WORK SITE OR SUCH AREAS SHALL BE FENCED OFF AND PROVIDED WITH
- WARNING SIGNS TO PREVENT ENTRY. WORKERS SHALL BE REQUIRED TO WEAR PHOTO-IDENTIFICATION BADGES AT ALL TIMES FOR IDENTIFICATION AND SECURITY PURPOSES WHILE WORKING AT OCCUPIED SITES.

SEPARATION OF CONSTRUCTION AREAS FROM OCCUPIED SPACES:

CONSTRUCTION AREAS WHICH ARE UNDER THE CONTROL OF A CONTRACTOR AND THEREFORE NOT OCCUPIED BY DISTRICT STAFF OR STUDENTS SHALL BE SEPARATED FROM OCCUPIED AREAS. PROVISIONS SHALL BE MADE TO PREVENT THE PASSAGE OF DUST AND CONTAMINANTS INTO OCCUPIED PARTS OF THE BUILDING. PERIODIC INSPECTION AND REPAIRS OF THE CONTAINMENT BARRIERS MUST BE MADE TO PREVENT EXPOSURE TO DUST OR CONTAMINANTS. GYPSUM BOARD MUST BE USED IN EXIT WAYS OR OTHER AREAS THAT REQUIRE FIRE RATED SEPARATION. HEAVY DUTY PLASTIC SHEETING MAY BE USED ONLY FOR A VAPOR, FINE DUST OR AIR INFILTRATION BARRIER, AND SHALL NOT BE USED TO SEPARATE OCCUPIED SPACES FROM CONSTRUCTION AREAS.

- A SPECIFIC STAIRWELL AND/OR ELEVATOR SHOULD BE ASSIGNED FOR CONSTRUCTION WORKER USE DURING WORK HOURS. IN GENERAL, WORKERS MAY NOT USE CORRIDORS, STAIRS OR ELEVATORS DESIGNATED FOR STUDENTS OR SCHOOL STAFF.
- LARGE AMOUNTS OF DEBRIS MUST BE REMOVED BY USING ENCLOSED CHUTES OR A SIMILAR SEALED SYSTEM. THERE SHALL BE NO MOVEMENT OF DEBRIS THROUGH HALLS OF OCCUPIED SPACES OF THE BUILDING. NO MATERIAL SHALL BE DROPPED OR THROWN OUTSIDE THE WALLS OF THE BUILDING
- ALL OCCUPIED PARTS OF THE BUILDING AFFECTED BY RENOVATION ACTIVITY SHALL BE CLEANED AT THE CLOSE OF EACH WORKDAY. SCHOOL BUILDINGS OCCUPIED DURING A CONSTRUCTION PROJECT SHALL MAINTAIN REQUIRED HEALTH, SAFETY AND EDUCATIONAL CAPABILITIES AT ALL TIMES THAT CLASSES ARE IN SESSION.

A PLAN DETAILING HOW EXITING REQUIRED BY THE APPLICABLE BUILDING CODE WILL BE MAINTAINED

A PLAN DETAILING HOW ADEQUATE VENTILATION WILL BE MAINTAINED DURING CONSTRUCTION.

CONSTRUCTION AND MAINTENANCE OPERATIONS SHALL NOT PRODUCE NOISE IN EXCESS OF 60 DBA IN OCCUPIED SPACES OR SHALL BE SCHEDULED FOR TIMES WHEN THE BUILDING OR AFFECTED BUILDING SPACES ARE NOT OCCUPIED OR ACOUSTICAL ABATEMENT MEASURES SHALL BE TAKEN.

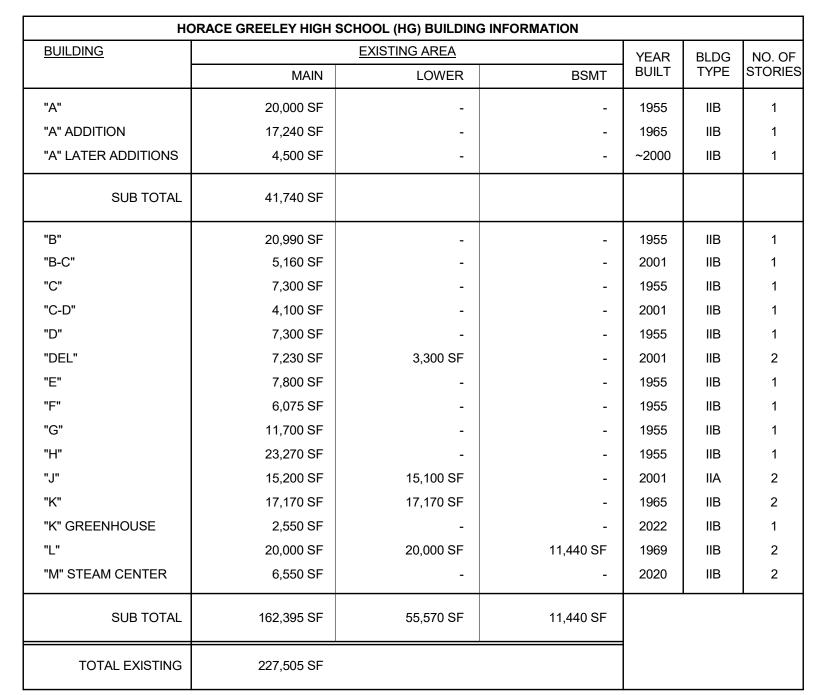
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF CHEMICAL FUMES, GASES, AND OTHER CONTAMINATES PRODUCED BY WELDING, GASOLINE OR DIESEL ENGINES, ROOFING, PAVING, PAINTING, ETC. TO ENSURE THEY DO NOT ENTER OCCUPIED PORTIONS OF THE BUILDING OR AIR INTAKES.

THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ACTIVITIES AND MATERIALS WHICH RESULT IN "OFF-GASSING" OF VOLATILE ORGANIC COMPOUNDS SUCH AS GLUES, PAINTS, FURNITURE, CARPETING, WALL COVERING, DRAPERY, ETC. ARE SCHEDULED. CURED OR VENTILATED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS BEFORE A SPACE CAN BE

LARGE AND SMALL ASBESTOS ABATEMENT PROJECTS AS DEFINED BY 12NYCRR56 SHALL NOT BE PERFORMED WHILE THE BUILDING IS OCCUPIED". NOTE, IT IS OUR INTERPRETATION THAT THE TERM "BUILDING", AS REFERENCED IN THIS SECTION, MEANS A WING OR MAJOR SECTION OF A BUILDING THAT CAN BE COMPLETELY ISOLATED FROM THE REST OF THE BUILDING WITH SEALED NON COMBUSTIBLE CONSTRUCTION. THE ISOLATED PORTION OF THE BUILDING MUST CONTAIN EXITS THAT DO NOT PASS THROUGH THE OCCUPIED PORTION AND VENTILATION SYSTEMS MUST BE PHYSICALLY SEPARATED AND SEALED AT THE

EXTERIOR WORK SUCH AS ROOFING, FLASHING, SIDING, OR SOFFIT WORK MAY BE PERFORMED ON OCCUPIED BUILDINGS PROVIDED PROPER VARIANCES ARE IN PLACE AS REQUIRED. AND COMPLETE ISOLATION OF VENTILATION SYSTEMS AND AT WINDOWS IS PROVIDED. CARE MUST BE TAKEN TO SCHEDULE WORK SO THAT CLASSES ARE NOT DISRUPTED BY NOISE OR

SURFACES THAT WILL BE DISTURBED BY RECONSTRUCTION MUST HAVE A DETERMINATION MADE AS TO THE PRESENCE OF LEAD PROJECTS WHICH DISTURB SURFACES THAT CONTAIN LEAD SHALL HAVE IN THE SPECIFICATIONS A PLAN PREPARED BY A CERTIFIED LEAD RISK ASSESSOR OR SUPERVISOR WHICH DETAILS PROVISIONS FOR OCCUPANT PROTECTION, WORKSITE PREPARATION, WORK METHODS, CLEANING AND CLEARANCE TESTING WHICH ARE IN GENERAL ACCORDANCE WITH THE HUD



PLUMBING FIXTURE COUNT (CLASSIFICATION: ASSEMBLY - BLEACHERS) PCNYS TABLE 403.1

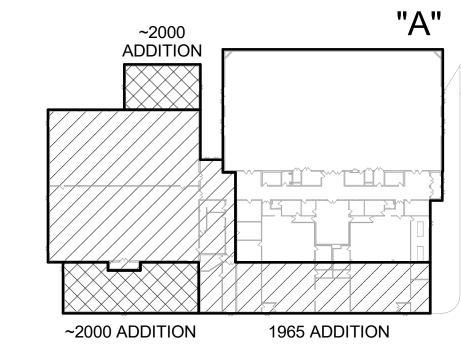
HOME BLEACHER: 1,240 NET 18" SEATS, 12 NET 33" ADA SPACES = 1,252 TOTAL OCC

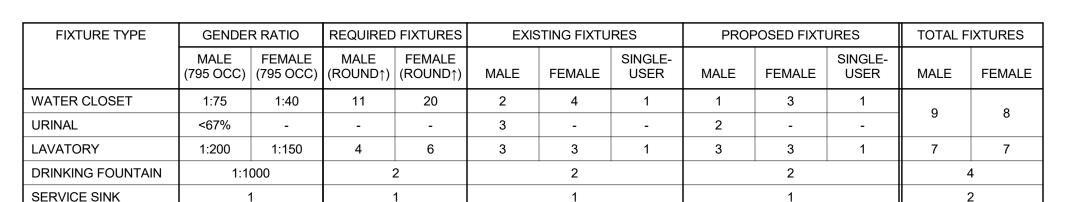
AWAY BLEACHER: 331 NET 18" SEATS. 6 NET 36" ADA SPACES = 337 TOTAL OCC

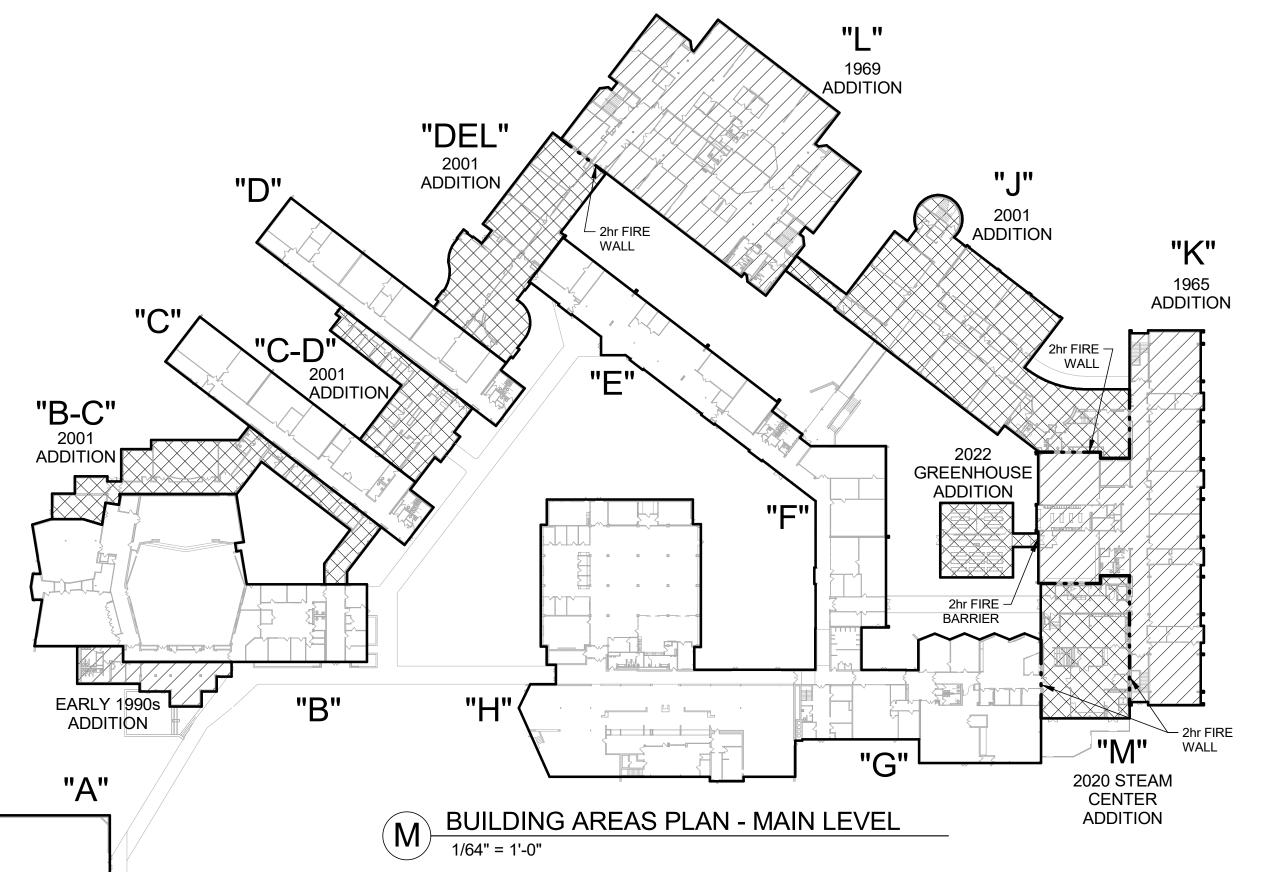
CALCULATIONS BASED ON FULL OCCUPANCY OF HOME & AWAY BLEACHERS:

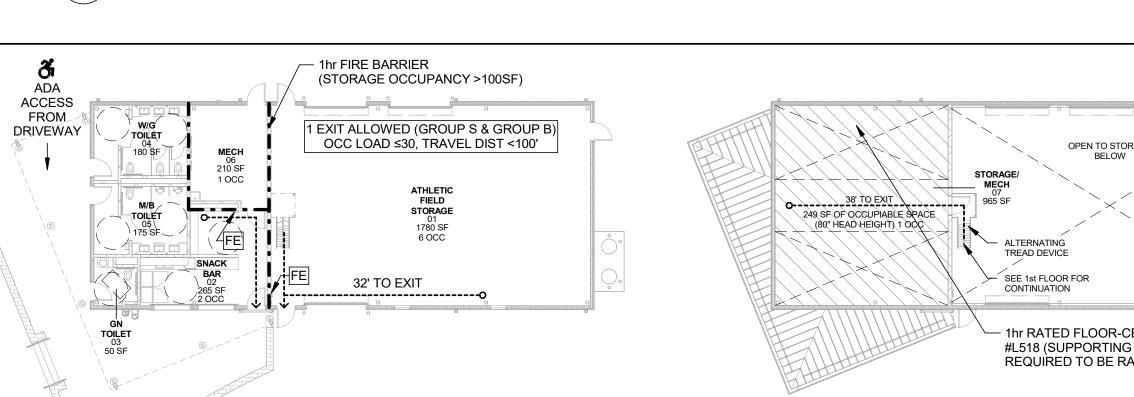
SINGLE-USER FIXTURES ARE ADDED PROPORTIONATELY TO GENDER RATIOS

TOTAL: 1,589 OCC (ASSUME 795 MALE, 795 FEMALE)









AP CODE COMPLIANCE PLAN

1/16" = 1'-0"

OPEN TO STORAGE 1hr RATED FLOOR-CEILING ASSEMBLY PER UL #L518 (SUPPORTING CONSTRUCTION NOT REQUIRED TO BE RATED IN TYPE VB)

ECCCNYS C402.2.2 ALLOWS THE USE OF THE U-FACTOR OF CONCRETE MASONRY UNITS w/ INTEGRAL INSULATION IN DETERMINING COMPLIANCE w/ TABLE C402.1.4: REQUIRED (WALLS): U-0.104 MAX PROVIDED (WALLS): U-0.057 (ADJUSTED FOR FULLY GROUTED CELLS) AP MEZZANINE CODE COMPLIANCE PLAN

ATHLETIC PAVILION (AP) COMPLIANCE NOTES:

FIVE OCCUPANTS.

BUILDING AREAS PLAN - LOWER LEVEL

THERE IS NO REQUIRED SEPARATION BETWEEN S-1 & B OCCUPANCIES.

MEZZANINE IS NOT REQUIRED TO BE OPEN PER NYS BC 505.2.3 EXCEPTION 1.

MEZZANINE FLOOR AREA DOES NOT EXCEED 1/3 OF THE TOTAL FLOOR AREA.

ALTERNATING TREAD DEVICE PERMITTED TO SERVE AS EGRESS COMPONENT PER NYS BC

1011.14 - MEZZANINE HAS LESS THAN 250 SF OF OCCUPIABLE SPACE & SERVES LESS THAN

Horace Greeley High School

ING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS. PC (KI

DISTRICT-WIDE

CAPITAL IMPROVEMENTS

NEW CONSTRUCTION

& ATHLETIC

UPGRADES

CHAPPAQUA CENTRAI

SCHOOL DISTRICT

66 Roaring Brook Road

Chappaqua, NY 10514

285 MAIN STREET • MOUNT KISCO, NEW YORK 10549

CONSTRUCTION DOCUMENTS

HG: 66-10-04-06-0-015-023

AP: 66-10-04-06-7-052-001

CS: 66-10-04-06-7-027-002

OB: 66-10-04-06-0-026-002

SB: 66-10-04-06-0-036-007

KGDARCHITECTS.COM

P: 914.666.5900

SED Control No.

Professional Seal

ADDITION

09/16/2024 ISSUE FOR BID 3 10/27/2023 SED ISSUE No. Date

ADDITION

2hr FIRE WALL -

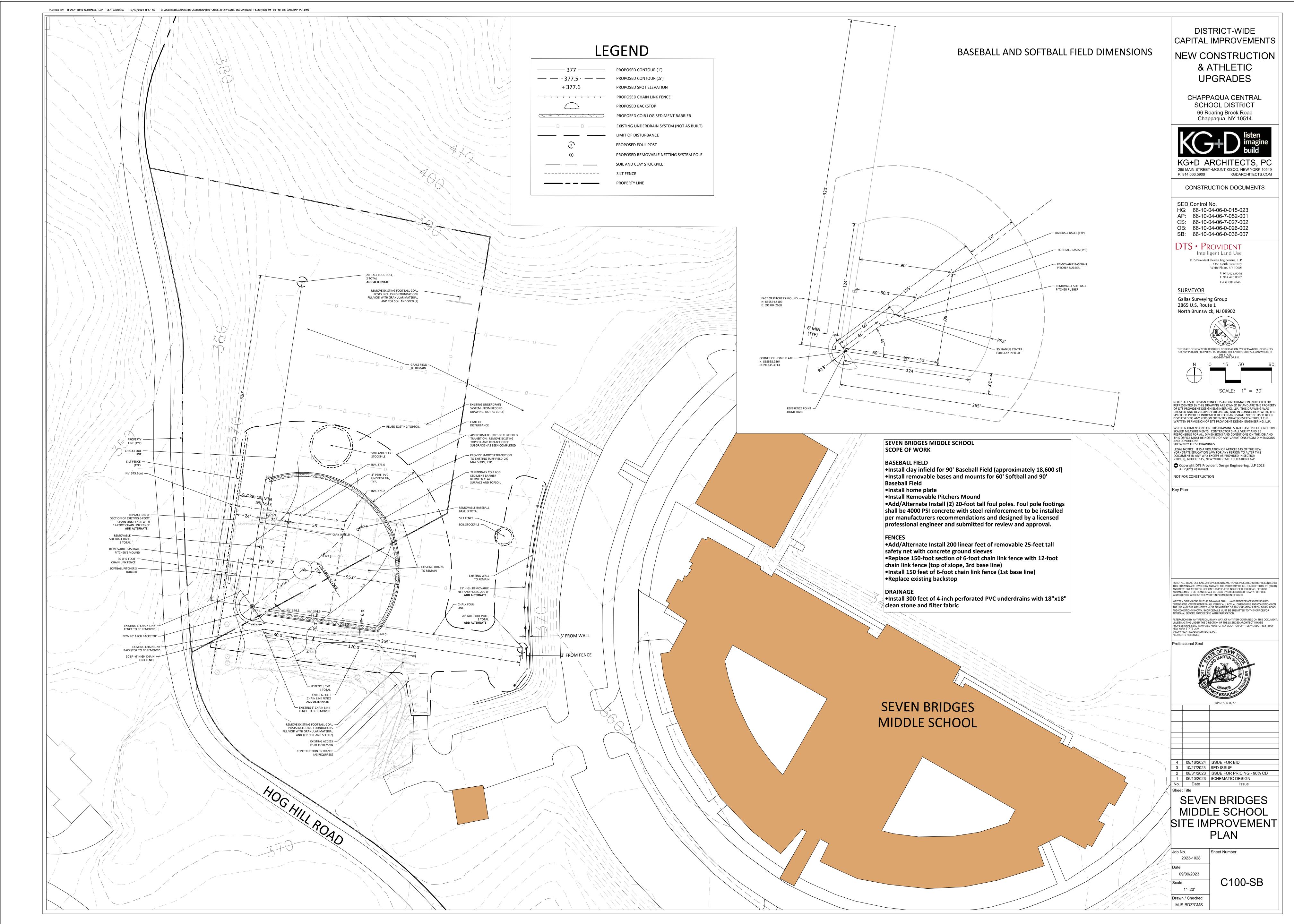
CODE COMPLIANCE

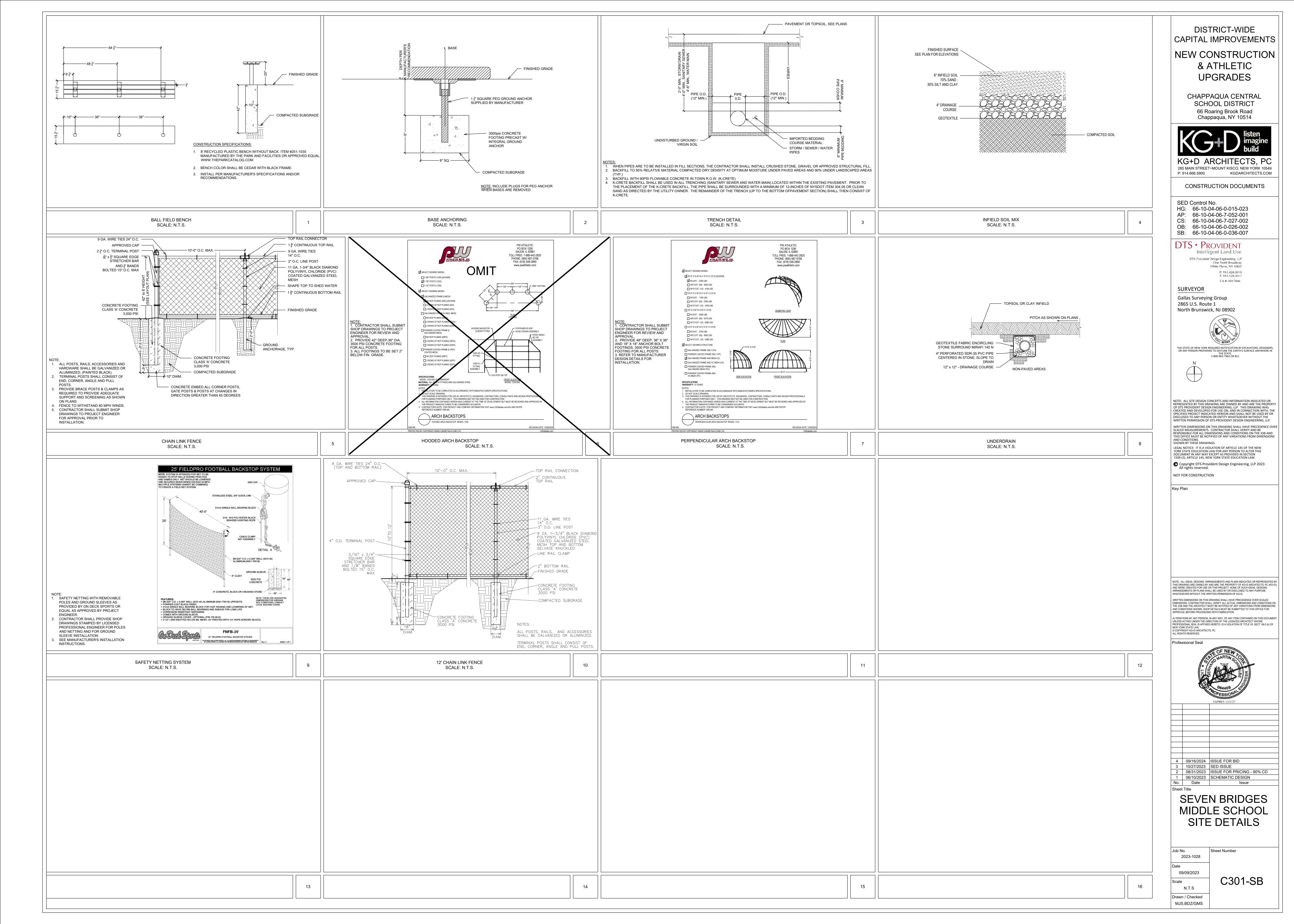
Sheet Number 2023-1028

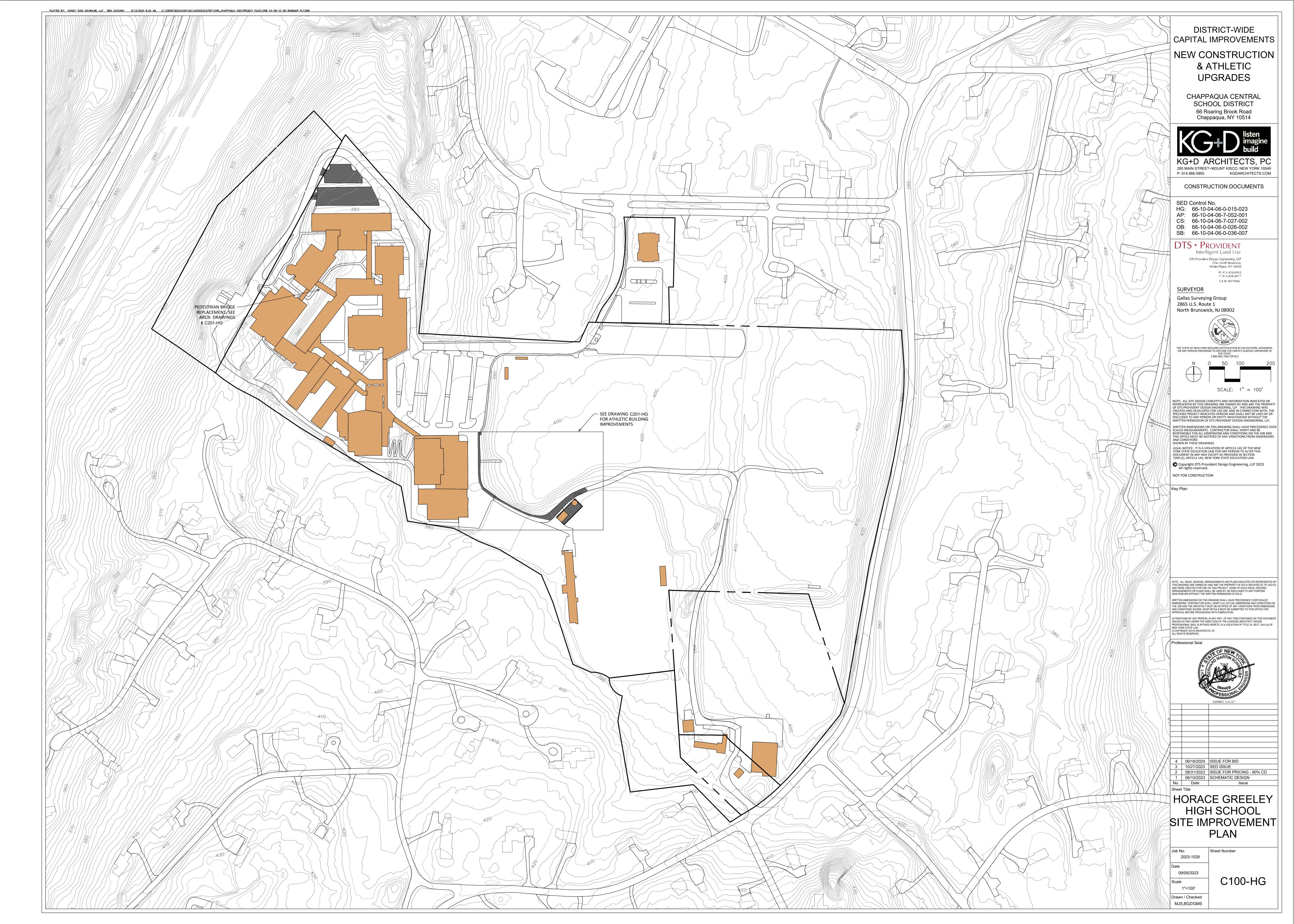
10/27/2023 AS NOTED

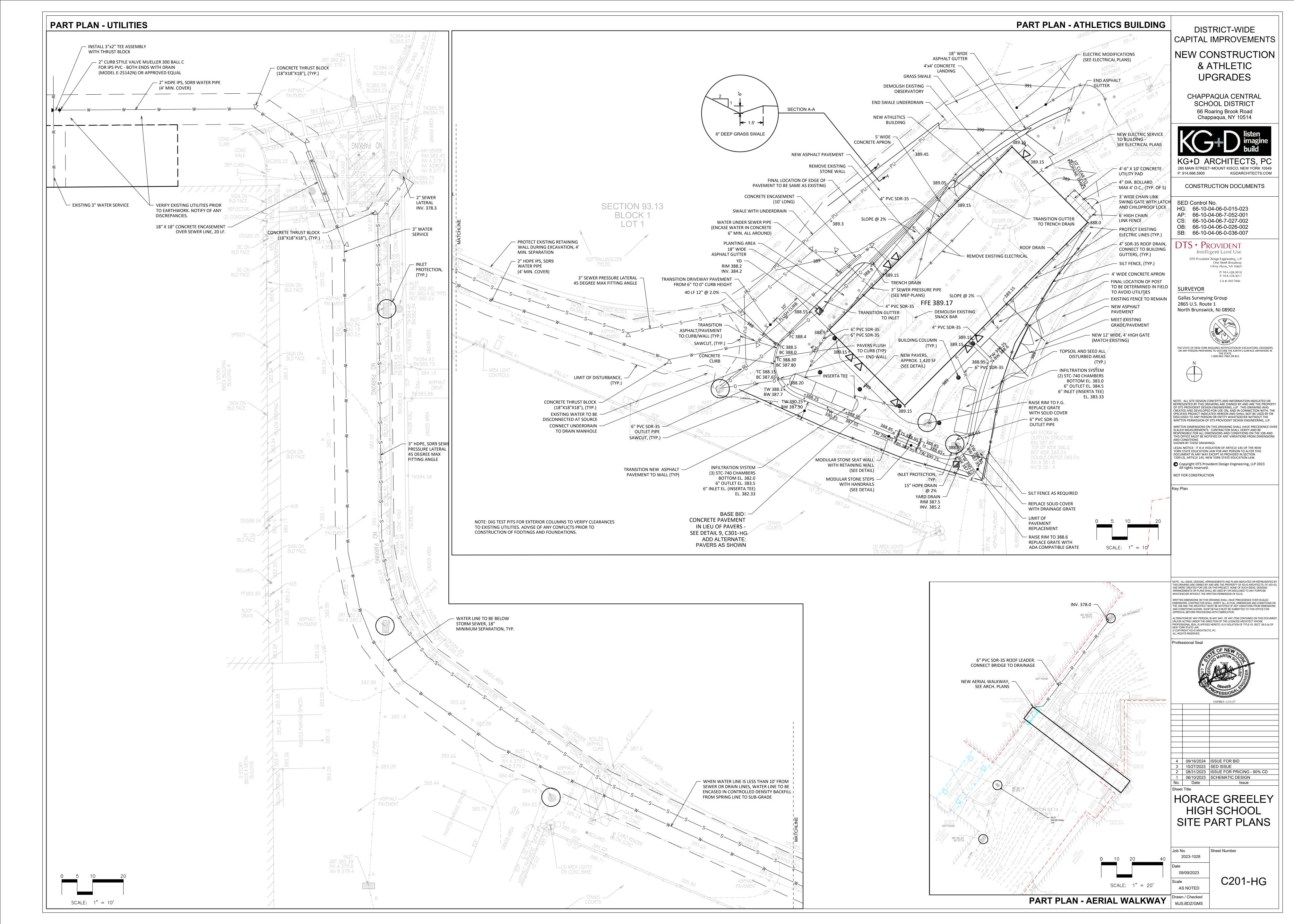
Drawn / Checked

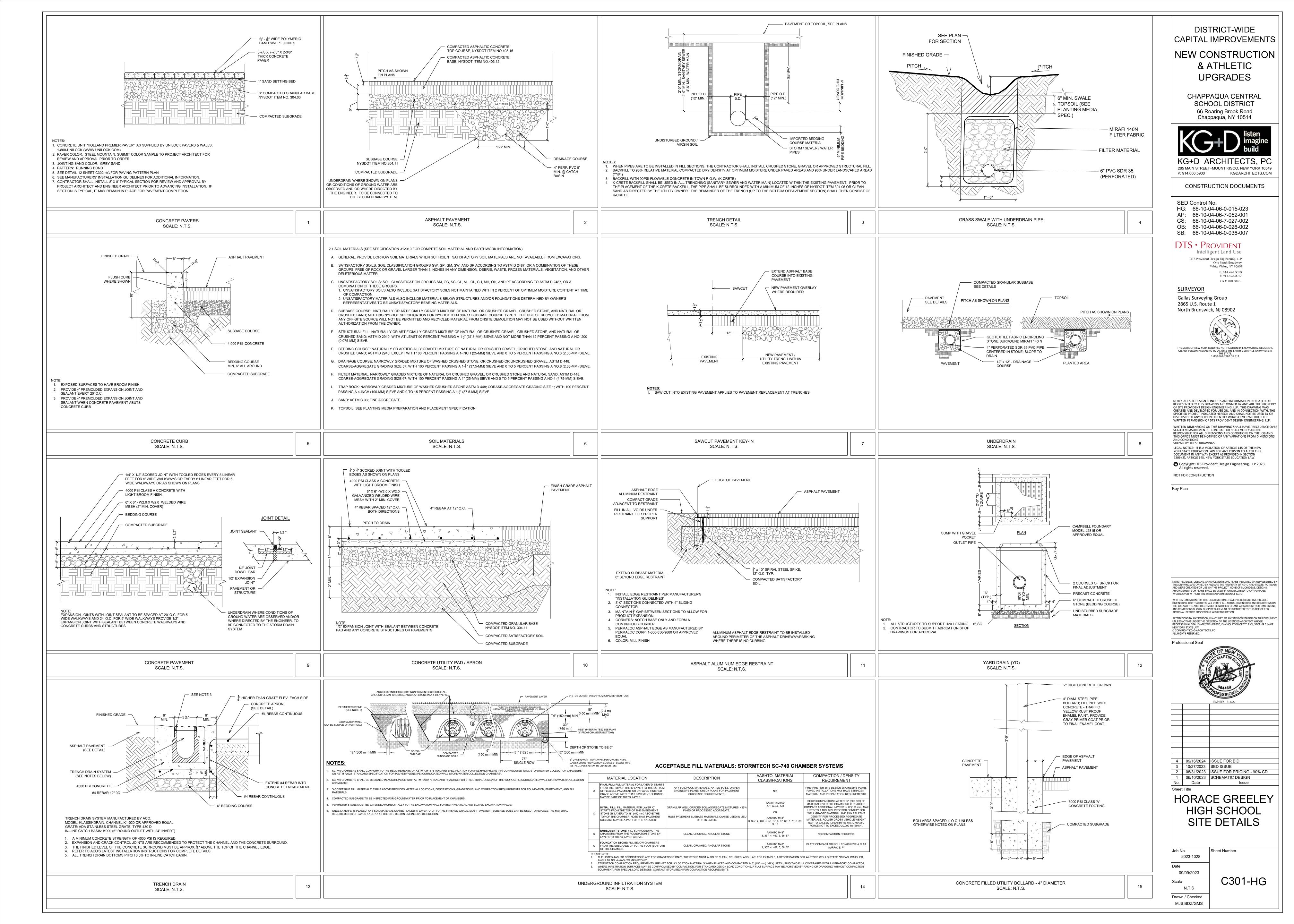


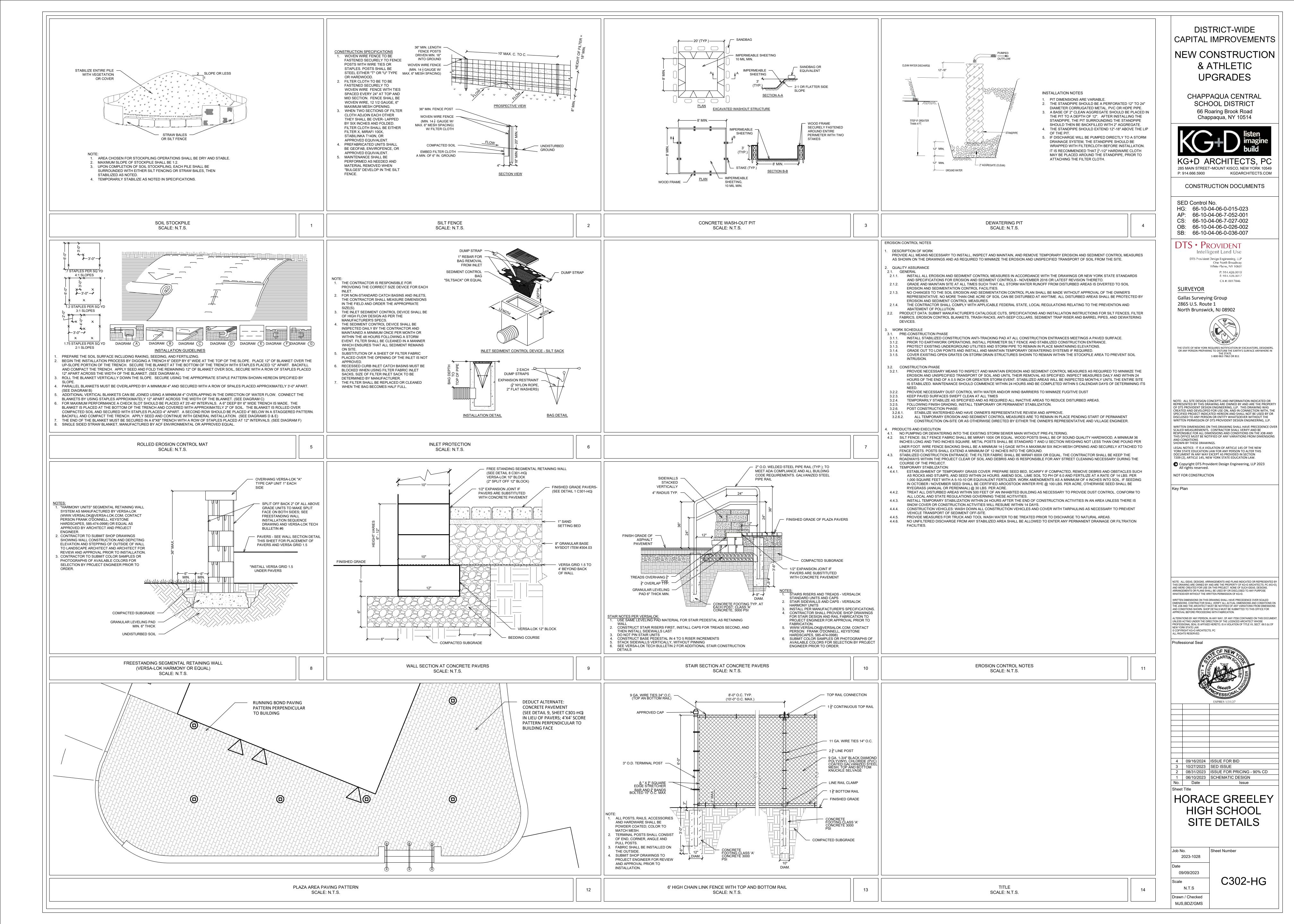












General Notes:

- The purpose of these drawings is to show the structural work associated with footbridge between building F & J at the Horrace Greeley High School, 70 Roaring Brook Road, Chappagua, NY.
- 2 The work shown on these drawings has been designed in accordance with the structural requirements of the 2020 edition of the Building Code of New York State.
- The structural components have been designed for the following loads:

Schools	
Corridors	100 psf
Roof loads:	
Snow:	
Ground snow load, p _g	30 psf
Flat roof snow load, p _f	30 psf*
Exposure factor, C _e	1.0
Importance factor, I _s	1.0
Thermal factor, C _t	1.2
Drift surcharge load, p _d	N/A
Width of snow drift, W	N/A
Rain loads: in accordance with Section 1611	
Rainfall intensity (100-year 15-minute interval), i	6.00 in./hr
Roof live load:	20 psf
*Note: the flat roof snow load shall be no less than 30 psf	·
	Corridors Roof loads: Snow: Ground snow load, pg Flat roof snow load, pf Exposure factor, Ce Importance factor, Is Thermal factor, Ct Drift surcharge load, pd Width of snow drift, W Rain loads: in accordance with Section 1611 Rainfall intensity (100-year 15-minute interval), i Roof live load:

B. Wind design data:

Wind loads have been determined based on Section 1609.1.1 in accordance with ASCE 7-16 Chapters 26, 27, 29 and 30, Directional Procedure

Basic Design Wind Speed (3-second gust): V	114 mph
Allowable Stress Design Wind Speed, Vasd	89 mph
Risk category	II
Wind Exposure	С
Internal pressure coefficient	0.0
"a" dimension for use with components and cladding	3.0 ft

C. Earthquake design data:

Risk category	II
Seismic importance factor, l _e :	1.0
Mapped short period spectral response accelerations, S _s :	0.286
Mapped 1 second period spectral response accelerations, S	1: 0.061
Site class:	D
Design short period spectral response accelerations, S _{DS} :	0.299
Design 1 second period spectral response accelerations, S _{D1}	1: 0.097
Solomia decian estadony	D

Seismic design category Seismic force resisting system: Structural steel systems not specifically detailed for seismic

resistance	
Design base shear:	1.5 KIPS
Seismic response coefficient, C _s :	0.100
Response modification factor, R:	3.0
Deflection amplification factor, C _d	3.0
Analysis procedure: Equivalent Lateral Force	

D. Other loads:

	Concentrated loads	
	All other primary roof members	300 lbs
E.	Special loads:	
	Retaining walls	
	Lateral equivalent fluid pressure	35 pcf
	Seismic load (h = height of wall)	5.5 h^2
F.	Guardrails (load applied in any direction):	
	Top rail concentrated	200 lbs
	or	
	Top rail uniform load	50 plf
	Intermediate rail concentrated load	50 lbs

- 4 This structure has been designed to be self-supporting and stable after the construction of the building has been completed. The stability of the structure prior to completion is solely the responsibility of the contractor. This responsibility extends to all related aspects of the construction activity including, but not limited to, erection methods, erection sequence, temporary bracing, forms, shoring, use of equipment, and similar construction procedures. Review of the construction by the engineer is for conformance with design aspects only, not to review the contractor's construction procedures. Lack of comment on the part of the engineer with regard to construction procedures is not to be interpreted as approval of those procedures.
- This structure utilizes moment frames to provide lateral stability. Therefore, temporary bracing, guys, etc., must be maintained until all moment frames have been erected.
- Jobsite safety and construction procedures are solely the responsibility of the contractor. Review of the construction by the engineer is for conformance with design aspects only, not to review the contractor's provisions for job site safety. Lack of comment by the engineer is not to be interpreted as approval of those aspects of work.
- PDF digital files of all erection and detail shop drawings for steel reinforcing bars (concrete construction), structural steel, indicating the fabricator, manufacturer, finish, layout, and all accessories, must be submitted to and be checked by the contractor and subcontractor and bear the checker's initials before submission to the architect for review prior to fabrication. Fabrication and/or delivery to the site of components prior to receiving approved shop drawings shall be at the fabricator's own risk.
- Deferred submittals: Deferred submittals are those portions of the design that are not submitted at the time of application and are to be submitted to the building official within a specified period. The following deferred submittals shall be submitted to the engineer for approval.
- A. Precast pre-stressed concrete planks After approval by the engineer, the deferred submittal documents shall be submitted to the building official for approval. Deferred submittal items shall not be installed until the deferred submittal

and other work are described in the project "Statement of Special Inspections". The contractor shall

- documents have been approved by the building official. Testing and inspection of concrete, steel reinforcing bars (concrete construction), structural steel
- review the "Statement of Special Inspections" and coordinate the scheduling of inspections with the special inspector. Uninspected work that required inspections may be rejected solely on that basis. 10 If faulty construction procedures, or material, result in defective work that requires additional engineering time to devise corrective measures, professional fees may be charged to the contractor at the standard hourly rate of additional services. Such fees may be withheld from the general
- contractor's payment 11 Loads, openings and structure in any way related to requirements of other (non-structural) disciplines are shown for bidding purposes only. However, these plans do not show the full scope of openings, in roofs, floors and walls. For size and location of all openings, see architectural and mechanical drawings. Do not scale openings. The contractor shall obtain from the heating and ventilating, electrical, plumbing and other trades the final approved size and location of all openings, equipment and work to be provided for their trade for roofs, floors and walls, whether shown or not shown on structural drawings. Excess cost related to variation in requirements or equipment are not
- 12 The contractor shall verify all dimensions, elevations and angles with architectural drawings and existing conditions before proceeding with any work.
- 13 The contractor shall <u>field verify existing conditions</u> before proceeding with any work. The contractor shall field verify all dimensions noted "±" that are indicated on the drawings.
- 14 The contractor and subcontractors shall obtain the latest copies of approved plans and surveys and
- they shall familiarize themselves thoroughly with these plans before commencing any work. 15 These drawings are supplemented by a detailed technical specification. The notes shown under
- certain categories of work are intended to summarize basic requirements.
- Work shown as "Typical Details" apply throughout the project as required. Work shown as "Sections" shall be considered to apply for the same and similar conditions in the building.
- 17 Some details of the work are shown on the architectural drawings. A careful review and study of
- these details are necessary before the full scope of the work can be comprehended. 18 Do not scale drawings.

Codes and Standards References

- 1 Concrete:
- Concrete work shall conform to all the requirements of ACI 301-10, "Specifications for Structural Concrete in Buildings" and ACI 318-14, "Building Code Requirements for Structural Concrete".
- Structural steel: Design, fabrication and erection of structural steel shall conform to the AISC 360-16 "Specification for Structural Steel for Buildings" as adopted on July 7, 2016, by the American Institute of Steel Construction (AISC) and the 15th Edition of the AISC Steel Construction Manual.

Foundation notes

- 1 Recommendations for the site preparation and earthwork within the perimeter of the proposed new structure, preparation of soil bearing surfaces, material specification and placement of structural backfill for support of foundations and slabs-on-grade, and drainage are stated in the geotechnical engineering report prepared for this project by Whitestone Associates Engineering & Geology and dated June 16, 2023. The geotechnical report is a reference document, not a contract document, and the design team is not responsible or liable for the accuracy of the information contained in the
- The foundations have been designed to rest on inorganic, undisturbed soil or compacted granular fill having a bearing value of 3000 psf as recommended in the geotechnical engineering report referenced above. Such bearing strata are anticipated at the bottom of footing elevations noted on the foundation plan. All bearing strata shall be reviewed by the geotechnical engineer prior to
- placing concrete in order to verify the bearing value. If ledge rock is encountered above the proposed bottom of footing elevations indicated, then it shall be removed to the extent necessary to provide a minimum of 1'-0" soil cover above the top of the
- Footings supported on ledge shall rest on broom clean solid rock. If the slope of the rock surface exceeds 1 on 6, then the footing shall be dowelled to the ledge with 3/4" steel rods drilled 10 inches into the rock surface at 2 feet on center
- 5 If ledge rock and soil both occur at the bottom of footing bearing elevation, then a minimum of one foot of ledge rock below planned bottom of footing elevation shall be removed and replaced with a "cushion" layer of crushed stone to minimize differential settlement. The crushed stone "cushion" layer shall extend beyond the end of the ledge rock for a minimum of 10 feet along the length of the supported footing.
- 6 The slab-on-grade sub-base shall be a crusher run stone free from soft disintegrated pieces, mud, dirt, or other injurious material. The material shall have no stone greater than 2 inches in any one
- dimension and with less than 10 percent by weight passing a No.100 sieve. The bottom of exterior footings not on solid rock shall be at least 3' - 6" below finished grade. 8 All soil surrounding and under footings shall be protected from freezing and frost action during the
- course of construction. Step footings where elevations change at a maximum slope of one vertical on two horizontal and place lower footings first.
- 10 Keep foundation excavations free of water at all times.
- 11 Use crushed stone backfill or controlled compacted fill or lean concrete (f'c=1500 psi) for overexcavation of footings.
- 12 Existing utilities: locate existing underground utilities in areas of excavation work. Provide adequate means of support and protection during earthwork operations.
- 13 Where footings are in close proximity to sub-surface piping bottom of footings shall be at least 8"
- below elevation of piping unless otherwise shown on the drawings. 14 Submittals to the engineer are required for structural fill and slab sub-base.

Concrete Notes:

- All concrete work shall conform to all the requirements of ACI 301, "Specifications for Structural Concrete in Buildings" and ACI 318 "Building Code Requirements for Structural Concrete", indicated in the code reference section of these general notes.
- Concrete shall be the specified weight and develop a minimum compressive strength in 28 days as

<u>Location</u>	<u>Weight</u>	Minimum <u>Strength</u>	Maximum W/C Ratio <u>(</u> or slum <u>where indicated)</u>
Footings	Normal	3,000 psi	0.55
Piers:		•	
Exterior exposed	Normal	5,000 psi	0.40
Slabs-on-grade -exterior	Normal	5,000 psi	0.40

- 3 All detailing fabrication, and erection of reinforcing bars, unless otherwise noted, must follow the latest ACI code and the latest ACI "Manual of Standard Practice for Detailing Reinforced Concrete
- Concrete design mix will be submitted to the engineer for review, together with laboratory reports attesting that the mixes can attain the minimum strength required in accordance with ACI 301 indicated above.
- Portland cement shall be Type I or Type II and conform to ASTM C 150. Other cementitious material such as flyash, ground granulated blast- furnace slag, or ground glass pozzolan may be blended with cement for use in the concrete mix. Flyash shall conform to ASTM C 618 and may replace cement in the following ranges for the 2 classes of flyash; Class C, 20 to 35%; Class F, 15 to 25%. Ground granulated blast-furnace slag shall conform to ASTM C 989 and may not exceed 50% of total weight of cementitious materials. Ground glass pozzolan shall conform to
- ASTM C 1866 and may replace cement in the range of 15% to 50% by weight For normal weight concrete: coarse aggregate shall be 3/4" and conform to ASTM C 33. Fine aggregate shall be manufactured or natural sand from the same source for the entire project and shall conform to ASTM C 33.
- No admixtures are permitted without the engineer's written permission other than entrained air. Concrete exposed to the weather, such as that used in foundation walls, shall contain 5% +/- 1 1/2% entrained air. Concrete exposed to the weather and to de-icing compounds shall contain 6% +/- 1 1/2% entrained air. Do not use air entrainment admixture for interior normal weight concrete slabs.
- Limit water-soluble, chloride-ion content in hardened concrete to the following percent by weight of cement: 1.00 for reinforced concrete that will be dry and protected from moisture, 0.30 for reinforced concrete that will exposed to moisture but not exposed to chlorides, 0.15 for reinforced concrete exposed to moisture and chlorides from deicing chemicals and salt/seawater, and 0.06 for
- prestressed (post-tensioned) concrete. 10 Reinforcing steel shall conform to ASTM A 615, Grade 60.
- 11 Welded wire fabric shall conform to ASTM A 1064 with a minimum yield strength of 65 ksi. Lap one
- mesh size at sides and ends, and wire together. 12 The following concrete cover shall be provided for reinforcement:

Location	Cover (inches)
Concrete cast against and	· · · · ·
Permanently exposed to earth	3
Concrete exposed to earth or weather:	
#6 through #18 bars	2
#5 bar and smaller	1 1/2
Concrete not exposed to weather or in contact with ground:	
Slabs, walls, joists:	
#14 and #18 bars	1 1/2
#11 bar and smaller	3/4
Beams, columns	
Primary reinforcement, ties, stirrups, spirals	1 1/2

- 13 The conveyance, placement and protection of the concrete shall conform to the requirements of ACI 318, indicated above, and ACI 304R, "Guide for Measuring, Mixing, Transporting and Placing Concrete". Mechanical vibrators are to be used to consolidate the freshly cast concrete around the reinforcing and against form surfaces and to prevent the formation of air or stone pockets honeycombing, pitting or planes of weakness. However, care must be used to avoid over vibration
- that can lead to aggregate segregation. 14 No welding of reinforcing will be permitted.
- 15 All lap splices shall be Class B, in accordance with ACI 318 indicated above.
- 16 Concrete piers: Provide dowels with standard hook from footing at all piers. Size and quantity of dowels to match vertical pier reinforcing (Class "B" splice).
- 17 The contractor shall be responsible for limiting pours to minimize shrinkage cracking. In general, walls shall not be poured in continuous lengths exceeding 30 feet without providing construction joints or control joints. The location and configuration of joints exposed to view shall be coordinated with the architect.
- 18 The installation of slabs shall conform to the requirements of ACI 302.1R, "Guide to Concrete Floor and Slab Construction". Interior finish slab surfaces are to have a steel trowel finish. Exterior slab surfaces are to have a broom finish unless specified on the architectural drawings.
- 19 Expansion and isolation-joints: Filler strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self Sealant at top of joint: Sika's Sikaflex 2c SL poly urethane elastomeric sealant. Provide cap to
- separate sealant from filler. 20 The curing and protection of concrete shall conform to the requirements of ACI 318 and ACI 308R "Guide to Curing Concrete". Concrete slabs shall be protected from loss of surface moisture for not less than 7 days using a curing compound conforming to ASTM C 309 or constantly wetted burlap. Curing compounds shall be compatible with any intended flooring overlay. Do not install finish
- flooring until slab has adequately dried per the flooring manufacturer's specifications. 21 Cold weather concrete placement: If cold weather concreting conditions exist as defined by a period of more than three days when the average outdoor temperature, (high + low)/2, is less than 40 deg.

- F. the procedures outlined in ACI 306.1. "Standard Specification for Cold Weather Concreting" and ACI 306R, "Guide to Cold Weather Concreting" shall be utilized.
- 22 Hot weather concrete placement: Maintain concrete temperature below 90 deg. F. at time of placement and comply with ACI 301 and ACI 305R, "Guide to Hot Weather Concreting".
- 23 Accurately position, support, and secure reinforcement and anchors against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars. Provide bar supports as follows:
- A. Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Do not "wet stick" reinforcement or anchors. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete.
- 24 Sizes and locations of all required embedded items, such as anchor bolts, piping sleeves, etc., for all trades shall be coordinated by the general contractor with other trades
- 25 Submittals to the engineer are required for concrete mix designs, cement, reinforcing bars, admixtures, and aggregates. as specified in Specification Section 03300.

Structural Steel Notes:

- Design fabrication and erection of structural steel shall conform to the American Institute of Steel Construction's "Specification for Structural Steel for Buildings", indicated in the code reference section of these general notes.
- Materials: American standard she

American standard shapes, angles,	
Plates and bars:	ASTM A 36
Structural steel tubing,	
Rectangular and square	ASTM A 500, Grade C (Fy=50 ks
Structural steel pipe:	ASTM A 53, Grade B (Fy=35 ksi)
Bolts	ASTM F3125, Grade A 325

- Anchor rods ASTM F 1554. Grade 36 ASTM E 70xx, low hydrogen All welding shall conform to American Welding Society's AWS D1.1 "Structural Welding Code-Steel" code for arc and gas welding and be performed by a certified welder in accordance with A.W.S.
- High strength bolts: install high-strength bolts according to Research Council on Structural Connections' (RCSC's) "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified.
- Joint type: Snug tightened unless otherwise noted The fabricator is responsible for designing connections for the reactions shown on these plans and submitting these design calculations, signed and sealed by a qualified professional engineer registered in the state of jurisdiction who is responsible for their preparation, for review by the structural engineer of record through the architect. The reactions shown are "service" loads for "Allowable Stress Design" (ASD). Connections may be designed for these values using the
- conventional "Allowable Stress Design" method, as specified in the AISC Steel Construction Manual indicated in the code reference section of these general notes. For moment connections, notch-tough welding electrodes, complying with AWS requirements, shall be used for full penetration welds. Also for full penetration welds, provide welding tabs at beam
- flange edges to allow welding of full beam width. For moment connections, backing bars and weld tabs for welds need not be removed, unless testing agency requires removal to facilitate testing and inspection or weld tabs interfere with architectural
- 8 Full or partial penetration groove welds shall be ultrasonic tested, as indicated in the Statement of Special Inspections, and shall be detailed to allow for such ultrasonic testing.
- Where slotted hole connections are shown, nuts shall be fastened snug tight, then untightened by one-half turn. Peen threads to prevent further loosening of the nut.
- 10 Grout shall be nonmetallic, shrinkage-resistant grout conforming to ASTM C 1107. Grade B or C. factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time. All steel members and bolting exposed to weather shall be cleaned in accordance with the Steel
- Structures Painting Council Specification SP 6 for Commercial Blast Cleaned and hot-dipped galvanized in accordance with ASTM A 123 and ASTM A 153. Minimum acceptable zinc coating weight shall be 2 oz./sq. Ft. See architectural specifications for finished paint if required. Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780. 12 Provide bitumastic protection coating for all structural steel below grade
- 13 Continuous members, where indicated on the drawings, shall require either 1) the member to be furnished as one piece, or 2) if individual pieces are to be provided, then they shall be connected by either welding or bolting to develop the full strength of the continuous member.
- 14 Split cantilevers for steel beams shall be designed for the full moment capacity of the beam unless otherwise noted Unless otherwise noted, at cantilever beam connection to top of columns, provide welded 3/4" cap
- plate with (4)-3/4" diameter A 325 bolts on beam gage. Provide 1/2" minimum fitted stiffeners welded at both sides of beam web. Locate stiffeners over column flange on cantilever side. 16 Bent beams are defined as beams having its full section properties throughout its length, including at
- the bent. Provide full penetration welds all around at the bent.
- 17 Provide 1/4" closure plates with seal weld at ends of all HSS members.
- 18 For miscellaneous steel, see architectural drawings. 19 Submittals to the engineer are required for certificates of compliance for structural steel, bolts, nuts,
- washers, and weld filler material prior to the fabrication of any steel 20 At the completion of fabrication, the fabricator shall submit a certificate of compliance stating that the work was performed in accordance with the approved contract documents, as required by Section

Steel Deck Notes: Steel deck shall be designed, fabricated, and erected in accordance with the Steel Deck Institute

1704.2 of the building code indicated at the beginning of these General Notes.

- specification indicated in the code reference section of these general notes. Formed steel roof deck to be 3" deep, 20 gage (uncoated steel thickness = 0.0358"), galvanized (G60 coating) (G90 coating), deep rib, United Steel Deck "N" Deck profile, as manufactured by Canam Steel Deck, Incorporated or an approved equal.
- Formed steel roof deck shall be welded to supporting steel with 5/8" diameter puddle welds at all edge ribs plus a sufficient number of interior ribs to limit the spacing between adjacent points of attachment to 8" on center.. Intermediate side connections shall be made with No.10 self-tapping screws at mid-span or 3'-0" on center, whichever is smaller. Deck perimeter edge connections between supports (parallel to supports) shall be made with No.12 self-tapping screws at mid-span or 3'-0" on center, whichever is smaller. Install deck ends over supporting frame with a minimum end

bearing of 1-1/2 inches. End laps of sheets shall be a minimum of 2" and shall occur over supports.

Steel deck must be protected before and after erection and all debris cleaned from its surface where concrete will be poured or roofing is to be placed.

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007

SED Control No.



93 Lake Avenue, Suite 201 Danbury, CT 06810 [203]490-4140 | www.tdeg.com

Key Plan

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS. PC (KG+C AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON. IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT.

UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF

NEW YORK STATE LAW.

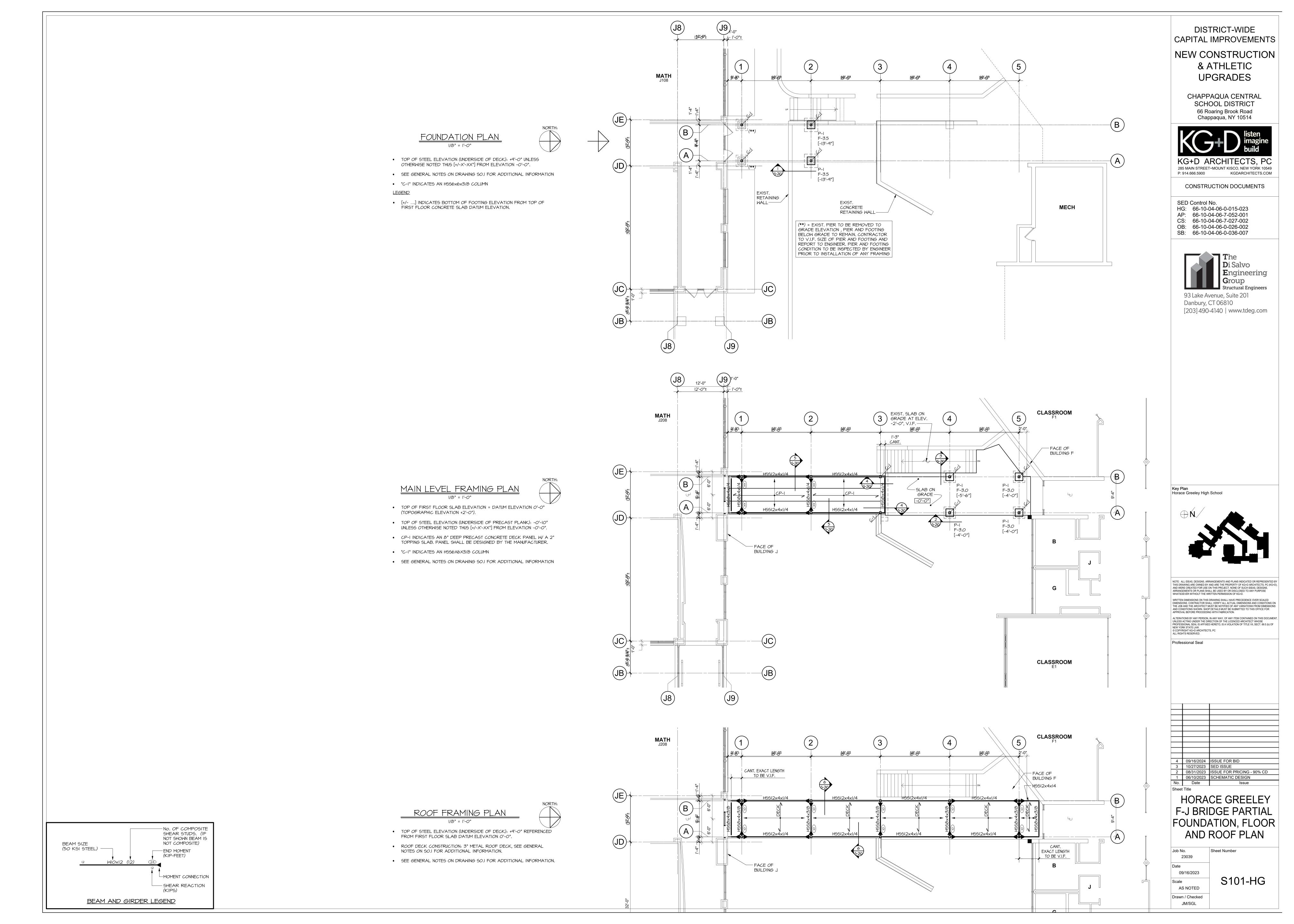
© COPYRIGHT KG+D ARCHITECTS, PC
ALL RIGHTS RESERVED. Professional Seal

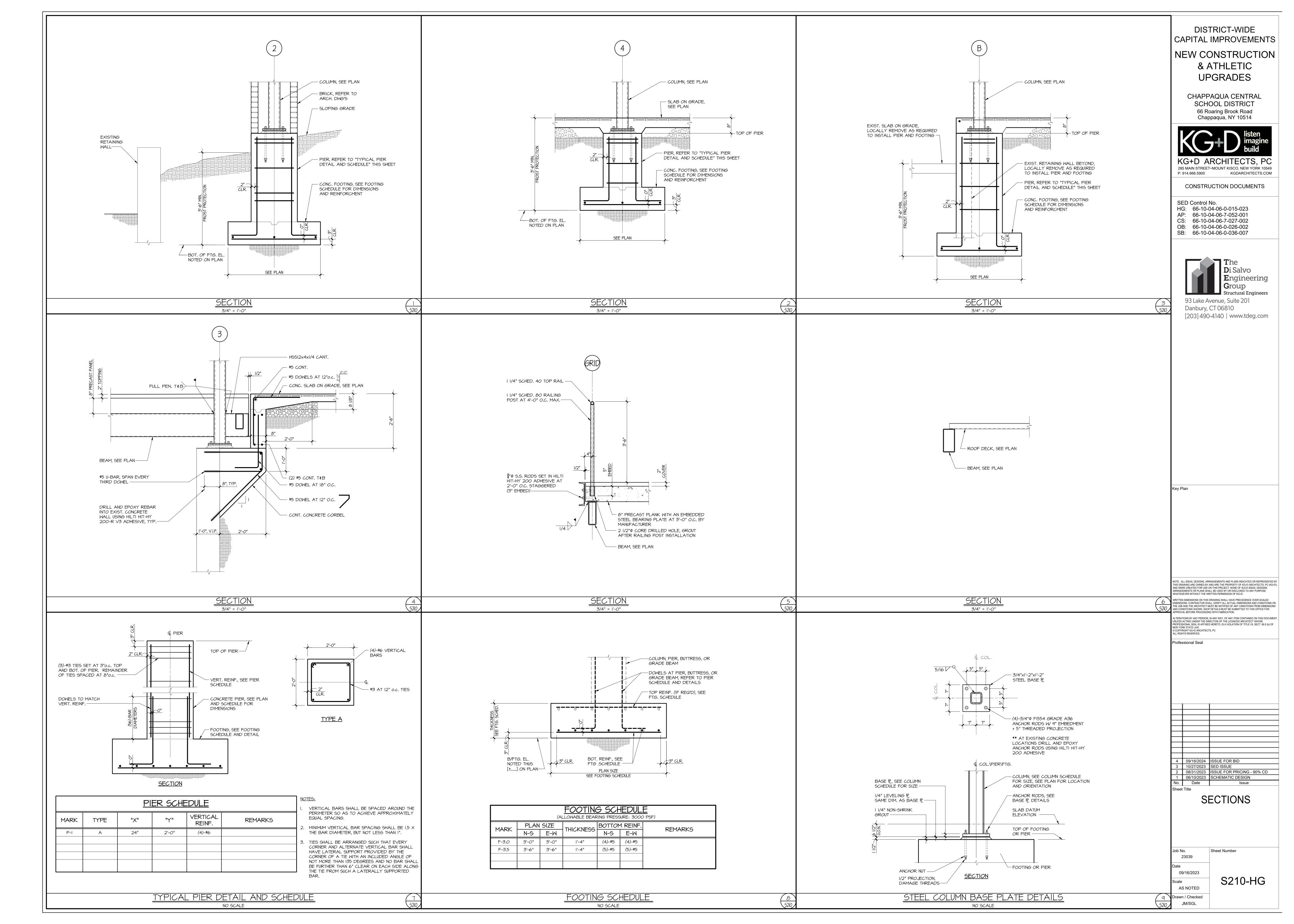


GENERAL NOTES AND **MATERIAL SPECIFICATIONS**

Sheet Number 23039 09/16/2023 S001-HG AS NOTED

Drawn / Checked JM/SGL





General Notes: The purpose of these drawings is to show the structural work associated with athletic pavilion building at the Horrace Greeley High School, 70 Roaring Brook Road, Chappagua, NY. The work shown on these drawings has been designed in accordance with the structural requirements of the 2020 edition of the Building Code of New York State. The structural components have been designed for the following loads: Storage warehouse 125 psf Roof loads: Ground snow load, pa Flat roof snow load, pf 1.0 Exposure factor, C_e Importance factor, Is Thermal factor, Ct Drift surcharge load, p Width of snow drift, W Rain loads: in accordance with Section 1611 6.00 in./hr Rainfall intensity (100-year 15-minute interval), i Roof live load: 20 psf *Note: the flat roof snow load shall be no less than 30 psf Wind loads have been determined based on Section 1609.1.1 in accordance with ASCE 7-16, Chapters 26, 27, 29 and 30, Directional Procedure Basic Design Wind Speed (3-second gust): V 114 mph Allowable Stress Design Wind Speed, Vasd 89 mph Wind Exposure Internal pressure coefficient 0.18 "a" dimension for use with components and cladding Design wind pressure (Nominal design wind pressures) for components and cladding on building walls (use Zone 4 generally; 13 The following concrete cover shall be provided for reinforcement: use Zone 5 within "a" of building wall corners): Surface pressure (psf) 100 sq. ft Negative Zone 4 -16.9 Negative Zone 5 -23.1 -21.6 -19.5 -18.0 Positive Zones 4 & 5 17.3 16.5 Design wind pressure (Nominal design wind pressures) for components and cladding on building roofs (for locations of zones 1, 2 and 3, refer to building code): Surface pressure (psf) -18.5 Negative Zone 1 -24.6 -39.3 -34.4 -27.9 -23.1 Negative Zone 2 -45.8 -38.6 -29.0 Negative Zone 3 -29.0 10.5 10.0 10.0 Positive all zones Earthquake design data: Risk category Seismic importance factor, le: Mapped short period spectral response accelerations, S_s: 0.061g Mapped 1 second period spectral response accelerations, S₁: Site class: 0.299gDesign short period spectral response accelerations, S_{DS}: Design 1 second period spectral response accelerations, S_{D1}: 0.097g Seismic design category Seismic force resisting system: intermediate reinforced masonry shear walls Structural steel systems not specifically detailed for seismic resistance 10 KIPS Design base shear: 0.100 Seismic response coefficient, Cs Response modification factor, R 3.0 Deflection amplification factor, C_d: Analysis procedure: Equivalent Lateral Force 20 Expansion and isolation-joints: Other loads: Concentrated loads: Garages with passenger vehicles (on 4.5 inches square) 3.000 lbs All other primary roof members Special loads: Retaining walls Lateral equivalent fluid pressure 35 pcf Seismic load (h = height of wall) Guardrails (load applied in any direction): Top rail concentrated Top rail uniform load Intermediate rail concentrated load 50 lbs This structure has been designed to be self-supporting and stable after the construction of the building has been completed. The stability of the structure prior to completion is solely the responsibility of the contractor. This responsibility extends to all related aspects of the construction activity including, but not limited to, erection methods, erection sequence, temporary bracing, forms, shoring, use of equipment, and similar construction procedures. Review of the construction by the engineer is for conformance with design aspects only, not to review the contractor's construction procedures. Lack of comment on the part of the engineer with regard to construction procedures is not to be interpreted as approval of those procedures. This structure utilizes moment frames to provide lateral stability. Therefore, temporary bracing, guys, etc., must be maintained until all moment frames have been erected. Jobsite safety and construction procedures are solely the responsibility of the contractor. Review of the construction by the engineer in Specification Section 03300. is for conformance with design aspects only, not to review the contractor's provisions for job site safety. Lack of comment by the engineer is not to be interpreted as approval of those aspects of work. PDF digital files of all erection and detail shop drawings for steel reinforcing bars (concrete and concrete -masonry construction), structural steel, indicating the fabricator, manufacturer, finish, layout, and all accessories, must be submitted to and be checked by the contractor and subcontractor and bear the checker's initials before submission to the architect for review prior to fabrication. Fabrication and/or delivery to the site of components prior to receiving approved shop drawings shall be at the fabricator's own risk. Testing and inspection of concrete, steel reinforcing bars (concrete and concrete masonry construction), concrete masonry, structural steel, wood framing, wood sheathing, and other work are described in the project "Statement of Special Inspections". The contractor shall review the "Statement of Special Inspections" and coordinate the scheduling of inspections with the special inspector. Uninspected work that required inspections may be rejected solely on that basis If faulty construction procedures, or material, result in defective work that requires additional engineering time to devise corrective measures, professional fees may be charged to the contractor at the standard hourly rate of additional services. Such fees may be withheld from the general contractor's payment. Loads, openings and structure in any way related to requirements of other (non-structural) disciplines are shown for bidding purposes only. However, these plans do not show the full scope of openings, in roofs, floors and walls. For size and location of all openings, see architectural and mechanical drawings. Do not scale openings. The contractor shall obtain from the heating and ventilating, electrical, plumbing and other trades the final approved size and location of all openings, equipment and work to be provided for their trade for roofs, floors and walls, whether shown or not shown on structural drawings. Excess cost related to variation in requirements or equipment are not to be borne by the owner. notify the architect prior to installation of equipment if actual weight exceeds weight shown on drawings. with any work. noted "±" that are indicated on the drawings. 14 The contractor and subcontractors shall obtain the latest copies of approved plans and surveys and they shall familiarize themselves thoroughly with these plans before commencing any work. intended to summarize basic requirements.

11 For any mechanical equipment weights used in design of supporting elements that are indicated on the drawings. Contractor shall

12 The contractor shall verify all dimensions, elevations and angles with architectural drawings and existing conditions before proceeding The contractor shall <u>field verify existing conditions</u> before proceeding with any work. The contractor shall <u>field verify all dimensions</u>

15 These drawings are supplemented by a detailed technical specification. The notes shown under certain categories of work are

Work shown as "Typical Details" apply throughout the project as required. Work shown as "Sections" shall be considered to apply for the same and similar conditions in the building. 17 Some details of the work are shown on the architectural drawings. A careful review and study of these details are necessary before

the full scope of the work can be comprehended. 18 Do not scale drawings.

Codes and Standards References Concrete:

Concrete work shall conform to all the requirements of ACI 301-10, "Specifications for Structural Concrete in Buildings" and ACI 318-14, "Building Code Requirements for Structural Concrete" Concrete masonry:

Concrete masonry work shall conform to the requirements of "Building Code Requirements for Masonry Structures, TMS 402-13" and "Specifications for Masonry Structures, TMS 602-13". Design, fabrication and erection of structural steel shall conform to the AISC 360-16 "Specification for Structural Steel for Buildings"

as adopted on July 7, 2016, by the American Institute of Steel Construction (AISC) and the 15th Edition of the AISC Steel

Wood construction shall conform to the AWC NDS-2018, "National Design Specification (NDS) for Wood Construction" with the 2018 Wood Trusses shall conform to TPI 1 -2014, "National Design Standard for Metal-plate-connected Wood Truss Construction".

Foundation notes

Recommendations for the site preparation and earthwork within the perimeter of the proposed new structure, preparation of soil bearing surfaces, material specification and placement of structural backfill for support of foundations and slabs-on-grade, and drainage are stated in the geotechnical engineering report prepared for this project by Whitestone Associates Engineering & Geology and dated June 16, 2023. The geotechnical report is a reference document, not a contract document, and the design team is not responsible or liable for the accuracy of the information contained in the report. The foundations have been designed to rest on inorganic, undisturbed soil or compacted granular fill having a bearing value of 3000

psf as recommended in the geotechnical engineering report referenced above. Such bearing strata are anticipated at the bottom of footing elevations noted on the foundation plan. All bearing strata shall be reviewed by the geotechnical engineer prior to placing concrete in order to verify the bearing value. If ledge rock is encountered above the proposed bottom of footing elevations indicated, then it shall be removed to the extent

necessary to provide a minimum of 1'-0" soil cover above the top of the concrete footing. Footings supported on ledge shall rest on broom clean solid rock. If the slope of the rock surface exceeds 1 on 6, then the footing

If ledge rock and soil both occur at the bottom of footing bearing elevation, then a minimum of one foot of ledge rock below planned bottom of footing elevation shall be removed and replaced with a "cushion" layer of crushed stone to minimize differential settlement. The crushed stone "cushion" layer shall extend beyond the end of the ledge rock for a minimum of 10 feet along the length of the supported footing

shall be dowelled to the ledge with 3/4" steel rods drilled 10 inches into the rock surface at 2 feet on center

The slab-on-grade sub-base shall be a crusher run stone free from soft disintegrated pieces, mud, dirt, or other injurious material. The material shall have no stone greater than 2 inches in any one dimension and with less than 10 percent by weight passing a

The bottom of exterior footings not on solid rock shall be at least 3' - 6" below finished grade.

All soil surrounding and under footings shall be protected from freezing and frost action during the course of construction. Step footings where elevations change at a maximum slope of one vertical on two horizontal and place lower footings first. Foundation walls shall be backfilled by placing fill on both sides simultaneously and to the same level.

Keep foundation excavations free of water at all times. 12 Use crushed stone backfill or controlled compacted fill or lean concrete (f'c=1500 psi) for over-excavation of footings. Existing utilities: locate existing underground utilities in areas of excavation work. Provide adequate means of support and protection

during earthwork operations. Where footings are in close proximity to sub-surface piping bottom of footings shall be at least 8" below elevation of piping unless otherwise shown on the drawings. 15 Submittals to the engineer are required for structural fill and slab sub-base.

All concrete work shall conform to all the requirements of ACI 301, "Specifications for Structural Concrete in Buildings" and ACI 318 "Building Code Requirements for Structural Concrete", indicated in the code reference section of these general notes. Concrete shall be the specified weight and develop a minimum compressive strength in 28 days as follows:

Location	<u>Weight</u>	Minimum Strength	Maximum W/C Ratio_(or slump where indicated)
Footings Walls and piers	Normal	3,000 psi	0.55
Exterior	Normal	4,000 psi	0.45
Exterior exposed	Normal	5,000 psi	0.40
Slabs-on-grade -interior	Normal	4,000 psi	0.45

All detailing fabrication, and erection of reinforcing bars, unless otherwise noted, must follow the latest ACI code and the latest ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures". Concrete design mix will be submitted to the engineer for review, together with laboratory reports attesting that the mixes can attain the minimum strength required in accordance with ACI 301 indicated above.

Portland cement shall be Type I or Type II and conform to ASTM C 150. Other cementitious material such as flyash, ground granulated blast- furnace slag, or ground glass pozzolan may be blended with cement for use in the concrete mix. Flyash shall conform to ASTM C 618 and may replace cement in the following ranges for the 2 classes of flyash; Class C, 20 to 35%; Class F, 15 to 25%. Ground granulated blast- furnace slag shall conform to ASTM C 989 and may not exceed 50% of total weight of cementitious materials. Ground glass pozzolan shall conform to ASTM C 1866 and may replace cement in the range of 15% to 50% by weight. For normal weight concrete: coarse aggregate shall be 3/4" and conform to ASTM C 33. Fine aggregate shall be manufactured or

natural sand from the same source for the entire project and shall conform to ASTM C 33. No admixtures are permitted without the engineer's written permission other than entrained air. Concrete exposed to the weather, such as that used in foundation walls, shall contain 5% +/- 1 1/2% entrained air. Concrete exposed to the weather and to de-icing compounds shall contain 6% +/- 1 1/2% entrained air. Do not use air entrainment admixture for interior normal weight concrete slabs. Limit water-soluble, chloride-ion content in hardened concrete to the following percent by weight of cement: 1.00 for reinforced concrete that will be dry and protected from moisture, 0.30 for reinforced concrete that will exposed to moisture but not exposed to chlorides, 0.15 for reinforced concrete exposed to moisture and chlorides from deicing chemicals and salt/seawater, and 0.06 for prestressed (post-tensioned) concrete. Reinforcing steel shall conform to ASTM A 615, Grade 60.

Welded wire fabric shall conform to ASTM A 1064 with a minimum yield strength of 65 ksi. Lap one mesh size at sides and ends, and 12 Vapor retarder shall be Stego Wrap (15 mil) vapor retarder by Stego Industries LLC and shall have a water vapor permeance after conditioning (ASTM E 1745, Paragraphs 7.1.2 – 7.1.5) that is less than 0.01 perms and meets the requirements of Class A. Place as per ASTM E 1643 and manufacturer's written instructions.

Cover (inches) Concrete cast against and Permanently exposed to earth Concrete exposed to earth or weather: #6 through #18 bars 1 1/2 #5 bar and smaller Concrete not exposed to weather or in contact with ground Slabs, walls, joists: #14 and #18 bars 1 1/2 #11 bar and smaller Beams, columns Primary reinforcement, ties, stirrups, spirals

14 The conveyance, placement and protection of the concrete shall conform to the requirements of ACI 318, indicated above, and ACI 304R, "Guide for Measuring, Mixing, Transporting and Placing Concrete". Mechanical vibrators are to be used to consolidate the freshly cast concrete around the reinforcing and against form surfaces and to prevent the formation of air or stone pockets, honeycombing, pitting or planes of weakness. However, care must be used to avoid over vibration that can lead to aggregate

15 No welding of reinforcing will be permitted. All lap splices shall be Class B, in accordance with ACI 318 indicated above.

Concrete piers: Place concrete piers and walls together. Set pier reinforcing and set wall reinforcing through pier vertical bars. Provide dowels with standard hook from footing at all piers. Size and quantity of dowels to match vertical pier reinforcing (Class "B" 18 The contractor shall be responsible for limiting pours to minimize shrinkage cracking. In general, walls shall not be poured in

continuous lengths exceeding 30 feet without providing construction joints or control joints. The location and configuration of joints exposed to view shall be coordinated with the architect. 19 The installation of slabs shall conform to the requirements of ACI 302.1R, "Guide to Concrete Floor and Slab Construction". Interior finish slab surfaces are to have a steel trowel finish. Exterior slab surfaces are to have a broom finish unless specified on the architectural drawings.

Filler strips: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self expanding cork Sealant at top of joint: Sika's Sikaflex 2c SL poly urethane elastomeric sealant. Provide cap to separate sealant from filler. The curing and protection of concrete shall conform to the requirements of ACI 318 and ACI 308R, "Guide to Curing Concrete". Concrete slabs shall be protected from loss of surface moisture for not less than 7 days using a curing compound conforming to ASTM C 309 or constantly wetted burlap. Curing compounds shall be compatible with any intended flooring overlay. Do not install

finish flooring until slab has adequately dried per the flooring manufacturer's specifications. Cold weather concrete placement: If cold weather concreting conditions exist as defined by a period of more than three days when the average outdoor temperature, (high + low)/2, is less than 40 deg. F. the procedures outlined in ACI 306.1, "Standard Specification for Cold Weather Concreting" and ACI 306R, "Guide to Cold Weather Concreting" shall be utilized. Hot weather concrete placement: Maintain concrete temperature below 90 deg. F. at time of placement and comply with ACI 301 and ACI 305R, "Guide to Hot Weather Concreting".

Accurately position, support, and secure reinforcement and anchors against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars. Provide bar supports as follows:

A. Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Do not "wet stick" reinforcement or anchors. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete.

Sizes and locations of all required embedded items, such as anchor bolts, piping sleeves, etc., for all trades shall be coordinated by the general contractor with other trades. Submittals to the engineer are required for concrete mix designs, cement, reinforcing bars, admixtures, and aggregates. as specified

Concrete Masonry Notes:

All concrete masonry work shall conform to the requirements of the "Building Code Requirements for Masonry Structures, TMS 402" and the "Specifications for Masonry Structures. TMS 602, indicated in the code reference section of these general notes. The compressive masonry strength, f'm, shall be 1,900 psi minimum. System components have been selected based on the unit strength method. Concrete block shall be lightweight hollow load bearing masonry units conforming to ASTM C 90, with a minimum ultimate

compressive strength of 1,900 psi on the net area of the units. Units shall be protected from moisture absorption. Portland cement used in the mortar and grout shall conform to ASTM C 150. Masonry cement or mortar cement shall not be

Mortar shall be Type S conforming to the volumetric proportions set forth in ASTM C 270. Use 1 part Portland cement; 0.25 to 0.5 parts hydrated lime or lime putty; and aggregate proportioned to 2.25 to 3 times the sum of the separate volumes of cementitious materials (i.e. Portland cement plus lime). Provide aggregate in loose, damp condition. Add water to produce a workable mix. Coarse grout used in pilasters and walls shall conform to the volumetric proportions set forth in ASTM C 476. Use one part Portland cement, 2.25 to 3 parts damp, loose sand, 1 to 2 parts 3/8" pea gravel. Add water to produce a flowable mix with an 8 to 11 inch

Alternatively, fine grout may be used that conforms to the volumetric proportions set forth in ASTM C 476 using one part Portland cement, 2.25 to 3 parts damp loose sand and adding water to produce a flowable mix with an 8 to 11 inch slump. Steel reinforcing bars shall conform to ASTM A 615, Grade 60. Reinforcing bars to be lapped 48 bar diameters at splices. Reinforcement to be secured against displacement at spacing not exceeding 200 bar diameters. Joint (horizontal) reinforcement shall be hot-dipped galvanized W1.7 (9 gage) steel wire, ASTM A 951 with ASTM A 153 Class B-2

coating, Ladder type, by Hohmann & Barnard, Inc., or an approved equal. Place joint reinforcing in every second course (16"o.c.). Joint reinforcement shall be lapped 6 inches at splices. Place units while mortar is soft and plastic. Remove and relay in fresh mortar any unit disturbed to the extent that initial bond is

broken after initial positioning. 10 Fully bed units in all shear walls including cross webs.

All cells with reinforcing bars or bolts shall be grouted solid. Vertical cells to be grouted solid shall have a minimum clear opening of 3"x2-1/2". The entire perimeter of the cell shall be fully Consolidate grout pours exceeding 12 inches in height by mechanical vibration and reconsolidate by mechanical vibration after initial water absorption and settlement has occurred. Grout pours exceeding 5.33 feet are high lift pours and shall require cleanouts. High

lift grouting shall not be used unless high lift grout procedures are submitted to the engineer for review and approved by the engineer. The structural plans do not show the full extent of masonry lintels that may be required for doors, windows, ducts, louvers, etc. For those openings that require masonry lintels and are not shown on the structural plans, see architectural drawings for location and size of openings. Do not scale openings. For masonry lintel size for corresponding masonry opening size, see "Typical Masonry Lintels in Non-Load Bearing Walls Detail". Note, if architectural drawings do not indicate a masonry lintel for a particular opening, then provide a steel lintel as per lintel notes, unless otherwise directed by the engineer. Masonry opening lintels have been designed on the basis of arching action of the completed wall. Lintels require temporary support

until the mortar has achieved the specified strength. Cover the tops of all masonry construction to protect against precipitation. Masonry shall not be constructed in temperatures below 40 F. Provide a heat source and protection as required to maintain temperature above 40 F in accordance with ACI 530.1 Hot weather construction techniques shall be in accordance with ACI 530.1 and shall be implemented when the ambient air

temperature exceeds 100 F, or 90 F if the wind speed exceeds 8 mph. 19 Unless otherwise shown on architectural or structural drawings provide vertical control joints through concrete masonry unit walls for

Distance between joints should not exceed the lesser of length to height ratio of 1.5, or 25 feet At changes in wall height

At changes in wall thickness – including pipe and duct chases and pilasters At and above expansion joints in foundations and floors

At and below expansion joints in roofs and floors that bear on the wall For openings, do not locate control joints within 32 inches of openings

Adjacent to corners of walls or at wall intersections within a distance equal to half the control joint spacing. 20 Submittals to the engineer are required for certificates of compliance for block grade and strength, grout, mortar, and reinforcing bars prior to delivery to the site.

Structural Steel Notes: Design fabrication and erection of structural steel shall conform to the American Institute of Steel Construction's "Specification for

Structural Steel for Buildings", indicated in the code reference section of these general notes. Wide flange shapes: ASTM A 992 Grade 50 American standard shapes, angles, ASTM A 36 Structural steel tubing, ASTM A 500, Grade C (Fy=50 ksi) Rectangular and square

ASTM F3125, Grade A 325 ASTM F 1554, Grade 36 Anchor rods ASTM E 70xx, low hydrogen Welding electrode All welding shall conform to American Welding Society's AWS D1.1 "Structural Welding Code-Steel" code for arc and gas welding and be performed by a certified welder in accordance with A.W.S. standards.

High strength bolts: install high-strength bolts according to Research Council on Structural Connections' (RCSC's) "Specification for Structural Joints Using High-Strength Bolts" for type of bolt and type of joint specified. Joint type: Snug tightened unless otherwise noted The fabricator is responsible for designing connections for the reactions shown on these plans and submitting these design calculations, signed and sealed by a qualified professional engineer registered in the state of jurisdiction who is responsible for their

preparation, for review by the structural engineer of record through the architect. The reactions shown are "service" loads for "Allowable Stress Design" (ASD). Connections may be designed for these values using the conventional "Allowable Stress Design" method, as specified in the AISC Steel Construction Manual indicated in the code reference section of these general notes. For moment connections, notch-tough welding electrodes, complying with AWS requirements, shall be used for full penetration welds. Also for full penetration welds, provide welding tabs at beam flange edges to allow welding of full beam width. For moment connections, backing bars and weld tabs for welds need not be removed, unless testing agency requires removal to facilitate testing and inspection or weld tabs interfere with architectural finishes.

Full or partial penetration groove welds shall be ultrasonic tested, as indicated in the Statement of Special Inspections, and shall be detailed to allow for such ultrasonic testing. Where slotted hole connections are shown, nuts shall be fastened snug tight, then untightened by one-half turn. Peen threads to prevent further loosening of the nut.

Grout shall be nonmetallic, shrinkage-resistant grout conforming to ASTM C 1107, Grade B or C, factory-packaged, nonmetallic aggregate grout, noncorrosive, nonstaining, mixed with water to consistency suitable for application and a 30-minute working time. 11 Structural steel shall be cleaned in accordance with the Steel Structures Painting Council Specification SP 3 for Power Tool Cleaning (except for steel exposed to weather) and painted with the specified primer.

12 Provide bitumastic protection coating for all structural steel below grade. Bent beams are defined as beams having its full section properties throughout its length, including at the bent. Provide full penetration welds all around at the bent. 14 Provide 1/4" closure plates with seal weld at ends of all HSS members.

15 For miscellaneous steel, see architectural drawings. Submittals to the engineer are required for certificates of compliance for structural steel, bolts, nuts, washers, and weld filler material prior to the fabrication of any steel 17 At the completion of fabrication, the fabricator shall submit a certificate of compliance stating that the work was performed in accordance with the approved contract documents, as required by Section 1704.2 of the building code indicated at the beginning of these General Notes.

<u>Lintel Notes:</u>

and brick walls use for each 4" of masonry: 3 1/2" x 3/8" flat plate 3 1/2" x 4" x 5/16" (LLV) 5'-0" 3 1/2" x 5" x 5/16" (LLV) 6'-0" 3 1/2" x 6" x 5/16" (LLV) 3 1/2" x 6" x 3/8" (LLV) Openings in non-bearing walls masonry where no specific lintels or lintel sizes are indicated shall have 8" bearing at each end and shall have the following sizes: <u>Max. M.O.</u> 9'-0" W8x31 + 5/16" plate 12'-0"

Unless otherwise noted, for lintels over doors, windows, ducts, and miscellaneous openings in non-bearing 4", 8" and 12" CMU walls

W8x35 + 5/16" plate Plates indicated in above lintels shall have a width 1" less than the wall thickness and a length 1" less than the masonry opening. Provide 7 1/2" x 5/8" x 0'-7 1/2" bearing plates on 3/4" grout bed with (2)-5/8" diameter x 6" long welded anchor study at 3" o.c. unless otherwise noted. Field weld bottom flange of beam to bearing plate with 1/4" weld at each side of flange. For 6" masonry partitions use WT 7x13 for spans up to 7'-0" with 6" bearing each end. For 10" masonry partitions use WT 7x21.5 for spans up to 7'-0" with 8" bearing each end. Fill the first two courses directly under bearing with grout for 16" length.

See architectural and mechanical drawings for size and location of openings. When openings occur in bearing walls or the height of masonry above the lintel is less than the opening width or when a control joint is located directly above or within 16" of the jamb opening and drawings do not otherwise indicate a specific lintel design, consult with the architect to confirm lintel requirements. 8 Lintels over adjacent openings with piers between less than 2'-8" wide shall be continuous over piers. Masonry units of such piers shall be filled with grout for full story height. Connect lintel to structural steel columns when there is less than 16" of masonry between the masonry opening and the outermost

10 Lintels supporting exterior masonry shall be hot-dipped galvanized. See structural steel notes 11 Lintels for openings in walls: These plans do not show the full scope of steel lintels required for new wall openings for doors, windows, ducts, louvers, etc.. For masonry opening size and location of all wall openings, see architectural and mechanical drawings. Do not scale openings. For steel lintel size for corresponding masonry opening size, see notes, above, unless otherwise noted on

General Wood Notes:

Wood design is based on the NDS, "National Design Specification for Wood Construction with Supplement", as indicated in the code reference section of these general notes. Stud bearing walls, shear walls, and roof and floor decks shall be framed with the member sizes and/or types at the spacings shown on plan. The contractor shall coordinate locations of all plumbing piping, HVAC ducting and recessed lighting fixtures, etc prior to layout to minimize interference that may require the altering or strengthening of the installed framing.

3 All wood framing is to be stored on site above the ground on "stickers" indoors or under tarps with adequate clearances to allow air Roofs shall be installed at the pitches indicated on the architectural drawings. Joists and rafters shall be installed directly over bearing studs unless otherwise detailed. Joists and rafters shall be supported laterally at each support by full depth solid blocking two inches in thickness, except where joists

are supported by a flush header or nailed to a rim joist. Flush framed connections shall be made with prefabricated galvanized steel hangers made by Simpson Strong-Tie, Co., Inc. or Kant-Sag connectors by United Steel Products Co. of width and depth appropriate for the supported member. Install with the type and quantity of fasteners recommended by the manufacturer. Prefabricated steel hangers used in contact with preservative pressure treated wood shall be hot dipped galvanized in accordance with ASTM A 123 or stainless steel, Type 316, or have a "Triple Zinc" (ASTM G 185) coating. Fasteners in contact with preservative pressure treated wood shall be hot dipped galvanized in accordance with ASTM A 153 or stainless steel, Type 316. Do not mix stainless steel and galvanized fasteners and connectors. 8 Contractor shall choose metal connector (Simpson, USP, or approved equal) based on member reactions shown on drawings and/or

connection configuration and provide product data to the engineer for approval. Metal connections are required at flush framed conditions, roof rafter hold-downs, post caps and bases, and where indicated on plan. Structural wood framing used in exterior applications or in contact with concrete or masonry shall be Southern Yellow Pine No. 2 or

better, ACQ (Alkaline Copper Quaternary) or CA (Copper Azole) preservative pressure treated wood with a retention appropriate for 10 Built-up members of three plies or less shall have adjacent plies nailed together with two rows of nails at 12" o.c. (10d common nails for 1-1/2" plies, 12d common nails for 1-3/4" plies). Built-up members of more than 3 plies shall be assembled with 1/2" diameter thru

<u>Dimensioned Wood Framing Notes:</u>

1 The structural wood stress grade stamped lumber shall be graded as follows: Joists, rafters and studs: Douglas Fir-Larch or Douglas Fir-Larch (North), No. 2 F_b (base) = 850 psi F_c (parallel to grain) = 1400 psi F_c (perpendicular to grain) = 625 psi F_v (base) = 180 psi E (base) = 1,600,000 psi

bolts at 16" o.c. staggered up and down with 2 inch clearance at top and bottom edges.

The design of the dimensional lumber members and their connections is based on the lumber having a moisture content at the time of Joists or rafters are to be installed with "crown" up (i.e. positive camber) and within 1/4 inch in 10 feet straight, end-to-end alignment.

Severely distorted (twisted, bowed, cupped, checked, etc.) lumber shall not be used. Notches in the top or bottom of dimensioned lumber joists or rafters shall not exceed one-sixth the member depth and shall not be located in the middle third of the span. End notches shall not exceed one-fourth the member depth. Bored holes shall not be within two inches of the top and bottom of the member and their diameter shall not exceed one-third the member depth, unless otherwise noted on plans.

Wood Structural Panels:

Wood Structural Panels commonly referred to as sheathing panels, plywood or oriented strand board ("OSB"), shall conform to U.S. Product Standard DOC PS 1 or PS 2, and bear the APA grade-trademark of the American Plywood Association. Sheathing panels for floors, roof, and walls shall be APA rated sheathing, Exposure 1, with a minimum span index rating of 32/16. Sheathing panels on flat surfaces shall be installed with face grain or panel long dimension perpendicular across supports and continuous over two or more spans. Provide 1/8" space between panel edges parallel to face grain or panel long dimension, 1/16" space between panel edges over supporting members.

Floor sheathing shall be glued to supporting members with construction adhesive such as PL 200, laid in a continuous 1/4 inch wide bead along the member length At designated shear walls, horizontal edges of wall sheathing shall be backed by solid blocking between studs to provide backing for specified panel edge nailing

At panel edges, nails are to be 3/8" from edge of panel. The heads of nails shall be driven flush to the surface of the panel and not break the surface.

<u>Laminated Veneer Lumber</u>

Laminated Veneer Lumber (LVL) shall be "Micro-Lam" as manufactured by Weyerhaeuser, "G-P Lam" as manufactured by the Georgia Pacific Corporation or "Gang-Lam" as manufactured by the Louisiana Pacific Corporation.

2600 psi F_c (parallel to grain) = 2510 psi F_c (perpendicular to grain) = 750 psi 285 psi

1,900,000 psi Member sizes shown on plan (width x depth) specified as LVL may be constructed of multiple LVL plies or PSL of the specified depth, fastened together by nailing or bolting as required. Member sizes followed only by PSL or solid glulam must be installed as a solid

member, not built-up. Members may not be bored or notched without written permission from the engineer.

I-joists shall be manufactured of laminated veneer lumber top and bottom flanges and Oriented Strand Board webs bonded together with an exterior adhesive. Approved manufacturers are Weyerhaeuser, ("TJI" joists), Georgia Pacific ("GPI" joists), Louisiana Pacific ("LPI" joists), and Anthony Forest Products ("PJI" joists).

Joists sizes are indicated generically on plan, width x depth in inches I-joist manufacturer's series designations

3-1/2" LPI 20 Plus GPI 20 GPI 40 TJI 560 TJI 110 TJI 360 PJI 60 GPI 40 LPI 32 Plus LPI 56 GPI 20 PJI 80 TJI 110 TJI 360 TJI 560 P.JI 60 GPI 40 LPI 32 Plus LPI 56 TJI 360 PJI 60 TJI 560 LPI 32 Plus PJI 80 LPI 42 Plus

Selected joist sizes have been designed with Weyerhaeuser software for a TJ-ProTM rating system of 50 or higher. If joists other than TJI's are used, they shall have a similar demonstrated performance. I-joists are to be stored on site above the ground on "stickers" under tarps with adequate clearances to allow air circulation. I-joists are to be handled in the upright position. Do not walk on joists until manufacturer's recommended temporary top flange bracing or permanent sheathing is installed. 4 Joists of the proper size are to be installed at the spacings indicated on the drawings using the manufacturer's recommended details

Edge joists/box nailers are to be 1-3/4 inch minimum thick matching the joist depth made of LVL material. Do not cut or notch flanges. Webs opening may be cut only as recommended in the manufacturer's literature and then only after consultation with the engineer. Do not bevel cut the top end of the joist beyond the edge of bearing. Provide single "squash blocks" under bearing walls from above nailed to the joist flanges. Match the dimensions and material of the supporting stud below. "Squash blocks" are to be cut 1/16" longer than depth of joist and are to be installed with grain vertical. Install joist web stiffeners as specified by the joist manufacturer and the metal connector manufacturer in addition to locations shown

Rim boards: provide 1.3E laminated structural lumber (LSL), "Timberstrand" as manufactured by Weyerhaeuser, with the following allowable stress and stiffness characteristics:

1700 psi F_c (parallel to grain) = 1400 psi F_c (perpendicular to grain) = 680 psi 400 psi 1,300,000 psi

Wood Fasteners Notes:

Wood components are to be fastened together with common nails as indicated in the following schedule unless specifically indicated

Nailing schedule Connection location

Quantity or Nail size/type spacing and

Floor construction	450, 150, 150, 150, 150, 150, 150, 150, 1	
Built up girder/beam (3 plies or less):	10d common - 1.50" plies 2 h	
	16d common - 1.75" plies	(top & bot)
		12" o.c. direct
Floor joists to Sill or girder:	10d common	4 toe-nail
Rim/box joist to Joist end:	16d common	3 end direct
Bridging to joists:	8d common	3 toe-nail or
	10d common	2 direct
Floor truss chord to sill or girder:	16d common	3 direct
Band joist to truss end:	10d common	3 direct
Edge floor truss bottom chord to sill:	16d common	8" o.c. direct
Edge floor joist/ truss to sill:	10d common	8" o.c. toe-nail
Floor sheathing:	8d common	6" o.c. edges
	10" o.c. other	
Wall construction		
Stud to sole plate:	8d common	4 toe-nail or
·	16d common	2 end direct
Top plate to stud:	16d common	2 end direct
Double studs:	10d common	9" o.c. direct
Corner studs:	16d common	16" o.c. direct
Sole plate to joist or blocking:	16d common	8" o.c. direct
Blocking between joist to top plate:	10d common	2" o.c. toe-nail
Rim/box joist to top plate:	16d common	8" o.c. toe-nail
Double cap plate:	16d common	16" o.c. direct
Double cap plate laps at end joints (24" min. offset):	16d common	8 direct
Double cap plate laps at corners and intersections:	16d common	2 direct
Header end to trimmer:	8d common	2" o.c. toe-nail o
Toddor ond to timmor.	10d common	3" o.c. direct
Wall sheathing unless identified as a shear wall:	8d common	4" o.c. at edges
vali sheathing diffess identified as a shear wall.	od common	8" o.c. other
Roof & ceiling construction		0 0.0. 00101
Ceiling joist to plate:	16d common	4 toe-nail
Ceiling joist to plate. Ceiling joists laps (over partition):	10d common	4 direct
Ceiling joists taps (over partition).	10d common	5 direct
Collar tie to rafter:	10d common	5 direct
Roof rafter to plate:	10d common	4 toe-nail
Roof rafter to plate:	16d common	4 toe-nail or
Noon raiter to muge.		
Valloy/hip rafter to ridge, header or trimmer	16d common	3 end direct
Valley/hip rafter to ridge, header or trimmer:	16d common	2" o.c. toe-nail o
la ale maftan ta laine	16d common	3" o.c. end direc
Jack rafter to hip:	10d common	3 toe-nail or
District the form of the state of the state of	16d common	2 direct
Blocking between rafters to top plate:	10d common	2" o.c. toe-nail
Roof sheathing:	8d common	6" o.c. edges

Nails and spikes shall conform to the nominal sizes specified in Federal Specifications FF-N-105B and as noted below:

			<u>Penr</u>	<u>ryweight</u>		
Type		8d	10d	12d	16d	<u>20d</u>
Common	Shank diameter	0.131"	0.148"	0.148"	0.162"	0.192"
	Length	2.50"	3.00"	3.25"	3.50"	4.00"
	Head diameter	0.281"	0.312"	0.12"	0.344"	0.406"
Pneumatic or e	lectric powered hammers of	often use fasten	ers of same le	ength as com	mon nails but	of lesser gage or diameter; use

engineer for approval prior to installation if powered hammers are to be used. Bolts shall conform to ASTM A 307 or ASTM A 36. Lag and wood screws shall conform to ANSI/ASME standard B18.6.1 - 19.81. All fasteners used in contact with preservative pressure treated wood shall be hot dipped galvanized in accordance with ASTM A 153

fastener of the diameter or gage equal to or greater than the common nail specified. Fastener specifications must be submitted to the

10" o.c. other

or stainless steel, Type 316. Do not mix stainless steel and galvanized fasteners and connectors. Bored lead holes for fasteners shall be as follows: A Nail and spike lead holes are not required unless to prevent splitting of wood. If required, lead hole diameter shall not exceed 75% of nail/spike diameter.

B Wood screws - lead hole diameter equals 7/8 of unthreaded shank diameter in connected wood part and 7/8 of diameter at root of thread in wood receiving thread. C Lag screws - lead hole diameter equals shank diameter for extent of unthreaded shank, and 60% of shank diameter for threaded portion of shank.

Thru bolts - lead hole diameter 1/32" to 1/16" larger than nominal bolt diameter. Insert threaded screw type fasteners by turning with screwdriver or wrench. Do not drive by hammering. Facilitate installation by placing soap or other lubricant on threads. Provide standard round washers under the heads of all thru bolts and lag screws and under all nuts unless otherwise indicated on the

plans. Tighten fasteners without crushing wood fibers under washers.

DISTRICT-WIDE CAPITAL IMPROVEMENTS NEW CONSTRUCTION & ATHLETIC CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514

> P: 914.666.5900 KGDARCHITECTS.COM CONSTRUCTION DOCUMENTS

285 MAIN STREET • MOUNT KISCO, NEW YORK 10549

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED I DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D). PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT TH TTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON TH JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND INDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL FORE PROCEEDING WITH FABRICATION. ERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT NLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONA EAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LA'

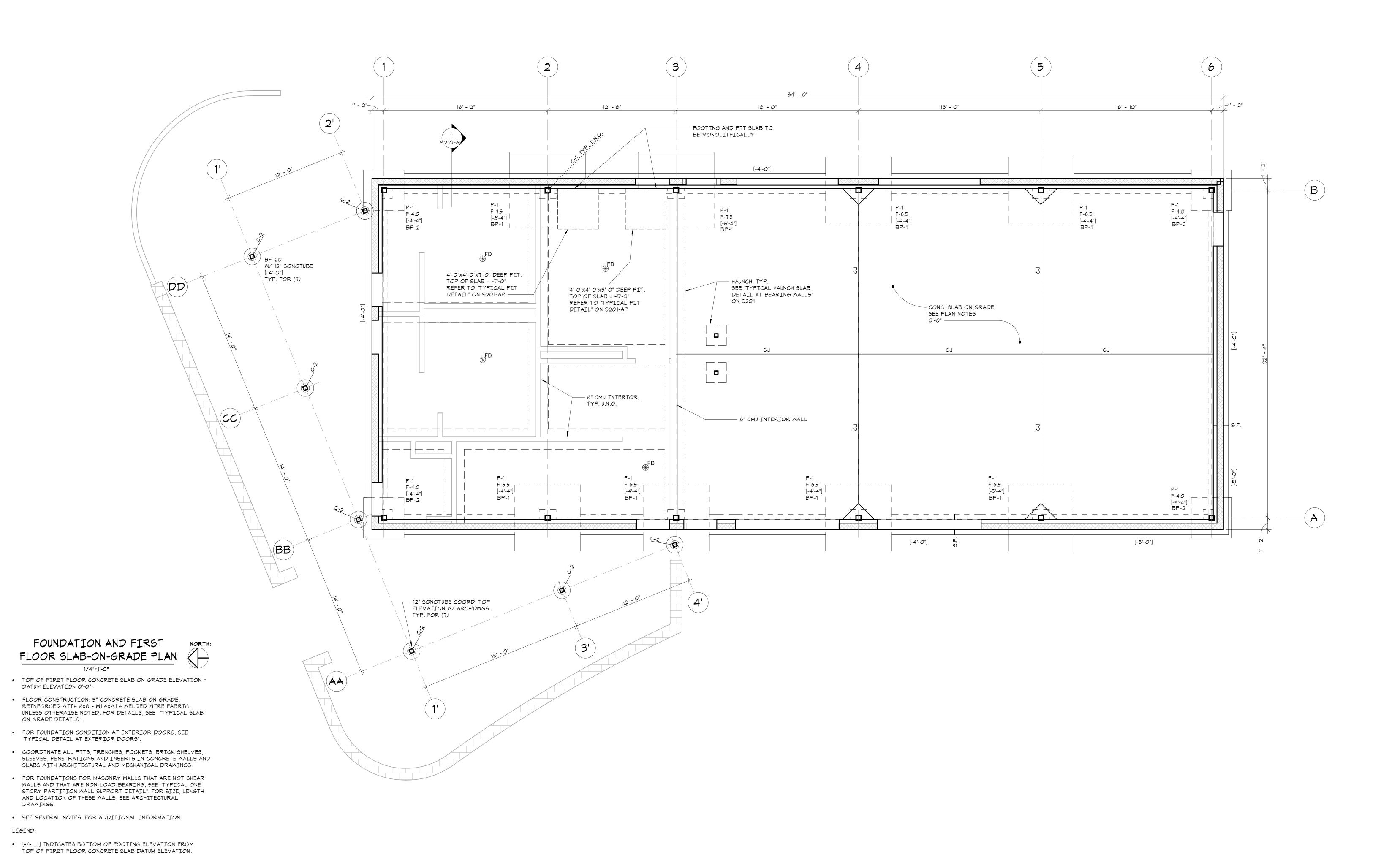
Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/01/2023	SCHEMATIC DESIGN
No.	Date	Issue
Sheet	Title	

GENERAL NOTES AND MATERIAL **SPECIFICATIONS**

No. 2023-1028	Sheet Number
te 09/06/23	
ale AS NOTED	S00

Drawn / Checked **Author Checker** S001-AP



• (+/-...) INDICATES TOP OF WALL ELEVATION FROM TOP OF FIRST FLOOR CONCRETE SLAB DATUM ELEVATION.

• +/..... INDICATES TOP OF CONCRETE SLAB ELEVATION FROM TOP OF FIRST FLOOR CONCRETE SLAB DATUM ELEVATION. MAINTAIN FULL SLAB THICKNESS AT SLOPED AND DEPRESSED AREAS. SEE ARCHITECTURAL DRAWINGS

"SF" INDICATES APPROXIMATE LOCATION OF STEPS IN

ELECTRICAL AND PLUMBING DRAWINGS. FOR DETAILS, SEE

CONTROL/CONSTRUCTION JOINTS IN SLABS ON GRADE. FOR

FOOTINGS ON PLAN. COORDINATE LOCATION AND ELEVATION WITH SITE GRADING AND MECHANICAL,

DETAILS, SEE "TYPICAL SLAB ON GRADE DETAILS".

F-## INDICATES FOOTING TYPE. SEE "FOOTING SCHEDULE

BP-# INDICATES COLUMN BASEPLATE. REFER TO S202-AP

• "C-2" INDICATES A 6"x6" P.T. POST W/ A SIMPSON CPT88Z

"TYPICAL STEPPED FOOTING DETAIL".

"C-1" INDICATES AN HSS6x6x5/8 COLUMN.

"CJ" INDICATES APPROXIMATE LOCATION OF

FOR LOCATION AND EXTENT.

AND FOOTING DETAIL".

FOR DETAILS.

POST BASE

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY IIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), A ERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMEN' OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THI WRITTEN PERMISSION OF KG+D.

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND ONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL EFORE PROCEEDING WITH FABRICATION.

JNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONA SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LA

Professional Seal

	09/16/2024	ISSUE FOR BID
	10/27/2023	SED ISSUE
	08/31/2023	ISSUE FOR PRICING - 90% CD
	06/01/2023	SCHEMATIC DESIGN
	Date	Issue
ام	Titla	·

FIRST FLOOR SLAB-ON-GRADE AND FOUNDATION PLAN

Sheet Number 2023-1028

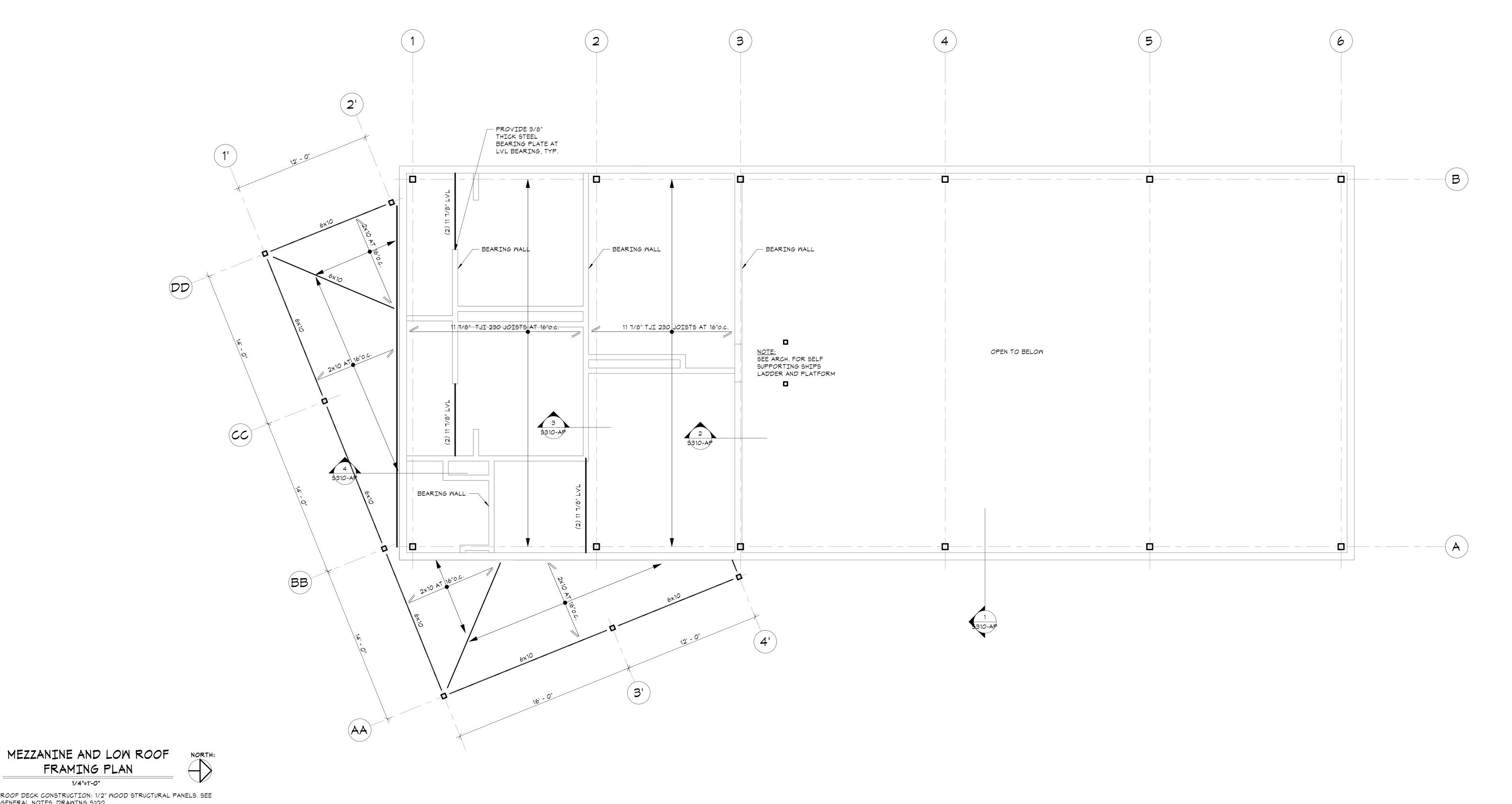
AS NOTED

Drawn / Checked

JM EM

11-01-2018

S101-AP

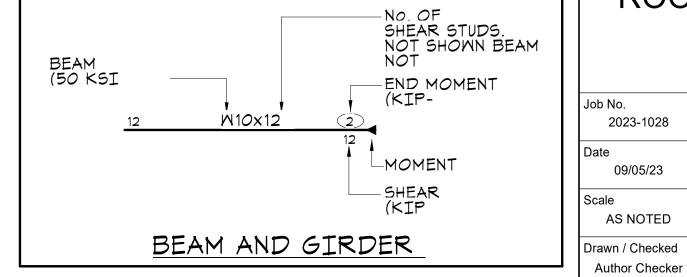


 ROOF DECK CONSTRUCTION: 1/2" WOOD STRUCTURAL PANELS. SEE GENERAL NOTES, DRAWING S100.

 COORDINATE SIZE AND LOCATION OF ALL ROOF PENETRATIONS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ALL ROOF PENETRATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION AND INSTALLATION OF PENETRATION FRAMING ELEMENTS. PROVIDE FRAMING AS INDICATED IN "TYPICAL ROOF/FLOOR OPENING DETAIL". DO NOT SCALE OPENING

SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

	FRAMING LEGEND		
JOISTS/RAFTERS	BEAM/HEADER	WOOD POSTS	
SPAN DIRECTION OF FRAMING FRAMING FRAMING FRAMING FRAMING MARK, SEE SCHED. DOWNSLOPE DIRECTION OF SLOPING MEMBERS OTHER FRAMING	BEAM (3)-2×10 SIZE (3)-2×10 SIZE (3)-2×10 SIZE (3)-2×10 BEAM I.D. BEAM REACTION (LBS) * SEE LAMINATED VENEER LUMBER (LVL) AND PARALLEL STRAND LUMBER (PSL) NOTE No.3.	■ POST DOWN □ POST UP AND DOWN □ POST UP POST SHALL BE: (3)-2×4 MIN. IN 2×4 STUD WALL, U.O.N. (2)-2×'S MATCHING STUD WALL THICKNESS MIN. IN STUD WALLS GREATER THAN 2×4, U.O.N.	



DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED

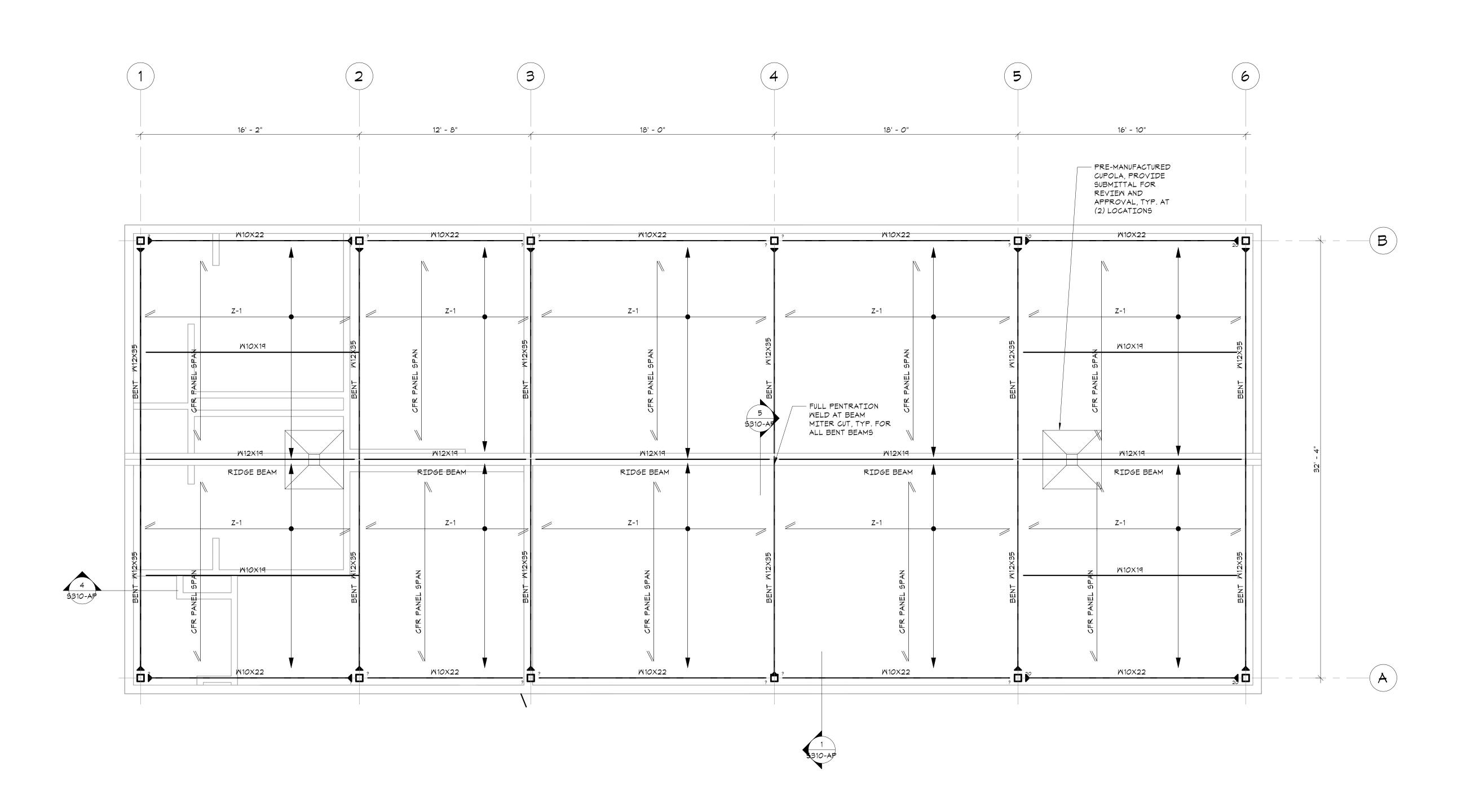
DIMENSIONS CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW. © COPYRIGHT KG+D ARCHITECTS, PC. ALL RIGHTS RESERVED.

Professional Seal

4 09/16/2024 ISSUE FOR BID 3 10/27/2023 SED ISSUE 2 08/31/2023 ISSUE FOR PRICING - 90% CD 1 06/01/2023 SCHEMATIC DESIGN No. Date

MEZZANINE & LOW **ROOF FRAMING** PLAN

Sheet Number 2023-1028 09/05/23 S102-AP Scale AS NOTED Drawn / Checked



ROOF FRAMING PLAN



TOP OF STEEL ELEVATION (UNDERSIDE OF DECK): 12'-0" UNLESS OTHERWISE NOTED THUS [+/-X'-XX"] FROM ELEVATION DATUM OF

 ROOF DECK CONSTRUCTION: 4" CFR COMPOSITE ROOF PANELS BY METL-SPAN

- COORDINATE SIZE AND LOCATION OF ALL ROOF PENETRATIONS WITH ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. ALL ROOF PENETRATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO FABRICATION AND INSTALLATION OF PENETRATION FRAMING ELEMENTS. PROVIDE FRAMING AS INDICATED IN "TYPICAL ROOF/FLOOR OPENING DETAIL". DO NOT SCALE OPENINGS.
- REINFORCE STEEL JOISTS AT SUPPORT OF PIPES/CONDUITS AND ANY CONCENTRATED LOADS AT TOP OR BOTTOM CHORDS, AS PER "TYPICAL JOIST REINFORCING DETAIL".
- "Z-1" INDICATES 8" DEEP Z-PURLIN AT 4'-0"o.c. Z-PURLINS SHALL BE 8" DEEP W/ 2 1/2" FLANGES AND MATERIAL THICKNESS EQUAL TO 0.098" (12ga.)
- "MF" INDICATES MOMENT FRAME.
- SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

BEAM (50 KSI

12

W10x12

W10x12

Dat

BEAM (KIP
BEAM AND GIRDER

NO. OF
SHEAR STUDS.
NOT SHOWN BEAM
NOT

END MOMENT
(KIP
Dat

Sca

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AN WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENT. OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW © COPYRIGHT KG+D ARCHITECTS, PC .

ALL RIGHTS RESERVED.

Professional Seal

4 09/16/2024 ISSUE FOR BID
3 10/27/2023 SED ISSUE
2 08/31/2023 ISSUE FOR PRICING - 90% CD
1 06/01/2023 SCHEMATIC DESIGN
No. Date Issue
Sheet Title

ROOF FRAMING PLAN

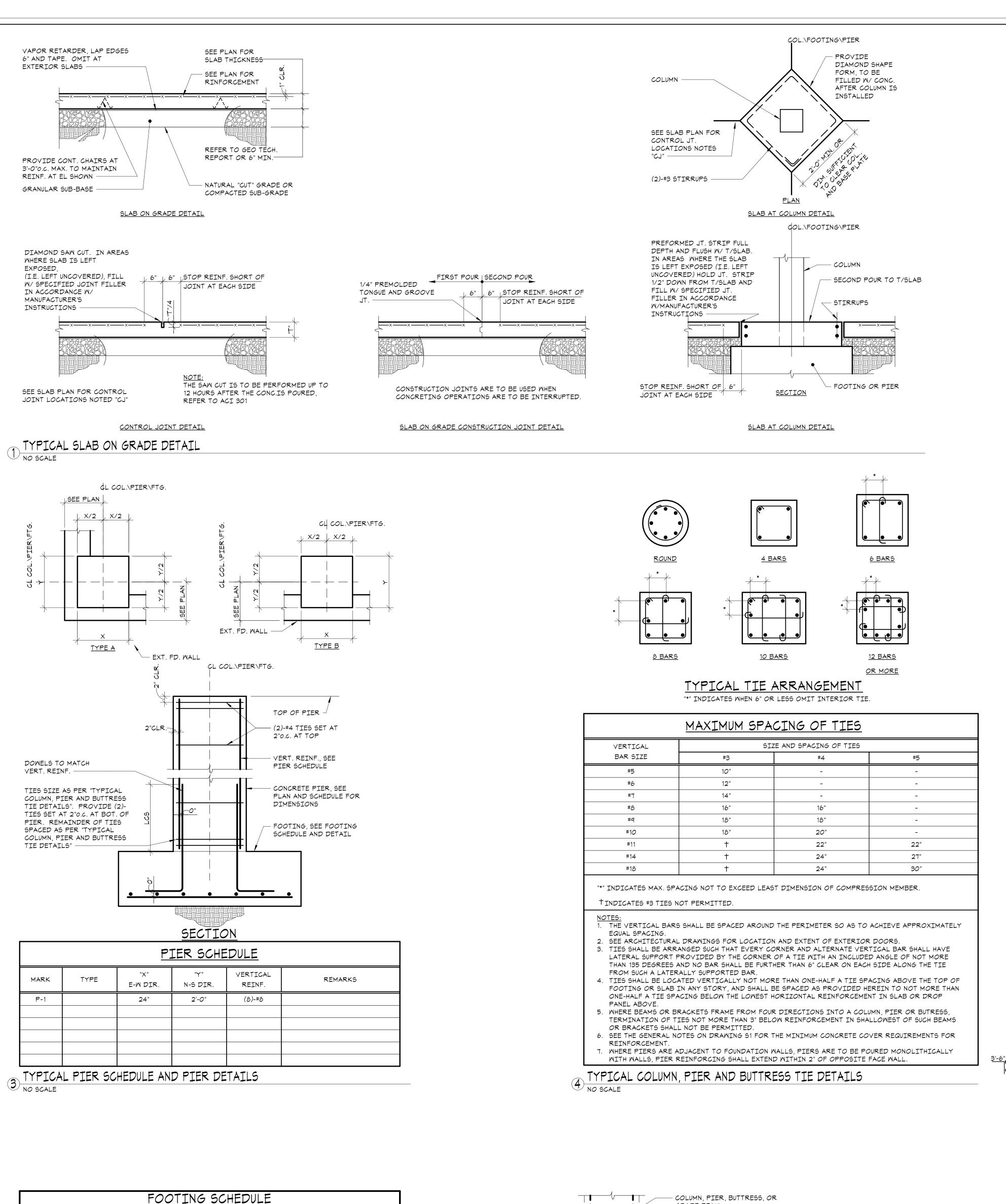
Job No. 2023-1028

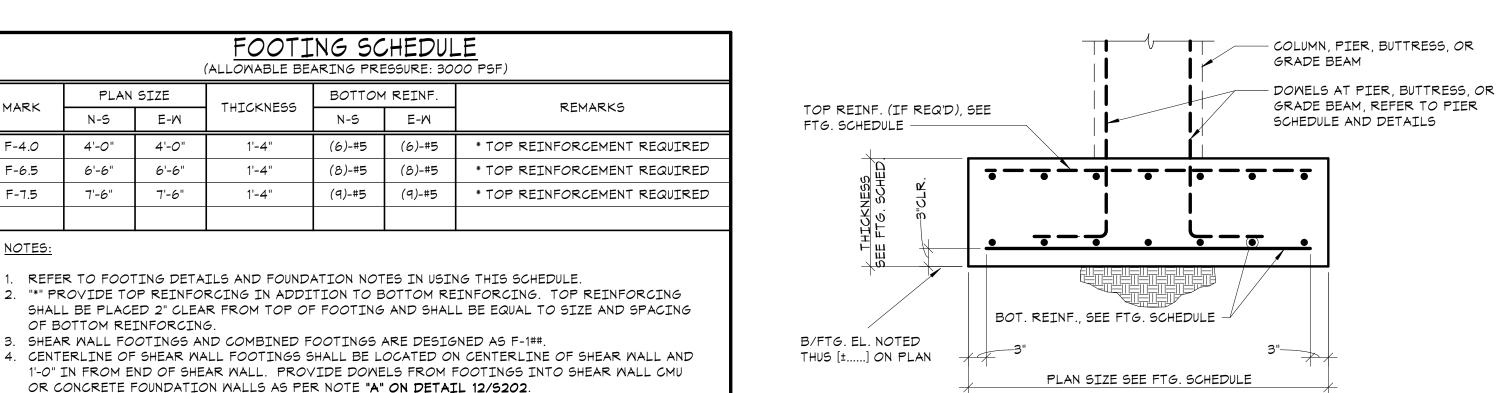
Date 11-01-2018

Scale AS NOTED

Drawn / Checked

JM EM





MARK

F-6.5

F-7.5

NOTES:

NO SCALE

FOOTING SCHEDULE AND DETAIL

5. WHERE SHEAR WALL FOOTINGS OVERLAP WITH COLUMN FOOTINGS, COMBINE THE TWO FOOTINGS

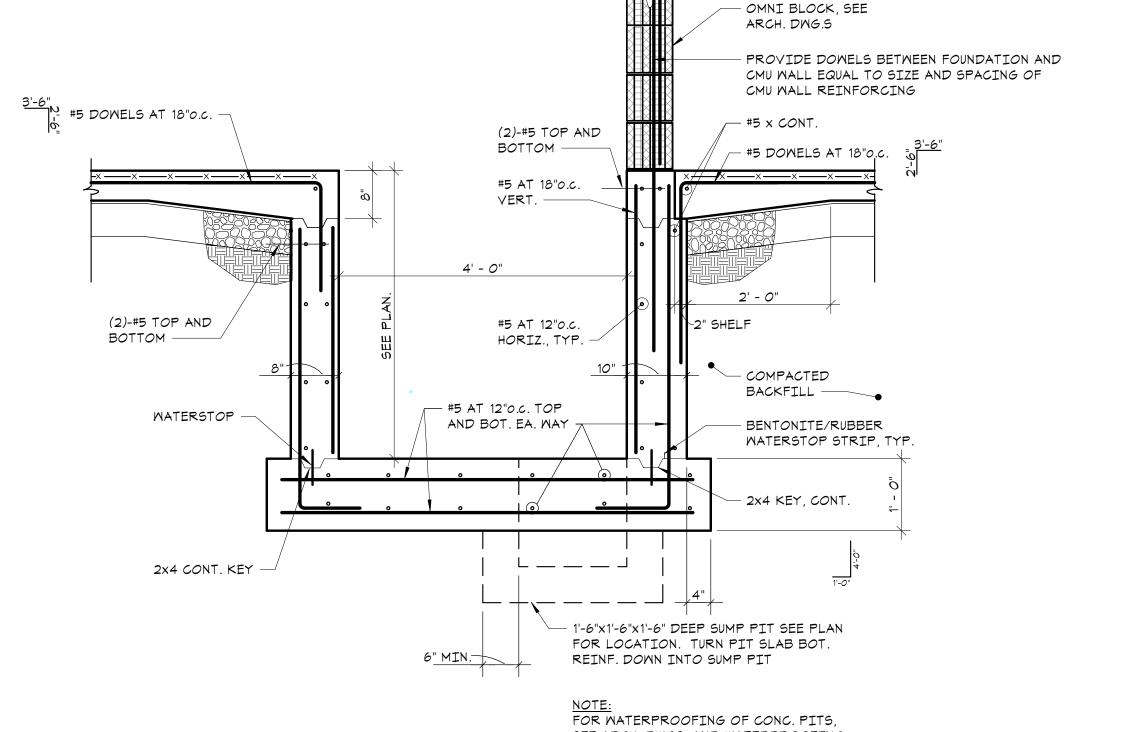
INCLUDING THE FULL AMOUNT OF REINFORCEMENT. ALIGN TOPS OF FOTTINGS.

CONC. PAD AT ENTRY SEE ARCH/SITE DWG'S. - #5 NOSING BAR, EA. EDGE - EDGE W/ 1/8" RADIUS TOOL — #5 NOSING BAR PROVIDE #5x1'-6" LG. DOWELS AT 12"O.C. DRILL AND EMBED 6" INTO CONC. W/ HILTI "HIT - PROVIDE 4'-0" WIDE HY150" ADHESIVE ANCHORING STRIP OF W.W.F ADJACENT TO MALL AT BOTTOM OF SLAB PITCH TO DRAIN (2)-#5, EXTEND 2'-0" BEYOND DOOR OPENING AT EACH END -2x4 KEY CONT. 1' - 0" 5 T#5 AT 18"o.c. NOTES: SEE APPROPRIATE SECTION FOR REMAINDER OF FOUNDATION INFORMATION NOT REPEATED HERE.

EXTERIOR DOORS.

SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF

2 TYPICAL FOUNDATION WALL DETAIL AT EXTERIOR DOORS



SEE ARCH. DWGS. AND WATERPROOFING SPECIFICATIONS.

6 TYPICAL PIT DETAIL
NO SCALE

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007

S DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), A RE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMEN' R PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT TH MENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE B AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND INDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL FORE PROCEEDING WITH FABRICATION.

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY

NLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONA EAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LA' COPYRIGHT KG+D ARCHITECTS, PC. Professional Seal

> 4 09/16/2024 ISSUE FOR BID 3 10/27/2023 SED ISSUE

08/31/2023 | ISSUE FOR PRICING - 90% CD

06/01/2023 SCHEMATIC DESIGN

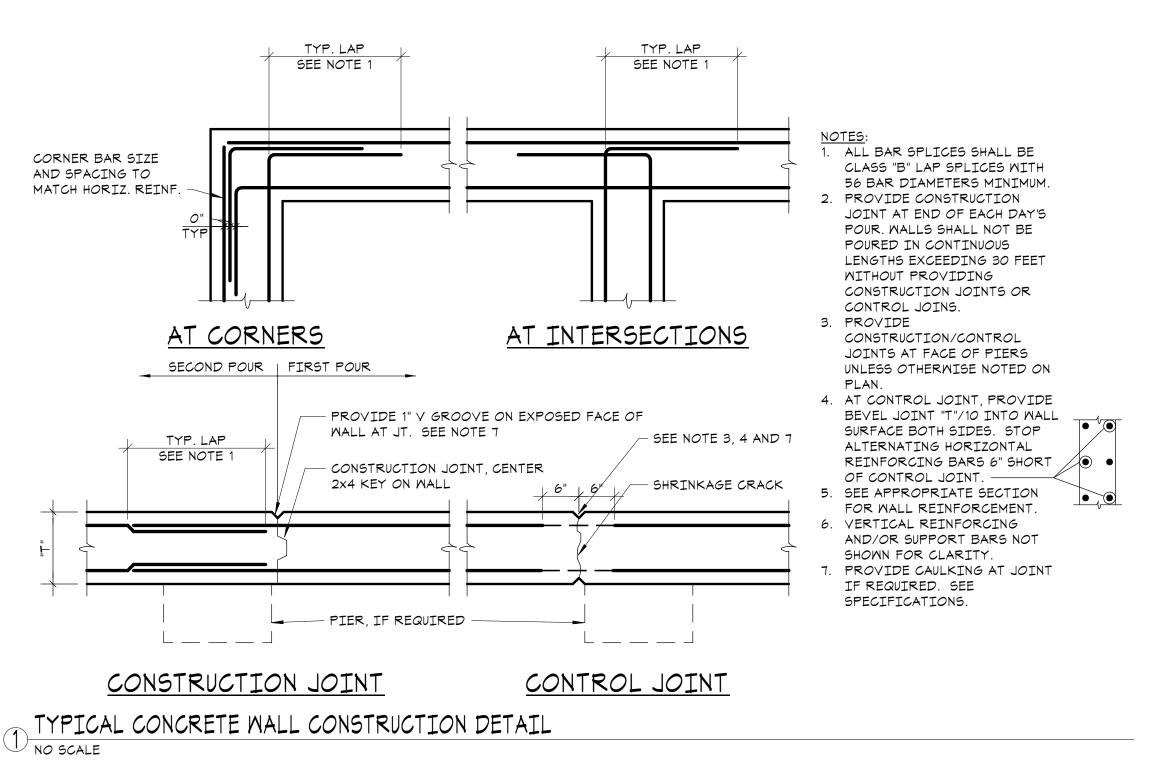
No. Date

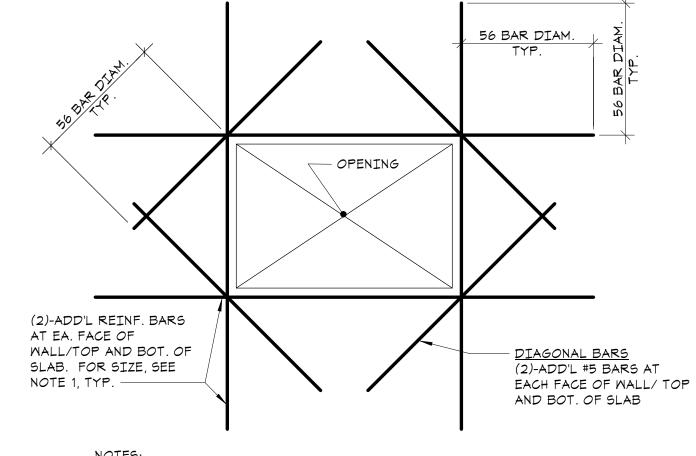
JM EM

FOUNDATION SCHEDULES AND TYPICAL DETAILS

Sheet Number 2023-1028 11-01-2018

S201-AP AS NOTED Drawn / Checked





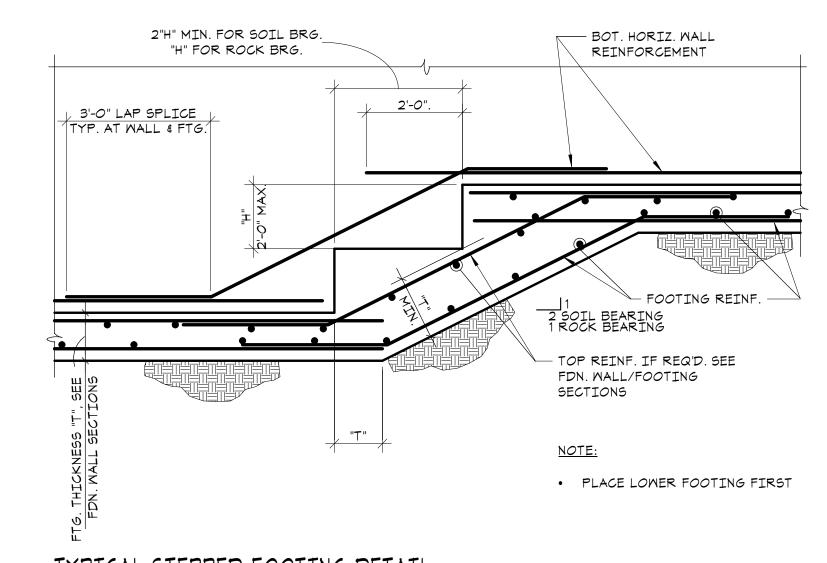
NOTES:

MECHANICAL DRAWINGS.

- 1. AT WALLS, ADDITIONAL REINFORCING SIZE SHALL MATCH HORIZONTAL AND VERTICAL REINFORCING. AT SLABS USE #5 BARS. 2. THIS DETAIL APPLIES AT ALL OPENINGS 12"X12" AND LARGER. DETAIL IS
- SIMILAR AT ALL CIRCULAR OPENINGS 12" AND LARGER. 3. COORDINATE ALL OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND

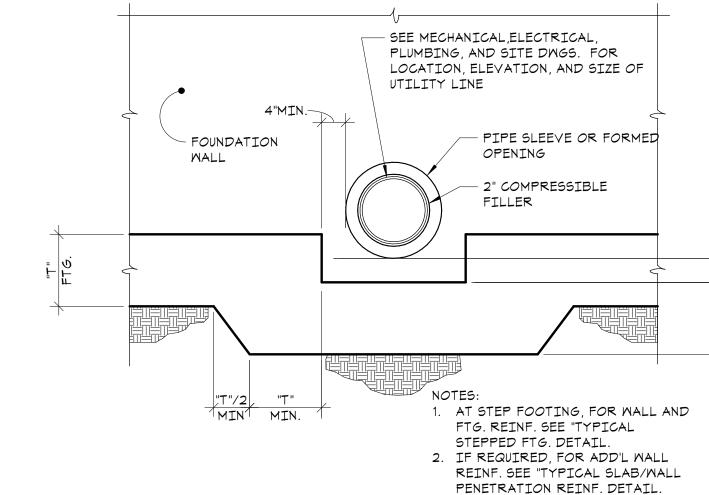
TYPICAL SLAB/WALL PENETRATION REINFORCING DETAIL

NO SCALE



TYPICAL STEPPED FOOTING DETAIL

NO SCALE



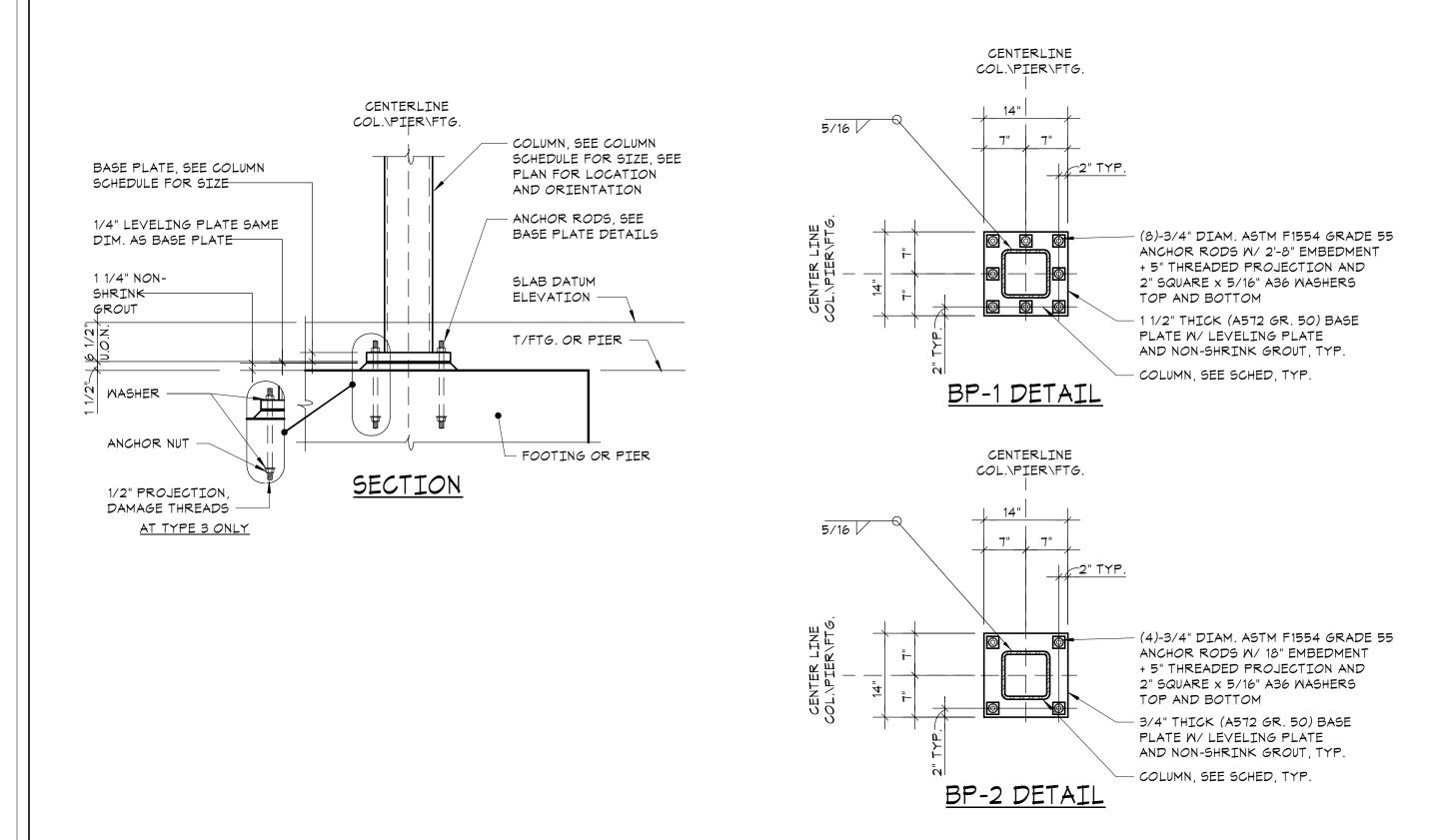
TYPICAL STEP FOOTING DETAIL AT WALL PIPE PENETRATION NO SCALE

	COMPR	ESSION			TE	NSION (F	c = 3000	psi)						TENSION (f'o	: = 4000 psi	j)		
			Ē	EMBEDMEN	IT LENGT	+		LAP SF	LICE LEN	GTH		EMBEDMEN	NT LENGTH			LAP SPLI	CE LENGTH	
BAR SIZE	EMBED.	LAP SPLICE	TOP	BARS	OTHER	BARS	TOP	BARS	OTHER	BARS	TOP	BARS	OTHER	BARS	TOP	BARS	OTHER	R BARS
J12 L	LENGTH	LENGTH	CATE SEE N	GORY IOTE 1	CATE SEE N			GORY IOTE 1	CATE SEE N		CATE SEE N		CATE SEE N	GORY OTE 1		GORY NOTE 1		GORY NOTE 1
			I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
#3	9"	12"	22"	33"	17"	25"	29"	43"	23"	33"	19"	28"	15"	22"	25"	37"	20"	29"
#4	11"	15"	29"	43"	22"	33"	38"	56"	29"	43"	25"	37"	19"	29"	33"	49"	25"	38'
#5	14"	19"	36"	54"	28"	42"	47"	71"	37"	55"	31"	47"	24"	36"	41"	62"	32"	47'
#6	17"	23"	43"	65"	33"	50"	56"	85"	43"	65"	37"	56"	29"	43"	49"	73"	38"	56
#7	20"	27"	63"	94"	48"	72"	82"	123"	63"	94"	54"	81"	42"	63"	71"	106"	55"	82
#8	22"	30"	72"	107"	5 5	83"	94"	140"	72"	108"	62"	93"	48"	72"	81"	121"	63"	94
#9	25"	34"	81"	121"	62"	93"	106"	158"	81"	121"	70"	105"	54"	81"	91"	137"	71"	106
#10	28"	39"	91"	136"	70"	105"	119"	177"	91"	137"	79"	118"	61"	91"	103"	154"	80"	119'
#11	31"	43"	101"	151"	78"	116"	132"	197"	102"	151"	87"	131"	67"	101"	114"	171"	88"	132
#14	38"	NP	121"	181"	93"	140"	NP	NP	NP	NP	105"	157"	81"	121"	NP	NP	NP	NP
#18	50"	NP	161"	242"	124"	186"	NP	NP	NP	NP	140"	209"	108"	161"	NP	NP	NP	NP
SEE NOTE 2	LCE	LCS		LT	E			LT	-s			L1	ΓE			L	гэ	

NOTED ON DWG'S).

- NOTES: 1. THIS SCHEDULE INCLUDES EMBEDMENT AND SPLICE LENGTHS AS PER ACI 318-02 AND SATISFY THE PROJECT REQUIREMENTS AND THE FOLLOWING CRITERIA. SPECIFIED YIELD STRENGTH OF REINFORCEMENT, Fy = 60,000 psi NORMAL WEIGHT CONCRETE, W = 150 pcf. TENSION EMBEDMENT AND LAP SPLICE LENGTHS ARE DIVIDED INTO TWO CATEGORIES WHICH SHALL BE APPLIED AS FOLLOWS: CATEGORY 1: CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN THE BAR DIAMETER, CLEAR COVER NOT LESS THAN THE BAR DIAMETER, AND STIRRUPS OR TIES THROUGHOUT THE DEVELOPMENT NOT LESS THAN THE CODE MINIMUM; OR, CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED, NOT LESS THAN 2x THE BAR DIAMETER AND CLEAR COVER NOT LESS THAN THE BAR DIAMETER. CATEGORY 2: ALL OTHER CASES.
- 2. NOTATION USED IN SECTION AND DETAILS FOR VARIOUS EMBEDMENT AND SPLICE LENGTH REREQUIREMENTS. 3. USE COMPRESSION LAP SPLICE LENGTH (LCS) AT ALL COMPRESSION MEMBER SPLICE LOCATIONS NOT SPECIFICALLY DETAILED AND UNLESS INDICATED OTHERWISE ON PLANS OR DETAILS. USE TENSION SPLICE FOR ALL OTHER SPLICES (UNLESS OTHERWISE
- 4. THE STANDARD COMPRESSION LAP SPLICE IS (0.0005 x REINFORCED YIELD STRENGTH x THE BAR DIAMETER). THE STANDARD TENSION LAP SPLICE CLASS B IS 1.3 x THE DEVELOPMENT LENGTH. THE CONTRACTOR MAY SUBMIT LESSER SPLICE LENGTHS FOR REVIEW AND APPROVAL AT THE SAME TIME PROVIDING THE FOLLOWING INFORMATION. A DETAILS PREPARED AND SUBMITTED BY THE CONTRACTOR INDICATING LOCATION AND PROPOSED LAYOUT OF REBARS AND
- B WHERE THE SIZE AND NUMBER OF TIES OR SPIRALS PERMITS THE REDUCTION OF LAP LENGTH, THOSE BARS SHALL BE INDICATED ON THE DETAILS.
- C WHERE COMPUTED STRESS VALUES PERMIT THE REDUCTION OF LAP LENGTH, COMPUTATIONS SHALL BE SUBMITTED FOR D THE APPLICABLE SECTION OF THE ACI 318-95 CODE PERMITTING THE LESSER SPLICE LENGTH SHALL BE INDICATED ON THE
- SUBMITTED MATERIAL. 5. TOP BARS ARE HORIZONTAL BARS PLACED SO THAT MORE THAN 12" OF CONCRETE IS CAST ON THE MEMBER BELOW THE BAR.
- 6. WHERE BARS OF DIFFERENT SIZE ARE TO BE SPLICED, THE SPLICE LENGTH FOR ALL BARS SHALL BE THAT REQUIRED FOR THE LARGEST.
- 7. "NP" INDICATES NOT PERMITTED. BARS LARGER THAN NO. 11 SHALL NOT BE SPLICED EXCEPT AS FOLLOWS: TO #11 BARS IN COMPRESSION. USE LARGER OF THE DEVELOPMENT LENGTH OF THE LARGER BAR OR THE SPLICE LENGTH OF THE SMALLER BAR (51" FOR #14 AND 68" FOR #18).

SCHEDULE OF EMBEDMENT AND SPLICE LENGTH NO SCALE



6 TYPICAL STEEL COLUMN BASE PLATE DETAILS

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY IIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), A ERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMEN' R PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THI

DISTRICT-WIDE

CAPITAL IMPROVEMENTS

NEW CONSTRUCTION

& ATHLETIC

UPGRADES

CHAPPAQUA CENTRAL

SCHOOL DISTRICT

66 Roaring Brook Road

Chappaqua, NY 10514

285 MAIN STREET • MOUNT KISCO, NEW YORK 10549

CONSTRUCTION DOCUMENTS

HG: 66-10-04-06-0-015-023

AP: 66-10-04-06-7-052-001

CS: 66-10-04-06-7-027-002

OB: 66-10-04-06-0-026-002

SB: 66-10-04-06-0-036-007

P: 914.666.5900

SED Control No.

KGDARCHITECTS.COM

RITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND ONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL EFORE PROCEEDING WITH FABRICATION.

LTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, JNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONA SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LA COPYRIGHT KG+D ARCHITECTS, PC.

Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/01/2023	SCHEMATIC DESIGN
No.	Date	Issue
01 4	T:0.	

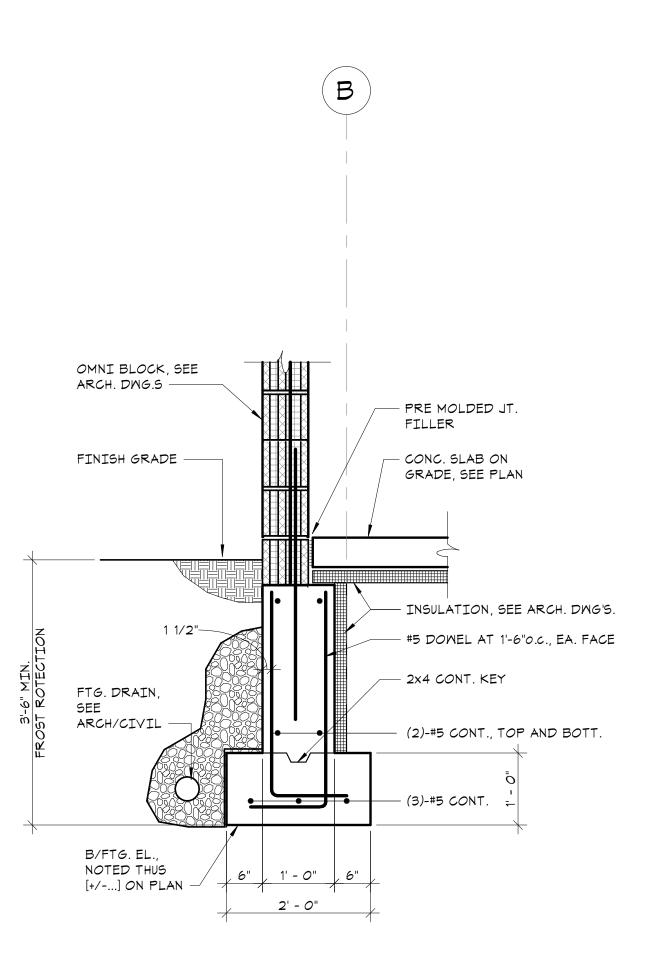
FOUNDATION SCHEDULES AND TYPICAL DETAILS

Sheet Number 2023-1028 11-01-2018

AS NOTED

Drawn / Checked JM EM

S202-AP



5ECTION

3/4" = 1'-0"

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC.
ALL RIGHTS RESERVED.

Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/01/2023	SCHEMATIC DESIGN
lo.	Date	Issue
neet	Title	
	^ 7	

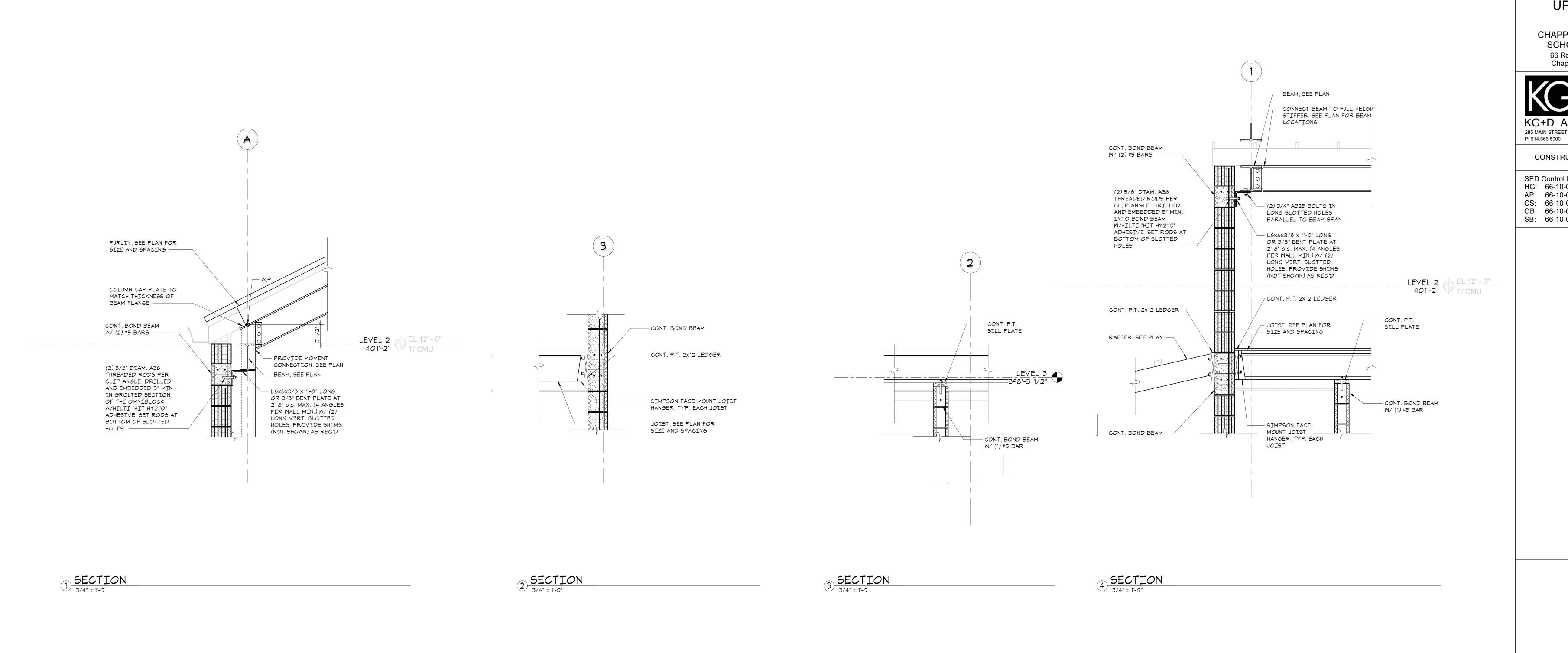
ATHLETIC PAVILION FOUNDATION SECTIONS

ob No. Sheet Number 2023-1028 ate

09/07/23 cale AS NOTED

Drawn / Checked
Author Checker

S210-AP



W12 RIDGE
BEAM, SEE PLAN

Z GIRT, SEE PLAN

W12 BENT BEAM,
SEE PLAN

FULL PEN. WELD
ALL AROUND AT
MITER JOINT
OF BENT BEAM

5 SECTION
3/4" = 1'-0"

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), ANI WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PRESON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, IN ISSUED AND LINESS ACTING LINES THE DIRECTION OF THE LICENSED APPLIED WAYOUR PROCESSIONAL

UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW © COPYRIGHT KG+D ARCHITECTS, PC .

ALL RIGHTS RESERVED.

Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/01/2023	SCHEMATIC DESIGN
No.	Date	Issue
Sheet	t Title	
		THI FTIC

ATHLETIC PAVILION FRAMING SECTIONS

Job No. 2023-1028

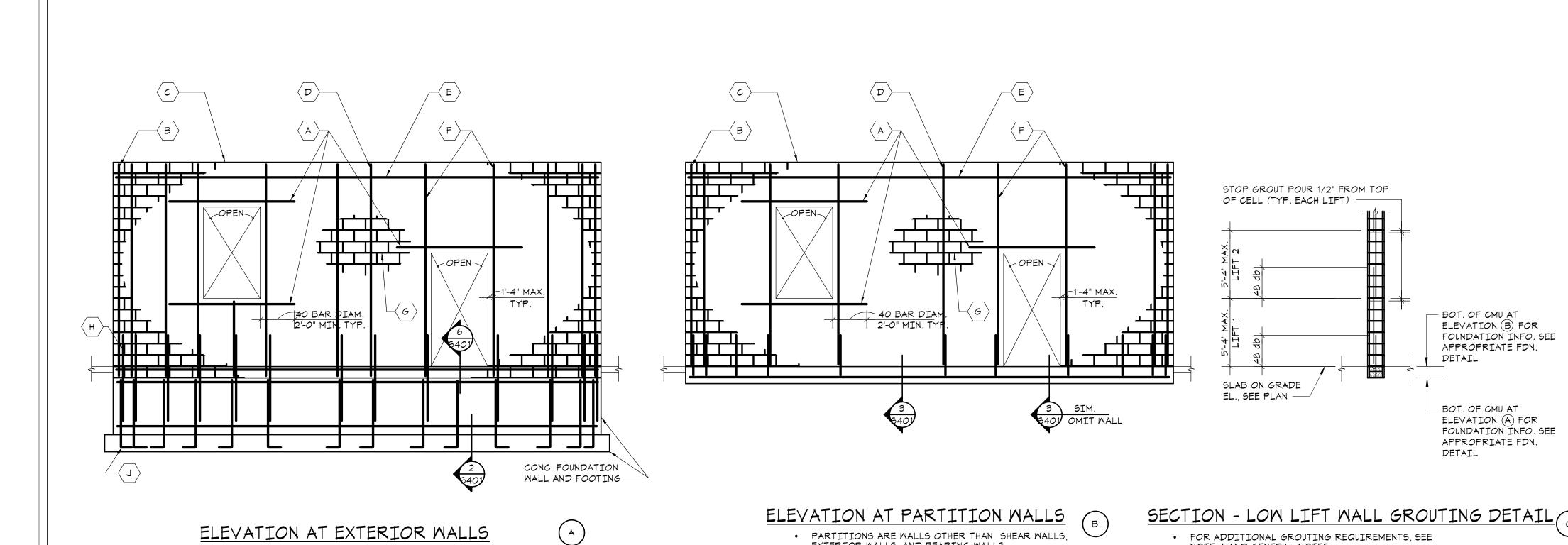
Date 09/07/23

Scale AS NOTED

Sheet Number

Sheet Number

Drawn / Checked



PARTITIONS ARE WALLS OTHER THAN SHEAR WALLS,

EXTERIOR WALLS, AND BEARING WALLS

	<u>KEYNOTES</u>		<u> </u>	REINFORCEMENT SCHEDULE
	(2)-#5 HORIZ. REINF. GROUTED SOLID IN BOND BEAMCOURSE TYP. ABOVE AND BELOW ALL OPENINGS. FOR HORIZONTAL REINFORCING IN MASONRY LINTELS	WALL DESCRIPTION	MALL ELEVATION TYPE	VERTICAL REINFORCEMENT
	SEE "TYPICAL MASONRY LINTEL IN NON-LOAD BEARING WALL DETAIL"	8" CMU EXTERIOR WALLS	А	D #5 AT 48"o.c.
	VERT. FULL HEIGHT REINF. IN SOLID GROUT, TYP. AT WALL ENDS, CORNERS, AND EACH SIDE OF CJ'S,SEE REINFORCEMENT SCHEDULE	OMNI-BLOCK		B (2)-#5's F (1)-#5
	CMU WALL. FOR SIZE, SEE PLANS AND REINFORCEMENT SCHEDULE.	8" CMU PARTITIONS	В	D #5 AT 48"o.c. B (1)-#5
	TYP. VERTICAL REINF., SEE REINFORCEMENT SCHEDULE (U.O.N. BY SECTION). FILL CELLS CONTAINING REINF. SOLID W/ GROUT .	6" CMU		F (1)-#5
	(2)-#5 HORIZ. REINF. AT TOP OF WALL GROUTED SOLID IN BOND BEAM COURSE. PLACE REINF. ONE COURSE LOWER WHERE WALL ABUTS FLOOR ABOVE.	PARTITIONS	В	D #4 AT 48"o.c. B (1)-#4 (1)-#4
	VERT. FULL HEIGHT REINF. IN SOLID GROUT, TYP. AT BOTH SIDES OF ALL WALL OPENINGS, SEE REINFORCEMENT SCHEDULE.			
,	HORIZ. JOINT REINFORCING, SEE GENERAL NOTES.			
	PROVIDE REINFORCING DOWELS BETWEEN FDN. AND MASONRY WALL EQUAL TO SIZE AND SPACING OF MASONRY VERT. WALL REINFORCING (MAX. SPACING = 4'-0"o.c.). REINFORCING DOWELS SHALL EXTEND INTO MASONRY WALLS AND SHALL BE LAPPED 48 BAR DIAM.			
$\overline{}$	PROVIDE REINFORGING DOWELS BETWEEN FTG. AND FDN. WALL EQUAL TO SIZE AND SPACING OF MASONRY VERT. WALL REINFORGING (MAX. SPAGING = 4'-0"o.c.). REINFORGING DOWELS SHALL EXTEND INTO MASONRY WALLS AND SHALL BE LAPPED 48 BAR DIAM.	ALL WALLS SH. ADDITIONAL	ALL HAVE HORIZ. JOIN	FOR PLACEMENT OF REINFORCEMENT AND ADDITIONAL REQUIREMENTS. NT REINFORCEMENT AS PER GENERAL NOTES. AT SHEAR WALLS PROVIDE PROCEMENT AS PER "TYP. REINF. ARRANGEMENTS AT CMU SHEAR WALL ENDS,
		NOTES:		

1. FOR CMU WALL LOCATIONS AND EXTENT, SEE ARCH. DWGS.

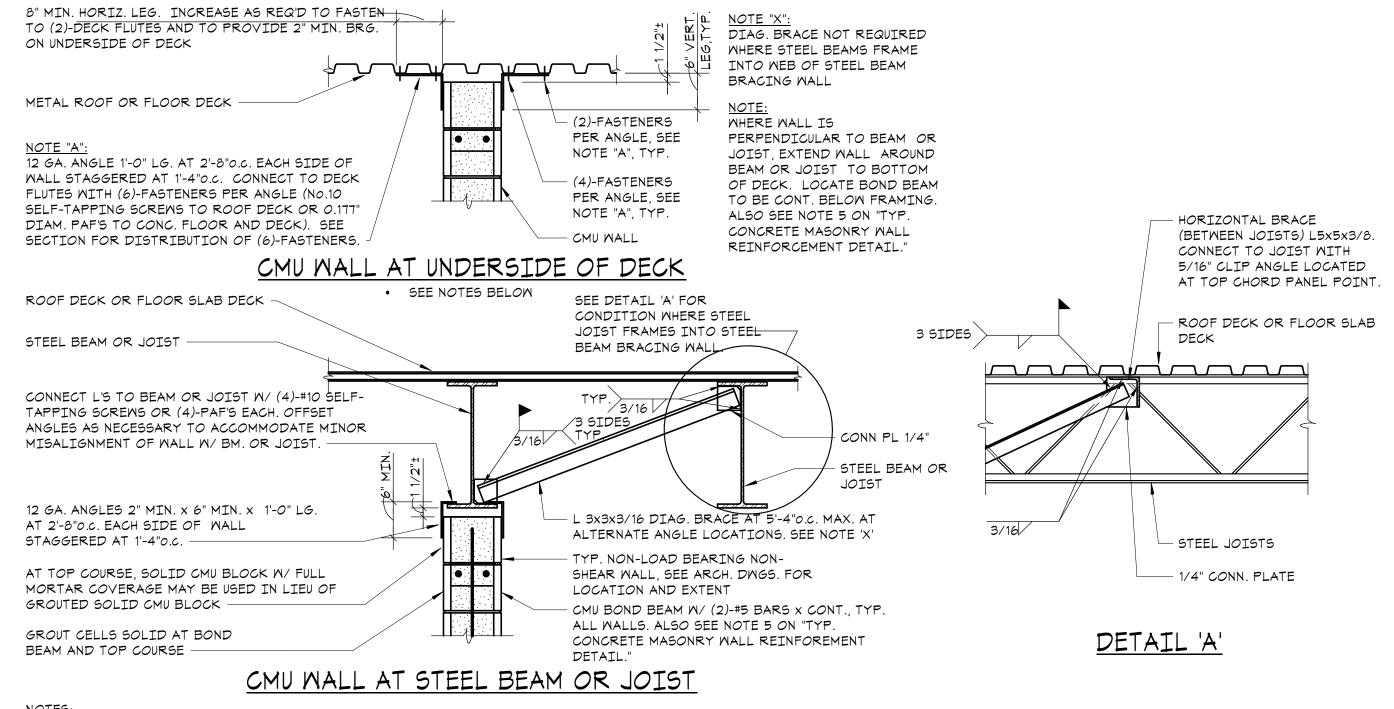
JOINTS WITHIN 32" OF MASONRY OPENINGS. 3. ALL CMU CELLS CONTAINING VERTICAL REINFORCEMENT SHALL BE GROUTED SOLID. 4. ALL GROUTED CELLS SHALL BE MECHANICALLY VIBRATED IN ACCORDANCE WITH ACI 530. IN ADDITION, AFTER 10 MINUTES, MECHANICALLY VIBRATE GROUTED CELLS A

2. SEE ARCH. DWGS. FOR LOCATIONS OF CONTROL JOINTS. DO NOT LOCATE CONTROL

SECOND TIME. 5. BOND BEAM AT SLOPING STEEL BEAMS/ROOFS/CEILINGS: ELEVATION OF CONTINUOUS BOND BEAM MUST VARY W/ SLOPING STL. BM./ROOF/CEILING. WHERE CHANGES COURSE, RUN BOND BEAM IN BOTH COURSES FOR A MINIMUM OF 6'-0"

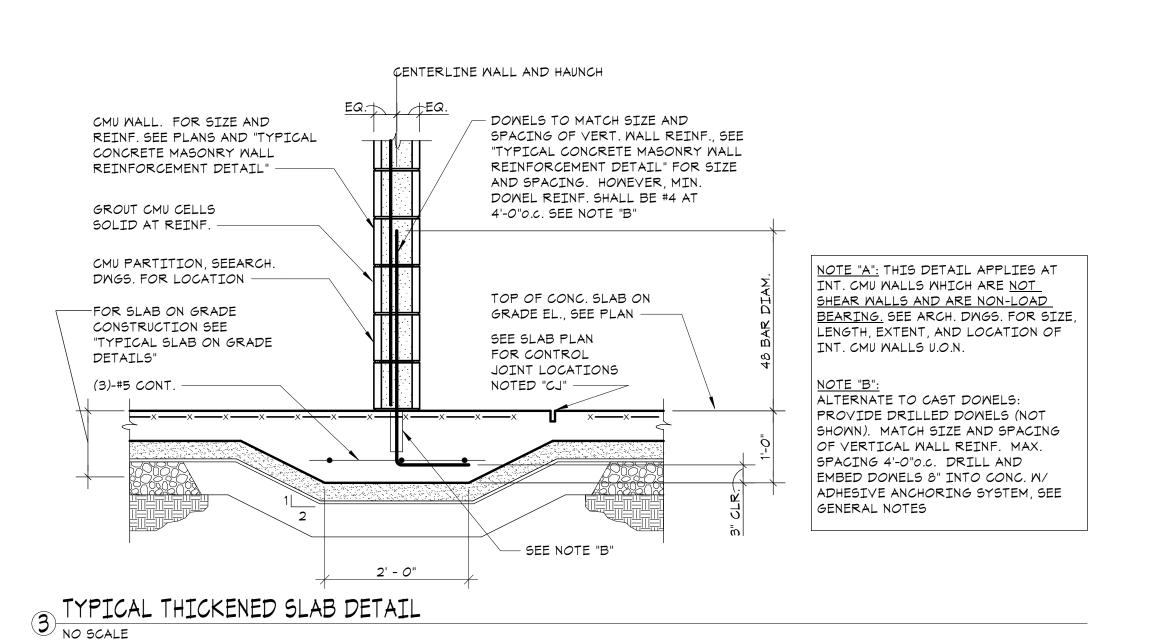
TYPICAL CONCRETE MASONRY WALL REINFORCEMENT DETAIL NO SCALE

ELEVATION AT EXTERIOR WALLS

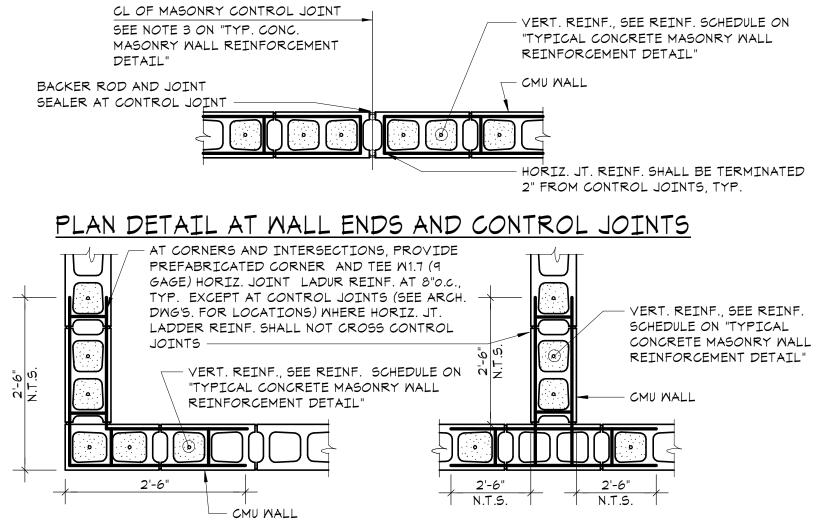


1. THESE DETAILS APPLY AT INTERIOR CMU WALLS WHICH ARE NOT SHEAR WALLS AND ARE NON-LOAD BEARING. SEE ARCHITECTURAL DRAWINGS FOR SIZE, LENGTH, AND LOCATION OF INTERIOR 2. BRACING AT TOP OF WALL IS NOT REQURIED BETWEEN INTERSECTING CMU WALLS SPACED LESS THAN 10 FEET FOR 4" WALLS, 14 FEET FOR 6" WALLS, 17 FEET FOR 8" WALLS, AND 21 FEET FOR 12" 3. WHERE LOCATION OF CMU WALL FACE IS OFF BEAM/JOIST CENTERLINE SUCH THAT ABOVE GAGE ANGLES AT STEEL BEAM OR STEEL DECK CAN NOT SANDWICH CMU WALL FROM BOTH SIDES, BRACE CMU WALL WITH STEEL ANGLES/BENT PLATES AND THREADED RODS SIMILAR TO SECTION "TYPICAL CONNECTION DETAIL AT TOP OF SHEAR/EXTERIOR WALLS", EXCEPT IN LIEU OF WELDING ANGLE/BENT PLATE TO BOTTOM FLAGE OF BEAM, BOLT TO BOTTOM FLANGE OF BEAM WITH (2) 3/4" DIAM. A325 BOLTS IN 1 7/8" LONG HORIZONTAL SLOTTED HOLES (SLOTS PARALLEL TO SPAN OF

TYPICAL BRACING DETAIL AT TOP OF PARTITION WALL



FOR ADDITIONAL GROUTING REQUIREMENTS, SEE NOTE 4 AND GENERAL NOTES.



PLAN DETAIL AT CORNERS AND INTERSECTIONS TYPICAL HORIZONTAL JOINT REINFORCING (NOT SHOWN FOR CLARITY)

TYPICAL MASONRY WALL PLAN DETAILS NO SCALE

(2)-#6 FOR 8"x8" LINTEL SEE NOTE 4 ---FILL SOLID W/ GROUT — 7 5/8" | #3 TIES AT 16"o.c. SCORE WHERE EXPOSED BLOCK IS PAINTED — —— (2)-#4 Т*О*Р FILL SOLID M/ GROUT -7 5/8" - (2)-#6 FOR M.O. TO 9'-4" (2)-#7 FOR M.O. TO 14'-8" SEE NOTE 4 FOR M.O. TO 8'-8" FOR M.O. TO 14'-8" 8" BEARING (MIN.) EACH END 12" BEARING (MIN.) EACH END SEE LINTEL NOTES SEE LINTEL NOTES

1. THIS DETAIL APPLIES ONLY TO LINTELS IN NON-LOAD BEARING WALLS. 2. AT EACH SIDE OF WALL OPENINGS, PROVIDE VERT. REINF. FULL HEIGHT AS PER "TYPICAL CONCRETE MASONRY WALL REINFORCEMENT DETAIL".

3. SEE MASONRY GENERAL NOTES FOR INFO. REGARDING MASONRY LINTELS NOT SHOWN ON STRUCTURAL PLANS AND INFO. REGARDING TEMPORARY SUPPORT. 4. EXTEND REINFORCING BARS PAST OPENINGS AS PER "TYPICAL CONCRETE MASONRY WALL REINFORCEMENT DETAIL".

SECTION NO SCALE

NO SCALE

4 09/16/2024 ISSUE FOR BID 3 10/27/2023 SED ISSUE 08/31/2023 ISSUE FOR PRICING - 90% CD 06/01/2023 SCHEMATIC DESIGN No. Date Sheet Title

OTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY

R PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT TH

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND

NDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL FORE PROCEEDING WITH FABRICATION.

NLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT WHOSE PROFESSIONA EAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LA'

Professional Seal

S DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), A RE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMEN'

DISTRICT-WIDE

CAPITAL IMPROVEMENTS

NEW CONSTRUCTION

& ATHLETIC

UPGRADES

CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road

Chappaqua, NY 10514

285 MAIN STREET • MOUNT KISCO, NEW YORK 10549

CONSTRUCTION DOCUMENTS

HG: 66-10-04-06-0-015-023

AP: 66-10-04-06-7-052-001

CS: 66-10-04-06-7-027-002

OB: 66-10-04-06-0-026-002

SB: 66-10-04-06-0-036-007

P: 914.666.5900

SED Control No.

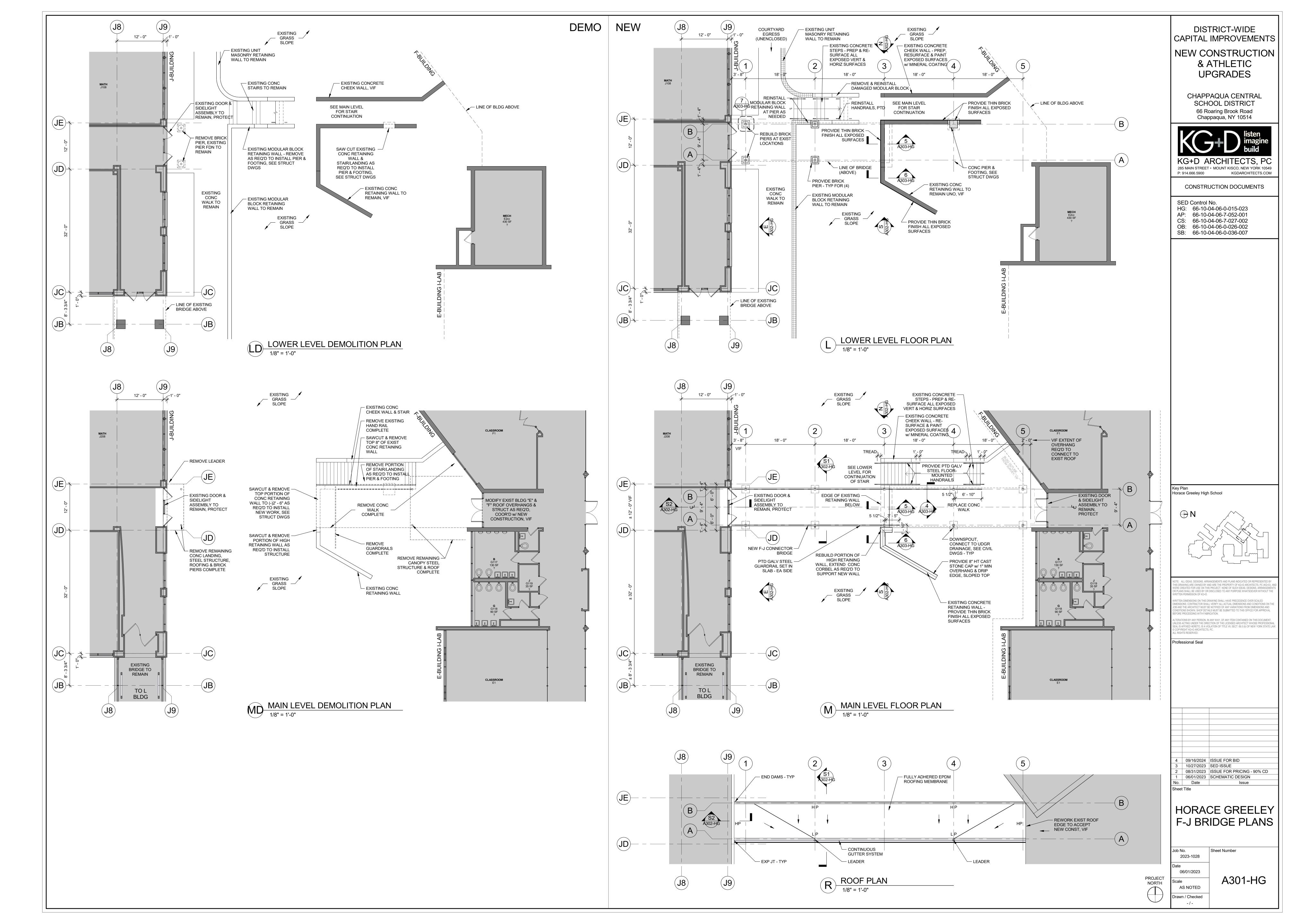
KGDARCHITECTS.COM

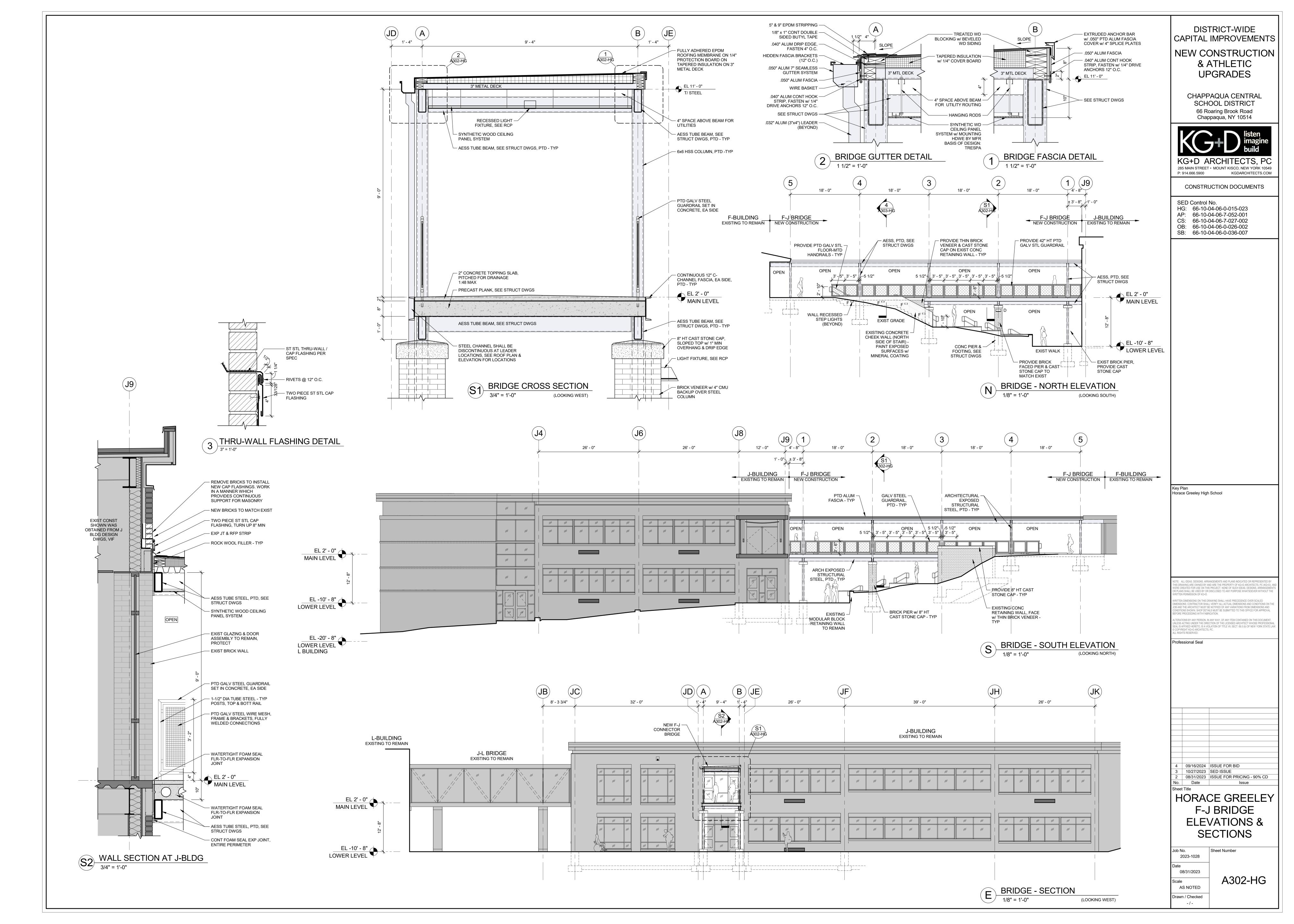
MASONRY SCHEDULE AND

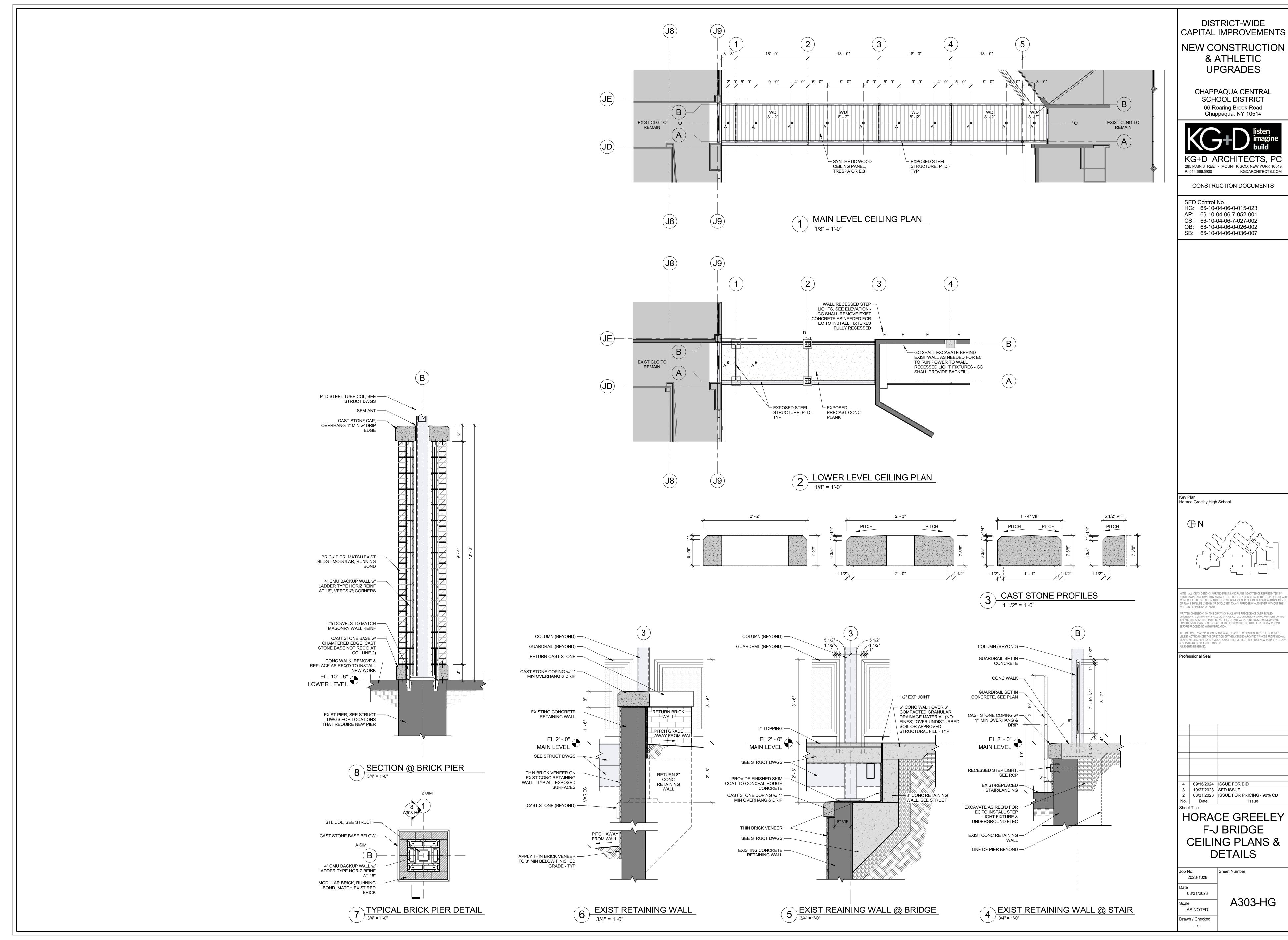
Sheet Number Job No. 2023-1028 11-01-2018 S401-AP AS NOTED

Drawn / Checked JM EM

TYPICAL DETAILS

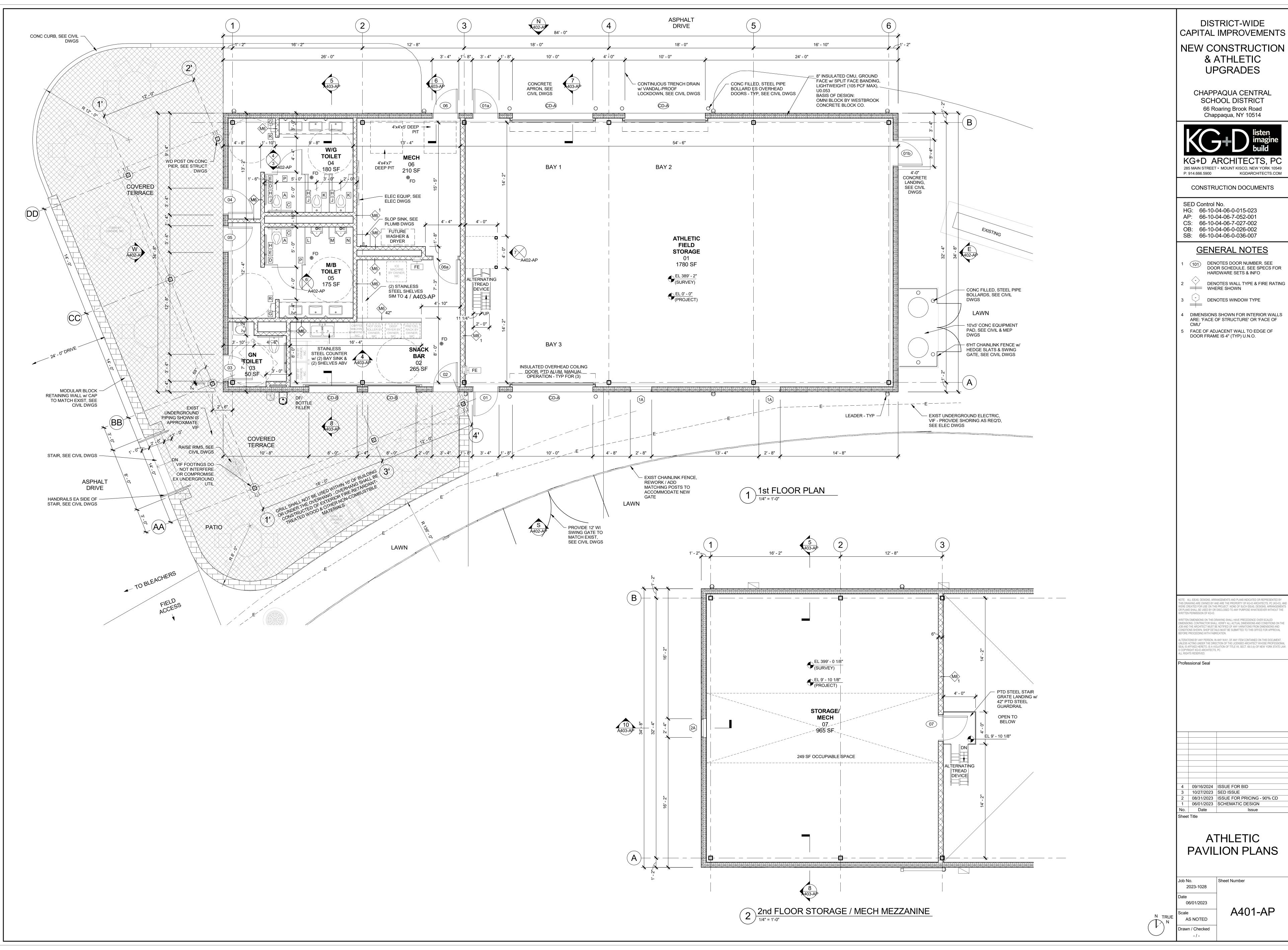






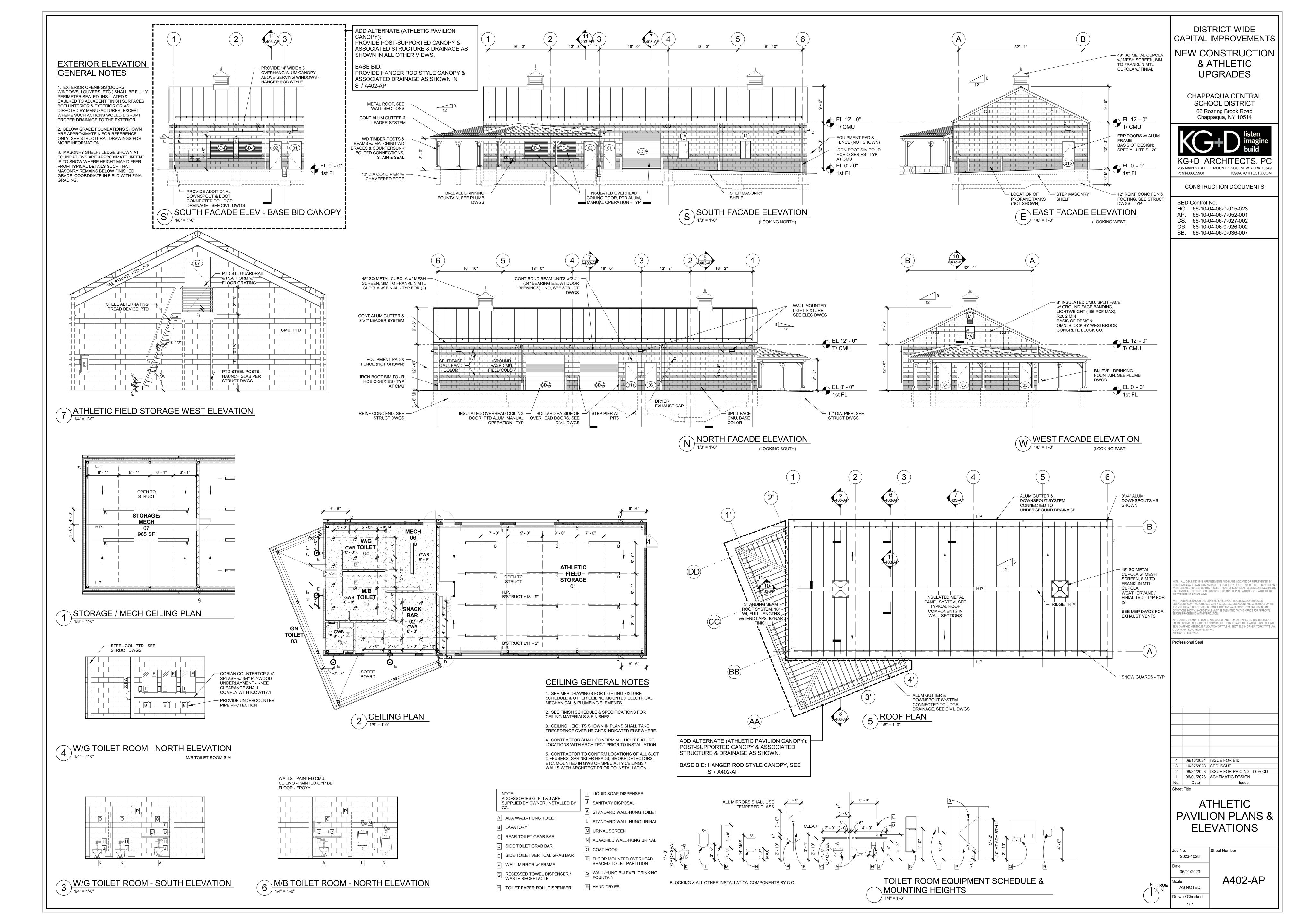


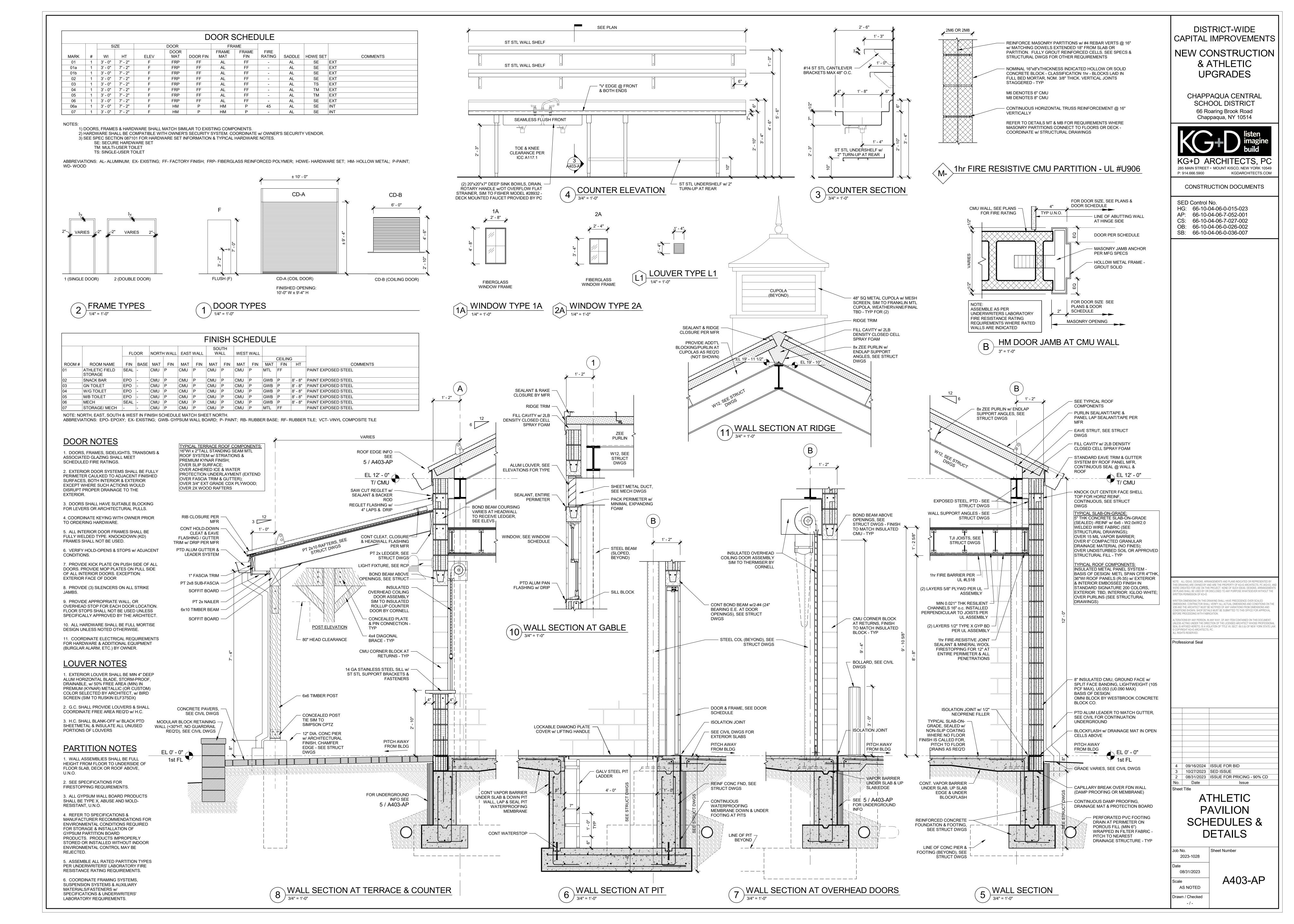
4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
NIa	D-4-	laavia

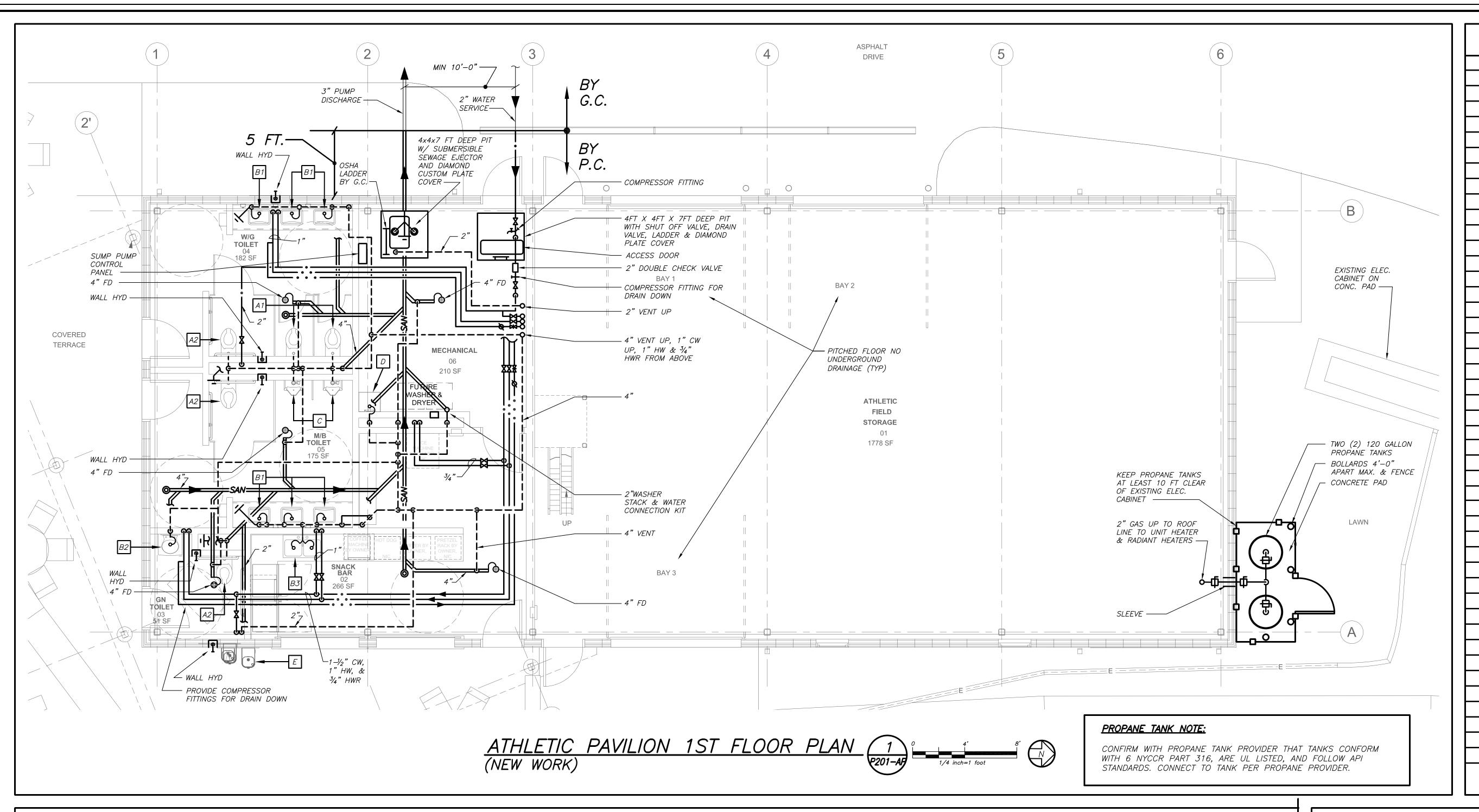




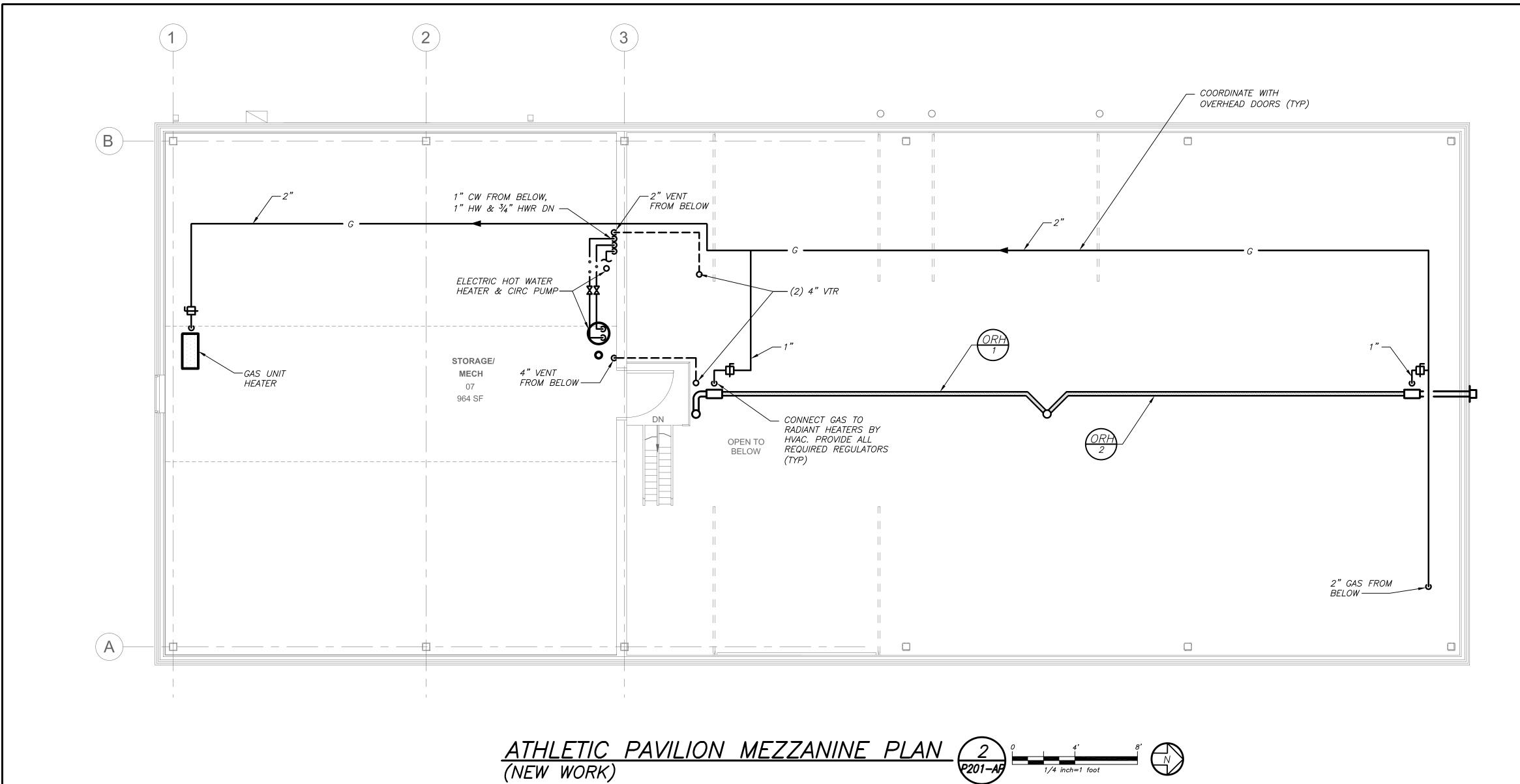
IS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AN ERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENT. R PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE

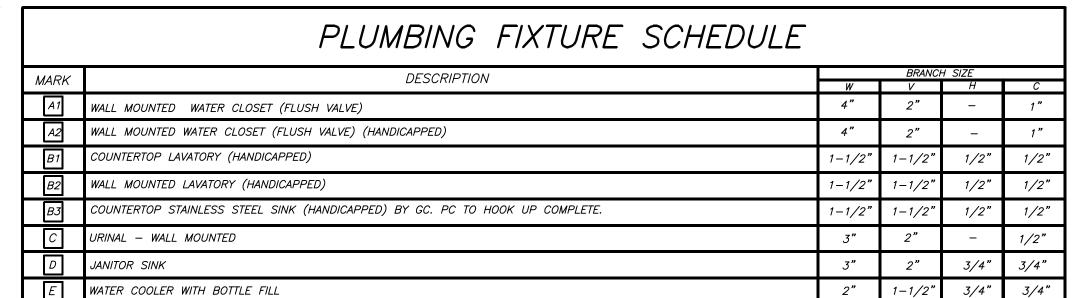


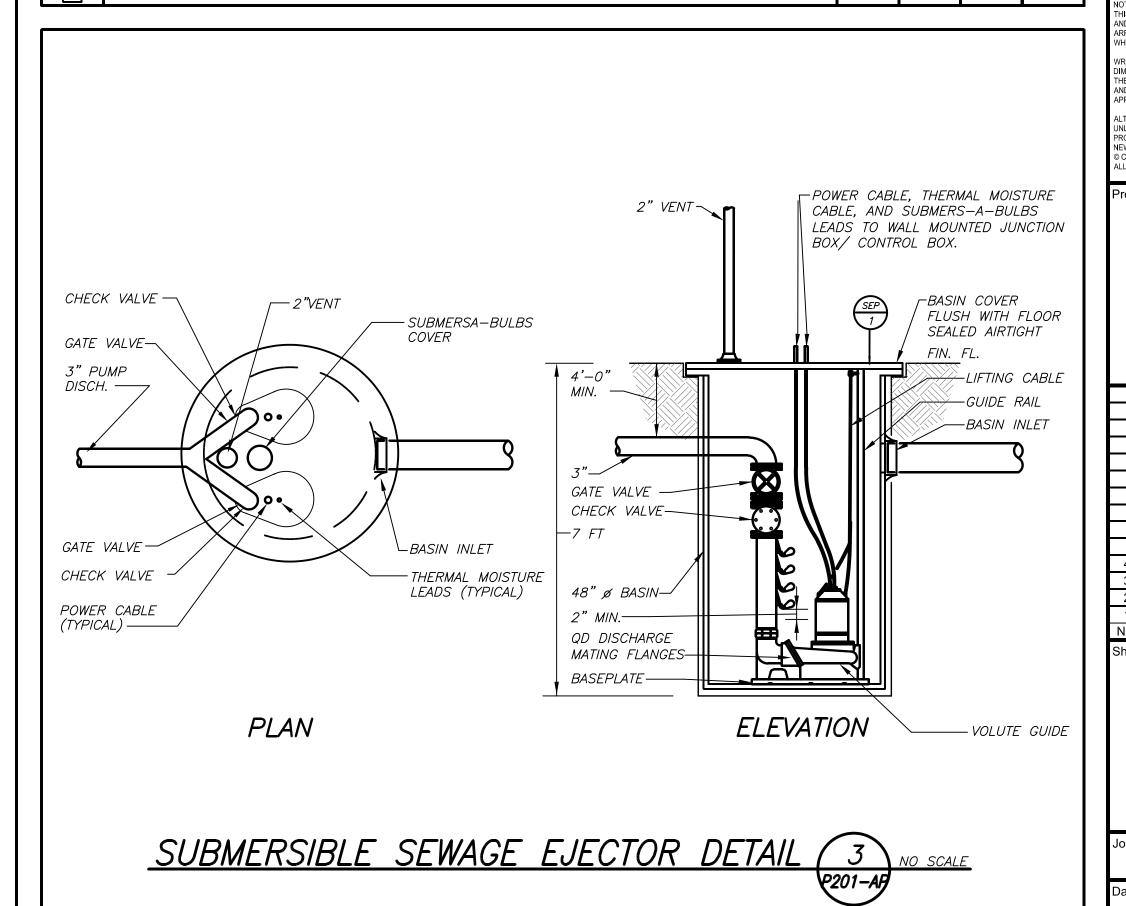




	EXISTING PIPING, FIXTURES, ETC. TO REMAIN
\\\	EXISTING PIPING, FIXTURES, ETC. TO BE REMOVED
	NEW PIPING, FIXTURES, ETC.
	COLD WATER PIPING
	HOT WATER PIPING
-•• -	HOT WATER RETURN PIPING
	PLUMBING VENT PIPING
— SAN —	SANITARY PIPING
= SAN =	SANITARY PIPING (UNDERGROUND)
—ESAN —	EXISTING SANITARY PIPING
=ESAN=	EXISTING SANITARY PIPING (UNDERGROUND)
<u> — РО — </u>	PUMP DISCHARGE PIPING
= PD =	PUMP DISCHARGE PIPING (UNDERGROUND)
<u> </u>	STORM PIPING
$=$ $s\tau =$	STORM PIPING (UNDERGROUND)
— EST —	EXISTING STORM PIPING
	EXISTING STORM (UNDERGROUND)
— G —	UNINTERRUPTIBLE GAS PIPING
	EXISTING GAS PIPING
— EG —	FIRE PROTECTION PIPING
— SP —	SPRINKLER PIPING
<u> </u>	
	SPRINKLER HEAD
	FLOW DIRECTION WITHIN PIPE
<u> </u>	CLEANOUT
<u> </u>	CLEANOUT DECK PLATE
	SHUT-OFF VALVE
<u>—————</u>	COMBINATION BALANCING & SHUT-OFF VALVE
<u></u>	OS & Y VALVE
<u>—————————————————————————————————————</u>	OS & Y VALVE WITH TAMPER SWITCH
<u> ———</u>	CHECK VALVE
<u>—</u> —	GAS SHUT OFF COCK
	SIDEWALL SPRINKLER HEAD
÷ -	PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP)
	PLUMBING FIXTURE IDENTIFICATION
<u> </u>	BACKFLOW PREVENTER APPURTENANCE IDENTIFICATION
P.C.	PLUMBING CONTRACTOR
G.C.	GENERAL CONTRACTOR
HVAC	HVAC CONTRACTOR
VTR	VENT THRU ROOF
FAI	FRESH AIR INTAKE
FD	FLOOR DRAIN
PRV	PRESSURE REDUCING VALVE
	CIRCULATOR PUMP IDENTIFICATION
SP *	SUMP PUMP IDENTIFICATION
HWH *	HOT WATER HEATER IDENTIFICATION
•	POINT OF CONNECTION
(*)-	PART PLAN, DETAIL, SECTION NUMBER







DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



285 MAIN STREET • MOUNT KISCO, NEW YORK 10549 P: 914.666.5900 KGDARCHITECTS.COM

CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



BARILE GALLAGHER & ASSOCIATES

CONSULTING ENGINEERS
39 MARBLE AVE PLEASANTVILLE, NY 10570
014.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

Key Plan

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR

APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC ALL RIGHTS RESERVED.

Professional Seal

4 09/16/2024 ISSUE FOR BID

 3
 10/27/2023
 SED ISSUE

 2
 08/31/2023
 ISSUE FOR PRICING - 90% CD

 1
 06/10/2023
 SCHEMATIC DESIGN

 No.
 Date
 Issue

 Sheet Title

ATHLETIC PAVILION FLOOR PLANS

Job No. 2023-1028

Drawn / Checked

P201-AP

1-AFDa

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON

JOB AND COORDINATE HIS WORK WITH THE WORK

OF ALL OTHER CONTRACTORS

GENERAL REMOVAL NOTES

- THE SCOPE OF REMOVAL SHOWN ON "REMOVALS" DRAWINGS IS DIAGRAMMATIC ONLY AND INDICATES THE INTENT OF THE WORK TO BE PERFORMED AND NOT THE COMPLETE SCOPE OF DEMOLITION AND/OR REMOVAL WORK. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO REMOVE ANY RELATED MECHANICAL DEVICES EVEN IF NOT SPECIFICALLY INDICATED TO BE REMOVED ON THESE DRAWINGS IN ORDER TO ACCOMMODATE NEW WORK.
- 2. DEVICES SHOWN CROSS HATCHED ON DRAWINGS ARE ITEMS TO BE REMOVED. ANY DEVICES REMOVED SHALL INCLUDE (BUT SHALL NOT BE LIMITED TO) THE REMOVAL OF ALL ASSOCIATED PIPING, CONTROLS, ETC. THAT ARE NOT INCORPORATED IN THE NEW LAYOUT, UNTIL SUCH REMOVAL IS COMPLETE. THIS CONTRACTOR SHALL PERFORM ALL WORK REQUIRED TO INSURE CONTINUITY OF SERVICE TO EXISTING REMAINING EQUIPMENT. NO EXTRAS RELATING TO THE SCOPE OF WORK DESCRIBED WILL BE ALLOWED.
- 3. EQUIPMENT, PIPING, ETC., REQUIRED TO RECONNECT SHALL BE INSTALLED CONCEALED WITHIN THE NEW SUSPENDED CEILINGS, PARTITIONS AND/OR WALLS, FLOORS, NO SURFACE MOUNTED OR EXPOSED EQUIPMENT, PIPING, ETC., SHALL BE PERMITTED, UNLESS SPECIFICALLY INDICATED.
- 4. ALL ITEMS TO BE REMOVED SHALL BE REVIEWED WITH THE OWNER PRIOR TO REMOVAL. OWNER SHALL HAVE FIRST SALVAGE RIGHTS. ITEMS THE OWNER WISHES TO KEEP SHALL BE REMOVED WITH CARE AND STORED AS DIRECTED BY OWNER. ITEMS THE OWNER DOES NOT WISH TO KEEP SHALL BE REMOVED FROM THE SITE AND DISPOSED *OF PROPERLY.*
- 5. REMOVE OR RELOCATE ALL DEVICES LOCATED ON THE EXTERIOR OF THE BUILDING OR ON THE INTERIOR OF EXTERIOR WALLS AS REQUIRED TO ACCOMMODATE A NEW BUILDING ADDITION OR TO ALLOW THE ADDITION OF DOORWAYS INTO THE NEW ADDITION.
- 6. REMOVALS SHALL BE COORDINATED WITH OTHER TRADES AFFECTED.
- 7. REMOVAL OF ANY PIECE OF EQUIPMENT OR TERMINAL DEVICE SHALL INCLUDE REMOVAL OF CONNECTING DUCTWORK AND PIPING BACK TO EXISTING MAINS THAT REMAIN. CAP EACH BRANCH AIR/WATER-TIGHT. CONTROLS AND CONTROL COMPONENTS SHALL ALSO BE REMOVED. DO NOT LEAVE COMPONENTS (CONTROLLERS, PNEUMATICS, ETC.) THAT HAVE NO FUNCTION. PROVIDE CONTROL WIRING, DUCTWORK, PIPING, ETC. AS NECESSARY TO MAINTAIN CONTINUITY OF SERVICE FOR EQUIPMENT OR TERMINAL DEVICES TO REMAIN.
- 8. ALL PIPING TO BE REMOVED SHALL BE PROPERLY PLUGGED OR CAPPED BENEATH FINISHED SURFACES. SO THAT UPON COMPLETION OF ALL NEW WORK, ALL ABANDONED PIPING SHALL BE CONCEALED IN FINISHED AREAS.
- 9. NO DEAD ENDS SHALL BE LEFT ON ANY PIPING UPON COMPLETION OF JOB. BRANCHES SHALL BE CUT AND CAPPED AT MAINS. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER UPON COMPLETION OF NEW WORK.
- 10. CHIMNEY INSPECTION AND SOOT REMOVAL: ON PROJECTS INCLUDING BOILER REMOVAL OR REPLACEMENT, CONTRACTOR SHALL GATHER TOGETHER WITH A VACUUM-CLEANING MACHINE ALL ACCUMULATIONS OF SOOT. HE SHALL REMOVE ALL SOOT FROM THE BASE OF THE CHIMNEY. THE CHIMNEY SHALL BE INSPECTED AND ANY DEFICIENCIES NOTED IN A WRITTEN REPORT.

	ABBREVIATIONS
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
ATC	AUTOMATIC TEMPERATURE CONTROL TRADE CONTRACTOR
ATC	AUTOMATIC TEMPERATURE CONTROL SYSTEM
BMS	BUILDING MANAGEMENT SYSTEM (ATC)
BR	BOTTOM WALL REGISTER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CR	CEILING REGISTER
CO	CLEAN OUT (DOOR)
CV	MOTORIZED CONTROL VALVE
EC	ELECTRICAL CONTRACTOR
EMS	ENERGY MANAGEMENT SYSTEM (ATC)
FC	FLEXIBLE CONNECTION
FD	FIRE DAMPER
FSC	FULL SIZE CONNECTION
FSD	FIRE/SMOKE DAMPER
GC	GENERAL TRADES CONTRACTOR
HVAC	HEATING, VENTILATING, AIR CONDITIONING CONTRACTOR
MFR	MANUFACTURER
MD	MOTORIZED DAMPER
OAI/FAI	OUTSIDE (FRESH) AIR INTAKE
PFRE	PRE-FINISHED SHEET METAL ENCLOSURE
PL	PLUMBING CONTRACTOR
SMRE	SHEET METAL RISER ENCLOSURE (PRE-FINISHED)
TD	TRANSFER DUCT
TR	TOP WALL REGISTER
WMG	1/2" SQ. WIRE MESH GRILLE
VIF	VERIFY IN FIELD

GENERAL NOTES

- BEFORE SUBMITTING A PROPOSAL, BIDDERS SHALL EXAMINE ALL RELATED TO THIS WORK AND SHALL BECOME FULLY INFORMED AS TO THE EXTENT AND CHARACTER OF THE WORK REQUIRED AND ITS RELATION TO THE OTHER WORK IN THE BUILDING.
- BEFORE COMMENCING WORK, THE CONTRACTOR WILL EXAMINE ALL CONDITIONS OF THE PROJECT UPON WHICH HIS WORK IS IN ANY WAY DEPENDENT FOR PERFECT WORKMANSHIP ACCORDING TO THE INTENT OF THE DRAWINGS AND SPECIFICATIONS. NO "WAIVER OF RESPONSIBILITY" FOR INCOMPLETE, INADEQUATE OR DEFECTIVE ADJOINING WORK WILL BE CONSIDERED UNLESS NOTICE HAS BEEN FILED BY THIS CONTRACTOR AND ACCEDED TO BY THE OWNER'S REPRESENTATIVE IN WRITING BEFORE THE CONTRACTOR BEGINS ANY PART OF THE WORK.
- THE CONTRACTOR WILL PAY FOR ALL LICENSES, PERMITS AND INSPECTION FEES REQUIRED BY CIVIL AUTHORITIES HAVING JURISDICTION. COMPLY WITH ALL LAWS, ORDINANCES, REGULATIONS, AND FIRE UNDERWRITER'S REQUIREMENTS APPLICABLE TO WORK HEREIN SPECIFIED WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- SMALL SCALE DRILLING THROUGH WALLS AND FLOORS OR CUTTING OF PIPING INSULATION WHICH MAY CONTAIN ASBESTOS SHALL BE PERFORMED BY A PERSON WITH A "RESTRICTED ASBESTOS HANDLER ALLIED TRADES CERTIFICATE" AND SHALL HAVE A COPY OF IT IN HIS POSSESSION AT ALL TIMES WHILE WORKING OF THE PROJECT. THIS SHALL ALSO APPLY TO REMOVAL OF PIPING, DUCTWORK OR EQUIPMENT INSULATION.
- 5. IT IS SPECIFICALLY INTENDED THAT ANYTHING (WHETHER MATERIAL OR LABOR), WHICH IS USUALLY FURNISHED AS A PART OF SUCH EQUIPMENT, AS IS HEREINAFTER CALLED FOR (AND WHICH IS NECESSARY FOR THE COMPLETION AND PROPER OPERATION) SHALL BE FURNISHED AS PART OF THIS CONTRACT WITHOUT ADDITIONAL COST THE OWNER, WHETHER OR NOT SHOWN IN DETAIL OR DESCRIBED IN THE SPECIFICATIONS.
- WHEN DRAWINGS AND SPECIFICATIONS CONFLICT OR THERE IS A QUESTION AS TO THE PROPER INTENT OF THIS CONTRACT, THE CONTRACTOR SHALL ASSUME THE GREATER QUANTITY, THE HIGHER QUALITY AND/OR THE MORE EXPENSIVE METHOD IN HIS PRICING. ALL QUESTIONS SHALL BE DIRECTED TO THE ARCHITECT/ENGINEER IN WRITING ONLY AND ONLY UP TO TEN (10) DAYS PRIOR TO BIDDING.
- THE DRAWINGS INDICATE THE GENERAL RUNS OF THE PIPING, DUCTWORK, ETC. SYSTEMS AND THE LOCATION OF EQUIPMENT AND APPARATUS, HOWEVER IT SHALL BE UNDERSTOOD THAT THE RIGHT IS RESERVED BY THE ARCHITECT/ENGINEER TO CHANGE THE LOCATION OF PIPING WORK, DUCTWORK, EQUIPMENT AND APPARATUS TO A REASONABLE EXTENT AS BUILDING CONDITIONS MAY DICTATE. PRIOR TO THEIR INSTALLATION WITHOUT EXTRA COST TO THE OWNER.
- 8. ALL DUCT DIMENSIONS SHOWN ARE CLEAR INSIDE DIMENSIONS. THE CONTRACTOR SHALL ACCOUNT FOR ANY LINING IN SIZING OF SHEET
- 9. ALL COMPONENTS SUPPLIED BY THIS CONTRACTOR SHALL BE UL LISTED AND/OR ETL LABELED AND SHALL CONFORM TO ASHRAE STANDARD 15.
- 10. ANY CHANGES FROM THE DRAWINGS AND SPECIFICATIONS AND ANY INTERPRETATION THEREOF SHALL HAVE THE PRIOR APPROVAL OF THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL SUBMIT IN WRITING, AT THE TIME OF SIGNING THE CONTRACT, ANY ITEMS OF NECESSARY LABOR AND MATERIALS, WHICH, IN HIS OPINION, ARE LACKING IN REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS TO INSURE A COMPLETE JOB IN ALL RESPECTS. NO CONSIDERATION WILL BE GRANTED TO ALLEGED MISUNDERSTANDING OF MATERIALS TO BE FURNISHED. WORK TO BE DONE. OR CONDITIONS TO BE COMPLIED WITH, IT BEING UNDERSTOOD THAT THE TENDER OF A PROPOSAL CARRIES WITH IT THE AGREEMENT TO ALL ITEMS AND CONDITIONS REFERRED TO HEREIN, OR INDICATED ON THE ACCOMPANYING DRAWINGS.
- '. FURNISH ALL COMBINATION MOTOR STARTER/DISCONNECTS FOR EQUIPMENT (WITH THE EXCEPTION OF STARTERS AND ELECTRIC ITEMS ALREADY MOUNTED ON EQUIPMENT OR EQUIPMENT NOT REQUIRING SAME). FAN MOTOR STARTER/DISCONNECTS SHALL HAVE CONTACTS FOR ATC CONNECTION AND A TERMINAL BLOCK CONNECTION FOR FIRE ALARM FAN SHUTDOWN. STARTERS PER MANUFACTURERS RECOMMENDATIONS. UNDERWRITERS INSPECTION AND CERTIFICATE REQUIRED. COORDINATE WITH ELECTRICAL CONTRACTOR.
- '2. THIS CONTRACTOR SHALL COORDINATE WITH OTHER TRADES PROVIDING ELECTRIC, GAS, WATER, ETC. CONNECTIONS TO SYSTEMS OR EQUIPMENT THAT ARE PART OF THIS CONTRACT. PROVIDE EQUIPMENT THAT ARE PART OF THIS CONTRACT. PROVIDE EQUIPMENT CUTS AND EXACT LOCATIONS, INCLUDING ORIENTATION, OF ALL SYSTEMS AND EQUIPMENT REQUIRING SUCH CONNECTIONS. THIS SHALL BE DONE WELL IN ADVANCE OF THOSE TRADES INSTALLING THEIR CONNECTION
- . COORDINATION DRAWINGS (IF APPLICABLE): ATTENTION IS DIRECTED TO DIVISION 1 FOR COORDINATION DRAWING REQUIREMENTS FOR THIS PROJECT. THESE DRAWINGS ARE CRITICAL TO THE PROPER EXECUTION OF THE WORK AND FAILURE TO HONOR THESE REQUIREMENTS MAY BECOME THE BASIS FOR DENIAL OF ANY AND ALL CLAIMS FOR EITHER OR BOTH "TIME" AND "MONEY".
- 4. LOCATION AND SIZES OF EXISTING PIPING, DUCTWORK, EQUIPMENT, ETC. ARE APPROXIMATE. EXACT SIZES AND LOCATIONS OF ALL EXISTING WORK SHALL BE VERIFIED ON THE JOB.
- BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS.
- 6. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO SUBMISSION OF BID TO DETERMINE WHAT WORK MUST BE PERFORMED AFTER NORMAL BUSINESS HOURS. UNLESS OTHERWISE DIRECTED ANY NOISY WORK (CHOPPING. CORE DRILLING. HAMMERING. ETC.) AND BUILDING POWER INTERRUPTIONS SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS. CONFIRM NORMAL BUSINESS HOURS WITH BUILDING OWNER. NO ADDITIONAL COST WILL BE CHARGED TO OWNER FOR WORK PERFORMED OUTSIDE NORMAL BUSINESS HOURS.
- 17. REFER TO ARCHITECT'S REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING MOUNTED ITEMS.
- 8. OPENINGS AROUND PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS. ALL SLEEVES MUST HAVE BUSHINGS. SEALANT SHALL BE 3 HOUR FIRE BARRIER #CP-25 (NO LESS THAN 3' THICK BACKED UP WITH MINERAL WOOL).
- 19. PREPARE 'AS-BUILT' DRAWINGS THAT REFLECT ACTUAL CONSTRUCTION AND SHOW DEVIATIONS FROM DESIGN DRAWINGS.

	EXISTING DUCTWORK, EQUIPMENT, ETC. TO REMAIN	END (HICE)	HOT WATER COIL IDENTIFICATION
	EXISTING DUCTWORK, EQUIPMENT, ETC. TO BE REMOVED	HWH	HOT WATER HEATER IDENTIFICATION
	— POINT OF CHANGE IN DUCT SIZE	# (HWP)	
	NEW DUCTWORK — 1" THERMAL ACOUSTIC LINING—DUCT SIZES ON PLANS ARE CLEAR INSIDE DIMENSIONS — THERMAL ACOUSTIC LINING	t HX	HOT WATER PUMP IDENTIFICATION
	NEW DUCTWORK — FLEXIBLE CONNECTION / POINT OF CHANGE IN DUCT SIZE — FLEXIBLE CONNECTION		HEAT EXCHANGER IDENTIFICATION
	NEW DUCTWORK — POINT OF CHANGE IN DUCT SIZE	(MAU)	MAKEUP AIR UNIT IDENTIFICATION
野	SQUARE DUCT TURN WITH TURNING VANES	ORH *	GAS FIRED RADIANT HEATER IDENTIFICATION
$\boxtimes_{\mathfrak{D}}$	EXISTING CEILING DIFFUSER	SF *	SUPPLY FAN IDENTIFICATION
X 3	EXISTING 3-WAY CEILING DIFFUSER	(RAH)	ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION
 	EXISTING 2-WAY CEILING DIFFUSER		RETURN FAN IDENTIFICATION
<u> </u>	EXISTING CEILING REGISTER	RTU	ROOFTOP UNIT IDENTIFICATION
	— TYPE -SEE SCHEDULE	UH)	
	NEW 4—WAY CEILING DIFFUSER — CFM — TYPE —SEE SCHEDULE	* UV	UNIT HEATER IDENTIFICATION
	NEW 3—WAY CEILING DIFFUSER — CFM — TYPE —SEE SCHEDULE	*	UNIT VENTILATOR IDENTIFICATION
	— TYPE —SEE SCHEDOLE NEW 2—WAY CEILING DIFFUSER — CFM — TYPE —SEE SCHEDULE	(UVAC)	UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION
	CEILING EXHAUST/RETURN REGISTER — CFM	(UVI *	UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION
****	— TYPE-SEE SCHEDULE REGISTER/DIFFUSER IDENTIFICATION — CFM	VUV *	VERTICAL UNIT VENTILATOR IDENTIFICATION
<i>D</i> ► - <i>R</i> ►	DUCT DROP; DUCT RISE	AC EXIST	EXISTING AIR CONDITIONING UNIT IDENTIFICATION
	DUCT MTD. MANUAL AIR VOLUME DAMPER (W/LOCKING DEVICE)	AHU EXIST	EXISTING AIR HANDLING UNIT IDENTIFICATION
	MOTORIZED AIR VOLUME DAMPER (W/ACCESS DOOR)	B EXIST)	EXISTING BOILER IDENTIFICATION
	— FD & AD	(CFT)	
	FIRE DAMPER (U.L. APPROVED) & ACCESS DOOR — FSD & AD	EXIST	EXISTING CHEMICAL FEED TANK IDENTIFICATION
—•	COMBINATION FIRE/SMOKE DAMPER (U.L. APPROVED) & ACCESS DOOR	CH EXIST	EXISTING CABINET HEATER IDENTIFICATION
—HWS——	HOT WATER HEATING SUPPLY PIPING	CHWP EXIST	EXISTING CHILLED WATER PUMP IDENTIFICATION
HWR / HWRR 	HOT WATER RETURN / HOT WATER REVERSE RETURN PIPING	CP EXIST	EXISTING CONDENSATE PUMP IDENTIFICATION
—CHWS——	CHILLED WATER SUPPLY PIPING	CONV	EXISTING CONVECTOR IDENTIFICATION
—— CHWR———	CHILLED WATER RETURN PIPING	CU EXIST)	EXISTING CONDENSING UNIT IDENTIFICATION
		\longrightarrow	
	LIQUID REFRIGERANT PIPING	DH EXIST	EXISTING DEHUMIDIFIER IDENTIFICATION
- 5	SUCTION REFRIGERANT PIPING	DOAS EXIST	EXISTING DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION
— HG ——	HOT GAS REFRIGERANT PIPING	DSI EXIST	EXISTING DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION
— CD ——	CONDENSATE DRAIN PIPING	DSO EXIST	EXISTING DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION
—GLWS——	GEOTHERMAL GROUND LOOP WATER SUPPLY PIPING	DXC EXIST	EXISTING DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION
— GLWR ——	GEOTHERMAL GROUND LOOP WATER RETURN PIPING	EF EXIST	EXISTING EXHAUST FAN IDENTIFICATION
	EXISTING HOT WATER HEATING SUPPLY PIPING	ERU	EXISTING ENERGY RECOVERY UNIT IDENTIFICATION
— EHWR ——	EXISTING HOT WATER HEATING RETURN PIPING	EXIST	
		ĒXÍST	EXISTING EXPANSION TANK IDENTIFICATION
— EHWRR———	EXISTING HOT WATER HEATING REVERSE RETURN PIPING	FC EXIST	EXISTING INDOOR VRF FAN COIL UNIT IDENTIFICATION
— ECHWS——	EXISTING CHILLED WATER SUPPLY PIPING	FS EXIST	EXISTING VRF FLOW SELECTOR IDENTIFICATION
— ECHWR———	EXISTING CHILLED WATER RETURN PIPING	FOT EXIST	EXISTING FUEL OIL TANK IDENTIFICATION
— ELPS ——	EXISTING LOW PRESSURE STEAM PIPING	FOP EXIST	EXISTING FUEL OIL PUMP IDENTIFICATION
— ECR ——	EXISTING CONDENSATE RETURN PIPING	GF EXIST	EXISTING GLYCOL FEED SYSTEM IDENTIFICATION
		EXIST	
	FLOW DIRECTION WITHIN PIPE	GP	EVISTING CENTHERMAL DUMP IDENTIFICATION
*	FLOW DIRECTION WITHIN PIPE — CONNECTION TO EQUIPMENT ABOVE	GP EXIST	EXISTING GEOTHERMAL PUMP IDENTIFICATION
	GATE VALVE (HORIZONTAL/VERTICAL)	GRV EXIST	EXISTING GEOTHERMAL PUMP IDENTIFICATION EXISTING GRAVITY RELIEF VENT IDENTIFICATION
→ → → → → → → → → →		GRV EXIST GSHP EXIST	
—————————————————————————————————————	GATE VALVE (HORIZONTAL/VERTICAL)	GRV EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION
→ × → × → × → × → → × → → × → → × → → × → → × → → × → → × → → ×	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER)	GRV EXIST GSHP EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION
→ X → → → → → → → → → → → → → → → → → →	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE	GRV EXIST GSHP EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION
→ × → → → → → → → → → → → → → → → → → →	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE	GRV EXIST GSHP EXIST HP EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION
7-9	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES	GRV EXIST GSHP EXIST HP EXIST HIP EXIST HU EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION
₹-Ø ⊕-φ-0	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP)	GRV EXIST GSHP EXIST HP EXIST HIP EXIST HU EXIST HWC EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION
7-9	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION	GRV EXIST GSHP EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION
→ -Ø O O O O O O O O O O - O	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP)	GRV EXIST GSHP EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST HWP EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION
₹-Ø ⊕φ-0	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION	GRV EXIST GSHP EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION
→ Ø → ○ → P → ○ ↑ AV □	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER	GRV EXIST GSHP EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST HWP EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION
7-Ø	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK)	GRV EXIST GSHP EXIST HP EXIST HIP EXIST HU EXIST HWH EXIST HWP EXIST HX EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION
\$-\$\tau\$	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HU EXIST HWH EXIST HWH EXIST HX EXIST SA EXIST SF EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION
- φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION BOILER IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION	GRV EXIST GSHP EXIST HP EXIST HUP EXIST HWH EXIST HWH EXIST HX EXIST SA EXIST SA EXIST RAH EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION
\$\frac{1}{2} \times \frac{1}{2}	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION BOILER IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUV EXIST HWH EXIST HWH EXIST WAU EXIST SA EXIST SA EXIST RAH EXIST REF EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION
\$\frac{1}{2} \times \frac{\pi}{\pi} \times \	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUV EXIST HWH EXIST HWH EXIST WAU EXIST SA EXIST SA EXIST RAH EXIST REF EXIST RTU EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION
\$\frac{\rightarrow}{\rightarrow} \rightarrow \rightar	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION BOILER IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION	GRV EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST HWP EXIST HX EXIST SA EXIST SA EXIST RAH EXIST RAH EXIST RI EXIST RI EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION	GRV EXIST GSHP EXIST HP EXIST HU EXIST HWC EXIST HWH EXIST HWP EXIST CSA EXIST SA EXIST RAH EXIST RTU EXIST UH	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION
\$\frac{\rightarrow}{\rightarrow} \rightarrow \rightar	COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAAU EXIST SF EXIST RAH EXIST RETU EXIST UH EXIST UH EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING WONTH HEATER IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAU EXIST SA EXIST SA EXIST RAH EXIST REF EXIST RTU EXIST UV EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAAU EXIST SF EXIST RAH EXIST REF EXIST UVAC EXIST UVAC EXIST UVAC EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEHUMIDIFIER IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUP EXIST HWC EXIST HWH EXIST HWP EXIST WAU EXIST SA EXIST SA EXIST RAH EXIST REF EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVI EXIST UVI EXIST UVI EXIST UVI EXIST UVI EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION BOILER IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONVECTOR IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION	GRV EXIST HP EXIST HU EXIST HWC EXIST HWC EXIST HWC EXIST HWC EXIST HWC EXIST WAAU EXIST SA EXIST SF EXIST RAH EXIST REF EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXEMPLE FIND TUBE RADIATION IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAAU EXIST SF EXIST RF EXIST RF EXIST UVAC EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING WOIT HEATER IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION
- Φ -	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION	GRV EXIST HP EXIST HU EXIST HWC EXIST HWC EXIST HWH EXIST (AAU EXIST) (BAH EXIST) (CEXIS	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAAU EXIST SF EXIST RF EXIST RF EXIST UVAC EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING ROUPLY FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MTD.(5 - 2 * ± A.F.F U.O.N.) TEMPERATURE SENSOR — TO CONTROLLED ITEM WALL MTD.(5 - 2 * ± A.F.F U.O.N.) REVERSE ACTING THERMOSTAT
- Φ -	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION	GRV EXIST HP EXIST HU EXIST HWC EXIST HWC EXIST HWH EXIST (AAU EXIST) (BAH EXIST) (CEXIS	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) REVERSE ACTING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) REVERSE ACTING THERMOSTAT
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DEDICATED TOUTLESS SPLIT OUTDOOR UNIT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUU EXIST HWH EXIST HWH EXIST WAAU EXIST SF EXIST RF EXIST RF EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST FT EXIST TS	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION TYPE NEW FIN TUBE RADIATION IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) REVERSE ACTING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2"±-A.F.FU.O.N.) REVERSE ACTING THERMOSTAT
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	GATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION EXHAUST FAN IDENTIFICATION ENERGY RECOVERY UNIT IDENTIFICATION	GRV EXIST HP EXIST HU EXIST HWC EXIST HWC EXIST HWC EXIST HWC EXIST HWC EXIST HWC EXIST HX EXIST CEXIST CEXIST COLUMN COLUMN COL	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TYPE OF THE PROPERTY OF THE
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT—OFF VALVE (CIRCUIT SETTER) 2 — WAY CONTROL VALVE 3 — WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT—OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION DEHUMIDIFIER IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION EXHAUST FAN IDENTIFICATION ENERGY RECOVERY UNIT IDENTIFICATION EXPANSION TANK IDENTIFICATION EXPANSION TANK IDENTIFICATION	GRV EXIST HIP EXIST HUWC EXIST HWH EXIST HWH EXIST HWH EXIST WAAU EXIST RAH EXIST REF EXIST WUV EXIST EXIST TE EXIST	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HOUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MITD. (5'-2"±.A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MID. (5'-2"±.A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT EXISTING WALL MID. TEMPERATURE SENSOR/THERMOSTAT
↑ AV	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUP EXIST HWH EXIST HWH EXIST HX EXIST WAAU EXIST RAH EXIST REF EXIST RIU EXIST UVAC	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FOR TOWN IN IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MID. (5'-2"±.A.F.F-U.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MID. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MID. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT EXISTING WALL MID. TEMPERATURE SENSOR/THERMOSTAT WALL MID. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT EXISTING WALL MID. TEMPERATURE SENSOR/THERMOSTAT WALL MID. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION	GRV EXIST HP EXIST HUP EXIST HUP EXIST HWP EXIST HWP EXIST HX EXIST WAAU EXIST RE EXIST RE EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST FT = *	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FOR TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MID.(S'-2'±.A.F.FU.O.N.) REVERSE ACTING THERMOSTAT TO CONTROLLED ITEM WALL MID.(S'-2'±.A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MID. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER)
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUP EXIST HWH EXIST HWH EXIST HX EXIST WAAU EXIST RAH EXIST REF EXIST RIU EXIST UVAC	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FOR TOWN IN IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MTD. (5'-2"±.A.F.F-U.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MTD. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT EXISTING WALL MID. TEMPERATURE SENSOR/THERMOSTAT WALL MTD. (5'-2"±.A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MTD. CARBON DIOXIDE SENSOR
- Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ - Φ	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXHAUST FAN IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION	GRV EXIST HP EXIST HUP EXIST HUP EXIST HWP EXIST HWP EXIST HX EXIST WAAU EXIST RE EXIST RE EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST FT = *	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXIST OCONTROLLED ITEM WALL MID.(S'-2'±.A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MID.(S'-2'±.A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MID. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER)
□ - Ø - O ↑ AV □ □ ○ ↑ AV □ □ ○ ↑ CHWA ∴ CHWA ∴ CON CON CON CON CON CON CON CON	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHILLED WATER PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION INDOOR VER FAN COIL UNIT IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION VER FLOW SELECTOR IDENTIFICATION FUEL OIL TANK IDENTIFICATION FUEL OIL TANK IDENTIFICATION FUEL OIL PUMP IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUP EXIST HWP EXIST HWP EXIST HX EXIST WAD EXIST SA EXIST RAH EXIST WITO TE COS RH CS SWV	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HOWAITER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING RETURN FAN IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MITD.(5'-2'±-A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MITD.(5'-2'±-A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MITD.(5'-2'±-A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MITD.(5'-2'±-A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MITD. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) SUMMER/WINTER VALVE
□ - Ø - O - O - O - O - O - O - O - O - O	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONVECTOR IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DIRECT EXPANSION REFRIGERANT COIL IDENTIFICATION EXPANSION TANK IDENTIFICATION EXPANSION TANK IDENTIFICATION PUEL OIL TANK IDENTIFICATION FUEL OIL PUMP IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUW EXIST HWW EXIST HX EXIST REALH EXIST RET EXIST UVAC EXIST EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXI	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HUMIDIFIER IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING ROOFTOP UNIT IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION EXISTING WENTICAL UNIT VENTILATOR SENSOR TO CONTROLLED ITEM WALL MID.(5'-2'±-A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MID.(5'-2'±-A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MID. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) SUMMER/WINTER VALVE DOOR UNDERCUT
☐ — Ø — O — O — ↑ AV — ☐ ☐ Ø ←	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CABINET HEATER IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DERICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DERICATED TOUTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DERICATED TOUTLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXHAUST FAN IDENTIFICATION EXPANSION TANK IDENTIFICATION EXPANSION TANK IDENTIFICATION FUEL OIL TANK IDENTIFICATION FUEL OIL TANK IDENTIFICATION FUEL OIL TANK IDENTIFICATION GLYCOL FEED SYSTEM IDENTIFICATION GLYCOL FEED SYSTEM IDENTIFICATION GLYCOL FEED SYSTEM IDENTIFICATION GLYCOL FEED SYSTEM IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUW EXIST HWW EXIST HX EXIST REALH EXIST RET EXIST UVAC EXIST EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXI	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION TO CONTROLLED ITEM WALL MID (5'-2"±A.F.FU.O.N.) TEMPERATURE SENSOR TO CONTROLLED ITEM WALL MID (5'-2"±A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MID (5'-2"±A.F.FU.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MID (5'-2"*A.F.FU.O.N.) PR
☐ — Ø — O — O — ↑ AV — ☐ ☐ Ø ←	CATE VALVE (HORIZONTAL/VERTICAL) COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) 2 - WAY CONTROL VALVE 3 - WAY CONTROL VALVE EXPANSION JOINT, ANCHOR AND GUIDES CHECK VALVES PIPE CONNS. (BOTTOM; TOP 45 OR 90; PIPE UP) AUTOMATIC AIR VENT IDENTIFICATION THERMOMETER PRESSURE GAUGE (WITH SHUT-OFF COCK) AIR HANDLING UNIT IDENTIFICATION BOILER IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CHEMICAL FEED TANK IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSATE PUMP IDENTIFICATION CONDENSING UNIT IDENTIFICATION DEDICATED OUTDOOR AIR SYSTEM IDENTIFICATION DEDICATED DUCTLESS SPLIT INDOOR UNIT IDENTIFICATION DEDICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DERICATED DUCTLESS SPLIT OUTDOOR UNIT IDENTIFICATION DERICATED TURLESS SPLIT OUTDOOR UNIT IDENTIFICATION EXPANSION TANK IDENTIFICATION EXPANSION TANK IDENTIFICATION FURCH SELECTOR IDENTIFICATION FUEL OIL TANK IDENTIFICATION FUEL OIL TANK IDENTIFICATION GEOTHERMAL PUMP IDENTIFICATION GRAVITY RELIEF VENT IDENTIFICATION GRAVITY FELIEF VENT IDENTIFICATION	GRV EXIST GSHP EXIST HIP EXIST HUW EXIST HWW EXIST HX EXIST REALH EXIST RET EXIST UVAC EXIST EXIST UVAC EXIST UVAC EXIST UVAC EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXIST EXIST UVAC EXIST EXI	EXISTING GRAVITY RELIEF VENT IDENTIFICATION EXISTING GROUND SOURCE HEAT PUMP UNIT IDENTIFICATION EXISTING AIR SOURCE HEAT PUMP VRF IDENTIFICATION EXISTING CEILING RADIANT HEATING PANEL IDENTIFICATION EXISTING HOT WATER COIL IDENTIFICATION EXISTING HOT WATER HEATER IDENTIFICATION EXISTING HOT WATER PUMP IDENTIFICATION EXISTING HEAT EXCHANGER IDENTIFICATION EXISTING MAKEUP AIR UNIT IDENTIFICATION EXISTING SOUND ATTENUATOR IDENTIFICATION EXISTING SUPPLY FAN IDENTIFICATION EXISTING ROOF MOUNTED AIR HANDLING UNIT IDENTIFICATION EXISTING ROOF TO UNIT IDENTIFICATION EXISTING UNIT HEATER IDENTIFICATION EXISTING UNIT VENTILATOR IDENTIFICATION EXISTING UNIT VENTILATOR AIR CONDITIONER IDENTIFICATION EXISTING UNIT VENTILATOR FRESH AIR INTAKE IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING VERTICAL UNIT VENTILATOR IDENTIFICATION EXISTING FIN TUBE RADIATION IDENTIFICATION TO CONTROLLED ITEM WALL MTD. (5'-2'±-A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2'±-A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2'±-A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT TO CONTROLLED ITEM WALL MTD. (5'-2'±-A.F.F-U.O.N.) PROGR. HEAT/COOLING THERMOSTAT WALL MTD. CARBON DIOXIDE SENSOR RELATIVE HUMIDITY SENSOR COMBINATION BALANCING & SHUT-OFF VALVE (CIRCUIT SETTER) SUMMER/WINTER VALVE DOOR UNDERCUIT LOW DOOR LOUVER

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



BARILE GALLAGHER & ASSOCIATES CONSULTING ENGINEERS

39 MARBLE AVE PLEASANTVILLE, NY 10570

4.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS. PC (KG+ ND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, RRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION ALTERATIONS BY ANY PERSON. IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF

NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC
ALL RIGHTS RESERVED. Professional Seal

	4	09/16/2024	ISSUE FOR BID
	3	10/27/2023	SED ISSUE
	2	08/31/2023	ISSUE FOR PRICING - 90% CD
	1	06/10/2023	SCHEMATIC DESIGN
ı			

LEGEND, NOTES, & |

ABBREVIATIONS

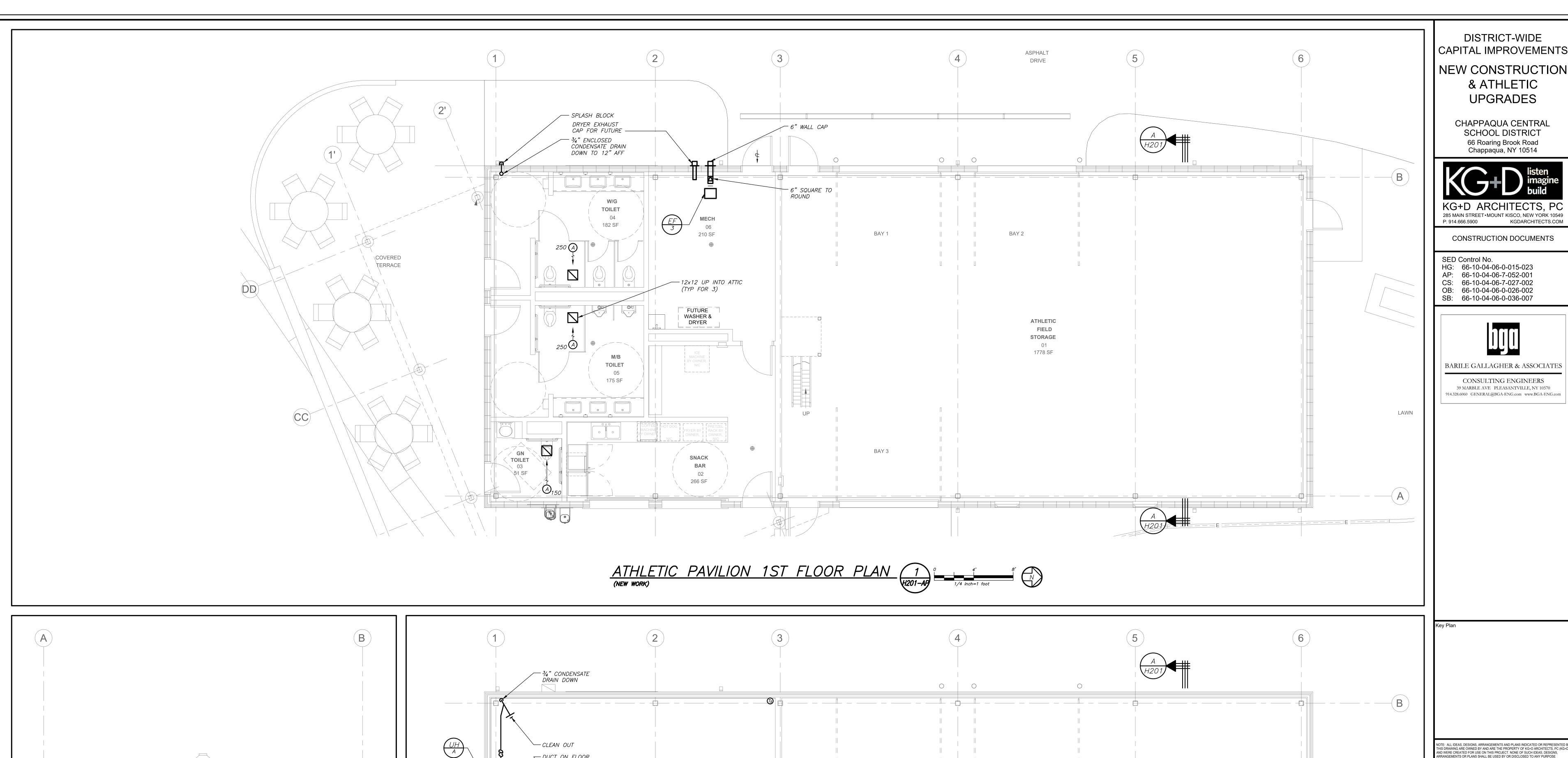
2023-1028

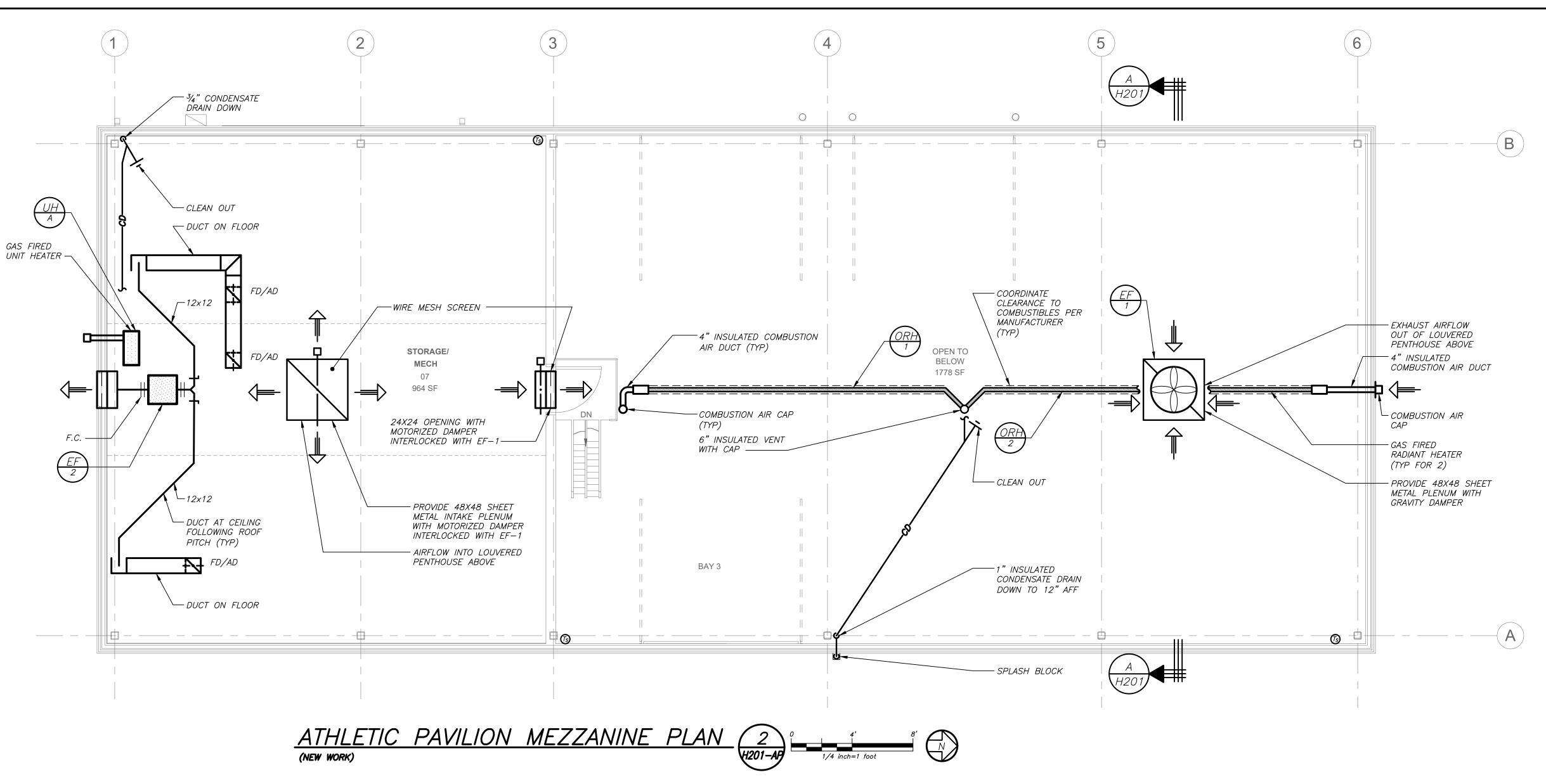
Drawn / Checked

BGA/BGA

09/16/2024 AS NOTED

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS





DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



P: 914.666.5900 KGDARCHITECTS.COM

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



BARILE GALLAGHER & ASSOCIATES

CONSULTING ENGINEERS 39 MARBLE AVE PLEASANTVILLE, NY 10570 914.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED IIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D. RITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED WHITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC ALL RIGHTS RESERVED.

Professional Seal

4 09/16/2024 ISSUE FOR BID 3 10/27/2023 SED ISSUE

2 08/31/2023 ISSUE FOR PRICING - 90% CD 1 06/10/2023 SCHEMATIC DESIGN No. Date Issue ATHLETIC

PAVILION FLOOR **PLANS** (NEW WORK)

2023-1028

Drawn / Checked

BGA/BGA

AS NOTED

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

SHEET METAL

PLENUM ---

WIRE MESH SCREEN —

RADIANT HEATER

(TYP FOR 2) —

— FAN SUPPORT FRAME

FROM STRUCTURE

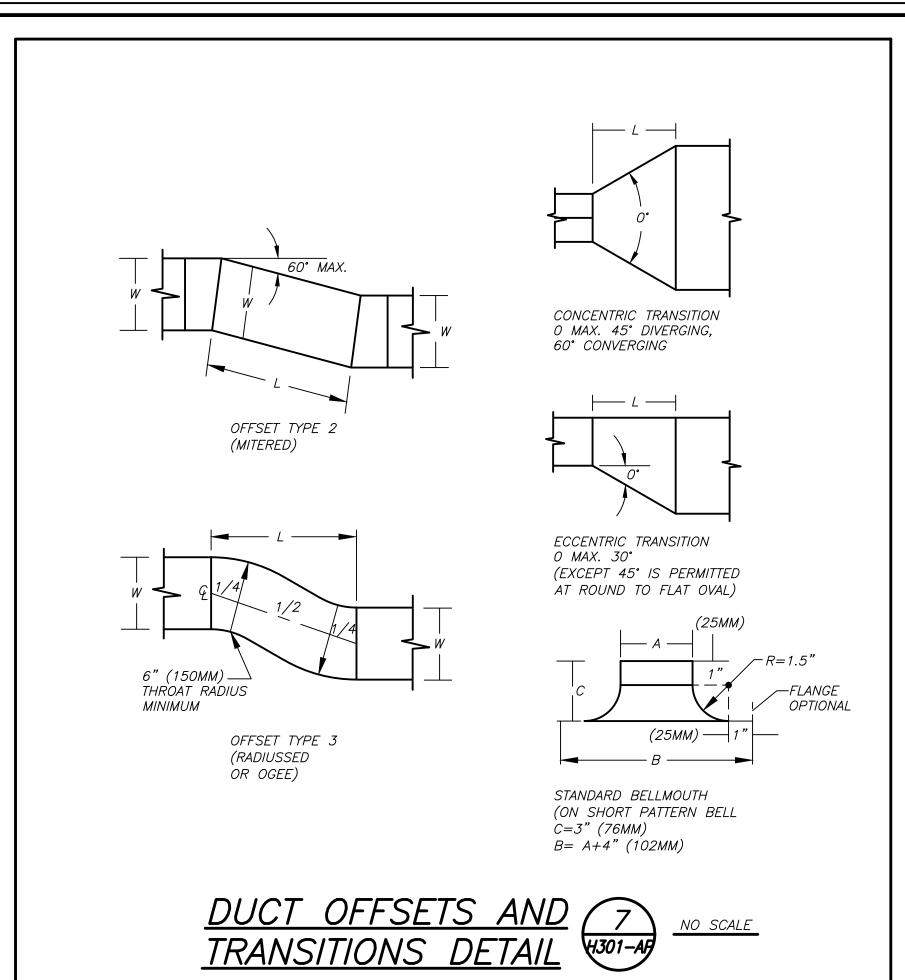
— MAX 50" TO

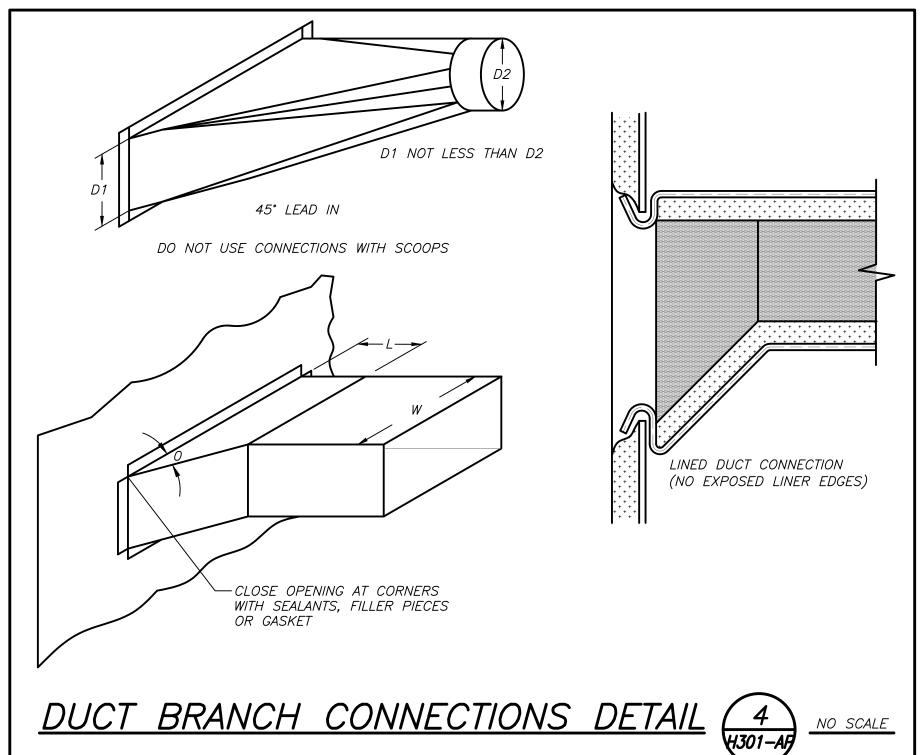
STORED

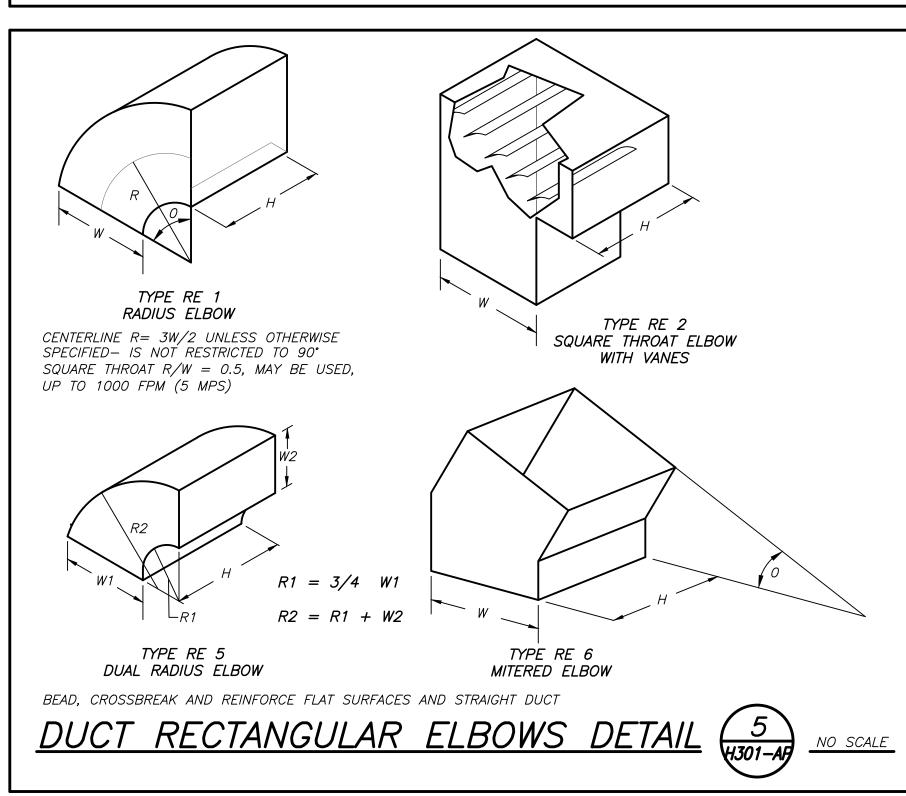
DBE: TAB: H206 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\HVAC\HGHS\233200—H201—HGAP.dwg — DATE: Sep 12, 2024 — 5:01pm

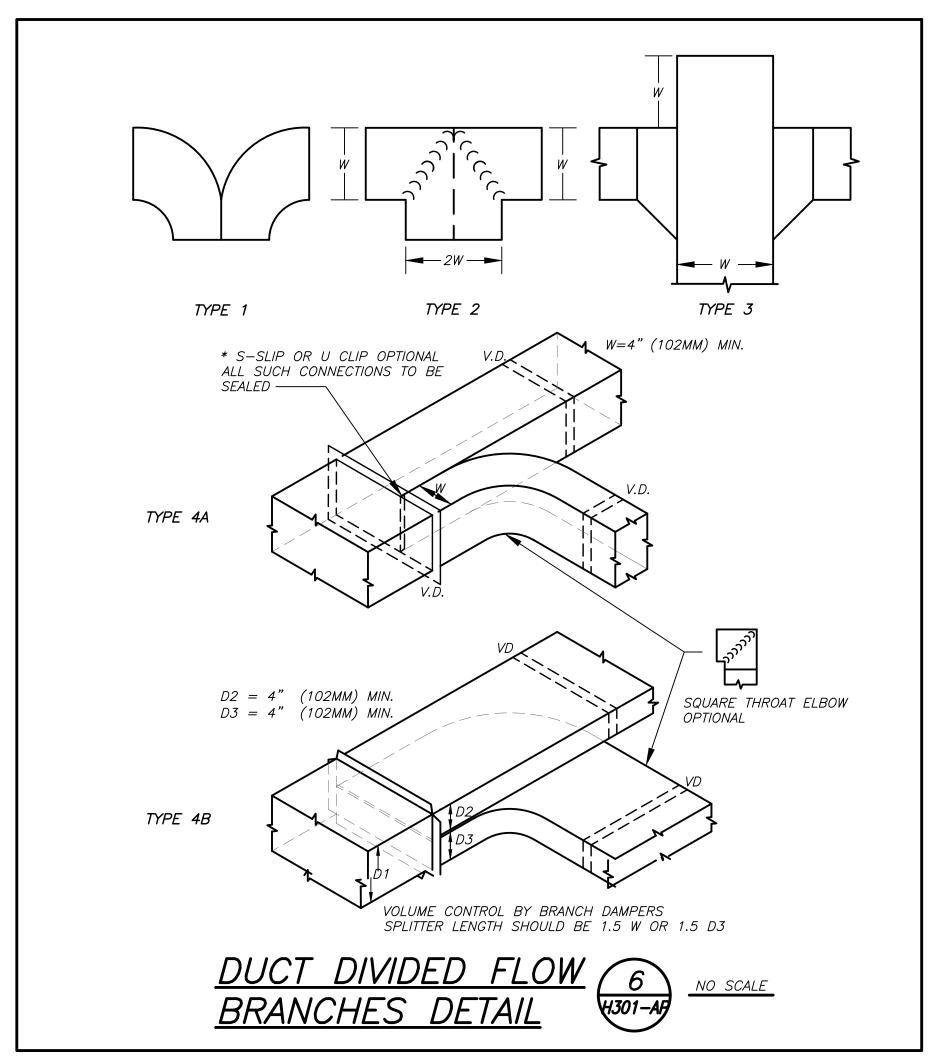
12'-0"

CONTENTS









	SCHEDULE OF EXHAUST FANS											
MARK	SERVICE	LOCATION	MODEL No. 🕧	TYPE	CFM	EXT. S.P. IN H ₂ O	RPM	HP	ELECTRIC V/PH/HZ	SIZE (IN)	WEIGHT (LBS.)	REMARKS
EF 1	ATHLETIC FIELD STORAGE	STORAGE	SBE	PROPELLER	2,500	0.35	810	1/3	120/1/60	32Lx32Wx20H	100	REFER TO 245
EF 2	ATHLETIC PAVILION TOILETS	MECH 07	SQ-99-VG	IN-LINE CENTRIFUGAL	650	1.0	1860	1	120/1/60	21Lx15Wx15H	67	REFER TO 235
EF 3	ATHLETIC PAVILION MECH	MECH 06	SP-A250	CABINET	250	0.25	900	60W	120/1/60	14Lx12Wx12H	25	REFER TO 235
		_			-	-	-		•	•		

N (1) AS MANUFACTURED BY "GREENHECK".

2 INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

3 PROVIDE VIBRATION ISOLATORS, BACKDRAFT DAMPER, SPEED CONTROL, DISCONNECT SWITCH, AND NAMEPLATE IDENTIFYING FAN MARK, MODEL NO., CFM, RPM, HP, AND ELECTRICAL SERVICE

PROVIDE ROOF CURB, WEATHERPROOF FACTORY MOUNTED DISCONNECT SWITCH, INTERNALLY MOUNTED VARIABLE SPEED CONTROLLER, MOTORIZED DAMPER, AND NAMEPLATE IDENTIFYING FAN MARK, MODEL NO., CFM, RPM, HP, AND ELECTRICAL SERVICE

[5] INDICATED EQUIPMENT DESIGNATIONS ARE FOR USE IN CONSTRUCTION ONLY. CONTRACTOR SHALL COORDINATE WITH OWNER ON DESIRED FINAL TAG IDENTIFICATION/ NUMBERING/ LETTERING. OWNER APPROVED DESIGNATIONS SHALL BE USED IN BMS PROGRAMMING AND ON PERMANENT EQUIPMENT IDENTIFICATION TAGS. AS—BUILT DRAWINGS SHALL BE UPDATED WITH FINAL IDENTIFICATION TAG DESIGNATIONS.

SCHEDULE OF GAS UNIT HEATERS

MARK	MODEL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DATA		ELECTRIC	PHYSICAL	DATA	REMARKS	
IVIAINN	No. 1	INPUT (BTUH)	OUTPUT (BTUH)	FUEL	HP	SERVICE	LxWxH	WEIGHT (LBS)	KEWAKNS	
UH A	UEAS85	85,000	79,050	PROPANE	0.5	120/1/60	30/33/21	105	REFER TO (1)(2)(3)(4)	
N ① A	(1) AS MANUFACTURED BY "REZNOR".									

(2) INSTALL PER MANUFACTURER'S RECOMMENDATIONS
(3) SET TO LOW SPEED. PROVIDE UNIT MOUNTED VARIABLE SPEED CONTROLLER AND MANUAL THERMOSTAT.

SCHEDULE OF REGISTERS AND DIFFUSERS

	SCHEDULE OF MEDISTENS AND DIFFOSENS								
MARK	TYPE	SERVICE	MODEL No. 1	DIRECTION DISCHARGE	DAMPER TYPE	FINISH	REMARKS		
A	CEILING REGISTER	RETURN	635	_	OPPOSED BLADE	PER ARCH.	REFER TO 2 3 4 5		
A/ (C)	N C								

N (1) AS MANUFACTURED BY "PRICE".

O (2) INSTALL PER MANUFACTURERS RECOMMENDATIONS.

T (3) PROVIDE CABLE OPERATED DAMPERS IN UN-ACCESSIBLE AREAS.

S 4) PROVIDE MOUNTING FRAME COMPATIBLE W/ MOUNTING SURFACE. COORDINATE ALL BORDER TYPES, COLORS, FINISHES, AND DIMENSIONS WITH ARCHITECT.

(5)	(NOT TO EXCEED 675 fpm)								
50 TO 149	150 TO 249	TO	TO	600 TO 799	800 TO 1099	1100 TO 1199	TO		
646	878	10V10	12V12	11V11	16¥16	18V18	21421		

		S	CHED	ULE	OF	GAS	FIRED	D RADIANT HEATERS	
MARK	SERVICE	LOCATION	TYPE	MODEL No. 1	GAS TYPE	INPUT MBH	ELECTRIC SERVICE	REMARKS	
ORH 1	STORAGE BAYS	UPPER CEILING	OVERHEAD RADIANT	SST–X	PROPANE	65	120/1/60	REFER TO 2345	
ORH 2	V	 	V	\	\		\		

N (1) AS MANUFACTURED BY "SCHWANK".

O (2) INSTALL PER MANUFACTURERS RECOMMENDATIONS.

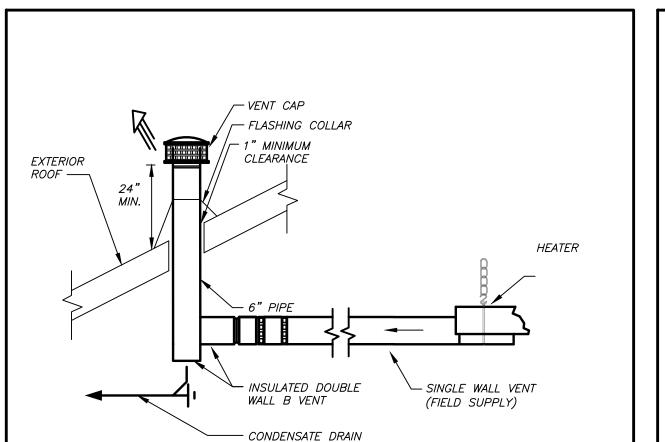
TO STRUCTURE IN AN APPROVED MANNER.

(2) INSTALL PER MANUFACTURERS RECOMMENDATIONS.

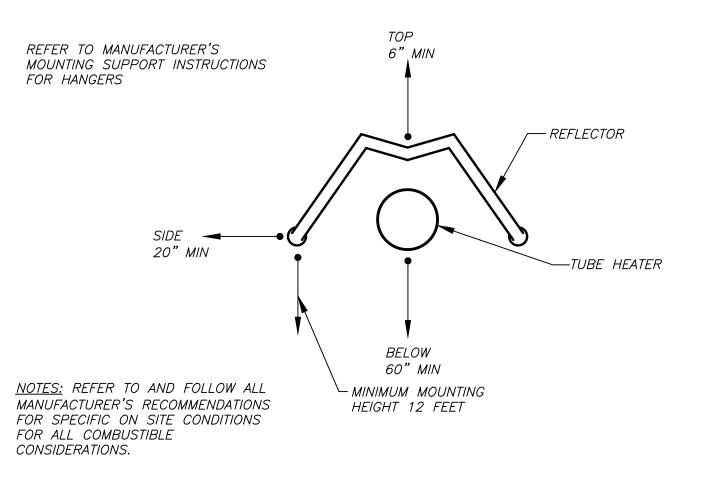
(3) PROVIDE MANUAL THERMOSTAT AND INTAKE/VENT CAPS.

PROVIDE MANUAL THERMOSTAL AND INTAKE/VENT CAPS.

4) PROVIDE ALL REQUIRED MOUNTING BRACKETS, HANGING RODS/CHAINS AND ATTACHMENTS AND SECURE





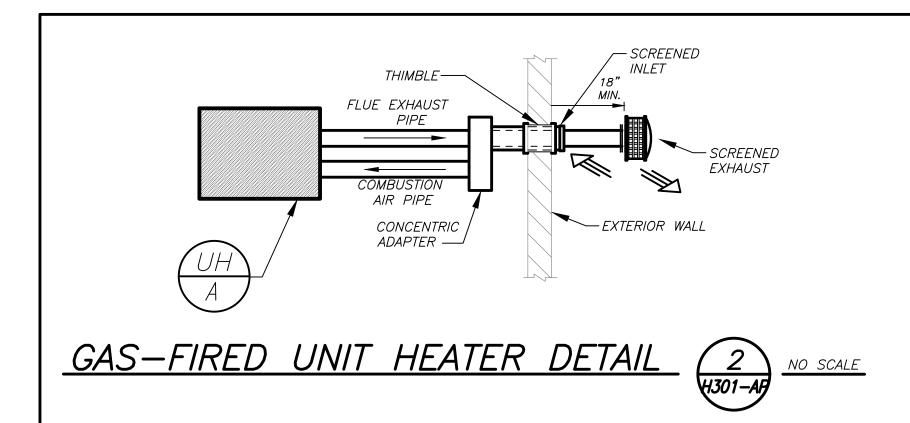


MANUFACTURER TO SUBMIT SHOP DRAWING TO THIS CONFIGURED SPECIFIC INSTALLATION.

HEATER DISTANCE TO

COMBUSTIBLES DETAIL

1
NO SCALE



DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



P: 914.666.5900 KGDARCHITECTS.CC

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



BARILE GALLAGHER & ASSOCIATES

CONSULTING ENGINEERS
39 MARBLE AVE PLEASANTVILLE, NY 10570
328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

Key Pl

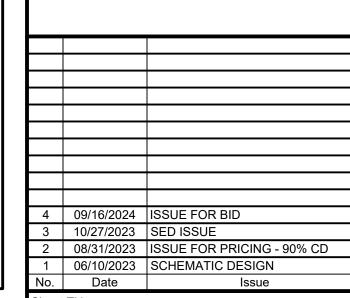
NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D), AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC

Professional Seal



SCHEDULES & DETAILS

Job No.
2023-1028

Date
09/16/2024

Scale
AS NOTED

Drawn / Checked

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

DBE: TAB: H301 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\HVAC\HGHS\233200—H301—HGAP.dwg — DATE: Sep 12, 2024 — 5:01pm

GENERAL NOTES

- DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES, REGULATIONS, BUILDING STANDARDS AND THE BEST PRACTICES OF THE TRADE FOR FIRST CLASS ELECTRICAL INSTALLATION.
- . THE DRAWINGS INDICATE SIZE AND GENERAL LOCATION OF WORK. SCALED DIMENSIONS SHALL NOT BE USED. THE EXACT LOCATION AND ELEVATION OF ALL ELECTRICAL EQUIPMENT SHALL BE COORDINATED IN FIELD WITH RESPECTIVE CONTRACTOR/OWNER.
- WHERE PANELBOARDS, SWITCHES, CIRCUIT BREAKERS, ETC. ARE EXISTING AND TO BE REUSED THE CONTRACTOR SHALL CLEAN AND REFURBISH THE EQUIPMENT. THIS SHALL INCLUDE TIGHTENING ALL CONNECTIONS, REPLACING DEFECTIVE MECHANISMS AND PROVIDING ALL REQUIRED AND NECESSARY MISCELLANEOUS COMPONENTS SO THAT THE EQUIPMENT SHALL BE IN PERFECT WORKING ORDER.
- 4. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO SUBMISSION OF BID TO DETERMINE WHAT WORK MUST BE PERFORMED AFTER NORMAL BUSINESS HOURS. UNLESS OTHERWISE DIRECTED ANY NOISY WORK (CHOPPING, CORE DRILLING, HAMMERING, ETC.) AND BUILDING POWER INTERRUPTIONS SHALL BE PERFORMED OUTSIDE OF NORMAL BUSINESS HOURS. CONFIRM NORMAL BUSINESS HOURS WITH BUILDING OWNER. NO ADDITIONAL COST WILL BE CHARGED TO OWNER FOR WORK PERFORMED OUTSIDE NORMAL BUSINESS HOURS.
- 5. ALL WORK WHERE SHOWN WITH DARK/SOLID LINES ON THE DRAWINGS IS NEW UNLESS OTHERWISE NOTED. WHERE SHOWN WITH DASHED LINES WITH LETTER (E) IS EXISTING TO REMAIN, WITH LETTER (R) IS EXISTING TO BE REMOVED, WITH LETTER (ER) IS EXISTING RELOCATED, WITH LETTER (RN) IS EXISTING TO BE REPLACED WITH NEW AND WITH LETTER (RR) IS EXISTING TO BE REMOVED AND RELOCATED.
- CIRCUIT NUMBERS TO EXISTING PANELS ARE SHOWN FOR INTENT ONLY. ACTUAL CIRCUIT NUMBERS TO BE USED SHALL BE AS PER FIELD CONDITIONS BY UTILIZING SPARE CIRCUITS, BREAKERS OR SPACES IN EXISTING PANEL, SIZE AS INDICATED ON THE PLANS. THE ELECTRICAL CONTRACTOR SHALL BALANCE LOAD OF CIRCUITS EVENLY ON ALL PHASES.
- FEEDERS AND BRANCH CIRCUITRY SHALL BE RUN IN MINIMUM 74" CONDUIT UNLESS OTHERWISE NOTED. FINAL CONNECTIONS TO MOTORS MAY BE MADE WITH FLEXIBLE METALLIC CONDUIT (NO LONGER THAN 18"). IN UNFINISHED AREAS CONDUIT SHALL BE RUN EXPOSED AND IN FINISHED AREAS CONDUIT SHALL BE RUN CONCEALED.
- . PROVIDE PANEL NAME PLATE MADE OF BLACK LAMINATED PLASTIC WITH WHITE ENGRAVED LETTERING AND TYPE WRITTEN DIRECTORY FOR ALL NEW AND EXISTING PANELS BEING USED FOR THIS PROJECT.
- 9. ALL CONDUCTORS SHALL BE COPPER, TYPE THHN/THWN INSULATED. ALL CONDUCTORS SHALL HAVE 600 VOLT RATED INSULATION UNLESS OTHERWISE NOTED.
- 10. THE USE OF FLEXIBLE CONDUIT FROM LIGHTING FIXTURES TO JUNCTION BOX IS PERMITTED ONLY WHEN A SEPARATE GROUND WIRE IS INSTALLED WITH THE CONDUCTORS INSIDE FLEXIBLE CONDUIT. THE GROUND WIRE MUST BOND THE FIXTURE HOUSING TO THE JUNCTION BOX. MAXIMUM LENGTH 6'-0".
- 11. EXACT LOCATION AND MOUNTING HEIGHTS OF ALL DEVICES SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO THE INSTALLATION.
- 12. WALL MOUNTED EQUIPMENT (SWITCHES, RECEPTACLES, ETC.,) SHALL BE SURFACE MOUNTED IN UNFINISHED AREAS AND ON EXISTING CONCRETE BLOCK WALLS AND FLUSH MOUNTED IN NEW WALLS/PARTITIONS.
- 13. CONDUIT RUNS SHALL BE PARALLEL WITH OR AT RIGHT ANGLES TO WALLS AND CEILINGS. CONDUIT SHALL BE SUPPORTED BY APPROVED MEANS. SUPPORTS FOR HORIZONTAL RUNS OF CONDUIT SHALL NOT EXCEED SEVEN FEET ON CENTERS.
- 14. PROVIDE PULL BOXES, JUNCTION BOXES, CONDUIT ELBOWS AND OFFSETS TO SUIT FIELD CONDITIONS AND THE NATIONAL ELECTRICAL CODE.
- 15. CONTRACTOR SHALL COORDINATE WITH THE FIRE DEPARTMENT AND F.A. VENDOR BEFORE PROCEEDING WITH WORK INVOLVING FIRE ALARM SYSTEM.
- 16. THE MINIMUM WIRE SIZE FOR 120 VOLT BRANCH CIRCUITS SHALL BE NO. 12 AWG. EXCEPT OVER 100' IN LENGTH SHALL BE NO. 10 AWG.

17. PROVIDE ALL REQUIRED AND NECESSARY ACCESSORIES (EX. CONNECTORS, ADAPTERS,

- BUSHINGS. CLAMPS. ETC.) TO FACILITATE COMPLETE INSTALLATION.
- 18. COORDINATE LOCATION OF ALL MECHANICAL EQUIPMENT WITH HVAC CONTRACTOR IN FIELD. FUSES FOR ALL MOTOR LOADS SHALL BE DUAL ELEMENT TIME DELAY TYPE.
- COVER. PROVIDE ARCHITECT APPROVED ACCESS DOORS OR PLATES AS REQUIRED IN AREAS WHERE UNOBSTRUCTED ACCESS TO BOX OR OUTLET IS NOT POSSIBLE. 20. PRIOR TO ANY CHASING, CHOPPING OR CORE DRILLING BEING PERFORMED, THE CONTRACTOR SHALL FIELD INVESTIGATE CONDITIONS AND COORDINATE ALL WORK TO

19. ALL JUNCTION OR OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO

- ENSURE THAT IT WILL BE IN HARMONY AND NOT AFFECT ANY EXISTING BUILDING SYSTEMS. THIS WORK MUST BE APPROVED BY BUILDING OWNER PRIOR TO PROCEEDING. 21. OPENINGS AROUND ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANCE RATED WALLS, PARTITIONS, FLOORS OR CEILINGS SHALL BE FIRE STOPPED USING APPROVED METHODS. ALL SLEEVES MUST HAVE BUSHINGS. SEALANT SHALL BE 3 HOUR FIRE BARRIER #CP-25
- 22. ALL PANELBOARD COVERS SHALL BE INSTALLED IN PLACE AT THE COMPLETION OF EACH DAYS WORK.
- 23. PREPARE 'AS-BUILT' DRAWINGS THAT REFLECT ACTUAL CONSTRUCTION AND SHOW DEVIATIONS FROM DESIGN DRAWINGS.

(NO LESS THAN 3" THICK BACKED UP WITH MINERAL WOOL).

- 24. LIGHT FIXTURES SHALL BE CONSTRUCTED TO SUIT PARTICULAR TYPE OF CEILING AND WALL CONSTRUCTION AND SHALL BE PROVIDED WITH APPROPRIATE TRIMS, MOUNTING FRAMES AND ADAPTERS AS REQUIRED.
- 25. ALL NEW CIRCUIT BREAKERS INSTALLED INTO EXISTING PANELBOARDS SHALL BE UL LISTED FOR USE IN THE PANEL.

GENERAL REMOVAL NOTES

- BEFORE COMMENCING WORK, EXAMINE ALL ADJOINING AREAS THAT MAY BE AFFECTED BY REMOVAL. REPORT TO THE GENERAL CONTRACTOR ANY CONDITION THAT PREVENTS PERFORMANCE OF THE WORK.
- 2. BECOME THOROUGHLY FAMILIAR WITH EXISTING CONDITIONS WHERE CONNECTIONS MUST BE MADE, CHANGED OR ALTERED. THE INTENT OF THE WORK IS SHOWN ON THE DRAWINGS AND DESCRIBED HEREINAFTER AND NO CONSIDERATION WILL BE GRANTED BY REASON OF LACK OF FAMILIARITY ON THE PART OF THE CONTRACTOR WITH ACTUAL PHYSICAL CONDITIONS AT THE SITE. INSPECT EACH AND EVERY AREA AFFECTED BY THE ALTERATION OF THE SPACE BEFORE SUBMITTAL OF BID.
- 3. ALL CONDUCTORS AND CONDUIT ASSOCIATED WITH REMOVED ELECTRICAL EQUIPMENT SHALL BE REMOVED COMPLETELY BACK TO ITS SOURCE OF POWER AND DISCONNECTED.
- 4. ALL POWER CONDUCTORS, CONTROL WIRING AND CONDUIT ASSOCIATED WITH MECHANICAL EQUIPMENT SUCH AS FANS, AIR CONDITIONING UNITS, PUMPS, ETC. DESIGNATED FOR REMOVAL ON THE HVAC AND PLUMBING REMOVAL DRAWINGS SHALL BE REMOVED CLEAR BACK TO THE SOURCE OF POWER AND DISCONNECTED. ALL MOTOR STARTERS, DISCONNECT SWITCHES, CONTROL DEVICES, ETC. SHALL BE REMOVED. REFER TO MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 5. CIRCUIT BREAKERS AND/OR SWITCHES IN PANELBOARD(S) OR DISTRIBUTION BOARD(S) MADE SPARE DUE TO REMOVAL SHALL BE DESIGNATED AS SUCH ON THE PANEL SCHEDULE.
- 6. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO TRACE AND RELOCATE ALL EXISTING FEEDERS AND BRANCH CIRCUIT WIRING WHICH PASSES THROUGH THE REMOVAL AREA THAT SERVE EXISTING OCCUPIED SPACES TO REMAIN. COORDINATE WITH BUILDING MANAGER PRIOR TO ANY SHUTDOWNS OR DISRUPTIONS THAT MAY BE REQUIRED TO ACCOMPLISH THIS
- 7. DISPOSE OF ALL REMOVED EQUIPMENT, WHICH IS NOT INTENDED TO BE REUSED. PRIOR TO DISPOSAL, CONTACT BUILDING MANAGER TO DETERMINE IF ANY REMOVED EQUIPMENT IS DESIRED FOR STOCK.
- 8. EXISTING CIRCUIT BREAKERS IN PANEL(S) ARE TO BE RE-USED. ELECTRICAL CONTRACTOR TO DISCONNECT PANEL AND CIRCUIT BREAKERS WITH GREAT CARE TO ENSURE AGAINST DAMAGE. THIS CONTRACTOR SHALL PROVIDE NEW CIRCUIT BREAKERS AS REQUIRED. ALL NEW CIRCUIT BREAKERS INSTALLED INTO EXISTING PANELBOARDS SHALL BE UL LISTED FOR USE IN THE PANEL.
- 9. ALL FIRE ALARM DEVICES IN THE AREA OF WORK ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED.
- 10. EXISTING EQUIPMENT DESIGNATED FOR REUSE SHALL BE CLEANED, REFURBISHED AND RESTORED TO OPTIMUM PERFORMANCE. THIS SHALL INCLUDE BUT NOT LIMITED TO CLEANING OF LIGHT FIXTURES AND LAMPS, RESISTANCE TESTING OF BRANCH CIRCUITRY AND FEEDERS, ETC.
- 11. EXTEND EXISTING CIRCUITRY TO THOSE DEVICES THAT ARE TO BE RELOCATED. MATCH EXISTING TYPE AND SIZE. RELOCATION OF EXISTING EQUIPMENT SHALL BE PERFORMED ONLY UPON OWNERS ACCEPTANCE OF EXISTING EQUIPMENT.
- 12. EXTEND EXISTING CIRCUITS SERVING EQUIPMENT TO REMAIN FROM PANELS THAT ARE TO BE REMOVED TO NEW PANELS OR EXISTING PANELS THAT ARE TO REMAIN.

ABBREVIATIONS ABBV. DESCRIPTION *AMP/AMPERE* A.F.F.ABOVE FINISHED FLOOR AMP INTERRUPTING CURRENT AWGAMERICAN WIRE GAUGE CONDUIT C.B.CIRCUIT BREAKER CABINET HEATER CHCONDENSING UNIT EXISTING TO REMAIN ELECTRICAL CONTRACTOR EXHAUST FAN EF (ER) EXISTING RELOCATED F.A.C.P. FIRE ALARM CONTROL PANEL GFI GROUND FAULT INTERRUPTER kcmil THOUSAND CIRCULAR MILLS KVA KILOVOLT AMPERE KILOWATT KWLIGHTING LTGMCB | MAIN CIRCUIT BREAKER MDP MAIN DISTRIBUTION PANEL MLO MAIN LUGS ONLY MTD MOUNTED NOT TO SCALE NTS P.A. PUBLIC ADDRESS PNLPANFI (R) REMOVE EXISTING RETURN FAN REPLACE EXISTING W/NEW

REMOVED, SALVAGED AND RELOCATED

(RR)

TYP.

WP

TYPICAL

WATT

UNIT HEATER

WEATHERPROOF

UNIT VENTILATOR

LEGEND \neg A 2'x4' LED CEILING MOUNTED LIGHT FIXTURE. UPPER CASE LETTER DENOTES TYPE, LOWER CASE LETTER DENOTES SWITCH CONTROL. FIXTURE SCHEDULE DENOTES TYPE. 2'x4' LED CEILING MOUNTED LIGHT FIXTURE FOR EMERGENCY OPERATION. 'EM' INDICATES SWITCHED EMERGENCY FIXTURE, 'EM/NL'-UNSWITCHED EMERGENCY/NIGHT FIXTURE (TYP.). CEILING/WALL MOUNTED EXIT LIGHT WITH OUTLET BOX, DIRECTIONAL ARROWS SHADED PORTION INDICATES ILLUMINATED FACE. SCHEDULE DENOTES TYPE. WALL MOUNTED EMERGENCY LIGHT FIXTURE WITH INTEGRAL BATTERY BACK-UP.

DAYLIGHT PHOTO SENSOR FOR LIGHTING LEVEL CONTROL, WATTSTOPPER LS—102 (SWITCHING). PROVIDE POWER PACK WATTSTOPPER BZ-150. FLUSH WALL MOUNTED LOW VOLTAGE MOMENTARY CONTACT SWITCH, SIMILAR TO WATTSTOPPER LVSW-101. WORK WITH CEILING SENSORS (DT-300) FOR MANUAL ON, AUTO OFF OPERATION. a' INDICATES CONTROL ZONE; '3' INDICATES 3—WAY SWITCH; '4' INDICATES 4—WAY SWITCH.

CEILING MOUNTED LOW VOLTAGE, DUAL TECHNOLOGY SENSOR, SIMILAR TO WATTSTOPPER MODEL# DT-300, MANUAL ON, AUTO OFF, WORK WITH LOCAL LOW VOLTAGE MOMENTARY CONTACT WALL SWITCH (LVSW-101). INCLUDE REQUIRED POWER PACKS. PROGRAM TO MAXIMUM SENSITIVITY AND TIME DELAY TO 20 MIN.

FLUSH WALL MOUNTED LIGHTING CONTROL SWITCH CONTROLLING OUTLET "a". 'K' WHERE USED INDICATES KEY SWITCH. FLUSH WALL MOUNTED 3—WAY LIGHTING CONTROL SWITCH. 125V-2P-3W-20A GROUNDED TYPE, SPECIFICATION GRADE WALL MOUNTED TAMPER RESISTANCE

20A FLUSH WALL MOUNTED GROUND FAULT INTERRUPTING TYPE DUPLEX RECEPTACLE HUBBELL #GF5362.

SURFACE MOUNTED NEW ELECTRICAL PANELBOARD. EXISTING ELECTRICAL PANELBOARD. WALL MOUNTED COMBINATION FIRE ALARM SPEAKER/STROBE DEVICE. WALL MOUNTED COMBINATION FIRE ALARM HORN/STROBE DEVICE. WALL MOUNTED FIRE ALARM MANUAL PULL STATION

CEILING MOUNTED IONIZATION TYPE SMOKE DETECTOR BPS BOOSTER POWER SUPPLY.

(C)/(C)| CEILING OR WALL MOUNTED CARBON MONOXIDE DETECTOR WITH SOUNDER BASE (G)/(G) CEILING OR WALL MOUNTED GAS LEAK DETECTOR (H) | CEILING MOUNTED HEAT DETECTOR

ST | WALL MOUNTED FIRE ALARM STROBE LIGHT.

DUPLEX RECEPTACLE SIMILAR TO HUBBELL #5362WTR.

FACP | FIRE ALARM CONTROL PANEL INTERFACE MODULE CONSISTING OF CONTROL RELAY AND MONITOR MODULES. IN NEMA 1 ENCLOSURE. ALSO PROVIDE LOAD RELAY AS REQUIRED IF EXISTING DISCONNECT/STARTERS DO NOT HAVE A SET OF DRY CONTACTS TO TIE—IN FOR FAN SHUTDOWN.

40/3 HEAVY DUTY TYPE DISCONNECT SWITCH WITH FINAL FLEXIBLE EQUIPMENT CONNECTION. 240 INDICATES VOLTAGE, 3 INDICATES NO. OF POLES, 60 INDICATES AMPERE RATING, NF INDICATES $_{\uparrow}$ $_{\downarrow}$ $_{\downarrow}$ $_{\downarrow}$ NON-FUSED(OR FUSE SIZE) U.O.N. REFER TO SPECIFICATION AND DRAWINGS FOR ENCLOSURE. WP │ 'WP' WHERE USED INDICATES WEATHERPROOF ENCLOSURE (NEMA 3R).

THERMAL SWITCH, CUTLER—HAMMER MS SERIES MANUAL STARTERS SINGLE—PHASE 20AMP. 120V U.O.N. WHERE INDICATED WITH 'WP' PROVIDE WATERTIGHT ENCLOSURE 208 VOLT, SINGLE PHASE 2 POLE, THERMAL OVERLOAD PROTECTED TOGGLE TYPE SWITCH. | SIMILAR TO EATON #AH4361 + #AH27940G NEMA 1 ENCLOSURE.

 $\sqrt{5}$ MOTOR (F.B.O. WIRED BY ELEC.) — NUMBER INDICATES HORSEPOWER. REFER TO PANEL SCHEDULES FOR WIRING AND OVER CURRENT PROTECTION. HOMERUN TO DESIGNATED PANEL, ARROWHEAD INDICATES SINGLE POLE CIRCUIT. HOMERUN SHALL CONSIST OF 2#12-3/4"C U.O.N. 2,(4,6) HOMERUN TO DESIGNATED PANEL, NUMBERS IN PARENTHESIS INDICATE MULTIPLE CIRCUIT, I.E.

3-HOTS AND 1-GROUND U.O.N. EXISTING TO REMAIN - NEW

TC | AUTOMATIC TIME CLOCK FOR LIGHTING CONTROL. TORK 1100 SERIES. AUTOMATIC TWIST TIMER SWITCH 120V, 1P, 20AMP 0-12HR TIME SETTING SIMILAR TO INTERMATIC SPRING WOUND TIMERS #G1256622

lacksquare AUTOMATIC TWIST TIMER SWITCH 208V, 1P, 20AMP 0-12HR TIME SETTING SIMILAR TO INTERMATION

ELECTROMECHANICAL TIMER #MIL72AQTUZ-240 (1) TAG SYMBOL. NUMERAL DENOTES REFERENCE TO A WORK NOTE.

MECHANICAL EQUIPMENT IDENTIFICATION: — EQUIPMENT ABBREVIATION (FE, SF, HV, ETC. SEE ABBREVIATIONS ON THIS DWG.) — EQUIPMENT NUMBER

DETAIL/PART PLAN NUMBER IDENTIFICATION: ---- DETAIL/PART PLAN NUMBER

-DRAWING NUMBER

DISTRICT-WIDE CAPITAL IMPROVEMENTS

> NEW CONSTRUCTION & ATHLETIC **UPGRADES**

CHAPPAQUA CENTRAL SCHOOL DISTRICT

66 Roaring Brook Road

Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

KGDARCHITECTS.COM

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002

SB: 66-10-04-06-0-036-007

P: 914.666.5900



BARILE GALLAGHER & ASSOCIATES

CONSULTING ENGINEERS 39 MARBLE AVE PLEASANTVILLE, NY 10570 14.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

HIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS. PC (KG D WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, NGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE ATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+ VRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED

MIMENSIONS. CONTRACTOR SHALL VERIEY ALL ACTUAL DIMENSIONS AND CONDITIONS C THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSION D CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR N TFRATIONS BY ANY PERSON. IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT ALL TEATHONS BY ANY PERSON, IN ANY WAY, OF ANY TIEM CONTAINED ON THIS DOCUME UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG4D ARCHITECTS, PC ALL RIGHTS RESERVED.

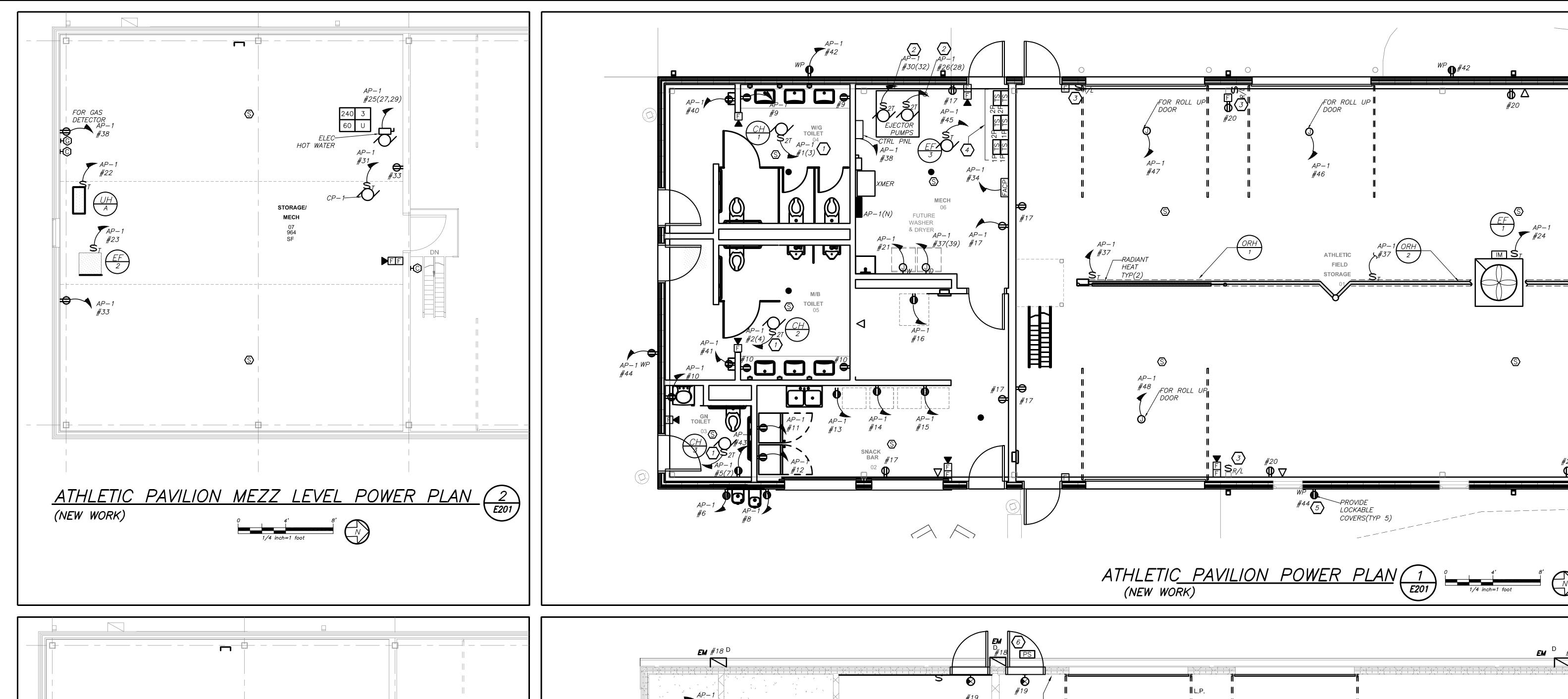
Professional Seal

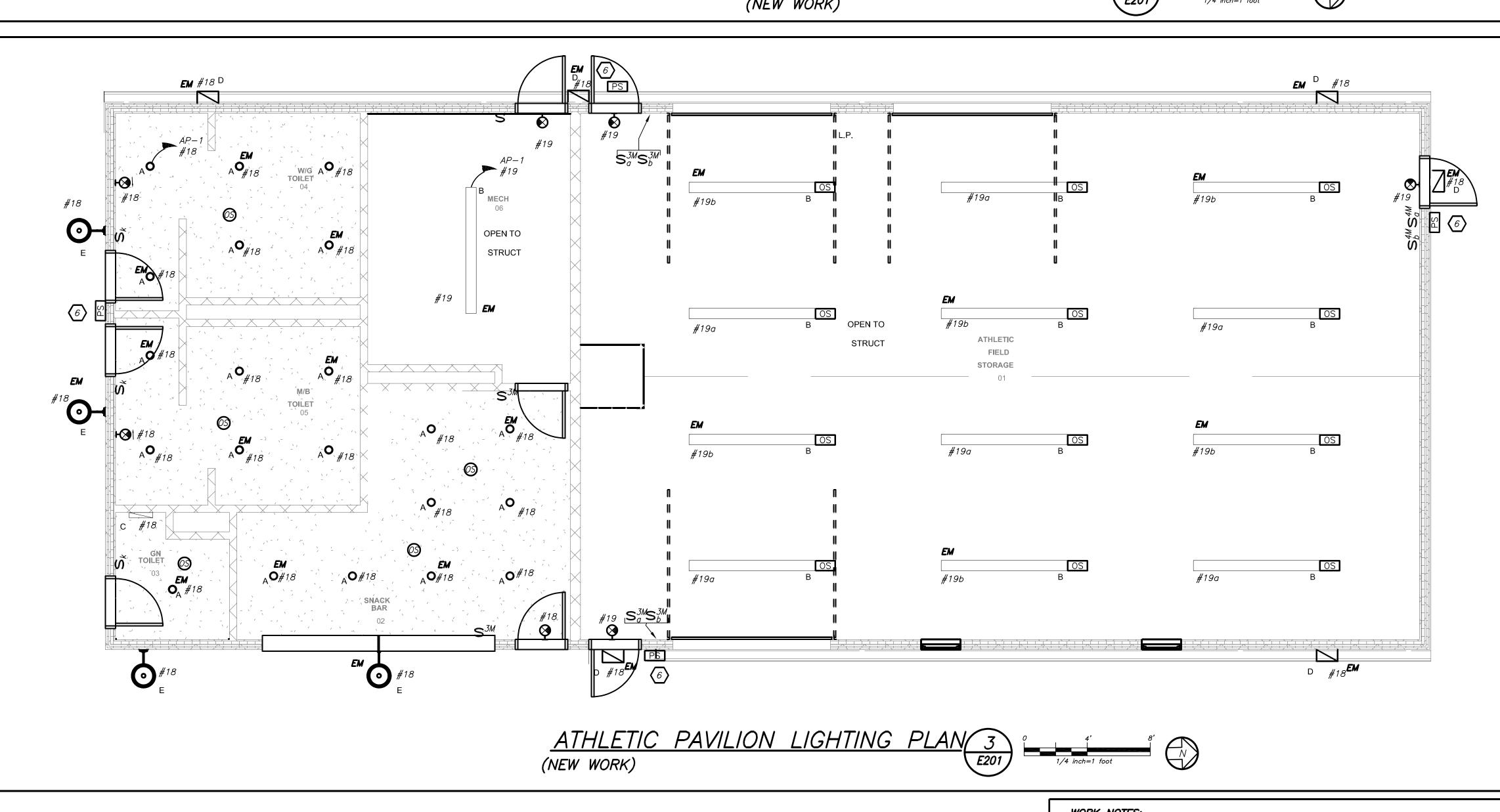
3 | 10/27/2023 | SED ISSUE 2 | 08/31/2023 | ISSUE FOR PRICING - 90% CE 1 | 06/10/2023 | SCHEMATIC DESIGN

LEGENDS, NOTES **ABBREVIATIONS**

rawn / Checked BGA/BGA

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS





WORK NOTES: ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL CABINET HEATER MANUFACTURER INDEECO PART #9222U02000C. THIS CONTRACTOR SHALL COORDINATE INSTALLATION WITH GC BEFORE STÄRT OF ANY WORK. GC SHALL BE RESPONSIBLE FOR ALL CUTTING AND 2 EJECTOR PUMPS LOCATED INSIDE THE PIT. PROVIDE RIGID GALVANIZED CONDUIT FROM CONTROL PANEL TO EJECTOR PUMP LOCATED IN SUMP PIT. PROVIDE RAISE/LOW SWITCH FOR ROLL UP DOORS. FINAL MOUNTING LOCATION SHALL BE COORDINATED WITH ARCHITECT AND OR GC BEFORE START OF ANY WORK. EC SHALL PROVIDE ALL INTERCONNECTIONS FOR A COMPLETE OPERATIONAL SYSTEM.

 2
 08/31/2023
 ISSUE FOR PRICING - 90% CD

 1
 06/10/2023
 SCHEMATIC DESIGN

 No.
 Date
 Issue

09/16/2024

BGA/BGA

PROVIDE TWIST TIMER SWITCH TO CONTROL EF-1, EF-2, EF-3, EF-1, EF-1,

 $\overbrace{5}$ coordinate exact mounting location with owner and architect before the start of any work.

(6) REMOTE PHOTO CELL SHALL CONTROL ALL FIXTURES ON THE SAME SIDE OF BUILDING.

DISTRICT-WIDE CAPITAL IMPROVEMENTS NEW CONSTRUCTION & ATHLETIC

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514

UPGRADES

CONSTRUCTION DOCUMENTS

CONSULTING ENGINEERS 39 MARBLE AVE PLEASANTVILLE, NY 10570 .328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.c

THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D. IMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS OF THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS.

) CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR PROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC ALL RIGHTS RESERVED.

ATHLETIC PAVILION POWER & LIGHTING

PLAN 2023-1028

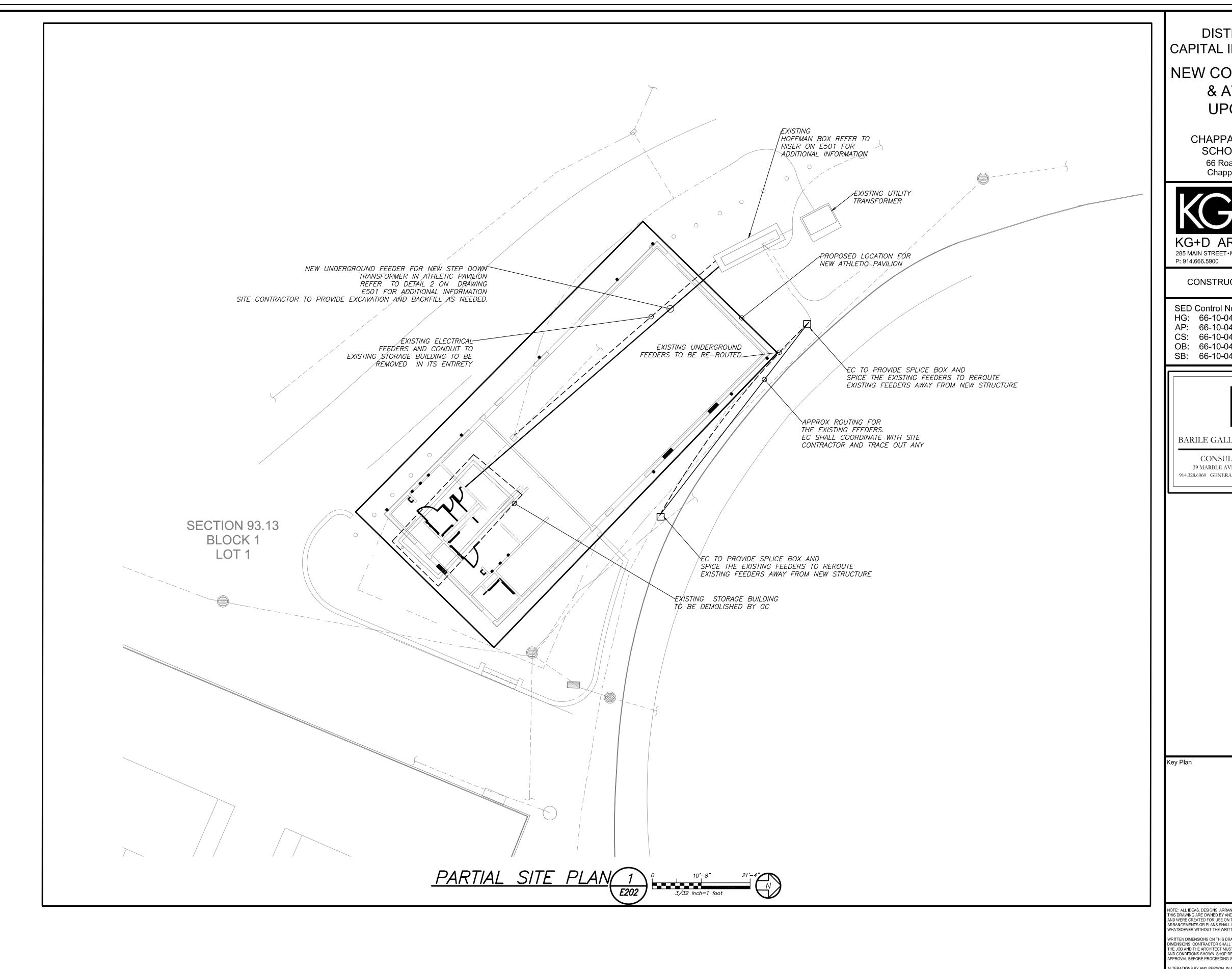
BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

DBE: TAB: Layout1 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\Electrical\HGHS\a233200E201—AP.dwg — DATE: Sep 13, 2024 — 12:59pm

STORAGE/

ATHLETIC PAVILION MEZZ LEVEL LIGHTING PLAN (NEW WORK)

9 4 8 6



DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC UPGRADES

> CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

KGDARCHITECTS.COM

SED Control No.
HG: 66-10-04-06-0-015-023
AP: 66-10-04-06-7-052-001
CS: 66-10-04-06-7-027-002
OB: 66-10-04-06-0-026-002
SB: 66-10-04-06-0-036-007



CONSULTING ENGINEERS
39 MARBLE AVE PLEASANTVILLE, NY 10570
14.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHICCTS, PC (KG+D), AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D.

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED

WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG-D ARCHITECTS, PC ALL RIGHTS RESERVED.

Professional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD

1 06/10/2023 SCHEMATIC DESIGN
No. Date Issue
Sheet Title

ΑΤΗLΕΤΙC

ΡΔ\//ΙΙΙΟΝΙ

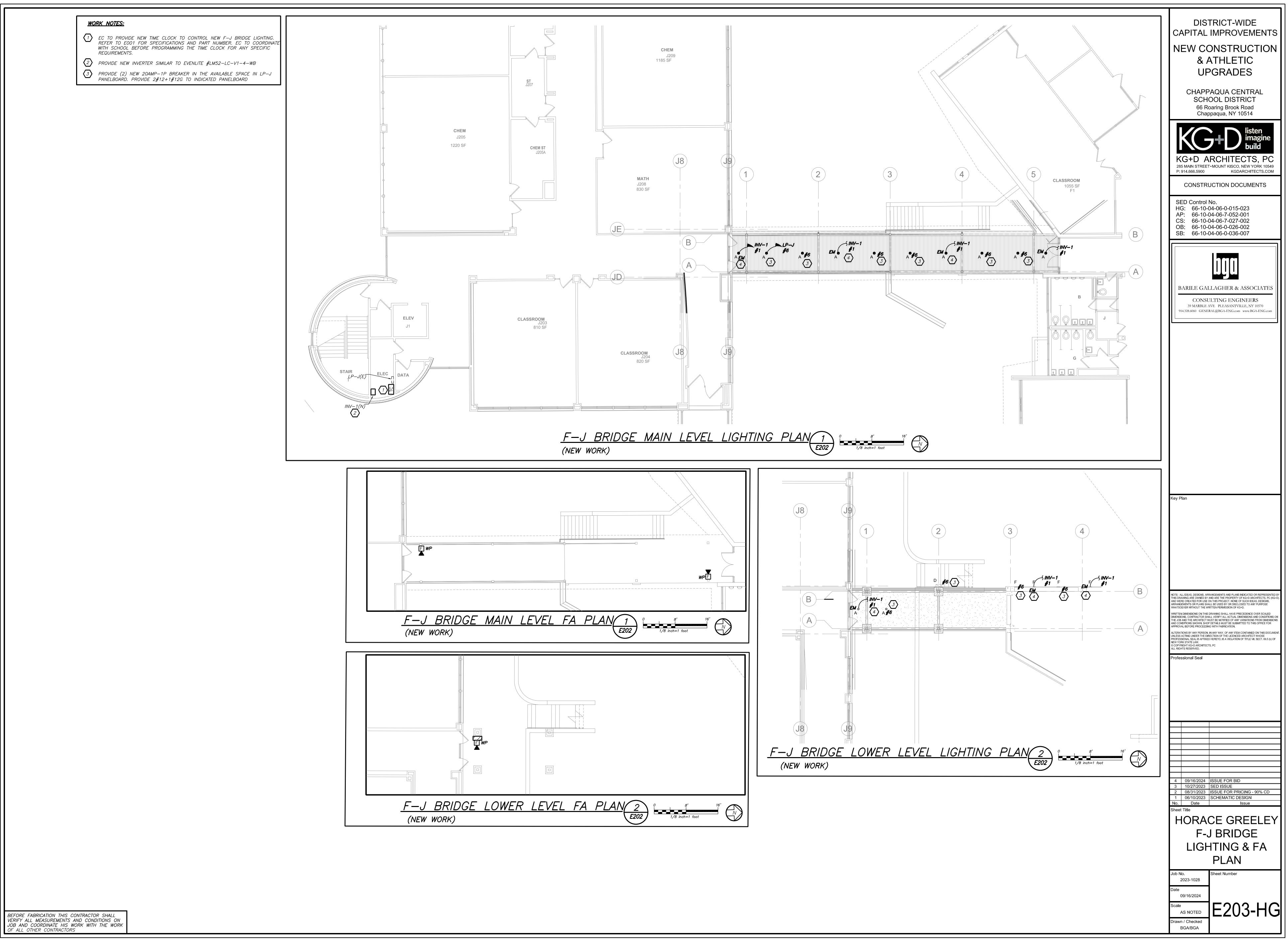
PAVILION SITE PLAN

Job No. 2023-1028 Date

> Drawn / Checked BGA/BGA

E202-A

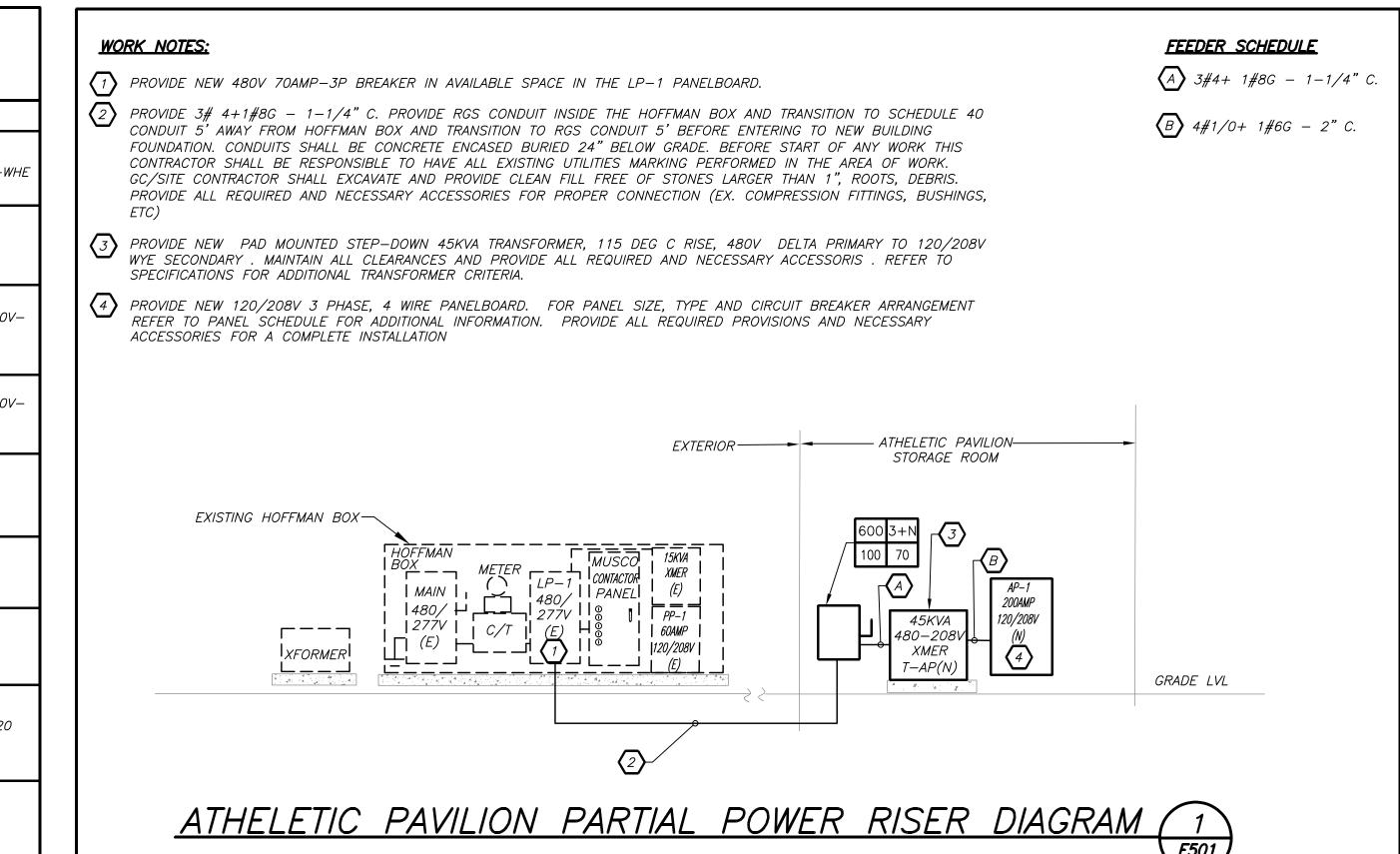
BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

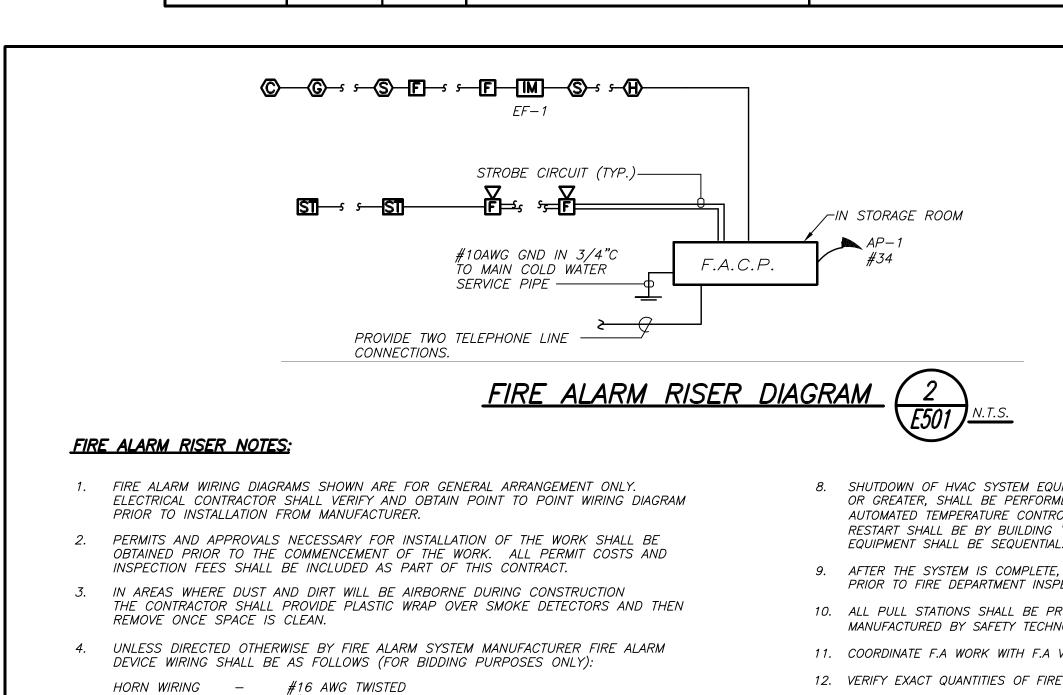


DBE: TAB: Layout1 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\Electrical\HGHS\233200E203—AP.dwg — DATE: Sep 13, 2024 — 2:00pm

	BUILDING F—J BRIDGE LIGHTING FIXTURE SCHEDULE									
TYPE	MOUNTING	LAMPS	DESCRIPTION	MANUFACTURER & CAT.#						
"A"	RECESSED EXTERIOR	20W LED	EXTERIOR RECESSED STAINLESS STEEL DOWN LIGHT WITH WIDE BEAM DISTRIBUTION	BEGA LIGHTING CAT.# B-24-285-35						
"F"	STEP LIGHT	9.2W LED	ALUMINUM LED STEP LINE LANDSCAPE LUMINARIES WITH CONSTRUCTION MOUNTING KITS AND EARLY INSTALLATION OPTIONS	PHILIPS LIGHTING CAT# HADCO RSC2—A—D—G2—RS2—HO						
"D"	SURFACE MTD.	13W LED	LED WALL LIGHT IMPACT RESISITANCE OVER DOOR, 3000K COLOR TEMP, GENE1	SIGNIFY LIGHTING CAT#SWL-WW-G1-PCB-1-BZ						

	ATHELETIC PAVILION LIGHTING FIXTURE SCHEDULE											
TYPE	MOUNTING	LAMPS	DESCRIPTION	MANUFACTURER & CAT.#								
"A"	RECESSED	19W LED	CEILING DOWN LIGHT ROUND 3500K COLOR TEMP REGULAR OUTPUT, PRISMATIQUE LENS, 0—10V DIMMING	EUREKA LIGHTING CAT.# TANGRAM 4580—LED—35—90—120V—DV—PRL—WHE								
"A" <i>EM</i>	RECESSED	19W LED	SAME AS TYPE "A" WITH INTEGRAL BATTERY BACK UP	EUREKA LIGHTING CAT.# TANGRAM 4580-LED-35-90-120V-DV-EMB PRL-WHE-3981EA								
"B"	SURFACE MTD.	85W LED	8' LINEAR UTILITY LED 3500K COLOR TEMP, 0-10V DIMMING, WITH LEVITON OSFHU OCCUPANCY SENSOR	MERCURY LIGHTING CAT#LW104-8-8500-35K-A-0-10V- UNI-01								
"B" <i>EM</i>	SURFACE MTD.	85W LED	SAME AS TYPE "B" WITH INTEGRAL BATTERY BACK UP	MERCURY LIGHTING CAT#LW104-8-8500-35K-A-0-10V- UNI-EM10-01								
"C"	SURFACE MTD.	20W LED	18" LINEAR LED DOUBLE ACRYLIC DIFFUSER, BRUSHED NICKEL	MAJESTIC LIGHTING CAT#V1247—20W—3000K—80CRI								
"D"	SURFACE MTD.	13W LED	LED WALL LIGHT IMPACT RESISITANCE OVER DOOR, 3000K COLOR TEMP, GENE1	SIGNIFY LIGHTING CAT#SWL-WW-G1-PCB-1-BZ								
"D" <i>EM</i>	SURFACE MTD.	13W LED	SAME AS TYPE "D" WITH INTEGRAL BATTERY BACK UP	SIGNIFY LIGHTING CAT#SWL-WW-G1-PCB-1-BZ-EM								
"E"	SURFACE MTD.	13W LED	SURFACE MOUNTED WALL LANTERN WITH SYMMETRICAL DISTRIBUTION STRAIGHT SHADE, 2 CONE, 3000K COLOR TEMP	LIGMAN LIGHTING CAT#UDU-41WCOB-2-W35-01-120								
② /፟፟፟	CEILING /WALL MOUNT	1 – 5W LED UNV.	LED EXIT LIGHTS, STEEL HOUSING, NUMBER OF FACES AND DIRECTIONAL ARROWS AS INDICATED ON PLANS. SELF POWERED MODEL WITH 90 MINUTE BATTERY.	ENCORE LIGHTING #LSE-6-R-1/U								





STROBE WIRING - #14 AWG TWISTED

A. A MINIMUM TEMPERATURE RATING OF 150 C

REQUIREMENTS AND IS LISTED BY UL.

TO PURCHASING.

3/4" CONDUIT.

ŌF 1−3 HZ.

THE COLOR OF THE CABLE SHALL BE RED

SEE NOTE 5 FOR ADDITIONAL CLARIFICATION.

SIGNAL WIRING — #14 AWG TWISTED/SHIELDED

THE WIRING SHALL HAVE THE FOLLOWING CHARACTERISTICS:

B. A MINIMUM AVERAGE INSULATION THICKNESS OF 15 MILS

A MINIMUM AVERAGE JACKET THICKNESS OF 25 MILS

E. THE CABLE SHALL BE A TYPE FPLP (PLENUM TYPE) WHEN CONDUIT IS USED.

F. THE CABLE SHALL BE VISIBLY MARKED EXTERNALLY THAT IT MEETS THE ABOVE

CONFIRM WIRING TYPE AND QUANTITY WITH FIRE ALARM SYSTEM MANUFACTURER PRIOR

5. PROVIDE MC FIRE ALARM CABLE WITH RED STRIPE AS MANUFACTURED BY AFC SERIES 1800

CABLE IS RUN EXPOSED IN UNFINISHED AREAS, PROVIDE PLENUM RATED CABLE IN MIN.

6. STROBES SHALL HAVE A MINIMUM LIGHT OUTPUT OF 75 CANDELA AND A FLASH RATE

WALL MOUNTED HORN/STROBE UNITS SHALL NOT HAVE ANY OTHER DEVICES OR APPURTENANCES WITHÍN 5 FEET OF THE DEVICE. THEY SHALL BE A MAXIMUM OF 80 INCHES ABOVE FLOOR OR 6" BELOW THE CEILING, WHICHEVER IS LOWER. DEVICES SHALL BE FLUSH MOUNTED IN ALL FINISHED AREAS. PROVIDE DOUBLE DEEP DEVICE BOX IN WALL.

WHEN CABLE IS CONCEALED OR ABOVE HUNG CEILING. WHEN FIRE ALARM CABLE IS RUN

EXPOSED IN FINISHED AREAS, CABLE SHALL RUN IN WIREMOLD V-700. WHEN FIRE ALARM

	$\underbrace{E501}_{N.7.3.}$
8.	SHUTDOWN OF HVAC SYSTEM EQUIPMENT (NOT LIMITED TO, ROOF TOP, EXHAUST FANS, ETC.) OF 1000 CFM OR GREATER, SHALL BE PERFORMED VIA A RELAY INTERFACE SYSTEM. SEND SIGNAL TO BUILDING AUTOMATED TEMPERATURE CONTROL (ATC) SYSTEM INDICATING SHUTDOWN HAS OCCURRED. EQUIPMENT RESTART SHALL BE BY BUILDING 'ATC' SYSTEM UPON FIRE ALARM RESET TO NORMAL MODE. RESTART OF EQUIPMENT SHALL BE SEQUENTIAL.
9.	AFTER THE SYSTEM IS COMPLETE, TEST ALL COMPONENTS IN ACCORDANCE WITH SEQUENCE OF OPERATION PRIOR TO FIRE DEPARTMENT INSPECTION.
10.	ALL PULL STATIONS SHALL BE PROVIDED WITH CLEAR PROTECTIVE LEXAN COVER. COVER SHALL BE AS MANUFACTURED BY SAFETY TECHNOLOGY INTERNATIONAL INC. CAT. #STI 1100 STOPPER II.
11.	COORDINATE F.A WORK WITH F.A VENDOR.
12.	VERIFY EXACT QUANTITIES OF FIRE ALARM DEVICES WITH PLANS.
13.	ALL DEVICES SHALL BE SUPERVISED AS PER N.F.P.A. 72. PROVIDE END OF LINE RESISTORS AS REQUIRED PER INDIVIDUAL MANUFACTURER. PROVIDE LOAD RELAYS AS REQUIRED FOR PROPER OPERATION OF EQUIPMENT.
14.	PROVIDE WIRE GUARDS FOR ALL FIRE ALARM DEVICES LOCATED IN GYM'S, BOILER ROOMS, LOCKER ROOMS AND MECHANICAL EQUIPMENT ROOMS.

WHEN 70 PARTS PER MILLION (ppm) ARE REACHED WITHIN 60 TO 240 MINUTES OR 150ppm ARE REACHED WITHIN 10 TO 50 MINUTES, OR 400ppm ARE REACHED WITHIN 4 TO 15 MINUTES AS REQUIRED BY UL 17. THE GAS DETECTOR SHALL MONITOR PROPANE (LP), AND NATURAL (METHANE) TYPE HEATING GASES. THE GAS DETECTOR SHALL INITIATE A SUPERVISORY SIGNAL WHEN 25% LOWER EXPLOSIVE LIMIT (LEL) IS REACHED AS REQUIRED BY UL 1484.

15. CARBON MONOXIDE AND GAS LEAK DETECTOR SHALL RING LOCAL TROUBLE BELL AT FIRE ALARM CONTROL

16. THE CARBON MONOXIDE DETECTOR SHALL HAVE AN SOUNDER BASE AND INITIATE A SUPERVISORY SIGNAL

PANEL FOR SUPERVISORY CONDITION ONLY.

18. THIS CONTRACTOR IS RESPONSIBLE FOR ALL PROGRAMMING AND MAPPING OF EACH DEVICE AS REQUIRED.

PNL:	AP-1	1	MOUNTING:	SUR	FACE	Х	IM	AIN I	.UGS (ONLY		MAIN	I C BKR-	GROUND	BUS:	X
		3 PHASE, 4 WIRE	(NEMA 1)		LUSH				JBLE L			200A		ISOLATED GROUND		+=
		IIN A.I.C. SYM		IN	мсс			FEED	THRU	LUG			I BUS -	7	VSS:	
NEU1	RAL:	100%					SI	HUNT	TRIP I	MAIN		150A		NUMBER OF PO	DLES:	42
скт	TRIP	LOAD	WIRE	CND.	KV	A / PHA	SE		KV	A / PH	ASE	CND.	WIRE	LOAD	TRIP	CH
	(AMP)			(IN.)	Α	В	С		Α	В	С	(IN.)			(AMP)	<u> </u>
1	2 /				0.80				0.80						2 /	2
3	20	CH-1	2#12+1#12G	3/4		0.80				0.80		3/4	2#12+1#12G	CH-2	/20	4
5	2 /	CH-3	244214420	3/4			0.80				0.50	3/4	2#12+1#12G	WATER FOUNTAIN	20	6
7	/20	CH-3	2#12+1#12G	3/4	0.80				0.50			3/4	2#12+1#12G	WATER FOUNTAIN	20	8
9	20	BATH GFI	2#12+1#12G	3/4		0.34				0.54		3/4	2#12+1#12G	BATH GFI	20	10
11	20	REFRIGERATOR	2#12+1#12G	3/4			0.50				0.50	3/4	2#12+1#12G	REFRIGERATOR	20	1:
13	20	FUTURE LOAD	2#12+1#12G	3/4	0.50				0.50			3/4	2#12+1#12G	FUTURE LOAD	20	1.
15	20	FUTURE LOAD	2#12+1#12G	3/4		0.50				0.80		3/4	2#12+1#12G	ICE MACHINE	20	1
17	20	RECEP	2#12+1#12G	3/4			1.08				1.20	3/4	2#12+1#12G	LIGHTING	20	18
19	20	LIGHTING	2#12+1#12G	3/4	0.90				1.08			3/4	2#12+1#12G		20	2
21	20	FUTURE WASHER	2#10+1#10G	3/4		1.00				0.40		3/4	2#12+1#12G		20	2.
23	25	EF-2	2#10+1#10G	3/4			0.75				0.75	3/4	2#12+1#12G	EF-1	20	2.
25	3/				3.00				0.50			3/4	2#12+1#12G	EJEC PUMP	2 /	2
27	/	ELEC HOT WATER	3#10+1#10G	3/4		3.00	0.00			0.50			2#12+1#12G		20	
29	30	00.4	01140 - 411400	2/4	0.40		3.00		0.50		0.50	3/4	2#12+1#12G	EJEC PUMP	2	30
31 33		CP-1 MEZZ RECEP	2#12+1#12G 2#12+1#12G		0.40	0.54			0.50	0.50		3/4	2#12+1#12G	FIRE ALARM PANEL	/20 20	3:
35		SPARE	2#12+1#120	5/4		0.34				0.30		-	-	-	20	3
	2 /	- TANE			1.00				0.20			3/4		CONTROL PUMP	20	38
39	- /60	FUTURE DRYER	2#6+1#10G	1		1.00				0.50		3/4	ł	HAND DRYER	20	4
41	20	HAND DRYER	2#12+1#12G	3/4			0.50				0.70		ł	EXT RECEP	20	4.
43		HAND DRYER	2#12+1#12G		0.50				0.50			3/4	ł	EXT RECEP	20	4.
45	20	EF-3	2#12+1#12G			0.60				0.50		3/4	l	ROLL UP DOOR	20	4
47	20	ROLL UP DOOR	2#12+1#12G	3/4			0.50				0.50	3/4	2#12+1#12G	ROLL UP DOOR	20	4
49	20	SPARE	-	-								-	-	SPARE	20	50
51	20	SPARE	-	-								-	-	SPARE	20	5
53	20	SPARE	-	-								-	-	SPARE	20	54
		SUBTOTALS			7.90	7.78	7.13		4.58	4.54	4.65			SUBTOTALS		
		TOTAL LOADS		12.5	KVA	PHASE	E A						LIGHTING:	2.10 KVA		
				12.3	KVA	PHASE	E B					RE	CEPTACLE:	0.00 KVA		
				11.8	KVA	PHASE	E C						KITCHEN:	0.00 KVA		
		TOTAL CONN. LOAD		36.6	KVA	102.0	A						MOTOR:	30.44 KVA		
		TOTAL DEMAND LOA	AD	36.6	KVA	102.0	Α						POWER:	4.04 KVA		
													TOTAL:	36.58 KVA		

DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



CONSULTING ENGINEERS 39 MARBLE AVE PLEASANTVILLE, NY 10570 914.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.cor

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTE S DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KI ND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, RRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE HATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D. DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR PROVAL BEFORE PROCEEDING WITH FABRICATION. ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.
© COPYRIGHT KG+D ARCHITECTS, PC LL RIGHTS RESERVED.

Professional Seal

4	09/16/2024	ISSUE FOR BID							
3	10/27/2023	SED ISSUE							
2	08/31/2023	ISSUE FOR PRICING - 90% CD							
1	06/10/2023	SCHEMATIC DESIGN							
No.	Date	Issue							
Sheet Title									

ATHELETIC PAVILION RISER &

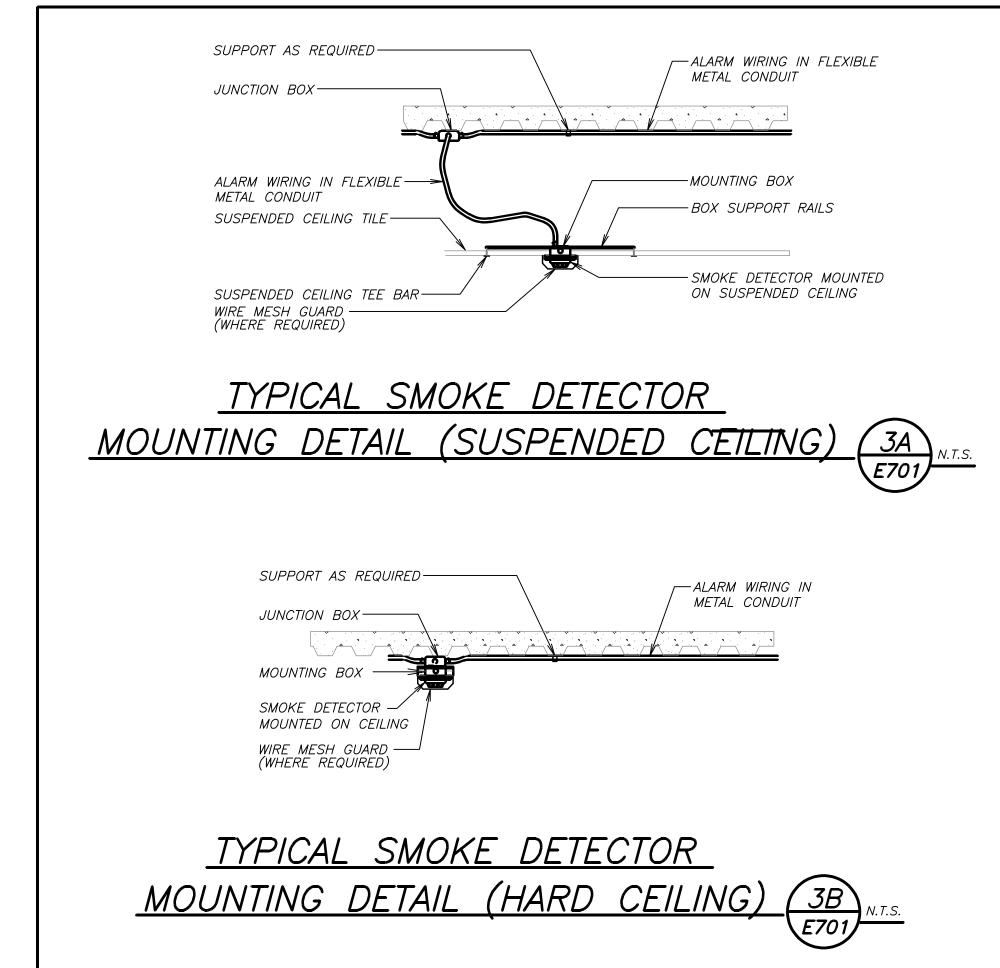
BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

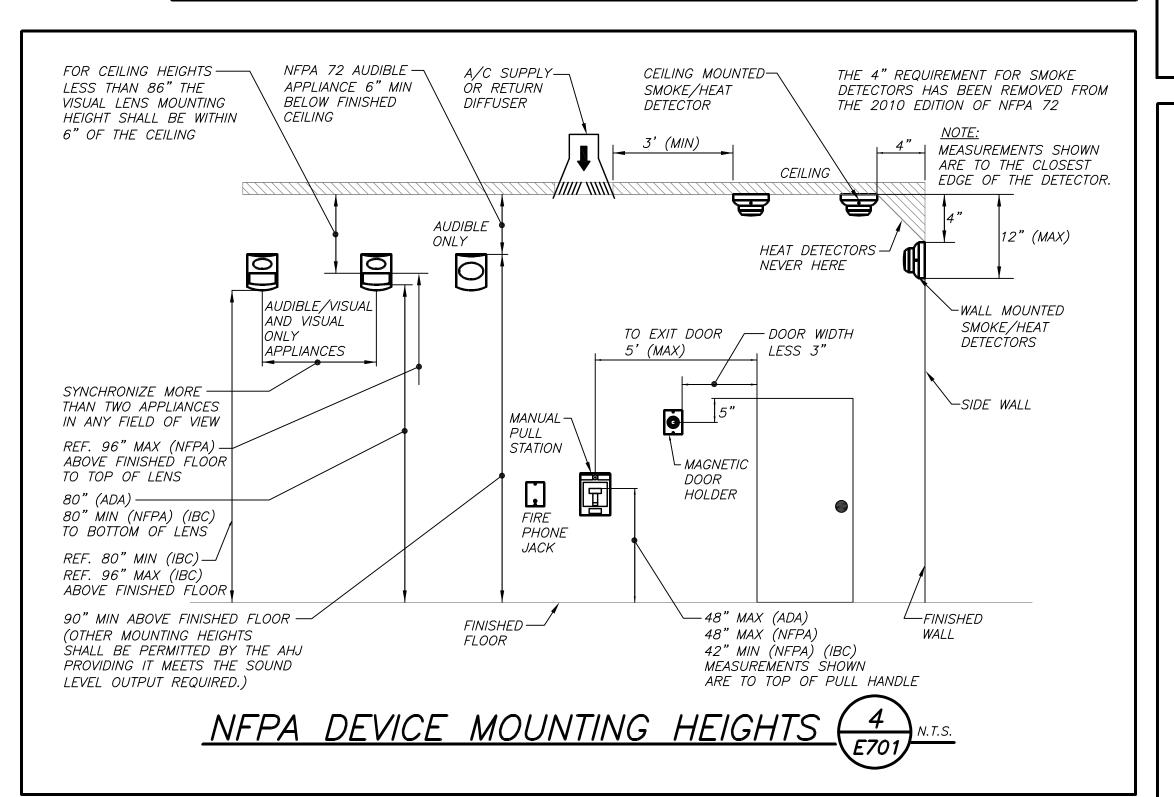
DBE: TAB: Layout1 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\Electrical\HGHS\a233200E501—AP.dwg — DATE: Sep 13, 2024 — 1:26pm

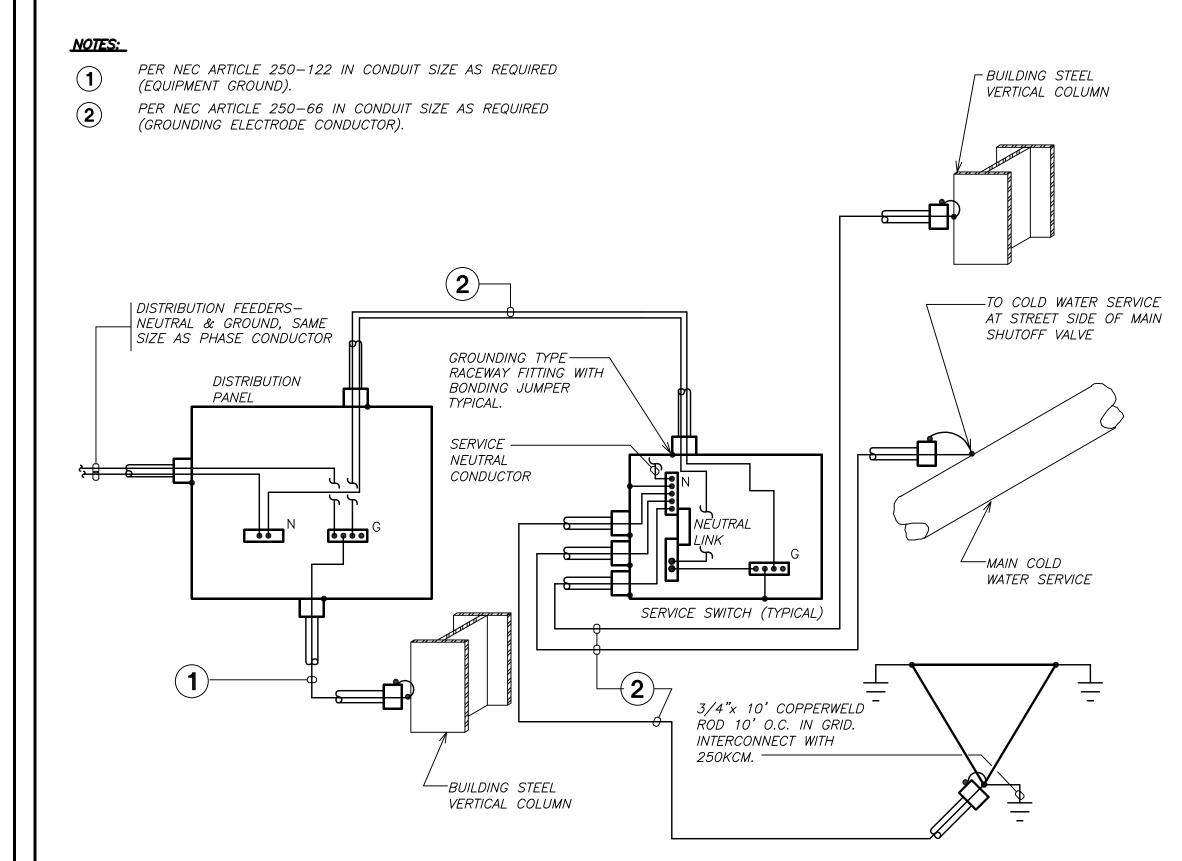
SCHEDULE

2023-1028

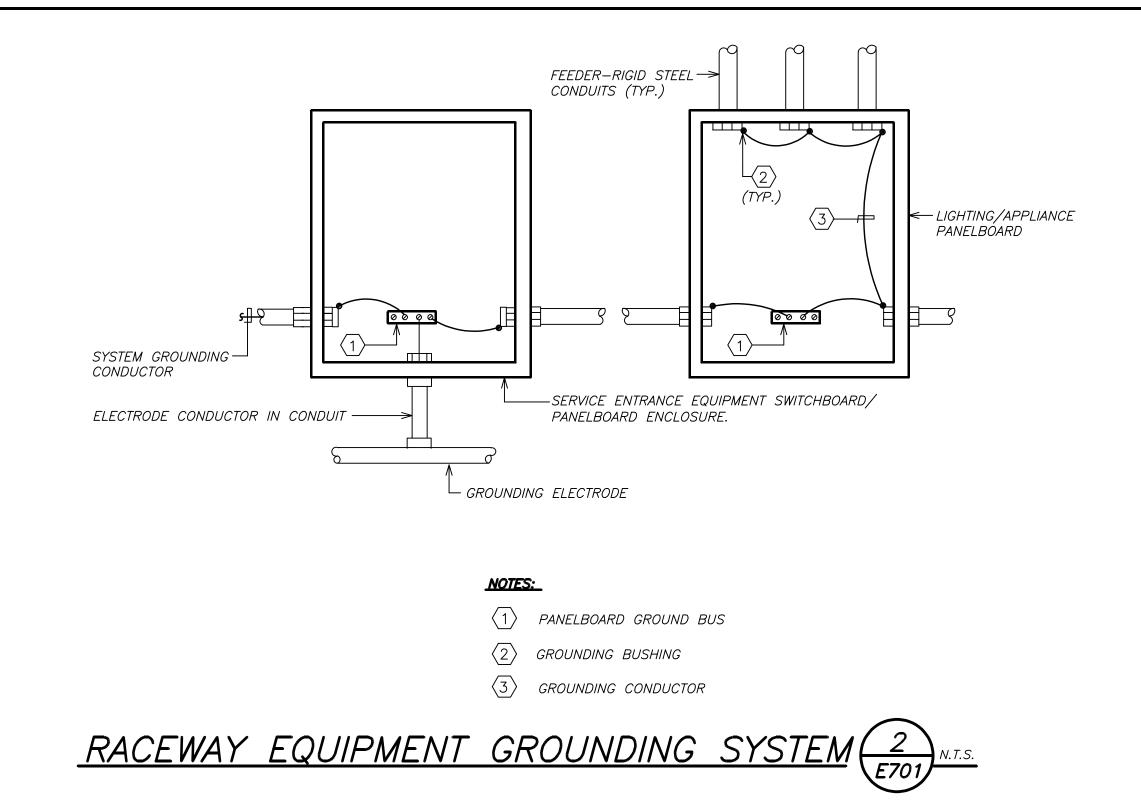
BGA/BGA







SCHEMATIC SERVICE GROUNDING SYSTEM (1) N.T.S.



DISTRICT-WIDE CAPITAL IMPROVEMENTS

NEW CONSTRUCTION & ATHLETIC **UPGRADES**

CHAPPAQUA CENTRAL SCHOOL DISTRICT 66 Roaring Brook Road Chappaqua, NY 10514



P: 914.666.5900 KGDARCHITECTS.COM CONSTRUCTION DOCUMENTS

SED Control No. HG: 66-10-04-06-0-015-023 AP: 66-10-04-06-7-052-001 CS: 66-10-04-06-7-027-002 OB: 66-10-04-06-0-026-002 SB: 66-10-04-06-0-036-007



CONSULTING ENGINEERS 39 MARBLE AVE PLEASANTVILLE, NY 10570 4.328.6060 GENERAL@BGA-ENG.com www.BGA-ENG.com

NOTE: ALL IDEAS, DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF KG+D ARCHITECTS, PC (KG+D) AND WERE CREATED FOR USE ON THIS PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF KG+D. WRITTEN DIMENSIONS ON THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY ALL ACTUAL DIMENSIONS AND CONDITIONS ON THE JOB AND THE ARCHITECT MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.

ALTERATIONS BY ANY PERSON, IN ANY WAY, OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENCED ARCHITECT WHOSE PROFESSIONAL SEAL IS AFFIXED HERETO, IS A VIOLATION OF TITLE VII, SECT. 69.5 (b) OF NEW YORK STATE LAW.

© COPYRIGHT KG+D ARCHITECTS, PC ALL RIGHTS RESERVED.

rofessional Seal

4	09/16/2024	ISSUE FOR BID
3	10/27/2023	SED ISSUE
2	08/31/2023	ISSUE FOR PRICING - 90% CD
1	06/10/2023	SCHEMATIC DESIGN
No.	Date	Issue
Sheet Title		

DETAILS

BEFORE FABRICATION THIS CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND CONDITIONS ON JOB AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS

DBE: TAB: Layout1 — Y:\CHAPPAQUA CSD\Chappaqua CSD — DW Capital Projects (2332.00)\Drawings\Electrical\HGHS\233200E701—AP.dwg — DATE: Sep 13, 2024 — 1:27pm

2023-1028

BGA/BGA