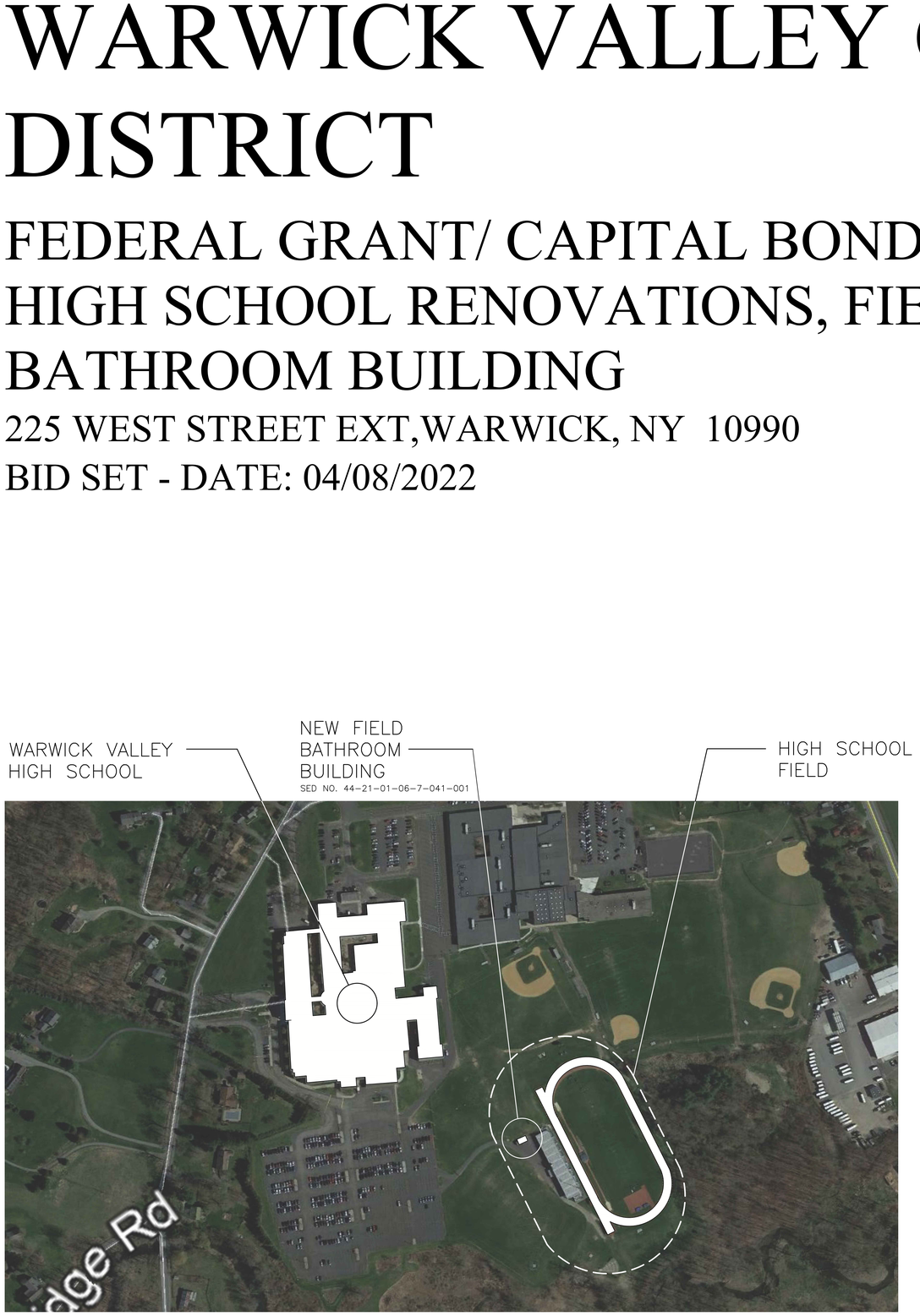
WARWICK VALLEY CENTRAL SCHOOL DISTRICT

FEDERAL GRANT/ CAPITAL BOND PACKAGE 2
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING

225 WEST STREET EXT,WARWICK, NY 10990

BID SET - DATE: 04/08/2022



LOCATION PLAN

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HS R-103	ROOF DETAILS
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HS P-100	PARTIAL FIRST FLOOR AND ROOF PLANS - KITCHEN, SERVERY, & CAFETERIAS - DEMOLITION & NEW WORK
DETAILS AND SCHEDULES	
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HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
COVER PAGE

SHEET NO.
CP

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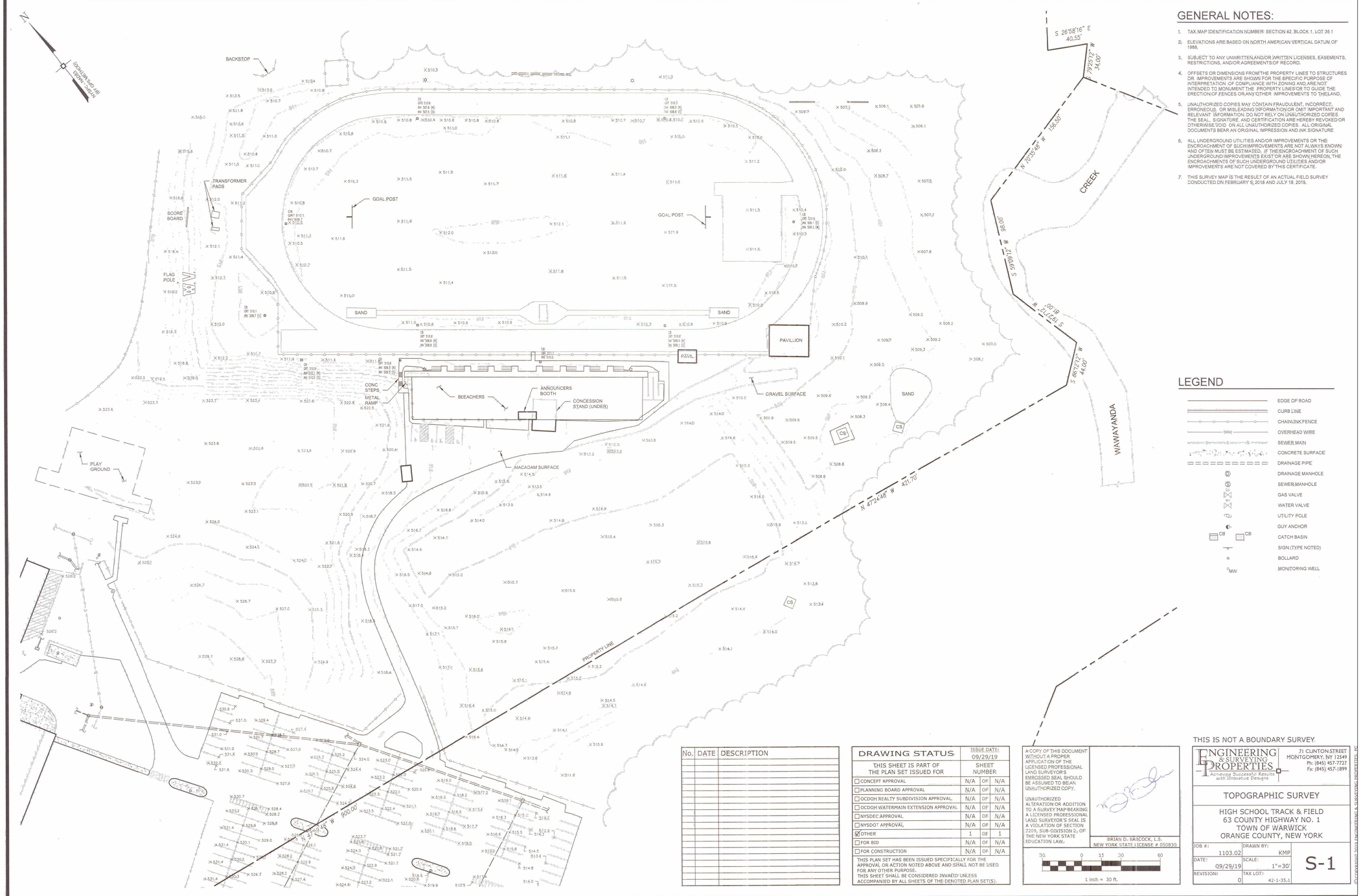

GENERAL NOTES:

1. TAX MAP IDENTIFICATION NUMBER: SECTION 42, BLOCK 1, LOT 35.1
2. ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
3. SUBJECT TO ANY UNWRITTEN AND/OR WRITTEN LICENSES, EASEMENTS, RESTRICTIONS, AND/OR AGREEMENTS OF RECORD.
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7. THIS SURVEY MAP IS THE RESULT OF AN ACTUAL FIELD SURVEY CONDUCTED ON FEBRUARY 5, 2018 AND JULY 19, 2019.

No.	DATE	DESCRIPTION

DRAWING STATUS	ISSUE DATE: 09/29/19		
THIS SHEET IS PART OF THE PLAN SET ISSUED FOR	SHEET NUMBER		
☐ CONCEPT APPROVAL	N/A	OF	N/A
☐ PLANNING BOARD APPROVAL	N/A	OF	N/A
☐ OCDOH REALTY SUBDIVISION APPROVAL,	N/A	OF	N/A
☐ OCDOH WATERMAIN EXTENSION APPROVAL	N/A	OF	N/A
☐ NYSDEC APPROVAL	N/A	OF	N/A
☐ NYSDOT APPROVAL,	N/A	OF	N/A
☑ OTHER	1	OF	1
☐ FOR BID	N/A	OF	N/A
☐ FOR CONSTRUCTION	N/A	OF	N/A

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BRIAN D. BABCOCK, L.S.
NEW YORK STATE LICENSE # 050830

30 0 15 30 60
1 inch = 30 ft.

THIS IS NOT A BOUNDARY SURVEY.

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MONTGOMERY, NY 12549
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TOPOGRAPHIC SURVEY

HIGH SCHOOL TRACK & FIELD
63 COUNTY HIGHWAY NO. 1
TOWN OF WARWICK
ORANGE COUNTY, NEW YORK

JOB #:	DRAWN BY:	
1103.02	KMP	S-1
DATE: 09/29/19	SCALE: 1"=30'	
REVISION: 0	TAX LOT: 42-1-35.1	

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CHECKED BY	
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SCALE	AS NOTED

SHEET TITLE
EXISTING SURVEY PLAN

SHEET NO.
S-1

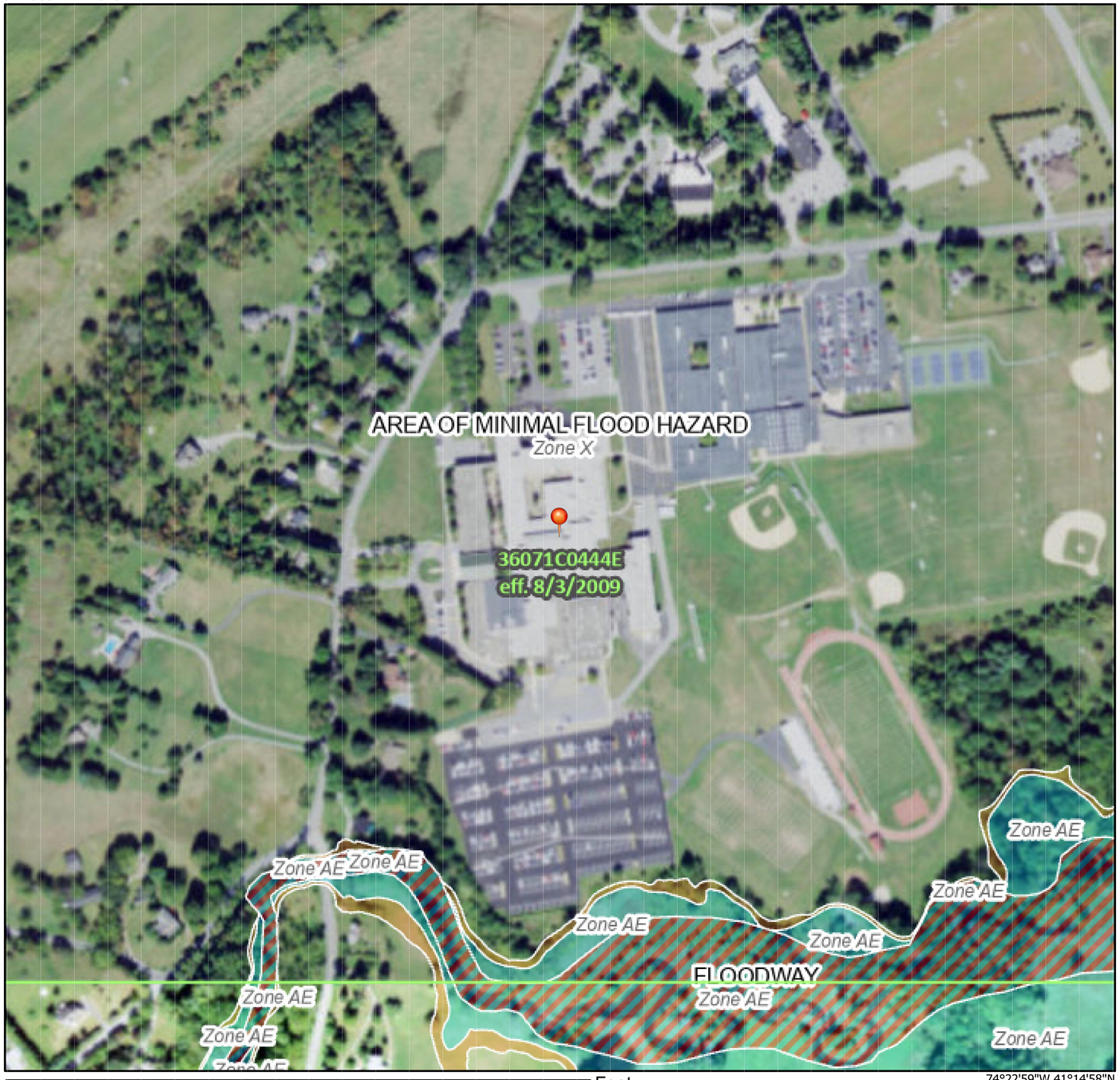
C:\Users\brian\EP Projects\Drawings\t103.02a – Schmick – Warwick High School\t103.02–Worksheet.dwg
Date Printed: Sep 29, 2019, 6:19pm

FILE PATH – N:\ – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\SITE\05–21–06 FF–s105–s106.dwg

National Flood Hazard Layer FIRMette

FEMA

74°23'36"W 41°15'25"N



0 250 500 1,000 1,500 2,000 Feet

1"=175'

74°22'59"W 41°14'58"N

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/25/2022 at 4:29 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
EXISTING FLOODWAY PLAN

SHEET NO.
S-2

FILE PATH –N:\? – PROJECT DIRECTORIES\?– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\SITE\05–21–06-FF–s105–s106.dwg

HIGH SCHOOL BUILDING

BLEACHERS

MANHOLE (E)

UST

WATER VALVE BOX

PARKING AREA

METER (E)

SCOREBOARD

TRANSFORMER (E)

BLEACHERS

JV SOFTBALL

GOAL POST

EXT 12" CMP

DRAINAGE AREA

WOODED AREA

PROPOSED STORAGE BUILDING
A.F. 518.9
N.I.C.

GENERAL NOTES:

1. ALL EXCAVATION AND TRENCHING BY SITE CONTRACTOR. SEE NEW WORK DRAWINGS FOR EXTENT OF EXCAVATIONS. COORDINATE WITH DISTRICT, A.F. AS WELL AS ELECTRICAL, PLUMBING, AND GENERAL CONTRACTORS.

AREA TO GRADE

SHED REMOVED BY DISTRICT

ASPHALT (E)

TRACK/ FOOTBALL FIELD (E)

BLEECHERS (E)

CONC. STAND (E)

EXISTING SCORER'S TABLE REMOVED BY DISTRICT

STONE PATH (E)

TO BE REMOVED BY DISTRICT

PAV. (E)

EXISTING PAVILION REMOVED BY DISTRICT

REGULATORY FLOODZONE (OUTSIDE OF AREAS OF WORK)

EXISTING FENCING AND ASSOCIATED TO BE REMOVED. FENCE FABRIC TO BE CAREFULLY REMOVED AND TURNED OVER TO DISTRICT.

PASSAGE
PG1.0

UNISEX HANDICAP BATHROOM
70.4

UNISEX HANDICAP BATHROOM
70.5

RAGE

STORAGE
70.3

SCALE: N.T.S.
NOTE: LOCATIONS OF EXISTING UNISEX HANDICAP BATHROOMS SHOWN FOR REFERENCE ONLY

1 SITE PLAN
SCALE:1"= 50" 0"

N

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SHEET TITLE
OVERALL FIELD SITE PLAN - REMOVALS

SHEET NO.
S-100

FILE PATH -N:\V – PROJECT DIRECTORIES\V– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06FF S-100 – S-101_recover.dwg

HIGH SCHOOL BUILDING
BLEACHERS
FUTURE EXT. CLSRM. (N.I.C.)
MANHOLE (E)
NEW MANHOLE
UST
WATER VALVE BOX
PARKING AREA
BURIED 1-1/2" CONDUIT WITH PULL TAPE FOR FUTURE BY EC (N)
CAP 6" ABOVE GRADE BOTH SIDES
SCOREBOARD
METER (E)
TRANSFORMER (E)
BURIED 2" P/W LINE (N) BY PC
FENCE 4' HEIGHT VINYL CLAD 6 GA (N)
BURIED 4" CONDUIT BY EC (N)
1" CW TO STEEPLECHASE PIT AREA TO YARD HYDRANT BY PC (N)
WELL AND 8' FENCE (N)
BURIED WTR. TANK (N)
IRRIGATION MAIN BY IC (N) SEE P DWGS
NEW STORAGE BUILDING (N.I.C)
NEW BATHROOM BLDG. SEE A, M, E, & P DWGS
RESURFACED ASPHALT
NEW POLE LIGHT TYP.-3 AND TRENCHING UNDER ASPHALT SEE E DWGS
6'x100' ASPHALT EXTENSION FOR 20 PORTA JOHNS
BLEECHERS (E)
CONC. STAND (E)
EXT. 12" CMP
BLEACHERS
JV SOFTBALL
GOAL POST
DRAINAGE AREA
WOODED AREA
GATE (N)
TRACK/ FOOTBALL FIELD (N)
APPROX. 800' OF STORM WATER RUNOFF SILT FENCE
LOCATIONS OF THESE ENTRANCES TO BE DETERMINED BY DISTRICT TYP.-3
NEW SCORER'S TABLE (N.I.C.) BY DISTRICT
PROVIDE BITUMINOUS ASPHALT PAVING FABRIC 1-1/2" TOP 2-1/2" BASE 6" STONE
FENCE 4' HEIGHT VINYL CLAD 6 GA (N)
60'
ASPHALT (N)
180'
FENCE 4' HEIGHT VINYL CLAD 6 GA (N)
WOODED AREA
REGULATORY FLOODZONE (OUTSIDE OF AREAS OF WORK)
FIELD LIGHT (N)
POLE VAULT (N)
LONG TRIPLE JUMP (N)
LONG TRIPLE JUMP (N)
HIGH JUMP (N)
SHOTPUT (N)
NEW PAVILION (N.I.C.) EXACT LOCATION BY DISTRICT SED# 44-21-01-06-7-043-001

PASSAGE PG1.0
UNISEX HANDICAP BATHROOM 70.4
UNISEX HANDICAP BATHROOM 70.5
RAGE
STORAGE 70.3
NOTE: LOCATIONS OF EXISTING UNISEX HANDICAP BATHROOMS SHOWN FOR REFERENCE ONLY

GENERAL NOTES:

1. SEED ALL DISTURBED GROUND AREAS WHEN WORK IS COMPLETED.
2. PROVIDE GEOTEXTILE FABRIC IN NEWLY GRADED AREAS TO PREVENT DEGRADATION.
3. NETTING FOR SHOTPUT AREA TO BE REUSED AND RELOCATED TO NEW LOCATION SHOWN.
4. NEW SITE PARKING STRIPING PROVIDED BY DISTRICT.
5. ALL EXCAVATION AND INFILL FOR PIPING AND CONDUIT BY SITE CONTRACTOR.

1 SITE PLAN
SCALE:1"= 50" 0"

N

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND PAVING
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

■BB SED NO. 44-21-01-06-7-041-001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■FF SED NO. 44-21-01-06-7-041-001 (FF=WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
OVERALL FIELD SITE PLAN - NEW WORK

SHEET NO.
S-101

FILE PATH -N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06_FF S-100 – S-101.dwg

DEMOLITION NOTES

1. Existing Perimeter Fencing Around the Track

- All of the existing fence fabric shall be carefully removed by the contractor by cutting and removing the metal ties connecting the fence fabric to the existing support posts. All ties shall be completely removed from the fence fabric. The fence fabric shall be tightly rolled, and the rolls strapped with a minimum of two straps per roll. The rolls shall be turned over to the school district.
- All posts, top and bottom rails, caps and other fence materials shall be entirely removed by the contractor, including the concrete footings. The contractor shall remove all of these fence materials from the job site, including all of the fence fabric ties. The post holes shall be filled in with clean dirt.

2. Existing Buildings

– General: The contractor shall provide adequate protection to the existing grandstand and concession stand so that they are not damaged in any way. Should damage occur, the contractor shall be solely responsible for the repair of such damage to the satisfaction of the school district.
– 2A (N.I.C.): The existing scorer's pavilion/table will be removed by the school district. The contractor shall coordinate/schedule the removal with the school district.
– 2B (N.I.C.): The existing pavilion will be removed by the school district. The contractor shall coordinate/schedule the removal with the school district.
– 2C (N.I.C.): The existing trash building will be removed by the school district. The contractor shall coordinate/schedule the removal with the school district.

3. Existing Pavement

– 3A: The surface of the existing pavement shall be milled for a depth of between 1 and 1.5 inches as preparation for the installation of the proposed new top course.
– 3B: After the existing trash building has been removed by the school district, saw cut the perimeter around the existing broken up pavement, including the asphalt layers and the stone base course. Compact the existing subbase and level the area to accept pavement replacement.

4. Existing Track and Field Event Areas

– 4A: Remove the entire 6 lane running track and steeplechase area to include pavement and base course material. Excavate subbase material to the depth to accept the proposed track pavement and base courses as shown on the proposed plan details.
– 4B: Excavate the existing soil along the inside of the existing track to accept the widening of the running track to 8 lanes and to a depth to meet the proposed track paving and drainage specifications.
– 4C: Remove the entire pavement and base material from the long jump/pole vault runway and sand pit areas. Backfill with clean soil and topsoil for the proposed sports field.
– 4D: Remove the entire pavement and base material from the high jump area. Backfill with clean soil and topsoil for the proposed sports field.
– 4E: Carefully remove netting around the shot put area and provide this to the school district. Remove the concrete launch pads from the existing shot put areas. Backfill with clean soil.

5. Sports Field Area

– 5A: Strip topsoil and subsoil to the depth to meet the proposed grade as shown on the plans.
– 5B: Carefully remove the existing football goal posts and provide these to the school district. Remove foundation supports for the existing goal posts to full depth and backfill with clean soil.
– 5C: Catch basins and the existing storm water pipes between these catch basins shall be removed. Place Mirafi, or equal, filter fabric on bottom and sides of the trenches created by their removal and place 12" of #2 and #3 crushed stone surrounding a 6" perforated PVC pipe, carrying the filter fabric over the top of the stone. Backfill up to the proposed ground surface with clean soil.

6. Proposed Field Event Area

– 6A: Remove the existing ground cover (grass, weeds, brush, etc.) from the area of the proposed field events. Removal shall extend to the grading limits and depth to accept the paving shown on the proposed plan.
– 6B: The school district shall remove the existing zipline support structures.

7. Proposed New Pavement Areas

– 7A: Strip the topsoil and subsoil from the area of the proposed 10' wide paved pathway as shown on the proposed plan to the depth of the pavement subgrade.
– 7B: Strip the topsoil and subsoil from the area between the existing pavement and the rear line of the grandstand to the depth of the proposed pavement subgrade.
– 7C: Strip the topsoil in the area of the proposed bathhouse. Strip the topsoil and subsoil from the proposed pavement area between the front of the proposed bathhouse and the existing pavement area down to pavement subgrade.
– 7D: Strip the topsoil in the area of the proposed pavement to the west of the existing pavement as shown on the proposed plan. Excavate down to the proposed pavement subgrade.
– 7E: Strip the existing gravel driveway and the existing topsoil in the area between the existing grandstand and existing track to the limits of the proposed parking area pavement. Excavate down to the proposed pavement subgrade.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
DEMOLITION NOTES

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
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PROJECT NO.	05-21-04 05-20-06
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SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
DEMOLITION NOTES

SHEET NO.
S-110

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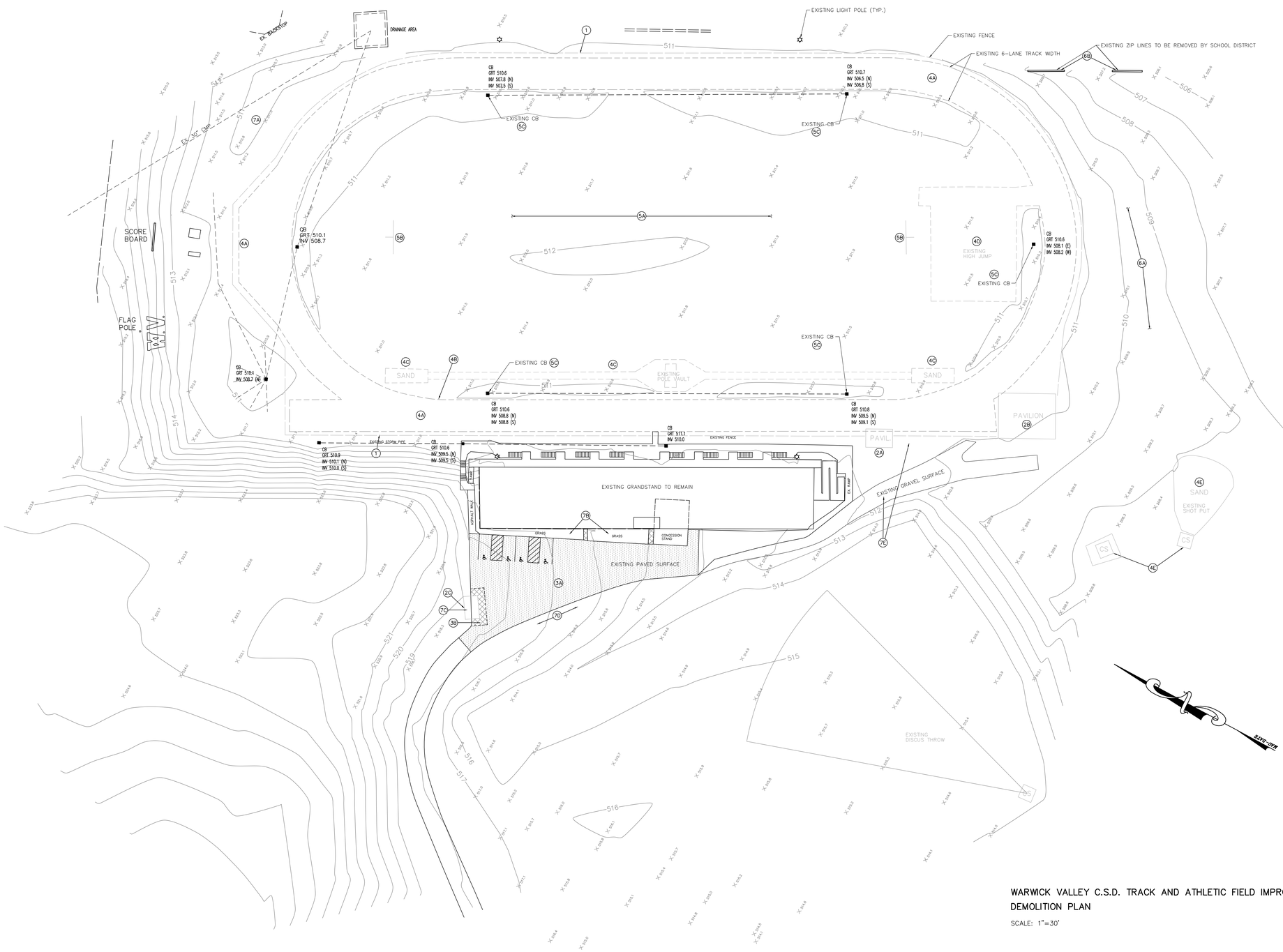

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
DEMOLITION PLAN

SCALE: 1"=30'

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SCALE	AS NOTED

SHEET TITLE
DEMOLITION PLAN

SHEET NO.
S-111

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06.FF-S-110 - S-505.dwg

GRADING PLAN

General:

A. The grading plans show both the existing and proposed contours. The contractor shall excavate/fill as needed to bring the ground up to the subgrade as specified beneath the pavement and lawn/field areas.

B. All disturbed areas outside of the proposed paved track, field events and driveway areas shall be topsoiled and sodded per the detail provided and in accordance with the N.Y.S.D.O.T. "Standard Specifications", Section 612 and 613.

C. All earthwork, clearing and grubbing and trenching shall be performed in accordance with the latest edition of the N.Y.S.D.O.T. "Standard Specifications", Section 200.

PAVING NOTES

General:

- All pavement materials shall be produced and placed in accordance with the latest edition of the N.Y.S.D.O.T. "Standard Specifications", Sections 300, 400 and 700.
- All milling of any existing pavement areas shall be performed in accordance with the latest edition of the N.Y.S.D.O.T. "Standard Specifications", Section 490.

P1:

- The existing pavement in this area shall be milled to a depth of 1 to 1.5 inches and broom cleaned. Any cracks in the pavement shall be sealed using a material meeting the N.Y.S.D.O.T. Item #418.7603 requirements.
- After the proposed new pavement called for on the surrounding sides has been paved up to the binder course, the joints between the existing and new pavement shall be sealed using a material meeting the requirements of N.Y.S.D.O.T. Item #418.7603.
- Prior to placing the top course over this area, the area shall be sprayed with a tack coat meeting the N.Y.S.D.O.T. Item #402.0201 requirements.
- The top course shall be applied at the same time the surrounding new pavement is placed.

P2: Parking Lot and Driveway Paving

- These areas shall be paved in accordance with N.Y.S.D.O.T. "Standard Specifications" for placement and compaction of the specified materials.
- Sufficient asphaltic concrete material shall be placed for both the binder and top course so as to produce the minimum thickness called for in the details.
- Striping of the pavement is not part of this contract (N.I.C.) and will be performed by the school district.

P3:

1. The track area shall be paved to the elevations and limits shown on the plans and details. After the asphalt pavement has been placed and compacted, a 15 mm application of CRAFCO BSS 300 embedded polyurethane synthetic surfacing shall be applied. All lane markings shall be 2" wide white stripes.
2. The locations of the start, staggered start, steeplechase, and finish lines shall be in accordance with the National Federation of State High School Associations and determined by the contractor applying the surfacing. The background color shall be specified by the school district.

P3A: Field Event Areas

- Paving and surfacing shall be performed to the same design standards as the track and to the limits called out on the plans.
- All running lanes are to be level in both N–S and E–W directions. Sloping for drainage is shown on the cross section provided in the drawings. Striping for takeoff boards and locations are shown on the plans and in accordance with the National Federation of State High School Associations.

P3B: High Jump Area

- Paving and surfacing shall be performed to the same design standards as the track and to the limits called out on the plans.

STORM DRAINAGE

- All details, sizes, slopes, etc. are called out on the plans for both the drainage and underdrainage systems.
- Within the existing track and sports field areas, the contractor shall confirm by digging test pits, the locations, sizes and directions of the existing storm drainage systems. The contractor shall notify the engineer of any and all discrepancies between the existing drainage found and what is shown on the plans in a timely fashion so that adjustments/change order directions can be issued.

TRACK AND FIELD EQUIPMENT

All field event equipment anchored to the ground shall be installed as follows

- The steeplechase water pit shall be model F500 as manufactured by Gill Athletics (or equal). The concrete foundation shall be installed per the manufacturer's specifications and shall extend below the local frost line (3 feet). The concrete shall be poured on a compacted base of #2/#3 crushed limestone a minimum of 8" thick. The jump barrier shall be bolted to a concrete foundation as specified by the manufacturer.
- The goal posts shall be reinstalled using a poured concrete foundation matching the existing foundation in all respects.
- The pole vault standards shall be model S4 as manufactured by Gill Athletics (or equal). The base shall be bolted to the concrete foundation as specified by the manufacturer, allowing the bar support position to be adjustable.
- The long jump/triple jump landing areas shall have a perimeter containment made of aluminum and of the dimensions shown. Sand shall be a minimum of 12" deep and conform to the track and field standards.
- The high jump standards shall be model S4 as manufactured by Gill Athletics (or equal). The standards are portable and not anchored to the track/runway surface.
- The shot put launch area shall be a 10' x 10' pad constructed with a poured concrete mix of a minimum of 4000 psi. The pad shall be a minimum of 12" thick with #4 rebars set 8" on center in both directions. A raised toeboard, model 364 as manufactured by Gill Athletics (or equal), shall be bolted to the concrete pad as specified by the manufacturer.

FENCING

- Fencing shall be installed at the locations shown on the plan. The locations for entrances and entrance and access gates shall be determined by the school district. Fencing shall be 4' high, 6 gauge, black vinyl coated fabric with vinyl coated posts and rails. Supports to be installed per the detail.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
GRADING, PAVING AND STORM DRAINAGE NOTES

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PROJECT NO.	05-21-04 05-20-06
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REVISION	DATE
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SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
GRADING, PAVING AND STORM DRAINAGE NOTES

SHEET NO.
S-120

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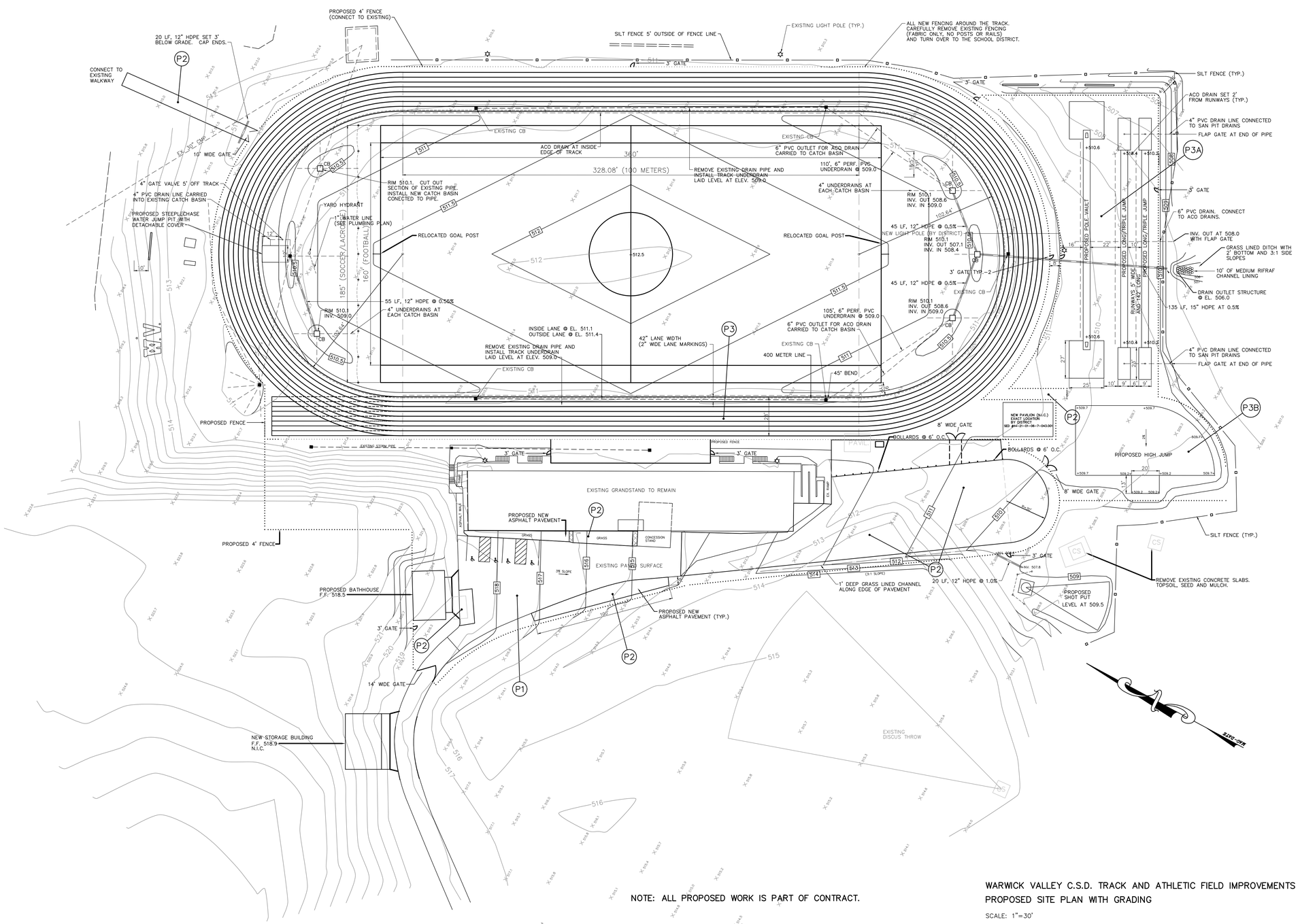

NOTE: ALL PROPOSED WORK IS PART OF CONTRACT.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
PROPOSED SITE PLAN WITH GRADING

SCALE: 1"=30'

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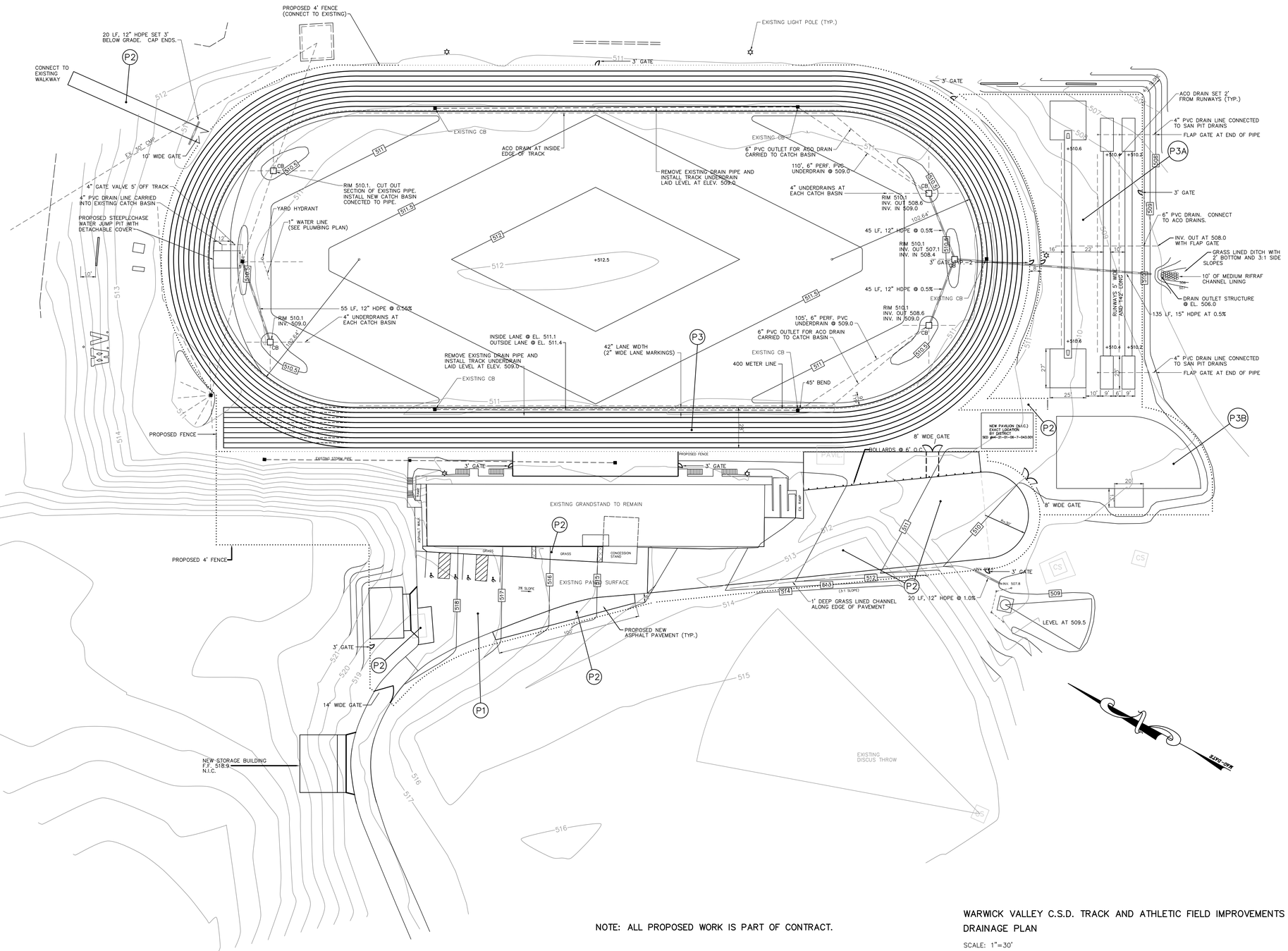
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PROPOSED SITE PLAN WITH GRADING

SHEET NO.
S-121

FILE PATH = N:\1 – PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06.FF-S-110 – S-505.dwg



NOTE: ALL PROPOSED WORK IS PART OF CONTRACT.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
DRAINAGE PLAN

SCALE: 1"=30'

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PROJECT NO.	05-21-04 05-20-06
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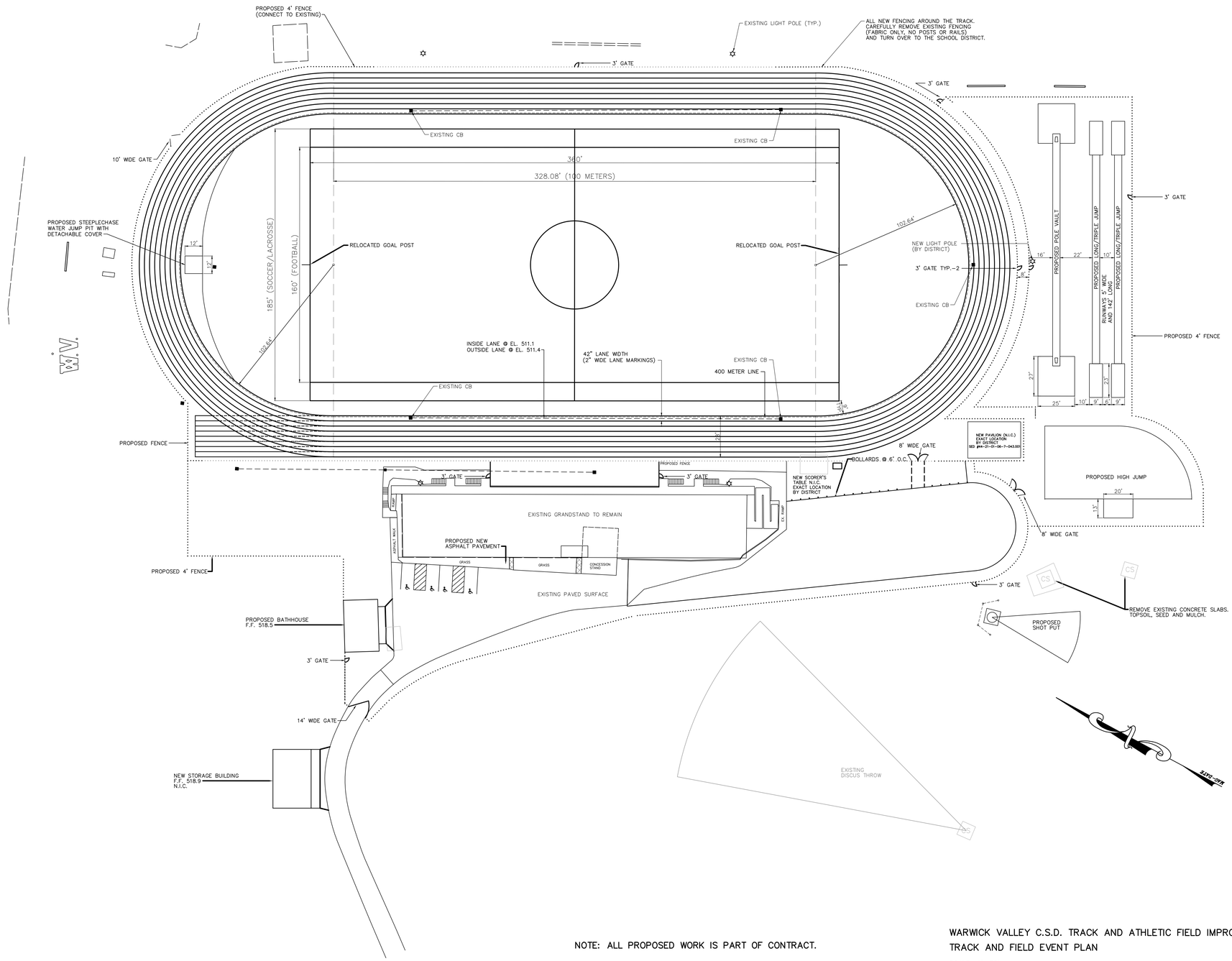
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
DRAINAGE PLAN

SHEET NO.
S-122

FILE PATH -N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06.FF-S-110 – S-505.dwg



NOTE: ALL PROPOSED WORK IS PART OF CONTRACT.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
TRACK AND FIELD EVENT PLAN

SCALE: 1"=30'

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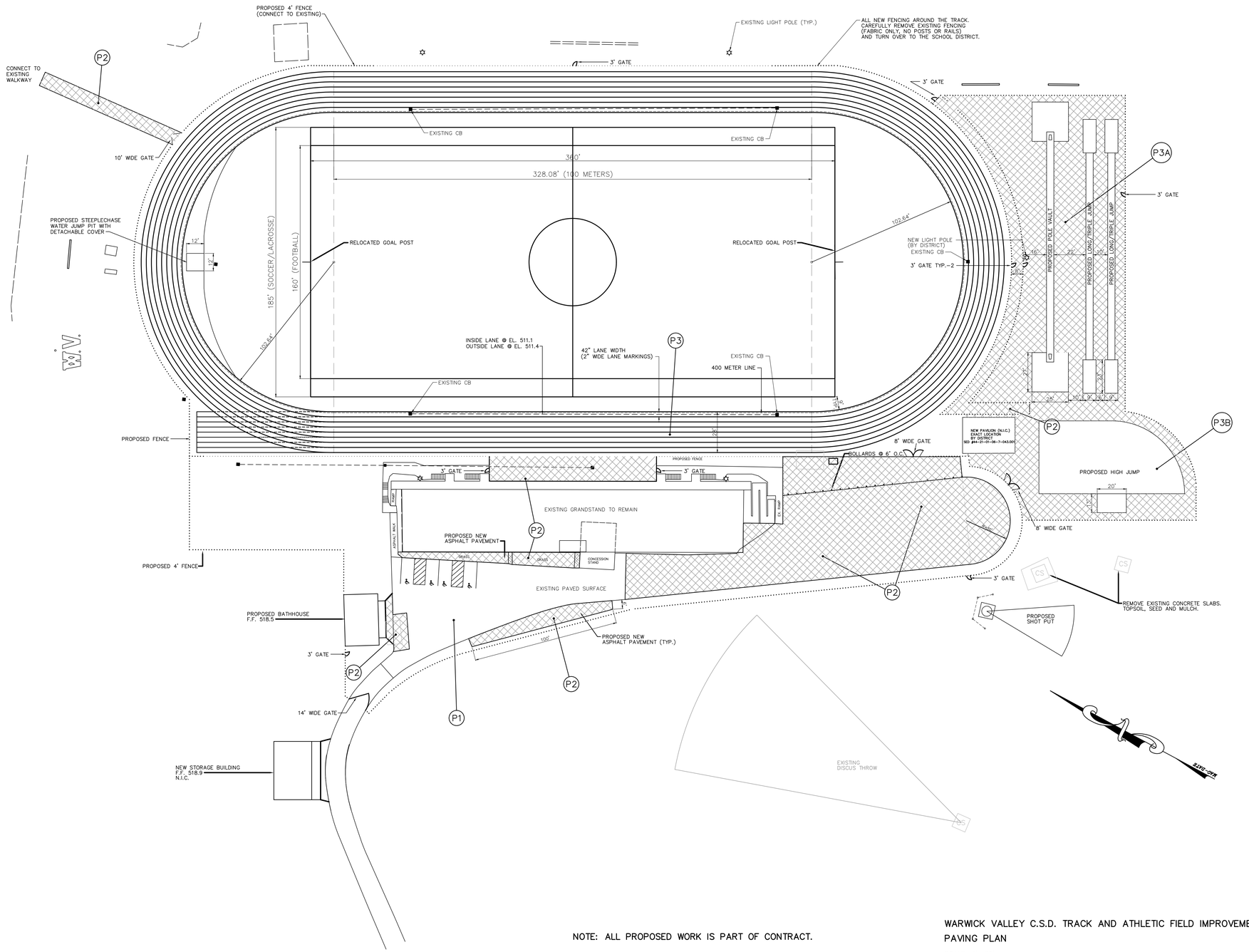
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
TRACK AND FIELD EVENT PLAN

SHEET NO.
S-123

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06 FF-S-110 - S-505.dwg



NOTE: ALL PROPOSED WORK IS PART OF CONTRACT.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
PAVING PLAN

SCALE: 1"=30'

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ENGINEER:
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291 Geneva Street – Ithica, NY 14501
Ph: 315-735-1918, Fax: 315-735-8365
www.erengpc.com

CONSULTANT(S):
FULLER D'ANGELO P.C.
ARCHITECTS PLANNERS
48 KNOLLWOOD ROAD
ELMSFORD NEW YORK 10523
TEL 914.592.4444
FAX 914.592.1717
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STATE OF NEW YORK — JAMES EISENBACH — NO. 050444 — LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

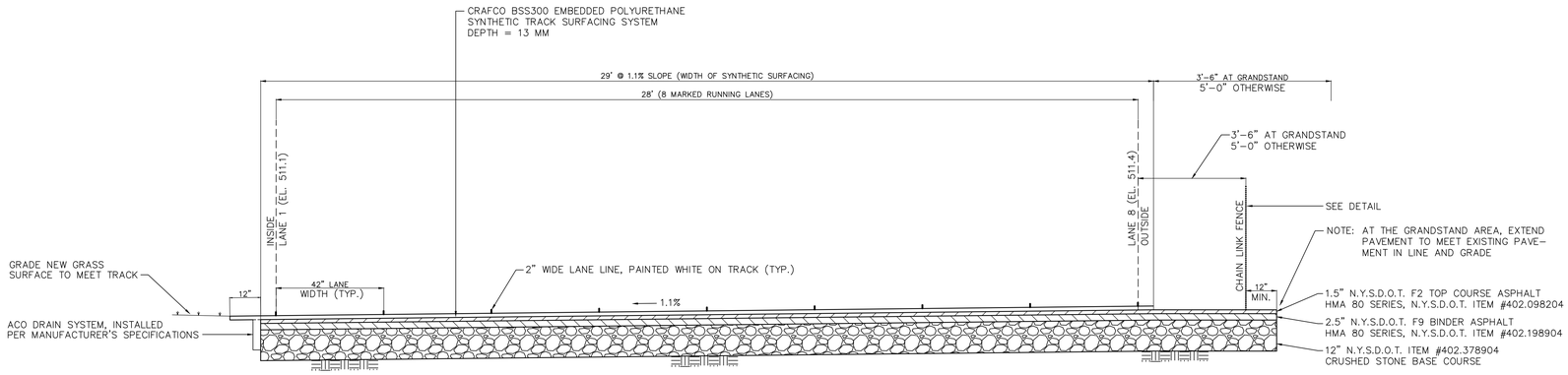
BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

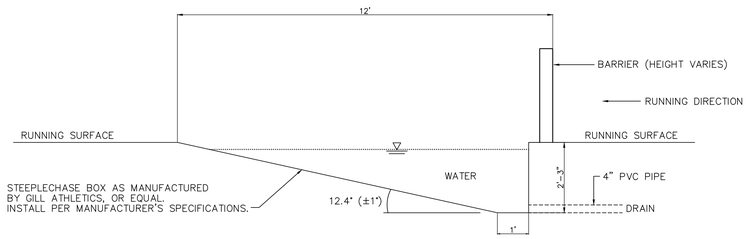
SHEET TITLE
PAVING PLAN

SHEET NO.
S-124

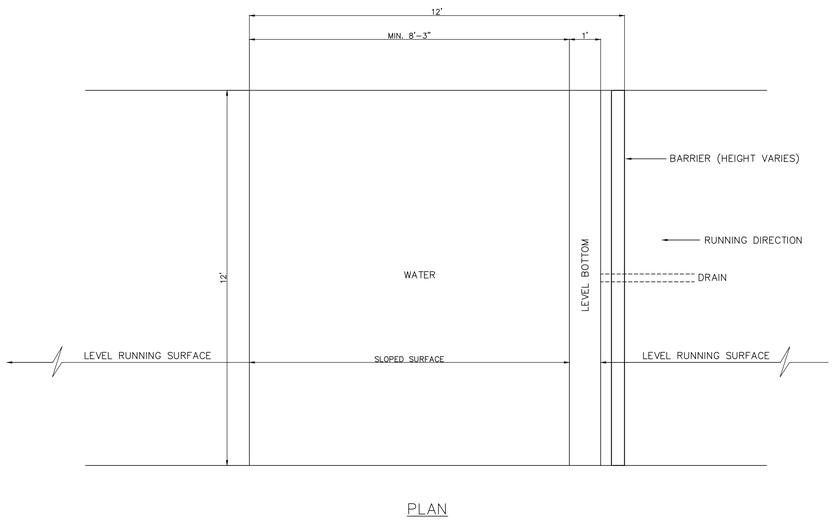
FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06.FF-S-110 - S-505.dwg



TYPICAL TRACK SECTION
SCALE: 1"=2'

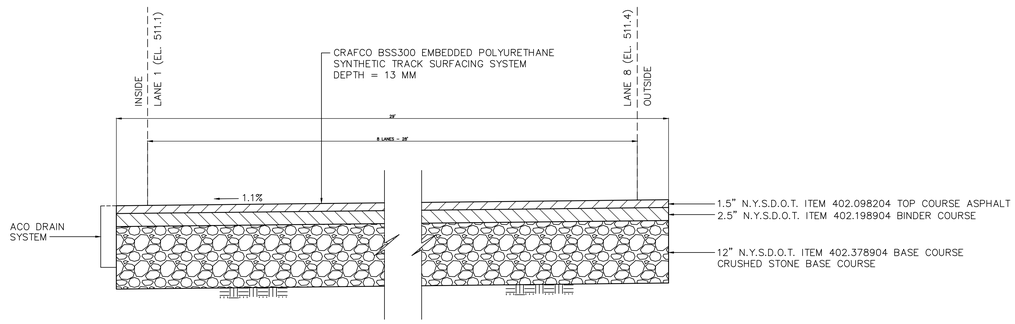


SECTION



PLAN

STEEPLECHASE WATER JUMP PIT
SCALE: NOT TO SCALE



NOTE: BASE, BINDER AND TOP COURSES SHALL MEET THE N.Y.S.D.O.T. MATERIAL SPECIFICATIONS AND SHALL BE PLACED IN ACCORDANCE WITH SECTIONS 300 AND 400 OF THE N.Y.S. "STANDARD SPECIFICATIONS"

TYPICAL TRACK AND FIELD EVENT RUNWAYS SECTION
SCALE: NOT TO SCALE

FOR HIGH JUMP: THE APPROACH AREA WOULD BE MADE OF THE SAME COMPOSITION AS THE OTHE FIELD EVENT RUNWAYS.

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
TRACK AND FIELD EVENT DETAILS

SCALE: AS SHOWN

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ENGINEER:
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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

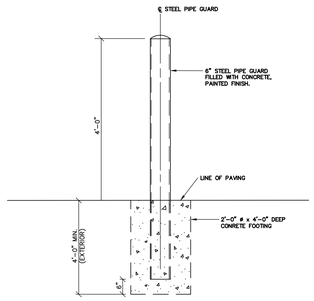
☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

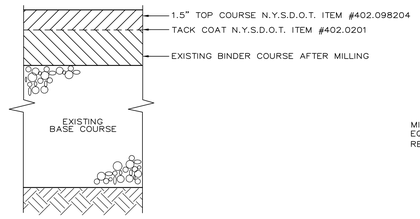
SHEET TITLE
SECTIONS & DETAILS

SHEET NO.
S-500

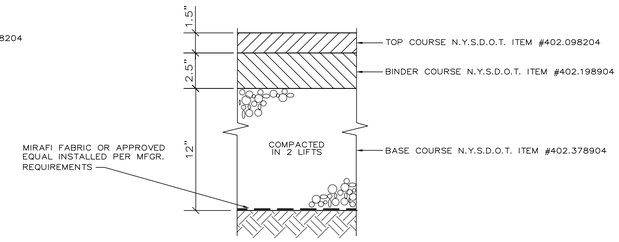
FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06FF-S-110 - S-505.dwg



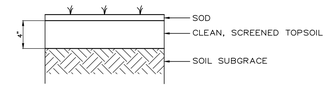
TYPICAL BOLLARD
NO SCALE



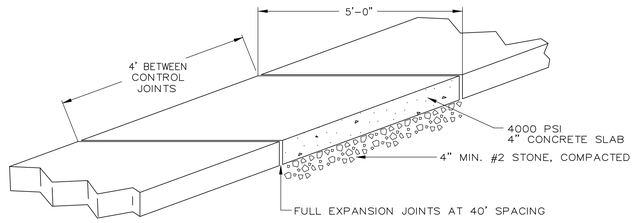
PAVEMENT DETAIL – OVERLAY AREA
NO SCALE



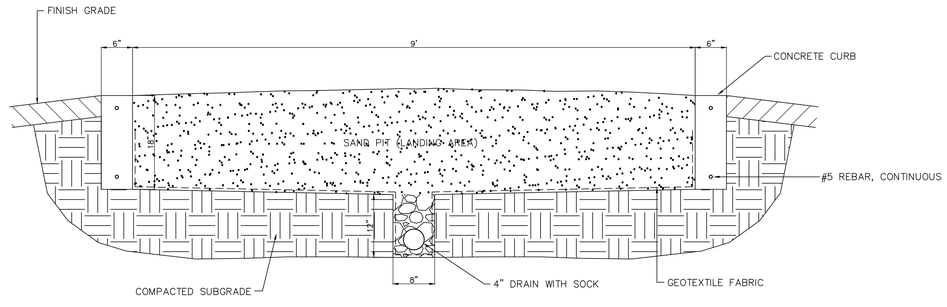
PAVEMENT DETAIL – NEW PAVEMENT
NO SCALE



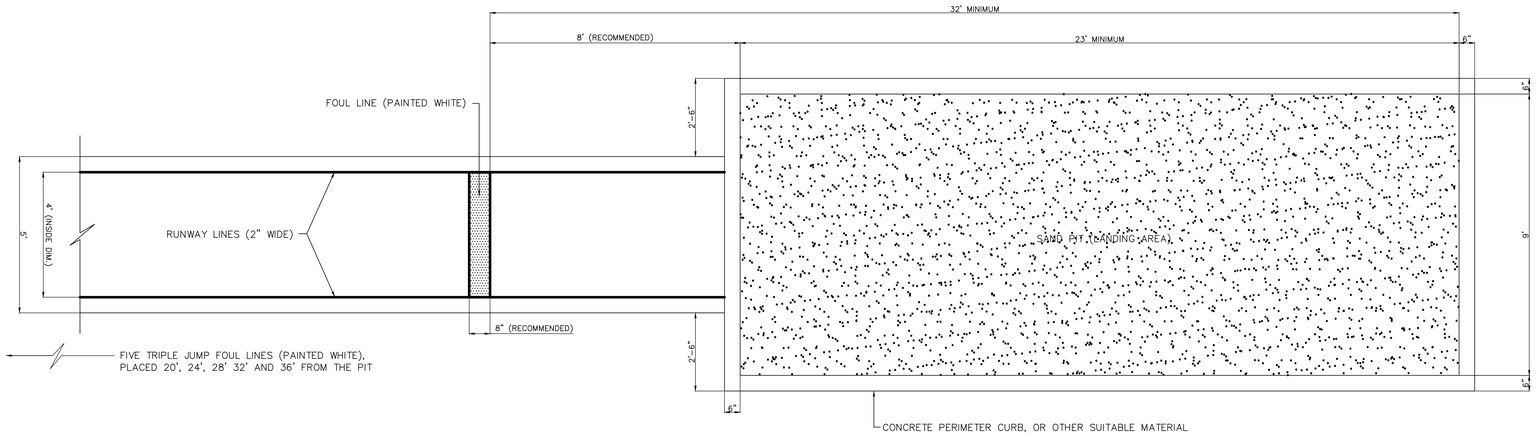
SODDING DETAIL
NO SCALE



CONCRETE SIDEWALK DETAIL
NO SCALE



SECTION



PLAN

LONG JUMP/TRIPLE JUMP PIT
SCALE: NOT TO SCALE

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
FIELD EVENT & MISCELLANEOUS DETAILS

SCALE: AS SHOWN

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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225 WEST STREET EXT, WARWICK, NY 10990

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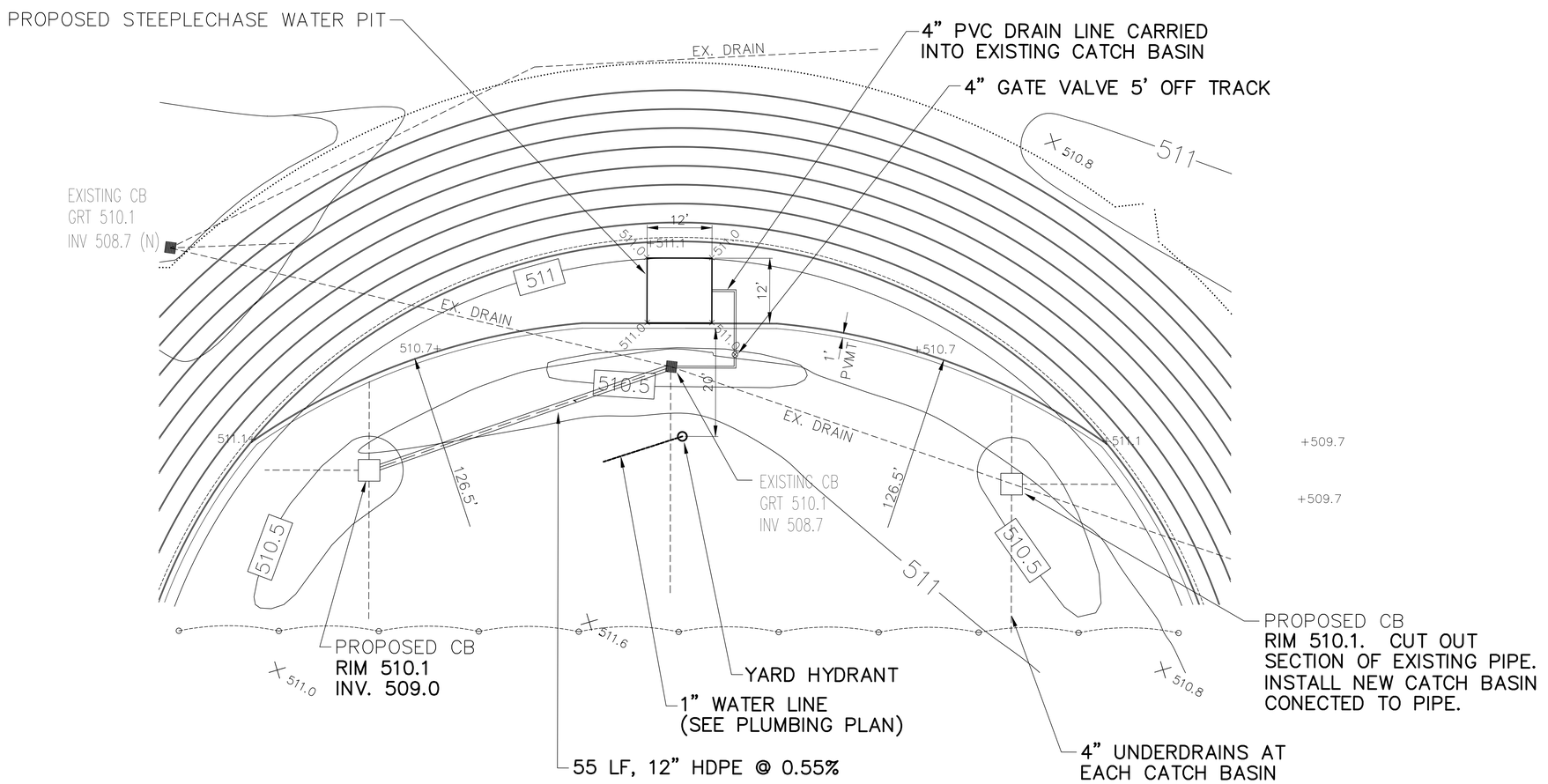
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	**04.08.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
SECTIONS & DETAILS

SHEET NO.
S-501

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06 FF-S-110 - S-505.dwg



WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
DETAIL OF STEEPLECHASE AREA
SCALE: 1"=10'

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JOHN EISENBACH
No. 059414
LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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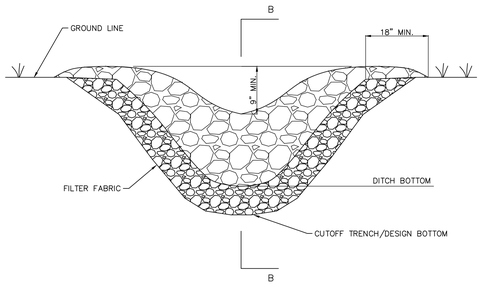
PROJECT NO.	05-21-04 05-20-06
BID SET	**04.08.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

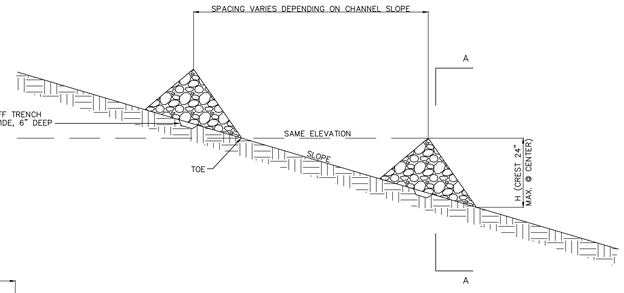
SHEET TITLE
SECTIONS & DETAILS

SHEET NO.
S-502

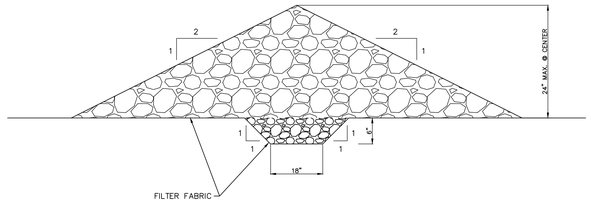
FILE PATH -N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06FF-S-110 - S-505.dwg



SECTION A–A
NOT TO SCALE



PROFILE
NOT TO SCALE



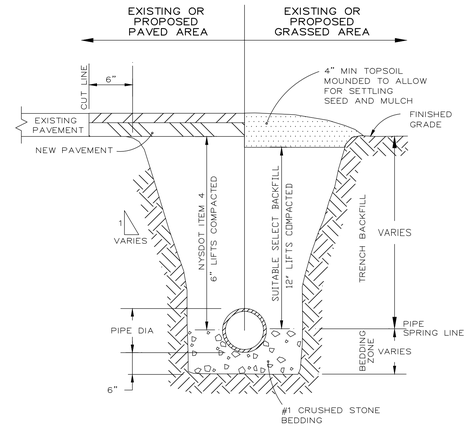
SECTION B–B
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

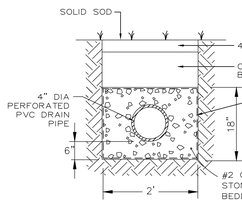
MAXIMUM DRAINAGE AREA: 2 ACRES

CHECK DAM DETAILS
NOT TO SCALE

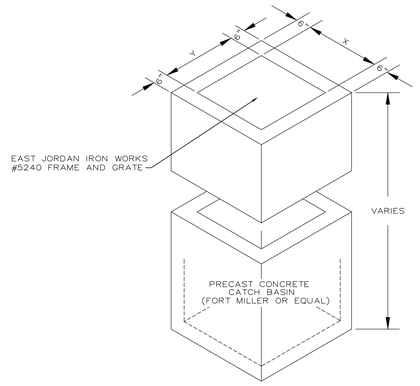


TYPICAL STORM DRAIN TRENCH SECTION
NO SCALE

NOTE:
ALL CONSTRUCTION, INSPECTION AND MONITORING SHALL COMPLY WITH ALL OSHA, STATE AND LOCAL ORDINANCES, LAWS AND PROCEDURES. THIS SHALL INCLUDE ALL CONSTRUCTION METHODS, MATERIALS AND SAFETY PROCEDURES. ADDITIONAL TRENCH SAFETY, INSPECTION AND MONITORING SHALL BE DESIGNED AND FURNISHED BY THE CONTRACTOR AS REQUIRED BY OSHA, STATE AND LOCAL ORDINANCES, LAWS AND PROCEDURES.

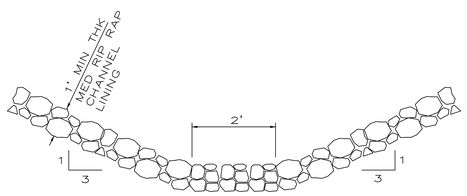


FIELD UNDERDRAIN SECTION
NO SCALE

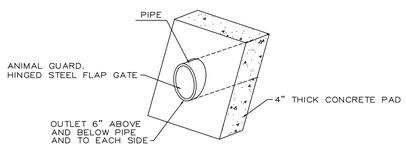


STRUCTURE TYPE	SIZE X & Y
A	2'–6"X2'–6"

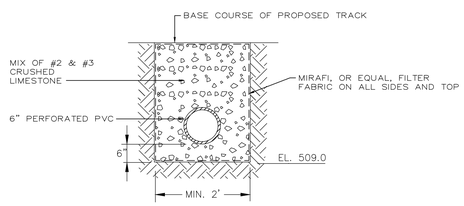
CATCH BASIN DETAIL
NO SCALE



TYPICAL RIP RAP CHANNEL SECTION
NO SCALE



DRAIN OUTLET DETAIL
NO SCALE



TRENCH UNDERDRAIN BELOW TRACK
NO SCALE

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
DRAINAGE DETAILS

SCALE: AS SHOWN

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STATE OF NEW YORK JAMES EISENBACH No. 095414 LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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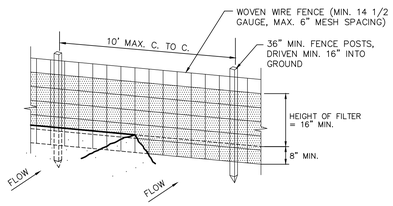
PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

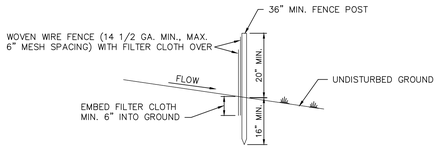
SHEET TITLE
SECTIONS & DETAILS

SHEET NO.
S-503

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\V05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\V05-21-06FF-S-110 – S-505.dwg



PERSPECTIVE VIEW
NO SCALE



SECTION
NO SCALE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

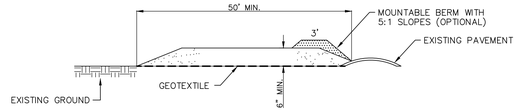
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

POSTS : STEEL EITHER "T" OR "U" TYPE OR 2" HARDWOOD
FENCE : WOVEN WIRE, 14 1/2 GA. 6" MAX. MESH OPENING
FILTER CLOTH : FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL.
PREFABRICATED UNIT : GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

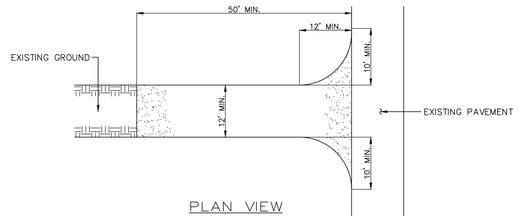
SILT FENCE DETAILS
NO SCALE

EROSION CONTROL NOTES

1. INSTALL SILT FENCING ALONG THE LOWER PERIMETER OF THE GRADING OF THE FIELD EVENT AREA.
2. INSTALL INLET PROTECTION AROUND THE EXISTING AND PROPOSED CATCH BASINS.



PROFILE

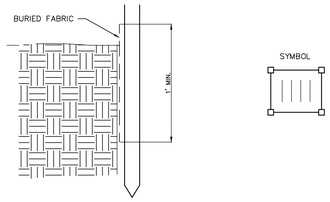


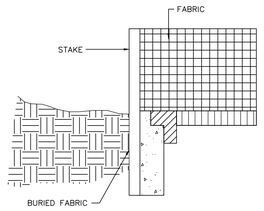
PLAN VIEW

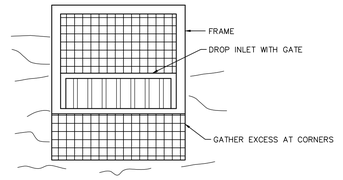
CONSTRUCTION SPECIFICATIONS

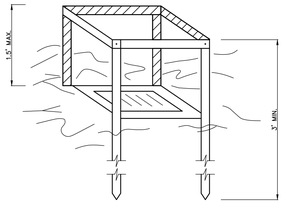
1. STONE SIZE – USE 1" TO 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL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

STABILIZED CONSTRUCTION ACCESS DETAIL
NO SCALE









2"x4" WOOD FRAME

CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40–85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2"x4" WOOD OR EQUIVALENT, OR METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.

MAXIMUM DRAINAGE AREA 1 ACRE

FILTER FABRIC DROP INLET PROTECTION
NO SCALE

WARWICK VALLEY C.S.D. TRACK AND ATHLETIC FIELD IMPROVEMENTS
EROSION CONTROL DETAILS

SCALE: AS SHOWN

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

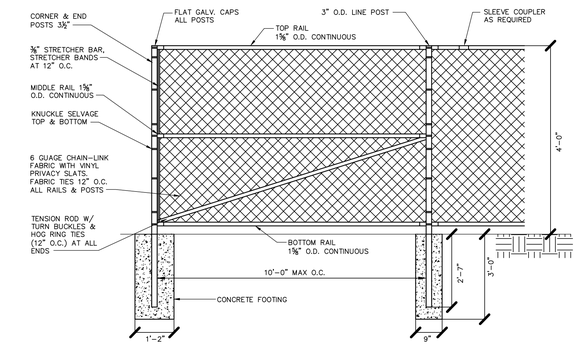
☐BB SED NO. 44–21–01–06–7–041–001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44–21–01–06–7–041–001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44–21–01–06–0–001–040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
SECTIONS & DETAILS

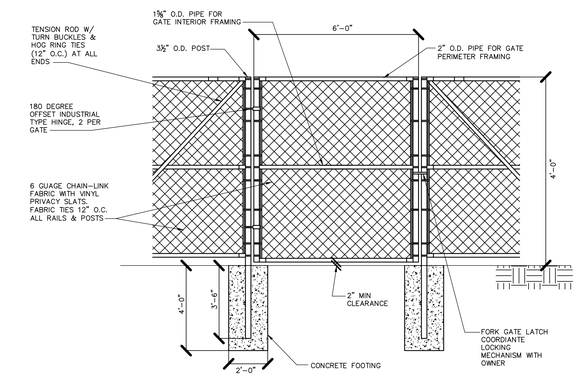
SHEET NO.
S-504

FILE PATH = N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\SITE\05–21–06.FF–S–110 – S–505.dwg



COORDINATE VINYL PRIVACY SLAT COLOR WITH OWNER.

1 4' CHAINLINK FENCE
SCALE: NONE



2 SINGLE CHAINLINK GATE
SCALE: NONE

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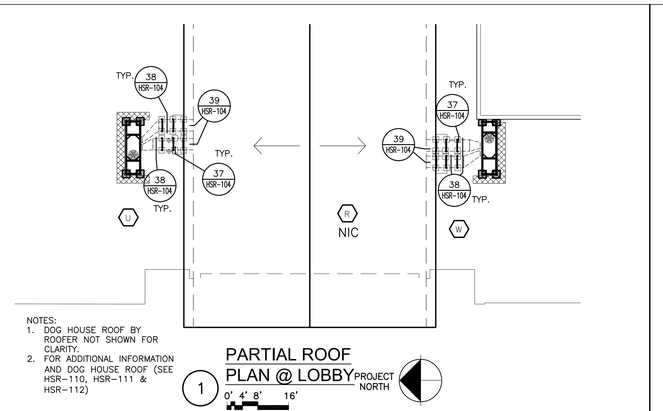
PROJECT NO.	05-21-04 05-20-06
BID SET	**04.08.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
SECTIONS & DETAILS

SHEET NO.
S-505

FILE PATH -N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\SITE\05-21-06FF-S-110 - S-505.dwg



NOTES:
1. DOG HOUSE ROOF BY ROOFER NOT SHOWN FOR CLARITY.
2. FOR ADDITIONAL INFORMATION AND DOG HOUSE ROOF (SEE HSR-110, HSR-111 & HSR-112)

1 PARTIAL ROOF PLAN
0' 4' 8' 16'
PROJECT NORTH

CODE COMPLIANCE REQUIREMENTS:

1. INSTALL NEW ROOFING TO MEET THE FOLLOWING MINIMUM REQUIREMENTS:
   A. NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, WHICH INCLUDES BY REFERENCE THE NEW YORK STATE ENERGY CONSERVATION CODE.

   B. UNDERWRITERS LABORATORIES INC. CLASS A EXTERNAL FIRE RATING FOR ROOF ASSEMBLIES TESTED IN ACCORDANCE WITH ASTM E 108 OR UL 790.

   C. UNDERWRITERS LABORATORIES INC. STANDARD 1256 FOR ROOF ASSEMBLIES WITH FOAM INSULATION.

2. INSTALL ROOFING TO COMPLY WITH THE WIND UPLIFT REQUIREMENTS OF THE NY STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, BASED ON THIS CRITERIA:
   RISK CATEGORY III
   BASIC WIND SPEED 130 MPH
   EXPOSURE CATEGORY B
   BUILDING HEIGHT 30 FT.

3. INSTALL ROOFING AS INDICATED TO RESIST THE FOLLOWING UPLIFT LOADS, CALCULATED IN ACCORDANCE WITH ASCE 7 USING A SAFETY FACTOR OF 2:
   FIELD ZONE: 60 PSF
   PERIMETER ZONE: 100 PSF
   CORNER ZONE: 150 PSF

4. FABRICATE AND INSTALL ROOF PERIMETER FLASHINGS THAT COMPLY WITH THE NY STATE UNIFORM FIRE PREVENTION AND BUILDING CODE AND WITH ANSI/SPRI ES-1 "WIND STANDARD FOR EDGE SYSTEMS USED WITH LOW SLOPE ROOFING SYSTEMS", ON A BUILDING USING THE CRITERIA DESCRIBED ABOVE.

5. FABRICATE AND INSTALL WOOD BLOCKING COMPONENTS TO RESIST A FORCE OF 275 POUNDS PER LINEAL FOOT APPLIED IN ANY DIRECTION.

ROOF PROTECTION NOTES:

1. DO NOT WALK ON NEW AND EXISTING N.I.C. ROOF AREAS.

2. DO NOT STORE MATERIAL OR EQUIPMENT, AND DO NOT PILE DEBRIS ON NEW ROOF AREAS.

3. INSTALL 1 INCH THICK EXTRUDED POLYSTYRENE INSULATION OVER 6 MIL FIRE RETARDANT POLYETHYLENE, COVERED WITH 2x10 WOOD PLANKS TO PROTECT ROOFING WHERE CONSTRUCTION WORK AND TRAFFIC WILL OCCUR.

4. NEATLY CUT AND POSITION ROOF PROTECTION COMPONENTS TO FIT WITHIN 1/2 INCH OF ROOF PENETRATIONS, EAVES AND CHANGE IN ELEVATION WALLS.

5. DO NOT COVER THE ROOF DRAINS. MAINTAIN THE ROOF DRAIN STRAINERS VISIBLE AND CLEAR AT ALL TIMES.

LEGEND:

- A — ROOF AREA DESIGNATION
- ROOF ACCESS DOOR (SEE DET. 12/HSR-101)
- WINDOW — WINDOW FLASHING (SEE DET. 15&16/HSR-102)
- EXPANSION JOINT (SEE DET. 17&18/HSR-102) SIM.
- NEW ROOF DRAIN AT EXISTING LOCATION (SEE DET. 21/HSR-102)
- N — NEW ROOF DRAIN AT NEW LOCATION (SEE DET. 22/HSR-102)
- D — NEW DRAIN LINE (SEE DET. 22/HSR-102)
- E — EXISTING ROOF LADDER (SEE NOTE 10)
- N — NEW ROOF LADDER (SEE DET. 23/HSR-102)
- HVAC — HVAC CURB (SEE DET. 24/HSR-102)
- P — SEALANT POCKET (SEE DET. 25/HSR-102)
- REVISED AREA DIVIDER (SEE DET. 25/HSR-102)
- HORIZONTAL PIPE SUPPORT (SEE DET. 27/HSR-103)
- EQUIPMENT CURB (SEE DET. 28/HSR-103)
- DUCT PENETRATION AT EXISTING LOCATION (SEE DET. 29/HSR-103)
- DUCT AT EXISTING LOCATION (SEE DET. 29/HSR-103 & NOTE 18)
- S — SKYLIGHT (SEE DET. 30/HSR-101)
- EXHAUST FAN (SEE DET. 31/HSR-103)
- V — VENT PIPE (SEE DET. 32/HSR-103)
- CAPPED CURB (SEE DET. 33/HSR-103)
- ABANDONED EQUIPMENT (SEE DET. 33/HSR-103)
- T — TURBINE (SEE DET. 34/HSR-103 SIM.)
- DUCT PENETRATION AT NEW LOCATION (SEE DET. 36/HSR-106)
- DUCTS AT NEW LOCATION (SEE HSR-111 FOR LOCATIONS) (SEE DET. 36 & 38/HSR-104)
- COLUMN BASE FLASHING (SEE HSR-111 FOR LOCATIONS) (SEE DET. 41/HSR-104)
- AC — AC UNIT ON PAVERS (SEE NOTE 4)
- E — ELECTRICAL CONDUIT (SEE NOTE 6)
- EQUIPMENT (SEE NOTE 14)
- ELECTRICAL BOX ON FREE STANDING SUPPORTS (SEE NOTE 15)
- ANTENNA (SEE NOTE 20)
- CRICKET– SLOPE 1/4" PER FT
- TAPERED ISOCYANURATE INSULATION, SLOPE 1/8" PER FT
- H.P. — INSULATION HIGH POINT
- WALKWAY PADS

GENERAL NOTES:

1. DIMENSIONS AND CONDITIONS ON THE ROOF PLAN AND DETAILS ARE APPROXIMATE AND SHALL BE CONFIRMED BY THE CONTRACTOR.

2. ONLY CERTAIN FASTENERS ARE SHOWN ON THE DRAWINGS, REFER TO THE SPECIFICATIONS FOR ADDITIONAL FASTENER REQUIREMENTS.

3. TEST EACH DRAIN LINE WITH A RUNNING HOSE FOR AT LEAST ONE HOUR PRIOR TO STARTING ANY OTHER WORK ON SITE. PROVIDE A WRITTEN REPORT OF ANY CLOGGED LINES TO THE OWNER.
   A. CLOGGED DRAIN LINES REPORTED TO THE OWNER BEFORE WORK STARTS WILL BE CLEANED BY THE OWNER.
   B. COVER & PROTECT ALL DRAIN OPENINGS AT THE BEGINNING OF EACH WORK DAY. REMOVE THE COVERS AT THE END OF EACH DAY AND BEFORE PRECIPITATION OCCURS.
   C. PERFORM WHATEVER WORK IS REQUIRED SO ALL DRAIN LINES ARE CLEAN AND FREE FLOWING UPON COMPLETION OF THE PROJECT.

4. REMOVE AND RESET EXISTING AC CONDENSERS ON 2 X 2 FOOT X 2 INCH THICK CONCRETE PAVERS SET ON WALKWAY PADS POSITIONED A MINIMUM OF 10 FT. AWAY FROM THE ROOF EAVE. FASTEN THE CONDENSERS TO THE PAVERS WITH STAINLESS STEEL NAIL–INS. DISCONNECT, ADJUST, MODIFY, AND RECONNECT THE EXISTING REFRIGERANT SUPPLY & RETURN LINES AND CONDUITS.

5. REMOVE AND RESET SITE LIGHT FIXTURES, WIRES AND CONDUITS ON THE FACADE JUST BELOW THE NEW EAVE METAL. REPLACE COMPONENTS THAT CANNOT BE PROPERLY REINSTALLED.

6. REMOVE THE EXISTING ROOF TOP ELECTRICAL CONDUIT; REPOSITION AND RESET THE CONDUIT ON CONCRETE PAVERS OVER WALKWAY PADS SPACED 5 FEET ON CENTER. SECURE THE CONDUITS TO THE PAVERS WITH GALVANIZED STEEL CLIPS.

7. WIRE BRUSH, PRIME & PAINT THE ROOF TOP EQUIPMENT HOUSINGS, EXTERIOR & INTERIOR ACCESS LADDERS, BULKHEAD DOORS & DOOR FRAMES (BOTH SIDES), AND THE VENT PIPES. DO NOT PAINT OVER EQUIPMENT NAME PLATES AND LABELS.

8. REPAIR EQUIPMENT HOUSINGS SO THEY ARE WATERTIGHT; REPLACE ANY MISSING PIECES.

9. REMOVE, MODIFY AND REMOUNT THE EXISTING LADDERS – REWORK THEM SO THEY ARE OSHA COMPLIANT AND FASTENED ABOVE THE NEW CAP FLASHING. SCRAPE, PRIME AND PAINT THE LADDERS. FILL OLD FASTENER HOLES WITH COLOR MATCHING MORTAR.

10. RE–CAULK ALL VERTICAL MASONRY CONTROL AND EXPANSION JOINTS IN THE CHANGE IN ELEVATION WALLS ABOVE LOWER LEVEL ROOFS. REMOVE EXISTING SEALANT AND BACK UP MATERIALS, AND INSTALL NEW BACKER ROD AND SEALANT.

11. RE–CAULK JOINTS BETWEEN THE WALL LOUVERS AND MASONRY FACADE. REMOVE EXISTING SEALANT AND BACK UP MATERIALS, AND INSTALL NEW BACKER ROD AND SEALANT.

12. REPAIR SURFACE DEFECTS LESS THAN 1/2 INCH DEEP IN THE TOP SURFACE OF THE ROOF DECKS AS BASE BID WORK USING FAST SETTING CONCRETE GROUT. REPLACE DAMAGED OR DETERIORATED SECTIONS OF DECK IN ACCORDANCE WITH THE UNIT PRICES.

13. INSULATE EXISTING DRAIN LINES WHERE EXPOSED INSIDE THE BUILDING, ALL NEW DRAIN LINES, AND THE UNDERSIDES OF THE NEW DRAIN BOWLS.

14. DISCONNECT, MODIFY, RAISE AND RESET THE CHILLER UNIT AND STEEL CHANNELS, SEE DET 28/HSR–103 & PIPE SUPPORT DET 27/HSR–103.

15. REMOVE, MODIFY AND RESET THE ELECTRICAL BOXES AND CONDUITS – MOUNT THEM ON FREE STANDING SUPPORTS PLACED ON 2 X 2 FOOT X 2 INCH THICK CONCRETE PAVERS ON WALKWAY PADS.

16. CREATE A 6 FT DRAIN SUMP – FROM EXPANSION JOINT TO EXPANSION JOINT.

17. MOVE THE VENT PIPE AWAY FROM THE EXPANSION JOINT / WALL AND INSTALL 22 GAUGE GALVANIZED STEEL PLATE TO COVER THE HOLE IN THE DECK.

18. REMOVE EXISTING SPUF AND COATING FROM THE DUCTS. INSTALL NEW CURBS AND FLASHINGS, SEE DETAIL 29/HSR–103. COVER THE DUCTS WITH 3 INCH THICK ISOCYANURATE INSULATION WITH TAPERED ISOCYANURATE ON TOP AND FULLY ADHERED EPDM WATERPROOFING.

19. REMOVE AND RESET THE WALL LOUVERS.

20. REMOVE ABANDONED ANTENNAS. REMOVE AND RESET ACTIVE ANTENNAS.

21. COORDINATE THE INSTALLATION OF EQUIPMENT & DUCT WORK WITH PARTIAL ROOF PLAN HSR–110. EQUIPMENT AND DUCTWORK BY MECHANICAL CONTRACTOR. ALL OTHER ROOF TOP WORK AND MATERIAL BY ROOF CONTRACTOR, INCLUDING THE INSTALLATION OF STEEL AND RELOCATION OF EQUIPMENT.

22. IF THERE IS A LONG DELAY OF MATERIAL DELIVERY MAKE THE ROOF WATERTIGHT AT BASE FLASHING BY: RE–INSTALLING SPRAY POLYURETHANE ROOF ON SPRAY POLYURETHANE ROOFS AND RE–INSTALLING BUR ON BUR WITH GRAVEL ROOFS.

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DECK TYPE CHART & INSULATION REQUIREMENTS

ROOF AREA	DECK TYPE	STARTING THICKNESS OF NEW INSULATION	MINIMUM R–VALUE OF NEW INSULATION	AVERAGE THICKNESS OF NEW INSULATION	AVERAGE R–VALUE OF NEW INSULATION
V	METAL	5.5"	30	5.9"	34.4
Z	METAL	5.5"	30	6.0"	35.0
AA	LT WEIGHT CONC	5.5"	30	7.5"	44.2
BB	METAL	5.5"	30	6.5"	38.2
DD	METAL	5.5"	30	6.0"	35.0
HH	METAL	5.5"	30	6.0"	35.0
JJ	LT WEIGHT CONC	5.5"	30	6.4"	37.4

NOTES:
1. INSTALL INSULATION WITH A MINIMUM R–VALUE OF 30 FOR CONTINUOUS INSULATION ENTIRELY ABOVE THE DECK, TO MEET THE NYS ENERGY CONSERVATION CONSTRUCTION CODE, INCLUDING THE INTERNATIONAL ENERGY CONSERVATION CODE AND THE NY STATE SUPPLEMENT, FOR A BUILDING IN CLIMATE ZONE 4.
2. INSTALL TAPERED ISOCYANURATE INSULATION THAT SLOPES 1/8 INCH PER FOOT; MINIMUM STARTING THICKNESS 5–1/2 INCHES UNLESS OTHERWISE NOTED. INSTALL THE ISOCYANURATE INSULATION IN MULTIPLE LAYERS, WITH THE THICKEST LAYER BEING 4 INCHES. STAGGER ALL JOINTS BETWEEN LAYERS 12 INCHES.
3. INSTALL ISOCYANURATE INSULATION CRICKETS OVER THE TAPERED INSULATION.
4. INSTALL A COVER BOARD USING LOW RISE FOAM ADHESIVE OVER THE INSULATION AND CRICKETS.

2 PARTIAL ROOF PLAN
0' 4' 8' 16'
PROJECT NORTH

KEY PLAN
NOT TO SCALE
PROJECT NORTH

LEGEND
- ROOFING TO REPLACE
- ROOFING WORK
- EXISTING ROOFING TO REMAIN

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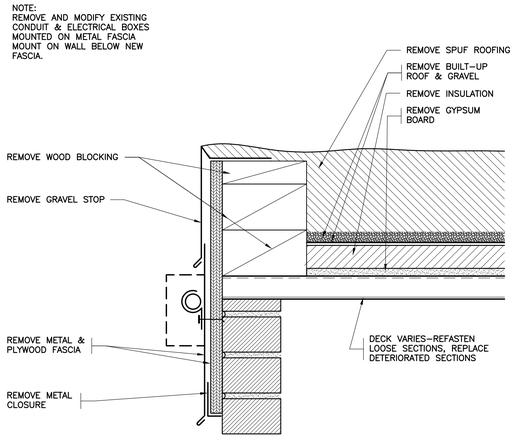
WARWICK VALLEY HIGH SCHOOL
89 SANFORDVILLE RD
WARWICK NY 10990

PARTIAL ROOF PLAN

SHEET NO.
HSR-100

FILE PATH: L:\Current Projects\Warwick HS 2021\2 Drawings\HSR–100 High School Roof plans.dwg



1 EXISTING EAVE
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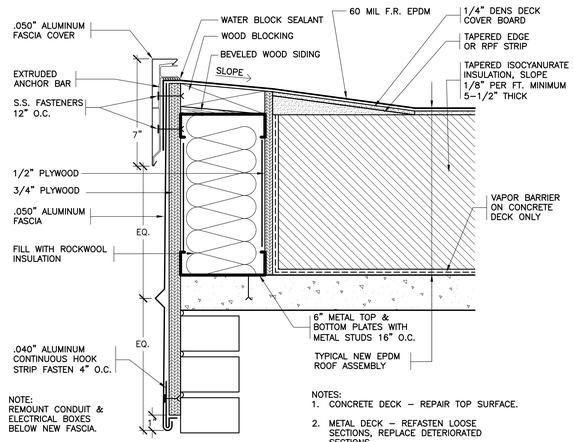
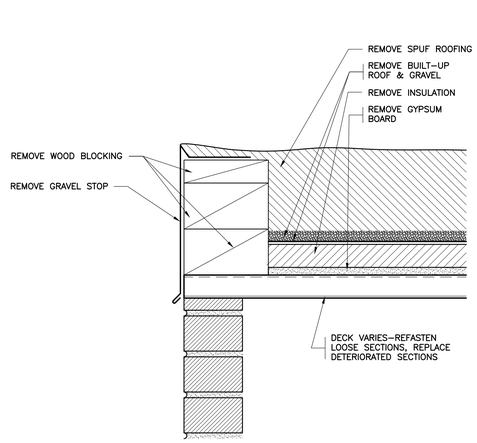


NOTES:
1. CONCRETE DECK – REPAIR TOP SURFACE.
2. METAL DECK – REFASTEN LOOSE SECTIONS, REPLACE DETERIORATED SECTIONS.
3. REMOUNT CONDUIT & ELECTRICAL BOXES BELOW NEW FASCIA.

2 REVISED EAVE
SCALE: 0" 1" 2" 4" 8"



3 EXISTING EAVE
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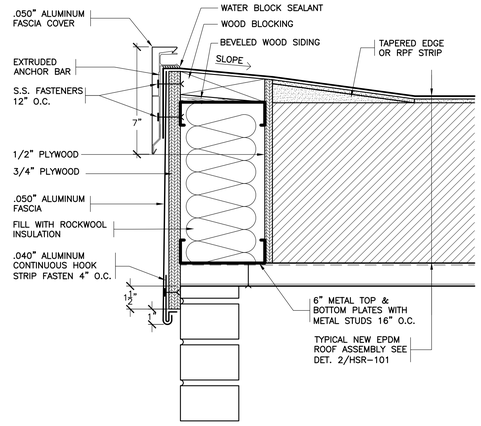
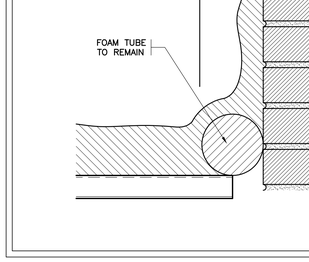
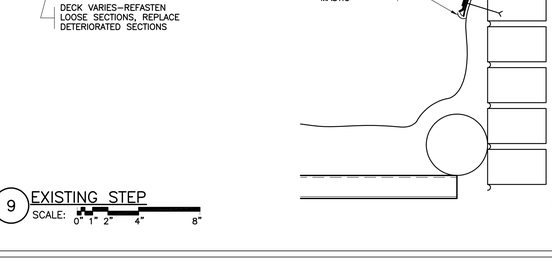


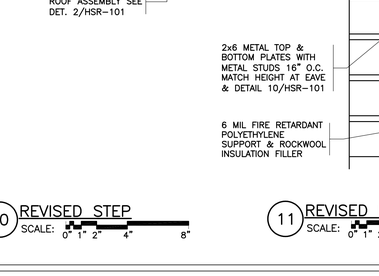
4 REVISED EAVE
SCALE: 0" 1" 2" 4" 8"



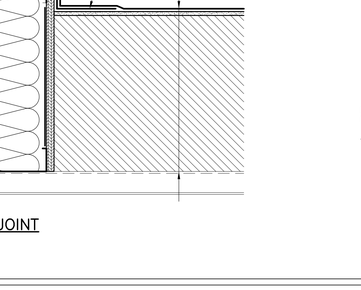
5 EXISTING EAVE
SCALE: 0" 1" 2" 4" 8"



6 REVISED EAVE
SCALE: 0" 1" 2" 4" 8"

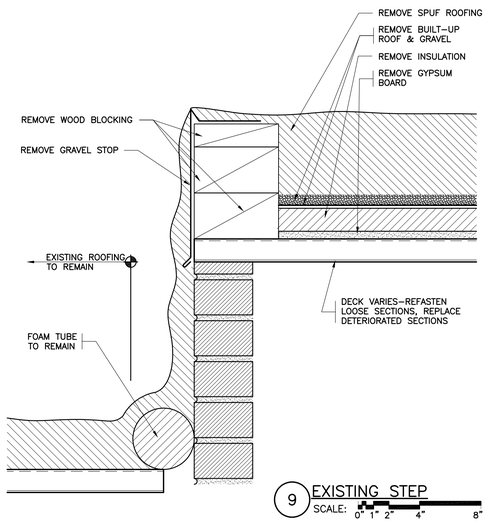


7 EXISTING BASE
SCALE: 0" 1" 2" 4" 8"

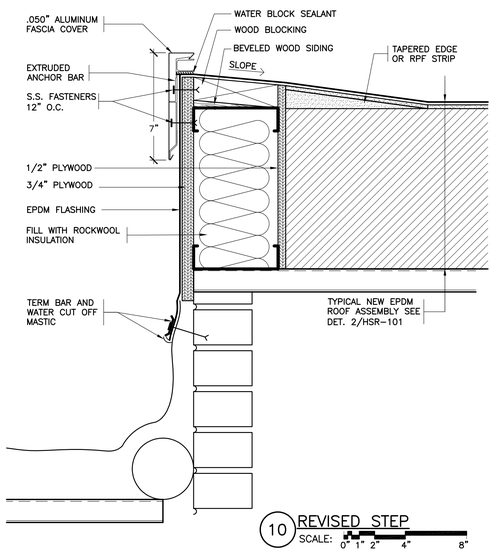


8 REVISED BASE
SCALE: 0" 1" 2" 4" 8"

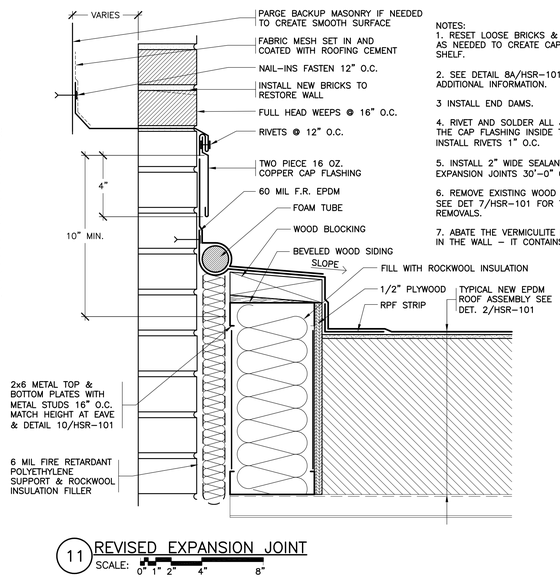
NOTES:
1. RESET LOOSE BRICKS & FILL CAVITY AS NEEDED TO CREATE CAP FLASHING SHELF.
2. SEE DETAIL 35/HSR–103 FOR ADDITIONAL INFORMATION.
3. INSTALL END DAMS.
4. RIVET AND SOLDER ALL JOINTS IN THE CAP FLASHING INSIDE THE WALL. INSTALL RIVETS 1" O.C.
5. INSTALL 2" WIDE SEALANT FILLED EXPANSION JOINTS 30'–0" O.C.
6. MAKE NEW GYPSUM WALL FLUSH WITH BRICKS ABOVE.
7. THE WORK IN THIS AREA INCLUDES ASBESTOS CONTAINING VERMICULITE BLOWN–IN INSULATION.
8. THE VERMICULITE LIES INSIDE THE WALLS AS INDICATED ON DRAWINGS HSR–100 DETAILS 7 & 8 AND HSR–101.
9. THE WORK SHALL BE PERFORMED INSIDE A TWO–LAYER TENT FOR REMOVAL OF THE VERMICULITE.
10. THE CONTRACTOR SHALL REMOVE THE TWO COURSES OF BRICK AS INDICATED ON THE ABOVE REFERENCED DRAWING DETAILS FOLLOWED BY THE REMOVAL OF ALL VERMICULITE INSIDE THE CAVITY FROM THE TOP OF THE CHASE DOWN TO ONE LAYER OF BRICK BELOW THE OPENING CREATED BY THE ABATEMENT.
11. ALL MATERIALS REMOVED AS PART OF THIS WORK SHALL BE DISPOSED OF AS ASBESTOS CONTAMINATED.
12. THE CONTRACTOR SHALL THEN PROVIDE BLOWN–IN CLOSED CELL FOAM INSULATION TO FILL UP AND ENCLOSE THE CAVITY ABOVE THE CAP FLASHING AND UP TO THE ROOF AND ALSO BELOW AND ON THE SIDES TO ENCLOSE THE BULK VERMICULITE THAT REMAINS IN THE LOWER PORTION OF THE CAVITY.
13. ONCE THE FOAM HAS BEEN INSTALLED, THE CONTRACTOR SHALL INSTALL THE NEW FLASHING, INCLUDING BY NOT LIMITED TO COPPER FLASHING, FABRIC MESH AND PARGED ON BACKUP MASONRY AS INDICATED ON DETAIL 8/HSR–101.
14. UPON COMPLETION OF THE INSTALLATION, THE ENTIRE TENT SHALL BE CLEANED PRIOR TO A FINAL VISUAL BY THE ONSITE PROJECT MONITOR.
15. THE AREA SHALL BE CLEARED BY COLLECTION OF A SET OF AGGRESSIVE PCM AIR SAMPLES.
16. AFTER CLEARANCE HAS BEEN ACHIEVED, THE TENT SHALL BE REMOVED AND THE NEW BRICK SHALL BE PROVIDED AS INDICATED ON DETAIL 8/HSR–101.



9 EXISTING STEP
SCALE: 0" 1" 2" 4" 8"

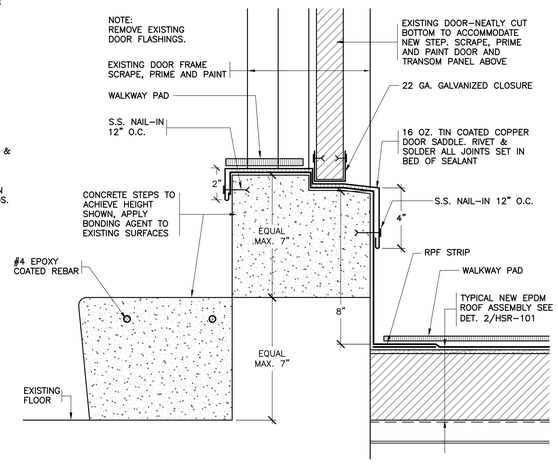


10 REVISED STEP
SCALE: 0" 1" 2" 4" 8"



NOTES:
1. RESET LOOSE BRICKS & FILL CAVITY AS NEEDED TO CREATE CAP FLASHING SHELF.
2. SEE DETAIL 8A/HSR–101 FOR ADDITIONAL INFORMATION.
3 INSTALL END DAMS.
4. RIVET AND SOLDER ALL JOINTS IN THE CAP FLASHING INSIDE THE WALL. INSTALL RIVETS 1" O.C.
5. INSTALL 2" WIDE SEALANT FILLED EXPANSION JOINTS 30'–0" O.C.
6. REMOVE EXISTING WOOD BLOCKING & SEE DET 7/HSR–101 FOR TYPICAL REMOVALS.
7. ABATE THE VERMICULITE INSULATION IN THE WALL – IT CONTAINS ASBESTOS.

11 REVISED EXPANSION JOINT
SCALE: 0" 1" 2" 4" 8"



12 REVISED DOOR
NOT TO SCALE

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JACK EISENBACH
No. 059445
LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐DB SED NO. 44–21–01–06–7–041–001 (RE–FIELD BATHROOM BUILDING)
☐DF SED NO. 44–21–01–06–7–041–001 (RE–FIELD BATHROOM BUILDING)
☐HS SED NO. 44–21–01–06–0–001–040 (HS–WV HIGH SCHOOL)

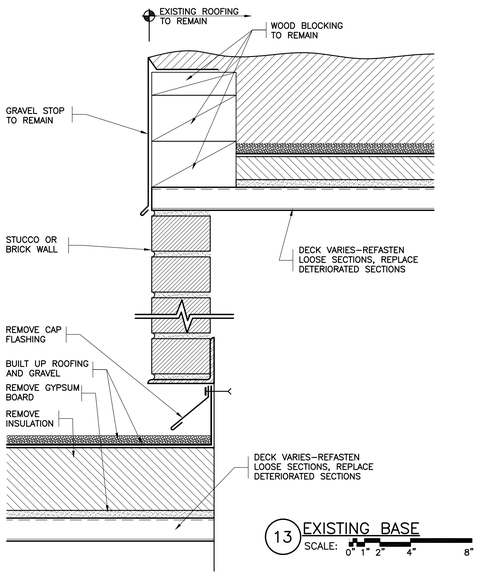
PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
WARWICK VALLEY HIGH SCHOOL
89 SANFORDVILLE RD
WARWICK NY 10990

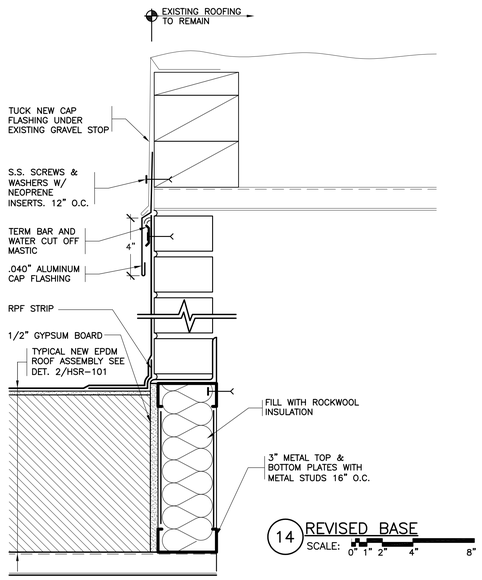
ROOF DETAILS

SHEET NO.
HSR–101

FILE PATH – L:\Current Projects\Warwick HS 2021\3 Drawings\HSR–101 High School Date: 1–12.dwg

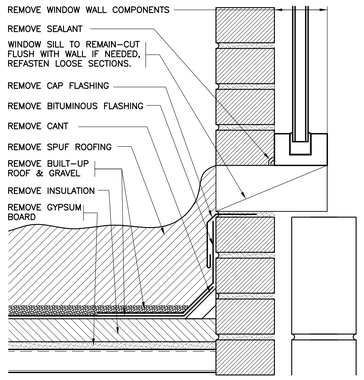


13 EXISTING BASE
SCALE: 0" 1" 2" 4" 8"

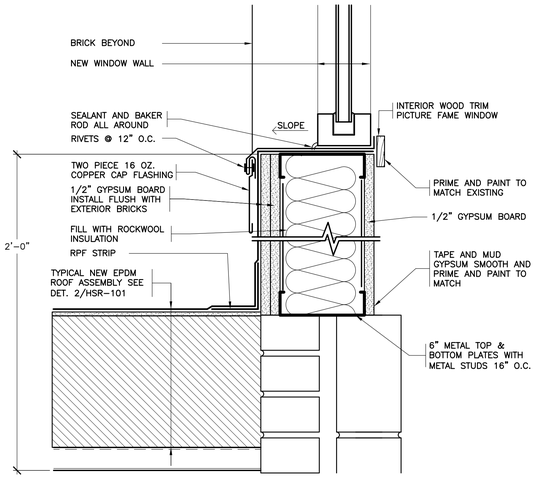


14 REVISED BASE
SCALE: 0" 1" 2" 4" 8"

NOTE:
1. REMOVE EXISTING WINDOW WALL AND RELATED FLASHING.



15 EXISTING WINDOW
SCALE: 0" 1" 2" 4" 8"



16 REVISED WINDOW
SCALE: 0" 1" 2" 4" 8"

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17 EXISTING EXPANSION JOINT
SCALE: 0" 1" 2" 4" 8"

18 REVISED EXPANSION JOINT
SCALE: 0" 1" 2" 4" 8"

NOTE:
1. ABATE THE VERMICULITE INSULATION IN THE WALL – IT CONTAINS ASBESTOS.

19 EXISTING BASE
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. RESET LOOSE BRICKS & FILL CAVITY AS NEEDED TO CREATE CAP FLASHING SHELF.

2. SEE DETAIL 8A/HSR–101 FOR ADDITIONAL INFORMATION.

3 INSTALL END DAMS.

4. RIVET AND SOLDER ALL JOINTS IN THE CAP FLASHING INSIDE THE WALL. INSTALL RIVETS 1" O.C.

5. INSTALL 2" WIDE SEALANT FILLED EXPANSION JOINTS 30'–0" O.C.

6. AT GYMNASIUM WALL– MATCH CAP FLASHING HEIGHT WITH WINDOW'S CAP FLASHING SEE DET. 16/A–3.

20 REVISED BASE
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. REMOVE EXISTING ROOF DRAINS AND RELATED FLASHINGS.

2. INSTALL TAPERED EDGE STRIPS & INSULATION FILLERS TO CREATE A MINIMUM 4 FT. x 4 FT. SQUARE SUMP AT EACH DRAIN.

3. INSTALL INSULATION ON ALL HORIZONTAL DRAIN LINES, NEW VERTICAL DRAIN LINES AND THE UNDERSIDE OF THE NEW DRAIN BOWL.

21 NEW ROOF DRAIN @ EXISTING LOCATION
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. SEE ROOF PLAN FOR LOCATION OF NEW ROOF DRAINS. AT NEW DRAIN LOCATIONS CUT THE EXISTING DECK AND REINFORCE THE DECK OPENING WITH (4) 2–1/2" X 2–1/2" X 1/4" STEEL ANGLES BOLTED TO THE EXISTING STEEL MEMBERS.

2. INSTALL TAPERED EDGE STRIPS & INSULATION FILLERS TO CREATE A MINIMUM 4 FT. X 4 FT. SQUARE SUMP AT EACH DRAIN.

3. INSTALL NEW DRAIN LINE AND CONNECT TO EXISTING DRAIN LINE. INSULATE THE DRAIN BOWL AND NEW PIPE.

4. INSTALL INSULATION ON ALL NEW DRAIN LINES AND UNDERSIDE OF THE NEW DRAIN BOWL.

22 NEW ROOF DRAIN @ NEW LOCATION
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. GRIND ALL WELDS SMOOTH AND HOT DIP GALVANIZE ENTIRE ASSEMBLY AFTER FABRICATION.

2. LADDER SHALL BE OSHA COMPLIANT.

23 NEW ROOF LADDER
NOT TO SCALE

24 TYPICAL HVAC CURB
NOT TO SCALE

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DBR SED NO. 44–21–01–06–7–041–001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
DFE SED NO. 44–21–01–06–7–041–001 (FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
HS SED NO. 44–21–01–06–0–001–040 (HS–MW HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

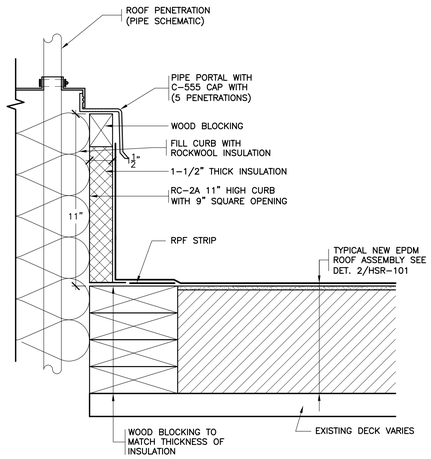
PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
WARWICK VALLEY HIGH SCHOOL
89 SANFORDVILLE RD
WARWICK NY 10990

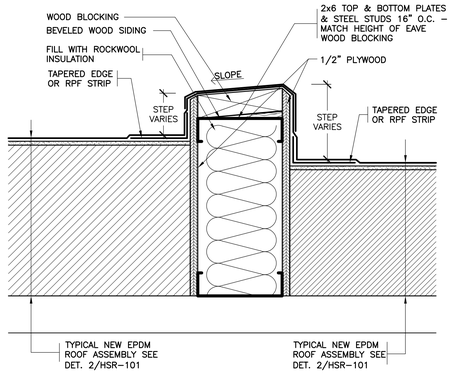
ROOF DETAILS

SHEET NO.
HSR-102

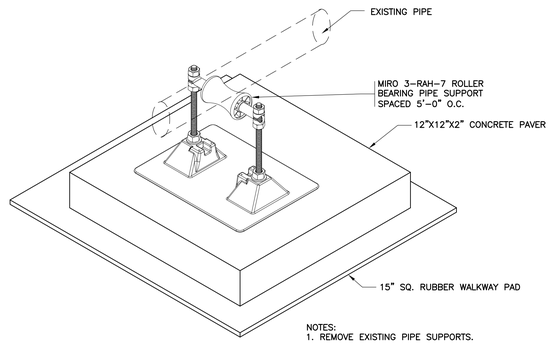
FILE PATH –L:\Current Projects\Warwick HS 2021\2 Drawings\HSR–102 High School Dets 13–24.dwg



25 PORTAL PLUS CURB
SCALE: 0" 1" 2" 4" 8"



26 REVISED AREA DIVIDER
SCALE: 0" 1" 2" 4" 8"

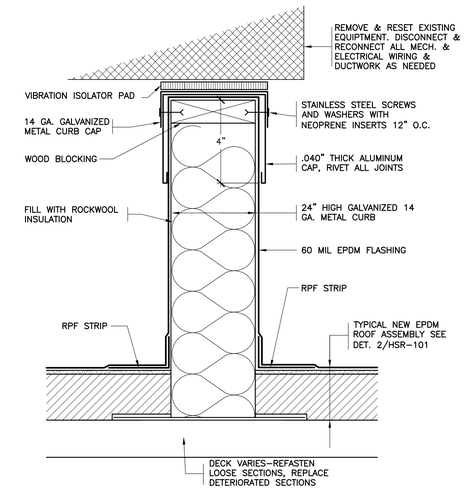


NOTES:
1. REMOVE EXISTING PIPE SUPPORTS.

1. SCRAPE, PRIME AND PAINT PIPES.

2. EPDM ROOF ASSEMBLY NOT SHOWN.

27 PIPE SUPPORT
NOT TO SCALE



28 REVISED EQUIPMENT SUPPORT
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. REMOVE EXISTING CURB FLASHINGS, DUCT COVERING AND INSULATION. COVER FASTENER HOLES AND SEAMS IN THE DUCT WITH PEEL AND STICK MEMBRANE. INSTALL NEW 3" THICK ISOCYANURATE INSULATION ON THE SIDES AND BOTTOM OF THE DUCTS, AND TAPERED INSULATION SLOPING 1/4" PER FOOT, MINIMUM 3" THICK ON TOP OF THE DUCTS. COVER THE INSULATION WITH 60 MIL F.R. FULLY ADHERED EPDM.

2. REMOVE, MODIFY AND EXTEND EXISTING DUCT. REMOVE, MODIFY AND RESET EXISTING DUCT SUPPORTS ON NEW 2'-0"x2'-0"x2" THICK CONCRETE PAVERS OVER WALKWAY PADS. FASTEN SUPPORTS TO PAVERS WITH 2 S.S. NAIL-INS.

29 REVISED DUCT CURB AT EXISTING LOCATION
NOT TO SCALE

NOTES:
1. REMOVE EXISTING SKYLIGHT, CURB AND RELATED FLASHINGS.

2. REMOVE, CLEAN AND RESET THE EXISTING CEILING DOMES.

30 REVISED SKYLIGHT
SCALE: 0 1" 2" 4" 8"

NOTE:
REMOVE & DISPOSE OF EXISTING
VENTILATORS AND RELATED FLASHINGS.

31 REVISED EXHAUST FAN
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. REMOVE ALL EXISTING FLASHINGS.

2. REMOVE KENNEDY COUPLINGS AND EXTEND VENT PIPES TO MEET MIN. HEIGHT REQUIREMENT.

3. INSTALL PREMOLDED PIPE FLASHINGS WHENEVER POSSIBLE. WHEN PREMOLDED PIPE FLASHINGS CANNOT BE INSTALLED USE FIELD WRAPPED FLASHINGS.

32 REVISED VENT PIPE
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. REMOVED EXISTING CAPS, ABANDONED SKYLIGHT CURBS, SKYLIGHT SHAFTS INSIDE THE BUILDING, AND RELATED FLASHINGS.

2. IF THERE IS A LONG DELAY OF MATERIAL DELIVERY MAKE THE ROOF WATERTIGHT AT BASE FLASHING BY: RE-INSTALLING SPRAY POLYURETHANE ROOF ON SPRAY POLYURETHANE ROOFS AND RE-INSTALLING BUR ON BUR WITH GRAVEL ROOFS.

DECK INFILL (METAL DECK)
SCALE: 0" 1" 2" 4" 8"

NOTES:
1. COORDINATE DECK INFILL WITH THE REMOVAL AND REPLACEMENT OF THE EXISTING HVAC UNIT.

2. FASTEN THE NEW METAL DECK TO THE STEEL ANGLES WITH SELF-DRILLING SCREWS 12" O.C.

3. INSTALL VENT PIPE FLASHING SEE DETAIL 32/HSR-103 SIM. AND ROOF PLAN.

4. IF THERE IS A LONG DELAY OF MATERIAL DELIVERY MAKE THE ROOF WATERTIGHT AT BASE FLASHING BY: RE-INSTALLING SPRAY POLYURETHANE ROOF ON SPRAY POLYURETHANE ROOFS AND RE-INSTALLING BUR ON BUR WITH GRAVEL ROOFS.

DECK INFILL (CONCRETE DECK)
SCALE: 0" 1" 2" 4" 8"

33 DECK INFILL

34 NEW EVECO VENTILATOR
SCALE: 0 1" 2" 4" 8"

35 REVISED CAP FLASHING
SCALE: 0 1/2" 1" 2" 4"

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CPF SED NO. 44-21-01-06-7-041-001 (FF-NEW MODULAR BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
HS SED NO. 44-21-01-06-0-001-040 (HS-WW HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
WARWICK VALLEY HIGH SCHOOL
89 SANFORDVILLE RD
WARWICK NY 10990

ROOF DETAILS

SHEET NO.
HSR103

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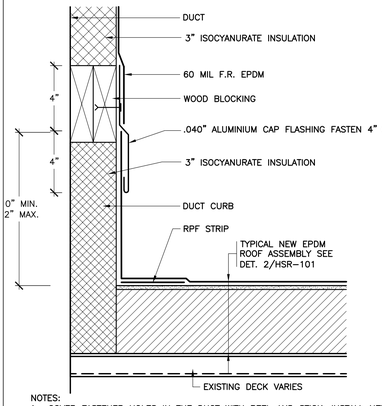
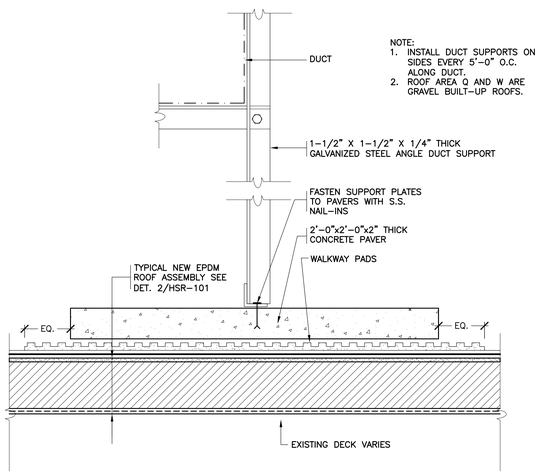


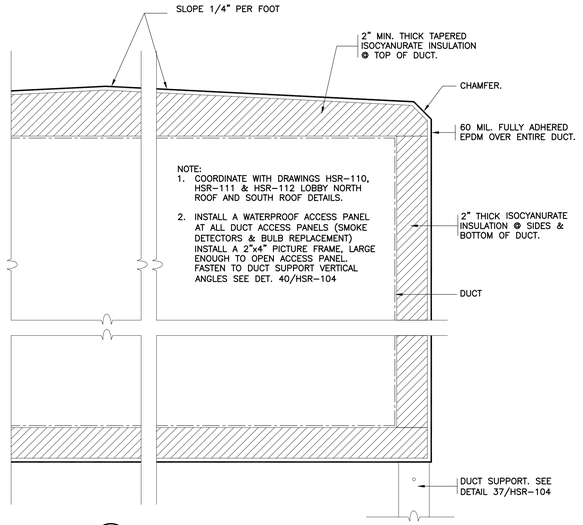
NOTES:
1. COVER FASTENER HOLES IN THE DUCT WITH PEEL AND STICK. INSTALL NEW 3" THICK ISOCYANURATE INSULATION ON THE SIDES AND BOTTOM OF THE DUCTS, AND TAPERED INSULATION SLOPING 1/4" PER FOOT, MINIMUM 3" THICK ON TOP OF THE DUCTS. COVER THE INSULATION WITH FULLY ADHERED 60 MIL F.R. EPDM.
2. SEE DETAIL 37/HSR-104 FOR SUPPORT.
3. SEE DETAIL 38/HSR-104 FOR HORIZONTAL DUCT FLASHING.
4. SEE DETAIL 40/HSR-104 FOR DUCTS WITH ACCESS PANELS.
5. IF THERE IS A LONG DELAY OF MATERIAL DELIVERY MAKE THE ROOF WATERTIGHT AT BASE FLASHING BY: RE-INSTALLING SPRAY POLYURETHANE ROOF ON SPRAY POLYURETHANE ROOFS AND RE-INSTALLING BUR ON BUR WITH GRAVEL ROOFS.

36 REVISED DUCT CURB
SCALE: 0" 1" 2" 4" 8"



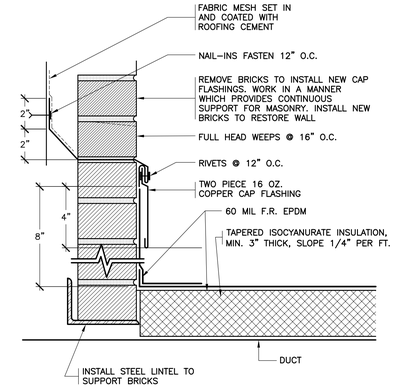
NOTE:
1. INSTALL DUCT SUPPORTS ON SIDES EVERY 5'-0" O.C. ALONG DUCT.
2. ROOF AREA Q AND W ARE GRAVEL BUILT-UP ROOFS.

37 REVISED DUCT SUPPORT ON PAVERS
NOT TO SCALE



NOTE:
1. COORDINATE WITH DRAWINGS HSR-110, HSR-111 & HSR-112 LOBBY NORTH ROOF AND SOUTH ROOF DETAILS.
2. INSTALL A WATERPROOF ACCESS PANEL AT ALL DUCT ACCESS PANELS (SMOKE DETECTORS & BULB REPLACEMENT) INSTALL A 2"x4" PICTURE FRAME, LARGE ENOUGH TO OPEN ACCESS PANEL. FASTEN TO DUCT SUPPORT VERTICAL ANGLES SEE DET. 40/HSR-104

38 REVISED DUCT WATERPROOFING
NOT TO SCALE



NOTES:
1. COVER FASTENER HOLES IN THE DUCT WITH PEEL AND STICK. INSTALL NEW 3" THICK ISOCYANURATE INSULATION ON THE SIDES AND BOTTOM OF THE DUCTS, AND TAPERED INSULATION SLOPING 1/4" PER FOOT, MINIMUM 3" THICK ON TOP OF THE DUCTS. COVER THE INSULATION WITH FULLY ADHERED 60 MIL F.R. EPDM.
2. WHERE THE DUCTS PENETRATE THE WALLS EXTEND THE NEW EPDM ONTO THE WALL ON ALL FOUR SIDES 5". INSTALL NEW BUILT IN CAP FLASHING ALONG THE TOP OF THE DUCT. INSTALL A CONTINUOUS TERMINATION BAR AND SEALANT ON THE SIDES AND BOTTOM.

39 REVISED DUCT PENETRATION
SCALE: N.T.S.

NOTES:
1. STRIP IN ACCESS DOOR FRAME WITH EPDM
2. INSULATION AND EPDM NOT SHOWN FOR CLARITY.
3. TO INSULATE AND COVER WITH EPDM SEE DETAIL 38/HSR-104

40 REVISED DOOR TO ACCESS PANEL
NOT TO SCALE

NOTES:
1. FOR RTU AND MAU COLUMNS FLASHING.
2. IF THERE IS A LONG DELAY OF MATERIAL DELIVERY MAKE THE ROOF WATERTIGHT AT BASE FLASHING BY: RE-INSTALLING SPRAY POLYURETHANE ROOF ON SPRAY POLYURETHANE ROOFS AND RE-INSTALLING BUR ON BUR WITH GRAVEL ROOFS.

41 REVISED COLUMN BASE FLASHING
SCALE: 0" 1" 2" 4" 8"

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JACK EISENBACH
No. 059445
LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BR SED NO.	44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO.	44-21-01-06-0-001-001 (HS-HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■HS SED NO.	44-21-01-06-0-001-040 (HS-HV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

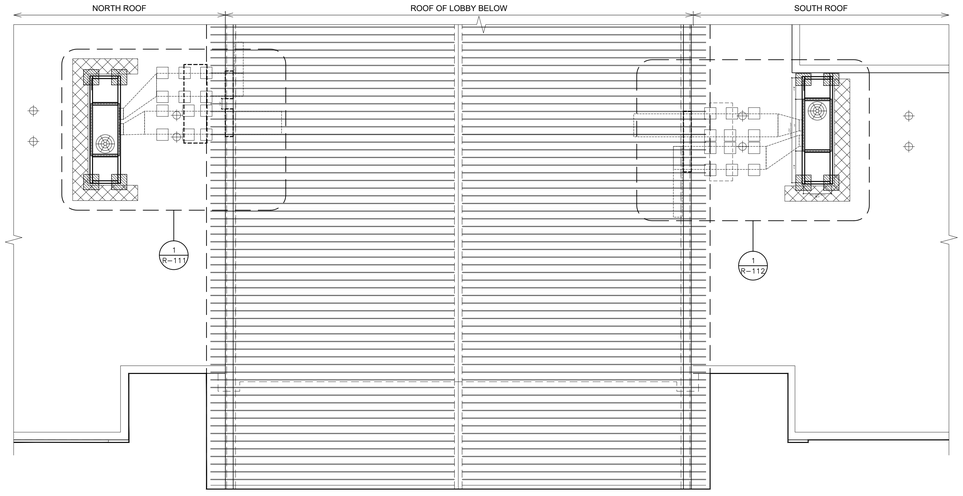
PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
WARWICK VALLEY HIGH SCHOOL
89 SANFORDVILLE RD
WARWICK NY 10990

ROOF DETAILS

SHEET NO.
HSR104

RLE PATH -L:\Current Projects\Warwick HS 2021\2 Drawings\HSR-104 High School Date 3d-.dwg



1 PARTIAL ROOF PLAN @ LOBBY
SCALE: 1/8" = 1'-0"

LOBBY ROOF NOTES:

1. THE WORK IN THIS AREA INCLUDES ASBESTOS CONTAINING VERMICULITE BLOWN-IN INSULATION.
2. THE VERMICULITE LIES INSIDE THE WALLS AS INDICATED ON DRAWINGS HS M-103.
3. THE WORK SHALL BE PERFORMED BY THE ROOFING CONTRACTOR INSIDE A TWO-LAYER TENT FOR REMOVAL OF THE VERMICULITE FROM THE EXTERIOR OF THE BUILDING.
4. COORDINATE ALL REMOVAL AND REPLACEMENT WORK WITH THE ARCHITECT'S DRAWING.
5. THE CONTRACTOR SHALL REMOVE BRICK AT THE LOCATIONS INDICATED ON THE ABOVE REFERENCED DRAWING TO ALLOW FOR THE INSTALLATION OF NEW DUCTWORK. THE REMOVAL OF BRICK SHALL INCLUDE AT A MINIMUM ONE COURSE OF BRICK WIDER AND HIGHER THAN THE SIZE OF DUCTWORK BEING INSTALLED. THIS ADDITIONAL BRICK REMOVAL IS TO ALLOW FOR THE CUTTING AND REMOVAL OF THE INTERIOR BLOCK WALL ONCE ABATEMENT IS COMPLETE. THE CONTRACTOR SHALL ENSURE THAT ENOUGH BRICK IS REMOVED TO ALLOW FOR THIS WORK TO BE PERFORMED UNENCUMBERED.
6. ONCE THE BRICK HAS BEEN REMOVED, THE CONTRACTOR SHALL REMOVE ALL VERMICULITE INSIDE THE CAVITY FROM THE TOP OF THE CHASE DOWN TO ONE LAYER OF BRICK BELOW THE OPENING CREATED BY THE ABATEMENT.
7. ALL MATERIALS REMOVED AS PART OF THIS WORK SHALL BE DISPOSED OF AS ASBESTOS CONTAMINATED.
8. THE CONTRACTOR SHALL THEN PROVIDE BLOWN-IN CLOSED CELL FOAM INSULATION TO FILL UP AND ENCLOSE THE CAVITY ABOVE THE OPENING, UP TO THE ROOF AND ALSO BELOW AND ON THE SIDES TO ENCLOSE THE BULK VERMICULITE THAT REMAINS IN THE LOWER PORTION OF THE CAVITY.
9. ONCE THE FOAM HAS BEEN INSTALLED, THE FAÇADE OF THE EXPOSED INTERIOR BLOCK WALL SHALL BE SCRUBBED CLEAN OF ANY TRACES OF VERMICULITE, FOLLOWED BY THE CLEANING OF THE TENT ITSELF PRIOR TO A FINAL VISUAL BY THE ONSITE PROJECT MONITOR.
10. THE AREA SHALL BE CLEARED BY COLLECTION OF A SET OF AGGRESSIVE PCM AIR SAMPLES.
11. AFTER CLEARANCE HAS BEEN ACHIEVED, THE TENT SHALL BE REMOVED, AND THE CONTRACTOR SHALL PROCEED WITH INTERIOR BLOCK REMOVAL AS NOTED.
12. UPON COMPLETION OF THE DUCT INSTALLATION BY THE HVAC CONTRACTOR, THE ROOFING CONTRACTOR SHALL INFILL THE SPACE AROUND THE DUCT AS SPECIFIED ON DRAWING D/A-113.

ROOF NOTES:

1. CONTRACTOR TO COORDINATE PLATFORM DIMENSIONS WITH RTU AND MAU MANUFACTURER CUTS.
2. ALL STEEL TO BE ASTM A992. PIPE POSTS TO BE ASTM A500.
3. SUBMIT SHOP DRAWINGS WITH FIELD MEASURED DIMENSIONS.
4. ALL STEEL TO BE GALVANIZED.
5. KB ON DENOTES ∠3"x3"x1/4" DIAGONAL BRACE. (TYPICAL)
6. BOLTS TO BE GALVANIZED 3/4"ø A325 WITH GALVANIZED WASHERS. WELDS TO UTILIZE E70XX ELECTRODES.
7. SECURE EQUIPMENT TO DUNNAGE WITH MECHANICAL FASTENERS.
8. PROVIDE NEOPRENE PADS UNDER EQUIPMENT TO REDUCE VIBRATION.
9. EXISTING ROOFING & INSULATION TO BE REMOVED & REPLACED, EXCEPT WHERE NOTED.
10. COORDINATE FINAL LOCATION OF H.V. UNIT & DUNNAGE WITH EXISTING STRUCTURE, EXISTING ROOF DRAINS AND EXISTING ROOF EQUIPMENT.
11. EXISTING ROOF STRUCTURE HAS BEEN REVIEWED AND EVALUATED AND HAS THE CAPACITY TO SUPPORT ADDITIONAL IMPOSED LOADS.
12. CONTRACTOR TO PROTECT EXISTING ROOF(S) DURING CONSTRUCTION. CONTRACTOR TO PROVIDE 1" RIDGE INSULATION AND 1/2" EXTERIOR PLYWOOD ROOF PROTECTION AT ALL WORK AREAS. CONTRACTOR TO LIMIT ROOF TRAFFIC ON EXISTING ROOFS.

LEGEND:

- EXISTING ROOF DRAIN
- V — EXISTING VENT PIPE
- EXISTING EXHAUST FAN.
- P — PITCH POCKET. SEE DETAIL 8/HS-A101.
- E — EXISTING ROOF LADDER
- AC — EXISTING HVAC UNIT
- AC — EXISTING AC UNIT
- SL — EXISTING SKYLIGHT
- WALKWAY PADS. SEE SPECIFICATIONS
- RTU — ROOF TOP UNIT.
- H — EXISTING ROOF HATCH.

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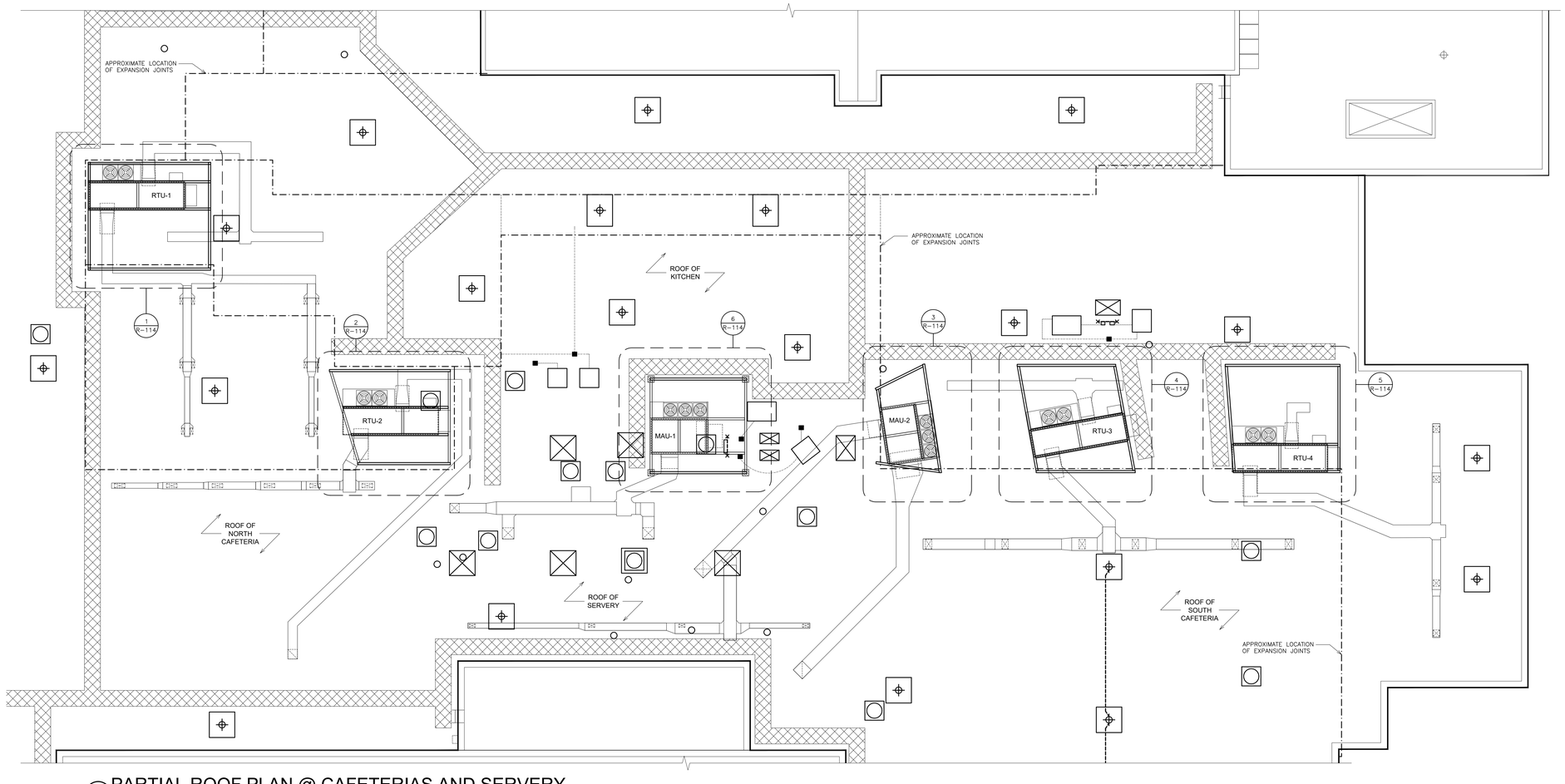
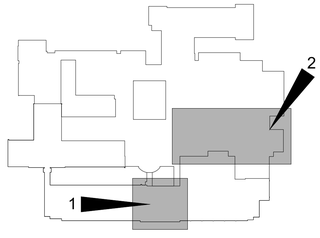


2 PARTIAL ROOF PLAN @ CAFETERIAS AND SERVERY
SCALE: 1/8" = 1'-0"



HIGH SCHOOL KEY PLAN
SCALE N.T.S.

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

- ☐ BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
- ☐ FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
- ■ HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL ROOF PLANS

SHEET NO.
HS R-110

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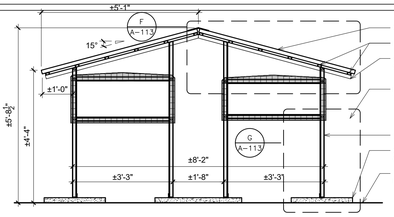
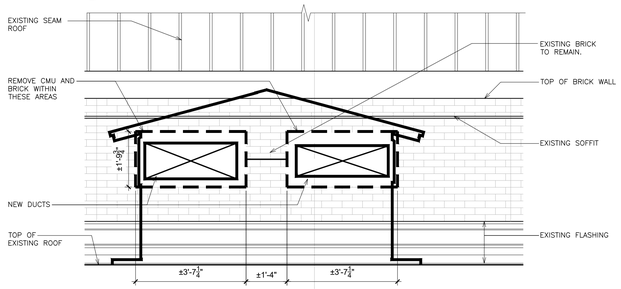
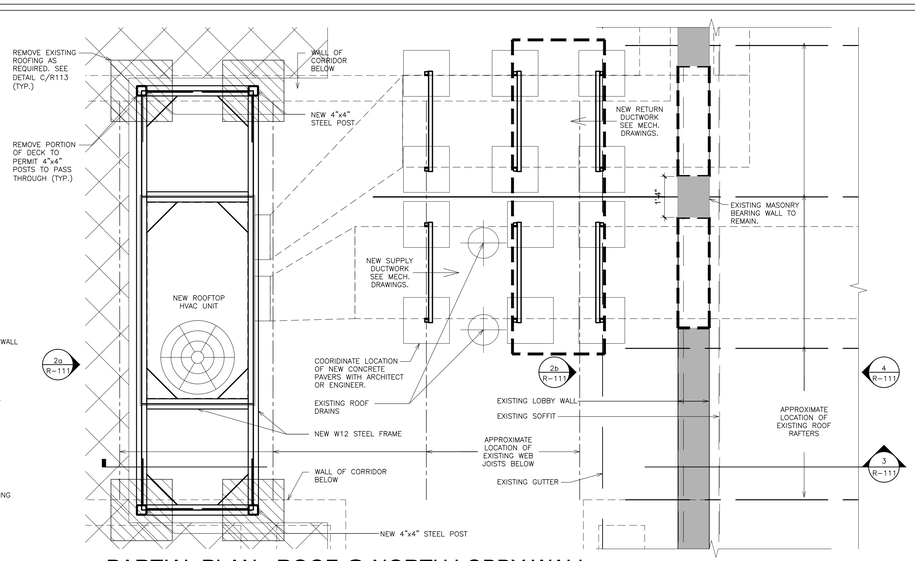


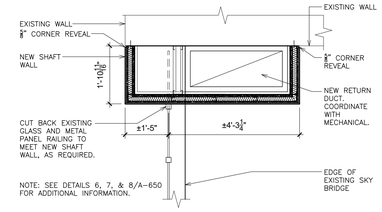
2c SECTION - NORTH DUCT CANOPY
SCALE: 1/2" = 1'-0"



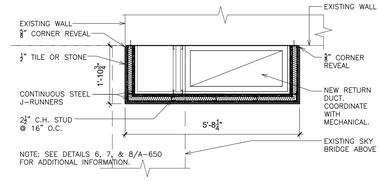
2b EXTERIOR ELEVATION - NORTH LOBBY WALL
SCALE: 1/2" = 1'-0"



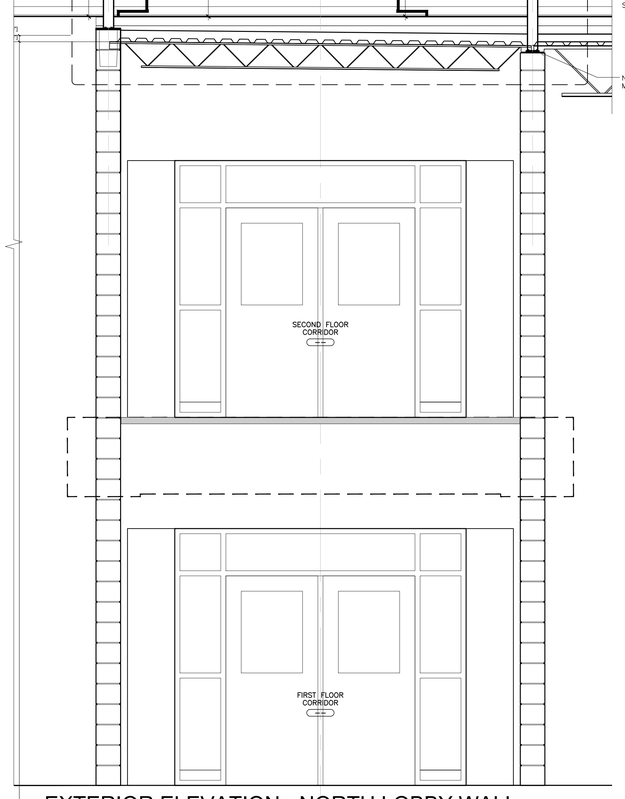
1 PARTIAL PLAN - ROOF @ NORTH LOBBY WALL
SCALE: 1/2" = 1'-0"



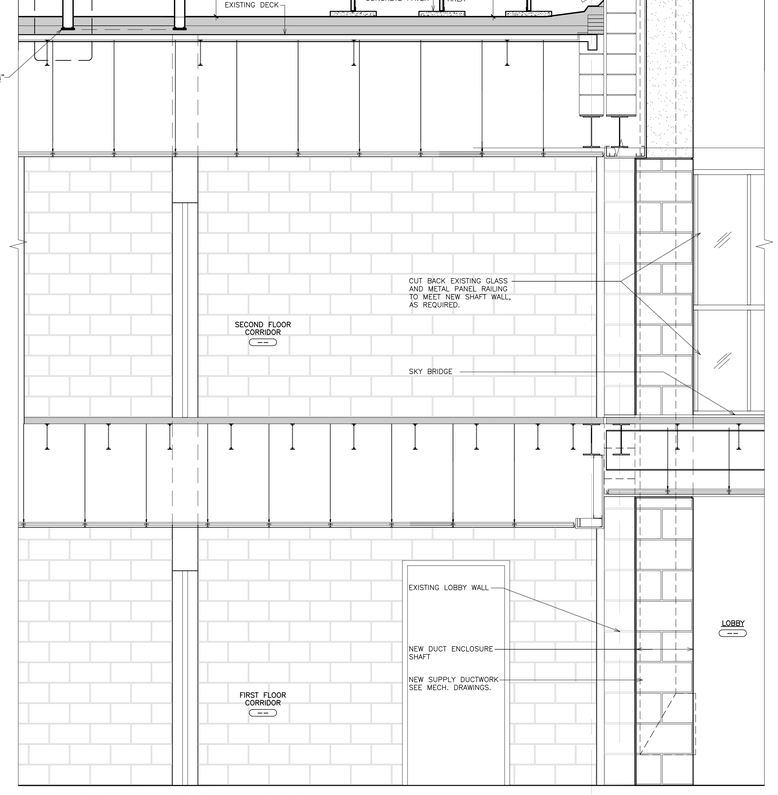
5 DETAIL - SHAFT @ SKY BRIDGE OF SECOND FLOOR
SCALE: 1/2" = 1'-0"



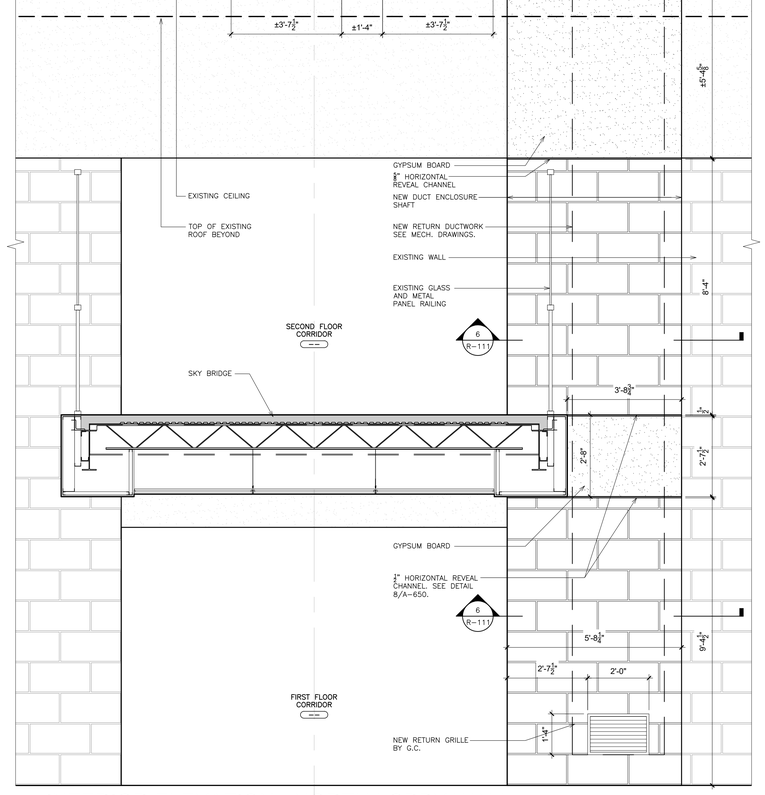
6 DETAIL - SHAFT @ GROUND FLOOR
SCALE: 1/2" = 1'-0"



2a EXTERIOR ELEVATION - NORTH LOBBY WALL
SCALE: 1/2" = 1'-0"



3 SECTION - NORTH LOBBY WALL
SCALE: 1/2" = 1'-0"



4 INTERIOR ELEVATION - NORTH LOBBY WALL
SCALE: 1/2" = 1'-0"

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
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☐HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE

LOBBY NORTH ROOF PLAN, ELEVATIONS, AND SECTIONS

SHEET NO.

HS R-111

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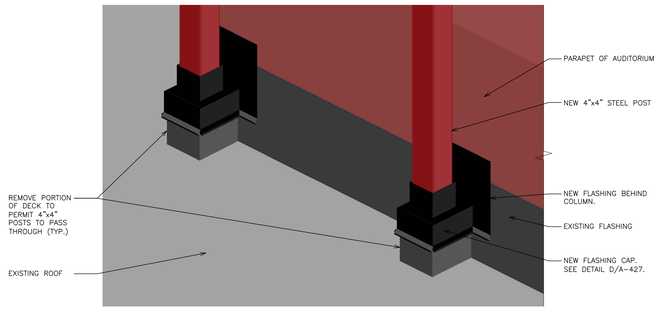
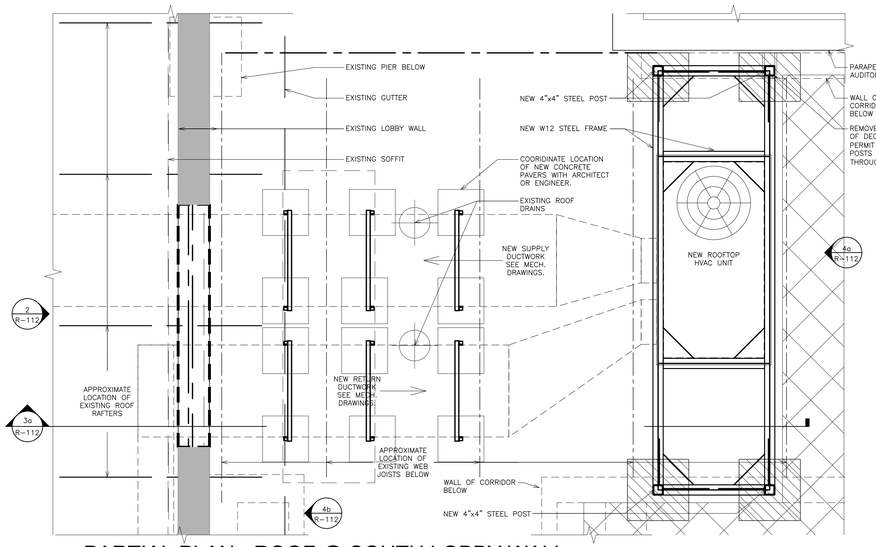
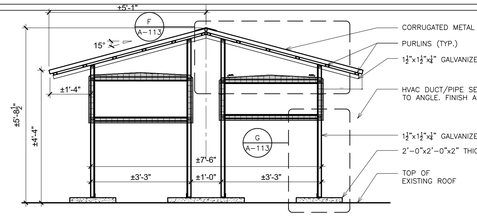


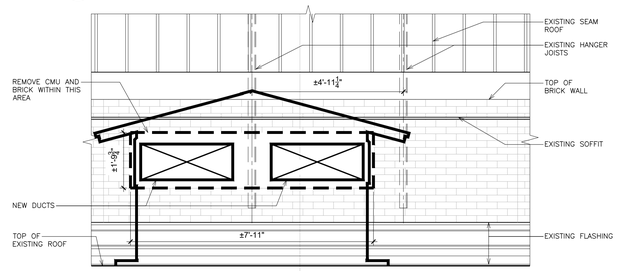
5 AXONAMETRIC - POST AT WALL
SCALE: N.T.S.



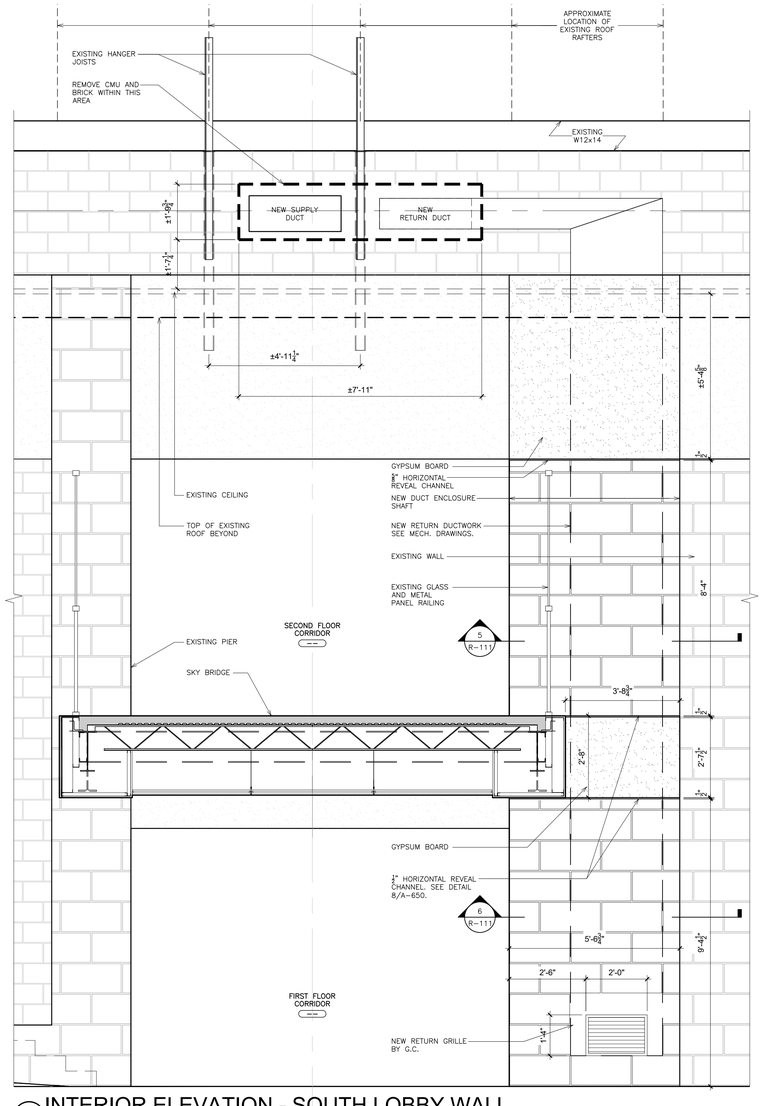
1 PARTIAL PLAN - ROOF @ SOUTH LOBBY WALL
SCALE: 1/2" = 1'-0"



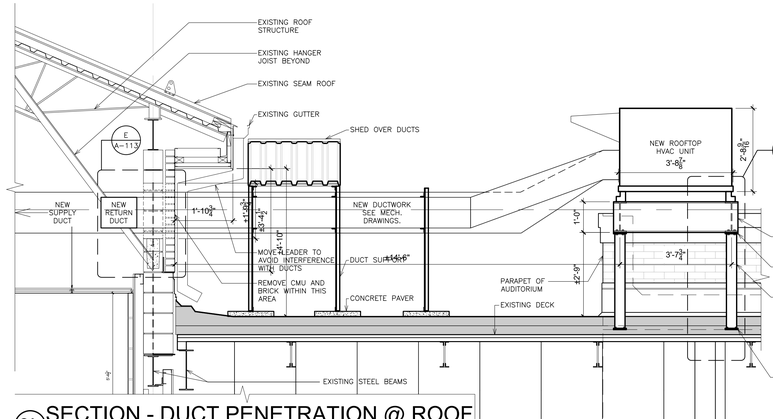
4c SECTION - SOUTH DUCT CANOPY
SCALE: 1/2" = 1'-0"



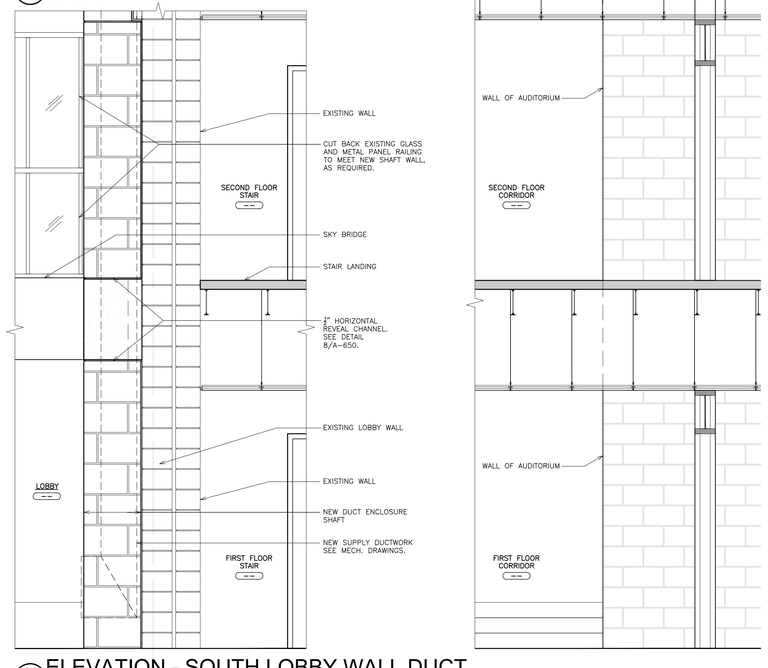
4b EXTERIOR ELEVATION - SOUTH LOBBY WALL
SCALE: 1/2" = 1'-0"



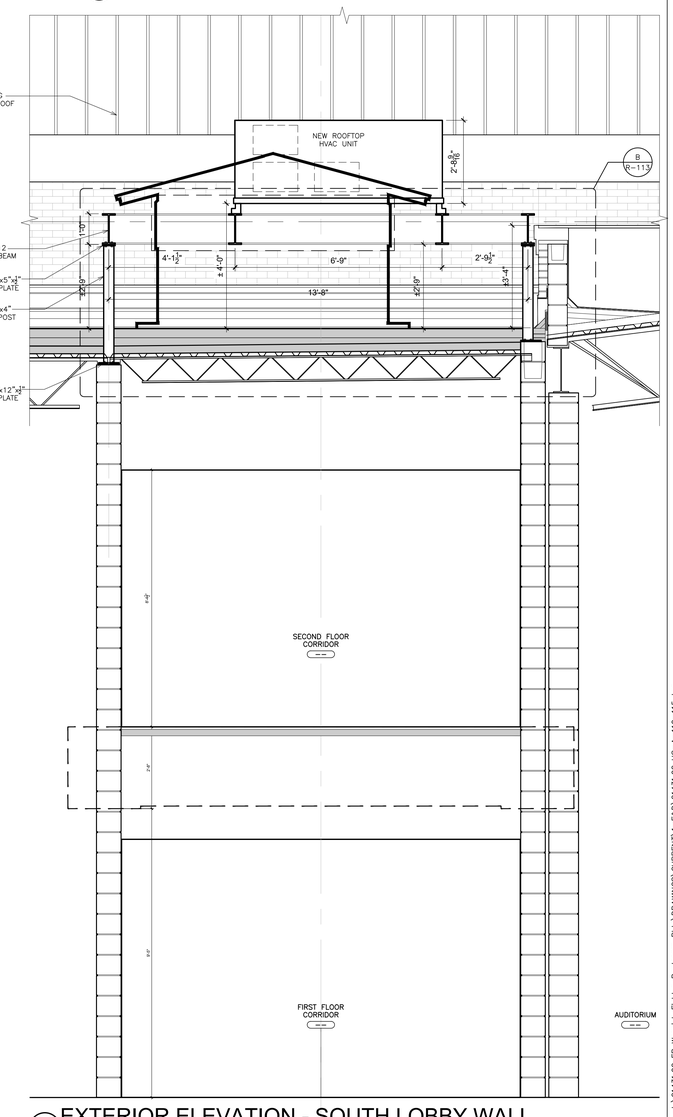
2 INTERIOR ELEVATION - SOUTH LOBBY WALL
SCALE: 1/2" = 1'-0"



3b SECTION - DUCT PENETRATION @ ROOF
SCALE: 1/2" = 1'-0"



3a ELEVATION - SOUTH LOBBY WALL DUCT
SCALE: 1/2" = 1'-0"



4a EXTERIOR ELEVATION - SOUTH LOBBY WALL
SCALE: 1/2" = 1'-0"

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STAMP
REGISTERED ARCHITECT JOHN D'ANGELO 026145 STATE OF NEW YORK

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

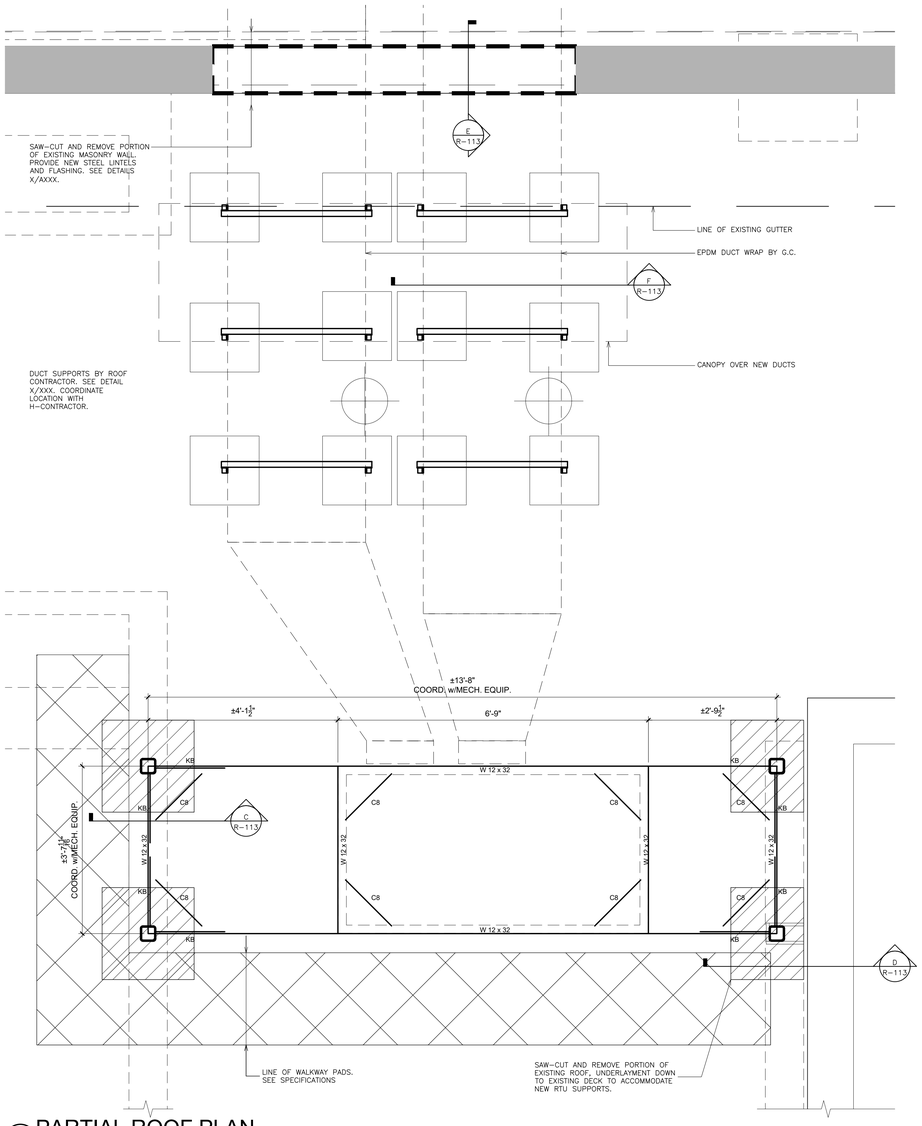
☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

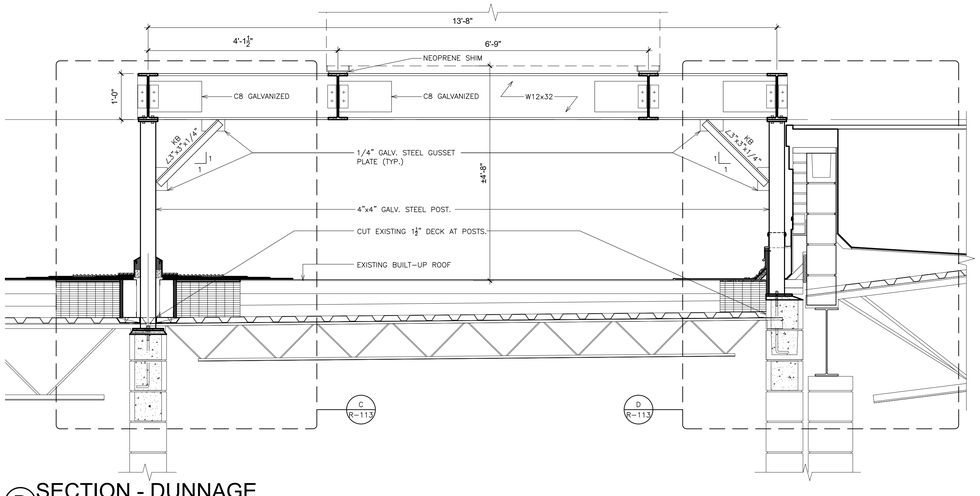
SHEET TITLE
LOBBY SOUTH ROOF PLAN, ELEVATIONS, AND SECTIONS

SHEET NO.
HS R-112

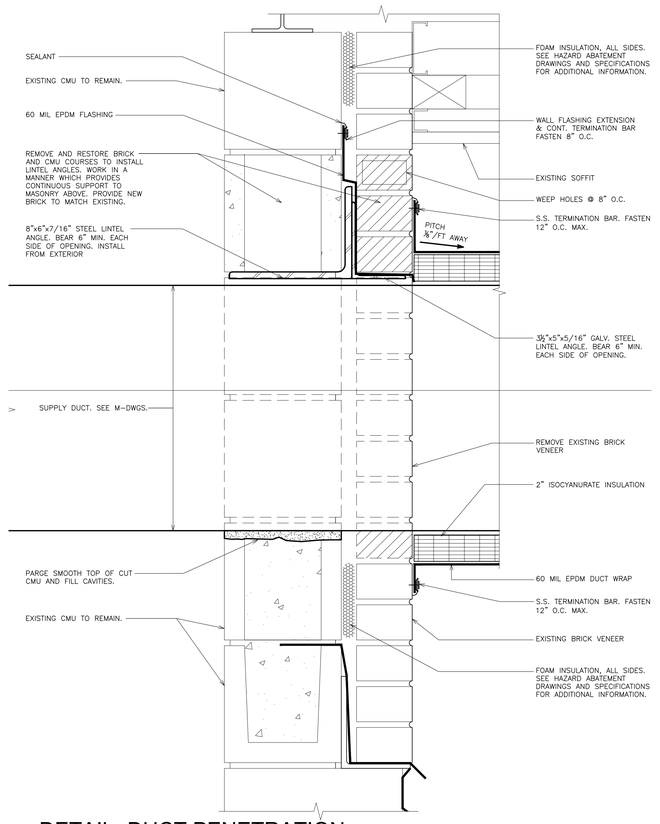
FILE PATH – I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-F&D\21431.02 HS-A-110-115.dwg



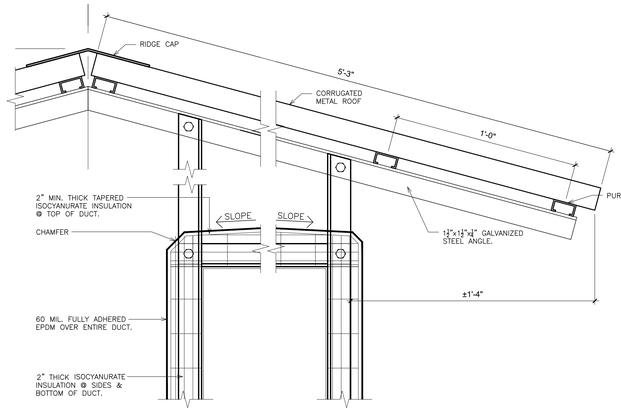
A PARTIAL ROOF PLAN
SCALE: 3/4" = 1'-0"



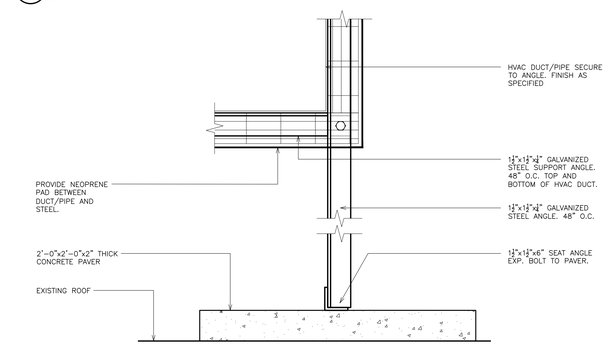
B SECTION - DUNNAGE
SCALE: 3/4" = 1'-0"



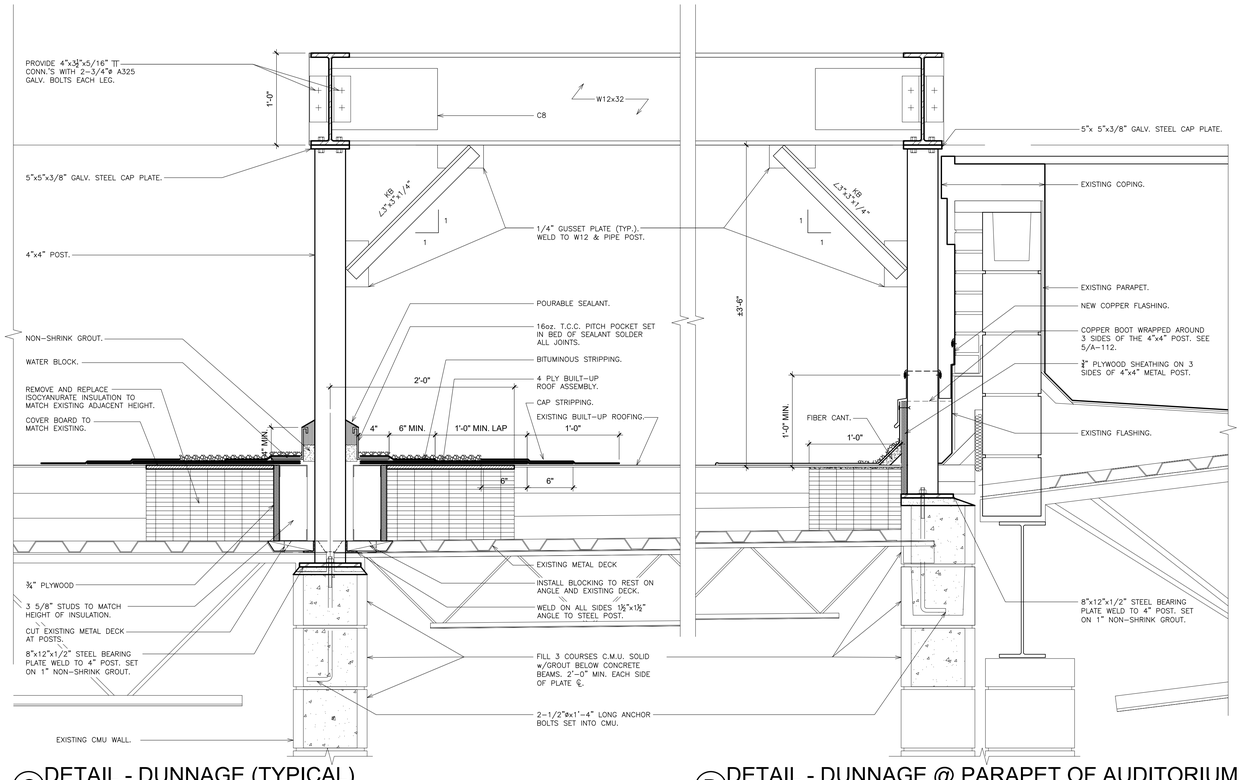
E DETAIL- DUCT PENETRATION
SCALE: 3"= 1'-0"



F DETAIL- DUCT INSULATION/CANOPY
SCALE: 3" = 1'-0"



G DETAIL- DUCT/PIPE SUPPORT (TYPICAL)
SCALE: 3" = 1'-0"



C DETAIL - DUNNAGE (TYPICAL)
SCALE: 1 1/2" = 1'-0"

D DETAIL - DUNNAGE @ PARAPET OF AUDITORIUM
SCALE: 1 1/2" = 1'-0"

NOTE: ALL EXPOSED STEEL TO BE HOT DIPPED GALVANIZED.

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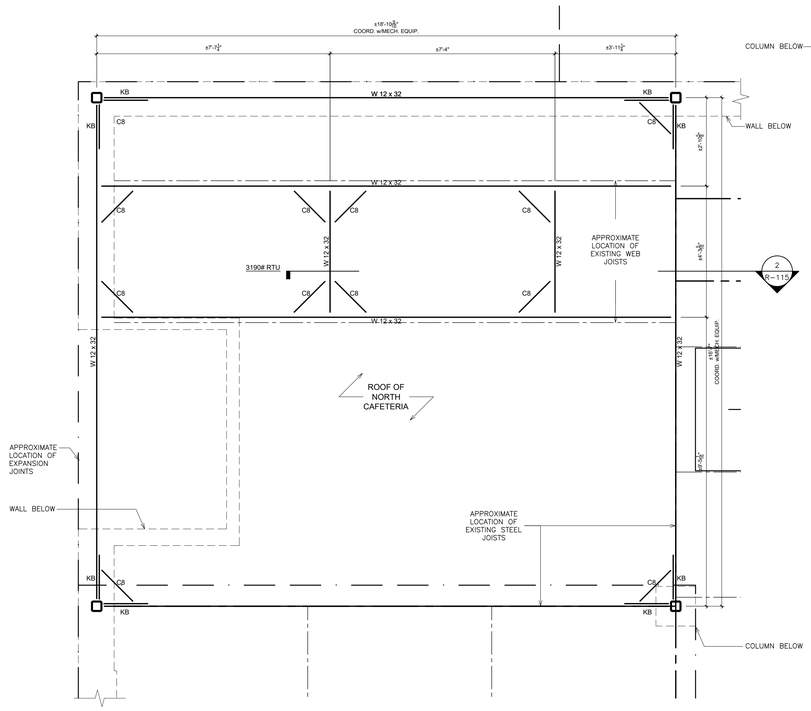
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

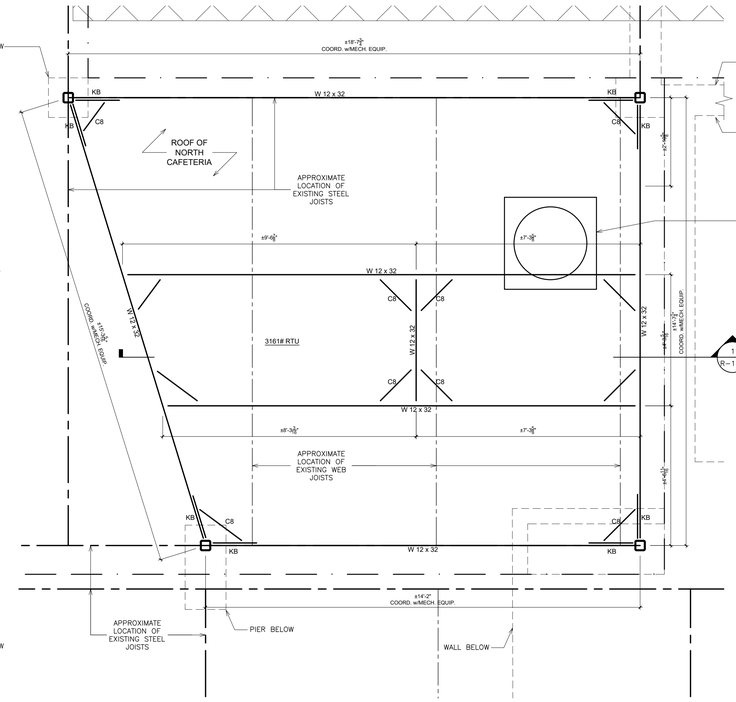
SHEET TITLE
LOBBY RTU ROOF PLAN, WALL SECTION, AND DUNNAGE DETAILS

SHEET NO.
HS R-113

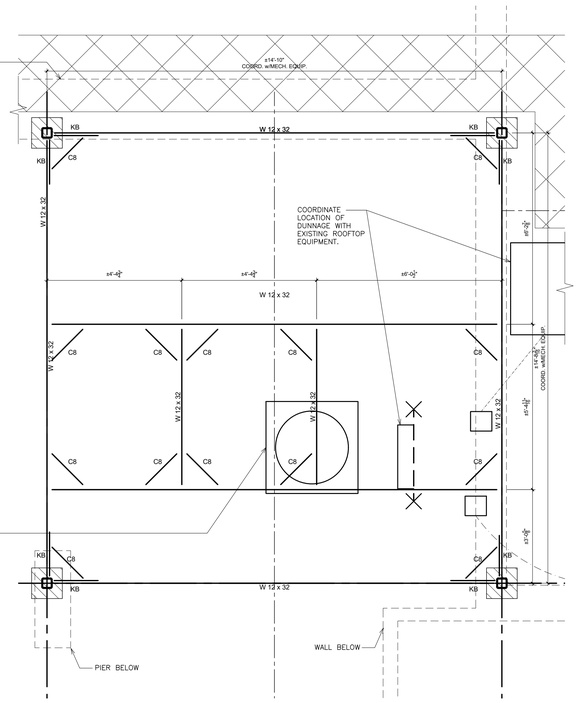
FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-FF&D\21431.02 HS-A-110-115.dwg



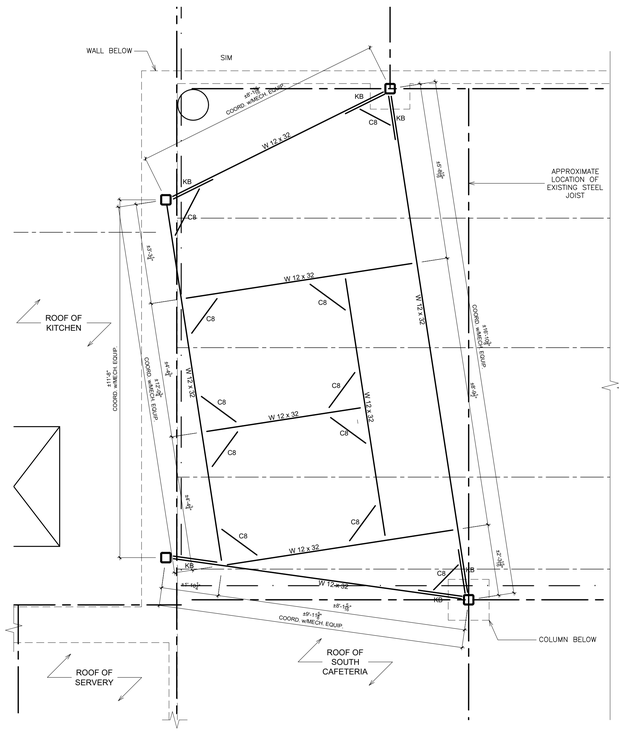
1 NORTH CAFETERIA RTU-1
SCALE: 1/2" = 1'-0"



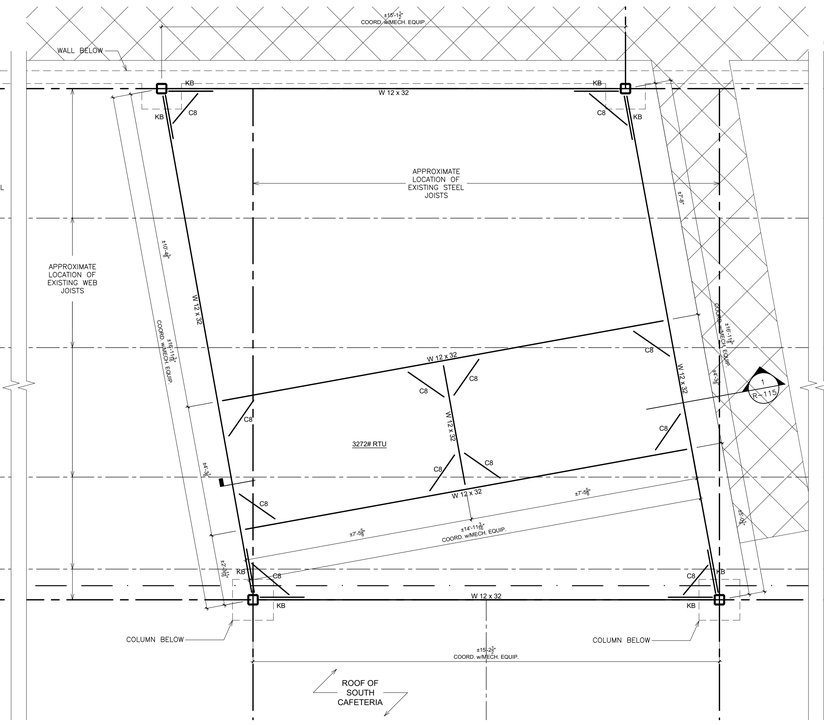
2 NORTH CAFETERIA RTU-2
SCALE: 1/2" = 1'-0"



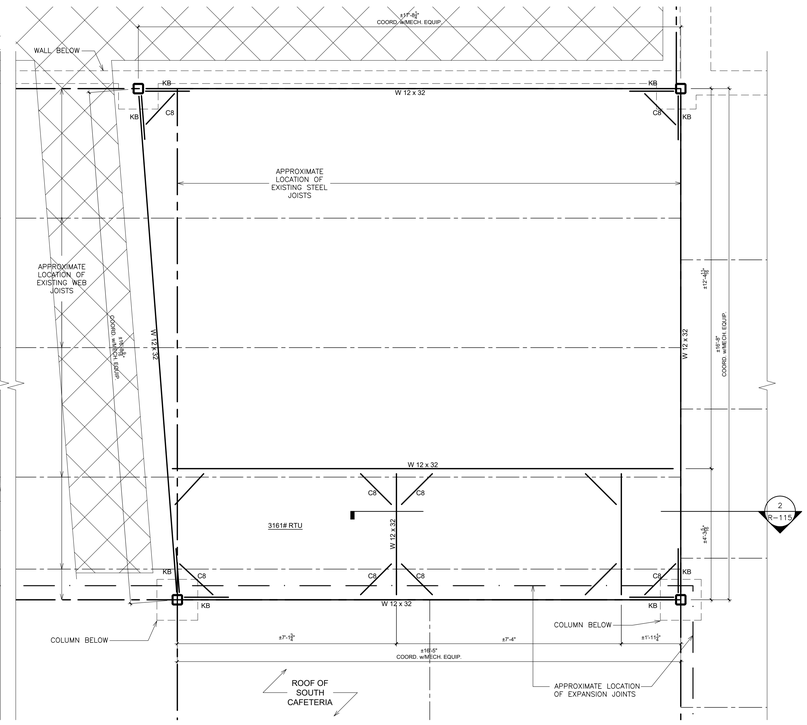
6 KITCHEN/SERVERY MAU-1
SCALE: 1/2" = 1'-0"



3 SOUTH CAFETERIA - SERVERY MAU-2
SCALE: 1/2 = 1'-0"



4 SOUTH CAFETERIA RTU-3
SCALE: 1/2" = 1'-0"



5 SOUTH CAFETERIA RTU-4
SCALE: 1/2" = 1'-0"

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REGISTERED ARCHITECT JOHN D'ANGELO 032145 STATE OF NEW YORK

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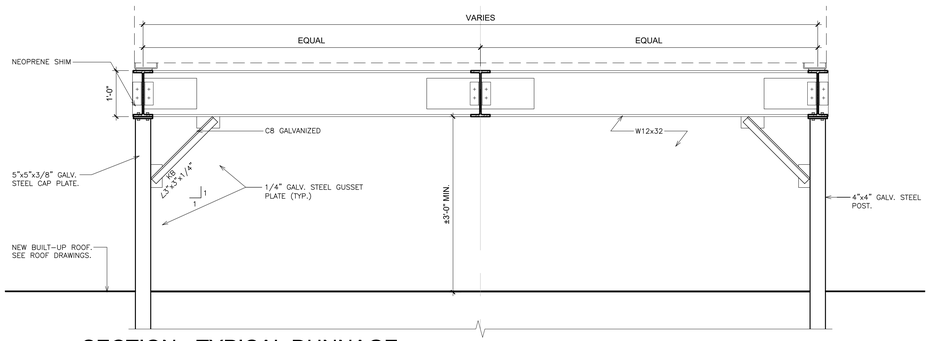
☐HS SED NO. 44-21-01-06-0-001-040 (HS=NEW HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

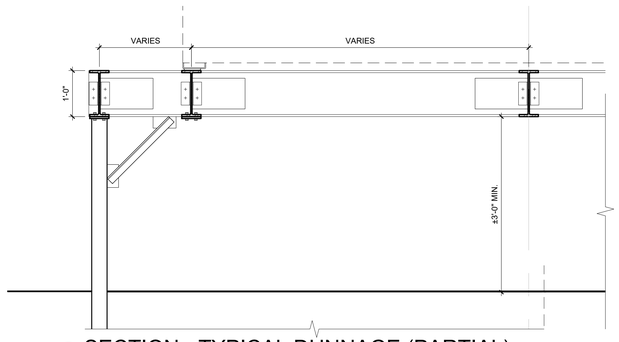
SHEET TITLE
ROOF PLAN AT CAFETERIA & KITCHEN DUNNAGES

SHEET NO.
HS R-114

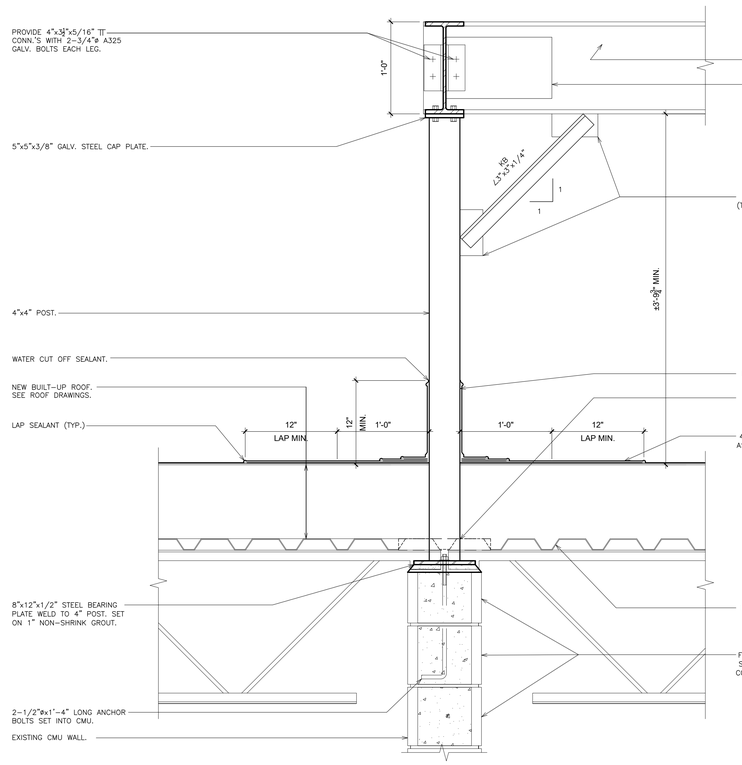
FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-F&D\21431.02 HS-A-110-115.dwg



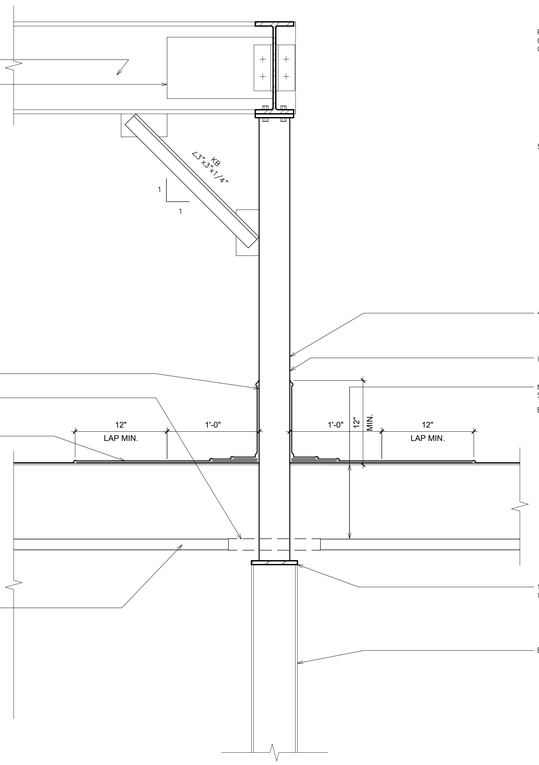
1 SECTION - TYPICAL DUNNAGE
SCALE: 3/4" = 1'-0"



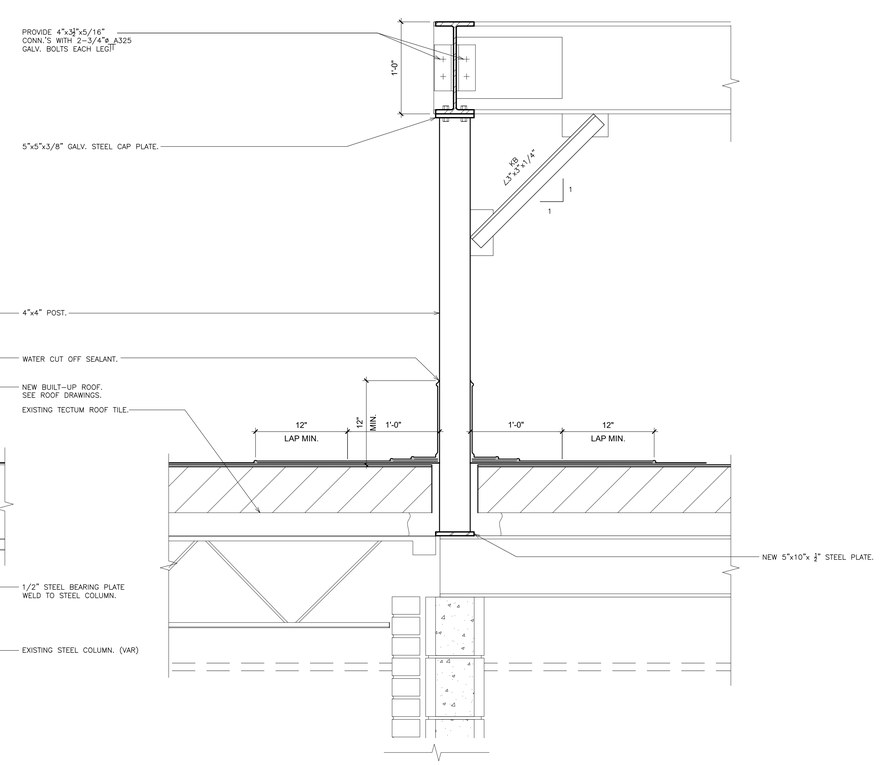
2 SECTION - TYPICAL DUNNAGE (PARTIAL)
SCALE: 3/4" = 1'-0"



A DETAIL - DUNNAGE ON BEARING WALL
SCALE: 1 1/2" = 1'-0"



B DETAIL - DUNNAGE ON STEEL COLUMN
SCALE: 1 1/2" = 1'-0"



C DETAIL - DUNNAGE ON TECTUM PANEL
SCALE: 1 1/2" = 1'-0"

NOTE: ALL EXPOSED STEEL TO BE HOT DIPPED GALVANIZED.

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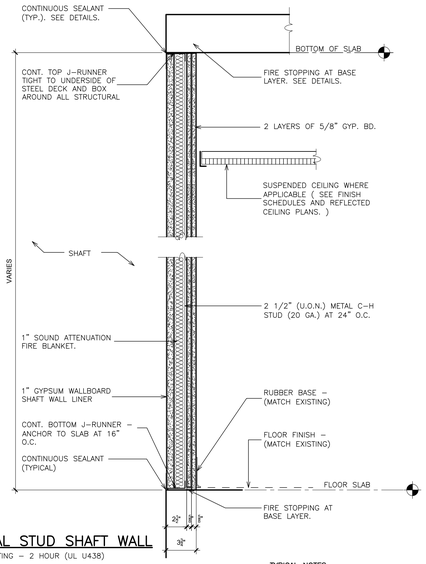
☐HS SED NO. 44-21-01-06-0-001-040 (HS=NV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
CAFETERIA & SERVERY - CURB & DUNNAGE DETAILS

SHEET NO.
HS R-115

FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-FnD\21431.02 HS-A-110-115.dwg



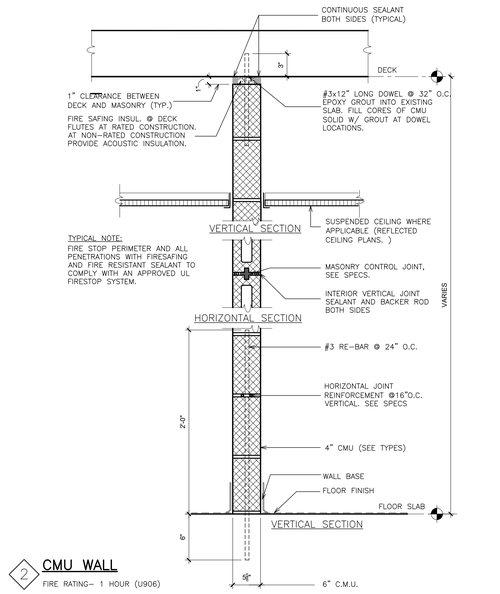
1 METAL STUD SHAFT WALL
FIRE RATING – 2 HOUR (UL U438)

1A METAL STUD SHAFT WALL
FIRE RATING – 1 HOUR REQUIRED

1 PARTITIAON TYPES
SCALE: N.T.S.

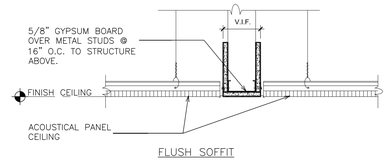
TYPICAL NOTES:

1. FIRE STOP PERIMETER AND ALL PENETRATIONS WITH FIRESAFING AND FIRE RESISTANT SEALANT TO COMPLY WITH AN APPROVED UL FIRESTOP SYSTEM.
2. COORDINATE SIZE AND CONFIGURATION OF SHAFT TRANSITION WITH DUCT CONTRACTOR



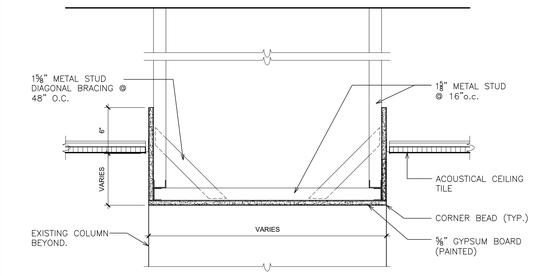
2 CMU WALL
FIRE RATING– 1 HOUR (U906)

NOTE:
INSTALL STEEL ANGLE LINTELS FOR PENETRATIONS THROUGH CONCRETE BLOCK WALL. 3½"x3½"x⅜" ANGLES FOR EVERY 4" OF MASONRY TO SUPPORT, FIRESTOP AND SEAL @ PERIMETER OF PENETRATION. (NOTE: MAX. OPENING WITHOUT LINTEL–12" WIDTH, 12" HEIGHT.)



5 DETAIL - GRID TRANSITION SOFFIT
SCALE: 1 1/2" = 1'-0"

FLUSH SOFFIT



9 DETAIL - GRID TRANSITION SOFFIT
SCALE: 1 1/2" = 1'-0"

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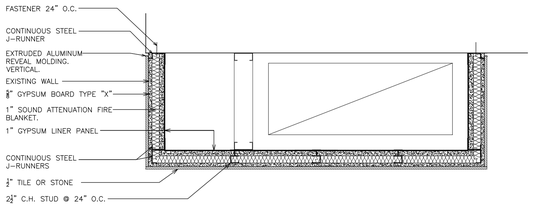
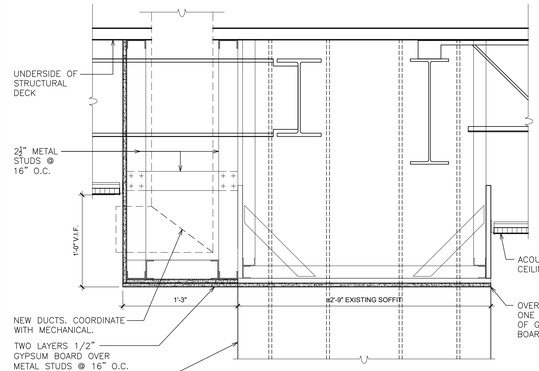
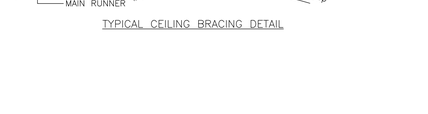
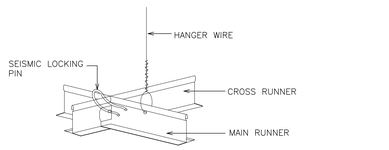


6 DETAIL - 1 HOUR RATED SHAFT
SCALE: 1" = 1'-0"



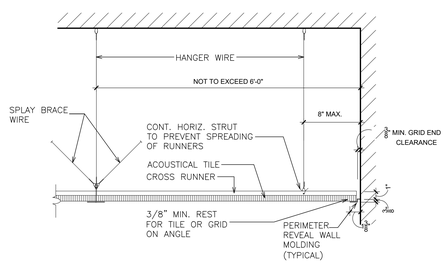


TYPICAL CEILING BRACING DETAIL

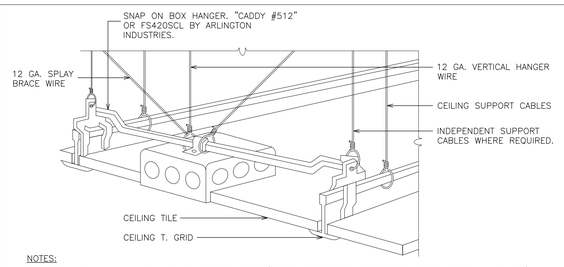


SPLICES AND INTERSECTIONS OF RUNNERS SHALL BE ATTACHED WITH MECHANICAL INTERLOCKING CONNECTORS SUCH AS POP RIVETS, SCREWS, PINS, PLATES WITH BENT TABS, OR OTHER APPROVED CONNECTORS. DESIGN CONNECTORS FOR 2x DESIGN LOAD OR ULTIMATE AXIAL TENSION OR COMPRESSION (MINIMUM 60 POUNDS)

LOCKING PIN DETAIL

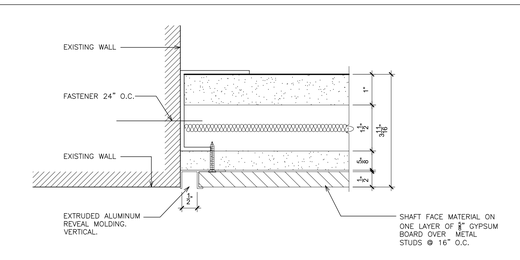


2 SEISMIC DETAIL @ ALL NEW SUSPENSION CEILINGS
SCALE: N.T.S.

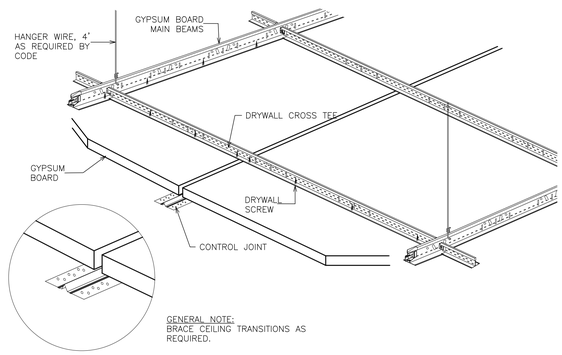


NOTES:
1. FOR USE WITH NEW CEILING MOUNTED DEVICES (SMOKE DETECTORS, RECEPTACLES, SPEAKERS, FANS ETC.).
2. INDEPENDENT SUPPORT FROM BUILDING STRUCTURE REQUIRED FOR ITEMS EXCEEDING 20 LBS. AND FANS.

3 TYPICAL DETAIL - CEILING MOUNTED DEVICE
NOT TO SCALE

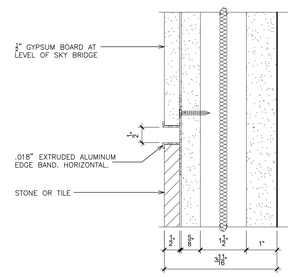


7 DETAIL - WALL PANELS
SCALE: 6" = 1'-0"

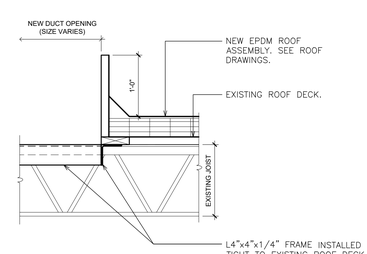


GENERAL NOTE:
BRACE CEILING TRANSITIONS AS REQUIRED.

4 DETAIL - CONTROL JOINT FOR DRYWALL CEILING SYSTEM
SCALE: 3" = 1'-0"



8 DETAIL - WALL PANELS
SCALE: 6" = 1'-0"



11 ROOF @ DUCT PENETRATION - TYPICAL
SCALE: 1" = 1'-0"

10 DETAIL- SOFFIT @ CAFETERIA - NEW DUCTS
SCALE: N.T.S.

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Eisenbach & Rulnick Engineering, P.C.
291 Genesee Street – Utica, NY 13501
Ph.315-735-1916 Fax.315-735-6360
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REGISTERED ARCHITECT JOHN D'ANGELO STATE OF NEW YORK

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

☐BB SED NO.	44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO.	44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO.	44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE

PARTITION TYPES AND MISCELLANEOUS DETAILS

SHEET NO.

HS R-650

FILE PATH –I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-F&D\21431.02 HS-A-650.dwg

CODE INFORMATION

1. USE GROUP CLASSIFICATION [BCNYS-311 & 312]

FIRE SEPARATION DISTANCE: ≥ 30' — GROUP 'U' UTILITY & MISCELLANEOUS

2. CONSTRUCTION TYPE [BCNYS-602]

MINIMUM TYPE REQUIRED: TYPE-VB
UNPROTECTED / NON-COMBUSTIBLE:

3. BUILDING HEIGHT [BCNYS-504.0]

ALLOWABLE HEIGHT: (STORY/FEET) 1 / 40'-0"
ACTUAL HEIGHT: (STORY/FEET) 1 / 15'-8"

4. BUILDING AREA [BCNYS-506.0]

A) ALLOWABLE BUILDING AREA PER TABLE 506.2: 5,500 S.F./FL
B) ACTUAL NET BUILDING AREA: 752 S.F.

5. OCCUPANCY LOAD [BCNYS-1004]

STORAGE - OCCUPANCY LOAD FACTOR: 300 GROSS SQ. FT. / PERSON.

6. EGRESS WIDTH [BCNYS-1005.1] (WITHOUT SPRINKLER SYSTEM)

STAIRWAYS 0.3 INCHES / OCCUPANT
OTHER EGRESS COMPONENTS 0.2 INCHES / OCCUPANT

7. EXIT ACCESS TRAVEL DISTANCE [BCNYS-1016.1]

OCCUPANCY	TRAVEL DISTANCE
U	300 FEET MAX.

7A. COMMON PATH OF EGRESS TRAVEL [BCNYS-1006.2]

1. 100 FEET MAXIMUM IF OCCUPANCY LOAD LESS THAN OR EQUAL TO 30.

8. FIRE RESISTANT RATING OF BUILDING ELEMENTS TYPE - VB

A) STRUCTURAL FRAME INCLUDING COLUMNS, GIRDERS AND TRUSSES — 0 HRS.
B) BEARING WALLS
EXTERIOR — 0 HRS.
INTERIOR — 0 HRS.
C) NON-BEARING WALLS AND PARTITIONS
EXTERIOR — 0 HRS.
D) NON-BEARING WALLS AND PARTITIONS
INTERIOR — 0 HRS.
E) FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS — 0 HRS.
F) ROOF CONSTRUCTION INCLUDING SUPPORTING BEAM AND JOISTS — 0 HRS.

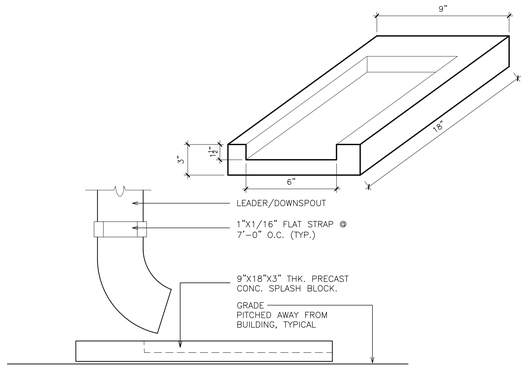
9. FIRE PROTECTION SYSTEM (BCNYS-901)

A) SUPPRESSION SYSTEM - NONE
B) NOTIFICATION / ALARMS
C) DETECTION
D) PORTABLE FIRE EXTINGUISHER

ROOF LOAD SCHEDULE	
LIVE LOAD	30 PSF
ROOFING	5 PSF
CEILING	3 PSF
TOTAL	38 PSF

PROJECT DESIGN CRITERIA		
WIND DESIGN DATA		
BASIC WIND SPEED (3 SECOND GUST)	90 MPH	
WIND IMPORTANCE FACTOR Iw	1.00, II	
WIND EXPOSURE	B	
GROUND SNOW LOAD	30 PSF	
EARTHQUAKE DESIGN DATA		
SEISMIC IMPORTANCE FACTOR Ie	1.00, II	
SEISMIC DESIGN CATEGORY	IIA	

NOTES:
1. PROVIDE ¾" PLYWOOD ROOF DECK



3 DETAIL- LEADER & SPLASH BLOCK
SCALE: 3" = 1'-0"

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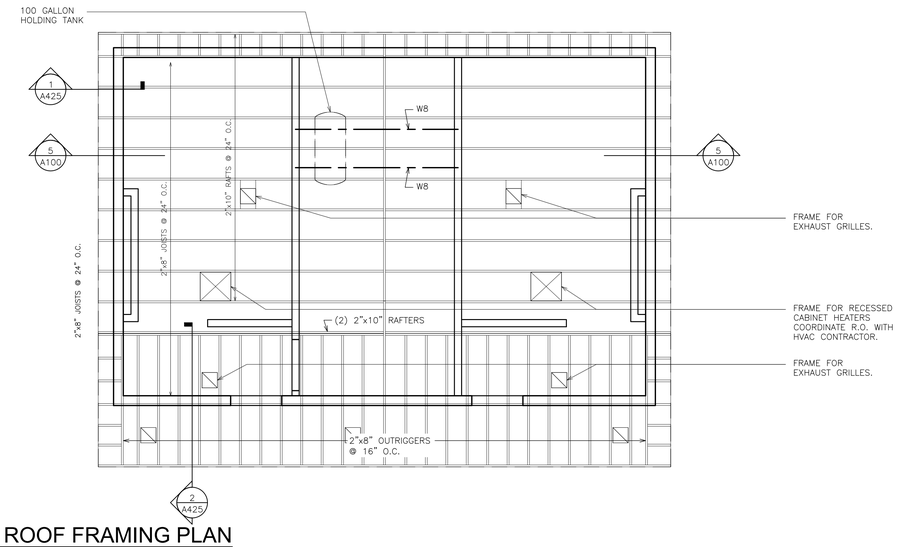
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
FIELD HOUSE - SITE PLAN

SHEET NO.
BB
A-10

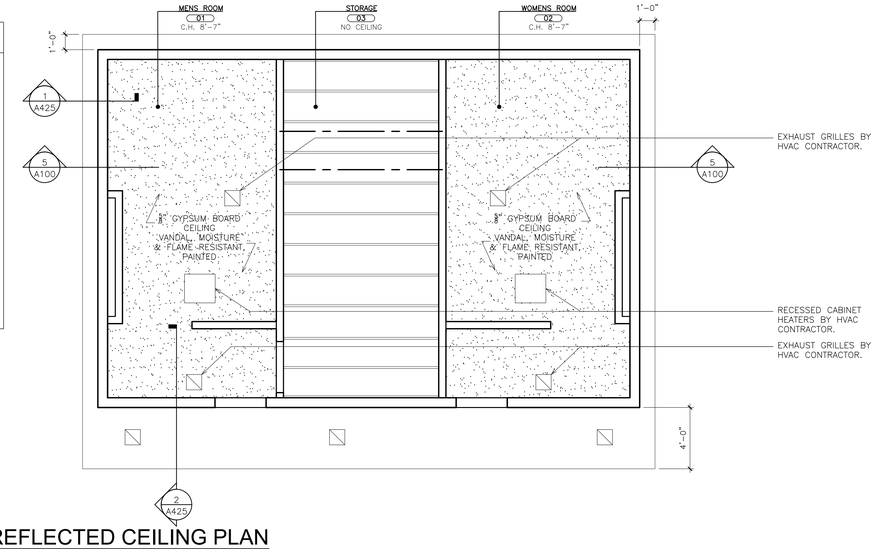
FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\I-F&D\21431.02-A10.dwg



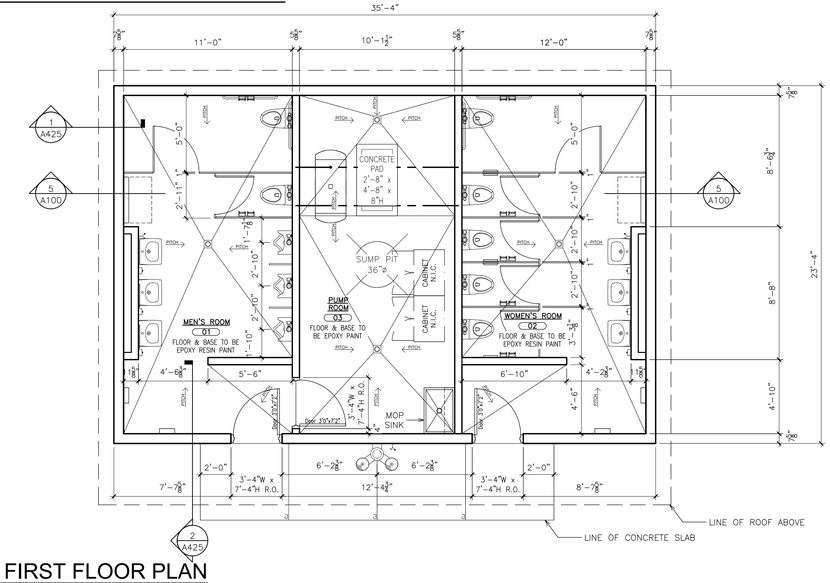
4 FIELD HOUSE- ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

CEILING LEGEND

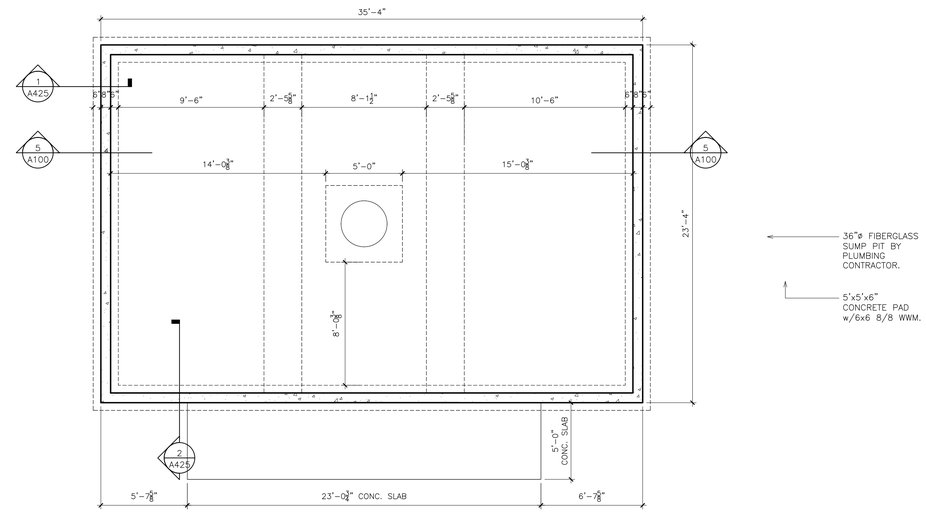
- 1'x4' PENDANT MOUNTED LIGHT FIXTURE
- 2'x4' OR 2'x2' RECESSED LIGHT FIXTURE
- WALL MOUNTED LIGHT FIXTURE
- GYPSUM BOARD CEILING AND SUSPENSION SYSTEM
- FIRE ALARM SMOKE DETECTOR
- CEILING MOUNTED EXIT SIGN
- CEILING REGISTER, SIZE VARIES. SEE MECHANICAL DRAWINGS.
- CEILING DIFFUSER, SIZE VARIES. SEE MECHANICAL DRAWINGS.



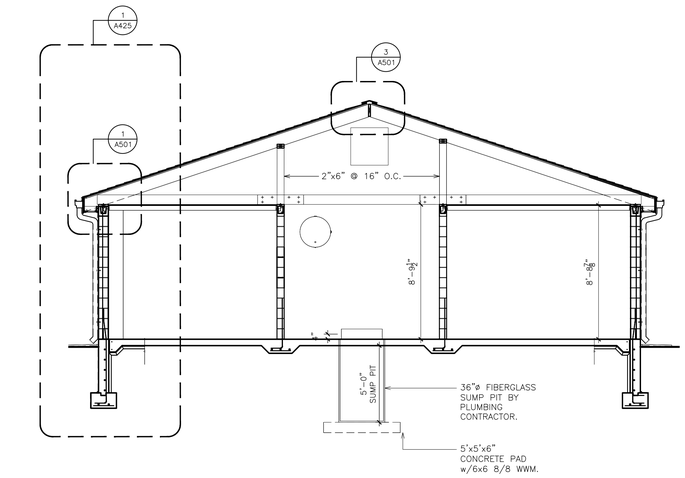
3 FIELD HOUSE- REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"



2 FIELD HOUSE- FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



1 FIELD HOUSE- FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



5 FIELD HOUSE- SECTION
SCALE: 1/2" = 1'-0"

0 2' 4' 8' 16'

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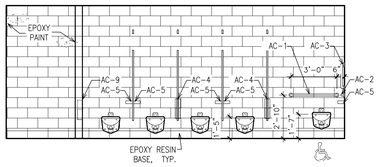
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

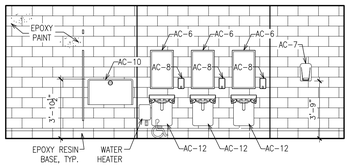
SHEET TITLE
FIELD HOUSE -
FOUNDATION PLAN, FIRST FLOOR
PLAN, REFLECTED CEILING PLAN,
ROOF FRAMING PLAN & BUILDING
SECTION

SHEET NO.
BB
A-100

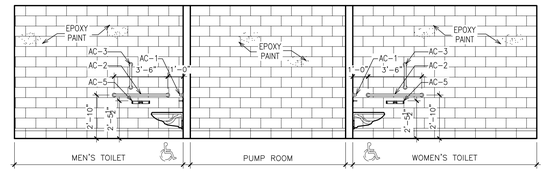
FILE PATH -\\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\T-F&D\21431.02-A100.dwg



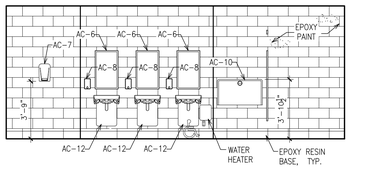
WOMEN'S
10 INTERIOR ELEVATIONS - WEST
SCALE: 1/4" = 1'-0"



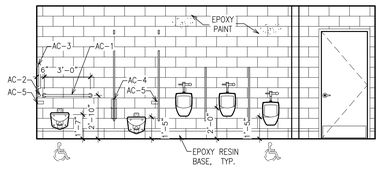
WOMEN'S
9 INTERIOR ELEVATIONS - EAST
SCALE: 1/4" = 1'-0"



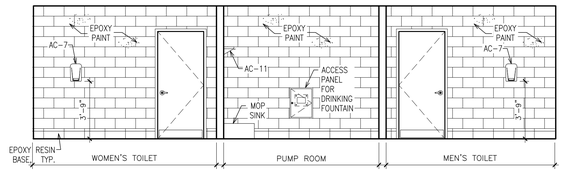
6 INTERIOR ELEVATIONS - NORTH
SCALE: 1/4" = 1'-0"



MEN'S
8 INTERIOR ELEVATIONS - WEST
SCALE: 1/4" = 1'-0"



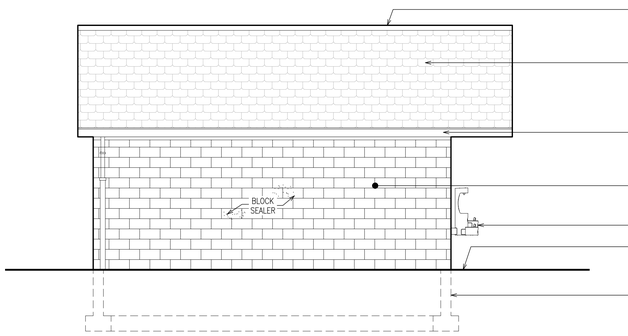
MEN'S
7 INTERIOR ELEVATIONS - EAST
SCALE: 1/4" = 1'-0"



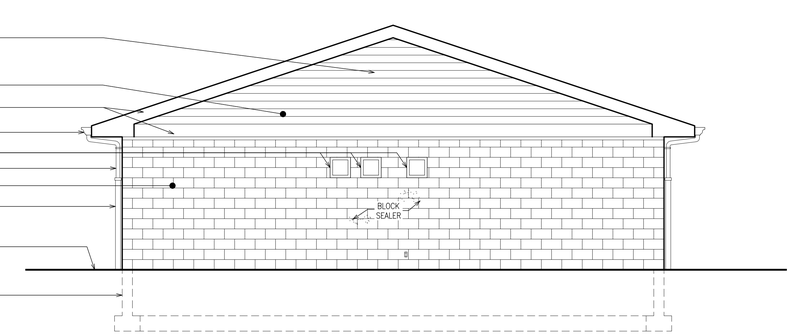
5 INTERIOR ELEVATIONS - SOUTH
SCALE: 1/4" = 1'-0"

ACCESSORY SCHEDULE
(REFER TO SPECIFICATIONS)

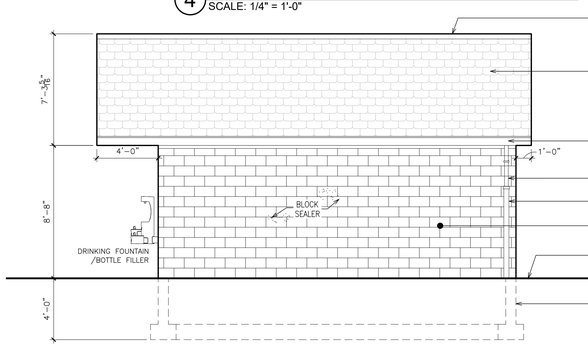
AC-1	GRAB BAR 36"
AC-2	GRAB BAR 42"
AC-3	GRAB BAR 18"
AC-4	PARTITION MOUNTED SANITARY NAPKIN DISPOSAL
AC-5	DOUBLE ROLL TOILET TISSUE DISPENSER
AC-6	MIRROR 18"X30"
AC-7	ELECTRIC HAND DRYER – SURFACE MOUNT
AC-8	LIQUID SOAP DISPENSER
AC-9	RECESSED SANITARY NAPKIN DISPOSAL
AC-10	BABY CHANGING STATION
AC-11	UTILITIES SHELF WITH MOP/BROOM HOLDER & RAG HOOKS
AC-12	LAVATORY PROTECTIVE ENCLOSURE



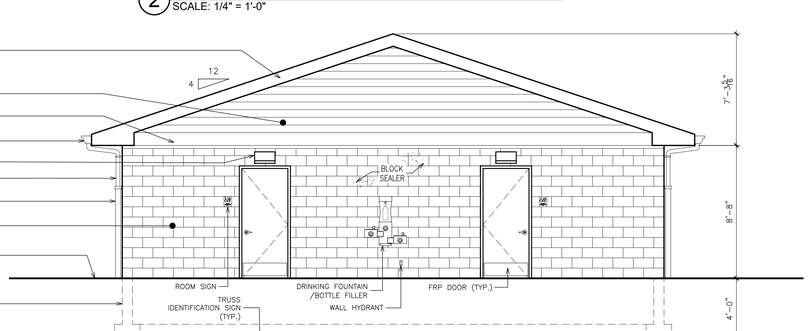
4 EXTERIOR ELEVATION - WEST SIDE
SCALE: 1/4" = 1'-0"



2 EXTERIOR ELEVATION - NORTH SIDE
SCALE: 1/4" = 1'-0"

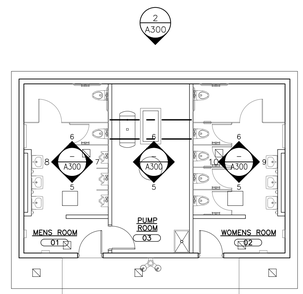


3 EXTERIOR ELEVATION - EAST SIDE
SCALE: 1/4" = 1'-0"



1 EXTERIOR ELEVATION - SOUTH SIDE
SCALE: 1/4" = 1'-0"

0 2' 4' 8' 16'



11 KEY PLAN
SCALE: 1/8" = 1'-0"

N

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REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
FIELD HOUSE - ELEVATIONS-EXTERIOR & INTERIOR

SHEET NO.
BB
A-300

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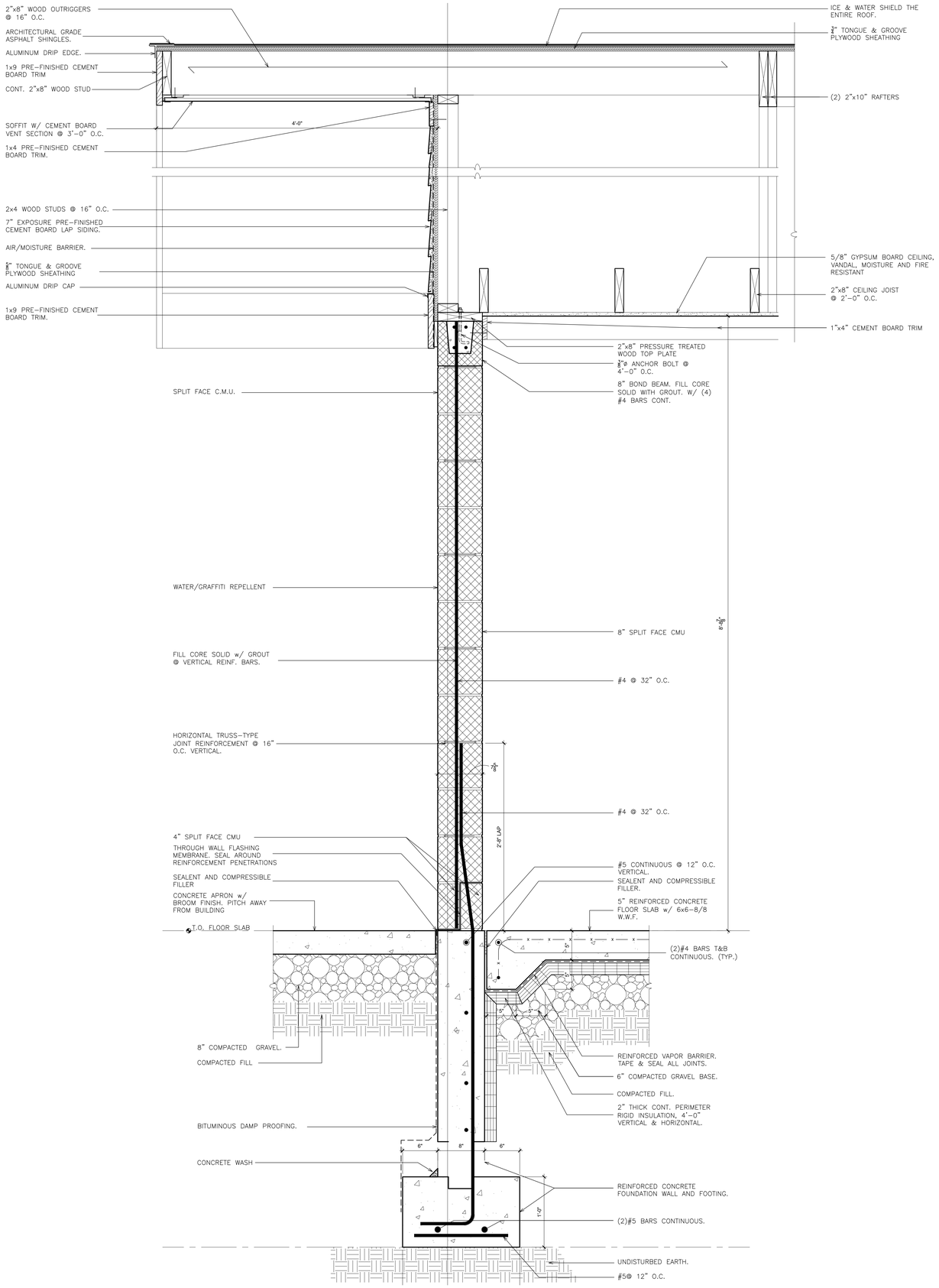
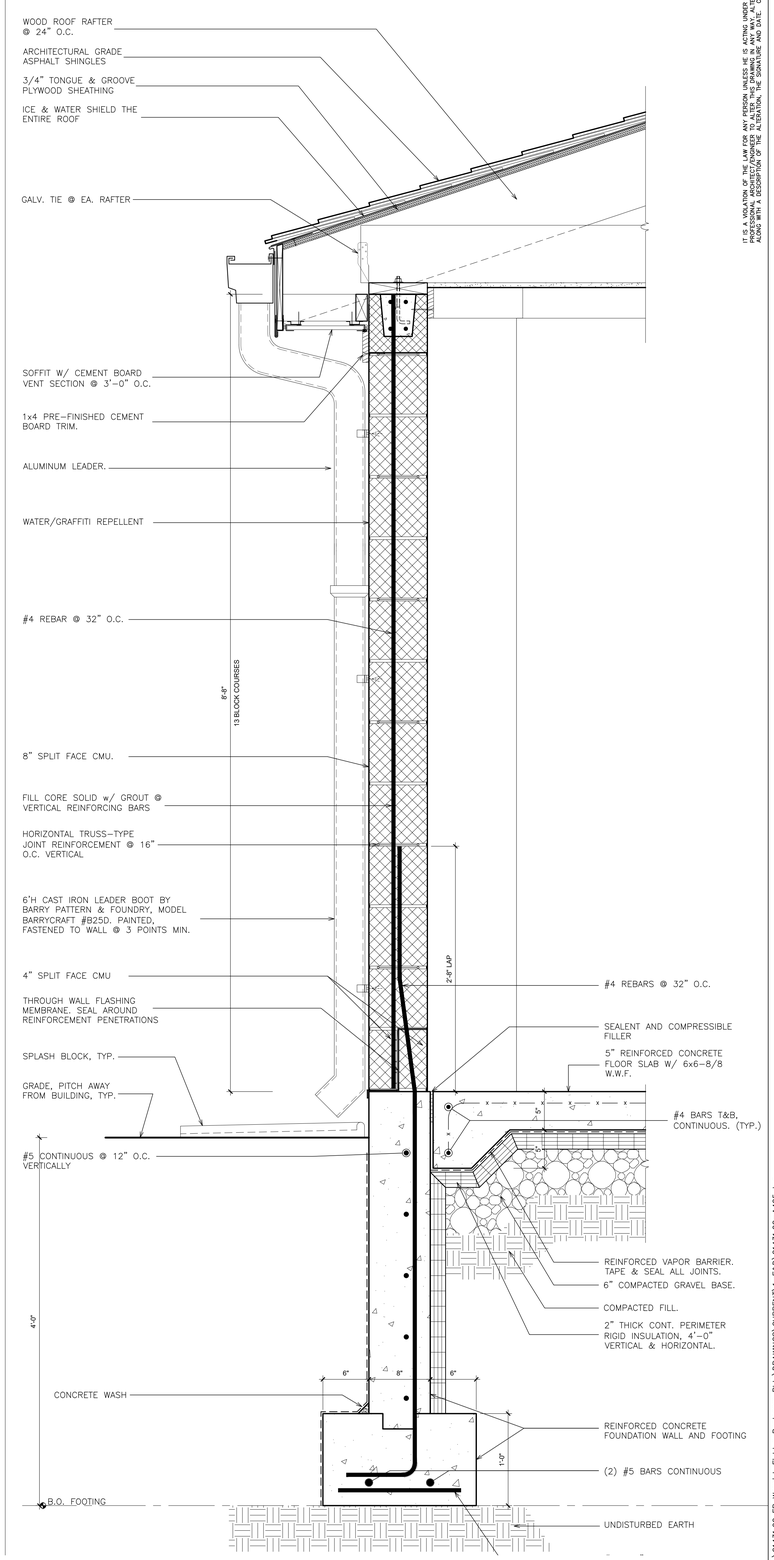


2 WALL SECTION
SCALE: 1 1/2" = 1'-0"



1 WALL SECTION
SCALE: 1 1/2" = 1'-0"

0 3" 6" 2'
1"

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DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
FIELD HOUSE-
WALL SECTIONS

SHEET NO.
BB
A-425

FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-FBD\21431.02-A425.dwg

CONTROL JOINT

TERMINATION @ TOP OF FOUNDATION WALL

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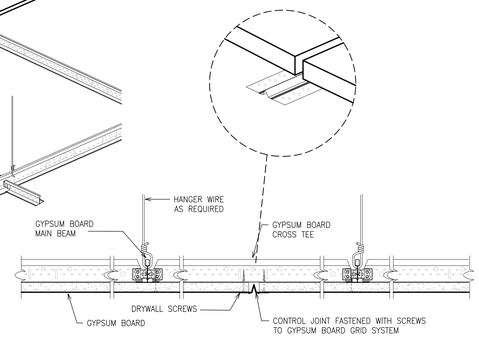
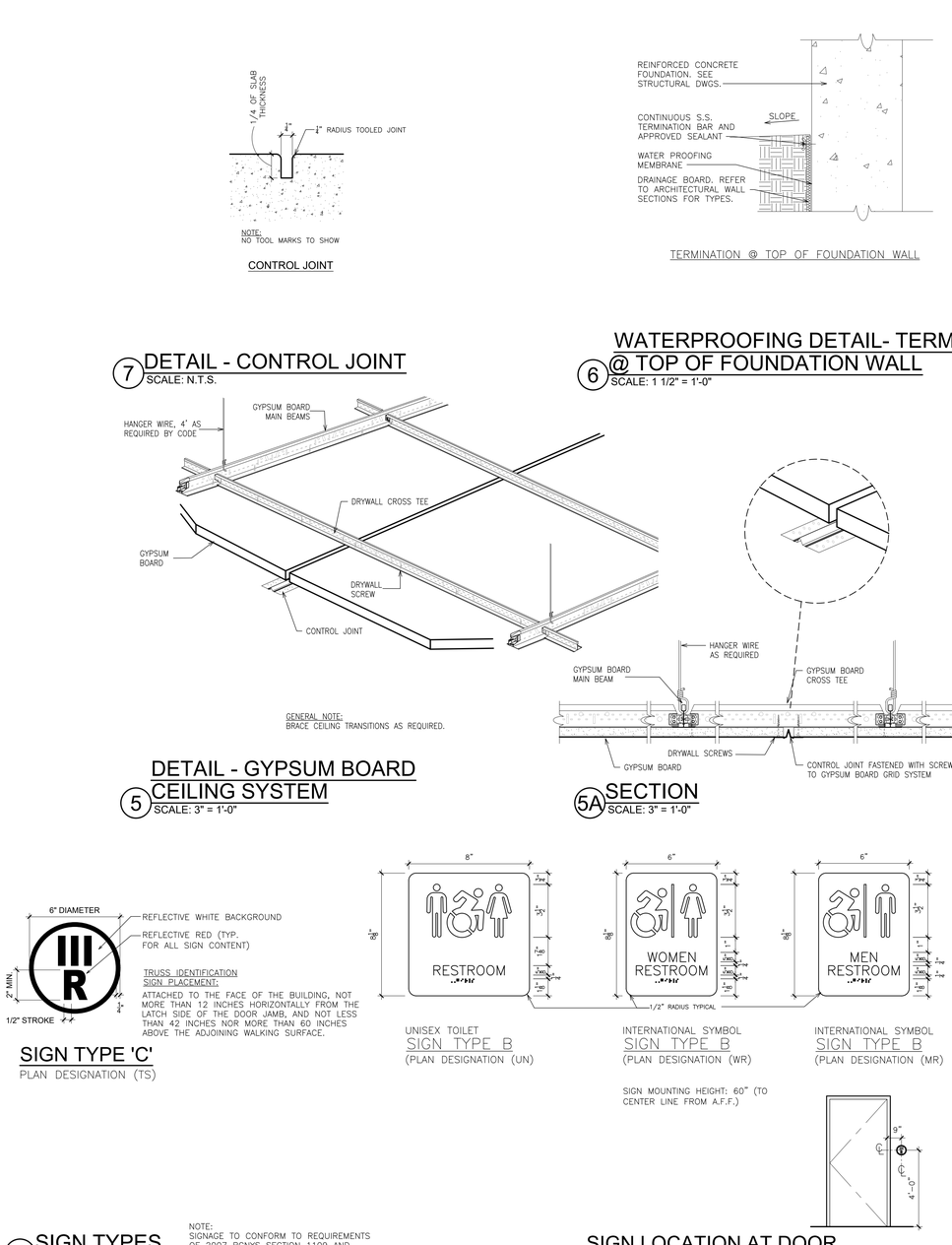
7 DETAIL - CONTROL JOINT
SCALE: N.T.S.

WATERPROOFING DETAIL- TERMIN. 6 @ TOP OF FOUNDATION WALL
SCALE: 1 1/2" = 1'-0"

GENERAL NOTE:
BRACE CEILING TRANSITIONS AS REQUIRED.

DETAIL - GYPSUM BOARD CEILING SYSTEM
5 SECTION
SCALE: 3" = 1'-0"





1 CMU WALL FIRE RATING– NONE	5 5/8"	6" C.M.U. (SIMILAR TO 2HR. RATED UL DESIGN U906)
3 CMU WALL FIRE RATING– NONE	7 5/8"	8" C.M.U. (SIMILAR TO 2HR. RATED UL DESIGN U906)

TRUSS IDENTIFICATION SIGN PLACEMENT:
ATTACHED TO THE FACE OF THE BUILDING, NOT MORE THAN 12 INCHES HORIZONTALLY FROM THE LATCH SIDE OF THE DOOR JAMB, AND NOT LESS THAN 42 INCHES NOR MORE THAN 60 INCHES ABOVE THE ADJOINING WALKING SURFACE.

SIGN TYPE 'C'
PLAN DESIGNATION (TS)

UNISEX TOILET
SIGN TYPE B
(PLAN DESIGNATION (UN)

INTERNATIONAL SYMBOL
SIGN TYPE B
(PLAN DESIGNATION (WR)

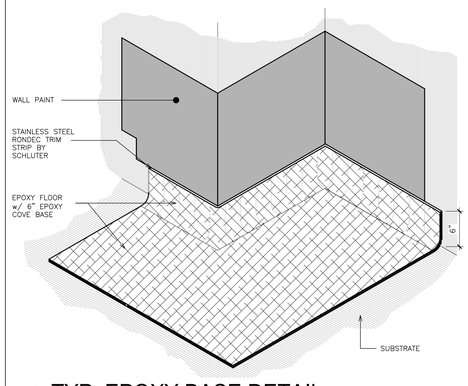
INTERNATIONAL SYMBOL
SIGN TYPE B
(PLAN DESIGNATION (MR)

SIGN MOUNTING HEIGHT: 60" (TO CENTER LINE FROM A.F.F.)

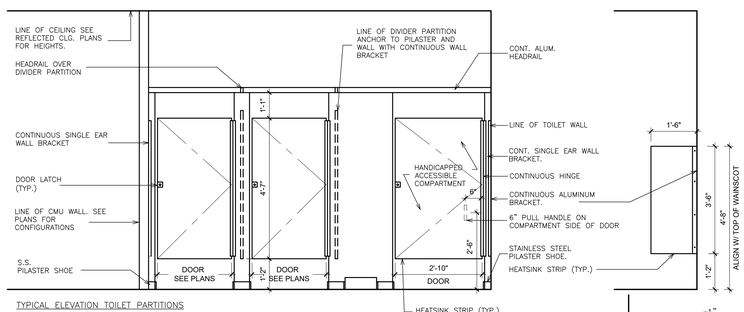
SIGN LOCATION AT DOOR

4 SIGN TYPES
SCALE: N.T.S.

NOTE:
SIGNAGE TO CONFORM TO REQUIREMENTS OF 2007 BCNYS SECTION 1109 AND ICC/ANSI A117.1–2003

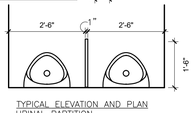


3 TYP. EPOXY BASE DETAIL
SCALE: N.T.S.



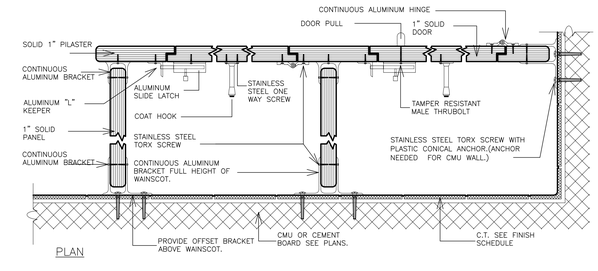
TYPICAL ELEVATION TOILET PARTITIONS

NOTES:
1. SEE PLANS FOR ACTUAL NUMBER AND CONFIGURATION OF PARTITIONS.
2. COLORS AS SELECTED BY ARCHITECT FROM FULL RANGE OF CUSTOM COLORS

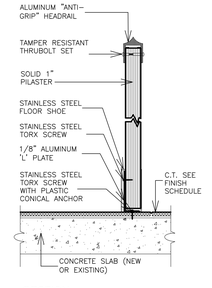


TYPICAL ELEVATION AND PLAN URINAL PARTITION
SCALE: 1/2" = 1'–0"

2 DETAIL - OVERHEAD BRACED TOILET PARTITIONS
SCALE: 1/2" = 1'-0"



PLAN



SECTION

1 DETAIL - TOILET PARTITIONS
SCALE: 3" = 1'-0"

ENGINEER:
Eisenbach & Ruhnke Engineering, P.C.
291 Genesee Street – Utica, NY 13501
Ph 315–720–1916 Fax 315–720–8365
www.erengpc.com

CONSULTANT(S):
FULLER D'ANGELO P.C.
ARCHITECTS PLANNERS
48 KNOLLWOOD ROAD
ELMSFORD NEW YORK 10523
TEL 914.592.4444
FAX 914.592.1717
WWW.FULLERDANGELO.COM

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

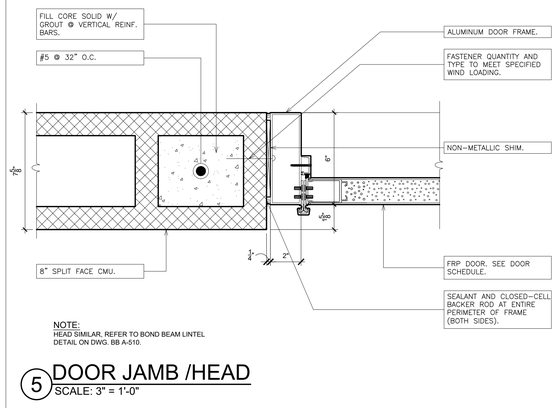
■BB SED NO. 44–21–01–06–7–041–001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44–21–01–06–7–041–001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44–21–01–06–0–001–040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
FIELD HOUSE – DETAILS – MISCELLANEOUS

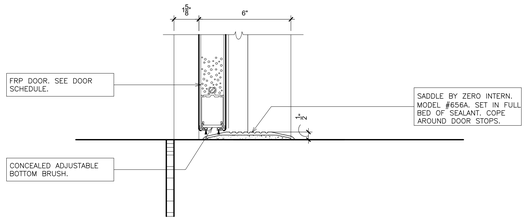
SHEET NO.
BB
A-500

FILE PATH =I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1–F &D\21431.02–A500.dwg

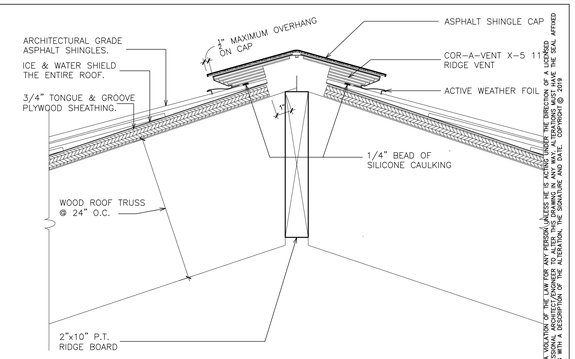


NOTE:
HEAD SIMILAR, REFER TO BOND BEAM LINTEL DETAIL ON DWG. BB A-510.

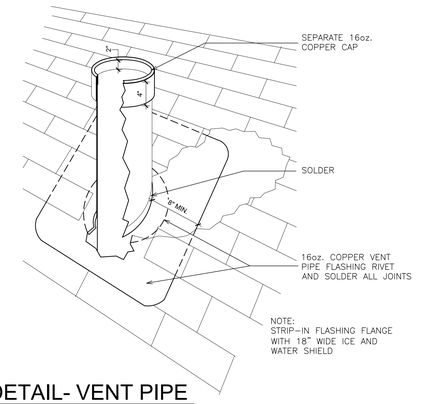
5 DOOR JAMB /HEAD
SCALE: 3" = 1'-0"



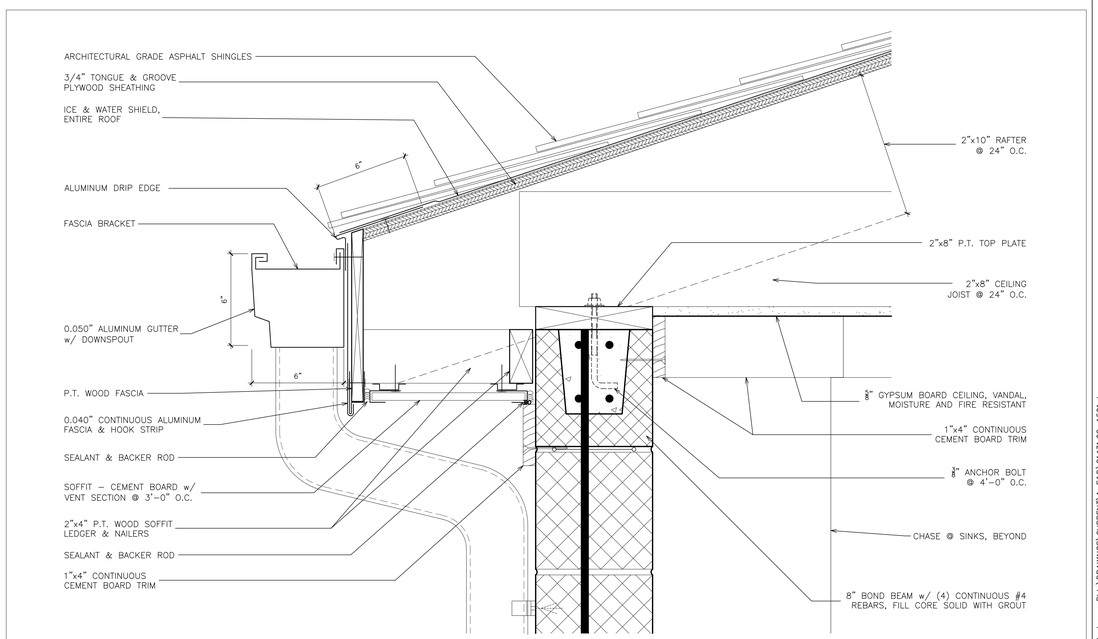
4 DOOR SILL
SCALE: 3" = 1'-0"



3 DETAIL - RIDGE VENT
SCALE: 3" = 1'-0"



2 DETAIL- VENT PIPE
SCALE: 3" = 1'-0"



1 DETAIL - EAVE
SCALE: 3" = 1'-0"

0 1" 2" 6" 1'

ENGINEER:
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Ph.315-720-1916 Fax.315-720-8360
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REGISTERED ARCHITECT JOHN D'ANGELO STATE OF NEW YORK

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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PROJECT NO.	05-21-04 09-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
FIELD HOUSE-
DETAILS - ROOF

SHEET NO.
BB
A-501

FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\T-F&O\21431.02-A501.dwg

STEEL LINTEL SCHEDULE

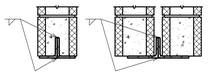
MAXIMUM CLEAR MASONRY OPENING	WALL TYPE						
	4"	MIN. BEARING LENGTH ON MASONRY	6"	MIN. BEARING LENGTH ON MASONRY	8",12",16" (FOR EACH 4" WYTHE)	MIN. BEARING LENGTH ON MASONRY
4'-0" OR LESS	L4X3½X5/16(LLV)	6"	⇗2-L3X2½X5/16(LLV)	6"	L-3½X3½X5/16(LLV)	6"
4'-0" ~ 6'-0"	L5X3½X5/16(LLV)	6"	⇗2-L3X2½X5/16(LLV)	6"	L-4X3½X5/16(LLV)	6"
6'-0" ~ 8'-0"	L6X3½X5/16(LLV)	6"	⇗2-L3½X2½X5/16(LLV)	6"	L-5X3½X5/16(LLV)	6"

BOND BEAM LINTELS:

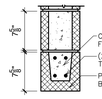
1. WIDTH OF U-BLOCK TO MATCH CMU WALL ABOVE.
2. FOR LOCATIONS SEE ARCH. DRAWINGS.
3. PROVIDE 8" MIN. BEARING AT EACH END OF LINTELS.

NOTES:

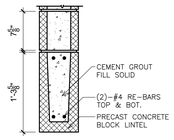
1. ALL LINTELS IN THIS TABLE ARE LOOSE LINTELS BEARING ON MASONRY. ALL BEARING MASONRY MUST BE 100% SOLID BRICK OR BLOCK. HOLLOW MASONRY SHALL BE SOLIDLY GROUTED. UNLESS NOTED OTHERWISE PROVIDE LINTELS IN NON-BEARING WALLS. SEE ARCH. DRAWINGS FOR OPENING LOCATION & DIMENSIONS. ALL OPENINGS 1'-0" OR GREATER REQUIRE LINTELS.
2. LINTELS IN BLOCK MASONRY WALLS MAY ALSO BE CONSTRUCTED W/ BOND BEAMS AS PER DETAILS.
3. ALL LINTELS SHALL BE PRIMED. ALL LINTELS LOCATED IN EXTERIOR WALLS SHALL BE GALVANIZED.
4. IN EXISTING CONSTRUCTION PROVIDE OVERHEAD SUPPORT FOR INSTALLATION OF NEW MASONRY AND LINTEL.
5. SUBMIT SHOP DRAWINGS OF ALL LINTEL ANGLES FOR REVIEW.



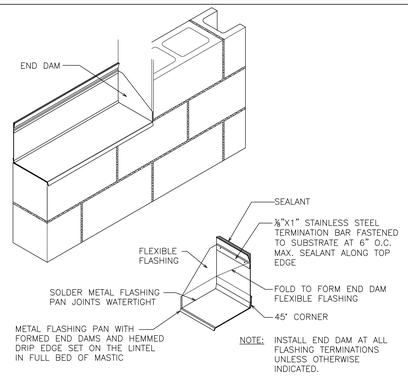
TYPICAL STEEL LINTEL DETAILS



PARTITION / 6", 8" BOND BEAMS
4'-0" MAX. MASONRY OPENINGS

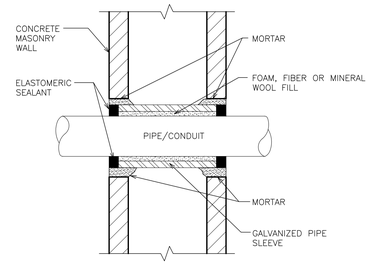


PARTITION / 6", 8" BOND BEAMS
4'-0" TO 7'-0" MAX. MASONRY OPENINGS



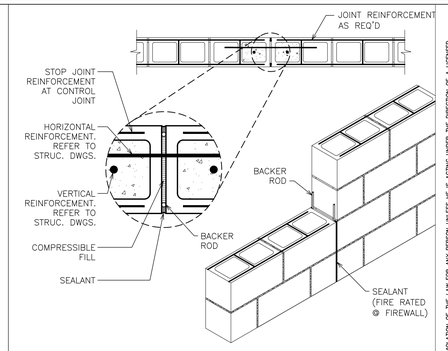
NOTE: INSTALL END DAM AT ALL FLASHING TERMINATIONS UNLESS OTHERWISE INDICATED.

11 DETAIL- METAL FLASHING END DAM
SCALE: N.T.S

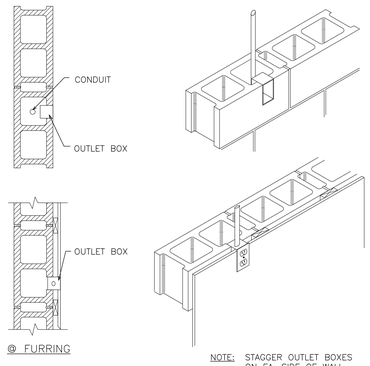


NOTE: AT FIRE RATED CONSTRUCTION, SEALANT & FILL MATERIAL SHALL HAVE A FIRE RATING EQUAL TO OR GREATER THAN CONSTRUCTION BEING PENETRATED

10 DETAIL- WALL PENETRATION
SCALE: N.T.S

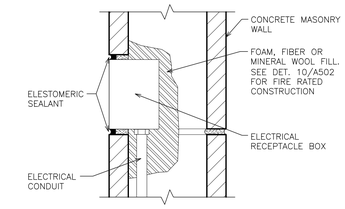


9 DETAIL- MOVEMENT JOINT REINFORCEMENT TYPICAL
SCALE: N.T.S

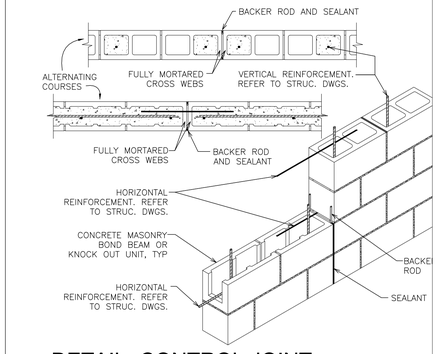


NOTE: STAGGER OUTLET BOXES ON EA. SIDE OF WALL

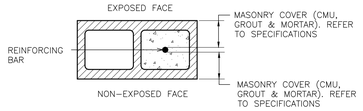
8 UTILITY BOXES
SCALE: N.T.S

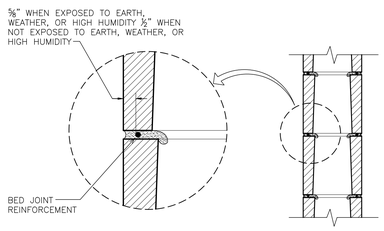


7 DETAIL- UTILITY BOX PENETRATION
SCALE: N.T.S

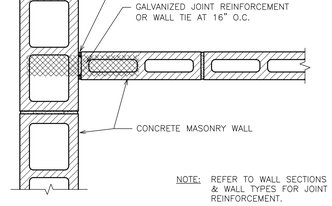


6 DETAIL- CONTROL JOINT REINFORCEMENT - BOND BEAM
SCALE: N.T.S



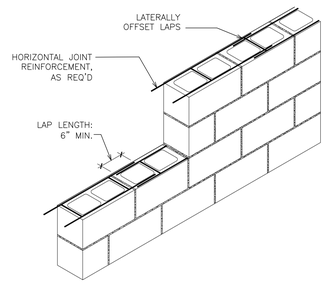


5 DETAIL- PROTECTION OF REINF.
SCALE: N.T.S

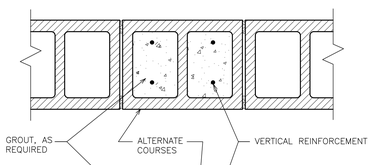


NOTE: REFER TO WALL SECTIONS & WALL TYPES FOR JOINT REINFORCEMENT.

4 DETAIL- WALL INTERSECTION - INTERIOR NON-LOAD BEARING WALL
SCALE: N.T.S

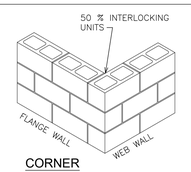


3 DETAIL- SPLICING JOINT REINF.
SCALE: N.T.S

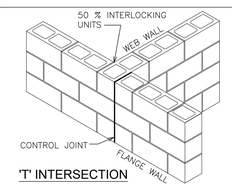


NOTE: REFER TO WALL SECTIONS & WALL TYPES FOR JOINT REINFORCEMENT.

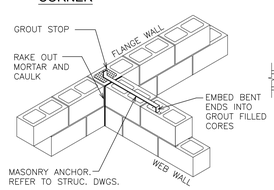
2 DETAIL- BONDED PILASTER
SCALE: N.T.S



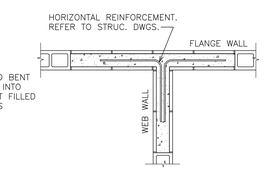
CORNER



'T' INTERSECTION



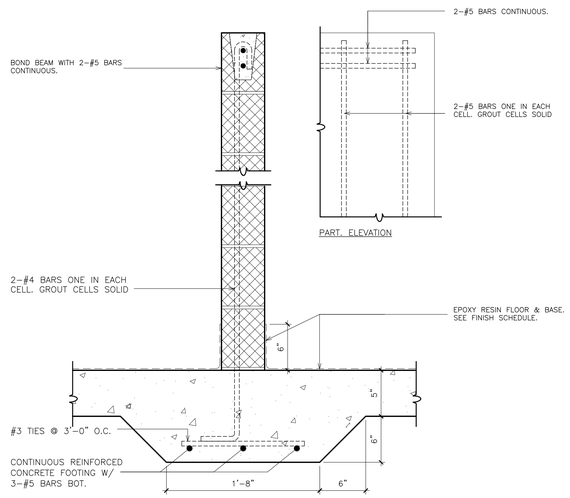
STEEL CONNECTORS



BOND BEAMS

NOTE: REFER TO WALL SECTIONS & WALL TYPES FOR JOINT REINFORCEMENT.

1 DETAIL- INTERSECTING WALLS
SCALE: N.T.S



12 DETAIL @ CMU WALL ENDS
SCALE: 1 1/2" = 1'-0"

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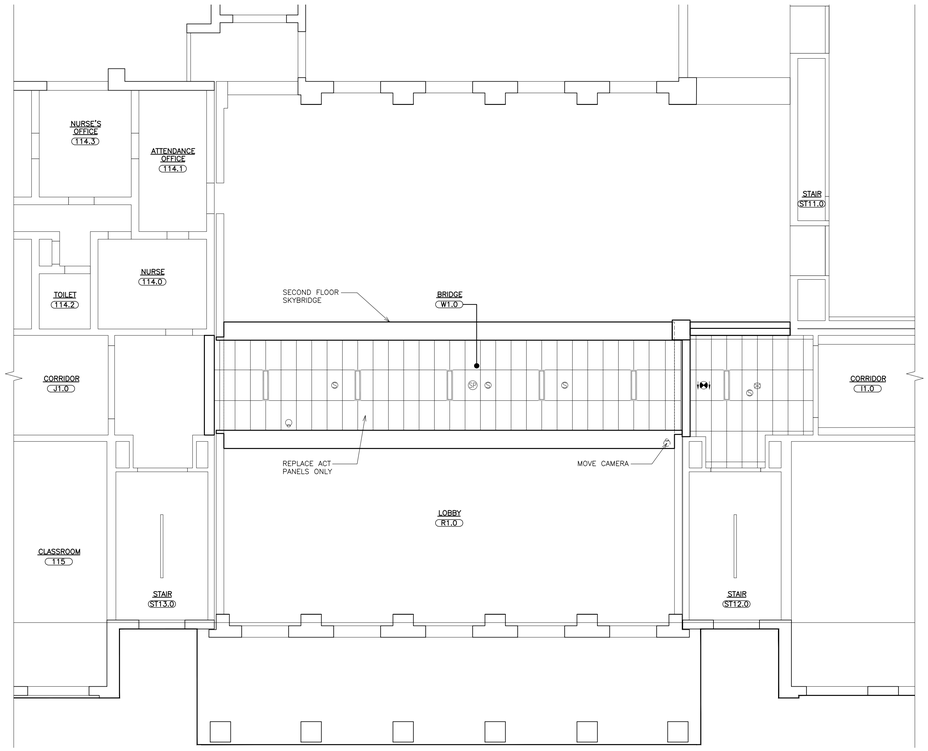
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

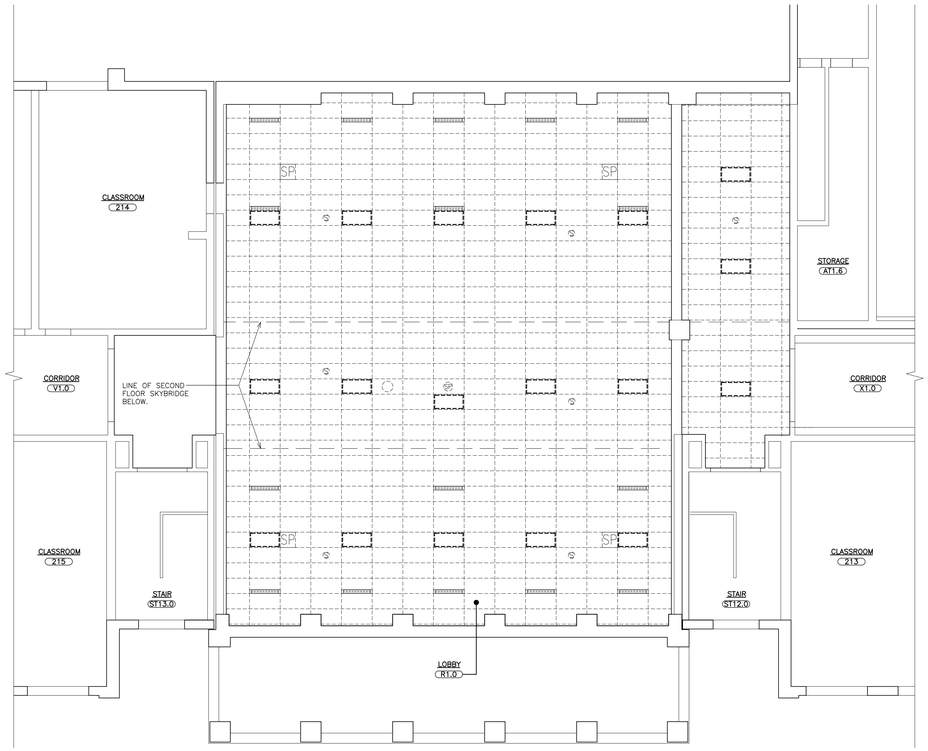
SHEET TITLE
FIELD HOUSE - DETAILS - MASONRY

SHEET NO.
BB
A-510

FILE PATH -I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-F&D\21431.02-A510.dwg



1 LOBBY - 1st FLOOR REFLECTED CEILING PLAN - REMOVALS
SCALE: 1/8" = 1'-0"



3 LOBBY - 2nd FLOOR REFLECTED CEILING PLAN - REMOVALS
SCALE: 1/8" = 1'-0"

WORKSCOPE NOTES:

- WS1 COORDINATE NEW DUCTWORK WITH EXISTING EQUIPMENT, FIXTURES, AND CONDUIT.
- WS2 REMOVE EXISTING SUSPENDED CEILING IN ITS ENTIRETY, INCLUDING ALL GRID, BLACK IRON SUPPORT FRAMING, SUPPLEMENTAL FRAMING AND PERIMETER TRIM. DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. TEMPORARILY SUPPORT ALL LOOSE AND HANGING WIRES OR PIPING.
- WS3 AFTER REMOVAL OF CEILING SYSTEM AND PERIMETER TRIM, PREPARE AND PAINT EXISTING WALL SURFACE IN AN AREA 9" WIDE, IMMEDIATELY ABOVE AND BELOW THE EXISTING CEILING LINE PRIOR TO INSTALLATION OF NEW PERIMETER TRIM. MATCH EXISTING ADJACENT WALL COLOR AND FINISH.
- WS4 EXISTING SUSPENDED CEILING SYSTEM TO REMAIN. CUT EXISTING GRID AND SUPPLEMENTAL FRAMING MEMBERS ALONG TOP OF EXISTING PARTITION. PROVIDE ADDITIONAL WIRE HANGERS TO SUPPORT CUT END OF SUPPLEMENTAL FRAMING AND GRID TO REMAIN.
- WS5 REMOVE EXISTING ACT AND FIXTURES. STORE SAFELY FOR REINSTALLATION AT THE CONCLUSION OF NEW DUCT INSTALLATION.
- WS6 REMOVE EXISTING EXPOSED ELECTRICAL CONDUIT. REINSTALL AT CONCLUSION OF WORK.
- WS7 SAW-CUT ROOF SLAB FOR NEW DUCT PENETRATIONS. SEE MECHANICAL AND ROOF DRAWINGS.
- WS8 PAINT PATCHED EXPOSED CEILING AND WALL AREAS 9" AROUND NEW DUCT PENETRATIONS TO MATCH EXISTING.
- WS9 HVAC CONTRACTOR TO OPEN WALL TO CAP AND SEAL EXISTING ABANDONED DUCTWORK, REMOVE WALL SLEEVES, GRILLES, DIFFUSERS, AND ASSOCIATED EQUIPMENT. GENERAL CONTRACTOR TO INSTALL 2HR FIRE RATED CMU AND PAINT TO MATCH EXISTING WALL COLOR AND TEXTURE.

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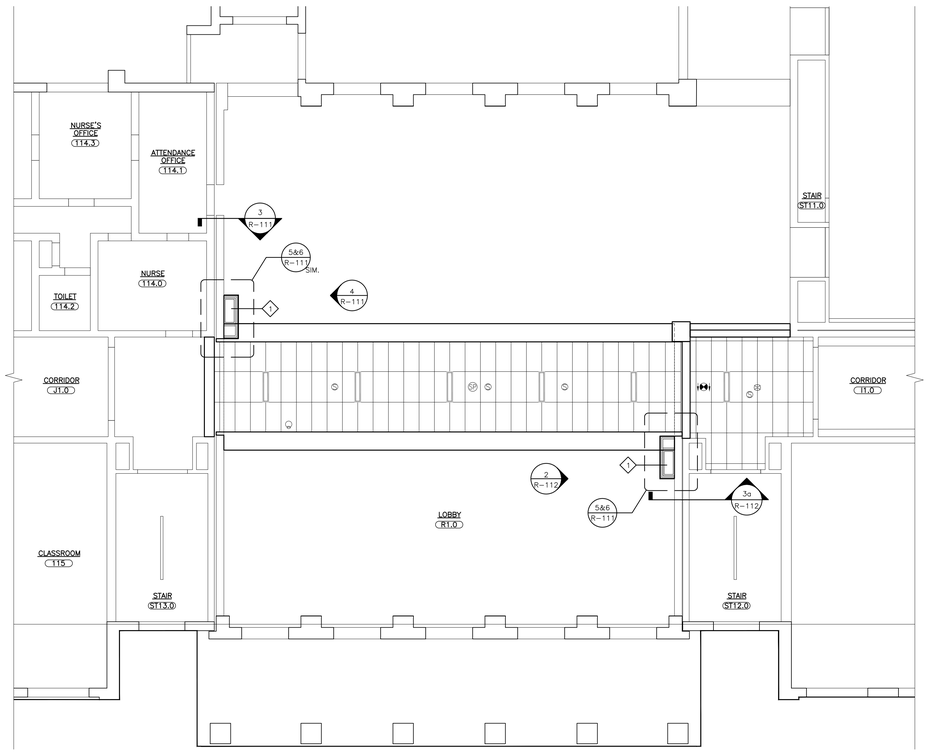
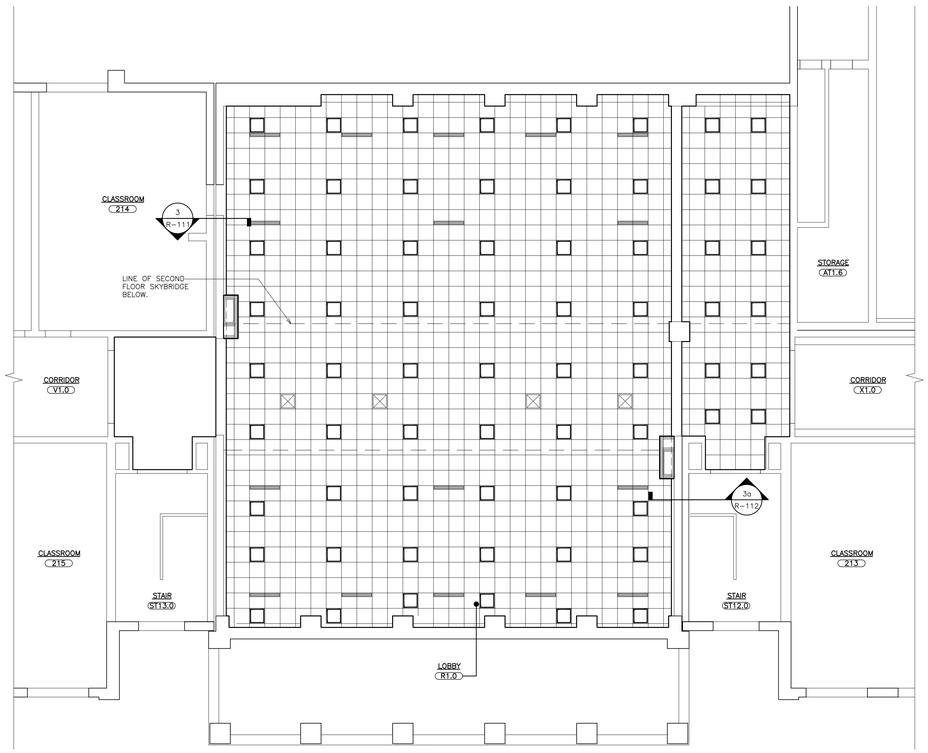


2 LOBBY - 1st FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



4 LOBBY - 2nd FLOOR REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

CEILING LEGEND

- 10"/12"/14"x48" SURFACE MOUNTED
- 24"x48" RECESSED LIGHT FIXTURE
- 24"x24" RECESSED LIGHT FIXTURE.
- RECESSED CAN LIGHT FIXTURE
- CEILING MOUNTED RECESSED SPEAKER
- FIRE ALARM SMOKE DETECTOR
- MOTION SENSOR
- WIFI HUB
- SURVEILLANCE CAMERA BUBBLE
- FIRE STROBE
- FACE PLATE
- CEILING MOUNTED EXIT SIGN
- CEILING MOUNTED EXIT SIGN W/ DIRECTIONAL ARROW.
- EMERGENCY EXIT LIGHTS.
- CEILING REGISTER AND DIFFUSER.
- CEILING RETURN GRILLE.
- 24"x24" CEILING PANELS.
- GYPSUM BOARD CEILING OR SOFFIT

NOTES:
1. NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT
2. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

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REGISTERED ARCHITECT JOHN D'ANGELO STATE OF NEW YORK

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF=NY FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-0-001-040 (HS=HS HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

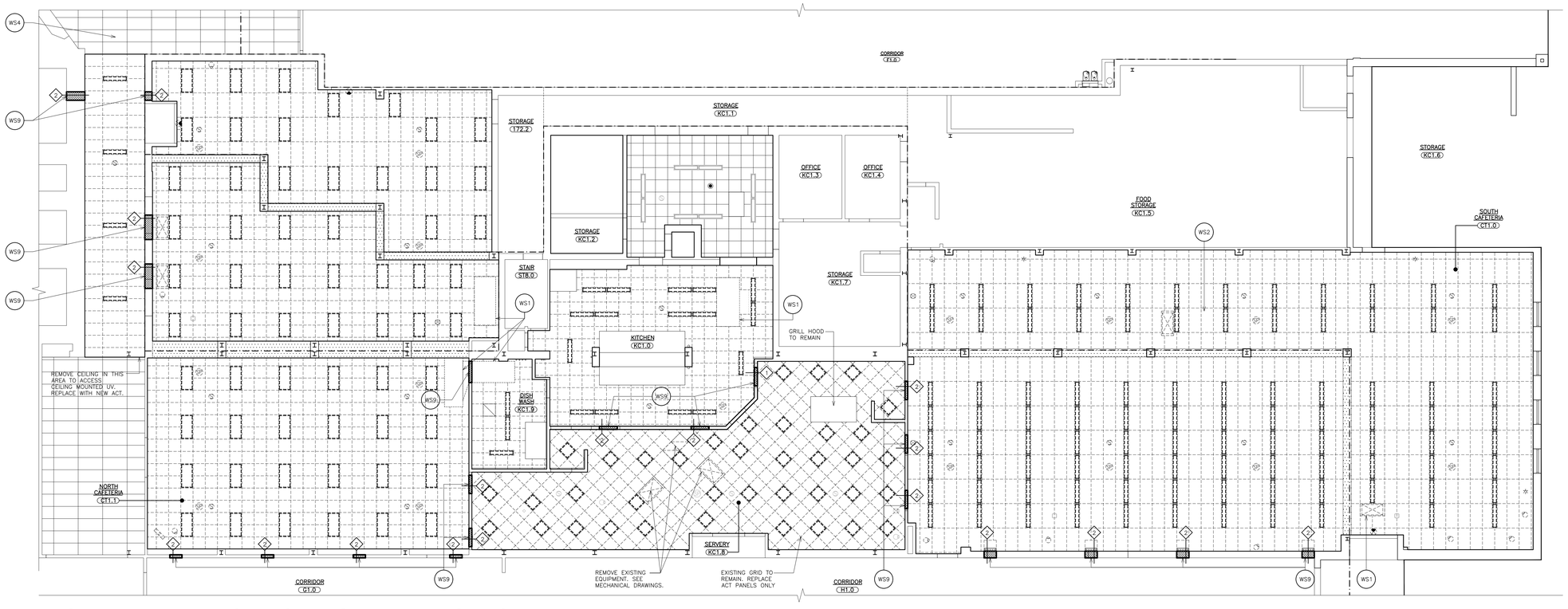
SHEET TITLE

CAFETERIA & SERVERY RTU ROOF PLAN DUNNAGE DETAILS

SHEET NO.

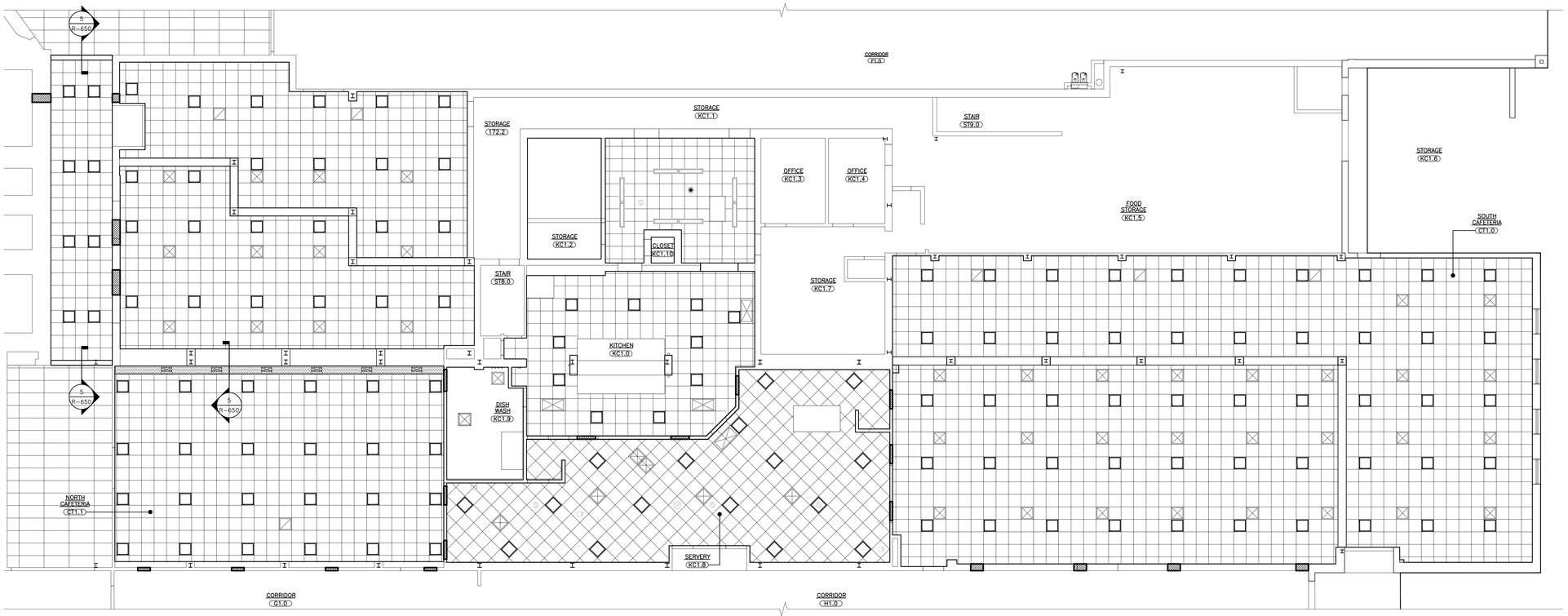
HS A-201

FILE PATH -I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\~FBD\21431.02 HS-A-201-202.dwg



5 CAFETERIA - REFLECTED CEILING PLAN - REMOVALS

SCALE: 1/8" = 1'-0"



6 CAFETERIA - REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

WORKSCOPE NOTES:

- WS1 COORDINATE NEW DUCTWORK WITH EXISTING EQUIPMENT, FIXTURES, AND CONDUIT.
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- CEILING MOUNTED RECESSED SPEAKER
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- MOTION SENSOR
- WIFI HUB
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- FIRE STROBE
- FACE PLATE
- CEILING MOUNTED EXIT SIGN
- CEILING MOUNTED EXIT SIGN W/ DIRECTIONAL ARROW.
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- 24"x24" CEILING PANELS.
- GYPSUM BOARD CEILING OR SOFFIT

NOTES:
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REGISTERED ARCHITECT JOHN D'ANGELO 032145 STATE OF NEW YORK

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
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☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

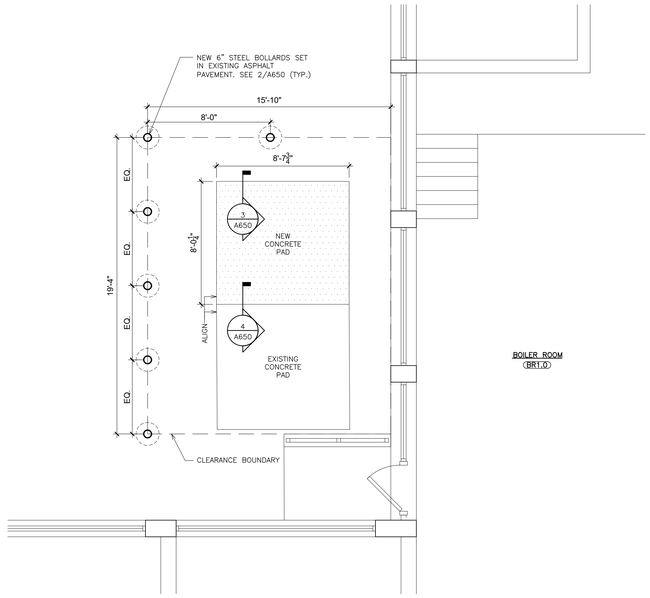
SHEET TITLE

CAFETERIA & SERVERY RCP REMOVALS AND NEW

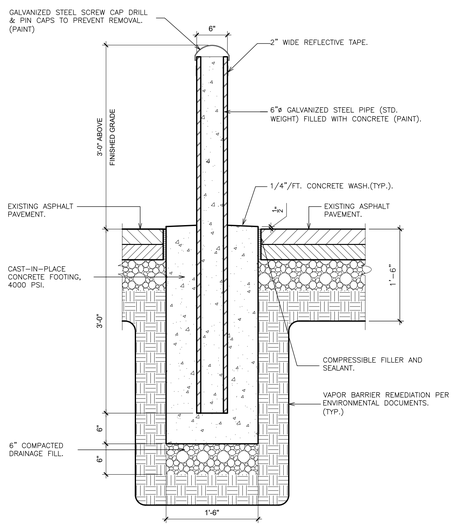
SHEET NO.

HS A-202

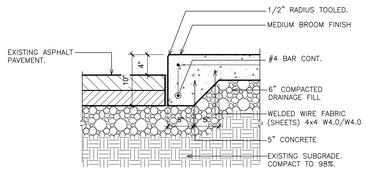
FILE PATH: -I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\1-FBD\21431.02 HS-A-201-202.dwg



1 PARTIAL PLAN @ NORTH CHILLER
SCALE: 1/4" = 1'-0"



2 DETAIL - BOLLARD
SCALE: 1" = 1'-0"



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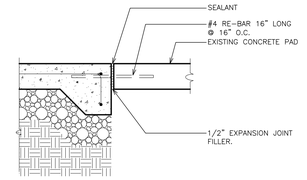
SCALE: 1" = 1'-0"



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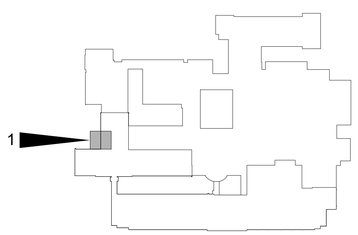

HIGH SCHOOL KEY PLAN
SCALE N.T.S.

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PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PLAN AND DETAIL - NORTH CHILLER

SHEET NO.
HS
A-650

FILE PATH - I:\21431.02 ER Warwick Field n Restroom Bldg\DRAWINGS\CURRENT\I-F&D\21431.02 A-650.dwg

MECHANICAL GENERAL NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. IT IS NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT; HOWEVER, CONTRACT DOCUMENTS REQUIRE COMPONENTS AND MATERIALS WHETHER OR NOT INDICATED OR SPECIFICALLY SPECIFIED TO MAKE THE SYSTEMS BEING INSTALLED COMPLETE, CODE COMPLIANT, TESTED AND OPERATIONAL.

2. CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.

3. ALL MATERIALS, EQUIPMENT, METHODS OF INSTALLATION, REMOVALS AND DISPOSAL SHALL BE IN ACCORDANCE WITH THE STANDARDS, REGULATIONS, CODES, ORDINANCES, AND LAWS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS, AND OTHER AUTHORITIES THAT HAVE LAWFUL JURISDICTION.

4. PERFORM WORK, PROVIDE MATERIALS AND EQUIPMENT FOR SYSTEMS SHOWN, SPECIFIED AND DESCRIBED ON DRAWINGS. COMPLETELY COORDINATE ALL TRADES OF THIS CONTRACT AND PROVIDE COMPLETE AND FULLY FUNCTIONAL INSTALLATION. ALL WORK IN THIS SET TO BE COMPLETED UNDER THIS CONTRACT, UNLESS OTHERWISE INDICATED.

5. PROTECT ALL EXISTING AND NEW BUILDING ELEMENTS (INSTALLED BY OTHER CONTRACTS) FROM DAMAGE. CONTRACTOR SHALL RESTORE ALL DAMAGED ELEMENTS TO ORIGINAL OR BETTER CONDITION.

6. WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT NEAT, RECTILINEAR APPEARANCE WHEN COMPLETED. MAINTAIN MAXIMUM HEAD ROOM AT ALL TIMES. DO NOT RUN PIPES, DUCTS, AND CONDUIT EXPOSED UNLESS SHOWN AND NOTED TO BE EXPOSED ON DRAWINGS.

7. MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN MANUFACTURER'S EQUIPMENT CLEARANCES.

8. CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATED TO ISOLATING, SHUTTING DOWN, DRAINING, FILLING AND TESTING SYSTEMS TO ALLOW FOR COMPLETION OF WORK. INTERRUPTIONS TO EXISTING SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE OWNER AND UTILITY AS APPLICABLE. INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTIONS. ALL SYSTEM INTERRUPTIONS SHALL BE SCHEDULED WITH OWNER, UTILITY AND COORDINATED WITH OTHER TRADE WORK.

9. ALL EQUIPMENT PIPING, WIRING, INSULATION ETC. INSTALLED IN HVAC AIR PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.

10. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND FLOORS WITH UL RATED MATERIALS/METHODS EQUIVALENT TO FIRE RATING OF ASSEMBLY.

11. COORDINATE ALL WALL/FOUNDATION PENETRATIONS WITH GENERAL CONTRACT AND SEAL WEATHERTIGHT. PROVIDE STAINLESS STEEL ESCUTCHEON PLATE/TRIM RING FOR EACH ABOVE GRADE PENETRATION (BOTH SIDES).

12. PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRES INSPECTION, REPLACEMENT OR REPAIR. ACCESS PANELS/DOORS SHALL BE A MINIMUM OF 12"x12", UNLESS OTHERWISE NOTED.

13. DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILINGS. ALL SUPPORT SHALL BE FROM BUILDING STRUCTURE OR FROM CEILING SUSPENSION SYSTEM WHICH HAS BEEN REINFORCED. SUPPORTS SHALL BE SELECTED AND INSTALLED TO PROVIDE A VIBRATION FREE INSTALLATION.

14. CLEANING DURING MECHANICAL WORK: THE MECHANICAL ROOM AND ROOMS WHERE WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNEE IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.

15. PROTECT EXISTING SURFACES AND EQUIPMENT NOT MARKED FOR REMOVAL OR MODIFICATION. CONTRACTOR RESPONSIBLE FOR REPAIR OF EXISTING SURFACES AND/OR EQUIPMENT TO THE APPROVAL OF THE OWNER.

16. EACH CONTRACTOR RESPONSIBLE FOR RETURNING WALLS, CEILINGS AND SURFACES THEY DISTURB THAT ARE NOT SCHEDULED FOR REPLACEMENT BACK TO ORIGINAL CONDITIONS.

HVAC REMOVAL NOTES:

1. THE SCOPE OF REMOVAL SHOWN ON "REMOVALS" DRAWING 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 THE CONTRACTOR TO REMOVE OR RELOCATE ANY RELATED MECHANICAL DEVICES/ITEMS EVEN IF NOT SPECIFICALLY INDICATED TO BE REMOVED ON THESE DRAWINGS IN ORDER TO ACCOMODATE NEW WORK.

2. EQUIPMENT/ITEMS SHOWN CROSS HATCHED ON DRAWINGS ARE ITEMS TO BE REMOVED. ANY DEVICES/ITEMS 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. THE 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 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.

MECHANICAL SYMBOLS

- T – THERMOSTAT – ARROW INDICATES DEVICE/ZONE CONTROL
- F – FREEZESTAT
- P – STATIC PRESSURE SENSOR
- T – TEMPERATURE SENSOR W/CONTROL WIRING AND 1/2" CONDUIT WITH CLEAR PLASTIC GUARD(LOCKABLE)
- H – HUMIDITY SENSOR
- F – FLOW SENSOR
- DSD – DUCT SMOKE DETECTOR
- VFD – VARIABLE FREQUENCY DRIVE
- ø – ROUND DUCTWORK
- 4– WAY CEILING SUPPLY DIFFUSER
- CEILING EXHAUST/RETURN REGISTER
- FLOW ARROW
- CIRCUIT SETTER
- FDSD – COMBINATION FIRE DAMPER/ SMOKE DAMPER
- NEW PIPING, DUCTWORK, AND EQUIPMENT
- EXISTING TO REMAIN PIPING, DUCTWORK, AND EQUIPMENT
- PIPING, DUCTWORK, AND EQUIPMENT FOR REMOVAL
- BALL VALVE
- CIRCUIT SETTER
- CHECK VALVE
- CONTROL VALVE – 2 WAY
- DRAIN VALVE WITH HOSE BIB
- UNION
- STRAINER WITH BLOWDOWN
- REDUCER OR INCREASER
- BRANCH FROM BOTTOM OF PIPE
- BRANCH FROM TOP OF PIPE
- PIPE ELBOW DN
- PIPE ELBOW UP
- GAUGE WITH BALL VALVE
- AV – AUTOMATIC AIR VENT
- MV – MANUAL AIR VENT
- PIPE CAP
- PIPE BREAK
- PIPE FLOW ARROW
- 1 – REVISION NOTE
- # – KEYED NOTE
- POINT OF NEW CONNECTION
- LIMIT OF REMOVAL
- CD–1 200 CFM – DIFFUSER/GRILLE LABEL
- BDD – BACK DRAFT DAMPER

	SINGLE LINE	DOUBLE LINE	SINGLE LINE	DOUBLE LINE
MANUAL VOLUME DAMPER			RETURN/EXHAUST AIR RECTANGULAR ELBOW DN	
AUTOMATIC AIR DAMPER INTERLOCKED WITH EQUIPMENT	AAD	AAD	ROUND ELBOW UP	
DUCT SMOKE DETECTOR	DSD	DSD	ROUND ELBOW DN	
FLEXIBLE CONNECTION			CENTERED TRANSITION	
SUPPLY/OUTSIDE AIR RECTANGULAR ELBOW UP			OFFSET TRANSITION	
SUPPLY/OUTSIDE AIR RECTANGULAR ELBOW DN			SQUARE TO ROUND TRANSITION	
RETURN/EXHAUST AIR RECTANGULAR ELBOW UP			RADIUS ELBOW	
45° DEGREE LEADING EDGE *BRANCH TAKEOFF			MITERED ELBOW WITH TURNING VANES	

HVAC ABBREVIATIONS

AAD	AUTOMATIC AIR DAMPER
ACCU	AIR COOLED CONDENSING UNIT
AD	ACCESS DOOR
AHU	AIR HANDLING UNIT
AMP	AMPERAGE
BDD	BACKDRAFT DAMPER
BHP	BRAKE HORSEPOWER
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
CH	CABINET HEATER
CLG	CEILING
C	CONDENSATE
DB	DRYBULB TEMPERATURE
DDC	DIRECT DIGITAL CONTROL (SYSTEM)
DEG	DEGREE
DIA	DIAMETER
DN	DOWN
DP	DEWPOINT TEMPERATURE
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
F	FAHRENHEIT
FD	FIRE DAMPER
FF	FINAL FILTER
FLR	FLOOR
FPM	FEET PER MINUTE
FSTAT	FREEZESTAT
FT	FEET
FT HD	FEET OF HEAD
FT WG	FEET OF WATER GAUGE
FV	FACE VELOCITY
G	GAS
GAL	GALLON
GPM	GALLONS PER MINUTE
HD	HEAD
HP	HORSEPOWER
L	LOUVER
MAT	MIXED AIR TEMPERATURE
MAU	MAKE–UP AIR UNIT
MBH	1,000 BTU/HR
MCA	MINIMUM BRANCH CIRCUIT AMPACITY
MD	MOTORIZED DAMPER
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
PD	PRESSURE DROP
R	REMOVE
RA	RETURN AIR
RL	REFRIGERANT LIQUID
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
S	SATISFACTORY
SAT	SUPPLY AIR TEMPERATURE
SEN	SENSIBLE HEAT
SG	SPECIFIC GRAVITY
SP	STATIC PRESSURE
TAB	TESTING, ADJUSTING, BALANCE
TSTAT	THERMOSTAT
TYP	TYPICAL
UC	UNDER CUT
VD	VOLUME DAMPER
WB	WETBULB
WG	WATER GAUGE
ΔT	TEMPERATURE DIFFERENCE
IC	IRRIGATION CONTRACTOR

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

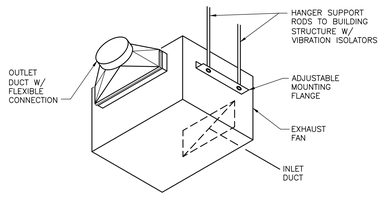
☐BB SED NO. 44–21–01–06–7–041–001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44–21–01–06–7–041–001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44–21–01–06–0–001–040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

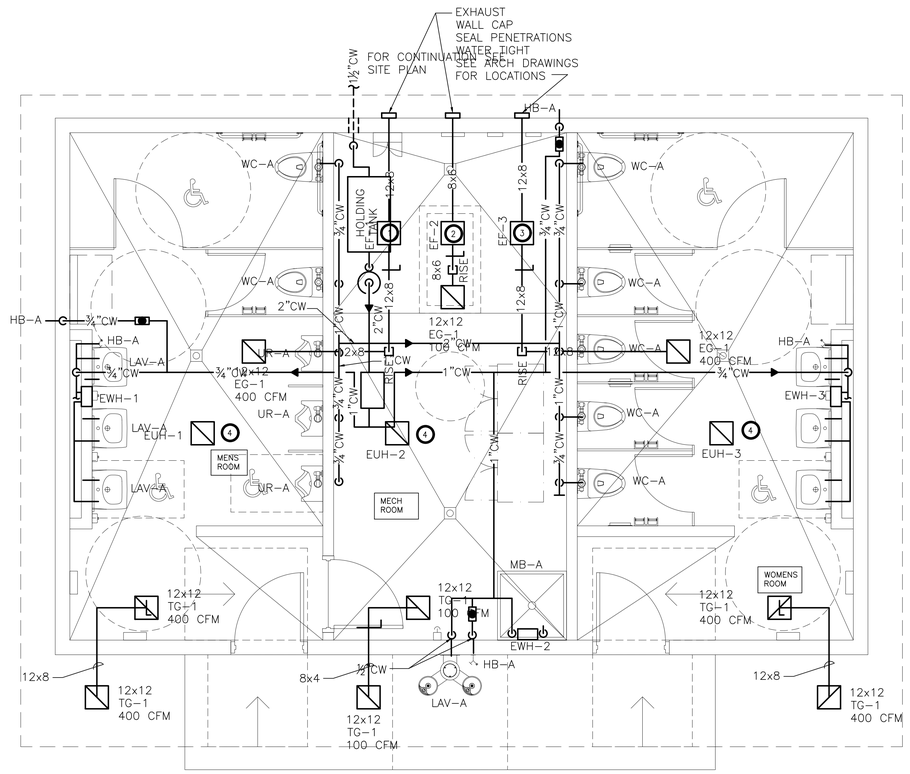
SHEET TITLE
ABBREVIATIONS AND SYMBOLS

SHEET NO.
M-001

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04–m001.dwg



2 EXHAUST FAN DETAIL
SCALE: NONE



1 BATHROOM FLOOR PLAN - NEW WORK
SCALE: 3/8"=1'-0"

KEYED NOTES – NEW WORK:

1. PROVIDE EXHAUST FAN EF-1 GREENHECK MODEL CSP-510, WC-8 AND ALL APPURTENANCES 400 CFM @.375 STATIC PRESSURE, 1070 RPM 217 WATTS (OR APPROVED EQUAL)
2. PROVIDE EXHAUST FAN EF-2 GREENHECK MODEL CSP-190, WC-6 AND ALL APPURTENANCES 100 CFM @.500 STATIC PRESSURE, 1400 RPM 100 WATTS (OR APPROVED EQUAL)
3. PROVIDE EXHAUST FAN EF-3 GREENHECK MODEL CSP-510, WC-8 AND ALL APPURTENANCES 400 CFM @.375 STATIC PRESSURE, 1070 RPM 217 WATTS (OR APPROVED EQUAL)
4. PROVIDE ELECTRIC UNIT HEATER EUH 1,2,3 MARKEL G3385D-RP 3.0 KW 10200 BTU'S 277 VOLTS 10.8 AMPS 54" RISE. PROVIDE INTEGRAL THERMOSTAT. MOUNT IN CEILING. PROVIDE ALL SUPPORTS AS REQUIRED FROM STRUCTURE ABOVE (WIRING BY EC)

GRILLE SCHEDULE

MARK	TYPE	MODEL	FACE SIZE	CEILING MODULE SIZE	NECK SIZE	FRAME TYPE	MATERIAL	MFR. FINISH	REMARKS
EG-1	EXHAUST	TITUS PAR	12x12	12x12	10"ø	SURFACE	STEEL	WHITE	SEE NOTES 1,2
TG-1	TRANSFER	TITUS 30RL	12x12	12x12	10"ø	SURFACE	STEEL	WHITE	SEE NOTES 1,2

NOTE 1: PROVIDE VOLUME DAMPERS SHOWN ON THE DRAWINGS.
NOTE 2: PROVIDE OPTIONAL OPPOSED BLADE DAMPER AT FACE OF GRILLE

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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225 WEST STREET EXT, WARWICK, NY 10990

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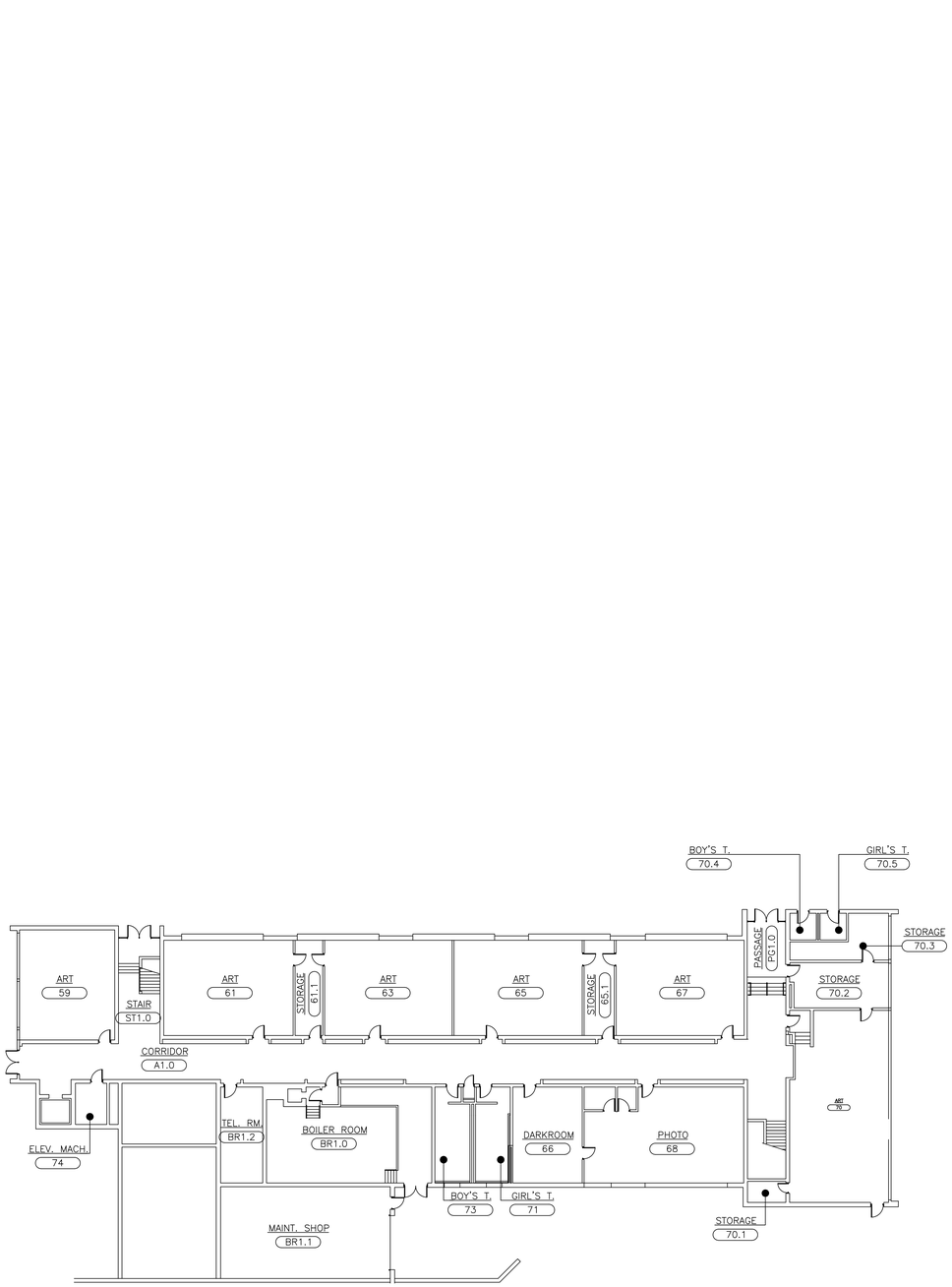
□HS SED NO. 44-21-01-06-0-001-040 (HS-MV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

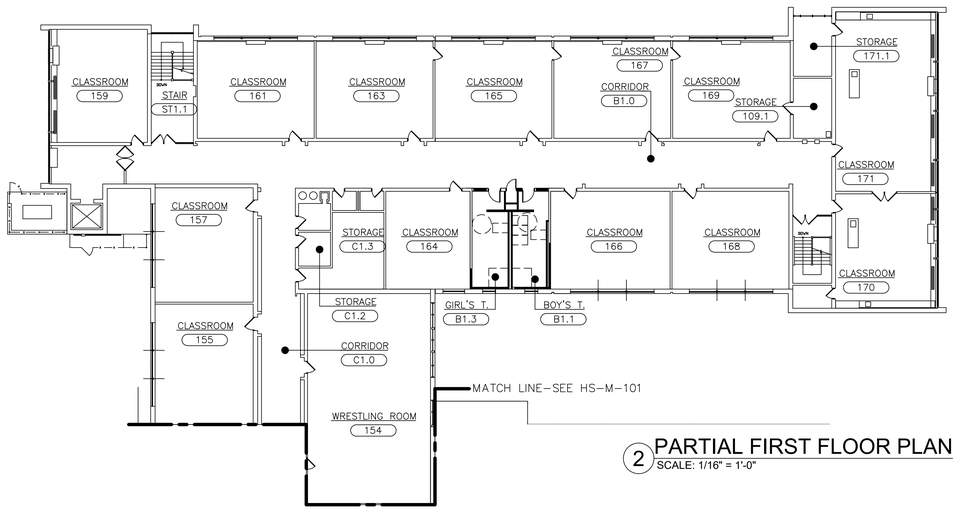
SHEET TITLE
BATHROOM FLOOR PLAN - NEW WORK

SHEET NO.
BB
M-100

FILE PATH -N:\1 – PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-BBP100.M100.E100.dwg



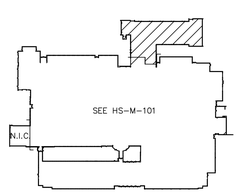
1 PARTIAL BASEMENT PLAN
SCALE: 1/16" = 1'-0"



2 PARTIAL FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

NOTE:
PLAN PROVIDED FOR REFERENCE ONLY. FIELD VERIFY EXISTING CONDITIONS FOR UV–C INSTALLATION PRIOR TO BID. SEE UV–C FIXTURE SCHEDULES FOR DETAILS.

N BASEMENT KEY PLAN
SCALE: NONE



N FIRST FLOOR KEY PLAN
SCALE: NONE

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■ HS SED NO. 44-21-01-06-0-001-040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL BASEMENT & FIRST FLOOR PLANS (UV-C CONTRACT)

SHEET NO.
HS M-1

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS–M100–M102.dwg

GREENHOUSE 141.2
SHOP 141.1
CLASSROOM 141
CLASSROOM 143
CLASSROOM 145
CLASSROOM 147
CLASSROOM 149
CLASSROOM 151
CLASSROOM 153
CORRIDOR D1.0
CORRIDOR 01.0
OFFICE 154.2
OFFICE 154.1
OFFICE 154.3
STORAGE D1.1
STORAGE D1.2
MATCH LINE–SEE HS–M–100
TECH LAB 139
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LOUNGE xxx
RECEIVING 144
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BOY'S T. L1.2
GIRL'S T. L1.1
STAIR 17.0
STORAGE BR1.3
RAMP
STUDIO/VIDEO EDITING AND PRODUCTIONS 140
COMPUTER ROOM 142
CONTROL ROOM 138.2
I.T. SERVER ROOM 138.1
AMPHITHEATER 138
MEDIA STORAGE MC1.4
SNACK BAR MC1.3
MC1.2
MC1.0
COLLABORATIVE AND PRE–ASSEMBLY AREA MC1.1
COMPUTER STUDIES MC1.5
ROTUNDA RESEARCH/ REFERENCE MC1.7
MAIN CIRCULATION DESK MC1.6
MEETING ROOMS MC1.8
PRESENTATION MC1.11
GROUP STUDY MC1.10
COLLABORATIVE STUDY MC1.9
QUIET STUDY AND BOOK STACKS MC1.12
STAIR 4.0
RAMP
POOL PL1.0
OFFICE PL1.2
OFFICE PL1.4
OFFICE 172.9
OFFICE 172.6
OFFICE 172.5
OFFICE 172.4
OFFICE 172.3
FACULTY RM. 172
OFFICE 172.1
CORRIDOR E1.0
RAMP
GIRL'S LOCKER RM. PL1.6
BOY'S LOCKER RM. PL1.7
STORAGE N1.1
GYMNASIUM GS2.0
ST. GS2.16
OFF. 62.15
ST. 62.14
SHOW. 62.12
GIRL'S LOCKER ROOM GS2.1
BOY'S LOCKER ROOM GS2.10
ST. GS2.6
ST. GS2.5
SHOW. GS.
STOR. GS2.21
STOR. GS2.21
CORRIDOR N1.0
GIRL'S LOCKER ROOM G1.5
OFFICE GS1.6
CORRIDOR Q1.0
OFFICE GS1.8
BOY'S LOCKER ROOM GS1.10
I. GS1.19
SHOW. GS1.20
GYMNASIUM GS1.0
FITNESS CENTER AUX. GYM GS1.11
MEN'S GS1.
CLASSROOM 162
OFFICE GS1.2
STORAGE GS1.1
CORRIDOR F1.0
OFFICE KC1.3
OFFICE KC1.4
ST. KC1.6
STAIR ST9.0
NORTH CAFETERIA CT1.1
STORAGE KC1.1
FOOD STORAGE KC1.5
STAIR ST8.0
KITCHEN KC1.0
DISH WASH KC1.9
SERVERY KC1.8
SOUTH CAFETERIA CT1.0
CORRIDOR G1.0
CORRIDOR H1.0
N.I.C.
BOILER RM. BR1.0
OFFICE 134.2
STORAGE 134.1
MAIL 127.1
ELEV. MACHINE ROOM
CLASSROOM 134
GIRL'S T. M1.3
BOY'S T. M1.1
STAIR ST7.0
CLASSROOM 132
CLASSROOM 130
CLASSROOM 128
CORRIDOR M1.0
CORRIDOR P1.0
J.C. P1.3
LOBBY P1.1
MENS TOIL. P1.2
WOMENS TOIL. P1.4
RAMP
STORAGE AT1.2
STORAGE AT1.1
AUDITORIUM AT1.0
STAGE AT1.3
STORAGE AT1.4
STORAGE 100.13
BAND STORAGE 100.10
BAND ROOM 100.5
PASSAGE PG5.0
BAND ROOM 100.0
CORRIDOR I1.0
STORAGE AT1.5
129.1
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OFFICE 133.2
OFFICE 133.4
OFFICE 133.5
OFFICE 133.6
OFFICE 133.7
OFFICE 133.8
GUIDANCE 133.0
LOUNGE 133.13
VEST. K1.1
COURTYARD
OFFICE 133.9
OFFICE 133.11
OFFICE 133.12
COURTYARD
STOR. J1.5
NURSE'S OFFICE 114.6
EXAM ROOM 114.4
NURSE'S OFFICE 114.3
ATTENDANCE 114.1
CORRIDOR K1.0
CLASSROOM 126
CLASSROOM 124
CLASSROOM 122
CLASSROOM 120
CLASSROOM 118
J.C. J1.3
STOR. 114.7
LOUNGE 114.5
NURSE 114.0
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CLASSROOM 129
CLASSROOM 127
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CLASSROOM 115
CLASSROOM 113
CLASSROOM 111
CLASSROOM 109
CLASSROOM 107
CLASSROOM 105
CLASSROOM 103
COPY ROOM 101
STAIR ST14.0
STAIR ST13.0
STAIR ST12.0
STAIR ST10.0
SEE HS–M–100
N.I.C.

1 PARTIAL FIRST FLOOR PLAN
SCALE: 1/16" = 1'-0"

NOTE:
PLAN PROVIDED FOR REFERENCE ONLY. FIELD VERIFY EXISTING CONDITIONS FOR UV–C INSTALLATION PRIOR TO BID. SEE UV–C FIXTURE SCHEDULES FOR DETAILS.

FIRST FLOOR KEY PLAN
SCALE: NONE

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225 WEST STREET EXT, WARWICK, NY 10990

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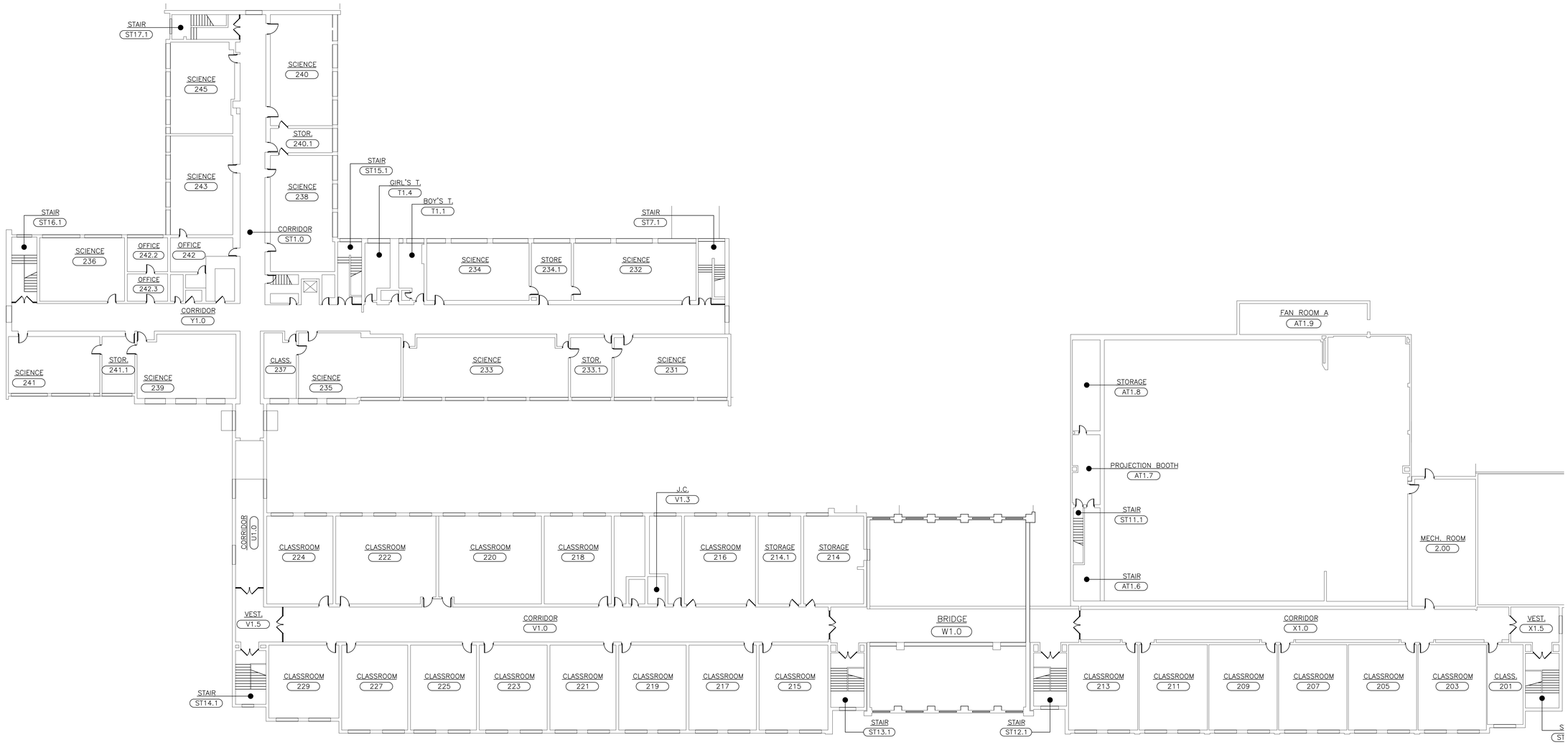
PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL FIRST FLOOR PLAN (UV-C CONTRACT)

SHEET NO.
HS M-2

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\V05–21–04 Warwick Federal Grant Project\CAD\Package 2\V05–21–04.HS–M100–M102.dwg



1 PARTIAL SECOND FLOOR PLAN
SCALE: 1/16" = 1'-0"

NOTE:
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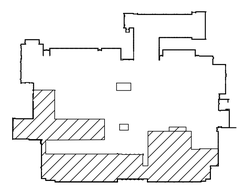

N

SECOND FLOOR KEY PLAN
SCALE: NONE

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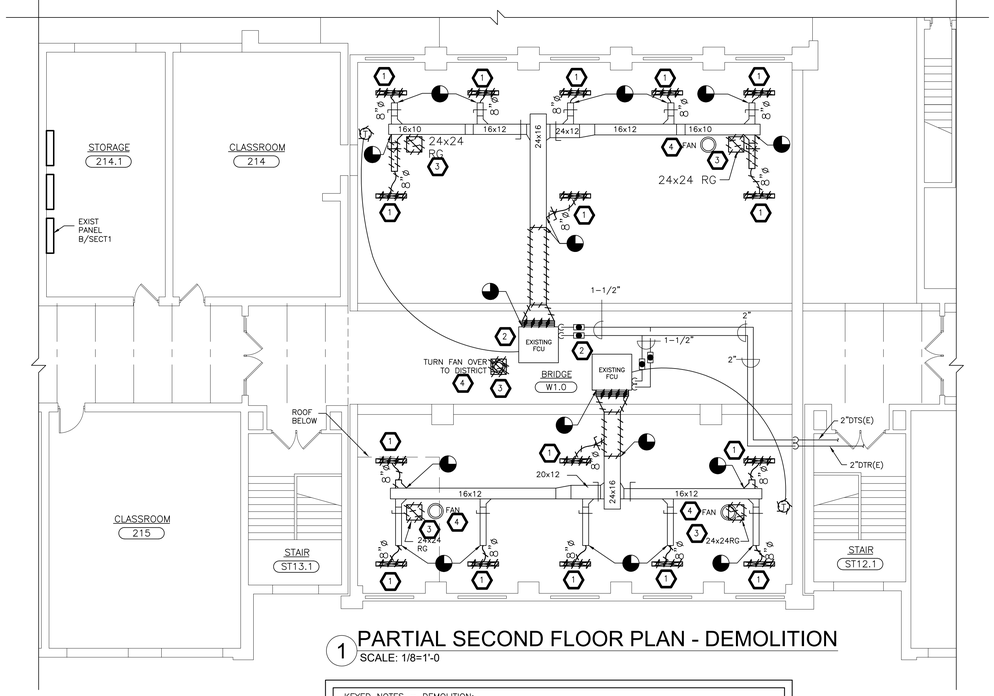
PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL SECOND FLOOR PLAN (UV-C CONTRACT)

SHEET NO.
HS M-3

FILE PATH -N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-M100-M102.dwg

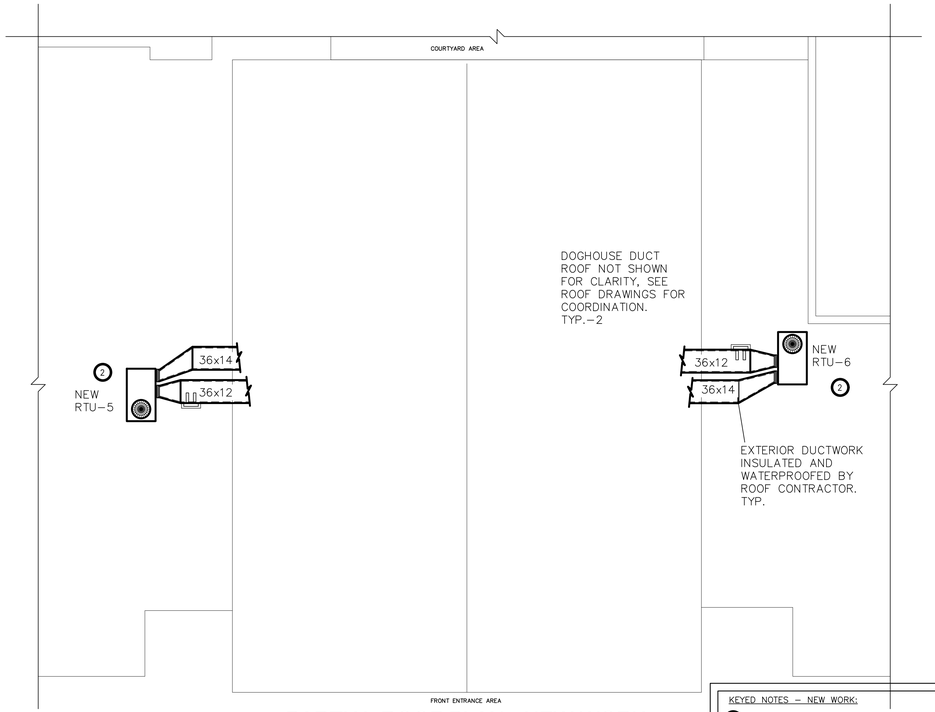


1 PARTIAL SECOND FLOOR PLAN - DEMOLITION

SCALE: 1/8=1'-0

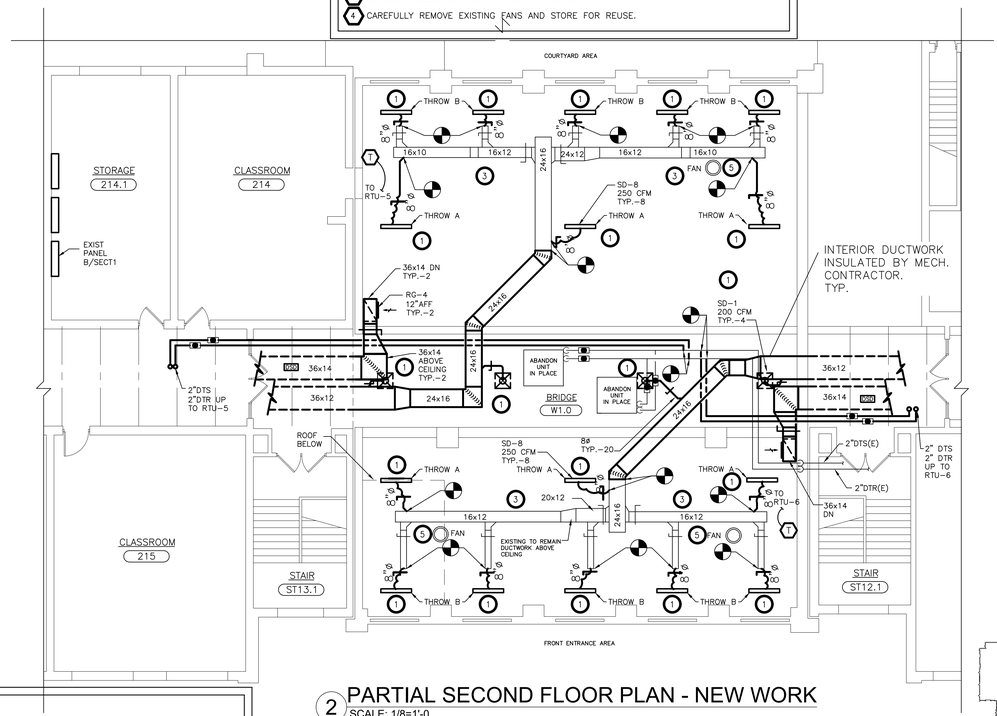
KEYED NOTES – DEMOLITION:

1. REMOVE LINEAR SLOT DIFFUSERS, DAMPERS, FLEX CONNECTIONS, AND PORTION OF DUCTWORK AS SHOWN. DISCONNECT AT POINTS SHOWN. MODIFY EXISTING TO REMAIN DUCTWORK AS NECESSARY TO PREPARE FOR NEW WORK.
2. DISCONNECT AND REMOVE PORTION OF DUCTWORK FROM CEILING HUNG FCUS AS SHOWN. REMOVE EXISTING UNIT'S TEMPERATURE SENSOR, INCLUDING WIREMOLD, CONTROL WIRING, AND CONDUIT. VERIFY IN FIELD. DISCONNECT FCUS FROM SERVICE AND ABANDON UNITS IN PLACE. TURN DTS AND DTR VALVES OFF. PREPARE FOR NEW WORK.
3. REMOVE GRILLES AS SHOWN. PREPARE FOR NEW WORK.
4. CAREFULLY REMOVE EXISTING FANS AND STORE FOR REUSE.



3 PARTIAL ROOF PLAN - NEW WORK

SCALE: 1/8=1'-0



2 PARTIAL SECOND FLOOR PLAN - NEW WORK

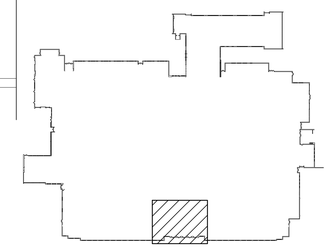
SCALE: 1/8=1'-0

KEYED NOTES – NEW WORK:

1. PROVIDE INSULATED DUCTWORK, WALL SLEEVES, SUPPLY DIFFUSERS, RETURN GRILLES, ALL DAMPERS, DETECTORS, AND ALL APPURTENANCES AND CONNECT TO NEW DUCTWORK ON ROOF. SEE NEW WORK PLAN FOR SIZES AND ADDITIONAL NOTES. SEE M-500 AND M-501 FOR DETAILS. SEE M-502 FOR THROW PATTERN DETAILS. COORDINATE WITH HM CONTRACTOR FOR WALL PENETRATIONS. COORDINATE WITH ELECTRICAL DRAWINGS.
2. PROVIDE RTUS. SEE M-502 FOR SCHEDULE. PROVIDE INSULATED DUCTWORK, DAMPERS, TEMPERATURE SENSORS, PIPE PORTALS AND ALL APPURTENANCES. SEE NEW WORK PLAN FOR SIZES AND ADDITIONAL NOTES. SEE M-500 AND M-501 FOR DETAILS. PROVIDE NECESSARY PENETRATIONS AND SEAL TO MAKE WEATHERTIGHT. EXTERIOR WALL PENETRATIONS AND VERMICULITE REMEDIATION BY ROOF CONTRACTOR.
3. PROVIDE INSULATION TO EXISTING TO REMAIN DUCTWORK TO MATCH NEWLY INSTALLED DUCTWORK. CLEAN EXISTING TO REMIAN DUCTWORK.
4. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL DETECTORS AND FOR DIFFUSER PLACEMENT IN NEW DROP CEILINGS.
5. REINSTALL FANS, PROVIDE NEW HARDWARE TO SUPPORT FAN.

GENERAL NOTES:

1. SEE UV-C LIGHTING SCHEDULES FOR NEW AND EXISTING EQUIPMENT.
2. CONTRACTOR TO COORDINATE WORK TO MAINTAIN ROOF WARRANTY.
3. HVAC EQUIPMENT ON THIS SHEET TO REMAIN FUNCTIONAL UNTIL NEW HVAC EQUIPMENT IS OPERATIONAL. PROVIDE TEMPORARY DUCT TO CONNECT TO EXISTING HVAC UNITS. RUN DUCT DOWN TO FLOOR.



FIRST FLOOR KEY PLAN

SCALE: NONE

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STATE OF NEW YORK – MARK EISENBACH – NO. 059435 – LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

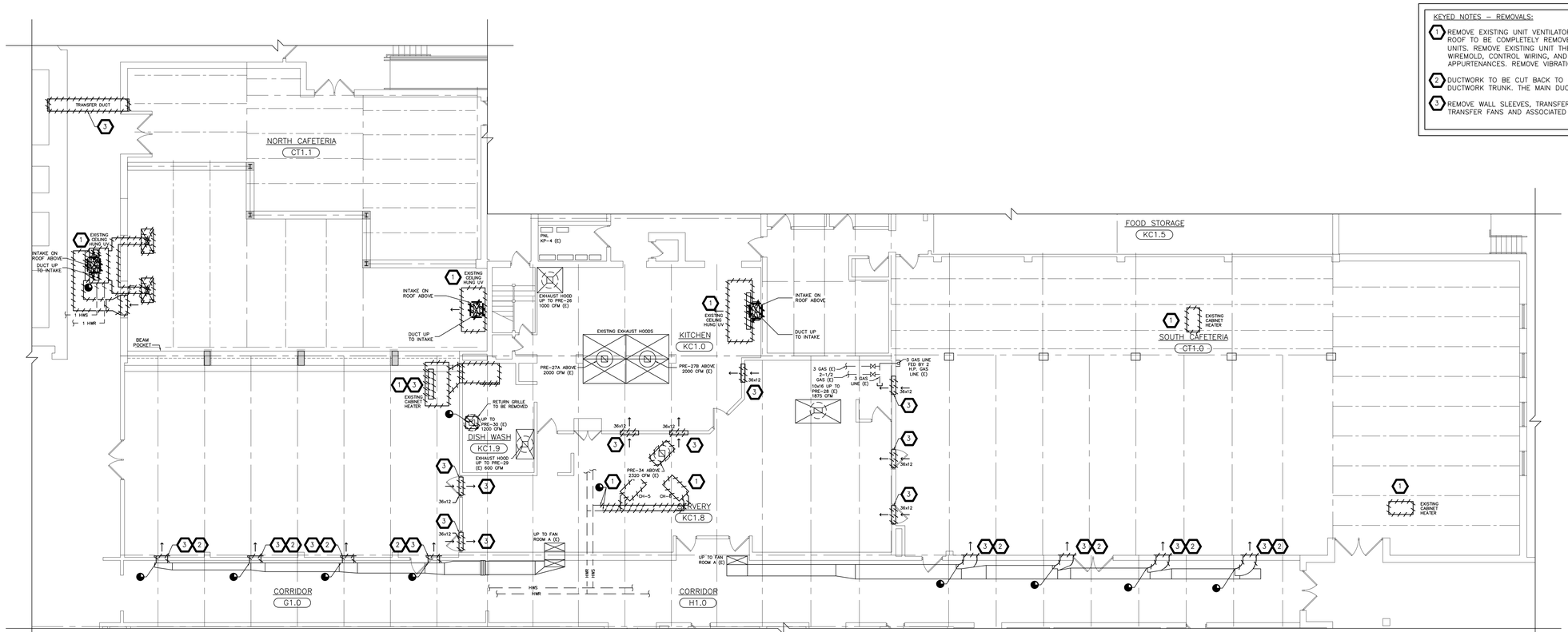
□BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL SECOND FLOOR PLAN - MAIN LOBBY - DEMOLITION AND NEW WORK

SHEET NO.
HS M-100

FILE PATH -N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-M100.dwg



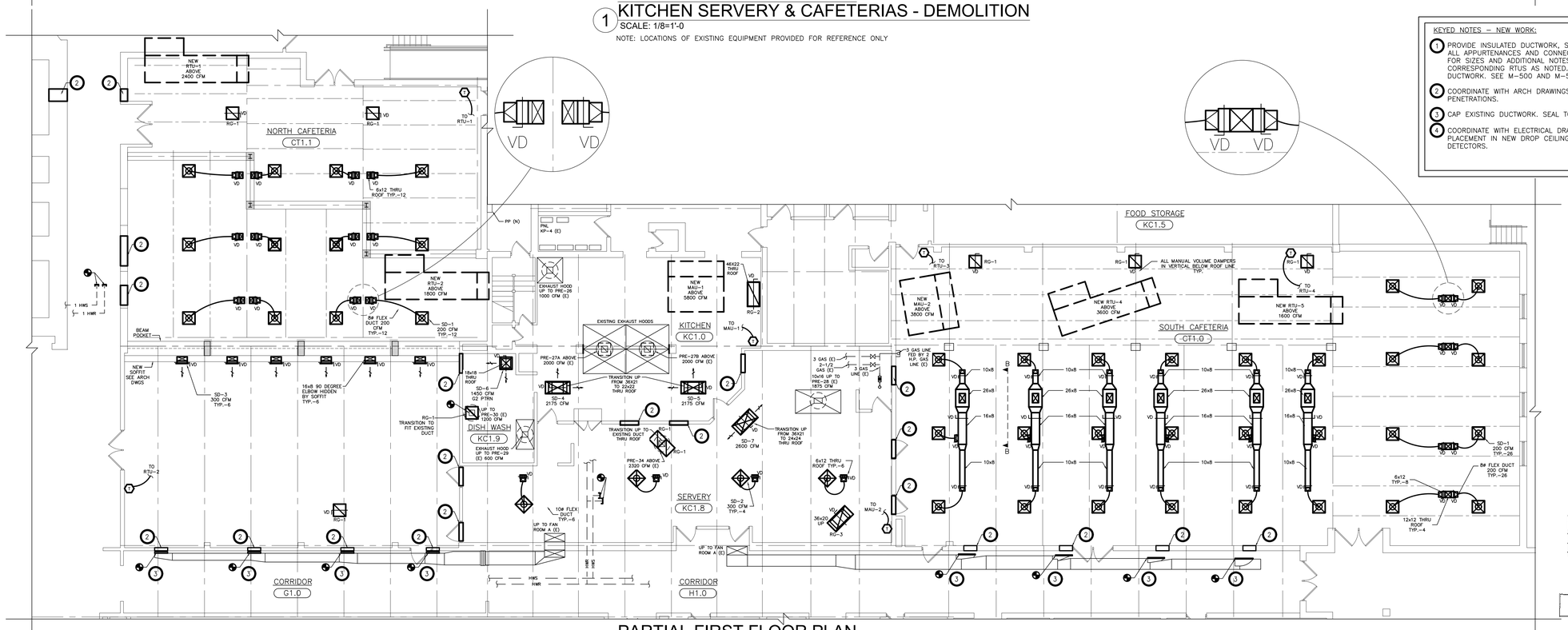
PARTIAL FIRST FLOOR PLAN
KITCHEN SERVERY & CAFETERIAS - DEMOLITION

1 SCALE: 1/8=1'-0

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – REMOVALS:

1. REMOVE EXISTING UNIT VENTILATORS AND CABINET HEATERS. DUCTWORK AND INTAKES ON ROOF TO BE COMPLETELY REMOVED. CUT BACK AND CAP EXISTING PIPING SERVICING UNITS. REMOVE EXISTING UNIT THERMOSTATS/TEMPERATURE SENSORS, INCLUDING WIREMOLD, CONTROL WIRING, AND CONDUIT. REMOVE ASSOCIATED VALVES AND APPURTENANCES. REMOVE VIBRATION ISOLATORS AND UNIT SUPPORTS. VERIFY IN FIELD.
2. DUCTWORK TO BE CUT BACK TO NOT LESS THAN 6" FROM THE WALL, OR TO THE MAIN DUCTWORK TRUNK. THE MAIN DUCTWORK TRUNK IS TO REMAIN.
3. REMOVE WALL SLEEVES, TRANSFER GRILLS/SUPPLY DIFFUSERS, AND INDICATED DUCTWORK. TRANSFER FANS AND ASSOCIATED TO BE REMOVED WHEN APPLICABLE.



PARTIAL FIRST FLOOR PLAN
KITCHEN SERVERY & CAFETERIAS - NEW WORK

2 SCALE: 1/8=1'-0

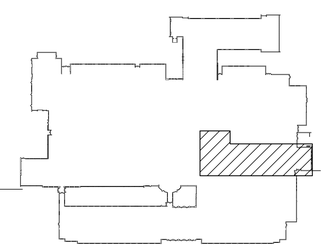
NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – NEW WORK:

1. PROVIDE INSULATED DUCTWORK, SUPPLY DIFFUSERS, RETURN GRILLES, ALL DAMPERS, AND ALL APPURTENANCES AND CONNECT TO NEW DUCTWORK ON ROOF. SEE NEW WORK PLAN FOR SIZES AND ADDITIONAL NOTES. PROVIDE NEW TEMPERATURE SENSORS AND CONNECT TO CORRESPONDING RTUS AS NOTED. SEE DWG HS–M–103 FOR RTUS AND CONTINUATION OF DUCTWORK. SEE M–500 AND M–501 FOR DETAILS.
2. COORDINATE WITH ARCH DRAWINGS REGARDING WALL REPAIRS FOR FORMER DUCT WALL PENETRATIONS.
3. CAP EXISTING DUCTWORK. SEAL TO MAKE AIRTIGHT.
4. COORDINATE WITH ELECTRICAL DRAWINGS FOR ALL DETECTORS AND FOR GRILLE/DIFFUSER PLACEMENT IN NEW DROP CEILINGS. MECHANICAL CONTRACTOR TO FULLY INTEGRATE DETECTORS.

GENERAL NOTES:

1. SEE UV–C LIGHTING SCHEDULES FOR NEW AND EXISTING EQUIPMENT.
2. CONTRACTOR TO COORDINATE WORK TO MAINTAIN ROOF WARRANTY.
3. ALL HVAC EQUIPMENT AND DUCTWORK ON THIS SHEET TO REMAIN FUNCTIONAL UNTIL NEW HVAC EQUIPMENT IS OPERATIONAL.



FIRST FLOOR KEY PLAN

SCALE: NONE

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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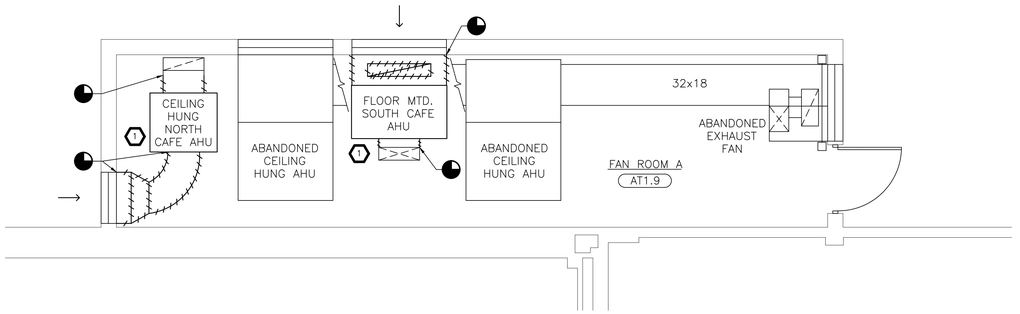
■HS SED NO. 44–21–01–06–0–001–040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL FIRST FLOOR PLAN - KITCHEN, SERVERY, & CAFETERIAS - DEMOLITION & NEW WORK

SHEET NO.
HS M-101

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04–HS–M101–M104.dwg

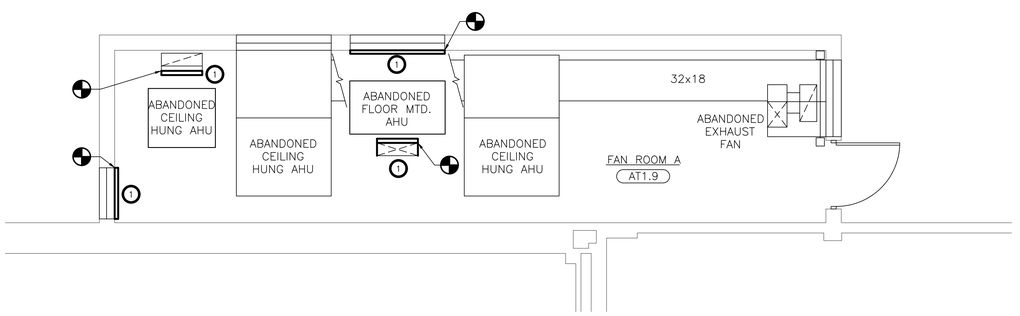


PARTIAL SECOND FLOOR PLAN
1 FAN ROOM A (CAFETERIA) - DEMOLITION

SCALE: 1/4=1'-0

KEYED NOTES – REMOVALS:

1. DISCONNECT AND REMOVE PORTION OF DUCTWORK FROM CAFETERIA AHUS AS SHOWN. CUT BACK AND CAP EXISTING SUPPLY AND RETURN PIPING. REMOVE EXISTING CAFETERIA UNIT THERMOSTATS/TEMPERATURE SENSORS. VERIFY IN FIELD. DISCONNECT FROM SERVICE AND ABANDON UNITS IN PLACE. ELECTRICAL CONTRACTOR TO DISCONNECT POWER FEED.



PARTIAL SECOND FLOOR PLAN
2 FAN ROOM A (CAFETERIA) - NEW WORK

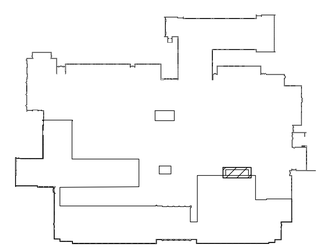
SCALE: 1/4=1'-0

KEYED NOTES – NEW WORK:

1. PROVIDE 18 GA STEEL BLANK OFF PANELS TO SEAL DUCTS AND LOUVERS. SEAL PANELS TO LOUVERS TO MAKE WEATHERTIGHT. SEAL PANELS TO DUCTWORK TO MAKE AIRTIGHT. PANELS TO HAVE SMOOTH AND SQUARE CUTS.

GENERAL NOTES:

1. HVAC EQUIPMENT AND DUCTWORK ON THIS SHEET NOTED FOR DISCONNECTION OR ABANDONMENT TO REMAIN FUNCTIONAL UNTIL NEW HVAC EQUIPMENT IS OPERATIONAL.



SECOND FLOOR KEY PLAN

SCALE: NONE

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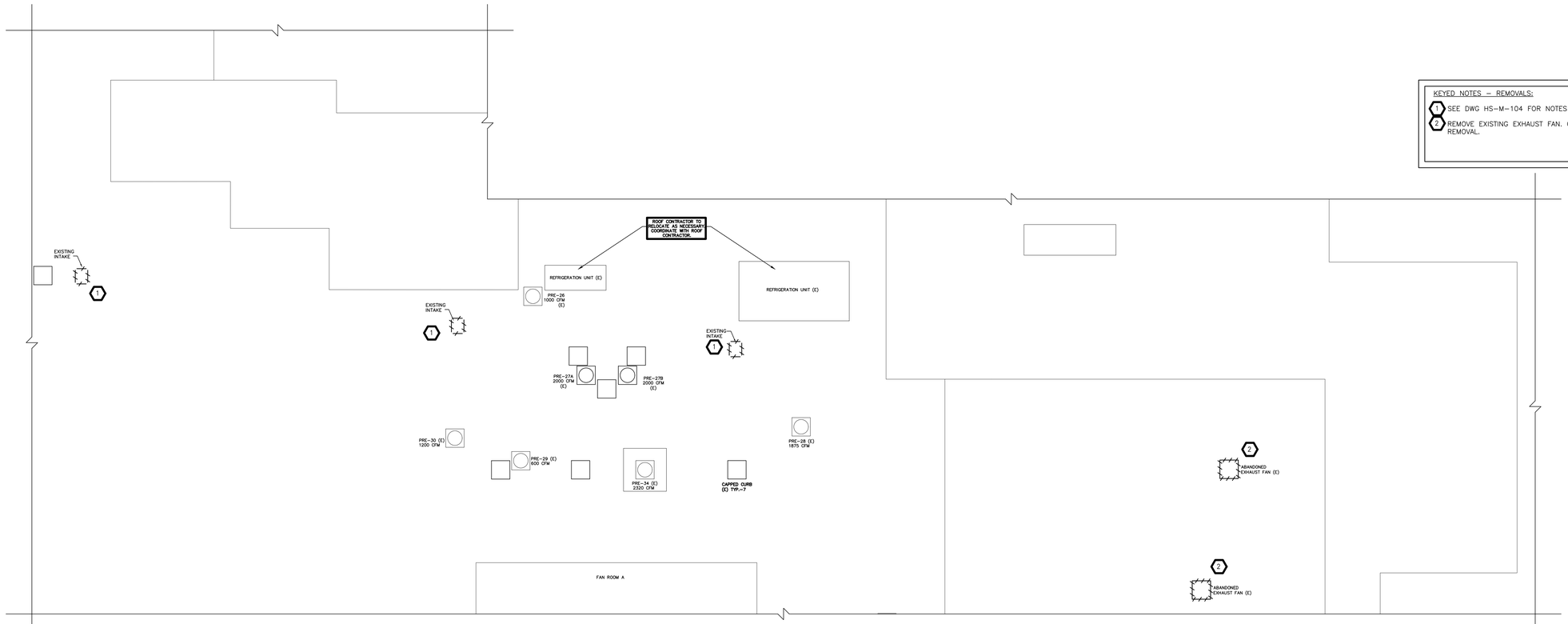
PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL SECOND FLOOR PLAN - FAN ROOM A - DEMOLITION & NEW WORK

SHEET NO.
HS M-102

FILE PATH -\\ -- PROJECT DIRECTORIES\\- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-M101-M104.dwg



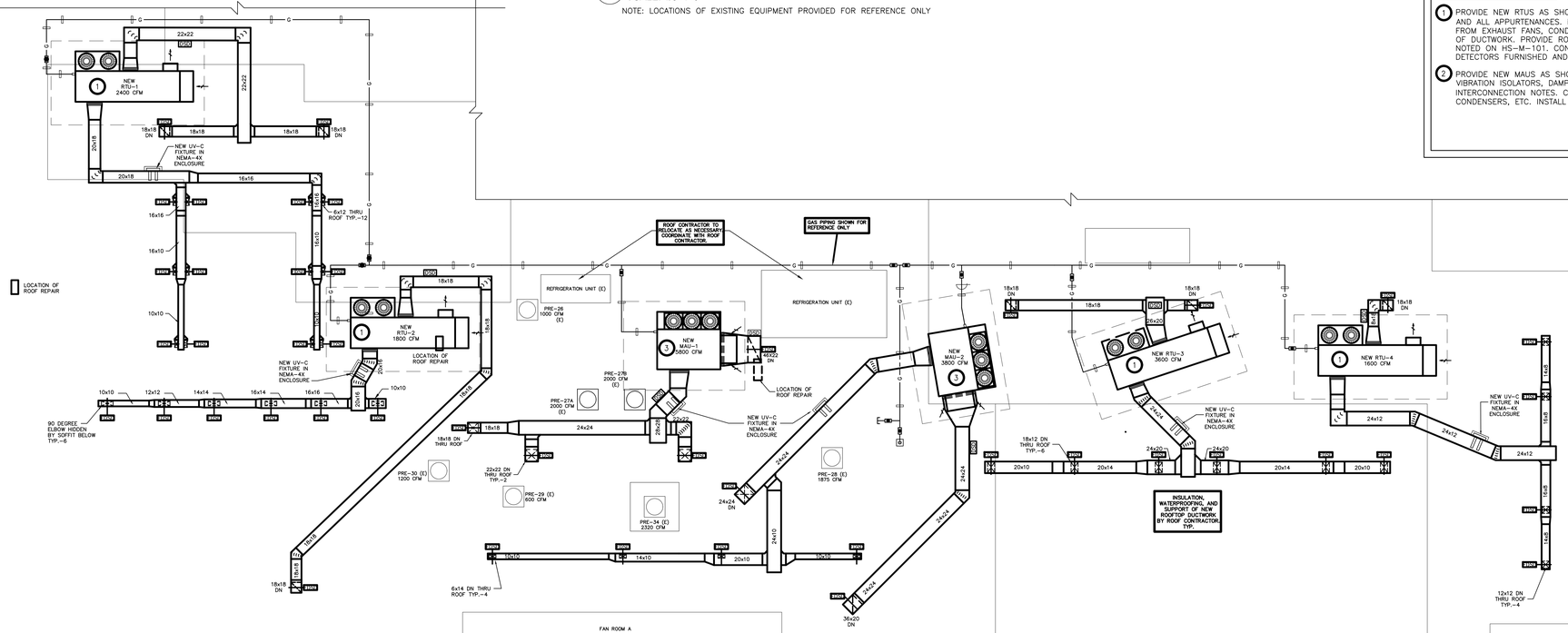
1 PARTIAL ROOF PLAN - DEMOLITION

SCALE: 1/8=1'-0

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – REMOVALS:

1. SEE DWG HS-M-104 FOR NOTES ON REMOVAL OF EXISTING INTAKES ON ROOF.
2. REMOVE EXISTING EXHAUST FAN. COORDINATE WITH E.C. AND ROOF CONTRACTOR FOR REMOVAL.



2 PARTIAL ROOF PLAN - NEW WORK

SCALE: 1/8=1'-0

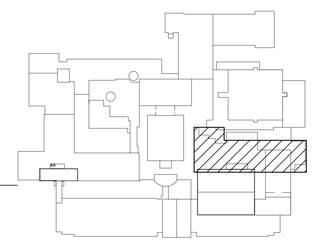
NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY
COORDINATE WITH ROOF DRAWINGS FOR DUNNAGE

KEYED NOTES – NEW WORK:

1. PROVIDE NEW RTUS AS SHOWN. SEE M-502 FOR SCHEDULE. PROVIDE DUCTWORK, VIBRATION ISOLATORS, DAMPERS, AND ALL APPURTENANCES. NOTE UNIT CLEARANCE REQUIREMENTS. RTU AIR INTAKES SHALL MAINTAIN A 10' DISTANCE FROM EXHAUST FANS, CONDENSERS, ETC. SEE M-500 AND M-501 FOR DETAILS. SEE HS-M-101 FOR CONTINUATION OF DUCTWORK. PROVIDE ROOF PENETRATIONS AND SEAL TO MAKE WEATHERTIGHT. CONNECT TO TEMPERATURE SENSORS NOTED ON HS-M-101. CONNECT UNITS, DETECTORS AND TEMPERATURE SENSORS TO BMS. INSTALL DUCT SMOKE DETECTORS FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR. STRUCTURAL SUPPORTS BY ROOF CONTRACTOR.
2. PROVIDE NEW MAUS AS SHOWN. SEE M-502 FOR SCHEDULE. PROVIDE DUCTWORK WITH INTERIOR ACOUSTIC LINING, VIBRATION ISOLATORS, DAMPERS, AND ALL APPURTENANCES. TIE INTO EXISTING EXHAUST FANS. SEE SEQUENCING FOR INTERCONNECTION NOTES. CONNECT TO BMS. MAU AIR INTAKES SHALL MAINTAIN 10' DISTANCE FROM EXHAUST FANS, CONDENSERS, ETC. INSTALL DUCT SMOKE DETECTORS FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR.

GENERAL NOTES:

1. SEE UV-C LIGHTING SCHEDULES FOR NEW AND EXISTING EQUIPMENT.
2. CONTRACTOR TO COORDINATE WORK TO MAINTAIN ROOF WARRANTY.
3. ALL INTAKES AND DUCTWORK MARKED FOR REMOVAL ARE TO REMAIN FUNCTIONAL UNTIL ASSOCIATED HVAC EQUIPMENT IS REMOVED.



ROOF KEY PLAN

SCALE: NONE

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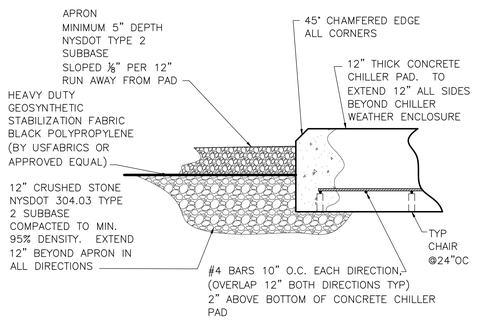
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

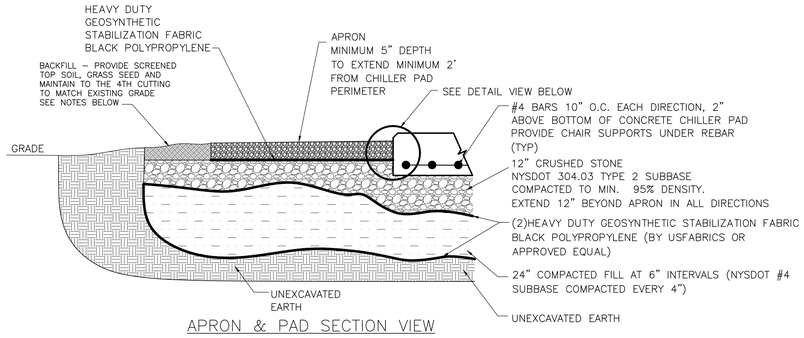
SHEET TITLE
PARTIAL ROOF PLAN - KITCHEN, SERVERY, & CAFETERIAS - DEMOLITION & NEW WORK

SHEET NO.
HS M-103

FILE PATH - N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04 HS-M101-M104.dwg



DETAIL VIEW

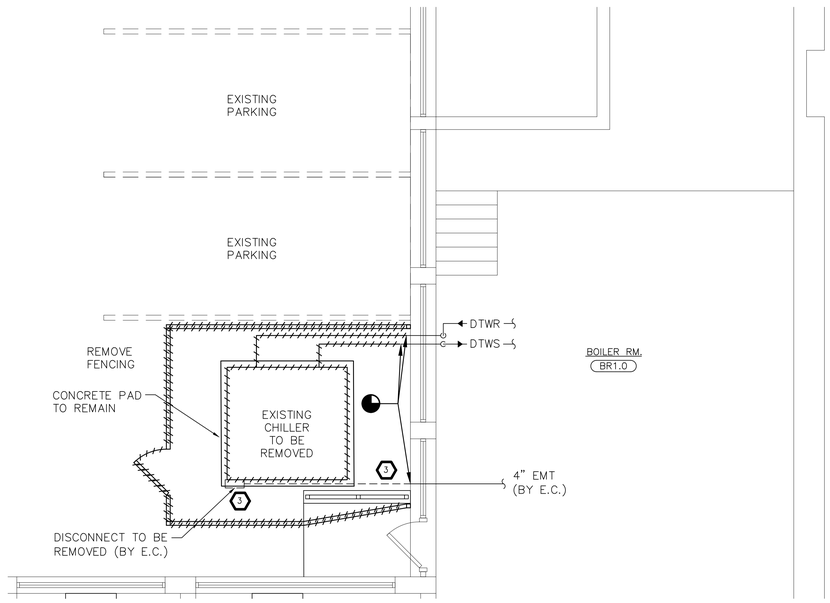


APRON & PAD SECTION VIEW

3 CONRETE PAD DETAILS
SCALE: NONE

CONCRETE CHILLER PAD, APRON, AND GRADING NOTES:

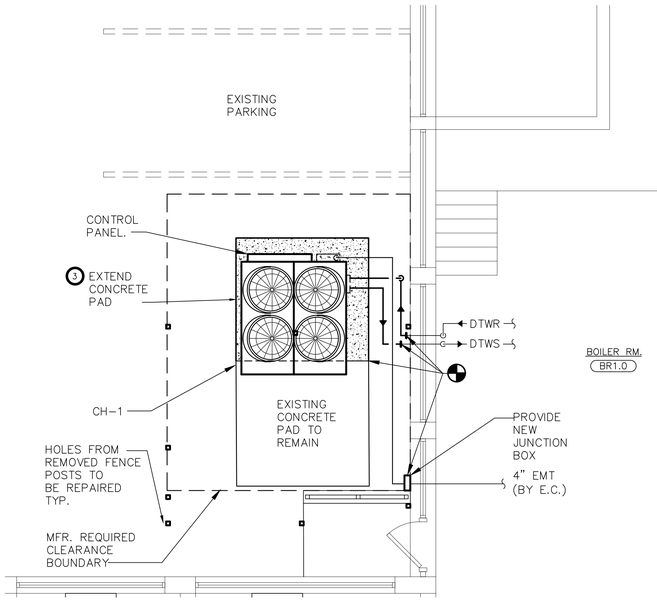
A. TOP OF NEW CHILLER PAD SHALL BE 4"± ABOVE EXISTING GRADE LEVEL
B. TOP SURFACES FINISHES:
   B.A. CHILLER PAD SHALL BE TROWEL FINISHED
C. APRON: (SEE DETAILS THIS SHEET)
   C1. SHALL BE 2" ABOVE EXISTING GRADE LEVEL
   C2. COMPACTED FLAT SLOPED ⅛" PER 12" OF RUN AWAY FROM CONCRETE CHILLER PAD
   C3. VOID OF DEPRESSIONS GREATER THAN ⅛"
D. PROVIDE ANCHOR BOLTS FOR CHILLER PER CHILLER MANUFACTURER'S WRITTEN REQUIREMENTS
E. ALL CONCRETE WORK MUST FOLLOW ACI STANDARDS
F. COORDINATE ALL WORK WITH OWNER
G. CONCRETE:
   G1. MINIMUM 28 DAY COMPRESSIVE STRENGTH – 5000 PSI
   G2. MINIMUM CEMENT FACTOR – (5.5) 94 LB. SACKS PER CUBIC YARD OF CONCRETE
   G3. MAXIMUM AGGREGATE SIZE – 1"
   G4. MAXIMUM SLUMP – 4"
   G5. ADMIXTURES – WATER-REDUCING AGENT, AIR ENTERING AGENT (4% TO 6%)
H. REINFORCING STEEL MATERIALS (SEE DETAIL #S/HS-M107):
   H1. REINFORCING BARS – NEW BILLET STEEL ASTM A-165 GRADE 60
   H2. WELDED WIRE MESH REINFORCING – COLD DRAWN WIRE PER ASTM A-185
   H3. REINFORCING STEEL AND WIRE MESH TO BE UNPAINTED, UNCOATED, FREE FROM RUST, SCALE, AND OIL



1 PARTIAL FIRST FLOOR PLAN - DEMOLITION
SCALE: 1/4=1'-0

KEYED NOTES – DEMOLITION:

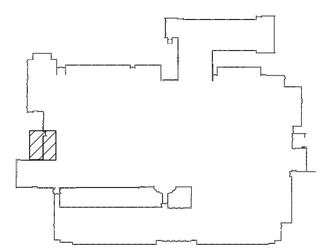
1. REMOVE EXISTING CHILLER. DISCONNECT EXISTING DTW PIPING, DISCONNECT AT POINTS SHOWN.
2. REMOVE FENCING, AND PORTION OF ASPHALT AS NECESSARY TO PREPARE AREA FOR NEW WORK. TURN FENCE OVER TO OWNER
3. REMOVE DISCONNECT AND PORTION OF ELECTRICAL WIRING AND CONDUIT AS SHOWN.



2 PARTIAL FIRST FLOOR PLAN - NEW WORK
SCALE: 1/4=1'-0

KEYED NOTES – NEW WORK:

1. PROVIDE NEW CHILLER TO BE INSTALLED AND CHARGED PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO PROVIDE NEW PIPING AND ASSOCIATED TO CONNECT TO EXISTING DTW PIPING, CONTROLS, AND ALL ACCESSORIES REQUIRED FOR A COMPLETE OPERATING SYSTEM. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PIPE SIZING AND TO MAKE EXISTING PIPE TRANSITIONS FIT TO NEW CHILLER. RESEAL EXISTING DTW PIPING PENETRATIONS. CONTRACTOR IS RESPONSIBLE FOR START UP, TESTING, CERTIFICATIONS, AND INSPECTIONS. SEE M-502 FOR DETAILS.
2. COORDINATE WITH GC FOR NEW CONCRETE PAD AND ASPHALT. REPAIR HOLES FROM REMOVED FENCE POSTS IN EXISTING ASPHALT AND CONCRETE.
3. PROVIDE NEW 12" THICK CONCRETE PAD AS SHOWN. PIN EVERY 12"OC WITH ⅝X12 REBAR AND GROUT AS REQUIRED.



FIRST FLOOR KEY PLAN
SCALE: NONE

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STAMP
STATE OF NEW YORK – MARK EISENBACH – NO. 095835 – LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

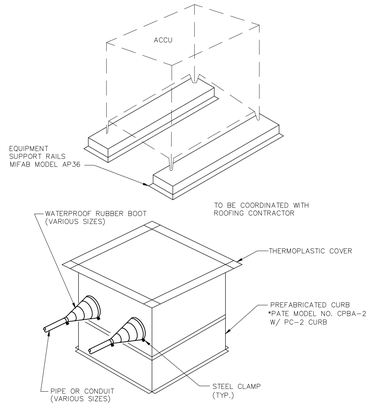
☐ BB SED NO. 44-21-01-06-7-041-001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐ FF SED NO. 44-21-01-06-7-041-001 (FF=WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐ HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

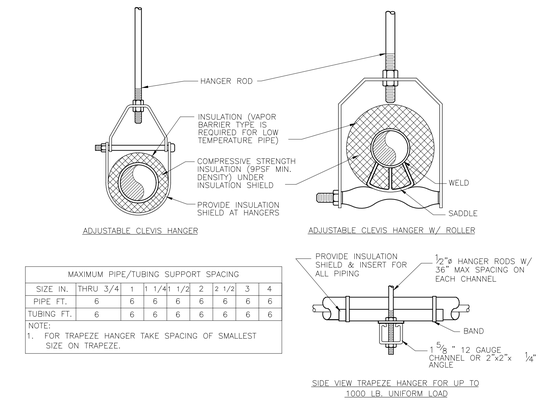
SHEET TITLE
PARTIAL FIRST FLOOR PLAN - NORTH CHILLER - DEMOLITION & NEW WORK

SHEET NO.
HS M-104

FILE PATH –N:\7 – PROJECT DIRECTORIES\7– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-M101-M104.dwg



4 PIPE/CONDUIT CURB ASSEMBLY DETAILS
SCALE: NONE

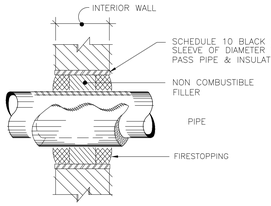


MAXIMUM PIPE/TUBING SUPPORT SPACING								
SIZE IN.	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
PIPE FT.	6	6	6	6	6	6	6	6
TUBING FT.	6	6	6	6	6	6	6	6

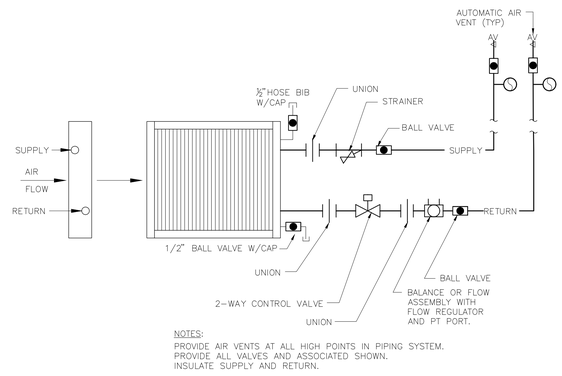
NOTE:
1. FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.

SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

1 PIPE SUPPORT DETAIL
SCALE: NONE

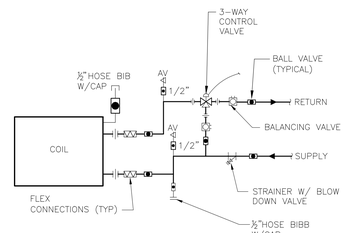


5 PIPE SLEEVE AT WALL PENETRATION
SCALE: NONE



NOTES:
PROVIDE AIR VENTS AT ALL HIGH POINTS IN PIPING SYSTEM.
PROVIDE ALL VALVES AND ASSOCIATED SHOWN.
INSULATE SUPPLY AND RETURN.

UNIT VENTILATOR - FAN COIL UNIT HOT WATER / CHILLED WATER COIL DETAIL
2 SCALE: NONE



NOTES:
1. SUPPORT PIPES FROM STRUCTURE OR FLOOR STANCHEON AS APPLICABLE.
2. COILS MOUNTED IN DUCTS TO BE PROVIDE WITH ACCESS PANELS UPSTREAM OF THE COIL.
3. PIPE COIL TO ALLOW REMOVAL OF COIL WITHOUT REMOVING PIPING BEYOND UNIONS OR FLANGES.
4. FOR UNITS PROVIDED WITH OTHER THAN ONE COIL, PROVIDE FLOW BALANCER, FLANGES, FLEXIBLE CONNECTOR, DRAINS, AND AIR VENTS FOR EACH COIL.
5. COOLING COIL SIMILAR

COIL PIPING DETAIL 3 WAY VALVE
3 SCALE: NONE

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STATE OF NEW YORK · JAMES EISENBACH · LICENSED PROFESSIONAL ENGINEER · No. 099435

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
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225 WEST STREET EXT. WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
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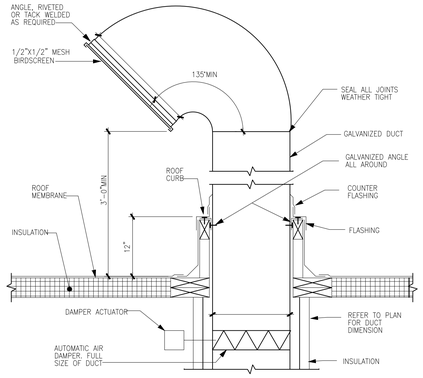
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
DETAILS

SHEET NO.
M-500

FILE PATH =N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-M500-M501.dwg

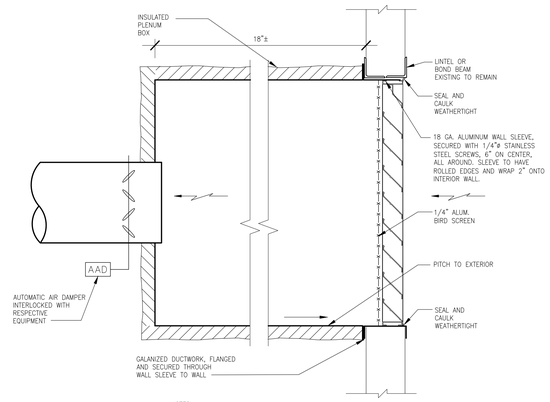


NOTE:

1. INSTALL GOOSENECK WITH INTAKE AWAY FROM FRONT OF BUILDING

AIR INTAKE RETANGULAR GOOSENECK DETAIL

7 SCALE: NONE

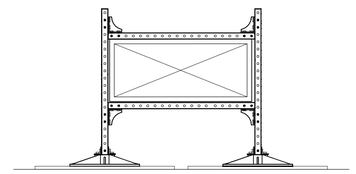


NOTES:

1. ALL HARDWARE SHALL BE CORROSION RESISTANT AND HAVE FINISH TO MATCH ADJACENT SURFACE WHERE EXPOSED TO VIEW.
2. PROVIDE RUSKIN ELF375DXH LOUVER, OR APPROVED EQUAL

LOUVER DETAIL

4 SCALE: NONE

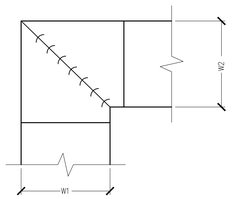


NOTES:

1. CLEAR BALLAST (IF PRESENT) AND CLEAN SURFACE OF ROOF TO RECEIVE WALKWAY PAD.
2. SPACE SUPPORTS PER SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS – METAL AND FLEXIBLE" AND PER MANUFACTURERS RECOMMENDATIONS.

ROOF MOUNTED DUCT SUPPORT DETAIL

1 SCALE: NONE

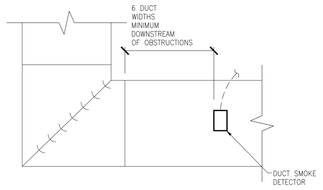


NOTES:

1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2 VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1½" MAXIMUM SPACE BETWEEN VANES AND A ¾" TRAILING EDGE.
4. WHEN W1 EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANES TYPE.

DUCTWORK SQUARE VANE ELBOWS DETAIL

8 SCALE: NONE

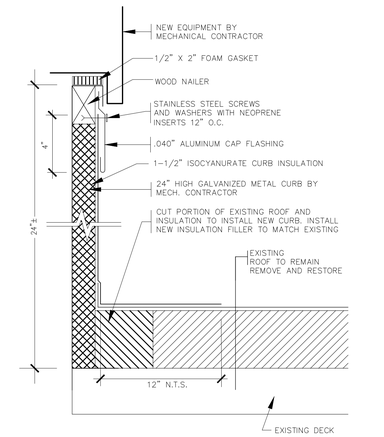


NOTES:

1. DETECTORS SHALL BE FURNISHED/WIRED BY ELECTRICAL CONTRACTOR AND INSTALLED BY HVAC CONTRACTOR.

DUCTWORK SMOKE DETECTOR INSTALLATION

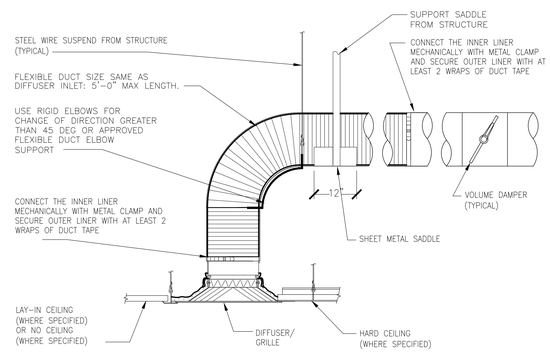
5 SCALE: NONE



NOTE:
ALL WORK ON THE EXISTING ROOF MUST BE PERFORMED BY AN AUTHORIZED APPLICATOR TO MAINTAIN THE EXISTING WARRANTY.

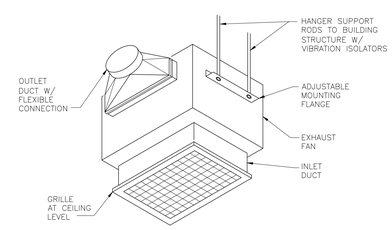
TYPICAL HVAC CURB (EXISTING ROOF)

2 SCALE: NONE



FLEXIBLE AIR DUCT CONNECTOR

6 SCALE: NONE



EXHAUST FAN DETAIL

3 SCALE: NONE

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PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
DETAILS

SHEET NO.
M-501

FILE PATH -N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.m500-M501.dwg

GRILLES AND SUPPLY DIFFUSER SCHEDULE

MARK	TYPE	MODEL	GRILLE/ DIFFUSER FACE SIZE	CEILING MODULE SIZE	NECK SIZE	FRAME TYPE	MATERIAL	MFR. FINISH	REMARKS
SD-1	SUPPLY	TITUS TMS	24"x24"	24"x24"	8"ø	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,2
SD-2	SUPPLY	TITUS TMS	24"x24"	24"x24"	10"ø	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,2
SD-3	SUPPLY	TITUS 300 RL	14"x6"	–	–	SURFACE MOUNT	STEEL	WHITE	SEE NOTE 1,3
SD-4	SUPPLY	TITUS TDC	48"x24"	48"x24"	36"x21"	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,7
SD-5	SUPPLY	TITUS TDC	48"x24"	48"x24"	36"x21"	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,8
SD-6	SUPPLY	TITUS TDC	24"x24"	24"x24"	18"x18"	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,9
SD-7	SUPPLY	TITUS TDC	48"x24"	48"x24"	36"x21"	FULL FACE, 1" LAY-IN	STEEL	WHITE	SEE NOTES 1,10
SD-8	SUPPLY	TITUS TBDI-80	48"x5"	48"x24"	9"x5-¾"	PANEL MOUNT, 1" LAY-IN	STEEL	BLACK	SEE NOTES 1,5,6
RG-1	RETURN	TITUS 50R	18"x18"	24"x24"	18"x18"	PANEL MOUNT, 1" LAY-IN	STEEL/ALUMINUM	WHITE/ALUM.	SEE NOTES 1,3
RG-2	RETURN	TITUS 50R	48"x24"	48"x24"	46"x22"	FULL FACE, 1" LAY-IN	STEEL/ALUMINUM	WHITE/ALUM.	SEE NOTES 1,3
RG-3	RETURN	TITUS 50R	48"x24"	48"x24"	36"x20"	FULL FACE, 1" LAY-IN	STEEL/ALUMINUM	WHITE/ALUM.	SEE NOTES 1,3
RG-4	RETURN	SEE NOTE 4	24"x16"	–	–	SURFACE MOUNT	STEEL	BRONZE	SEE NOTES 1,3

NOTE 1: PROVIDE VOLUME DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING.
NOTE 2: PROVIDE INSULATION OPTION FOR INDICATED GRILLE/DIFFUSER.
NOTE 3: PROVIDE WITH MODEL-SPECIFIC BUILT-IN STEEL MANUAL DAMPER.
NOTE 4: PACIFIC REGISTER CO., FILTER GRILLE W/ MERV-8 BLACK WASHABLE FILTER, SQUARE PATTERN, STD. FRAME, FLUSH SCREWS, POWDER COATED – OR AS SELECTED BY DISTRICT, COORDINATE FINAL SELECTION WITH DISTRICT BEFORE ORDERING.
NOTE 5: GASKETED BLADES, TWO 1-1/2" SLOTS, 8" INLET TO OVAL INTAKE/NECK, INT. AND EXT. OF PLENUM TO BE INSULATED. THROW DATA:14',20',29' @250 CFM, NC-30.
NOTE 6: "THROW A" – BLADES TO BE ADJUSTED BY CONTRACTOR TO THROW AIR VERT. STRAIGHT DOWN. "THROW B" – CONTRACTOR ADJUSTS BLADES TO THROW AIR HORIZ. TOWARD NEARBY WINDOWS.
NOTE 7: F2 THROW PATTERN 2-DIRECTIONAL, POSITION AS SHOWN ON DRAWING
NOTE 8: E2 THROW PATTERN 2-DIRECTIONAL, POSITION AS SHOWN ON DRAWING
NOTE 9: G2 THROW PATTERN 2-DIRECTIONAL, POSITION AS SHOWN ON DRAWING
NOTE 10: A2 THROW PATTERN 2-DIRECTIONAL, POSITION AS SHOWN ON DRAWING

INSULATION SCHEDULE

TYPE	EQUIPMENT OR SYSTEM SERVED	INSULATION CLASS (a)			JACKETING CLASS (b)			THICKNESS (IN)					
								NOMINAL PIPE SIZE (IN)					DUCTWORK
		INTERIOR CONCEALED	INTERIOR EXPOSED	EXTERIOR	INTERIOR GENERAL	EQUIPMENT ROOMS	EXTERIOR	<1"	1"–<1½"	1½"– <4"	4 "– <8"	≥8" & UP	(c)
A	RS, RL	FE (R-4)	FE (R-4)	FE (R-4)	0	0	4	0.5	1.5	1.5	1.5	1.5	
B	DCW, COOLING COIL CONDENSATE	FE (R-4)	– –	– –	0	– –	– –	0.5	0.5	1.0	1.0	1.0	
		– –	FE (R-4)	– –	– –	4	– –	0.5	0.5	1.0	1.0	1.0	
C	HWS, HWR	FG (R-7)	– –	– –	1	– –	– –	1.5	1.5	2	2	2	
		– –	FG (R-7)	– –	1	1	– –	1.5	1.5	2	2	2	
		– –	– –	UR (R-9)	– –	– –	6	1.5	1.5	2	2	2	
D	DUCTWORK	FG (d) (R-6)	– –	– –	2	– –	– –	– –		– –	– –	– –	1.5(g)
		– –	FG (e) (R-6)	– –	2	2	– –	– –		– –	– –	– –	2 (f)(g)
		– –	– –	UR(e) (R-12)	– –	– –	3	– –		– –	– –	– –	2 (i)

(a) FG – – FIBROUS GLASS
FE – – FLEXIBLE ELASTOMERIC
UR – – URETHANE
CS – – CALCIUM SILICATE
FR – – FIRE RATED

(b) 0 – – NONE
1 – – ALL SERVICE
2 – – ALUMINUM FOIL
3 – – CANVAS
4 – – POLYVINYL CHLORIDE
5 – – STAINLESS STEEL
6 – – ALUMINUM
7 – – EPDM

(c) SUPPLY AIR
OUTSIDE AIR
MIXED AIR
RETURN AIR

(d) BLANKET

(e) RIGID BOARD

(f) EXCEPT SUPPLY AIR WITHIN CONDITIONED SPACE

(g) INSULATE EXHAUST AIR 15'-0" FROM EXTERIOR PENETRATION

(i) TWO LAYERS, 3 IN TOTAL

ALL INSULATION TO COMPLY WITH 2020 NYS ENERGY CONSERVATION CONSTRUCTION CODE

ROOFTOP UNIT SCHEDULE

	MARK	SERVICE	MODEL NO.	CFM	O/A MIN	FAN MOTOR (HP) (SUPPLY)/ (EXHAUST)	COOLING											HEATING					ELECTRICAL								REMARKS
							TYPE	TEMPERATURE (°F)					CAPACITY			GPM	ENT. FLUID (°F)	LVG. FLUID (°F)	EER	TYPE	TEMPERATURE (°F)		CAPACITY MBH	GPM	ENT. FLUID (°F)	LVG. FLUID (°F)	V/PH/HZ	MCA (A)	MOP (A)	FACTORY DISC.	VFD	GFCI OUTLET	ENERGY RECOV.	UNIT WEIGHT (LB)	
								ENT. AIR		LVG. AIR		OD AMB	TONS	MBH							ENT. AIR	LVG. AIR												
								DB	WB	DB	WB	DB/WB	NOM.	TOTAL	SENS.						DB	DB	TOTAL											
(HS)	RTU-1	NORTH CAFETERIA	LG ARDE-112-36-30L-5I-C	2400	1700	(3)/(2)	PKG. DX – R410A REFRIG.	77.4	64.5	54.6	54.0	92/74	5.0	75.1	60.0	–	–	–	12.8	INDIRECT NATURAL GAS	59.1	90.0	100	–	–	–	208/3/60	39.1	50.0	YES	YES	YES	YES	3,284	SEE NOTES 1–7
(HS)	RTU-2	NORTH CAFETERIA	LG ARDE-112-30-30H-5I-C	1800	1300	(2)/(1.5)	PKG. DX – R410A REFRIG.	78.0	64.9	51.9	51.5	92/74	5.0	71.1	51.6	–	–	–	12.8	INDIRECT NATURAL GAS	56.3	97.4	100	–	–	–	208/3/60	33.7	45.0	YES	YES	YES	YES	3,198	SEE NOTES 1–7
(HS)	RTU-3	SOUTH CAFETERIA	LG ARDE-112-36-30H-10D-G	3600	2350	(5)/(3)	PKG. DX – R410A REFRIG.	78.3	65.1	54.0	53.1	92/74	10.0	130.0	96.1	–	–	–	11.6	INDIRECT NATURAL GAS	54.9	96.1	200	–	–	–	208/3/60	71.5	80.0	YES	YES	YES	YES	3,417	SEE NOTES 1–7
(HS)	RTU-4	SOUTH CAFETERIA	LG ARDE-112-30-30L-5I-C	1600	1050	(2)/(1.5)	PKG. DX – R410A REFRIG.	80.2	66.4	51.8	51.5	92/74	5.0	71.2	49.7	–	–	–	12.8	INDIRECT NATURAL GAS	47.0	93.3	100	–	–	–	208/3/60	33.7	45.0	YES	YES	YES	YES	3,198	SEE NOTES 1–7
(HS)	RTU-5	MAIN LOBBY	YORK XTO-30x45	2450	750	(3.0)/– –	DTW COIL – CHILLED WTR.	80.0	67.0	57.7	55.8	92/74	6.8	81.7	57.7	19.0	45	53	–	DTW COIL – HOT WTR.	50.0	127.5	200	12	180.0	150.0	208/3/60	22.0	25.0	YES	YES	YES	YES	1,722	SEE NOTES 1–6
(HS)	RTU-6	MAIN LOBBY	YORK XTO-30x45	2450	750	(3.0)/– –	DTW COIL – CHILLED WTR.	80.0	67.0	57.7	55.8	92/74	6.8	81.7	57.7	19.0	45	53	–	DTW COIL – HOT WTR.	50.0	127.5	200	12	180.0	150.0	208/3/60	22.0	25.0	YES	YES	YES	YES	1,722	SEE NOTES 1–6

NOTE 1: PROVIDE DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING OR AS NEEDED TO COMPLY WITH ECCCNYS C403.7.7 REQUIREMENTS FOR INTAKES AND EXHAUST OPENINGS.
NOTE 2: OBSERVE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.
NOTE 3: MECHANICAL CONTRACTOR TO PROVIDE WEATHERPROOF ENCLOSURES "SYSTEM SENSOR DH400OE-1" OR APPROVED EQUAL FOR ALL DUCT SMOKE DETECTORS MOUNTED IN EXTERIOR DUCTWORK ON ROOF.
NOTE 4: MAINTAIN MINIMUM OF 10' FROM ROOF EDGE WHEN PLACING UNIT.
NOTE 5: UNLESS OTHERWISE SPECIFIED, UNITS ARE TO HAVE MERV-8 FILTERS FOLLOWED BY MERV-13 FILTERS.
NOTE 6: INTERCONNECT DUCT SMOKE DETECTORS (FURNISHED AND WIRED BY EC) TO DEACTIVATE UNIT WHEN DSD ALARMS.
NOTE 7: INTERCONNECT CARBON MONOXIDE DETECTORS (PROVIDED BY EC) TO DEACTIVATE UNIT WHEN CO DETECTOR ALARMS. INTERCONNECT TO EACH UNIT SERVING THE SAME SPACE AS THE CO DETECTOR(S).
NOTE 8: INTERCONNECT CARBON DIOXIDE DETECTORS (PROVIDED BY EC) TO MODULATE CONDITIONED AIR SUPPLY BASED ON DEMAND.

MAKEUP AIR UNIT SCHEDULE

	MARK	SERVICE	MODEL NO.	CFM	O/A MIN	SUPPLY FAN HP	COOLING									HEATING				ELECTRICAL								REMARKS
							TYPE	TEMPERATURE (°F)					CAPACITY			EER	TYPE	TEMPERATURE (°F)		CAPACITY MBH	V/PH/HZ	MCA (A)	MOP (A)	FACTORY DISC.	VFD	CONVN. GFCI OUTLET	ENERGY RECOV.	UNIT WEIGHT (LB)	
								ENT. AIR		LVG. AIR		OD AMB	TONS	MBH				ENT. AIR	LVG. AIR										
								DB	WB	DB	WB	DB/WB	NOM.	TOTAL	SENS.			DB	DB	TOTAL									
(HS)	MAU-1	KITCHEN	LG ARDR-212-25I-N	5800	350	7.5	PKG. DX – R410A REFRIG.	90.2	72.9	55.5	55.2	92/74	25.0	344.9	221.7	10.1	INDIRECT NATURAL GAS	7.4	71.3	500,000	208/3/60	145.7	175.0	YES	YES	YES	YES	3,852	SEE NOTES 1–8
(HS)	MAU-2	SERVERY	LG ARDR-212-17.5I-M	3800	500	5	PKG. DX – R410A REFRIG.	90.2	72.9	54.6	54.3	92/74	17.5	234.9	148.8	11	INDIRECT NATURAL GAS	7.6	85.6	400,000	208/3/60	93.7	125.0	YES	YES	YES	YES	3,198	SEE NOTES 1–8

NOTE 1: PROVIDE DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING OR AS NEEDED TO COMPLY WITH ECCCNYS C403.7.7 REQUIREMENTS FOR INTAKES AND EXHAUST OPENINGS.
NOTE 2: OBSERVE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.
NOTE 3: MECHANICAL CONTRACTOR TO PROVIDE WEATHERPROOF ENCLOSURES "SYSTEM SENSOR DH400OE-1" OR APPROVED EQUAL FOR ALL DUCT SMOKE DETECTORS MOUNTED IN EXTERIOR DUCTWORK ON ROOF.
NOTE 4: "COOLING" AND "HEATING" EAT AND LAT CALCULATED AT WORST CASE – 90% OA, 10% RETURN.
NOTE 5: UNITS OUTFITTED WITH FACTORY MOTORIZED DAMPER AND AIR FLOW MONITOR ON OA INTAKE AND FIELD INSTALLED MOTORIZED DAMPER ON RETURNS. SEE M-600 FOR CONTROL SEQUENCING.
NOTE 6: UNITS TO BE PROVIDED WITH TWO MERV 8 FILTERS FOLLOWED BY TWO MERV 13 FILTERS. REFER TO MANUFACTURER'S RECOMMENDATIONS.
NOTE 7: INTERCONNECT DUCT SMOKE DETECTORS (FURNISHED AND WIRED BY EC) TO DEACTIVATE UNIT WHEN DSD ALARMS.
NOTE 8: INTERCONNECT CARBON MONOXIDE DETECTORS (PROVIDED BY EC) TO DEACTIVATE UNIT WHEN CO ALARMS. INTERCONNECT TO EACH UNIT SERVING THE SAME SPACE AS THE CO DETECTOR(S).

CHILLER SCHEDULE

	MARK	SERVICE	BRAND/MODEL NO.	CAPACITY (TONS)	PACKAGE/ SPLIT	CONDENSER			EVAPORATOR											COMPRESSOR				ELECTRICAL							UNIT WEIGHT (LB)	REMARKS
						DESIGN AMBIENT TEMP. (°F)	MIN. AMBIENT TEMP. (°F)	FAN QTY.	FLUID	VOL. (GAL)	FLOW (GPM)	FLOW MIN/MAX (GPM)	P DROP (FT H20)	P DROP MIN/MAX (FT H20)	CONNECTION TYPE/ SIZE (IN)	ENT. FLUID (°F)	LVG. FLUID (°F)	SUCT. INSULATED	QTY.	TYPE	QTY.	REFRIG. TYPE	UNIT CHARGE (LB)	V/PH/HZ	MCA (A)	MOP (A)	FACTORY DISC.	VFD	CONVN. GFCI OUTLET			
(HS)	CH-1	(NORTH CHILLER) 2 PIPE DTW SYS.–BLDG.	DAIKIN AGZ070E DST AIR COOLED CHILLER	64.78	PACKAGE	95.0	32.0	4	WATER	3.2	155.0	102.9	274.4	17.1	7.90	50.7	LEFT/2.5	54.00	44.00	YES	1	AIR–SCROLL	4	R410A	46	208/3/60	320	350	YES	YES	YES	3497	SEE NOTES 1–4

NOTE 1: COIL FINS ARE MICROCHANNEL – EPOXY COATED,
NOTE 2: OBSERVE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL, CHARGE, AND START UP UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.
NOTE 3: IF CONVENIENCE GFCI OUTLET OPTION IS UNAVAILIBLE, PROVIDE AND WIRE STANDALONE GFCI OUTLET.
NOTE 4: CHILLER REQUIRES DRAINING, SHUT DOWN, AND 3 WAY VALVE CHANGE OVER DURING HEATING SEASON. PROVIDE TYPED SEASONAL SHUTDOWN/ STARTUP PLAN TO AVOID DAMAGE AND POST IN NEARBY BOILER ROOM. REFER TO MANUFACTURER RECOMMENDATIONS WHEN AVAILABLE. SUBMIT SHUTDOWN/STARTUP PLAN DIGITALLY IN CLOSEOUT DOCUMENTS.

EXHAUST FAN SCHEDULE

	MARK	LOCATION /SERVICE	FAN TYPE	AIR FLOW CFM	STATIC PRESS., (IN WC.)	MAX. RPM	HP/WATTS	VOLT/PHASE	MODEL	MFG	REMARKS
(BB)	EF-1	OUTDOOR BATHROOM BUILDING	DIRECT-DRIVE	400	.375	1070	217 WATTS	115/1	CSP-A510	GREENHECK	SEE NOTES 1,2,4
(BB)	EF-2	OUTDOOR BATHROOM BUILDING	DIRECT-DRIVE	100	.375	1400	113 WATTS	115/1	CSP-A190	GREENHECK	SEE NOTES 1,2,3
(BB)	EF-3	OUTDOOR BATHROOM BUILDING	DIRECT-DRIVE	400	.375	1070	217 WATTS	115/1	CSP-A510	GREENHECK	SEE NOTES 1,2,4

NOTE 1: PROVIDE VIBRATION ISOLATORS. SEAL PENETRATIONS TO BE WEATHER PROOF. SEAL DUCTWORK FOR AIRTIGHT SEAL.
NOTE 2: PROVIDE "VARI-SPEED" CONTROLS. MOUNT INTERNALLY.
NOTE 3: PROVIDE GREENHECK WC-6
NOTE 4: PROVIDE GREENHECK WC-8

OA DESIGN CRITERIA
WARWICK HIGH SCHOOL

	NOTES
RTU-1 & RTU-2 – NORTH CAFETERIA CAFETERIA OCCUPANT DENSITY = 100/1000 SQUARE FEET RP=7.5 CFM/PERSON PZ=295 PEOPLE (POSTED MAX OCCUPANCY) RA=0.18 CFM/SQ.FT. AZ=4341 SQ.FT. VBZ=2993.88 CFM MIN TOTAL OUTSIDE AIR REQUIRED – 3,000 CFM	
RTU-3 & RTU-4 – SOUTH CAFETERIA CAFETERIA OCCUPANT DENSITY = 100/1000 SQUARE FEET RP=7.5 CFM/PERSON PZ=329 PEOPLE (POSTED MAX OCCUPANCY) RA=0.18 CFM/SQ.FT. AZ=4854 SQ.FT. VBZ=3341.22 CFM MIN TOTAL OUTSIDE AIR REQUIRED – 3,400 CFM	
RTU-5 & RTU-6 – MAIN LOBBY FIRST FLOOR LOBBY OCCUPANT DENSITY = 30/1000 SQFT. RP=7.5 CFM/PERSON PZ=145 PEOPLE (CALCULATED) RA=0.06 CFM/SQ.FT. AZ=4826 SQ.FT. (VBZ 1)=1377.06 CFM SECOND FLOOR CORRIDOR (LOBBY BRIDGE) OCCUPANT DENSITY = –/1000 SQUARE FEET * RP= – CFM/PERSON * PZ= – PEOPLE * RA=0.06 CFM/SQ.FT. AZ=1143 SQ.FT. (VBZ 2)=68.58 CFM VBZ=(VBZ 1)+(VBZ 2)=1445.64 CFM MIN TOTAL OUTSIDE AIR REQUIRED – 1,500 CFM	* PER 2020 IMC, POPULATION-BASED OCCUPANCY VALUES ARE NOT PROVIDED FOR CORRIDOR VENTILATION CALCULATIONS. CALCULATION IS BASED ON BREATHING ZONE AREA.
MAU-1 – KITCHEN CAFETERIA OCCUPANT DENSITY = 20/1000 SQUARE FEET RP=7.5 CFM/PERSON PZ=19 PEOPLE (CALCULATED) RA=0.18 CFM/SQ.FT. AZ=943 SQ.FT. VBZ=311.19 CFM MIN TOTAL OUTSIDE AIR REQUIRED – 350 CFM	
MAU-2 – SERVERY CAFETERIA OCCUPANT DENSITY = 20/1000 SQUARE FEET RP=7.5 CFM/PERSON PZ=30 PEOPLE (CALCULATED) RA=0.18 CFM/SQ.FT. AZ=1502 SQ.FT. VBZ=495.66 CFM MIN TOTAL OUTSIDE AIR REQUIRED – 500 CFM	

OCCUPANCY CLASSIFICATION DERIVED FROM NYSMC TABLE 403.3.1.1

RP=OUTDOOR AIRFLOW RATE PER PERSON (NYSMC TABLE 403.3.1.1)
PZ=QTY. OF OCCUPANTS IN SPACE (CALCULATED OR OTHERWISE NOTED)
RA=OUTDOOR AIRFLOW RATE PER UNIT AREA (NYSMC TABLE 403.3.1.1)
AZ=OCCUPIABLE FLOOR AREA
VBZ=REQUIRED OUTDOOR AIRFLOW RATE IN BREATHING ZONE

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY. IF THIS ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM BEING ALTERED, THE LEGEND "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE. COPYRIGHT © 2019

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

■BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF-W FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■HS SED NO. 44-21-01-06-0-001-040 (HS-W HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
HVAC SCHEDULES

SHEET NO.
M-502

FILE PATH –N:\I – PROJECT DIRECTORIES\I– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.m502.dwg

WARWICK VALLEY HIGH SCHOOL UV-C LIGHTING SCHEDULE

NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	HVAC UNIT VOLTAGE/PH	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	QTY.	UV-C POWER LOCATION
BASEMENT								
UVC-HS-1	59	HORIZ. UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-2	61	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-3	63	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-4	65	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-5	66	UV		120/1	IN CABINET	UV-FCU-CL 60H-P-B-VENT	1	
UVC-HS-6	67	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-7	68	HORIZ. UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
FIRST FLOOR								
UVC-HS-8	Main Lobby R1.0	RTU *	2450	230/3	36"x12" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-9		RTU *	2450	230/3	36"x12" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-10	MC Media Center	AHU	5520	460/3	36"x24" DUCT	UV-DUCT-FL 2/95HP-NX	1	PANEL
UVC-HS-11	MC 1.12 Media Center Study	RTU	3600	208/3	25"x20" DUCT	UV-DUCT-FL 2/95HP-NX	1	HVAC POWER
UVC-HS-12	Fitness Center GS1.11	RTU	3200	208-230/3	40"x12" DUCT	UV-DUCT-FL 2/95HP-NX	1	HVAC POWER
UVC-HS-13-2	Pool/Fan Room N	AHU	8200	208/3	(x2) 12"x36" DUCTS	UV-DUCT-FL 2/60HP-NX	2	HVAC POWER
UVC-HS-15-3	Pool Locker Rms/ Fan Rm N	AHU	4340	208/3	18"x12" DUCT	UV-DUCT-FL 2/60HP-NX	3	HVAC POWER
UVC-HS-16	North Cafeteria	RTU *	2400	208/3	20"x18" DUCT	UV-DUCT-FL 60-N4X	1	HVAC POWER
UVC-HS-15		RTU *	1800	208/3	20"x16" DUCT	UV-DUCT-FL 60-N4X	1	HVAC POWER
UVC-HS-16	South Cafeteria	RTU *	3600	208/3	24"x24" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-17		RTU *	1600	208/3	24"x12" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-18	Kitchen	MAU *	5800	208/3	28"x28" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-19	Servery	MAU *	3800	208/3	24"x24" DUCT	UV-DUCT-FL 95-N4X	1	HVAC POWER
UVC-HS-20	100 Band Rm/ Passage PG5.0	AHU	4400	208/3	30"x20" Vertical	UV-DUCT-FL 2/95HP-NX	1	HVAC POWER
UVC-HS-21	100.5 Chorus Rm	RTU	2500	208/3	26"x14" DUCT	UV-DUCT-FL 2/95HP-NX	1	HVAC POWER
UVC-HS-22	101	UV	750	120/1	IN CABINET	UV-FCU-CL 60H-P-B-VENT	1	HVAC POWER
UVC-HS-23	103	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-24	105	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-25	107	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-26	109	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-27	111	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-28	113	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-29	114.0 Attendance/Nurse's Office	HORIZ. FCU	775	120/1	36"x8" DUCT	UV-DUCT-FL 2/35HP-NX	1	HVAC POWER
UVC-HS-30	114.4 Attendance/Nurse's Office	HORIZ. FCU	500	120/1	36"x8" DUCT	UV-DUCT-FL 2/35HP-NX	1	HVAC POWER
UVC-HS-31	115	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-32	117	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-33	118	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-34	119	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-35	120	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-36	121	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-37	122	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-38	123	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-39	124	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-40	125	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-41	126	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-42	127 (CLASS.)	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-43	129	UV	1000	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-44	134	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-45	136, 138	VRF ** (Tie into HRU)	450	208/1	14"x10" DUCT	UV-DUCT-FL 2/35HP-NX	1	HVAC POWER
UVC-HS-46	139/ 139,139.1	HORIZ. UV	1500	120/1	IN DUCT	UV-DUCT-FL 2/60HP-NX	1	HVAC POWER
UVC-HS-47	142	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-48-2		AHU	1950	460/3	34"x14" DUCT	UV-DUCT-FL 2/35HP-NX	2	PANEL
UVC-HS-49	143	HORIZ. UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-50	145	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-51	161	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-52	162	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-53	163	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-54	165	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-55	167	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER
UVC-HS-56	169	UV		120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	HVAC POWER

(*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.
(**) INDICATES A VRF SYSTEM PAIRED WITH AN HRU. TIE UV-C POWER AND CONTROLS INTO HRU.

WARWICK VALLEY HIGH SCHOOL UV-C LIGHTING SCHEDULE (CONTINUED)

NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	HVAC UNIT VOLTAGE/PH	UV-C INSTALL LOCATION	UV-C FIXTURE VOLTAGE/PH	QTY.	UV-C POWER LOCATION
SECOND FLOOR								
UVC-HS-57	201	UV	750	120/1	IN CABINET	UV-FCU-CL 60H-P-B-VENT	1	HVAC POWER
UVC-HS-58	203	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-59	205	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-60	207	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-61	209	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-62	211	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-63	213	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-64	214	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-65	215	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-66	216	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-67	217	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-68	218	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-69	219	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-70	220	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-71	221	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-72	222	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-73	223	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-74	224	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-75	225	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-76	227	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-77	229	UV	1250	120/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-78	CORR./242.2-242.3 OFFICES	HORIZ. FCU	575	120/1	14"x8" DUCT	UV-DUCT-FL 2/35HP-NX	1	

(*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.
(**) INDICATES A VRF SYSTEM PAIRED WITH AN HRU. TIE UV-C POWER AND CONTROLS INTO HRU.

UV-C LIGHT FIXTURE SPECIFICATION AND INSTALLATION NOTES

NOTE 1: PROVIDE UV-C LIGHT FIXTURES AND BULBS FROM LIGHT PROGRESS USA BRAND, NO SUBSTITUTION, AND ANY HARDWARE, SHIELDING, WIRING, DRIVERS, RELAYS, TRANSFORMERS, AND ALL APPURTENANCES NECESSARY FOR INSTALLATION.

NOTE 2: PROVIDE POWER TO LIGHT FIXTURES USING 2#12 –W1#12 GRD WIRING. PROVIDE 3/4" CONDUIT OR METAL CLADDING TO POWER AND CONTROL WIRING. POWER AND CONTROL WIRING TO BE IN SEPARATE CONDUIT/MC TO AVOID INTERFEREANCE.

NOTE 3: UV-C CONTRACTOR TO PROVIDE AND COORDINATE CUTTING, PATCHING, SEALING, AND REINSULATING OF DISTURBED DUCTWORK. REINFORCE DUCTWORK TO MAINTAIN RIGIDITY AND PROVIDE SUPPORT TO PREVENT DUCTWORK SAGGING, DEFORMATION, OR VIBRATION. TEST AND SEAL ALL PENETRATIONS TO BE AIRTIGHT.

NOTE 4: EACH UV-C LIGHTING CIRCUIT MUST INCLUDE AN INDIVIDUAL SERVICE SWITCH. ONE SERVICE SWITCH MUST DISCONNECT POWER FROM ALL UV-C FIXTURES ON THE CIRCUIT. THIS SERVICE SWITCH SHALL NOT DISCONNECT POWER TO THE HVAC UNIT, CONTROLLER, OR FAN. THE SERVICE SWITCH FACE PLATES MUST INDICATE ON AND OFF DIRECTIONS.

NOTE 5: THE SERVICE SWITCH SHALL HAVE A STATUS INDICATING LED, EITHER INCORPORATED INTO THE SWITCH OR OTHERWISE ADDED. THE SERVICE SWITCH LED SHALL ILLUMINATE ONLY IF THE UV-C FIXTURE(S) ARE ON AND ILLUMINATED. IF THERE ARE FACTORY-MOUNTED STATUS LEDS ON THE UV-C FIXTURES AND THEY ARE VISIBLE FROM THE OUTSIDE OF THE FIXTURE, THE SWITCH STATUS LED MAY BE OMITTED.

NOTE 6: UV-C LIGHTING AND ALL APPURTENANCES MUST BE POSITIONED TO BE ACCESSIBLE WITHIN REASON TO ALLOW FOR CLEANING, MAINTENANCE, AND REPLACEMENT OF BULB(S). VERIFY PLACEMENT BASED ON FIELD CONDITIONS. PROVIDE PAINTED ACCESS PANELS AS NEEDED.

NOTE 7: TIE INTO SPECIFIED HVAC EQUIPMENT CONTROLS. REFER TO THE UV-C ACTIVATION CONDITIONS DETAIL REGARDING WHEN THE UV-C FIXTURE(S) SHALL BE ACTIVATED.

NOTE 8: CONNECT TO BMS CONTROLS AND INTEGRATE TO TRIP TROUBLE CODES FOR MALFUNCTIONS, SUCH AS A NON-FUNCTIONAL BALLAST OR BULB. PROVIDE UV-C FIXTURE WITH OPTIONS AND EQUIPMENT TO COMMUNICATE WITH EXISTING BMS. VERIFY IN FIELD.

NOTE 9: AFFIX 1" PLASTIC OR VINYL LABELS TO EACH UV-C LIGHT FIXTURE AND SERVICE SWITCH WITH THE CORRESPONDING UV-C CIRCUIT MARK NOTED ABOVE. EACH UV-C FIXTURE TO BE MARKED WITH AN APPROPRIATE WARNING LABEL. PROVIDE PLASTIC OR VINYL PURPLE MARKERS TO APPROXIMATELY MARK LOCATIONS OF UV-C FIXTURES ABOVE CEILINGS. AFFIX TO T-BAR FOR DROP CEILINGS. AFFIX A LABEL READING "UV-C ON" NEAR ALL STATUS INDICATING LEDS, WHETHER FACTORY-MOUNTED OR OTHERWISE. FOR CIRCUITS THAT REQUIRE POWER TO COME FROM A NEARBY AVAILABLE POWER PANEL, AFFIX LABEL TO CIRCUIT SWITCH INDICATING PANEL'S ROOM NUMBER, PANEL NAME, AND BREAKER NUMBER.

NOTE 10: CONTROLS TO BE COORDINATED WITH DISTRICT CONTROLS VENDER (JOHNSON CONTROLS).

NOTE 11: ALL LOCATIONS, ORIENTATIONS, AND TYPES OF UV-C LIGHT FIXTURES ARE APPROXIMATE. DETERMINE FINAL LOCATION/ORIENTATION BASED ON MANUFACTURER'S RECOMMENDATIONS AND FIELD CONDITIONS.

NOTE 12: FOR UNITS WITH FIXTURES INDICATED TO BE MOUNTED "IN CABINET", PROVIDE AT LEAST ONE (1) SNAP-ACTION TYPE SWITCH TO EACH OF THE SCHEDULED HVAC UNITS' (UV, AHU, RTU, ETC.) ACCESS DOORS/PANELS AND/OR ADJACENT DUCTWORK ACCESS DOORS/PANELS. HARDWIRE POWER TO SWITCHES TO AUTOMATICALLY TURN OFF ALL UV-C LIGHTS ON THE APPLICABLE UV-C CIRCUIT IF ANY PANELS ARE OPENED. PROVIDE ALL WIRING AND APPURTENANCES. SEE SCHEDULE FOR UNIT TYPES. VERIFY ACCESS DOORS/PANELS IN FIELD.

NOTE 13: "IN CABINET" INSTALLATIONS SHALL MAKE USE OF LIGHT SHIELDING AND REQUIRE PROPER AIMING DURING INSTALLATION. REFER TO MANUFACTURER'S RECOMMENDATIONS.

HVAC UNIT LEGEND

RTU – ROOF TOP UNIT
AHU – AIR HANDLING UNIT
UV – VERTICAL UNIT VENTILATOR – FLOOR MOUNTED
HORIZ. UV – HORIZONTAL UNIT VENTILATOR – CEILING HUNG
FCU – VERTICAL FAN COIL UNIT – FLOOR MOUNTED
HORIZ. FCU – HORIZONTAL FAN COIL UNIT – CEILING HUNG
VRF – VARIABLE REFRIGERANT FLOW SYSTEM
HRU – HEAT RECOVERY UNIT
MAU – MAKE-UP AIR UNIT

CIRCUIT NAMING CONVENTION

UVC-MS-19-4

- UVC-MS: UV-C LIGHT FIXTURE
- 19: SCHOOL ABBREVIATION
- 4: CIRCUIT NO.
- NO. OF UV-C FIXTURES ON CIRCUIT (OMIT IF ONLY ONE)

SEE NOTES AND SCHEDULES REGARDING LABELING EQUIPMENT WITH INDICATED CIRCUIT MARK

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

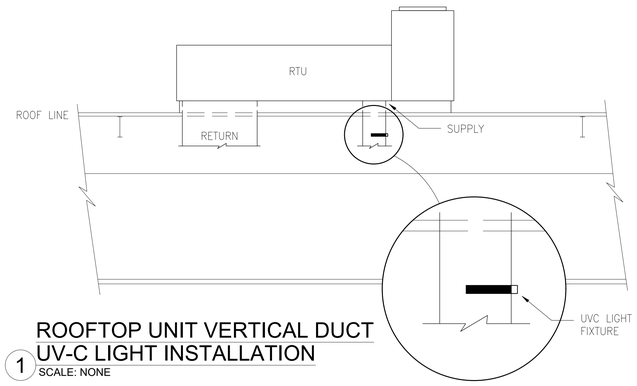
☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐■HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

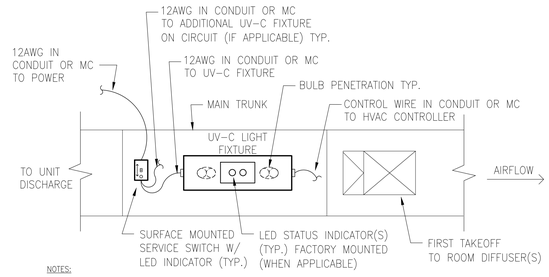
SHEET TITLE
HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULE (UV-C CONTRACT)

SHEET NO.
M-503

FILE PATH -N:\V - PROJECT DIRECTORIES\V- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.m503-m505.dwg



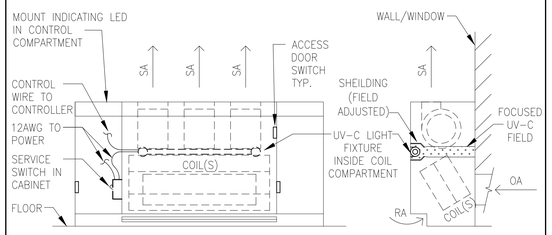
1 ROOFTOP UNIT VERTICAL DUCT UV-C LIGHT INSTALLATION
SCALE: NONE



NOTES:

1. IN-DUCT UV-C LIGHT FIXTURES TO BE POSITIONED BETWEEN HVAC UNIT DISCHARGE AND FIRST TAKEOFF FROM TRUNK.
2. REFER TO AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. POWER AND CONTROL WIRING TO BE IN SEPARATE CONDUIT/MC TO AVOID INTERFERENCE.

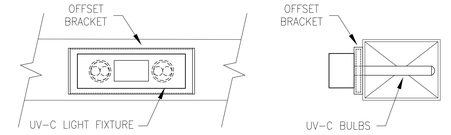
2 DUCTWORK UV-C LIGHT TYPICAL INSTALLATION DETAIL
SCALE: NONE



NOTES:

1. "IN CABINET" INSTALLATIONS TO HAVE AT LEAST ONE (1) SNAP-ACTION TYPE SWITCH TO EACH OF THE SCHEDULED HVAC UNITS' (UV, AHU, RTU, ETC.) ACCESS DOORS/PANELS AND/OR ADJACENT DUCTWORK ACCESS DOORS/PANELS. HARDWIRE POWER TO SWITCHES TO AUTOMATICALLY TURN OFF ALL UV-C LIGHTS ON THE APPLICABLE UV-C CIRCUIT IF ANY PANELS ARE OPENED. PROVIDE ALL WIRING AND APPURTENANCES. SEE SCHEDULE FOR UNIT TYPES. VERIFY ACCESS DOORS/PANELS IN FIELD.
2. REFER TO AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
3. LED INDICATING LIGHT TO BE MOUNTED IN CONTROL PANEL OR AS OTHERWISE APPROVED. LED LIGHT SHALL BE VISIBLE EVEN WITH ALL OTHER ACCESS PANELS CLOSED. LED LIGHT SHALL ILLUMINATE ONLY WHEN UV-C LIGHTS ARE ILLUMINATED.

3 VERTICAL UV/FCU UV-C LIGHT TYPICAL INSTALLATION DETAIL
SCALE: NONE



NOTES:

1. OFFSETS TO BE INSTALLED AS APPLICABLE.

4 OFFSET BRACKET PLACEMENT FOR HIGH WATTAGE BULB IN SMALL DUCT
SCALE: NONE

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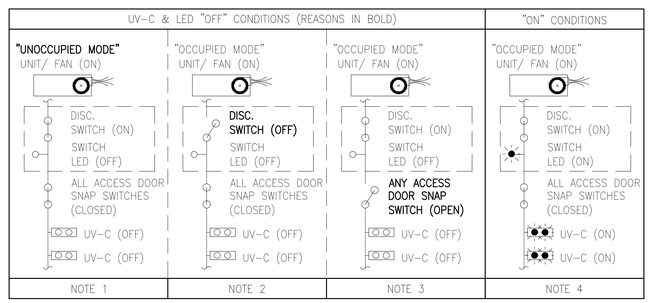
EQUIPMENT:	LABELS REQUIRED:
UV-C LIGHT FIXTURES	• UV-C CIRCUIT MARK • "UV-C ON" AT INDICATING LEDS • WARNING LABEL (BY MANUFACTURER) • BLANK LABEL ON CEILINGS FOR QUICK LOCATION (WHEN APPLICABLE)
SERVICE SWITCH	• UV-C CIRCUIT MARK • "UV-C ON" AT INDICATING LEDS (WHEN APPLICABLE) • PANEL LOCATION, NAME, BREAKER # (WHEN APPLICABLE)

NOTE: LABEL COLOR TO BE PURPLE, OR AS SELECTED BY DISTRICT

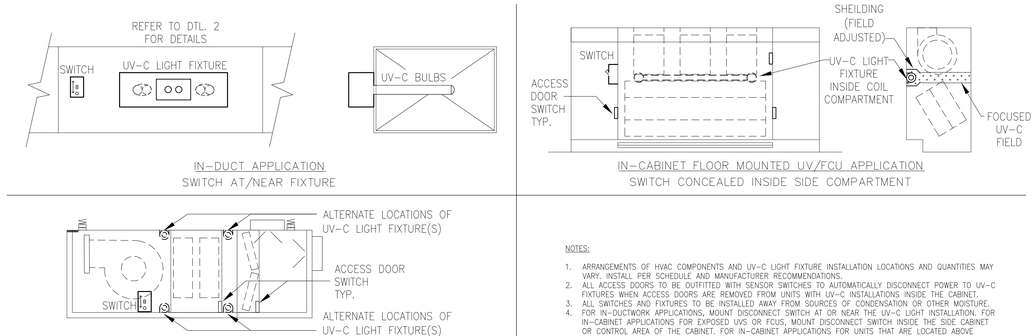
5 LABELING REQUIREMENTS AND LOCATIONS
SCALE: NONE



NOTES:

1. UV-C FIXTURES SHALL NOT ENGAGE DURING "UNOCCUPIED" MODE. "OCCUPIED MODE" TO BE ACTIVE WITHIN THE TIME FRAME FROM ONE HOUR BEFORE SCHOOL UNTIL ONE HOUR AFTER SCHOOL "UNOCCUPIED MODE" TO BE ACTIVE OUTSIDE OF THAT TIME FRAME (COORDINATE TIME-FRAME SETTING WITH DISTRICT REPRESENTATIVE), OR AS DEFINED BY THE HVAC EQUIPMENT.
2. THE DISCONNECTING SWITCH IN THE "OFF" POSITION SHALL NOT ILLUMINATE THE LED AND SHALL DISCONNECT ALL UV-C LIGHTS ON THE CIRCUIT. UV-C FIXTURES SHALL NOT ENGAGE IF THE DISCONNECTING SWITCH IS "OFF".
3. HVAC UNITS WITH UV-C LIGHT FIXTURES INSTALLED INSIDE OF THE UNIT'S CABINET (WHEN APPLICABLE) SHALL HAVE SNAP SWITCH SENSORS INSTALLED TO ALL ACCESS DOORS. IF ANY ACCESS DOOR SNAP SWITCH SENSORS ARE OPEN THE UV-C FIXTURES SHALL NOT ENGAGE.
4. THE UV-C LIGHT FIXTURES AND DISCONNECTING SWITCH LED SHALL ENGAGE AND ILLUMINATE ONLY WHEN: DURING "OCCUPIED MODE", WHEN THE HVAC UNIT IS "ON", ALL SNAP SWITCH SENSORS ARE CLOSED, AND DISCONNECTING SWITCH IS "ON".

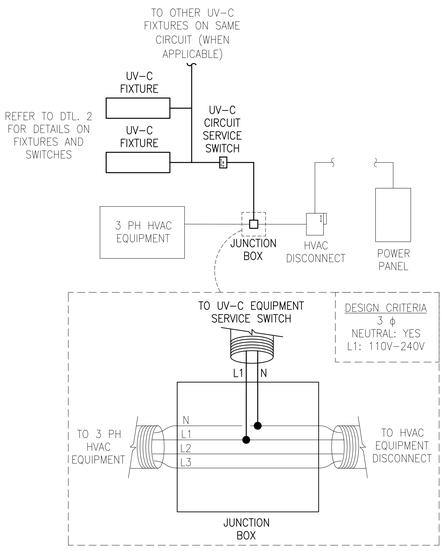
6 UV-C LIGHT FIXTURE ACTIVATION CONDITIONS
SCALE: NONE



NOTES:

1. ARRANGEMENTS OF HVAC COMPONENTS AND UV-C LIGHT FIXTURE INSTALLATION LOCATIONS AND QUANTITIES MAY VARY. INSTALL PER SCHEDULE AND MANUFACTURER RECOMMENDATIONS.
2. ALL ACCESS DOORS TO BE OUTFITTED WITH SENSOR SWITCHES TO AUTOMATICALLY DISCONNECT POWER TO UV-C FIXTURES WHEN ACCESS DOORS ARE REMOVED FROM UNITS WITH UV-C INSTALLATIONS INSIDE THE CABINET.
3. ALL SWITCHES AND FIXTURES TO BE INSTALLED AWAY FROM SOURCES OF CONDENSATION OR OTHER MOISTURE.
4. FOR IN-DUCTWORK APPLICATIONS, MOUNT DISCONNECT SWITCH AT OR NEAR THE UV-C LIGHT INSTALLATION. FOR IN-CABINET APPLICATIONS FOR EXPOSED UVS OR FCUS, MOUNT DISCONNECT SWITCH INSIDE THE SIDE CABINET OR CONTROL AREA OF THE CABINET. FOR IN-CABINET APPLICATIONS FOR UNITS THAT ARE LOCATED ABOVE CEILINGS OR ARE OTHERWISE CONCEALED, DISCONNECT SWITCH TO BE MOUNTED DIRECTLY TO THE OUTSIDE OF THE UNIT.

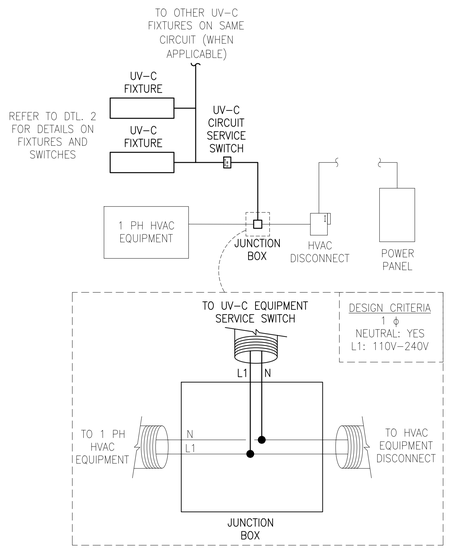
7 UV-C LIGHT FIXTURE & DISCONNECT SWITCH INSTALLATION LOCATIONS
SCALE: NONE



8 UV-C POWER DIAGRAM THREE PHASE W/ NEUTRAL & L1=110V-240V
SCALE: NONE

NOTES:

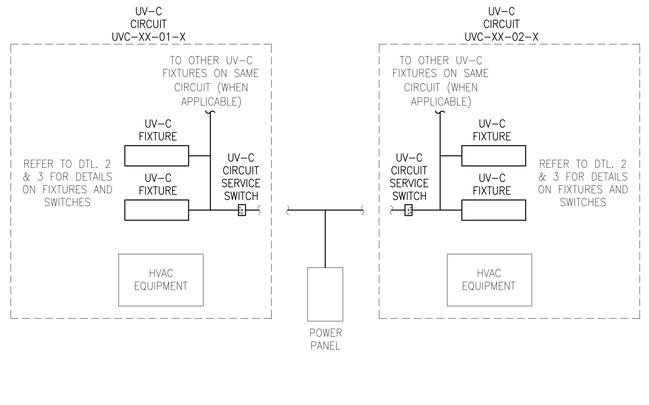
1. CIRCUIT MAY BE POWERED FROM HVAC EQUIPMENT'S POWER CIRCUIT WHEN A NEUTRAL WIRE IS PRESENT. BEFORE TAPPING, ONE LEG'S CIRCUIT VOLTAGE MUST TEST TO THE SPECIFIED VOLTAGE RANGE ABOVE. INSTALL 4"x4"x2" JUNCTION BOX BETWEEN HVAC DISCONNECT AND HVAC EQUIPMENT AS SHOWN.



9 UV-C POWER DIAGRAM SINGLE PHASE W/ NEUTRAL & L1=110V-240V
SCALE: NONE

NOTES:

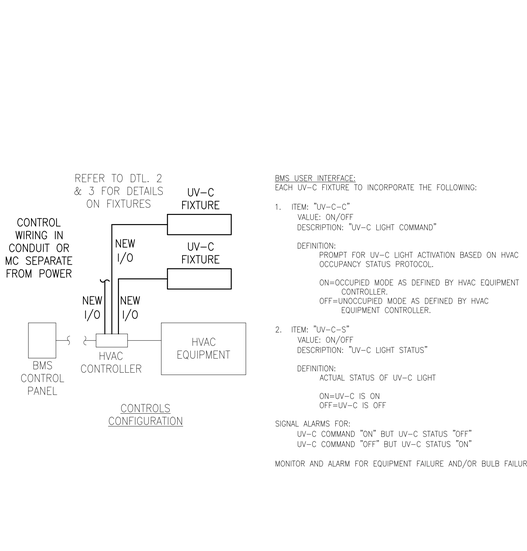
1. CIRCUIT MAY BE POWERED FROM HVAC EQUIPMENT'S POWER CIRCUIT WHEN A NEUTRAL WIRE IS PRESENT. BEFORE TAPPING, CIRCUIT VOLTAGE MUST TEST TO THE SPECIFIED VOLTAGE RANGE ABOVE. INSTALL 4"x4"x2" JUNCTION BOX BETWEEN HVAC DISCONNECT AND HVAC EQUIPMENT AS SHOWN.



10 UV-C POWER DIAGRAM THREE PHASE W/O NEUTRAL AND/OR 240V-480V
SCALE: NONE

NOTES:

1. UV-C CIRCUIT MUST BE POWERED FROM AN AVAILABLE NEARBY PANEL IF NEUTRAL IS NOT PRESENT IN HVAC EQUIPMENT POWER CIRCUIT, OR EXCEEDS THE VOLTAGE RANGE NOTED ABOVE. SEE UV-C SCHEDULES FOR PROPOSED POWER SOURCES. DO NOT TAP INTO OTHER UNSPECIFIED EXISTING CIRCUITS. UV-C CIRCUITS TO BE GROUPED TOGETHER WHENEVER FEASIBLE. PROVIDE NEW BREAKER. CLEARLY IDENTIFY ROOM NUMBER, PANEL NAME, AND BREAKER NUMBER AT UV-C FIXTURE SERVICE SWITCH. IDENTIFY NEW CIRCUIT AT PANEL.



BMS USER INTERFACE:
EACH UV-C FIXTURE TO INCORPORATE THE FOLLOWING:

1. ITEM: "UV-C-C"
   VALUE: ON/OFF
   DESCRIPTION: "UV-C LIGHT COMMAND"

   DEFINITION:
   PROMPT FOR UV-C LIGHT ACTIVATION BASED ON HVAC OCCUPANCY STATUS PROTOCOL.

   ON=OCCUPIED MODE AS DEFINED BY HVAC EQUIPMENT CONTROLLER.
   OFF=UNOCCUPIED MODE AS DEFINED BY HVAC EQUIPMENT CONTROLLER.
2. ITEM: "UV-C-S"
   VALUE: ON/OFF
   DESCRIPTION: "UV-C LIGHT STATUS"

   DEFINITION:
   ACTUAL STATUS OF UV-C LIGHT

   ON=UV-C IS ON
   OFF=UV-C IS OFF

SIGNAL ALARMS FOR:
UV-C COMMAND "ON" BUT UV-C STATUS "OFF"
UV-C COMMAND "OFF" BUT UV-C STATUS "ON"

MONITOR AND ALARM FOR EQUIPMENT FAILURE AND/OR BULB FAILURE.

11 UV-C CONTROLS DIAGRAM
SCALE: NONE

NOTES:

1. UV-C EQUIPMENT SHALL BE INTEGRATED INTO THE EXISTING BMS AS SHOWN. ACTIVATION PROTOCAL SHALL BE BASED UPON THE "UV-C FIXTURE ACTIVATION CONDITIONS" DETAIL.

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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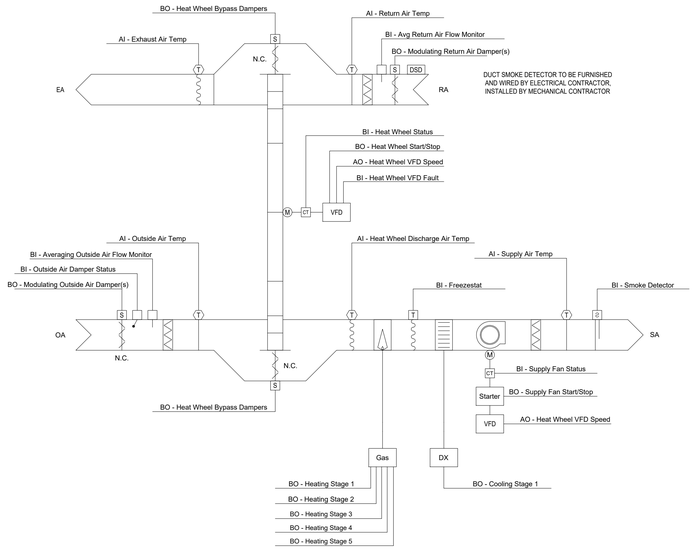
☐ FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐ HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
UV-C LIGHT FIXTURE DETAILS
(UV-C CONTRACT)

SHEET NO.
M-504

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-m503-m505.dwg



1 MAKE UP AIR UNIT CONTROL SCHEMATIC
SCALE: NONE

2 MAKE UP AIR UNIT FAN SYSTEM CONTROL SCHEMATIC
SCALE: NONE

MAKEUP AIR UNIT – SUPPLY AIR TEMP

RUN CONDITIONS – SCHEDULED:
THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
OCCUPIED MODE: THE UNIT SHALL MAINTAIN
75 DEG. F (ADJ.) COOLING SETPOINT
70 DEG. F (ADJ.) HEATING SETPOINT.

UNOCCUPIED MODE (NIGHT SETBACK): THE UNIT SHALL MAINTAIN
80 DEG. F (ADJ.) COOLING SETPOINT.
65 DEG. F (ADJ.) HEATING SETPOINT.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
HIGH ZONE TEMP: IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).
LOW ZONE TEMP: IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (ADJ.).

ZONE OPTIMAL START:
THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING START-UP. THIS ALGORITHM SHALL MINIMIZE THE UNOCCUPIED WARM-UP OR COOL-DOWN PERIOD WHILE STILL ACHIEVING COMFORT CONDITIONS BY THE START OF SCHEDULED OCCUPIED PERIOD.

ZONE UNOCCUPIED OVERRIDE:
A TIMED LOCAL OVERRIDE CONTROL SHALL ALLOW AN OCCUPANT TO OVERRIDE THE SCHEDULE AND PLACE THE UNIT INTO AN OCCUPIED MODE FOR AN ADJUSTABLE PERIOD OF TIME. AT THE EXPIRATION OF THIS TIME, CONTROL OF THE UNIT SHALL AUTOMATICALLY RETURN TO THE SCHEDULE.

THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF. IF OPTIMAL START UP IS AVAILABLE, THE MIXED AIR DAMPER SHALL OPERATE AS DESCRIBED IN THE OCCUPIED MODE EXCEPT THAT THE OUTSIDE AIR DAMPER SHALL MODULATE TO FULLY CLOSED.

FREEZE PROTECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

SMOKE DETECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A SMOKE DETECTOR STATUS.
A SIGNAL SHALL BE SENT TO THE FIRE CONTROL PANEL AND BMS TO INITIATE ALARMS.

ECONOMIZER:
THE CONTROLLER SHALL MEASURE THE ZONE TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT 2 DEG. F LESS THAN THE ZONE COOLING SETPOINT. THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM ADJUSTABLE POSITION OF 20%(ADJ.) OPEN WHENEVER OCCUPIED.

THE ECONOMIZER SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 65 DEG. F (ADJ.).
AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE.
AND THE SUPPLY FAN STATUS IS ON.

THE ECONOMIZER SHALL CLOSE WHENEVER:
MIXED AIR TEMPERATURE DROPS FROM 45 DEG. F TO 40 DEG. F (ADJ.).
OR ON LOSS OF SUPPLY FAN STATUS.
OR THE FREEZESTAT (IF PRESENT) IS ON.

ENERGY RECOVERY:
HEAT RECOVERY WHEEL – VARIABLE SPEED:
THE CONTROLLER SHALL MODULATE THE HEAT WHEEL FOR ENERGY RECOVERY AS FOLLOWS.

COOLING RECOVERY MODE:
THE CONTROLLER SHALL MEASURE THE HEAT WHEEL DISCHARGE AIR TEMPERATURE AND MODULATE THE HEAT WHEEL SPEED TO MAINTAIN A SETPOINT 2°F (ADJ.) LESS THAN THE UNIT SUPPLY AIR TEMPERATURE SETPOINT. THE HEAT WHEEL SHALL RUN FOR COOL RECOVERY WHENEVER:
UNIT RETURN AIR TEMPERATURE IS 5°F (ADJ.) OR MORE BELOW THE OUTSIDE AIR TEMPERATURE.
AND THE UNIT IS IN A COOLING MODE.
AND THE SUPPLY FAN IS ON.

HEATING RECOVERY MODE:
THE CONTROLLER SHALL MEASURE THE HEAT WHEEL DISCHARGE AIR TEMPERATURE AND MODULATE THE HEAT WHEEL SPEED TO MAINTAIN A SETPOINT 2°F (ADJ.) GREATER THAN THE UNIT SUPPLY AIR TEMPERATURE SETPOINT. THE HEAT WHEEL SHALL RUN FOR HEAT RECOVERY WHENEVER:
UNIT RETURN AIR TEMPERATURE IS 5°F (ADJ.) OR MORE ABOVE THE OUTSIDE AIR TEMPERATURE.
AND THE UNIT IS IN A HEATING MODE.
AND THE SUPPLY FAN IS ON.

PERIODIC SELF-CLEANING:
THE HEAT WHEEL SHALL RUN AT 5% SPEED (ADJ.) FOR 10SEC (ADJ.) EVERY 4HRS (ADJ.) THE UNIT RUNS.

FROST PROTECTION:
THE HEAT WHEEL SHALL RUN AT 5% SPEED (ADJ.) WHENEVER:
OUTSIDE AIR TEMPERATURE DROPS BELOW 15°F (ADJ.)
OR WHENEVER EXHAUST AIR TEMPERATURE DROPS BELOW 20°F (ADJ.).

OUTSIDE AIR DAMPER:
THE OUTSIDE AIR DAMPER SHALL OPEN ANYTIME THE UNIT RUNS AND SHALL CLOSE ANYTIME THE UNIT STOPS. THE SUPPLY FAN SHALL START ONLY AFTER THE DAMPER STATUS HAS PROVEN THE DAMPER IS OPEN. THE OUTSIDE AIR DAMPER SHALL CLOSE 4SEC (ADJ.) AFTER THE SUPPLY FAN STOPS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
OUTSIDE AIR DAMPER FAILURE: COMMANDED OPEN, BUT THE STATUS IS CLOSED.
OUTSIDE AIR DAMPER IN HAND: COMMANDED CLOSED, BUT THE STATUS IS OPEN.

AVERAGING OUTSIDE AIR FLOW MONITOR:
THE OUTSIDE AIR FLOW MONITOR SHALL MONITOR CFM OF OUTSIDE AIR COMING THROUGH THE OUTSIDE AIR DAMPER WHENEVER THE UNIT RUNS. OUTSIDE AIR FLOW MONITOR CFM READING SHALL BE READ BY CONTORLLER.

BUILDING EXHAUST FAN EQUIPMENT INTEGRATION TO MAU SUPPLY FAN:
CONTROLLER TO READ AN ON/OFF INPUT SIGNAL FROM EXISTING BUILDING EXHAUST FANS.
CONTROLLER TO MODULATE OUTSIDE AIR DAMPER, RETURN AIR DAMPER, SUPPLY FAN CFM, AND COOLING/HEATING STAGING TO ACHIEVE SETTINGS LISTED IN FAN SYSTEM TABLE.
THE VFD SHALL REDUCE SUPPLY FAN RPM WHEN COMMANDED (MIN. 50% SPEED, ADJ. – SEE FAN SYSTEM TABLE):
HEATING/COOLING SHALL STAGE DOWN TO DELIVER USER DEFINED TEMPERATURE SETPOINTS AND TO PREVENT SHORT CYCLING.
CONTROLLER TO MAINTAIN THE MINIMUM OUTDOOR AIR CFM (SEE EQUIPMENT SCHEDULE).
CONTROLLER TO MAKE DECISIONS BASED ON A CODED CONTROL PROGRAM INCORPORATING ELEMENTS OUTLINED IN THE FAN SYSTEM SCHEDULE.

THE BYPASS DAMPERS WILL OPEN WHENEVER THE HEAT WHEEL IS DISABLED.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
HEAT WHEEL ROTATION FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
HEAT WHEEL IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
HEAT WHEEL RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).
HEAT WHEEL VFD IN FAULT

SUPPLY FAN:
THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME, UNLESS SHUTDOWN ON SAFETIES.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR TEMPERATURE SETPOINT – FIXED:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND SHALL MAINTAIN A FIXED SUPPLY AIR TEMPERATURE SETPOINT OF 55°F (ADJ.).

COOLING STAGE:
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT. TO PREVENT SHORT CYCLING, THE STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE COOLING SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS GREATER THAN 60°F (ADJ.).
AND THE SUPPLY AIR TEMPERATURE IS ABOVE COOLING SETPOINT.
AND THE FAN STATUS IS ON.

GAS HEATING STAGES:
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND STAGE THE HEATING TO MAINTAIN ITS HEATING SETPOINT. TO PREVENT SHORT CYCLING, THERE SHALL BE A USER DEFINABLE (ADJ.) DELAY BETWEEN STAGES, AND EACH STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE HEATING SHALL BE ENABLED WHENEVER:
OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.).
AND THE SUPPLY AIR TEMPERATURE IS BELOW HEATING SETPOINT.
AND THE FAN STATUS IS ON.

PREFILTER HOURS:
THE CONTROLLER SHALL MONITOR THE FAN RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
PREFILTER CHANGE REQUIRED: PREFILTER HAS BEEN IN USE FOR MORE THAN 2200HR (ADJ.).

FINAL FILTER HOURS:
THE CONTROLLER SHALL MONITOR THE FAN RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
FINAL FILTER CHANGE REQUIRED: FINAL FILTER HAS BEEN IN USE FOR MORE THAN 2200HRS (ADJ.).

SUPPLY AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

BMS INTEGRATION
UNIT SHALL BE INTEGRATED INTO BMS UI. UNIT STATUS CONSISTING OF OCCUPIED/UNOCCUPIED/OFF AS WELL AS "COND_#" FROM THE FAN SYSTEM SCHEDULE SHALL BE CLEARLY IDENTIFIABLE ALONG WITH ANY ALARMS.

CONTROL DIAGRAMS LEGEND

AI = ANALOG INPUT. A PHYSICAL INPUT TO THE CONTROL MODULE.

AO = ANALOG OUTPUT. A PHYSICAL OUTPUT FROM THE CONTROL MODULE.

AV = ANALOG VALUE. AN INTERMEDIATE (SOFTWARE) POINT THAT MAY BE EDITABLE OR READ-ONLY. EDITABLE AVS ARE TYPICALLY USED TO ALLOW THE USER TO SET A FIXED CONTROL PARAMETER, SUCH AS A SETPOINT. READ ONLY AVS ARE TYPICALLY USED TO DISPLAY THE STATUS OF A CONTROL OPERATION.

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KITCHEN FAN SYSTEM SCHEDULE – MAU-1

	MARK	SUPPLY CFM	FAN PERCENT LOAD	RETURN CFM	OA CFM/ MAKEUP AIR	EXHAUST FANS ACTIVE	PERCENT MAKEUP	REMARKS
	COND_1	5800	100	350	5450	FOUR FANS: PRE-27A, PRE-27B, PRE-26, & PRE-30	80-88	
	COND_2	5800	100	600	5200	THREE FANS: PRE-27A & PRE-27B AND EITHER PRE-26 OR PRE-30	90-100	
	COND_3	5800	100	2100	4000	TWO FANS: PRE-27A & PRE-27B	87-100	
	COND_4	4350	75	1750	2500	TWO FANS: PRE-26 & PRE-30	89-100	
	COND_5	2900	50	1400	1500	ONE FAN: PRE-26 OR PRE-30	83-100	
	COND_6	2900	50	1900	1000	NONE	N/A	

NOTE 1: PROVIDE CONTROLLERS, DAMPER ACTUATORS, RELAYS, WIRING AND ASSOCIATED FOR A BALANCED FUNCTIONING SYSTEM.
NOTE 2: NEWLY PROVIDED EXHAUST FAN RELAY TO SEND INPUT SIGNAL TO MAU CONTROLLER. WHEN EXHAUST FAN IS ACTIVE, MAU CONTROLLER RECEIVES INPUT TO SIGNAL THAT THE EXHAUST FAN IS ACTIVE. MAU TO MONITOR AND MAKE DECISIONS REGARDING SUPPLY FAN SPEED, AIR DAMPER MOVEMENT, ETC. BASED ON COMBINATIONS OF ACTIVE FANS, AS SHOWN IN THE TABLE ABOVE. DURING BALANCING, CONTRACTOR TO SET MANUAL AND MOTORIZED DAMPER POSITIONS TO ACHIEVE DESIRED AIRFLOW AS OUTLINED ABOVE.
NOTE 3: EXHAUST FAN PRE-29 IS INCLUDED IN CALCULATIONS BUT WILL NOT RECEIVE A RELAY.
NOTE 4: FANS PRE-27A AND PRE-27B TO RUN SIMULTANEOUSLY.
NOTE 5: DESIRED PERCENT MAKEUP IS 80%-100%

SERVERY FAN SYSTEM SCHEDULE – MAU-2

	MARK	SUPPLY CFM	FAN PERCENT LOAD	RETURN CFM	OA CFM	EXHAUST FANS ACTIVE	PERCENT MAKEUP	REMARKS
	COND_1	3800	100	200	3600	TWO FANS: PRE-34 & PRE-28	86	
	COND_2	3800	100	1500	2300	ONE FAN: EITHER PRE-34 OR PRE-28	99-100	
	COND_3	1900	50	1400	500	NONE	N/A	

NOTE 1: PROVIDE CONTROLLERS, DAMPER ACTUATORS, RELAYS, WIRING AND ASSOCIATED FOR A BALANCED FUNCTIONING SYSTEM.
NOTE 2: NEWLY PROVIDED EXHAUST FAN RELAY TO SEND INPUT SIGNAL TO MAU CONTROLLER. WHEN EXHAUST FAN IS ACTIVE, MAU CONTROLLER RECEIVES INPUT TO SIGNAL THAT THE EXHAUST FAN IS ACTIVE. MAU TO MONITOR AND MAKE DECISIONS REGARDING SUPPLY FAN SPEED, AIR DAMPER MOVEMENT, ETC. BASED ON COMBINATIONS OF ACTIVE FANS, AS SHOWN IN THE TABLE ABOVE. DURING BALANCING, CONTRACTOR TO SET MANUAL AND MOTORIZED DAMPER POSITIONS TO ACHIEVE DESIRED AIRFLOW AS OUTLINED ABOVE.
NOTE 3: DESIRED PERCENT MAKEUP IS 80%-100%.

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(FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
(HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

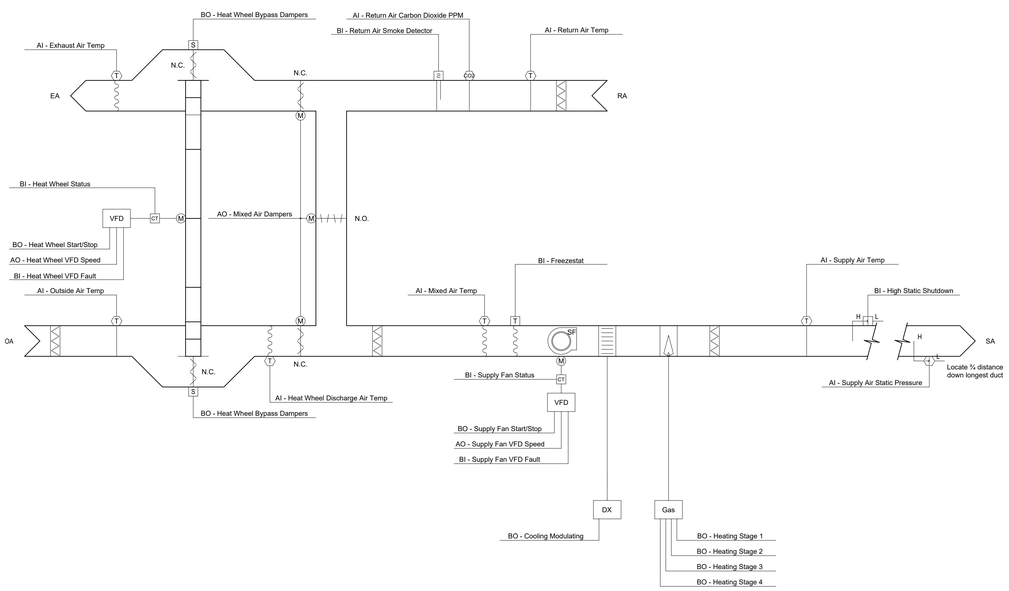
☐BB SED NO. 44-21-01-06-7-041-001
☐FF SED NO. 44-21-01-06-7-041-001
☐HS SED NO. 44-21-01-06-0-001-040

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
CONTROL SCHEMATICS

SHEET NO.
M-600

FILE PATH -N:\ - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.m600.m601.dwg



3 RTU CONTROL SCHEMATIC - GAS HEATING DX COOLING WITH ENERGY WHEEL
SCALE: NONE

VARIABLE AIR VOLUME (ROOF TOP UNIT)

RUN CONDITIONS – SCHEDULED:
THE UNIT SHALL RUN BASED UPON AN OPERATOR ADJUSTABLE SCHEDULE.

FREEZE PROTECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A FREEZESTAT STATUS.

HIGH STATIC SHUTDOWN:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING AN HIGH STATIC SHUTDOWN SIGNAL.

RETURN AIR SMOKE DETECTION:
THE UNIT SHALL SHUT DOWN AND GENERATE AN ALARM UPON RECEIVING A RETURN AIR SMOKE DETECTOR STATUS.

SUPPLY FAN:
THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).

SUPPLY AIR DUCT STATIC PRESSURE CONTROL:
THE CONTROLLER SHALL MEASURE DUCT STATIC PRESSURE AND SHALL MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT OF 1.5IN H2O (ADJ.). THE SUPPLY FAN VFD SPEED SHALL NOT DROP BELOW 30% (ADJ.).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJ.) GREATER THAN SETPOINT.
- LOW SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS 25% (ADJ.) LESS THAN SETPOINT.
- SUPPLY FAN VFD FAULT.

HEAT RECOVERY WHEEL – VARIABLE SPEED:
THE CONTROLLER SHALL MODULATE THE HEAT RECOVERY WHEEL FOR ENERGY RECOVERY AS FOLLOWS.

COOLING RECOVERY MODE:
THE CONTROLLER SHALL MEASURE THE HEAT WHEEL DISCHARGE AIR TEMPERATURE AND MODULATE THE HEAT WHEEL SPEED TO MAINTAIN A SETPOINT 2°F (ADJ.) LESS THAN THE UNIT SUPPLY AIR TEMPERATURE SETPOINT. THE HEAT WHEEL SHALL RUN FOR COOL RECOVERY WHENEVER:
- THE UNIT RETURN AIR TEMPERATURE IS 5°F (ADJ.) OR MORE BELOW THE OUTSIDE AIR TEMPERATURE.
- AND THE UNIT IS IN A COOLING MODE.
- AND THE ECONOMIZER (IF PRESENT) IS OFF.
- AND THE SUPPLY FAN IS ON.

HEATING RECOVERY MODE:
THE CONTROLLER SHALL MEASURE THE HEAT WHEEL DISCHARGE AIR TEMPERATURE AND MODULATE THE HEAT WHEEL SPEED TO MAINTAIN A SETPOINT 2°F (ADJ.) GREATER THAN THE UNIT SUPPLY AIR TEMPERATURE SETPOINT. THE HEAT WHEEL SHALL RUN FOR HEAT RECOVERY WHENEVER:
- THE UNIT RETURN AIR TEMPERATURE IS 5°F (ADJ.) OR MORE ABOVE THE OUTSIDE AIR TEMPERATURE.
- AND THE UNIT IS IN A HEATING MODE.
- AND THE ECONOMIZER (IF PRESENT) IS OFF.
- AND THE SUPPLY FAN IS ON.

PERIODIC SELF-CLEANING:
THE HEAT WHEEL SHALL RUN AT 5% SPEED (ADJ.) FOR 10SEC (ADJ.) EVERY 4HR (ADJ.) THE UNIT RUNS.

FROST PROTECTION:
THE HEAT WHEEL SHALL RUN AT 5% SPEED (ADJ.) WHENEVER:
- OUTSIDE AIR TEMPERATURE DROPS BELOW 15°F (ADJ.)
- OR THE EXHAUST AIR TEMPERATURE DROPS BELOW 20°F (ADJ.).

THE HEAT WHEEL BYPASS DAMPERS WILL OPEN WHENEVER THE HEAT WHEEL IS DISABLED.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HEAT WHEEL ROTATION FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- HEAT WHEEL IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- HEAT WHEEL RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.).
- HEAT WHEEL VFD FAULT

SUPPLY AIR TEMPERATURE SETPOINT – OUTSIDE AIR RESET:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE AND SHALL MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT RESET BASED ON OUTSIDE AIR TEMPERATURE.

THE SUPPLY AIR TEMPERATURE SETPOINT SHALL RESET FOR COOLING AS FOLLOWS:
- AS OUTSIDE AIR TEMPERATURE RISES FROM 50°F (ADJ.) TO 85°F (ADJ.) THE SUPPLY AIR TEMPERATURE SETPOINT SHALL RESET DOWNWARDS FROM 65°F (ADJ.) TO 55°F (ADJ.).

IF THE RETURN AIR TEMPERATURE DROPS BELOW 68°F (ADJ.), THEN THE SUPPLY AIR TEMPERATURE SETPOINT SHALL BE RESET FOR HEATING AS FOLLOWS:
- AS OUTSIDE AIR TEMPERATURE DROPS FROM 50°F (ADJ.) TO 20°F (ADJ.). THE SUPPLY AIR TEMPERATURE SETPOINT SHALL RESET UPWARDS FROM 75°F (ADJ.) TO95°F (ADJ.)

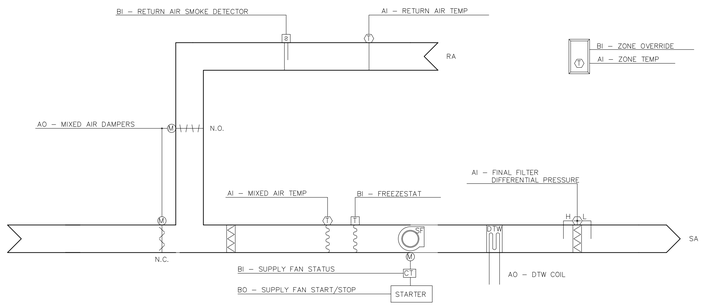
COOLING STAGES:
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND STAGE THE COOLING TO MAINTAIN ITS COOLING SETPOINT. TO PREVENT SHORT CYCLING, THERE SHALL BE A USER DEFINABLE (ADJ.) DELAY BETWEEN STAGES, AND EACH STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE COOLING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS GREATER THAN 60°F (ADJ.).
- AND THE ECONOMIZER (IF PRESENT) IS DISABLED OR FULLY OPEN.
- AND THE SUPPLY FAN STATUS IS ON.
- AND THE HEATING (IF PRESENT) IS NOT ACTIVE.

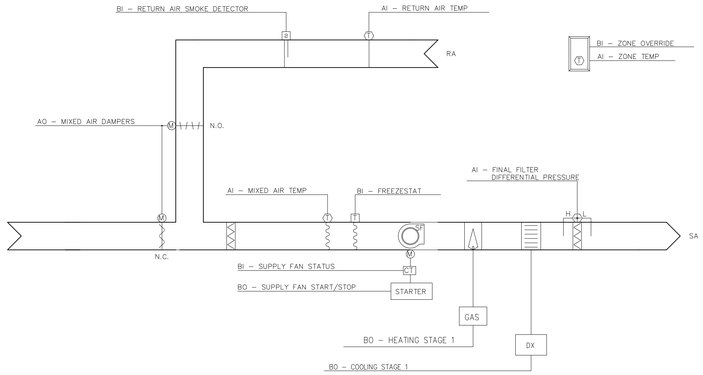
ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS 5°F (ADJ.) GREATER THAN SETPOINT.

GAS HEATING STAGES:
THE CONTROLLER SHALL MEASURE THE SUPPLY AIR TEMPERATURE AND STAGE THE HEATING TO MAINTAIN ITS HEATING SETPOINT. TO PREVENT SHORT CYCLING, THERE SHALL BE A USER DEFINABLE (ADJ.) DELAY BETWEEN STAGES, AND EACH STAGE SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.

THE HEATING SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.).
- AND THE SUPPLY FAN STATUS IS ON.
- AND THE COOLING (IF PRESENT) IS NOT ACTIVE.



1 AIR HANDLING UNIT CONTROL SCHEMATIC - DTW COIL
SCALE: NONE



2 AIR HANDLING UNIT CONTROL SCHEMATIC - GAS HEATING DX COOLING
SCALE: NONE

THE HEATING STAGES SHALL RUN FOR FREEZE PROTECTION WHENEVER:
- SUPPLY AIR TEMPERATURE DROPS FROM 40°F TO 35°F (ADJ.).
- AND THE SUPPLY FAN STATUS IS ON.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS 5°F (ADJ.) LESS THAN SETPOINT.

ECONOMIZER:
THE CONTROLLER SHALL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT 2°F (ADJ.) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT. THE OUTSIDE AIR DAMPERS SHALL MAINTAIN A MINIMUM ADJUSTABLE POSITION OF 20% (ADJ.) OPEN WHENEVER OCCUPIED.

THE ECONOMIZER SHALL BE ENABLED WHENEVER:
- OUTSIDE AIR TEMPERATURE IS LESS THAN 65°F (ADJ.).
- AND THE OUTSIDE AIR TEMPERATURE IS LESS THAN THE RETURN AIR TEMPERATURE.
- AND THE SUPPLY FAN STATUS IS ON.

THE ECONOMIZER SHALL CLOSE WHENEVER:
- MIXED AIR TEMPERATURE DROPS FROM 40°F TO 35°F (ADJ.).
- OR THE FREEZESTAT (IF PRESENT) IS ON.
- OR ON LOSS OF SUPPLY FAN STATUS.

THE OUTSIDE AND EXHAUST AIR DAMPERS SHALL CLOSE AND THE RETURN AIR DAMPER SHALL OPEN WHEN THE UNIT IS OFF. IF OPTIMAL START UP IS AVAILABLE THE MIXED AIR DAMPER SHALL OPERATE AS DESCRIBED IN THE OCCUPIED MODE EXCEPT THAT THE OUTSIDE AIR DAMPER SHALL MODULATE TO FULLY CLOSED.

MINIMUM OUTSIDE AIR VENTILATION – CARBON DIOXIDE (CO2) CONTROL:
WHEN IN THE OCCUPIED MODE, THE CONTROLLER SHALL MEASURE THE RETURN AIR CO2 CONCENTRATION AND MODULATE THE OUTSIDE AIR DAMPERS OPEN ON RISING CO2 CONCENTRATIONS, OVERRIDING NORMAL DAMPER OPERATION TO MAINTAIN A CO2 SETPOINT OF 750 PPM (ADJ.).

PREFILTER HOURS:
THE CONTROLLER SHALL MONITOR THE FAN RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- PREFILTER CHANGE REQUIRED: PREFILTER HAS BEEN IN USE FOR MORE THAN 2200 HRS (ADJ.).

FINAL FILTER HOURS:
THE CONTROLLER SHALL MONITOR THE FAN RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- FINAL FILTER CHANGE REQUIRED: FINAL FILTER HAS BEEN IN USE FOR MORE THAN 2200 HRS (ADJ.).

MIXED AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR ECONOMIZER CONTROL (IF PRESENT) OR PREHEATING CONTROL (IF PRESENT).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).
- LOW MIXED AIR TEMP: IF THE MIXED AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

RETURN AIR CARBON DIOXIDE (CO2) CONCENTRATION MONITORING:
THE CONTROLLER SHALL MEASURE THE RETURN AIR CO2 CONCENTRATION.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH RETURN AIR CARBON DIOXIDE CONCENTRATION: IF THE RETURN AIR CO2 CONCENTRATION IS GREATER THAN 1000PPM (ADJ.) WHEN IN THE UNIT IS RUNNING.

RETURN AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR SETPOINT CONTROL OR ECONOMIZER CONTROL (IF PRESENT).

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS GREATER THAN 90°F (ADJ.).
- LOW RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

SUPPLY AIR TEMPERATURE:
THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:
- HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN 120°F (ADJ.).
- LOW SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS LESS THAN 45°F (ADJ.).

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EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-D-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
CONTROL SCHEMATICS

SHEET NO.
M-601

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.m600.m601.dwg

SYMBOLS LIST

GENERAL SYMBOLS:

- (#) KEYED NOTE
- HEAVY LINE–WEIGHT INDICATES TO PROVIDE DEVICES/EQUIPMENT AS NEW
- HEAVY LINE–WEIGHT WITH HASH MARKS INDICATES DEVICES/EQUIPMENT TO BE REMOVED
- INDICATES CONNECTION TO EXISTING
- INDICATES POINT OF DISCONNECT
- #(E) '(E)' NEXT TO LIGHT LINE–WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO REMAIN
- #(ER) '(ER)' NEXT TO LIGHT LINE–WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO BE REMOVED AND RELOCATED. REFER TO DEFINITIONS FOR INFORMATION
- #(RE) '(RE)' NEXT TO LIGHT LINE–WEIGHT INDICATES EXISTING DEVICES/EQUIPMENT TO BE REINSTALLED. REFER TO DEFINITIONS FOR INFORMATION
- REMOVALS (EQUIPMENT,CONDUIT,WIRING ETC.)
- EXISTING TO REMAIN
- NEW WORK

POWER SYMBOLS:

- # DUPLEX RECEPTACLE
- # QUAD RECEPTACLE
- # SPECIAL RECEPTACLE (NEMA CONFIGURATION AS INDICATED)
- M MOTOR CONNECTION (REFER TO EQUIPMENT CONTROL SCHEDULE)
- ELECTRICAL CONNECTION
- CONTACTOR
- JB JUNCTION BOX
- DISCONNECT SWITCH (NON–FUSED)
- DISCONNECT SWITCH (FUSED)
- PUSH BUTTON
  EM – INDICATES EMERGENCY SHUT–OFF
- MANUAL MOTOR STARTER
- COMBINATION MAGNETIC MOTOR STARTER
- VFD VARIABLE FREQUENCY DRIVE
- 208V PANELBOARD (RECESSED)
- 208V PANELBOARD (SURFACE)

TELEPHONE/DATA SYMBOLS:

- DR DATA RACK
- #D COMMUNICATIONS OUTLET
  #D – INDICATES NUMBER OF DATA JACKS
  #T – INDICATES NUMBER OF TELEPHONE JACKS
  WAP – WIRELESS ACCESS POINT
  PRES – INDICATES PRESENTATION STATION OUTLET
  PROJ – INDICATES PROJECTOR STATION OUTLET

ONE–LINE SYMBOLS:

- ##A–#P CIRCUIT BREAKER
- ##A FUSE
- ##A FUSED DISCONNECT SWITCH
- GROUND
- 100A,MLO PANELBOARD

FIRE ALARM SYMBOLS:

- 30 AUDIO/VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.
- 30 VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.
- PS PULL STATION
- SD R SMOKE DETECTOR. R SUBSCRIPT: PROVIDE ACCESSORY EQUIPMENT/WIRING/PROGRAMMING FOR ELEVATOR RECALL AND SHUNT TRIP.
- HEAT DETECTOR
- CM CONTROL MODULE
- MM MONITOR MODULE
- DSD DUCT SMOKE DETECTOR
- RTS REMOTE TEST STATION
- MDH MAGNETIC DOOR HOLDER
- TS TAMPER SWITCH
- FDR FIRE DOOR RELEASE
- FS FLOW SWITCH
- FSD FAN SHUT–DOWN
- FACP FIRE ALARM CONTROL PANEL
- FAAP FIRE ALARM ANNUNCIATOR PANEL
- CO CARBON MONOXIDE DETECTOR (ELECTROCHEMICAL STYLE) (SYSTEM SENSOR C01224TR OR EQUAL) (INSTALL PER MANUFACTURERS RECOMMEND. AND PER NFPA 720)
- CO2 CARBON DIOXIDE DETECTOR
- GD GAS DETECTOR

SPECIAL SYSTEMS SYMBOLS:

- ACCP AC SYSTEM CONTROL PANEL
- ACMS AC SYSTEM MASTER CONTROL STATION
- CR CARD READER
- DC DOOR CONTACT
- ELECTRIC DOOR STRIKE
- REX REQUEST TO EXIT
- IC INTERCOM STATION
- C1 CLOCK (NO DESIGNATION DENOTES CLASSROOM CLOCK).
  C1 – DENOTES SINGLE FACE HALLWAY CLOCK.
  C2 – DENOTES DUAL FACE HALLWAY CLOCK.
- S PUBLIC ADDRESS SPEAKER (CEILING)
- S PUBLIC ADDRESS SPEAKER (WALL)
- PUBLIC ADDRESS HORN SPEAKER (WALL)
- C# CEILING MOUNTED CCTV CAMERA
- C# WALL MOUNTED CCTV CAMERA

LIGHTING SYMBOLS:

(REFER TO LIGHT FIXTURE SCHEDULE)

- $# LIGHT SWITCH
  a,b,c – INDICATES SWITCH LEG
  D – DIMMER SWITCH
  K –KEYED
  3 – 3–WAY
  4 – 4–WAY
- C1 OS OCCUPANCY SENSOR
  C# – INDICATES CEILING SENSOR TYPE (REFER TO OCCUPANCY SENSOR SCHEDULE)
  W# – INDICATES WALL SENSOR TYPE (REFER TO OCCUPANCY SENSOR SCHEDULE).
- X# CEILING–MOUNTED EXIT LIGHT. HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL.
- X# WALL–MOUNTED EXIT LIGHT. HATCH MARKS INDICATES ILLUMINATED FACE, ARROW INDICATES DIRECTION OF TRAVEL.
- E# DUAL HEAD WALL–MOUNTED EMERGENCY BATTERY PACK LUMINAIRE.
- SINGLE HEAD WALL–MOUNTED EMERGENCY BATTERY PACK LUMINAIRE.
- F# 2'x4' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE.
- F# 2'x2' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE.
- F# 1'x4' CEILING MOUNTED LIGHT FIXTURE, F# INDICATES TYPE.
- F# CEILING MOUNTED DOWNLIGHT FIXTURE, F# INDICATES TYPE.
- F# 4' WALL MOUNTED LIGHT FIXTURE, F# INDICATES TYPE.
- F# WALL MOUNTED FIXTURE, F# INDICATES TYPE.

GENERAL DEMOLITION NOTES:

1. DEMOLITION DRAWINGS ARE BASED ON FIELD OBSERVATION. REPORT ANY CONFLICTS TO THE ENGINEER BEFORE DISTURBING EXISTING EQUIPMENT.
2. BEGINNING OF DEMOLITION MEANS THE CONTRACTOR ACCEPTS ALL EXISTING CONDITIONS.
3. VERIFY SCOPE OF WORK: CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO DETERMINE THE SCOPE OF THE WORK, AND TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT THEIR WORK AND, THEREFORE, THEIR BID.
4. UNLESS NOTED OTHERWISE, EXISTING ELECTRICAL EQUIPMENT SHOWN ON THESE PLANS ARE A PART OF CONTRACT. TO MAINTAIN DRAWING CLARITY NOT ALL EXISTING ELECTRICAL EQUIPMENT HAS BEEN SHOWN. FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT/ ENGINEER OF ANY CONFLICTS.
5. UNLESS NOTED OTHERWISE, REMOVE ALL ELECTRICAL ITEMS SHOWN ON THESE PLANS AS INDICATED BY CROSS HATCHED LINES AND/OR KEYED NOTES.
6. UNLESS NOTED OTHERWISE, DEMOLITION OF ELECTRICAL EQUIPMENT/DEVICES INCLUDES REMOVAL OF CIRCUITRY BACK TO ASSOCIATED SOURCE/PANEL. THIS INCLUDES REMOVAL OF THE DEVICE, WIRING, CONDUIT, BOXES, CONTROL DEVICES, ETC.
7. WHERE POSSIBLE, EXISTING CONDUITS/RACEWAYS (ASSOCIATED WITH REMOVED EQUIPMENT AND WIRING) MAY BE RE–USED FOR NEW CIRCUITING. EXISTING CONDUITS/RACEWAYS MUST BE IN GOOD CONDITION, AND IN COMPLIANCE WITH NEC/SPECIFICATION REQUIREMENTS. NOTIFY ENGINEER PRIOR TO REUSING.
8. EXISTING CIRCUIT BREAKERS ASSOCIATED WITH ELECTRICAL EQUIPMENT SCHEDULED FOR DEMOLITION SHALL REMAIN FOR SPARES UNLESS REMOVAL IS REQUIRED TO MAKE ADDITIONAL SPACE (IN EXISTING PANELBOARDS) FOR NEW CIRCUIT BREAKERS.
9. MAINTAIN THE ELECTRICAL INTEGRITY OF ALL EXISTING BRANCH CIRCUITS INTERRUPTED BY REMOVAL WORK. PROVIDE ALL WIRING, CONDUIT, AND HARDWARE REQUIRED TO MAINTAIN CONTINUITY OF ELECTRICAL EQUIPMENT REMAINING ON EXISTING BRANCH CIRCUITS NOT BEING COMPLETELY REMOVED OR OUTSIDE WORK THE WORK AREA.
10. UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN WALLS SCHEDULED FOR REMOVAL. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.
11. UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN CEILINGS SCHEDULED FOR REMOVAL. TO MAINTAIN DRAWING CLARITY, EXISTING CEILINGS SCHEDULED FOR DEMOLITION HAVE NOT BEEN IDENTIFIED ON THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.
12. WHERE REMOVALS OCCUR ON SERVICES THAT ARE TO REMAIN IN OPERATION, CAP OR OTHERWISE TERMINATE THE REMAINING SERVICES BENEATH FINISHED SURFACES.
13. ALL CONDUITS STUBBED THRU FLOOR SERVING ITEMS TO BE REMOVED, AND NOT SHOWN OR REQUIRED TO BE REUSED, SHALL BE CUT OFF FLUSH, SLAB LEVEL WITH CONCRETE.
14. PORTIONS OF FEEDERS RISERS WHICH REQUIRE REMOVAL DUE TO DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT ACCESSIBLE LOCATIONS, REROUTED AND RECONNECTED. EXTEND EXISTING FEEDERS AS REQUIRED. MATCH EXISTING FEEDERS IN CONDUCTOR SIZE (AMPACITY RATING), RACEWAY SIZE, ETC.
15. CAREFULLY REMOVE, PROTECT AND STORE ALL EQUIPMENT TO BE REUSED IN A SAFE PLACE UNTIL READY FOR REINSTALLATION. CLEAN MATERIALS BEFORE REINSTALLATION AND ENSURE EQUIPMENT IS STILL FULLY OPERATIONAL.
16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OR RELOCATION OF ITEMS, NOT SHOWN ON THESE DRAWINGS TO ACCOMMODATE THE RENOVATIONS. CONTRACTOR SHALL INCLUDE, IN BASE BID, AN ALLOWANCE FOR UNFORESEEN CONDITIONS WHEN CONCEALED WORK IS EXPOSED. CLAIMS FOR ADDITIONAL DEMOLITION WORK WILL NOT BE ACCEPTED EXCEPT FOR CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT/ENGINEER.

FIRE ALARM NOTES:

1. CONTRACTOR SHALL VERIFY AND COORDIANTE WITH THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR TYPE OF FIRE ALARM DEVICES TO BE USED.
2. CONTRACTOR SHALL BE RESPONSIBLE TO RETAIN AND COORDINATE THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR PROGRAMMING AND FINAL CONNECTIONS. CONTRACTOR SHALL INCLUDE PROGRAMMING AND FINAL CONNECTION COSTS IN THEIR BID.
3. FIRE ALARM WIRING DIAGRAMS SHOWN ARE GENERAL ARRANGEMENTS ONLY. OBTAINED PRIOR TO THE COMMENCEMENT OF THE WORK. ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
4. PERMITS AND APPROVALS NECESSARY FOR INSTALLATION OF WORK SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF THE WORK. ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
5. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN AND PROTECT FIRE ALARM NOTIFICATION DEVICES, SMOKE DETECTORS AND OTHER FIRE ALARM SAFETY DEVICES IN OPERATION AT ALL TIMES. IF ANY PORTION OF FIRE ALARM SYSTEM IS DISABLED, NOTIFY BUILDING CUSTODIAN IMMEDIATELY.
6. IN AREAS WHERE DUST AND DIRT WILL BE AIRBOURNE DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL PROVIDE PLASTIC WRAPOVER SMOKE DETECTORS AND THEN REMOVE ONCE SPACE IS CLEAN.IF A FIRE ALARM DEVICE IS LOCATED ON A WALL OR CEILING TO BE REMOVED, UNLESS OTHERWISE INDICATED THE DEVICE SHALL BE REMOVED AND STORED. ONCE CONSTRUCTION IS COMPLETE THE DEVICE SHALL BE REINSTALLED IN IT'S ORIGINAL LOCATION OR AS CLOSE TO ' ITS ORIGINAL LOCATION AS FEASIBLE. REUSE EXISTING WIRING IF POSSIBLE, PROVIDE NEW WIRING IF NECESSARY.
7. UNLESS DIRECTED OTHERWISE BY FIRE ALARM SYSTEM MANUFACTURER FIRE ALARM DEVICE WIRING SHALL BE AS FOLLOWS (FOR BIDDING PURPOSES ONLY)
   SIGNAL WIRING – #14 AWG TWISTED/SHIELDED
   BELL WIRING – #14 AWG TWISTED CABLE
   STROBE WIRING – #14 TWISTED CABLE
   THE WIRING SHALL HAVE THE FOLLOWING CHARACTERISTICS:
   A. A MINIMUM TEMPERATURE RATING 150° C
   B. A MINIMUM AVERAGE INSULATION THICKNESS OF 15 MILS
   C. A MINIMUM AVERAGE JACKET THICKNESS OF 25 MILS
   D. THE COLOR OF THE CABLE SHALL BE RED
   E. THE CABLE SHALL BE A TYPE FPLP (PLENUM TYPE) WHEN CONDUIT IS USED. TO PURCHASING
   F. THE CABLE SHALL BE VISIBLY MARKED EXTERNALLY THAT IT MEETS THE ABOVE REQUIREMENTS AND IS LISTED BY U.L.CONFIRM WIRING TYPE AND QUANTITY WITH FIRE ALARM SYSTEM MANUFACTURER PRIOR.
8. PROVIDE MC FIRE ALARM CABLE WITH RED STRIPE AS MANUFACTURED BY AFC SERIES 1800 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 CABLE IS RUN EXPOSED IN UNFINISHED AREAS, PROVIDE PLENUM RATED CABLE IN MIN. ¾" CONDUIT.
9. STROBES SHALL HAVE A MINIMUM LIGHT OUTPUT OF 75 CANDELA AND A FLASH9.RATE OF 1–3 HZ.
10. SHUTDOWN OF HVAC SYSTEM EQUIPMENT (NOT LIMITED TO, ROOF TOP, 10. 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 OCCURED. EQUIPMENT RESTART SHALL BE BY BUILDING 'ATC' SYSTEM UPON FIRE ALARM RESET TO NORMAL MODE. RESTART OF EQUIPMENT SHALL BE SEQUENTIAL.
11. AFTER THE SYSTEM MODIFICATIONS ARE COMPLETE TEST ALL COMPONETS IN ACCORDANCE WITH SEQUENCE OF OPERATION PRIOR TO FIRE DEPARTMENT INSPECTION.
12. A CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN ALL BOILER ROOMS. ACTIVATION INITIATE A SUPERVISORY SIGNAL AT THE FIRE ALARM CONTROL PANEL AND ANNUNCIATOR PANEL WHEN 70 PPM ARE REACHED WITHIN 60–240 MINUTES OR 150 PPM ARE REACHED WITHIN 10–50 PER UL 2034.

GENERAL NEW WORK NOTES:

1. UNLESS NOTED AS EXISTING OR PROVIDED BY OTHERS, CONTRACTOR SHALL PROVIDE ALL MATERIALS SHOWN ON DRAWINGS. ALL MATERIALS PROVIDED SHALL BE NEW, UNUSED CONDITION.
2. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE PROVIDED WITH MINIMUM DISRUPTION TO THE BUILDING SYSTEMS AND STAFF. CONTINUOUS OPERATION OF THE BUILDING SYSTEMS, OUTSIDE OF WORK AREA, SHALL BE MAINTAINED THROUGHOUT THE ENTIRE PROJECT, TEMPORARY SHUTDOWN OF SYSTEMS SHALL ONLY BE ALLOWED WITH WRITTEN CONSENT OF THE OWNER. EXISTING ALARM AND EMERGENCY SYSTEMS SHALL NOT BE DISRUPTED AT ANY TIME DURING THE PROJECT.
3. REMOVE & REINSTALL EXISTING CONSTRUCTION (CEILINGS, LIGHTING, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, FURNISHINGS, ETC.) AS NECESSARY TO COMPLETE THE REMOVALS & RENOVATION WORK REQUIRED BY THE DRAWINGS & SPECIFICATIONS. REPLACE ANY ITEMS DAMAGED BY OR DUE TO THIS REMOVAL & REINSTALLATION WITH NEW ITEMS TO MATCH EXISTING. (APPLIES TO AREAS WITHIN & OUTSIDE OF THE PROJECT AREA).
4. IN AREAS WHERE CEILING IS BEING REMOVED, EXISTING CONDUITS AND CABLING WHICH ARE NOT INDEPENDENTLY SUPPORTED ABOVE THE CEILING SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE USING SPECIFIC METHODS.
5. SURFACE MOUNT ALL WIRING DEVICES, LIGHTING CONTROLS, TELECOMMUNICATION DEVICES, FIRE ALARM DEVICES, ETC. LOCATED ON EXISTING MASONRY WALLS. PROVIDE SURFACE MOUNTED BOXES, RACEWAYS, WIREMOLD, ETC. PER SPECIFICATIONS.
6. COVERS ASSOCIATED WITH JUNCTION AND PULL BOXES SHALL BE READILY ACCESSIBLE.
7. PROVIDE PULL BOXES WHERE REQUIRED BY CODE AND WHERE NECESSARY FOR CONDUCTOR INSTALLATION. PROVIDE PULL BOXES EVERY 100' FOR ALL EMPTY RACEWAY RUNS. PRIOR TO INSTALLATION OF PULL BOXES, COORDINATE WITH OTHER TRADES.
8. PROVIDE SEPARATE RACEWAYS AND BOXES FOR CONDUCTORS OF NORMAL AND EMERGENCY CIRCUITS.
9. DO NOT COMBINE MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRAL CONDUCTORS PLUS THREE GROUND CONDUCTORS, IN ANY ONE BRANCH CIRCUIT CONDUIT, UNLESS OTHERWISE INDICATED ON DRAWINGS.
10. THE USE OF NON–METTALLIC SURFACE RACEWAY OR EXPOSED NON–METTALLIC RACEWAY IN ASSEMBLY SPACES AND MEANS OF EGRESS AREAS IS PROHIBITED.
11. THE USE OF SHARED NEUTRALS IN LIGHTING AND RECEPTACLE BRANCH CIRCUITS IS PROHIBITED. PROVIDE SEPARATE NEUTRAL AND GROUND FOR EVERY CIRCUIT.
12. PROTECT EXISTING SURFACES.
13. WALK–THRU WITH OWNER REPRESENTATIVE AND VERIFY ALL ELECTRICAL DEVICE LOCATIONS PRIOR TO INSTALLATION.
14. INSTALL ALL CIRCUITRY PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, AND CEILING.
15. REFER TO ELECTRICAL EQUIPMENT AND CONTROL SCHEDULE FOR HVAC/PLUMBING EQUIPMENT CIRCUITRY, CONTROLS & ADDITIONAL INFORMATION.
16. TO MAINTAIN DRAWING CLARITY, MOTOR CONTROL DEVICES, FOR HVAC/PLUMBING EQUIPMENT, HAVE NOT BEEN SHOWN. REFER TO ELECTRICAL EQUIPMENT & CONTROL SCHEDULE FOR TYPES OF MOTOR CONTROL DEVICES REQUIRED, LOCATIONS WHERE CONTROL DEVICES ARE SCHEDULED FOR INSTALLATION, AND ADDITIONAL INFORMATION.
17. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT/DEVICES WITH ARCHITECTURAL PLANS, ELEVATIONS, FURNITURE LAYOUTS, AND WITH OTHER DIVISIONS PRIOR TO INSTALLATION. CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT COST TO OWNER.
18. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SUPPORT HARDWARE FOR SECURELY FASTENING THE ELECTRICAL CONTROL DEVICES AND ENCLOSURES TO THE BUILDING STRUCTURE. THE REQUIRED HARDWARE INCLUDES, BUT IS NOT LIMITED TO, INTERMEDIATE STEEL ANGLE, UNISTRUCT, FASTENERS, JOISTS CLAMPS, ETC. MOUNT STARTERS, VFD'S, DISCONNECTS, RELAYS, AND OTHER ELECTRICAL CONTROL DEVICES AND ENCLOSURES AT LOCATION(S) INDICATED IN ELECTRIC EQUIPMENT & CONTROL SCHEDULE(S). ALLOW MAINTENANCE ACCESS AND SERVICE SPACE AT EACH LOCATION.
19. WHERE NEW CIRCUIT BREAKERS ARE REQUIRED FOR INSTALLATION IN EXISTING ELECTRICAL PANELS, CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS WHICH ARE COMPATIBLE WITH EXISTING ELECTRICAL PANELS. MATCH FRAME SIZES, KIAC RATINGS, ETC.
20. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PROVIDE COMPLETE, TYPE–WRITTEN, AND UP–TO–DATE PANELBOARD DIRECTORIES FOR ALL PANELBOARDS (NEW AND EXISTING) AFFECTED BY THIS PROJECT. PROVIDE OWNER WITH TWO COPIES OF UPDATED PANELBOARD CIRCUIT BREAKER DIRECTORIES.
21. EACH RECEPTACLE, SWITCH AND JUNCTION BOX, PROVIDED, OR ALTERED, UNDER THIS CONTRACT, SHALL BE LABELED WITH THE CORRESPONDING POWER PANEL NAME AND CIRCUIT BREAKER NUMBER. ALL LABELING SHALL BE TYPEWRITTEN USING A LABEL MAKER AND SHALL BE PERMANENTLY AFFIXED TO EACH FACEPLATE. HANDWRITTEN LABELS WILL NOT BE ACCEPTED. PRIOR TO START OF LABELING, MEET WITH OWNER TO DETERMINE LABELING SCHEME TO BE UTILIZED. PROVIDE LABELING TO MEET OWNER REQUIREMENTS.
22. ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF SWITCHES, PANELBOARDS, OCCUPANCY SENSORS, CONTROL DEVICES, ETC.. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO OWNER FOR RESOLUTION.
23. CLEANING DURING ELECTRICAL WORK: THE MECHANICAL ROOM AND ROOMS WHERE WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNEE IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.
24. EACH CONTRACTOR RESPONSIBLE FOR RETURNING WALLS, CEILINGS AND SURFACES THEY DISTURB THAT ARE NOT SCHEDULED FOR REPLACEMENT BACK TO ORIGINAL CONDITIONS.

GENERAL WORK NOTES:

ALL WORK IN ELECTRICAL DRAWINGS, UNLESS OTHERWISE NOTED, IS ENTIRELY PROVIDED BY THE DISTRICT.

COORDINATION NOTE:

1. **COORDINATE WITH ALL CONTRACTORS AND DISTRICT.**
2. **SEE SITE DRAWINGS FOR ADDITIONAL CONTRACTOR WORK AS MARKED.**

ABBREVIATIONS

EX–	EXISTING
A–	AMPERE
NF–	NON–FUSED
EXT–	EXTERIOR
AC–	ABOVE COUNTER
NIC–	NOT IN CONTRACT
FA–	FIRE ALARM
AFF–	ABOVE FINISHED FLOOR
NL–	NIGHT LIGHT
NTS–	NOT TO SCALE
FL–	FLOOR
AHU–	AIR HANDLING UNIT
OC–	ON CENTER
FLA–	FULL LOAD AMPS
A/V–	AUDIO/VISUAL
P–	POLE
FLUOR–	FLUORESCENT
AWG–	AMERICAN WIRE GUAGE
PNL–	PANEL
GC–	GENERAL CONTRACTOR
AU–	AT UNIT
PRI–	PRIMARY
GFI–	GROUND FAULT CIRCUIT
BKR–	BREAKER
SEC–	SECONDARY
C–	CONDUIT
GND–	GROUND
SW–	SWITCH
CB–	CIRCUIT BREAKER
HP–	HORSEPOWER
TEL–	TELEPHONE
CKT–	CIRCUIT
HVAC–	HEATING VENTILATION & AIR CONDITIONING
TV–	TELEVISION
CLG–	CEILING
TYP–	TYPICAL
DEMO–	DEMOLISH/DEMOLITION
KVA–	KILOVOLT AMPS
UGE–	UNDERGROUND ELECTRIC
DTL–	DETAIL
KW–	KILOWATTS
UNO–	UNLESS NOTED OTHERWISE
DWG–	DRAWING
LTG–	LIGHTING
EA–	EACH
MC–	MECHANICAL CONTRACTOR
EC–	ELECTRICAL CONTRACTOR
MCA–	MINIMUM CIRCUIT AMPS
WG–	WIRE GUARD
EF–	EXHAUST FAN
MCB–	MAIN CIRCUIT BREAKER
WP–	WEATHERPROOF
EM–	EMERGENCY
MDP–	MAIN DISTRIBUTION PANEL
XFMR–	TRANSFORMER
EC–	ELECTRICAL CONTRACTOR
MC–	MECHANICAL CONTRACTOR
PC–	PLUMBING CONTRACTOR

NOTE: ABBREVATIONS MAY OR MAY NOT USE PERIODS, EXAMPLE A.F.F. OR AFF

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT IS ALTERED, THE ALTERING ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT SHALL AFFIX TO THE ITEM THE SEAL AFFIXED ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

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STAMP
STATE OF NEW YORK – MARK EISENBACH – No. 095845 – LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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ABBREVIATIONS AND SYMBOLS

SHEET NO.
E-001

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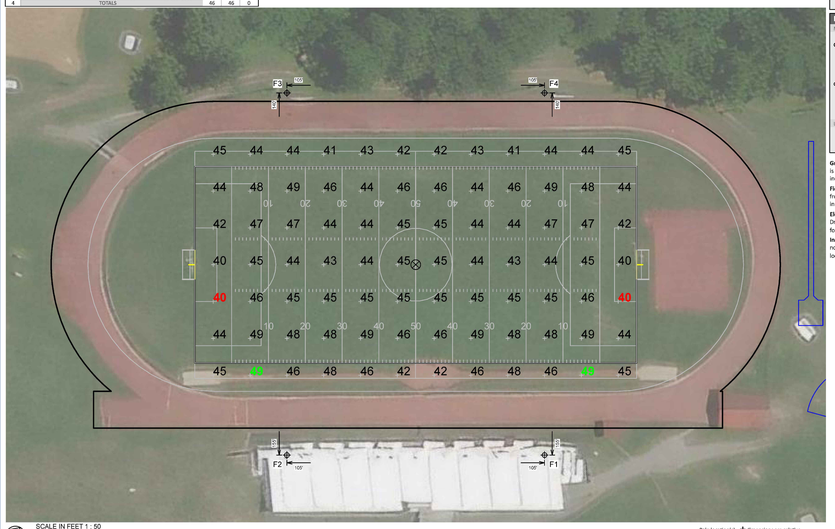
EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
4	TOTALS					46	46	0



SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s): ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	Soccer
Size:	360' x 185'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**45**
Scan Average:	45.07
Maximum:	49
Minimum:	40
Avg / Min:	1.12
Guaranteed Max / Min:	**3**
Max / Min:	1.22
UG (adjacent pts):	1.13
CU:	0.55
No. of Points:	84

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**46**
Total Load:	57.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

Warwick Valley CSD Stadium

Warwick, NY

Lighting System

Pole / Fixture Summary

Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F2	80'	80'	7	TLC-LED-1500	10.01 kW	A
		80'	2	TLC-LED-1500	2.86 kW	B
		80'	1	TLC-LED-600	0.58 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
F3-F4	80'	80'	7	TLC-LED-1500	10.01 kW	A
		80'	2	TLC-LED-1500	2.86 kW	B
		16'	2	TLC-BT-575	1.15 kW	A
T1	60'	60'	6	TLC-LED-1200	7.02 kW	C
5		*52*			*64.26 kW*	

Circuit Summary

Circuit	Description	Load	Fixture Qty
A	Field	45.8 kW	38
B	Track	11.44 kW	8
C	Field Events	7.02 kW	6

Fixture Type Summary

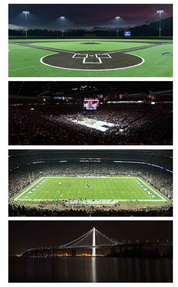
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	36
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	6
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>120,000	>120,000	>120,000	2

Light Level Summary

Calculation Grid Summary

Grid Name	Calculation Metric	Illumination Ave	Min	Max	Max/Min	Ave/Min	Circuits	Fixture Qty
Blanket Spill	Horizontal	0.77	0	15	0.00		A,B,C	52
Bleachers	Horizontal	7.41	2	13	7.11	3.71	A,B	46
Field Events	Horizontal Illuminance	21.6	9	34	3.70	2.40	C	6
Football	Horizontal Illuminance	45.6	40	50	1.25	1.14	A,B	46
Soccer	Horizontal Illuminance	45.1	40	49	1.22	1.13	A,B	46
Track	Horizontal Illuminance	21.8	10	34	3.51	2.18	A,B	46
Walking Track	Horizontal Illuminance	8.04	2	18	9.27	4.02	B	6

From Hometown to Professional



ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

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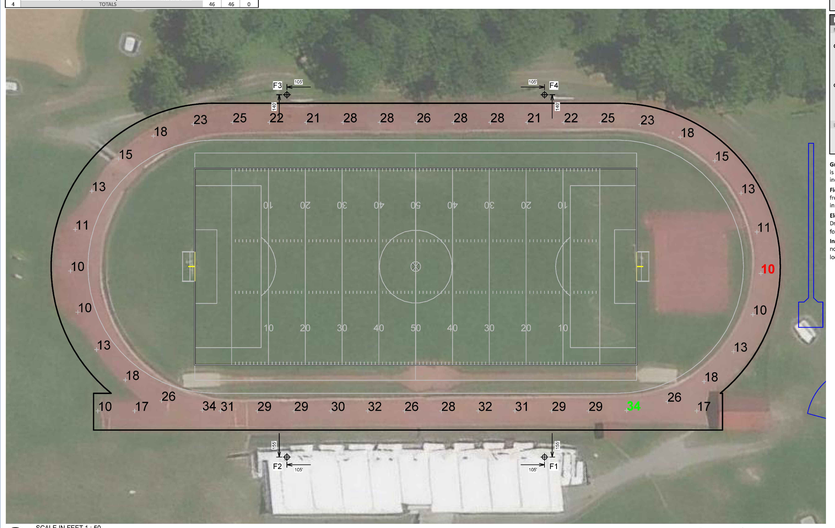
PROJECT SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
4	TOTALS					46	46	0



SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s): ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**20**
Scan Average:	21.78
Maximum:	34
Minimum:	10
Avg / Min:	2.27
Guaranteed Max / Min:	**4**
Max / Min:	3.51
UG (adjacent pts):	0.00
CU:	0.15
No. of Points:	47

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**46**
Total Load:	57.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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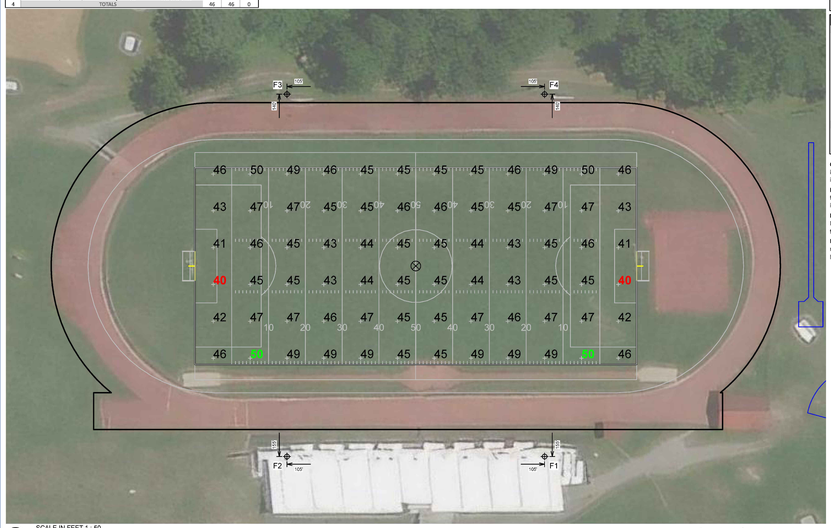
ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
4	TOTALS					46	46	0



SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s): ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**45**
Scan Average:	45.63
Maximum:	50
Minimum:	40
Avg / Min:	1.14
Guaranteed Max / Min:	**3**
Max / Min:	1.25
UG (adjacent pts):	1.13
CU:	0.48
No. of Points:	72

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**46**
Total Load:	57.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

GENERAL NOTE:

1. ALL WORK ON THIS SHEET TO BE FURNISHED BY MUSCO LIGHTING AND INSTALLED BY DISTRICT.

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT, TO ALTER ANY ITEM ON THIS PLAN IN ANY WAY. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL STAMP THE PLAN AND ADD A NOTATION ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT © 2019

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www.erengpc.com

CONSULTANT(S):

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STAMP

STATE OF NEW YORK — JAMES EISENBACH — 095414 — LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44-21-01-06-0-001-040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	**04.06.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE

PARTIAL SITE LIGHTING PLANS

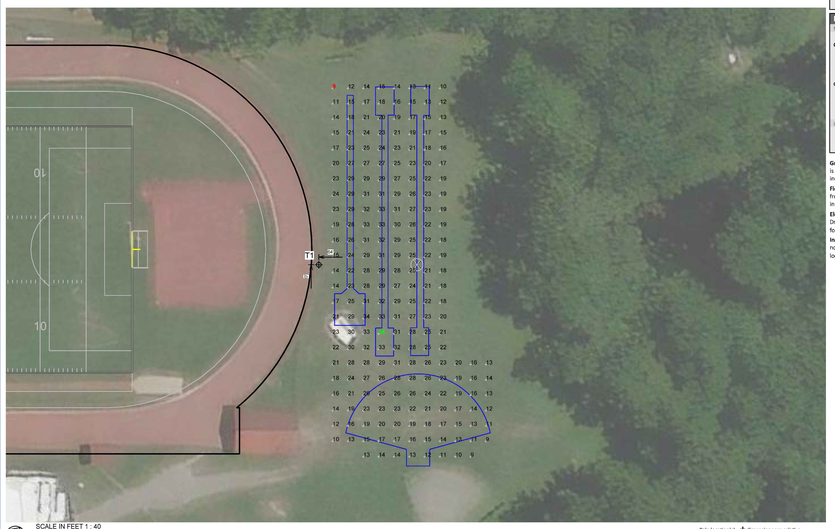
SHEET NO.

FF
E-100

FILE PATH - N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\Musco Lighting\05-21-04-FF-E100-102.dwg

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
1	T1	60'		60'	TLC-LED-1200	6	6	0
6	TOTALS					52	52	0



SCALE IN FEET 1 : 40

0' 40' 80'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s) ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	**Field Events**
Size:	130' x 250'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Guaranteed Average:	**20**
Scan Average:	21.82
Maximum:	34
Minimum:	9
Avg / Min:	2.35
Guaranteed Max / Min:	**4**
Max / Min:	3.70
UG (adjacent pts):	1.60
CU:	0.59
No. of Points:	218

LUMINAIRE INFORMATION

Applied Circuits:	C
No. of Luminaires:	**6**
Total Load:	7.02 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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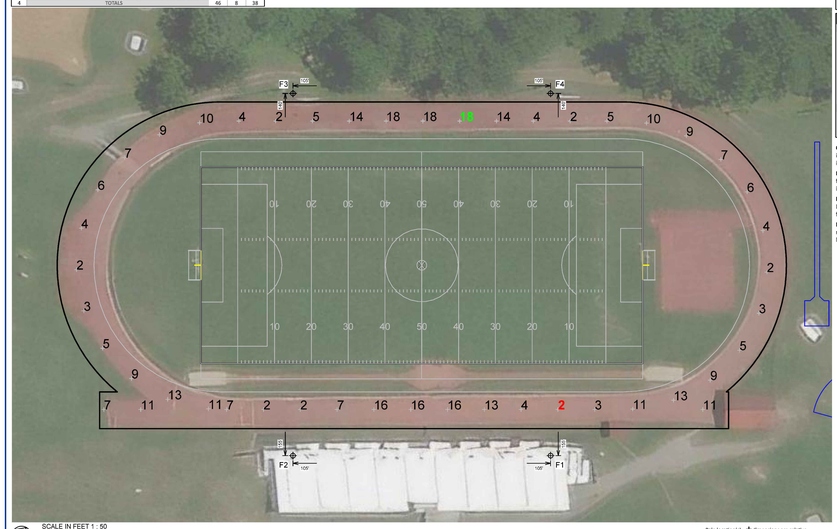
ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	1
				15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-1500	9	7	7
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-1500	9	2	7
4	TOTALS					46	8	38



SCALE IN FEET 1 : 50

0' 50' 100'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s) ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	**Walking Track**
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**8.04**
Maximum:	18
Minimum:	2
Avg / Min:	4.15
Max / Min:	**9.27**
UG (adjacent pts):	0.00
CU:	0.27
No. of Points:	47

LUMINAIRE INFORMATION

Applied Circuits:	B
No. of Luminaires:	**8**
Total Load:	11.44 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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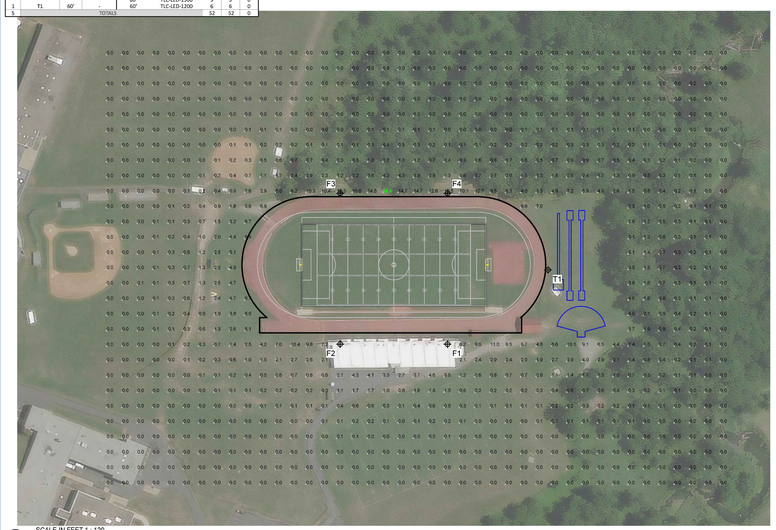
ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
4	TOTALS					46	46	0



SCALE IN FEET 1 : 120

0' 120' 240'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s) ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	**Blanket Spill**
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**0.77**
Maximum:	15
Minimum:	0
Avg / Min:	-
Max / Min:	
UG (adjacent pts):	210.23
CU:	0.08
No. of Points:	957

LUMINAIRE INFORMATION

Applied Circuits:	A, B, C
No. of Luminaires:	**52**
Total Load:	64.26 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole QTY	Pole LOCATION	Pole SIZE	Pole GRADE ELEVATION	Luminaires MOUNTING HEIGHT	Luminaires LUMINAIRE TYPE	Luminaires QTY / POLE	Luminaires THIS GRID	Luminaires OTHER GRIDS
2	F1-F2	80'		80'	TLC-LED-600	1	1	0
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
2	F3-F4	80'	-	15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-1500	9	9	0
4	TOTALS					46	46	0

SCALE IN FEET 1 : 30

0' 30' 60'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s) ✚ dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

GRID SUMMARY

Name:	**Bleachers**
Size:	Irregular
Spacing:	10.0' x 10.0'

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	**7.41**
Maximum:	13
Minimum:	2
Avg / Min:	4.13
Max / Min:	**7.11**
UG (adjacent pts):	1.87
No. of Points:	120

LUMINAIRE INFORMATION

Applied Circuits:	A, B
No. of Luminaires:	**46**
Total Load:	57.24 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

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ILLUMINATION SUMMARY

GENERAL NOTE:

1. ALL WORK ON THIS SHEET TO BE FURNISHED BY MUSCO LIGHTING AND INSTALLED BY DISTRICT.

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT, TO ALTER ANY ITEM ON THIS PLAN IN ANY WAY. IF ANY ITEM IS ALTERED, THE ALTERING ENGINEER SHALL STAMP THE PLAN AND ADD A NOTATION ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT @ 2019

ENGINEER:

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291 Genesee Street – Utica, NY 13501
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www.erengpc.com

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FAX 914.592.1717
WWW.FULLERDANGELO.COM

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STAMP

STATE OF NEW YORK — JOHN EISENBACH — 095644 — LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF=WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	**04.08.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

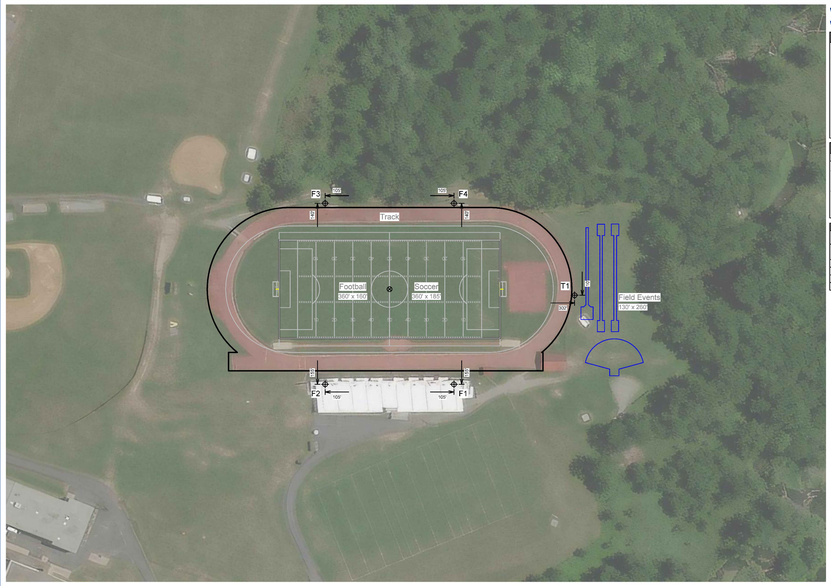
SHEET TITLE

PARTIAL SITE LIGHTING PLANS

SHEET NO.

FF
E-101

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\Musco Lighting\05-21-04_FF-E100-102.dwg



SCALE IN FEET 1 : 100

0 100' 200'

ENGINEERED DESIGN By: - File #190156C - 05-Jan-22

Pole location(s) + dimensions are relative to 0,0 reference point(s)

Warwick Valley CSD Stadium

Warwick, NY

EQUIPMENT LAYOUT

INCLUDES:
- Field Events
- Football
- Soccer
- Track

Electrical System Requirements: Refer to Amperage Draw Chart and/or the **"Musco Control System Summary"** for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	F1-F2	80'	-	80'	TLC-LED-600	1
				15.5'	TLC-BT-575	2
				80'	TLC-LED-1500	5
2	F3-F4	80'	-	15.5'	TLC-BT-575	2
				80'	TLC-LED-1500	9
1	T3	60'	-	60'	TLC-LED-1200	6
4			TOTALS			52

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (@ max power factor)	Line Amperage Per Luminaire (@ max power factor)					
Single Phase Voltage	208	220	240	277	347	380	480
	MIN	MIN	MIN	MIN	MIN	MIN	MIN
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-600	3.4	3.2	3.0	2.6	2.0	1.9	1.5

musco lighting

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EQUIPMENT LAYOUT

GENERAL NOTE:

1. ALL WORK ON THIS SHEET TO BE FURNISHED BY MUSCO LIGHTING AND INSTALLED BY DISTRICT.

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STATE OF NEW YORK – JOHN EISENBACH – 059414 – LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

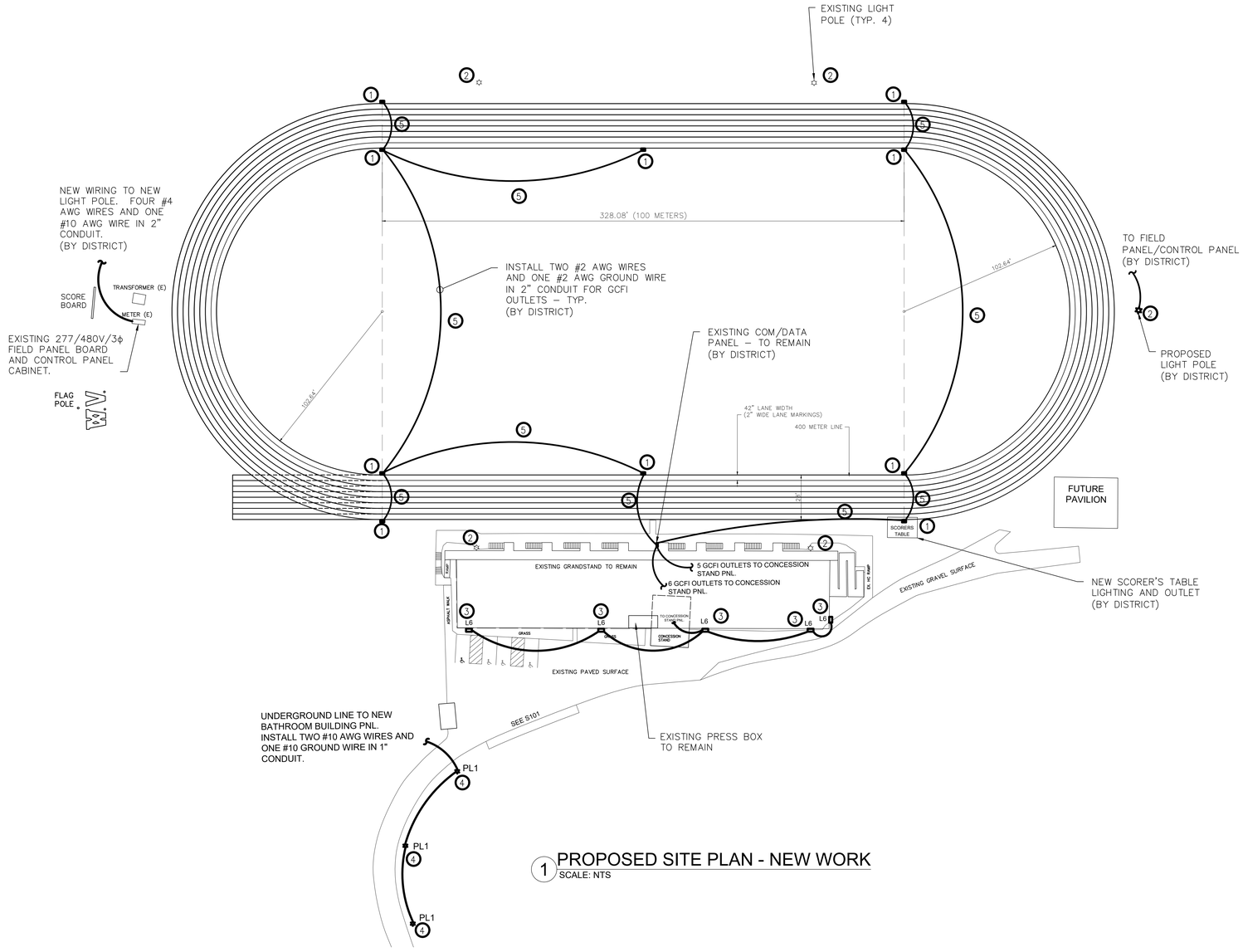
SHEET TITLE

PARTIAL SITE LIGHTING PLAN

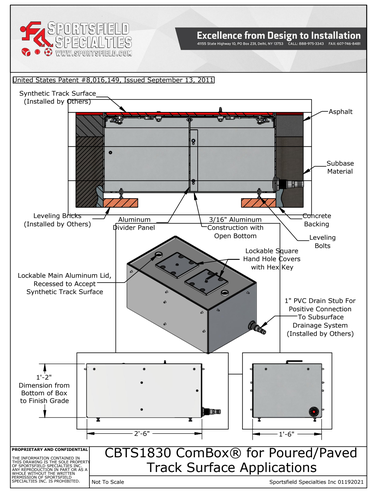
SHEET NO.

FF
E-102

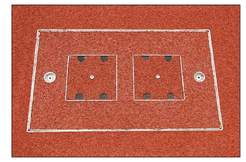
FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\Musco Lighting\05-21-04FF-E100-102.dwg



1 PROPOSED SITE PLAN - NEW WORK
SCALE: NTS



PULLBOX APPLICATION NEW WORK
2 SCALE: NTS



TRACK SURFACED PULLBOX NEW WORK
3 SCALE: NTS

KEYED NOTES – NEW WORK:

1. DISTRICT SHALL PROVIDE AND INSTALL NEW SPORTSFIELD SPECIALTIES CBTS1830 COMBOXES (PULLBOX) PER MANUFACTURERS INSTRUCTIONS. DISTRICT SHALL INSTALL ONE GCFI OUTLET INTO EACH PULLBOX (11) AND WIRED BACK TO 120V PANELBOARD LOCATED IN CONCESSION STAND. MAXIMUM OF SIX GCFI OUTLETS PER BRANCH CIRCUIT. DISTRICT SHALL PROVIDE AND INSTALL ALL WIRING, CONDUIT, CIRCUIT BREAKERS AND SUPPLIES TO COMPLETE INSTALLATION OF POWER CIRCUITS. GCFI OUTLETS SHALL BE INSTALLED IN WEATHERPROOF HOUSINGS WITHIN PULLBOXES.
2. DISTRICT SHALL PROVIDE AND INSTALL MUSCO STADIUM LIGHTING ONTO FOUR EXISTING AND ONE NEW LIGHT POLE AS INDICATED. INSTALL STADIUM LIGHTING PER MANUFACTURER INSTRUCTIONS. DISTRICT SHALL PROVIDE MUSCO RECOMMENDED STADIUM LIGHTING CONTROLS, WIRING, STARTERS, CONDUIT AND SUPPLIES NECESSARY TO ENSURE A COMPLETE LIGHTING SYSTEM.
3. DISTRICT SHALL PROVIDE AND INSTALL WALLPACK LIGHTING (L6) AS INDICATED ONTO EXISTING GRANDSTAND FOR PATH LIGHTING. DISTRICT SHALL PROVIDE AND INSTALL LIGHTS, WIRING, CONDUIT, CIRCUIT BREAKER, SUPPLIES AND HARDWARE AS REQUIRED FOR A COMPLETE LIGHT SYSTEM AND CONNECT TO THE EXISTING 120V PANELBOARD LOCATED INSIDE THE CONCESSION STAND. REFER TO LIGHTING FIXTURE SCHEDULE ON DRAWING E–500 FOR SPECIFICATIONS.
4. DISTRICT SHALL PROVIDE AND INSTALL THREE POLE LIGHTS (PL1) ALONG EXISTING PAVEMENT AS INDICATED. DISTRICT SHALL PROVIDE AND INSTALL LIGHT POLES, WIRING, CONDUIT, CIRCUIT BREAKER, SUPPLIES AS REQUIRED TO COMPLETE SYSTEM AND CONNECT TO NEW 277V PANELBOARD TO BE LOCATED IN THE EXTERIOR BATHROOM BUILDING MECHANICAL ROOM. REFER TO LIGHTING FIXTURE SCHEDULE ON DRAWING E–500 FOR SPECIFICATIONS.
5. DISTRICT SHALL PROVIDE AND INSTALL THREE 2" SCHEDULE 80 PVC CONDUIT AS INDICATED TO ALL PULLBOXES. LONG SWEEPS SHALL BE USED TO ENTER/EXIT PULLBOXES, CONDUIT SHALL BE MADE WATER TIGHT AND CAPPED INSIDE PULLBOX WHERE PERMITTED. INSTALL BACKUP PULL ROPES IN CONDUIT FOR USE DURING MEETS. DISTRICT SHALL PROVIDE AND INSTALL COMMUNICATION WIRING (BELDEN 9533 CABLE) LINKING ALL PULLBOXES USING 3 PIN XLR (MALE & FEMALE) AND CONNECT TO THE PRESS BOX AND SCORER'S TABLE. DISTRICT SHALL PROVIDE AND INSTALL CAT 5 ETHERNET (T56EA/B RJ45) NETWORT CABLE TO ALL PULLBOXES.

GENERAL NOTES:

1. INSTALL SPORTSFIELD SPECIALTIES CBTS 1830 COMBOXES WITHIN CLOSE PROXIMITY TO TRACK EDGES SUCH THAT TRACK SURFACE COATING CAN BE INSTALLED ON AND 12–16" AROUND PERIMETER OF COMBOX PROVIDING A CONTINUOUS TRACK SURFACE AS PICTURED IN DETAIL 3 OF THIS DRAWING. COMBOXES SHALL BE INSTALLED SUCH THAT THE WHEN SURFACED THE COMBOX SHALL BE LEVEL WITH THE FINISHED TRACK ELEVATION.
2. INSTALL SPORTSFIELD SPECIALTIES CBTS 1830 COMBOXES PER MANUFACTURER INSTRUCTIONS, DETAIL 2 OF THIS DRAWING PROVIDES INSTALLATION DIAGRAM. MANUFACTURER INSTRUCTIONS TO BE PROVIDED AT A LATER DATE.
3. ALL WORK BY DISTRICT OR OTHERS SHALL MEET NFPA (NEC 2020) STANDARDS.
4. ALL WORK BY DISTRICT OR OTHERS SHALL MEET STANDARDS SET FORTH BY THE FOLLOWING:
   - 4.1. NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFHS)
   - 4.2. NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)
   - 4.3. INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS (IAAF)
   - 4.4. AMERICAN SPORTS BUILDERS ASSOCIATION (ASBA)
   - 4.5. MANUFACTURERS DATA AND RECOMMENDED INSTALLATIONS REQUIREMENTS
   - 4.6. WHERE THESE STANDARDS CONFLICT WITH OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN.

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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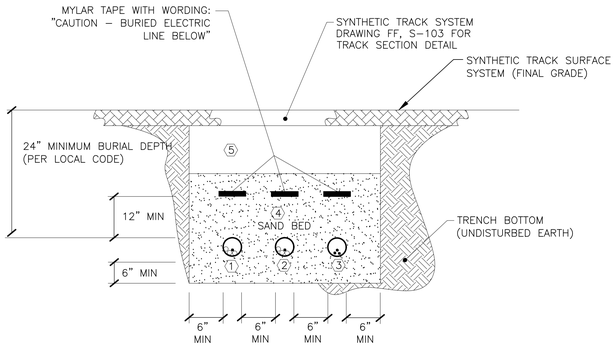
■FF SED NO.	44-21-01-06-7-041-001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO.	44-21-01-06-0-001-040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL SITE PLAN - NEW WORK

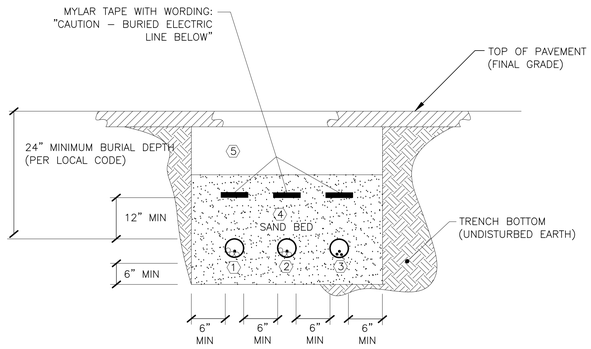
SHEET NO.
FF
E-103

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–06FF–e103.dwg



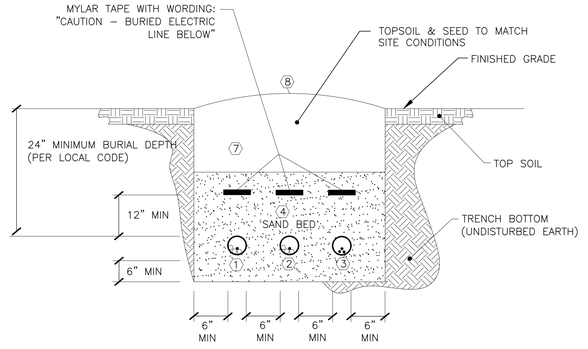
TYPICAL BURIED CONDUIT ATHLETIC TRACK

1 SCALE: NONE



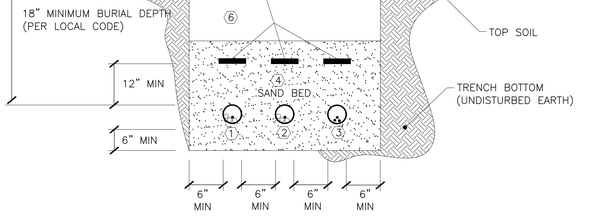
TYPICAL BURIED CONDUIT ASHPALT PAVEMENT

2 SCALE: NONE



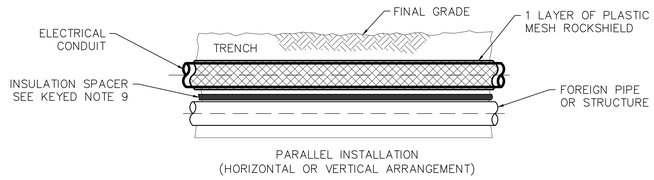
TYPICAL BURIED CONDUIT ALL OTHER APPLICATIONS

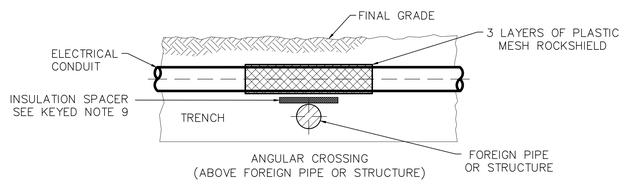
3 SCALE: NONE

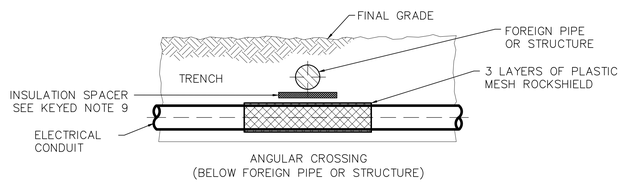


TYPICAL BURIED CONDUIT ATHLETIC FIELD

4 SCALE: NONE







ANGULAR & PARALLEL CROSSING OF SUBSURACE STRUCTURE WATER/SEWER PIPE PROTECTION BELOW GRADE CLEARANCES

5 SCALE: NONE

KEYED TRENCH NOTES:

1. ELECTRICAL CABLES FOR 120V ATHLETIC FIELD GCFI OUTLETS, REFER TO DRAWING (FF E–103) FOR WIRE SIZES AND POWER SOURCE.
2. DATA AND COMMUNICATION WIRES, REFER TO DRAWING (FF E–103) FOR WIRE TYPE.
3. SPARE CONDUIT FOR FUTURE FIBER OPTIC CABLES, INSTALL 3 PULL ROPES – LABELED ON BOTH ENDS
4. 6" MIN. SAND BEDDING REQUIRED AROUND ALL TRENCH PIPING & CONDUIT
5. COMPACED SELECT BACKFILL TO MATCH SURROUNDING CONDITIONS. NO ROCK OR DEBRIS IN BACKFILL.
6. BACKFILL WITH SELECT TOPSOIL TO MATCH REMAINDER OF ATHLETIC FIELD.
7. PROVIDE A MINIMUM OF 6" TOPSOIL, OVER COMPACTED SELECT BACKFILL TO MATCH SURROUNDING CONDITIONS. NO ROCK OR DEBRIS IN BACKFILL.
8. TRENCH SHALL BE CROWNED SLIGHTLY TO ALLOW FOR FUTURE SETTLEMENT
9. A INSULATION SPACER SHALL BE INSTALLED BETWEEN METALIC WATER/SEWER PIPE TO PREVENT ELECTRICAL CONTACT WITH THE SUBSURFACE STRUCTURE.

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■HS SED NO. 44-21-01-06-0-001-040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
ATHLETIC FIELD - DETAILS

SHEET NO.
FF
E-104

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\V05-21-04 Warwick Federal Grant Project\CAD\Package 2\V05-21-06.FF-e104.dwg

PANEL SCHEDULE

PANEL ID: PP-1 VOLTS/PHASE/WIRE 277V/480Y/3PH/4W PANEL SIZE 400A MIN SCC 22 KAIC LOCATION: MECH ROOM

NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	#	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	1			A			2	
	3	IRRIGATION PUMP	40A	B	30A	GRINDER PUMP GP-2	4	
	5			C			6	
	7			A	75A	ELECTRIC WATER HEATER EWH-2	8	
	9	GRINDER PUMP GP-1	30A	B	75A	ELECTRIC WATER HEATER EWH-3	10	
	11			C	20A	PUMP CONTROLS	12	
	13	SPACE	20A	A	20A	ELECTRIC UNIT HEATER EUH1 (BOYS)	14	
	15	SPACE	20A	B	20A	ELECTRIC UNIT HEATER EUH3 (GIRLS)	16	
	17	SPACE	20A	C	20A	ELECTRIC UNIT HEATER EUH2 (MECH RM)	18	
	19	SPACE	20A	A			20	
	21			B	60A	277/480V 50kVA 3PHASE TRANSFORMER	22	
	23	WELL PUMP	20A	C			24	
	25			A	20A	SPACE	26	
	27	ELECTRIC WATER HEATER EWH-1	20A	B	20A	SPACE	28	
	29	SPACE		C	20A	SPACE	30	
	31	SPACE		A	20A	SPACE	32	
	33	SPARE	20A	B	20A	SPARE	34	
	35	SPARE	20A	C	20A	SPARE	36	
	37	SPARE	20A	A	20A	SPARE	38	
	39	SPARE	20A	B	20A	SPARE	40	
	41	SPARE	20A	C	20A	SPARE	42	

NOTES:
MAINS FROM EXISTING SCORBOARD PANEL BOX
2 SETS OF 500 MCM TO BRANCH PANELBOARD

GENERAL NOTES:
- PANELBOARD BUS RATING 400 AMPS
- 277V/480V – 3PHASE/4 WIRE
- SURFACE MOUNTED 42 POLE
- PROVIDE GROUNDING ELECTRODES AT BUILDING

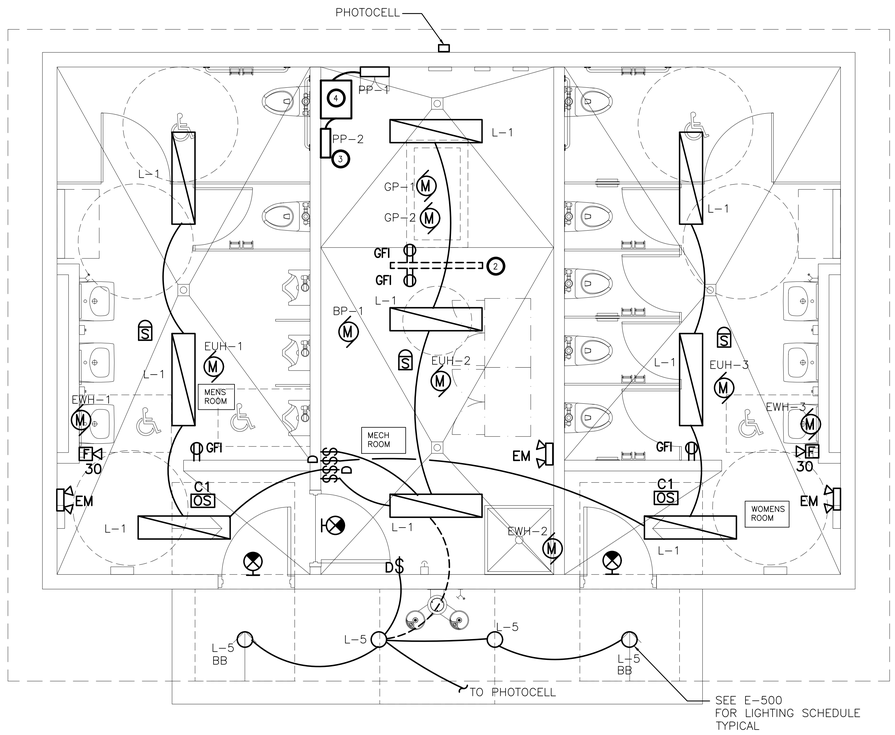
PANEL SCHEDULE

PANEL ID: PP-2 VOLTS/PHASE/WIRE 120V/208Y/3PH/4W PANEL SIZE 100A MIN SCC 22 KAIC LOCATION: MECH ROOM

NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	#	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	1	LIGHTS	20A	A	20A	EXHAUST FAN EF-1	2	
	3	LIGHTS	20A	B	20A	EXHAUST FAN EF-2	4	
	5	RECEPTACLES (GFI)	20A	C	20A	EXHAUST FAN EF-3	6	
	7	RECEPTACLES (GFI)	20A	A	20A	POLE MOUNTED LIGHTS	8	
	9	POLE MOUNTED LIGHTS	20A	B	20A	BOOSTER PUMP BP-1	10	
	11	SPACE		C	20A	HAND-DRYER (BOYS)	12	
	13			A	20A	HAND-DRYER (GIRLS	14	
	15	DOMESTIC WATER PUMP DWP-1 (IN TANK)	20A	B		SPACE	16	
	17			C		SPACE	18	
	19	SPACE		A		SPACE	20	
	21	SPARE	20A	B	20A	SPARE	22	
	23	SPARE	20A	C	20A	SPARE	24	
	25	SPARE	20A	A	20A	SPARE	26	
	27	SPARE	20A	B	20A	SPARE	28	
	29	SPARE	20A	C	20A	SPARE	30	

NOTES:
MAINS FROM EXISTING SCORBOARD PANEL BOX
1 SETS OF 2/0 WITH GRD TO BRANCH PANELBOARD

GENERAL NOTES:
- PANELBOARD BUS RATING 100 AMPS
- 120V/208V – 3PHASE/4 WIRE
- SURFACE MOUNTED 30 POLE
- PROVIDE GROUNDING ELECTRODES AT BUILDING



1 BATHROOM FLOOR PLAN - NEW WORK
SCALE: 3/8"=1'-0"

KEYED NOTES – NEW WORK:

1. PROVIDE LIGHT FIXTURES, WIRING, CONDUITS, SWITCHING AND ALL APPURTENANCES AS SHOWN.
2. PROVIDE UNISTRUT FRAME FOR MOUNTING CONTROL PANELS AND OUTLETS PROVIDE 4'–0" WIDE BY 4'–0" HIGH (2) ¾"PLYWOOD PAINTED GREY BOTH SIDES. MOUNT 3'–0" AFF.
3. PROVIDE A 100 AMP PANEL (PP–2) 120–208V 3PH 4 WIRE 60 HZ, MIN SCC 22 KAIC WITH ASSOCIATED STEPDOWN TRANSFORMER 45 KVA AND APPURTENANCES.
4. PROVIDE AND INSTALL 45kVA 277/480V 3PHASE PRIMARY TO 120/208V WYE SECONDARY TRANSFORMER, EATON MODEL V48M28T4516 OR EQUIVALENT.

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE

EQUIPMENT						SUPPLY							CONTROLLER DEVICE TYPE & ACCESSORIES (UNO, PROVIDED BY ELECTRICAL CONTRACTOR)													
DESIGNATION	DESCRIPTION	ROOM LOCATION	SIZE			VOLTAGE/ PHASE/HZ	PANEL/ CONTROL CENTER	CIRCUIT NUMBER	BREAKER SIZE	POWER WIRING FROM PANEL TO CONTROL UNIT		POWER WIRING FROM CONTROL UNIT TO EQUIPMENT		GROUND WIRE (SIZED PER NEC)	PACKAGED CONTROL UNIT (BY OTHERS)	VARIABLE FREQUENCY DRIVE (VFD)	CONTROL STARTER	NON–FUSED DISCONNECT SWITCH	CONTROL DEVICE INSTALL LOCATION	DUCT SMOKE DETECTOR (SUPPLY)	DUCT SMOKE DETECTOR (RETURN)	FIRE ALARM FAN SHUTDOWN	DISCONNECT SWITCH			REF. NOTES	DESIGNATION
			HP/WATTS	MOP	MCA					WIRE	COND.	WIRE	COND.										FRAME	FUSE	LOCATION		
GP–1	GRINDER PUMP (OUTDOOR BATHROOM)	MECH RM	1.5	20	3.4	460V/3ϕ/60HZ	PP–1	SEE PANEL SCHED	30A	#12	1"	FACTORY WIRED	---	#12	---			FACTORY WIRED	AT UNIT				60				
GP–2	GRINDER PUMP (OUTDOOR BATHROOM)	MECH RM	1.5	20	3.4	460V/3ϕ/60HZ	PP–1	SEE PANEL SCHED	30A	#12	1"	FACTORY WIRED	---	#12	---			FACTORY WIRED	AT UNIT				60				
EF–1	EXHAUST FAN	BOYS	217 WATTS	20	4	120V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EF–2	EXHAUST FAN	MECH RM	100 WATTS	20	2	120V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EF–3	EXHAUST FAN	GIRLS	217 WATTS	20	4	120V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EUH–1	ELECTRIC UNIT HEATER	BOYS		20	10.8	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EUH–2	ELECTRIC UNIT HEATER	MECH RM		20	10.8	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EUH–3	ELECTRIC UNIT HEATER	GIRLS		20	10.8	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
EWH–1	ELECTRIC WATER HEATER	BOYS		75	58	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	75A	#4	1¼"			#8				FACTORY WIRED	AT UNIT				100				
EWH–2	ELECTRIC WATER HEATER	MECH RM		75	58	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	75A	#4	1¼"			#8				FACTORY WIRED	AT UNIT				100				
EWH–3	ELECTRIC WATER HEATER	GIRLS		75	58	277V/1ϕ/60HZ	PP–1	SEE PANEL SCHED	75A	#4	1¼"			#8				FACTORY WIRED	AT UNIT				100				
WP–1	WELL PUMP	EXTERIOR																									NOTE 2
BP–1	BOOSTER PUMP	MECH RM	2	20	4	460V/3ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				
DWP–1	DOMESTIC WATER PUMP (IN TANK)	EXTERIOR	1.5	20	8.4	240V/3ϕ/60HZ	PP–1	SEE PANEL SCHED	20A	#12	1"			#12				FACTORY WIRED	AT UNIT				60				

AU – AT UNIT
N/A – NOT APPLICABLE
FRAC. – FRACTIONAL

1. FOLLOW NEC 2020 (NFPA 70) REQUIREMENTS.
2. WELL PUMP WP–1 (TBD) THE WELL DRILLER NEEDS TO PROVIDE A CERTIFIED WATER REPORT FOR PROPER SIZING OF THE WELL PUMP AND REVERSE OSMOSIS SYSTEM. PROVIDE A ALLOWANCE OF $20,000 DOLLARS FOR BIDDING PURPOSES ONLY FINAL SIZING BY MECHANICAL ENGINEER.

AS PART OF BASE BID, ALL WORK ON THIS DRAWING SHALL BE PROVIDED IN ITS ENTIRETY BY THE ELECTRICAL CONTRACTOR.

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STATE OF NEW YORK · JACK EISENBACH · LICENSED PROFESSIONAL ENGINEER · NO. 059445

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

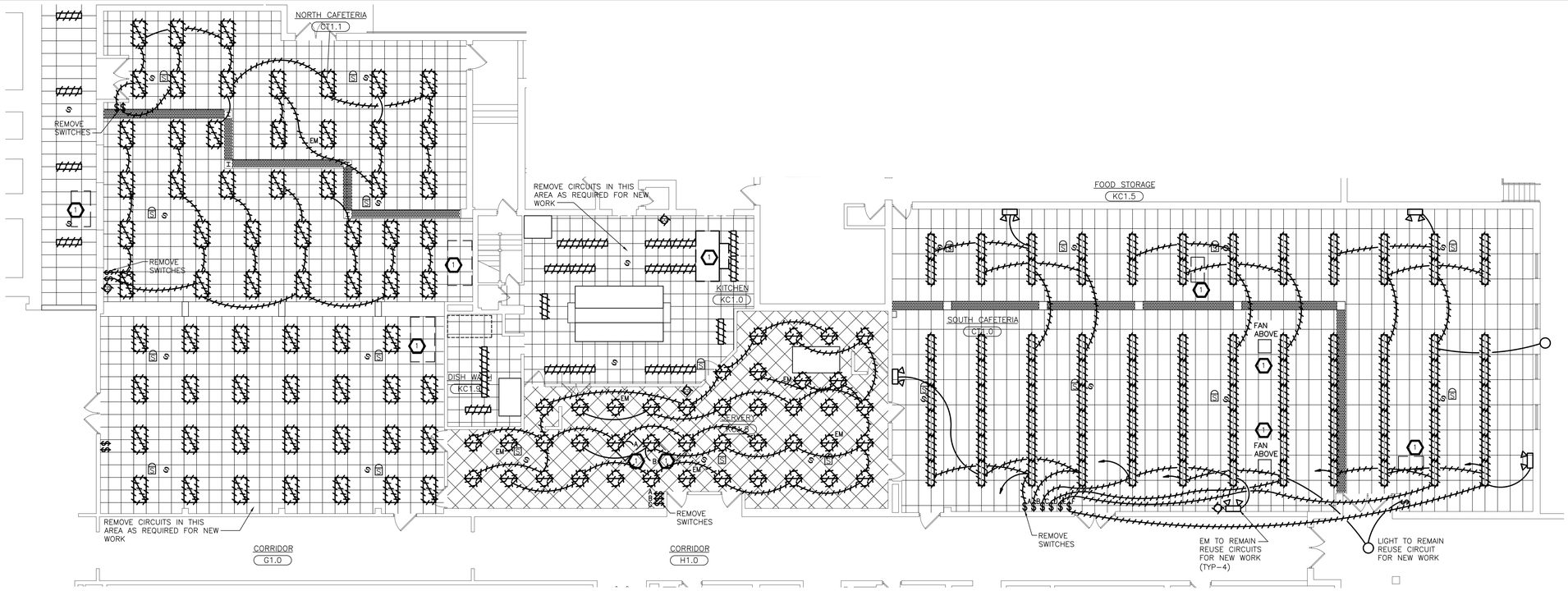
■BB SED NO. 44-21-01-06-7-041-001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF–WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44-21-01-06-3-001-040 (HS–WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
BATHROOM FLOOR PLAN - NEW WORK

SHEET NO.
BB
E-100

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04–BBP100.M100.E100.dwg



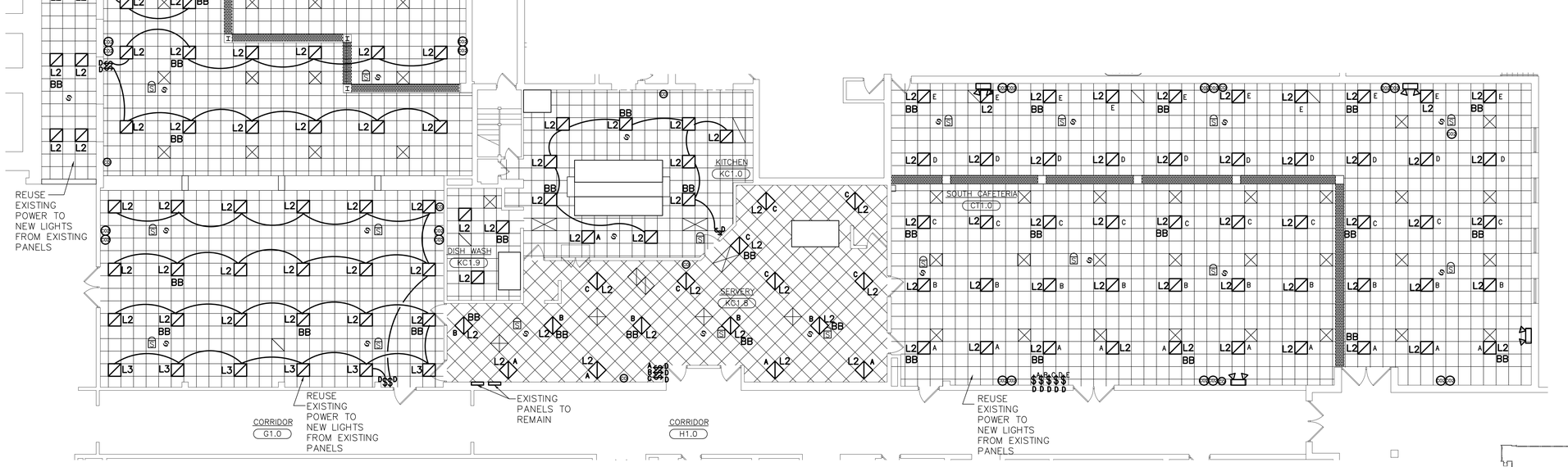
1 PARTIAL FIRST FLOOR PLAN KITCHEN SERVERY & CAFETERIAS - DEMOLITION

SCALE: 1/8"=1'-0"

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – REMOVALS:

1. DISCONNECT POWER AND REMOVE BACK TO NEAREST JUNCTION BOX. COORDINATE WITH MECHANICAL CONTRACTOR.
2. DISCONNECT EXISTING CEILING MOUNTED SPEAKERS, SMOKE DETECTORS AND ASSOCIATED ELECTRICAL EQUIPMENT AND OBSTACLES BEFORE CEILING REPLACEMENT. SECURITY CAMERAS ARE TO BE DISCONNECTED ONLY WHEN REQUIRED. VERIFY WITH DISTRICT WHEN CAMERA DOWNTIME IS PERMISSIBLE. VERIFY IN FIELD.
3. DISCONNECT POWER FROM THE TWO (2) CAFETERIA UNITS IN FAN ROOM A BACK TO PANELS. SEE DRAWING HS-M-105 FOR UNIT LOCATIONS.



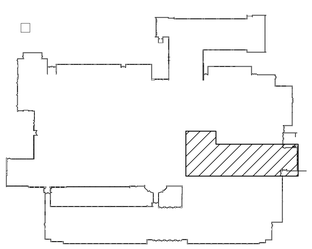
2 PARTIAL FIRST FLOOR PLAN KITCHEN SERVERY & CAFETERIAS - NEW WORK

SCALE: 1/8"=1'-0"

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – NEW WORK:

1. RECONNECT EXISTING SPEAKERS, SMOKE DETECTORS AND ASSOCIATED AFTER CEILING REPLACEMENT. RELOCATE AS NEEDED. SECURITY CAMERAS ARE TO BE RECONNECTED IN THE SAME ORIENTATION IMMEDIATELY AFTER CEILING TILE PLACEMENT. VERIFY WITH DISTRICT I.T. DEPARTMENT AFTER RECONNECTION THAT CAMERAS ARE FUNCTIONAL AND ARE POINTED CORRECTLY. SEE ARCH DRAWINGS FOR LOCATIONS. VERIFY IN FIELD.
2. PROVIDE NEW CARBON MONOXIDE DETECTORS AND ACCESSORIES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTOR TO INTERCONNECT DETECTORS TO HVAC UNIT(S) SERVING THE SPACE.
3. PROVIDE NEW CARBON DIOXIDE DETECTORS AND CONTROLLERS FOR DCV. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. MECHANICAL CONTRACTOR TO INTERCONNECT DETECTORS TO HVAC UNIT(S) SERVING THE SPACE



KEY PLAN N

SCALE: NONE

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STATE OF NEW YORK — MARK EISENBACH — No. 099444 — LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

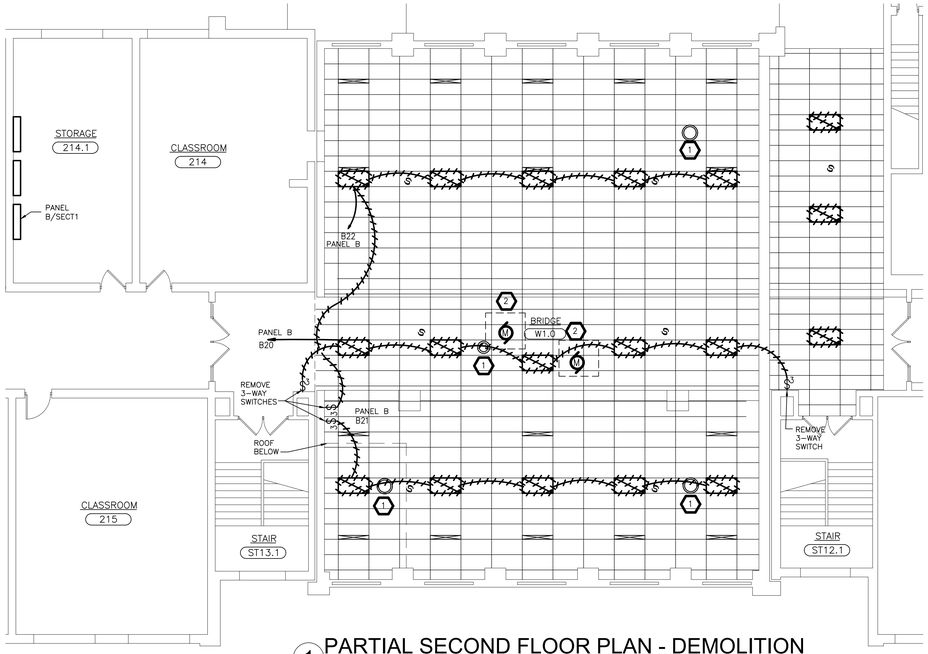
SHEET TITLE

PARTIAL FIRST FLOOR PLAN - KITCHEN, SERVERY, & CAFETERIAS - DEMOLITION & NEW WORK

SHEET NO.

HS E-100

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04_HS-e100.dwg

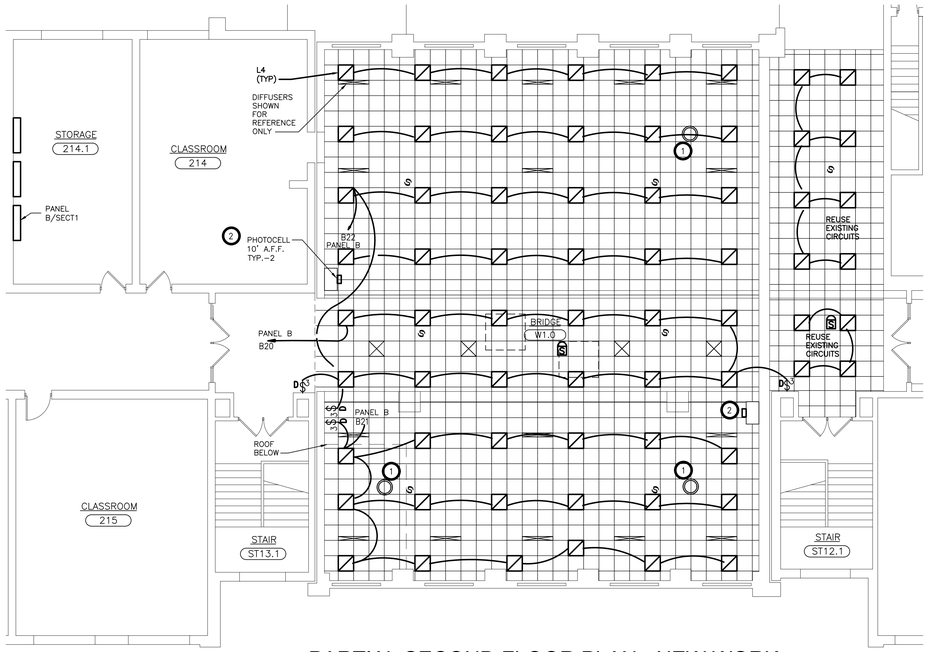


1 PARTIAL SECOND FLOOR PLAN - DEMOLITION

SCALE: 1/8"=1'-0"

KEYED NOTES – NEW WORK:

1. DISCONNECT POWER FROM FANS SHOWN. REMOVE EXISTING CEILING OUTLET COVER.
2. DISCONNECT POWER FROM EXISTING FCUS AND REMOVE WIRING BACK TO PANEL B/SECT1. CONDUIT TO REMAIN.
3. DISCONNECT ELECTRICAL DEVICES IN CEILING AND CAREFULLY STORE FOR REUSE. FIELD VERIFY FOR ALL ADDITIONAL DEVICES AND FOR EXACT LOCATIONS.

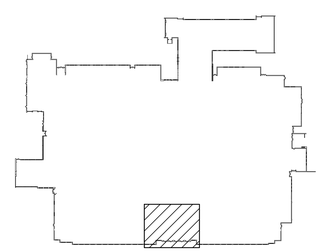


2 PARTIAL SECOND FLOOR PLAN - NEW WORK

SCALE: 1/8"=1'-0"

KEYED NOTES – NEW WORK:

1. RECONNECT POWER TO FANS AND REPLACE OUTLET COVER WHEN CEILING REPLACEMENT IS COMPLETE.
2. PROVIDE TWO INDOOR PHOTOCELL SENSORS TO CONTROL NEW CEILING LIGHTING BRIGHTNESS. AFFIX TO AND RUN WIRING THROUGH NEW DUCT ENCLOSURES.
3. ELECTRICAL CONTRACTOR TO PROVIDE WIRING AND APPURTENANCES TO TIE NEW DUCT SMOKE DETECTORS INTO APPLICABLE UNITS AND EXISTING FIRE ALARM SYSTEM. SEE MECHANICAL DRAWINGS FOR NEW DUCT SMOKE DETECTOR LOCATIONS. ELECTRICAL CONTRACTOR TO FURNISH AND WIRE DUCT SMOKE DETECTORS, MECHANICAL CONTRACTOR TO INSTALL DUCT SMOKE DETECTORS.
4. RECONNECT EXISTING SPEAKERS, SMOKE DETECTORS AND ASSOCIATED AFTER CEILING REPLACEMENT. RELOCATE AS NEEDED. SECURITY CAMERAS ARE TO BE RECONNECTED IN THE SAME ORIENTATION IMMEDIATELY AFTER CEILING TILE PLACEMENT. VERIFY WITH DISTRICT I.T. DEPARTMENT AFTER RECONNECTION THAT CAMERAS ARE FUNCTIONAL AND ARE POINTED CORRECTLY. VERIFY IN FIELD.



FIRST FLOOR KEY PLAN

SCALE: NONE

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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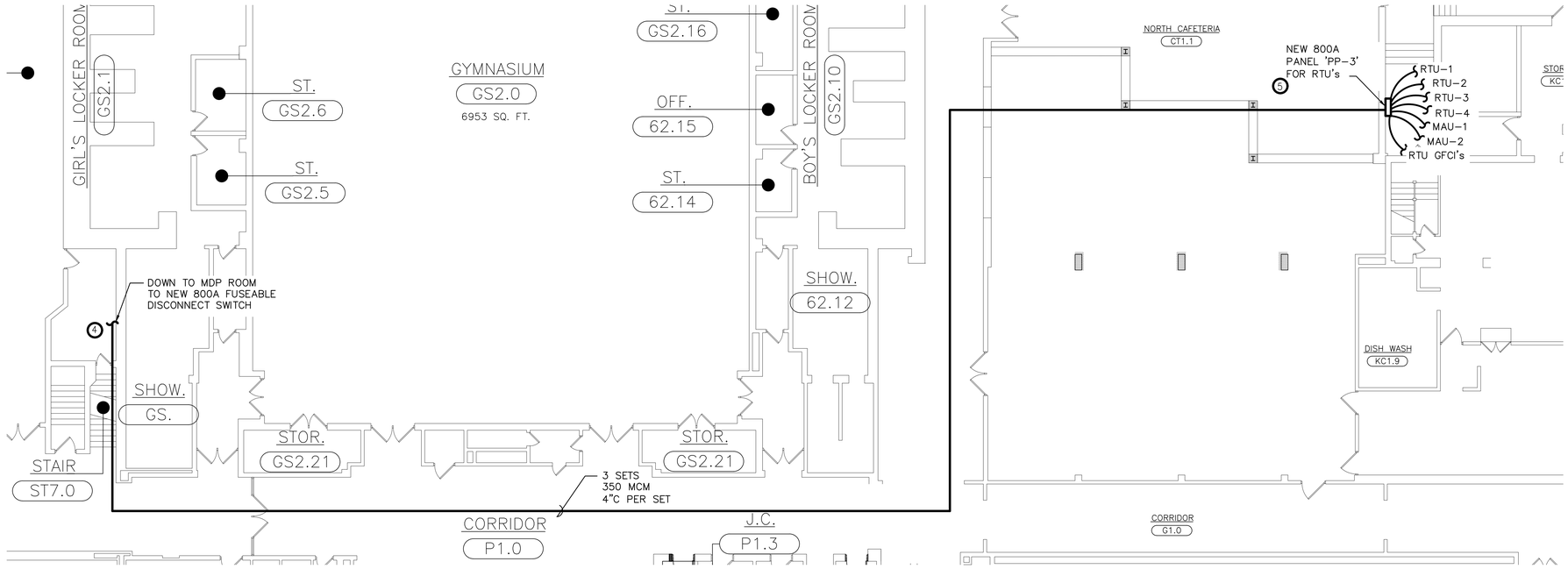
☐HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
MAIN LOBBY - DEMOLITION AND NEW WORK

SHEET NO.
HS
E-101

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-E101.dwg



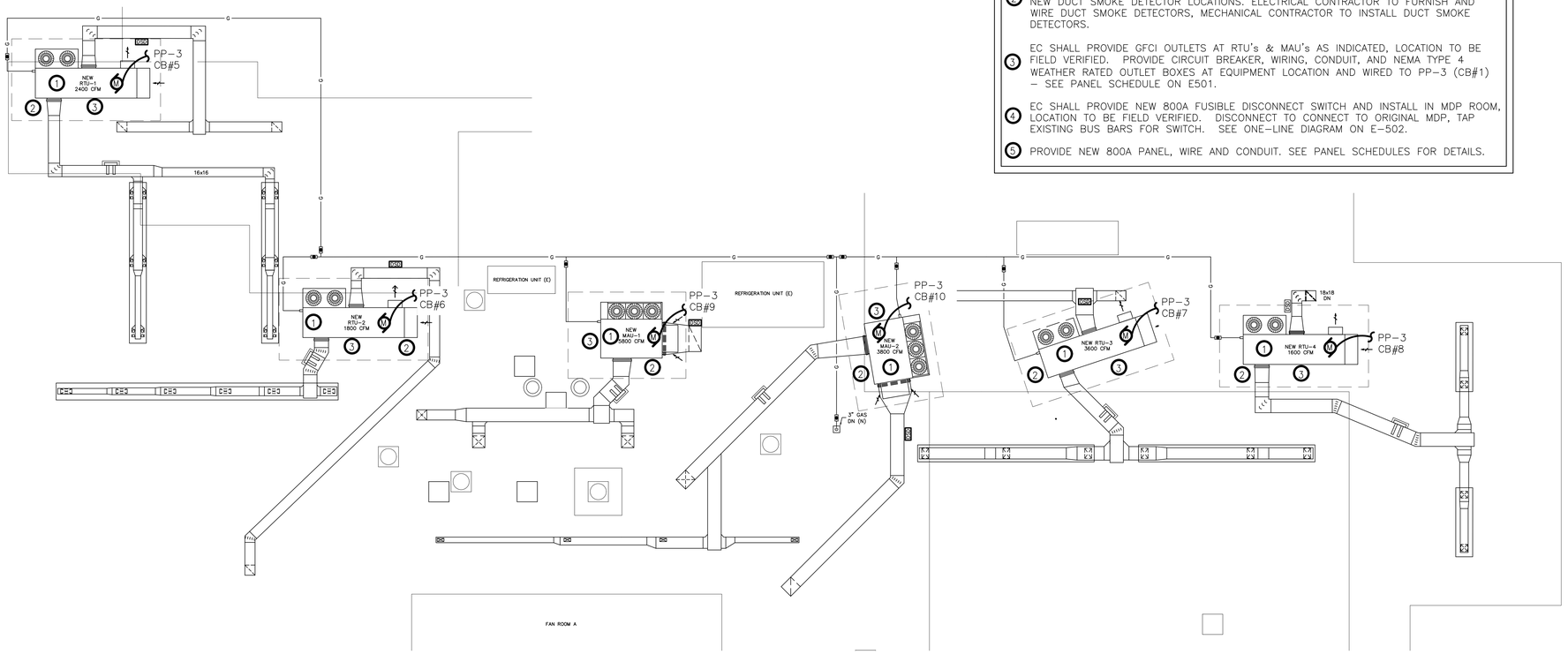
1 PARTIAL FIRST FLOOR PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – NEW WORK:

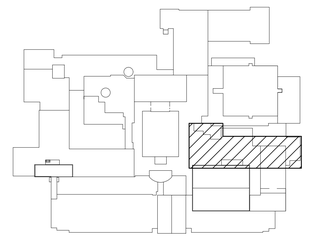
1. ELECTRICAL CONTRACTOR (EC) TO PROVIDE POWER TO NEW ROOFTOP UNITS AND MAUS. PROVIDE WIRING, CONDUIT AND ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
2. EC TO PROVIDE WIRING AND APPURTENANCES TO TIE NEW DUCT SMOKE DETECTORS INTO APPLICABLE UNITS AND EXISTING FIRE ALARM SYSTEM. SEE MECHANICAL DRAWINGS FOR NEW DUCT SMOKE DETECTOR LOCATIONS. ELECTRICAL CONTRACTOR TO FURNISH AND WIRE DUCT SMOKE DETECTORS, MECHANICAL CONTRACTOR TO INSTALL DUCT SMOKE DETECTORS.
3. EC SHALL PROVIDE GFCI OUTLETS AT RTU's & MAU's AS INDICATED, LOCATION TO BE FIELD VERIFIED. PROVIDE CIRCUIT BREAKER, WIRING, CONDUIT, AND NEMA TYPE 4 WEATHER RATED OUTLET BOXES AT EQUIPMENT LOCATION AND WIRED TO PP-3 (CB#1) – SEE PANEL SCHEDULE ON E501.
4. EC SHALL PROVIDE NEW 800A FUSIBLE DISCONNECT SWITCH AND INSTALL IN MDP ROOM, LOCATION TO BE FIELD VERIFIED. DISCONNECT TO CONNECT TO ORIGINAL MDP, TAP EXISTING BUS BARS FOR SWITCH. SEE ONE-LINE DIAGRAM ON E-502.
5. PROVIDE NEW 800A PANEL, WIRE AND CONDUIT. SEE PANEL SCHEDULES FOR DETAILS.



2 PARTIAL ROOF PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTES: LOCATIONS OF EQUIPMENT, DUCTWORK, AND PIPING PROVIDED FOR REFERENCE ONLY
COORDINATE WITH ROOF DRAWINGS AND MECHANICAL DRAWINGS



ROOF KEY PLAN

SCALE: NONE

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
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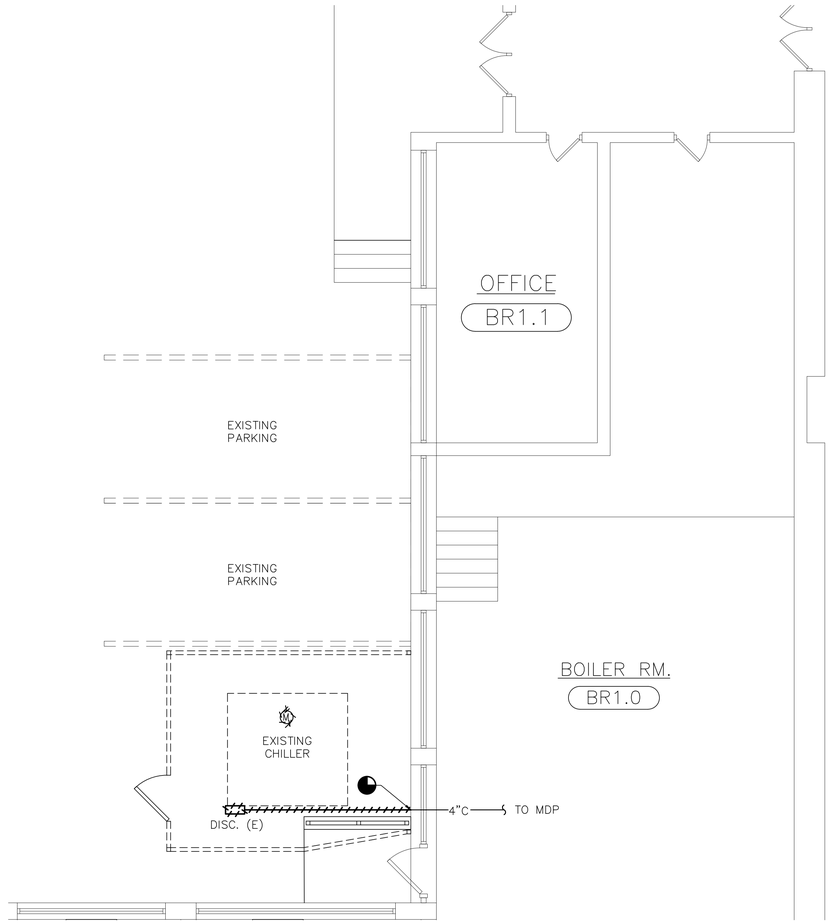
☐HS SED NO. 44-21-01-06-0-001-040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL ROOF & FIRST FLOOR PLANS - KITCHEN, SERVERY, & CAFETERIAS - NEW WORK

SHEET NO.
HS
E-102

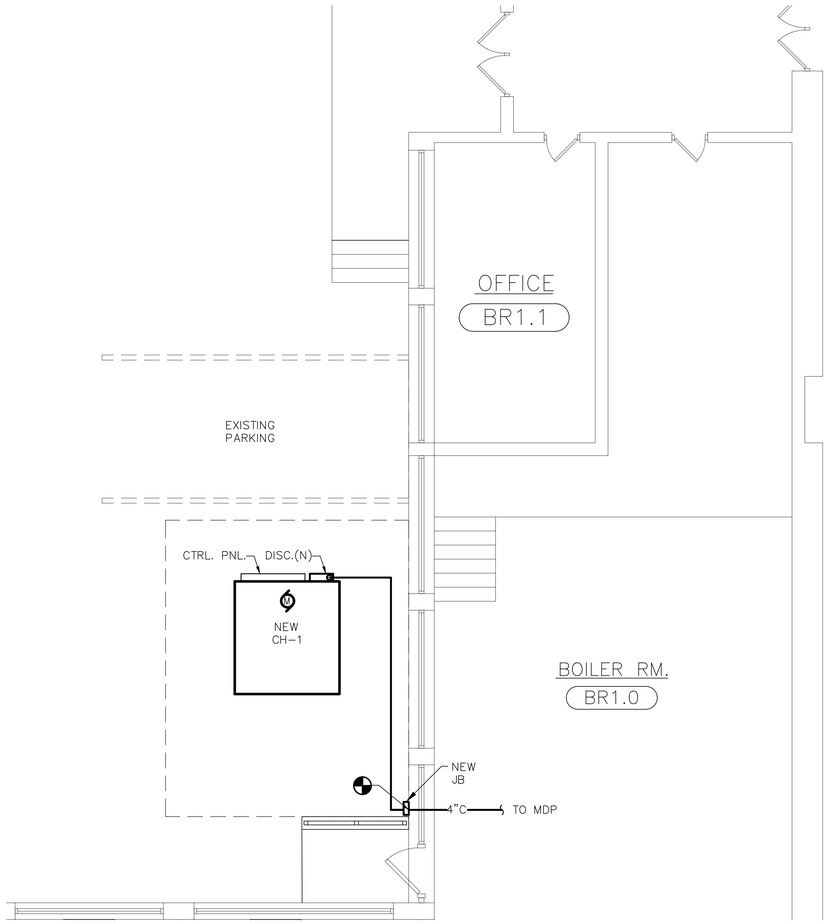
FILE PATH - N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-E102.dwg



1 PARTIAL FIRST FLOOR PLAN - NORTH CHILLER - DEMOLITION
SCALE: 1/4=1'-0

KEYED NOTES – REMOVALS:

1. REMOVE EXISTING WIRING BACK TO MDP. VERIFY RUN AND PANEL SOURCE IN FIELD.
2. REMOVE EXISTING EMT BACK TO POINT INDICATED.
3. REMOVE EXISTING DISCONNECT.
4. REMOVE EXISTING CIRCUIT BREAKER AND RETURN TO OWNER. VERIFY RUN AND PANEL SOURCE IN FIELD.



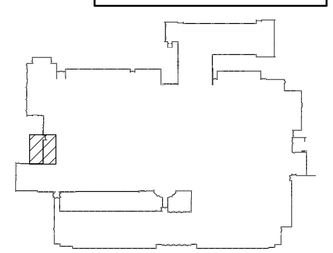
2 PARTIAL FIRST FLOOR PLAN - NORTH CHILLER - NEW WORK
SCALE: 1/4=1'-0

KEYED NOTES – NEW WORK:

1. PROVIDE NEW WIRING BACK TO MDP. PROVIDE NEW EMT AND CONNECT AT POINT SHOWN. USE WATERTIGHT FITTING TO CONNECT NEW AND EXISTING EMT. RESEAL WALL PENETRATION.
2. RECONNECT POWER TO NEW CHILLER AND FACTORY DISCONNECT.
3. PROVIDE NEW 350A CIRCUIT BREAKER IN EXISTING PANEL SPACE.
4. COORDINATE WITH MECHANICAL CONTRACTOR.

AS PART OF ALTERNATE, ALL WORK ON THIS DRAWING SHALL BE PROVIDED IN ITS ENTIRETY BY THE ELECTRICAL CONTRACTOR.

AS PART OF BASE BID, ALL WORK ON THIS DRAWING SHALL BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT.



FIRST FLOOR KEY PLAN
SCALE: NONE

N

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MARK EISENBACH
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LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
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REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

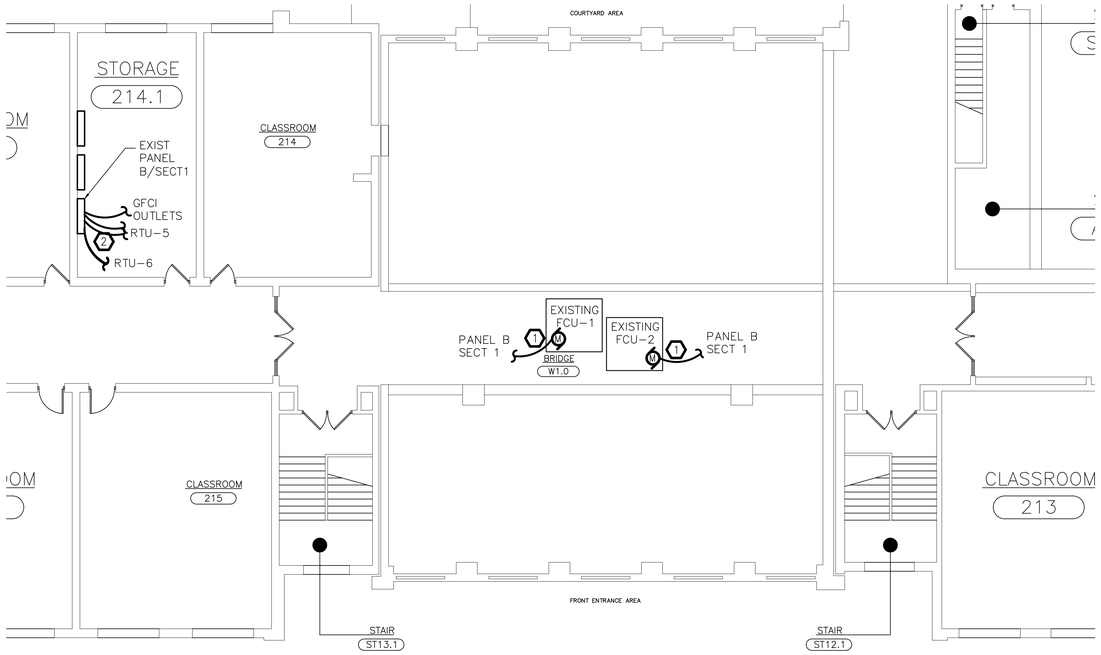
SHEET TITLE
PARTIAL FIRST FLOOR - NORTH CHILLER - DEMOLITION & NEW WORK

SHEET NO.
HS
E-103

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-E103.dwg

KEYED NOTES – REMOVALS:

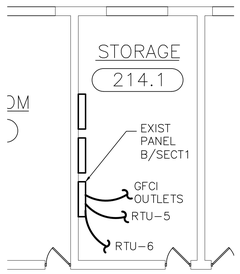
1. ELECTRICAL CONTRACTOR (EC) SHALL DISCONNECT POWER FROM FCU, REMOVE WIRING AND CONDUIT BACK TO POWER SOURCE (PANEL B/SECT 1) – DO NOT ABANDON IN PLACE.
2. EC SHALL REMOVE EXISTING CIRCUIT BREAKERS FOR FCU–1 AND FCU–2, RETURN CIRCUIT BREAKERS TO OWNER.



1 PARTIAL SECOND FLOOR PLAN - DEMOLITION

SCALE: 1/8=1'-0

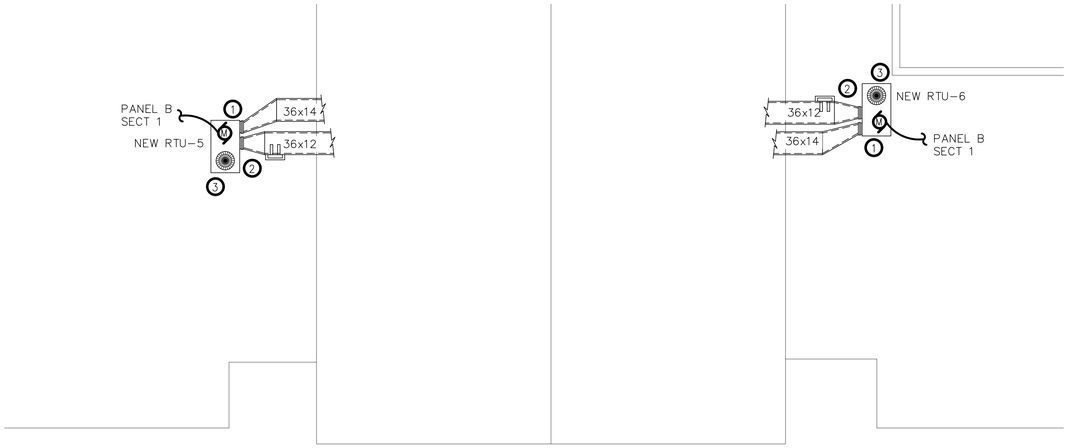
NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY



2 PARTIAL SECOND FLOOR PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTES: LOCATIONS OF EQUIPMENT, DUCTWORK, AND PIPING PROVIDED FOR REFERENCE ONLY
COORDINATE WITH ROOF DRAWINGS AND MECHANICAL DRAWINGS



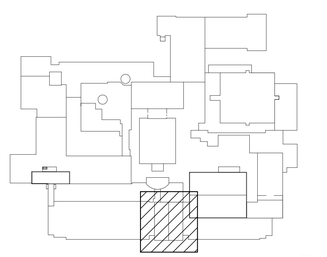
3 PARTIAL ROOF PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTES: LOCATIONS OF EQUIPMENT, DUCTWORK, AND PIPING PROVIDED FOR REFERENCE ONLY
COORDINATE WITH ROOF DRAWINGS AND MECHANICAL DRAWINGS

KEYED NOTES – NEW WORK:

1. ELECTRICAL CONTRACTOR (EC) PROVIDE POWER TO NEW ROOFTOP UNITS. PROVIDE WIRING, BREAKERS, CONDUIT AND ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
2. EC TO PROVIDE WIRING AND APPURTENANCES TO TIE NEW DUCT SMOKE DETECTORS INTO APPLICABLE UNITS AND EXISTING FIRE ALARM SYSTEM. SEE MECHANICAL DRAWINGS FOR NEW DUCT SMOKE DETECTOR LOCATIONS. ELECTRICAL CONTRACTOR TO FURNISH AND WIRE DUCT SMOKE DETECTORS, MECHANICAL CONTRACTOR TO INSTALL DUCT SMOKE DETECTORS.
3. EC SHALL PROVIDE GFCI OUTLETS AT RTU's AS INDICATED, LOCATION TO BE FIELD VERIFIED. PROVIDE CIRCUIT BREAKER, WIRING, CONDUIT, AND NEMA TYPE 4 WEATHER RATED OUTLET BOXES AT EQUIPMENT LOCATION AND WIRED TO PANEL B/SECT 1.



ROOF KEY PLAN

SCALE: NONE

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

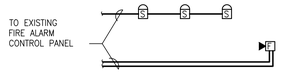
☐BB SED NO. 44-21-01-06-7-041-001 (BB–FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44-21-01-06-7-041-001 (FF–WW FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-0-001-040 (HS–WW HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL ROOF & SECOND FLOOR PLANS - LOBBY - NEW WORK

SHEET NO.
HS E-104

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04-HS–E104.dwg



NOTE: NOT ALL DEVICES MAY BE SHOWN

1 PARTIAL FIRE ALARM RISER DIAGRAM
SCALE: NONE

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE

	EQUIPMENT			SIZE				SUPPLY								CONTROLLER DEVICE TYPE & ACCESSORIES (UNO, PROVIDED BY ELECTRICAL CONTRACTOR)												
	DESIGNATION	DESCRIPTION	ROOM LOCATION	HP	MOP	MCA	VOLTAGE/ PHASE/HZ	PANEL/ CONTROL CENTER	CIRCUIT NUMBER	BREAKER SIZE	POWER WIRING FROM PANEL TO CONTROL UNIT		POWER WIRING FROM CONTROL UNIT TO EQUIPMENT		GROUND WIRE (SIZED PER NEC)	PACKAGED CONTROL UNIT (BY OTHERS)	VARIABLE FREQUENCY DRIVE (VFD)	CONTROL STARTER	NON-FUSED DISCONNECT SWITCH	CONTROL DEVICE INSTALL LOCATION	DUCT SMOKE DETECTOR (SUPPLY)	DUCT SMOKE DETECTOR (RETURN)	FIRE ALARM FAN SHUTDOWN	DISCONNECT SWITCH			REF. NOTES	REMARKS
											WIRE	COND.	WIRE	COND.										FRAME	FUSE	LOCATION		
(HS)	RTU-1	ROOF TOP UNIT	ROOF	3.0 / 2.0	50	39.1	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #5	50A	6 AWG	1"	FACTORY WIRED	---	10 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	RTU-2	ROOF TOP UNIT	ROOF	2.0 / 1.5	45	33.7	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #6	45A	8 AWG	1"	FACTORY WIRED	---	10 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	RTU-3	ROOF TOP UNIT	ROOF	5.0 / 3.0	80	71.5	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #7	80A	4 AWG	1"	FACTORY WIRED	---	8 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	RTU-4	ROOF TOP UNIT	ROOF	2.0 / 1.5	45	33.7	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #8	45A	8 AWG	1"	FACTORY WIRED	---	10 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	RTU-5	ROOF TOP UNIT (LOBBY)	ROOF	1.5	60	43.2	208V/3ϕ/60HZ	PANEL 'B'	USE EXISTING	60A	6 AWG	1"	FACTORY WIRED	---	10 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 2, 4	
(HS)	RTU-6	ROOF TOP UNIT (LOBBY)	ROOF	1.5	60	43.2	208V/3ϕ/60HZ	PANEL 'B'	USE EXISTING	60A	6 AWG	1"	FACTORY WIRED	---	10 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	BY MC	BY MC	YES	---	---	---	1, 2, 4	
(HS)	MAU-1	MAKE UP AIR UNIT (KITCHEN)	ROOF	7.5	175	145.7	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #9	175A	2/0 AWG	2"	FACTORY WIRED	---	6 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	AU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	MAU-2	MAKE UP AIR UNIT (SERVRY)	ROOF	5.0	125	93.7	208V/3ϕ/60HZ	PANEL 'PP-3'	CB #10	125A	2 AWG	1 1/2"	FACTORY WIRED	---	6 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	AU	BY MC	BY MC	YES	---	---	---	1, 3	
(HS)	CH-1	CHILLER (NORTH)	EXTERIOR	REMARKS	350	320	208V/3ϕ/60HZ	EXISTING PANEL	USE EXISTING	350A	400 MCM	4"	FACTORY WIRED	---	3 AWG	---	FACTORY WIRED	BY BMS	FACTORY WIRED	OU	N/A	N/A	YES	---	---	---	1, 5	SEE NOTE 6

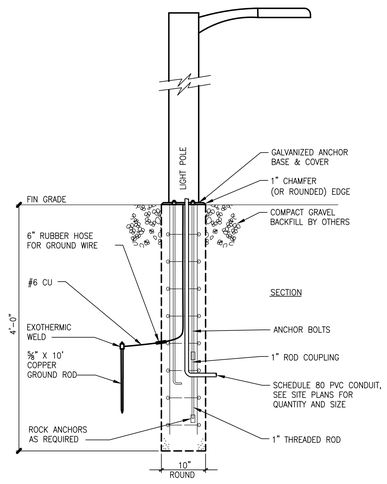
AU – AT UNIT
OU – ON UNIT
N/A – NOT APPLICABLE
FRAC. – FRACTIONAL

1. FOLLOW NEC 2020 (NFPA 70) REQUIREMENTS.
2. USE EXISTING PANEL SPACES – INSTALL NEW CIRCUIT BREAKERS, WIRING AND CONDUITS. FIELD VERIFY RUN LENGTH FROM PANEL TO TERMINAL UNIT. REMOVE EXISTING WIRING AND CONDUIT – DO NOT ABANDON IN PLACE.
3. PROVIDE GFCI OUTLET AT RTU-1,2,3, AND 4 WIRED WITH 2-#12 AND 1-#12 GND IN ¾" CONDUIT FROM NEW 'RTU' PANEL CIRCUIT #1.
4. PROVIDE GFCI OUTLET AT RTU'S 5 AND 6 WIRED WITH 2-#12 AND 1-#12 GND IN ¾" CONDUIT FROM EXISTING 'B' PANEL – SECTION 1 (STORAGE ROOM#214.1). PROVIDE NEW 20A CIRCUIT BREAKER IN AVAILABLE SLOT WITHIN PANEL.
5. EC TO FIELD VERIFY DISTANCE FROM CHILLER LOCATION TO EXISTING POWER SOURCE. REMOVE EXISTING CIRCUIT BREAKER AND RETURN TO OWNER, INSTALL NEW CIRCUIT BREAKER. REMOVE EXISTING WIRING AND BACK TO SOURCE AND INSTALL NEW WIRING FROM POWER SOURCE TO NEW CHILLER.
6. CHILLER HAS FOUR FAN MOTORS (FLA = 7.8A EACH). THERE ARE FOUR COMPRESSOR MOTORS ON TWO CIRCUITS (RLA = 55.8A AND 72.4A PER CIRCUIT RESPECTIVELY).

LIGHT FIXTURE SCHEDULE

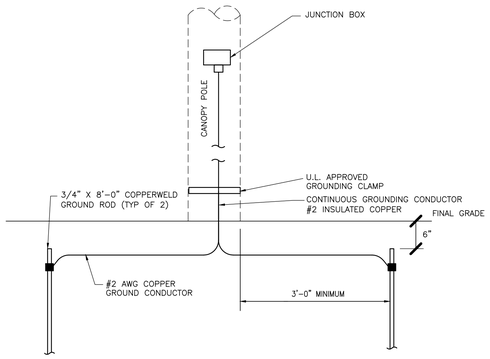
TYPE	DESCRIPTION	LAMPS	VOLTAGE/DRIVER	MOUNTING	DESIGN BASIS	ACCEPT. MFR'S.	REMARKS
L1	1x4 LUMINAIRE	LED 4000K	M-VOLT	SURFACE	MERCURY LIGHTING LW25W-4-4700-40K-PF-1%-UNI-VP	OR APPROVED EQUAL	PROVIDE UNISTRUTS AND SUPPORTS AS REQUIRED PROVIDE GALVANIZED FASTENERS
L2	2x2 LUMINAIRE	LED 4000K	M-VOLT	LAY-IN	LITHONIA LIGHTING ENVX-2X2 HRG 4800LM 90 CRI 40K	OR APPROVED EQUAL	DIMMING-EZT BB-E10WLCP
L3	2x2 LUMINAIRE	LED 4000K	M-VOLT	LAY-IN	LITHONIA LIGHTING ENVX-2X2 HRG 3300LM 90 CRI 40K	OR APPROVED EQUAL	DIMMING-EZT BB-E10WLCP
L4	2x2 LUMINAIRE	LED 4000K	M-VOLT	LAY-IN	LITHONIA LIGHTING SPX-2X2 4800LM 90CRI 40K 3DCB 3D FRAME	OR APPROVED EQUAL	DIMMING-EZT BB-E10WCP
L5	LED CEILING	----	MVOLT	CEILING	LUMINAIRE APX13-MIN10-25W -40K-MVOLT-FOP-BLK-EMB310T20	OR APPROVED EQUAL	
PL-1	LED POLE LIGHT (NEAR NEW HS BATHROOM BLDG)	LED 5000K	M-VOLT	POLE MOUNTED	LITHONIA LIGHTING DSXO-LED 20C-530-50K-T3M	OR APPROVED EQUAL	PROVIDE 5" DIAMETER STEEL POLE 12'-0" LONG PAINTED BLACK, WITH 12"x12"x2'-0"DEEP CONCRETE BASE WITH ANCHORS. POSITION HEAD TO BE ABOVE ROADWAY PATH
L6	LED WALL SCONCE	LED 5000K	M-VOLT	SURFACE MOUNTED	LITHONIA LIGHTING WDGE3LED P3 40K 80CRI BLACK	OR APPROVED EQUAL	MOUNT ON BACK OF BLEECHER AREA FIELD VERIFY EXACT LOCATIONS WITH DISTRICT

BB- BATTERY BACKUP



NOTE: VERIFY POLE BASE & BOLT PATTERN WITH POLE MANUFACTURER

2 LIGHTING POLE INSTALLATION
SCALE: NONE

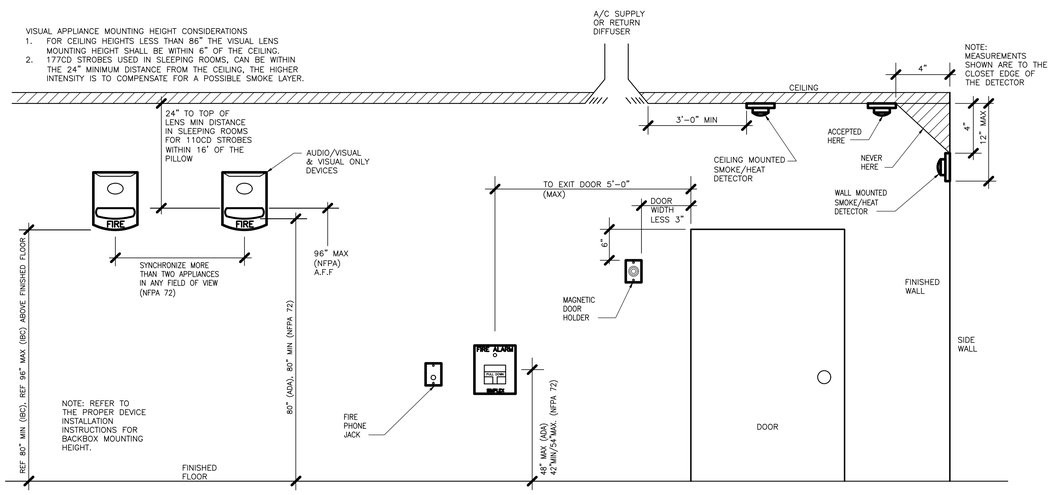


4 GROUND ROD AT CANOPIES
SCALE: NONE

DEVICE/FIXTURE SCHEDULE

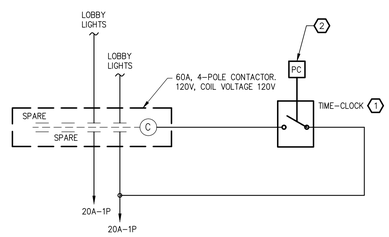
TYPE	DESCRIPTION	MOUNTING	DESIGN BASIS	ACCEPT. MFR'S.
30	AUDIO/VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.	SEE DEVICE LOCATION DETAIL THIS DRAWING	P2RL (RED) (HONEYWELL)	OR APPROVED EQUAL
30	VISUAL SIGNALING DEVICE. NUMBER DENOTES CANDELA RATING.	SEE DEVICE LOCATION DETAIL THIS DRAWING	SRL (RED) (HONEYWELL)	OR APPROVED EQUAL
	PULL STATION	SEE DEVICE LOCATION DETAIL THIS DRAWING	NBG-12LX (HONEYWELL)	OR APPROVED EQUAL
S	SMOKE DETECTOR	SEE DEVICE LOCATION DETAIL THIS DRAWING	FSP-851(A) W/B200S(COA) (HONEYWELL)	OR APPROVED EQUAL
EM	EMERGENCY WALL LIGHT		SURE-LITES SELSOR7WHSD SELF DIAGNOSTIC, ROUND LENSE (WHITE) (COOPER)	OR APPROVED EQUAL
C1 (DS)	CEILING MOUNT SENSOR; DUAL-TECHNOLOGY; LOW VOLTAGE	CEILING MOUNT	SENSOR SWITCH CM PDT9 (ACUITY CONTROLS)	OR APPROVED EQUAL

GENERAL NOTES: CANDELA RATINGS SHALL BE BASED ON NFPA 72 TABLE 18.5.5.4.1(a) 2013



NOTE: NOT ALL DEVICES MAY BE USED

3 DEVICE LOCATION DETAIL
SCALE: NONE



LIGHTING CONTROL DIAGRAM KEYED NOTES:

1. PROVIDE A PHOTO-CELL INITIATED TIME CLOCK. COORDINATE EXACT SETTINGS WITH OWNER'S REPRESENTATIVE. PROVIDE COMPLETE SYSTEM WIRING PER MANUFACTURER'S REQUIREMENTS.
2. MATCH PHOTO-CELL SETTINGS AND PLACEMENT SUCH THAT INITIATION OF FIXTURES OCCURS SIMULTANEOUSLY.

5 LIGHTING CONTROL DIAGRAM
SCALE: NONE

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(HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001
□FF SED NO. 44-21-01-06-7-041-001
□HS SED NO. 44-21-01-06-0-001-040

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
SCHEDULES AND DETAILS

SHEET NO.
E-500

FILE PATH - N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.E500.dwg

PANEL SCHEDULE

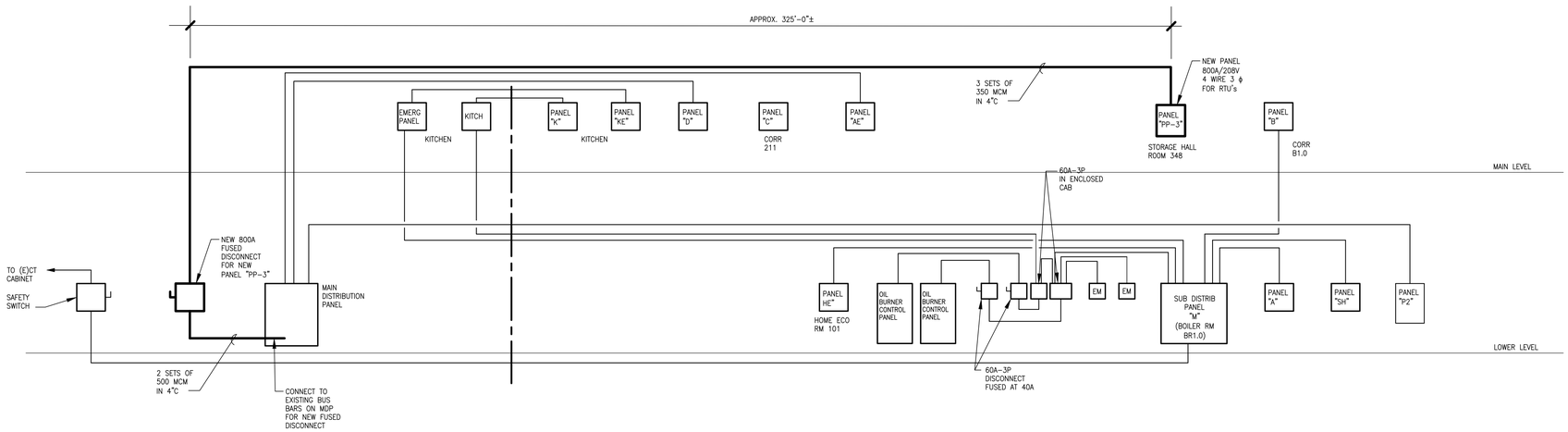
PROJECT NO: 05-21-04
PROJECT NAME: WARWICK VALLEY CENTRAL SCHOOL DIST. GRANT PROJECT

Panel ID: 'PP-3'
Location: STORAGE HALL ROOM 348
Service: 120V/208Y - 3ϕ/4 Wire

ENCLOSURE: NEMA 1, SURFACE MOUNT
Mains: 800A - 3 POLE
Main CB: 800A - 3 POLE
MLO: 800A - 3 POLE

22KAIC MINIMUM

Ckt		A	P	Ckt		A	P
1	RTU GFCI's	20	1	2	SPARE	--	1
Ckt		A	P	Ckt		A	P
3	SPARE	--	1	4	SPARE	--	1
Ckt						A	P
5	RTU - 1					50	3
Ckt						A	P
6	RTU - 2					45	3
Ckt						A	P
7	RTU - 3					80	3
Ckt						A	P
8	RTU - 4					45	3
Ckt						A	P
9	MAU - 1 (KITCHEN)					175	3
Ckt						A	P
10	MAU - 2 (SERVERY)					125	3
Ckt		A	P	Ckt		A	P
11	SPARE	--	3	12	SPARE	--	3



1 EXISTING POWER RISER DIAGRAM
SCALE: NONE

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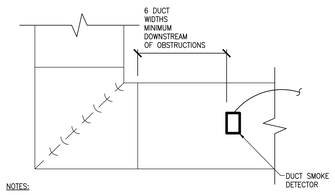
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	**04.06.2022**
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PANEL SCHEDULE AND EXISTING POWER RISER DIAGRAM

SHEET NO.
E-501

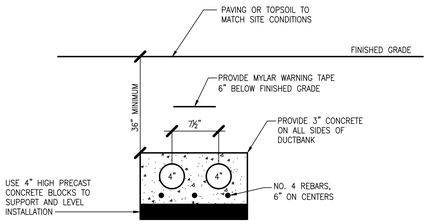
FILE PATH -N:\I - PROJECT DIRECTORIES\I- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.E500.dwg



NOTES:

1. DETECTORS SHALL BE FURNISHED/WIRED BY ELECTRICAL CONTRACTOR AND INSTALLED BY HVAC CONTRACTOR.

1 DUCTWORK SMOKE DETECTOR INSTALLATION
SCALE: NONE



DETAIL NOTES:

A. INSTALL CONDUIT SO BOTTOM OF DUCT IS AT PROPER ELEVATION.

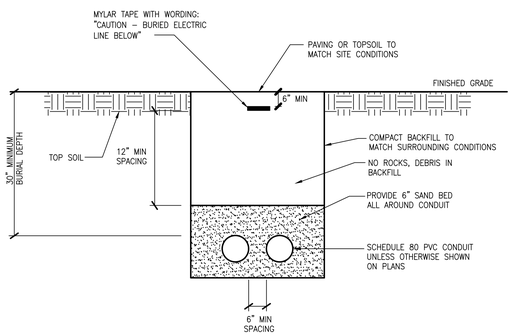
B. LEAVE PULLROPE IN ALL CONDUITS

C. TIE ALL CONDUIT DOWN TO PREVENT FLOAT-OUT.

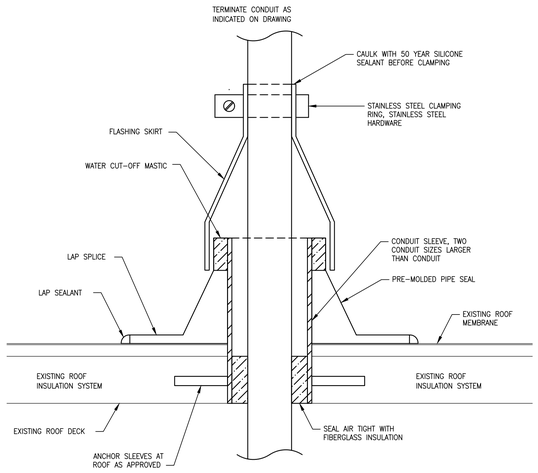
D. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

E. LARGER DUCTBANKS SHALL HAVE SIMILAR CONDUIT SPACING.

2 TYPICAL CONCRETE DUCTBANK
SCALE: NONE



3 TYPICAL DIRECT BURIED CONDUIT
SCALE: NONE



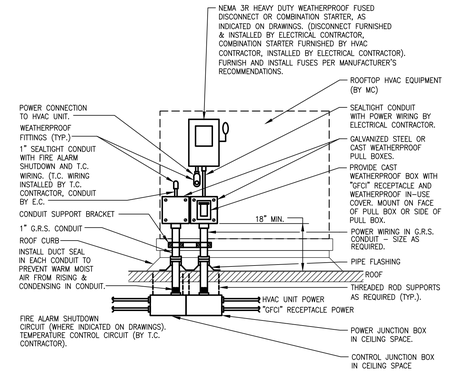
DETAIL NOTES:

A. PRIOR TO PERFORMING ANY WORK, COORDINATE ALL WORK WITH EXISTING ROOF MANUFACTURER.

B. PERFORM WORK IN STRICT ACCORDANCE WITH ALL ROOF MANUFACTURER REQUIREMENTS SO AS NOT TO VOID ANY AND ALL WARRANTEE PROVISIONS.

C. COORDINATE WORK WITH ALL OTHER TRADES.

4 TYPICAL CONDUIT FLASHING
SCALE: NONE



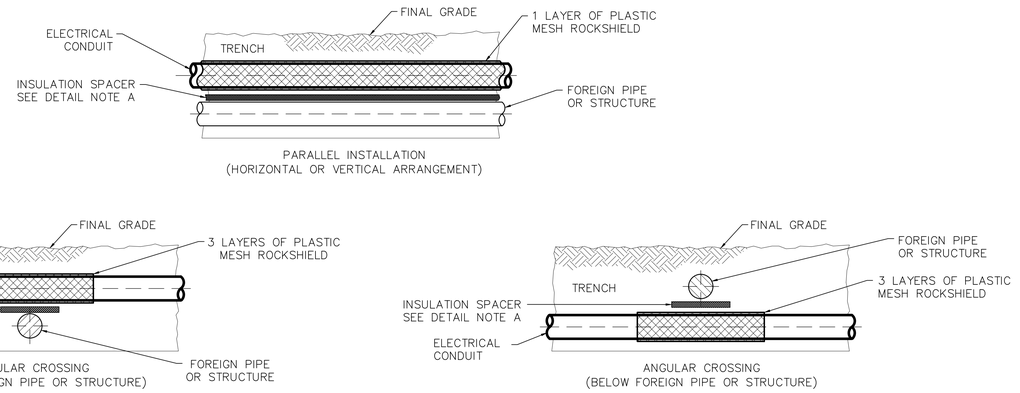
DETAIL NOTES:

A. WIRING TO THE ROOFTOP HVAC EQUIPMENT SHALL EXTEND THROUGH THE ROOF IN CONDUITS LOCATED OUTSIDE OF THE EQUIPMENT ROOF CURB AS SHOWN, UNLESS OTHERWISE SPECIFICALLY ALLOWED BY THE UNIT MANUFACTURER.

B. WIRING RUN INSIDE THE HVAC EQUIPMENT SHALL BE ACCOMPLISHED IN A MANNER ACCEPTABLE WITH THE UNIT MANUFACTURER AND SHALL MEET ALL REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE.

C. COORDINATE CONTROL WIRING RACEWAY INSTALLATION WITH THE TEMPERATURE CONTROL CONTRACTOR. TEMPERATURE CONTROL WIRING BY T.C. CONTRACTOR.

5 TYPICAL ROOF TOP HVAC EQUIPMENT DETAIL
SCALE: NONE



DETAIL NOTES:

A. A INSULATIONSPACER SHALL BE INSTALLED BETWEEN METALIC WATER/SEWER PIPE TO PREVENT ELECTRICAL CONTACT WITH THE SUBSURFACE STRUCTURE.

B. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

6 ANGULAR & PARALLEL CROSSING OF SUBSURACE STRUCTURE GAS PIPE PROTECTION BELOW GRADE CLEARANCES
SCALE: NONE

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STATE OF NEW YORK – JAMES EISENBACH – No. 095474 – LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

□BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
□HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
DETAILS

SHEET NO.
E-502

FILE PATH -:N:\ – PROJECT DIRECTORIES\ – E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.E500.dwg

PLUMBING ABBREVIATIONS

A/E	ARCHITECT / ENGINEER	IIW	INDIRECT WASTE
AD	AREA DRAIN	IWH	INSTANTANEOUS WATER HEATER
AD	ACCESS DOOR	KW	KILOWATT
ADA	AMERICANS WITH DISABILITIES ACT	LAV	LAVATORY
AFF	ABOVE FINISH FLOOR	M	METER
AFG	ABOVE FINISHED GRADE	MC	MECHANICAL CONTRACTOR
AHJ	AUTHORITY HAVING JURISDICTION	MBH	1000 BTUH
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MH	MANHOLE
AP	ACCESS PANEL	NC	NORMALLY CLOSED
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION & AIR CONDITIONING ENGINEERS	NG	NATURAL GAS
		NIC	NOT IN CONTRACT
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS	NOM	NOMINAL
ASPE	AMERICAN SOCIETY OF PLUMBING ENGINEERS	NPW	NON POTABLE WATER
		NTS	NOT TO SCALE
AWWA	AMERICAN WATERWORKS ASSOCIATION	O2	OXYGEN
BFG	BELOW FINISHED GRADE	OD	OUTSIDE DIAMETER
BHP	BREAK HORSEPOWER	OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
BOR	BASE OF RISER		
BTU	BRITISH THERMAL UNIT	P	PUMP
BTUH	BRITISH THERMAL UNIT PER HOUR	PC	PLUMBING CONTRACTOR
C	CELSIUS	PD	PUMP DISCHARGE
CA	COMBUSTION AIR	PDI	PLUMBING AND DRAINAGE INSTITUTE
CA	COMPRESSED AIR	PF	PLUMBING FIXTURE
CGA	COMPRESSED GAS ASSOCIATION	PG	PRESSURE GAGE
CI	CAST IRON	PPM	PARTS PER MILLION
CO	CLEANOUT	PRS	PRESSURE REDUCING STATION
CO2	CARBON DIOXIDE	PRV	PRESSURE REDUCING VALVE
COND	CONDENSATE	PSI	POUNDS PER SQUARE INCH
CP	CIRCULATING PUMP	PSIA	POUNDS PER SQUARE INCH ATMOSPHERE
CPVC	CHLORINATED POLYVINYL CHLORIDE	PSIG	POUNDS PER SQUARE INCH GAUGE
CU	COPPER	PVC	POLYVINYL CHLORIDE
CW	COLD WATER (DOMESTIC)	RD	ROOF DRAIN
D	DRAIN	RL	RAIN LEADER
DIA	DIAMETER	RO	REVERSE OSMOSIS WATER
DFU	DRAINAGE FIXTURE UNIT	RPZ	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DN	DOWN		
DPCO	DECK PLATE CLEANOUT	SAN	SANITARY SEWER
DWG	DRAWING	SMACNA	SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION
DWH	DOMESTIC WATER HEATER		
DWV	DRAIN WASTE VENT	SCFM	STANDARD CUBIC FOOT/MINUTE
EC	ELECTRICAL CONTRACTOR	SCW	SOFTENED COLD WATER
EL	ELEVATION	SP	SUMP PUMP
ET	EXPANSION TANK	SQFT	SQUARE FEET
EWC	ELECTRIC WATER COOLER	SS	STAINLESS STEEL
EXIST	EXISTING	ST	STORM SEWER
F	FAHRENHEIT	T&P	TEMPERATURE & PRESSURE (RELIEF VALVE)
FD	FLOOR DRAIN	TD	TRENCH DRAIN
FU	FIXTURE UNITS	TDH	TOTAL DYNAMIC HEAD
FV	FLUSH VALVE	TEMP	TEMPERATURE/TEMPORARY
G	NATURAL GAS	TMV	THERMOSTATIC MIXING VALVE
GAL	GALLON	TP	TRAP PRIMER
GALV	GALVANIZED	TSTAT	THERMOSTAT
GC	GENERAL CONTRACTOR	TW	TEMPERED WATER
GPH	GALLONS PER HOUR	TYP	TYPICAL
GPM	GALLONS PER MINUTE	UC	UNDERCUT
H&CW	HOT AND COLD WATER	UH	UNIT HEATER
HB	HOSE BIBB	UL	UNDERWRITERS LABORATORY
HC	HEATING & HVAC CONTRACTOR	UPC	UNIFORM PLUMBING CODE
HD	HUB DRAIN	UR	URINAL
HP	HORSEPOWER	V	VENT
HS	HAND SINK	VB	VACUUM BREAKER
HW	HOT WATER (DOMESTIC)	VTR	VENT THROUGH ROOF
INV	INVERT	WC	WATER CLOSET
IC	IRRIGATION CONTRACTOR	WCO	WALL CLEANOUT
		WH	WALL HYDRANT
		WHA	WATER HAMMER ARRESTER
		WSFU	WATER SUPPLY FIXTURE UNIT
		XA	EXHAUST AIR

PLUMBING SYMBOLS

- NEW PIPING AND EQUIPMENT
- EXISTING TO REMAIN PIPING AND EQUIPMENT
- PIPING AND EQUIPMENT FOR REMOVAL
- BALL VALVE
- BALL VALVE (HOSE END & CAP)
- BALANCING VALVE
- CHECK VALVE
- CONTROL VALVE – 2 WAY
- DRAIN VALVE WITH HOSE BIBB
- FLANGED CONNECTION (FL)
- FUSIBLE LINK OIL SHUTOFF VALVE
- FLOW CONTROL VALVE (FCV)
- GATE VALVE
- GLOBE VALVE
- GAS COCK
- LUBRICATED PLUG VALVE
- PRESSURE REDUCING VALVE (PRV)
- RELIEF VALVE
- STRAINER WITH BLOWDOWN
- STRAINER WITH BLOWDOWN
- SOLENOID VALVE
- THREE-WAY CONTROL VALVE
- TRIPLE DUTY GLOBE VALVE
- UNION
- REDUCER OR INCREASER
- BRANCH FROM BOTTOM OF PIPE
- BRANCH FROM TOP OF PIPE
- PIPE ELBOW DN
- PIPE ELBOW UP
- GAUGE WITH BALL VALVE
- AUTOMATIC AIR VENT (AAV)
- MANUAL AIR VENT (MAV)
- THERMOMETER
- BUTTERFLY VALVE
- PIPE CAP
- END OF LINE CLEAN OUT
- HOSE BIBB
- FLOOR DRAIN
- FLOOR DRAIN WITH P-TRAP
- DECK PLATE CLEAN OUT
- GAS OUTLET
- WATER HAMMER ARRESTOR
- WALL HYDRANT (WH)
- VACUUM BREAKER (VB)
- INLINE PUMP
- WATER METER
- SUCTION DIFFUSER
- FLEXIBLE CONNECTOR
- PIPE BREAK
- PIPE FLOW ARROW
- REVISION/KEYED NOTE
- KEYED NOTE
- KEYED NOTE
- KEYED NOTE
- POINT OF NEW CONNECTION
- LIMIT OF REMOVAL
- SAW CUT FLOOR

- PIPE FLOW ARROW
- BELOW SLAB PIPING
- CW — COLD WATER PIPING
- HW — HOT WATER PIPING
- HWC — HOT WATER RECIRC PIPING
- IW — INDIRECT WASTE PIPING
- SAN — SANITARY PIPING
- D — DRAIN PIPING
- V — VENT PIPING
- G — NATURAL GAS PIPING
- SAN — SANITARY PIPING (BELOW GRADE)
- SLEEVE

GENERAL PLUMBING NOTES:

1. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. IT IS NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT; HOWEVER, CONTRACT DOCUMENTS REQUIRE COMPONENTS AND MATERIALS WHETHER OR NOT INDICATED OR SPECIFICALLY SPECIFIED TO MAKE THE SYSTEMS BEING INSTALLED COMPLETE, CODE COMPLIANT, TESTED AND OPERATIONAL.
2. CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
3. ALL MATERIALS, EQUIPMENT, METHODS OF INSTALLATION, REMOVALS AND DISPOSAL SHALL BE IN ACCORDANCE WITH THE STANDARDS, REGULATIONS, CODES, ORDINANCES, AND LAWS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS, AND OTHER AUTHORITIES THAT HAVE LAWFUL JURISDICTION.
4. PERFORM WORK, PROVIDE MATERIALS AND EQUIPMENT FOR SYSTEMS SHOWN, SPECIFIED AND DESCRIBED ON DRAWINGS. COMPLETELY COORDINATE ALL TRADES OF THIS CONTRACT AND PROVIDE COMPLETE AND FULLY FUNCTIONAL INSTALLATION. ALL WORK IN THIS SET TO BE COMPLETED UNDER THIS CONTRACT, UNLESS OTHERWISE INDICATED.
5. PROTECT ALL EXISTING AND NEW BUILDING ELEMENTS FROM DAMAGE. CONTRACTOR SHALL RESTORE ALL DAMAGED ELEMENTS TO ORIGINAL OR BETTER CONDITION.
6. WORK SHALL BE EXECUTED IN A WORKMANLIKE MANNER AND SHALL PRESENT NEAT, RECTILINEAR APPEARANCE WHEN COMPLETED. MAINTAIN MAXIMUM HEAD ROOM AT ALL TIMES. DO NOT RUN PIPES, DUCTS, AND CONDUIT EXPOSED UNLESS SHOWN AND NOTED TO BE EXPOSED ON DRAWINGS.
7. MATERIALS AND EQUIPMENT SHALL BE NEW AND INSTALLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. MAINTAIN MANUFACTURER'S EQUIPMENT CLEARANCES.
8. CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATED TO ISOLATING, SHUTTING DOWN, DRAINING, FILLING AND TESTING SYSTEMS TO ALLOW FOR COMPLETION OF WORK. INTERRUPTIONS TO EXISTING SERVICES AND SYSTEMS SHALL BE AS SHORT AS POSSIBLE AND AT A TIME AND DURATION APPROVED BY THE OWNER AND UTILITY AS APPLICABLE. INCLUDE ALL PREMIUM TIME ASSOCIATED WITH INTERRUPTIONS. ALL SYSTEM INTERRUPTIONS SHALL BE SCHEDULED WITH OWNER, UTILITY AND COORDINATED WITH OTHER TRADE WORK.
9. ALL EQUIPMENT PIPING, WIRING, INSULATION ETC. INSTALLED IN HVAC AIR PLENUM SPACES SHALL MEET CODE REQUIREMENTS FOR SMOKE AND COMBUSTIBILITY.
10. SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, PARTITIONS AND FLOORS WITH UL RATED MATERIALS/METHODS EQUIVALENT TO FIRE RATING OF ASSEMBLY.
11. PROVIDE PROPER ACCESS TO EQUIPMENT THAT REQUIRES INSPECTION, REPLACEMENT OR REPAIR. ACCESS PANELS/DOORS SHALL BE A MINIMUM OF 12"X12", UNLESS OTHERWISE NOTED.
12. DO NOT SUPPORT EQUIPMENT FROM SUSPENDED CEILINGS. ALL SUPPORT SHALL BE FROM BUILDING STRUCTURE OR FROM CEILING SUSPENSION SYSTEM WHICH HAS BEEN REINFORCED. SUPPORTS SHALL BE SELECTED AND INSTALLED TO PROVIDE A VIBRATION FREE INSTALLATION.
13. PLUMBING CONTRACTOR IS RESPONSIBLE FOR JETTING/SNAKING ALL SANITARY WASTE LINES (ALL FLOOR DRAINS) SHOWN ON THE DRAWINGS TO BE FULLY OPERATIONAL.
14. CLEANING DURING PLUMBING WORK: THE MECHANICAL ROOM AND ROOMS WHERE WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNEE IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING, WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.
24. EACH CONTRACTOR RESPONSIBLE FOR RETURNING WALLS, CEILINGS AND SURFACES THEY DISTURB THAT ARE NOT SCHEDULED FOR REPLACEMENT BACK TO ORIGINAL CONDITIONS.

COORDINATION NOTE:

1. COORDINATE WITH ALL CONTRACTORS AND DISTRICT.
2. SEE SITE DRAWINGS FOR ADDITIONAL CONTRACTOR WORK AS MARKED.

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT. WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
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☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
ABBREVIATIONS AND NOTES

SHEET NO.
P-001

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04.p001.dwg

COORDINATION NOTE:

1. COORDINATE WITH SITE AND BATHROOM BUILDING DRAWINGS.
2. COORDINATE WITH ALL CONTRACTORS AND DISTRICT.

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NO. 85944
LICENSED PROFESSIONAL ENGINEER

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

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PROJECT NO.	05-21-04 05-20-06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
PARTIAL SITE PLAN - NEW WORK

SHEET NO.
FF
P-100

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\Irrigation system\05-21-06-FF-P100-101.dwg

SYMBOL	MANUFACTURER/MODEL	QTY
15	Hunter I-25-04-SS	48

SYMBOL	MANUFACTURER/MODEL	QTY
	Hunter ICV-G-FS 1-1/2"	14
	Hunter HQ-5JRC 1"	2
	Irrigation Lateral Line: PVC Class 200 SDR 21 1"	1,018 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 1 1/2"	714.6 l.f.
	Irrigation Lateral Line: PVC Class 200 SDR 21 2"	357.6 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 2 1/2"	930.8 l.f.
	Irrigation Mainline: PVC Class 200 SDR 21 3"	155.4 l.f.
	Pipe Sleeve: PVC Class 200 SDR 21	40.1 l.f.

Valve Callout

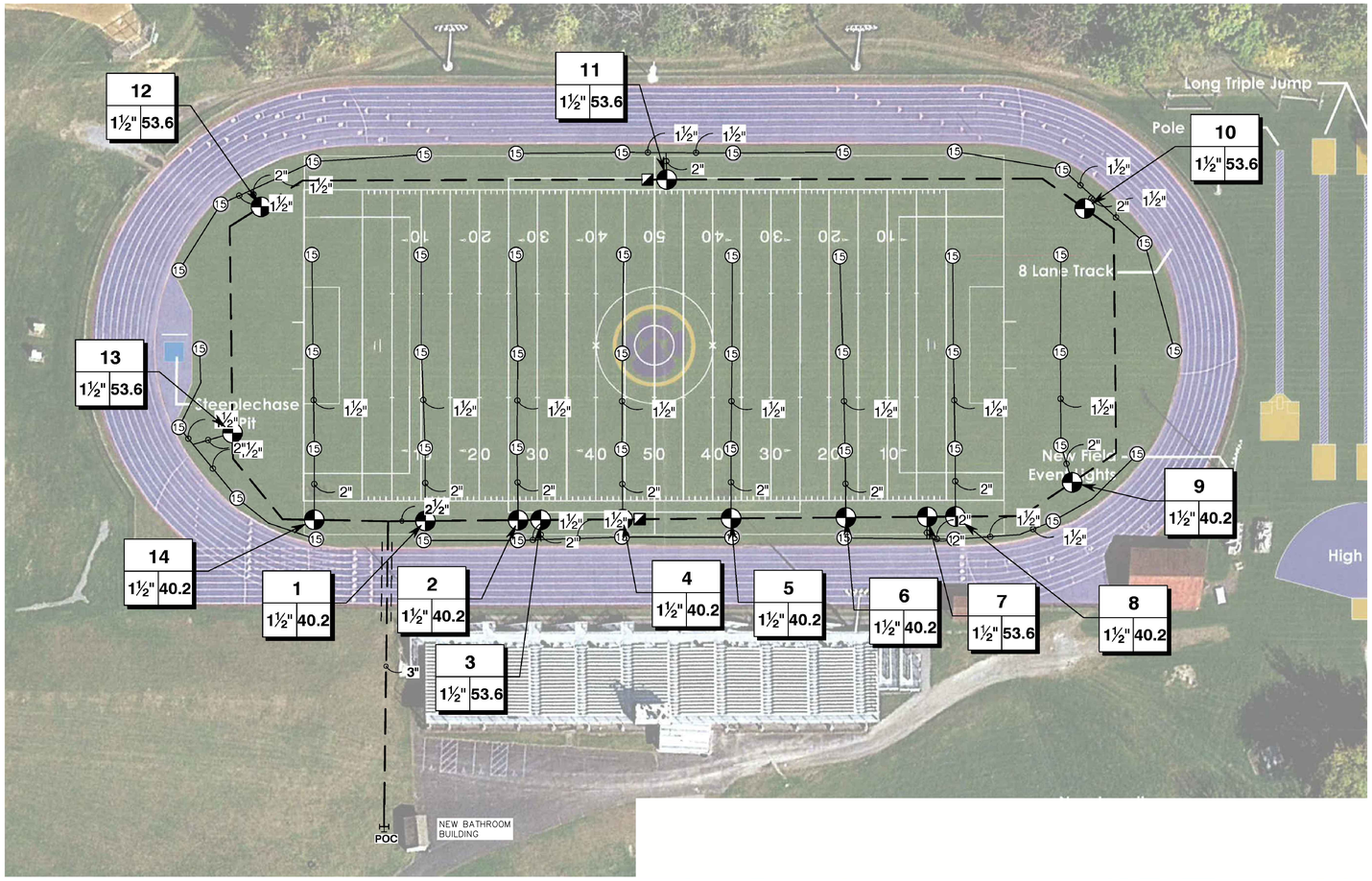
Valve Number

Valve Flow

Valve Size

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL/WEEK	GAL/DAY
1	Hunter ICV-G-FS	Turf Rotor	0.43 in/h	1	142	5,738	
2	Hunter ICV-G-FS	Turf Rotor	0.43 in/h	1	140	5,628	
3	Hunter ICV-G-FS	Turf Rotor	0.85 in/h	1	71	3,806	
4	Hunter ICV-G-FS	Turf Rotor	0.47 in/h	1	129	5,186	
5	Hunter ICV-G-FS	Turf Rotor	0.46 in/h	1	132	5,306	
6	Hunter ICV-G-FS	Turf Rotor	0.45 in/h	1	133	5,347	
7	Hunter ICV-G-FS	Turf Rotor	0.99 in/h	1	63	3,377	
8	Hunter ICV-G-FS	Turf Rotor	0.46 in/h	1	131	5,266	
9	Hunter ICV-G-FS	Turf Rotor	0.44 in/h	1	136	5,467	
10	Hunter ICV-G-FS	Turf Rotor	0.84 in/h	1	72	3,850	
11	Hunter ICV-G-FS	Turf Rotor	0.81 in/h	1	74	3,969	
12	Hunter ICV-G-FS	Turf Rotor	1.15 in/h	1	53	2,841	
13	Hunter ICV-G-FS	Turf Rotor	1.14 in/h	1	53	2,841	
14	Hunter ICV-G-FS	Turf Rotor	0.46 in/h	1	130	5,226	
		TOTALS:			1,459	60,924	



General Notes

IRRIGATION DRAWINGS ARE DIAGRAMMATIC. ALL IRRIGATION EQUIPMENT PLACED IN THE FIELD WILL BE APPROVED BY THE OWNER OR ITS REPRESENTITIVE.
CONTRACTOR RESPONSIBLE FOR VERIFICATION OF EQUIPMENT QUANITY.
DUE TO THE SCALE, ACCURACY OR CONDITION OF SITE PLANS, CONTRACTOR WILL MODIFY PATTERN TO GUARANTEE 100% COVERAGE OF INDICATED AREAS IN CASES WHERE SITE DIMENSIONS CONFLICT WITH DRAWING.
ALL LATERAL PIPE WILL BE 1" UNLESS MARKED.

ALL MAINLINE WILL BE X" UNLESS MARKED.

ALL SIDEWALK CROSSINGS TO BE SLEEVED.

BACKFLOW AS PER LOCAL CODES.

FLOW RATE IS 110 GPM @ 100 PSI

No.	Revision/Issue	Date

CENTRAL TURF & IRRIGATION SUPPLY

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E-MAIL: DESIGN@CENTRALTIS.COM

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Project Name and Address

WARWICK HIGH SCHOOL
WARWICK, NY

Project	15 - Warwick High School	Sheet
Date	12-07-21	IR-01
Drawn by: JP	Checked by: JP	
Scale	1" = 30'-0"	

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2. COORDINATE WITH ALL CONTRACTORS AND DISTRICT.

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STATE OF NEW YORK
JOHN EISENBACH
No. 095414
LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND
EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BB SED NO. 44-21-01-06-7-041-001 (BB-FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
■FF SED NO. 44-21-01-06-7-041-001 (FF-WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44-21-01-06-0-001-040 (HS-WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

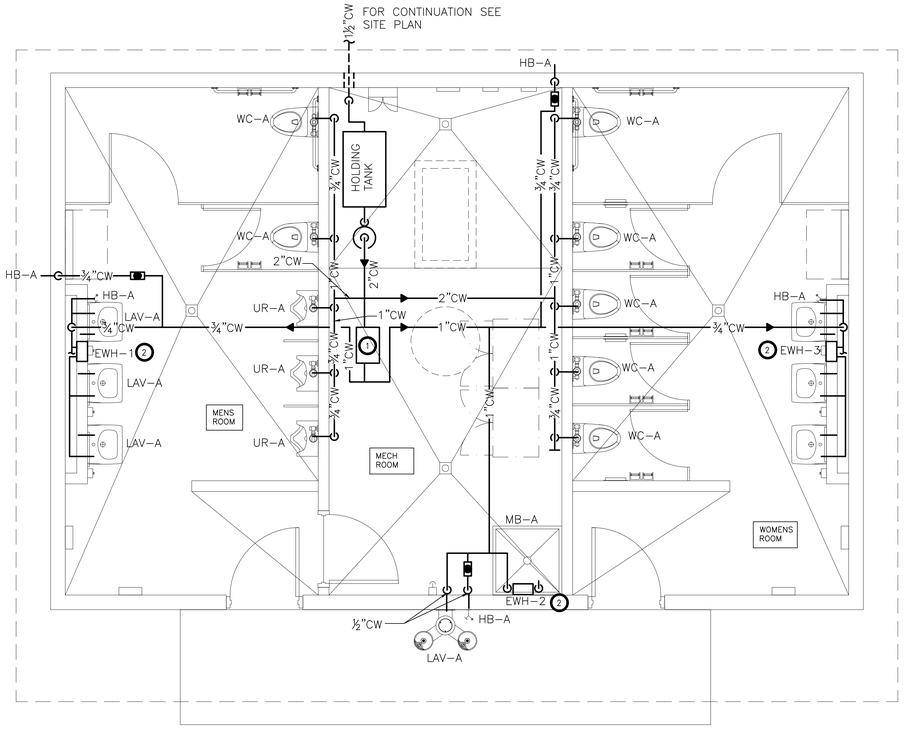
SHEET TITLE

PARTIAL SITE PLAN - NEW WORK

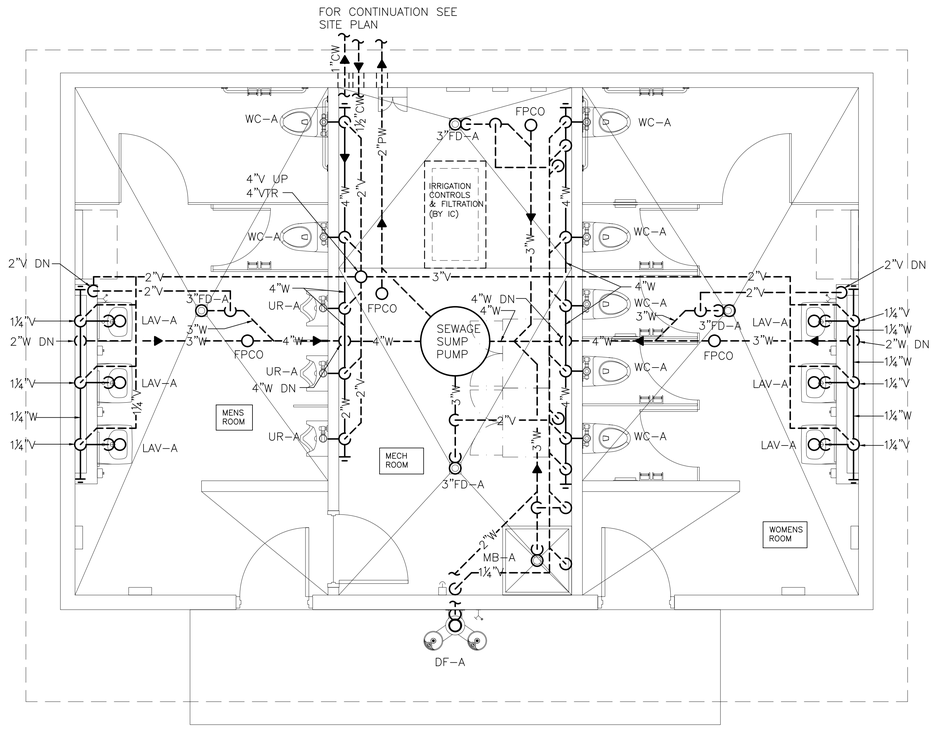
SHEET NO.

FF
P-101

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\Irrigation system\05-21-06 FF-P100-101.dwg



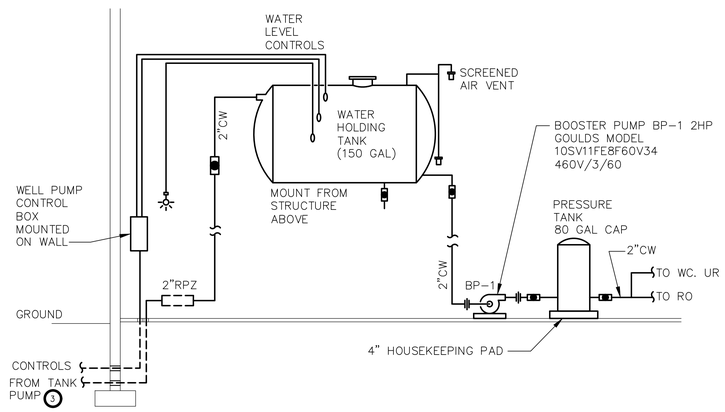
2 BATHROOM FLOOR PLAN HW & CW - NEW WORK
SCALE: 3/8"=1'-0"



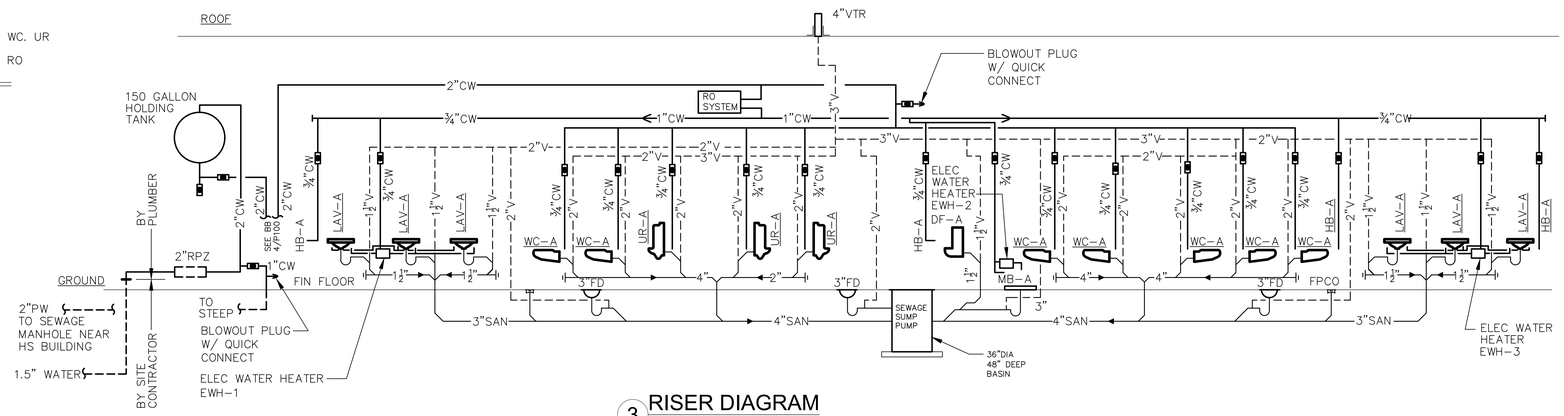
1 BATHROOM FLOOR PLAN SAN & VENT- NEW WORK
SCALE: 3/8"=1'-0"

KEYED NOTES – NEW WORK:

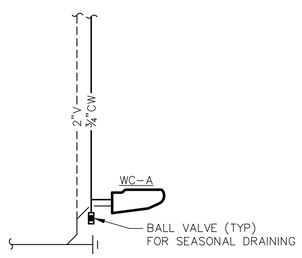
1. PROVIDE REVERSE OSMOSIS SYSTEM NEO–PURE RO–4300–DLX AND ALL APPURTENANCES. TO FEED ALL LAVATORIES AND DRINKING FOUNTAIN. (INSTALL PER MANUFACTURERS RECOMMENDATIONS. (BIDDING PURPOSES ONLY)
2. PROVIDE CHRONOMITE Z–R SERIES MODEL R–58L/277 Z–R1818D AND ALL APPURTENANCES. PROVIDE LOCKABLE DOOR (OR APPROVED EQUAL). INSTALL PER MANUFACTURERS RECOMMENDATIONS.
3. PROVIDE DWP–1 (IN TANK) GRUNDFOS 22SQE07–240V–VARIABLE SPEED 20 GPM @ 80FT/HD 1.5 HP. PROVIDE CONSTANT PRESSURE KIT CU301–MKII & TRANSDUCER. PROVIDE EXPANSION TANK WATTS DETA–20 8 GALLON AND APPURTENANCES.
4. WELL PUMP WP–1 (TBD) THE WELL DRILLER NEEDS TO PROVIDE A CERTIFIED WATER REPORT FOR PROPER SIZING OF THE WELL PUMP AND REVERSE OSMOSIS SYSTEM. PROVIDE A ALLOWANCE OF $20,000 DOLLARS FOR BIDDING PURPOSES ONLY FINAL SIZING BY MECHANICAL ENGINEER.



4 WATER STORAGE TANK/PRESSURE TANK DETAIL
SCALE: NONE



3 RISER DIAGRAM
SCALE: NONE



TYPICAL DRAIN CONNECTION AT ALL PLUMBING FIXTURES
5 SCALE: NONE

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HIGH SCHOOL RENOVATIONS, FIELD WORK AND
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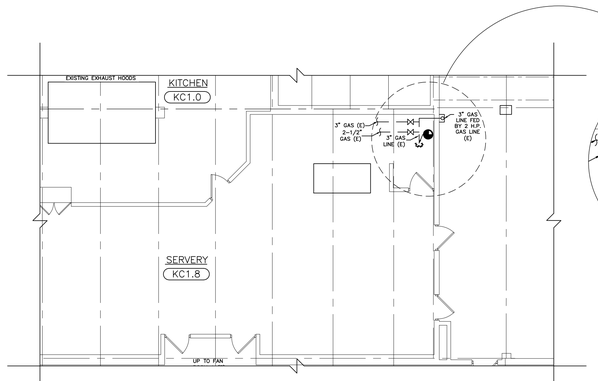
PROJECT NO.	05–21–04 05–20–06
BID SET	04.08.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
BATHROOM FLOOR PLAN - NEW WORK

SHEET NO.
BB P-100

FILE PATH –N:\V – PROJECT DIRECTORIES\V– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04–BBP100M100_E100.dwg



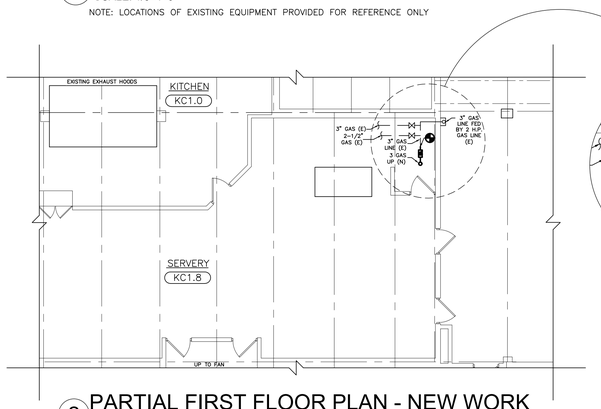
1 PARTIAL FIRST FLOOR PLAN - DEMOLITION

SCALE: 1/8=1'-0

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – REMOVALS:

1. REMOVE CAP AND PORTION OF GAS PIPING AS NECESSARY TO ACCOMPLISH NEW WORK.



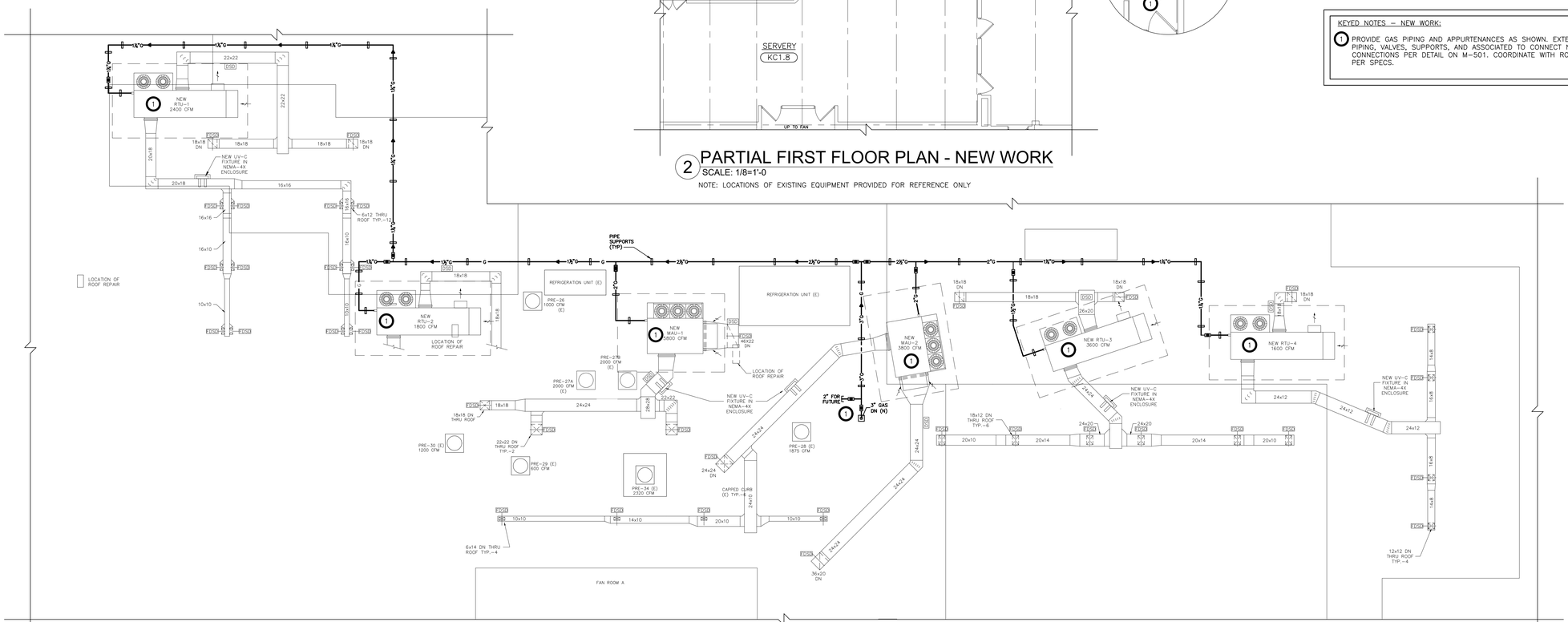
2 PARTIAL FIRST FLOOR PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTE: LOCATIONS OF EXISTING EQUIPMENT PROVIDED FOR REFERENCE ONLY

KEYED NOTES – NEW WORK:

1. PROVIDE GAS PIPING AND APPURTENANCES AS SHOWN. EXTEND NEW 3" LINE THROUGH ROOF AS SHOWN. PROVIDE PIPING, VALVES, SUPPORTS, AND ASSOCIATED TO CONNECT NEW RTUS AND MAUS TO NEW GAS LINE. MAKE GAS PIPING CONNECTIONS PER DETAIL ON M-501. COORDINATE WITH ROOF CONTRACTOR AND DRAWINGS. PAINT AND LABEL PIPING PER SPECS.



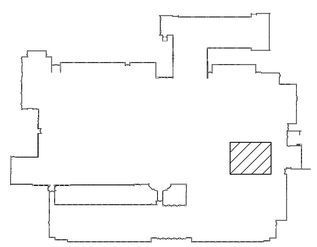
3 PARTIAL ROOF PLAN - NEW WORK

SCALE: 1/8=1'-0

NOTE: MECHANICAL EQUIPMENT SHOWN FOR REFERENCE ONLY. COORDINATE WITH ROOF DRAWINGS AND MECHANICAL DRAWINGS.

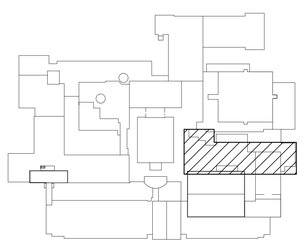
GENERAL NOTES:

1. CONTRACTOR TO COORDINATE WORK TO MAINTAIN ROOF WARRANTY.



FIRST FLOOR KEY PLAN

SCALE: NONE



ROOF KEY PLAN

SCALE: NONE

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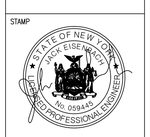

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PROJECT NO.	05-21-04 05-20-06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

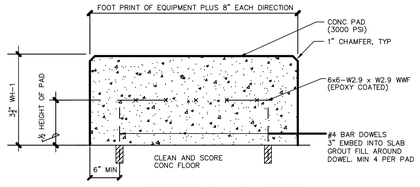
SHEET TITLE

PARTIAL FIRST FLOOR AND ROOF PLANS - KITCHEN, SERVERY, & CAFETERIAS - DEMOLITION & NEW WORK

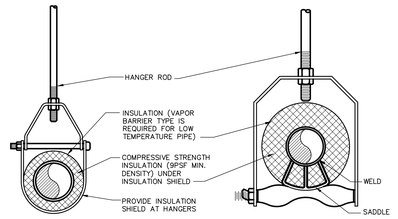
SHEET NO.

HS P-100

FILE PATH - N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05- Warwick Valley CSD\05-21-04 Warwick Federal Grant Project\CAD\Package 2\05-21-04-HS-P-100.dwg



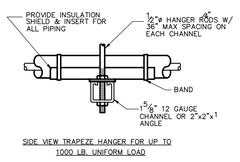
1 CONCRETE PAD DETAIL
SCALE: NONE



ADJUSTABLE CLEVIS HANGER — ADJUSTABLE CLEVIS HANGER W/ ROLLER

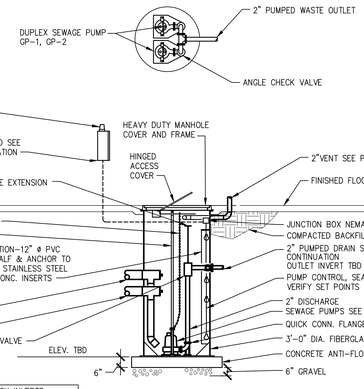
MAXIMUM PIPE/TUBING SUPPORT SPACING								
SIZE IN.	THRU 3/4	1	1 1/4	1 1/2	2	2 1/2	3	4
PIPE FT.	6	6	6	6	6	6	6	6
TUBING FT.	6	6	6	6	6	6	6	6

NOTE:
1. FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.



SIDE VIEW TRAPEZE HANGER FOR UP TO 1000 LB. UNIFORM LOAD

2 PIPE SUPPORT DETAIL
SCALE: NONE



FLOAT SWITCH INVERTS (TO BE VERIFIED BY P.C.)	
SECOND PUMP ON	TBD
ALARM LEVEL	TBD
FIRST PUMP ON	TBD
PUMPS OFF	TBD

NOTES:
1. PREFABRICATED FIBERGLASS BASIN W/ INTEGRAL SS. PIPE RAILS, INLET, DISCHARGE AND CONDUIT TAPS:
2. SINGLE HATCH BASIN COVER: TOPP NO. C36HSS OR EQUAL
3. DUPLEX PUMP CONTROL PANEL: BOULAY FABRICATION INC. NO.: BOU# TI16039 2HP 460/3/60 OR EQUAL
4. PUMP CONTROL AND ALARM FLOATS MECHANICALLY ACTIVATED NORMALLY OPEN/CLOSED (FIELD VERIFY CABLE LENGTH REQUIRED): SJE RHOMBUS "SIGNALMASTER" OR EQUAL.
5. COORDINATE ALL ELEVATIONS AND ACCESSORIES PROVIDED BY OTHERS PRIOR TO INSTALLATION.

7 SEWAGE EJECTOR PUMP DUPLEX PUMPING STATION
SCALE: NONE

INSULATION SCHEDULE

TYPE	EQUIPMENT OR SYSTEM SERVED	INSULATION CLASS (a)			JACKETING CLASS (b)			THICKNESS (IN) NOMINAL PIPE SIZE (IN)				
		INTERIOR CONCEALED	INTERIOR EXPOSED	EXTERIOR	INTERIOR GENERAL	EQUIPMENT ROOMS	EXTERIOR	<1"	1"–<1½"	1½"– <4"	4 "– <8"	≥8 & UP
A	DCW, COOLING COIL CONDENSATE	FE (R-4)	– –	– –	0	– –	– –	0.5	0.5	1.0	1.0	1.0
		– –	FE (R-4)	– –	– –	0	– –	0.5	0.5	1.0	1.0	1.0
B	DHW/ DHWR	FG (R-7)	– –	– –	1	– –	– –	1.5	1.5	2	2	2
		– –	FG (R-7)	– –	– –	1	– –	1.5	1.5	2	2	2
C	IW, SAN, CW EXTERIOR	– –	– –	– –	– –	– –	– –					
		– –	– –	FG (R-4)	– –	– –	2	1.5	1.5	1.5	1.5	1.5

(a) FG – – FIBROUS GLASS; FE – – FLEXIBLE ELASTOMERIC; UR – – URETHANE; CS – – CALCIUM SILICATE; FR – – FIRE RATED
(b) 0 – – NONE; 1 – – ALL SERVICE; 2 – – POLYVINYL CHLORIDE; 3 – – CANVAS; 4 – – POLYVINYL CHLORIDE
(d) BLANKET; (e) RIGID BOARD

ALL INSULATION TO COMPLY WITH 2020 NYS ENERGY CONSERVATION CONSTRUCTION CODE

WATER HAMMER ARRESTORS

NO.	FIXTURE UNIT RATING	SIZE IN INCHES	PDI SYMBOL
WHA–A	1 – 11	1/2"	A
WHA–B	12 – 32	3/4"	B
WHA–C	33–60	1"	C

SIZING DATA BASED ON THE PLUMBING DRAINAGE STANDARD P.D.I. – WH201.

FIXTURE AND EQUIPMENT CONNECTION SCHEDULE

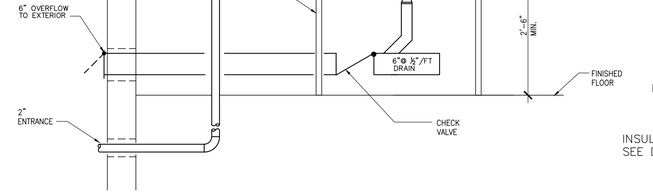
DESIGNATION	DESCRIPTION	COLD WATER	HOT WATER	WASTE OR SANITARY	VENT	REMARKS
WC–A	WATER CLOSET	3/4"	––	4"	2"	NOTE 1
UR–A	URINAL	3/4"	––	2"	2"	NOTE 2
LAV–A	LAVATORY	1/2"	1/2"	1–1/4"	1–1/4"	NOTE 3
FD–A	FLOOR DRAIN		––	3"	2"	NOTE 4
FPCO	CLEANOUT		––	4"		NOTE 5
DF–A	DRINKING FOUNTAIN	3/4"	––	1 1/2"	1–1/4"	NOTE 9
MB–A	MOP BASIN	3/4"	3/4"	3"	2"	NOTE 8
HB–A	HOSE BIBB	3/4"	––	––	––	NOTE 10

NOTES:
1. WALL MOUNTED WATER CLOSET AMERICAN STANDARD AFWALL 3351.101 WITH 5901.110 SEAT AND SLOAN FLUSH VALVE ROYAL 111 ESS–1.6–OR–HW
2. WALL MOUNTED URINAL AMERICAN STANDARD WASHBROOK 6590.001 WITH SLOAN FLUSH VALVE ROYAL 186 ESS–1.0–HW
3. WALL HUNG LAVATORY AMERICAN STANDARD 0355.012 W/JR SMITH CARRIER 0700, MCGUIRE 2167–LK–F AND MCGUIRE 8912–F. FAUCET AMERICAN STANDARD 605B–205, PK00.HAC, 605XTMV1070 HARD WIRED AC MULTI AC PROVIDE STAINLESS STEEL FLEXIBLE SUPPLIES, CW,HW BRASSCRAFT S1–A AND SHUT OFF VALES W/ REMOVABLE HANDLES. LAV GUARD BY ARCHITECT
4. FLOOR DRAIN MODEL JR SMITH 2010C–A WITH TRAP SEAL BY PROVENT SYSTEMS OR APPROVED EQUAL.
5. PROVIDE CLEANOUT JR SMITH MODEL 4020 OR APPROVED EQUAL
6. ALL PLUMBING FIXTURES TO BE PROVIDED WITH SHUT–OFF VALVES AS SPECIFIED
7. INSTALL ALL CARRIERS PER MANUFACTURERS RECOMMENDATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR CARRIER HEIGHTS.
8. PROVIDE MOP BASIN FIAT MSB–3636 WITH FIAT 830–AA. PROVIDE MOP BRACKET 889–CC, VINYL GUARDS E–77–AA AND HOSE BRACKET 832–AA OR APPROVED EQUAL
9. PROVIDE ELKAY MODEL LK4409BF – BLACK OR APPROVED EQUAL
10. PROVIDE JR SMITH HOSE BIBB 5685(H) WITH REMOVABLE HANDLE OR APPROVED EQUAL

PUMP SCHEDULE

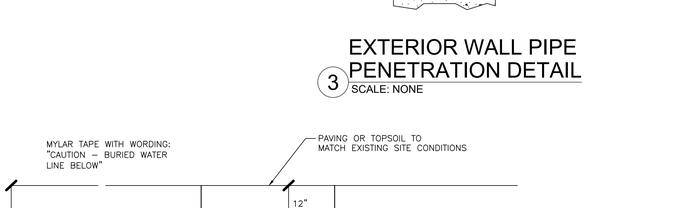
NO.	LOCATION	SERVICE	GPM	HEAD FT WATER	MOTOR WATTS/HP	MOTOR VOLTAGE	MOTOR PHASE	MOTOR MAX. RPM	DESIGN MAKE
GP–1	MECH ROOM	SEWAGE	25	40	1.5	460	60	1750	WEIL 2436
GP–2	MECH ROOM	SEWAGE	25	40	1.5	460	60	1750	WEIL 2436

3 EXTERIOR WALL PIPE PENETRATION DETAIL
SCALE: NONE



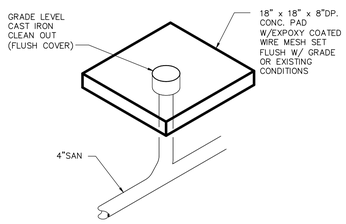
BACKFLOW ASSEMBLY CLEARANCES:
1. ASSEMBLY SHALL BE INSTALLED WITH CENTERLINE OF 30" TO 60" ABOVE FINISHED FLOOR. INSTALLATION AT A GREATER HEIGHT SHALL BE PROVIDED WITH A FIXED PLATFORM.
2. ASSEMBLY SHALL BE INSTALLED WITH 18" MINIMUM CLEARANCE BETWEEN BOTTOM OF RELIEF VALVE AND THE FLOOR.
3. ASSEMBLY SHALL BE INSTALLED WITH 12" MINIMUM CLEARANCE ABOVE ASSEMBLY.
4. ASSEMBLY SHALL BE INSTALLED WITH A MINIMUM OF 30" OF CLEAR SPACE BETWEEN THE FRONT SIDE OF THE DEVICE AND THE NEAREST WALL OR OBSTRUCTION.
5. ASSEMBLY SHALL BE INSTALLED WITH A MINIMUM OF 8" CLEARANCE FROM THE BACK SIDE OF DEVICE TO THE NEAREST WALL OR OBSTRUCTION.
6. ASSEMBLY SHALL BE ADEQUATELY SUPPORTED AND/OR RESTRAINED TO PREVENT LATERAL MOVEMENT. SUPPORTS SHALL BE PLACED IN A MANNER THAT WILL NOT OBSTRUCT THE FUNCTION OF OR THE ACCESS TO THE RELIEF VALVE.

8 BACKFLOW PREVENTER DETAIL
SCALE: NONE

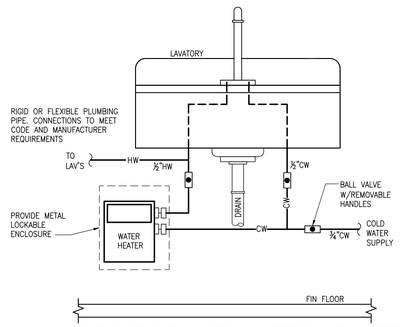


NOTES:
1. EXCAVATE REMOVE ROCK, BACKFILL, SEED AND RESTORE OR PAVE TO ORIGINAL CONDITIONS.

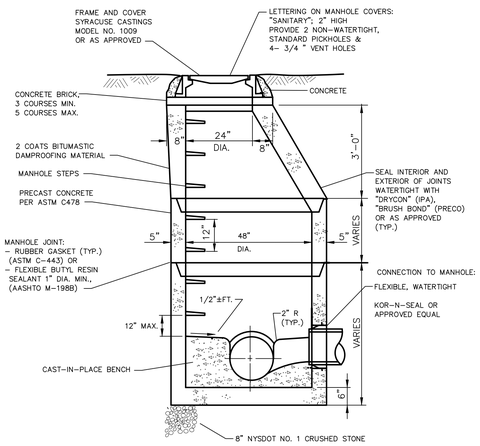
4 TRENCH DETAIL
SCALE: NONE



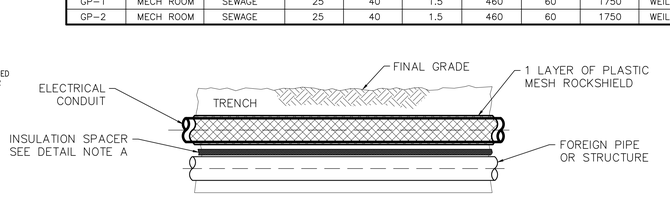
5 GRADE LEVEL CLEANOUT DETAIL
SCALE: NONE



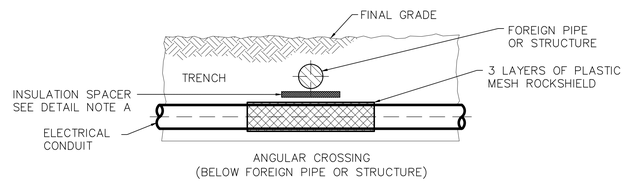
6 POINT OF USE WATER HEATER
SCALE: NONE



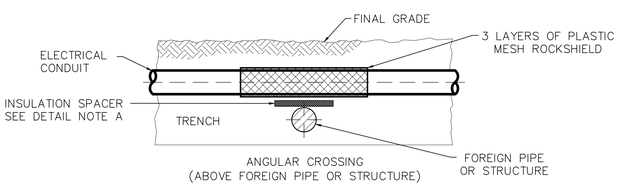
9 SANITARY MANHOLE DETAIL
SCALE: NONE



PARALLEL INSTALLATION (HORIZONTAL OR VERTICAL ARRANGEMENT)



ANGULAR CROSSING (BELOW FOREIGN PIPE OR STRUCTURE)



ANGULAR CROSSING (ABOVE FOREIGN PIPE OR STRUCTURE)

DETAIL NOTES:
A. A INSULATIONSPACER SHALL BE INSTALLED BETWEEN METALIC WATER/SEWER PIPE TO PREVENT ELECTRICAL CONTACT WITH THE SUBSURFACE STRUCTURE.
B. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

ANGULAR & PARALLEL CROSSING OF SUBSURACE STRUCTURE GAS PIPE PROTECTION BELOW GRADE CLEARANCES
SCALE: NONE

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT IS ALTERED, THE ALTERING ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT SHALL AFFIX TO THE ITEM HIS SEAL ALONG WITH A DESCRIPTION OF THE ALTERATION, THE SIGNATURE AND DATE. COPYRIGHT @ 2019

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STAMP
STATE OF NEW YORK — JAMES EISENBACH — No. 095875 — LICENSED PROFESSIONAL ENGINEER

WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL RENOVATIONS, FIELD WORK AND EXTERIOR BATHROOM BUILDING
225 WEST STREET EXT, WARWICK, NY 10990

☐BB SED NO. 44–21–01–06–7–041–001 (BB=FIELD BATHROOM BUILDING) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐FF SED NO. 44–21–01–06–7–041–001 (FF=WV FOOTBALL FIELD) 89 SANFORDVILLE ROAD, WARWICK, NY 10990
☐HS SED NO. 44–21–01–06–0–001–040 (HS=WV HIGH SCHOOL) 89 SANFORDVILLE ROAD, WARWICK, NY 10990

PROJECT NO.	05–21–04 05–20–06
BID SET	04.06.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED

SHEET TITLE
SCHEDULES AND DETAILS

SHEET NO.
P-500

FILE PATH –N:\1 – PROJECT DIRECTORIES\1– E & R Projects\05– Warwick Valley CSD\05–21–04 Warwick Federal Grant Project\CAD\Package 2\05–21–04.p500.dwg