

NORTHERN SHORES ELEMENTARY SCHOOL

PORTABLE RELOCATION

SUFFOLK PUBLIC SCHOOLS

RRMM ARCHITECTS, PC

DEPT. OF EDUCATION #127-32-00-100
IFB #1894-B
DATE: APRIL 29, 2025

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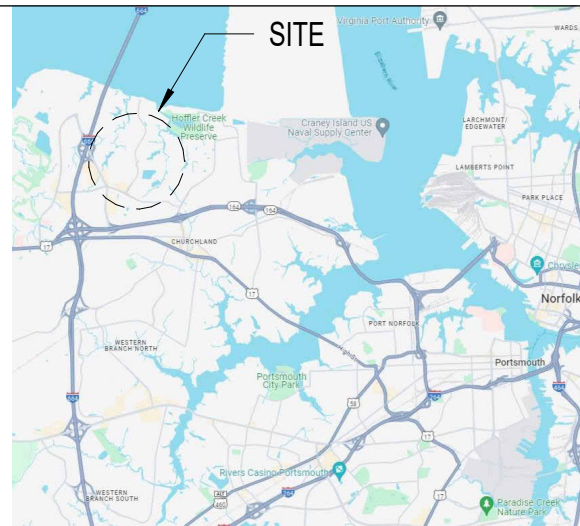
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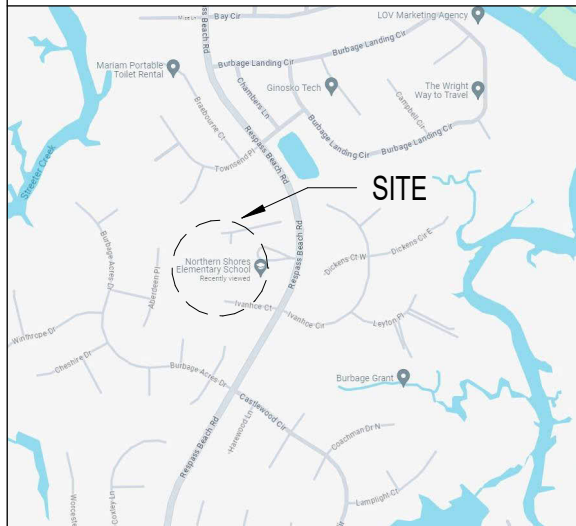
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VICINITY MAP



LOCATION MAP



PORTABLE CLASSROOM RELOCATION PROJECT SCOPE:

NOTE: ALL POTENTIAL BIDDERS ARE REQUIRED TO ATTEND A MANDATORY PRE-BID CONFERENCE AND REVIEW EXISTING SITE CONDITIONS IN ORDER TO SUBMIT A BID FOR THIS PROJECT.

THERE ARE THIRTEEN (13) EXISTING PORTABLE CLASSROOM UNITS ON THE EXISTING SITE. THE CONTRACTOR IS TO INCLUDE IN HIS BID THE FOLLOWING:

THE REMOVAL OF ONE (1) FIRE-DAMAGED PORTABLE UNIT (AS IDENTIFIED AS M.U. #8 ON THE DRAWINGS) AND THE REMOVAL OF ONE (1) UNUSABLE PORTABLE UNIT (AS IDENTIFIED AS M.U. #6 ON THE DRAWINGS) COMPLETE, AND ARE TO BE DISPOSED OF PROPERLY, OFF-SITE. CONTRACTOR TO SALVAGE ANY MATERIALS FROM THIS UNIT FOR USE ON OTHER PORTABLE UNIT RELOCATION EFFORTS AS NECESSARY AND THEN RIGHT OF FIRST REFUSAL TO THE OWNER IF NOT USED IN RELOCATION EFFORTS.

TWO (2) PORTABLE UNITS, (AS IDENTIFIED AS M.U. #13 AND M.U. #14 ON THE DRAWINGS), AND ATTACHED WALKWAYS, RAMPS, LANDINGS, STAIRS AND RAILINGS ARE TO REMAIN IN PLACE. RECONFIGURE ONE RAMP AND AFFECTED RAILINGS THAT WILL NEED TO BE ROTATED 90 DEGREES AS SHOWN TO MAKE WAY FOR FUTURE CONSTRUCTION BY OTHERS. REWORK RAILINGS AT NORTH END OF PLATFORM TO ACCOMMODATE RELOCATED AND CONNECTING PORTABLE STAIR UNIT.

THE CONTRACTOR WILL BE REQUIRED TO EXAMINE THE REMAINING EXISTING PORTABLE UNITS THOROUGHLY TO DETERMINE WHICH SEVEN (7) OF THE REMAINING NINE (9) UNITS ARE SUITABLE FOR RELOCATION TO THE NEW LOCATION IDENTIFIED ON THE DRAWINGS.

THE RELOCATION OF SEVEN (7) PORTABLE UNITS FROM EXISTING LOCATION TO NEW LOCATION SHOWN ON THE DRAWINGS AS WELL AS RELOCATION AND INSTALLATION ALL EXISTING METAL COMPONENTS OF WALKWAYS, RAMPS, LANDINGS, STAIRS AND RAILINGS SYSTEMS. THE COMPONENTS AND DIMENSIONS SHOWN ARE FROM INVENTORIED PIECES OF TWO EXISTING AND VARYING METAL WALKWAY SYSTEM COMPONENTS, WHICH INCLUDE ADJUSTABLE SUPPORT POSTS ON THE WALKWAYS, RAMPS AND LANDINGS. THE ARCHITECT HAS MADE THEIR BEST ATTEMPT AT REASSEMBLING THE COMPONENTS TO FORM A COMPLETE WALKWAY SYSTEM. NOTE THAT THE WALKWAY CANNOT REDUCE IN WIDTH IN THE DIRECTION OF TRAVEL. THE CONTRACTOR IS TO SUPPLEMENT ANY ADDITIONAL METAL COMPONENTS LISTED ABOVE THAT MAY NOT BE AVAILABLE ON SITE FOR A COMPLETE WALKWAY SYSTEM.

THE CONTRACTOR WILL REQUIRED TO REMOVE THE REMAINING THREE (3) PORTABLE UNITS COMPLETE AND ANY REMAINING WALKWAYS, RAMPS, LANDINGS, SUPPORT POSTS AND RAILINGS THAT ARE DESIGNATED TO BE REMOVED AND DISPOSE OF PROPERLY OFF-SITE.

THE OWNER WILL HAVE ALL FIXTURES, FURNISHINGS AND EQUIPMENT REMOVED FROM INSIDE THE PORTABLE UNITS BY **JUNE 9, 2025**. THE WORK WILL NEED TO BE SUBSTANTIALLY COMPLETE BY **AUGUST 1, 2025**.

TYPICAL PORTABLE CLASSROOM BREAKDOWN SEQUENCE:

THE FOLLOWING IS A BRIEF SUGGESTED DESCRIPTION AND SCOPE OF BREAKDOWN FOR THE EXISTING PORTABLE UNITS TO BE RELOCATED OR REMOVED OFF-SITE AND PROPERLY DISPOSED OF.

THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND DOMINION ENERGY FOR THE REMOVAL OF FEEDERS TO ALL PORTABLE CLASSROOMS WITH SEPARATE ELECTRICAL SERVICES AND THE FOUR ELECTRICAL SERVICES THAT FEED PANELS WHICH SERVE THE REMAINING PORTABLE CLASSROOMS. THE CONTRACTOR WILL REMOVE ALL EXPOSED CONDUITS AND ALL CONDUCTORS BACK TO THE EXISTING PANELS. EXISTING CONDUITS RUN UNDERGROUND MAY BE ABANDONED IN PLACE. THE CONTRACTOR WILL REMOVE ALL DATA, INTERCOM, SECURITY, AND FIRE ALARM WIRING FROM ALL PORTABLE CLASSROOMS BACK TO THEIR POINT OF ORIGIN INSIDE THE BUILDING AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL REMOVE ALL EXISTING DATA, INTERCOM, SECURITY, AND FIRE ALARM CONDUITS THAT ARE RUN EXPOSED. EXISTING CONDUITS RUN UNDERGROUND MAY BE ABANDONED IN PLACE. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

UNLESS OTHERWISE NOTED, THE CONTRACTOR IS TO LEAVE ALL INTERIOR AND EXTERIOR PERMANENT FIXTURES, EQUIPMENT, CAMERAS, CANOPIES, WALL VENTS, ROOF VENTS AND THE LIKE INSTALLED IN PLACE DURING RELOCATION OF PORTABLE UNITS. ANY FIXTURES AND/OR EQUIPMENT LISTED ABOVE THAT ARE DAMAGED DURING RELOCATION SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

UNLESS OTHERWISE NOTED, THE CONTRACTOR IS TO REMOVE ALL WOOD WALKWAYS, RAMPS, STAIRS, LANDINGS, SUPPORT POSTS AND RAILINGS COMPLETE AND DISPOSE OF PROPERLY OFF-SITE. ALL METAL WALKWAYS, RAMPS, LANDINGS, STAIRS AND RAILINGS ARE TO BE DETACHED FROM EXISTING PORTABLE UNITS AND SAVED FOR REUSE FOR THE WALKWAY SYSTEM AT RELOCATED PORTABLE UNITS' NEW LOCATION. THE CONTRACTOR IS TO SALVAGE AND SAVE FOR REUSE ALL CMU "PEDESTAL FEET" AT WOOD AND METAL WALKWAY SYSTEMS/LANDINGS POSTS AT NEW WALKWAY SYSTEM LOCATION.

THE CONTRACTOR IS TO REMOVE ALL EXISTING 36-INCH-HIGH VINYL VENTED SOFFIT SKIRT MATERIAL COMPLETE, RETAINING EXISTING VINYL TOP TRIM INSTALLED ON PORTABLE UNIT FOR REUSE. ALL SKIRT MATERIAL TO BE DISPOSED OF PROPERLY OFF-SITE.

THE CONTRACTOR IS TO REMOVE ALL EXISTING PORTABLE UNIT ANCHORING SYSTEM AND SAVE FOR REUSE. ASSUME EIGHT (8) ANCHORING DEVICES FOR EACH PORTABLE UNIT.

EACH PORTABLE UNIT SITS ON A SERIES OF TWENTY (20) PIERS, COMPOSED OF THREE (3) 8- INCH X 16- INCH CMU BLOCK UNITS ON TOP OF A 2'-0" X 2'-0" X 1/2-INCH-THICK METAL PLATE. THE CONTRACTOR IS TO REUSE ALL PIER ELEMENTS AS PRACTICAL, REPLACING ANY BROKEN CMU BLOCK UNITS IN KIND. PROVIDE SOLID SHIMMING MATERIALS TO PROVIDE A LEVEL UNIT INSTALLATION IN THE NEW PORTABLE UNIT RELOCATION AREA.

MOST OF THE PORTABLE UNITS HAVE TRAILER TONGUES (UNATTACHED) AND WHEEL SETS (ATTACHED) BENEATH THE UNITS FOR THE CONTRACTOR'S USE FOR RELOCATING THE PORTABLE UNITS TO THE NEW LOCATION. THE CONTRACTOR IS TO RE-ATTACH TRAILER TONGUES TO THE UNITS AND PROVIDE WHEELS FOR THE WHEELS SETS. THE CONTRACTOR IS TO ASSUME THAT TRAILER TONGUES AND WHEEL SETS MAY NEED TO BE DISASSEMBLED FROM RELOCATED UNITS AND THEN USED TO RELOCATE UNITS THAT DO NOT HAVE THESE ELEMENTS.

ON THE INTERIOR OF THE PORTABLE UNITS TO BE RELOCATED, THE CONTRACTOR WILL BE REQUIRED TO REMOVE ALUMINUM FLOOR EXPANSION JOINT COVER AND SAVE FOR REUSE. INTERIOR WALL AND CEILING WOOD TRIM THAT SERVES AS EXPANSION JOINTS SHALL BE REMOVED COMPLETE AND DISPOSED OF PROPERLY OFF-SITE. PREP FLOOR, WALL AND CEILING AREAS FOR REINSTALLED ALUMINUM FLOOR EXPANSION JOINT COVER AND NEW WOOD TRIM FOR WALL AND CEILING EXPANSION JOINTS. REFER TO **SHEET PCRA-3** FOR ROOF AND WALL EXPANSION JOINT DETAILS.

THE CONTRACTOR IS TO EXERCISE CARE IN DISASSEMBLING EACH EXISTING PORTABLE UNIT INTO TWO (2) UNITS TO BE TRANSPORTED TO THE RELOCATED PORTABLE CLASSROOM AREA AND BE REASSEMBLED. THE CONTRACTOR IS TO PROVIDE AND MAINTAIN TEMPORARY PROTECTION ON EXPOSED PORTIONS OF DISASSEMBLED UNITS TO PROTECT FROM RAIN AND WIND DAMAGE DURING RELOCATION EFFORTS. ANY DAMAGE TO THE INTERIOR OF THE UNITS DURING RELOCATION SHALL BE REPAIR AND/OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING SITE FEATURES NOT IDENTIFIED IN THESE DRAWINGS TO BE REMOVED OR RELOCATED ARE TO REMAIN AND BE ABANDONED IN PLACE.

TYPICAL PORTABLE CLASSROOM REINSTALLATION SEQUENCE:

THE CONTRACTOR IS TO LAYOUT NEW CLASSROOM PORTABLE AREA AS REQUIRED TO LOCATE TEMPORARY POWER, DATA, INTERCOM, SECURITY AND FIRE ALARM FEEDS AHEAD OF PORTABLE UNIT PLACEMENT.

THE CONTRACTOR SHALL PROVIDE NEW DATA, INTERCOM, SECURITY SYSTEM, AND FIRE ALARM WIRING FROM THE EXISTING BUILDING TO BOTH EXISTING PORTABLE CLASSROOMS AND ALL OTHER RELOCATED PORTABLE CLASSROOMS. ALL THE WIRING WILL BE RUN IN CONDUIT. CONDUITS WILL BE RUN UNDERGROUND FROM THE EXISTING BUILDING TO THE RAISED WALKWAYS AS WELL AS BETWEEN THE TWO SECTIONS OF RAISED WALKWAY SYSTEMS. ALL CONDUITS WILL BE ATTACHED TO THE BOTTOM OF THE RAISED WALKWAY SYSTEM WHEREVER POSSIBLE. THE PROPOSED ROUTING OF THE UNDERGROUND CONDUITS FROM THE EXISTING BUILDING SHALL BE COORDINATED WITH EXISTING BELOW GRADE UTILITIES, AND APPROVED BY THE OWNER AND DOMINION ENERGY AS THE CONDUITS WILL CROSS AN EXISTING DOMINION ENERGY RIGHT OF WAY. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS AND DETAILS. [PARAGRAPH TO BE FINALIZED BY TCE]

THE CONTRACTOR IS TO REASSEMBLE PREVIOUSLY SELECTED SUITABLE PORTABLE UNITS TO THE AREA SHOWN ON THE DRAWINGS. INSTALL RELOCATED METAL BASE PLATES, CMU BLOCK PIERS, SHIM TO LEVEL POSITION AND REATTACH / REINSTALL TRAILER ANCHORING SYSTEM, EIGHT (8) LOCATIONS FOR EACH PORTABLE UNIT. PROVIDE REPLACEMENT CMU BLOCKS AND SHIMS AS REQUIRED FOR UNITS THAT ARE NOT USABLE IN THE RELOCATION EFFORT. THE CONTRACTOR IS TO REASSEMBLE THE UNITS IN A MANNER TO PREVENT AIR AND WATER PENETRATION THROUGH WALLS, FLOORS, CEILINGS AND ROOFS. ONCE THE UNITS ARE PLACED AND ANCHORED, CONTRACTOR TO DETACH TRAILER TONGUES AND WHEELS AND SAVE BELOW PORTABLES FOR FUTURE USE.

ON THE ROOF OF EACH REASSEMBLED PORTABLE UNIT, NEW ROOFING MEMBRANE TRANSITION STRIP WILL NEED TO BE APPLIED ON ROOF FROM END TO END OF UNIT AND ATTACH AS REQUIRED TO OBTAIN A TWO (2) YEAR WORKMANSHIP WARRANTY FROM THE INSTALLING ROOFING CONTRACTOR. PROVIDE GAF UNISIL PRODUCT OR EQUAL. REFER TO ROOF / CEILING EXPANSION JOINT DETAIL ON **SHEET PCRA-3**.

ON THE INTERIOR OF PORTABLE UNITS, THE CONTRACTOR IS TO REINSTALL ALUMINUM FLOOR EXPANSION JOINT COVERS SALVAGED FROM PORTABLE UNIT BREAKDOWN SEQUENCE AND SECURELY ATTACH TO REASSEMBLED UNIT FLOORING. REFER TO **SHEET PCRA-3** FOR INTERIOR WALL AND CEILING EXPANSION JOINT DETAILS. PRIME AND PAINT ALL WOOD TRIM INSTALLED; PROVIDE SEALANT AT WALL/CEILING AND WOOD TRIM INTERFACE. PROVIDE FINAL COAT OF SEMI-GLOSS PAINT, COLOR TO BE SELECTED BY ARCHITECT.

THE CONTRACTOR IS TO INSTALL NEW VINYL VENTED SOFFIT MATERIAL SKIRTING AROUND ENTIRE PERIMETER OF RELOCATED PORTABLE UNITS' BASE, INTEGRATING THE SKIRT MATERIAL INTO SALVAGED UPPER VINYL TRIM PIECE REMAINING FROM BREAKDOWN SEQUENCE. PROVIDE 36-INCH-WIDE VENTED SKIRT MATERIAL, CERTAINTED UNIVERSAL TRIPLE 4 INCH FULLY VENTED VINYL SOFFIT, 12- FOOT LENGTHS, OR EQUAL, COLOR TO MATCH EXISTING UPPER VINYL TRIM PIECE. CUT TO SIZE AS REQUIRED SO THAT BOTTOM OF PANEL IS FRICTION-FITTED TO FINAL GRADE.

THE CONTRACTOR IS TO PROVIDE NEW PORTABLE STAIR UNITS AS INDICATED ON THE PLAN ON **SHEET PCRA-2** AND DETAILS ON **SHEET PCRA-3**.

THE CONTRACTOR IS TO PLACE METAL WALKWAYS, RAMPS, LANDINGS AND RAILINGS AS INDICATED IN THE DRAWINGS TO THE GREATEST EXTENT POSSIBLE FROM EXISTING ELEMENTS SAVED FROM DEMOLITION SEQUENCE. THE DIMENSIONS SHOWN IN THE DRAWINGS ARE FROM INVENTORIED PIECES OF TWO EXISTING AND VARYING METAL WALKWAY SYSTEM COMPONENTS, WHICH INCLUDE ADJUSTABLE SUPPORT POSTS ON THE WALKWAYS, RAMPS AND LANDINGS. THE ARCHITECT HAS MADE BEST EFFORTS TO REASSEMBLE THE COMPONENTS TO FORM A COMPLETE WALKWAY SYSTEM. NOTE THAT THE WALKWAY CANNOT REDUCE IN WIDTH IN THE DIRECTION OF EGRESS TRAVEL. THE CONTRACTOR IS TO LAYOUT WALKWAY SYSTEM WITH EXISTING COMPONENTS AND SUPPLEMENT WITH ADDITIONAL COMPONENTS AS NECESSARY TO PROVIDE A CONTINUOUS, SAFE AND ACCESSIBLE ROUTE. PROVIDE ADDITIONAL RAILING PIECES TO FILL GAPS WHERE OCCURRING. PROVIDE FLAT PLATE OR THRESHOLD PIECES TO FILL HORIZONTAL GAPS IN THE WALKWAY SURFACE AND MAINTAIN ACCESSIBILITY. THE CONTRACTOR IS TO SECURELY ATTACH ALL COMPONENTS TO ONE ANOTHER AND TO PORTABLE UNITS WHERE APPLICABLE.

THE CONTRACTOR TO INCLUDE IN HIS BID AN ALLOWANCE OF 100 LF OF ADDITIONAL MATCHING WALKWAY COMPONENTS, 100 LF OF ADDITIONAL MATCHING METAL RAILING COMPONENTS AND FIVE (5) ADDITIONAL MATCHING 5'-6" X 5'-6" METAL LANDING SETS TO SUPPLEMENT ANY SHORTAGES FROM SALVAGED COMPONENTS TO PROVIDE A COMPLETE WALKWAY SYSTEM WITH ANY UNUSED ALLOWANCE CREDITED BACK TO THE OWNER. CONTRACTOR TO SECURELY ATTACH ALL COMPONENTS TO ONE ANOTHER AND TO PORTABLE UNITS WHERE APPLICABLE. PROVIDE ADA COMPLIANT METAL TRIM PIECES TO COVER ANY GAPS IN THE HORIZONTAL WALKING SURFACES IN THE WALKWAY, RAMPS AND STAIR LANDINGS. PROVIDE RAILING TRIM TO CLOSE ANY GAPS IN THE RAILING SYSTEM THAT WILL PREVENT PASSAGE OF 4- INCH DIAMETER SPHERE.

THE CONTRACTOR IS TO PROVIDE FINAL CLEANING OF INTERIOR OF REASSEMBLED PORTABLE UNITS AND REMOVE DEMOLISHED MATERIALS AS NOTED IN THE DRAWINGS AND DISPOSE OF PROPERLY OFF-SITE.

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
04.29.2025	23238-00	LS	RB	JAH
MARK	DATE	BY	DES	REVISIONS

DATE	PROJECT	DESIGNED	DRAWN	CHECKED
04.29.2025	23238-00	LS	RB	JAH
MARK	DATE	BY	DES	REVISIONS



PROJECT NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION
SUFFOLK PUBLIC SCHOOLS
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
DRAWING COVER SHEET / PROJECT SCOPE
IFB: 1894-B
VIRGINIA DEPARTMENT OF EDUCATION: 127-32-00-100

PROJECT NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION
SUFFOLK PUBLIC SCHOOLS
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA
DRAWING COVER SHEET / PROJECT SCOPE
IFB: 1894-B
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SHEET
PCRA-1

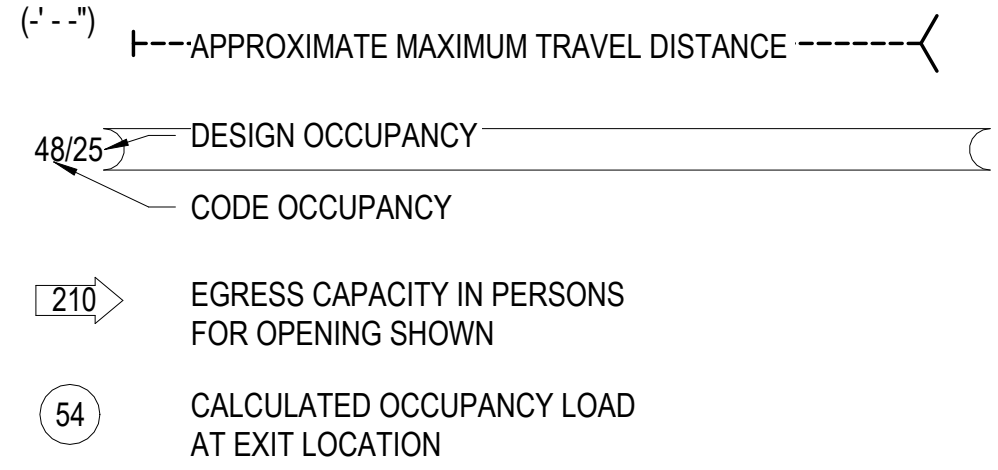
BUILDING CODE DESIGN SUPPORTING DATA

PROJECT CONSISTS OF PORTABLE CLASSROOM UNITS FOR USE DURING RENOVATIONS AND CONSTRUCTION AT NORTHERN SHORES ELEMENTARY SCHOOL. PROJECT CONSISTS OF 9 CLASSROOM TRAILERS. BASIC PROPERTIES ARE AS FOLLOWS.

VCC OCCUPANCY GROUP	E EDUCATION
CONST. TYPE	TYPE VB CERTIFIED TRAILERS DESIGNED AS CLASSROOMS
FULLY SPRINKLED	NO
FIRE RESISTANT RATING EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE	0 HR. 10' TO 30' FOR VB CONST. (PER VCC TABLE 705.5)
TRAVEL DISTANCE	200' WITHOUT SPRINKLER SYSTEM (PER VCC TABLE 1017.2)
COMMON PATH OF TRAVEL	75' MAX (PER VCC TABLE 1006.2.1)
DEAD ENDS	20' MAX (PER VCC 1020.5)
EXITS PER TRAILER	1 MINIMUM, OCCUPANT LOAD 50 MAX (PER VCC TABLE 1006.2.1)
ALLOWABLE FLOOR AREA	9,500 SF WITHOUT ANY FRONTAGE INCREASE. (PER VCC TABLE 506.2)
TOTAL ALLOWABLE STORY / HEIGHT	1 STORIES / 40' (PER VCC TABLE 504.3 AND 504.4)

EGRESS PATH TRAVEL DISTANCE	
EGRESS PATH NAME	TRAVEL DISTANCE
0 - EXISTING PORTABLE MU #14	101' - 0"
0 - RELOCATED PORTABLE A	166' - 8"
0 - RELOCATED PORTABLE B	170' - 2"

PLAN LEGEND



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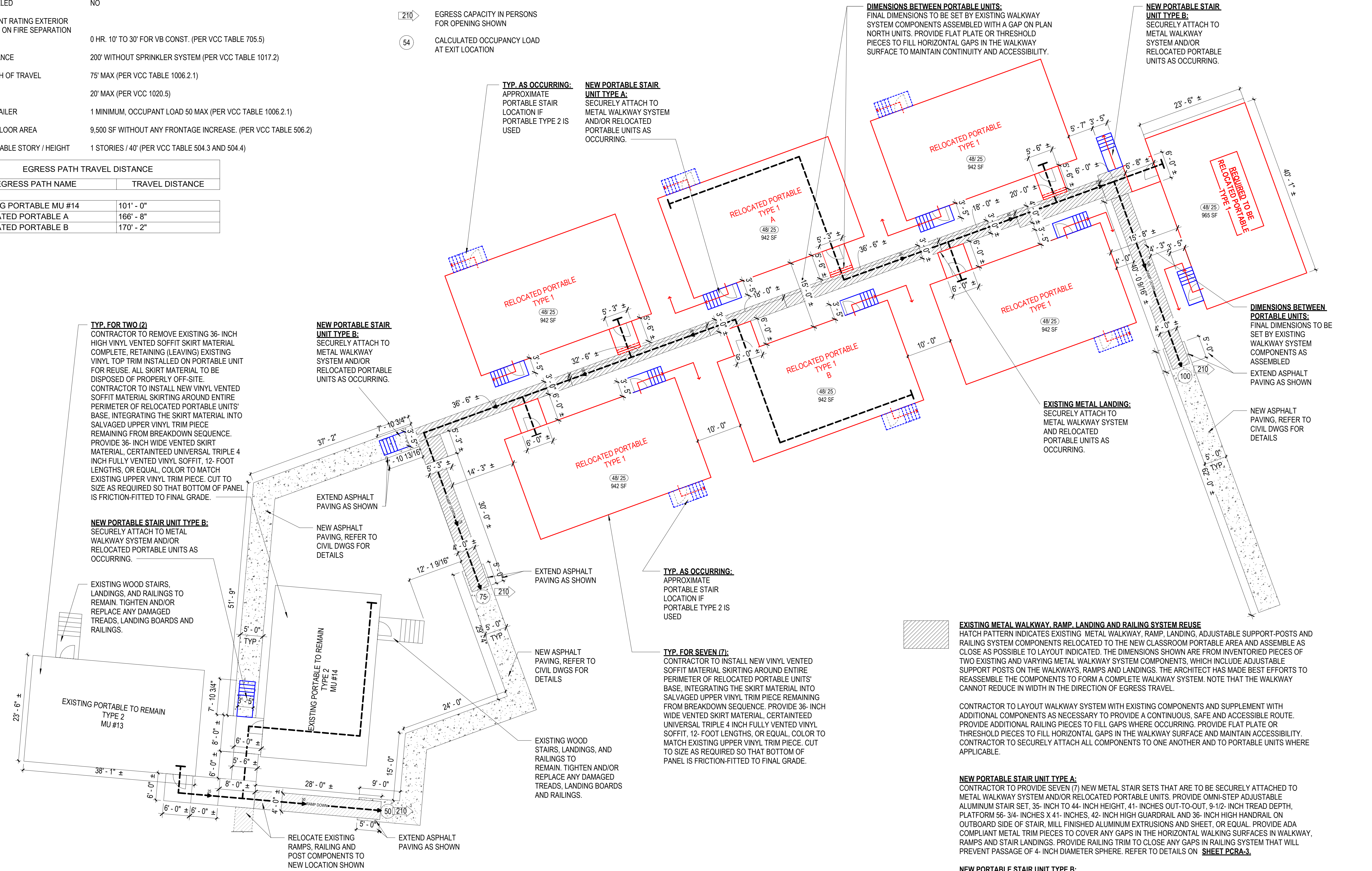
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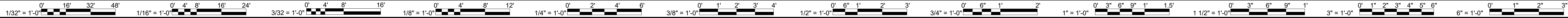
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01 - RELOCATION EFFORT - ENLARGED PORTABLES
PCRA-2 SCALE: 1" = 10'-0"



	DES
	BY
	MARK
	DATE
	REVISIONS

DATE	04.29.2025	LS	RB	JAH
PROJECT	23238-00	DESIGNED	DRAWN	CHECKED

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ARCHITECT

PROJECT NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION
SUFFOLK PUBLIC SCHOOLS
6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA

DRAWING ENLARGED PORTABLE RELOCATION PLAN

VIRGINIA DEPARTMENT OF EDUCATION 127-32-00-100
IFB: 1884-B

SHEET
PCRA-2

ON THE ROOF OF EACH REASSEMBLED PORTABLE UNIT, NEW ROOFING MEMBRANE TRANSITION STRIP WILL NEED TO BE APPLIED ON ROOF FROM END TO END OF UNIT AND ATTACH AS REQUIRED TO OBTAIN A TWO (2) YEAR WORKMANSHIP WARRANTY FROM THE INSTALLING ROOFING CONTRACTOR. PROVIDE GAF UNISIL PRODUCT OR EQUAL. REFER TO ROOF / CEILING EXPANSION JOINT DETAIL THIS SHEET.

REFER TO FOLLOWING INSTALLATION OVERVIEW:

- BEFORE COATING IS APPLIED, AN ADHESION TEST IS REQUIRED TO ENSURE AN ADHESION MINIMUM OF 2.0 POUNDS PER LINEAR INCH (PLI). TEST PATCHES SHOULD BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS.
- CLEAN ROOF AREA TO REMOVE CONTAMINANTS. POWER-WASH SUBSTRATE TO REMOVE CONTAMINANTS THAT COULD NEGATIVELY AFFECT ADHESION. ALLOW ROOF TO COMPLETELY DRY. REFER TO TABLE FOR CLEANER/CLEANING RATE.
- TREAT ALL ROOF PENETRATIONS IN AREA TO BE PATCHED, IF ANY. (REFER TO SUBSTRATE PREPARATION SECTION FOR REQUIREMENTS).
- ALL LOOSE SEAMS MUST BE 3-COURSED (REFER TO PRODUCT TABLE FOR SEAMS AND DETAILS. ALL OTHER SEAMS MUST BE TREATED WITH FLASHING GRADE ONLY, NO FABRIC REQUIRED. (REFER TO SEAM TREATMENT GUIDE FOR REQUIREMENTS). INSTALL A 1-INCH DIAMETER FOAM BACKER ROD IN A FLASHING GRADE SILICONE MASTIC AT ROOF EXPANSION JOINT. INSTALL FLASHING FABRIC IN FLASHING GRADE SILICONE MASTIC AND LET CURE.
- APPLY COATING PER MANUFACTURER'S RECOMMENDATIONS. INSTALL FULL COATING OF SILICONE COATING 1'-0" ON EACH SIDE OF CENTER OF THE ROOF.

INSTALL FLASHING FABRIC IN FLASHING GRADE SILICONE MASTIC AND LET CURE. INSTALL FULL COATING OF SILICONE COATING 12 INCHES EACH SIDE OF CENTER ROOF

FRICTION-FIT COMPRESSIBLE BATT INSULATION IN MEMBRANE RETAINER (60-MIL EPDM)

1" DIAMETER FOAM PLASTIC BACKER ROD SET IN A FLASHING GRADE SILICONE MASTIC

EXISTING PORTABLE UNIT ROOF, +/- 1:12 SLOPE

NEW 1 X 6 PRIMED / PTD WOOD TRIM

NEW 1 X 4 PRIMED / PTD WOOD TRIM

NEW 1 X 8 PRIMED / PTD WOOD TRIM, FASTENED TO ONE SIDE TO ALLOW FOR MOVEMENT

2 TYPICAL ROOF / CEILING EXP. JT.
PCRA-3 SCALE: 3" = 1'-0"

PORTABLE UNIT EXTERIOR WALL, TYP.

NEW 1 X 6 PRIMED / PTD WOOD TRIM

INSERT UNFACED BATT INSULATION INTO JOINT FULL DEPTH

OVERLAPPING METAL SIDING AT PORTABLE UNIT EXPANSION JOINT

NEW 1 X 4 PRIMED / PTD WOOD TRIM

NEW 1 X 8 PRIMED / PTD WOOD TRIM, FASTENED TO ONE SIDE TO ALLOW FOR MOVEMENT

1 TYPICAL WALL EXPANSION JOINT
PCRA-3 SCALE: 3" = 1'-0"



UNISIL QUICK SPEC
AGED TPO (UN-10)

NOTE: The following "Quick Spec" is an abbreviated specification and is not meant to replace the detailed specification. Complete 3-part CSI System Specifications are available at www.gaf.com.



METHOD REQUIREMENTS

Installation Overview:

- Before coating is applied, an adhesion test is required to ensure an adhesion minimum of 2.0 pounds per linear inch (PLI). Test patches should be applied with rates listed below.
- Power-wash substrate to remove contaminants that could negatively affect adhesion. Allow roof to completely dry.
- Treat all roof penetrations, drains, curbs, and scuppers. (Refer to Substrate Preparation section for requirements)
- All loose seams must be 3-coursed. All other seams must be treated with flashing grade only, no fabric required. (Refer to Seam Treatment Guide for requirements)
- Apply coating per the chart below:

Recommendations:

- Refer to Technical Data Sheet for product specific application and surface temperature restrictions.

CLEAN

	Product	Rate (Gal/Sq)
Cleaner	Cleaning Concentrate (diluted)	0.5 - 0.7

SEAMS & DETAILS

Treatment Type	Product	Total (Gal/Sq)	Total (linear ft/ gal)*	DFT* (mils)
3-Coursed Rates	Silicone Mastic and Fabric	2.50	75	45
Flashing Grade Only Rates	Silicone Mastic	4.00	50	60

Note: For other product options, please refer to our Seam Treatment Guide. *Flashing rates are based on a 6" (152 mm) width.

MATERIAL

Mill finish aluminum extrusions and sheet

HEIGHT

21"-26", 28"-35", 35"-44", 42"-52", Two-story: 8.5'-10.5'

WIDTH

37 5/8" between handrails (or one handrail and the building), 41" out-to-out

TREAD DEPTH

9 1/2"

RISER HEIGHT

7" – 8 13/16" (gets smaller or bigger as threshold height lowers or raises)

GUARDRAIL

42" high

HANDRAIL

36" high

PLATFORM

56 3/4" x 41"

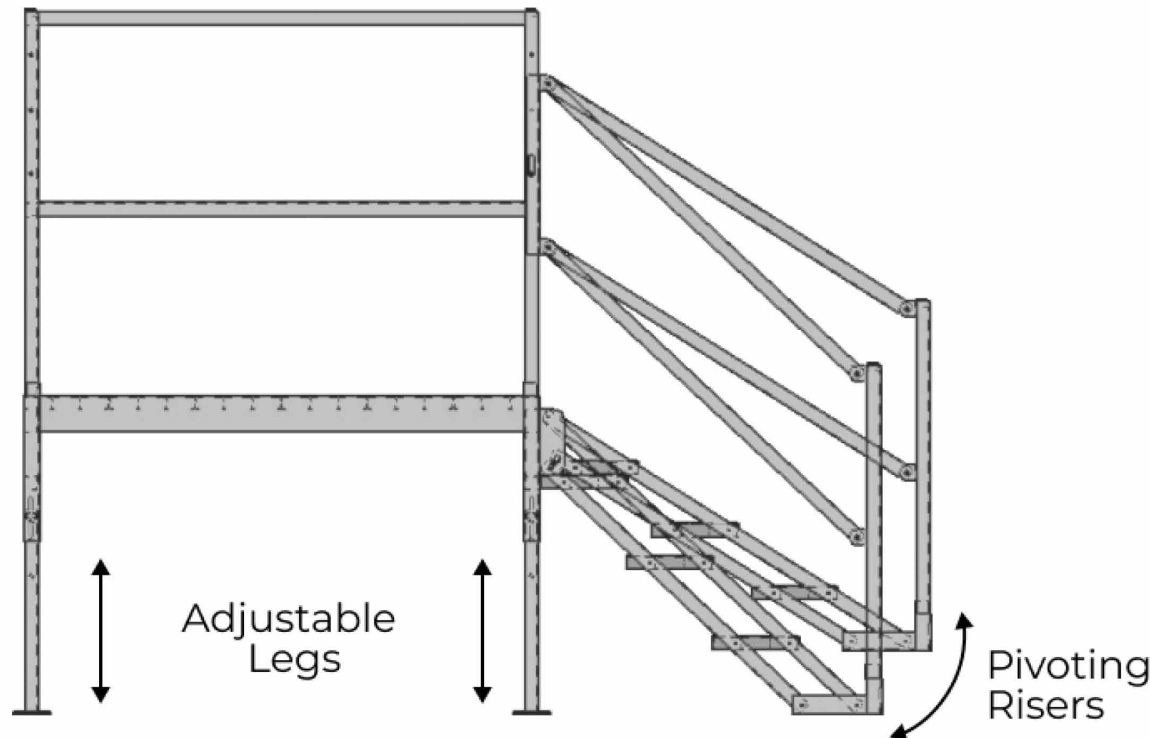
WEIGHT CAPACITY

100 lbs/sqft Live Load, 300 lbs over a sqft area

PORTABLE STAIR UNIT DETAILS

NOT TO SCALE

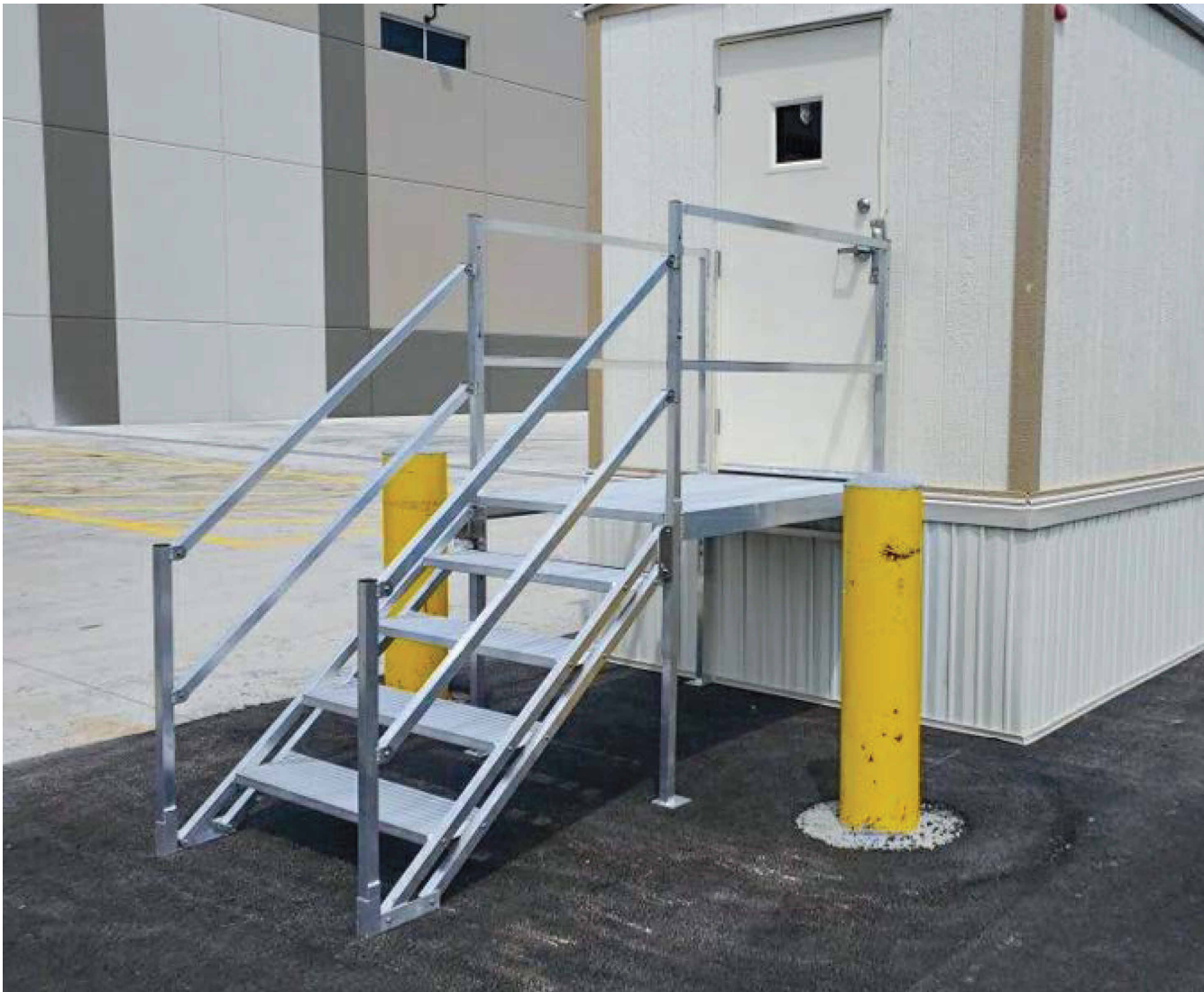
Adjustable Legs and Pivoting Risers



With adjustable legs and pivoting risers, our portable stairs are adjustable up to ± 2' for our two-story size.

NEW PORTABLE STAIR UNIT - SIDE ELEVATION

TYPICAL AT ALL NEW STAIRS
NOT TO SCALE



NEW PORTABLE STAIR UNIT TYPE B

TYPICAL AT END OF WALKWAY SYSTEM
NOT TO SCALE

Adjustable size options:

21" - 26" | 28" - 35" | 35" - 44" | 42" - 52"

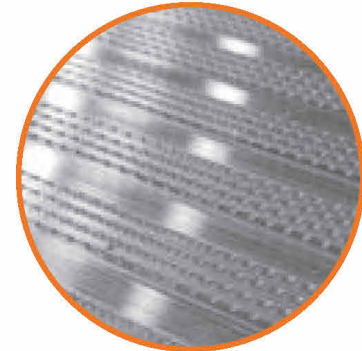
OMNI STEP can be configured in a standard

Side Approach (pictured here). A Straight

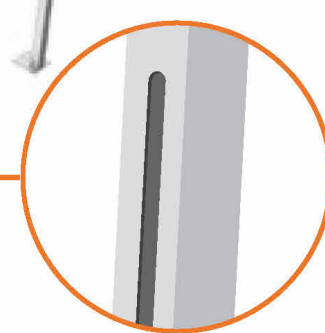
PORTABLE UNIT SIDE OF

THE STAIR UNIT - Done approach can be

configured using an additional side rail.



Knurled extruded decking walk surface



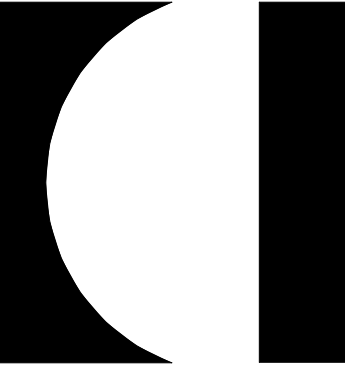
Four independently adjustable legs

NEW PORTABLE STAIR UNIT TYPE A

TYPICAL ADJACENT TO PORTABLE UNIT
NOT TO SCALE

DES
BY
MARK
DATE
REVISIONS

DATE	04.29.2025	PROJECT	23238-00	LS	RB	JAH
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PROJECT NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION

SUFFOLK PUBLIC SCHOOLS

6701 RESPASS BEACH RD,
SUFFOLK, VIRGINIA









DRAWING MISCELLANEOUS DETAILS

SHEET

PCRA-3

ELECTRICAL LEGEND:

POWER:

	JUNCTION BOX - SUBSCRIPT "WP" WHEN USED INDICATES WEATHERPROOF BOX WITH WEATHERPROOF COVERPLATE
	PANELBOARD, 120/240 VOLT
	FIRE ALARM OR FIBER OPTIC CONDUIT RUN CONCEALED ABOVE THE CEILING OR BELOW GRADE.
	PROVIDE NEW FIRE ALARM PULL STATION FOR EACH PORTABLE CLASSROOM THAT IS COMPATIBLE WITH THE EXISTING SCHOOL NOTIFIER FIRE ALARM SYSTEM. IF A PULL STATION EXISTS IN A GIVEN PORTABLE CLASSROOM. PROVIDE A CREDIT TO THE OWNER FOR THE NEW PULL STATION OR TURN THE NEW PULL STATION OVER TO THE OWNER.
	EXISTING FIRE ALARM AUDIO/VISUAL DEVICE
	EXISTING FIRE ALARM CONTROL PANEL
	DEMOLITION NOTE INDICATOR
	NEW WORK NOTE INDICATOR

ABBREVIATIONS:

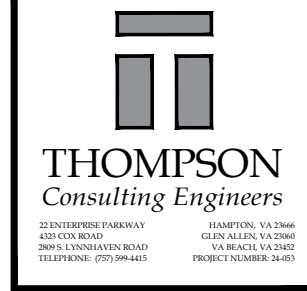
A	AMPERE
C/B.	CIRCUIT BREAKER
C/T	CURRENT TRANSFORMER
CKT	CIRCUIT
D.E.	DOMINION ENERGY
EGC	EQUIPMENT GROUNDING CONDUCTOR
FACP	FIRE ALARM CONTROL PANEL
IDF	INTERMEDIATE DISTRIBUTION FRAME
KAIC	KILO-AMPERE INTERRUPTING CAPACITY
KVA	KILO-VOLT AMPERE
KWHR	KILOWATT HOUR
MDF	MAIN DISTRIBUTION FRAME
N	NEUTRAL
NEMA	NATIONAL ELECTRICAL MANUFACTURING ASSOCIATION
SPD	SURGE PROTECTIVE DEVICE
WP	WEATHERPROOF

GENERAL DEMOLITION NOTES:

- PERFORM ALL THE REQUIRED DEMOLITION TO COMPLY WITH THE SCOPE AND INTENT OF THE PROJECT. REMOVE ALL WIRING ASSOCIATED WITH THE REQUIRED DEMOLITION BACK TO POINT OF ORIGIN OR LAST DEVICE TO REMAIN.
- EXERCISE CARE IN REMOVING MATERIAL AND EQUIPMENT DURING DEMOLITION. REPAIR ALL DAMAGE TO EXISTING SURFACES OR EXISTING EQUIPMENT TO REMAIN TO THE SATISFACTION OF THE ARCHITECT AND OWNER AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE THE OWNER WITH FIRST RIGHT OF REFUSAL FOR ALL ELECTRICAL EQUIPMENT BEING REMOVED AS A PART OF THIS CONTRACT AND NOT SCHEDULED FOR REINSTALLATION. ALL ELECTRICAL EQUIPMENT NOT TURNED OVER TO THE OWNER SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
- PROVIDE ALL ELECTRICAL DEMOLITION WORK NECESSARY TO INSTALL NEW WORK.
- WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
- THE EXISTING CONDITIONS ILLUSTRATED HAVE BEEN DETERMINED FROM ORIGINAL CONSTRUCTION DOCUMENTS AND A LIMITED NON-INVASIVE FIELD INVESTIGATION. THE CONTRACTOR SHALL INVESTIGATE FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK, COORDINATE AND MAKE ADJUSTMENTS AS NECESSARY.
- BEFORE BEGINNING ANY WORK, FIELD VERIFY THE WORKING CONDITION OF ALL AUXILIARY SYSTEM DEVICES SCHEDULED FOR REMOVAL AND REINSTALLATION. NOTIFY THE OWNER OF ALL DEFECTIVE EQUIPMENT. AFTER THE REINSTALLATION OF ALL EQUIPMENT, RE-VERIFY THE WORKING CONDITION. REPLACE ALL EQUIPMENT FOUND DEFECTIVE AFTER REINSTALLATION, WHICH WERE WORKING PRIOR TO REMOVAL WITH EQUIPMENT TO MATCH EXISTING AT NO ADDITIONAL COST TO THE OWNER.
- DURING THE REMOVAL OF EXISTING CEILING TILES, SUPPORT ALL EXISTING AUXILIARY SYSTEMS CABLES (DATA, INTERCOM, TELEPHONE, TELEVISION, CCTV, ETC.) FROM STRUCTURE ABOVE EXISTING CEILING.
- THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF EXISTING CEILING TILES AS REQUIRED TO INSTALL THE NEW BRANCH CIRCUITRY. REINSTALL EXISTING CEILING TILES AFTER COMPLETION OF WORK. REPLACE ALL CEILING TILES DAMAGED DURING THIS PROJECT WITH NEW TILES TO MATCH EXISTING TO THE SATISFACTION OF THE ARCHITECT AND OWNER. REPORT EXISTING TILE DAMAGE TO THE ARCHITECT PRIOR TO REMOVAL.

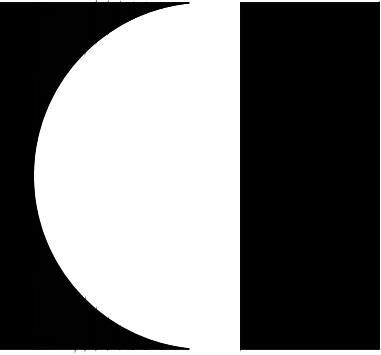
GENERAL NOTES:

- WHERE THE TERM "BRANCH CIRCUITRY" IS USED ON THESE DRAWINGS, IT IS TO BE CONSTRUED TO MEAN CONDUIT AND CONDUCTORS.
- VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES (POWER, TELEPHONE, TELEVISION ETC.) BEFORE DIGGING OR INSTALLING ANY UNDERGROUND CONDUITS. ANY EXISTING UNDERGROUND UTILITY THAT IS DAMAGED DURING CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED BACK TO ITS ORIGINAL CONDITION UTILIZING THE APPROPRIATE TRADES AT NO ADDITIONAL COST TO THE BEFORE DIGGING, CALL "VIRGINIA 811" TOLL FREE (1-800-552-7001) AND/OR PRIVATE UTILITY LOCATING CONTRACTOR.
- CIRCUIT BREAKERS SERVING SURGE PROTECTIVE DEVICES "SPD" SHALL BE LOCATED CLOSE TO THE EQUIPMENT MAIN CIRCUIT BREAKER.
- WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
- CONDUITS INSTALLED BELOW GRADE AND UNDER CONCRETE CURBS AND ASPHALT PAVING SHALL BE SCHEDULE 40 PVC, UNLESS OTHERWISE INDICATED. ALL METAL (GRS AND IMC) CONDUITS AND ELBOWS INSTALLED IN EARTH SHALL BE PAINTED WITH TWO COATS OF BITUMASTIC PAINT.



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DATE	04.29.2025	PROJECT	23238-00	DWNC	DWNC	KC
		DESIGNED				
		DRAWN				
		CHECKED				



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(757)622-2828



PROJECT

NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION
SUFFOLK PUBLIC SCHOOLS
6701 RESPASS BEACH RD
SUFFOLK, VIRGINIA

DRAWING

ELECTRICAL LEGEND ABBREVIATIONS
AND NOTES

IFB #1894-48
VIRGINIA DEPARTMENT OF EDUCATION: 12/23/00-100

SHEET

PCRE-1

MSA PROJ# 23189

ELECTRICAL SPECIFICATIONS:

SCOPE

THE WORK REQUIRED FOR THIS SECTION INCLUDES LABOR, MATERIALS, EQUIPMENT, APPURTENANCES, SERVICE AND SUPERVISION TO PROVIDE COMPLETE ELECTRICAL SYSTEMS AS SHOWN ON THE DRAWINGS.

THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID TO DETERMINE THE EXTENT OF THE WORK. LACK OF KNOWLEDGE OF EXISTING CONDITIONS WILL NOT BE CONSIDERED A BASIS FOR CHANGE ORDERS.

SPECIFICATIONS, CODES AND STANDARDS

THE LATEST EFFECTIVE PUBLICATIONS OF THE FOLLOWING STANDARDS, CODES, ETC. FORM A PART OF THESE SPECIFICATIONS.

ASAD 2010	ADA STANDARDS FOR ACCESSIBLE DESIGN
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CBMA	CERTIFIED BALLAST MANUFACTURERS ASSOCIATION
IBC 2021	INTERNATIONAL BUILDING CODE
ICC	INTERNATIONAL CODE COUNCIL
ICEA	INSULATED CABLE ENGINEERS ASSOCIATION
IECC	INTERNATIONAL ENERGY CONSERVATION CODE
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
NEC 2020	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NESC	NATIONAL ELECTRICAL SAFETY CODE
NFPA	NATIONAL FIRE PREVENTION ASSOCIATION
NFPA 70E	STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE
OSHA	THE OCCUPATIONAL SAFETY AND HEALTH ACT
UL	UNDERWRITERS LABORATORIES, INC.
VCC 2021	VIRGINIA CONSTRUCTION CODE

THIS CONTRACTOR SHALL GIVE REQUIRED NOTICES, OBTAIN NECESSARY PERMITS, AND PAY PERMIT FEES.

DRAWINGS

THE DRAWINGS INDICATE DIAGRAMMATICALLY THE EXTENT OF THE WORK. MINOR VARIATIONS IN LOCATION OF EQUIPMENT SHALL BE MADE UPON WRITTEN APPROVAL OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER. IT IS THE INTENTION OF THESE SPECIFICATIONS AND DRAWINGS TO FULLY COVER ALL WORK AND MATERIALS FOR A COMPLETE ELECTRICAL INSTALLATION, AND ANY DEVICES SUCH AS JUNCTION BOXES USUALLY EMPLOYED IN THIS CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THE DRAWINGS OR IN THE SPECIFICATION, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS A PART OF HIS TOTAL WORK UNDER THIS DIVISION.

EQUIPMENT

POWER WIRING AND POWER CONNECTIONS TO EQUIPMENT SHALL BE PROVIDED UNDER "ELECTRICAL" UNLESS OTHERWISE INDICATED ON THE ELECTRICAL DRAWINGS.

COORDINATION

COORDINATE THE WORK OF THIS DIVISION WITH OTHER TRADES AND EXISTING CONDITIONS TO AVOID OMISSIONS AND TO ELIMINATE ANY INTERFERENCE. THIS IS ESPECIALLY IMPORTANT IN DETERMINING EXACT LOCATIONS OF ALL WIRING DEVICES AND LIGHT FIXTURES. REPORT ANY DISCREPANCIES FOUND, AS SOON AS POSSIBLE, AFTER DISCOVERY TO THE ARCHITECT.

THE SCHEDULE OF THE ELECTRICAL WORK SHALL BE ARRANGED TO SUIT THE PROGRESS OF WORK BY THE OTHER TRADES AND SHALL IN NO WAY RETARD PROGRESS OF CONSTRUCTION OF THE PROJECT.

MATERIALS AND EQUIPMENT

ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW, LISTED, AND LABELED BY AN APPROVED TESTING AGENCY.

INSTALL MATERIALS AND EQUIPMENT SHALL BE PROPERLY STORED AND PROTECTED AT THE PROJECT SITE.

COMPLETE SCHEDULES OF MATERIALS AND EQUIPMENT PROPOSED FOR INSTALLATION SHALL BE SUBMITTED TO THE ENGINEER WITHIN 30 DAYS AFTER AWARD OF THE CONTRACT. THE SCHEDULES SHALL INCLUDE CATALOG CUTS, DIAGRAMS AND SUCH OTHER DESCRIPTIVE DATA AS MAY BE REQUIRED BY THE ENGINEER.

RECORD DRAWINGS

DURING CONSTRUCTION, KEEP AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK AS SHOWN ON THE CONTRACT DRAWINGS AND THAT WHICH IS ACTUALLY INSTALLED, AND NOTE CHANGES THEREON WITH RED MARKS IN A NEAT AND ACCURATE MANNER. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL SUBMIT MARKED UP DRAWINGS AND SKETCHES TO THE ENGINEER.

NOTICES AND FEES

GIVE ALL REQUIRED NOTICES, OBTAIN ALL NECESSARY PERMITS, AND PAY ALL REQUIRED FEES, INCLUDING ANY FEES ASSOCIATED WITH TEMPORARY ELECTRICAL POWER SERVICES DURING CONSTRUCTION, UTILITY COMPANY FEES, WHICH ARE FOR THE PERMANENT INSTALLATION OF ELECTRICAL POWER SERVICES, SHALL BE PAID FOR BY THE OWNER.

CONDUIT

CONDUIT RUN EXPOSED SHALL BE GALVANIZED RIGID STEEL (GRS), OR INTERMEDIATE METALLIC CONDUIT (IMC). CONDUIT INSTALLED BELOW GRADE SHALL BE SCHEDULE 40 PVC.

BURY CONDUIT 24" BELOW GRADE.

MINIMUM SIZE CONDUIT SHALL BE 1/2" WITH LARGER SIZES AS REQUIRED BY THE NATIONAL ELECTRICAL CODE FOR NUMBER OF WIRES CONTAINED THEREIN.

CONDUIT SUPPORTS SHALL BE APPROVED WALL BRACKETS.

CONDUIT TERMINATIONS ONE AND ONE-QUARTER INCH AND LARGER AND CONDUIT STUBS SHALL HAVE O.Z. TYPE "B" INSULATING BUSHINGS. RIGID CONDUIT TERMINATIONS ONE INCH AND SMALLER SHALL HAVE O.Z. TYPE "A" INSULATING BUSHINGS.

JUNCTION BOXES

JUNCTION BOXES SHALL BE HOT DIPPED GALVANIZED STEEL TYPE WITH STANDARD KNOCKOUTS AS REQUIRED FOR CONDUIT TERMINATION. MINIMUM SIZE OF JUNCTION BOX SHALL BE FOUR INCHES SQUARE, ONE AND ONE-HALF INCHES DEEP.

JUNCTION BOXES OCCURRING OUT OF DOORS SHALL BE CAST AND PROVIDED WITH GASKETS BETWEEN BOX AND WATERPROOF COVER.

WIRE AND CABLE

WIRE AND CABLE SHALL BE INSTALLED IN CONDUIT.

WIRE AND CABLE SHALL BE COPPER 600 VOLT INSULATION, WITH CONDUCTIVITY OF NOT LESS THAN 98% AT TEMPERATURE OF 20° C (68° F), UL LISTED, MINIMUM SIZE NO. 12, TYPE "RHH", "USE", "RHW", "THW", "XHHW", "THWN" OR "THHN" AS APPLICABLE, UNLESS OTHERWISE INDICATED ON DRAWINGS.

BRANCH CIRCUIT WIRING FOR AND WIRING IN LIGHT FIXTURES SHALL BY TYPE "THHN".

WIRES NO. 10 AND 12 AWG SHALL BE CONNECTED WITH COIL SPRING INSERT "WIRE-NUT" OR "WING-NUT" CONNECTORS MANUFACTURED BY IDEAL INDUSTRIES OR APPROVED EQUAL. CONNECTORS TERMINATED WITH PRESSURE TYPE COPPER CONNECTORS.

WIRE SHALL BE COLOR CODED AS FOLLOWS:

208Y/120_VOLT SYSTEM
PHASE A _ BLACK
PHASE B _ RED
PHASE C _ BLUE
NEUTRAL _ WHITE
GROUND _ GREEN

ELECTRICAL DESIGNS ARE BASED ON COPPER WIRE AND CABLE.

PANELBOARDS

PANELBOARDS SHALL BE CIRCUIT BREAKER TYPE AS INDICATED. PANELS SHALL HAVE A MINIMUM 20 INCH WIDE ENCLOSURE. A DIRECTORY, COMPLETELY TYPED TO IDENTIFY CIRCUITS, WITH TRANSPARENT PROTECTOR SHALL BE PROVIDED IN EACH PANEL.

PANELBOARDS SHALL BE PROVIDED WITH A GROUND AND NEUTRAL BUS.

PANELBOARDS SHALL BE SQUARE "D", TYPE "NQOB", NEHB" OR "I-LINE" AS REQUIRED. PANELBOARDS MANUFACTURED BY I.T.E., GENERAL ELECTRIC, CUTLER HAMMER OR SIEMENS SHALL BE CONSIDERED EQUAL TO SQUARE "D".

PANELBOARD SHALL BE U.L. SERVICE ENTRANCE RATED AND SHALL BE PROVIDED WITH A NEMA 3R ENCLOSURE. SHOP DRAWINGS SHALL BE SUBMITTED FOR PANELBOARDS.

SURGE PROTECTIVE DEVICES (SPD)

THE CONTRACTOR SHALL FURNISH AND INSTALL THE SURGE PROTECTIVE DEVICE (SPD) EQUIPMENT HAVING THE ELECTRICAL CHARACTERISTICS, RATINGS, AND MODIFICATIONS AS SPECIFIED HEREIN AND AS SHOWN ON THE CONTRACT DRAWINGS.

SPD UNITS AND ALL COMPONENTS SHALL BE DESIGNED, MANUFACTURED, AND TESTED IN ACCORDANCE WITH THE LATEST APPLICABLE ANSI/UL STANDARDS.

UNIT OPERATING VOLTAGE - REFER TO DRAWINGS FOR OPERATING VOLTAGE AND UNIT CONFIGURATION. MAXIMUM CONTINUOUS OPERATING VOLTAGE (MCOV) - THE MCOV SHALL NOT BE LESS THAN 115% OF THE NOMINAL SYSTEM OPERATING VOLTAGE. THE SUPPRESSION SYSTEM SHALL INCORPORATE THERMALLY PROTECTED METAL-OXIDE VARISTORS (MOVS) AS THE CORE SURGE SUPPRESSION COMPONENT FOR THE SERVICE ENTRANCE AND ALL OTHER DISTRIBUTION LEVELS. THE SYSTEM SHALL NOT UTILIZE SILICON AVALANCHE DIODES, SELENIUM CELLS, AIR GAPS, OR OTHER COMPONENTS THAT MAY CROWBAR THE SYSTEM VOLTAGE LEADING TO SYSTEM UPSET OR CREATE ANY ENVIRONMENTAL HAZARDS.

PROTECTION MODES - THE SPD MUST PROTECT ALL MODES OF THE ELECTRICAL SYSTEM BEING UTILIZED. THE REQUIRED PROTECTION MODES ARE INDICATED BY BULLETS IN THE FOLLOWING TABLE:

	PROTECTION MODES			
CONFIGURATION	L-N	L-G	L-L	N-G
WYE	•	•	•	•
DELTA	N/A	•	•	N/A
SINGLE SPLIT PHASE	•	•	•	•

ANSI/UL 1449 3RD EDITION VOLTAGE PROTECTION RATING (VPR) - THE MAXIMUM ANSI/UL 1449 3RD EDITION VPR FOR THE DEVICE SHALL NOT EXCEED THE FOLLOWING:

MODES	240/120
L-G; N-G	800
L-L	1200
L-N	900

SURGE CURRENT CAPACITY - THE MINIMUM SURGE CURRENT CAPACITY THE DEVICE IS CAPABLE OF WITHSTANDING SHALL BE AS SHOWN IN THE FOLLOWING TABLE:

MINIMUM SURGE CURRENT CAPACITY BASED ON ANSI / IEEE C62.41			
LOCATION CATEGORY			
CATEGORY	APPLICATION	PER PHASE	PER MODE
C	SERVICE ENTRANCE LOCATIONS (MAIN SERVICE ENTRANCE)	36 KA	25 KA

SPD TYPE - SPDs INSTALLED ON THE LOAD SIDE OF THE SERVICE ENTRANCE DISCONNECT SHALL BE TYPE 1 OR TYPE 2 SPDs.

EQUIPMENT MARKING AND PAINTING

PANELBOARDS, INDIVIDUAL COMPONENTS, CABINETS, ETC., SHALL BE PROVIDED WITH PERMANENTLY ATTACHED (ADHESIVES NOT ACCEPTABLE) ENGRAVED BAKELITE DESIGNATION PLATES TO INDICATE EQUIPMENT.

DATA/COMMUNICATION SYSTEMS CABLING

IT IS THE PURPOSE OF THIS SPECIFICATION TO REQUIRE THE FURNISHING OF THE HIGHEST QUALITY MATERIALS, EQUIPMENT, AND WORKMANSHIP AVAILABLE, TO FULFILL THE REQUIREMENTS OF THE WORK SPECIFIED HEREIN.

THE DATA/COMMUNICATION SYSTEMS CABLING SHALL PROVIDE ENHANCED CATEGORY 5 UTP DATA CABLING INFRASTRUCTURE AND A FIBER BACKBONE TO AN EXISTING NETWORK OPERATING SYSTEM.

PROVIDE ALL LABOR, EQUIPMENT, SUPPLIES, MATERIALS, AND INCIDENTALS AND ALL OPERATIONS NECESSARY FOR THE FULLY TESTED, AND COMPLETED INSTALLATION OF DATA/COMMUNICATIONS SYSTEMS CABLING, IN COMPLETE ACCORDANCE WITH THE CONTRACT DOCUMENTS.

THE CONTRACTOR SHALL PROVIDE TWO STRAND, SINGLE MODE FIBER OPTIC CABLING.

THE CONTRACTOR SHALL COORDINATE ROUTING OF CABLES WITH THE OWNERS TECHNOLOGY DEPARTMENT AND SHALL TERMINATE CABLES ON BOTH ENDS AS DIRECTED BY THE OWNERS TECHNOLOGY DEPARTMENT.

FURNISH, INSTALL, AND CERTIFY THE DATA/COMMUNICATION CABLE SYSTEM.

THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY ALL LEGAL AUTHORITIES AND AGENCIES HAVING JURISDICTION FOR THE WORK. THESE PERMITS OR INSPECTIONS SHALL BE A PART OF THE WORK OF THE CONTRACTOR PERFORMING THE WORK.

THE CONTRACTOR SHALL SUBMIT COMPLETE SCHEDULE OF ALL EQUIPMENT AND MATERIALS THAT SHALL BE FURNISHED FOR THE WORK. ACCOMPANYING THE SCHEDULE SHALL BE MANUFACTURER'S SPECIFICATION OR DATA SHEETS FOR ALL MAJOR COMPONENTS FOR REVIEW BY THE ARCHITECT:

THE CONTRACTOR SHALL PROVIDE RECORD DRAWINGS SHOWING ALL CABLE NUMBERS AND CONSTRUCTION DETAILS IN ACCORDANCE WITH THE ACTUAL SYSTEM INSTALLATION.

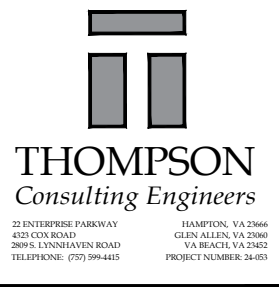
THE CONTRACTOR MUST BE A CONTRACTOR WHO HAS BEEN REGULARLY ENGAGED IN THE FURNISHING AND INSTALLATION OF DATA COMMUNICATIONS AND RELATED VOICE, DATA AND VIDEO COMMUNICATIONS SYSTEMS FOR A PERIOD OF AT LEAST THE LAST THREE (3) YEARS AND WHO CAN SHOW EVIDENCE OF SUCCESSFULLY COMPLETING, WITH ITS PRESENT STAFF, AT LEAST THREE (3) PROJECTS OF SIMILAR SIZE AND SCOPE. THE CONTRACTOR, NOT ITS EMPLOYEES, MUST MEET THESE CONTRACTOR QUALIFICATIONS. WITH THE SUBMITTAL, PROVIDE A LIST OF JOBS COMPLETED, WITH CONTACT, ADDRESS AND PHONE NUMBER OF THE OWNER, AND THE CONTRACTOR'S KEY EMPLOYEES ASSIGNED TO THE PROJECT, LISTING THEIR RESPONSIBILITIES DURING THE JOB AND THE LENGTH OF TIME WITH THE CONTRACTOR IN THIS CAPACITY.

HE CONTRACTOR SHALL BE BONDABLE AND HOLD A CLASS A CONTRACTOR'S LICENSE WHICH IS ACCEPTED AS VALID WITHIN THE STATE OF VIRGINIA.

FIBER OPTIC CABLING SHALL MEET THE FOLLOWING SPECIFICATIONS:

- a. GLASS TYPE SHALL BE 62.5 MICRON CORE;
- b. GLASS CLADDING SHALL BE 125 MICRON;
- c. GLASS TYPE SHALL BE MULTI-MODE;
- d. EACH FIBER SHALL HAVE A COLOR CODED 900 MICRON TIGHT BUFFER;
- e. EACH CABLE SHALL CONTAIN AN UP-JACKETED CENTRAL STRENGTH MEMBER;
- f. MAXIMUM ATTENUATION AT 850/1300 NM SHALL BE 3.5/1.25 DB/KM;
- g. MINIMUM BANDWIDTH AT 850/1300 NM SHALL BE 160/500 MHZ-KM;
- h. EACH CABLE SHALL HAVE A MINIMUM SHORT-TERM BEND RADIUS OF 10X THE CABLE DIAMETER;
- i. EACH CABLE SHALL HAVE A MINIMUM LONG-TERM BEND RADIUS OF 15X THE CABLE DIAMETER.

IN-FIELD SPLICING OF FIBER OPTIC CABLES SHALL NOT BE PERMITTED.



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	date
	mark
	revisions

DATE	04.29.2025			
PROJECT	23238-00	DWC	DWC	KC
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NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION

SUFFOLK PUBLIC SCHOOLS

6701 RESPASS BEACH RD

SUFFOLK, VIRGINIA

PROJECT

DRAWING

FEB #1984-BE

VIRGINIA DEPARTMENT OF EDUCATION - 1273200-100

ELECTRICAL SPECIFICATIONS

SHEET
PCRE-2
MSA PROJ 23189

ELECTRICAL SPECIFICATIONS (CONT.):

FIBER OPTIC CONNECTORS SHALL BE PIGTAIL [ST] [LC] TYPES THAT ARE FUSION SPLICED.

PERFORM THE WORK IN ACCORDANCE WITH ACKNOWLEDGED INDUSTRY AND PROFESSIONAL STANDARDS AND PRACTICES, AND THE PROCEDURES SPECIFIED HEREIN.

FURNISH AND INSTALL ALL MATERIALS FOR COMPLETE OPERATIONAL SYSTEMS.

MAINTAIN A COMPETENT SUPERVISOR AND SUPPORTING TECHNICAL PERSONNEL, ACCEPTABLE TO THE ARCHITECT.

MARK PORTS, CABLES, AND CABLE TERMINATIONS LOGICALLY AND PERMANENTLY. HAND-WRITTEN TAGS WILL NOT BE ACCEPTED.

PROTECT EQUIPMENT AND RELATED WIRING DURING INSTALLATION WHERE EXTREME ENVIRONMENTAL CONDITIONS CAN OCCUR.

PROVIDE AMPLE SERVICE LOOPS AT EACH TERMINATION SO THAT PANELS, AND EQUIPMENT CAN BE DEMOUNTED FOR SERVICE AND INSPECTION.

THE ACCEPTANCE TESTING SHALL BE PERFORMED BY THE OWNER OR THE OWNER'S AGENT. COORDINATE THIS PERIOD SO THAT FREE ACCESS, AND ELECTRICAL POWER IS AVAILABLE ON THE SITE.

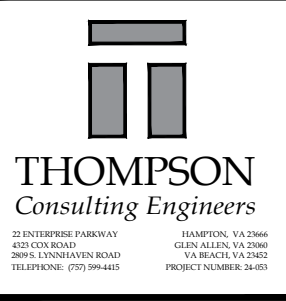
THE CONTRACTOR SHALL GUARANTEE ALL COMPONENTS AND LABOR FOR A PERIOD OF ONE YEAR.

SUBSTANTIAL COMPLETION

UPON COMPLETION OF THE ENTIRE WORK, THE CONTRACTOR SHALL PERFORM SUCH TEST AS REQUIRED BY THE ARCHITECT. THE ARCHITECT SHALL BE GIVEN 48 HOURS NOTICE BEFORE TESTS ARE MADE. THE CONTRACTOR SHALL FURNISH THE ARCHITECT A CERTIFICATE OF APPROVAL FROM THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.

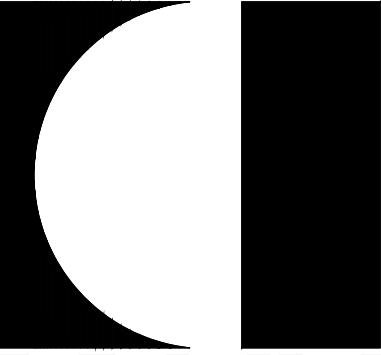
WARRANTY

CONTRACTOR SHALL FURNISH WRITTEN WARRANTY, COUNTERSIGNED, AND GUARANTEED BY THE GENERAL CONTRACTOR, STATING THAT THE WORK EXECUTED UNDER THIS DIVISION OF THE SPECIFICATIONS SHALL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE. DEFECTS DEVELOPING DURING THAT PERIOD SHALL BE CORRECTED WITHOUT COST TO THE OWNER.



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mark	date
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DATE	04.29.2025
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DESIGNED	DWC
DRAWN	DWC
CHECKED	KC



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NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION

SUFFOLK PUBLIC SCHOOLS

6701 RESPASS BEACH RD

SUFFOLK, VIRGINIA

PROJECT

DRAWING

ELECTRICAL SPECIFICATIONS (CONT.)

VIRGINIA DEPARTMENT OF EDUCATION - 1273200-100

FEB #1864-B

SHEET

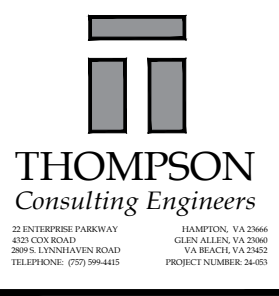
PCRE-3

MSA PROJ 23189



ELECTRICAL SITE PLAN - DEMOLITION

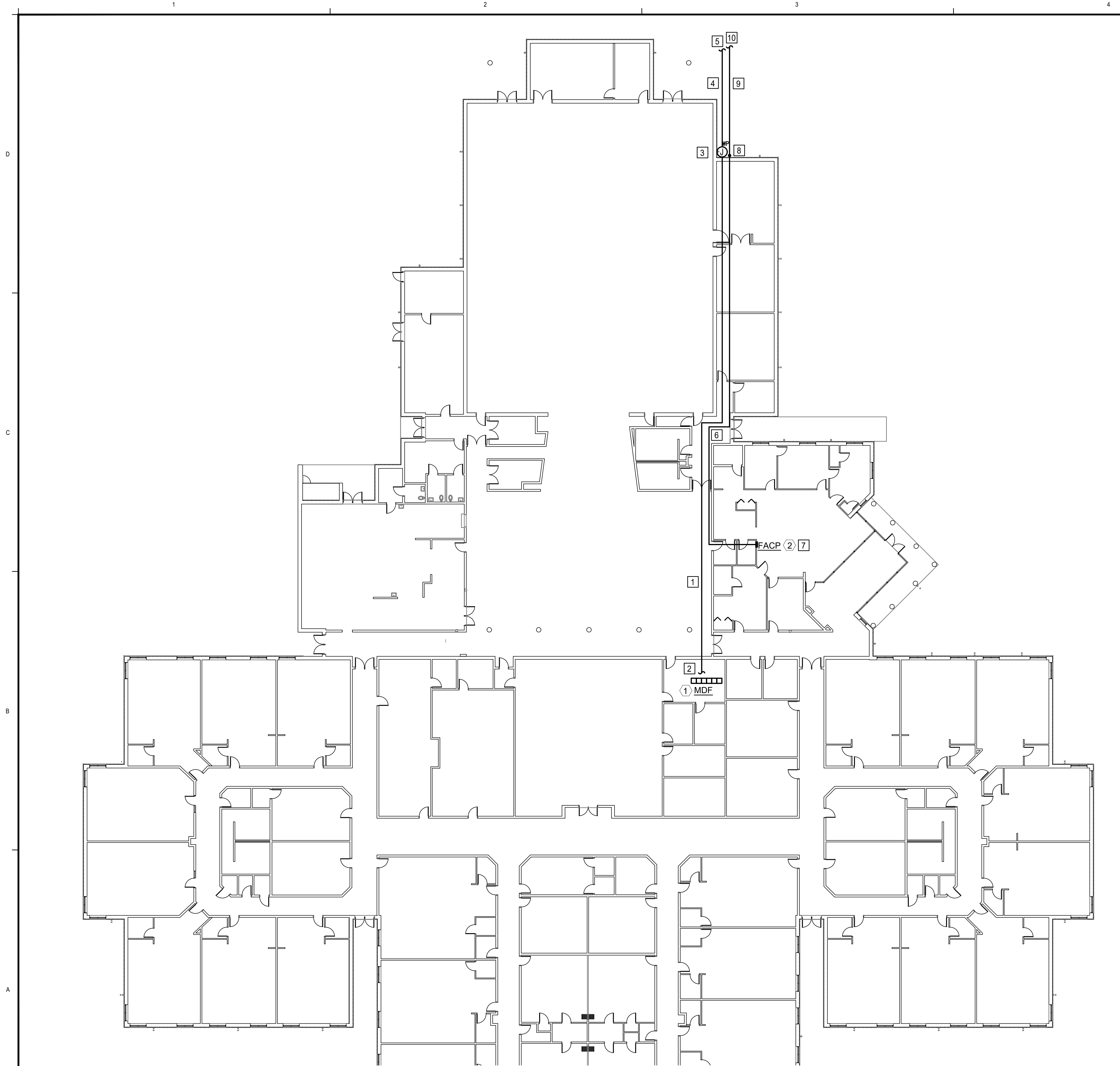
SCALE 1" = 25'-0"



DEMOLITION NOTES (THIS DRAWING ONLY)

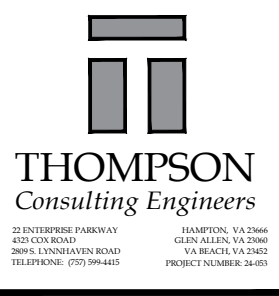
- 1 DISCONNECT EXISTING ELECTRICAL PANEL INSIDE PORTABLE CLASSROOM. REMOVE PANEL FEEDER CONDUIT AND CONDUCTORS BACK TO EXISTING PANELS INDICATED BY DEMOLITION NOTE 3.
- 2 DISCONNECT EXISTING ELECTRICAL PANEL INSIDE PORTABLE CLASSROOM. REMOVE PANEL FEEDER CONDUCTORS BACK TO DOMINION ENERGY KWHR METER. SAVE WEATHERPROOF LB CONDULET AND CONDUIT THROUGH PORTABLE CLASSROOM WALL FOR REUSE. COORDINATE REMOVAL OF KWHR METER AND SERVICE TO METER WITH DOMINION ENERGY. REMOVE KWHR METER BASE AND TURN OVER TO DOMINION ENERGY.
- 3 DISCONNECT TWO EXISTING ELECTRICAL PANELS FROM BOTH SIDES OF WOOD SUPPORT STRUCTURE. REMOVE PANEL FEEDER CONDUITS AND CONDUCTORS BACK TO DOMINION ENERGY KWHR METERS. COORDINATE REMOVAL OF KWHR METERS AND SERVICES TO METERS WITH DOMINION ENERGY. REMOVE KWHR METER BASES AND TURN OVER TO DOMINION ENERGY. REMOVE PANEL SUPPORT STRUCTURE COMPLETE.
- 4 DISCONNECT EXISTING FIRE ALARM WIRING FROM HORN AND PULLSTATION INSIDE PORTABLE CLASSROOM. SAVE HORN AND PULLSTATION INSIDE PORTABLE CLASSROOM FOR REUSE. REMOVE EXISTING FIRE ALARM WIRING RUN OUTSIDE PORTABLE CLASSROOM BACK TO POINT OF ORIGIN INSIDE THE BUILDING. REMOVE EXPOSED CONDUITS TO 3" BELOW GRADE AND ABANDON CONDUITS RUN UNDERGROUND IN PLACE.
- 5 DISCONNECT EXISTING DATA CABLING SERVING DATA RACK INSIDE PORTABLE CLASSROOM. REMOVE ALL EXISTING DATA CABLES BETWEEN PORTABLE CLASSROOMS AND FROM PORTABLE CLASSROOMS BACK TO POINT OF ORIGIN INSIDE THE BUILDING. REMOVE EXPOSED CONDUITS AND ABANDON CONDUITS RUN UNDERGROUND IN PLACE.
- 6 REMOVE GROUND MOUNTED JUNCTION BOX. REMOVE ALL EXISTING AUXILIARY SYSTEMS CABLES TO PORTABLE CLASSROOMS AND BACK TO POINT OF ORIGIN INSIDE THE BUILDING.

description	
by	
date	
mark	revisions
DATE	04.29.2025
PROJECT	23238-00
DESIGNED	DWC
DRAWN	DWC
CHECKED	KC
1317 Executive Blvd, Suite 200 Chesapeake, Virginia 23320 (757)622-2828	
PROJECT	NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION SUFFOLK PUBLIC SCHOOLS 6701 RESPASS BEACH RD SUFFOLK, VIRGINIA
DRAWING	ELECTRICAL SITE PLAN - DEMOLITION & NOTES
SHEET	
PCRE-4	
MSA PROJ 23189	



PARTIAL EXISTING FLOOR PLAN - DEMOLITION & NEW WORK 11

SCALE 1/16" = 1'-0"



DEMOLITION NOTES (THIS DRAWING ONLY)

- 1. COORDINATE DISCONNECTING OF ALL EXISTING DATA, INTERCOM AND CCTV CABLES SERVING PORTABLE CLASSROOMS FROM EXISTING PATCH PANELS IN THE MDF WITH THE OWNERS TECHNOLOGY DEPARTMENT.
- 2. DISCONNECT EXISTING FIRE ALARM WIRING SERVING EXISTING PORTABLE CLASSROOMS FROM FACP. CHANGE FIRE ALARM SYSTEM PROGRAMMING TO ELIMINATE EXISTING PORTABLE CLASSROOMS.

NEW WORK NOTES (THIS DRAWING ONLY)

- 1. PROVIDE ONE (1) 24-STRAND, MULTI MODE, INDOOR / OUTDOOR RATED FIBER OPTIC CABLE IN 2" CONDUIT. RUN CONDUIT ABOVE EXISTING LAY IN TILE CEILINGS, BUT BELOW DRYWALL ATTACHED TO THE BOTTOM OF EXISTING TRUSSES.
- 2. TERMINATE NEW FIBER OPTIC CABLE SERVING RELOCATED PORTABLE CLASSROOMS TO EXISTING FIBER OPTIC PATCH PANELS UTILIZING EXISTING TERMINATION COMPONENTS.
- 3. CORE DRILL EXTERIOR WALL FOR CONDUIT WITH FIBER OPTIC CABLES. SEAL AROUND CONDUIT ON BOTH ENDS TO MAKE WATER-TIGHT TO THE SATISFACTION OF THE OWNER. PROVIDE WEATHERPROOF JUNCTION BOX ON END OF CONDUIT SIZED AS REQUIRED TO SUPPORT BENDING RADIUS OF INDIVIDUAL FIBER OPTIC CABLES.
- 4. PROVIDE ONE (1) 24-STRAND, MULTI MODE, INDOOR / OUTDOOR RATED FIBER OPTIC CABLES IN 2" CONDUIT. BURY CONDUIT 24" BELOW FINISH GRADE MINIMUM. TURN CONDUIT UP EXTERIOR WALL AND EXTEND TO JUNCTION BOX.
- 5. " CONDUIT AND FIBER OPTIC CABLES TO PORTABLE CLASSROOMS. SEE DRAWING PCRE-6 FOR CONTINUATION.
- 6. PROVIDE NEW FIRE ALARM CABLES TO PULL STATIONS AND AUDIO/VISUAL DEVICES IN PORTABLE CLASSROOMS IN 1" CONDUIT. RUN CONDUIT ABOVE EXISTING LAY IN TILE CEILINGS, BUT BELOW DRYWALL ATTACHED TO THE BOTTOM OF EXISTING TRUSSES.
- 7. CONNECT NEW FIRE ALARM CABLES TO EXISTING FACP. CHANGE FIRE ALARM SYSTEM PROGRAMMING TO INCLUDE PULL STATIONS IN RELOCATED PORTABLE CLASSROOMS.
- 8. CORE DRILL EXTERIOR WALL FOR CONDUIT WITH FIRE ALARM CABLES. SEAL AROUND CONDUIT ON BOTH ENDS TO MAKE WATER-TIGHT TO THE SATISFACTION OF THE OWNER. PROVIDE WEATHERPROOF CONDULET ON END OF CONDUIT .
- 9. PROVIDE 1" CONDUIT WITH FIRE ALARM CABLES. BURY CONDUIT 24" BELOW FINISH GRADE MINIMUM. TURN CONDUIT UP EXTERIOR WALL AND EXTEND TO WEATHERPROOF CONDULET.
- 10. 1" CONDUIT AND FIRE ALARM CABLES TO PORTABLE CLASSROOMS. SEE DRAWING PCRE-6 FOR CONTINUATION.
- 11. INSTALL ALL NEW CONDUIT INSIDE THE BUILDING CONCEALED ABOVE THE EXISTING LAY-IN TILE CEILINGS AND BELOW EXISTING DRYWALL ATTACHED TO THE BOTTOMS OF THE EXISTING TRUSSES.

description	
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date	
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DATE	04.29.2025
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DRAWN	DWC
CHECKED	KC

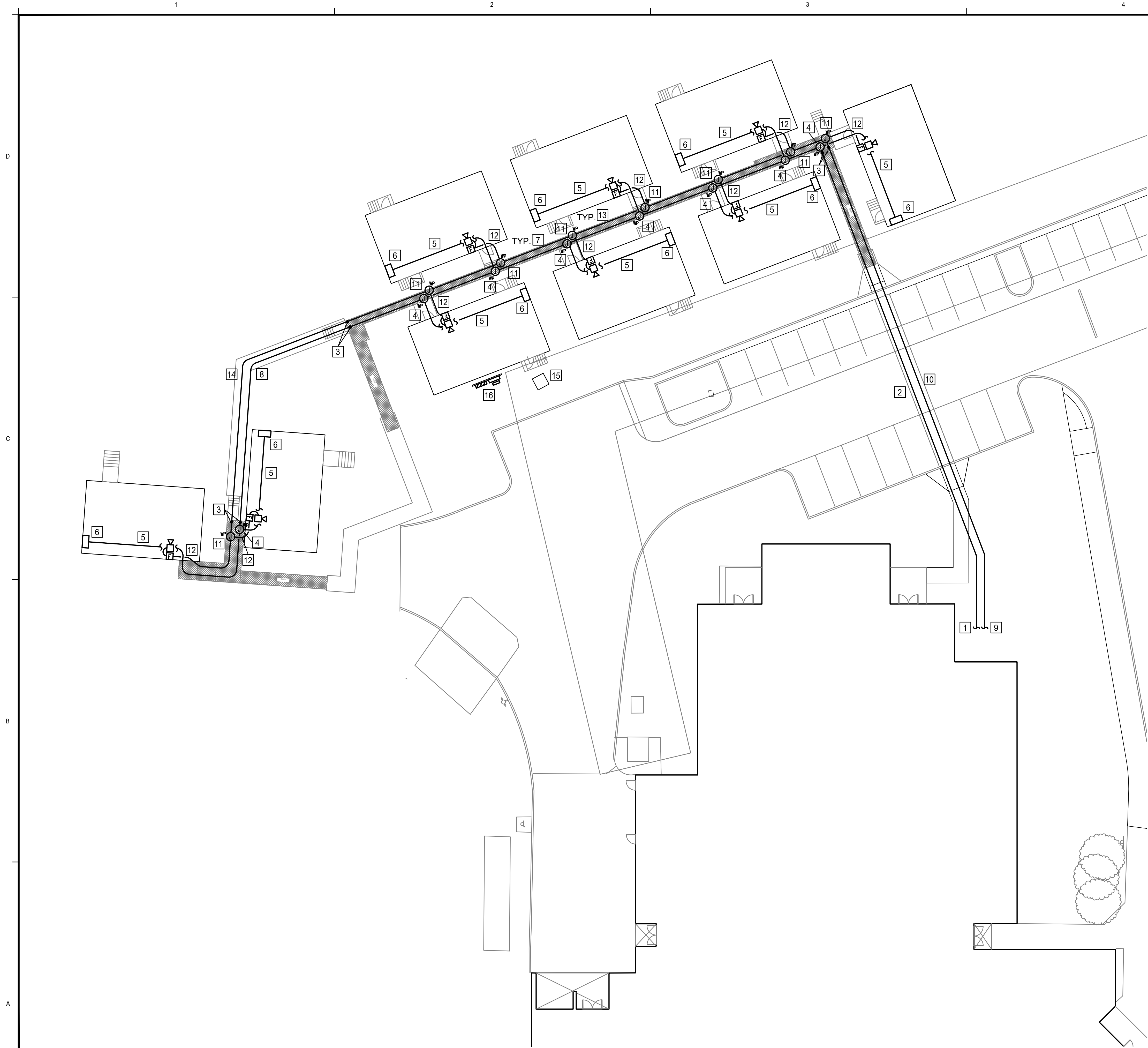
1317 Executive Blvd, Suite 200
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PROJECT	NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION SUFFOLK PUBLIC SCHOOLS 6701 RESPASS BEACH RD SUFFOLK, VIRGINIA
DRAWING	PARTIAL EXISTING FLOOR PLAN - DEMOLITION & NEW WORK AND NOTES

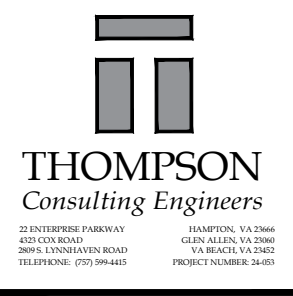
SHEET

PCRE-5

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ELECTRICAL SITE PLAN - NEW WORK
SCALE 1" = 25'-0"



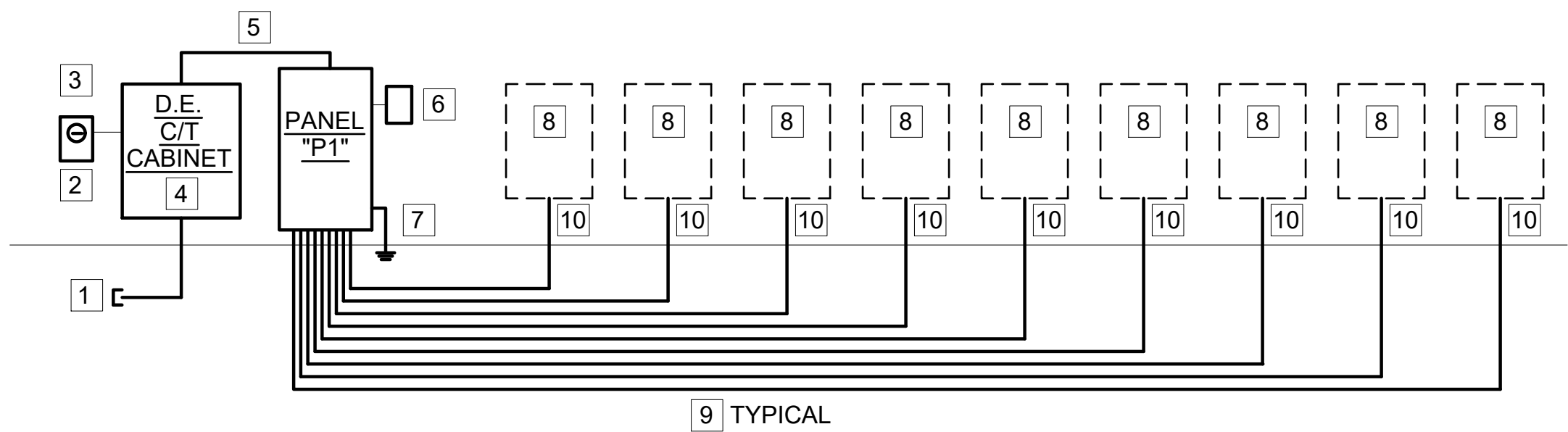
- NEW WORK NOTES** (THIS DRAWING ONLY)
- 1 CONDUIT WITH FIBER OPTIC CABLES. SEE DRAWING PCRE-5 FOR CONTINUATION.
 - 2 PROVIDE ONE (1) 24-STRAND, MULTI MODE, INDOOR / OUTDOOR RATED FIBER OPTIC CABLE IN 2" CONDUIT. RUN CONDUIT 24" BELOW FINISHED GRADE MINIMUM.
 - 3 TURN CONDUIT UP RAISED WALKWAY SUPPORT AND EXTEND TO WETHERPROOF JUNCTION BOX.
 - 4 PROVIDE WEATHERPROOF JUNCTION BOX SIZED AS REQUIRED TO SUPPORT BENDING RADIUS OF INDIVIDUAL FIBER OPTIC CABLES. ATTACH JUNCTION BOX TO BOTTOM OF RAISED WALKWAY STRUCTURE.
 - 5 PROVIDE 2" CONDUIT WITH THE FIBER OPTIC CABLE GOING TO THE IDF RACK IN THE PORTABLE CLASSROOM AND LEAVING THE IDF RACK. ATTACH CONDUIT TO BOTTOM OF RAISED WALKWAY AND BOTTOM OF PORTABLE CLASSROOM STRUCTURE. EXTEND CABLE UP INSIDE EXISTING CONDUIT TO IDF RACK.
 - 6 EXISTING IDF RACK INSIDE PORTABLE CLASSROOM. LEAVE SUFFICIENT SLACK INSIDE THE IDF RACK. ALTER THE CABLE AS REQUIRED TO CONNECT 2 STRANDS OF THE CABLE TO THE EXISTING FIBER OPTIC PATCH PANEL UTILIZING EXISTING TERMINATION COMPONENTS.
 - 7 PROVIDE 2" CONDUIT WITH FIBER OPTIC CABLE. ATTACH CONDUIT TO BOTTOM OF RAISED WALKWAY STRUCTURE.
 - 8 PROVIDE 1" CONDUIT WITH FIBER OPTIC CABLES. RUN CONDUIT 24" BELOW FINISHED GRADE MINIMUM.
 - 9 CONDUIT WITH FIRE ALARM CABLES. SEE DRAWING PCRE-5 FOR CONTINUATION.
 - 10 PROVIDE 1" CONDUIT WITH FIRE ALARM WIRING TO PORTABLE CLASSROOMS. RUN CONDUIT 24" BELOW FINISHED GRADE MINIMUM.
 - 11 PROVIDE WEATHERPROOF JUNCTION BOX FOR FIRE ALARM WIRING. ATTACH JUNCTION BOX TO BOTTOM OF RAISED WALKWAY STRUCTURE.
 - 12 PROVIDE 3/4" CONDUIT WITH FIRE ALARM WIRING. ATTACH CONDUIT TO BOTTOM OF PORTABLE CLASSROOM STRUCTURE. EXTEND FIRE ALARM WIRING INSIDE EXISTING RACEWAY SAVED DURING DEMOLITION AND CONNECT WIRING TO EXISTING FIRE ALARM DEVICES SAVED DURING DEMOLITION.
 - 13 PROVIDE 1" CONDUIT WITH FIRE ALARM WIRING. ATTACH CONDUIT TO BOTTOM OF RAISED WALKWAY STRUCTURE.
 - 14 PROVIDE 3/4" CONDUIT WITH FIRE ALARM WIRING. RUN CONDUIT 24" BELOW FINISHED GRADE MINIMUM.
 - 15 EXISTING DOMINION ENERGY PAD MOUNTED TRANSFORMER.
 - 16 INSTALL NEW PANEL "P1", DOMINION ENERGY C/T CABINET, AND DOMINION ENERGY KWHR METER ON SUPPORT STRUCTURE IN ACCORDANCE WITH "PANEL "P1" MOUNTING DETAIL" ON DRAWING PCRE-7.

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date	
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Chesapeake, Virginia 23320
(757)622-2828

PROJECT	NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION SUFFOLK PUBLIC SCHOOLS 6701 RESPASS BEACH RD SUFFOLK, VIRGINIA
DRAWING	ELECTRICAL SITE PLAN - NEW WORK & NOTES

SHEET
PCRE-6
MSA PROJ 23189

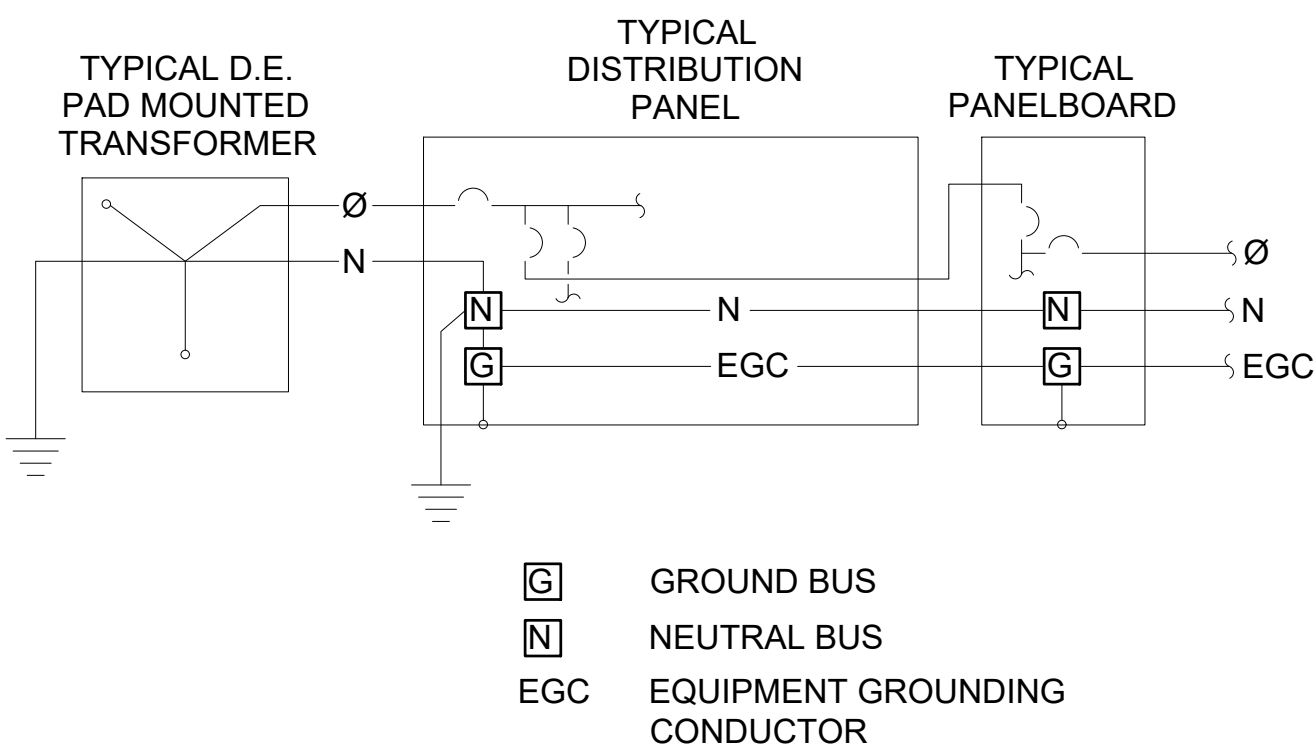


PORTABLE CLASSROOM POWER RISER DIAGRAM

NOT TO SCALE

POWER RISER DIAGRAM NOTES

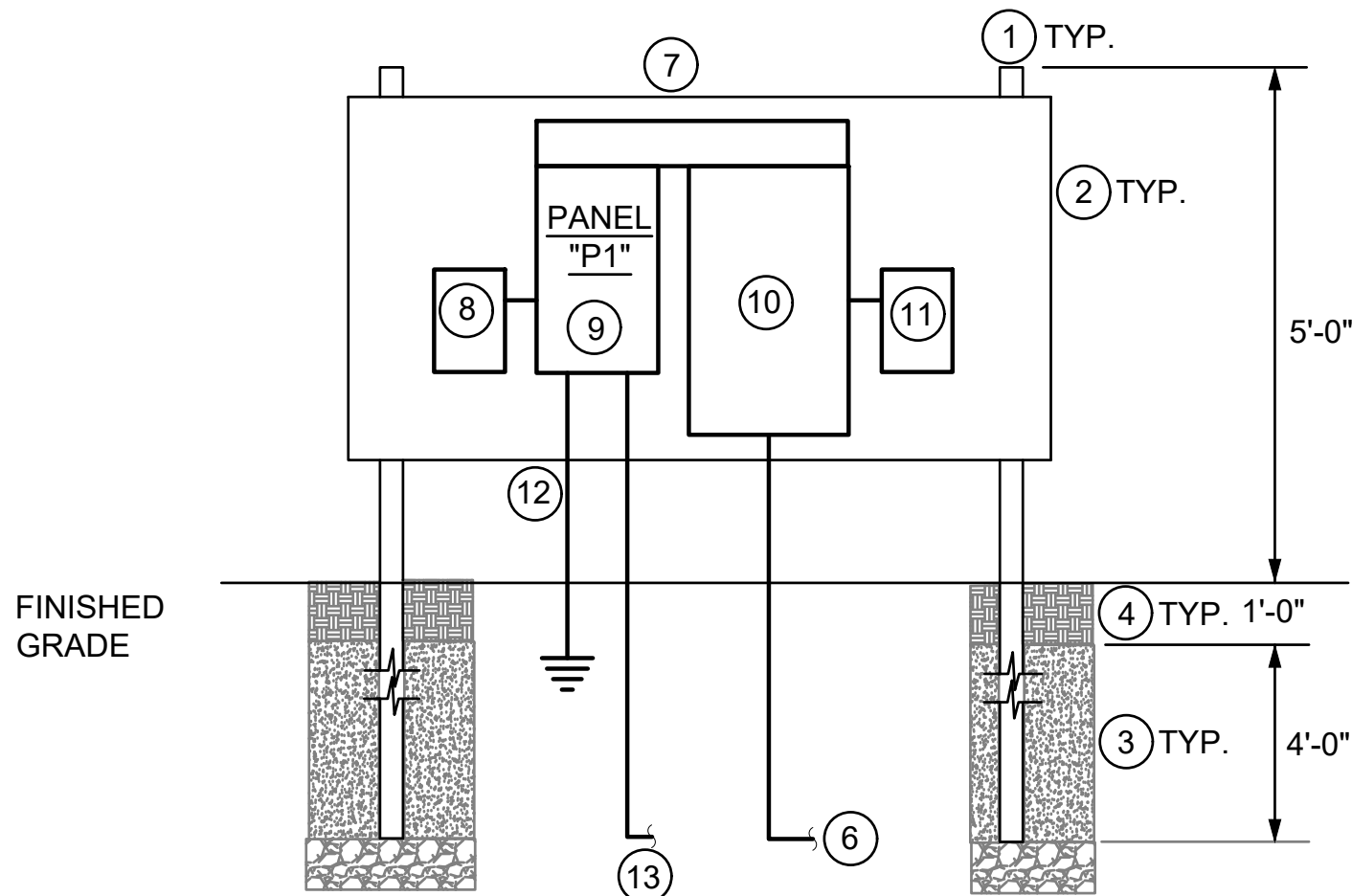
- 1 PROVIDE TWO (2) 4" CONDUITS FOR USE BY DOMINION ENERGY. TERMINATE CONDUITS 5'-0" BEYOND C/T CABINET AND INSIDE THE C/T CABINET AS DIRECTED BY DOMINION ENERGY.
- 2 DOMINION ENERGY KWHR METER. FURNISHED BY DOMINION ENERGY AND INSTALLED AS DIRECTED BY DOMINION ENERGY.
- 3 PROVIDE 1-1/4" EMPTY CONDUIT FOR USE BY DOMINION ENERGY.
- 4 DOMINION ENERGY C/T CABINET. FURNISHED BY DOMINION ENERGY AND INSTALLED AS DIRECTED BY DOMINION ENERGY.
- 5 PROVIDE THREE (3) 2" CONDUITS WITH 2 #3/0 PHASE CONDUCTORS AND 1 #3/0 NEUTRAL CONDUCTOR IN EACH CONDUIT. TERMINATE CONDUCTORS IN C/T CABINET AS DIRECTED BY DOMINION ENERGY.
- 6 PROVIDE SERVICE SURGE PROTECTIVE DEVICE "SPD" IN NEMA 3R WEATHERPROOF ENCLOSURE IN ACCORDANCE WITH SPECIFICATIONS ON DRAWING PCRE-2. PROVIDE 4 #6 AND 1 #10 GROUND IN 1-1/4" CONDUIT AND CONNECT TO CIRCUIT BREAKER IN ACCORDANCE WITH PANEL "P1" SCHEDULE.
- 7 PROVIDE #1/0 COPPER GROUNDING ELECTRODE CONDUCTOR TO ELECTRICAL SERVICE SUPPORT STRUCTURE, 3/4" X 10'-0" COPPER GROUND ROD, AND INSTALL IN ACCORDANCE WITH ARTICLE 250 OF THE N.E.C.
- 8 EXISTING 100 AMP, 240/120 VOLT, 1 PHASE, 3 WIRE PANELBOARD LOCATED INSIDE PORTABLE CLASSROOM.
- 9 RUN PANEL FEEDER BELOW GRADE TO PORTABLE CLASSROOM. CONVERT PVC CONDUIT UNDERGROUND TO IMC CONDUIT AND EXTEND UP WALL OF PORTABLE CLASSROOM. CONNECT CONDUIT TO EXISTING WEATHERPROOF LB CONDULET SAVED DURING DEMOLITION AND EXTEND CONDUCTORS IN EXISTING CONDUIT TO PANEL INSIDE PORTABLE CLASSROOM.
- 10 PROVIDE 3 #3 AND 1 #8 GROUND IN 1-1/4" CONDUIT.



TYPICAL GROUNDING DETAIL

NOT TO SCALE

LOCATION: MOUNTING: Surface # NEMA: Type 1					PANEL: P1 VOLTS: 120/240 PHASES: 1 WIRES: 3					KAIC RATING: 10 MAINS TYPE: M.C.B. MAINS RATING: 600 A				
CKT NO	LOAD SERVED	P	C/B TRIP	WIRE SIZE	A		B		WIRE SIZE	C/B TRIP	P	LOAD SERVED	CKT NO	
1	PORTABLE CLASSROOM PANEL	2	100	3	50.0	50.0			3	100	2	PORTABLE CLASSROOM PANEL	2	
3							50.0	50.0					4	
5	PORTABLE CLASSROOM PANEL	2	100	3	50.0	50.0			3	100	2	PORTABLE CLASSROOM PANEL	6	
7							50.0	50.0					8	
9	PORTABLE CLASSROOM PANEL	2	100	3	50.0	50.0			3	100	2	PORTABLE CLASSROOM PANEL	10	
11							50.0	50.0					12	
13	PORTABLE CLASSROOM PANEL	2	100	3	50.0	50.0			3	100	2	PORTABLE CLASSROOM PANEL	14	
15							50.0	50.0					16	
17	PORTABLE CLASSROOM PANEL	2	100	3	50.0	1.0			10	30	2	SPD	18	
19							50.0	1.0					20	
21	SPACE	1	--	--	--	--			--	--	1	SPACE	22	
23	SPACE	1	--	--			--	--	--	--	1	SPACE	24	
25	SPACE	1	--	--	--	--			--	--	1	SPACE	26	
27	SPACE	1	--	--			--	--	--	--	1	SPACE	28	
CONNECTED LOAD (AMPS):					451.0 A		451.0 A							
CONNECTED LOAD (KVA):					55 kVA		55 kVA							
TOTAL CONNECTED LOAD (KVA):					110 kVA		TOTAL ESTIMATED DEMAND LOAD (KVA):					110 kVA		
NOTES:														
# PROVIDE UL SERVICE ENTRANCE RATED PANEL IN NEMA 3R WEATHERPROOF ENCLOSURE.														

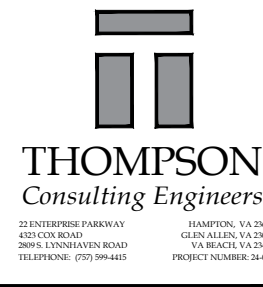


PANEL "P1" MOUNTING DETAIL

NOT TO SCALE

PANEL "P1" MOUNTING DETAIL NOTES:

- 1 PROVIDE 4" X 4" SALT TREATED WOOD POST.
- 2 PROVIDE 3/4" THICK SALT TREATED MARINE GRADE PLYWOOD FOR EQUIPMENT MOUNTING. SECURE PLYWOOD TO POSTS WITH STAINLESS STEEL HARDWARE.
- 3 SET END OF POST AND CONCRETE FOUNDATION ON A 6" THICK LAYER OF TIGHTLY COMPACTED CRUSHER-RUN STONE.
- 4 PROVIDE 12" DIAMETER HOLE FOR I-BEAM SUPPORT. PROVIDE 4' DEEP CONCRETE FOUNDATION AROUND I-BEAM WITH 12" OF SOIL ON TOP OF CONCRETE.
- 5 INSTALL STRUCTURE TO ENSURE THAT N.E.C. REQUIRED WORKING CLEARANCES ARE OBTAINED.
- 6 SERVICE ENTRANCE CONDUITS FOR USE BY DOMINION ENERGY. SEE "POWER RISER DIAGRAM" ON THIS DRAWING FOR ADDITIONAL INFORMATION.
- 7 PROVIDE NEMA 3R WEATHPROOF WIRING TROUGH (SIZE AS REQUIRED) WITH 6 #3/0 PHASE CONDUCTORS AND 3 #3/0 NEUTRAL CONDUCTORS. CONNECT CONDUCTORS INSIDE C/T CABINET AS DIRECTED BY DOMINION ENERGY.
- 8 PROVIDE SERVICE ENTRANCE SPD IN NEMA 3R ENCLOSURE IN ACCORDANCE WITH SPECIFICATIONS. SECURE SPD TO PLYWOOD WITH STAINLESS STEEL HARDWARE.
- 9 PROVIDE PANEL "P1" WITH NEMA 3R WEATHERPROOF VENTED ENCLOSURE. SEE PANELBOARD SCHEDULE. SECURE CABINET TO PLYWOOD WITH STAINLESS STEEL HARDWARE.
- 10 DOMINION ENERGY C/T CABINET. FURNISHED BY DOMINION ENERGY AND INSTALLED AS DIRECTED BY DOMINION ENERGY. SECURE CABINET TO PLYWOOD WITH STAINLESS STEEL HARDWARE.
- 11 DOMINION ENERGY KWHR METER. FURNISHED BY DOMINION ENERGY AND INSTALLED AS DIRECTED BY DOMINION ENERGY. SECURE METER TO PLYWOOD WITH STAINLESS STEEL HARDWARE. PROVIDE 1-1/4" EMPTY CONDUIT FROM KWHR METER TO C/T CABINET FOR USE BY DOMINION ENERGY.
- 12 PROVIDE #1/0 COPPER GROUNDING ELECTRODE CONDUCTOR CONNECTED TO 3/4" x 10' COPPER CLAD GROUND ROD. INSTALL GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- 13 NINE (9) PORTABLE CLASSROOM PANEL FEEDERS. SEE "POWER RISER DIAGRAM" ON THIS DRAWING FOR ADDITIONAL INFORMATION.



DATE	04.29.2025	PROJECT	23238-00	DESIGNED	DWC	DRAWN	DWC	CHECKED	KC
DESCRIPTION		BY		DATE		MARK		REVISIONS	



PROJECT	NORTHERN SHORES ELEMENTARY SCHOOL - PORTABLE RELOCATION SUFFOLK PUBLIC SCHOOLS 6701 RESPASS BEACH RD SUFFOLK, VIRGINIA
DRAWING	POWER RISER RISER DIAGRAM, NOTES & DETAILS

SHEET	PCRE-7
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