



Howard High School

Building Permit Application

Howard County Maryland
Department of Inspections, Licenses and Permits
3430 Court House Drive
Permits: 410-313-2455
www.howardcountymd.gov

Date Received: _____

Permit No.:

B16002500

Building Address: 6501 Ducketts Ln
 City: Elkridge State: MD Zip Code: 21075
 Suite/Apt. # _____ SDP/WP/BA #: SDP-12-042
 Census Tract: _____ Subdivision: _____
 Section: _____ Area: _____ Lot: _____
 Tax Map: 0037 Parcel: 0569 Grid: 0012
 Zoning: R12 Map Coordinates: 4937-A8 Lot Size: 9.8440

Property Owner's Name: Howard County Public School System
 Address: 10910 Clarksville Pike
 City: Ellicott City State: MD Zip Code: 21042
 Phone: 410.313.8204 Fax: 410.313.7188
 Email: gregory_maciulla@hcpss.org

Existing Use: Public School
 Proposed Use: Public School
 Estimated Construction Cost: \$ 475,000
 Description of Work: Install one (1) 9-unit portable/relocatable to provide additional classroom space to accommodate students and staff. 66' X 138'
 Occupant or Tenant: HCPSS -Ducketts Lane Elementary School
 Was tenant space previously occupied? Yes No
 Contact Name: Greg Maciulla (HCPSS - School Construction)
 Address: 8045 Harriet Tubman Lane
 City: Columbia State: MD Zip Code: 21044
 Phone: 410.313.8204 Fax: 410.313.7188
 Email: gregory_maciulla@hcpss.org

Applicant's Name & Mailing Address, (If other than stated herein)
 Applicant's Name: _____
 Address: _____
 City: _____ State: _____ Zip Code: _____
 Phone: _____ Fax: _____
 Email: _____

Contractor Company: J V Schafer
 Contact Person: Jason Miller
 Address: 1309 Q Continental Drive
 City: Abington State: MD Zip Code: 21009
 License No.: 12017148
 Phone: 410.335.3000 Fax: 410.335.6529
 Email: jason.miller@jvschafer.com

Engineer/Architect Company: Fisher, Collins & Carter, Inc.
 Responsible Design Prof.: Chuck Crovo
 Address: 10272 Baltimore National Pike
 City: Ellicott City State: MD Zip Code: 21042
 Phone: 410.461.2855 Fax: _____
 Email: ccrovo@fcc-eng.com

Commercial Building Characteristics	Residential Building Characteristics	
Height: <u>11'4 1/2"</u>	<input type="checkbox"/> SF Dwelling <input type="checkbox"/> SF Townhouse	
No. of stories: <u>1</u>	Depth Width	
Gross area, sq. ft./floor: <u>3,807</u>	1 st floor: _____	
	2 nd floor: _____	
Area of construction (sq. ft.): _____	Basement: _____	
Use group: _____	<input type="checkbox"/> Finished Basement	
	<input type="checkbox"/> Unfinished Basement	
	<input type="checkbox"/> Crawl Space	
Construction type:	<input type="checkbox"/> Slab on Grade	
<input type="checkbox"/> Reinforced Concrete	No. of Bedrooms: _____	
<input type="checkbox"/> Structural Steel	Multi-family Dwelling	
<input type="checkbox"/> Masonry	No. of efficiency units: _____	
<input type="checkbox"/> Wood Frame	No. of 1 BR units: _____	
<input checked="" type="checkbox"/> State Certified Modular	No. of 2 BR units: _____	
	No. of 3 BR units: _____	
	Other Structure: _____	
	Dimensions: _____	
<input checked="" type="checkbox"/> Roadside Tree Project Permit	Footings: _____	
<input type="checkbox"/> Yes <input type="checkbox"/> No	Roof: _____	
Roadside Tree Project Permit #	<input type="checkbox"/> State Certified Modular	
	<input type="checkbox"/> Manufactured Home	

Utilities	
Water Supply	
<input checked="" type="checkbox"/> Public	
<input type="checkbox"/> Private	
Sewage Disposal	
<input type="checkbox"/> Public	
<input checked="" type="checkbox"/> Private	2- 2000 gal. storage tanks
Electric: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Heating System	
<input checked="" type="checkbox"/> Electric <input type="checkbox"/> Oil	
<input type="checkbox"/> Natural Gas <input type="checkbox"/> Propane Gas	
<input type="checkbox"/> Other: _____	
Sprinkler System:	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Grading Permit Number: _____	
Building Shell Permit Number: _____	

RECEIVED

JUN 10 2016

THE UNDERSIGNED HEREBY CERTIFIES AND AGREES AS FOLLOWS: (1) THAT HE/SHE IS AUTHORIZED TO MAKE THIS APPLICATION; (2) THAT THE INFORMATION IS CORRECT AND THAT HE/SHE WILL COMPLY WITH ALL REGULATIONS OF HOWARD COUNTY WHICH ARE APPLICABLE THERETO; (4) THAT HE/SHE WILL PERFORM NO WORK ON THE ABOVE REFERENCED PROPERTY NOT SPECIFICALLY DESCRIBED IN THIS APPLICATION; (5) THAT HE/SHE GRANTS COUNTY OFFICIALS THE RIGHT TO ENTER ONTO THIS PROPERTY FOR THE PURPOSE OF INSPECTING THE WORK PERMITTED AND POSITIVE RESULTS

Applicant's Signature: Jason Miller
 jason.miller@jvschafer.com
 Email Address: _____
 Project Manager, J V Schafer
 Title/Company: _____

Print Name: Jason Miller
 Date: June 7, 2016

(Redline done to add portables)

Checks Payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 PLEASE WRITE NEATLY & LEGIBLY
 -FOR OFFICE USE ONLY-

AGENCY	DATE	SIGNATURE OF APPROVAL
State Highways		
Building Officials		
PSZA (Zoning)		
PSZA (Engineering)		
Health		

Is Sediment Control approval required for issuance? Yes No
 CONTINGENCY CONSTRUCTION START

DPZ SETBACK INFORMATION	
Front:	
Rear:	
Side:	
Side St.:	
All minimum setbacks met?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is Entrance Permit Required?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Historic District?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Lot Coverage for New Town Zone:	
SDP/Red-line approval date:	

Filing Fee	\$
Permit Fee	\$
Tech Fee	\$ <i>N/A</i>
Excise Tax	\$
PSFS	\$
Guaranty Fund	\$
Add'l per Fee	\$
Total Fees	\$
Sub- Total Paid	\$
Balance Due	\$
Check	#

816002500



Bureau of Environmental Health

8930 Stanford Boulevard, Columbia, MD 21045
Main: 410-313-2640 | Fax: 410-313-2648
TDD 410-313-2323 | Toll Free 1-866-313-6300
www.hchealth.org
Facebook: www.facebook.com/hocohealth
Twitter: HowardCoHealthDep

Maura J. Rossman, M.D., Health Officer

MEMORANDUM

TO: Greg Maciulla
Project Manager, Howard County Public School System

FROM: Jeff Williams
Program Supervisor, Well & Septic Program

RE: Portable Trailer at Ducketts Lane Elementary School

DATE: April 11, 2016

The proposed portable trailer location at Ducketts Lane Elementary School is located over the geothermal well field. There are multiple well locations in the area and the Health Department has no surveyed as-built plan indicating the upper terminal depth or exact location of each borehole. As a result, it would be highly likely that installation of footers for the trailer would encounter and damage the geothermal system.

For this reason, we would recommend the use of alternate means of setting the trailer, such as ABS pads subject to their meeting all applicable safety and construction standards. If there are any questions, please contact me at jewilliams@howardcountymd.gov or 410-313-1771.

SPEED MEMO
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
DEVELOPMENT ENGINEERING DIVISION
(410) 313-2420

To: Charles J. Crovo, Sr., P.E.
Fisher, Collins & Carter, Inc.
10272 Baltimore National Pike
Ellicott City, Maryland 21042

Date: April 28, 2016
Reviewer: Philip M. Thompson
of sheets revised: 1

Subject: **PROPOSED SITE DEVELOPMENT PLAN REVISION**

SDP-12-042 The Legacy at Ducketts Ridge (ES #41)

This division has reviewed the revised site development plan for the referenced development submitted with a letter dated April 20, 2016 showing the following changes on sheet(s) 3 of 39.

Revise the plan to add a portable classroom.

- THE REVISIONS ARE APPROVED
 THE REVISIONS ARE APPROVED, SUBJECT TO THE FOLLOWING:

ALL CHANGES MUST BE DONE IN BLACK INK ON THE ORIGINALS.

DPZ/DLD: (1) Identify the shaded feature north of and adjacent to the portable classroom. DPZ/DED: (1) Provide a detailed note in the revision block.

Additional Sheet Attached

YOU ARE REQUIRED TO INCORPORATE THE REVISIONS ON THE ORIGINAL APPROVED SITE DEVELOPMENT PLAN (SDP) on file with Large Format Imaging Services located on the ground floor of the George Howard Building, WITHIN ONE WEEK OF RECEIPT OF THIS MEMO AND PRIOR TO ANY SUBSEQUENT CHANGES REQUESTED. A DATED NOTE MUST BE MADE ON THE PLAN IDENTIFYING THE CHANGES. Arrangements to make these changes can be made by contacting Large Format Imaging Services at (410) 313-2073. A distribution charge of \$3.00 per plan sheet is required at the time these changes are made to the originals. Make checks payable to: Director of Finance. (Distribution as follows: 2 - Construction Inspection Division).

CC: Large Format Imaging Service/plan attached
DILP/plan attached
CID/plan attached
DLD (2)/transmittal only
Zoning/transmittal only
DED File/plan attached



Jim Witmer, P.E.
Development Engineering Division

"SELF CERTIFICATION"

(To be filled out at the time originals are updated to reflect these approved changes)

"On _____, I, _____ representing the firm of _____
(Date) (Employee Name)

Certify that I have met all the conditions

(Firm Name)

Of approval noted above, and I have made only those revisions approved."



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Sales

For sales please contact your nearest sales representative.

Contact Us

Email: sales@olivertechnologies.com

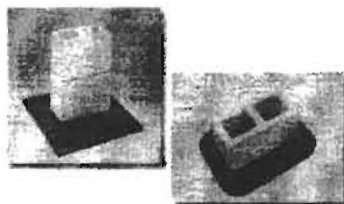
Phone: 800.284.7437

Address: 467 Swan Avenue
Hohenwald, TN 38462

ABS Pier Pads

Tested and approved by the leading home manufacturers and most states.

Square Pads & Oval Pads



Benefits

- Lightweight
- Easy to install
- Cost effective
- Non-Porous (not affected by frost heave or thaw)
- Greater surface coverage
- UV tested and approved
- Load tested to 30,000 lbs.
- Environmentally Safe (made from recycled materials)

[Video Installation](#) | [PDF Installation](#)

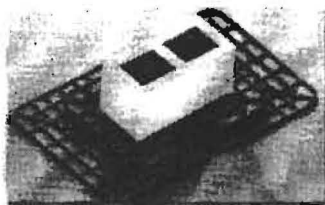
Available Sizes

PAD SIZE	ID NO.	PAD AREA	1000 PSF SOIL	2000 PSF SOIL	3000 PSF SOIL
Oval 18" x 18.5"	1055-23/AIT-06-1000	288 sq. in.	2000 lbs.	4000 lbs.	6000 lbs.
Oval 17" x 22"	1055-18/AIT-06-1001	360 sq. in.	2500 lbs.	5000 lbs.	7500 lbs.
Oval 17.5" x 22.5"	1055-21	384 sq. in.	2667 lbs.	6000 lbs.	8000 lbs.
Oval 17.5" x 25.5"	1055-17/AIT-06-1002	432 sq. in.	3000 lbs.	6000 lbs.	9000 lbs.
Oval 21" x 29"	1055-22/AIT-06-1003	578 sq. in.	4000 lbs.	8000 lbs.	12000 lbs.
Oval 23.25" x 31.25"	1055-20/AIT-06-1004	675 sq. in.	4694 lbs.	9388 lbs.	13988 lbs.

PAD SIZE	ID NO.	PAD AREA	1000 PSF SOIL	2000 PSF SOIL	3000 PSF SOIL
Square 16" x 16"	1055-14/AIT-06-1005	256 sq. in.	1785 lbs.	3560 lbs.	5333 lbs.
Square 18.5" x 18.5"	1055-9/AIT-06-1006	342 sq. in.	2375 lbs.	4750 lbs.	7100 lbs.
Square 20" x 20"	1055-7/AIT-06-1007	400 sq. in.	2750 lbs.	5500 lbs.	8250 lbs.
Square 24" x 24"	1055-13/AIT-06-1008	576 sq. in.	4000 lbs.	8000 lbs.	12000 lbs.

* CONCRETE BLOCKS ARE REQUIRED TO BE DOUBLE BLOCKED

Multi-Pad Configurations



MAXIMUM PIER LOAD IN POUNDS:			
	8" Cell Block	Soil Bearing Value	Maximum Load
32" x 14.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	4000 lbs.
	Double Stack	2000 lbs. / sq. ft.	8000 lbs. *
34" x 22" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	5000 lbs.
	Double Stack	2000 lbs. / sq. ft.	10000 lbs. *
35" x 23.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	6000 lbs.
	Double Stack	2000 lbs. / sq. ft.	12000 lbs. *



MADE FROM RECYCLED MATERIAL

**See [State Approvals](#) to verify that product is approved for use in your state.





Installation Instructions for ABS Pads For use on all Mobile and Manufactured Homes, including HUD approved Homes and Modular Building Patent #5503500 and other patents pending

GENERAL INSTRUCTIONS:

1. All pads are to be installed flat side down, ribbed side up.
2. The ground under the pads should be leveled as smooth as possible with all vegetation and debris removed. Pads to be placed on evenly compacted soil, at or below the frost-line or otherwise protected from the effects of frost. Refer to NCSBCS/ANSI A225.1
3. Pier & pad spacing will be determined by the manufactured homes' written set-up instructions or any local or state codes.
4. Center blocks on ABS pad and complete pier.
5. The open cells between the ribbing on the upper side of the pads may be filled with soil or sand after installation to prevent any accumulation of stagnant water in the pads.
6. A pocket penetrometer may be used to determine the actual soil bearing value. If no soil testing equipment is available – use an assumed soil value of 1000 lbs. / square foot.

NOTES:

1. All pad sizes shown are nominal dimensions and may vary up to 1/8".
2. *The maximum deflection* in a single pad is 5/8" measured from the highest point to the lowest point of the top face.
(NOTE: Actual test results were less than 5/8")
3. Pad loads are the same when using single stack or double stack blocks.
4. The maximum load at any intermediate soil value may be interpolated between the next lower and next higher soil values given in the table below.
5. Any ABS pad configuration may be used to replace a home manufacturer's recommended concrete or wood base pad.
6. Steel Piers: All pads are tested with steel piers on 1000 PSF soil density unless otherwise noted. If required, attach with 2" #12 x 1/2" hex tech screws. Minimum Pier Base 7 1/4". The Multi -Pad configuration requires a minimum 9 1/4" pier base.
7. Available pads tested on 2000 PSF soil capacity using steel piers are: ID #1055-14, 1055-9, 1055-7 and 1055-13.
8. If soil capacities exceed 3000 psf, use the 3000 psf soil values from the table.

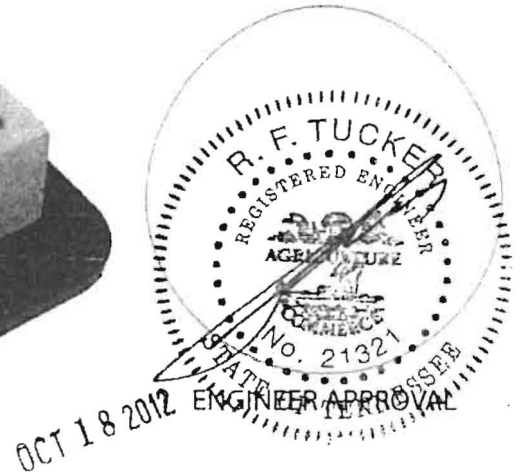
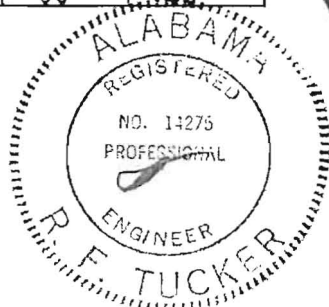
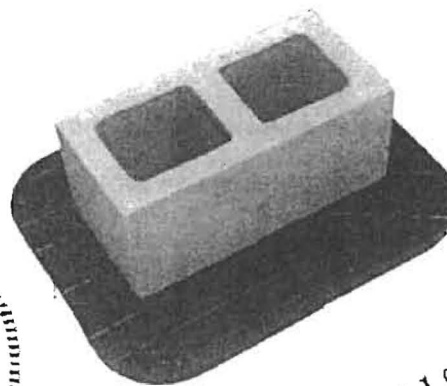
PAD SIZE	ID NO.	PAD AREA	1000 PSF	1500 PSF	2000 PSF	2500 PSF	3000 PSF
Oval 16" x 18.5"	1055-23/AIT-06-1000	288 sq. in.	2000 lbs.	3000 lbs.	4000 lbs.	5000 lbs.	6000 lbs.
Oval 17" x 22"	1055-16/AIT-06-1001	360 sq. in.	2500 lbs.	3750 lbs.	5000 lbs.	6250 lbs.	7500 lbs.
Oval 17.5" x 22.5"	1055-21	384 sq. in.	2667 lbs.	4000 lbs.	5334 lbs.	6667 lbs.	8000 lbs. *
Oval 17.5" x 25.5"	1055-17/AIT-06-1002	432 sq. in.	3000 lbs.	4500 lbs.	6000 lbs.	7500 lbs.	9000 lbs. *
Oval 21" x 29"	1055-22/AIT-06-1003	576 sq. in.	4000 lbs.	6000 lbs.	8000 lbs. *	10000 lbs. *	12000 lbs. *
Oval 23.25" x 31.25"	1055-20/AIT-06-1004	675 sq. in.	4688 lbs.	7032 lbs.	9376 lbs. *	11720 lbs. *	14064 lbs. *

PAD SIZE	ID NO.	PAD AREA	1000 PSF	1500 PSF	2000 PSF	2500 PSF	3000 PSF
Square 16" x 16"	1055-14/AIT-06-1005	256 sq. in.	1778 lbs.	2664 lbs.	3556 lbs.	4445 lbs.	5333 lbs.
Square 18.5" x 18.5"	1055-9/AIT-06-1006	342 sq. in.	2375 lbs.	3550 lbs.	4750 lbs.	5935 lbs.	7100 lbs.
Square 20" x 20"	1055-7/AIT-06-1007	400 sq. in.	2750 lbs.	4125 lbs.	5500 lbs.	6875 lbs.	8250 lbs. *
Square 24" x 24"	1055-13/AIT-06-1008	576 sq. in.	4000 lbs.	6000 lbs.	8000 lbs. *	8000 lbs. *	8000 lbs. *

* Indicates that Piers are required to be double blocked.

EXAMPLE: 16' x 80' section (Alabama only)

PAD SIZE	1000 PSF	2000 PSF
Oval 16" x 18.5"	3'0"	6'0"
Oval 17" x 22"	3'9"	7'6"
Oval 17.5" x 22.5"	4'0"	8'0"
Oval 17.5" x 25.5"	4'5"	8'0"
Oval 21" x 29"	6'0"	8'0"

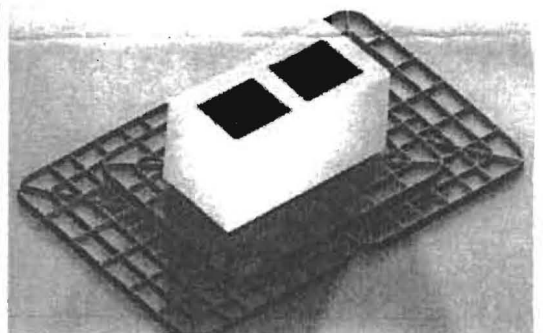
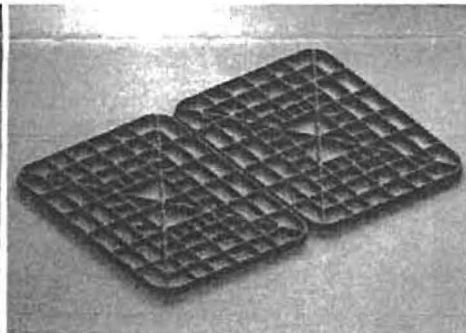
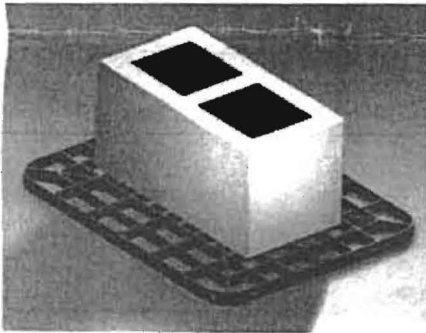


Multi-Pad Configurations

ABS Pad Types			8" Cell Block		Soil Bearing Value	Maximum Load
Oval 16" x 18.5" Pad	2.00 Square Feet	ID # 1055-23/AIT-06-1000	32" x 18.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	4000 lbs.
Oval 32" x 18.5" Pad Configuration (03)	4.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	8000 lbs. *
Oval 17" x 22" Pad	2.50 Square Feet	ID # 1055-16-AIT-06-1001	34" x 22" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	5000 lbs.
Oval 34" x 22" Pad Configuration (03)	5.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	10000 lbs. *
Oval 17.5" x 25.5" Pad	3.00 Square Feet	ID # 1055-17/AIT-06-1002	35" x 25.5" Pad Configuration	Single Stack	1000 lbs. / sq. ft.	6000 lbs.
Oval 35" x 25.5" Pad Configuration (03)	6.00 Square Feet			Double Stack	2000 lbs. / sq. ft.	12000 lbs. *

*Concrete blocks are only rated at 8000 pounds, 8001 pounds and higher must be double stacked.

PAD ASSEMBLY



STEP 1 - 17" x 22" ABS Pad **STEP 2 - (2) 17" x 22" ABS PADS**
(34" x 22" Configuration)

STEP 3 - Complete Assembly
34" x 22" Multi-pad Configuration

NOTES:

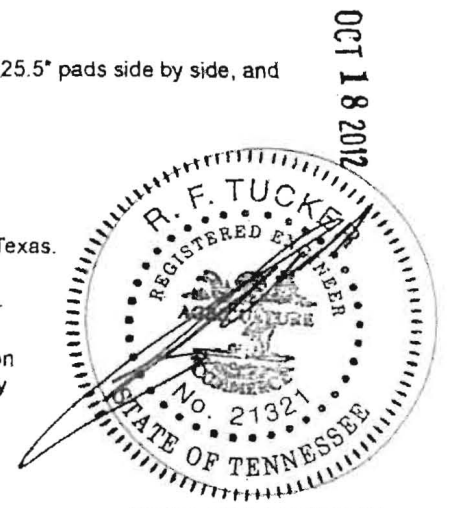
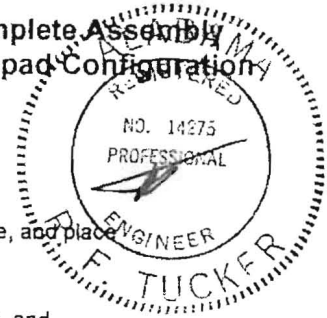
- General instructions (on reverse) apply to all multi – pad configurations.
- The 32" x 18.5" pad configuration is formed by using (3) 16" x 18.5" ABS Pads. Place (2) 16" x 18.5" side by side, and place (1) 16" x 18.5" on top, laid in the opposite direction to the bottom pads.
- The 34" x 22" pad configuration is formed by using (3) 17" x 22" ABS Pads. Place (2) 17" x 22" pads side by side, and (1) 17" x 22" pad on top. The top pad is laid in the opposite direction as the bottom pads.
- The 35" x 25.5" pad configuration is formed by using (3) 17.5" x 25.5" ABS Pads. Place (2) 17.5" x 25.5" pads side by side, and (1) 17.5" x 25.5" pad on top. The top pad is laid in the opposite direction to the bottom pads.

STATE SPECIFIC NOTES:

TEXAS: 17.5" x 22.5" ID #1055-21 and 23.25" x 31.25" ID #1055-20 may not be installed in the State of Texas.

CALIFORNIA: Use an assumed value of 1000 lb/sq. ft. unless engineering and calculations are provided.

ALABAMA: For the State of Alabama all ABS pads shall not have more than 3/8" deflection. See chart on page one for details on correct installation in Alabama. The 23.25" x 31.25" ID#1055-20 may not be installed in the State of Alabama.



ENGINEER APPROVAL

Hatfield's Equipment and Dedication Services, Inc.

P.O. Box 519 • Annapolis Junction, MD 20701-0519
Office: 301-490-4289 / 888-490-4289 • Fax: 301-490-5794

Howard County Public School
System
Construction Services
8800 Ridge Road
Ellicott City, MD 21043
Greg Maciulla

Ducketts Lane Elementary
School. Holding tanks for
portable classrooms
Proposal # 7366

3/17/16

We propose to supply the labor, materials and equipment to complete the following:

Set two 2000 gallon top seam septic tanks
Place an alarm system into the last tank
Wires and location to be completed by the school construction division
Cost \$ 4,900.00

4000 gallon tank maintenance
Cost \$ 465.00 per 4000 gallons

Exclusions: Permits, export of fill, import of fill, asphalt repair, concrete repair,
temporary fencing, any items not priced above.

All work to be billed as completed.

Customer agrees to pay Hatfield's Equipment And Dedication Services Inc. in full the
amount due within 30 days.

A finance charge at the periodic rate of 2% per month which constitutes an annual
percentage rate of 24%, will be applied to any balances not paid in 30 days

Customer agrees to pay 40% of amount due as attorney fees if placed in the hands of an
attorney for collection.

Non-payment of any past due amount will be sufficient justification to stop work on the
project.

Respectfully Submitted



Ken Hatfield, President

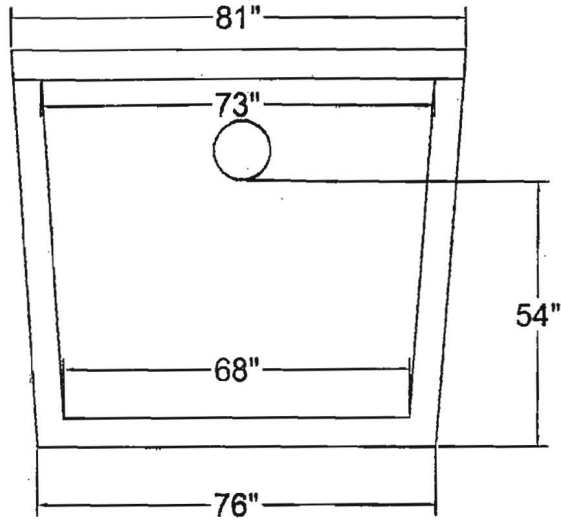
Accepted by

Signature

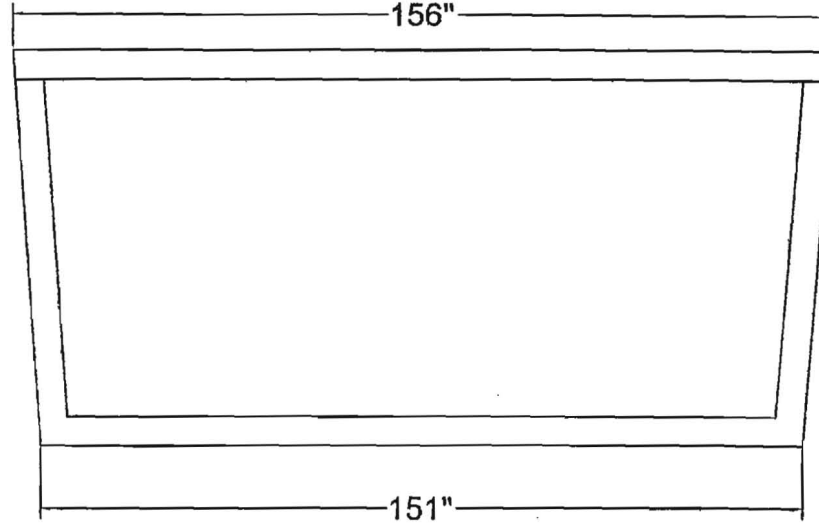
Print Name

2000 gal Top Seem Concrete Tank

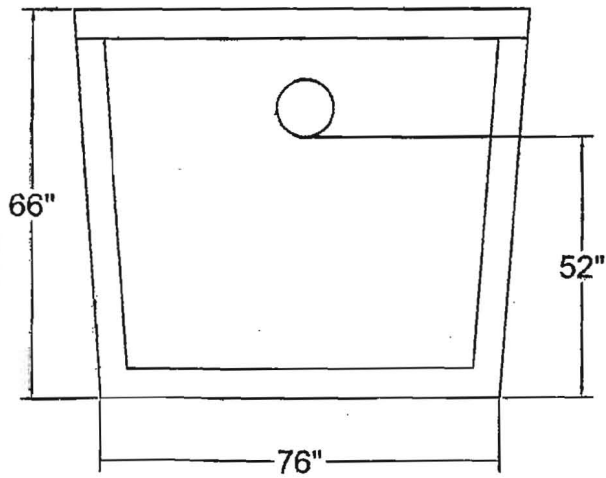
INLET END VIEW



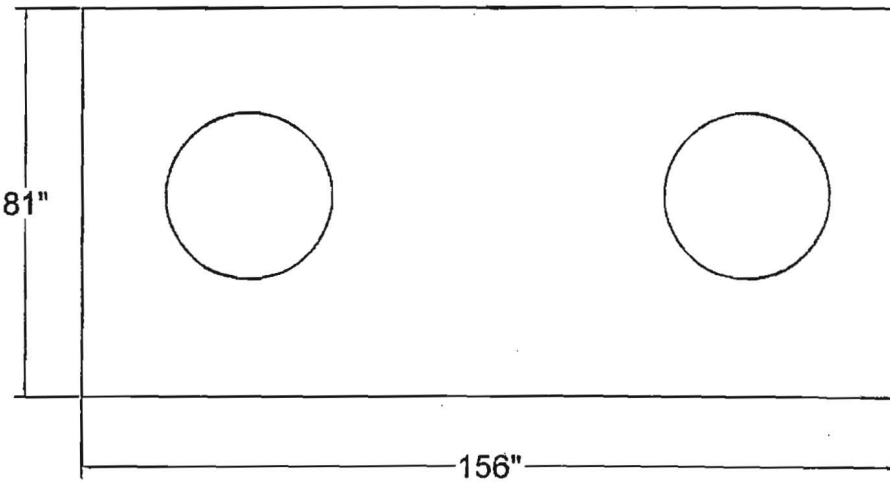
SIDE VIEW



OUTLET END VIEW



TOP VIEW



General Notes

No.	Revision/Change	Date

BABYLON VAULT CO.
 926 WAKEFIELD VALLEY RD.
 NEW WINDSOR, MD. 21176
 # (410) 848-0393

Project Name and Address

2000 T.S

Name Title Date	Date
-----------------------	------

HOWARD COUNTY 2016

PUBLIC SCHOOL SYSTEM

Relocatable Classrooms: Ducketts Lane Elementary School

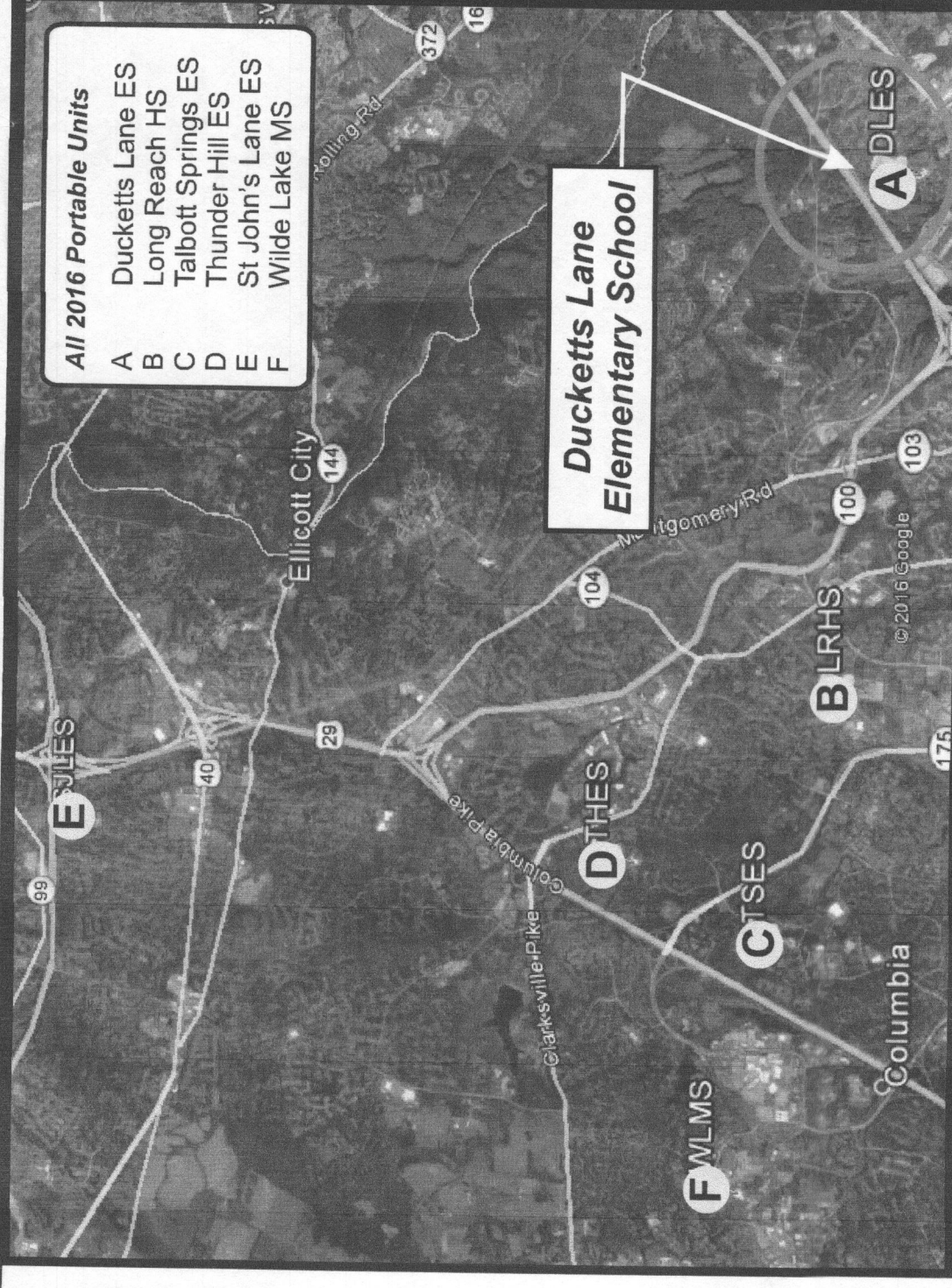
SCOPE OF WORK:

Provide pressure treated (PT) wood stairs and wood ramps for one (1) 9-Classroom portable unit (from Wilde Lake MS) at the following location:

Ducketts Lane Elementary School
6501 Ducketts Lane
Elkridge, MD 21075

GENERAL NOTES:

- A. All work to be performed in accordance with requirements of all applicable building and ADA codes of Howard County and the State of Maryland.
- B. HCPSS shall be responsible for all permits.
- C. Contractor shall be responsible for identifying and locating all utilities before site work begins. Areas disturbed by construction shall be returned to original grade, seeded and mulched as required to match existing conditions.
- D. All hardware (nails, bolts, straps, ties, etc.) shall be galvanized.
- E. All exterior wood lumber and framing shall be pressure treated (PT) number 2 or better. No CCA is allowed.
- F. All connections from 2x framing members to 4x4 posts to be with (2) 3/8" dia. galvanized carriage bolts. Typical except where noted.
- G. All wood decking on decks, ramps, stairs to be true, flush and even, free of tripping hazards. All wood rails to be sanded smooth and free of splinters.
- H. Platform landings laid adjacent to unit doors are to be 1/4" lower than finished floor of unit.
- I. Site conditions and grades vary. Distance of deck above grade length of ramp and number of risers must be field verified at site prior to construction.



2016 Howard County Vicinity Map

Engineer's Stamp



I, Steven K. Broyles hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 14429, Expiration Date: May 9, 2017

HOWARD COUNTY
PUBLIC SCHOOL SYSTEM
70910 Route 108 Ellicott City, Maryland 21043-6198 (410) 313-6600

PROJECT TITLE: 2016 Relocatable Classroom Project

DRAWING TITLE: **Cover Sheet - Ducketts Lane ES**

JOB No.

SCALE: AS SHOWN

DRN. BY:

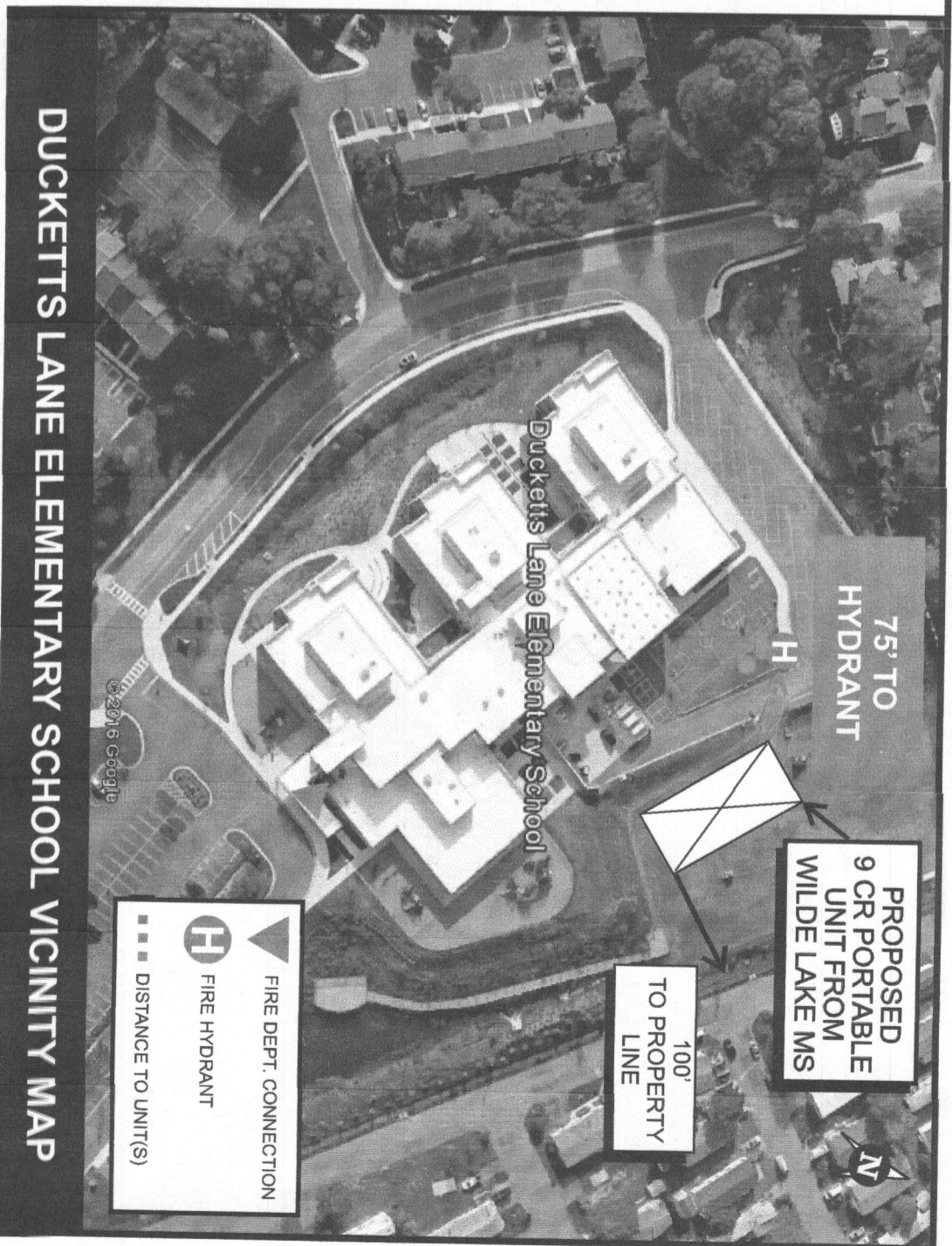
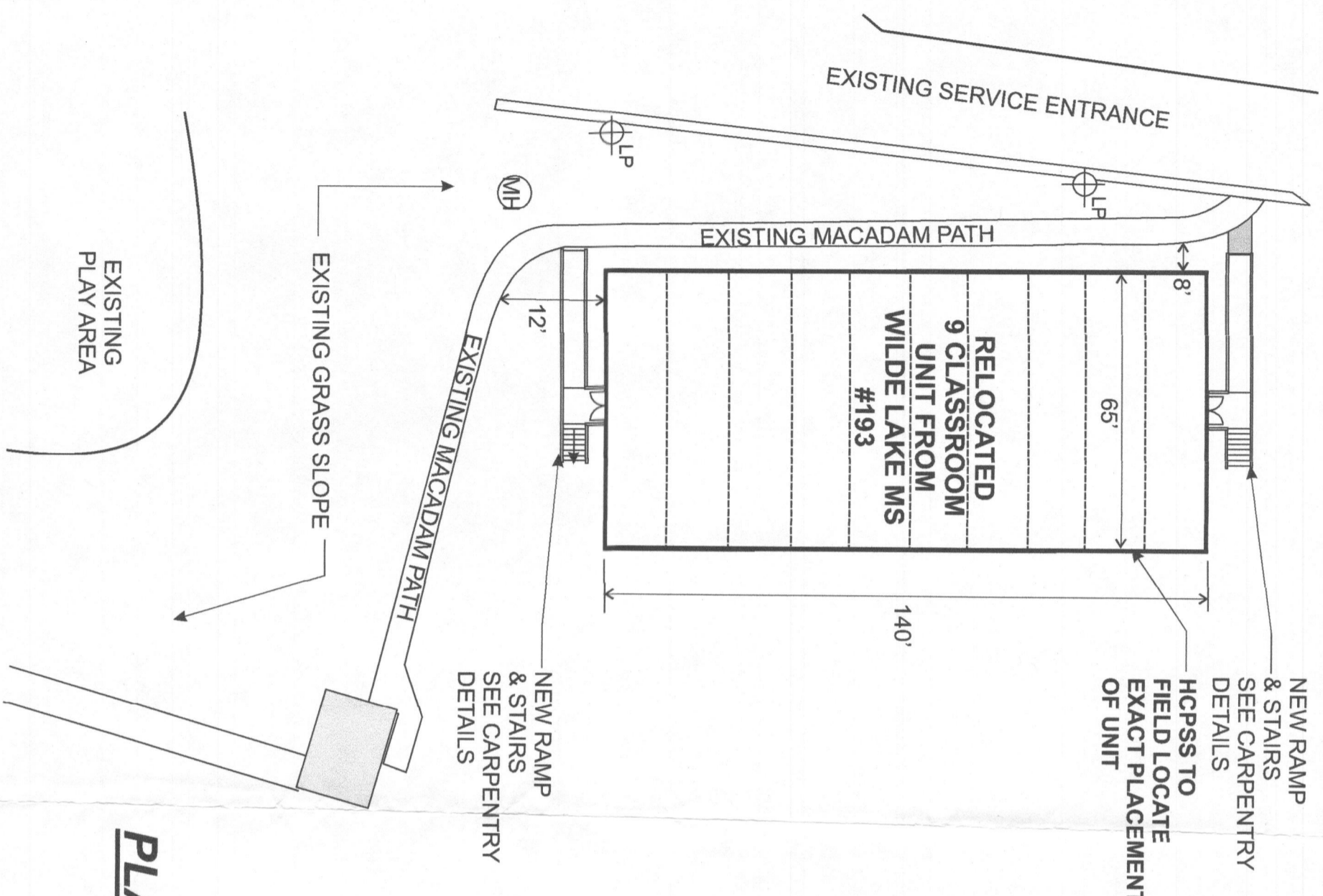
CHECKED BY: G.M.

DATE: June 6, 2016

SHEET No. 1 of 4

LIST OF DRAWINGS

1. Cover Sheet
2. Ducketts Lane ES Site Plan
3. Ramp Construction Details
4. Deck & Misc Details



PLAN VIEW

1/32" = 1'-0"

I Steven K. Broyles hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 14429, Expiration Date: May 9, 2017

Engineer's Stamp
 STATE OF MARYLAND
 STEVEN KENNETH BROYLES
 PROFESSIONAL ENGINEER
 14429

HOWARD COUNTY
 PUBLIC SCHOOL SYSTEM
 10910 Route 108 Ellicott City, Maryland 21043-6198 (410) 313-6600

PROJECT TITLE:
 2016 Relocatable Classroom Project

DRAWING TITLE:
Ducketts Lane ES Site Plan

JOB No.
 SCALE: AS SHOWN
 DRN. BY: EHC
 DATE: June 6, 2016
 CHECKED BY: G.M.

SHEET No.
2 OF **4**

HOWARD COUNTY 2016

PUBLIC SCHOOL SYSTEM

Relocatable Classrooms: Ducketts Lane Elementary School

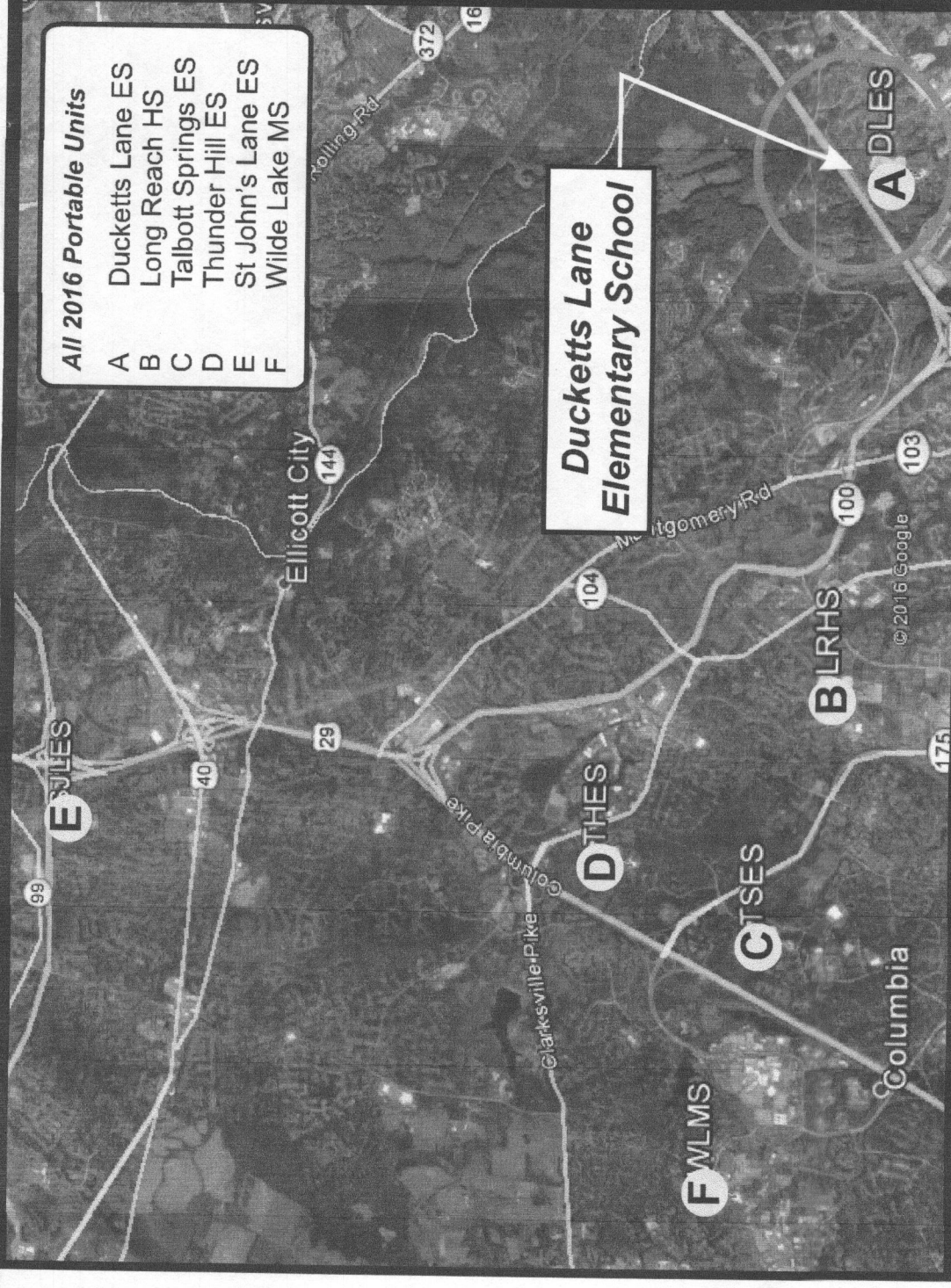
SCOPE OF WORK:

Provide pressure treated (PT) wood stairs and wood ramps for one (1) 9-Classroom portable unit (from Wilde Lake MS) at the following location:

Ducketts Lane Elementary School
6501 Ducketts Lane
Elkridge, MD 21075

GENERAL NOTES:

- A. All work to be performed in accordance with requirements of all applicable building and ADA codes of Howard County and the State of Maryland.
- B. HCPSS shall be responsible for all permits.
- C. Contractor shall be responsible for identifying and locating all utilities before site work begins. Areas disturbed by construction shall be returned to original grade, seeded and mulched as required to match existing conditions.
- D. All hardware (nails, bolts, straps, ties, etc.) shall be galvanized.
- E. All exterior wood lumber and framing shall be pressure treated (PT) number 2 or better. No CCA is allowed.
- F. All connections from 2x framing members to 4x4 posts to be with (2) 3/8" dia. galvanized carriage bolts. Typical except where noted.
- G. All wood decking on decks, ramps, stairs to be true, flush and even, free of tripping hazards. All wood rails to be sanded smooth and free of splinters.
- H. Platform landings laid adjacent to unit doors are to be 1/4" lower than finished floor of unit.
- I. Site conditions and grades vary. Distance of deck above grade length of ramp and number of risers must be field verified at site prior to construction.



2016 Howard County Vicinity Map

Engineer's Stamp



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HOWARD COUNTY
PUBLIC SCHOOL SYSTEM
70910 Route 108 Ellicott City, Maryland 21043-6198 (410) 313-6600

PROJECT TITLE: 2016 Relocatable Classroom Project

DRAWING TITLE: Cover Sheet - Ducketts Lane ES

JOB No.

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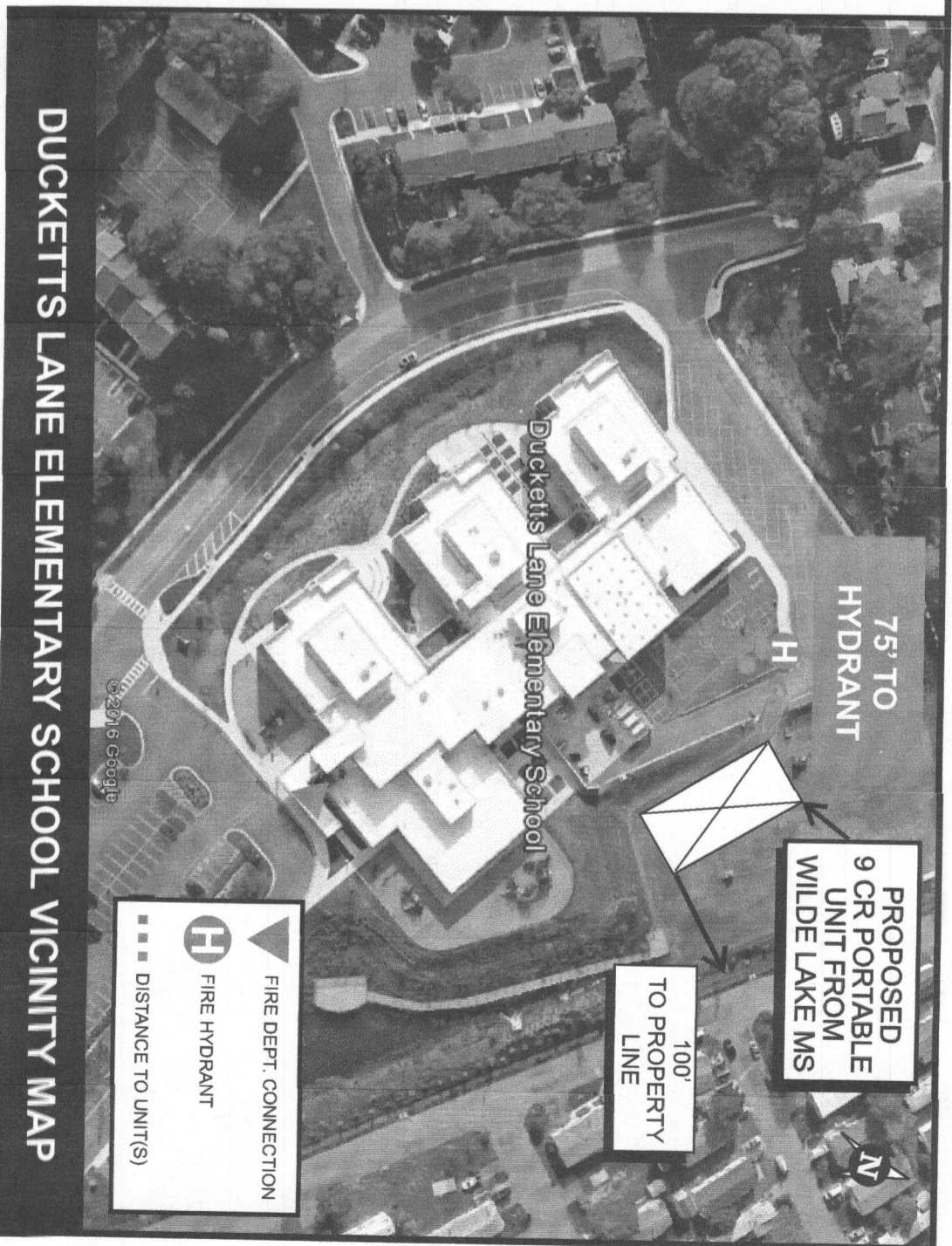
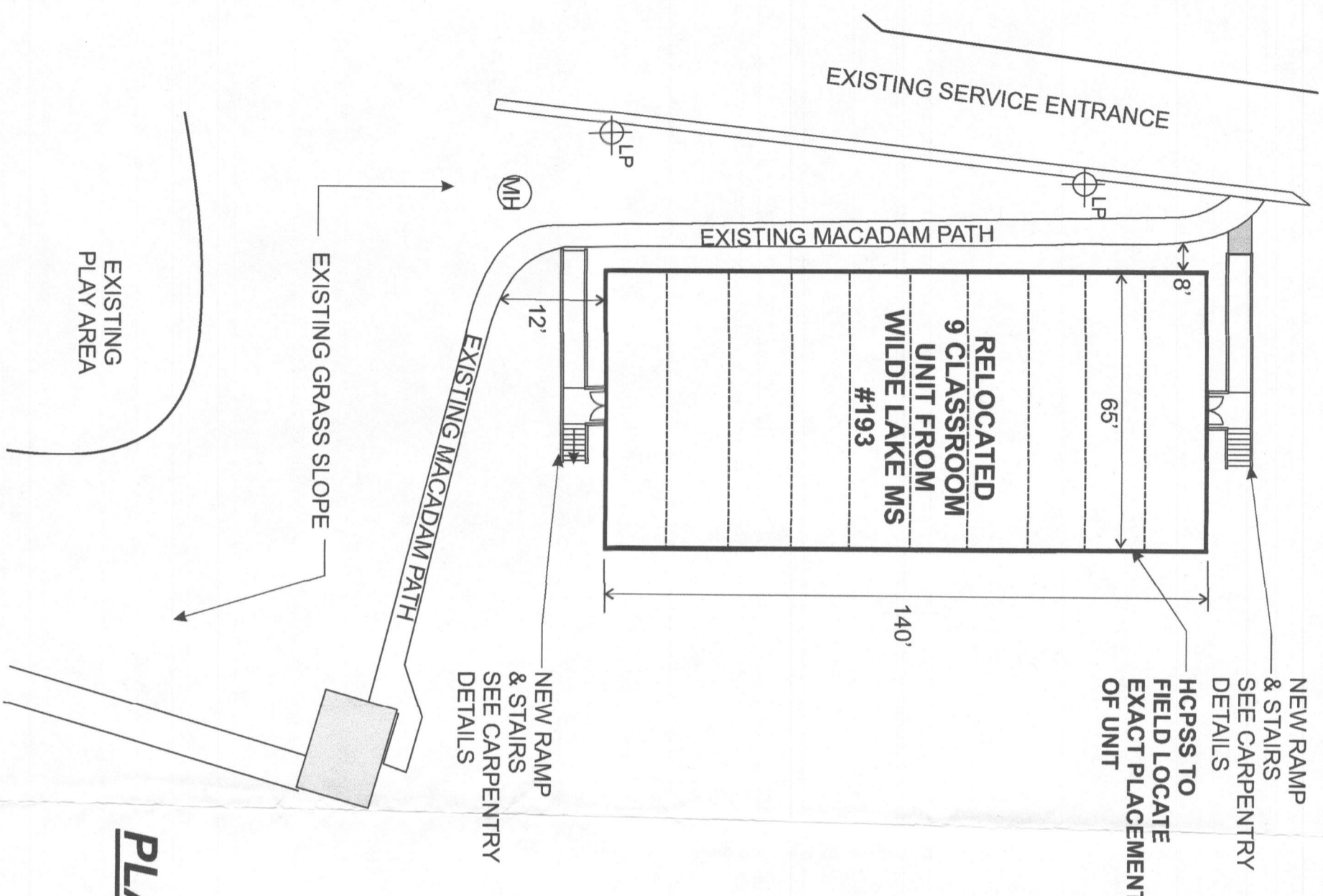
CHECKED BY: G.M.

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SHEET No. 1 of 4

LIST OF DRAWINGS

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PLAN VIEW

1/32" = 1'-0"

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 14429

HOWARD COUNTY
 PUBLIC SCHOOL SYSTEM
 10910 Route 108 Ellicott City, Maryland 21043-6198 (410) 313-6600

PROJECT TITLE:
 2016 Relocatable Classroom Project

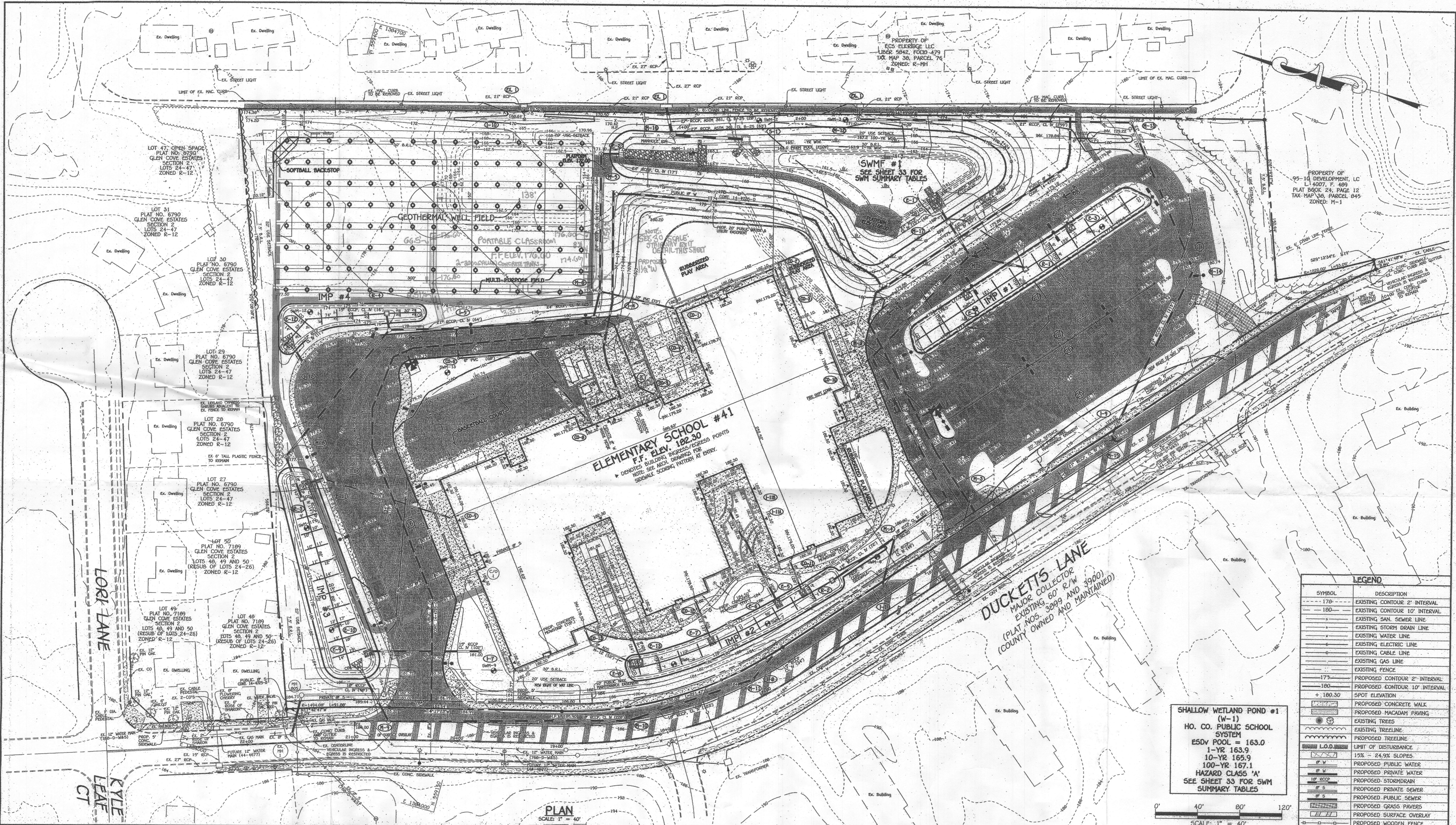
DRAWING TITLE:
Ducketts Lane ES Site Plan

JOB No.
 SCALE: AS SHOWN

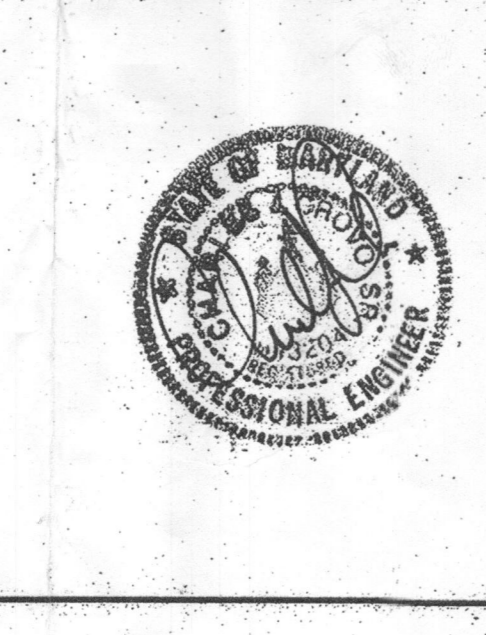
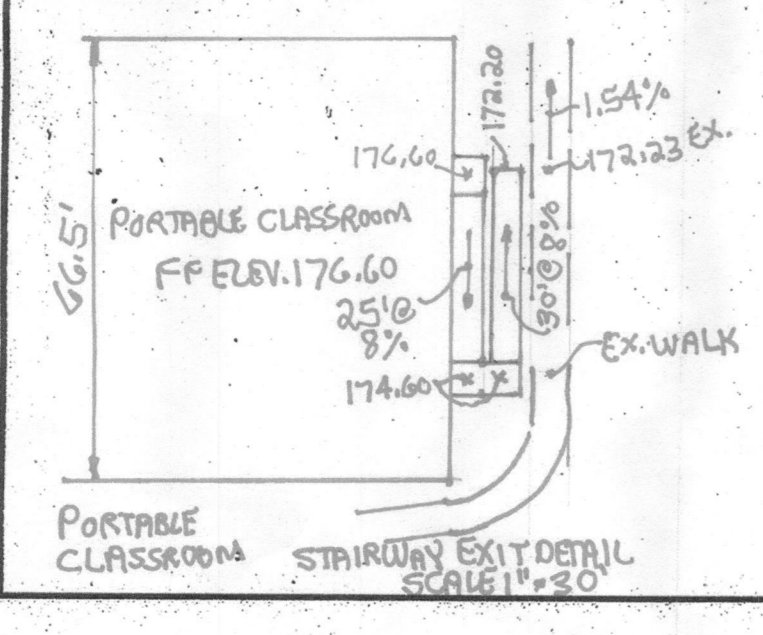
DRN. BY: ERC
 DATE: June 6, 2016

CHECKED BY: G.M.

SHEET No.
2 OF **4**



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTRAL SERVICE OFFICE: PARL - 10072 SALTICRE NATIONAL FEE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2222



"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2012."

Charles J. Grovo, Sr.
 CHARLES J. GROVO, SR., P.E.
 DATE: 4/23/12

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning
 Chief, Division of Land Development
 Chief, Development Engineering Division

DATE: 5/11/12
 DATE: 5/11/12
 DATE: 5/11/12

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
P.0569	6501 DUCKETTS LANE ELK RIDGE, MD 21075

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
ELEMENTARY SCHOOL #41	N/A	P.0569
PLAT# OR L/F	GRID#	ZONING
21073-21075	-	R-12
TAX MAP#	ELECT. DIST.	CENSUS TRACT
37	FIRST	6012.01

SITE DEVELOPMENT PLAN

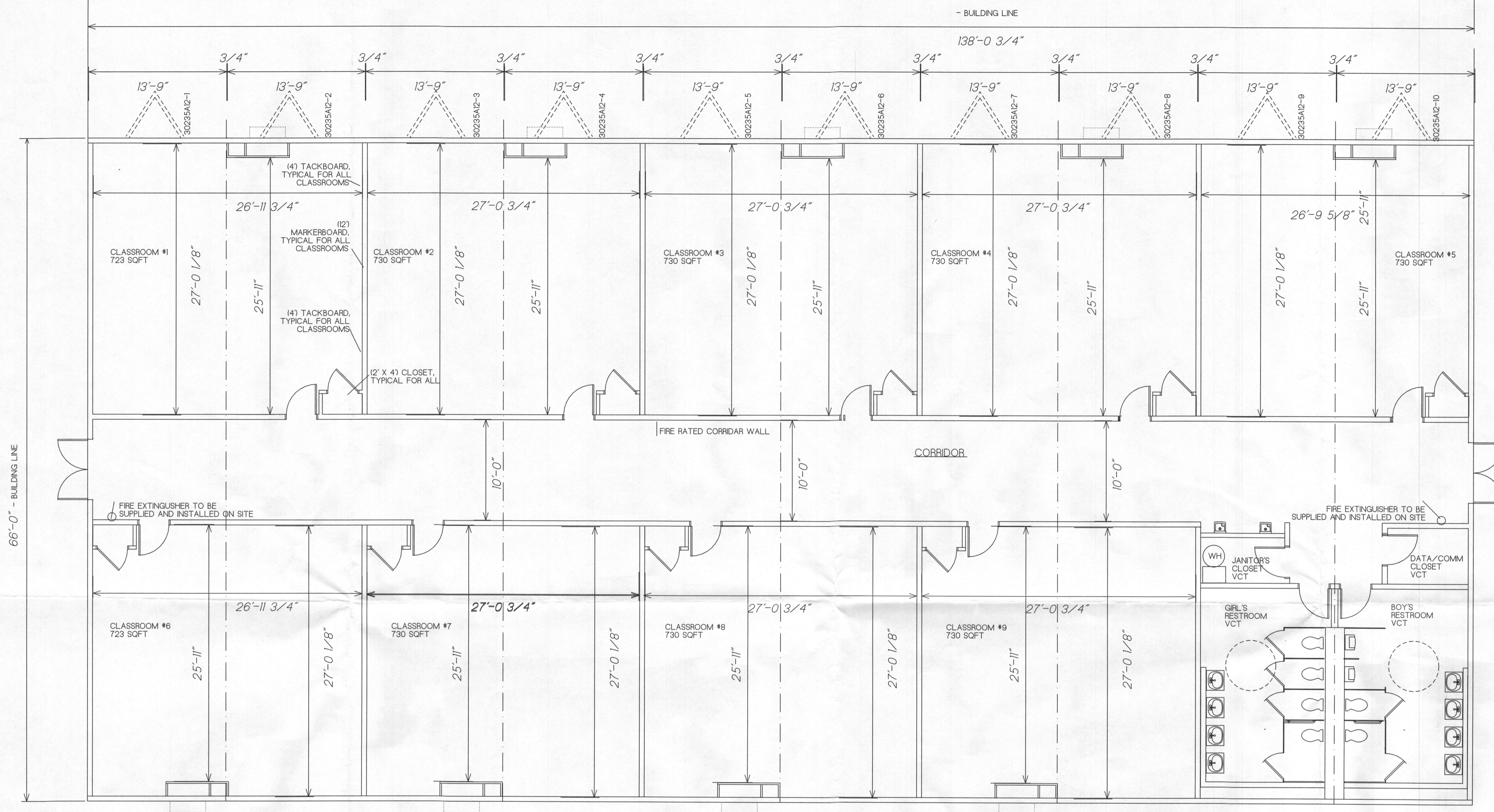
ELEMENTARY SCHOOL #41

THE LEGACY AT DUCKETTS RIDGE

PARCEL A

ZONED R-12 TAX MAP No.: 37 GRID No.: 12 PARCEL No.: 569
 FIRST ELECTION DISTRICT
 SCALE: 1" = 40'
 HOWARD COUNTY, MARYLAND
 DATE: APRIL 23, 2012

SHEET 3 OF 30



BUILDING NOTES:

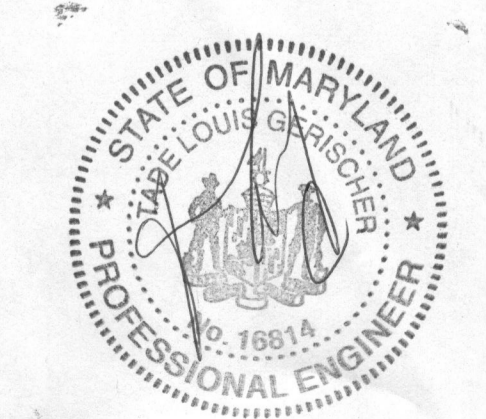
- ATTIC VENTILATION SHALL NOT BE LESS THAN 1/150th OF THE HORIZONTAL AREA TO BE VENTILATED, UNLESS A VAPOR BARRIER IS INSTALLED THEN THE RATE SHALL BE REDUCED TO 1/300th. VENTILATION IS NOT REQUIRED IF NO INTERIOR FINISH IS APPLIED DIRECTLY TO THE UNDERSIDE OF THE ROOF RAFTERS PER IBC SECTION 1203.2.
- THE BUILDING EXTERIOR AND ALL FACILITIES WITHIN THE BUILDING SHALL BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
- BUILDER/DEALER SHALL BE RESPONSIBLE FOR ON SITE BARRIER FREE PROVISIONS: STEPS, RAMPS, PARKING SIGNS, ETC. - BUILDING APPROACH (WALK OR RAMP) WITH A MINIMUM WIDTH OF 5' AND A GRADIENT OF NOT MORE THAN 1/20 FOR SIDEWALKS AND A MAXIMUM OF 1/12 FOR RAMPS.
- LANDING SHALL BE PROVIDED OUTSIDE OF EACH EXIT DOOR, EACH EXIT DOOR - 5 FOOT MINIMUM WIDTH WITH 1/2 MAXIMUM CHANGE IN ELEVATION. LANDING TO EXTEND A MINIMUM OF 24" PAST STRIKE EDGE OF THE DOOR. LANDING AND RAMPS BY OTHERS AT SITE

BUILDING NOTES CONTINUED:

- ALL LOCKS TO BE UNLOCKABLE FROM THE INTERIOR WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- CORROSION RESISTANT FLASHING AT THE TOP AND SIDES OF DOORS, WINDOWS AND AT ROOF PENETRATIONS.
- GLAZING TO BE SAFETY GLAZED AND SO MARKED WHEN GLASS IS WITHIN 24" ARC OF PASSAGE DOORS AND IN PASSAGE DOORS, OR AND WHEN ALL FOUR OF THESE ARE MET: WITHIN 18" OF FLOOR, 36" OR MORE TO TOP, INDIVIDUAL PANE IS OVER 9 SF AND IS WITHIN 36" TO A WALKING SURFACE.

INSTALL HEADER ABOVE DOORS & WINDOWS
 DOUBLE 2X4 #3 SPF OR BETTER MAX SPAN 52"
 DOUBLE 2X6 #3 SPF OR BETTER MAX SPAN 66"
 DOUBLE 2X8 #3 SPF OR BETTER MAX SPAN 72"
 DOUBLE 2X10 #3 SPF OR BETTER MAX SPAN 82"

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16814, EXPIRATION DATE: 2/12/18
Tade L. Gerischer Sr. 3/3/16
 TADE L. GERISCHER SR. DATE



Sheet 1

STRUCTURAL

TLG Engineering Co.
 8711 Barbara Ann Way, Unit 102
 Delmar, MD 21875
 443-359-5886
 EMAIL: gerischer.tade@comcast.net
 PHONE: 410-321-1716
 FAX: 410-321-1716
 SCALE: 3/16" = 1'-0"

SHEET 1 OF 1

CIVIL ENGINEER

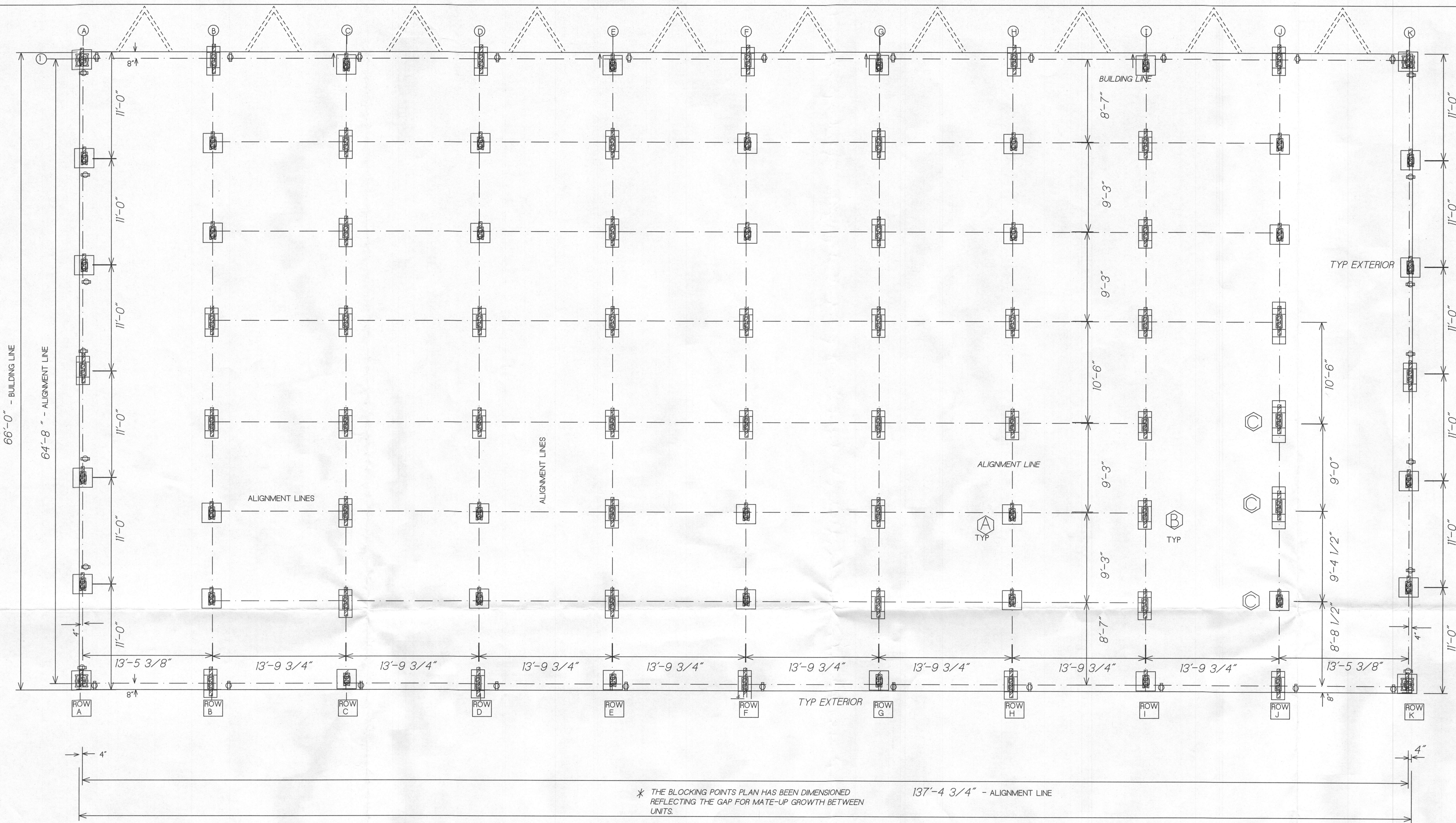
BUILDING

MODULAR BUILDINGS
 EXPRESS II, LLC
 64 HESS ROAD
 LEOLA, PA 17450

OWNER / PROPERTY

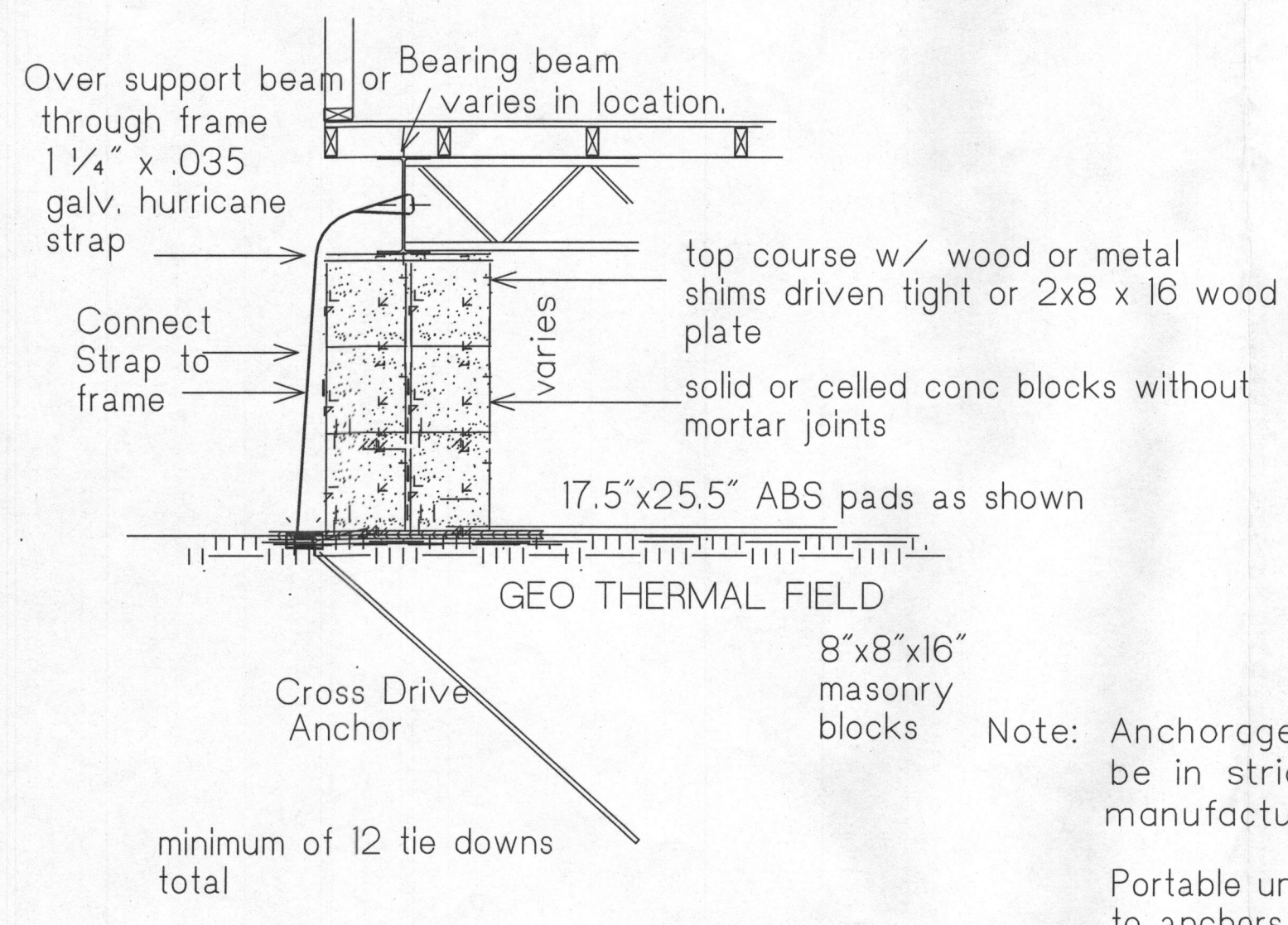
HOWARD COUNTY B.O.E.
 Duckets Lane Elementary School
 6501 Duckets Lane
 Elkridge, MD 21075

10 UNIT FACILITY
 HOWARD COUNTY
 OVERALL FLOOR
 PLAN

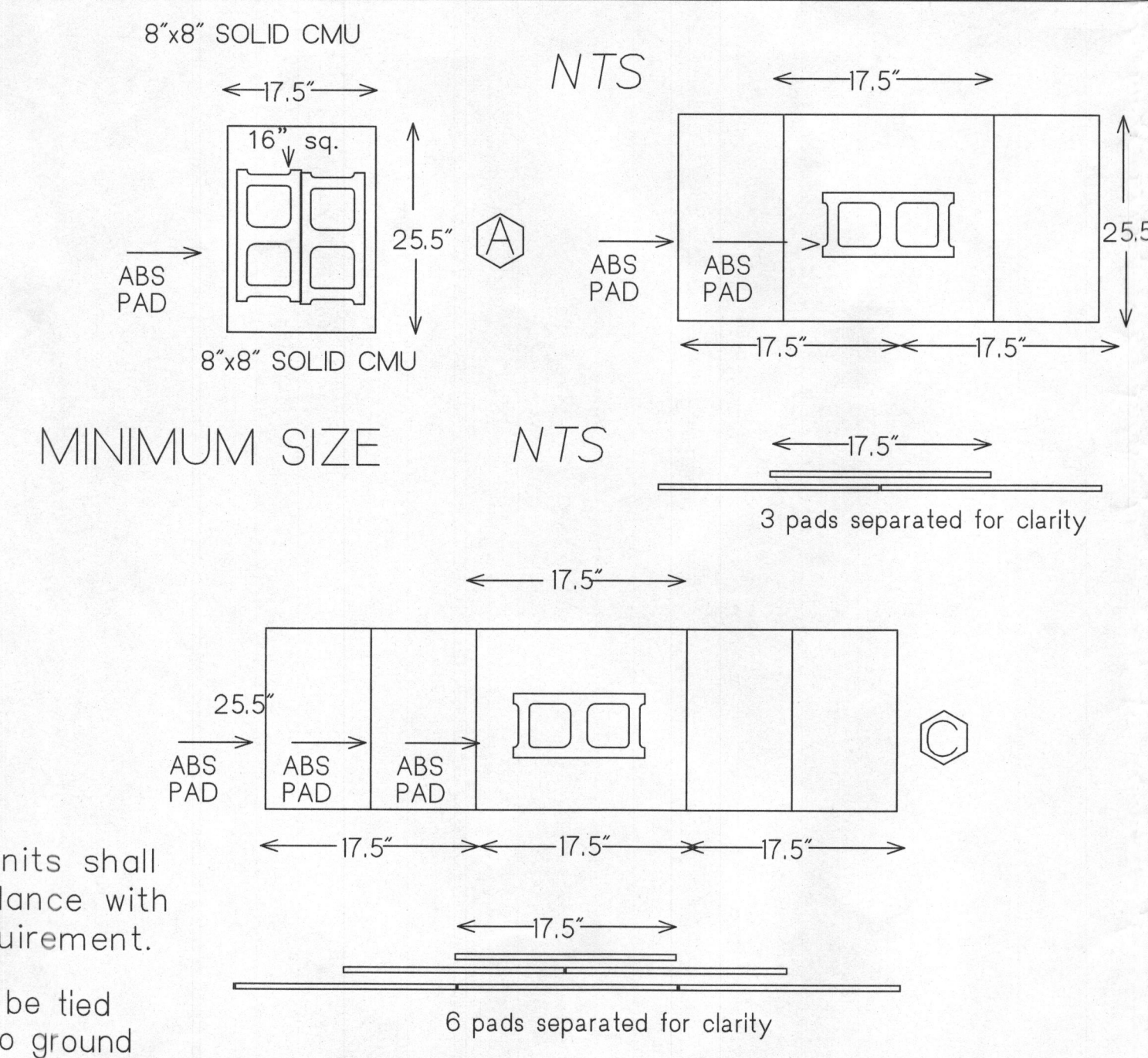


* THE BLOCKING POINTS PLAN HAS BEEN DIMENSIONED REFLECTING THE GAP FOR MATE-UP GROWTH BETWEEN UNITS.

TYPICAL DRY BLOCK ON ABS PADS



Note: Anchorage of all units shall be in strict accordance with manufacturer's requirement.
Portable units are to be tied to anchors driven into ground



PAD CONFIGURATION SIZE

ROW	1	3	6
A	6	1	
B	4	4	
C	2	6	
D	4	4	
E	2	6	
F	4	4	
G	2	6	
H	4	4	
I	2	6	
J	3	2	3
K	6	1	

NOTE: ANCHORAGE OF ALL UNITS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S REQUIREMENT.

BUILDING UNITS TO SET ON INTERIOR AND EXTERIOR PILES
STRUCTURAL CONCRETE
DESIGN COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE 3000 PSI.
CONCRETE SHALL HAVE REGULAR WEIGHT AGGREGATE.

GROUND ANCHOR FOR 3150 LB CAPACITY
SUPERIMPOSED DEAD LOADS - ACTUAL WEIGHTS OF MATERIALS AND CONSTRUCTION ASSEMBLIES ARE USED IN THE DESIGN OF THE STRUCTURE
CORRIDOR FLOOR LIVE LOADS - 100 LB/SQ FT
ROOF LIVE LOADS - 40 LB/SQ FT
FLOOR LIVE LOADS - 50 LB/SQ FT
PRESUMPTIVE LOAD-BEARING FOUNDATION SOIL LOADS: 1000 PSF

PIERS MUST BE SQUARE AND LEVEL

- Subgrade Recommendations
A representative of the soils engineer's firm shall monitor the compaction and excavation processes.
- If loose soft conditions are encountered at the footing subgrade, construction of a stabilized stone and fabric sub-foundation mat or under cutting of the unsatisfactory soils may be necessary. The decision to undercut or install the cloth and stone mat below the foundation level should be made during construction based on the observed soil conditions during preparation of the existing ground surface. Unsatisfactory movement (pumping) of the ground surface and/or low test results will be the justification for the undercut or construction of the stone mat.
 - After approval of the compaction process, the structural fills are placed and compacted in 8" thick layers to achieve the new subgrade elevation. The fill materials that were undercut to accommodate the compaction process may be reused as structural fill provided the moisture contents are within 2% of optimum for compaction. The compacted fill will meet a minimum of 95% of the modified moisture density



I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16814, EXPIRATION DATE: 2/12/18
Tade L. Gerscher Sr. DATE: 3/23/18

Sheet 1

STRUCTURAL

CML ENGINEERING

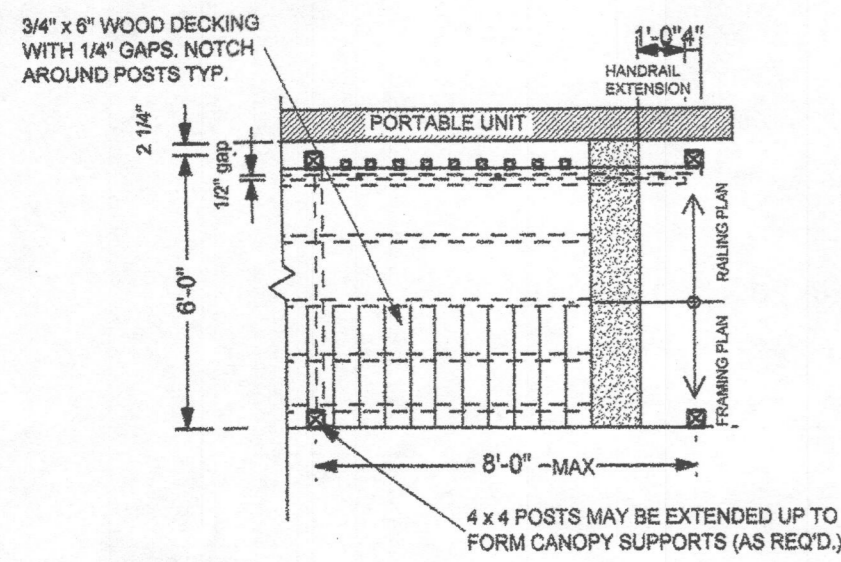
TLG Engineering Co.
8711 Barbara Ann Way, Unit 102
Delmar, MD 21875
443-559-8886
EMAIL: gerscher.tlg@comcast.net

OWNER / PROPERTY
HOWARD COUNTY B.O.E.
Ducketts Lane Elementary School
6501 Ducketts Lane
Elkridge, MD 21075

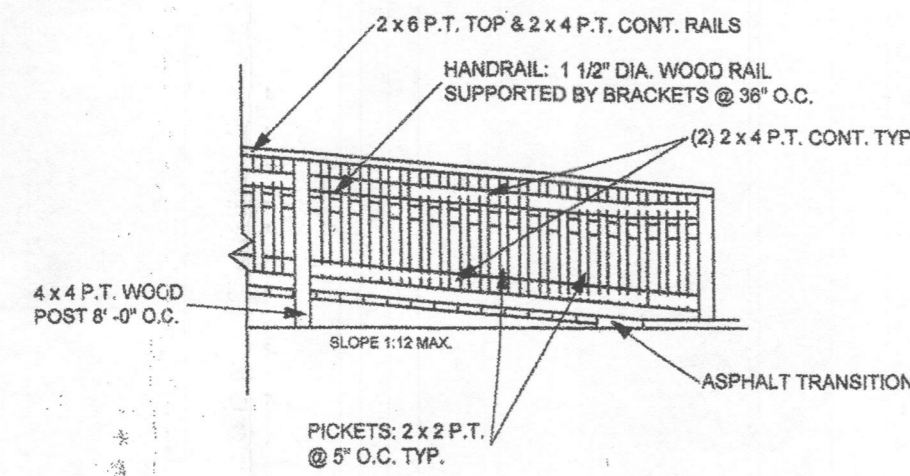
BUILDING
EMH ENVIRONMENTAL INC.
3060-A WASHINGTON RD.
RT 97
GLENWOOD, MD 21738

10 UNIT FACILITY
HOWARD COUNTY
FOOTING &
FOUNDATION SHEET

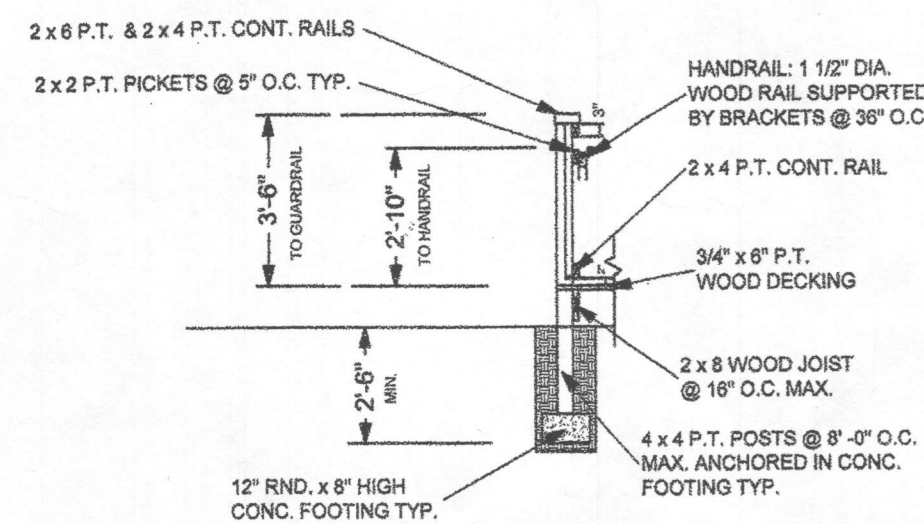
SHEET 1 OF 1
Scale: 3/16" = 1 foot



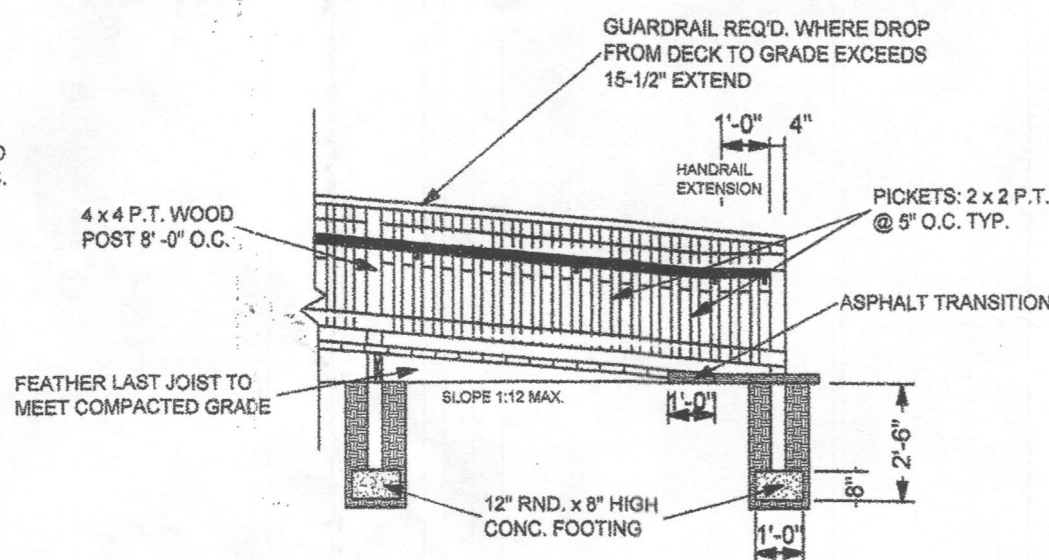
PLAN



ELEVATION

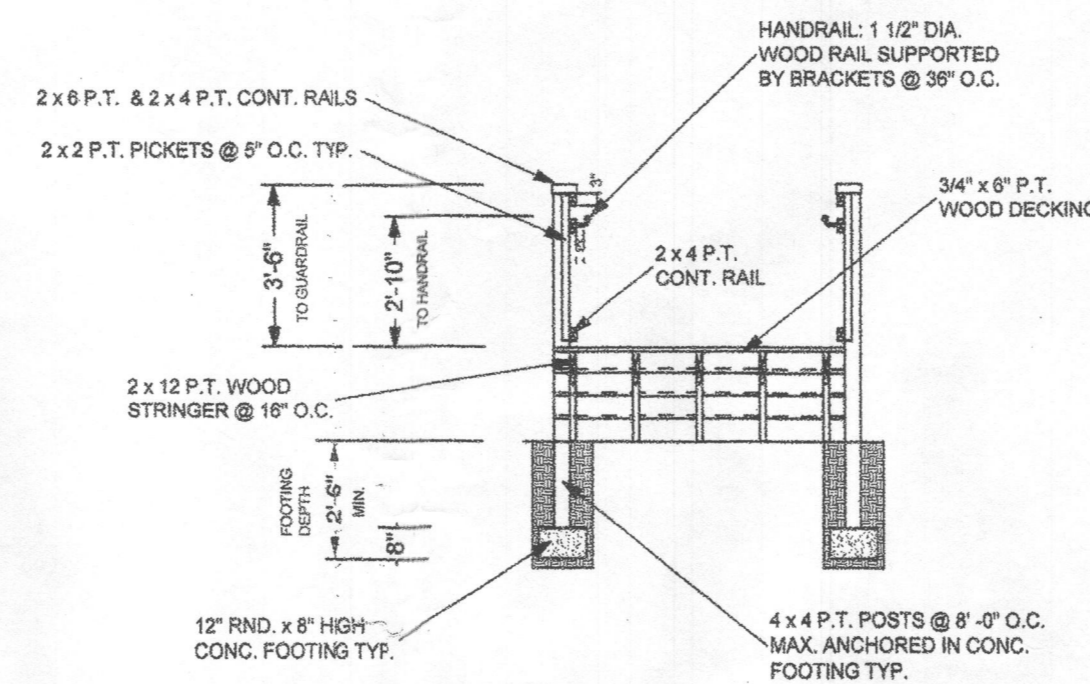


SECTION

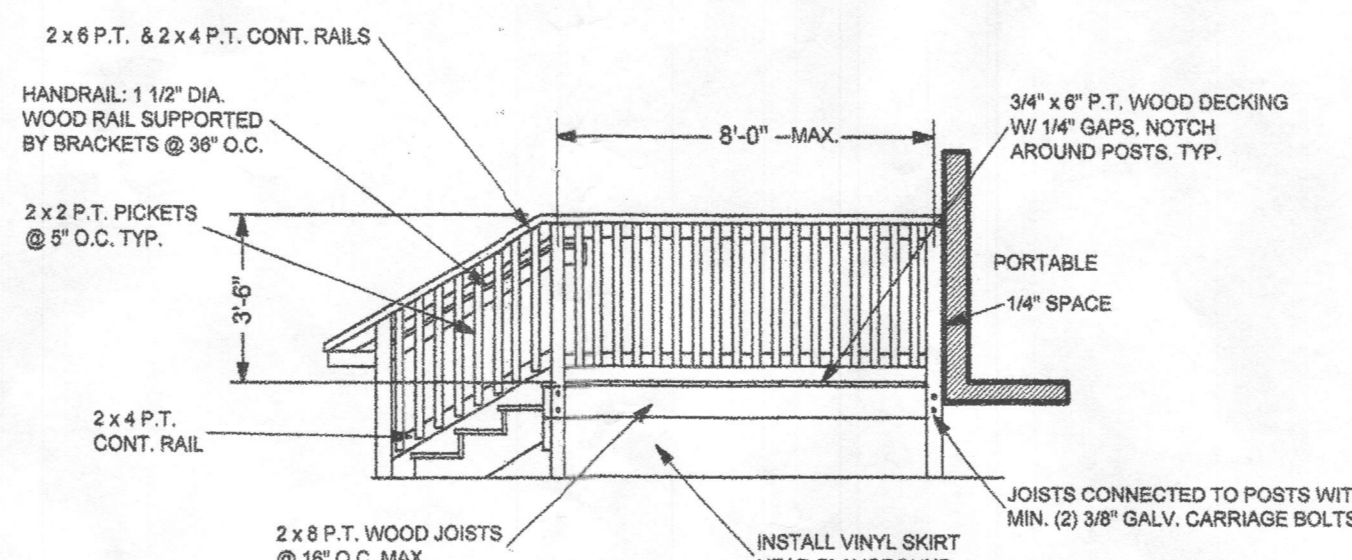


SECTION

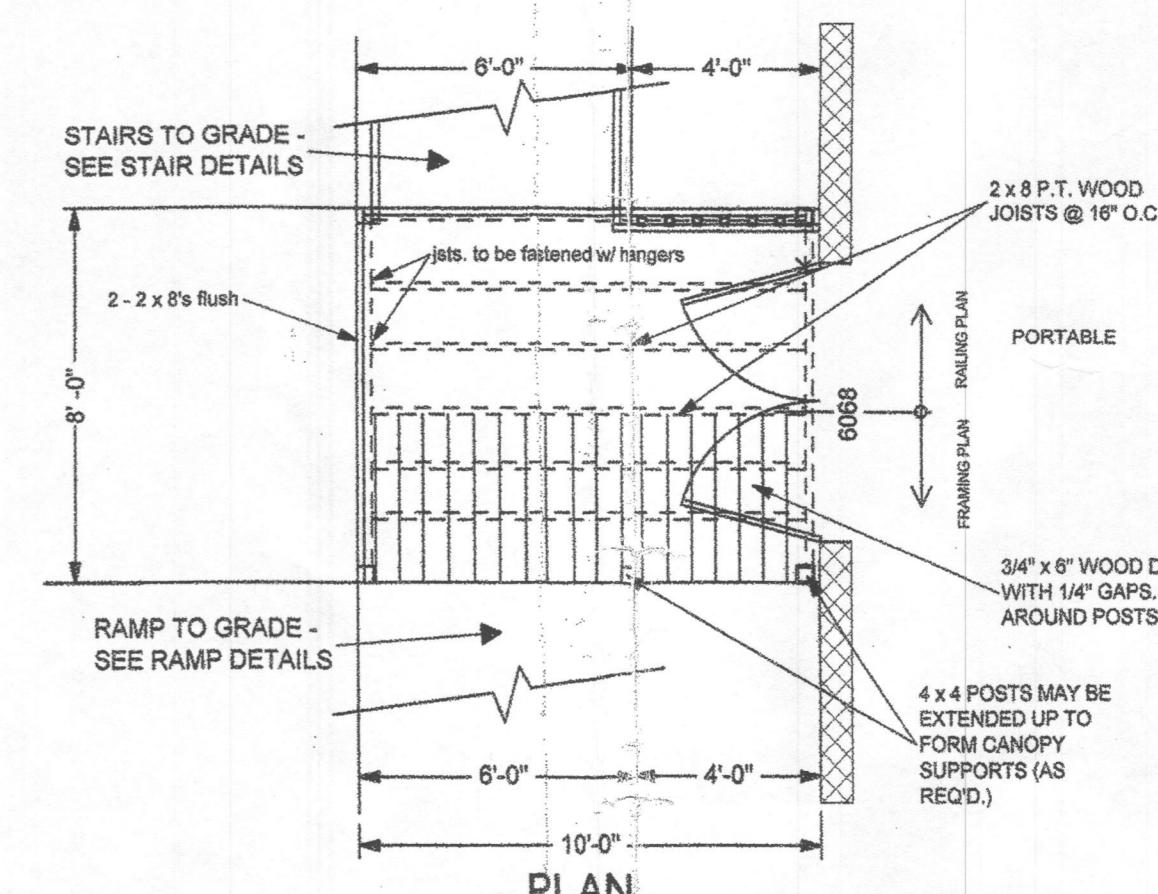
HC RAMP DETAILS



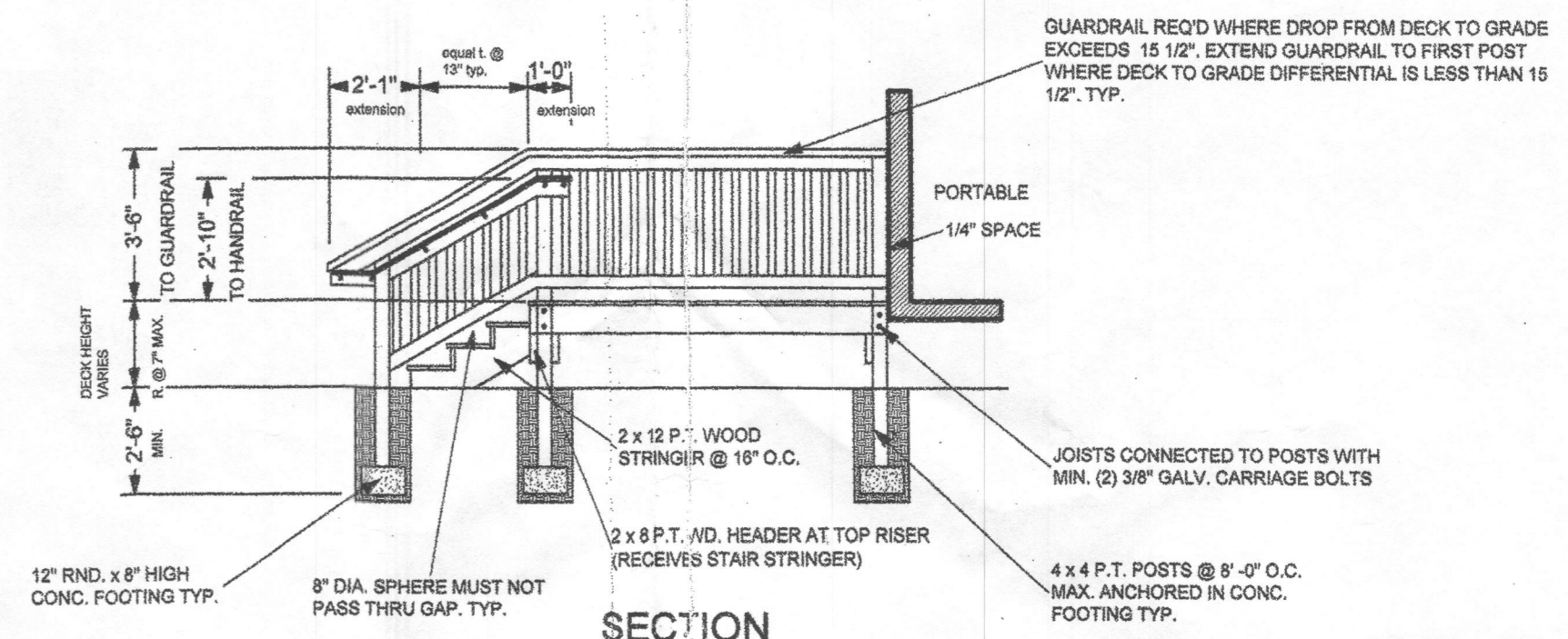
SECTION



ELEVATION

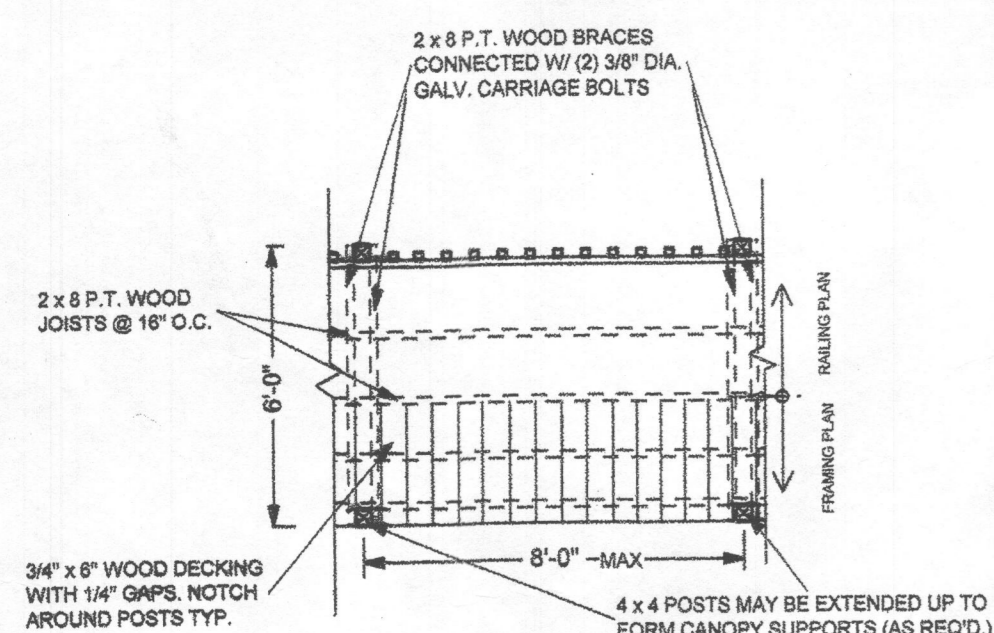


PLAN

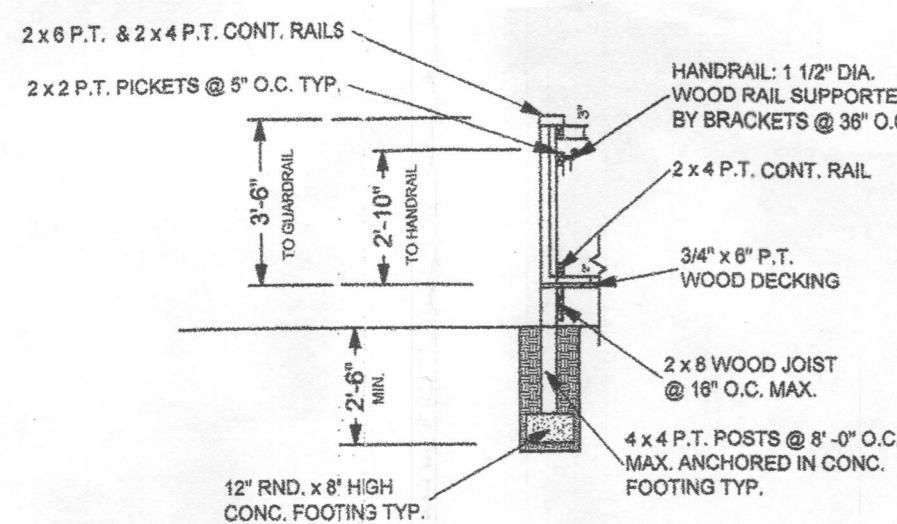


SECTION

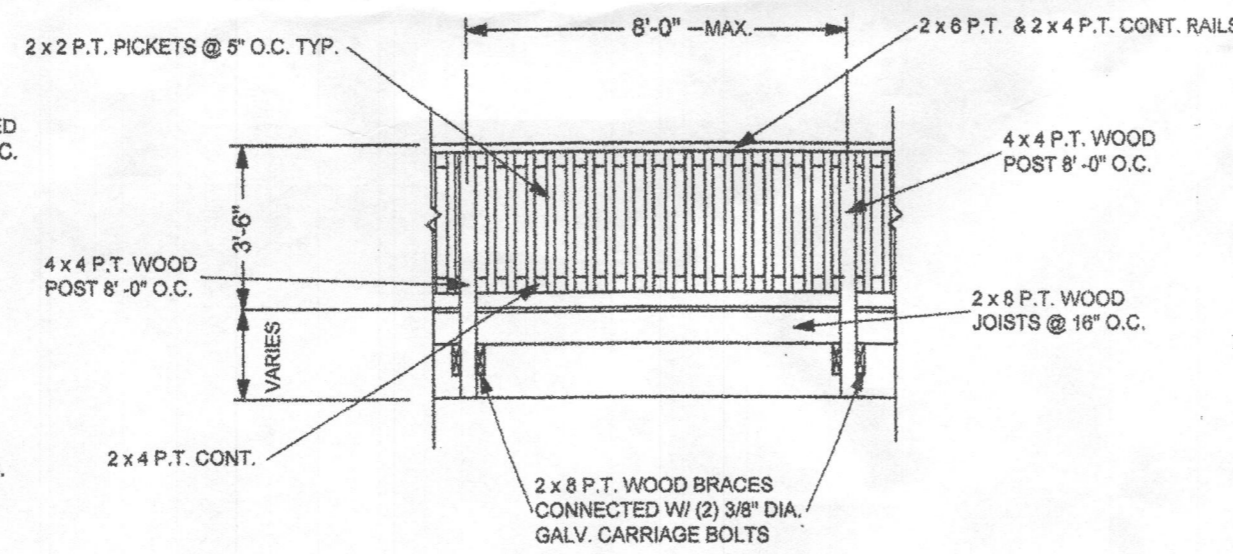
STAIR DETAILS & LANDINGS W/ DOUBLE DOORS



PLAN



SECTION



ELEVATION

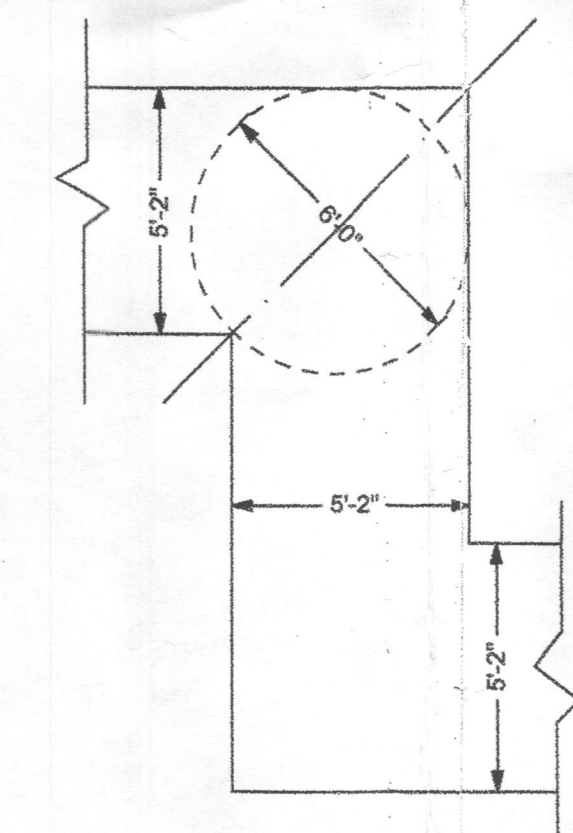
WOOD DECK DETAILS

DESIGN LOADS

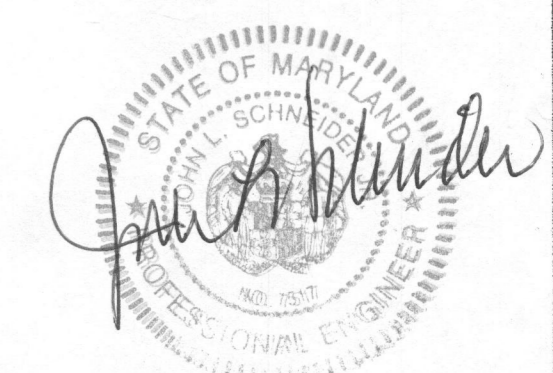
- LIVE LOADS
 - ROOF (SHED & CANOPY) = 30 PSF
 - WOOD DECK FLOOR, RAMPS & STAIRS = 100PSF
- SNOW LOADS
 - GROUND SNOW LOAD PG = 30PSF
 - SNOW EXPOSURE FACTOR CE = 0.9
 - SNOW IMPORTANCE FACTOR I = 1.2
 - SNOW THERMAL FACTOR CT = 1.0
 - FLAT ROOF SNOW LOAD PF = 25 PSF
- LATERAL LOADS
 - WIND LOADS PER IBC-2009
 - BASIC WIND SPEED = 90MPH
 - WIND LOAD IMPORTANCE FACTOR & OCCUPANCY CATEGORY = I = 1.15, III
 - WIND EXPOSURE = B
 - INTERNAL PRESSURE COEFFICIENT = +OR - 0.18
 - WIND PRESSURE FOR COMPONENTS & CLADDING = 21 PSF

SEISMIC LOADS FOR IBC-2009

- SEISMIC IMPORTANCE FACTOR & OCCUPANCY CATEGORY LE = 1.25 III
- MAPPED SPECTRAL RESPONSE ACCELERATIONS SS = .16 & SI = .51
- SITE CLASS D
- MAPPED SPECTRAL RESPONSE COEFFICIENTS SDS = .256 & SD1 = .24
- SEISMIC DESIGN CATEGORY III
- BASIC SEISMIC FORCE- FORCE RESISTING SYSTEM ORDINARY REINFORCED MASONRY SHEAR PIERS FOR FOUNDATION & COEFFICIENT FOR NON-BUILDING STRUCT. FOR CANOPY 0.1W
- DESIGN BASE SHEAR CS = .064
- SEISMIC RESPONSE COEFFICIENTS R = 5.0
- RESPONSE MODIFICATION FACTORS
- ANALYSIS PROCEDURE USED EQUIVALENT LATERAL FORCE PROCEDURE



6'-0" INTERIOR RADIUS TO BE MAINTAINED ON ALL CORNERS FOR HC REQUIREMENTS



GENERAL NOTES

- ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF ALL APPLICABLE CODES (INCLUDING IRC-2009, NFPA 2009, ADAAG, NEC 2008) AND ALL OTHER REGULATIONS OF HOWARD COUNTY AND STATE OF MARYLAND
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND CERTIFICATES OF INSPECTIONS REQUIRED TO COMPLETE THE WORK
- CONTRACTOR SHALL CHECK THE SITE AND REVIEW WITH "MISS UTILITY" (1-800-257-7777) BEFORE DRILLING OR EXCAVATING ANY DISTURBANCES TO THE SITE. THE SITE SHALL BE RESTORED TO SIMILAR ADJACENT CONDITIONS WITH LIKE MATERIALS AS REQUIRED.

UNIT PLACEMENT

- SITE CONDITIONS AND GRADES WILL VARY. HEIGHT OF PIERS, DISTANCE OF DECK ABOVE GRADE, AND NUMBER OF RISERS MUST BE FIELD VERIFIED AT SITE PRIOR TO PLACEMENT OF UNITS. TYP.
- PIER FOOTING LAYOUT AND CONSTRUCTION, PORTABLE UNIT SET-UP, ANCHORS & STRAPS ALL TO BE IN STRICT ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S REQUIREMENTS FOR UNIT SIZES IN USE AT SITE.
- REINFORCEMENTS BARS SHALL BE DEFORMED BARS, ASTM A615, GRADE 60.
- WELDING SHALL BE PER THE A.W.S. WITH E70 ELECTRODES.

WOOD CONSTRUCTION

- ALL HARDWARE (NAILS, BOLTS, STRAPS, TIES, ETC.) SHALL BE GALVANIZED
- ALL EXTERIOR WOOD LUMBER AND FRAMING SHALL BE PRESSURE TREATED (P.T.) NUMBER 2 OR BETTER. NO CCA IS ALLOWED.
- ALL CONNECTIONS FROM 2x FRAMING MEMBERS TO 4x4 POSTS TO BE WITH (2) 3/8" GALV. CARRIAGE BOLTS. TYP. EXCEPT WHERE NOTED
- ALL WOOD DECKING ON DECKS, RAMPS, STAIRS TO BE LAND TRUE, FLUSH AND EVEN, AND FREE OF TRIPPING CONDITIONS. ALL WOOD RAILS TO BE FREE OF SPLINTERS AND SANDED SMOOTH.
- PLATFORM LANDINGS LAID ADJACENT TO UNIT DOORS ARE TO BE SET 1/4" LOWER THAN FINISH FLOOR OF UNIT.
- USE (2) 3/8" DIA. GALV. CARRIAGE BOLTS WHERE APPLICABLE. TYP.
- ALL THRESHOLDS FROM DECK TO PORTABLE TO BE LESS THAN 1/4" HIGH

QUALITY ASSURANCE

- TEST CORES OF THE EXISTING PAVEMENT SHALL BE TAKEN TO DETERMINE THE COMPOSITION AND TOTAL THICKNESS OF THE EXISTING PAVEMENT
- THE SUBGRADE SHALL BE EVALUATED BY A QUALIFIED GEOTECHNICAL ENGINEER TO VERIFY THAT THE SUBGRADE HAS A MINIMUM ALLOWABLE BEARING CAPACITY OF 1,500 PSF AND THAT THE SOIL MEETS THE PROBE VALUE REQUIREMENTS FOR SOIL CLASS A AS RECOMMENDED BY THE TIE DOWN ANCHOR MANUFACTURER.
- THE PAVEMENT AREA WITHIN ANY SINGLE CLASSROOM SHALL BE FAIRLY LEVEL. THE AREA DIRECTLY UNDER PIERS SHALL BE FREE OF DIRT, STONE, AND DEBRIS.
- A MORTAR LEVELING BED SHALL BE PROVIDED IF THE PAVEMENT IS NOT LEVEL. THE CMU WYTHES SHALL BE FLUSH AND TIGHT WHEN PLACED AGAINST EACH OTHER.
- THE FIRST COURSE FOR EACH OF THE TWO CENTER END WALL PIERS SHALL CONSIST OF TWO (2) 12" ROUND X 8" HIGH CONCRETE FOOTINGS DOWN A MINIMUM OF 30" BELOW FINISHED GRADE.
- PIERS SHALL BE INSPECTED FOR ALIGNMENT AND VERTICAL PLUMBNESS PRIOR TO INSTALLATION OF RELOCATABLE UNITS.

Ducketts Lane Elementary School

6501 Ducketts Ln, Elkridge, MD 21075

custom designs unlimited, inc.
INTERNATIONAL
15 mooring point court
annapolis, md. 21403
tel: (410) 990-1850
fax: (410) 990-1860
email: rlang38208@aol.com
http://customdesignsinternational.net

name:	Wild Lake Middle School	date:		revisions:	
scale:	1/4" = 1'-0"				
dwg. no.:	94824				
drwn. by:	bob lang	date:	10/5/2014		
Deck/Ramp Construction Dwg.		sheet no: 1 of 1			