Application for URBAN DESIGN COMMITTEE Review

Department of Planning and Development Review
Planning & Preservation Division
900 E. Broad Street, Room 510
Richmond, Virginia 23219
(804) 646-6335
http://www.richmondgov.com/CommitteeUrbanDesign

Application Type

- ☐ Addition/Alteration to Existing Structure
- ☑ New Construction
- ☐ Streetscape
- ☐ Site Amenity
- ☐ Encroachment
- ☐ Master Plan
- ☐ Sign
- ☐ Other

Review Type

- ☐ Conceptual
- ☑ Final

Project Name: Miles J. Jones Elementary School - Installation of new 7 classroom modular building.

Project Address: 200 Beaufont Hill Drive

Brief Project Description (this is not a replacement for the required detailed narrative) : New 7 classroom modular building. This building will be temporary and consist of approximately 112'-0" x 65'-0". This building will add to the current student capacity. The building will contain 7 classrooms and support area.

Applicant Information

(on all applications other than encroachments, a City agency representative must be the applicant)

Name: Lloyd Schieldge Email: lschield@richmond.k12.va.us

City Agency: Richmond Public Schools Phone: 804.335.5401

Address: 1250 Ingram Avenue, Richmond, VA 23224

Main Contact (if different from Applicant): N/A

Company: N/A Phone: N/A

Email: N/A

Submittal Deadlines

All applications and support materials must be filed no later than 21 days prior to the scheduled meeting of the Urban Design Committee (UDC). Please see the schedule on page 3 as actual deadlines are adjusted due to City holidays. **Late or incomplete submissions will be deferred to the next meeting.**

Filing

Applications can be mailed or delivered to the attention of "Urban Design Committee" at the address listed at the top of this page. **It is important that the applicant discuss the proposal with appropriate City agencies, Zoning Administration staff, and area civic associations and residents prior to filing the application with the UDC.**

UDC Background

The UDC is a ten member committee created by City Council in 1968 whose purpose is to advise the City Planning Commission on the design of projects on City property or right-of-way. The UDC provides advice of an aesthetic nature in connection with the performance of the duties of the Commission under Sections 17.05, 17.06 and 17.07 of the City Charter. The UDC also advises the Department of Public Works in regards to private encroachments in the public right-of-way.

Richmond Public Schools
2907 North Boulevard
Richmond, VA 23230-3913
Facility Services
Phone: (804) 780-6251
Cell: (804) 201-8860
Fax: (804)780-8789
Adavis5@richmond.k12.va.us
Andrew Davis, Director

URBAN DESIGN COMMITTEE
December 4, 2015
Richmond Public Schools
Miles Jones Elementary School
200 Beaufont Hill Drive
Richmond, VA 23225

Final Review

Narrative:

Richmond Public Schools has a significant deficit of elementary school classroom space south of the river for the current 2015/2016 school year and the foreseeable future, the 2014-2015 enrollment at Miles Jones Elementary School was 547, the projection for the 2015-2016 school year was 580, to date, 638 (plus 43 Pre-K) have enrolled. The total enrollment is expected to grow by an additional 25 students in the 2016-2017 school year before leveling off to a total of 573 students in 2024-2025. (Refer to **EXHIBIT-A** for the Population and Enrollment Forecasts).

The District installed two (2) new multiple classroom buildings and accompanying Dining Hall Facilities at two (2) existing elementary schools (Greene Elementary School & Broad Rock Elementary School) over this past summer in an effort to alleviate the population growth, we are now proposing another multiple classroom building (7-classrooms), at a different south-side school (Reid Elementary School) to further address the ongoing overpopulation issue.

During the Spring of 2014, the Richmond Public School Board assembled a Facilities Task Force to assess the District's current portfolio of facilities and develop a directional & financial blueprint for the District to follow moving forward.

A Facilities Needs Report was presented to the Richmond Public School Board by the Task Force and the Richmond Public Schools Administration on April 13, 2015. The Facilities Needs Report states that in order to address the overcrowding issues south of the river, the District would like to implement the following actions:

1. Rezoning Construction of a new elementary school

2. Renovations and additions to the existing elementary schools

These plans are contingent upon the allocation of necessary funding. The Richmond Public Schools Administration and School Board are currently working closely with city officials and the City Council to obtain the necessary funding to implement these tasks, however until funding is allocated, the temporary modular units are proposed as a means to satisfy current capacity issues.

The City of Richmond recently solicited Proposals (RFP NO. J160004121) for Program Management Services (Due Date: September 29, 2015). The "Program" is expected to include the following proposed projects, valued at a total of approximately $118,000,000.

A. The renovation of, and addition to, one elementary school.
B. The construction of two new elementary schools.
C. The construction of one new middle school.

This project is to provide one temporary modular buildings at Miles Jones Elementary School. The proposed building is a 112'-0" x 65'-0", 7-classroom temporary modular building with restrooms (Note: Restrooms will not be connected until Summer Break) (Refer to **EXHIBIT-B** for Proposed Building Plans). The buildings will be accessed by ADA compliant walkway that will extend to the existing school building. Dominion Power will provide the power hook-ups needed for the units. Descriptive data on the units has been included in the packet. We intend to have the proposed units installed by the middle of December (2015) to allow for power hook-up, as well as allowing for the teachers to set-up their new temporary classrooms, and furniture delivery and set-up, prior to the students returning from Winter Break.

Site Plan:

Please see the attached site plans (Refer to **EXHIBIT-C**) for location of the proposed temporary modular buildings on the existing site.

Since these units are temporary, only minimal landscaping is proposed for this project and RPS is open to recommendations (Refer to **EXHIBIT-D**).

Exterior lighting will be installed on the unit. (Each door opening). No additional trash receptacles, benches or picnic tables will be added beyond what already exists on-site today.

Proposed building materials for the units are described in the attached data sheets (Refer to **EXHIBIT-E**) , and include:

- HardiPanel exterior siding
- Contrasting color HardiTrim
- Steel clad exterior doors with view block

- Dual-glazed low "e" exterior windows
- Low sloped roof designed to divert drainage away from doors and windows
- Gutters and downspouts
- White EPDM roof

Timeline:

The following is the proposed timeline:

- November 25, 2015 – Temporary modular buildings delivered to site
- January 1, 2016 – Certificate of Occupancy

Once a final plan to address the overcrowding has been implemented, and permanent space provided for the student population, these temporary modular building will be permanently removed from the site, including all associated walkways and utilities. The site will be returned to the existing condition.

The site design and construction administration for this project will be procured utilizing an existing Term Contract with an A&E. The temporary modular buildings will be procured utilizing an existing E & I Cooperative's Agreement with Mobile Modular Management – Contract Number CNR01338

As noted in the UDC Guidelines, the UDC supports the City Planning Commission's policy, adopted July 17, 1995, which states that all future modular unit requests, including renewals of currently approved units, will not be considered unless they are submitted with a cost analysis which compares the cost of the modular unit(s) to the cost of constructing as addition or a new school in lieu of the modular units.

Permanent resolution to overcrowding at Miles Jones Elementary School will involve redistricting, with additions and renovations to surrounding schools that will then accept students currently assigned to Miles Jones Elementary School. The latest data available indicates the costs associated with the proposed redistricting/building additions, and renovations, will be $66,318,450 (Refer to **EXHIBIT-F** for the RPS 2015 Facility Update Cost Estimate 3-24-15). The estimated cost of delivery/installation & first year lease of the modular unit will be $421,404

EXHIBIT-G is reserved for supporting documents such as the requested letter on behalf of the school Principal indicating support of the project and acknowledging any negative impact inposed by this effort are outweighed by the positive effects of the project.

If further information is required, or if clarification is desired, please contact Lloyd Schieldge, CIP Manager, Richmond Public Schools, directly by cell phone, at 335.5401 (804), or email, at lschield@richmond.k12.va.us

Attachments:	EXHIBIT-A:	Population & Enrolment Forecast
	EXHIBIT-B:	Proposed Floor Plans
	EXHIBIT-C:	Proposed Site Plan
	EXHIBIT-D:	Proposed Landscaping Plan – (Reserved for comments by Planning Commission)
	EXHIBIT-E:	Data Sheets
	EXHIBIT-F:	Supporting Documents

EXHIBIT-A

Population and Enrollment Forecasts

ATTACHMENT - 2

RICHMOND PUBLIC SCHOOLS, VA
POPULATION AND ENROLLMENT FORECASTS

Mary Munford Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	107	99	96	88	89	90	89	89	88	88	86	87	87	88
1	95	96	95	86	85	86	87	86	86	85	84	84	83	83
2	102	103	81	83	81	80	81	82	81	83	82	81	81	80
3	92	99	91	89	81	79	78	79	80	80	82	81	80	80
4	84	90	90	88	86	79	77	76	77	79	79	81	80	79
5	68	67	76	76	79	77	71	69	68	71	73	73	75	74
Total	548	554	529	510	501	491	483	481	480	486	488	487	486	484
Total: Elementary	548	554	529	510	501	491	483	481	480	486	488	487	486	484
Change		6	-25	-19	-9	-10	-8	-2	-1	6	2	-1	-1	-2
Percent Change		1.09%	-4.51%	-3.59%	-1.76%	-2.00%	-1.63%	-0.41%	-0.21%	1.25%	0.41%	-0.20%	-0.21%	-0.41%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

LAST YEAR
THIS YEAR
NEXT YEAR

Miles Jerome Jones Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	96	97	101	101	98	97	96	96	95	95	93	91	89	90
1	81	90	95	96	97	96	95	94	94	93	92	90	88	86
2	68	78	93	94	93	94	93	92	91	92	91	90	88	86
3	69	71	84	108	105	104	105	104	103	104	105	104	103	100
4	78	76	64	77	106	103	102	103	102	102	103	104	103	102
5	79	85	82	71	81	111	108	107	108	108	108	109	110	109
Total	471	492	519	547	580	605	599	596	593	594	592	588	581	573
Total: Elementary	471	492	519	547	580	605	599	596	593	594	592	588	581	573
Change		21	27	28	33	25	-6	-3	-3	1	-2	-4	-7	-8
Percent Change		4.46%	5.49%	5.39%	6.03%	4.31%	-0.99%	-0.50%	-0.50%	0.17%	-0.34%	-0.68%	-1.19%	-1.38%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

NOTE: THESE NUMBERS INCLUDE ONLY K-5. PRE-K IS ADDITIONAL

Oak Grove Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	45	55	125	117	108	108	108	107	105	105	103	101	100	101
1	59	43	127	106	115	113	112	112	111	109	108	106	104	103
2	61	68	98	109	101	109	107	106	106	107	105	104	102	100
3	62	53	108	106	107	99	107	105	104	105	106	104	103	101
4	50	63	92	102	103	104	96	104	102	101	103	104	102	101
5	55	42	99	92	103	104	105	97	105	104	103	105	106	104
Total	332	324	649	632	637	637	635	631	633	631	628	624	617	610
Total: Elementary	332	324	649	632	637	637	635	631	633	631	628	624	617	610
Change		-8	325	-17	5	0	-2	-4	2	-2	-3	-4	-7	-7
Percent Change		-2.41%	100.31%	-2.62%	0.79%	0.00%	-0.31%	-0.63%	0.32%	-0.32%	-0.48%	-0.64%	-1.12%	-1.13%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

EXHIBIT-B

Proposed Building Plans

GENERAL NOTES:

PLUMBING NOTES:

ELECTRICAL NOTES:

MECHANICAL NOTES:

WINDOW & DOOR SPECIFICATIONS

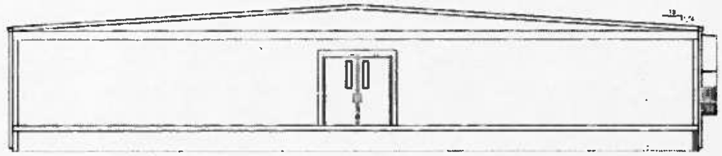
SYMBOLS

STRUCTURAL LOAD LIMITATIONS ALL OTHER STATES

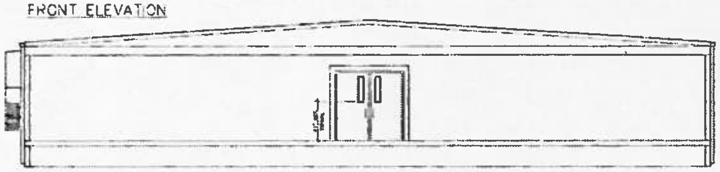
STRUCTURAL LOAD LIMITATIONS MARYLAND ONLY

ACCESSIBILITY NOTES:

SERIAL NO 2850 AB



FRONT ELEVATION



REAR ELEVATION

N.C. INSTALLATION INSTRUCTIONS

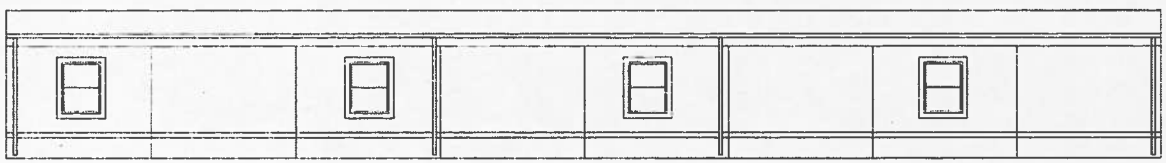
ATTENTION LOCAL INSPECTIONS DEPARTMENT

ATTENTION LOCAL INSPECTIONS DEPARTMENT

SITE INSTALLED ITEMS

MARYLAND NOTES:

SERIAL NO 2851 AB

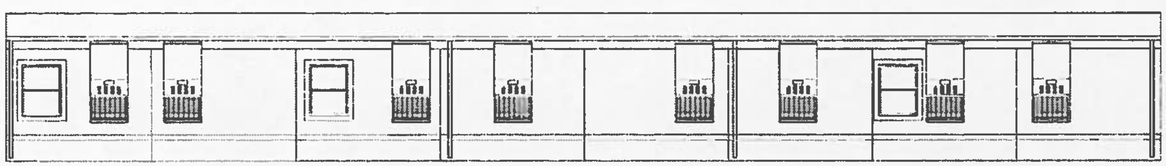


LEFT ELEVATION

MELVIN SLOAN

APPROVED RADCO Jan 23, 2014 APPROVED R.JOHNSON

BUILDING DESIGN PARAMETERS



RIGHT ELEVATION

CODE SUMMARY:

STATE	BUILDING	ELECTRICAL	MECHANICAL	PLUMBING	ACCESSIBILITY	ENERGY CODE
DEL.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MARYLAND	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
VIRGINIA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
N. CAROLINA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SERIAL NO 2852 AB

SERIAL NO 2853 AB

PROFESSIONAL CERTIFICATION:

CONSULTING ENGINEER

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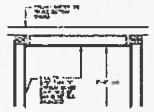
FIRST STRING SPACE

DATE: 11-27-13

FSS2850-53 A-H
MOD-POD EDUCATION

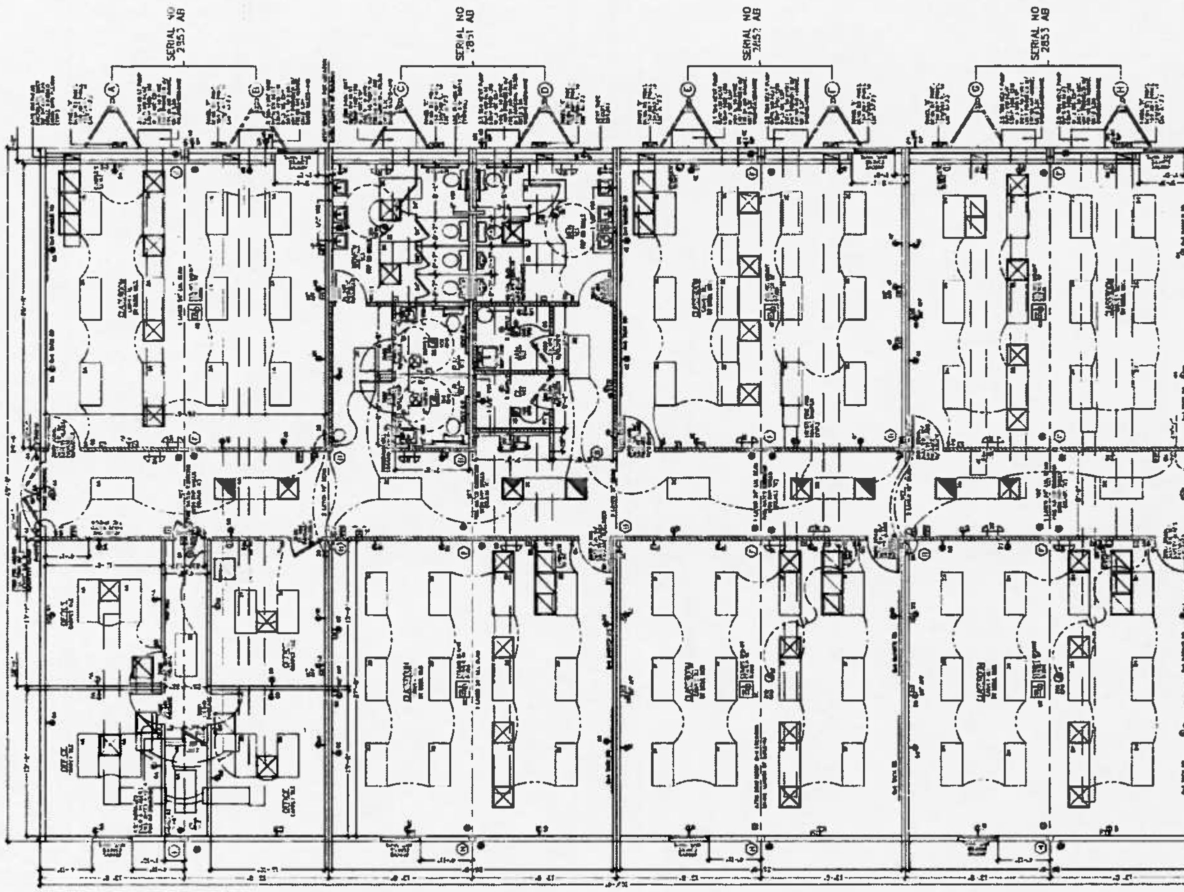
COVER SHEET

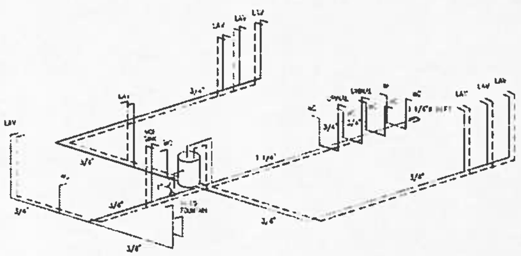
SHEET 1 OF 4



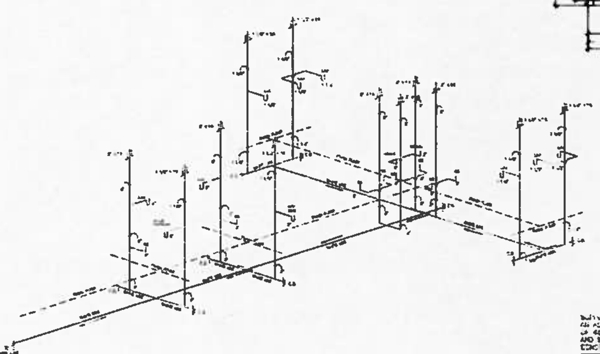
DWV RISER NOTES:

COLUMN STRAPPING SCHEDULE:





SUPPLY RISER -NTS-



DWV RISER NTS

RADCO
APPROVED
Jan 23, 2014
APPROVED

PROFESSIONAL CERTIFICATION:

CONSULTING ENGINEER

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FIRST STRING SPACE

J.R.

FSS2850-53 A-H
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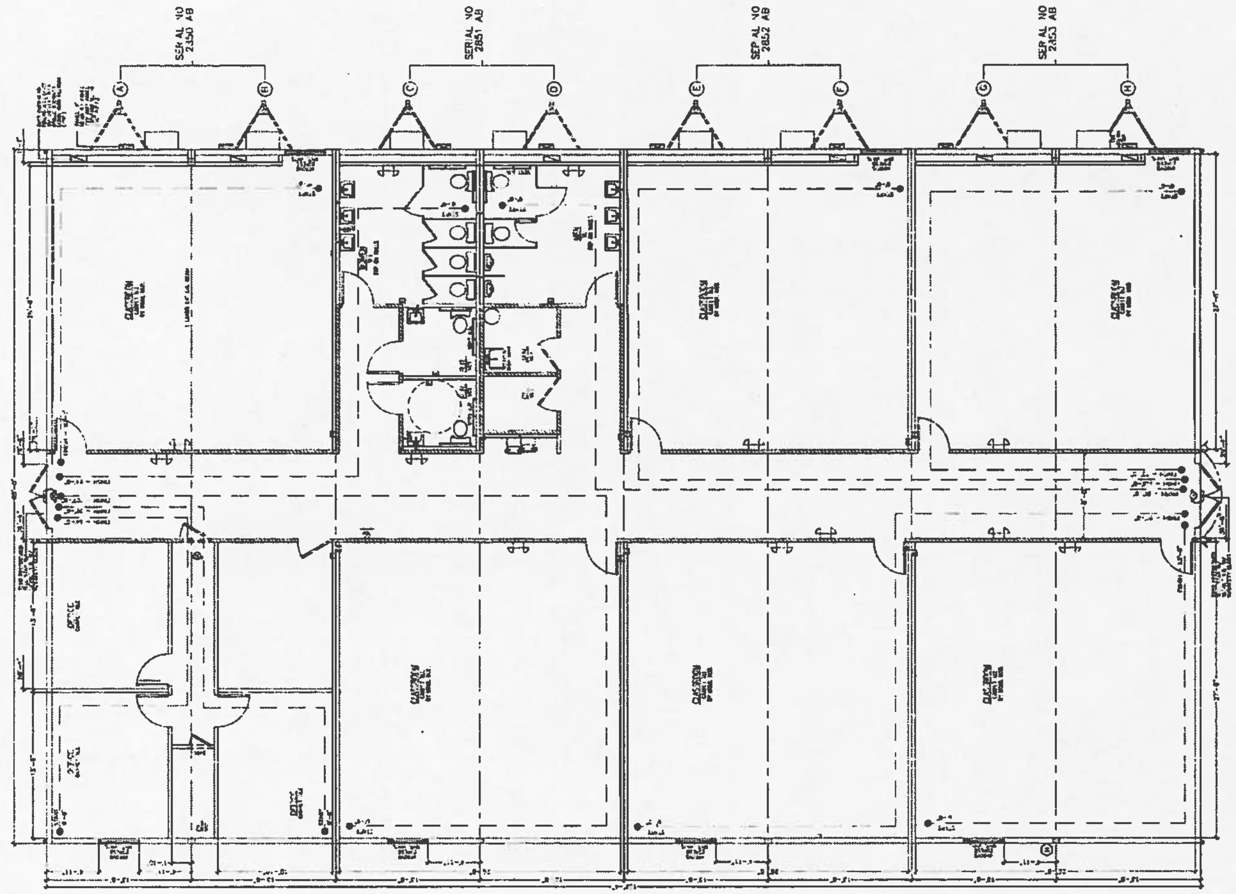
FLOOR PLAN



RADCO
APPROVED
Jan 23, 2014
B.JOHNSON

PROFESSIONAL CERTIFICATION:

NOTE:
EACH EXIT DOOR IS ABLE TO ACCOMMODATE:
(2) 72x80 DOORS W/A TOTAL CLEAR WIDTH OF 128"/2= 64" EACH DOOR
227 x 0.2 = 45.4" WHICH IS LESS THAN 128

LIFE SAFETY PARAMETERS

1. USE/OCCUPANCY: EDUCATIONAL
2. OCCUPANT LOAD:
   EDUCATION = 4,380 NET SQ. FT./20 = 219 OCCUPANTS
   OFFICE AREA = 748 SQ. FT./100 = 8 OCCUPANTS
   TOTAL OF 227 OCCUPANTS

CONSULTING ENGINEER | JAMES BRADLEY, P.E. – PA 15363

FIRST STRING SPACE INC.
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FIRST STRING SPACE

PEARSON, GEORGIA 31642

SCALE: SEE NOTES
REFERENCE: MOD-POD

FSS2850-53 A-H
MOD-POD EDUCATION

LIFE SAFETY PLAN

3 OF -

EXTERIOR FINISH MATERIAL:

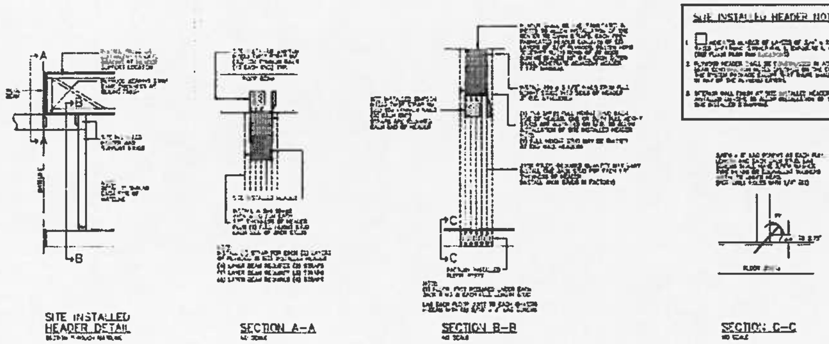
ROOF – MULE-HIDE 45 MIL (WHITE) EPDM FULLY ADHERED IN ACCORDANCE WITH ESR-1778 OVER 7/16" MULE-HIDE FR DECK PANEL 'C' INSTALLED PER MANUFACTURERS SPECIFICATIONS
OR
ROOF – FIRESTONE 45 MIL (WHITE) EPDM FULLY ADHERED OVER 7/16" FIRESTONE COVER DX INSTALLED PER MANUFACTURERS SPECIFICATIONS

WALL – HARDI-PANEL SIDING (STUCCO) OVER APPROVED MOISTURE BARRIER OVER 7/16" OSB SHEATHING INSTALLED PER MANUFACTURERS SPECIFICATIONS.

INTERIOR FINISH MATERIAL:

CEILING	–	T-GRID CEILING INSTALLED PER MANUFACTURER'S SPECIFICATIONS
WALL	–	5/8" TYPE 'X' GYP. BOARD (VCG THROUGHOUT) INSTALLED PER MANUFACTURERS SPECIFICATIONS
CORRIDOR, RESTROOM & CLOSET	–	FRP OVER 5/8" TYPE 'X' GYP. BOARD INSTALLED PER MANUFACTURERS SPECIFICATIONS (CLASS 'A' FINISH)
FLOOR	–	AS NOTED ON PLAN

NOTE: INTERIOR FINISHES SHALL BE CLASS 'C' OR BETTER



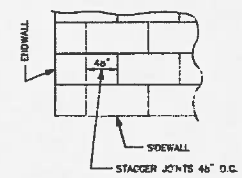
SITE INSTALLED HEADER DETAIL

SECTION A–A

SECTION B–B

SECTION C–C

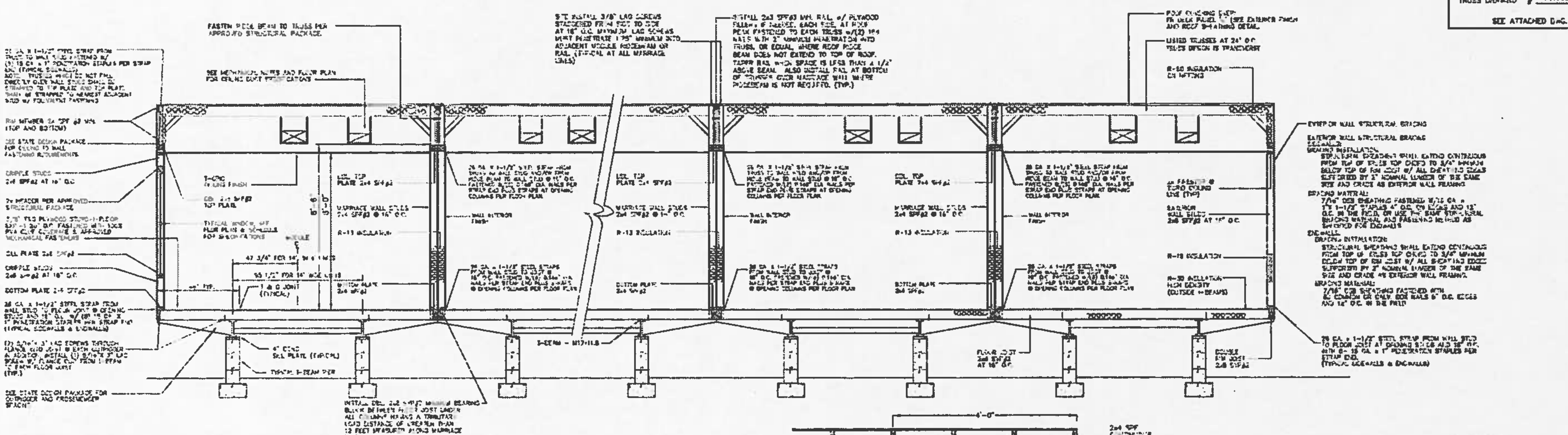
SITE INSTALLED HEADER NOTES: [illegible]

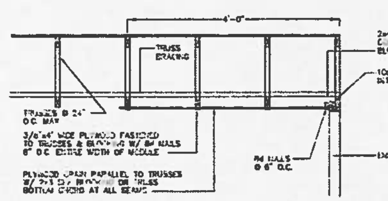


MULEHIDE:
FR DECK PANEL 'C' TO BE FASTENED TO TRUSSES W/ 8D NAILS @ 6" O.C. ON EDGES AND 12" O.C. IN FIELD
OR
FIRESTONE:
7/16" COVER DX SHEATHING TO BE FASTENED TO TRUSSES W/ 8D NAILS @ 6" O.C. EDGES AND 12" O.C. IN FIELD

ROOF SHEATHING DETAIL

APPROVED TRUSS DESIGN
TRUSS MANUF #: UNIVERSAL
TRUSS DRAWING # F117722 (MARYLAND)
TRUSS DRAWING # F117723 (OTHER STATES)
SEE ATTACHED DWG.





SECTION A–A
(TYP. EACH ENDWALL)

APPROVED RADCO Jan 23, 2014 R.JOHNSON APPROVED

GENERAL CROSS-SECTION NOTES:

1. UNLESS OTHERWISE SPECIFIED, ALL STEEL MUST COMPLY W/ ASTM A36. YIELD STRENGTH = 36 KSI.
2. ALL LAG SCREWS MUST COMPLY W/ ANSI/ASME B18.2.1 [illegible] 60 KSI MINIMUM
3. SEE FOUNDATION PLAN FOR PIER AND TIE-DOWN STRAPPING LOCATIONS, ORIENTATIONS, AND SPECIFICATIONS.

MICROLAM BEAM CONSTRUCTION

[illegible] LAYER(S) [illegible] x [illegible] MICROLAM, EACH MODULE.

NOTES:

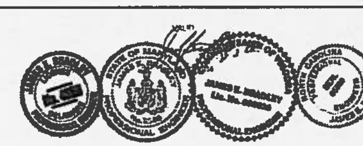
1. MICROLAM F_b = [illegible] PSI
2. MICROLAM MUST BE CONTINUOUS OVER COLUMN(S)
3. BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.
4. FASTEN ROOF SHEATHING INTO TOP EDGE OF MICROLAM TO PROVIDE CONTINUOUS LATERAL SUPPORT OF BEAM.
5. INSTALL [illegible] RIDGE BEAM BEARING STIFFENER OVER SUPPORT COLUMNS WHEN SPECIFIED ON FLOOR PLAN. FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM WITH 100% GLUE COVERAGE AND [illegible] GA. STAPLES [illegible] 3/4" MINIMUM PENETRATION INTO MICROLAM BEAM.
6. WHEN MORE THAN ONE LAYER OF MICROLAM IS INSTALLED ON EITHER SIDE OF THE MATING LINE, LAYERS [illegible]

RIDGE BEAM CONSTRUCTION:

(SEE FLOOR PLAN) PLYWOOD, RATED SHEATHING, EXP-1, STRUCT-1, 5 PLY/5 LAYER, 48/24 EACH HALF CONTINUOUS ENTIRE LENGTH OF CLEARSPAN.

NOTES:

1. PLYWOOD FACE GRAIN MUST BE PARALLEL TO THE RIDGE BEAM SPAN.
2. ALL PLYWOOD BUTT JOINTS MUST BE STAGGERED 24" MINIMUM
3. ALL RIDGE BEAM PLYWOOD LAMINATIONS MUST BE THE SAME DEPTH, THICKNESS, AND GRADE OF PLYWOOD. NO LUMBER OR PLYWOOD FLANGES ARE PERMITTED
4. PLYWOOD MUST BE MANUFACTURED IN ACCORDANCE W/ PS 1-95
5. PLYWOOD LAMINATIONS IN EACH HALF OF THE UNITS MUST BE GLUE NAILED TO ADJACENT LAYERS IN ACCORDANCE W/ [illegible] W/ AN ADHESIVE COMPLYING W/ ASTM D2559, OR [illegible]
6. PLYWOOD MUST NOT BE TREATED W/ A FIRE RETARDANT PROCESS.
7. MOISTURE CONTENT MUST BE LESS THAN 16%.
8. BEAMS SUPPORTED BY ENDWALL COLUMNS MUST EXTEND CONTINUOUS OVER COLUMNS TO EXTERIOR FACE OF ENDWALL.
9. INSTALL (2X4) X 20" [illegible] RIDGE BEAM BEARING STIFFENER OVER SUPPORT COLUMNS, WHEN SPECIFIED ON FLOOR PLAN. FASTEN THE FACE OF THE STIFFENER TO THE RIDGE BEAM W/ 100% GLUE COVERAGE AND (6) 16 GA. X 2-1/2" STAPLES.

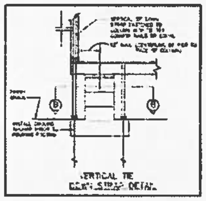


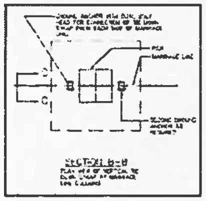
PROFESSIONAL CERTIFICATION:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. [illegible] EXPIRATION DATE [illegible]

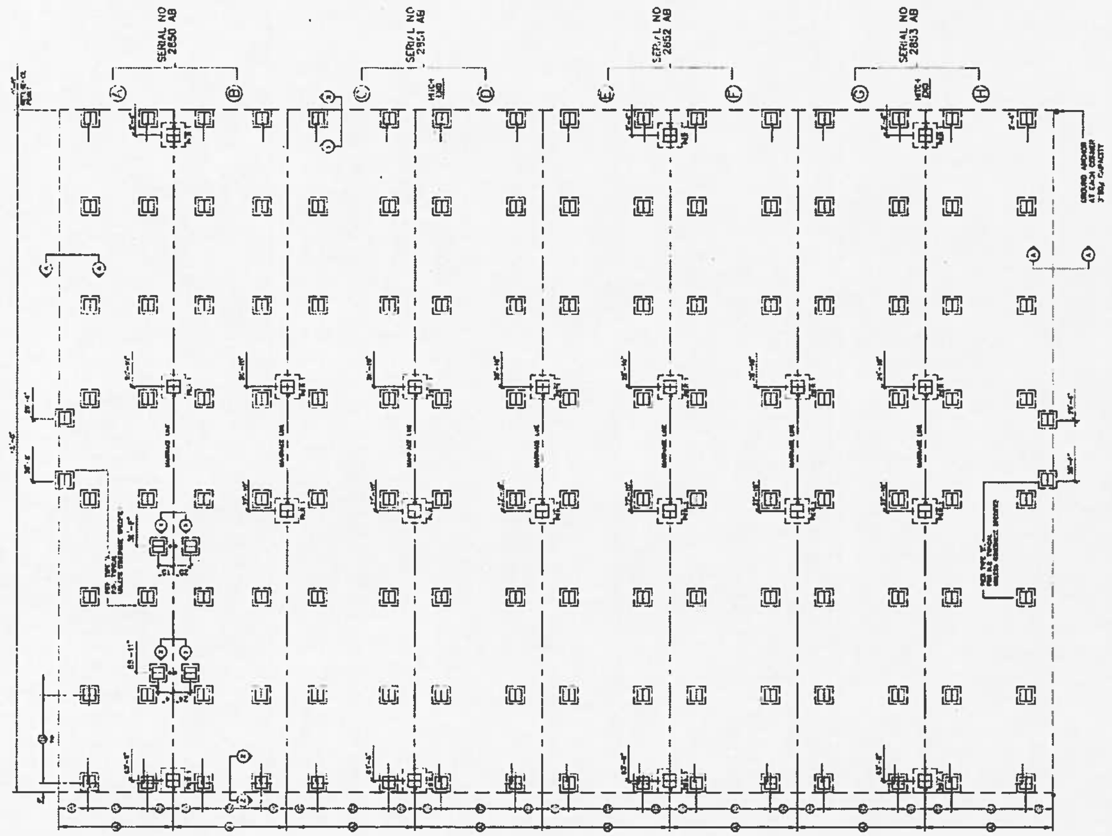
CONSULTING ENGINEER: JAMES BRADLEY, P.E. – 312 FOX TRAIL – [illegible], PA. [illegible] – (814) [illegible]

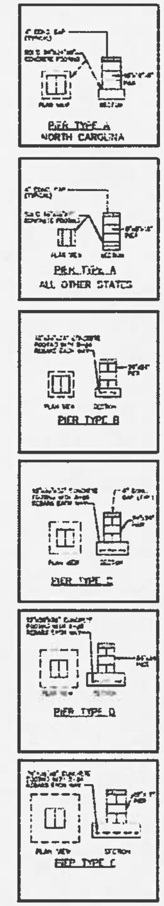
FIRST STRING SPACE INC.
OUR STRENGTH IS TEAMWORK

FIRST STRING SPACE [illegible] RAILROAD AVE. EAST PEARSON, GEORGIA [illegible] (912) [illegible]		
DATE: 11-27-13	THIRD PARTY: RADCO [illegible]	
SCALE: NO SCALE		
CODE: [illegible]		
STATES: NC, VA, MD, PA	REVISIONS	BY: J.B.
REFERENCE: MOD-POD		
FSS2850-53 A-H MOD-POD EDUCATION		SHEET 4 OF 4
CROSS SECTION	DESTINATION [illegible]	









FOUNDATION DIMENSIONS ALL OTHER STATES		
A MODULE WIDTH	B PIER TO MODULE EDGE	C STEEL BEAM SPACING
13'-8"	34 1/4"	35 1/2"
D MAXIMUM PIER SPACING	MINIMUM SOIL BEARING CAPACITY	
4'-10" 7'-5"	2000 PSF 3000 PSF	

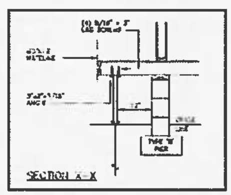
FOUNDATION DIMENSIONS NORTH CAROLINA		
A MODULE WIDTH	B PIER TO MODULE EDGE	C STEEL BEAM SPACING
13'-8"	34 1/4"	35 1/2"
D MAXIMUM PIER SPACING	MINIMUM SOIL BEARING CAPACITY	
5'-6" 6'-4"	2000 PSF 3000 PSF	

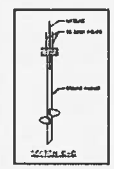
RADCO
APPROVED
Jan 23, 2014
R.JOHNSON

FOUNDATION NOTES:

NOTE:

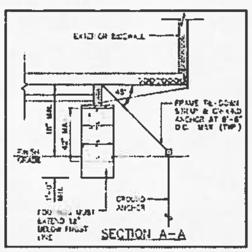
NOTE:

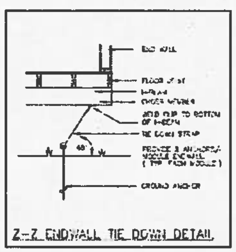




MARRIAGE WALL PIER REQUIREMENTS

PROFESSIONAL CERTIFICATION:





CONSULTANT ENGINEER | JAMES BRADLEY, P.E.

FIRST STRING SPACE INC.
OUR STRENGTH IS TEAMWORK

FIRST STRING SPACE

SCALE: NO SCALE

FSS2850-53 A-H
MOD-POD EDUCATION

FOUNDATION

J.B

SHEET 1 OF 1

EXHIBIT-C

Proposed Site Plan


SITE LOCATION
Miles J Jones Elementary School
200 Beaufont Hills Dr
Beaufont
Hooks
Midlothian
150
50
M.J.Jones Elementary
School Vicinity Map

PERMIT SUBMITTAL FOR MILES JEROME JONES ELEMENTARY TRAILERS

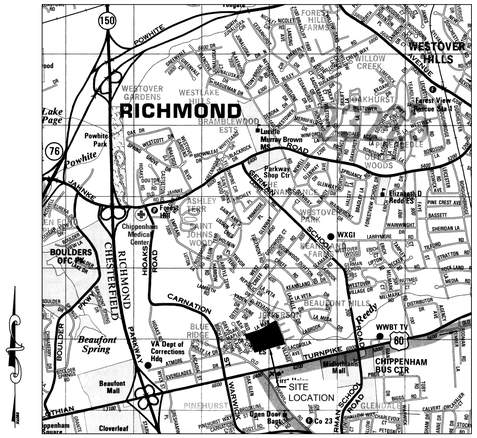
200 BEAUFONT HILLS DRIVE

CITY OF RICHMOND, VIRGINIA

PROJECT INFORMATION

PARCEL INFORMATION:

1. ADDRESS: 200 BEAUFONT HILLS DRIVE
   RICHMOND, VA 23225
2. PARCEL ID: C0050992020
3. EXISTING USE: PUBLIC SCHOOL
4. PROPOSED USE: PUBLIC SCHOOL
5. ZONING: R-48
6. PARCEL ACREAGE: 11.142 AC (TOTAL)
   LIMITS OF DISTURBANCE: 1,296 SF (TOTAL)
   FOUNDATIONS: 642 SF
   UTILITY TRENCHES: 654 SF
7. CLASSROOMS BUILDING: 1 STORY, 7,280 S.F.
8. PARKING ANALYSIS:
   NOT APPLICABLE
9. SURVEY INFORMATION OBTAINED DURING A FIELD SURVEY PERFORMED BY TIMMONS GROUP IN DECEMBER 2015.


RICHMOND
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BOULDERS OFC PK
Beaufont Spring
Beaufont Mall
VA Dept of Corrections Hdq
Chippenham Medical Center
Forest View High School
Elizabeth D Redford ES
Lucille Morrey Brown MS
Parkrun Shop Ctr
WXGI
WWBT TV
Upper Room Baptist Church
Cloverleaf
Lake Page
Powhite Park
Powhite
Chesterfield
Richmond
Boulders
Carnation
Turnpike
Warwick
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Pinehurst
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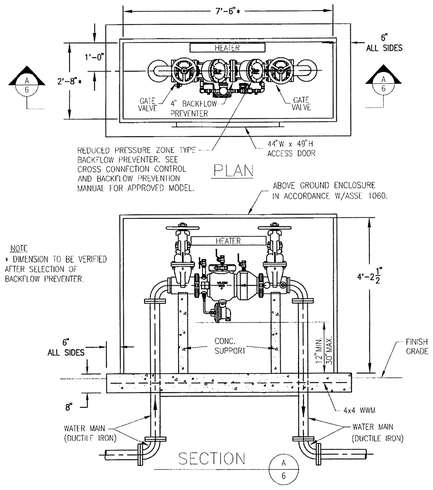
CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES



DATE		DRWG. NO.
APR. 2006	ENCLOSURE DETAIL	ENCL
REVISIONS		

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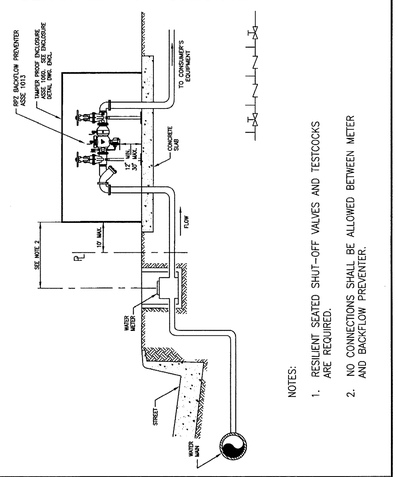
CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES



NOTES:
1. RESILIENT SEATED SHUT-OFF VALVES AND TESTCOCKS ARE REQUIRED.
2. NO CONNECTIONS SHALL BE ALLOWED BETWEEN METER AND BACKFLOW PREVENTER.

NOTE: THE MECHANICAL BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED SUBJECT TO THE APPROVAL OF THE CITY OF RICHMOND DPU. ANY DEVIATION FROM THE METHODS DESCRIBED ABOVE MUST RECEIVE APPROVAL PRIOR TO INSTALLATION. ALL MECHANICAL BACKFLOW PREVENTION ASSEMBLIES APPROVED BY THE CITY OF RICHMOND DPU FOR INSTALLATION AT THE SERVICE CONNECTION SHALL BE IN ACCORDANCE WITH THE CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION PROGRAM.

DATE	DOMESTIC BACKFLOW PREVENTION ASSEMBLY TYPICAL INSTALLATION DETAIL	DWG. NO.
APR. 2006		BKFLWASSM
REVISIONS		

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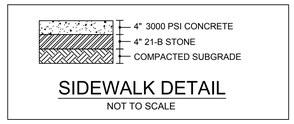


SIDEWALK DETAIL
NOT TO SCALE

GENERAL NOTES

1. ALL WORK IS TO CONFORM TO THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS. WORK BEING PERFORMED IN THE RIGHT-OF-WAY SHALL ADDITIONALLY CONFORM TO THE STANDARDS AND SPECIFICATIONS SET FORTH IN THE CITY OF RIGHT-OF-WAY EXCAVATION AND RESTORATION MANUAL.
2. CONTRACTOR TO VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY, IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLAN, OR IF THERE APPEARS TO BE A CONFLICT OR IF ANY UTILITY NOT SHOWN ON THE PLAN IS DISCOVERED. TO LOCATE UTILITIES, CALL "MISS UTILITY" OF CENTRAL VIRGINIA: 1-800-552-7001 (TOLL FREE)
3. ALL GRADE STAKES DESTROYED BY THE CONTRACTOR, SHALL BE REPLACED AT HIS EXPENSE.
4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE EXISTING RIGHT OF WAY STONES. ANY MARKERS DAMAGED SHALL BE REPLACED AT HIS EXPENSE.
5. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.
6. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF BASE MATERIAL.
7. AN ACTUAL COPY OF THE C.B.R. REPORT SHALL BE SUBMITTED PRIOR TO THE PLACEMENT OF THE BASE MATERIAL. IF THE C.B.R. VALUES ARE LESS THAN 10, THE DEVELOPER WILL BE REQUIRED TO SUBMIT HIS REVISED PAVEMENT DESIGN FOR CITY APPROVAL.
8. PRIME COAT MUST BE APPLIED TO ROAD BASE AGGREGATE PRIOR TO APPLICATION OF ASPHALT SURFACE (PRIME COAT RC-250, 0.3 GALLONS PER SQUARE YARD).
9. SEE LANDSCAPE PLANS FOR FENCE DETAILS.
10. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND REQUIREMENTS FOR ACCESSIBILITY OF DISABLED PERSONS.

STANDARD GEOTECHNICAL NOTES PER CITY OF RICHMOND

ENGINEERED FILL

1. ALL CONTROLLED FILL ZONES ARE TO BE MONITORED BY A FULL TIME GEOTECHNICAL ENGINEERING SERVICES FIRM.
2. ENGINEERED FILLS SHALL BE PROPERLY PLACED ACCORDING TO THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
3. ALL SUMMARY REPORTS FROM THE GEOTECHNICAL ENGINEER REPRESENTING THE PROJECT MUST STATE HIS PROFESSIONAL OPINION ON THE SATISFACTORILY COMPLETED PHASES OF CONSTRUCTION, SUCH AS: SLOPE CUTS, SUBDRAINAGE SYSTEMS, PREPARATION OF SUBGRADES AND COMPACTION OF EARTH FILLS.
4. NO FILLS SHALL HAVE ZONES THAT EXCEED TWO (2) FEET IN ELEVATION WITHOUT CONDUCTING COMPACTION TESTS AND OBTAINING RESULTS OF 95 % OR GREATER.
5. THE GEOTECHNICAL ENGINEER MUST SUBMIT A DETAILED ANALYSIS, ITEMIZING THE FIELD DENSITY TEST RESULTS. THIS REPORT SHALL BE ACCOMPANIED WITH A COPY OF THE SITE PLAN SHEET AND INDICATE THE TEST LOCATIONS AND ELEVATIONS. THE GEOTECHNICAL ENGINEER MUST PROVIDE ENOUGH DESIGNATED TESTING IN ALL FILL ZONES TO ADEQUATELY EXAMINE AND CERTIFY THE INTEGRITY OF THE FILL.
6. THE GEOTECHNICAL ENGINEER MUST SUBMIT A CERTIFIED BUILDING PAD REPORT FOR EACH FILL PAD LOCATION. THIS REPORT SHALL PROFILE THE FILL MATERIAL PLACEMENT AND PROVIDE THE COMPACTION TEST RESULTS. ALL REPORTS WILL BE ACCOMPANIED BY THE SITE PLAN, INDICATING THE TEST LOCATIONS AND ELEVATIONS.
7. NO BUILDING PADS IN FILL ZONES WILL HAVE STRATUMS EXCEEDING TWO (2) FEET IN ELEVATION WITHOUT TEST VERIFYING DENSITY.
8. THESE GEOTECHNICAL NOTES SHALL IN NO WAY LESSEN THE REQUIREMENTS OF THE SUBMITTED SOILS REPORT.

ROAD SUBGRADE

1. INSPECTION AND APPROVAL OF THE SUBGRADE WILL BE REQUIRED PRIOR TO THE PLACEMENT OF THE APPROVED PAVEMENT SECTION MATERIAL.
2. ANY CLAY DEPOSITS IN THE TOP TWO FEET OF THE SUBGRADE MUST BE REMOVED OR ADDRESSED AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
3. SUBGRADE APPROVAL SHALL BE ACCOMPANIED BY THE SUPPORTING DOCUMENTATION VERIFYING DENSITY TEST RESULTS OF 95 % OR GREATER.

   THE ENTIRE SUBGRADE WILL HAVE BEEN PROOF-ROLLED IN THE PRESENCE OF THE SITE INSPECTOR AND GEOTECHNICAL REPRESENTATIVE. PROOF-ROLLING SHALL BE A RUBBER TIRE VEHICLE SUCH AS A LOADED TEN (10) TON TRUCK OR APPROVED COMPACTION EQUIPMENT.

   THE FINAL SUBGRADE SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND SITE INSPECTOR BEFORE PLACEMENT OF PAVEMENT SECTION MATERIALS.

PAVEMENT SECTION

1. ALTERNATE EQUIVALENT PAVEMENT SECTIONS MAY BE SUBSTITUTED FOR THE CITY STANDARD PAVEMENT DESIGN WHEN PROPER METHODS OF SUBGRADE SOILS ANALYSIS ARE CONDUCTED AND WITH THE APPROVAL OF THE DIRECTOR.
2. C.B.R. SAMPLING OF THE SUBGRADE SOILS FOR FINAL PAVEMENT DESIGN MUST BE COORDINATED BY THE OWNER, THROUGH THE GEOTECHNICAL ENGINEER AND VERIFIED BY THE ASSIGNED SITE INSPECTOR DURING THE CONSTRUCTION PHASE.

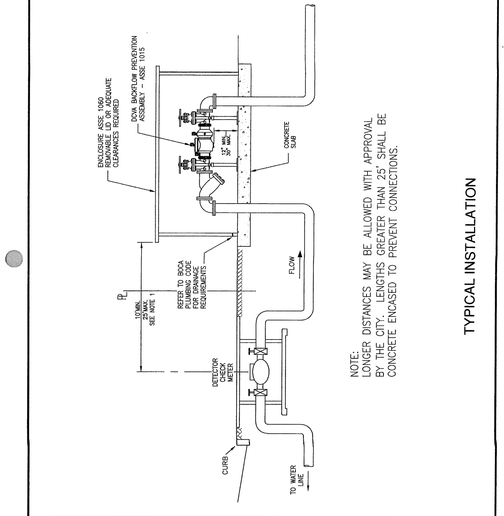
   TEST FOR FINAL PAVEMENT DESIGN SHALL BE CONDUCTED ON A APPROVED REVEAL OF THE SUBGRADE. THESE TESTS SHALL BE MADE AT EACH INTERSECTION, CHANGES IN SUBGRADE SOILS, AND AT A MAXIMUM SPACING OF 500 FEET. A MINIMUM OF TWO (2) C.B.R. SAMPLES WILL BE REQUIRED FOR ANY CUL-DE-SAC OR DEAD END STREET LESS THAN 500 FEET IN LENGTH.

   TEST SPACING AND METHODS MUST FOLLOW THE APPROVED GUIDELINES SET FORTH AND/OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.

PAVEMENT DESIGN

1. REQUIRED THICKNESSES OF SUBBASE, BASE COURSE, AND SURFACE COURSE ARE SHOWN IN THE STREET STANDARDS. SUBBASE THICKNESS IS BASED ON A C.B.R. VALUE OF TEN AND MAY BE INCREASED OR DECREASED AS ALLOWED BY THE STANDARDS. IT SHALL NOT DECREASE BELOW THE CITY OF RICHMOND'S MINIMUM DESIGN STANDARD.
2. ALTERNATE EQUIVALENT PAVEMENT SECTIONS MAY BE SUBSTITUTED FOR THOSE CALLED FOR IN THE STANDARDS PROVIDED, WHEN THEY HAVE THE APPROVAL OF THE DIRECTOR AND ARE DESIGNED IN ACCORDANCE WITH THE PAMPHLET, "A DESIGN GUIDE FOR SUBDIVISION ROAD PAVEMENTS IN VIRGINIA" BY DR. N. K. VASWANI, OCTOBER 1973, AS AMENDED.

CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES



NOTE:
LONGER DISTANCES MAY BE ALLOWED WITH APPROVAL BY THE CITY. LENGTHS GREATER THAN 25' SHALL BE CONCRETE ENCASED TO PREVENT CONNECTIONS.

TYPICAL INSTALLATION

DATE	LOW HAZARD FIRE SYSTEM WITH DETECTOR CHECK - ENCLOSURE INSTALLATION	DWG. NO.
APR. 2006		LO-HAZ
REVISIONS SEP. 2014		

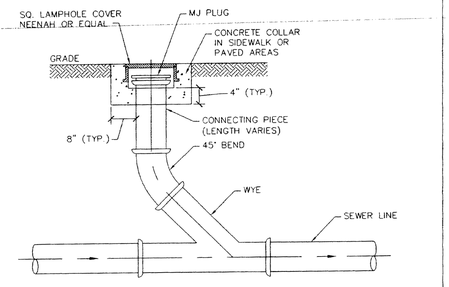
68

CITY OF RICHMOND
DEPARTMENT OF PUBLIC UTILITIES
TYPICAL INSTALLATION PROCEDURES

1. REFER TO ALL APPLICABLE CODES AND MANUALS DURING DESIGN.
2. THE BFP ASSEMBLY'S SHUTOFF VALVES SHALL BE THE ONES APPROVED BY THE MANUFACTURER FOR THAT BFP ASSEMBLY.
3. SUBMIT PLANS SEALED AND SIGNED BY A PROFESSIONAL ENGINEER TO CROSS CONNECTION DEPT.
4. APPLY FOR A PLUMBING PERMIT FROM BUILDING INSPECTIONS OFFICE.
5. APPLY FOR A WATER SERVICE PERMIT FROM DPU DEVELOPMENT OFFICE.
6. INSTALL PIPING AND BACKFLOW PREVENTER, INCLUDING TEST COCKS ADAPTERS – (4) STRAIGHT HOSE ADAPTER FITTINGS, 1/4" S.A.E. 45° FLARE TUBE X 1/4" NPT, FOR CONNECTION TO TEST DEVICE. BACKFLOW PREVENTION DEVICES WILL BE INSTALLED OUTSIDE (OR INSIDE OF A BUILDING WITH APPROVAL OF THE CROSS CONNECTION CONTROL SPECIALIST). REFER TO PLANS FOR TYPICAL INSTALLATION DETAILS. NO TAP-INS WILL BE PERMITTED FOR ANY PURPOSE UPSTREAM OF THE BACKFLOW PREVENTION DEVICE.
7. CALL CROSS CONNECTION CONTROL SPECIALIST FOR INSPECTION OF THE BACKFLOW PREVENTER. INSPECTION AND APPROVAL IS REQUIRED BEFORE ANY METER WILL BE INSTALLED. [804-646-8544]
8. CALL PLUMBING INSPECTOR FOR INSPECTION OF ALL PIPING AND PLUMBING WORK DOWNSTREAM OF THE METER. CALL MECHANICAL INSPECTOR FOR INSPECTION OF ALL WORK DOWNSTREAM OF THE DETECTOR CHECK METER.

DATE	TYPICAL INSTALLATION PROCEDURES	DWG. NO.
APR. 2006		RPZ-IP
REVISIONS SEP. 2014		

64



NOTES:
1. CLEANOUT COVER SHALL BE BRASS IN CONCRETE/PAVEMENT OR PLASTIC IN GRASS AREAS.
2. CLEANOUT SHALL BE 4" OR LARGER UNLESS OTHERWISE APPROVED BY DPU DEPUTY DIRECTOR OR DESIGNEE.

DEPARTMENT OF PUBLIC UTILITIES	CITY OF RICHMOND, VIRGINIA CLEANOUT DETAIL NOT TO SCALE	REV. 12/09 P-7

COMMONWEALTH OF VIRGINIA
STEPHEN JOSEPH RAUCH
Lic. No. 028864
12-2-15
PROFESSIONAL ENGINEER

THIS DRAWING PREPARED AT THE
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TEL 804.541.6600 FAX 804.458.1511 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

REVISION DESCRIPTION	DATE
	12/2/15

DRAWN BY
DESIGNED BY S. RAUGH
CHECKED BY S. RAUGH
SCALE NONE

TIMMONS GROUP

MILES JEROME JONES ELEMENTARY
RICHMOND CITY - VA
NOTES AND DETAILS

JOB NO. 37607
SHEET NO. C2.0

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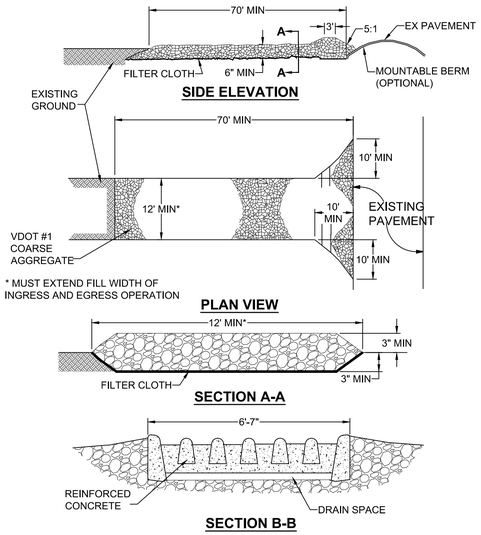


CE **STONE CONSTRUCTION ENTRANCE** 3.02-1

NO SCALE

TABLE 3.32-D
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA

SEED[1]		
LAND USE	SPECIES	APPLICATION PER ACRE
Minimum Care Lawn (Commercial or Residential)	Tall Fescue[1] Perennial Ryegrass Kentucky Bluegrass[1]	95 - 100% 0 - 5% 0 - 5% TOTAL: 175 - 200 lbs
High - Maintenance Lawn	Tall Fescue[1]	TOTAL: 200 - 250 lbs
General Slope (3:1 or less)	Tall Fescue[1] Red Top Grass or Creeping Fescue Seasonal Nurse Crop[2]	128 lbs 2 lbs 20 lbs TOTAL: 150 lbs
Low - Maintenance Slope (Steeper than 3:1)	Tall Fescue[1] Red Top Grass or Creeping Fescue Seasonal Nurse Crop[2] Crownvetch[3]	108 lbs 2 lbs 20 lbs 20 lbs TOTAL: 150 lbs

1 - When selecting varieties of turfgrass, use the Virginia Crop improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA, A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html

2 - Use seasonal nurse crop in accordance with seeding dates as stated below

February 16th - April	Annual Rye
May 1th - August 15th	Foxtail Millet
August 16th - October	Annual Rye
November - February 15th	Winter Rye

3 - Substitute Service Lespedeza for Crownvetch east of Granville, VA (May through September use hulled seed, all other periods, use unhulled Sericea). If Flatpea is used, increase rate to 30 lbs/acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 - 40

FERTILIZER & LIME

- Apply 10-20-10 **fertilizer** at a rate of **500** lbs / acre (or 12 lbs / 1,000 sq ft)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs / 1.000 sq ft)

NOTE:
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.

- Incorporate the lime and fertilizer into the top 4 - 6 inches of the soil by disking or by other means.

- When applying Slowly Available Nitrogen, use rates available in Erosion & sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

Summary of Fertilizer Specification Revisions for Establishment of Turf

Standards & Specifications		2003 Urban Nutrient Management Technical Bulletin
3.31 Emory Seeding		**10-10-10** fertilizer applied at a rate of **450** lbs. / acre or **10** lbs / 1,000 ft²
3.32 Permanent Seeding	Mixed Grasses & Legumes	**10-20-10** fertilizer applied at a rate of **500** lbs. / acre or **12** lbs / 1,000 ft²
	Legume stands only	Apply the equivalent of 100 lbs. of phosphate (P_2O_5) and 100 lbs. of Potash (K_2O) per acre. NO NITROGEN (N)
	Grass stands only	**10-20-10** fertilizer applied at a rate of **500** lbs. / acre or **12** lbs / 1,000 ft²
3.33 Sodding		**10-10-10** fertilizer applied at a rate of **450** lbs. / acre or **10** lbs / 1,000 ft². NOTE: For cool season grasses apply fertilizer in fall or spring. For warm season grasses apply the fertilizer in late spring or summer only.
3.34 Bermuda grass & aOYSIA GRASS Establishment		**10-10-10** fertilizer applied at a rate of **500** lbs. / acre or **12** lbs / 1,000 ft². Apply additional phosphorus and potassium 30 - 60 days later based on the soil test. Apply an additional equivalent of 1 lb./1,000 ft² of nitrogen when the P & K are applied.

CITY OF RICHMOND
EROSION AND SEDIMENT CONTROL GUIDELINES

THE SITE IS TO BE GRADED TO PROPOSED CONTOURS AS SHOWN. NO CRITICAL EROSION CONTROL PROBLEMS ARE ANTICIPATED AS MOST EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO LAND DISTURBANCE. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING MAINTENANCE AND PROCEDURES.

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. EXCESS EXCAVATION DISPOSED OF OFF THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
3. EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP OF THE LAND DISTURBING ACTIVITY.
4. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED SO THAT SEDIMENT CARRYING RUNOFF FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES.
5. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL THE DISTURBED AREA IS STABILIZED.
6. PROPERTIES ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE BY VEHICULAR TRAFFIC OR RUNOFF.
7. THE DISPOSAL OF WASTE MATERIALS REMOVED FROM EROSION AND SEDIMENT CONTROL FACILITIES AND THE DISPOSAL OF THESE FACILITIES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION SEDIMENT CONTROL HANDBOOK.
8. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
9. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
10. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER EACH RUN-OFF PRODUCING RAINFALL.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE BY LOCAL AUTHORITIES HAVING JURISDICTION.

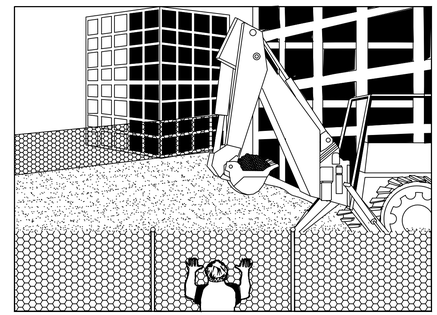
1. A STONE CONSTRUCTION ENTRANCE (VESCH PRACTICE #3.02) WILL BE INSTALLED TO PREVENT SEDIMENT FROM BEING TRACKED INTO THE RIGHT OF WAY.
2. SAFETY FENCE (VESCH PRACTICE #3.38) IS PROPOSED AROUND THE MAJORITY OF THE PROPERTY PERIMETER.

PERMANENT STABILIZATION

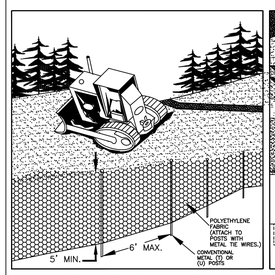
SEEDING SHALL BE IN ACCORDANCE WITH STD. & SPEC. 3.32, PERMANENT SEEDING. SEED TYPE SHALL BE AS SPECIFIED FOR "MINIMUM CARE LAWNS" AND "GENERAL SLOPES" IN THE HANDBOOK.

1. ANY DISTURBED AREA NOT PAVED, SODED, OR BUILT UPON, WILL HAVE A VEGETATIVE COVER PRIOR TO FINAL INSPECTION, AND IN THE OPINION OF THE DCR WILL BE MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND SURVIVE SEVER WEATHER CONDITIONS.
2. WINTERIZATION-ANY DISTURBANCE AREA NOT PAVED, SODDED, OR BUILT UPON BY OCTOBER 15TH IS TO BE SEEDED AND MULCHED ON THAT DATE UNLESS WAIVED BY THE DCR.
3. TEMPORARY SEEDING WILL BE APPLIED WITHIN 7 DAYS TO DENUDED AREAS WHICH MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. FOR TEMPORARY SEEDING USE 50% OF THE RECOMMENDED RATES OF FERTILIZER, LIME AND FULL AMOUNT OF SEED AND MULCH REQUIRED FOR REGULAR SEEDING.
4. ELECTRIC POWER, TELEPHONE, AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEED AND MULCHED WITHIN 7 DAYS AFTER BACKFILL.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS, AND SILT DAMS ARE TO BE MULCHED AND SEEDED FOR VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL STOCKPILES, ON SITE AS WELL AS SOIL TRANSPORTED FROM THE PROJECT SITE.

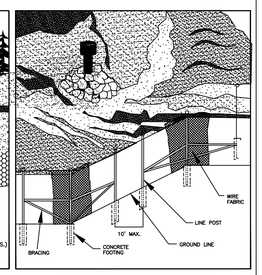
SAFETY FENCE



PERSPECTIVE VIEW



PERSPECTIVE VIEW
PLASTIC FENCE



PERSPECTIVE VIEW
METAL FENCE

SOURCE: CONWED PLASTICS VDOT ROAD AND BRIDGE STANDARDS PLATE. 3.1-1

COMMONWEALTH OF VIRGINIA
STEPHEN JOSEPH RAUCH
Lic. No. 028864
12-2-15
PROFESSIONAL ENGINEER

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REVISION DESCRIPTION	DATE

DATE 12/2/15
DRAWN BY
DESIGNED BY S. RAUGH
CHECKED BY S. RAUGH
SCALE NONE

TIMMONS GROUP

MILES JEROME JONES ELEMENTARY
RICHMOND CITY - VA

EROSION CONTROL NOTES AND DETAILS

JOB NO. 37607
SHEET NO. C2.1

UTILITY NOTES

1. SANITARY SEWER CONNECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING AND RESTORING SITE. SEWER SHALL TIE INTO EXISTING MANHOLE. PROVIDE RISER IN EXISTING MANHOLE IF REQUIRED.
2. CONTRACTOR SHALL CONNECT 2" WATER SERVICE DOWNSTREAM OF METER AND BACKFLOW PREVENTER. THE BACKFLOW PREVENTER SHALL BE INSTALLED IN ABOVE-GROUND "HOT BOX" DOWNSTREAM OF METER. PROVIDE HEAT TRACE WIRE TO "HOT BOX". THE BACKFLOW PREVENTER MUST BE INSTALLED WITHIN 25' LF OF THE EXISTING WATER METER. BACKFLOW PREVENTER SHALL BE WATTS MODEL 919 OR APPROVED EQUAL.
   NOTE: CONTRACTOR SHALL LOCATE EXISTING BACKFLOW PREVENTER IN BUILDING AND ABANDON.
3. WATER AND SEWER PIPING MATERIAL SHALL COMPLY WITH 605.3, 702.3, AND 712 OF THE IPC.

LINDA D. BATES
INST. 02-010298
PARCEL ID. C0050992077

THE CITY OF RICHMOND, VIRGINIA
INST. 98-28130
PARCEL ID. C0050992020

BC SUGAR MAPLE LLC
INST. 06-37539
PARCEL ID. C0050992001

LA MAR DRIVE
50' PUBLIC RIGHT OF WAY

F.F.=231.73'
ROOF OVERHANG
COLUMN
COLUMN
TOP=230.42'
INV. IN=227.52'
12" PLASTIC
TOP=230.71'
INV. OUT=228.24'
SIDEWALK
ASPHALT
4' CHAIN LINK FENCE
GATE
4' CHAIN LINK FENCE
MULCHED PLAYGROUND AREA
REFER TO ARCHITECTURAL DRAWINGS FOR STAIR, RAMP, AND RAILING DETAILS
REMOVE EX MULCHED PLAYGROUND AREA
MODULAR CLASSROOMS
REMOVE EX LANDSCAPE TIMBERS
REMOVE AND REPLACE EX SIGN
APPROXIMATE LOCATION OF EX WATER SERVICE VIA CITY OF RICHMOND GIS. FIELD LOCATE EX WATERLINE.
3" X 2" TEE
2" 45° BEND
RPZ BACKFLOW PREVENTER WITHIN HOTBOX. REFER TO SHEET C2.0 FOR DETAILS.
APPROXIMATE DIRECTION
TOP=227.68'
INV. IN=222.80'(E)
INV. IN=220.03'(W)
INV. OUT=219.98'
(TOP IS 1' BELOW SURFACE)
2" 45° BEND
6"SAN
6" PVC SANITARY LATERAL @ 2.00%
INVERT ELEVATION = 228.85'
FIELD LOCATE EX MANHOLE BELOW SURFACE. CONNECT TO EX MANHOLE WITH KOR-N-SEAL. INV. IN = 226.15'
REMOVE AND REPLACE EX SIGN
TOP=227.61'
INV. IN=219.67'(S)
INV. IN=220.23'(W)
INV. OUT=219.64'
4" THICK CONCRETE LANDING PAD
REFER TO ARCHITECTURAL DRAWINGS FOR STAIR AND LANDING PAD DETAILS
TOP=227.49'
INV. IN=222.74'(S)
INV. IN=220.89'(W)
INV. OUT=220.80'
TOP=226.74'
INV. OUT=221.79'
(1± GRAVEL IN BOTTOM)
APPROXIMATE DIRECTION
APPROXIMATE DIRECTION
P.P. PE34
P.P. PE32
P.P. PD38
FIBER OPT. MARKER
8' CHAIN LINK FENCE
1" CEDAR
1" CEDAR
1" CEDAR
1" CEDAR
7" DECIDUOUS
5" DECIDUOUS
1" DECIDUOUS
1" DECIDUOUS
CONCRETE
PLASTIC BOARDER
LANDSCAPE TIMBERS
MULCHED PLAYGROUND AREA
112'
65'
24'
10'
9.08'
0.92'
5'
5'
5.5'
5'
9'
3.2'

GAS VALVE
GAS TEST
TELEPHONE PEDESTAL
LIGHT POLE
POWER POLE
GUY WIRE
SANITARY MANHOLE
SIGN
DRAINAGE GRATE
ROOF DRAIN
WATER VALVE
FIRE HYDRANT

SCALE 1"=20'
0 20' 40'

NAD 83

COMMONWEALTH OF VIRGINIA
STEPHEN JOSEPH RAUGH
Lic. No. 028864
12-2-15
PROFESSIONAL ENGINEER

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TIMMONS GROUP

REVISION DESCRIPTION

DATE

DATE 12/2/15
DRAWN BY J. STUMPF
DESIGNED BY S. RAUGH
CHECKED BY S. RAUGH
SCALE 1"=20'

MILES JEROME JONES ELEMENTARY
RICHMOND CITY - VA
SITE AND UTILITY PLAN

JOB NO. 37607
SHEET NO. C3.0

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EXHIBIT-D

Proposed Landscaping Plan

(Reserved for comments by Planning Commission)

EXHIBIT-E

Data Sheets

Mobile Modular's

CampusMaker ModPod®

The Flexible Solution for Sustainable Learning Spaces

CampusMaker ModPod – the state-of-the-art eco-friendly modular classroom.

Adaptable Classrooms for Today's Changing Schools.

Sustainable and customized learning environments.

Fluctuating school enrollment. Shifting demographics. Changing expectations. The CampusMaker ModPod® delivers the flexible solutions for today's rapidly evolving educational needs.

Today's school districts are progressively seeking better, more secure and adaptable ways to make the most of their available space. Now with the revolutionary CampusMaker ModPod, creating a reusable and sustainable learning environment has never been easier.

Constructed of durable materials and designed to be easily configured into a wide variety of self-contained classroom complexes, the CampusMaker ModPod delivers what every school needs: energy efficiency, security and a building design that is easily adaptable to different enrollment needs.

Optimum Flexibility

The expandable and retractable design of the CampusMaker ModPod not only offers the ease of reconfiguration but also a wide variety of configuration options, enabling the Facilities Departments to prepare for most enrollment situations.

These configurations include restrooms, administrative offices, libraries, laboratories, music classrooms and more.

Tangible Savings

The innovative side-by-side installation of the classrooms significantly reduces the length of utility runs, electrical and plumbing connections, walkways, stairs and access ramps.

All perimeter walls of each double classroom contained within a CampusMaker ModPod are finished as exterior walls. This allows for easy reconfiguration of the CampusMaker ModPod to a larger or smaller size based upon enrollment. Further, reconfiguration can be performed with minimal disruption to the adjacent classrooms.

Safety and Security

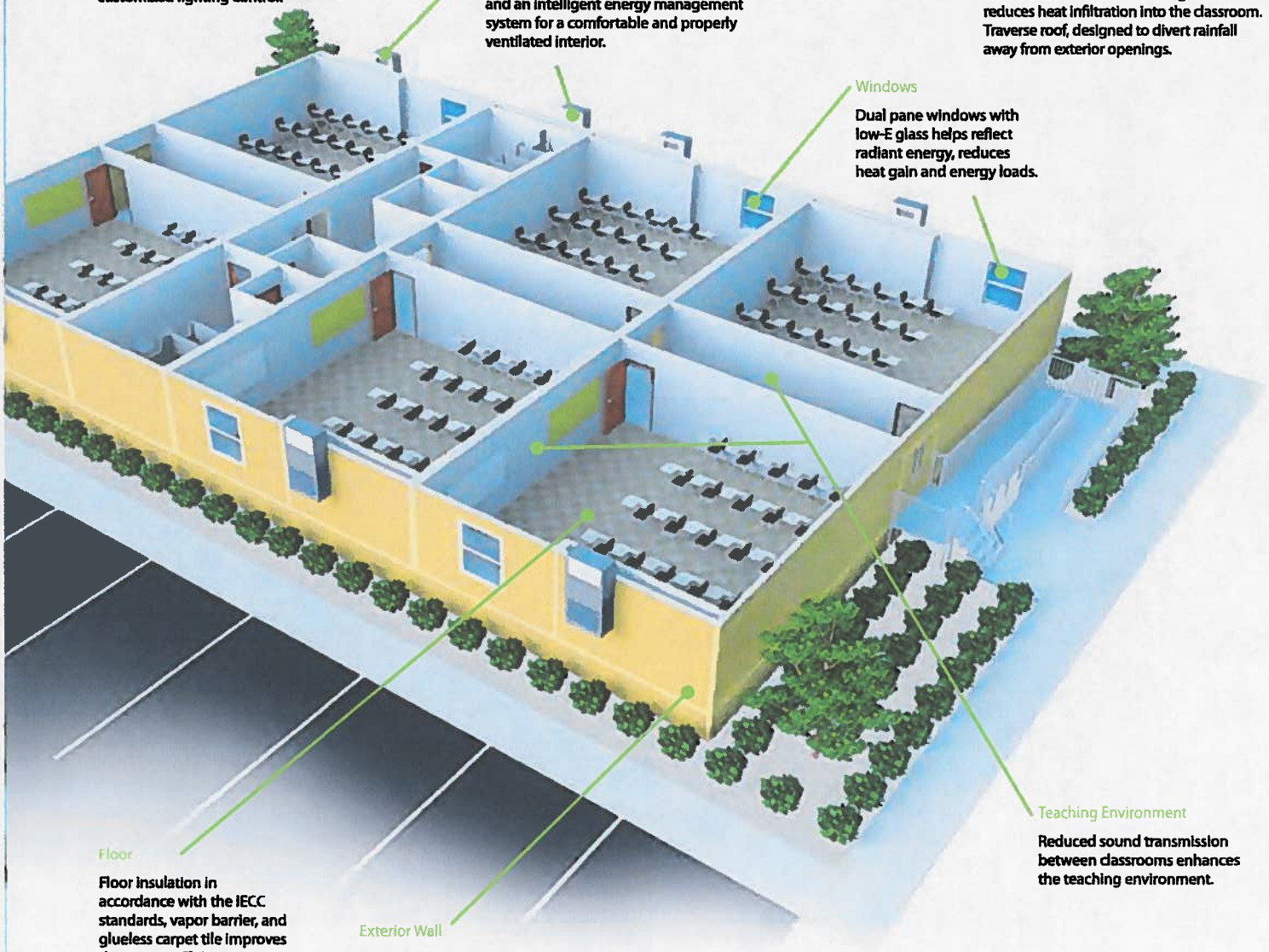
When Mobile Modular designed the CampusMaker ModPod, one of our primary goals was to create a modular classroom system that ensured the safety and security of students and staff.

Each CampusMaker ModPod complex is accessed via an internal corridor with steel clad exterior doors, self-closers and panic hardware. To ensure further safety and security, each classroom is accessed through a solid core fire rated door with a large view block and locking system.

All doors can be equipped with optional alarms, electronic entry control and easily integrated with each facility's primary security and life safety systems.

Let us take care of all of your space needs.

Mobile Modular's **CampusMaker ModPod®** Complex



Lighting (Not shown)

Energy efficient T-8 lighting coupled with flexible switching for customized lighting control.

HVAC

High efficiency HVAC system with Heat Pump and an intelligent energy management system for a comfortable and properly ventilated interior.

Roof (Not shown)

White EPDM Cool Roof with batt- insulation in accordance with the IECC regulations reduces heat infiltration into the classroom. Traverse roof, designed to divert rainfall away from exterior openings.

Windows

Dual pane windows with low-E glass helps reflect radiant energy, reduces heat gain and energy loads.

Teaching Environment

Reduced sound transmission between classrooms enhances the teaching environment.

Floor

Floor insulation in accordance with the IECC standards, vapor barrier, and glueless carpet tile improves the energy efficiency, comfort and durability of the CampusMaker ModPod.

Exterior Wall

Permanent construction quality – 2"x 6" framing, plywood sheathing, commercial grade vapor barrier, batt-insulation in accordance with IECC and low maintenance interior and exterior finishes.

The above illustration depicts a six classroom CampusMaker ModPod complex, with a restroom module and integrated interior corridor. A CampusMaker ModPod classroom module is comprised of two classrooms (27'-0" x 28'-0")* with an egress corridor. Each classroom is approximately 790 sq. ft. and can accommodate up to 35 students. The interior corridor is 8'-0" wide and is further enhanced with a one hour fire rated construction to protect the occupants. Sprinklers can be installed for additional protection.

800.944.3442 | www.mobilemodularrents.com

*The availability of the product and its features may vary. Please contact your sales specialist for further information. These specifications are subject to change without notice.

E&I BUSINESS PARTNER

mobile modular

Your Project - Our Commitment

Mary Munford Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	107	99	96	88	89	90	89	89	88	88	88	87	87	88
1	95	96	95	86	85	86	87	86	86	85	84	84	83	83
2	102	103	81	83	81	80	81	82	81	83	82	81	81	80
3	92	99	91	89	81	79	78	79	80	80	82	81	80	80
4	84	90	90	88	86	79	77	76	77	79	79	81	80	79
5	68	67	76	76	79	77	71	69	68	71	73	73	75	74
Total	548	554	529	510	501	491	483	481	480	486	488	487	486	484
Total: Elementary	548	554	529	510	501	491	483	481	480	486	488	487	486	484
Change		6	-25	-19	-9	-10	-8	-2	-1	6	2	-1	-1	-2
Percent Change		1.09%	-4.51%	-3.59%	-1.76%	-2.00%	-1.63%	-0.41%	-0.21%	1.25%	0.41%	-0.20%	-0.21%	-0.41%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

Miles Jerome Jones Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	96	97	101	101	98	97	96	96	95	95	93	91	89	90
1	81	90	95	96	97	96	95	94	94	93	92	90	88	86
2	68	73	93	94	93	94	93	92	91	92	91	90	88	86
3	69	71	84	108	105	104	105	104	103	104	105	104	103	100
4	78	76	64	77	106	103	102	103	102	102	103	104	103	102
5	79	85	82	71	81	111	108	107	108	108	108	109	110	109
Total	471	492	519	547	580	605	599	596	593	594	592	588	581	573
Total: Elementary	471	492	519	547	580	605	599	596	593	594	592	588	581	573
Change		21	27	28	33	25	-6	-3	-3	1	-2	-4	-7	-8
Percent Change		4.46%	5.49%	5.39%	6.03%	4.31%	-0.99%	-0.50%	-0.50%	0.17%	-0.34%	-0.68%	-1.19%	-1.38%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

Oak Grove Elementary

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
K	45	55	125	117	108	108	108	107	105	105	103	101	100	101
1	59	43	127	106	115	113	112	112	111	109	108	106	104	103
2	61	68	98	109	101	109	107	106	106	107	105	104	102	100
3	62	53	108	106	107	99	107	105	104	105	106	104	103	101
4	50	63	92	102	103	104	96	104	102	101	103	104	102	101
5	55	42	99	92	103	104	105	97	105	104	103	105	106	104
Total	332	324	649	632	637	637	635	631	633	631	628	624	617	610
Total: Elementary	332	324	649	632	637	637	635	631	633	631	628	624	617	610
Change		-8	325	-17	5	0	-2	-4	2	-2	-3	-4	-7	-7
Percent Change		-2.41%	100.31%	-2.62%	0.79%	0.00%	-0.31%	-0.63%	0.32%	-0.32%	-0.48%	-0.64%	-1.12%	-1.13%

Forecasts Developed February 2015
Green cells (2014-15 and earlier) are historical data
Blue cells (2015-16 and later) are forecasted years

All CampusMaker ModPod® classrooms feature:

- High efficiency HVAC system with Heat Pump
- Intelligent energy management system, featuring automatic temperature, humidity and fresh air exchange controls
- High performance building insulation
- Energy efficient T-8 electronic ballast and lamps
- Commercial grade, heavy duty vapor barrier
- White EPDM Cool Roof
- Traverse roof, designed to divert rainfall drainage away from exterior openings
- Glueless carpet tiles - 100% recyclable, made from post consumer materials
- Dual pane low-E window

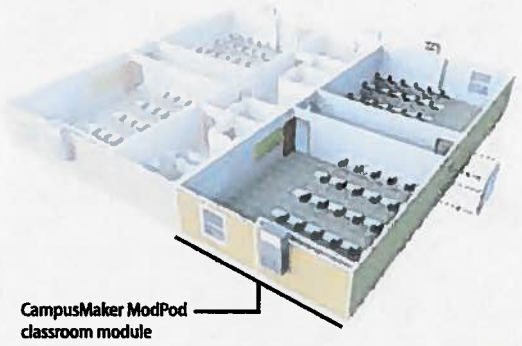
Additionally, the CampusMaker ModPod, also offers a comprehensive selection of options to meet the demands of even the most stringent specifications.

CampusMaker ModPod sustainable options include:

- Passive shading devices
- UVC light for HVAC condenser cells
- CO_2 monitoring system
- Radiant heat barrier
- Tubular Daylighting System
- LED fixtures and lamps
- Natural fiber insulation
- Forest Stewardship Council (FSC) certified lumber
- Locally sourced materials
- Low flush toilet with smart valve
- Tankless hot water heater
- Automated faucet
- Automated paper towel dispenser
- Automated hand soap dispenser

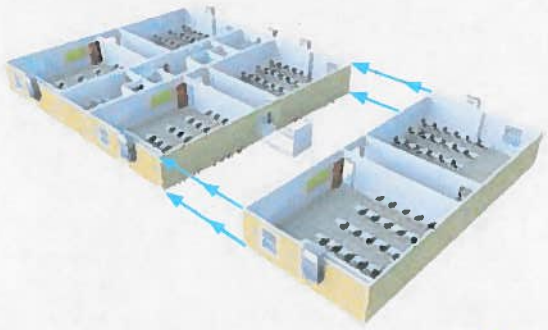
It's as easy as adding and subtracting.
Protected, Flexible and Environmentally Friendly.

Four classroom configuration.



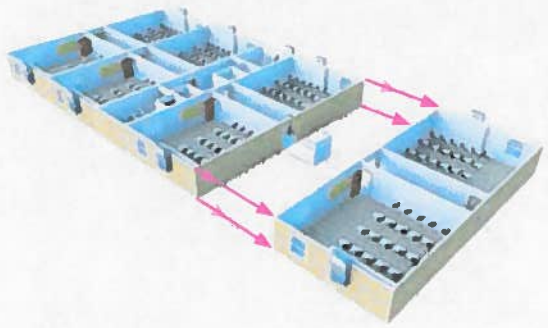
To adjust the size of the CampusMaker ModPod the two classroom module at either end can be detached and relocated to another site or school. Construction of a new exterior wall is not required as the wall and finishes are already in place. This feature minimizes the down time due to construction and disruption to the remainder of the classroom complex.

Add an additional classroom module to expand the CampusMaker ModPod complex.



By simply removing and relocating the existing security entrance doors to the newly expanded CampusMaker ModPod this classroom complex is set to operate with six classrooms, a restroom module and corridor. All this can be accomplished with minimal disruption to the occupants and in most cases, the work can be completed in just a few days.

Retract a classroom module to reduce the CampusMaker ModPod complex.



Mobile Modular Management Corporation

Mid-Atlantic Regional Office
4301-C Stuart Andrew Blvd.
Charlotte, NC 28217

Georgia Sales Office
P.O. Box 151
3300 Hamilton Mill Rd., Suite 102
Buford, GA 30519

Maryland – Washington D.C.
& Virginia Sales Office
15 Churchville Rd., Suite 143
Bel Air, MD 21014

North Carolina Sales Office
4301-C Stuart Andrew Blvd.
Charlotte, NC 28217

800.944.3442
www.mobilemodularrents.com

E&I Cooperative Services

E&I Cooperative Services (E&I) is the member-owned, not-for-profit sourcing cooperative delivering expertise, solutions and services to higher education and related institutions. E&I provides members with access to a diverse portfolio of competitively awarded contracts, electronic procurement platforms and consulting services to help them source effectively. By leveraging the knowledge and expertise of more than 3,000 member institutions, E&I helps members reduce costs and optimize supply chain efficiencies. The Cooperative's member-driven competitive solicitation process meets generally accepted procurement standards across the nation. For more information, please visit www.eandi.org

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EXHIBIT-F

RPS 2015 Facility Update
Cost Estimate 3-24-15

ATTACHMENT - 4

RPS - Facil... Report
Review of Buildin... truction Costs

Richmond Public School Buildings	Type of Project	Existing SF	2015 Costs	Comments	2015 Costs (650 Basis)	Comments
Elementary Schools						
Bellevue ES	Complete renovation/replacement	55,623	$10,012,140	limited site/functional obsolecence	$10,012,140	limited site/functional obsolecence
1 Blackwell ES	None- newer building	83,251	$0	1998 construction	$0	1998 construction
2 Broad Rock ES	None- new building	90,810	$0	2012 construction	$0	2012 construction????
Carver, G.W. ES	Major renovation	100,000	$13,000,000		$13,000,000	
Cary, John B. ES	Minor renovation/addition	46,711	$2,335,550	Addition needed to meet program req	$5,179,550	15,800 sf CR addition
Chimborazo ES	Minor renovation	75,370	$3,768,500		$4,668,500	5,000 sf CR addition
Fairfield Court ES	Complete renovation/replacement with addition	44,398	$7,991,640	Addition needed to meet program req	$11,231,640	18,000 sf CR addition w/ multipurpose
3 Fisher, J.B. ES	Minor renovation/addition	44,222	$2,211,100	Addition needed to meet program req	$5,451,100	18,000 sf CR addition w/ multipurpose
Fox, William ES	Major renovation/addition	58,260	$7,573,800	Addition needed to meet program req	$8,383,800	4,500 sf multipurpose addition
Francis, J. L. ES	Minor renovation/addition	56,954	$2,847,700	Addition needed to meet program req	$4,971,700	11,800 sf addition
Ginter Park ES	Major renovation	60,371	$7,848,230		$7,848,230	
4 Greene, E.S.H. ES	Complete renovation/replacement with addition	41,490	$7,468,200	Addition needed to meet program req	$11,518,200	22,500 sf CR addition w/ multipurpose
Holton, Linwood ES	None- newer building	80,548	$0	1998 construction	$0	1998 construction
5 Jones, Miles J ES	None- newer building	80,548	$0	1999 construction	$0	1999 construction
Mason, George ES	Complete renovation/replacement	67,048	$12,068,640		$13,418,640	7,500 sf CR addition
Munford, Mary HS	Moderate renovation	64,468	$5,802,120		$7,926,120	11,800 sf addition
Oak Grove ES	None- new building	90,810	$0	2012 construction	$0	
Overby- Sheppard ES	Moderate renovation	49,300	$4,437,000		$7,677,000	18,000 sf CR addition w/ multipurpose
6 Redd, E.D. ES	Moderate renovation/addition	56,671	$5,100,390	Addition needed to meet program req	$8,502,390	10,000 sf addition
7 Reid, G.H. ES	Major renovation/addition	64,964	$8,445,320	Addition needed to meet program req	$9,255,320	4,500 sf multipurpose addition
8 Southampton ES	Complete renovation/replacement with addition	56,521	$10,173,780	Addition needed to meet program req	$11,973,780	10,000 sf CR addition
Stuart, J.E.B. ES	Major renovation/addition	44,408	$5,773,040	Addition needed to meet program req	$7,033,040	7,000 sf CR addition
9 Swansboro ES	Complete renovation/replacement with addition	48,183	$8,672,940	Addition needed to meet program req	$12,272,940	20,000 sf CR addition
10 Westover Hills ES	Moderate renovation/addition	50,008	$4,500,720	Addition needed to meet program req	$7,344,720	15,800 sf CR addition
Woodville ES	Complete renovation/replacement	76,928	$13,847,040		$13,847,040	
Subtotal ES		1,587,865	**$143,877,850**		**$181,515,850**	
Middle Schools						
Binford MS	Complete renovation/replacement	98,013	$18,622,470	limited site/functional obsolecence	$18,622,470	limited site/functional obsolecence
Boushall, T. C. MS	Minor renovation	128,530	$6,426,500		$6,426,500	
Brown, Lucille M. MS	None- newer building	129,775	$0	1998 Construction	$0	1998 Construction
Elkhardt MS	Complete renovation/replacement with addition	91,575	$17,399,250	Addition needed to meet program req	$26,899,250	add 50,000 sf
Henderson, T.H. MS	Major renovation	188,131	$25,397,685		$25,397,685	
Hill, A.H. ES	Major renovation	81,152	$10,955,520	limited site, historic	$10,955,520	limited site, historic
King Jr., Martin Luther MS	None- new building	147,000	$0	Recent replacement	$0	Recent replacement
Thompson MS	Complete renovation/replacement with addition	108,364	$20,589,160	Addition needed to meet program req	$26,789,160	add 30,000 sf
Subtotal MS		972,540	**$99,390,585**		**$114,590,585**	
High Schools						
Armstrong HS	Moderate renovation	237,532	$23,753,200	Former Kennedy HS	$23,753,200	Former Kennedy HS
Huguenot HS	New- recent replacement	253,821	$0		$0	
Jefferson, Thomas HS	Major renovation	179,993	$26,098,985		$26,098,985	
Marshall, John HS	Major renovation	230,994	$33,494,130		$33,494,130	
Wythe, George HS	Major renovation	243,114	$35,251,530		$35,251,530	

1 - 10 = $66,318,450

/2015 10:45 AM

EXHIBIT-G

Supporting Documents

RICHMOND PUBLIC SCHOOLS
301 NORTH NINTH STREET RICHMOND, VA 23219-1927

Thomas E. Kranz
Assistant Superintendent Support Services
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fax: (804) 780-6208
e-mail: tkranz@richmond.k12.va.us

November 12, 2015

Dear Urban Design Committee Members:

At the present time Miles Jones Elementary School has an enrollment of 681 students (including 43 Pre-K students) in a building that was designed with a functional capacity of 592 students.

The increase in student enrollment is attributed to the following two primary reasons:

1) Student growth
2) The need to reduce class size in the 1st – 3rd grades so that we can better meet the educational needs of our students

As part of the Facility Task Force "Facilities Needs Report" enrollment for fiscal years 2016-2025 was computed. The projected enrollment for Miles Jones Elementary School anticipates a steady increase of students which will result in even more overcrowding.

The long-term strategy is to build a new elementary school to replace the existing E.S.H. Greene Elementary and then rezone Miles Jones Elementary School and three other schools to fit within the functional capacity of each building and to eliminate all current on-site portables.

Since we were unable to execute our strategy prior to the start of the current school year, and the projected student growth has been confirmed by actual numbers, we are requesting approval to bring in a seven (7) classroom modular building including restrooms, which will be leased on an annual basis. Our intent is to have these units onsite for at least one year while the School Board, City Administration, and City Council devise a funding plan to achieve our long-term strategy.

Our least desirable option that we wanted to entertain in order to accommodate the immediate student population growth was to place students in modular buildings, however we do not believe there are any other options currently available. This solution is intended to be temporary.

This plan has been reviewed by the School Board, RPS Administrators, the school principal and school staff, and everyone realizes that we are doing everything possible to minimize the impact of placing a modular classroom building on the grounds of Miles Jones Elementary School.

We are hopeful that you will look favorable on our request, meanwhile, should you have any questions, or need clarification; please do not hesitate to contact me directly.

Sincerely,

Thomas E. Kranz

Thomas E. Kranz
Assistant Superintendent for Support Services