NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB NO. 2025-IFB-1007262
Albemarle County Public Schools
2775 Hydraulic Rd, Charlottesville, VA 22901
STATE PROJECT NO. 002-88-01-100

VOLUME 1

PROJECT TEAM

QUINN EVANS
Architect & Landscape Architect

1840 West Broad Street
Suite 400
Richmond, Virginia 23220
v 804.788.4774

TIMMONS GROUP
Civil Engineer

608 Preston Ave STE 200
Charlottesville, VA 22903
v 434.295.5624

2RW
Mechanical, Electrical, Plumbing Engineer

100 10th St NE
Charlottesville, VA 22902
v. 434.296.2116

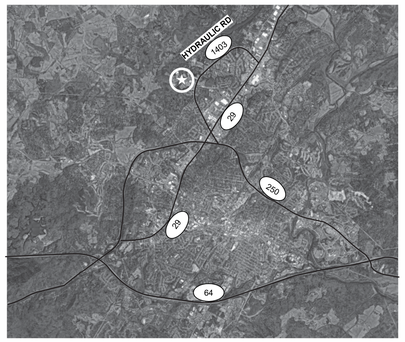
DUNBAR PLLC
Structural Engineer

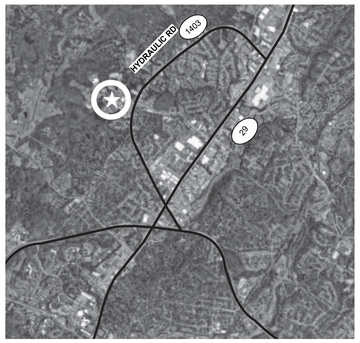
1025 Boulders Parkway
Suite 310
Richmond, Virginia 23225
v. 804.272.3916

FOODSERVICE CONSULTANTS STUDIO
Foodservice Consultant

3420 Pump Road #158
Henrico, Virginia 23233
v. 804.550.2090

VICINITY MAPS





PROJECT DATA

THIS BUILDING IS DESIGNED TO BE COMPLIANT WITH THE 2018 EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

BUILDING USE GROUP:	E
CONSTRUCTION TYPE:	IIB
SEISMIC DESIGN CATEGORY	B
AUTOMATIC FIRE SUPPRESSION	FULLY SPRINKLERED PER NFPA-13

FIRE RESISTANCE RATING

PRIMARY STRUCTURAL FRAME	0 HOURS
BEARING WALLS (INTERIOR)	0 HOURS
BEARING WALLS (EXTERIOR)	0 HOURS
NON-BEARING WALLS (INTERIOR)	0 HOURS
NON-BEARING WALLS (EXTERIOR)	0 HOURS
FLOOR CONSTRUCTION	0 HOURS
ROOF CONSTRUCTION	0 HOURS
SHAFT ENCLOSURES	1 HOUR AT ELEVATOR AND EGRESS STAIRS

BUILDING SQUARE FOOTAGE
TWO STORIES

LEVEL 1:	36,000 GSF
LEVEL 2:	23,000 GSF
BASEMENT:	4,000 GSF
TOTAL GSF:	62,000 GSF

BUILDING HEIGHT

MAXIMUM CODE ALLOWED: 75'
ACTUAL BUILDING HEIGHT: 47' 10 1/2" (AT LIMITED 3-STORY AREA)

MAXIMUM OCCUPANCY PER LEVEL:

LEVEL 1:	775
LEVEL 2:	547
BASEMENT:	12
TOTAL CODE OCCUPANCY:	1,334

PROGRAM OCCUPANCY:

STUDENTS:	500
STAFF:	34
TOTAL PROGRAM OCCUPANCY:	534

NOTE:
1. EXIT ACCESS STAIRWAYS THAT SERVE ONLY TWO ADJACENT STORIES ARE NOT REQUIRED TO BE ENCLOSED WITH A SHAFT ENCLOSURE PER VCC 1019.3. EXIT ACCESS STAIRWAYS MAY SERVE AS AN EXIT ACCESS COMPONENT IN A MEANS OF EGRESS SYSTEM PER VCC 1019.1.
2. PER VCC 1010.2, GATES SERVING AS A MEANS OF EGRESS SYSTEM SHALL COMPLY WITH THE REQUIREMENTS FOR DOORS. THE GATE AT THE EXTERIOR COURTYARD SHALL INCLUDE ONE LEAF THAT IS A MAX OF 4' WIDE AND WILL BE EQUIPPED WITH A PANIC DEVICE.

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

COMMONWEALTH OF VIRGINIA
CHARLES W. TILLEY
LIC. No. 010767
10/08/2024
REGISTERED

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: KS
DRAWN BY: BG, EW, AJ, EC

QEA No.41911390

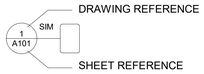
BID DOCUMENTS
10/8/2024

COVER SHEET - VOLUME 1

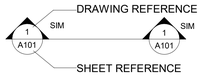
G001A

GRAPHIC SYMBOLS

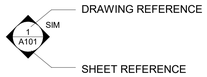
DETAIL / PLAN



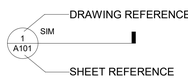
BLDG SECTION CUT



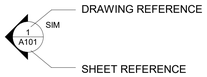
INTERIOR ELEVATION



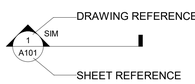
DETAIL CUT



EXTERIOR ELEVATION



WALL SECTION CUT



MATERIAL SYMBOLS

- EARTH
- GRAVEL
- CONCRETE-PLAN
- CONCRETE-SECTION
- PRECAST CONCRETE
- BRICK
- CMU
- GROUT
- STEEL
- ALUMINUM
- DIMENSIONAL LUMBER (SIZE AS INDICATED)
- BLOCKING (SIZE AS INDICATED)
- WOOD
- PLYWOOD
- PARTICLE BOARD
- BATT INSULATION
- RIGID INSULATION
- SPRAY FOAM INSULATION
- SPRAY FIREPROOFING
- SHIM
- SEALANT & BACKER ROD (SIZE AS INDICATED) — 3/8"
- GYPSUM BOARD
- METAL STUD
- METAL TRACK
- ACOUSTICAL CEILING
- CARPET (SECTION)

SYMBOL & TAG LEGEND

Room name
101 — ROOM TAG

101 — DOOR NUMBER

XX — WALL TYPES

XX — ALUMINUM STOREFRONT ALUMINUM CURTAINWALL HOLLOW METAL TAG

XX-XX — KEYNOTE

XX — MATERIAL DESIGNATION (REFER TO MATERIALS SCHED.).

REVISION CLOUD AND INDICATOR

XX — CONSTRUCTION ASSEMBLY

X/SHEET # / X/SHEET # — MATCHLINE

A — NEW COLUMN LINE

- EXISTING ELEVATION
- NEW ELEVATION
- WORK POINT
- FEC-'X' — FIRE EXTINGUISHER; 'X' DESIGNATES TYPE, REF SPECIFICATIONS
- MW'X' — MARKERWALL; 'X' DESIGNATES LENGTH REF TYPICAL MARKERWALL ELEVATION ON SHEET A001
- MS'X' — METAL SHELVING UNIT; 'X' DESIGNATES TYPE, REF SPECIFICATIONS
- A-'X' — APPLIANCE; 'X' DESIGNATES TYPE, REF SPECIFICATIONS
- EQ'X' — SCIENCE EQUIPMENT; 'X' DESIGNATES TYPE, REF SPECIFICATIONS

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G012	LIFE SAFETY PLANS

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C0.2	OVERALL SITE LAYOUT
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C1.1	NOTES & DETAILS
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C2.2	EXISTING CONDITIONS PLAN
C2.3	EXISTING CONDITIONS PLAN
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C2.6	DEMOLITION PLAN
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C3.1	EROSION & SEDIMENT CONTROL NOTES & DETAILS
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C3.3	EROSION SEDIMENT CONTROL PLAN - PHASE IB
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L102	LAYOUT AND MATERIALS PLAN
L103	LAYOUT AND MATERIALS PLAN
L104	LAYOUT AND MATERIALS PLAN ENLARGEMENT
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L106	PAVEMENT SCORING PLAN
L200	LANDSCAPE SECTIONS
L201	LANDSCAPE SECTIONS
L300	LANDSCAPE DETAILS
L301	LANDSCAPE DETAILS
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S414	ROOF FRAMING SECTION AND DETAILS
S415	ROOF FRAMING SECTION AND DETAILS
S416	ROOF FRAMING SECTION AND DETAILS
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A111	CONTROL PLANS
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A203	BUILDING ELEVATIONS
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A312	WALL SECTIONS
A313	WALL SECTIONS
A314	WALL SECTIONS
A315	WALL SECTIONS
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QF204	FOODSERVICE CA LAB ELECTRICAL ROUGH-IN PLAN
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QF302	FOODSERVICE KITCHEN EXHAUST HOOD DETAILS
QF303	FOODSERVICE CA LAB EXHAUST HOOD DETAILS
QF304	FOODSERVICE CA LAB EXHAUST HOOD DETAILS
QF305	FOODSERVICE UTILITY DISTRIBUTION SYSTEM DETAILS
QF306	FOODSERVICE UTILITY DISTRIBUTION SYSTEM DETAILS
QF307	FOODSERVICE KITCHEN FAN DETAILS
QF308	FOODSERVICE KITCHEN FAN DETAILS
QF309	FOODSERVICE CA LAB FAN DETAILS
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P000	LEGENDS, ABBREVIATIONS & GENERAL NOTES
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P101B	LEVEL 1 - PARTIAL PLAN AREA B - FOUNDATION
PG101A	LEVEL 1 - PARTIAL PLAN AREA A - GRAVITY
PG101B	LEVEL 1 - PARTIAL PLAN AREA B - GRAVITY
PG102A	LEVEL 2 - PARTIAL PLAN AREA A - GRAVITY
PG102B	LEVEL 2 - PARTIAL PLAN AREA B - GRAVITY
PP101A	LEVEL 1 - PARTIAL PLAN AREA A - PRESSURE
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PP102B	LEVEL 2 - PARTIAL PLAN AREA B - PRESSURE
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P601	RISER DIAGRAM - STORM
P602	RISER DIAGRAM - SANITARY
P603	RISER DIAGRAM - DOMESTIC WATER
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P701	SCHEDULES

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MH101B	LEVEL 1 - PARTIAL PLAN AREA B - DUCTWORK
MH102A	LEVEL 2 - PARTIAL PLAN AREA A - DUCTWORK
MH102B	LEVEL 2 - PARTIAL PLAN AREA B - DUCTWORK
MI101A	LEVEL 1 - PARTIAL PLAN AREA A - INSTRUMENTATION
MI101B	LEVEL 1 - PARTIAL PLAN AREA B - INSTRUMENTATION
MI102A	LEVEL 2 - PARTIAL PLAN AREA A - INSTRUMENTATION
MI102B	LEVEL 2 - PARTIAL PLAN AREA B - INSTRUMENTATION
MP102A	LEVEL 2 - PARTIAL PLAN AREA A - PIPING
MP101A	LEVEL 1 - PARTIAL PLAN AREA A - PIPING
MP101B	LEVEL 1 - PARTIAL PLAN AREA B - PIPING
MP102B	LEVEL 2 - PARTIAL PLAN AREA B - PIPING
M103	ROOF PLAN
M401	ENLARGED PLANS
M501	DETAILS
M502	DETAILS
M503	DETAILS
M504	DETAILS
M701	SCHEDULES
M702	SCHEDULES
M703	SCHEDULES
M801	CONTROLS
M802	CONTROLS
M803	CONTROLS
M804	CONTROLS
M805	CONTROLS
M806	CONTROLS
M807	CONTROLS

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ES102	ELECTRICAL SITE PLAN
ES103	ELECTRICAL SITE PLAN
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EL101A	LEVEL 1 - PARTIAL PLAN AREA A - LIGHTING
EL101B	LEVEL 1 - PARTIAL PLAN AREA B - LIGHTING
EL102A	LEVEL 2 - PARTIAL PLAN AREA A - LIGHTING
EL102B	LEVEL 2 - PARTIAL PLAN AREA B - LIGHTING
EP101A	LEVEL 1 - PARTIAL PLAN AREA A - POWER
EP101B	LEVEL 1 - PARTIAL PLAN AREA B - POWER
EP102A	LEVEL 2 - PARTIAL PLAN AREA A - POWER
EP102B	LEVEL 2 - PARTIAL PLAN AREA B - POWER
EP103	ROOF PLAN - POWER
ET101A	LEVEL 1 - PARTIAL PLAN AREA A - SPECIAL SYSTEMS
ET101B	LEVEL 1 - PARTIAL PLAN AREA B - SPECIAL SYSTEMS
ET102A	LEVEL 2 - PARTIAL PLAN AREA A - SPECIAL SYSTEMS
ET102B	LEVEL 2 - PARTIAL PLAN AREA B - SPECIAL SYSTEMS
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E502	DETAILS
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E602	LV RISER DIAGRAM
E603	FA RISER DIAGRAM
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E701	PANEL SCHEDULES
E702	PANEL SCHEDULES
E703	PANEL SCHEDULES
E704	PANEL SCHEDULES
E705	PANEL SCHEDULES

TOTAL: 290

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

Albemarle County Public Schools

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No	Date	Description

PROJECT MANAGER: KS
DRAWN BY: AJ, BG, EW

QEA No.41911390

BID DOCUMENTS
10/8/2024

DRAWING INDEX & ARCH GRAPHIC SYMBOLS

G002

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/8/2024 2:18:06 PM

PROJECT TIMELINE

HATCH	SEQUENCE	TASK	SUBSTANTIAL COMPLETION	2024 DEC	2025 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2026 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
	Primary Sequence A																							
	A	High School Center II – Building and Site	5/31/2026																					
	A.1	Data Center – in High School Center II	3/1/2026																					
	A.2	Geothermal Wellfield and Existing Parking Lot	5/31/2026																					
	Primary Sequence B																							
	B.1	Campus Entrance Road and Driveway		Available upon Notice To Proceed – Complete Prior to Closing Existing Campus Entrance Road																				
	B.2	HSC II Pedestrian Pathways and Site Improvements	8/7/2026	Available upon opening of New Campus Entrance Road and Driveway																				
	B.3	Albemarle HS Front Entrance Driveway	8/7/2026	No Work								No Work												
	B.4	Albemarle HS Driveway	8/7/2026																					
	Primary Sequence C																							
	C.1	Albemarle HS Shotput and Discus	3/1/2025																					
	C.2	Albemarle HS Bus Lane	8/7/2026																					
	C.3	Albemarle HS Staff Parking Lot	10/1/2025																					
	C.4	Albemarle HS Practice Fields	10/1/2025																					
	Primary Sequence D																							
	D.1	Existing AHS Modular Classroom Building	8/7/2026																					
	D.2	Lambs Lane Connector Drive	8/7/2026																					

SEQUENCE C.1 : SHOTPUT & DISCUS FACILITIES

AVAILABLE: NOTICE TO PROCEED
SUBSTANTIAL COMPLETION: MARCH 1, 2025

SEQUENCE D.2 : LAMBS LANE CONNECTOR DRIVE

AVAILABLE: JUNE 1, 2026
SUBSTANTIAL COMPLETION: AUGUST 1, 2026

SEQUENCE D.1 : EXISTING MODULAR CLASSROOM BUILDING

TO REMAIN IN PLACE UNTIL JUNE 1, 2026. DISASSEMBLED BY CONTRACTOR AND RELOCATED TO LOCATION TO BE DETERMINED WITHIN 25 MILES OF CURRENT LOCATION.

TEMP CONDITION OF FIELD & PARKING

FINAL COMPLETION OF THIS PORTION OF PRACTICE FIELDS, PARKING LOT, AND LAMBS LANE CONNECTOR DRIVE WILL NOT BE POSSIBLE UNTIL MODULAR BUILDING IS REMOVED JUNE 1, 2026.

SUBSTANTIAL COMPLETION (INDICATED AREA ONLY):
AUGUST 1, 2026

SEQUENCE C.4 : PRACTICE FIELDS

AVAILABLE: MAY 19, 2025
SUBSTANTIAL COMPLETION: OCTOBER 1, 2025

SEQUENCE C.3 : PARKING LOT

AVAILABLE: MAY 2025 (EXACT DATE TBD)
SUBSTANTIAL COMPLETION: OCTOBER 1, 2025

SEQUENCE B.4 : DRIVEWAY

AVAILABLE: MARCH 1, 2026
SUBSTANTIAL COMPLETION: AUGUST 1, 2026

SEQUENCE C.2 BUS LANE

TIMING OF THIS WORK SHALL BE COORDINATED WITH DRIVING CLASSES THAT OCCUR IN BUS LOOP, DATES TO BE PROVIDED.
AVAILABLE: JUNE 9, 2025
SUBSTANTIAL COMPLETION: AUGUST 1, 2025

TEMPORARY DRIVEWAYS:

PROVIDE TEMPORARY DRIVEWAYS WHERE INDICATED FOR PUBLIC VEHICULAR ACCESS TO PARKING LOT FROM EXISTING ROADS AND DRIVEWAYS BETWEEN PARKING LOT SUBSTANTIAL COMPLETION AND DRIVEWAY SUBSTANTIAL COMPLETION.

AHS CONNECTOR WING PROJECT:

SEPARATE CONTRACTOR'S MATERIALS LAY DOWN AREA:
JUNE 9, 2025 - AUGUST 1, 2025

AHS FOOD DELIVERY AND TRASH PICKUP:

CONTRACTOR SHALL SEQUENCE WORK ALONG DRIVEWAY IN A MANNER THAT PROVIDES ACCESS FOR KITCHEN DELIVERIES AND TRASH PICKUP AT ALL TIMES.

AHS CONNECTOR WING PROJECT:

SEPARATE CONTRACTOR'S MATERIALS LAY DOWN AREA:
JUNE 9, 2025 - AUGUST 1, 2025

AHS "PATRIOT" LOT PARKING:

SHALL BE AVAILABLE FOR SCHOOL PARKING AT ALL TIMES DURING SCHOOL HOURS. MODIFICATIONS TO PARKING LOT SHALL BE MADE OFF-HOURS OR DURING SCHOOL BREAKS.

SEQUENCE A : ENTRANCE ROAD & DRIVEWAY

AVAILABLE: AT NOTICE TO PROCEED
COMPLETION: SHALL BE SUBSTANTIALLY COMPLETE AND AVAILABLE FOR PUBLIC VEHICLE USE PRIOR TO CLOSURE OF EXISTING DRIVEWAY

SEQUENCE A: HIGH SCHOOL CENTER II BUILDING & SITE

AVAILABLE: AT NOTICE TO PROCEED
SUBSTANTIAL COMPLETION: MAY 31, 2026

SEQUENCE A.1 : DATA CENTER

SUBSTANTIAL COMPLETION: MARCH 1, 2026
INCLUSIVE OF ALL SUPPORTING COMPONENTS INCLUDING BUT NOT LIMITED TO ELECTRICAL SERVICES, BOTH BACKUP GENERATORS, AND MECHANICAL COOLING SYSTEMS.

SEQUENCE B.3 : ALBEMARLE HS ENTRANCE DRIVE

AVAILABLE: ANYTIME EXCLUDING DURING SCHOOL HOURS
AUGUST 21, 2024 - JUNE 6, 2025
AUGUST 20, 2025 - JUNE 5, 2026 (DATES TO BE FINALIZED BY THE END OF 2024).

SEQUENCE B.2 : PEDESTRIAN PATHWAYS & SITE IMPROVEMENTS

AVAILABLE: AT COMPLETION OF NEW ENTRANCE ROAD AND DRIVEWAY

SEQUENCE A.2 : GEOTHERMAL WELLFIELD & EXSTING PARKING LOT

AVAILABLE: OCTOBER 1, 2025 OR UPON COMPLETION OF PARKING LOT ADJACENT TO PRACTICE FIELDS
SUBSTANTIAL COMPLETION: MAY 31, 2026

CONSTRUCTION ENTRANCE

AHS BUS LOT
AHS PARKING LOT
ALBEMARLE HIGH SCHOOL
LAMBS LANE
AHS TENNIS COURTS
AHS TENNIS COURTS
AHS FIELD HOUSE
AHS STADIUM
HYDRAULIC RD

0 30 60 Feet
GRAPHIC SCALE
NORTH

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

COMMONWEALTH OF VIRGINIA
CHARLES W. TILLEY
LIC. No. 010767
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: KS
DRAWN BY: HR

QEA No. 419113960

BID DOCUMENTS
10/08/2024

CONSTRUCTION SEQUENCING PLAN

G003

A1 / G011 LEVEL 1 - LIFE SAFETY PLAN
3/32" = 1'-0"

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/2/2024 3:31:44 PM

PROJECT DATA

THIS BUILDING IS DESIGNED TO BE COMPLIANT WITH THE 2018 EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.

BUILDING USE GROUP:	E
CONSTRUCTION TYPE:	IIB
SEISMIC DESIGN CATEGORY	B
AUTOMATIC FIRE SUPPRESSION	FULLY SPRINKLERED PER NFPA-13

FIRE RESISTANCE RATING

PRIMARY STRUCTURAL FRAME	0 HOURS
BEARING WALLS (INTERIOR)	0 HOURS
BEARING WALLS (EXTERIOR)	0 HOURS
NON-BEARING WALLS (INTERIOR)	0 HOURS
NON-BEARING WALLS (EXTERIOR)	0 HOURS
FLOOR CONSTRUCTION	0 HOURS
ROOF CONSTRUCTION	0 HOURS
SHAFT ENCLOSURES	1 HOUR AT ELEVATOR AND EGRESS STAIRS

BUILDING SQUARE FOOTAGE
TWO STORIES

LEVEL 1:	36,000 GSF
LEVEL 2:	23,000 GSF
BASEMENT:	4,000 GSF
TOTAL GSF:	62,000 GSF

BUILDING HEIGHT

MAXIMUM CODE ALLOWED: 75'
ACTUAL BUILDING HEIGHT: 47' 10 1/2" (AT LIMITED 3-STORY AREA)

MAXIMUM OCCUPANCY PER LEVEL:

LEVEL 1:	775
LEVEL 2:	547
BASEMENT:	12
TOTAL CODE OCCUPANCY:	1,334

PROGRAM OCCUPANCY:

STUDENTS:	500
STAFF:	34
TOTAL PROGRAM OCCUPANCY:	534

NOTE:
1. EXIT ACCESS STAIRWAYS THAT SERVE ONLY TWO ADJACENT STORIES ARE NOT REQUIRED TO BE ENCLOSED WITH A SHAFT ENCLOSURE PER VCC 1019.3. EXIT ACCESS STAIRWAYS MAY SERVE AS AN EXIT ACCESS COMPONENT IN A MEANS OF EGRESS SYSTEM PER VCC 1019.1.
2. PER VCC 1010.2, GATES SERVING AS A MEANS OF EGRESS SYSTEM SHALL COMPLY WITH THE REQUIREMENTS FOR DOORS. THE GATE AT THE EXTERIOR COURTYARD SHALL INCLUDE ONE LEAF THAT IS A MAX OF 4' WIDE AND WILL BE EQUIPPED WITH A PANIC DEVICE.

LIFE SAFETY LEGEND

ROOM TAG
- Room name
- ##,### SF
- X, ###
- ### SF
- ##
- ROOM IDENTIFIER
- ROOM AREA
- OCCUPANCY TYPE; PROGRAMMED OCCUPANCY
- OCCUPANT LOAD FACTOR
- NO. OF OCCUPANTS

STAIR OR DOOR EGRESS TAG
- 202
- 9"
- 6"
- 0.20
- 0
- STAIR OR DOOR IDENTIFIER
- STAIR OR DOOR CLEAR WIDTH
- EXIT CAPACITY FACTOR
- EXIT CAPACITY
- ACTUAL OCCUPANT LOAD

- 1-HOUR FIRE BARRIER
- X-X'
- TRAVEL DISTANCE TAG
- TRAVEL DISTANCE LINE
- FEC-1
- FIRE EXTINGUISHER CABINET
- FE
- FIRE EXTINGUISHER

PROVIDE CLASS K-RATED FIRE EXTINGUISHER UNITS AT KITCHEN & CULINARY LAB

PLUMBING FIXTURE CALCULATIONS

THE FOLLOWING HAVE BEEN CALCULATED PER 2018 VIRGINIA PLUMBING CODE, TABLE 403.1:

OCCUPANT LOAD:

OCCUPANCT TYPE	AREA (SF)	NSF/OCCUPANT	OCCUPANTS
ASSEMBLY	4,772	15	319
EDUCATIONAL (CLASSROOM)	13,355	20	686
PROGRAM OCCUPANCY			267
EDUCATIONAL (VOCATIONAL)	14,084	50	288
PROGRAM OCCUPANCY			267
BUSINESS	5,224	150	39
KITCHEN	2,907	200	15
STORAGE/MECHANICAL	4,866	300	24

WATER CLOSETS:

OCCUPANCT TYPE	OCCUPANTS MALE	OCCUPANTS FEMALE	WCS/OCCUPANT MALE	WCS/OCCUPANT FEMALE	# WCS REQUIRED MALE	# WCS REQUIRED FEMALE
ASSEMBLY	160	160	125	65	1.28	2.45
EDUCATIONAL (CLASSROOM)						
PROGRAM OCCUPANCY	134	134	50	50	2.67	2.67
EDUCATIONAL (VOCATIONAL)						
PROGRAM OCCUPANCY	134	134	50	50	2.67	2.67
BUSINESS	20	20	25	25	0.78	0.78
KITCHEN	8	8	75	75	0.11	0.11
STORAGE/MECHANICAL	12	12	100	100	0.12	0.12
TOTAL WCS REQUIRED					**8**	**9**
TOTAL WCS PROVIDED					**11**	**11**
TOTAL URINALS PROVIDED					**11**	

LAVATORIES:

OCCUPANCT TYPE	OCCUPANTS MALE	OCCUPANTS FEMALE	LAVS/OCCUPANT MALE	LAVS/OCCUPANT FEMALE	# LAVS REQUIRED MALE	# LAVS REQUIRED FEMALE
ASSEMBLY	160	160	200	200	0.80	0.80
EDUCATIONAL (CLASSROOM)						
PROGRAM OCCUPANCY	134	134	50	50	2.67	2.67
EDUCATIONAL (VOCATIONAL)						
PROGRAM OCCUPANCY	134	134	50	50	2.67	2.67
BUSINESS	20	20	40	40	0.49	0.49
KITCHEN	8	8	200	200	0.04	0.04
STORAGE/MECHANICAL	12	12	100	100	0.12	0.12
TOTAL LAVS REQUIRED					**7**	**7**
TOTAL LAVS PROVIDED					**11**	**11**

DRINKING FOUNTAINS:

OCCUPANCT TYPE	OCCUPANTS	DFS/OCCUPANT	# DFS REQUIRED
ASSEMBLY	319	500	0.64
EDUCATIONAL (CLASSROOM)			
PROGRAM OCCUPANCY	267	100	2.67
EDUCATIONAL (VOCATIONAL)			
PROGRAM OCCUPANCY	267	100	2.67
BUSINESS	39	100	0.39
KITCHEN	15	500	0.03
STORAGE/MECHANICAL	24	1000	0.02
TOTAL DFS REQUIRED			**7**
TOTAL DFS PROVIDED			**8**

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COMMONWEALTH OF VIRGINIA
CHARLES W. TILLEY
LIC. No. 010767
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100
Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: KS
DRAWN BY: AJ, EW, AL

QEA No.41911390

BID DOCUMENTS
10/8/2024

LIFE SAFETY PLANS

G011

LIFE SAFETY LEGEND

ROOM TAG

Room name
##,### SF
X, ###
SF
##

- ROOM IDENTIFIER
- ROOM AREA
- OCCUPANCY TYPE; PROGRAMMED OCCUPANCY
- OCCUPANT LOAD FACTOR
- NO. OF OCCUPANTS

STAIR OR DOOR EGRESS TAG

202
36"
0" × 0.20
OCCUP.
0

- STAIR OR DOOR IDENTIFIER
- STAIR OR DOOR CLEAR WIDTH
- EXIT CAPACITY FACTOR
- EXIT CAPACITY
- ACTUAL OCCUPANT LOAD

1-HOUR FIRE BARRIER

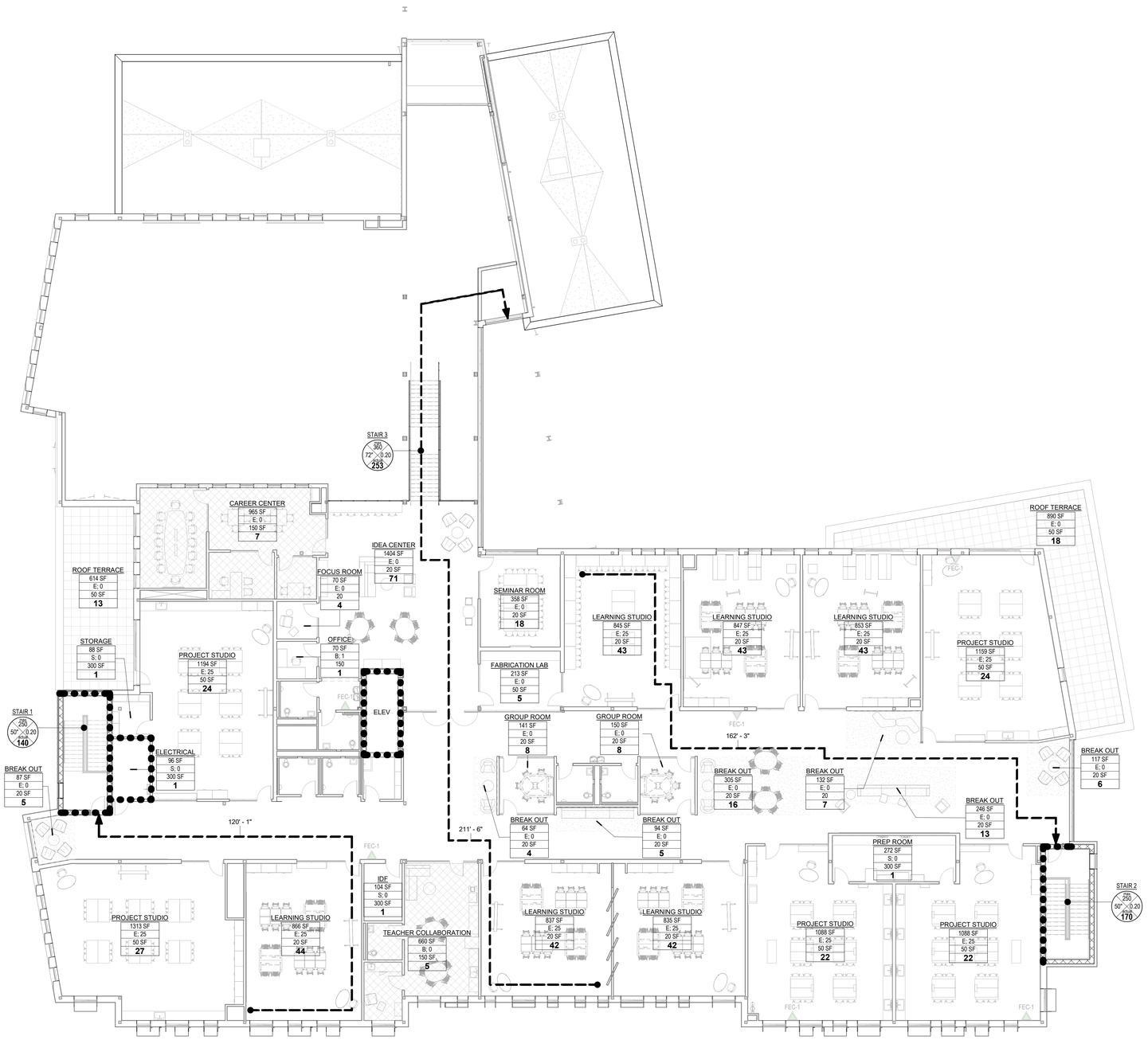
X'-X"

- TRAVEL DISTANCE TAG
- TRAVEL DISTANCE LINE

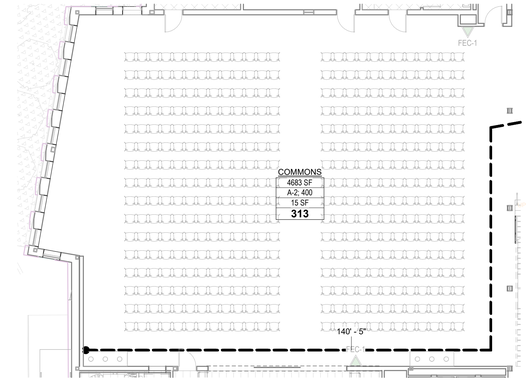
FEC-1 — FIRE EXTINGUISHER CABINET

FE — FIRE EXTINGUISHER

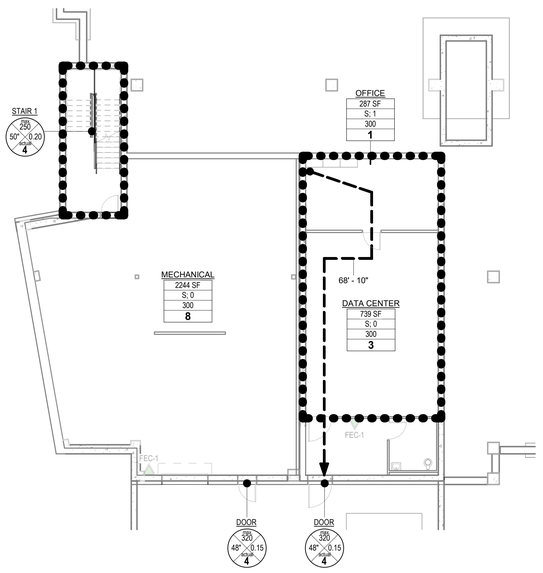
PROVIDE CLASS K-RATED FIRE EXTINGUISHER UNITS AT KITCHEN & CULINARY LAB



A1 G012 LEVEL 2 - LIFE SAFETY PLAN
3/32" = 1'-0"



F10 G012 LEVEL 1 - LIFE SAFETY PLAN
3/32" = 1'-0"



A10 G012 BASEMENT - LIFE SAFETY PLAN
3/32" = 1'-0"

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RICHMOND, VA 23220

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QUINNEVANS.COM

COMMONWEALTH OF VIRGINIA
CHARLES W. TILLEY
LIC. No. 010767
10/08/2024
ARCHITECT

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO.
002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: KS
DRAWN BY: AJ, EW, AL

QEA No.41911390

BID DOCUMENTS
10/8/2024

LIFE SAFETY PLANS

G012

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/2/2024 3:32:04 PM

ALBEMARLE COUNTY PUBLIC SCHOOLS
NEW CONSTRUCTION HIGH SCHOOL CENTER II

SITE PLAN
SDP 202400016

COUNTY OF ALBEMARLE, VIRGINIA

10/08/2024

SITE DATA:

TAX MAP PARCEL: 06000-00-00-078A0

PARCEL AREA: 216.691 ACRES

LIMITS OF DISTURBANCE: 11.73 ACRES

ZONING: R10 - RESIDENTIAL, RA - AGRICULTURAL (ZMA202300008)

SEE SPECIAL EXCEPTION SE202300039 AND PROFFERS (C1.2)

MAGISTERIAL DISTRICT: JACK JOUETT

SOURCE OF BOUNDARY AND TOPOGRAPHY: TIMMONS GROUP.
608 PRESTON AVENUE, SUITE 300
CHARLOTTESVILLE, VA 22903
(434) 327-1681

SOURCE TOPOGRAPHY: TIMMONS GROUP, MARCH, 12, 2020

DATUM: HORIZONTAL: NAD83 VIRGINIA STATE GRID SOUTH ZONE
VERTICAL: NAVD88 ESTABLISHED THROUGH LEICA SMARTNET

MISS UTILITY TICKET NO.(s): B004200891 & B004200841

UTILITIES
WATER SUPPLY: ACSA
SANITARY SEWER: ACSA

WATERSHED: IVY CREEK SUPPLY WATERSHED

ZONING SITE REQUIREMENTS:

SETBACKS REQUIRED
R-10 FRONT: 5' MIN. / NO MAX. PER SPECIAL EXCEPTION SE202300039
R-10 SIDE: 5' MIN. / NO MAX.
R-10 REAR: 20' MIN. / NO MAX.

R-A FRONT: 75' MIN. / NO MAX
R-A SIDE: 25' MIN. / NO MAX
R-A REAR: 35' MIN. / NO MAX

USE
PRESENT ALBEMARLE HIGH SCHOOL (AHS) & BUILDING SERVICES
PROPOSED ALBEMARLE HIGH SCHOOL (AHS) & HIGH SCHOOL CENTER II (HSC II)

PARKING
EXISTING SPACES FOR AHS: 530 (7 ADA SPACES)
PROPOSED TOTAL SPACES: 670 (15 ADA SPACES)
AHS PROPOSED SPACES: 543
HSC II PROPOSED SPACES: 127
SPACES ADDED: 140 (8 ADA SPACES)

REQUIRED HSC II SPACES: 127 (SEE SUMMARY OF PARKING REQUIREMENTS FROM ZMA202300008 ON C1.2)

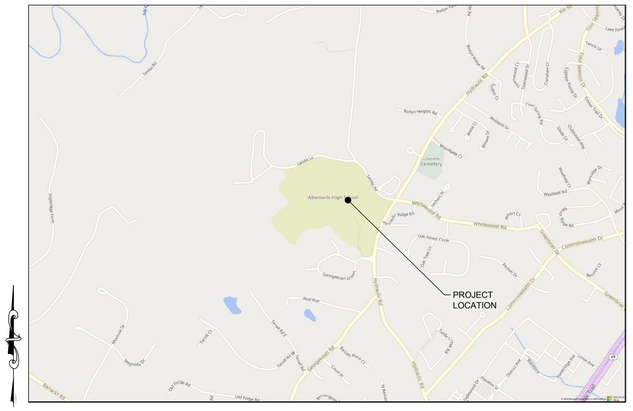
MAXIMUM BUILDING HEIGHT: 75 FT
PROPOSED BUILDING HEIGHT: 47' 10 ½"
PROPOSED BUILDING AREA: 62,000 GSF

IMPERVIOUS AREA (WITHIN PROJECT LIMITS)
EXISTING: 5.31 ACRES
PROPOSED: 6.86 ACRES

WETLAND IMPACTS: NONE

MANAGED SLOPES LOCATED WITHIN THE PARCEL ARE SHOWN ON SHEETS C2.0 AND C5.0.

THERE ARE NO CONSTRUCTION ACTIVITIES PROPOSED WITHIN THE 100-YR FLOODPLAIN.



VICINITY MAP
SCALE: 1" = 1000'

OWNER:
ALBEMARLE COUNTY SCHOOL BOARD
401 MCINTIRE RD
CHARLOTTESVILLE, VA 22902
CONTACT: MATT WERTMAN
TELEPHONE: 434 977-4511
FAX: (434) 979-0698

ENGINEER OF RECORD:
TIMMONS GROUP
608 PRESTON AVE.
CHARLOTTESVILLE, VA 22903
CONTACT: JONATHAN SHOWALTER, P.E.
TELEPHONE: 434-327-1681

Sheet List Table

Sheet Number	Sheet Title
C0.0	COVER SHEET
C0.1	EXISTING CONDITIONS OVERALL PLAN
C0.2	OVERALL SITE LAYOUT
C1.0	NOTES & DETAILS
C1.1	NOTES & DETAILS
C1.2	NOTES & DETAILS
C2.0	EXISTING CONDITIONS PLAN
C2.1	EXISTING CONDITIONS PLAN
C2.2	EXISTING CONDITIONS PLAN
C2.3	EXISTING CONDITIONS PLAN
C2.4	DEMOLITION PLAN
C2.5	DEMOLITION PLAN
C2.6	DEMOLITION PLAN
C2.7	DEMOLITION PLAN
C3.0	EROSION & SEDIMENT CONTROL NOTES & DETAILS
C3.1	EROSION & SEDIMENT CONTROL NOTES & DETAILS
C3.2	EROSION & SEDIMENT CONTROL PLAN - PHASE IA
C3.3	EROSION & SEDIMENT CONTROL PLAN - PHASE IB
C3.4	EROSION & SEDIMENT CONTROL PLAN - PHASE I
C3.5	EROSION & SEDIMENT CONTROL PLAN - PHASE II
C3.6	EROSION & SEDIMENT CONTROL PLAN - PHASE II
C4.0	SITE PLAN
C4.1	SITE PLAN
C4.2	SITE PLAN
C4.3	SITE PLAN
C5.0	GRADING & DRAINAGE PLAN
C5.1	GRADING & DRAINAGE PLAN
C5.2	GRADING & DRAINAGE PLAN
C5.3	GRADING & DRAINAGE PLAN
C5.4	INLET DRAINAGE AREA MAP
C6.0	STORMWATER MANAGEMENT PLAN
C6.1	STORMWATER MANAGEMENT PLAN
C6.2	STORMWATER MANAGEMENT NOTES & DETAILS
C6.3	LANE STORMKEEPER NOTES & DETAILS
C6.4	LANE STORMKEEPER NOTES & DETAILS
C7.0	STORM PROFILES
C7.1	STORM PROFILES
C7.2	UTILITY PROFILES
L1.0	IRRIGATION PLAN
L2.0	IRRIGATION NOTES & DETAILS
L2.1	IRRIGATION NOTES & DETAILS
L3.0	REVEGETATION NOTES
L3.1	REVEGETATION NOTES

TOTAL = 43 SHEETS

SIGNATURE PANEL:

	APPROVAL	DATE
DEPARTMENT OF COMMUNITY DEVELOPMENT:		
PLANNING & ZONING		
ENGINEERING		
INSPECTIONS		
ARCHITECTURAL REVIEW BOARD		
DEPARTMENT OF FIRE AND RESCUE		
ALBEMARLE COUNTY SERVICE AUTHORITY		
VIRGINIA DEPARTMENT OF TRANSPORTATION		
HEALTH DEPARTMENT		

QUINN EVANS
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SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No. Date Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

COVER SHEET

C0.0

PATH & FILENAME:
PLOTTING DATE & TIME:

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PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EXISTING CONDITIONS OVERALL PLAN

C0.1

PATH & FILENAME:
PLOTTING DATE & TIME:

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS

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RICHMOND, VA 23220

v 804.788.4774

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BID DOCUMENTS
10/08/2024

OVERALL SITE LAYOUT

C0.2

SITE PLAN LEGEND

WATER
STORM PIPE
STORM MANHOLE
DROP INLET & STRUCTURE NO.
CURB
CURB & GUTTER
LIMITS OF DISTURBANCE
FENCE
MAJOR CONTOUR
MINOR CONTOUR
PROPOSED SPOT ELEVATION
PARKING COUNT

GRADING

TC = TOP OF CURB
EP = EDGE OF PAVEMENT
TW = TOP OF WALL
BW = BOTTOM OF WALL
TS = TOP OF STAIRS
BS = BOTTOM OF STAIRS
HP = HIGH POINT

ALBEMARLE COUNTY
FINAL PLAN GENERAL NOTES

General Construction Notes

1. Prior to any construction within any existing public right-of-way, including connection to any existing road, a permit shall be obtained from the Virginia Department of Transportation (VDOT). This plan as drawn may not accurately reflect the requirements of the permit. Where any discrepancies occur the requirements of the permit shall govern.
2. All materials and construction methods shall conform to current specifications and standards of VDOT unless otherwise noted.
3. Erosion and siltation control measures shall be provided in accordance with the approved erosion control plan and shall be installed prior to any clearing, grading or other construction.
4. All slopes and disturbed areas are to be fertilized, seeded and mulched.
5. The maximum allowable slope is 2:1 (horizontal:vertical). Where reasonably obtainable, lesser slopes of 3:1 or better are to be achieved.
6. Paved, rip-rap or stabilization mat lined ditch may be required when in the opinion of the County Engineer, or designee, it is deemed necessary in order to stabilize a drainage channel.
7. All traffic control signs shall conform with the Virginia Manual for Uniform Traffic Control Devices.
8. Unless otherwise noted all concrete pipe shall be reinforced concrete pipe – Class III.
9. All excavation for underground pipe installation must comply with OSHA Standards for the Construction Industry (29 CFR Part 1926).

Albemarle County Service Authority — Serving ♦ Conserving
168 Spotnap Road Charlottesville, VA. 22911 (434) 977-4511

Hydrant Flow Test Report

Date of Report: 2/23/2024

Location	2751 Hydraulic Road	**Pressure Zone**	Stillhouse
Date and Time of Test	2/22/2024 11:30:00 AM		
Minutes of Flow	2		
Pipe Size (Inches)	8		
Pressure Hydrant	10248		
Static Pressure (psi)	91.3		
Residual Pressure (psi)	82.4		

☑ Q20 Looped ☐ Q20 Multiple Inline Hydrants ☐ Q20 Single Flow ☐ Sprinkler Test Single Flow

Flow Hydrant #1	10249	**Pitot Pressure #1 (psi)**	67.4	**Yellow 1** ☐	**Test Flow 1**	1147
Flow Hydrant #2	13613	**Pitot Pressure #2 (psi)**	37.9	**Yellow 2** ☑	**Test Flow 2**	1038
Flow Hydrant #3		**Pitot Pressure #3 (psi)**		**Yellow 3** ☐	**Test Flow 3**	0

Total Estimated Flow (gpm)	2185
AWWA Q20 Calculation (gpm)	

(No value in Q20 indicates insufficient pressure drop for Q20 OR a sole sprinkler test.)

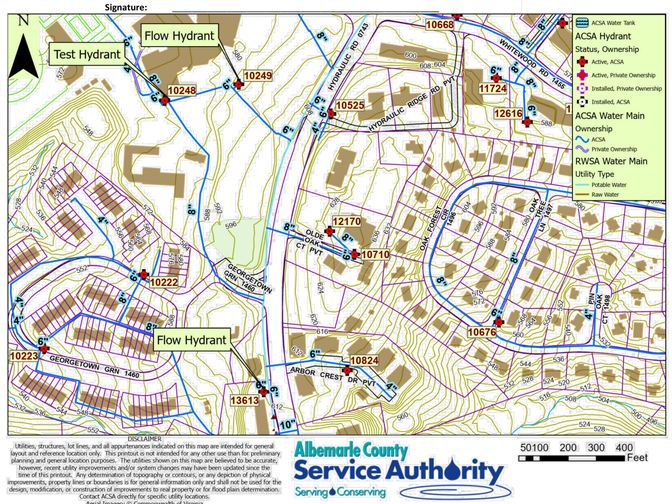
Comments
Hydrants opened all the way. 10 pound residual drop could not be achieved resulting in no Q20 calue.

For method of calculating pitot flow with a red Pollard diffuser: see eq. 13, Walski and Lutes article 1990 Journal Management and Operations AWWA. For yellow Pollard diffusers, a best fit third order polynomial equation of the Pollard flow vs. pitot pressure gauge is used.

Estimated Consumption (gal) 4370 ☐ Modeling Purposes Only
For use for water audit

Signature: Allan Bryant

Signature:



DISCLAIMER
Utilities, structures, lot lines, and all appurtenances indicated on this map are intended for general layout and reference location only. This printout is not intended for any other use than for preliminary planning and general location purposes. The utilities shown on this map are believed to be accurate; however, recent utility improvements and/or system changes may have been updated since the time of this printout. Any determination of topography or contours, or any depiction of physical improvements, property lines or boundaries is for general information only and shall not be used for the design, modification, or construction of improvements to real property or for flood plain determination.
Contact ACSA directly for specific utility locations.
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Albemarle County Service Authority — Serving ♦ Conserving

ACSA AVAILABLE FIRE FLOW INFORMATION

NO SCALE

ACSA GENERAL WATER & SEWER CONDITIONS

JUNE 27, 2019

1. WORK SHALL BE SUBJECT TO INSPECTION BY ALBEMARLE COUNTY SERVICE AUTHORITY (ACSA) INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER ACSA OFFICIALS AT THE START OF THE WORK.
2. THE ALBEMARLE COUNTY SERVICE AUTHORITY SHALL HAVE ACCESS TO USE THE AIRSPACE ABOVE THE LOCATIONS OF CONSTRUCTION FOR THE FLIGHT OF UNMANNED AERIAL VEHICLES FOR THE PURPOSE OF IMAGERY COLLECTION.
3. THE LOCATION OF EXISTING UTILITIES ACROSS THE LINE OF THE PROPOSED WORK ARE NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN ARE ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL, ON HIS OWN INITIATIVE, LOCATE ALL UNDERGROUND LINES AND STRUCTURES, AS NECESSARY.
4. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE CURRENT EDITION OF THE GENERAL WATER AND SEWER CONSTRUCTION SPECIFICATIONS, AS ADOPTED BY THE ACSA.
5. DATUM FOR ALL ELEVATIONS SHOWN IN NATIONAL GEODETIC SURVEY.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7001).
7. ALL WATER AND SEWER PIPES SHALL HAVE A MINIMUM OF THREE AND A HALF (3.5) FEET OF COVER MEASURED FROM THE TOP OF PIPE, OVER THE CENTERLINE OF PIPE. THIS INCLUDES ALL FIRE HYDRANT LINES, SERVICE LATERALS AND WATER LINES, ETC.
8. ALL WATER AND SEWER APPURTENANCES ARE TO BE LOCATED OUTSIDE OF ROADSIDE DITCHES.
9. VALVES ON DEAD END LINES SHALL BE RODDED TO PROVIDE ADEQUATE RESTRAINT FOR THE VALVE DURING A FUTURE EXTENSION OF THE LINE.
10. TREES ARE NOT PERMITTED IN THE ACSA EASEMENT.
11. THE CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH THE NO-LEAD REGULATION REGARDING BRASS FITTINGS EFFECTIVE JANUARY 4, 2014 (SENATE BILL 3874 WHICH AMENDS THE SAFE DRINKING WATER ACT).
12. THE SEWER LATERAL BEYOND THE CONNECTION AT THE SEWER MAIN SHALL BE PRIVATE. THE SEWER LATERAL STUB-OUT SHALL UNDERGO THE ACSA LOW-PRESSURE AIR TEST TO SATISFY COUNTY TESTING REQUIREMENTS. VISUAL INSPECTION OF THE SEWER LATERAL STUB-OUT SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
13. THE SEWER LATERAL BEYOND THE CONNECTION AT A MANHOLE SHALL BE PRIVATE. VISUAL INSPECTION AND PRESSURE TESTING OF THE SEWER LATERAL SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
14. THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE IS PRIVATE. VISUAL INSPECTION AND TESTING OF THE FIRE SPRINKLER MAIN DOWNSTREAM OF THE GATE VALVE SHALL BE WITNESSED BY THE COUNTY BUILDING INSPECTIONS DEPARTMENT. THIS INSPECTION SHALL OCCUR UNDER AN "OTHER PLUMBING" PERMIT WHICH MUST BE OBTAINED BY THE CONTRACTOR.
15. ALL FLUSHING OF FIRE SPRINKLER MAINS SHALL NOT OCCUR UNTIL APPROVAL IS GIVEN BY THE ACSA.

BLASTING NOTES

1. BLASTING SHALL NOT BE PERMITTED ON THIS PROJECT.

ALBEMARLE COUNTY STORMWATER MANAGEMENT NOTES

1. ALL DAMS AND CONSTRUCTED FILL TO BE WITHIN 95% OF MAXIMUM DRY DENSITY AND 2% OF OPTIMUM MOISTURE CONTENT. ALL FILL MATERIAL TO BE APPROVED BY A GEOTECHNICAL ENGINEER. A GEOTECHNICAL ENGINEER IS TO BE PRESENT DURING CONSTRUCTION OF DAMS.
2. PIPE AND RISER JOINTS ARE TO BE WATERTIGHT WITHIN STORMWATER MANAGEMENT FACILITIES.
3. FOR TEMPORARY SEDIMENT TRAPS OR BASINS WHICH ARE TO BE CONVERTED TO PERMANENT STORMWATER MANAGEMENT FACILITIES; CONVERSION IS NOT TO TAKE PLACE UNTIL THE SITE IS STABILIZED, AND PERMISSION HAS BEEN OBTAINED FROM THE COUNTY EROSION CONTROL INSPECTOR.

GENERAL CONSTRUCTION NOTES FOR EROSION AND SEDIMENT CONTROL

1. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
10. ALL FILL MATERIAL TO BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA.
11. ALL WASTE MATERIALS SHALL BE TAKEN TO AN APPROVED WASTE AREA. EARTH FILL SHALL BE INERT MATERIALS ONLY, FREE OF ROOTS, STUMPS, WOOD, RUBBISH, AND OTHER DEBRIS.
12. BORROW OR WASTE AREAS ARE TO BE RECLAIMED WITHIN 7 DAYS OF COMPLETION PER ZONING ORDINANCE SECTION 5.1.28.
13. ALL INERT MATERIALS SHALL BE TRANSPORTED IN COMPLIANCE WITH SECTION 13-301 OF THE CODE OF ALBEMARLE.
14. BORROW, FILL OR WASTE ACTIVITY INVOLVING INDUSTRIAL-TYPE POWER EQUIPMENT SHALL BE LIMITED TO THE HOURS OF 7:00AM TO 9:00PM.
15. BORROW, FILL OR WASTE ACTIVITY SHALL BE CONDUCTED IN A SAFE MANNER THAT MAINTAINS LATERAL SUPPORT, OR ORDER TO MINIMIZE ANY HAZARD TO PERSONS, PHYSICAL DAMAGE TO ADJACENT LAND AND STRUCTURES/IMPROVEMENTS, AND DAMAGE TO ANY PUBLIC STREET BECAUSE OF SLIDES, SINKING, OR COLLAPSE.
16. THE DEVELOPER SHALL RESERVE THE RIGHT TO INSTALL, MAINTAIN, REMOVE OR CONVERT TO PERMANENT STORMWATER MANAGEMENT FACILITIES WHERE APPLICABLE ALL EROSION CONTROL MEASURES REQUIRED BY THIS PLAN REGARDLESS OF THE SALE OF ANY LOT, UNIT, BUILDING OR OTHER PORTION OF THE PROPERTY.
17. TEMPORARY STABILIZATION SHALL BE TEMPORARY SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/ACRE, AND IN THE MONTHS OF SEPTEMBER TO FEBRUARY TO CONSIST A 50/50 MIX OF ANNUAL RYEGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.
18. PERMANENT STABILIZATION SHALL BE LIME AND FERTILIZER, PERMANENT SEEDING, AND MULCH. AGRICULTURAL GRADE LIMESTONE SHALL BE APPLIED AT 90LBS/1000SF, INCORPORATED INTO THE TOP 4-6 INCHES OF SOIL. FERTILIZER SHALL BE APPLIED AT 1000LBS/ACRE AND CONSIST OF A 10-20-10 NUTRIENT MIX. PERMANENT SEEDING SHALL BE APPLIED AT 180LBS/ACRE AND CONSIST OF 95% KENTUCKY 31 OR TALL FESCUE AND 0-5% PERENNIAL RYEGRASS OR KENTUCKY BLUEGRASS. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.
19. MAINTENANCE: ALL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT. ANY DAMAGE OR CLOGGING TO STRUCTURAL MEASURES SHALL BE REPAIRED IMMEDIATELY. SILT TRAPS SHALL BE CLEANED WHEN 50% OF THE WET STORAGE VOLUME IS FILLED WITH SEDIMENT. ALL SEEDED AREAS SHALL BE RESEEDED WHEN NECESSARY TO ACHIEVE A GOOD STAND OF GRASS. SILT FENCE AND DIVERSION DYKES WHICH COLLECT SEDIMENT TO HALF THEIR HEIGHT MUST BE CLEANED AND REPAIRED IMMEDIATELY.
20. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF FINAL SITE STABILIZATION, WHEN MEASURES ARE NO LONGER NEEDED, SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.
21. PERMANENT VEGETATION SHALL BE INSTALLED ON ALL DENUDED AREAS WITHIN NINE (9) MONTHS AFTER THE DATE THE LAND DISTURBING ACTIVITY COMMENCED. (WATER PROTECTION ORDINANCE SECTION 17-207B)

Fire Flow Requirement Calculation - Derived from 2021 IFC Appendix B

2RW

Client:	Quinn Evans
Project Number:	19168
Project:	ACPS HS Center II
Design Phase:	CD
Designer:	Joe S
Reviewer:	Joe N
Date:	7/29/2024

Building Construction Parameters		Comments / Notes
Total Calculated Building Area (include covered overhangs):	62941.0 sq. ft.	

Analysis Zone	Occupancy Use Group	Sprinkler System	Construction Type	Building Area %	Comments / Notes
Zone 1	Commercial	NFPA 13	Type IIB or IIIB	100.0%	

Fire Flow Calculation					Comments / Notes
Analysis	Analysis Zone Area	Flow	% Adjusted	Duration	
Zone 1	62941.0 sq. ft.	5250 gpm	1313 gpm	4.0 hr	
	Total Fire Flow for Construction Area Adjusted per IFC Table B105.2		1313 gpm	4.0 hr	
	Total Water Volume Required		315000	gallons	

FIRE PREVENTION STEPS

1. AS FOUND IN THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, ESTABLISH A WRITTEN FIRE PREVENTION PLAN AND IDENTIFY SOMEONE TO SERVE AS THE FIRE PREVENTION SUPERINTENDENT TO ENSURE SITE COMPLIANCE WITH THE PLAN.
2. SMOKING SHALL BE PROHIBITED IN AREAS WHERE SMOKING IS A HAZARD, AND THESE AREAS SHALL BE DESIGNATED WITH NO SMOKING SIGNS PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
3. AREAS WHERE SMOKING CAN OCCUR SHALL HAVE APPROPRIATE RECEPTACLES FOR DISCARDED SMOKING MATERIALS PER VIRGINIA STATESIDE FIRE PREVENTION CODE
4. CONTRACTOR SHALL ENSURE THE STREET NAMES AND BUILDING NUMBERS ARE ALWAYS PLAINLY VISIBLE FROM THE FRONTAGE STREET DURING CONSTRUCTION PER THE VIRGINIA STATEWIDE FIRE CODE.
5. PER THE VIRGINIA STATEWIDE FIRE PREVENTION CODE, SAFE AND EFFICIENT VEHICULAR ACCESS FOR FIREFIGHTING AND EMERGENCY OPERATIONS HALL BE PROVIDED AND MAINTAINED AT ALL CONSTRUCTION AND DEMOLITION SITES. THIS INCLUDES PROVISION OF THE REQUIRED UNOBSTRUCTED ACCESS WIDTHS, A SURFACE CAPABLE OF SUPPORTING EMERGENCY APPARATUS OF UP TO 85,000 LBS. IN ALL WEATHER CONDITIONS, FREE OF OVERHEAD OBSTRUCTIONS FROM 13 FT 6 IN AND BELOW, PROVIDE ACCESS TO FIRE DEPARTMENT CONNECTIONS WITHIN 100 FEET OF WATER SUPPLYHYDRANTS AND MUST PROVIDE FOR AERIAL ACCESS NO CLOSER THAN 15 FT AND NO MORE THAN 30 FT FROM THE ACCESS ROAD TO BUILDINGS OVER 30 FEET TALL. THIS ACCESS MAY BE VIA PERMANENT OR TEMPORARY ROAD AS LONG AS THE CONDITIONS ARE LISTED, AND THEY ARE PROPERLY IDENTIFIED/MARKED.
6. AN APPROVED WATER SUPPLY FOR FIREFIGHTING OPERATIONS SHALL BE IN PLACE WITH UNOBSTRUCTED ACCESSIBILITY AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE
7. WASTE AND COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH DAY AND DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
8. FIRE EXTINGUISHERS SHALL BE PROVIDED, WITH NOT LESS THAN ONE APPROVED FIRE EXTINGUISHER AT EACH STAIRWELL, ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE BEEN ACCUMULATED, IN EVER STORAGE AND CONSTRUCTION SHED AND IN AREAS OF SPECIAL HAZARDS, SUCH AS WHERE FLAMMABLE AND COMBUSTIBLE LIQUIDS ARE STORED OR USED, IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE CODE.
9. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL COMPLY WITH THE VIRGINIA STATEWIDE FIRE PRECENTION CODE AND SHALL REQUIRE A PERMIT FROM THE ALBEMARLE COUNTY FIRE MARSHAL'S OFFICE.

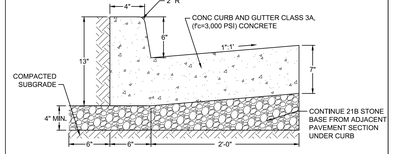
GENERAL NOTES

1. CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR AS BUILT DOCUMENTATION, AS REQUIRED BY THE LOCALITY. THIS INCLUDES, BUT IS NOT LIMITED TO, TESTING, INSTALLATION DOCUMENTATION, SURVEY, ETC. ALL REQUIREMENTS SHALL BE DISCUSSED WITH THE LOCALITY PRIOR TO THE BEGINNING CONSTRUCTION.
2. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS AND STANDARDS.
3. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND VERIFY THE APPROVAL OF THE PLANS BY ALL FEDERAL, STATE AND LOCAL AGENCIES.
4. LAND USE PERMITS (LUP-A) MUST BE OBTAINED FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION PRIOR TO BEGINNING ANY CONSTRUCTION WITHIN THE EXISTING STATE MAINTAINED RIGHT OF WAY (INCLUDING ACCESS).
5. VDOT IS TO RECEIVE WRITTEN NOTIFICATION 48 HOURS PRIOR TO COMMENCING WITH INITIAL CONSTRUCTION ACTIVITIES.
6. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF ALL POINTS OF CONNECTION OR PROPOSED WORK TO EXISTING CURBS, SANITARY LINES, WATERLINES, ETC, PRIOR TO CONSTRUCTION.
7. UPON DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE OWNER. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY THE OWNER'S REPRESENTATIVE, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS.
8. ALL STORM SEWER DESIGN AND CONSTRUCTION TO BE IN ACCORDANCE WITH VDOT STANDARDS. PRIOR TO TYING IN PRIVATE STORMWATER PIPES, VIDEO INSPECTION OF EXISTING STORMWATER PIPES IS REQUIRED TO CONFIRM CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT ALL STORM SYSTEM AT THE END OF THE PROJECT.
9. ALL RCP STORM SEWER PIPE SHALL BE REINFORCED TONGUE AND GROVE CONCRETE PIPE IN ACCORDANCE WITH ASTM-C-76. ALL PIPE WITH BE CLASS III RCP OR AS NOTED IN ACCORDANCE WITH CURRENT VDOT STANDARDS AND SPECIFICATIONS.
10. IF PRE-CAST UNITS ARE TO BE USED, THE MANUFACTURER SHALL SUBMIT DRAWING DETAILS FOR REVIEW. CERTIFICATION AND VDOT STAMP WILL BE REQUIRED ON ALL UNITS.
11. ALL CONCRETE SHALL BE A3-AE (AIR ENTRAINED 3,000 PSI), UNLESS OTHERWISE NOTED.
12. ALL ENTRANCES ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT VDOT STANDARDS.
13. DESIGN CHANGES, SPECIFIED MATERIALS CHANGES AND/OR FIELD CHANGES FROM THE APPROVED PLANS NEED TO BE RESUBMITTED TO THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. A LETTER OF EXPLANATION SHALL ACCOMPANY THE REVISED PLANS AND/OR THE DRAINAGE CALCULATIONS, WHICH MUST BE SUBMITTED AND APPROVED BY THE ENGINEER.
14. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN. IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL MISS UTILITY OF CENTRAL VIRGINIA AT 1-800-552-7001.
15. CASING SLEEVES SHALL BE PLACED AT ALL ROAD CROSSINGS FOR GAS, POWER, TELEPHONE AND CABLE TV SERVICE TRUNK LINES.
16. THE INSTALLATION OF SEWER, WATER, AND GAS MAINS (INCLUDING SERVICE LATERALS AND SLEEVES) SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF AGGREGATE BASE COURSE.
17. VDOT & ALBEMARLE COUNTY APPROVAL OF CONSTRUCTION PLANS DOES NOT PRECLUDE THE RIGHT TO REQUIRE ADDITIONAL FACILITIES AS DEEMED NECESSARY.
18. VDOT SHALL HAVE APPROVED THE AGGREGATE BASE COURSE(S) FOR DEPTH, TEMPLATE AND PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT THE OWNER'S REPRESENTATIVE FOR INSPECTION FOR THE AGGREGATE BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S).
19. A PRIME COAT SEAL BETWEEN THE AGGREGATE BASE AND BITUMINOUS CONCRETE WILL BE REQUIRED AT THE RATE OF 0.30 GALLONS PER SQUARE YARD (REC-250 PRIME COAT) PER VDOT STANDARDS AND SPECIFICATIONS.
20. THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE ROAD AND BRIDGE SPECIFICATIONS.
21. THE OWNER'S REPRESENTATIVE SHALL HAVE APPROVED THE AGGREGATE BASE COURSE(S) FOR DEPTH, TEMPLATE AND PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT THE OWNER FOR INSPECTION FOR THE AGGREGATE BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S).
22. A GEOTECHNICAL ENGINEER IS TO ASCERTAIN CAUSE AND CERTIFY RECOMMENDED METHOD OF REPAIR FOR ALL PAVEMENT STRUCTURAL FAILURES PRIOR TO STATE ACCEPTANCE.
23. ALL VEGETATION AND ORGANIC MATERIAL IS TO BE REMOVED FROM THE PROPOSED PAVEMENT LIMITS PRIOR TO CONDITIONING OF THE SUBGRADE.
24. CERTIFICATION AND SOURCE OF MATERIALS ARE TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR ALL MATERIALS AND BE IN ACCORDANCE WITH THE ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS.
25. APPROVAL OF A DETAILED CONSTRUCTION SEQUENCING/MAINTENANCE OF TRAFFIC NARRATIVE FOR THE WORK ZONE IS A PREREQUISITE FOR ISSUANCE OF A LAND USE PERMIT ALLOWING ACCESS TO AND CONSTRUCTION WITHIN VDOT MAINTAINED RIGHT OF WAY.
26. GRADE LINES ON PROFILES DENOTE FINISHED GRADE OF CENTER LINE OF ROAD.
27. ALL APPROACH GUTTERS TO SAG INLETS SHALL MAINTAIN A MINIMUM SLOPE OF 0.004 ft./ft.
28. WHERE A TYPE "B" NOSE IS SPECIFIED ON AN INLET IN CONJUNCTION WITH ROLL FACE CURB AND GUTTER OR CG-7, THERE SHALL BE A 20' TRANSITION ON EACH SIDE OF THE INLET.
29. CONTRACTOR SHALL PROVIDE A SEQUENCE OF CONSTRUCTION/MAINTENANCE OF TRAFFIC PLAN IN ACCORDANCE WITH THE STANDARDS AND GUIDELINES CONTAINED IN THE 2011 EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL FOR REVIEW BY THE ENGINEER, OWNER'S REPRESENTATIVE, AND VDOT PRIOR TO STARTING WORK THAT IMPACTS TRAFFIC ON STATE ROADS.
30. ALL NEW HANDICAP ACCESSIBLE REQUIREMENTS ON-SITE AND WITHIN ALL NEW STRUCTURES SHALL COMPLY WITH THE LATEST VERSION OF THE UNIFORM STATEWIDE BUILDING CODE, VIRGINIA CONSTRUCTION CODE, STANDARDS FOR ACCESSIBLE DESIGN, AND ICC/ANSI A117.1-03.
31. THE CLEAR ZONE IS TO BE FREE OF STORED MATERIALS AND PARKED EQUIPMENT.
32. HORIZONTAL AND VERTICAL SIGHT DISTANCES SHALL BE FREE OF PARKED VEHICLES.
33. ALL EXCAVATED AREAS WITHIN THE CLEAR ZONE THAT HAVE A DEPTH GREATER THAN 6" SHALL HAVE A 6:1 STONE WEDGE PLACED AT THE END OF THE DAY
34. VISIBILITY OF ALL MECHANICAL EQUIPMENT FROM THE ENTRANCE CORRIDOR SHALL BE ELIMINATED.
35. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT HAVE A SURFACE SLOPE GREATER THAN 1:48. ACCESS AISLES SHALL BE AT THE SAME LEVEL AS THE PARKING SPACE THEY SERVE. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE OF TRAVEL FROM ADJACENT PARKING TO AN ACCESSIBLE BUILDING ENTRANCE. IN PARKING FACILITIES THAT DO NOT SERVE A PARTICULAR BUILDING, ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ROUTE TO AN ACCESSIBLE PEDESTRIAN ENTRANCE TO THE PARKING FACILITY. WHERE BUILDINGS HAVE MULTIPLE ACCESSIBLE ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES SHALL BE DISPERSED AND LOCATED NEAR THE ACCESSIBLE ENTRANCES. ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTE SHALL BE INSTALLED IN ACCORDANCE WITH ICC ANSI A117.1-09 AND THE 2015 VIRGINIA CONSTRUCTION CODE.
36. ALL ROOF DRAINS SHALL DISCHARGE IN A MANNER NOT TO CAUSE A PUBLIC NUISANCE AND NOT OVER SIDEWALKS.
37. BUILDINGS OR STRUCTURES BUILT BEFORE JANUARY 1, 1985 MUST HAVE AN ASBESTOS SURVEY PERFORMED IN ORDER TO APPLY FOR A DEMOLITION PERMIT. ASBESTOS REMOVAL PERMITS ARE REQUIRED IF POSITIVE FOR SUCH FROM ALBEMARLE COUNTY AND VDOLI. CONTACT VDOLI FOR THEIR ADDITIONAL REQUIREMENTS AND PERMITS FORE DEMOLITION PROJECTS AT 540-562-3580 x131.
38. ALL WATER, SEWER, AND FIRE LINES REQUIRE NEW INSPECTION AND TESTING PROCEDURES. THE ACSA PERFORMS ANY TESTING AND INSPECTIONS OF THE PUBLIC SEWER AND WATER MAIN(S). THE ALBEMARLE COUNTY BUILDING INSPECTIONS DEPARTMENT (ACBID) DOES A VISUAL INSPECTION AND WITNESSES THE TESTING OF THE BUILDING DRAIN, WATER SERVICE PIPE, AND THE SPRINKLER LEAD-IN CONNECTION. THE DEVELOPER/CONTRACTOR IS RESPONSIBLE TO RETAIN A SPECIAL INSPECTOR AS OUTLINED IN THE UPDATED ALBEMARLE COUNTY POLICY FOR SITE UTILITIES TO PERFORM THE VISUAL INSPECTION AND TESTING OF ALL UTILITIES NOT COVERED BY THE ACSA OR ACBID. THIS INCLUDES BUILDING SEWERS, WATER AND FIRE LINE BRANCHES BETWEEN THE MAIN AND THE METER(S)/BUILDING(S). THE SPECIAL INSPECTOR'S REPORT MUST BE SUBMITTED AND APPROVED BY THE ALBEMARLE COUNTY ENGINEERING DEPARTMENT PRIOR TO A CERTIFICATE OF OCCUPANCY BEING ISSUED.
39. CONTACT ACSA 3 DAYS PRIOR TO ESTABLISHING A CONNECTION TO THE ACSA WATER MAIN.

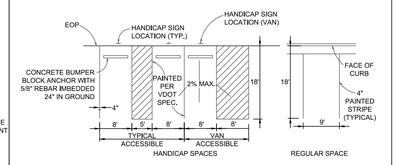
CONTAMINATED SOIL HANDLING AND TESTING NOTE:
IF SOILS APPEARING TO BE CONTAMINATED ARE ENCOUNTERED DURING DEMOLITION/GRADING, SOIL SHALL BE SEGREGATED DURING CONSTRUCTION ACCORDING TO THE FOLLOWING GENERAL CLASSIFICATIONS:

- NO IMPACT: NO OBVIOUS STAINING OR ODOR
- IMPACT: OVERT STAINING WITH OR WITHOUT THE PRESENCE OF FREE LIQUIDS AND/OR A MODERATE TO VERY STRONG ODOR.

ALL

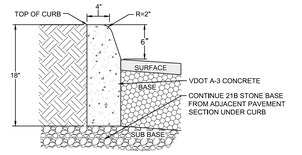


VDOT STANDARD CG-6 CURB & GUTTER
No Scale



TYPICAL PARKING SPACE DETAILS
No Scale

CURB WIPE DOWN DETAIL
No Scale



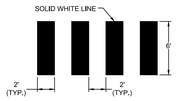
VDOT STANDARD CG-2 CURB
No Scale

SIGNAGE NOTES:

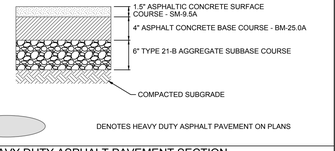
1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF EACH OF THE FOLLOWING AND ANY REVISION THERE TO:
   A. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES,
   B. THE VIRGINIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES,
   C. THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS,
   D. THE 2000 INTERNATIONAL FIRE CODE,
2. SIGN LOCATIONS ARE APPROXIMATE AND ARE TO BE MODIFIED IN THE FIELD TO AVOID CONFLICT WITH UNDERGROUND UTILITIES OR OTHER CONSTRUCTIONS, AND TO COMPLY WITH STANDARDS REFERENCED IN NOTE 1 ABOVE,
3. ALL SIGNS AND PAVEMENT MARKINGS ARE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR. ALL SIGNS TO BE FURNISHED AND INSTALLED WITH STANDARD U POST GALVANIZED BY THE CONTRACTOR.

NOTE: STOP SIGNS TO BE 30" WITH HIGH INTENSITY SHEETING

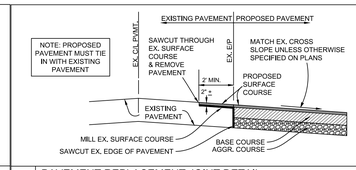
STOP BAR DETAIL
NO SCALE



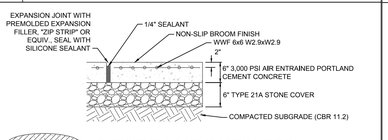
STRIPING AND SIGNAGE DETAIL
No Scale



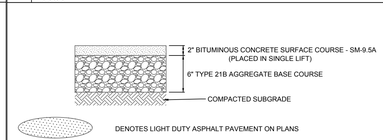
HEAVY DUTY ASPHALT PAVEMENT SECTION
No Scale



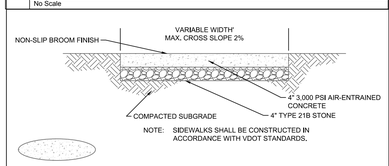
PAVEMENT REPLACEMENT JOINT DETAIL
No Scale



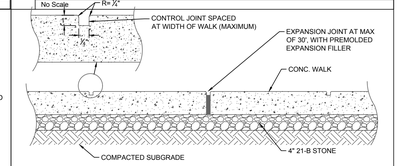
HEAVY DUTY CONCRETE SECTION
No Scale



LIGHT DUTY ASPHALT PAVEMENT SECTION
No Scale

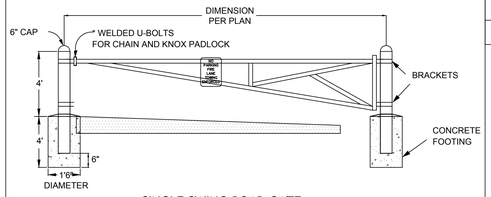


CONCRETE SIDEWALK PAVEMENT SECTION
No Scale



CONCRETE SIDEWALK JOINT DETAIL
No Scale

GATES SHALL BE 2" GALVANIZED PIPE (WELD SEAMS AND PAINT W/ GALVANIZED PRIMER AND PAINT)



SINGLE SWING ROAD GATE

NO SCALE
* PROVIDE AN APPROVED KNOX LOCK FOR THE GATE IN ACCORDANCE WITH THE INTERNATIONAL FIRE CODE, SECTION 506.1.1.
* CONSTRUCT GATE STOPS TO HOLD GATES IN OPEN POSITION
NOTE: INSTALL TWO USA-REFLECTOR GT-1 YELLOW ALUMINUM SUPPORTED REFLECTORS ON BOTH SIDES OF EACH GATE, OR APPROVED EQUAL.

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF JOSEPH C. MEDLEY FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED ON THE FOLLOWING DATES: MAY 22 THROUGH JUNE 07, 2023; JUNE 23, 2023; JULY 28, 2023; AUGUST 01, 2023; NOVEMBER 08 & 09, 2023; & JANUARY 05 & 08, 2024. THIS BASE-MAP AND DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

SURVEY NOTES:

1. PROPERTY & ZONING INFORMATION:

OWNER: COUNTY SCHOOL BOARD OF ALBEMARLE COUNTY;
VIRGINIA
REFERENCE: DB. 287, PG. 414
COUNTY TAX MAP NUMBER: 60-78A (06000-78-0A-00000)
PROPERTY ADDRESS: 2775 HYDRAULIC ROAD
AREA: 216.69 ACRES (GSI)
ZONED: RA (RURAL AREAS)

2. BOUNDARY INFORMATION SHOWN HEREON IS BASED ON:

a) LAND RECORDS OBTAINED (& REFERENCED) FROM THE CLERK'S OFFICE OF ALBEMARLE COUNTY; b) & VDOT PLANS OF RECORD AS REFERENCED HEREON; c) FIELD SURVEY BY THIS FIRM FOR RECOVERY AND VERIFICATION OF EXISTING PROPERTY CORNERS AS SHOWN HEREON.

RIGHT OF WAY CORRIDOR OF STATE ROUTE 743, HYDRAULIC ROAD, IS NOT MONUMENTED ALONG ITS MARGIN WITH THE SUBJECT PROPERTY DEPICTED HEREON. DELINEATION OF RIGHT OF WAY RELIES ON RECOVERY OF FOUND BOUNDARY EVIDENCE NORTH OF THE INTERSECTION OF SAID HYDRAULIC ROAD AND LAMBS LANE.

3. NOT TITLE REPORT PROVIDED; EASEMENTS MAY EXIST WHICH ARE NOT DEPICTED HEREON.

4. THIS PLAT DOES NOT REPRESENT A FORMAL BOUNDARY SURVEY PERFORMED BY THIS FIRM.

5. BASIS OF MERIDIAN NAD83 (NA 2011) VA SOUTH ZONE VIA NETWORK GPS OBSERVATIONS.

6. BASED ON FEMA FLOOD INSURANCE RATE MAP (FIRM); MAP NO. 51003C0260D, (PANEL 260 OF 575) EFFECTIVE FEBRUARY 4, 2005, PORTIONS OF THE SUBJECT PROPERTY LIES IN UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

7. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN THE IVY CREEK WATERSHED PER COUNTY GIS; PROPERTY IS ALSO WITHIN A WATER SUPPLY PROTECTION AREA.

8. THE PROPERTY SHOWN HEREON IS NOT LOCATED WITHIN AN AGRICULTURAL-FORESTAL DISTRICT.

9. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN AN ENTRANCE CORRIDOR OVERLAY AREA.

10. THE PROPERTY SHOWN HEREON IS LOCATED WITHIN AN AIRPORT IMPACT AREA.

11. NO MANAGED OR PRESERVED STEEP SLOPES PRESENT ON / WITHIN PROPERTY. CRITICAL SLOPES EXIST ON PROPERTY, REGULATED BY ORDINANCE.

12. CONTOUR INTERVAL = 1'

13. SEE SHEET 3 FOR SHEET LAYOUT

LEGEND

WATER VALVE
FIRE HYDRANT
WATER METER
SPIGOT
STORM DRAINAGE (SD) MANHOLE
STORM INLET W/ GRATE
RIPRAP
CLEAN-OUT
RCP REINFORCED CONCRETE PIPE
CMP CORRUGATED METAL PIPE
PVC POLYVINYL CHLORIDE PIPE
HDPE HIGH-DENSITY POLYETHYLENE
SANITARY MANHOLE
FLOW DIRECTION
GAS VALVE
GAS METER
POWER MANHOLE
POWER BOX
UTILITY VAULT, AS NOTED
UTILITY POLE
LIGHT POLE
GUY LINE ANCHOR
GROUND LIGHT
TELECOMM PEDESTAL
CELLULAR TOWER
SANITARY PIPE
OHP OVERHEAD POWER
UNDERGROUND POWER
UNDERGROUND FIBER OPTIC
WATER LINE
GAS LINE
UNDERGROUND UTILITY
X FENCE, AS NOTED
CENTERLINE SWALE/CREEK
EDGE OF GRAVEL (EG)
EDGE OF PAVEMENT (EP)
DECIDUOUS TREE (DEC)
CONIFER (CON)
HOLLY TREE
SIDEWALK
CONCRETE
EDGE OF CONCRETE
SIGN
FLAGPOLE
BOLLARD
TRAFFIC SIGNAL POLE
MAILBOX
TRAFFIC SYMBOLOGY
PROPERTY MARKER FOUND, AS NOTED
SURVEY CONTROL

UIG UTILITY DESIGNATION NOTES:

1) UIG UTILITY DESIGNATION PERFORMED BY TIMMONS GROUP AND COMPLETED IN AUGUST OF 2023 & NOVEMBER OF 2023.

2) ALL UIG UTILITIES FOUND ON-SITE ARE DESIGNATED AS QUALITY LEVEL B UNLESS OTHERWISE NOTED.

EOI = END OF INFORMATION FOR CONDUCTIVE UTILITY FIELD SIGNALS.

QLD-DATA = QUALITY LEVEL D - DATA ACCORDING TO RECORDS. APPROXIMATE LOCATION SHOWN OF AN NON-CONDUCTIVE / UNLOCATABLE UNDERGROUND UTILITY LINE.

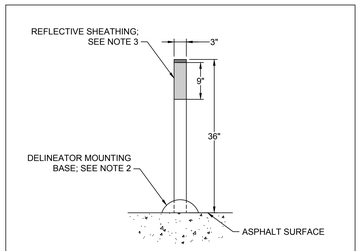
UTILITY OWNERS:

-ALBEMARLE COUNTY SERVICE AUTHORITY
-SEGRA / UMOS NETWORKS
-DOMINION ENERGY
-CITY OF CHARLOTTESVILLE
-CITY OF CHARLOTTESVILLE NATURAL GAS
- RIVANNA WATER & SEWER AUTHORITY
- BRIGHTSPEED

LINE TABLE		
LINE	BEARING	LENGTH
E1	S59°29'23"W	20.00'
L1	S30°30'37"E	38.91'
L2	S80°41'37"E	12.97'
L3	S38°23'16"E	37.97'
L4	S29°54'23"W	4.04'
L5	N54°45'56"W	19.31'
L6	S89°10'13"W	12.72'

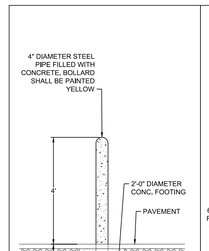
CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD BEARING	CHORD
C1	338.31'	166.17'	84.80'	28°08'34"	S44°34'54"E	164.51'
C2	358.31'	103.47'	52.10'	16°32'44"	S72°25'15"E	103.11'
C3	1685.02'	150.78'	75.44'	5°07'37"	S27°20'34"W	150.73'
C4	30.00'	40.88'	24.32'	78°04'20"	N52°42'44"E	37.79'
C5	30.00'	37.66'	21.76'	71°55'18"	N4°29'32"W	35.23'
C6	1685.02'	401.69'	201.80'	13°39'31"	S12°49'23"W	400.74'
C7	50.00'	101.45'	80.42'	116°15'29"	N64°07'22"E	84.92'
EC8	358.31'	210.36'	108.31'	33°38'16"	S47°19'45"E	207.35'

SURVEY LEGEND

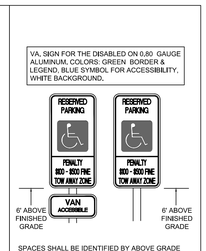


NOTES;
1. SELECTED DELINEATOR SHALL CONFORM TO ALL APPLICABLE VDOT STANDARDS AS LISTED IN THE MOST RECENT VERSION OF THE ROAD AND BRIDGE SPECIFICATION. ALL COMPONENTS MUST COMPLY WITH THE VDOT MATERIALS DIVISION APPROVED PRODUCTS LIST (16)
2. DELINEATOR(S) SHALL BE MOUNTED IN ACCORDANCE WITH MANUFACTURER SPEC AND SHALL CONFORM TO THE PROCEDURES FOUND IN SECTION 702.04 (C) OF THE LATEST VERSION OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS. THE BASE IS TO BE EMBEDDED PER MANUFACTURER SPEC; ANCHORING SYSTEMS SHALL CONFORM TO SECTION 235 OF THE VDOT SPEC.
3. POST REFLECTIVE SHEATHING SHALL MEET MINIMUM STANDARDS FOUND IN SECTION 246.02(F) OF THE VDOT ROAD AND BRIDGE SPEC. SHALL BE SELECTED FROM THE APPROVED PRODUCT LIST (P. 46)
4. DELINEATORS ARE TO BE SPACED 10' ON CENTER

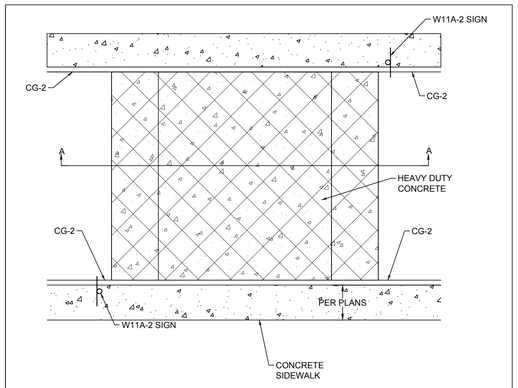
FLEXIBLE POST DELINEATOR - GROUND MOUNTED
No Scale



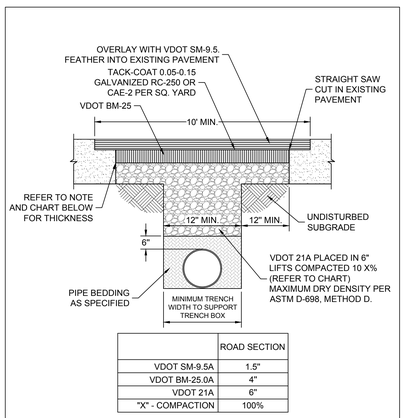
BOLLARD DETAIL
No Scale



ADA PARKING SIGNS
No Scale



RAISED CROSSWALK DETAIL
No Scale



	ROAD SECTION
VDOT SM-9.5A	1.5"
VDOT BM-25.0A	4"
VDOT 21A	6"
"X" - COMPACTION	100%

NOTE; PAVEMENT THICKNESS SHALL BE A MINIMUM OF ONE AND A HALF TIMES (1.5X) EXISTING PAVEMENT THICKNESS OR AS NOTED IN CHART ABOVE, WHICHEVER IS HIGHER. BACKFILL SHALL BE VDOT #21A ABOVE TOP OF BEDDING TO UNDERSIDE OF PAVEMENT

TYPICAL PAVEMENT REPAIR DETAIL
No Scale

NOTE: IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFERENCE CURRENT DETAILS IN THE VDOT ROAD & BRIDGE STANDARDS.

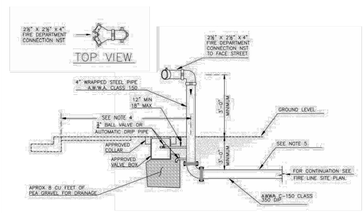
VDOT DETAILS LEGEND

STANDARD	TITLE	PAGE
EW-1	STANDARD ENDWALL FOR PIPE CULVERTS	101.01
EW-12	STANDARD ENDWALL FOR PIPE UNDERDRAIN	101.32
ES-1	FLARED END-SECTION FOR 12'-60" CONCRETE PIPE CULVERTS	102.01
DI-1, 2B 3B, 3C	STANDARD CURB DROP INLET (12" TO 24" PIPE: MAXIMUM DEPTH (H) = 9')	104.03
	DIMENSIONS, NOTES, AND QUANTITIES	104.04
	STANDARD CURB DROP INLET (12" TO 30" PIPE: MAXIMUM DEPTH (H) = 8')	104.09
	DIMENSIONS, NOTES, AND QUANTITIES	104.10
MH-1	MANHOLE FOR 12" TO 48" PIPE CULVERT	106.01
	STANDARD MANHOLE FRAME AND COVER	106.02
	STANDARD MANHOLE FRAME AND COVER	106.04
MH-2	PRECAST MANHOLE	106.07
IS-1	STANDARD METHOD OF SHAPING MANHOLE & INLET INVERTS	106.08
PB-1	INSTALL. OF PIPE CULVERTS AND STORM SEWERS CIR. PIPE BEDDING AND BACKFILL - METHOD "A"	107.01
UD-4	STANDARD GROUNDWATER UNDERDRAIN	108.01
CG-7	COMBINATION 4" CURB AND GUTTER	201.04
CG-9D	STANDARD ENTRANCE GUTTER	203.02
CG-11	COMMERCIAL ENTRANCE	203.04
CG-12	CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES)	204.01
	CG-12 DETECTABLE WARNING SURFACE (TYPE A, PERPENDICULAR APPLICATION)	204.02
	CG-12 DETECTABLE WARNING SURFACE (TYPE B, PARALLEL APPLICATION)	204.03
	CG-12 DETECTABLE WARNING SURFACE (TYPE C, PARALLEL & PERPENDICULAR APPLICATION)	204.04
	CG-12 DETECTABLE WARNING SURFACE (MEDIAN AND REFUGE ISLAND APPLICATIONS) TYPE M1, M2 , & R11, R12	204.05
MB-13	CONCRETE MEDIAN BARRIER TYPE I, II, OR III	502.18
	CONCRETE MEDIAN BARRIER TYPE I, II, OR III	502.19
HR-1	STANDARD HANDRAIL METHOD OF LOCATING AND ERECTING	601.05
STP-1	SQUARE TUBE SIGN POST	1321.12
	SQUARE TUBE SIGN POST - FOUNDATION TYPE D AND E DETAILS	1321.17

FIRE DEPARTMENT CONNECTION

Scale: NTS

NOTES:
1. PROVIDE BUILDING I.D. ON REMOTE FIRE DEPT. CONNECTION.
2. NO TREES, BUSHES OR WALLS WITHIN 5' RADIUS OF FIRE DEPT. CONNECTION.
3. IF FIRE SPRINKLER DESIGN INDICATES DEMAND OF 1000 GPM OR GREATER, THE UNDERGROUND FIRE DEPT. CONNECTION LINE SHALL BE INCREASED TO 6" DIAMETER WITH A THREE WAY 2-1/2" FIRE DEPT. HOSE CONNECTION.
4. 4' MIN. TO BACK OF CURB
5. PIPE BELOW GROUND LEVEL SHALL BE POLYWRAPPED PER SEC 610.
6. ALL PIPE SHALL BE AWWA C-150 CLASS 350 DIP.
7. ALL JOINTS SHALL BE MEGA-LUG RESTRAINED OR APPROVED EQUAL.



QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
Jonathan Showalter
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

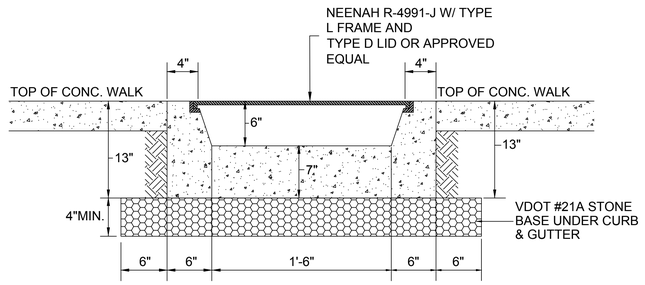
QEA No.41911390

BID DOCUMENTS
10/08/2024

NOTES & DETAILS

C1.1

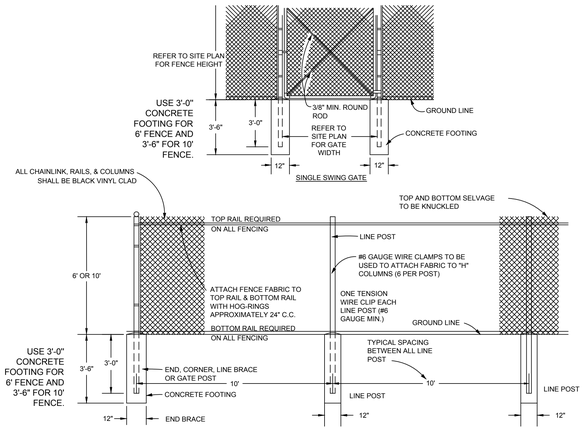
PATH & FILENAME:
PLOTTING DATE & TIME:



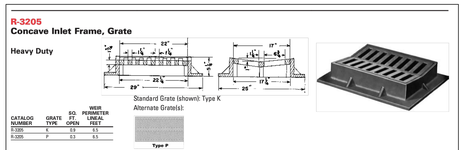
NOTE : THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
IF CAST IN PLACE, CONCRETE TO BE CLASS A3. IF PRECAST, CONCRETE TO BE 4000PSI.

FLUME WITH STEEL PLATE

NOT TO SCALE



STANDARD VINYL-COATED CHAIN LINK FENCE
No Scale



NEENAH CONCAVE V-FRAME
No Scale

SUMMARY OF PARKING REQUIREMENTS FROM ZMA202300008

Parking locations are indicated on illustrations 2.

As the new building is proposed on an existing parking lot, the following summary outlines the parking required for High School Center II and Albemarle High School.

We are assuming 45% of students attending HSCII will be from AHS due to the location and programs planned to be offered at the center. Transportation estimates that approximately 140 students would drive to HSCII based on current driving numbers that exist at Center one and the other high schools. Therefore we expect 77 student drivers (140*55%) at HSCII.

- 35 staff
- 15 visitor
- 77 students will drive from other home high schools (assuming 63 will attend from AHS)
- 200 students will arriving by bus
- 20 walking/bicycling
- 40 parent drop off by car

To address any loss of parking spots, and required parking needed due to the placement of the Center II building, ACPS will be building a new parking lot where the current basketball and tennis courts are near the AHS stadium. This parking lot is planned to be able to add up to an additional 200 parking spaces. New tennis courts will be built north of the AHS stadium and just south of Lambs Lane.

Original Proffers ___x_____
Amendment _____

PROFFER STATEMENT

ZMA No. **ZMA202300008 High School Center II at Albemarle High School**

Tax Map and Parcel Number(s): **06000-00-00-078A0 (portion)**

Owner(s) of Record: **School Board of Albemarle County, Virginia**

Date of Proffer Signature: January 3, 2024

9.9 acres to be rezoned from **RA** to **R10**

School Board of Albemarle County, Virginia, is the owner (the "Owner") of Tax Map and Parcel Number **06000-00-00-078A0** (the "Property") which is the subject of rezoning application ZMA No. **ZMA202300008**, a project known as "**High School Center II at Albemarle High School"** (the "Project").

Pursuant to Section 33.3 of the Albemarle County Zoning Ordinance, the Owner hereby voluntarily proffers the conditions listed below which shall be applied to the Property if it is rezoned to the zoning district identified above. These conditions are proffered as a part of the requested rezoning and the Owner acknowledges that the conditions are reasonable.

1. **FUTURE USES:** Residential R-10: The use of the Property shall allow for all by right uses pursuant to Section 17.2.1 of the Albemarle County Zoning Ordinance except for the following listed uses:
   a. Detached single-family dwellings.
   b. Semi-detached and attached single-family dwellings such as two-family dwellings, triplexes, quadraplexes, and townhouses, provided that density is maintained, and provided further that buildings are located so that each unit could be provided with a lot meeting all other requirements for detached single-family dwellings except for side yards at the common wall.
   c. Multiple-family dwellings such as garden apartments.
   d. Cluster development of permitted residential uses.
   e. Rental of permitted residential uses and guest cottages; provided that yard, area and other requirements of this ordinance shall be met for each such use whether or not such use is on an individual lot.
   f. Group home (reference 5.1.07). (Amended 8-9-17).
   g. Boarding houses.
   h. Homestays (reference 5.1.48).
   i. Family day homes (reference 5.1.56). (Added 9-11-13).
2. **SETBACK:** Construction of High School Center II shall have a minimum setback from Georgetown Green property line (TMP 060F0-00-00-00200) of 50-feet.

1

OWNER:
School Board of Albemarle County, Virginia

OWNER:

By: **Judy Le**
Title: **Chair of School Board, Rivanna Magisterial District**
School Board of Albemarle County, Virginia

2

County of Albemarle
Community Development Department - Planning

Rebecca Ragsdale
rragsdale@albemarle.org
Telephone: (434) 296-5832 ext.3226

January 30, 2024

Lindsay Snoddy
County of Albemarle School Board
2751 Hydraulic Rd
Charlottesville, VA 22901
lcsnoddy@k12albemarle.org

RE: SE202300039 High School Center II at Albemarle High School Special Exception Action Letter

Dear Ms. Snoddy,

On January 17, 2024, the Board of Supervisors took action on the above noted Special Exception on Tax Map Parcel Number 06000-00-00-078A0 in the Jack Jouett.

The Special Exception was approved by the Board's adoption of the attached Resolution.

Please be advised that although the Albemarle County Board of Supervisors took action on the project noted above, no uses on the property may lawfully begin until all applicable approvals have been received and conditions have been met. This includes:

- **compliance with the approved SPECIAL EXCEPTION; and**
- **approval of and compliance with a SITE PLAN.**

Should you have questions regarding the above-noted action, please contact me.

Sincerely,
Rebecca Ragsdale
Planning Manager

WWW.ALBEMARLE.ORG
401 McIntire Road, North Wing | Charlottesville, VA 22902-4579

RESOLUTION TO APPROVE
SE 2023-00039 HIGH SCHOOL CENTER II
AT ALBEMARLE HIGH SCHOOL

WHEREAS, upon consideration of the staff reports prepared for SE2023-00039 High School Center II at Albemarle High School and the attachments thereto, including staff's supporting analysis, any comments received, and all relevant factors in Albemarle County Code §§ 18-4.19 and 18-33.9, the Albemarle County Board of Supervisors hereby finds that:

1. The maximum front setback should be waived by special exception to accommodate unique parking or circulation plans on the subject parcel; and
2. The proposed special exception is consistent with the intent of the R-10 Residential zoning district and the Neighborhood Model Principles of the Comprehensive Plan.

NOW, THEREFORE, BE IT RESOLVED that the Albemarle County Board of Supervisors hereby approves a special exception to waive the 25-foot maximum front setback requirement of County Code § 18-4.19 on Parcel 06000-00-00-078A0.

I, Claudette K. Borgersen, do hereby certify that the foregoing writing is a true, correct copy of a Resolution duly adopted by the Board of Supervisors of Albemarle County, Virginia, by a vote of six to zero, as recorded below, at a meeting held on January 17, 2024.

Clerk, Board of County Supervisors

	Aye	Nay
Mr. Andrews	Y	___
Mr. Gallaway	Y	___
Ms. LaPisto-Kirtley	Y	___
Ms. Mallek	Y	___
Ms. McKeel	Y	___
Mr. Pruitt	Y	___

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

NOTES & DETAILS

C1.2

PATH & FILENAME:
PLOTTING DATE & TIME:

PATH & FILENAME:
PLOTTING DATE & TIME:

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10/08/2024

EXISTING CONDITIONS PLAN

C2.0

TMP 60-78A
COUNTY SCHOOL BOARD OF
ALBEMARLE COUNTY, VIRGINIA
DB. 287, PG. 414
ZONED: RA

MULTI-LEVEL GLASS AND MASONRY BUILDING "ALBEMARLE HIGH SCHOOL" 2775 HYDRAULIC RD

MATCHLINE - SEE SHEET C2.2

MATCHLINE - SEE SHEET C2.0

MATCHLINE - SEE THIS SHEET

PATH & FILENAME:
PLOTTING DATE & TIME:

SCALE 1"=20'
0 20' 40'

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BID DOCUMENTS
10/08/2024

EXISTING CONDITIONS PLAN

C2.1

MATCHLINE - SEE SHEET C2.3

MATCHLINE - SEE THIS SHEET

MATCHLINE - SEE THIS SHEET

MATCHLINE - SEE SHEET C2.1

EX. 20' WATERLINE EASEMENT FOR ACSA DB. 2040, PG. 648

EX. 20' WATERLINE EASEMENT FOR ACSA DB. 2043, PG. 648

20' WATER EASEMENT FOR ACSA INST. 200100001339

20' SEWER LINE EASEMENT FOR ACSA INST. 200200003788

20' WATER EASEMENT FOR ACSA INST. 199600007702

TMP 60-78A
COUNTY SCHOOL BOARD OF ALBEMARLE COUNTY, VIRGINIA
DB. 287, PG. 414
ZONED: RA

(UNABLE TO LOCATE U/G WATER) APPROX. LOCATION OF U/G WATER UNK SIZE UNK TYPE (ALBEMARLE COUNTY SERVICE AUTHORITY)

APPROX. LOCATION OF STORM SEWER PER AS-BUILTS

U/G POWER (PRIVATE)

U/G POWER (DOMINION ENERGY)

EX. 15' UNDERGROUND UTILITY EASEMENT FOR VEPCO DB. 3531, PG. 663 (APPROX.)

U/G NATURAL GAS - SERVICE DISCONTINUED BUT UNABLE TO LOCATE

U/G NATURAL GAS - SERVICE (CITY OF CHARLOTTESVILLE)

COVERED ENTRY

BOX PLANTERS (X6)

QLD-DATR

EOI

CONC. SWK & C&G

CHAIN FENCE

PAVED PATH

SOCCER FIELD

TENNIS COURTS

BLEACHERS

BENCHES

SHEDS

GOAL

RUNNING

MHD TOP=555.97' INV. IN=550.82' 24" RCP (SE) INV. OUT=550.72' 24" RCP (SW)

MHD TOP=574.69' INV. IN=561.65' 8" PVC (SW) INV. OUT=561.55' 8" PVC (NE)

MHD W/ CURB INLET TOP=579.30' INV. OUT=573.80' 15" RCP

MHD W/ CURB INLET TOP=579.37' INV. OUT=574.07' 15" RCP

STORM INLET W/ GRATE TOP=571.77' INV. IN=567.75' 15" RCP (SE) INV. OUT=567.67' 15" RCP (SW)

STORM INLET W/ GRATE TOP=570.73' INV. IN=568.73' 6" PVC INV. OUT=568.68' 6" PVC

STORM INLET W/ GRATE TOP=570.91' INV. OUT=568.[illegible]' 6" PVC

STORM INLET W/ GRATE 2.4' x 2.4' TOP=570.50' INV. IN=566.79' 15" RCP (NE) INV. IN=567.19' 15" RCP (SE) INV. OUT=566.68' 15" RCP (SW)

STORM INLET W/ GRATE 2.2' x 2.4' TOP=570.60' INV. IN=567.08' 15" RCP (SE) INV. OUT=567.05' 15" RCP (NE)

STORM INLET W/ GRATE 2.2' x 2.6' TOP=570.63' INV. OUT=567.37' 15" RCP (SE)

STORM INLET W/ GRATE 2.4' x 2.6' TOP=570.72' INV. IN=568.12' 8" PVC (SE) INV. OUT=568.10' 8" PVC (NE)

INLET W/ FLARED END SECTION INV.=567.51' 15" RCP

MHS TOP=571.29' INV. IN=563.15' 8" PVC (SE) INV. OUT=562.97' 8" PVC (NE)

MHD TOP=571.69' INV. IN=566.57' 15" RCP (NE) INV. IN=566.59' 15" RCP (SE) INV. OUT=566.54' 15" RCP (NW)

INV. OUT=575.84' 8" HDPE

24" RCP

18" RCP

15" RCP

8" DIP

8" SAN

8" DEC. (X3)

8" DEC. (X7)

8" DEC.

16" RED OAK

16" POPLAR

16" POPLAR (X2)

12" DEC.

5" MAPLE

41" MAPLE

24" RED OAK

PATH & FILENAME:
PLOTTING DATE & TIME:

SCALE 1"=20'
0 20' 40'

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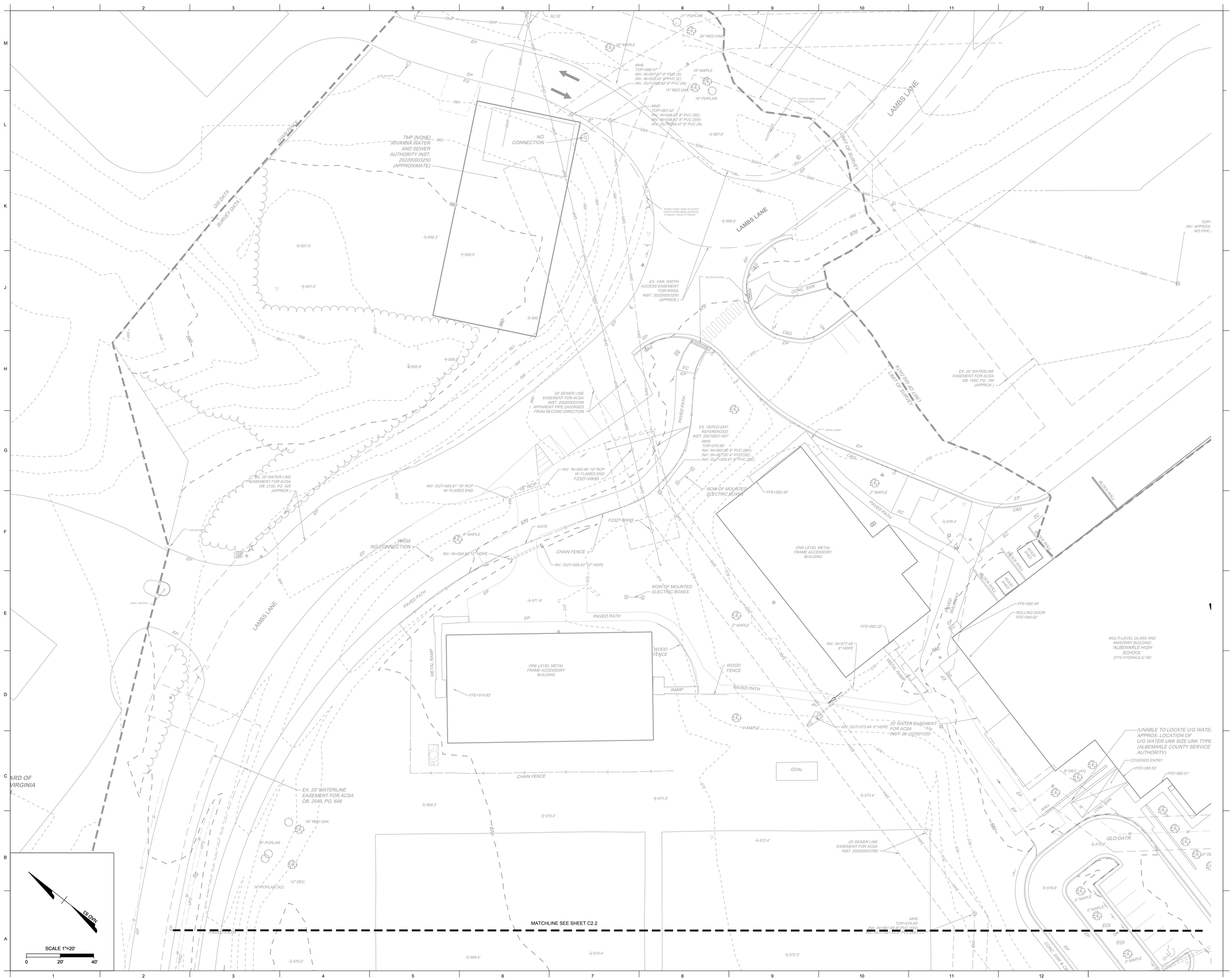
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EXISTING CONDITIONS PLAN

C2.2



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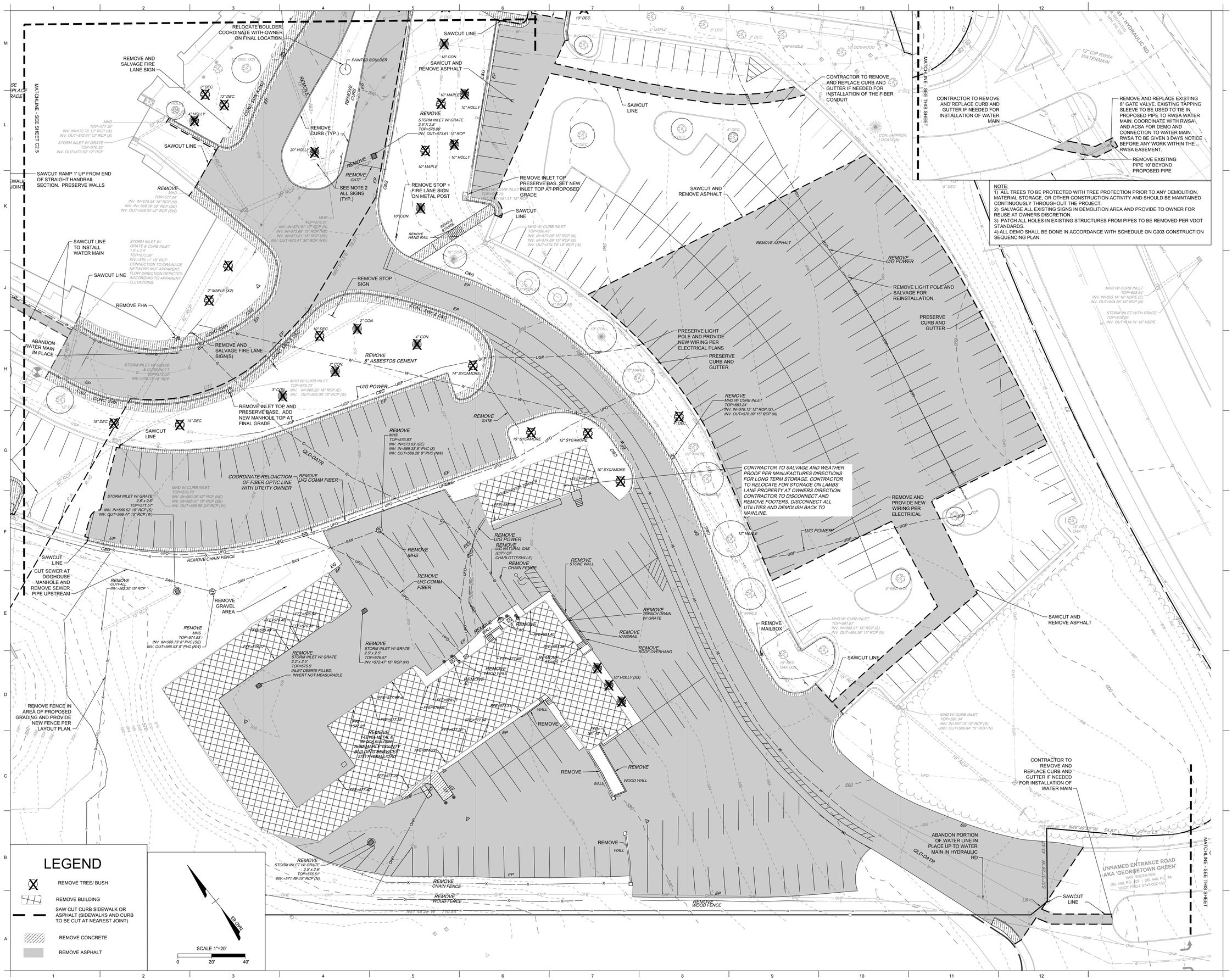
EXISTING CONDITIONS PLAN

C2.3



PATH & FILENAME:
PLOTTING DATE & TIME:

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DEMOLITION PLAN

C2.4

NOTE:
ALL TREES TO BE PROTECTED WITH TREE PROTECTION PRIOR TO ANY DEMOLITION, MATERIAL STORAGE, OR OTHER CONSTRUCTION ACTIVITY AND SHOULD BE MAINTAINED CONTINUOUSLY THROUGHOUT THE PROJECT.
1) ALL TREES TO BE PROTECTED WITH TREE PROTECTION PRIOR TO ANY DEMOLITION, MATERIAL STORAGE, OR OTHER CONSTRUCTION ACTIVITY AND SHOULD BE MAINTAINED CONTINUOUSLY THROUGHOUT THE PROJECT.
2) SALVAGE ALL EXISTING SIGNS IN DEMOLITION AREA AND PROVIDE TO OWNER FOR REUSE AT OWNERS DISCRETION.
3) PATCH ALL HOLES IN EXISTING STRUCTURES FROM PIPES TO BE REMOVED PER VDOT STANDARDS.
4) ALL DEMO SHALL BE DONE IN ACCORDANCE WITH SCHEDULE ON G003 CONSTRUCTION SEQUENCING PLAN.

MATCHLINE - SEE SHEET C2.7

MATCHLINE - SEE SHEET C2.4

MATCHLINE - SEE THIS SHEET

PRESERVE AND MODIFY BASE
REMOVE INLET TOP AND REPLACE WITH DI-1 AT PROPOSED GRADE
STORM INLET W/ GRATE
TOP=579.03'
INV. IN=573.73' 15" RCP
INV. OUT=573.68' 15" RCP

SAWCUT AND REMOVE 1' OF ASPHALT TO MATCH PAVEMENT

SAWCUT LINE

REMOVE CONC. SWK & CURB

REMOVE CURB

REMOVE STORM INLET W/ GRATE & CURB INLET

REMOVE SWK

REMOVE CMG

REMOVE GATE

REMOVE BUILDING

REMOVE CONCRETE

REMOVE ASPHALT

QLD-DATR

8" ASBESTOS CEMENT

ABANDON WATER MAIN IN PLACE

PRESERVE CURB

SAWCUT LINE TO INSTALL WATER MAIN

PRESERVE CURB AND GUTTER

SAWCUT SIDEWALK AT NEAREST JOINT; COORDINATE FINAL LOCATION WITH OWNER

REMOVE ALL PARKING LOT STRIPING

SEE NOTE 2 ALL SIGNS (TYP.)

PRESERVE AND MODIFY BASE
REMOVE INLET TOP AND REPLACE WITH DI-1 AT PROPOSED GRADE
STORM INLET W/ GRATE & CURB INLET
TOP=570.14'
INV. OUT=565.66' 15" RCP

SAWCUT RAMP 1' UP FROM END OF STRAIGHT HANDRAIL SECTION. PRESERVE WALLS

SAWCUT SIDEWALK AT NEAREST JOINT

REMOVE EXISTING RAMP

SAWCUT LINE TO INSTALL WATER MAIN

REMOVE FHA

ABANDON WATER MAIN IN PLACE

REMOVE AND SALVAGE FIRE LANE SIGN(S)

REMOVE INLET TOP AND PRESERVE BASE. ADD NEW MANHOLE TOP AT FINAL GRADE.

CUT SEWER AT DOGHOUSE MANHOLE AND REMOVE SEWER PIPE UPSTREAM

REMOVE OUTFALL
INV.=563.30' 15" RCP

REMOVE CHAIN FENCE

SAWCUT PAVEMENT AND CONCRETE

SAWCUT LINE

ERADICATE ISLAND STRIPING

REMOVE MHD W/ CURB INLET
TOP=580.11'
INV. OUT=575.91' 18" RCP (SW)

RELOCATE BOULDER COORDINATE WITH OWNER ON FINAL LOCATION.

PAINTED BOULDER

REMOVE AND SALVAGE FIRE LANE SIGN

REMOVE CURB (TYP.)

REMOVE STORM INLET W/ GRATE
2.5'X 2.5'
TOP=578.86'
INV. OUT=573.61' 15" RCP

REMOVE STOP + FIRE LANE SIGN ON METAL POST

REMOVE HAND RAIL

REMOVE STOP SIGN

REMOVE 8" ASBESTOS CEMENT

REMOVE MHS
TOP=576.83'
INV. IN=573.63' (SE)
INV. IN=569.33' 8" PVC (S)
INV. OUT=569.28' 8" PVC (NW)

REMOVE U/G POWER

REMOVE U/G NATURAL GAS (CITY OF CHARLOTTESVILLE)

REMOVE CHAIN FENCE

REMOVE U/G COMM FIBER

REMOVE GATE

REMOVE MHS

COORDINATE RELOACTION OF FIBER OPTIC LINE WITH UTILITY OWNER

REMOVE U/G COMM FIBER

REMOVE TREE/ BUSH

REMOVE BUILDING

SAW CUT CURB SIDEWALK OR ASPHALT (SIDEWALKS AND CURB TO BE CUT AT NEAREST JOINT)

REMOVE CONCRETE

REMOVE ASPHALT

SCALE 1"=20'
0 20' 40'

PATH & FILENAME:
PLOTTING DATE & TIME:

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v 804.788.4774
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PROFESSIONAL ENGINEER

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DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

DEMOLITION PLAN

C2.5

REMOVE LEVEL SPREADER AND RIRPAP

REMOVE CHAIN FENCE

CONTRACTOR TO SALVAGE AND WEATHER PROOF PER MANUFACTURES DIRECTIONS FOR LONG TERM STORAGE. RELOCATE FOR STORAGE TO ANOTHER PROPERTY WITHIN 30 MILES AT OWNERS DIRECTION. CONTRACTOR TO DISCONNECT AND REMOVE FOOTERS. DISCONNECT ALL UTILITIES AND DEMOLISH BACK TO MAINLINE.

16" RED OAK

16" POPLAR

12" DEC.

16"POPLAR (X2)

4" MAPLE

REMOVE
INV. OUT=575.84' 8" HDPE

GOAL

TO BE RELOCATED BY OTHERS

MATCHLINE - SEE SHEET C2.6

REMOVE SOCCER FIELD

MHD
TOP=555.97'
INV. IN=550.97' 24" RCP (SE)
INV. OUT=550.72' 24" RCP (SW)

24" RCP

18" RCP

REMOVE EXISTING 6' FENCE

SAWCUT AND REMOVE PORTION OF WALL

PRESERVE CANOPY

SAWCUT AT NEAREST JOINT

REMOVE WALL

SAWCUT LINE

REMOVE BOX PLANTERS (X6)

8" DEC. (X7)

8" DEC. (X3)

REMOVE AND SALVAGE SIGN AND POST. (TYP.)

2" MAPLE

5" MAPLE

EOI

REMOVE
MHD W/ CURB INLET
TOP=579.30'
INV. OUT=573.80' 15" RCP

REMOVE
MHD W/ CURB INLET
TOP=579.37'
INV. OUT=574.07' 15" RCP

REMOVE LIGHT POLE AND FOUNDATION

CONC. SWK & C&G

QLD-DATR

REMOVE INLET TOP AND REPLACE WITH MANHOLE TOP AT PROPOSED GRADE.

STORM INLET W/ GRATE
TOP=571.77'
INV. IN=567.75' 15" RCP (SE)
INV. OUT=567.67' 15" RCP (SW)

PRESERVE PIPE WITH ASSUMED 6" CONNECTION FROM INLET TO THE EAST

PRESERVE AND REMOVE INLET WITH DI-1 AT PR
STORM IN=573.03'
TOP=578.03'
INV. IN=573.73' 15"
INV. OUT=573.68'

24" RED OAK

STORM INLET W/ GRATE
TOP=570.73'
INV. IN=568.73' 6" PVC
INV. OUT=568.68' 6" PVC

STORM INLET W/ GRATE
TOP=570.91'
INV. OUT=568.[illegible]" PVC

MATCHLINE - SEE SHEET C2.5

INLET W/ FLARED END SECTION
INV.=567.91' 15" RCP

STORM INLET W/ GRATE
2.4' x 2.4'
TOP=570.50'
INV. IN=566.75' 15" RCP (NE)
INV. IN=567.19' 15" RCP (SE)
INV. OUT=566.68' 15" RCP (SW)

STORM INLET W/ GRATE
2.2' x 2.4'
TOP=570.60'
INV. IN=567.08' 15" RCP (SE)
INV. OUT=567.05' 15" RCP (NE)

15" RCP

APPROX. LOCATION OF STORM SEWER PER AS-BUILTS

MHD
TOP=571.69'
INV. IN=566.57' 15" RCP (NE)
INV. IN=566.59' 15" RCP (SE)
INV. OUT=566.54' 15" RCP (NW)

STORM INLET W/ GRATE
2.2' x 2.6'
TOP=570.63'
INV. OUT=567.37' 15" RCP (SE)

MATCHLINE - SEE THIS SHEET

STORM INLET W/ GRATE
2.4' x 2.6'
TOP=570.72'
INV. IN=568.13' 8" PVC (SE)
INV. OUT=568.10' 8" PVC (NE)

MATCHLINE - SEE THIS SHEET

NAD 83

SCALE 1"=20'

0 20' 40'

NOTE:
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4) ALL DEMO SHALL BE DONE IN ACCORDANCE WITH SCHEDULE ON G003 CONSTRUCTION SEQUENCING PLAN.

LEGEND

- REMOVE TREE/ BUSH
- REMOVE BUILDING
- SAW CUT CURB SIDEWALK OR ASPHALT (SIDEWALKS AND CURB TO BE CUT AT NEAREST JOINT)
- REMOVE CONCRETE
- REMOVE ASPHALT

PATH & FILENAME:
PLOTTING DATE & TIME:

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DEMOLITION PLAN

C2.6

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4) ALL DEMO SHALL BE DONE IN ACCORDANCE WITH SCHEDULE ON G003 CONSTRUCTION SEQUENCING PLAN.

LAMBS LANE

REMOVE INV. OUT=565.81' 18" RCP W/ FLARED END

REMOVE 18" RCP

REMOVE INV. IN=565.90' 18" RCP W/ FLARED END

SAWCUT LINE

REMOVE GATE

REMOVE CHAIN FENCE

REMOVE INV. IN=568.90' 12" HDPE

REMOVE INV. OUT=568.83' 12" HDPE

REMOVE PAVED PATH

REMOVE METAL RAMP

REMOVE WOOD FENCE

ONE-LEVEL METAL FRAME ACCESSORY BUILDING

FFE=574.82'

REMOVE RAMP

REMOVE LEVEL SPREADER AND RIRPAP

REMOVE CHAIN FENCE

CONTRACTOR TO SALVAGE AND WEATHER PROOF PER MANUFACTURES DIRECTIONS FOR LONG TERM STORAGE. RELOCATE FOR STORAGE TO ANOTHER PROPERTY WITHIN 30 MILES AT OWNERS DIRECTION. CONTRACTOR TO DISCONNECT AND REMOVE FOOTERS. DISCONNECT ALL UTILITIES AND DEMOLISH BACK TO MAINLINE.

GOAL

TO BE RELOCATED BY OTHERS

ERADICATE STRIPING THAT CONFLICTS WITH PROPOSED STRIPING AND RECONFIGURATION ON THE LAYOUT PLAN

REMOVE SECTION OF SIDEWALK BEHIND CG-6.

REMOVE AND BRING CABLING BACK TO POWER POLE PER DOMINION REQUIREMENTS

ROW OF MOUNTED ELECTRIC BOXES

REMOVE INV. IN=577.49' 8" HDPE

REMOVE INV. OUT=575.84' 8" HDPE

SAWCUT AND REMOVE PORTION OF WALL

PRESERVE CANOPY

SAWCUT AT NEAREST JOINT

REMOVE WALL

REMOVE AND SALVAGE SIGN AND POST.(TYP.)

CONC. SWK & CG

EOI

MATCHLINE - SEE SHEET C2.7

21" POPLAR
28" RED OAK
16" MAPLE
16" MAPLE
15" RED OAK
16" POPLAR
4" MAPLE
2" MAPLE
16" RED OAK
15" POPLAR
12" DEC.
POPLAR (X2)
8" DEC. (X3)

LEGEND

- REMOVE TREE/ BUSH
- REMOVE BUILDING
- SAW CUT CURB SIDEWALK OR ASPHALT (SIDEWALKS AND CURB TO BE CUT AT NEAREST JOINT)
- REMOVE CONCRETE
- REMOVE ASPHALT

SCALE 1"=20'
0 20' 40'

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

DEMOLITION PLAN

C2.7

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION
THIS PROJECT INCLUDES DEMOLITION OF THE EXISTING SCHOOL BUILDING SERVICES BUILDING AND CONSTRUCTION OF A NEW HIGH SCHOOL CENTER II BUILDING FOR SPECIALTY CLASSES, A NEW PARKING LOT, TWO NEW ROADS ON THE WEST AND NORTH SIDE OF THE HSC II BUILDING, NEW ADA PARKING/ACCESS FOR THE SHOTPUT AND DISCUS FIELDS, AND ASSOCIATED SITE WORK. LIMITS OF DISTURBANCE ARE 11.73 ACRES.

ADJACENT PROPERTY
THESE IMPROVEMENTS ARE BEING MADE WITHIN THE PROPERTY BOUNDARY. THE PROPERTY IS SHARED BY ALBEMARLE HIGH SCHOOL, JOURNEY MIDDLE SCHOOL, GREER ELEMENTARY SCHOOL AND THE IVY CREEK SCHOOL, AND IS BOUNDED BY HYDRAULIC ROAD TO THE EAST. RESIDENTIAL PROPERTIES SURROUND THE PARCEL THE SOUTH SIDE.

EXISTING SITE CONDITIONS
THE SITE IS AT THE LOCATION OF ALBEMARLE HIGH SCHOOL.

OFF-SITE AREAS
NO OFFSITE AREAS WILL BE DISTURBED.

CRITICAL EROSION AREAS
NO CRITICAL EROSION AREA EXIST. GEOTHERMAL WELL FIELD RUNOFF SHALL BE CONTROLLED AND FILTERED BY GEOTHERMAL DRILLING CONTRACTOR TO SATISFACTION OF THE OWNER AND COUNTY INSPECTORS.

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 CURRENT ADDITION 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.

STORMWATER RUNOFF CONSIDERATIONS

STORMWATER QUALITY WILL BE TREATED THROUGH ON-SITE BIORETENTION AND A STORMKEEPER ISOLATOR ROW. REMAINING REQUIRED CREDITS WILL BE ACHIEVED THROUGH THE PURCHASE OF OFF-SITE CREDITS BY OWNER. STORMWATER QUANTITY WILL BE MANAGED THROUGH AN UNDERGROUND STORAGE PIPE AND THE REDUCTION OF IMPERVIOUS AREA.

EROSION AND SEDIMENT CONTROL MAINTENANCE
ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH VESCH AND THE CONSTRUCTION SEQUENCE, INCLUDING THE INSPECTION OF ALL MEASURES AFTER ALL RAIN EVENTS.

STRUCTURAL PRACTICES:
1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02 A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT THE LOCATION INDICATED ON THE PLANS. IT IS IMPERATIVE THAT THIS MEASURE BE MAINTAINED THROUGHOUT CONSTRUCTION. ITS PURPOSE IS TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
2. SILT FENCE BARRIER - 3.05 SILT FENCE SEDIMENT BARRIERS SHALL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED. ITS PURPOSE IS TO INTERCEPT SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS AND PREVENT SEDIMENT FROM LEAVING THE SITE.
3. STORM DRAIN INLET PROTECTION - 3.07 STONE FILTERS SHALL BE PLACED AT THE INLET OF ALL DRAINAGE STRUCTURES AS INDICATED ON PLANS. ITS PURPOSE IS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION.
4. CULVERT INLET PROTECTION - 3.08 A SEDIMENT FILTER LOCATED AT THE INLET TO A CULVERT TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM PRIOR TO PERMANENT STABILIZATION.
5. DIVERSION DIKE - 3.09 A TEMPORARY RIDGE OF COMPACTED SOIL TO DIVERT WATER FROM A CERTAIN AREA.
6. CULVERT INLET SEDIMENT TRAP - 3.08 A TEMPORARY RIPRAP BARRIER AROUND A CULVERT OR STORMWATER INLET WITH CONTROLLED STORMWATER RELEASE TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH FOR THE MAJORITY OF SEDIMENT TO SETTLE OUT.
7. MAINTENANCE OF SEDIMENT TRAP - INSPECT TRAP EMBANKMENT WEEKLY TO ENSURE IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED DURING CONSTRUCTION ACTIVITIES. ADDITIONALLY THE TRAP SHALL BE CHECKED AFTER EVERY RAINFALL EVENT. SEDIMENT SHALL BE REMOVED AND THE IMPOUNDMENT RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH.
8. DUST CONTROL - 3.39 DUST CONTROL IS TO BE USED THROUGH THE SITE IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT.

VEGETATIVE PRACTICES:
9. TEMPORARY SEEDING - 3.31 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR MORE THAN 30 DAYS SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING OF THOSE AREAS. SELECTION OF THE SEED MIXTURE SHALL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
10. PERMANENT SEEDING - 3.32 FOLLOWING GRADING ACTIVITIES, ESTABLISH PERENNIAL VEGETATIVE COVER BY PLANTING SEED TO REDUCE EROSION, STABILIZE DISTURBED AREAS, AND ENHANCE NATURAL BEAUTY.

MANAGEMENT STRATEGIES
1. PROVIDE SEDIMENT TRAPPING MEASURES AS A FIRST STEP IN GRADING, SEED AND MULCH IMMEDIATELY FOLLOWING INSTALLATION.
2. PROVIDE TEMPORARY SEEDING OR OTHER STABILIZATION IMMEDIATELY AFTER GRADING.
3. ISOLATE TRENCHING FOR UTILITIES AND DRAINAGE FROM DOWNSTREAM CONVEYANCES IN ORDER TO MINIMIZE PERIMETER CONTROLS.
4. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THEY ARE NO LONGER REQUIRED TO COMPLY WITH THE CONTRACT DOCUMENTS OR STATE LAW.

PERMANENT STABILIZATION
ALL NON-PAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISHED GRADING. 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 FOR SLOPES LESS THAN 3:1. FOR SLOPES GREATER THAN 3:1, SEED TYPE SHALL BE AS SPECIFIED FOR "LOW MAINTENANCE SLOPES" IN TABLE 3.32-D THE HANDBOOK. FOR MULCH (STRAW OR FIBER) SHALL BE USED ON ALL SEEDED SURFACES. IN ALL SEEDING OPERATIONS SEED, FERTILIZER AND LIME SHALL BE APPLIED PRIOR TO MULCHING.

SEQUENCE OF INSTALLATION:
PHASE IA - SHEET C3.2 (BUILDING SITE)
1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE COUNTY OF ALBEMARLE E&S INSPECTOR, CONTRACTOR, OWNER, AND ENGINEER. THIS MEETING SHALL TAKE PLACE ON SITE.
2. PRIOR TO DEMOLITION BEGINNING, INSTALL SAFETY FENCE, TREE PROTECTION, INLET PROTECTION, CONSTRUCTION ENTRANCES SILT FENCE, DIVERSION DIKES, ETC.
3. AFTER ALL MEASURED INSTALLED, COORDINATE INSPECTION OF COUNTY E&S INSPECTOR. DEMOLISH EXISTING BUILDING, DRIVES, PARKING AROUND BUILDING.

PHASE IB - SHEET C3.3 (BUILDING SITE)
1. INSTALL ALL THE PERMANENT STORMWATER STRUCTURE BASES AND PIPES SHOWN IN SHEET C3.3. BEFORE BEGINNING MASS GRADING FOR THE BUILDING AREA. THROUGH GRADING FOR THE PROPOSED ROADS AND BUILDING CONTRACTOR SHALL KEEP THE AREA OF DRAINAGE TO EACH INLET PROTECTED STRUCTURE UNDER 1 ACRE THROUGH GRADING AND DIVERSION DIKES.
2. CLEAR AND GRUB PROJECT SITE AREA. REMOVE UTILITY LINES AS SHOWN IN DEMOLITION PLAN, COORDINATE REMOVAL WITH OWNER AND UTILITY PROVIDER.
3. PROVIDE TEMPORARY SEEDING AND DUST CONTROL.
4. CONTRACTOR MAY CONTINUE TO NEXT PHASE AFTER PERMISSION GRANTED BY THE E&S INSPECTOR.

PHASE I - SHEET C3.3 (PARKING LOT SITE)
1. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE COUNTY OF ALBEMARLE E&S INSPECTOR, CONTRACTOR, OWNER, AND ENGINEER. THIS MEETING SHALL TAKE PLACE ON SITE.
2. PRIOR TO DEMOLITION BEGINNING, INSTALL SAFETY FENCE, TREE PROTECTION, INLET PROTECTION, CONSTRUCTION ENTRANCE SILT FENCE, DIVERSION DIKES, ETC.
3. AFTER ALL MEASURED INSTALLED, COORDINATE INSPECTION OF COUNTY E&S INSPECTOR. INSTALL ALL THE PERMANENT AND TEMPORARY STORMWATER STRUCTURES BASES AND PIPES SHOWN IN SHEET C3.3 AND C3.4.
4. DEMOLISH DRIVES, PARKING, CLEAR AND GRUB PROJECT SITE AREA. REMOVE UTILITY LINES AS SHOWN IN DEMOLITION PLAN, COORDINATE REMOVAL WITH OWNER AND UTILITY PROVIDER.
5. PROVIDE TEMPORARY SEEDING AND DUST CONTROL.
6. CONTRACTOR MAY CONTINUE TO NEXT PHASE AFTER PERMISSION GRANTED BY THE E&S INSPECTOR.

PHASE II - SHEET C3.5 (BUILDING SITE)
1. MODIFY SAFETY FENCE, DIVERSIONS DIKES AND OTHER SHOWN PROTECTION MEASURES AS SHOWN ON SHEET C3.3.
2. AFTER INSPECTION OF E&S INSPECTOR, CONTRACTOR MAY BEGIN SITE GRADING AND CONSTRUCTION OF STORM SYSTEM. INSTALL INLET PROTECTIONS AND INSTALL UTILITY NETWORK PER PLANS AND COMPLETE GRADING.
3. STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING AND MULCHING AS SHOWN.
4. CONTRACTOR MAY CONTINUE CONSTRUCTING OTHER SITE ELEMENTS.
5. STABILIZE REMAINING DISTURBED AREAS WITH PERMANENT SEEDING AND MULCHING AS SHOWN.
6. AS CONSTRUCTION IS COMPLETED AND APPROVED BY E&S INSPECTOR, EROSION CONTROL MEASURES CAN BE REMOVED.

PHASE II - SHEET C3.5 (PARKING LOT SITE)

7. MODIFY SAFETY FENCE, DIVERSIONS DIKES AND OTHER SHOWN PROTECTION MEASURES AS SHOWN ON SHEET C3.4.
8. AFTER INSPECTION OF E&S INSPECTOR, CONTRACTOR MAY BEGIN SITE GRADING AND CONSTRUCTION OF STORM SYSTEM AND INSTALL INLET PROTECTIONS.
9. INSTALL UTILITY LINES IF REQUIRED PER PLANS AND COMPLETE GRADING.
10. STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING AND MULCHING AS SHOWN.
11. CONTRACTOR MAY CONTINUE CONSTRUCTING OTHER SITE ELEMENTS.
12. STABILIZE REMAINING DISTURBED AREAS WITH PERMANENT SEEDING AND MULCHING AS SHOWN.
13. AS CONSTRUCTION IS COMPLETED AND APPROVED BY E&S INSPECTOR, EROSION CONTROL MEASURES CAN BE REMOVED.

MINIMUM STANDARDS:

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:
MS-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 FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
MS-2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS 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 BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
MS-3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
MS-4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
MS-5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
MS-6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
MS-7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
MS-8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
MS-9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
MS-10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
MS-11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
MS-12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
MS-13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
MS-14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
MS-15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
MS-16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
MS-17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
MS-18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
MS-19.PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE STANDARDS AND CRITERIA LISTED IN SECTION 19 OF VIRGINIA ADMINISTRATIVE CODE 9VAC25-840-40 MINIMUM STANDARDS.

GENERAL EROSION AND SEDIMENT CONTROL NOTES:

ES-1: UNLESS OTHERWISE INDICATED, CONSTRUCT AND MAINTAIN ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
ES-2: THE CONTROLLING EROSION AND SEDIMENT CONTROL AUTHORITY WILL MAKE A CONTINUING REVIEW AND EVALUATION OF THE METHODS AND EFFECTIVENESS OF THE EROSION CONTROL PLAN.
ES-3: PLACE ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO OR AS THE FIRST STEP IN CLEARING, GRADING, OR LAND DISTURBANCE.
ES-4: MAINTAIN A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN ON THE SITE AT ALL TIMES.
ES-5: PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFFSITE BORROW OR WASTE AREA), SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE ARCHITECT/ENGINEER AND THE CONTROLLING EROSION AND SEDIMENT CONTROL AUTHORITY FOR REVIEW AND ACCEPTANCE.
ES-6: PROVIDE ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE RESPONSIBLE LAND DISTURBER. (MODIFIED NOTE)
ES-7: ALL DISTURBED AREAS SHALL DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND-DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT.
ES-8: DURING DEWATERING OPERATIONS, PUMP WATER INTO AN APPROVED FILTERING DEVICE.
ES-9: INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF- PRODUCING RAINFALL EVENT. MAKE ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES IMMEDIATELY.

SOILS INFORMATION:

21B - CULPEPER FINE SANDY LOAM, 2 TO 7 PERCENT SLOPES. 40 TO 79 INCHES TO LITHIC BEDROCK; 40 TO 79 INCHES TO PARALITHIC BEDROCK, WELL DRAINED. HYDROLOGIC SOIL GROUP: B.

21C - CULPEPER FINE SANDY LOAM, 7 TO 15 PERCENT SLOPES. 40 TO 79 INCHES TO LITHIC BEDROCK; 40 TO 79 INCHES TO PARALITHIC BEDROCK, WELL DRAINED. HYDROLOGIC SOIL GROUP: B.

65B - FAIRVIEW SANDY LOAM, 2 TO 7 PERCENT SLOPES. MORE THAN 80 INCHES TO RESTRICTIVE FEATURES, WELL DRAINED. HYDROLOGIC SOIL GROUP: B.

65C - FAIRVIEW SANDY LOAM, 7 TO 15 PERCENT SLOPES. MORE THAN 80 INCHES TO RESTRICTIVE FEATURES, WELL DRAINED. HYDROLOGIC SOIL GROUP: B.

88 - UDORTHENTS, LOAMY, 2 TO 25 SLOPES. MORE THAN 80 INCHES TO RESTRICTIVE FEATURES. NO DEFINED HYDROLOGIC SOIL CLASSIFICATION.

CONTRACTOR SHALL PROVIDE ALL INFORMATION REQUIRED FOR CONSTRUCTION RECORD DRAWINGS TO COUUNTY FOR REVIEW AND APPROVAL.

COUNTY OF ALBEMARLE
Department of Community Development

Construction Record Drawings (As-built) for VSMP

The following is a list of information required on construction record drawings for stormwater facilities (reference Water Protection Ordinance 17-422). *It is preferable that the construction record drawing be prepared by someone other than the designer. Please do not provide design drawings as construction record drawings.*

A. A signed and dated professional seal of the preparing engineer or surveyor.
B. The name and address of the firm and individual preparing the drawings on the title sheet.
C. The constructed location of all items associated with each facility, and the inspection records to verify proper dimensions, materials and installation. The items include, but are not limited to the following:
1. **Inspection Records** and photographs for pipe trenches and bedding, including underdrains.
2. **Video Pipe Inspection** for any pipes which are not accessible or viewable.
3. **Updated Location** with geo-coordinates of all facilities.
4. **Verified Drainage Area maps** for the drainage area treated, and for drainage to the facilities.
5. **Current physical and topographic survey** for all earthen structures. Ponds should include a survey of the pond bottom. Surveys should verify pond volumes are per design. Corrections may be required for alterations from the design.
6. **Plants, location and type**.
7. **Plans and profiles for all culverts, Pipes, Risers, Weirs and Drainage Structures** - Display the installed type of drainage structures, culvert/pipe size, weirs, materials, inlets or end treatment(s), inlet and outlet protection, alignment and invert elevations compared to design.
8. **Computations:** For significant deviations from design, provide sealed computations verifying that the as-built condition is equivalent or better than design.
9. **Ditch Lines** - Display the constructed location of all ditch lines and channels, including typical sections and linings.
10. **Easements** - Show all platted easements with dead book references labeled. Facilities and drainage must be within platted easements. Provide copies of recorded documents.
11. **Guardrail, fences or other safety provisions** - Display the constructed location of all safety provisions; fences, guardrail, including the type, length and applied end treatments, compared to design.
12. **Material layers** – biofilter media, stone layers, sand layers, keyways and cores must be verified as to material types and depths. Include inspection reports, boring or test pit reports and materials certifications. Biofilter media must be an approved state mix.
13. **Access roads** – show location of access roads, surface treatment, drainage, etc, as applicable.
14. **Compaction reports** are required to verify fill compaction in dams.
15. **Manufacturers certifications** for proprietary BMP's certifying proper installation and functioning.

PATH & FILENAME:
PLOTTING DATE & TIME:
J:\Projects\Albemarle_County_Public_Schools\HSC_Center\DWG\Sheet\CD\45841-C3-ECND.dwg | Plotted on 10/8/2024 10:13 AM | by Alexander Flint

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

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2775 Hydraulic Rd,
Charlottesville, VA 22901

No. Date Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

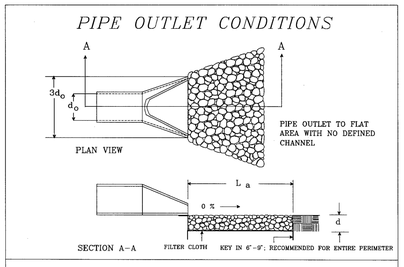
QEA No.41911390

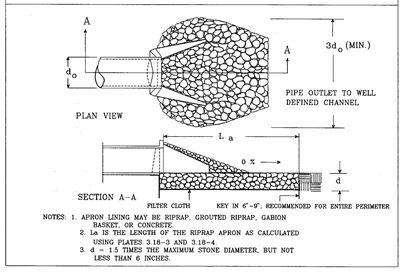
BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL NOTES & DETAILS

C3.0

PIPE OUTLET CONDITIONS





NOTES: 1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, GABION BASKET, OR CONCRETE.
2. La IS THE LENGTH OF THE RIPRAP APRON AS CALCULATED USING PLATES 3.18–3 AND 3.18–4.
3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER, BUT NOT LESS THAN 6 INCHES.

Source: Va. DSWC

Plate 3.18-1

Excavated drop inlet sediment trap design
Inlet # 304 (Sheet C3.3)
Drainage Area (Acres) (<1) 0.83
Trap Volumes:

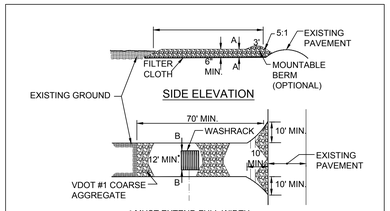
Eelevation (ft)	Area (SF)	Volume (CY)
567	441	
568	625	19.7
569	834	27.0
570	1069	35.2
571	1330	44.4
		126.4

Wet Storage:	
Wet Storage Required (CY) (134*DA)	111.2
Bottom of Excavation (ft)	567.00
Top Of Inlet Elevation (Ft)	569.00
Wet Sorage Provided at This Elevation (CY:	126.4
Slope of Wet Storage Sides	2:1

Excavated drop inlet sediment trap design
Temp. Inlet (Sheet C3.3)
Drainage Area (Acres) (<1) 0.95
Trap Volumes:

Eelevation (ft)	Area (SF)	Volume (CY)
565	358	
565.5	441	7.4
566.5	625	19.7
567.5	834	27.0
568.5	1069	35.2
569.5	1330	44.4
		133.8

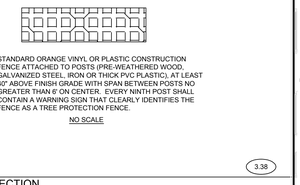
Wet Storage:	
Wet Storage Required (CY) (134*DA)	127.3
Bottom of Excavation (ft)	565.00
Top Of Inlet Elevation (Ft)	567.00
Wet Sorage Provided at This Elevation (CY:	133.8
Slope of Wet Storage Sides	2:1



0 3.02-1

STONE CONSTRUCTION ENTRANCE

No Scale



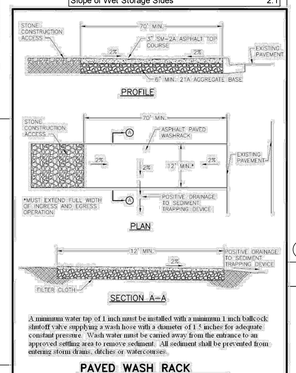
STANDARD ORANGE VINYL OR PLASTIC CONSTRUCTION FENCE ATTACHED TO POSTS (PRE-WEATHERED WOOD, GALVANIZED STEEL, IRON OR THICK PVC PLASTIC), AT LEAST 40" ABOVE FINISH GRADE WITH SPAN BETWEEN POSTS NO GREATER THAN 6' ON CENTER. EVERY NINTH POST SHALL CONTAIN A WARNING SIGN THAT CLEARLY IDENTIFIES THE FENCE AS A TREE PROTECTION FENCE.

NO SCALE

TP 3.38

TREE PROTECTION

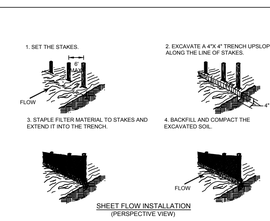
No Scale



A minimum water tap of 1 inch must be installed with a minimum 1 inch ballcock shutoff valve supplying a wash hose with a diameter of 1.5 inches for adequate constant pressure. Wash water must be carried away from the entrance to an approved settling area to remove sediment. All sediment shall be prevented from entering storm drains, ditches or watercourses.

PAVED WASH RACK

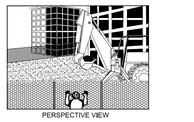
NO SCALE



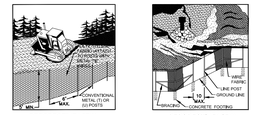
SF 3.05-2

SILT FENCE

No Scale



PERSPECTIVE VIEW



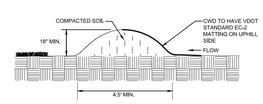
PERSPECTIVE VIEW
PLASTIC FENCE

PERSPECTIVE VIEW
METAL FENCE

SF 3.10

SAFETY FENCE

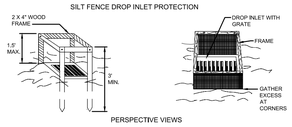
No Scale



DD CWD 3.09-1

TEMPORARY DIVERSION DIKE

No Scale



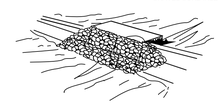
SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

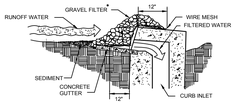
IP 3.07-1

STORM DRAIN INLET PROTECTION

No Scale

GRAVEL CURB INLET SEDIMENT FILTER





* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

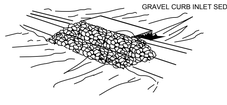
SPECIFIC APPLICATION: THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

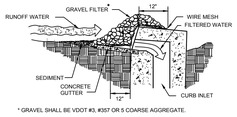
IP 3.07- 6

STORMWATER INLET PROTECTION

No Scale

GRAVEL CURB INLET SEDIMENT FILTER





* GRAVEL SHALL BE VDOT #3, #357 OR 5 COARSE AGGREGATE.

SPECIFIC APPLICATION: THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

IP 3.07- 6

STORMWATER INLET PROTECTION

No Scale

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

	TOTAL LBS. PER ACRE
MINIMUM CARE LAWN	
COMMERCIAL OR RESIDENTIAL	175-200 LBS.
TURF-TYPE TALL FESCUE	90-100%
IMPROVED PERENNIAL RYEGRASS	0-5%
KENTUCKY BLUEGRASS	0-5%
GENERAL SLOPE (3:1 OR LESS)	
TURF-TYPE TALL FESCUE	128 LBS.
RED TOP GRASS	2 LBS.
SEASONAL NURSE CROP *	20 LBS.
	150 LBS.
LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1)	
* SEE SLOPE STABILIZATION SEED MIX	

* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
FEBRUARY 16TH THROUGH APRIL..... ANNUAL RYE
MAY 1ST THROUGH AUGUST 15TH..... FOXTAIL MILLET
AUGUST 16TH THROUGH OCTOBER..... ANNUAL RYE
NOVEMBER THROUGH FEBRUARY 15TH..... WINTER RYE

** SUBSTITUTE SERICEA LESPEDEZA FOR CROWNVETCH EAST OF FARMVILLE, VA (MAY THROUGH SEPTEMBER USE HULLED SERICEA, ALL OTHER PERIODS, USE UNHULLED SERICEA). IF FLATPEA IS USED IN LIEU OF CROWNVETCH, INCREASE RATE TO 30 LBS./ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW-MAINTENANCE MIX DURING WARMER SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

PS 3.32

PERMANENT SEEDING MIX FOR PIEDMONT AREA

No Scale

TABLE 3.31-B
ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS
QUICK REFERENCE FOR ALL REGIONS

PLANTING DATES	SPECIES	RATE (LBS./ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50-100
FEB. 16 - APR. 30	ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM)	60-100
MAY 1 - AUG. 31	GERMAN MILLET (SETARIA ITALICA)	50

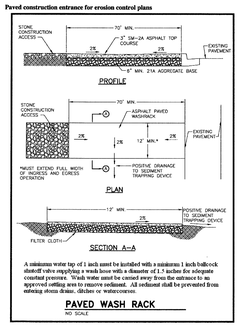
TS 3.31

TEMPORARY SEEDING PLANT MATERIALS

No Scale

Albemarle County
Engineering Review Reference Details
Page 3 of 4

Paved construction entrance for erosion control plans



A minimum water tap of 1 inch must be installed with a minimum 1 inch ballcock shutoff valve supplying a wash hose with a diameter of 1.5 inches for adequate constant pressure. Wash water must be carried away from the entrance to an approved settling area to remove sediment. All sediment shall be prevented from entering storm drains, ditches or watercourses.

PAVED WASH RACK

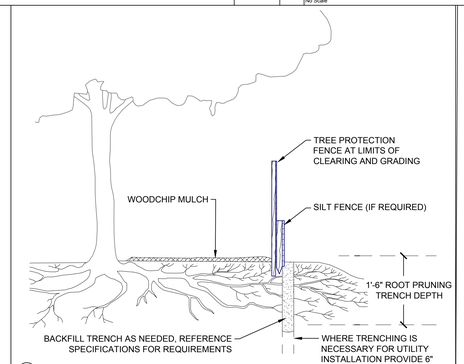
NO SCALE

(16 Jan 2003)

PCE 3.02

PAVED CONSTRUCTION ENTRANCE

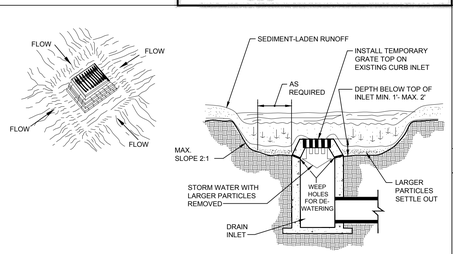
No Scale



TP

TREE PROTECTION

No Scale

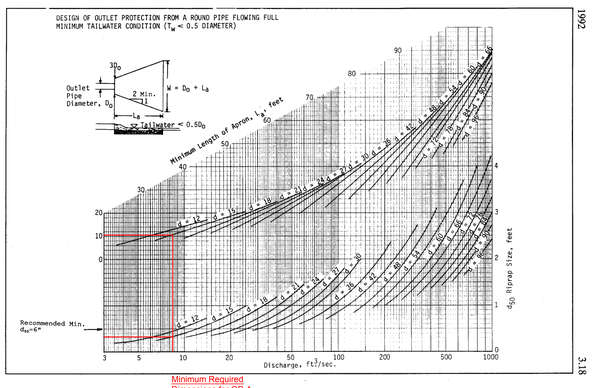


SOURCE:
VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, 1992, PLATE 3.07-4

ST 3.07-4

EXCAVATED DROP INLET SEDIMENT TRAP

No Scale



Source: USDA-SCS

III - 164

Plate 3.18-3

1992

3.18

Minimum Required Dimensions for OP-A
Do = 18", 1.5'
Q10 = 7.76 CFS
La = 10'
3Do = 4.5'
W = 1.25 + 10 = 11.5'

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

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YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
Jonathan M. Showalter
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41991390

BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL NOTES & DETAILS

C3.1

PATH & FILENAME:
PLOTTING DATE & TIME:

EROSION CONTROL LEGEND

		*
LOD	LIMITS OF CLEARING AND GRADING	-
	SOIL AREA DIVIDE	-
	DRAINAGE DIVIDE	-
SAF — SAF	SAFETY FENCE	3.01

NOTE: CONTRACTOR TO COORDINATE LOCATIONS OF SAF WITH ACPS FOR PHASING OF PROJECT AND RELOCATE OR PROVIDED ADDITIONAL FENCING AS NEEDED.

CE	CONSTRUCTION ENTRANCE	3.02
SF	SILT FENCE	3.05
SSF	SUPER SILT FENCE	3.05
IP	INLET PROTECTION	3.07
OP	OUTLET PROTECTION	3.18
DD	DIVERSION DIKE	3.09
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
MU	MULCHING	3.35
TP — TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

SOIL TYPE: 65C

SOIL TYPE: 65B

MATCHLINE SEE SHEET C3.4

NOTE: SAF TO SERVE AS TP IN THESE LOCATIONS

CONTRACTOR TO DIVERT ALL WATER FROM DISTURBANCE AREA TO INLET WITH INLET PROTECTION. PREVENT WATER FROM FLOWING TO THE SOUTH.

NOTE: SAF TO SERVE AS TP IN THESE LOCATIONS

UNNAMED ENTRANCE ROAD AKA "GEORGETOWN GREEN"
VAR. WIDTH ROW
DB. 440, PG. 107 | DB. 440, PG. 74
VDOT PROJ. 0743-002-153

STATE ROUTE 742 - Rte. 742
VAR. WIDTH ROW

N46°49'25"W 54.10'

N51°48'29"W 188.55'

SCALE 1"=30'
0 30' 60'

NORTH

PATH & FILENAME:
PLOTTING DATE & TIME:

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

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STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL PLAN - PHASE IA

C3.2

EROSION CONTROL LEGEND

		*
LOD	LIMITS OF CLEARING AND GRADING	-
	SOIL AREA DIVIDE	-
	DRAINAGE DIVIDE	-
SAF	SAFETY FENCE	3.01
CE	CONSTRUCTION ENTRANCE	3.02
SF	SILT FENCE	3.05
SSF	SUPER SILT FENCE	3.05
IP	INLET PROTECTION	3.07
OP	OUTLET PROTECTION	3.18
DD	DIVERSION DIKE	3.09
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
MU	MULCHING	3.35
TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

BUILDING PAD GRADING NOTES:

1. CONTRACTOR TO BUILD THE PROPOSED PIPE AND INLET BASES SHOWN BEFORE BEGINNING MASS GRADING FOR THE BUILDING PAD.
2. THROUGHOUT GRADING FOR THE PROPOSED ROADS AND BUILDING PAD THE CONTRACTOR SHALL KEEP THE AREA OF DRAINAGE TO EACH INLET PROTECTED STRUCTURE TO LESS THAN 1 ACRE THROUGH GRADING AND DIVISIONS DIKES.

SOIL TYPE: 65C

SOIL TYPE: 65B

SOIL TYPE: 65C

APPROXIMATE DRAINAGE AREA = 0.81 AC

APPROXIMATE DRAINAGE AREA = 0.54 AC

APPROXIMATE DRAINAGE AREA = 0.64 AC

APPROXIMATE DRAINAGE AREA TO = 0.84 AC

DRAINAGE AREA TO INLET = 0.83 AC

PROPOSED BUILDING FFE = 578

VDOT STD CLASS A1 RIPRAP
WIDTH 1 = 3.75'
WIDTH 2 = 11.25'
LENGTH = 10'
DEPTH = 18"

NOTE: SAF TO SERVE AS TP IN THESE LOCATIONS

INSTALL THESE STORMWATER PIPES AND STRUCTURE BASES IN THIS PHASE, TO DIVERT WATER TO AND FILTER THROUGH INLET PROTECTION IN PHASE IB

CONTRACTOR TO DIVERT ALL WATER FROM DISTURBANCE AREA TO INLET WITH INLET PROTECTION. PREVENT WATER FROM FLOWING TO THE SOUTH.

NOTE: SAF TO SERVE AS TP IN THESE LOCATIONS

MATCHLINE SEE SHEET C3.2

UNNAMED ENTRANCE ROAD AKA 'GEORGETOWN GREEN'
VAR. WIDTH R/W
DB. 440, PG. 107 | DB. 440, PG. W
VDOT PROJ. 0743-002-103

STATE ROUTE 743 - HYDRAULIC RD
VAR. WIDTH R/W
DB. 440, PG. 107

SCALE 1"=30'
0 30' 60'

PATH & FILENAME:
PLOTTING DATE & TIME:

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

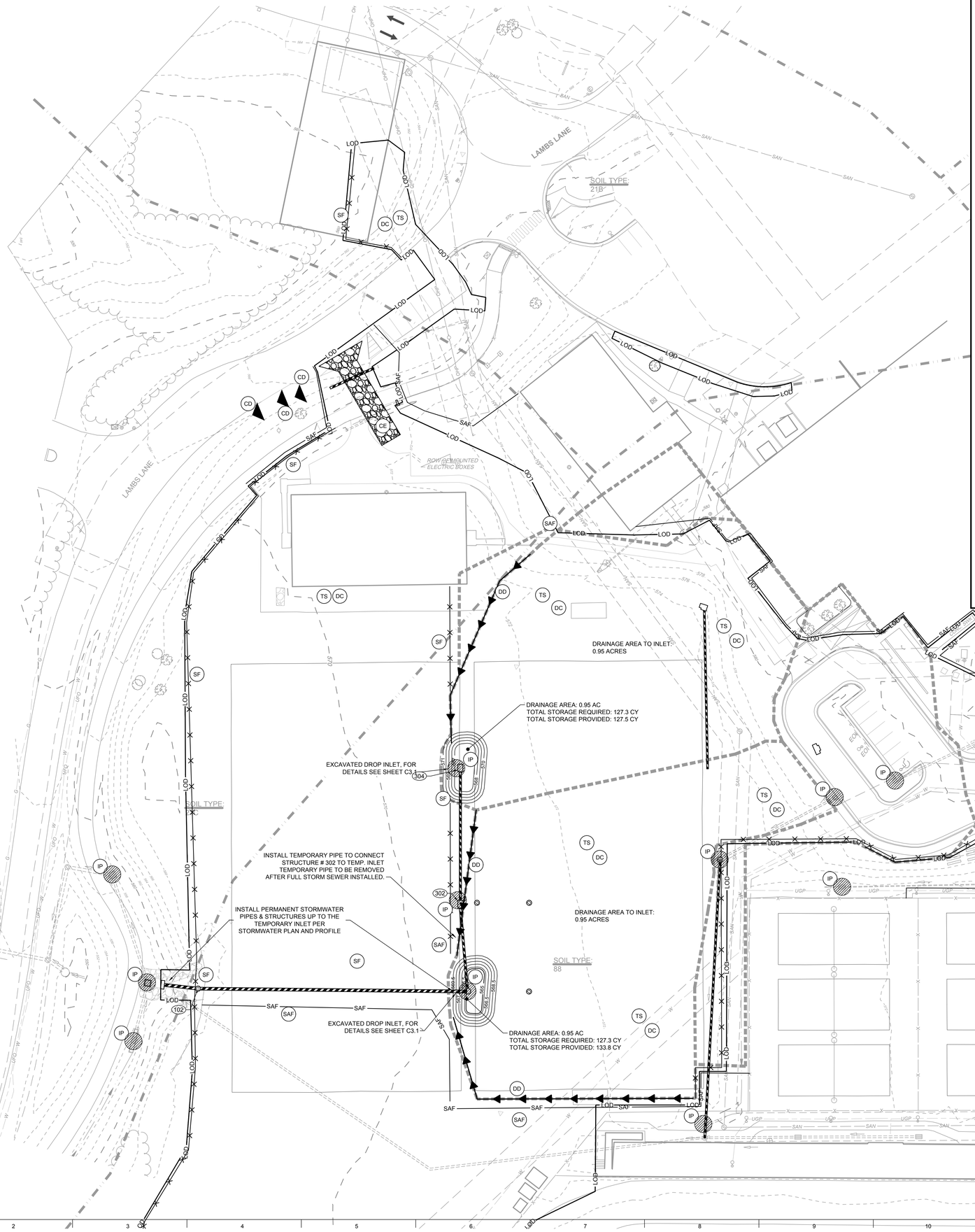
PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL PLAN - PHASE IB

C3.3



EROSION CONTROL LEGEND

		*
LOD	LIMITS OF CLEARING AND GRADING	-
	SOIL AREA DIVIDE	-
	DRAINAGE DIVIDE	-
SAF	SAFETY FENCE	3.01
CE	CONSTRUCTION ENTRANCE	3.02
SF	SILT FENCE	3.05
SSF	SUPER SILT FENCE	3.05
IP	INLET PROTECTION	3.07
OP	OUTLET PROTECTION	3.18
DD	DIVERSION DIKE	3.09
CD	ROCK CHECK DAMS	3.20
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
MU	MULCHING	3.35
TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

NAD 83

SCALE 1"=30'
0 30' 60'

PATH & FILENAME:
PLOTTING DATE & TIME:

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

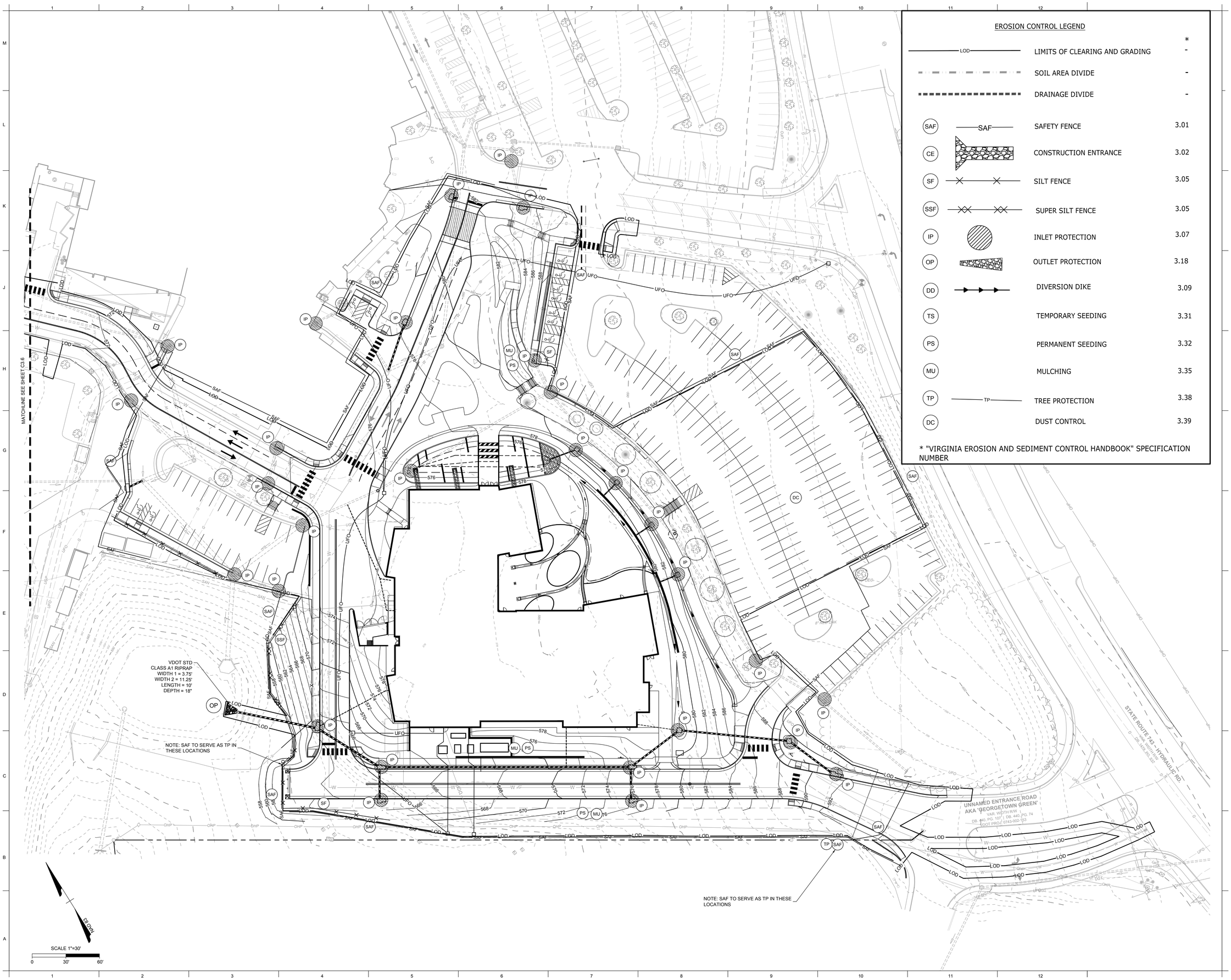
PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL PLAN - PHASE I

C3.4



EROSION CONTROL LEGEND

		*
LOD	LIMITS OF CLEARING AND GRADING	-
	SOIL AREA DIVIDE	-
	DRAINAGE DIVIDE	-
SAF	SAFETY FENCE	3.01
CE	CONSTRUCTION ENTRANCE	3.02
SF	SILT FENCE	3.05
SSF	SUPER SILT FENCE	3.05
IP	INLET PROTECTION	3.07
OP	OUTLET PROTECTION	3.18
DD	DIVERSION DIKE	3.09
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
MU	MULCHING	3.35
TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

EROSION & SEDIMENT CONTROL PLAN - PHASE II

C3.5

PATH & FILENAME:
PLOTTING DATE & TIME:

MATCHLINE SEE SHEET

MATCHLINE SEE SHEET

MATCHLINE SEE SHEET C3.5

THIS PORTION OF STORM NETWORK WAS BUILT IN PHASE1 OF ECS

SEE ATHLETIC FIELD TURF REQUIREMENTS FOR FINE GRADING, TOPSOIL, SOIL AMENDMENTS AND FERTILIZERS ON SHEETS L3.0 AND L3.1.

LAMBS LANE

NO CONNECTION

U/G POWER (DOMINION ENERGY)

U/G POWER (PRIVATE)

ROW OF MOUNTED ELECTRIC BOXES

	SOIL AREA DIVIDE	-
	DRAINAGE DIVIDE	-
SAF	SAFETY FENCE	3.01
CE	CONSTRUCTION ENTRANCE	3.02
SF	SILT FENCE	3.05
SSF	SUPER SILT FENCE	3.05
IP	INLET PROTECTION	3.07
OP	OUTLET PROTECTION	3.18
DD	DIVERSION DIKE	3.09
TS	TEMPORARY SEEDING	3.31
PS	PERMANENT SEEDING	3.32
MU	MULCHING	3.35
TP	TREE PROTECTION	3.38
DC	DUST CONTROL	3.39

* "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" SPECIFICATION NUMBER

SCALE 1"=30'
0 30' 60'

PATH & FILENAME:
PLOTTING DATE & TIME:

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EROSION & SEDIMENT CONTROL PLAN - PHASE II

C3.6

6" TRANSITION FROM TOP OF CURB TO BOTTOM OF CURB

R7-8, TYP. ALL ACCESSIBLE PARKING SPACES

DOUBLE YELLOW ROAD STRIPING

CG-12 (TYP.)

MATCHLINE - SEE SHEET C4.1

CG-12 (TYP.)

4" DASHED WHITE LINE (TYP.)

VDOT STD. STRIPED WHITE DIRECTIONAL ARROWS (TYP.)

TIE TO EXISTING DIP WATER MAIN WITH 8x8 TS&V

CONTRACTOR TO CONFIRM LOCATION OF DIP/AC WATERLINE TRANSITION AND ENSURE PROPOSED CONNECTION IS IN DIP WATERLINE; OLD DIP LINE TO BE CAPPED AFTER CONNECTION

CONTRACTOR TO SALVAGE AND RELOCATE EXISTING HYDRANT

4" GV AND 4" DIP TO RECONNECT 3" WATER METER TO NEW MAIN

90° BEND

GATE VALVE (TYP.)

24" WIDE SOLID WHITE STOP BAR (TYP.)

TEE

8" DIP ACSA WATER MAIN 2

11.25° + 22.5° BEND

18' TYP.

R1-1, STOP SIGN

47' WHITE STRIPES

6- 6.7" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

8" DIP ACSA WATER MAIN

RETAINING WALL WITH PEDESTRIAN GUARD RAIL. MAXIMUM 4.6' HIGH. SEE LANDSCAPE PLANS.

PROPOSED DOGHOUSE MANHOLE TO TIE TO EXISTING SEWER. REMOVE SEWER UPSTREAM. CONTRACTOR TO CONFIRM THE LOCATION AND INVERT OF THE SEWER BEFORE BEGINNING CONSTRUCTION OR NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

DUMPSTER ENCLOSURE SCREENING WALL PER SHEET A105 ARCHITECTURAL PLANS

SIDEWALK. SEE LANDSCAPE PLANS.

DOUBLE YELLOW ROAD STRIPING

APPROX. LOCATION OF FIBER CONDUIT AND PULLBOX. SEE ELECTRICAL PLANS SHEET ES101 AND E100 FOR DETAIL.

24" WIDE SOLID WHITE STOP BAR (TYP.)

R1-1, STOP SIGN

R-11, "ROAD CLOSED" SIGN WITH VDOT STD. TYPE III BARRICADE

RAMP WITH HANDRAILS

PROPOSED DROP-OFF LANE

BIKE RACKS

PROPOSED SIDEWALK, SEE LANDSCAPE PLANS.

7x 6.5" TALL STAIRS WITH HANDRAILS SEE LANDSCAPE PLANS.

7x 6.5" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

R60'

FLUSH CURB PER LANDSCAPE PLANS.

APPROX. LOCATION OF FIBER CONDUIT AND PULLBOX. SEE ELECTRICAL PLANS SHEET ES101 AND E100 FOR DETAIL.

BIORETENTION AREA (LEVEL II)

3- 6" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

3" SANITARY SEWER OUT OF BUILDING INV = 575.42. PROVIDE 4" EXTERIOR PVC PIPE TO 8" LINE WITH MINIMUM SLOPE OF 1.04% AND 3' MINIMUM COVER.

18" OF SIDEWALK CONCRETE AGAINST BUILDING FOUNDATION FOR MOWING STRIP(TYP.)

CLEANOUT (TYP.)

5" PVC SANITARY SEWER OUT OF BUILDING TO CLEANOUT. SEE PLUMBING PLANS

4" PVC TO GREASE INTERCEPTOR. SEE PLUMBING PLANS

RAMP WITH HANDRAILS DOWN FROM LOADING DOCK. RAMP PER ARCHITECTURAL PLANS

30" HIGH WALL AND STAIRS PER SHEET A105 ARCHITECTURAL PLANS

2" FORCE MAIN

3" DOMESTIC WATER LINE

2" DOMESTIC WATER METER VAULT

6" FIRE LINE WITH PIV

GENERATORS PER ELECTRICAL PLANS

GENERATORS PER ELECTRICAL PLANS

MOWING STRIP

HIGH VISIBILITY CROSSWALK (TYP)

REMOTE FDC

MOWING STRIP

RETAINING WALLS (TYP.) PER ARCHITECTURAL AND STRUCTURAL PLANS

"NO PARKING-FIRE LANE" SIGN

TRANSFORMER PER ELECTRICAL PLANS

"NO PARKING-FIRE LANE" SIGN

5' TRANSITION FROM CG-6 TO CG-7

5' TRANSITION FROM CG-6 TO CG-7

8" GEOMTHERMAL WELL SUPPLY AND RETURN SERVICE LINES

APPROX. LOCATION OF FIBER CONDUIT AND PULLBOXES. SEE ELECTRICAL PLANS SHEET ES101 AND E100 FOR DETAIL.

CONDUITS FOR POWER FROM DOMINION POLE TO TRANSFORMER PER DOMINION REQUIREMENTS N51°48'29"W 710.84'

8' BUFFER STRIP

FUTURE 10' SHARED USE PATH

50' BUILDING SETBACK PER SPECIAL EXCEPTION

CG-6 TO HAVE VDOT STD UD-4 ON THIS ROAD. TIE TO INLETS OR OUTLET TO EW-12 PER VDOT STANDARDS

CIP CONCRETE RUNNEL PER LANDSCAPE PLANS (TYP.)

RETAINING WALL. SEE LANDSCAPE DRAWINGS

UNDERGROUND PROPANE TANK PROVIDED BY OWNER'S VENDOR. CONTRACTOR TO COORDINATE INSTALLATION SCHEDULE. SEE PLUMBING PLAN FOR GAS PIPING CONNECTIONS.

"NO PARKING-FIRE LANE" SIGN

3.15' WIDE BUFFER STRIP

3.15' WIDE BUFFER STRIP

VDOT STD. CG-9D ENTRANCE

VDOT STD. CG-11 ENTRANCE

R1-1, STOP SIGN

FHA

45° BEND

45° BEND

TIE TO EXISTING SIDEWALK

UNNAMED ENTRANCE ROAD AKA 'GEORGETOWN GREEN' VAR. WIDTH R/W DB. 440, PG. 107 | DB. 440, PG. 74 VDOT PROJ. 0743-002-153

N46°49'25"W 54.87'

S37°17'26"W 41.12'

8"x8" TEE AND VALVE WITH 8" STUB OUT AND PLUG FOR FUTURE GEORGETOWN GREEN INTERCONNECTOR

CG-12 (TYP)

POTENTIAL LOCATION FOR FUTURE GEOTHERMAL WELL (TYP.)

8" GEOMTHERMAL WELL SUPPLY AND RETURN SERVICE LINES

5' R-10 BUILDING SETBACK

APPROX. LOCATION OF EXISTING INGRADE PULL BOX. FIBER OPTICS TERMINATION POINT. EXACT LOCATION TO BE COORDINATED DURING CONSTRUCTION. CONTRACTOR TO PRICE ROUTING CONDUIT TO THE FURTHER PULL BOX WHEN BIDDING.

SEE TYPICAL PAVEMENT REPAIR DETAIL ON SHEET C1.1.

GEOTHERMAL WELL (TYP.)

ELECTRICAL VEHICLE CHARGING STATION (TYP.)

4" WHITE STRIPES

17- 6.4" RISERS WITH HANDRAILS SEE LANDSCAPE PLANS.

APPROX. LOCATION OF PROPOSED GEOTHERMAL WELL FIELDS LOCATION

MATCHLINE - SEE THIS SHEET

2775 HYDRAULIC RD

12" CIP RWSA WATERMAIN

SEE TYPICAL PAVEMENT REPAIR DETAIL ON SHEET C1.1.

45° BEND

45° BEND

GATE VALVE

CONNECT TO EXISTING TEE IN 12" CIP RWSA WATER MAIN. TIE TO EXISTING TAPPING SLEEVE. CONTRACTOR TO COORDINATE WITH RWSA AND ACSA FOR CONNECTION. RWSA INSPECTOR TO BE GIVEN 3 DAYS NOTICE BEFORE ANY WORK WITHIN 20' OF THE RWSA WATERMAIN.

MATCHLINE - SEE THIS SHEET

HATCH LEGEND

- HEAVY DUTY ASPHALT
- LIGHT DUTY ASPHALT
- SEE LANDSCAPE PLANS FOR DIMENSIONS AND CROSS SECTIONS
- HEAVY DUTY CONCRETE
- MILL AND OVERLAY

SCALE 1"=20'

0 20' 40'

NOTE: PEDESTRIAN PAVEMENTS AND SITE FEATURES SUCH AS WALLS, RAMPS, FENCES AND STAIRS ARE SHOWN FOR REFERENCE ONLY. SEE LANDSCAPE DRAWING.

NOTE: CONTRACTOR TO CONTACT RWSA INSPECTOR WITH 3 DAYS NOTICE BEFORE ANY WORK WITHIN 20' OF THE RWSA WATERMAIN.

PATH & FILENAME:
PLOTTING DATE & TIME:

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BID DOCUMENTS
10/08/2024

SITE PLAN

C4.0

MATCHLINE SEE SHEET C4.2

MATCHLINE - SEE SHEET C4.0

NOTE: PEDESTRIAN PAVEMENTS AND SITE FEATURES SUCH AS WALLS, RAMPS, FENCES AND STAIRS ARE SHOWN FOR REFERENCE ONLY. SEE LANDSCAPE DRAWING.

HATCH LEGEND

- HEAVY DUTY ASPHALT
- LIGHT DUTY ASPHALT
- SEE LANDSCAPE PLANS FOR DIMENSIONS AND CROSS SECTIONS
- HEAVY DUTY CONCRETE
- MILL AND OVERLAY

SCALE 1"=20'
0 20' 40'

NAD 83

PATH & FILENAME:
PLOTTING DATE & TIME:

6" CURB WITH GUTTER PITCHING AWAY FROM CURB TO MATCH EXISTING

MATCHLINE - SEE THIS SHEET

CG-12 (TYP.)

6' TRANSITION FROM TOP OF CURB TO BOTTOM OF CURB

24" WIDE SOLID WHITE STOP BAR (TYP.)

26' TOP OF SPEED TABLE FLUSH WITH TOP OF CURB

TIE TO EXISTING (TYP.)

DOUBLE YELLOW ROAD STRIPING

5- 7" STAIRS WITH HANDRAILS. SEE LANDSCAPE PLANS.

R1-1, STOP SIGN

CONTINUE CONCRETE FLUME WITHOUT GRATE THROUGH SPEED TABLE RAMPS.

DROP OFF AND PICKUP SIDEWALK. SEE LANDSCAPE PLANS.

RAMP WITH HANDRAILS. SEE LANDSCAPE PLANS

CG-12 TYP.

CG-12 RAMP DOWN TO LANDING

CONNECT TO EXISTING CURB AND GUTTER

RAISED PEDESTRIAN CROSSWALK (TYP)

FLUME WITH METAL GRATE (TYP.)

HIGH VISIBILITY CROSSWALK (TYP)

4" DASHED WHITE LINE (TYP)

CUT EXISTING WATERLINE AND TIE IN NEW WATERLINE THROUGH SPEED TABLE RAMPS.

GATE VALVE (TYP.)

TIE TO EXISTING SIDEWALK AND CURB

TIE TO EXISTING SIDEWALK

8" DIP ACSA WATER MAIN

SEE TYPICAL PAVEMENT REPAIR DETAIL ON SHEET C1.1.

22.5° BEND

LIMIT OF SURVEY

RAISE ANY EXISTING ACTIVE VALVES TO REMAIN TO EXISTING GRADE.

TIE TO EXISTING CONCRETE RAMP

TIE TO EXISTING SIDEWALK

CG-6

FLUME WITH METAL GRATE (TYP.)

TIE TO EXISTING SIDEWALK

11.25° BEND

RECONNECT EXISTING WATER METER TO NEW MAIN. 8"X4" TEE AND 4" GATE VALVE TO 2" COPPER LINE TO VAULT

CONTRACTOR TO LOCATE VALVE AND WATERLINE TO BOILER ROOM AND CONNECT TO NEW MAIN. COORDINATE WITH ACSA AND ACPS.

VDOT STD. STRIPED WHITE DIRECTIONAL ARROWS (TYP.)

TIE TO EXISTING DIP WATER MAIN WITH 8x8 TS&V

CONTRACTOR TO CONFIRM LOCATION OF DIP/AC WATERLINE TRANSITION AND ENSURE PROPOSED CONNECTION IS IN DIP WATERLINE; OLD DIP LINE TO BE CAPPED AFTER CONNECTION

CONTRACTOR TO SALVAGE AND RELOCATE EXISTING HYDRANT

4" GV AND 4" DIP TO RECONNECT 3" WATER METER TO NEW MAIN

90° BEND

8" DIP ACSA WATER MAIN 2

GATE VALVE (TYP.)

24" WIDE SOLID WHITE STOP BAR (TYP.)

TEE

CG-12 (TYP)

20' CG-7 ENTRANCE

REPLACE SIDEWALK; TIE TO EXISTING, MATCH ELEVATIONS

5' TRANSITION FROM CG-6 TO CG-7

9' TYP.

18' TYP.

24'

CG-12 TYP.

R7-8, TYP. ALL ACCESSIBLE PARKING SPACES

SIDEWALK. SEE LANDSCAPE PLANS.

R1-1, STOP SIGN

4" WHITE STRIPES

6- 6.7" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

R7-8, TYP. ALL ACCESSIBLE PARKING SPACES

CG-12 (TYP.)

4" DASHED WHITE LINE (TYP.)

RAMP WITH HANDRAILS

7x 6.5" TALL STAIRS WITH HANDRAILS. SEE LANDSCAPE PLANS.

PROPOSED DROP-OFF LANE

PROPOSED SIDEWALK. SEE LANDSCAPE PLANS.

BIKE RACKS

7x 6.5" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

FLUSH CURB PER LANDSCAPE PLANS.

APPROX. LOCATION OF FIBER CONDUIT AND PULLBOX. SEE ELECTRICAL PLANS SHEET ES101 AND E100 FOR DETAIL.

BIORETENTION AREA (LEVEL II)

3- 6" RISERS WITH HANDRAILS. SEE LANDSCAPE PLANS.

3" SANITARY SEWER OUT OF BUILDING INV = 575.42. PROVIDE 4" EXTERIOR PVC PIPE TO 8" LINE WITH MINIMUM SLOPE OF 1.04% AND 3' MINIMUM COVER.

18" OF SIDEWALK CONCRETE AGAINST BUILDING FOUNDATION FOR MOWING STRIP(TYP.)

CLEANOUT (TYP.)

5" PVC SANITARY SEWER OUT OF BUILDING TO CLEANOUT. SEE PLUMBING PLANS

RETAINING WALL WITH PEDESTRIAN GUARD RAIL. MAXIMUM 4.6' HIGH. SEE LANDSCAPE PLANS.

PROPOSED DOGHOUSE MANHOLE TO TIE TO EXISTING SEWER. REMOVE SEWER UPSTREAM. CONTRACTOR TO CONFIRM THE LOCATION AND INVERT

4" PVC TO GREASE INTERCEPTOR. SEE PLUMBING PLANS

RAMP WITH HANDRAILS DOWN FROM LOADING DOCK. RAMP PER

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SITE PLAN

C4.1

PROPOSED GRASS SPORTS PRACTICE FIELDS

MATCHLINE - SEE SHEET C4.3

6' WIDE GATE

10' HIGH CHAIN LINK FENCE

3' WIDE CONCRETE STRIP

300'

160'

PAVED PATH

HIGH VISIBILITY CROSSWALK (TYP)

24" WIDE SOLID WHITE STOP BAR (TYP)

R1-1, STOP SIGN

CG-2

CG-6

CG-8

24'

9' TYP.

18' TYP.

R4'

R5'

R25'

R49'

R7-8, TYP. ALL ACCESSIBLE PARKING SPACES

VAN

SIDEWALK. SEE LANDSCAPE PLANS.

CG-12 TYP.

R70'

R38'

R15'

R57'

20'

VDOT STD. STRIPED WHITE DIRECTIONAL ARROWS (TYP.)

4" SOLID YELLOW STRIPED LINES

R40'

R50'

R2.5'

R10'

LIGHT POLE (TYP.)

BOLLARD (TYP)

6' WIDE SIDEWALK

TOTAL # OF SPACES = 193

FINISH AND PAINT CUT WALL SURFACE TO MATCH EXISTING. COORDINATE WITH ARCHITECT.

8' DROP OFF AND PICKUP SIDEWALK

TIE TO EXISTING SIDEWALK

32'

12'

20'

DOUBLE STRIPED 4" SOLID YELLOW CENTER LINE (TYP)

RAISED PEDESTRIAN CROSSWALK (TYP)

FLUME WITH METAL GRATE (TYP.)

SIDEWALK BUMP OUT FOR VIEWING. SEE LANDSCAPE PLANS.

CONTINUE CONCRETE FLUME WITHOUT GRATE THROUGH SPEED TABLE RAMPS.

MATCHLINE - SEE SHEET C4.1

TENNIS COURTS

CHAIN FENCE

BENCHES

BENCH

BLEACHERS

UGP

SAN

EP

W

6" DEC.

LONG SWK

10' HIGH CHAIN LINK FENCE

PROPOSED GRASS SPORTS PRACTICE FIELDS

4.071'"

TEST PIT INFORMATION REQUIRED BEFORE CONSTRUCTION FOR EXISTING WATERLINE UNDER PARKING LOT TO ENSURE ACCEPTABLE AMOUNT OF COVER OVER WATER MAIN.

FIELD TO AVOID VALVE

MATCHLINE - SEE THIS SHEET

PROPOSED SPORTS PRACTICE FIELDS

NOTE: PEDESTRIAN PAVEMENTS AND SITE FEATURES SUCH AS WALLS, RAMPS, FENCES AND STAIRS ARE SHOWN FOR REFERENCE ONLY. SEE LANDSCAPE DRAWING.

HATCH LEGEND

- HEAVY DUTY ASPHALT
- LIGHT DUTY ASPHALT
- SEE LANDSCAPE PLANS FOR DIMENSIONS AND CROSS SECTIONS
- HEAVY DUTY CONCRETE
- MILL AND OVERLAY

SCALE 1"=20'

0 20' 40'

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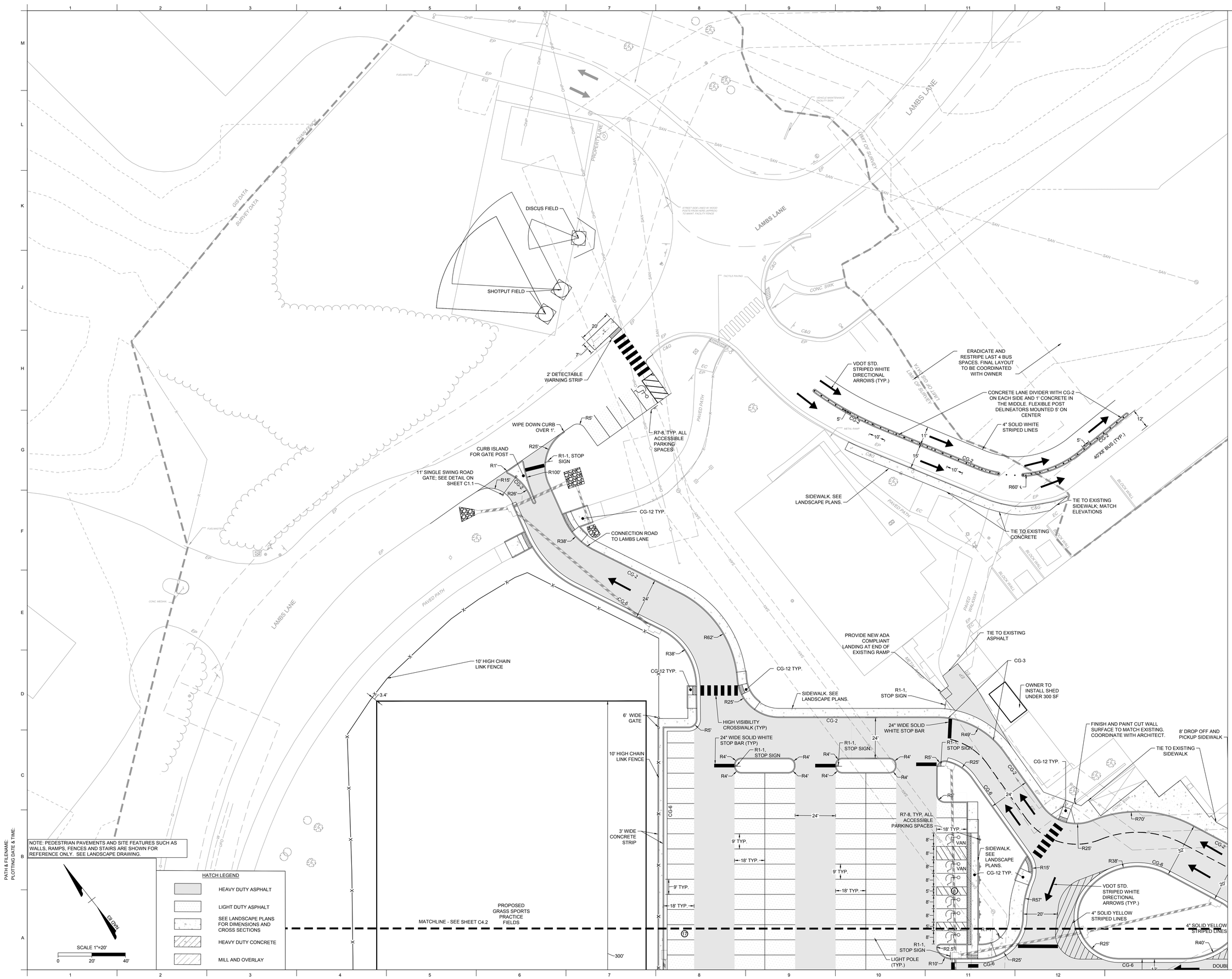
SITE PLAN

C4.2



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SITE PLAN

C4.3

6' TRANSITION FROM TOP OF CURB TO BOTTOM OF CURB

MATCHLINE - SEE SHEET C5.1

MILL AND OVERLAY TO RAISE GRADE PER PROPOSED GRADING SPOTS

POTHOLE EXISTING WATERLINE AND CONFIRM COVER WITH FINAL GRADING WILL BE 3' MINIMUM, OR COORDINATE WITH ENGINEER BEFORE BEGINNING CONSTRUCTION.

MODIFY BASE AND SET NEW INLET TOP AT PROPOSED GRADE

(3) 30" RCP CULVERTS UNDER WALKWAY STRUCTURE

CONCRETE WEIR WALL (TYP). SEE LANDSCAPE PLANS.

CLEANOUT (TYP.)

FOUNDATION DRAIN FROM WALLS

BIORETENTION

UNDERDRAINS

24" NYLOPLAST BASIN WITH SOLID TOP. TIE INTO EXISTING 18" RCP

4" SECONDARY DRAIN

4" HDPE ROOF DRAIN OUT OF BUILDING.

4" HDPE STORM DRAIN OUT OF BUILDING

CIP CONCRETE CHANNEL PER LANDSCAPE PLANS SHEET L105

2' HIGH RETAINING WALL (SEE LANDSCAPE PLANS SHEET L105)

NEW MANHOLE TOP TO MATCH PROPOSED GRADE. FRAME AND COVER TO BE OUT OF WALKWAY.

2' BRICK CHANNEL PER LANDSCAPE PLANS SHEET L104

GRAVEL FLOW SPREADER FROM ROOF DRAIN TO BIORETENTION (TYP.)

BIORETENTION BAFFLES - TOP ELEVATION TO MATCH FLUSH CURB (TYP.)

8" HDPE ROOF DRAIN. TIE TO EXISTING PIPE WITH INSERTA TEE

CLEAN OUT (TYP.)

8" HDPE ROOF DRAIN OUT OF BUILDING. INV = 575.17'

8" HDPE ROOF DRAIN OUT OF BUILDING. INV = 573.75'

8" HDPE ROOF DRAIN OUT OF BUILDING. INV = 575.50'

8" TRENCH DRAINS PER SHEET L104 LANDSCAPE PLANS

ENSURE POSITIVE DRAINAGE AWAY FROM DOORS (TYP.) AND BUILDING ALL SIDES. MINIMUM OF 1" DOWN FROM BUILDING FINISHED FLOOR PER ARCHITETURAL DETAIL AT ANY LOCATION THAT IS NOT A DOOR. TRANSITION UP TO DOORS AT GRADES MEETING ADA REQUIREMENTS.

SLOPE GRADE DOWN 8" OVER 2' OFF PATIO EDGE TO DAYLIGHT TRENCH DRAINS PER DETAILS ON LANDSCAPE PLANS

4" DIP PIPE WITH BELL END UP 12" ABOVE GRADE FOR OUTLET OF CONDENSATION PIPE. 4" HDPE PIPE TO INLET PER ROOF DRAIN NOTES

ENSURE POSITIVE DRAINAGE AWAY FROM DOORS (TYP.)

NOTES:
1. ALL ROOF DRAINS TO HAVE 2' MINIMUM COVER WITH
2. All ROOF DRAINS TO HAVE 2% MINIMUM SLOPE (TYP.)
3. RECONNECTED ANY EXISTING ROOF DRAINS OR OTHER DRAINS THAT ARE DISTURBED AND ARE TO REMAIN ACTIVE

VDOT STD CLASS A1 RIPRAP WIDTH 1 = 4.5' WIDTH 2 = 11.5' LENGTH = 10' DEPTH = 18"

VDOT STD CLASS A1 RIPRAP WIDTH = 4' LENGTH = 4' DEPTH = 18"

RETAINING WALLS

TMP 60-78A
COUNTY SCHOOL BOARD OF ALBEMARLE COUNTY, VIRGINIA
DB. 287, PG. 414
ZONED: RA

UNNAMED ENTRANCE ROAD AKA 'GEORGETOWN GREEN'
VAR. WIDTH R/W
DB. 440, PG. 107 | DB. 440, PG. 74
VDOT PROJ. 0743-002-157

N51°48'29"W 710.84'

N46°49'25"W 54.87'

N41°32'27"E 53.33'

MATCHLINE - SEE THIS SHEET

SCALE 1"=20'
0 20' 40'

GRASS LINED CHANNEL

SLOPE = 4.16%
Tc = 5 min.
Q2 = 0.23 cfs
Q10 = 0.30 cfs
2-YR VELOCITY = 2.47 FPS
10-YR DEPTH = 0.10'

DITCH SECTION A-A
(No Scale)

SLOPE = 3.70%
Tc = 5 min.
Q2 = 1.52 cfs
Q10 = 1.96 cfs
2-YR VELOCITY = 3.91 FPS
10-YR DEPTH = 0.19'

DITCH SECTION B-B
(No Scale)

GRADING AND DRAINAGE NOTES:
1. VERIFY ALL EXISTING ELEVATIONS AT CONNECTION POINTS AND NOTIFY ENGINEER OF ANY DISCREPANCIES OR SLOPES THAT DO NOT MEET STANDARDS OR ENSURE POSITIVE DRAINAGE BEFORE BEGINNING CONSTRUCTION.
2. ENSURE ALL SIDEWALKS AND CG-12 ARE PER VDOT AND ADA STANDARDS.
3. ALL CG-12 RAMPS TO HAVE 1:20 MAX. GUTTER SLOPE IN THE DIRECTION OF TRAVEL.
4. ALL SIDEWALKS SHALL HAVE A MAX SLOPE OF 2% PERPENDICULAR TO THE DIRECTION OF TRAVEL AND A SLOPE OF 2% MAX AT LANDINGS, ADA PARKING SPACE, AND AREAS WERE TURNING IS REQUIRED.
5. CONTRACTOR TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING, PAVEMENT AND SITE FEATURES TO CONVEYANCE CHANNELS AND INLETS. NOTIFY ENGINEER OF ANY APPARENT LOW AREA OR PROBLEM AREAS BEFORE BEGINNING CONSTRUCTION.

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

GRADING & DRAINAGE PLAN

C5.0

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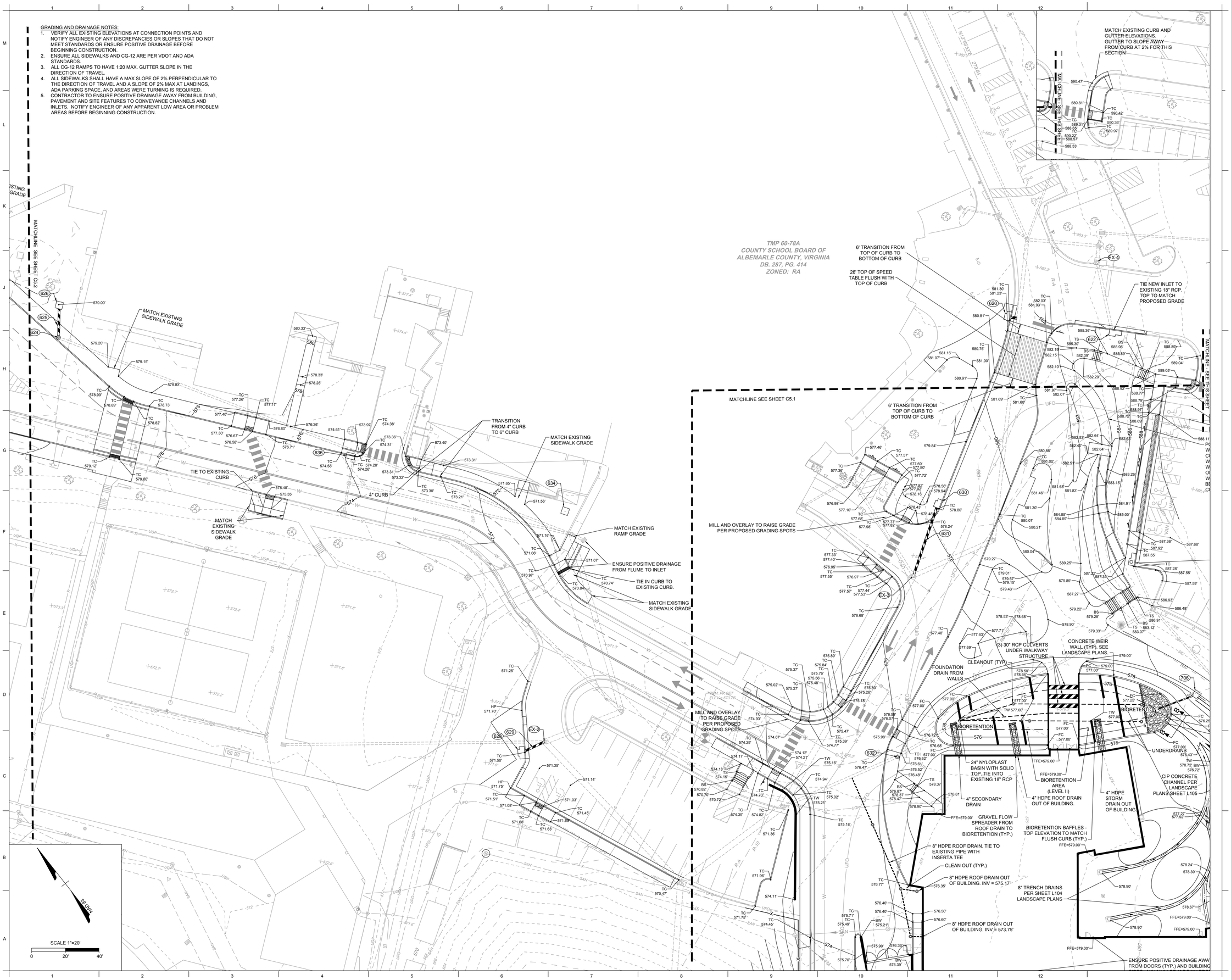

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GRADING & DRAINAGE PLAN

C5.1

PROPOSED GRASS SPORTS PRACTICE FIELDS

SEE ATHLETIC FIELD TURF REQUIREMENTS FOR FINE GRADING, TOPSOIL, SOIL AMENDMENTS AND FERTILIZERS ON SHEETS L3.0 AND L3.1.

MATCHLINE - SEE SHEET ####

LIGHT POLE (TYP.)

MATCH EXISTING SIDEWALK GRADE

30" NYLOPLAST BASIN WITH SOLID TOP

30" NYLOPLAST BASIN WITH SOLID TOP

LANE STORMKEEPER UNDERGROUND DETENTION. 5 ROWS WITH 11 CHAMBERS.

60" MH-1 WITH STEEL WEIR PLATE. SEE SHEET C6.2

30" NYLOPLAST BASIN WITH SOLID TOP

POTHOLE EXISTING WATERLINE AND CONFIRM COVER WITH FINAL GRADING WILL MEET ACSA MAXIMUMS OR COORDINATE WITH ENGINEER BEFORE BEGINNING FILL OVER EXISTING WATERLINE.

MATCHLINE - SEE SHEET C5.1

TMP 60-78A
COUNTY SCHOOL BOARD OF
ALBEMARLE COUNTY, VIRGINIA
DB. 287, PG. 414
ZONED: RA

PROPOSED GRASS SPORTS PRACTICE FIELDS

MATCHLINE - SEE THIS SHEET

PROPOSED SPORTS PRACTICE FIELDS

MATCHLINE - SEE THIS SHEET

GRADING AND DRAINAGE NOTES:

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NAD 83

SCALE 1"=20'
0 20' 40'

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PLOTTING DATE & TIME:

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GRADING & DRAINAGE PLAN

C5.2

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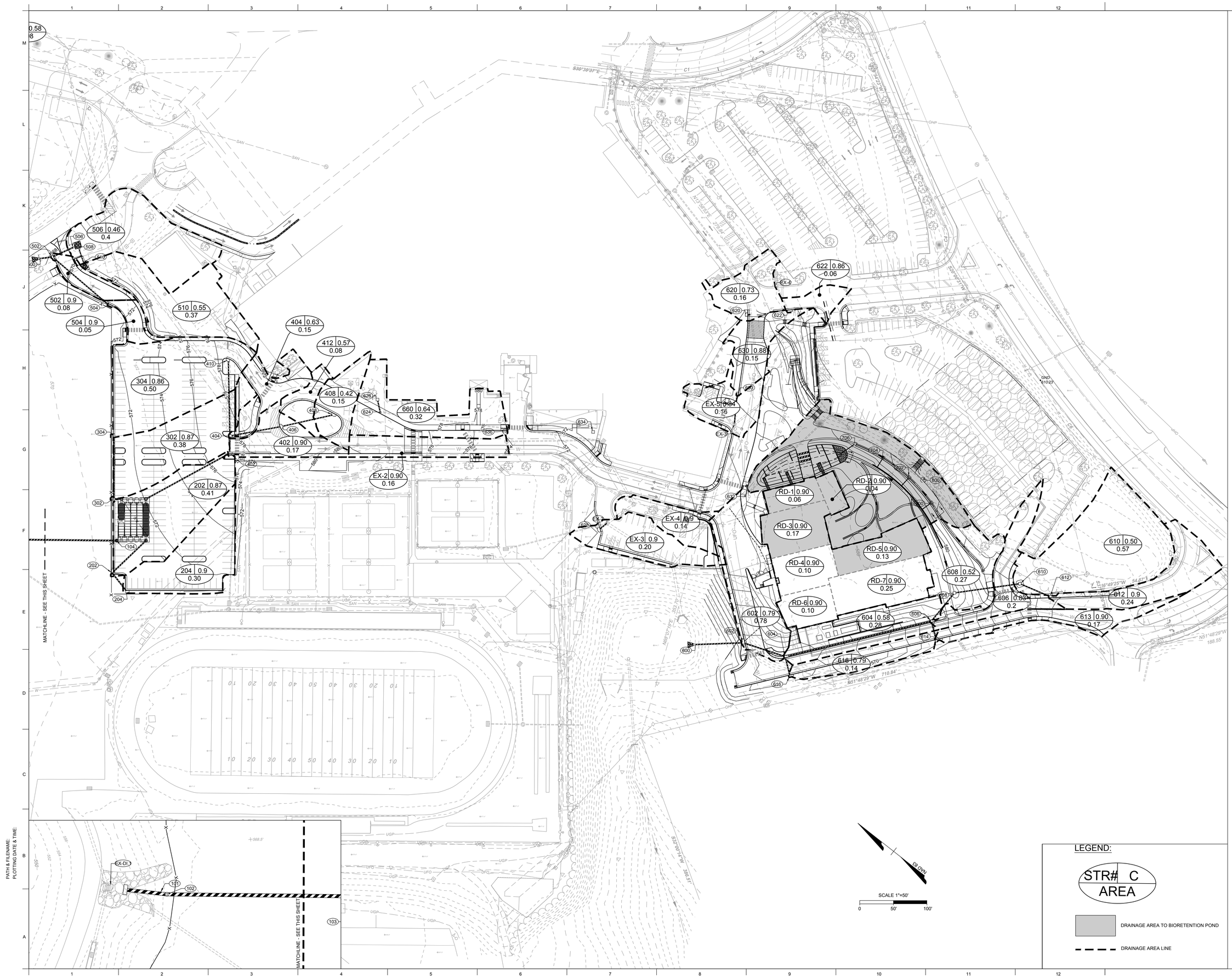
GRADING & DRAINAGE PLAN

C5.3



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INLET DRAINAGE AREA MAP

C5.4

PRE-DEVELOPED

PRE-DEVELOPED AREA C TO POA 2:
TOTAL AREA: 0.66 ACRES
IMPERVIOUS AREA: 0.40 ACRES
PERVIOUS AREA: 0.26 ACRES
CN: 91
Tc: 6.0 MIN

PRE-DEVELOPED AREA D TO POA 2:
TOTAL AREA: 0.10 ACRES
IMPERVIOUS AREA: 0.04 ACRES
PERVIOUS AREA: 0.06 ACRES
CN: 87
Tc: 6.0 MIN

APPROX. ROOF DRAIN DIVIDE OF ALBEMARLE COUNTY HIGH SCHOOL APPEARS TO BE FLOWING TO THE DRAINAGE SYSTEM TO THE SOUTH BYPASSING WORK BASED ON RECORD DRAWINGS.

STATE ROUTE 657 - LAMBS ROAD

S30°36'37"E

LAMBS LANE

STATE ROUTE 743 - HYDRAULIC ROAD

TRANSITION FROM SHEET FLOW TO SHALLOW CONC. FLOW

Tc: 12.40 MIN
SHEET FLOW: 9.17 MIN
SHALLOW CONC.: 3.34 MIN
CHANNEL FLOW: 0.0 MIN

PROJECT LIMITS OF DISTURBANCE

EXISTING STORMWATER MANAGEMENT POND TO REMAIN UNDISTURBED.
POINT OF ANALYSIS 2

PRE-DEVELOPED AREA B TO POA 2:
TOTAL AREA: 2.33 ACRES
IMPERVIOUS AREA: 0.36 ACRES
PERVIOUS AREA: 1.97 ACRES
CN: 83
Tc: 12.40 MIN

IRRIGATION WORK AND TILLING AND SOIL IMPROVEMENTS IN FIELD AREAS ARE MAINTENANCE AND NOT SUBJECT TO STORMWATER QUALITY AND QUANTITY REQUIREMENTS (17-301B.2)

Tc: 9.3 MIN
SHEET FLOW: 7.3 MIN
SHALLOW CONC.: 0.4 MIN
CHANNEL FLOW: 1.6 MIN

TRANSITION FROM SHEET FLOW TO SHALLOW CONC. FLOW

TRANSITION FROM SHALLOW CONC. FLOW TO CHANNEL FLOW

PRE-DEVELOPED AREA A TO POA 1:
TOTAL AREA: 6.21 ACRES
IMPERVIOUS AREA: 4.67 ACRES
PERVIOUS AREA: 1.54 ACRES
CN: 93
Tc: 9.3 MIN

EXISTING STORMWATER MANAGEMENT POND TO REMAIN UNDISTURBED.
POINT OF ANALYSIS 1

N51°48'29"W 188.55'

N31°48'29"W 710.54'

S31°04'14"W 394.51'

NORTH

SCALE 1"=60'
0 60' 120'

PATH & FILENAME:
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STORMWATER MANAGEMENT PLAN

C6.0

WATER QUALITY ANALYSIS

SITE DATA:

LIMITS OF DISTURBANCE: 9.20 ACRES

PRE-DEVELOPED AREA - B SOILS
IMPERVIOUS = 3.27 ACRES
PERVIOUS = 0.83 ACRES
FOREST = 0.00 ACRES

PRE-DEVELOPED AREA - D SOILS
IMPERVIOUS = 2.06 ACRES
PERVIOUS = 3.04 ACRES
FOREST = 0.00 ACRES

POST-DEVELOPED AREA - B SOILS
IMPERVIOUS = 2.85 ACRES
PERVIOUS = 1.25 ACRES
FOREST = 0.00 ACRES

POST-DEVELOPED AREA - D SOILS
IMPERVIOUS = 3.80 ACRES
PERVIOUS = 1.30ACRES
FOREST = 0.00 ACRES

TOTAL LOAD REDUCTION REQUIRED (LB/YR) = 3.59 LB/YR

TREATMENT PROPOSED
ONSITE TREATMENT IS PROPOSED BY ONE BIORETENTION FACILITY AND ONE MANUFACTURED UNDERGROUND DETENTION PIPE, AS CALCULATED IN THE VIRGINIA RUNOFF REDUCTION METHOD SPREADSHEET.

LEVEL 2 BIORETENTION FACILITY: 1.14 LB/YR

MANUFACTURED TREATMENT DEVICE: 1.72 LB/YR

TOTAL PROPOSED ONSITE TREATMENT = 2.87 LB/YR

STORMWATER CREDITS TO BE PURCHASED = 0.73 LB/YR

WATER QUANTITY CALCULATIONS FOR POINT OF ANALYSIS 1:

CHANNEL PROTECTION:

$Q_{AREA\ A\ POST} \leq [0.8 * (Q_{AREA\ A\ PRE} * RV_{AREA\ A\ PRE}) / RV_{AREA\ A\ POST}]$

$\leq [0.8 * (19.98\ CFS * 1.102\ AC\text{-}FT) / 0.923\ AC\text{-}FT]$

OK 17.80 CFS ≤ 19.08 CFS

THE POST-DEVELOPED FLOWS ARE LESS THAN/EQUAL TO THOSE REQUIRED BY THE ENERGY BALANCE EQUATION. THEREFORE, 9VAC25-870-66B IS SATISFIED THROUGH SUBSECTION #3.

FLOOD PROTECTION:

POST-DEVELOPED $Q_{10} \leq$ PRE-DEVELOPED Q_{10}

OK 38.16 CFS (POST-DEVELOPED Q_{10}) ≤ 39.67 CFS (PRE-DEVELOPED Q_{10}

WATER QUANTITY CALCULATIONS FOR POINT OF ANALYSIS 2:

CHANNEL PROTECTION:

$Q_{AREA\ B+C+D\ POST} \leq [0.8 * (Q_{AREA\ B+C\ PRE} * RV_{AREA\ B+C\ PRE}) / RV_{AREA\ B+C\ POST}] +$ UNDISTURBED AREA E

$\leq [0.8 * (6.60\ CFS * 0.367\ AC\text{-}FT) / 0.522\ AC\text{-}FT] + 0.28$

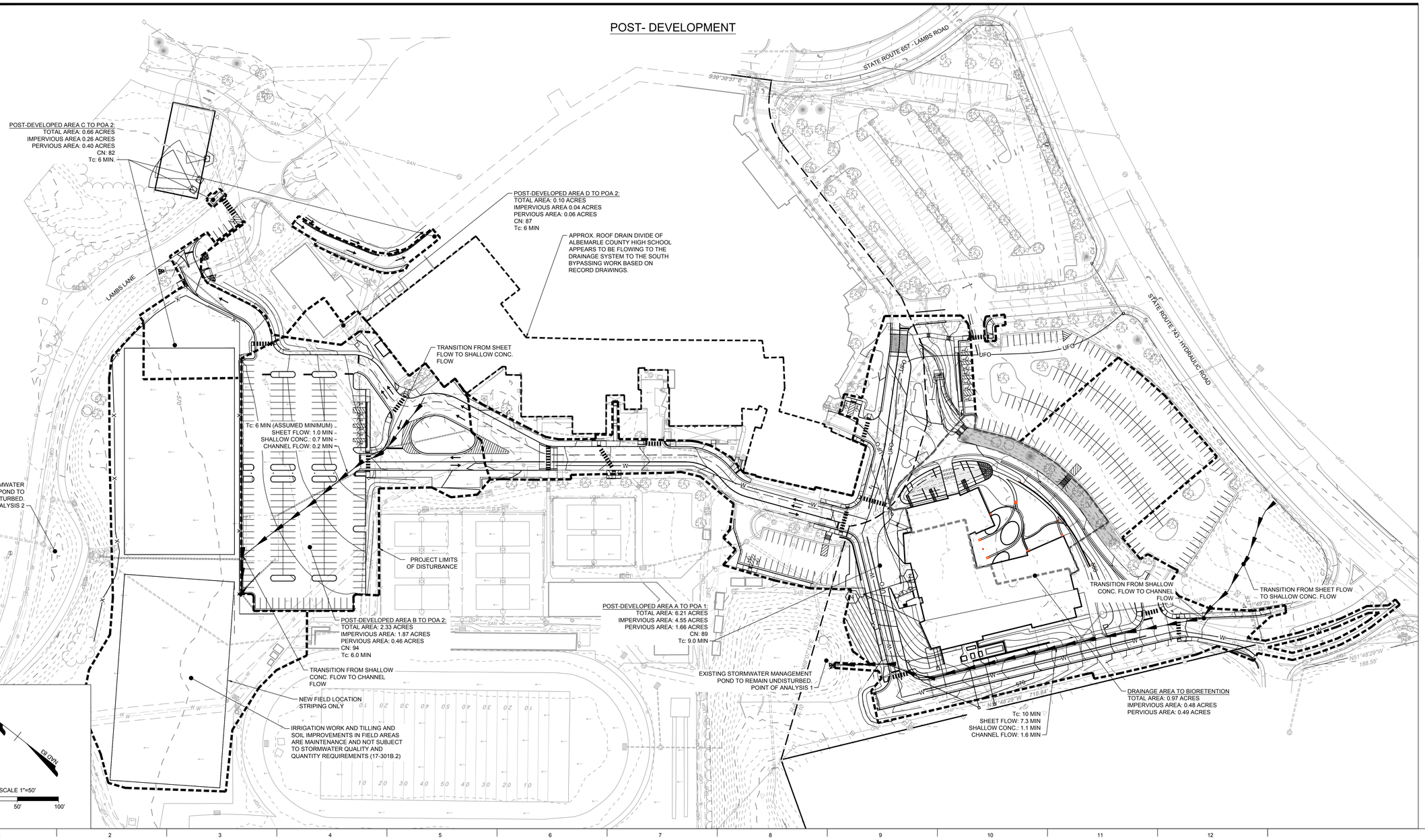
OK 3.53 CFS ≤ 3.99 CFS

FLOOD PROTECTION:

POST-DEVELOPED $Q_{10} \leq$ PRE-DEVELOPED Q_{10}

OK 14.76 CFS (POST-DEVELOPED Q_{10}) ≤ 15.55 CFS (PRE-DEVELOPED Q_{10}

POST- DEVELOPMENT



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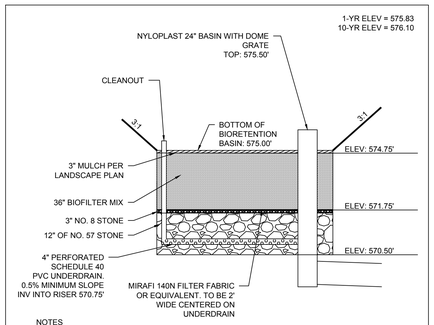
STORMWATER MANAGEMENT PLAN

C6.1

BMP PRACTICE DOCUMENTATION NOTE:

CONTRACTOR SHALL NOTIFY THE TIMMONS GROUP PRIOR TO COMMENCEMENT OF CONSTRUCTION OF BMP PRACTICES. A SPECIFIC PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, INSPECTOR, AND MANUFACTURER IS HIGHLY RECOMMENDED PRIOR TO INSTALLATION OF THE BIOFILTER TO ENSURE THESE PRACTICES ARE NOT ONLY INSTALLED CORRECTLY BUT ALSO DOCUMENTED THROUGHOUT CONSTRUCTION. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO DOCUMENT THE INSTALLATION OF THESE PRACTICES AND IF THEY PROCEED WITH DOING SO IT IS DONE AT THEIR OWN RISK. CONTRACTOR SHALL TAKE NOTES, PICTURES, AND MEASUREMENTS OF ALL STRATA LAYERS WITHIN THE BIORETENTION FACILITY DURING CONSTRUCTION. IT IS HIGHLY RECOMMENDED TO TAKE PICTURES OF EACH MEASUREMENT OF EACH STRATA LAYER. WITHOUT DOCUMENTING TO THIS LEVEL OF DETAIL THE CONTRACTOR RUNS THE RISK OF DIGGING THE FACILITIES BACK UP TO PROVE THE CORRECT SECTIONS WERE INSTALLED.

PLEASE FOLLOW ALL REQUIREMENTS OF THE ALBEMARLE COUNTY SWM AND ESC ANNUAL STANDARDS AND SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HAVE ALL CERTIFICATION ITEMS COMPLETED.



NOTES
1. 36" BIOFILTER MEDIA DEPTH SHALL BE THE MINIMUM DEPTH AFTER A SETTLING PERIOD OF THREE DAYS.

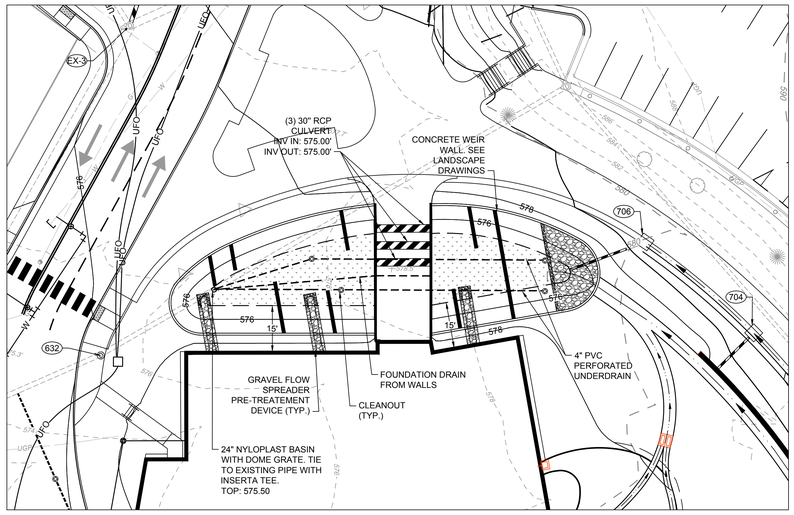
QUALITY SIZING CALCULATION:
DRAINAGE AREA = 0.97 ACRES
IMPERVIOUS = 0.48 ACRES
PERVIOUS = 0.49 ACRES

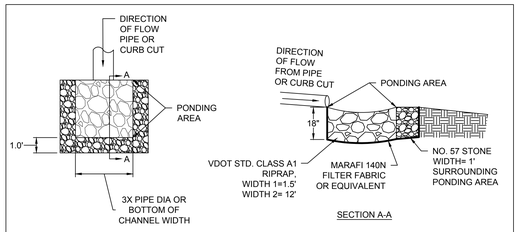
T(v)= 2,026 CF X 1.25 = 2,533 CF

DESIGN STORAGE DEPTH: (3' X 0.25) + (1' X 0.4) + 0.5' PONDING = 1.65'

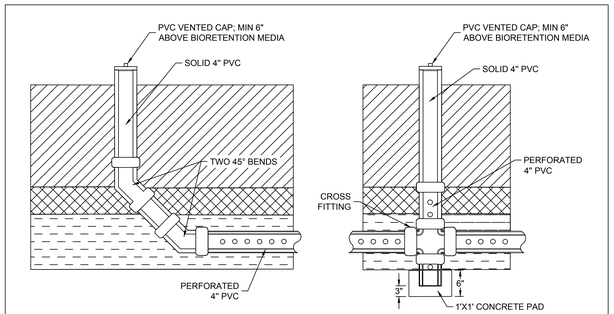
SURFACE AREA REQUIRED: T(v) / DESIGN STORAGE DEPTH -> 2,533/ 1.65' = 1535 SF
SURFACE AREA PROVIDED: 1,660 SF
PRETREATMENT FOREBAY REQUIRED: T(v)*0.15 = 2,533*0.15 = 380 CF
PRETREATMENT FOREBAY PROVIDED: 430 CF

BIORETENTION FACILITY DETAIL (LEVEL 2)
NO SCALE

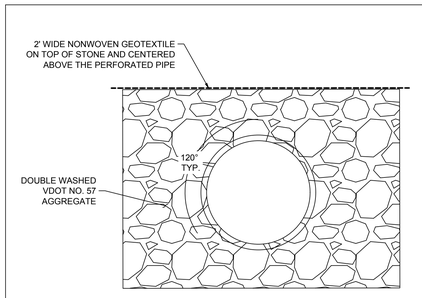




GRAVEL FLOW SPREADER PRE-TREATMENT DEVICE
No Scale

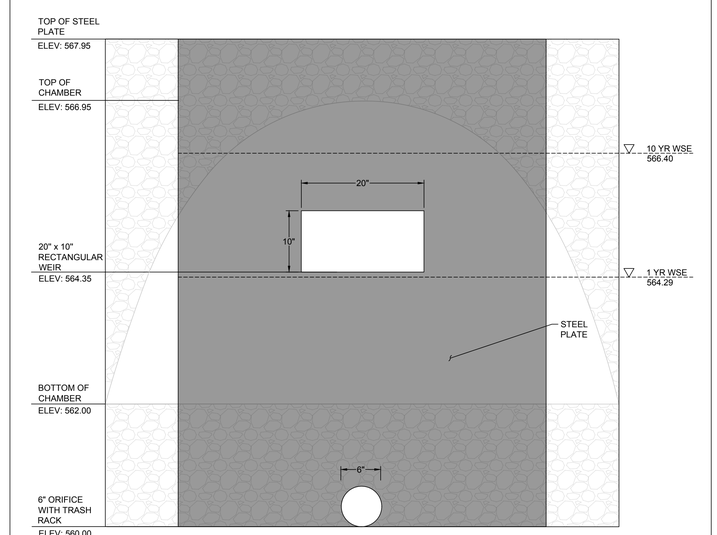


CLEANOUT AND OBSERVATION WELL
NO SCALE



SUBSURFACE PERFORATED PIPE
NO SCALE

DETENTION SYSTEM INSPECTION/MAINTENANCE SCHEDULE:
1. INSPECT PIPE SYSTEM BOTH UPSTREAM AND DOWNSTREAM OF WEIR PLATE CONTROL STRUCTURE FOR SEDIMENT BUILDUP ON A YEARLY BASIS.
2. INSPECT WEIR PLATE CONTROL STRUCTURE FOR CLOGGED ORIFICES ON A YEARLY BASIS. IF ANY CONTROL ORIFICES ARE CLOGGED, REMOVE DEBRIS.
3. EACH DETENTION PIPE SHALL BE CLEANED OUT ANNUALLY, OR MORE FREQUENTLY IF ANNUAL INSPECTION/CLEANING SHOWS MORE SEDIMENT THAN ANTICIPATED.
4. WHILE NOT REQUIRED TO BE INCLUDED IN THE EASEMENT, FEATURES SUCH AS DOWN SPOUTS, ROOF LEADER CONVEYANCES, ROOF PEAKS, YARD INLETS, ETC. ARE STILL SUBJECT TO INSPECTION AND ENFORCEMENT UNDER THE VSMP PROGRAM FOR COMPLIANCE.



SWM WEIR PLATE SECTION DETAIL
FOR LANE STORMKEEPER SYSTEM

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STORMWATER MANAGEMENT NOTES & DETAILS

C6.2

PATH & FILENAME:
PLOTTING DATE & TIME:

LANE

STORMKEEPER™
STORMWATER CHAMBER

STORMWATER CHAMBER SPECIFICATIONS

1. STORMWATER CHAMBERS SHALL BE LANE STORMKEEPER* SK290 OR APPROVED EQUAL.
2. CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPYLENE RESINS.
3. CHAMBERS SHALL PROVIDE CONTINUOUS, UNRESTRICTED INTERNAL SPACE WITH NO INTERNAL SUPPORT PANELS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
4. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASTHO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET FOR A) LONG DURATION DEAD LOADS, AND B) SHORT DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.
5. CHAMBERS SHALL MEET ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS."
6. CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS."
7. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE STORMKEEPER* SK290 SYSTEM

1. LANE STORMKEEPER* SK290 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRECONSTRUCTION MEETING WITH THE INSTALLERS.
2. LANE STORMKEEPER* SK290 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE LANE STORMKEEPER* SK290 INSTALLATION GUIDLINE.
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR LOCATED OVER THE CHAMBERS. LANE RECOMMENDS THREE (3) BACKFILL METHODS.
   A. STONESHOOTER LOCATED OFF THE CHAMBER BED.
   B. BACKFILL AS ROWS ARE BEING BUILT WITH AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   C. BACKFILL FROM OUTSIDE THE EXCAVATION UTILIZING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED BEFORE PLACING STONE.
6. MAINTAIN MINIMUM NINE INCH (9") SPACING BETWEEN CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12 INCHES INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING THE CHAMBERS MUST BE CLEAN, CRUSHED, ANGULAR STONE %" TO 2".
9. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION SUBGRADE MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.

NOTES FOR CONSTRUCTION EQUIPMENT

1. LANE STORMKEEPER * SK290 CHAMBERS ARE TO BE INSTALLED IN ACCORDANCE WITH INSTALLATION GUIDELINES.
2. THE USE OF CONSTRUCTION EQUIPMENT OVER THE LANE STORMKEEPER CHAMBERS IS LIMITED.
   A. NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   B. NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED OVER THE CHAMBERS UNTIL PROPER FILL DEPTHS ARE ACHIEVED IN ACCORDANCE WITH THE STORMKEEPER SK290 INSTALLATION GUIDE.
   C. WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE STORMKEEPER SK290 INSTALLATION GUIDE.
3. A MINIMUM COVER OF 30" OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
4. DURING NORMAL PAVING OPERATIONS, DUMP TRUCK AXLE LOADS ON 24" OF COVER FOR THE STORMKEEPER CHAMBER MAY BE NECESSARY. PRECAUTIONS SHOULD BE TAKEN TO AVOID RUTTING OF THE ROAD BASE LAYER, TO ENSURE THAT COMPACTION REQUIREMENTS HAVE BEEN MET AND THAT A MIN OF 24" OF COVER EXISTS OVER THE CHAMBERS.

   USE OF A DOZER TO PUSH EMBEDDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMKEEPER STANDARD WARRANTY.

   CONTACT LANE ENTERPRISES WITH QUESTIONS ON INSTALLATION REQUIREMENTS OR CONSTRUCTION LOADING AND EQUIPMENT.

HIGH SCHOOL CENTER II
ALBEMARLE COUNTY PUBLIC SCHOOLS
CHARLOTTESVILLE, VA
SK290 CHAMBER SYSTEM
LANE ENTERPRISES, INC.

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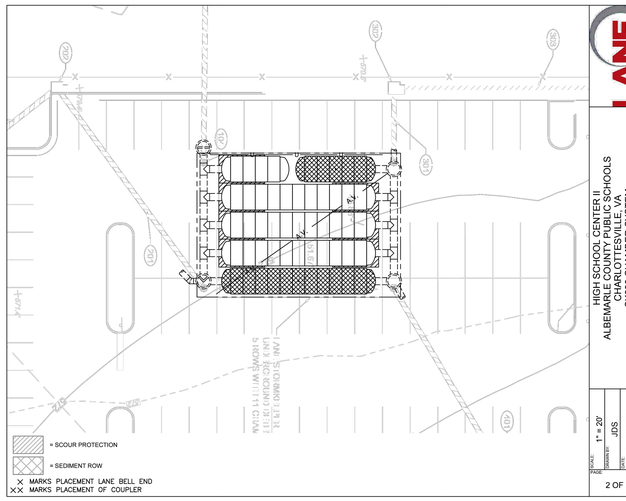
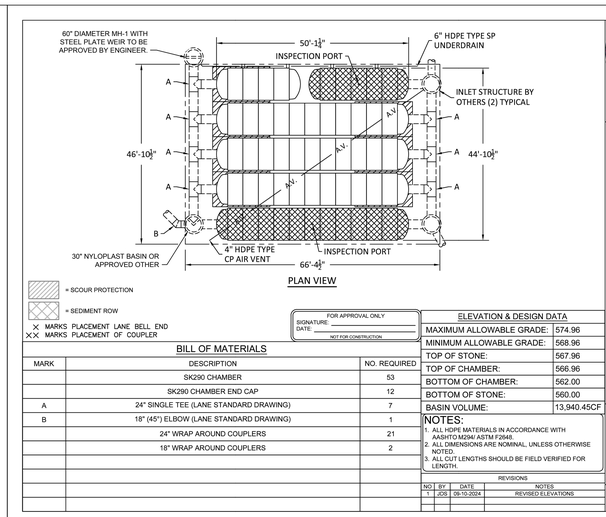


SCALE: 1" = 20' | DRAWN BY: JDS | DATE: 07-12-2024 | DRAWING NO: C1934 | PAGE: 2 OF 12



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DATE:
NOT FOR CONSTRUCTION

BILL OF MATERIALS

MARK	DESCRIPTION	NO. REQUIRED
	SK290 CHAMBER	53
	SK290 CHAMBER END CAP	12
A	24" SINGLE TEE (LANE STANDARD DRAWING)	7
B	18" (45°) ELBOW (LANE STANDARD DRAWING)	1
	24" WRAP AROUND COUPLERS	21
	18" WRAP AROUND COUPLERS	2

ELEVATION & DESIGN DATA

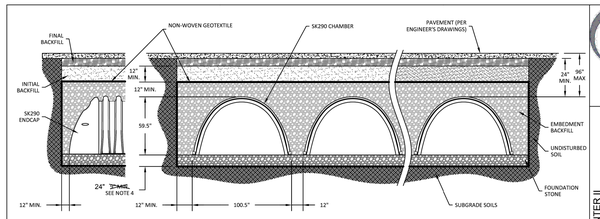
MAXIMUM ALLOWABLE GRADE:	574.96
MINIMUM ALLOWABLE GRADE:	568.96
TOP OF STONE:	567.96
TOP OF CHAMBER:	566.96
BOTTOM OF CHAMBER:	562.00
BOTTOM OF STONE:	560.00
BASIN VOLUME:	13,940.45CF

NOTES:
1. ALL HDPE MATERIALS IN ACCORDANCE WITH AASHTO M294/ ASTM F2648.
2. ALL DIMENSIONS ARE NOMINAL, UNLESS OTHERWISE NOTED.
3. ALL CUT LENGTHS SHOULD BE FIELD VERIFIED FOR LENGTH.

SCALE: 1/16" = 1" | DRAWN BY: JDS | DATE: 07-12-2024 | DRAWING NO: C1934 | PAGE: 3 OF 12

REVISIONS

NO	BY	DATE	NOTES
1	JDS	09-10-2024	REVISED ELEVATIONS



NOTES:

1. CHAMBER SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST INSTALLATION GUIDELINES.
2. SUBGRADE: TRENCH BOTTOMS WITH UNSTABLE OR UNYIELDING MATERIAL SHALL BE EXCAVATED TO A DEPTH DIRECTED BY THE ENGINEER AND REPLACED WITH SUITABLE MATERIAL. FOR UNSTABLE MATERIALS, GEOTEXTILE MAY BE USED TO STABILIZE THE TRENCH BOTTOM, IF DIRECTED BY THE ENGINEER. THE DESIGN ENGINEER IS RESPONSIBLE FOR VERIFYING SUBGRADE SUITABILITY.
3. GEOTEXTILE: AN AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE SHALL BE USED TO PREVENT ADJACENT MATERIALS FROM MIGRATING INTO THE FOUNDATION AND EMBEDMENT ZONES.
4. FOUNDATION STONE: SUITABLE MATERIAL SHALL BE A ¾ TO 2 INCH, CLEAN, CRUSHED, ANGULAR STONE (AASHTO M43 SIZES NO. 3 OR 4). MINIMUM FOUNDATION STONE THICKNESS SHALL BE ~~3 INCHES AND MORE AS SHOWN NECESSARY~~ PER TABLE 1. COMPACTION REQUIREMENTS ARE MET WHEN PLACED AND COMPACTED IN 9 INCH MAXIMUM LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
5. EMBEDMENT STONE: SUITABLE MATERIAL SHALL BE A ¾ TO 2 INCH, CLEAN, CRUSHED, ANGULAR STONE (AASHTO M43 SIZES NO. 3 OR 4). EMBEDMENT STONE SHALL EXTEND FROM THE TOP OF THE FOUNDATION STONE TO NOT LESS THAN 12 INCHES ABOVE THE CHAMBER. NO COMPACTION IS REQUIRED WHEN STONE IS PROPERLY PLACED ON AND AROUND THE CHAMBERS (NOTE: MANIFOLD INSTALLATION WILL REQUIRE STANDARD PIPE INSTALLATION PRACTICES).
6. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE (1) A GRANULAR, WELL-GRADED, SOIL-AGGREGATE MIXTURE WITH LESS THAN 35% FINES PER AASHTO M145, OR (2) A CLEAN, CRUSHED, ANGULAR STONE WITH AASHTO M43 SIZES NO. 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, OR 10. NOTE THAT PAVEMENT SUBBASE MAY COMPRISE A PORTION OF THIS LAYER. COMPACT CLEAN MATERIALS (LESS THAN 5% FINES) IN MAXIMUM 12 INCH LIFTS TO A MINIMUM 95% RELATIVE COMPACTION AND ALL OTHER MATERIALS IN MAXIMUM 6 INCH LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY UNLESS DIRECTED DIFFERENTLY BY THE ENGINEER. INITIAL BACKFILL SHALL EXTEND FROM TOP OF EMBEDMENT STONE TO NOT LESS THAN 24 INCHES ABOVE THE CHAMBER.
7. FINAL BACKFILL: SUITABLE MATERIALS, COMPACTION LIFTS, AND COMPACTION LEVELS AS DIRECTED BY THE ENGINEER. FINAL BACKFILL SHALL EXTEND FROM THE TOP OF THE INITIAL BACKFILL AND CONSTRUCTED TO A HEIGHT IN WHICH THE FINAL GRADE IS NO MORE THAN 96 INCHES ABOVE THE CHAMBER.
8. MINIMUM COVER: A MINIMUM COVER OF 24 INCHES IS REQUIRED TO SUPPORT A PAVING OPERATION WHEN THE SUBBASE AND BASE COURSES HAVE BEEN CONSTRUCTED TO ROADWAY STANDARDS. CONSIDERATIONS SHALL BE MADE TO INCREASE THE MINIMUM COVER TO OFFSET RUTTING POTENTIALS WHEN THE SURFACE IS LEFT UNPAVED AND LIABLE FOR TRAFFIC AND/OR CONSTRUCTION LOADINGS. SEE ALSO PAGE 1 "NOTES FOR CONSTRUCTION EQUIPMENT."
9. LOAD RATING: A PAVEMENT CONSTRUCTED ON PROPERLY PREPARED SUBBASE AND BASE COURSES WILL SUPPORT STANDARD HIGHWAY DESIGN TRUCKS (I.E. HS-20, HS-25, HL-93).

LOCATION	ELEVATION
MAXIMUM FINISHED GRADE OVER SYSTEM	572.26
MINIMUM FINISHED GRADE OVER SYSTEM	570.60
BOTTOM OF PAVEMENT ELEVATION	570.18
MINIMUM INITIAL BACKFILL ELEVATION (SEE NOTE #6)	568.96
TOP OF EMBEDMENT STONE	567.96
INVERT AIR RELIEF VENT	567.63
TOP OF CHAMBER ELEVATION	566.96
INVERT OF 24" MANIFOLD (TOP)	564.25
INVERT OF 24" MANIFOLD (BOTTOM)	562.24
CHAMBER INVERT ELEVATION	562.00
INVERT OF UNDERDRAIN	560.00
BOTTOM OF STONE ELEVATION	560.00
MINIMUM ALLOWABLE BEARING CAPACITY (KSF) = 2.2 ksf	

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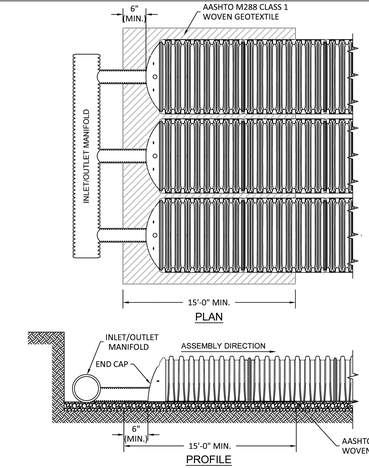

SCOUR PROTECTION DETAIL

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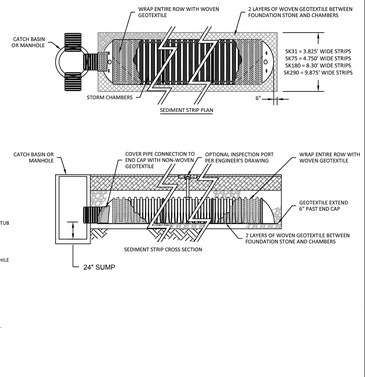
SEDIMENT STRIP INSPECTION AND MAINTENANCE

GENERAL NOTES:

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST INSPECTION SCHEDULE INTERVAL BASED ON PREVIOUS OBSERVATIONS OF ACCUMULATED SEDIMENT OR HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS REQUIRED.

INSPECTION STEPS:

1. INSPECT SEDIMENT STRIP FOR SEDIMENT
   A. USING INSPECTION PORT
      I. REMOVE LID ON INLINE BASIN
      II. USING A FLASHLIGHT AND STADIA ROD, MEASURE THE DEPTH OF SEDIMENT AND RECORD ON A MAINTENANCE LOG.
      III. LOWER A CAMERA INTO THE SEDIMENT STRIP FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL).
      IV. IF SEDIMENT IS AT OR ABOVE 3" PROCEED TO STEP 2 BELOW. IF NOT, PROCEED TO STEP 3.
   B. USING UPSTREAM STRUCTURES
      I. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF SEDIMENT STRIP.
      II. USING A FLASHLIGHT, INSPECT DOWN THE SEDIMENT STRIP THROUGH THE OUTLET PIPE.
      III. MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY.
      IV. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING A MANHOLE.
      V. IF SEDIMENT IS AT OR ABOVE 3" PROCEED TO STEP 2 BELOW. IF NOT, PROCEED TO STEP 3.
2. CLEAN OUT SEDIMENT STRIP USING TRUCKS FURNISHED WITH WATER JETTING AND VACUUM EQUIPMENT.
   A. FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 48" OR MORE IS PREFERRED.
   B. REMOVE MANHOLE LID/GRATE TO ACCESS MANHOLE CAVITY.
   C. LOWER THE HOSE AND NOZZLE INTO THE STRUCTURE AND SEDIMENT STRIP INLET STUB ABOVE THE MANHOLE SUMP.
   D. THE VACUUM HOSE MAY BE POSITIONED IN THE MANHOLE SUMP AS THE JETTING ACTION PROPELS THE NOZZLE INTO AND UP THE SEDIMENT STRIP.
   E. ONCE THE NOZZLE REACHES THE END OF THE SEDIMENT STRIP, PULL BACK ACCUMULATED MATERIAL TOWARDS THE MANHOLE WITH THE JETTING ACTION WHILE THE NOZZLE IS REELED BACK TOWARDS THE MANHOLE.
   F. WHILE MATERIAL IS BEING PULLED BACK, THE VACUUM ACTION IS REMOVING MATERIAL FROM THE SUMP.
   G. REPEAT THE PROCESS UNTIL A CLEAR EFFLUENT IS OBSERVED.
   H. VACUUM STRUCTURE SUMP AS REQUIRED.
3. REPLACE ALL COVERS, GRATES, FILTERS, LIDS, ETC.
4. RECORD OBSERVATIONS AND ACTIONS.
5. INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMKEEPER SYSTEM.



NOTE: ALL FITTING DIMENSIONS ARE FOR REFERENCE ONLY.
ALL WOVEN GEOTEXTILE TO BE AASHTO M288 CLASS I.

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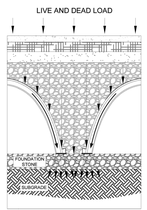
TABLE 1: SK290 FOUNDATION STONE DEPTH REQUIREMENTS (INCHES)

Cover Height ft	SK290 Minimum Required Bearing Capacity of Native Soil Subgrade, ksf																			
	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.3	3.2	3.1	3.0	2.9	2.8	2.7	2.6	2.5	2.4	2.3	2.2	2.1	2.0
2.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	18.0	15.0	15.0
2.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	15.0	18.0	15.0	18.0
3.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	15.0	15.0	15.0	18.0	18.0	18.0
3.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	18.0	18.0	24.0	24.0
4.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	24.0	24.0	24.0
4.5	9.0	9.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	30.0
5.0	9.0	9.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	30.0	30.0
5.5	9.0	9.0	9.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0
6.0	9.0	9.0	9.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0	30.0
6.5	9.0	9.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0	30.0	30.0
7.0	9.0	12.0	12.0	12.0	12.0	12.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0	30.0	30.0	36.0
7.5	12.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0	30.0	36.0	36.0
8.0	12.0	12.0	12.0	15.0	15.0	15.0	15.0	18.0	18.0	18.0	18.0	24.0	24.0	24.0	24.0	24.0	30.0	30.0	30.0	36.0	36.0	36.0

CONTRACTOR TO CONFIRM WITH GEOTECH INSPECTOR THAT SOIL BEARING CAPACITY MEETS 2.2 KSF BEFORE BEGINNING CONSTRUCTION OR COORDINATE WITH ENGINEER.



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REVISIONS

NO	BY	DATE	NOTES

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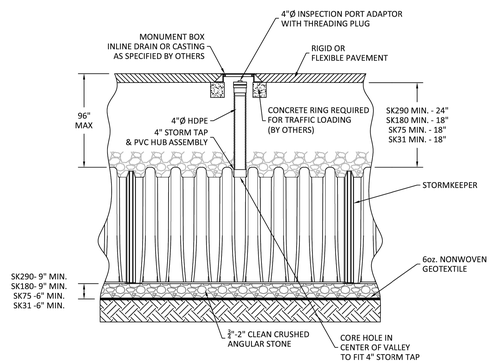

TYP. 4"Ø INSPECTION PORT

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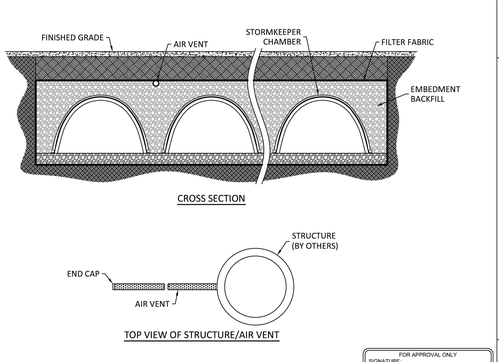

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NOTES:
1. LOCATE AIR VENT AS SHOWN ON SYSTEM LAYOUT.
2. TERMINATE AIR VENT INTO STRUCTURE. VENTED TO ATMOSPHERE.
3. ALL 4" PIPE IS HDPE TYPE CP, TYPE C IF OUTSIDE OF STONE BED.
4. ALL GEOMETRIC TOLERANCES IN ACCORDANCE WITH AASHTO/ASTM SPECIFICATIONS.
5. ALL HDPE MATERIALS IN ACCORDANCE WITH AASHTO M294/ ASTM F2648.
6. ALL DIMENSIONS ARE NOMINAL, UNLESS OTHERWISE NOTED.

TYPICAL AIR VENT DETAIL

SCALE: N.T.S. | DRAWN BY: JDS | DATE: 07-12-2024 | DRAWING NO: C1934 | PAGE: 9 OF 12

* OR APPROVED EQUAL

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
Jonathan M. Showalter
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

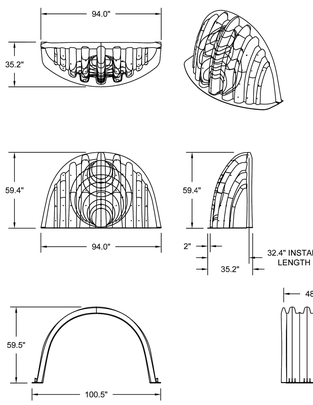
PROJECT MANAGER: J. Showalter | DRAWN BY: S. Kirby/A. Flint

QEA No.41991390

BID DOCUMENTS
10/08/2024

LANE STORMKEEPER NOTES & DETAILS

C6.3



StormKeeper SK290 End Caps	
Nominal Dimensions	
Size (L x W x H)	35.2" x 94" x 59.4"
End Cap Storage	39.6 cf
Min Installed Storage	109.5 cf
Weight	82 lbs

StormKeeper SK290 Chamber	
Nominal Dimensions	
Size (L x W x H)	52.8" x 100.5" x 59.5"
Chamber Storage	109.7 cf
Min Installed Storage	163.9 cf
Weight	125 lbs

LANE

HIGH SCHOOL CENTER II
ALBEMARLE COUNTY PUBLIC SCHOOLS
CHARLOTTESVILLE, VA
SK290 CHAMBER SYSTEM
LANE ENTERPRISES, INC.

SCALE: N.T.S.
DESIGNED BY: JDS
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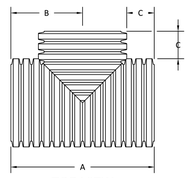


TOP VIEW

PIPE SIZE	PART #	A	B	C
6"	HDFT06T/S	12.50"	6.25"	2.75"
8"	HDFT08T/S	15.50"	7.75"	3.00"
10"	HDFT10T/S	18.50"	9.25"	3.25"
12"	HDFT12T/S	23.50"	11.75"	4.50"
15"	HDFT15T/S	31.00"	15.50"	6.75"
18"	HDFT18T/S	35.50"	17.75"	7.00"
24"	HDFT24T/S	47.25"	23.50"	9.75"
30"	HDFT30T/S	56.00"	28.00"	10.75"
36"	HDFT36T/S	64.00"	32.00"	11.50"
42"	HDFT42T/S	74.75"	37.25"	13.50"
48"	HDFT48T/S	74.75"	37.25"	10.00"
60"	HDFT60T/S	90.00"	45.00"	11.75"

FOR APPROVAL ONLY
SIGNATURE: _____
DATE: _____
NOT FOR CONSTRUCTION

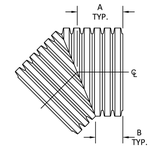
NOTES:
1. ALL 24" HDPE FITTINGS ARE SOLID PIPE.
2. ALL GEOMETRIC TOLERANCES IN ACCORDANCE WITH AASHTO/ASTM SPECIFICATIONS.
3. ALL HDPE MATERIALS IN ACCORDANCE WITH AASHTO M294/ ASTM F2648.
4. ALL DIMENSIONS ARE NOMINAL, UNLESS OTHERWISE NOTED.
5. ALL CUT LENGTHS SHOULD BE FIELD VERIFIED FOR LENGTH.

FITTING "A" DETAIL
-(7) REQUIRED-

LANE

HIGH SCHOOL CENTER II
ALBEMARLE COUNTY PUBLIC SCHOOLS
CHARLOTTESVILLE, VA
SK290 CHAMBER SYSTEM
LANE ENTERPRISES, INC.

SCALE: N.T.S.
DESIGNED BY: JDS
DATE: 07-12-2024
DRAWING NO.: C1934
PAGE: 11 OF 12



TOP VIEW

PIPE SIZE	PART #	A	B
4"	HDFT04EL45/S	3.50"	2.50"
6"	HDFT06EL45/S	5.00"	3.00"
8"	HDFT08EL45/S	5.25"	3.50"
10"	HDFT10EL45/S	7.00"	4.50"
12"	HDFT12EL45/S	8.75"	5.75"
15"	HDFT15EL45/S	11.50"	8.00"
18"	HDFT18EL45/S	13.25"	9.00"
24"	HDFT24EL45/S	17.75"	12.00"
30"	HDFT30EL45/S	17.75"	10.75"
36"	HDFT36EL45/S	18.00"	9.50"
42"	HDFT42EL45/S	24.00"	14.25"
48"	HDFT48EL45/S	24.00"	12.75"
60"	HDFT60EL45/S	25.25"	12.25"

FOR APPROVAL ONLY
SIGNATURE: _____
DATE: _____
NOT FOR CONSTRUCTION

NOTES:
1. ALL 18" HDPE FITTINGS ARE SOLID PIPE.
2. ALL GEOMETRIC TOLERANCES IN ACCORDANCE WITH AASHTO/ASTM SPECIFICATIONS.
3. ALL HDPE MATERIALS IN ACCORDANCE WITH AASHTO M294/ ASTM F2648.
4. ALL DIMENSIONS ARE NOMINAL, UNLESS OTHERWISE NOTED.
5. ALL CUT LENGTHS SHOULD BE FIELD VERIFIED FOR LENGTH.

FITTING "B" DETAIL
-(1) REQUIRED-

LANE

HIGH SCHOOL CENTER II
ALBEMARLE COUNTY PUBLIC SCHOOLS
CHARLOTTESVILLE, VA
SK290 CHAMBER SYSTEM
LANE ENTERPRISES, INC.

SCALE: N.T.S.
DESIGNED BY: JDS
DATE: 07-12-2024
DRAWING NO.: C1934
PAGE: 12 OF 12

* **OR APPROVED EQUAL**

QUINN EVANS

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RICHMOND, VA 23220

v 804.788.4774

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Jonathan Showalter
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No. Date Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

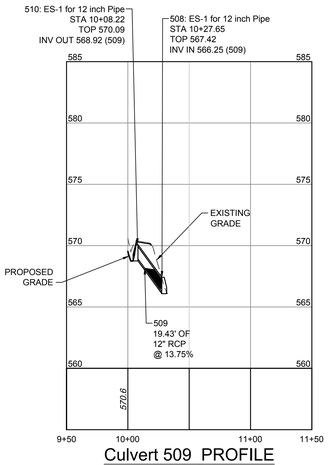
QEA No.41911390

BID DOCUMENTS
10/08/2024

LANE STORMKEEPER NOTES & DETAILS

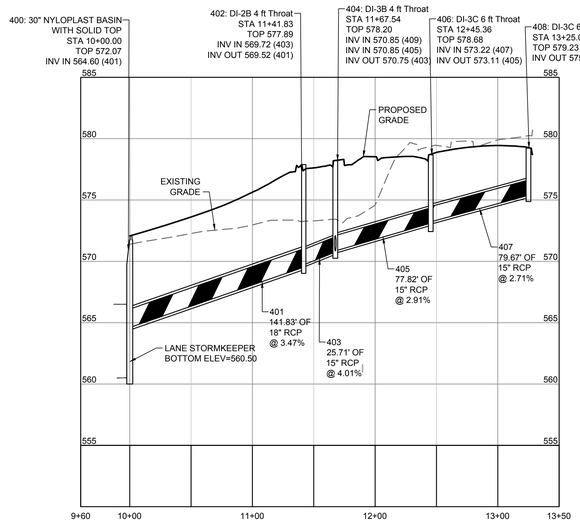
C6.4

PATH & FILENAME:
PLOTTING DATE & TIME:



Culvert 509 PROFILE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



STORM SEWER PROFILE - STR 408- STORAGE

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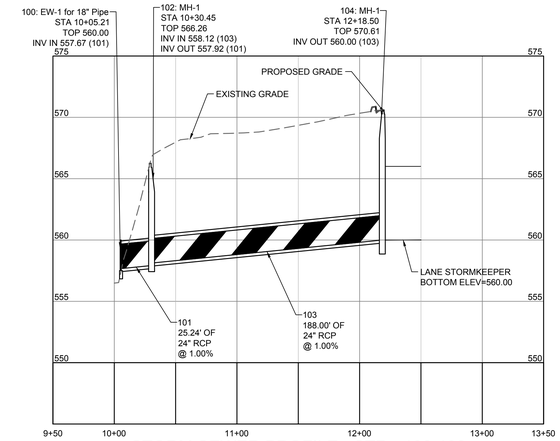
VERT SCALE: 1"=5



STORM SEWER PROFILE - STR - 106-102

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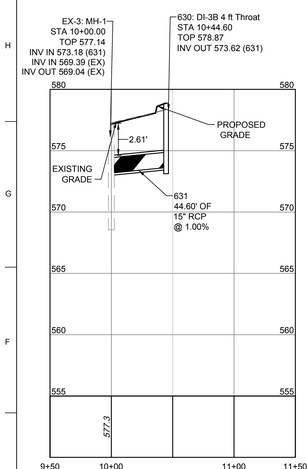
VERT SCALE: 1"=5



STORM SEWER PROFILE - EX-3-630

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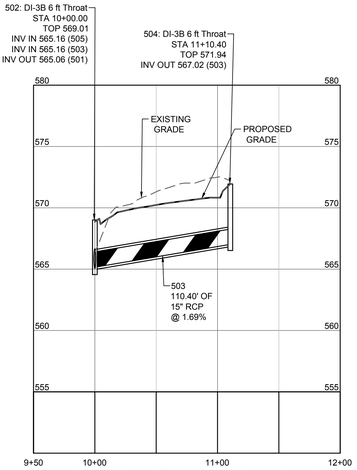

STORM SEWER PROFILE - STR 502-504

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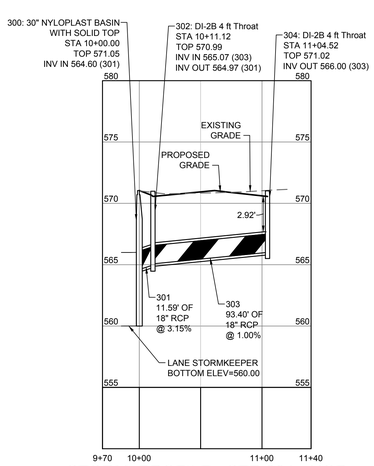

STORM PROFILE - STR 304 - UGP

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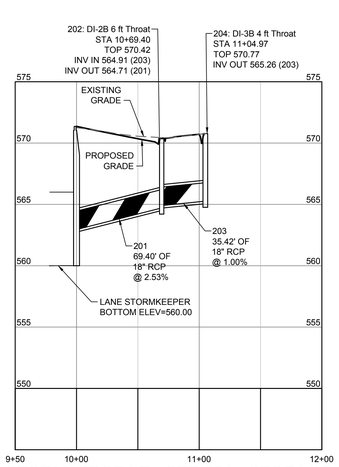
VERT SCALE: 1"=5



STORM PROFILE - STR 204 - STORAGE

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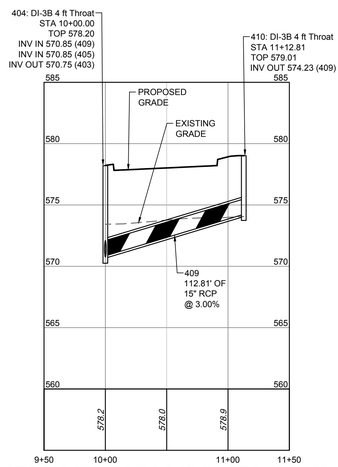

STORM SEWER PROFILE - STR 404-410

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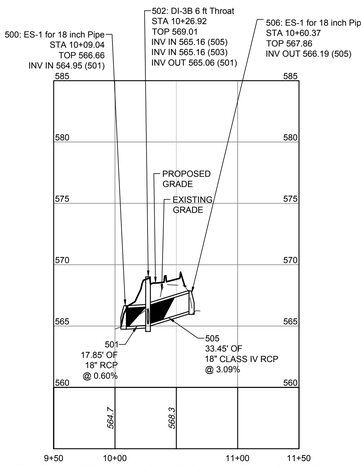
VERT SCALE: 1"=5



STORM SEWER PROFILE - STR 500-506

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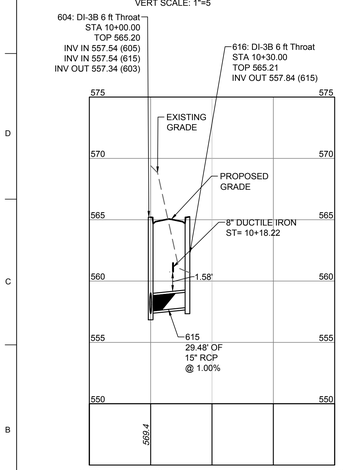

STORM SEWER PROFILE - STR 616-604

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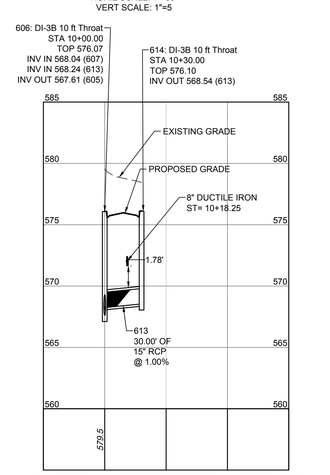

STORM SEWER PROFILE - STR 606-614

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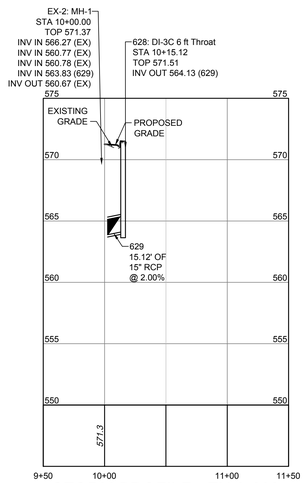
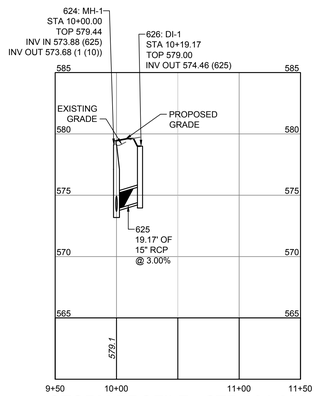


STORM PROFILE - EX-2-628

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



STORM PROFILE - STR 624-626

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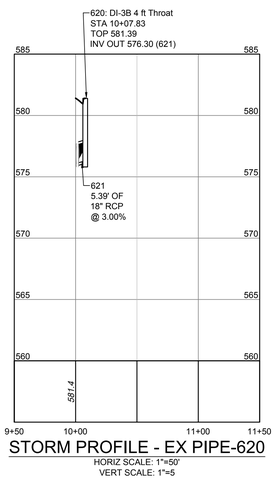
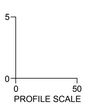


STORM PROFILE - EX PIPE-620

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



PATH & FILENAME:
PLOTTING DATE & TIME:

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PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
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Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

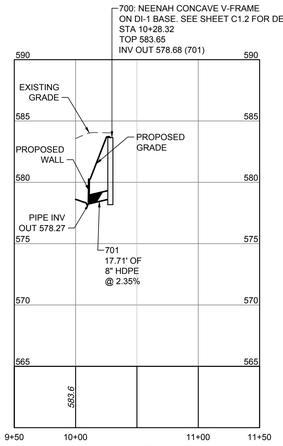
PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

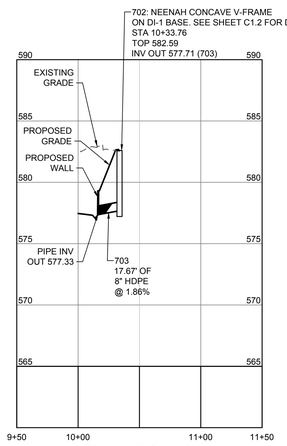
BID DOCUMENTS
10/08/2024

STORM PROFILES

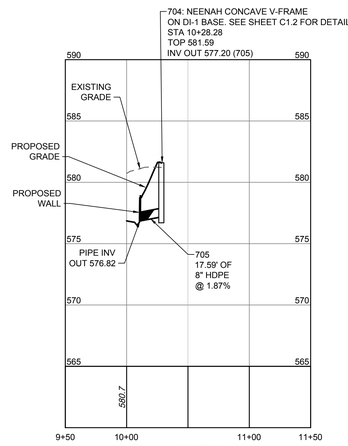
C7.0



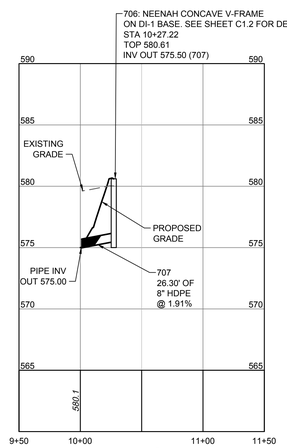
700- PROFILE
HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



702- PROFILE
HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



704 - PROFILE
HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



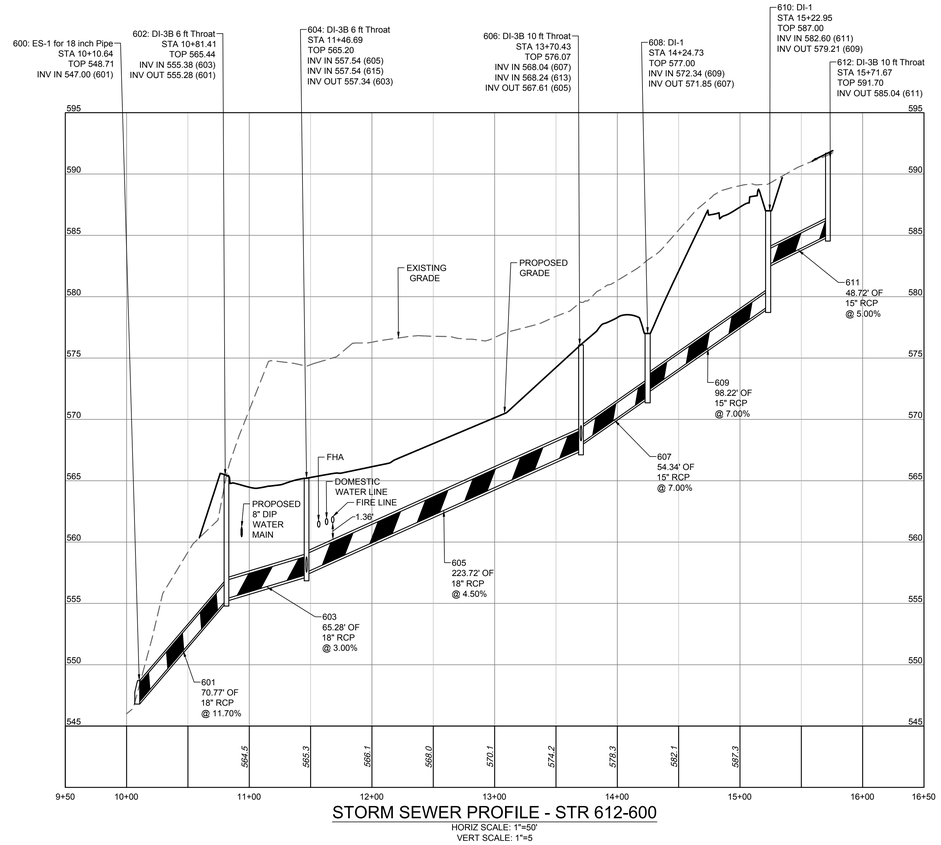
706 - PROFILE
HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5

STORM STRUCTURE TABLE

STRUCTURE #	TOP	STRUCTURE HEIGHT	DESCRIPTION
EX-DI 1	560.90	7.10'	DI-1
EX-2	571.37	10.70'	MH-1
EX-3	577.14	8.10'	MH-1
EX-4	584.44	5.90'	DI-3B 6 ft Throat
100	560.00		EW-1 for 18" Pipe
102	566.26	8.34'	MH-1
104	570.61	11.25'	60" MH-1
200	571.36	10.86'	30" Basin - Solid Top
202	570.42	5.71'	DI-2B 6 ft Throat
204	570.77	5.51'	DI-3B 4 ft Throat
300	571.05	10.55'	30" Basin - Solid Top
302	570.99	6.02'	DI-2B 4 ft Throat
304	571.02	5.02'	DI-2B 4 ft Throat
400	572.07	11.57'	30" Basin - Solid Top
402	577.89	8.37'	DI-2B 4 ft Throat
404	578.20	7.45'	DI-3B 4 ft Throat
406	578.68	5.75'	DI-3C 6 ft Throat
408	579.23	3.85'	DI-3C 6 ft Throat
410	579.46	5.22'	DI-3B 4 ft Throat
500	566.66		ES-1 for 18 inch Pipe
502	569.01	3.95'	DI-3B 6 ft Throat
504	571.94	4.92'	DI-3B 6 ft Throat
506	567.86		ES-1 for 18 inch Pipe
508	567.42		ES-1 for 12 inch Pipe
510	570.09		ES-1 for 12 inch Pipe
600	548.44		ES-1 for 15 inch Pipe
602	565.44	8.95'	DI-3B 6 ft Throat
604	565.20	7.86'	DI-3B 6 ft Throat
606	576.07	8.46'	DI-3B 10 ft Throat
608	577.00	5.15'	DI-1
610	587.00	7.79'	DI-1
612	591.70	6.67'	DI-3B 10 ft Throat
614	576.10	7.56'	DI-3B 10 ft Throat
616	565.21	7.38'	DI-3B 6 ft Throat
620	581.39	5.09'	DI-3B 4 ft Throat
622	584.84	4.63'	DI-3B 6 ft Throat
624	579.44	5.76'	MH-1
626	579.00	4.54'	DI-1
628	571.51	7.38'	DI-3C 6 ft Throat
630	578.87	5.24'	DI-3B 4 ft Throat
632	576.63	8.55'	MH-1
634	570.15	4.49'	DI-1
636	573.81	3.19'	DI-2B 4 ft Throat
700	583.65	5.05'	DI-1
702	582.59	4.95'	DI-1
704	581.59	4.47'	DI-1
706	580.61	5.16'	DI-1
800	583.24	4.85'	MH-1
900	575.00	5.46'	18" Basin - Circular Grate

STORM PIPE TABLE

PIPE #	DIA	FROM - TO	UPSTREAM INVERT	DOWNSTREAM INVERT	SLOPE	LENGTH	DESCRIPTION
101	24"	102 - 100	557.92	557.67	1.00%	25.24 LF	24 inch RCP
103	24"	104 - 102	560.00	558.12	1.00%	188.00 LF	24 inch RCP
201	18"	200 - 202	562.95	564.71	2.53%	69.40 LF	18 inch RCP
203	18"	204 - 202	565.26	564.91	1.00%	35.42 LF	18 inch RCP
301	18"	302 - 300	564.97	564.60	3.15%	11.59 LF	18 inch RCP
303	18"	304 - 302	566.00	565.07	1.00%	93.40 LF	18 inch RCP
401	18"	402 - 400	569.52	564.60	3.47%	141.83 LF	18 inch RCP
403	15"	402 - 404	569.72	570.75	4.01%	25.71 LF	15 inch RCP
405	15"	406 - 404	573.11	570.85	2.91%	77.82 LF	15 inch RCP
407	15"	408 - 406	575.38	573.22	2.71%	79.67 LF	15 inch RCP
409	15"	410 - 404	574.23	570.85	3.00%	112.81 LF	15 inch RCP
501	18"	502 - 500	565.06	564.95	0.60%	17.85 LF	18 inch RCP
503	15"	504 - 502	567.02	565.16	1.69%	110.40 LF	15 inch RCP
505	18"	506 - 502	566.19	565.16	3.09%	33.45 LF	18 inch RCP
509	12"	510 - 508	568.92	566.25	13.75%	19.43 LF	15 inch RCP
601	15"	602 - 600	555.28	547.00	11.70%	70.77 LF	18 inch RCP
603	15"	604 - 602	557.34	555.38	3.00%	65.28 LF	18 inch RCP
605	15"	606 - 604	567.61	557.54	4.50%	223.72 LF	18 inch RCP
607	15"	608 - 606	571.85	568.04	7.00%	54.34 LF	15 inch RCP
609	15"	610 - 608	579.21	572.34	7.00%	98.22 LF	15 inch RCP
611	15"	612 - 610	585.04	582.60	5.00%	48.72 LF	15 inch RCP
613	15"	614 - 606	568.54	568.24	1.00%	30.00 LF	15 inch RCP
615	15"	616 - 604	557.84	557.54	1.00%	29.48 LF	15 inch RCP
621	18"	620 -	576.30	576.14	3.00%	5.39 LF	18 inch RCP
625	15"	626 - 624	574.46	573.88	3.00%	19.17 LF	15 inch RCP
629	15"	628 - EX-2	564.13	563.83	2.00%	15.12 LF	15 inch RCP
631	15"	630 - EX-3	573.62	573.18	1.00%	44.60 LF	15 inch RCP
701	8"	700 -	578.68	578.27	2.35%	17.71 LF	8" HDPE
703	8"	702 -	577.71	577.38	2.00%	16.42 LF	8" HDPE
705	8"	704 -	577.20	576.87	2.00%	16.44 LF	8" HDPE
707	8"	706 -	575.50	575.00	2.00%	25.10 LF	8" HDPE



STORM SEWER PROFILE - STR 612-600
HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5

5
0
0 50
PROFILE SCALE

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SUITE 400
RICHMOND, VA 23220
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Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
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No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

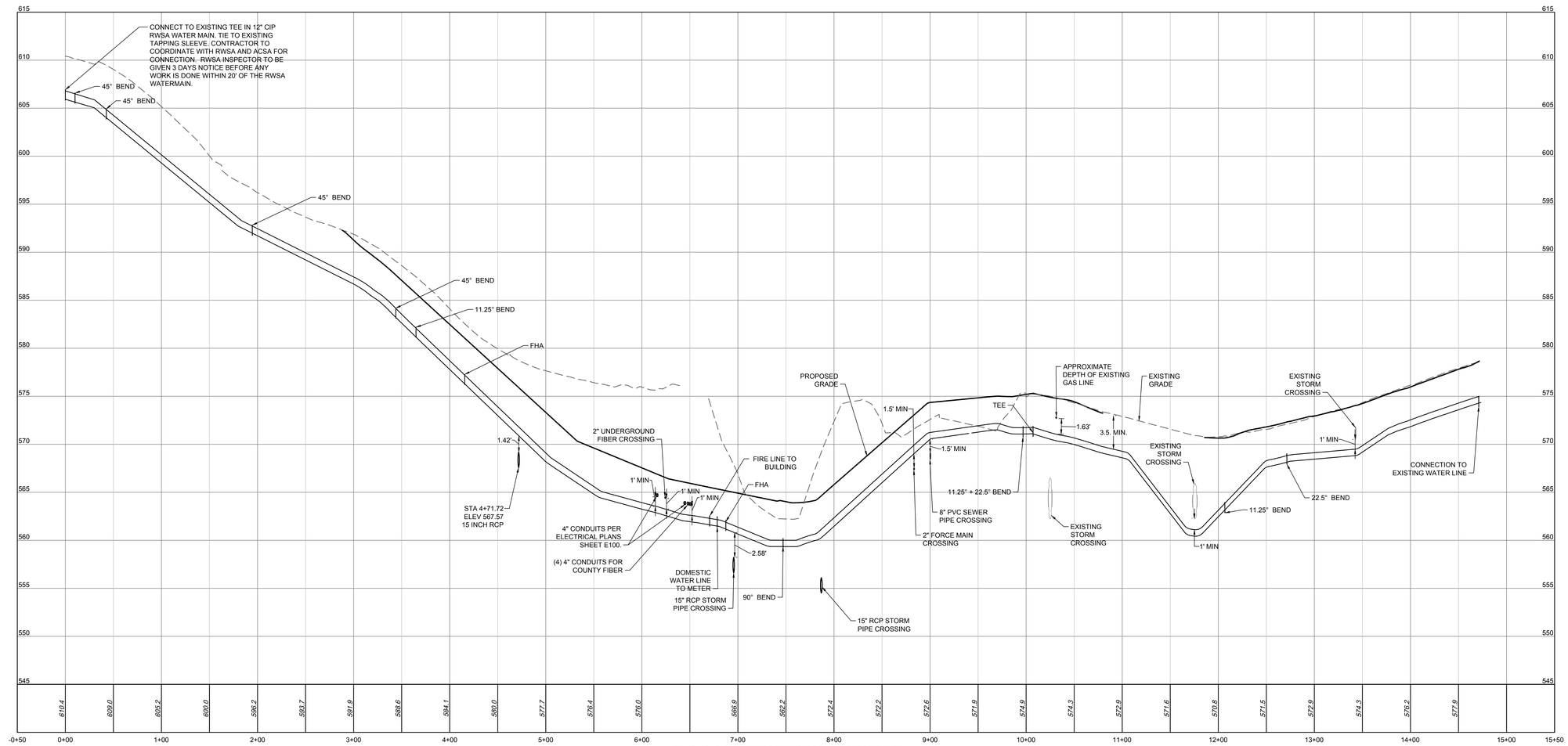
QEA No.41911390

BID DOCUMENTS
10/08/2024

STORM PROFILES

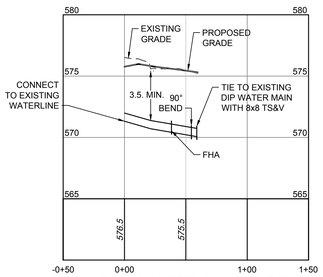
C7.1

PATH & FILENAME: ...\New School - Center\DWG\Sheet\C0245941-C7-PROF.dwg | Plotted on 10/8/2024 10:28 AM | by Alexander Flint
PLOTTING DATE & TIME:



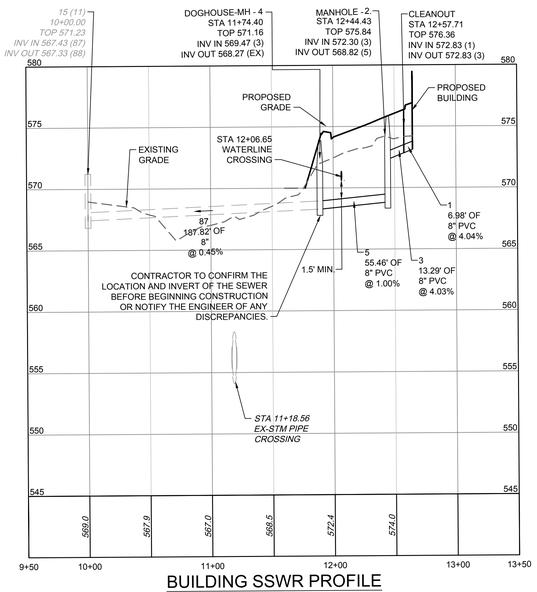
8" DIP ACSA WATER MAIN PROFILE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



8" DIP ACSA WATER MAIN 2 PROFILE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5



BUILDING SSWR PROFILE

HORIZ SCALE: 1"=50'
VERT SCALE: 1"=5

5
0
0
50
PROFILE SCALE

PATH & FILENAME:
PLOTTING DATE & TIME:

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: J. Showalter
DRAWN BY: S. Kirby/A. Flint

QEA No.41911390

BID DOCUMENTS
10/08/2024

UTILITY PROFILES

C7.2

NOTES & LEGENDS

QTY.	HEADS
56	● – TORO T7 SERIES GEAR DRIVEN MULTIPLE NOZZLE POP-UP SPRINKLER WITH 12.0 NOZZLE, 12.7 GPM.

PIPE

4,823 LF	——— – DENOTES ROUTE OF PR 200 PVC LATERAL PIPING. (SIZE AS LABELED)
496 LF	– – – – DENOTES ROUTE OF PR 200 MAIN LINE PIPING. (SIZE AS LABELED)

VALVES

18	⊕ – LOCATION OF ELECTRIC 24 V.A.C. REMOTE CONTROL VALVE WITH FLOW CONTROL FEATURE, TORO P220-06-0X. THE IRRIGATION CONTRACTOR SHALL INSTALL A 1" PVC BALL VALVE IN FRONT OF EACH CONTROL VALVE FOR ZONE ISOLATION. (SIZE AS LABELED)
2	⋈ – LOCATION OF LINE SIZED ISOLATION VALVE.
1	(MV) – LOCATION OF THE 2" MASTER VALVE, TORO P220-26-06.

CONTROLLER

1 (A) – LOCATION OF THE IRRIGATION CONTROLLER. THE CONTROLLER SHALL BE A IRRITROL TOTAL CONTROL SERIES SOLID STATE UNIT WHICH SHALL BE OF THE WALL MOUNT STYLE. THE CONTROLLER SHALL BE OF THE MODEL NUMBER TC-18EX-R. THE CONTROLLER SHALL BE MOUNTED IN THE APPROXIMATE LOCATION SHOWN ON THE PLAN.

– ALL ELECTRICAL CONNECTIONS AND INSTALLATIONS SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS. ALL 120 VAC WIRING SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODE REQUIREMENTS.

– CONTRACTOR TO CONFIRM EXISTING POWER CIRCUIT MEETS THE FOLLOWING REQUIREMENTS:120 VAC POWER CIRCUIT AT THE CONTROLLER LOCATION. THE POWER SOURCE SHALL BE CAPABLE OF SUPPORTING A 10 AMPERE LOAD AT 120 VAC. IF POWER IS NOT ADEQUATE, COORDINATE WITH OWNER BEFORE BEGINNING CONSTRUCTION

SENSORS

1 (R) – DENOTES THE LOCATION OF WIRELESS RAIN SENSOR.

BACKFLOW PREVENTION

1 ▶▶ – DENOTES THE LOCATION OF REDUCED PRESSURE BACKFLOW PREVENTER ASSEMBLY WHICH SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. THE BACKFLOW SHALL BE 2" IN SIZE.

WATER SUPPLY

1 (M) – DENOTES THE LOCATION OF THE PROPOSED IRRIGATION METER. THE METER SHALL BE THE OWNER'S RESPONSIBILITY. THE METER SHALL BE 1.5" IN SIZE.

PUMP & ACCESSORIES

– IF THE NECESSARY PRESSURE TO OPERATE THE IRRIGATION SYSTEM PROPERLY IS NOT AVAILABLE, A BOOSTER PUMP WILL BE REQUIRED TO BE INSTALLED AT THE OWNER'S EXPENSE.

– THE IRRIGATION SYSTEMS SHALL BE CAPABLE OF DELIVERING 55 GPM AT 95 PSI MAXIMUM WITH ONE STATION OPERATING WITH 60 PSI AT THE BASE OF THE HEAD FOR OPTIMUM PERFORMANCE OF THE IRRIGATION SYSTEM AS DESIGNED AND SPECIFIED.

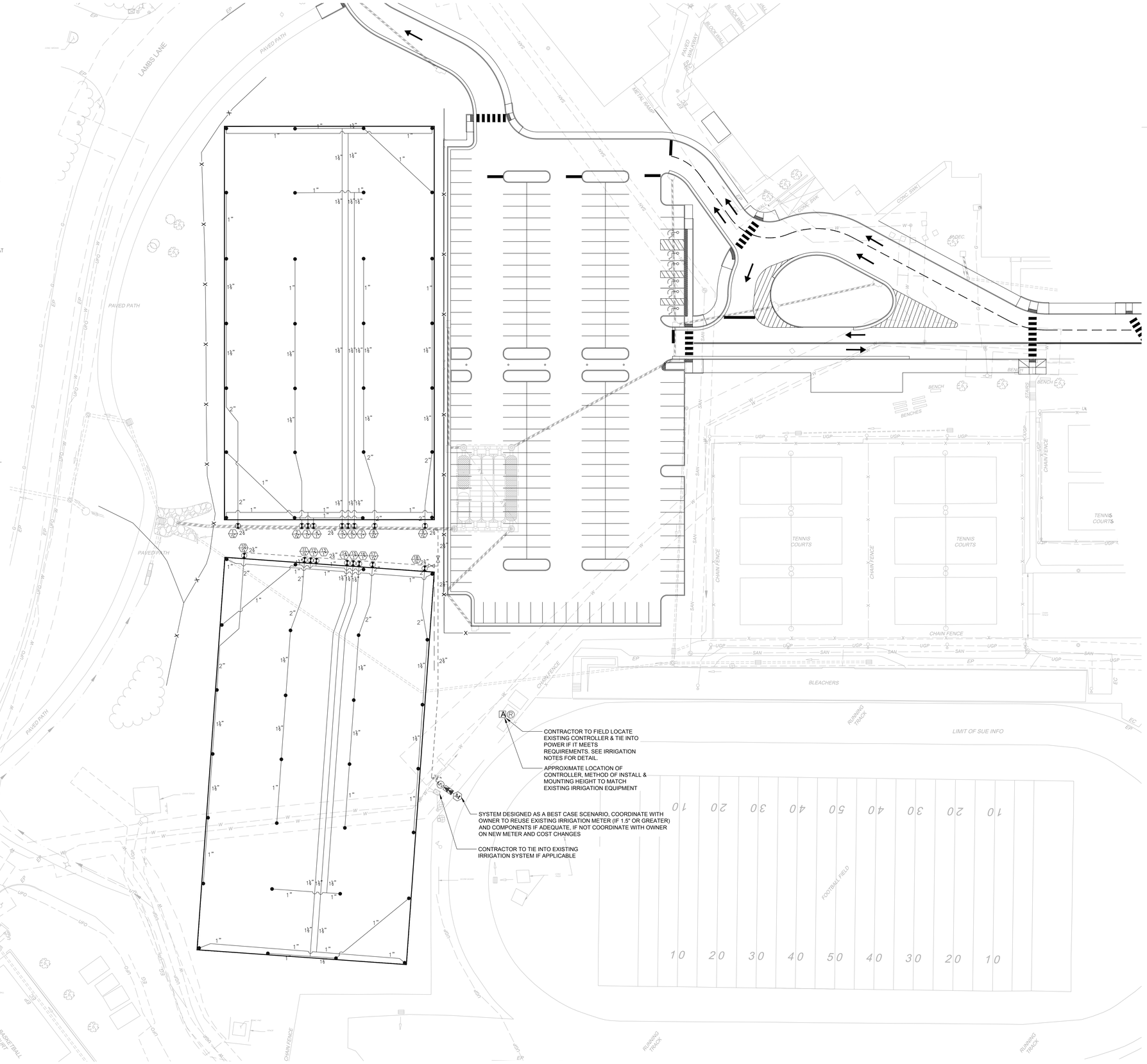
NOTE: IF THE WATER SUPPLY IS NOT CAPABLE OF THE DESIGNED CAPACITY (FLOW AND/OR PRESSURE), THE IRRIGATION SYSTEM WILL NEED TO BE REDESIGNED, WHICH MAY ALTER THE IRRIGATION MATERIAL ESTIMATE.

SLEEVING

– WHERE IRRIGATION PIPING CROSSES SIDEWALKS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING A SLEEVE 2 SIZES LARGER THAN THE PIPE THAT IS CROSSING THROUGH IT.

NOTE: THE IRRIGATION SYSTEM IS DISPLAYED SCHEMATIC IN NATURE THE IRRIGATION CONTRACTOR MAY BE REQUIRED TO MAKE MINOR ADJUSTMENTS IN THE FIELD. THESE MINOR ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER BUT SHALL BE MADE ONLY AFTER NOTIFICATION IS MADE TO THE OWNER OR HIS REPRESENTATIVE.

THIS DESIGN IS BASED ON THE SITE INFORMATION AND/OR DRAWINGS SUPPLIED BY THE CLIENT OF RECORD WITH DESIGN CRITERIA BEING SET BY THE CLIENT AND/OR PROJECT OWNER (I.E. AREA TO BE IRRIGATED, MANUFACTURER'S EQUIPMENT TO BE EMPLOYED, WATER SOURCE (LOCATION, FLOW & PRESSURE) CAPACITIES, ELECTRICAL POWER AVAILABILITY FOR IRRIGATION SYSTEM USE, ETC.). SMITH TURF & IRRIGATION BEARS NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS IN DESIGN OR APPLICATION WHICH MIGHT ARISE DUE TO INACCURACIES IN THE ABOVE REFERENCED INFORMATION SUPPLIED TO SMITH TURF & IRRIGATION IN RELATION TO THIS SPECIFIC PROJECT UNLESS OTHERWISE NOTED.



PATH & FILENAME:
PLOTTING DATE & TIME:

STI 1925
2201 Dabney Road
Richmond, Virginia 23230
Phone: 804-355-6404

EPA WaterSense PARTNER

J. FELICE HALL CERTIFIED IRRIGATION DESIGNER 7033279 COMMERCIAL

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DRAWN BY: F. HALL

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BID DOCUMENTS
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IRRIGATION PLAN

L1.0

ALBEMARLE HIGH SCHOOL
IRRIGATION SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

1. Drawings and general provision of Contract, including General and Special Conditions, apply to work of this section.

1.2 DESCRIPTION

1. Provide a complete underground irrigation system for the site as shown and specified. The work includes: Automatic irrigation system including piping, fittings, sprinkler heads, and accessories.
   1. Automatic irrigation system including piping, fittings, sprinkler heads, and accessories.
   2. Valves and fittings.
   3. Controller and central control computer.
   4. Control wire.
   5. Testing.
   6. Excavating and back filling irrigation system work.
   7. Booster Pump

1.3 QUALITY ASSURANCE

1. Installers qualifications:
   1. Upon request, contractor must provide the following, to include name of contact, name of project, address of project, & phone number of contact. If all of this criteria can't be met, then contractor will be disqualified:
      1. Virginia class A contractor's license showing a specialty in irrigation in continued force for the last 5 years.
      2. General liability insurance to $1,000,000.
      3. Five verifiable references in Virginia to attest to the contractor's ability to install.
   2. Projects of the size and complexity of this project.
   3. Experience of individual working for the contracting company will not be accepted as qualified job submittals. Experience must come from the company. Omission of any required information will be grounds for disqualification.
   4. Contractor's primary business is to be irrigation installation.

Primary defined as 60% of the contractor's business is to be derived from irrigation installation. Verification may be required.
   5. Only one irrigation bid will be accepted for the project. No qualified bids will be accepted.

2. Conform to applicable codes for piping and component requirements.

3. Materials, equipment, and methods of installation shall comply with the following codes and standards:
   1. Albemarle County, Public Utilities and Public Works Standards.
   2. National Fire Protection Association, (NFPA): National Electrical Code.
   3. American Society of Testing and Materials, (ASTM).
   4. National Sanitation Foundation, (NSF).

4. Obtain Irrigation Designers acceptance of installed and tested irrigation system prior to installing backfill materials. All mainline PVC must meet these criteria.

1.4 SUBMITTALS

1. Submit manufacturer's product data and installation instructions for each of the system components to include electric valves, heads, controller, wire, pipe, fittings, valve boxes, manual valves, wire splices, and all other equipment installed on project. Submittals must be organized and semi-permanently bound in booklet form with a table of contents to each section. This book must be periodically updated as material changes on the project.

2. Submit the following material samples:
   1. Piping and fittings
   2. Clamps
   3. Wire connectors and sealer

3. Submit the following equipment samples:
   1. Sprinkler heads, 1 of each type, complete with housing
   2. Valves and valve access boxes
   3. Controller

4. Approved equipment samples will be returned to contractor and may be used in the work.

5. Upon irrigation system acceptance, submit written operating and maintenance instructions. Provide format and contents as directed by the Irrigation Designer.

1.5 DELIVERY, STORAGE, AND HANDLING

1. Deliver irrigation system components in manufacturer's original undamaged and unopened containers with labels intact and legible. Site contractor will provide staging area.

2. Deliver plastic piping in bundles, packaged to provide adequate protection of pipe ends, either threaded or plain.

3. Store and handle materials to prevent damage and deterioration.

4. Provide secure, locked storage for valves, sprinkler heads, and similar components that cannot be immediately replaced, to prevent installation delays.

1.6 PROJECT CONDITIONS

1. Known underground and surface utility lines are indicated on the utilities drawings.

2. Protect existing trees, plants, lawns, and other features designated to remain as natural area.

3. Promptly repair damage to adjacent facilities caused by irrigation system work operations. Cost of repairs at Contractors expense.

4. Promptly notify the Irrigation Designer of unexpected sub-surface conditions.

5. Irrigation system layout is diagrammatic. Contractor and the Irrigation Designer in the field shall establish exact locations of piping, sprinkler heads, valves, and other components at time of installation. Contractor will stake mainline and all heads and valves and receive approval from irrigation designer prior to excavation. Contractor is ultimately responsible for maintaining 100% coverage on entire irrigated site.
   1. Space sprinkler components as indicated.
   2. Minor adjustments in system layout will be permitted to clear existing fixed obstructions. Final system layout shall be acceptable to the Irrigation Designer.
6. Cutting and patching:
   1. Cut through concrete and masonry with core drills. Jackhammers not permitted.
   2. Materials and finishes for patching shall match existing cut surface materials and finish. Exercise special care to provide patching at openings and exterior walls. Subject to approval of General

Contractors Representative.
   3. Methods and materials used for cutting and patching shall be acceptable to the Irrigation Designer.

PART 2 - PRODUCTS

2.1 MATERIALS

1. General:
   1. Provide only new materials, without flaws or defects and of the highest quality of their specified class and kind to be provided by an authorized Product Distributor. Product distributors will be asked to submit their factory authorization to sell and service all components that they provide.
   2. Comply with pipe sizes indicated. No substitution of smaller pipes will be permitted. Larger sizes may be used subject to acceptance of the Irrigation Designer. Remove damaged and defective pipe.
   3. Provide pipe continuously and permanently marked with manufacturer's name or trademark, size schedule and type of pipe, working pressure at 73 degrees F. and National Sanitation Foundation (NSF) approval.

2. Plastic pipe, fittings, and connections:
   1. 2.5" diameter and under: SDR21, class 200, bell end PVC.
   2. PVC pipe fittings: ASTM D2241 schedule 40 PVC molded fittings suitable for solvent weld connections. Fittings made of other materials are not permitted. Saddle and cross fittings are not permitted.

3. Sprinkler heads, valves, and associated equipment: Provide manufacturer's data on each type of equipment to obtain Irrigation Designers approval.
   1. Outlets
      1. Sprinklers: 1" threaded inlet, stainless steel riser with the ability to mount 2" below grade. Sprinklers shall discharge 12.7 GPM @60 PSI base pressure. Sprinklers shall be model T7 as manufactured by The Toro Company, Riverside, California.
   2. Valves
      1. Automatic remote control valves (RCV) shall be sized as specified on drawings. RCVs shall be installed per manufacturer's recommendations and shall be rated for pressure and flow as required. RCVs shall be low voltage. Valves shall be constructed of plastic. Valves shall be the P220-26-00 size indicated on model as manufactured by

The Toro Company, Riverside, California.
   3. Wire
      1. Control wire shall be 14/1 gauge UL/UF, direct burial red in color. Common wire shall be 14/1 gauge UL/UF, direct burial white in color.
      2. All wire splices below grade shall be made waterproof with correctly sized wire splice connectors, made for direct burial and rated for minimum of 30 volts.
      3. Wire shall be color-coded. White is to be used for common, red is to be used for control, blue for extra, green for stub-out and yellow for sensor. Any deviation will be replaced.
   4. Field controller
      1. Field controller shall have 18 zones and be installed in metal lockable cabinet. Controller shall have four independent programs, non-volatile memory, battery back up, water delay, seasonal adjust. Controller shall be Irritrol Total Control manufactured by the Toro Company.
   5. Sleeves
      1. Sleeves shall be schedule 40 PVC as indicated on the plan. Any additional sleeves shall be two sizes larger than the pipe routed through them.

2.3 ACCESSORIES

1. Drainage fill: 2" washed pea gravel.

2. Fill: Clean soil free of stones larger than 1" diameter foreign matter, organic material, and debris.
   1. Provide imported fill material as required to complete the work. Obtain rights and pay all costs for imported materials.
   2. Suitable excavated materials removed to accommodate the irrigation system work may be used as fill material subject to the Irrigation Designers review and acceptance.

3. Low voltage wire connectors: Socket seal type wire connectors and waterproof gel sealer with wire connectors 3M DBY's and DBR's or approved equal only.

4. Valve access boxes.
   1. Ametek shall manufacture valve access boxes. All valves shall be installed in 10" circular valve boxes.

5. Booster Pump
   1. Installer shall provide booster pump if necessary

6. Water meter installation shall be by others.

7. Backflow preventer shall be of the reduced pressure principal type and be installed as per ALBEMARLE County code. Backflow preventer shall be model 975XL as manufactured by Wilkins.

PART 3 - EXECUTION

3.1 INSPECTION

1. Examine final grades and installation conditions. Verify that field measurements are as shown on drawings. Do not start irrigation system work until unsatisfactory conditions are corrected.
2. Verify the location of utilities, plant materials, shrub bed lines, and tree lines. No irrigation lines are to be routed within 5 feet of any tree on project. Contractor is responsible for coordinating the location of all trees with landscape contractor. No irrigation heads will be installed until all trees have been installed or staked.

3. Verify that required utilities are available, in proper location, and ready for use.

4. Beginning of installation means installer accepts existing conditions.

5. Contractor must provide one experienced on-site foreman or supervisor subject to approval of the irrigation designer, who must be on site at all times when a crew is working.

3.2 PREPARATION

1. Prior to excavation, utility companies shall be notified in accordance with local codes and ordinances. Contractor must contact Miss Utility prior to beginning of installation. All current Miss Utility rules for contact and digging will be followed.

2. Contractor shall be responsible for damage to existing utilities and structures due to negligence and/or misuse by his crews or equipment.

3. Layout and stake the location of each pipe run and all sprinkler heads and sprinkler valves. Obtain Irrigation Designer's acceptance of layout prior to excavating.

4. Place sleeves as necessary for installation of piping and control wire. All piping under walks and walls shall be within a Schedule 40 PVC sleeve 2 sizes larger than the pressure pipe.

3.3 INSTALLATION

1. Excavating and back filling:
   1. All excavation shall be considered unclassified excavation and include all material encountered.
   2. Excavate trenches of sufficient depth and width to permit proper handling and installation of pipe and fittings.
   3. Excavate to depths required to provide 3" depth of debris free earth fill or sand bedding for piping when rock or other unsuitable bearing material is encountered.
   4. Fill to match adjacent grade elevations with approved earth fill material. Place and compact fill in layers not greater than 8" depth.
      1. Provide approved earth fill or sand to a point 4" above the top of pipe.
      2. Fill to within 6" of final grade with approved excavated or borrow fill materials free of lumps or rocks larger than 1" in any dimension.
      3. Provide clean topsoil fill free of rocks and debris for top 6" of fill.
   5. Install irrigation lateral lines with a minimum cover of 18" based on finished grades. Install irrigation mainline with a minimum of 24" based on finished grade.
   6. Excavate trenches and install piping and fill during the same working day. Do not leave open trenches or partially filled trenches open overnight.
   7. Replace stripped sod in sufficient time to allow for satisfactory sod recovery and growth. Water stripped and reinstalled sod until irrigation system is place in operation.
   8. Valves boxes installed per specifications on design.

2. Plastic pipe:
   1. Install plastic pipe in accordance with manufacturer's installation instructions. Provide for thermal expansion and contraction. Do not install plastic pipe if temperature is below 32 degrees.
   2. Saw cut plastic pipe. Use an electric miter saw, to ensure a square cut. Remove burrs and shavings at cut ends prior to installation. Use a hand beveller on all gasket pipe cuts.
   3. Make plastic-to-plastic joints with solvent weld joints or slip seal joints. Use only solvent recommended by the pipe manufacturer. Install plastic pipefittings in accordance with pipe manufacturer's instructions. Contractor shall make arrangements with pipe

manufacturer for all necessary field assistance.
   4. Make plastic to metal joints with plastic male adapters.
   5. Make solvent weld joints in accordance with manufacturer's recommendations.
   6. Allow joints to set **at least 24 hours** before pressure is applied to the system.
   7. Maintain pipe interiors free of dirt and debris. Close open ends of pipe by acceptable methods (duct tape ends) when pipe installation is not in progress.

3. Sprinklers, fittings, valves, and accessories:
   1. Install fittings, valves, sprinkler heads, risers, and accessories in accordance with manufacturer's instructions, except as otherwise indicated.
   2. Set sprinkler heads perpendicular to finished grades, except as otherwise indicated.
   3. Locate sprinkler heads to assure proper coverage of indicated areas. Do not exceed sprinkler head spacing distances indicated.
   4. Install quick-coupling valves with an adjustable double swing joint riser assembled by the use of at least 3 standard 90-degree elbows. Pre-fabricated swing joints are acceptable.
   5. Install controller in accordance with manufacturer's written instructions. All controller footings will be 12" deep concrete.
   6. Install valve access boxes on a suitable base of bricks to provide a level foundation at proper grade and to provide drainage of the access box. 11/2 cubic feet of pea gravel below box to be provided for drainage.
   7. Automatic valves shall be installed plumb with valve access box with all valve handles, bolts, connections and electrical splices accessible through the valves box opening (not less than 6" below valve box cover).
   8. All seal threaded connections of control valves with Teflon tape. **Plastic joint type compound is not acceptable.**

4. Control wiring:
   1. Install electric control cable in the piping trenches wherever possible. Place wire is trench adjacent to pipe. Install wire with slack to allow for thermal expansion and contraction. Expansion joints in wire may be provided at 200-foot intervals. Where necessary to run wire in a separate trench, provide a minimum cover of 15". Wire cannot be plowed or pulled with a vibratory plow.
   2. Provide sufficient slack at site connections at remote control valves in control boxes and at all wire splices to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.

PATH & FILENAME:
PLOTTING DATE & TIME:

STI 1925
2201 Dabney Road
Richmond, Virginia 23230
Phone: 804-355-6404

EPA WaterSense PARTNER

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IRRIGATION NOTES AND DETAILS

L2.0

3. Connect each remote control valve to one station of a controller except as otherwise indicated.
4. Connect remote control valves for each controller to a common ground wire system, independent of all other controllers.
5. Make wire connections to remote control electric valves and splices of wire in the field, using water proof wire connectors and sealing cement in accordance with manufacturer's recommendations, dry splices will not be accepted. Make wire splices in accessible splice or valve boxes 10" in diameter or greater.
6. Provide tight joints to prevent leakage of water and corrosion build-up on the joint.
7. When control wiring is in common trench with main line, wiring shall be below main line with 4" of fill dirt between pipe and wire.
8. Aboveground wire is to be installed in conduit and/or in accordance with electrical codes.
9. All materials and methods of installation shall conform to local electrical codes.

5. Quick-Coupling valves

1. When installed in lawn area, provide a 10" valve box for location. Stabilize the valve with a stake and 11/2" cubic feet of pea gravel (1/2 to 3/4").

6. Field satellite

1. Field satellite shall be installed as per manufacturer's recommendation. All grounding equipment necessary shall be included.

7. Flushing, testing, and adjustment
1. After sprinkler piping and risers are installed and before sprinkler heads are installed, open control valves and flush out the system with full head of water.
2. Perform system testing upon completion of each section. Make necessary repairs and retest-repaired sections as required.
3. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
4. Adjust all electric remote control valve flow control stems for system balance. Contractor must set pressure-regulating valves prior to acceptance specification on design.
5. Test and demonstrate the controller by operating all programs, day, hour, and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements and weather conditions.

8. Service:
1. When requested, return to the site during the subsequent fall season and winterize the system. Drain all water from the system and blow out the system with compressed air.
2. When requested, return to the site during the subsequent spring season and demonstrate to the Owner Representative the proper procedures for the system start-up, operation, and maintenance.
3. After 3 months of continuous operation, after acceptance of job, contractor must return to the site and re-adjust all irrigation heads, by re-packing heads that have become dislodged due to resettling of ground, torque of spray, or vibration. Re-adjust radius, arc, and trajectory of spray of all heads.

3.4 DISPOSAL OF WASTE MATERIAL

1. Stockpile, haul from site, and legally dispose of waste materials, including unsuitable excavated materials, rock, trash, and debris.

2. Maintain disposal route clear, clean, and free of debris.

3.5 ACCEPTANCE

1. Test and demonstrate to the Irrigation Designer the satisfactory operation of the system free of leaks.

2. Instruct the Owners designated personnel in the operation of the system including adjustment of sprinklers, controller(s), valves, and pump controls.

3. Upon acceptance, the Owner will assume operation of the system.

4. Provide owner with all manuals for products used on project.

5. Provide irrigation system record drawings:
1. Legibly mark drawings to record actual construction.
2. Indicate a measured distance triangulated to locate each installed valve-automatic, manual, quick-coupling type.
3. Identify field changes of dimension and detail and changes made by Change Order, if any.
4. Submit 3 copies of As-Built drawings to the owner on base drawings provided by the irrigation designer.
5. As-Builts shall also indicate control valve wiring routing paths, wire splice locations, and controller location.

3.6 GUARANTEE

1. The contractor shall guarantee all workmanship covered by the specifications to be free of defects for a period of one (1) year from the date of final acceptance of the project. He shall replace any part or parts found to be defective within the period of guarantee at no cost to the owner, except repairs or replacement necessitated by damage by others.
2. Back filling of all excavation shall be guaranteed. If, at any time during the first year of the guarantee period, trenches or heads should settle, the irrigation contractor shall repair any settling at no cost to the owner.

3.7 CLEANING

1. Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soil, debris, and equipment. Repair damage resulting from irrigation system installation.

END

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2201 Dabney Road
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IRRIGATION NOTES AND DETAILS

L2.1

PATH & FILENAME:
PLOTTING DATE & TIME:

SECTION 32 18 23.26 – ATHLETIC FIELD TURF

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The provisions of the Contract Documents apply to the work of this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Fine grading and preparing athletic fields
2. Topsoil Placement
3. Soil amendments
4. Fertilizers

1.3 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

PART 2 - PRODUCTS

2.1 TOPSOIL

A. Topsoil: ASTM D 5268, pH range of 6.0 to 7.0 , a minimum of 6 percent organic material content; free of stones ½" or larger in any dimension and other extraneous materials harmful to plant growth.

1. Topsoil Source: Reuse surface soil stockpiled on-site. Verify suitability of stockpiled surface soil to produce topsoil. Clean surface soil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.

a. Supplement with imported or manufactured topsoil from off-site sources when quantities are insufficient. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches (100 mm) deep; do not obtain from agricultural land, bogs or marshes.

B. Have topsoil tested by a certified soil testing laboratory to determine the type and quantity of soil amendments necessary. Add amendments to topsoil as necessary to meet these requirements.

2.2 INORGANIC SOIL AMENDMENTS

A. If the topsoil analysis indicates the need for inorganic soil amendments, the following standards apply:

B. Lime: ASTM C 602, agricultural limestone containing a minimum 80 percent calcium carbonate equivalent and as follows:

1. Class: Class O, with a minimum 95 percent passing through No. 8 (2.36-mm) sieve and a minimum 55 percent passing through No. 60 (0.25-mm) sieve.
2. Provide lime in form of dolomitic limestone.

C. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum 99 percent passing through No. 6 (3.35-mm) sieve and a maximum 10 percent passing through No. 40 (0.425-mm) sieve.

D. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

E. Aluminum Sulfate: Commercial grade, unadulterated.

F. Perlite: Horticultural perlite, soil amendment grade.

G. Agricultural Gypsum: Finely ground, containing a minimum of 90 percent calcium sulfate.

H. Sand: Clean, washed, natural or manufactured, free of toxic materials.

I. Diatomaceous Earth: Calcined, diatomaceous earth, 90 percent silica, with approximately 140 percent water absorption capacity by weight.

J. Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

2.3 ORGANIC SOIL AMENDMENTS

A. If the topsoil analysis indicates the need for organic soil amendments, the following standards apply:

B. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 3/4-inch (19-mm) sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

1. Organic Matter Content: 50 percent of dry weight.
2. Feedstock: Agricultural, food, or industrial residuals; biosolids; yard trimmings; or source-separated or compostable mixed solid waste.
3. Peat: Finely divided or granular texture, with a pH range of 6 to 7.5, containing partially decomposed moss peat, native peat, or reed-sedge peat and having a water-absorbing capacity of 1100 to 2000 percent.
4. Wood Derivatives: Decomposed, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture, free of chips, stones, sticks, soil, or toxic materials.
5. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.

2.4 FERTILIZER

A. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 4 percent nitrogen and 20 percent phosphoric acid.

B. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in topsoil analysis reports from a qualified soil-testing agency.
2. Minimum Composition: No less than 1 lb/1000 sq. ft. (0.45 kg/92.9 sq. m) of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.

2.5 SEEDING

A. Athletic Field Mix

Botanical Name	Common Name
30.00 % Festuca arundinacea, 'FoxHound'	Tall Fescue, 'FoxHound' (turf type)
30.00 % Lolium perenne, Green Supreme +	Perennial Ryegrass, Green Supreme +
15.00 % Poa pratensis, 'Maverick'	Kentucky Bluegrass, 'Maverick'
15.00 % Poa pratensis, 'Shamrock'	Kentucky Bluegrass, 'Shamrock'
10.00 % Lolium multiflorum	Annual Ryegrass

1. The Athletic field should be seeded at a rate of 75-150 lb per acre, or 3-5 lb per 1000 sq ft

2.6 MULCHES

A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.

B. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic; free of plant-growth or germination inhibitors; with maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.

2.7 EROSION-CONTROL MATERIALS

A. Erosion-Control Fiber Mesh: Biodegradable twisted jute or spun-coir mesh, a minimum of 0.92 lb/sq. yd. (0.5 kg/sq. m), with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches (150 mm) long.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive athletic field turf for compliance with requirements and for conditions affecting performance of the Work. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 TOPSOIL PLACEMENT FOR ATHLETIC FIELDS

A. Laser grade subgrades for athletic fields. Subgrade tolerance shall be within a tolerance of plus or minus ½" when measured with a 10 foot straight-edge.

B. Limit subgrade preparation to areas that will be planted in the immediate future.

C. Loosen subgrade to a minimum depth of 4 inches. Remove stones, sticks and roots larger than 1 inch in any dimension from subgrade. Completely remove trash and other extraneous debris from subgrade.

D. Have topsoil tested by a certified soil testing laboratory to determine the type and quantity of soil amendments necessary.

E. Sift topsoil to remove stones and other objects larger than ½" in any dimension. Maximum object size for topsoil shall be achieved by sifting not by hand removal or raking following placement of topsoil.

F. Mix soil amendments and fertilizers with topsoil at rates required by soil testing. Delay mixing fertilizer if planting does not follow placing of planting soil within 4 days. Either mix soil before spreading or apply soil amendments on surface of spread topsoil and mix thoroughly into top 4 inches (100 mm) of topsoil before planting.

G. Mix lime with dry soil prior to mixing fertilizer.

H. Spread topsoil to a minimum depth of six inches (6").

I. Final topsoil grades shall be within a tolerance of plus or minus ½" when measured with a 10 foot straight-edge. No ponding areas or localized low spots are acceptable.

3.4 MAINTENANCE OF NEW ATHLETIC FIELD TURF

A. Begin maintenance of athletic field turf immediately after each area is planted and continue until accepted by Owner.

B. Maintain and establish athletic field turf by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth athletic field surface.

C. Replant bare areas with same materials.

D. Replace disturbed mulch.

E. Watering: Provide and maintain temporary hoses, and lawn-watering equipment to convey water from a water source to keep athletic field turf uniformly moist to a depth of 4 inches.

F. Provide a source of water for irrigation. Utilize temporary irrigation meters, a well or water trucks as necessary for the water source.

G. Water sprigged and sodded areas per the requirements of the grower. Maintain moist soil to a depth of at least four inches.

H. Fertilizer formulas will be selected after soil testing and in accordance with Virginia Department of Agriculture regulations. Fertilizer applications will be made as follows:

I. For ryegrass-overseeded Bermuda grass fields, spring fertility programs with Nitrogen will begin after the first mowing.

J. Non-overseeded Bermuda grass fields will not be fertilized in the Spring until after the sod is almost green.

K. Once the sod turns green & during the growing season, applications of 1 pound of Nitrogen per 1000 sq. ft. shall be made every 4 weeks through August.

L. From September to November, Nitrogen shall be applied at the rate of 0.25 pound to 0.5 pound per 1000 sq. ft. every 2-3 weeks until a killing frost occurs.

M. Mow athletic field turf as soon as there is enough top growth to cut with mower set at indicated height. Repeat mowing as required to maintain indicated height without cutting more than 40 percent of the grass height (minimum of 3 mowings). Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain following grass height:

N. Mow grass to a finished height of 1 to 1.5 inches high.

O. Mow bermudagrass fields utilizing a reel type mower.

P. Apply pre-emergent herbicide to turf-grass areas. Apply 60-90 days after planting.

3.5 SATISFACTORY ATHLETIC FIELD TURF

A. Athletic field turf shall be considered satisfactory/acceptable provided requirements, including maintenance, have been met and a healthy, uniform, close stand of grass is established, free of weeds, bare spots exceeding 2 by 2 inches, and surface irregularities.

B. Replant athletic field turf that does not meet requirements and continue maintenance until they are satisfactory/acceptable.

C. Athletic field surfaces shall be free of irregularities and shall have a surface smoothness within a tolerance of plus or minus ½" as measured with a 10' straightedge. No ponding areas or localized low spots are acceptable.

D. Substantial Completion of the building and the remainder of the project may be achieved (pending prior Architect and Owner approval) before achieving satisfactory/acceptable athletic field turf. Continue to replant and maintain unsatisfactory/unacceptable athletic field turf until acceptance is obtained. Warranties for athletic field turf shall begin at the time of acceptance.

3.6 CLEANUP AND PROTECTION

A. Promptly remove soil and debris created by lawn work from sidewalks and paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto surface of roads, walks, or other paved areas.

B. Erect barricades and warning signs as required to protect newly planted areas from traffic. Maintain barricades throughout maintenance period until lawn is established.

END OF SECTION 32 18 23.26

PATH & FILENAME:
PLOTTING DATE & TIME:

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

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COMMONWEALTH OF VIRGINIA
JONATHAN M. SHOWALTER
Lic. No. 0402057151
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO.
002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No.	Date	Description

PROJECT MANAGER: C.OLDAKER
DRAWN BY: E.ESPINO

QEA No.41911390

BID DOCUMENTS
10/08/2024

REVEGETATION NOTES

L3.0

Notes

SITE OVERVIEW

THE HSC II SITE IS LOCATED IN ALBEMARLE COUNTY, VIRGINIA, WITHIN THE PIEDMONT REGION. THE SITE IS LOCATED ON THE WEST SIDE OF THE BUILDING, AND THE LAND TOTALS APPROXIMATELY 2.43 ACRES. THE CULPEPER FINE SANDY LOAM AND UDORTHENTS LOAMY SOILS ARE PREDOMINATELY COMPOSED OF MODERATELY WELL- TO WELL-DRAINED SILT LOAM.

OVERVIEW OF PLANTING REQUIREMENTS

PLANTING MUST TAKE PLACE IN THE FALL (LATE OCTOBER OR NOVEMBER); IF FALL PLANTING IS NOT FEASIBLE, PLANTING MAY TAKE PLACE IN EARLY SPRING. PRIOR TO PLANTING, SITE PREPARATION MUST INCLUDE (1) THE IDENTIFICATION OF INVASIVE SPECIES AND NOXIOUS WEEDS, AND SPOT-TREATMENT AS NEEDED; (2) MOWING EXISTING WEEDY VEGETATION; AND (3) SOIL PREPARATION TECHNIQUES AS REQUIRED IN THE SOIL PREPARATION SPECIFICATION. A NATIVE SEED COVER WITH A TEMPORARY SEED MATRIX MUST BE APPLIED TO BOTH TEMPORARILY AND PERMANENTLY STABILIZE THE SOIL BEFORE THE SEEDLINGS BECOME ESTABLISHED.

SOIL ANALYSIS AND PREPARATION

SOIL ANALYSIS WILL BE CONDUCTED PRIOR TO SOIL PREPARATION AND PLANTING. THE REQUIRED PHYSICAL AND CHEMICAL SOIL CONDITIONS AND QUALIFIED LABORATORIES FOR SOILING TESTING ARE DICTATED IN THE SOIL PREPARATION SPECIFICATION ON. SOIL TESTING WILL BE REQUIRED TO PROVIDE SOIL IMPROVEMENT RECOMMENDATIONS NECESSARY TO IMPLEMENT THE TARGET VEGETATION COMMUNITY (I.E. GRASS MEADOW). THE FOLLOWING STEPS WILL BE IMPLEMENTED FOR THIS TASK:

1. COLLECT SOIL SAMPLES AT A RATE OF ONE PER FIVE ACRES AND IN ACCORDANCE WITH THE LABORATORY'S REQUIREMENTS, AND SUBMIT FOR ANALYSIS.

2. DEVELOP A SOIL PREPARATION PLAN BASED ON THE RESULTS OF THE ANALYSIS AND RECOMMENDATIONS FROM THE LABORATORY.

3. INCORPORATE SOIL AMENDMENTS PER THE SOIL PREPARATION SPECIFICATION AND THE PLANTING METHODOLOGY PRESCRIBED BELOW. IF SOIL AMENDMENTS ARE NOT RECOMMENDED FOR A PLANTING AREA, CORE AERATE THE AREA BEFORE SEEDING.

PLANTING METHODOLOGY

1. REMOVE INVASIVE SPECIES AND NOXIOUS WEEDS AS NEEDED USING SPOT APPLICATIONS OF HERBICIDE AND MOWING WITH A BUSH HOG.

2. PREPARE SOIL PER THE SOIL PREPARATION PRESCRIBED ABOVE.

3. PLANT A TEMPORARY STABILIZATION GRASS SEED MIX BY BROADCASTING OR DRILLING. DRILLING IS PREFERRED (OUTSIDE OF AREAS WITH STEEP SLOPES); IF USING BROADCASTING, THE SOIL MUST BE CORE AERATED BEFORE INSTALLATION. THE ACCEPTABLE SEED MIXES

ARE LISTED ON SHEET C4.25. APPLY AT A RATE OF 40 LBS PER ACRE.

4. PLANT A PERMANENT SEED MIX IN THE FALL (LATE OCTOBER OR NOVEMBER). THE SPECIFIED MIX IS THE ATHLETIC FIELD MIX MIX BY ERNST CONSERVATION SEEDS AS SHOWN IN TABLE 1. APPLY AT A RATE OF 75-150 POUNDS PER ACRE. IF SEEDING IS CONDUCTED OUTSIDE OF OPTIMAL SEED GERMINATION PERIODS, A SEASONALLY-APPROPRIATE COVER CROP MAY NEED TO BE PAIRED WITH THE POLLINATOR-FRIENDLY SEEDING TO SUPPORT SOIL STABILIZATION AND EROSION AND SEDIMENT CONTROL DURING SEED ESTABLISHMENT PERIOD.

MAINTENANCE PLAN

1. MOW THE GRASS COMMUNITY A RECOMMENDED TWO TIMES PER YEAR FOR THE FIRST THREE YEARS AND NO MORE THAN FOUR TIMES

PER YEAR. DELAY MOWING UNTIL LATE SPRING DURING THE FIRST YEAR IF THE NEWLY-GERMINATED COMMUNITY MAY BENEFIT FROM

UNDISTURBED GROWTH.

2. APPLY HERBICIDE AS NEEDED TO CONTROL INVASIVE SPECIES AND NOXIOUS WEEDS SHOULD MOWING NOT PROVE SUFFICIENTLY

EFFECTIVE AT CONTROLLING GROWTH THAT IMPEDES ESTABLISHMENT OF THE GRASS COMMUNITY OR INTERFERES WITH THE SOLAR

FACILITY. IF THE INVASIVE SPECIES OR NOXIOUS WEED IS A BROADLEAF SPECIES, THEN A BROADLEAF HERBICIDE MAY BE USED IN A

BROADCAST APPLICATION. IF THE INVASIVE SPECIES IS A PARALLEL-VEINED SPECIES, THEN SPOT APPLICATION OF HERBICIDE MUST BE

EMPLOYED TO MINIMIZE DAMAGE TO DESIRABLE GRASS SPECIES.

3. IF SEED DOES NOT GERMINATE OR VEGETATION DIES WITHIN THE FIRST THREE YEARS OF ESTABLISHMENT, THE PLANTING MUST BE

REPLACED. BARE OR ERODING AREAS MUST BE IMMEDIATELY STABILIZED WITH GRASS COVER. SPOT FERTILIZATION SHOULD BE APPLIED AS

NEEDED TO INCREASE PLANT VIGOR. DURING THE FIRST YEAR OF ESTABLISHMENT, REPLANT ALL AREAS WITH LESS THAN 40% GROUND

COVER BY FOLLOWING THE ORIGINAL SEEDBED PREPARATIONS, AMENDMENT AND SEEDING REQUIREMENTS. REPLANT ALL AREAS WITH

BETWEEN 40% AND 85% COVER BY OVER-SEEDING AT HALF THE ORIGINAL RATE.

Soil

Albemarle County, Virginia (VA003)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21C	Culpeper fine sandy loam, 7 to 15 percent slopes	1.1	21.7%
88	Udorthents, loamy, 2 to 25 percent slopes	4.1	78.3%
Totals for Area of Interest		5.3	100.0%

Albemarle County, Virginia

21C—Culpeper fine sandy loam, 7 to 15 percent slopes

Map Unit Setting

- National map unit symbol: kb8l
- Elevation: 340 to 1,210 feet
- Mean annual precipitation: 25 to 65 inches
- Mean annual air temperature: 54 to 59 degrees F
- Frost-free period: 195 to 231 days
- Farmland classification: Farmland of statewide importance

Map Unit Composition

- Culpeper and similar soils: 80 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Culpeper

Setting

- Landform: Hillslopes
- Landform position (two-dimensional): Summit
- Landform position (three-dimensional): Interfluve
- Down-slope shape: Convex
- Across-slope shape: Convex
- Parent material: Residuum weathered from meta-arkosic sandstone and quartzite

Typical profile

- H1 - 0 to 8 inches: fine sandy loam
- H2 - 8 to 30 inches: clay
- H3 - 30 to 37 inches: sandy clay loam
- H4 - 37 to 45 inches: fine sandy loam
- H5 - 45 to 50 inches: bedrock
- H6 - 50 to 79 inches: bedrock

Properties and qualities

- Slope: 7 to 15 percent
- Depth to restrictive feature: 40 to 79 inches to paralithic bedrock; 40 to 79 inches to lithic bedrock
- Drainage class: Well drained
- Runoff class: Medium
- Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None
- Frequency of ponding: None
- Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3e
- Hydrologic Soil Group: B
- Ecological site: F148XY024PA - Moist, Piedmont - felsic, Upland, Mixed Oak - Hardwood - Conifer Forest

- Hydric soil rating: No

Albemarle County, Virginia

88—Udorthents, loamy, 2 to 25 percent slopes

Map Unit Setting

- National map unit symbol: 2xxz3
- Elevation: 360 to 1,540 feet
- Mean annual precipitation: 25 to 65 inches
- Mean annual air temperature: 54 to 59 degrees F
- Frost-free period: 195 to 231 days
- Farmland classification: Not prime farmland

Map Unit Composition

- Udorthents and similar soils: 85 percent
- Minor components: 5 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Udorthents

Setting

- Landform: Interfluves
- Landform position (two-dimensional): Summit
- Landform position (three-dimensional): Interfluve
- Down-slope shape: Convex
- Across-slope shape: Convex
- Parent material: Residuum weathered from granite and gneiss

Properties and qualities

- Slope: 2 to 25 percent
- Depth to restrictive feature: More than 80 inches
- Depth to water table: More than 80 inches
- Frequency of flooding: None
- Frequency of ponding: None

Minor Components

Hatboro, occasionally flooded

- Percent of map unit: 5 percent
- Landform: Flood plains
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: Yes

Expand Description — Map Unit Description

Seeding

Botanical Name	Common Name
30.00 % Festuca arundinacea, 'FoxHound'	Tall Fescue, 'FoxHound' (turf type)
30.00 % Lolium perenne, Green Supreme +	Perennial Ryegrass, Green Supreme +
15.00 % Poa pratensis, 'Maverick'	Kentucky Bluegrass, 'Maverick'
15.00 % Poa pratensis, 'Shamrock'	Kentucky Bluegrass, 'Shamrock'
10.00 % Lolium multiflorum	Annual Ryegrass

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15.00 % Poa pratensis, 'Shamrock'	Kentucky Bluegrass, 'Shamrock'
10.00 % Lolium multiflorum	Annual Ryegrass

Ernst Conservation Seeds Inc
8884 Mercer Pike
Meadville, PA 16335-9275
Phone (814) 336-2404; (800) 873-3321; Fax (814) 336-5191
www.ernstseed.com; sales@ernstseed.com

QUOTE

Quote Number	Q299046
Quote Date	9/12/2024
Page Number	1 of 1

BILL TO:
Timmons Group
Rick Thomas/Rebecca Napier
1001 Boulders Pkwy Ste 300
Richmond, VA 23225-5512

SHIP TO:
Timmons Group
1001 Boulders Pkwy Ste 300
Richmond, VA 23225-5512
ATTN: Rick Thomas/Rebecca Napier
UNITED STATES
Phone: 804-200-6500

Phone 804-200-6500
Fax 804-560-1648
Email bryan.mcknight@timmons.com

Customer PO#	Customer ID	Shipping Method	UPS Shipper #	Terms	Salesperson ID
EM 091224 PM	TIMM002	UPS GROUND		Credit Card	

Bulk Qty	PLS Qty	UOM	Item Number	Description	Unit Price	Ext. Price
1.000		LB BLK	ERNMX-1065	Athletic Field Mix Seeding rate 75-150 lb per acre, or 3-5 lb per 1,000 sq ft	$2.70000	$2.70

- Landform position (two-dimensional): Summit
- Landform position (three-dimensional): Interfluve
- Down-slope shape: Convex
- Across-slope shape: Convex
- Parent material: Residuum weathered from meta-arkosic sandstone and quartzite

Typical profile

- H1 - 0 to 8 inches: fine sandy loam
- H2 - 8 to 30 inches: clay
- H3 - 30 to 37 inches: sandy clay loam
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- H6 - 50 to 79 inches: bedrock

Properties and qualities

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- Depth to restrictive feature: 40 to 79 inches to paralithic bedrock; 40 to 79 inches to lithic bedrock
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- Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 1.98 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None
- Frequency of ponding: None
- Available water supply, 0 to 60 inches: Moderate (about 6.6 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3e
- Hydrologic Soil Group: B
- Ecological site: F148XY024PA - Moist, Piedmont - felsic, Upland, Mixed Oak - Hardwood - Conifer Forest

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

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10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No. Date Description

PROJECT MANAGER: C.OLDAKER
DRAWN BY: E.ESPINO

QEA No.41911390

BID DOCUMENTS
10/08/2024

REVEGETATION NOTES

L3.1

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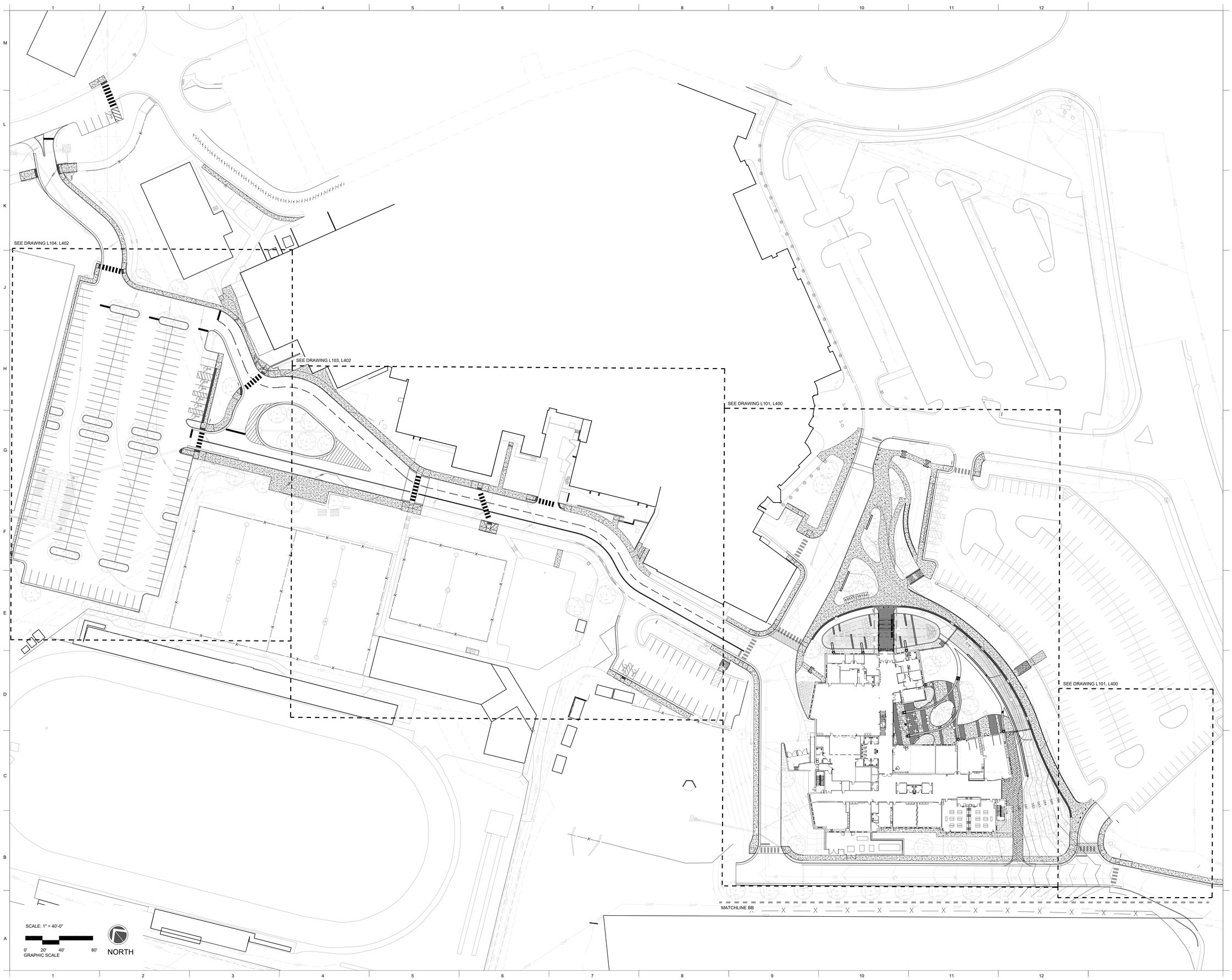

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SUITE 400
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v 804.788.4774

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COMMONWEALTH OF VIRGINIA
JOHN SYDNEY KNIGHT
Lic. No. 1046
10/04/2024
LANDSCAPE ARCHITECT

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

PROJECT MANAGER:	DRAWN BY:
JSK	HR

QEA No.41911390

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LANDSCAPE DRAWINGS
KEY PLAN

L100

GENERAL NOTES

1. SEE CIVIL DRAWINGS FOR ALL VEHICULAR ELEMENTS INCLUDING BUT NOT LIMITED TO PAVEMENTS, CURBS, CURB RAMPS, CROSSWALKS, AND PAVEMENT MARKINGS.
2. UNDERGROUND UTILITIES ARE SHOWN FOR REFERENCE ONLY. SEE CIVIL DRAWINGS.
3. SITE LIGHTING IS SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL DRAWINGS.
4. PROPOSED GRADING IS SHOWN FOR REFERENCE ONLY. SEE CIVIL DRAWINGS.
5. SEE CIVIL DRAWINGS FOR TOP AND BOTTOM ELEVATIONS OF STAIRS, RAMPS, AND SITE WALLS UNLESS OTHERWISE NOTED.
6. WHERE APPLICABLE, SIDEWALK DIMENSIONS ARE MEASURED FROM BACK OF CURB.
7. INSTALL CONCRETE MOW STRIPS AT ALL LOCATIONS WHERE NEW BUILDING ABUTS TURF LAWN. SEE DETAIL B6, DRAWING L300.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL EXTERIOR SIGN TYPES AND DETAILS.

LEGEND AND ABBREVIATIONS

- CIP CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- CIP HEAVY CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- BRICK PAVEMENT, SEE DETAIL J1, DRAWING L300
- CONCRETE UNIT PAVEMENT, SEE DETAIL J1, DRAWING L300

P.C POINT OF CURVATURE

P.C.C POINT OF COMPOUND CURVATURE

SEE DRAWING L104 FOR ADDITIONAL INFORMATION

EXTERIOR SIGN TYPE 200.2, SEE ARCHITECTURAL DRAWINGS

EXTERIOR SIGN TYPE 200.3, SEE ARCHITECTURAL DRAWINGS

E9 L300 EV CHARGING STATION PAD SEE ELECTRICAL DRAWINGS FOR CHARGING STATIONS

MATCH EDGE OF EXISTING ROAD

END PAD BETWEEN 12TH AND 13TH PARKING SPACES AS SHOWN

E1 L300 (6) 6.5" RISERS CIP CONCRETE STAIRS WITH HANDRAILS

E1 L300 (17) 6.4" RISERS CIP CONCRETE STAIRS WITH HANDRAILS. ALIGN WITH EX. PARKING SPACE AS SHOWN.

E1 L300 (3) 6" RISERS CIP CONCRETE STAIRS WITH HANDRAILS

B6 L300 CONCRETE MOW STRIP

B6 L300 CONCRETE MOW STRIP

LOADING DOCK, SEE ARCHITECTURAL DRAWINGS FOR MATERIALS AND LAYOUT

SEE DRAWING L105 FOR ADDITIONAL INFORMATION

H1 L301 SEAT WALL - RETAINING

L1 L303 CONCRETE RUNNEL

MATCH CORNER OF BUILDING

MAKE SMOOTH TRANSITION FROM FLAT PROFILE TO 'V' PROFILE IN 4'-0" LENGTH AT BEGINNING OF BRICK RUNNEL

MECHANICAL YARD, SEE ARCHITECTURAL DRAWINGS FOR MATERIALS AND LAYOUT

SEE CIVIL DRAWINGS FOR DRIVEWAY APRON

MATCHLINE AA

SCALE: 1" = 20'-0"

0' 10' 20' 40'
GRAPHIC SCALE

NORTH

MATCHLINE AA

MATCH EDGE OF EXISTING ROAD

BRICK EDGE

L3 L303 BRICK RUNNEL

K4 L304 DECORATIVE BOLLARDS, 4 @ 6' O.C.

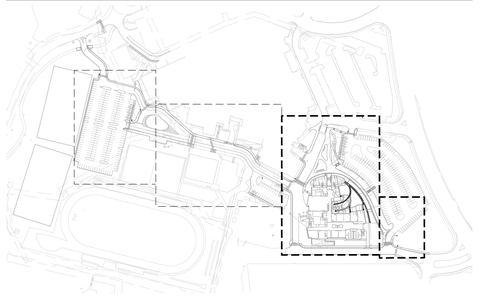
EXISTING TREES TO REMAIN

EXTERIOR SIGN TYPE 220.2, SEE ARCHITECTURAL DRAWINGS

BEGIN BRICK RUNNEL AT RADIUS POINT, BEGIN WITH FLAT SECTION, GRADUALLY TRANSITION TO V-SECTION OVER 12-FT. DISTANCE. SEE DETAIL, DRAWING L300

EXTERIOR SIGN TYPE 200.1, SEE ARCHITECTURAL DRAWINGS

KEY PLAN



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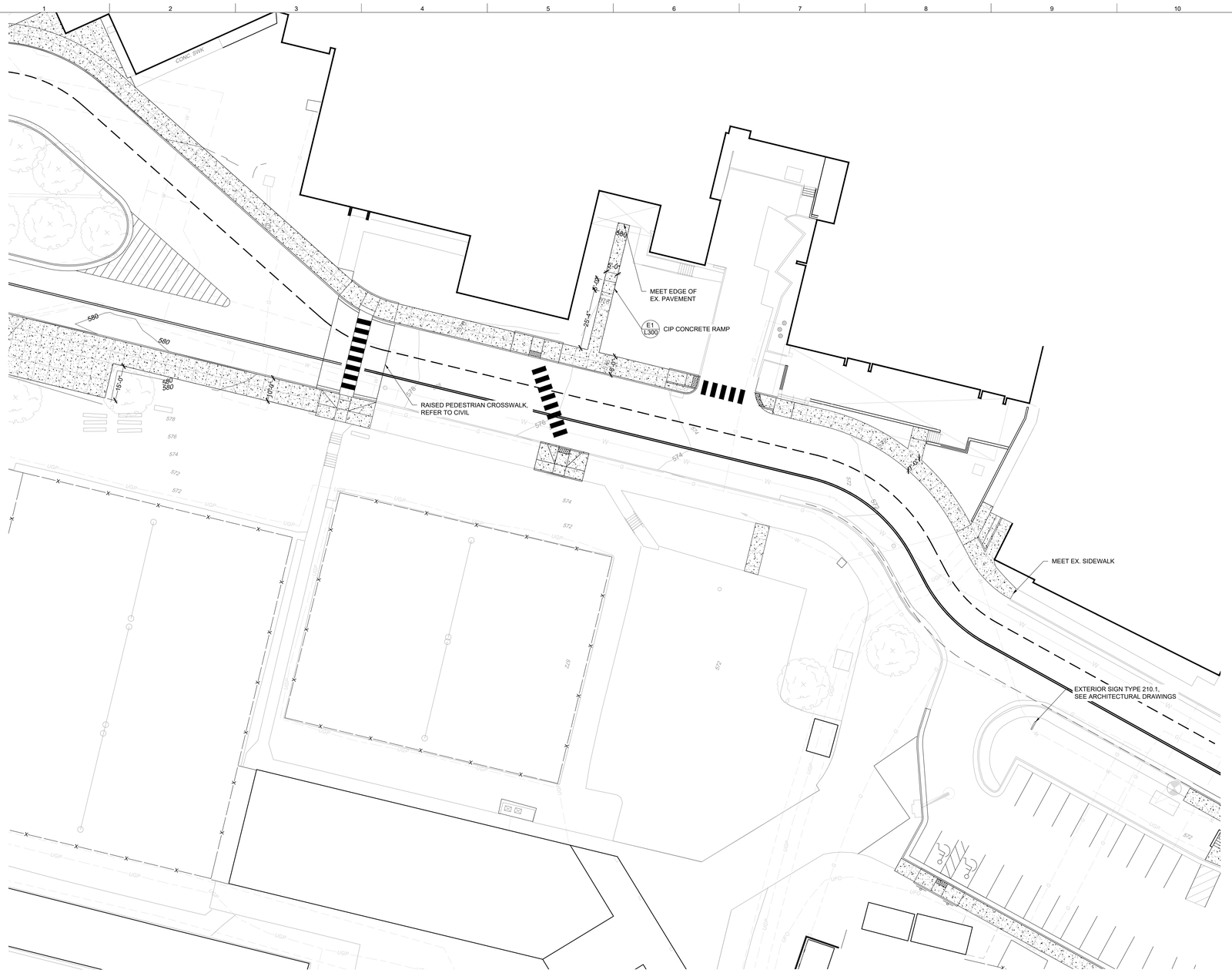
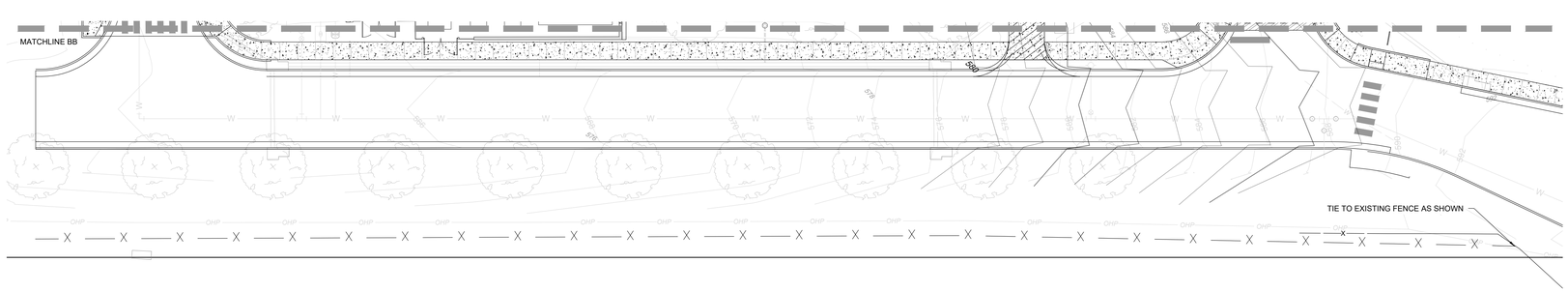
BID DOCUMENTS
10/8/2024

LAYOUT AND MATERIALS PLAN

L101





SCALE: 1" = 20'-0"

0' 10' 20' 40'
GRAPHIC SCALE

NORTH

GENERAL NOTES

1. SEE CIVIL DRAWINGS FOR ALL VEHICULAR ELEMENTS INCLUDING BUT NOT LIMITED TO PAVEMENTS, CURBS, CURB RAMPS, CROSSWALKS, AND PAVEMENT MARKINGS.
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3. SITE LIGHTING IS SHOWN FOR REFERENCE ONLY. SEE ELECTRICAL DRAWINGS.
4. PROPOSED GRADING IS SHOWN FOR REFERENCE ONLY. SEE CIVIL DRAWINGS.
5. SEE CIVIL DRAWINGS FOR TOP AND BOTTOM ELEVATIONS OF STAIRS, RAMPS, AND SITE WALLS UNLESS OTHERWISE NOTED.
6. WHERE APPLICABLE, SIDEWALK DIMENSIONS ARE MEASURED FROM BACK OF CURB.
7. INSTALL CONCRETE MOW STRIPS AT ALL LOCATIONS WHERE NEW BUILDING ABUTS TURF LAWN. SEE DETAIL B6, DRAWING L300.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL EXTERIOR SIGN TYPES AND DETAILS.

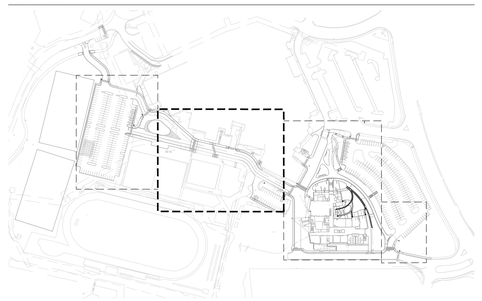
LEGEND AND ABBREVIATIONS

- CIP CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- CIP HEAVY CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- BRICK PAVEMENT, SEE DETAIL J1, DRAWING L300
- CONCRETE UNIT PAVEMENT, SEE DETAIL J1, DRAWING L300

P.C POINT OF CURVATURE

P.C.C POINT OF COMPOUND CURVATURE

KEY PLAN



QUINN EVANS

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SUITE 400
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v 804.788.4774

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COMMONWEALTH OF VIRGINIA
JOHN SYDNEY KNIGHT
Lic. No. 1046
10/04/2024
LANDSCAPE ARCHITECT

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO.
002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

PROJECT MANAGER: JSK
DRAWN BY: HR

QEA No.41911390

BID DOCUMENTS
10/8/2024

LAYOUT AND MATERIALS PLAN

L102

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
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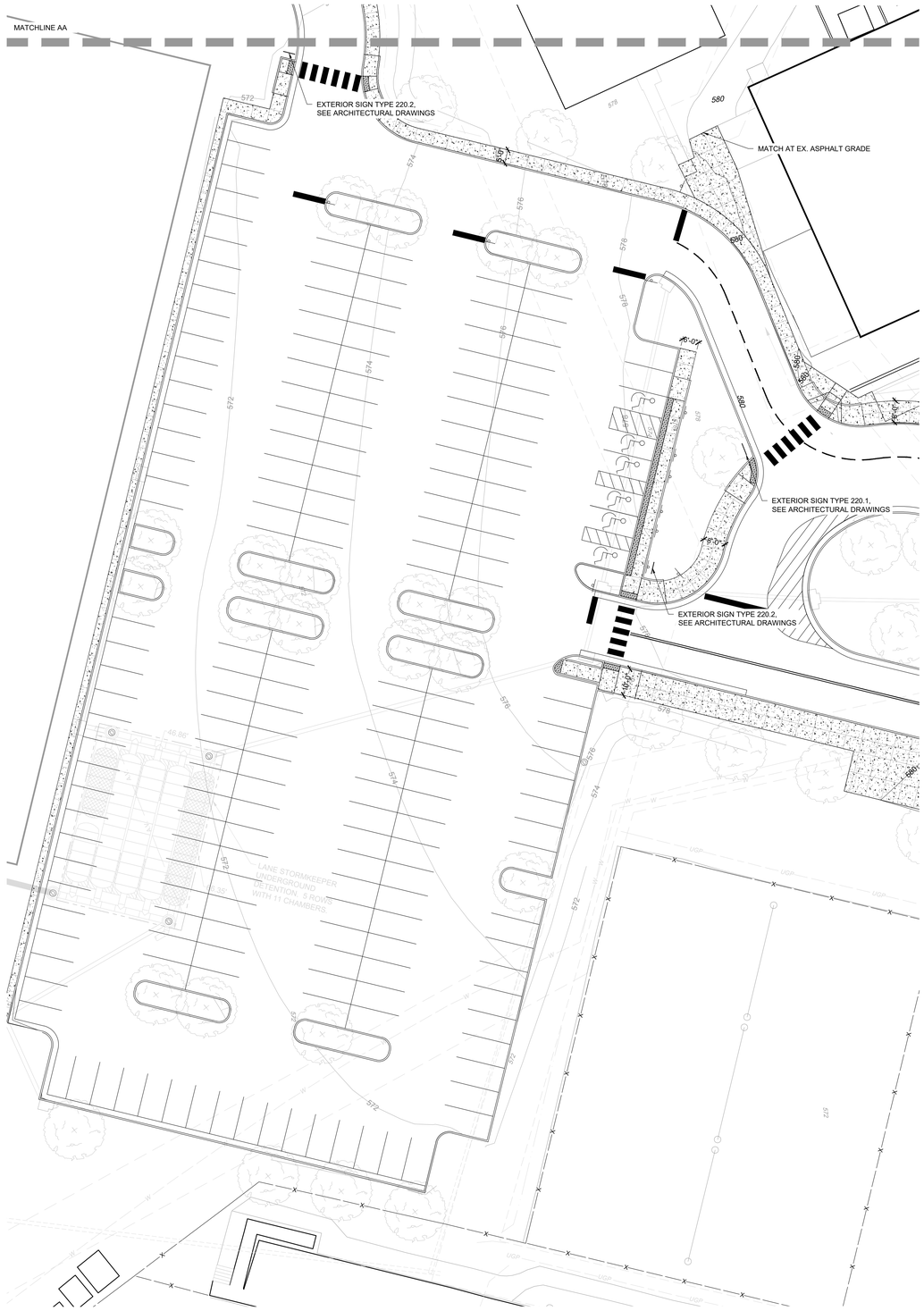

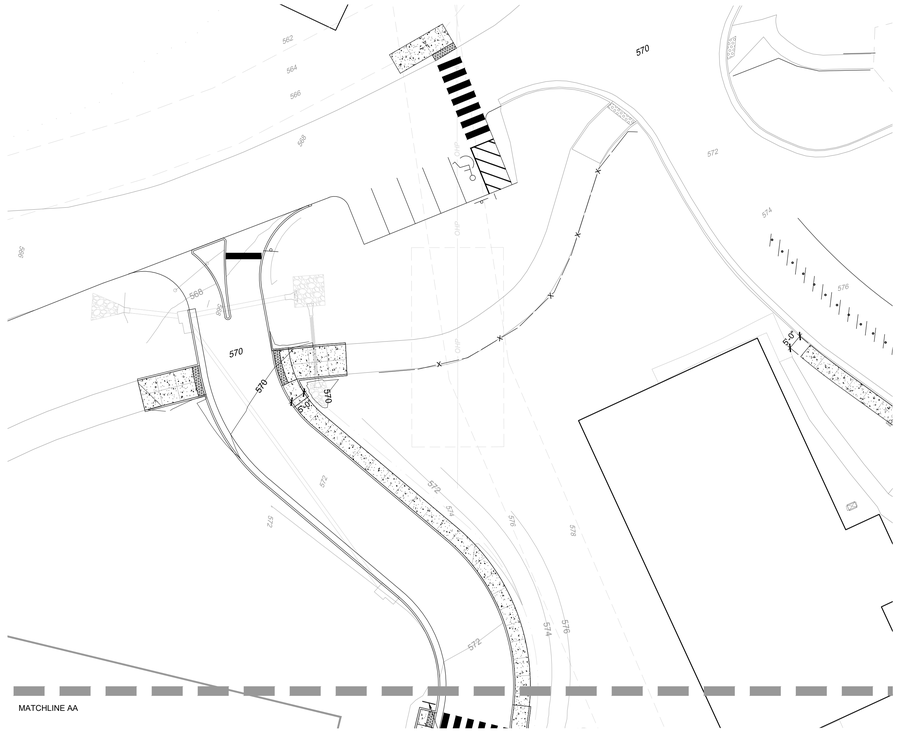

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- CONCRETE UNIT PAVEMENT, SEE DETAIL J1, DRAWING L300

P.C POINT OF CURVATURE

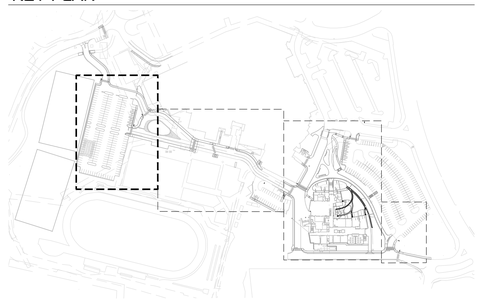
P.C.C POINT OF COMPOUND CURVATURE

SCALE: 1" = 20'-0"

0' 10' 20' 40'
GRAPHIC SCALE

NORTH

KEY PLAN



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LAYOUT AND MATERIALS PLAN

L103

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
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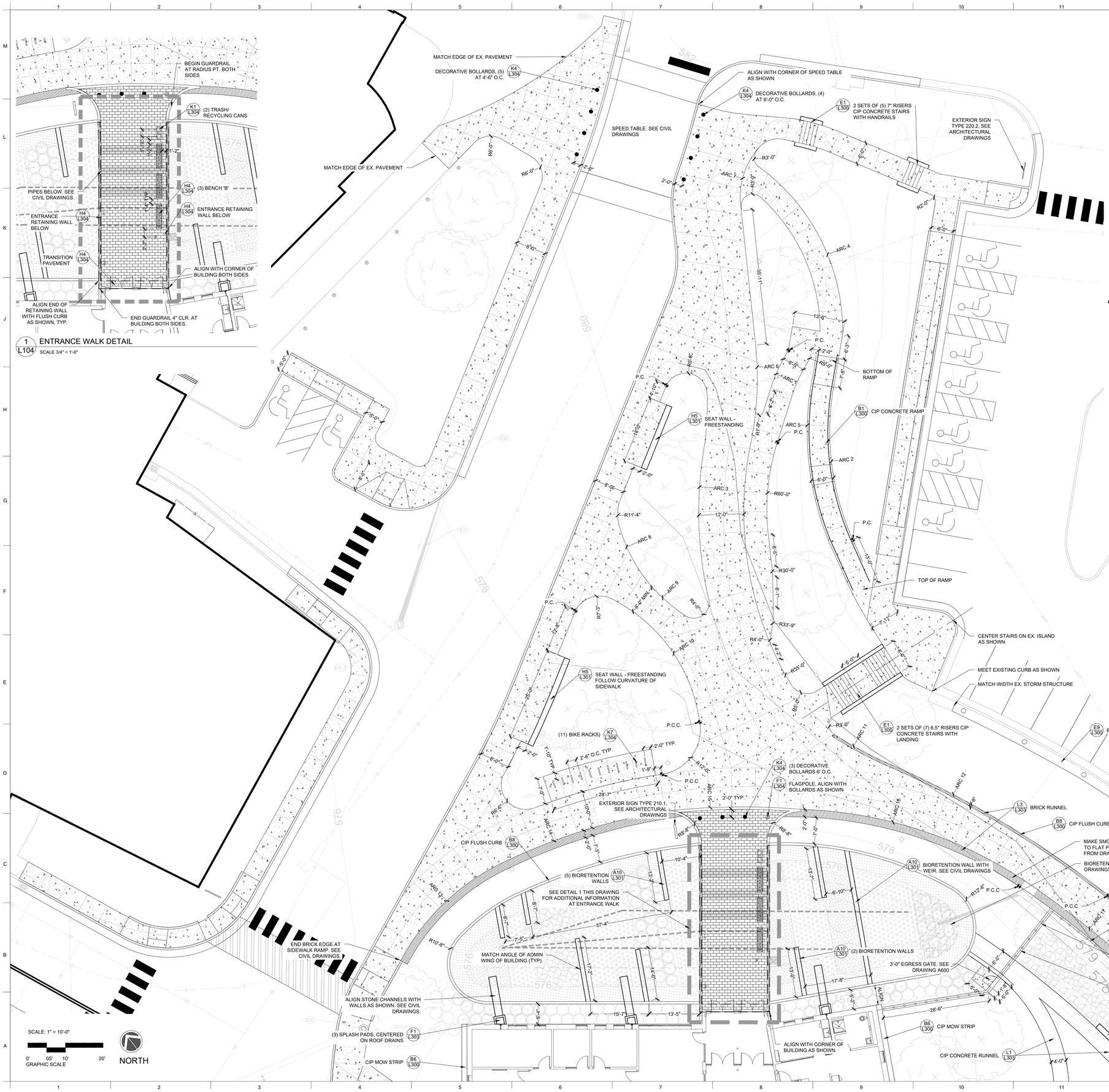
1 L104 ENTRANCE WALK DETAIL

SCALE 3/4" = 1'-0"



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7. SEE ARCHITECTURAL DRAWINGS FOR ALL EXTERIOR SIGN TYPES AND DETAILS.

LEGEND AND ABBREVIATIONS

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- CIP HEAVY CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- BRICK PAVEMENT, SEE DETAIL J1, DRAWING L300
- CONCRETE UNIT PAVEMENT, SEE DETAIL J1, DRAWING L300

P.C POINT OF CURVATURE

P.C.C POINT OF COMPOUND CURVATURE

ARC SCHEDULE

ARC	RADIUS POINT NORTHING	RADIUS POINT EASTING	RADIUS	ARC LENGTH
ARC 1	3914809.901800	11482939.931300	48'-4"	11'-9"
ARC 2	3914788.125300	11482973.511900	70'	41'-6"
ARC 3	3914772.406000	11482959.137200	103'	39'-9"
ARC 4	3914883.760100	11482895.317400	54'	51'-0"
ARC 5	3914788.125300	11482973.511900	76'-0"	45'-1"
ARC 6	3914910.541000	11482840.520600	85'	26'-2"
ARC 7	3914882.782100	11482954.191800	20'	15'-9"
ARC 8	3914830.417500	11482896.549600	41'	20'-7"
ARC 9	3914831.293800	11482902.579600	47'	10'-3"
ARC 10	3914814.058000	11482806.588700	43'	41'-5"
ARC 11	3914801.317000	11482968.299300	104'	15'-0"
ARC 12	3914629.327900	11482648.205300	259'	217'-7"
ARC 13	3914736.585800	11482766.283600	60'	37'-7"
ARC 14	3914642.969500	11482746.390200	156'	45'-5"
ARC 15	3914623.208000	11482725.113600	184'	35'-8"
ARC 16	3914670.612300	11482778.032500	113'	62'-10"
ARC 17	3914629.327900	11482648.205300	249'	162'-3"

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10/04/2024
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Albemarle County Public Schools

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Charlottesville, VA 22901

PROJECT MANAGER: JSK
DRAWN BY: HR

QEA No.41911390

BID DOCUMENTS
10/8/2024

LAYOUT AND MATERIALS PLAN ENLARGEMENT

L104

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
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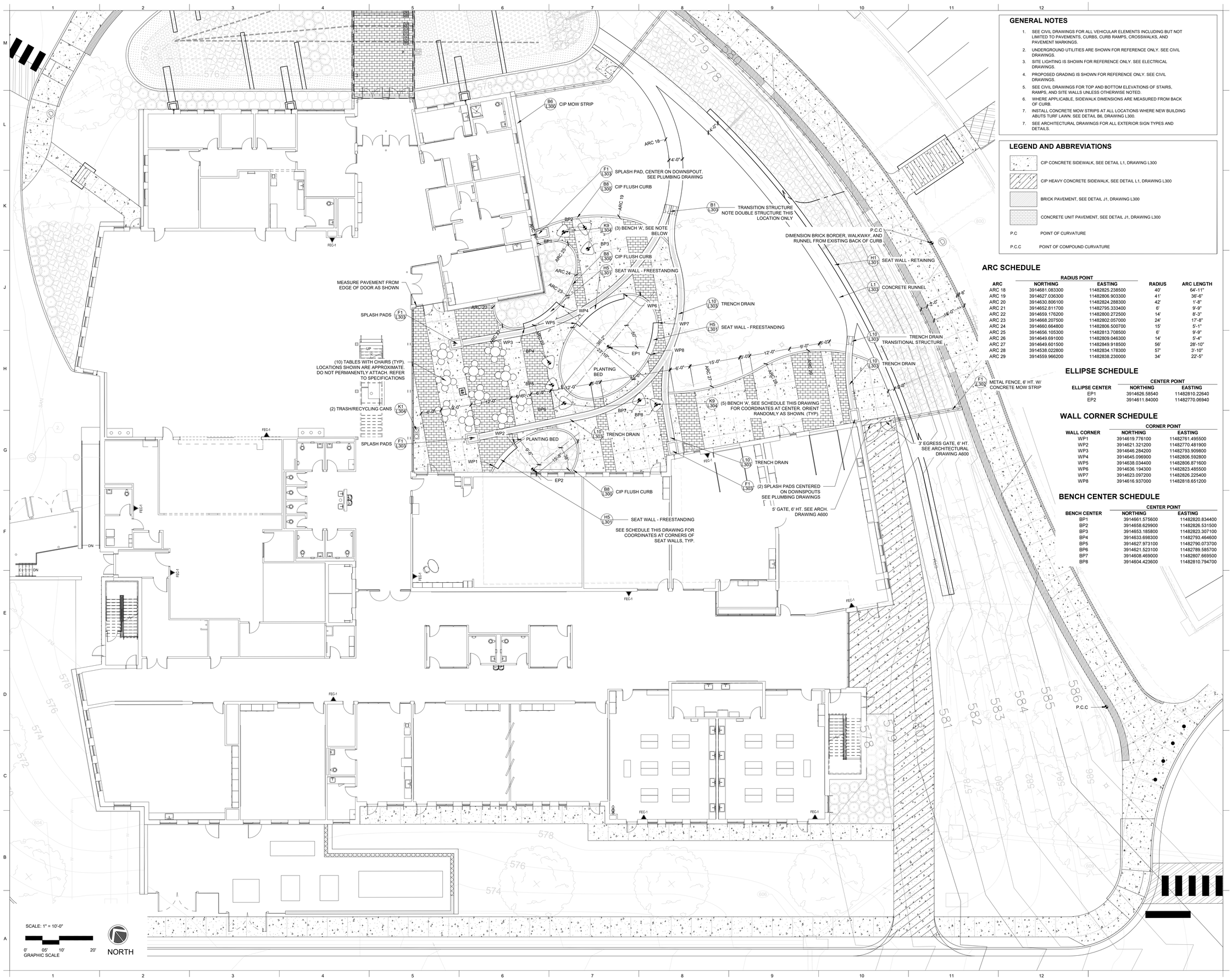

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- CIP HEAVY CONCRETE SIDEWALK, SEE DETAIL L1, DRAWING L300
- BRICK PAVEMENT, SEE DETAIL J1, DRAWING L300
- CONCRETE UNIT PAVEMENT, SEE DETAIL J1, DRAWING L300
- P.C — POINT OF CURVATURE
- P.C.C — POINT OF COMPOUND CURVATURE

ARC SCHEDULE

ARC	RADIUS POINT NORTHING	RADIUS POINT EASTING	RADIUS	ARC LENGTH
ARC 18	3914681.083300	11482825.238500	40'	64'-11"
ARC 19	3914627.036300	11482806.903300	41'	36'-6"
ARC 20	3914630.806100	11482824.288300	42'	1'-8"
ARC 21	3914652.811700	11482795.333400	6'	9'-9"
ARC 22	3914659.176200	11482800.272500	14'	8'-3"
ARC 23	3914668.207500	11482802.057000	24'	17'-8"
ARC 24	3914660.664800	11482806.500700	15'	5'-1"
ARC 25	3914656.105300	11482813.708500	6'	9'-9"
ARC 26	3914649.691000	11482809.046300	14'	5'-4"
ARC 27	3914649.601500	11482849.918500	56'	28'-10"
ARC 28	3914538.022800	11482834.178300	57'	3'-10"
ARC 29	3914559.966200	11482838.230000	34'	22'-5"

ELLIPSE SCHEDULE

ELLIPSE CENTER	CENTER POINT NORTHING	CENTER POINT EASTING
EP1	3914626.58540	11482810.22640
EP2	3914611.84000	11482770.06940

WALL CORNER SCHEDULE

WALL CORNER	CORNER POINT NORTHING	CORNER POINT EASTING
WP1	3914619.776100	11482761.495500
WP2	3914621.321200	11482770.481900
WP3	3914646.284200	11482793.909800
WP4	3914645.096900	11482806.592800
WP5	3914638.034400	11482806.871600
WP6	3914636.194300	11482823.485500
WP7	3914623.097200	11482826.225400
WP8	3914616.937000	11482818.651200

BENCH CENTER SCHEDULE

BENCH CENTER	CENTER POINT NORTHING	CENTER POINT EASTING
BP1	3914661.575600	11482820.834400
BP2	3914658.629900	11482826.531500
BP3	3914653.185800	11482823.307100
BP4	3914633.698300	11482793.464600
BP5	3914627.973100	11482790.073700
BP6	3914621.523100	11482789.585700
BP7	3914608.469000	11482807.669500
BP8	3914604.423600	11482810.794700

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Albemarle County Public Schools

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LAYOUT AND MATERIALS PLAN ENLARGEMENT

L105

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
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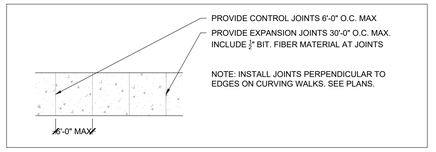
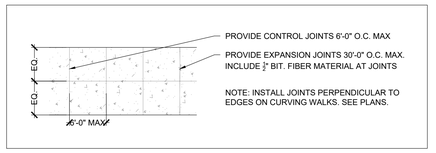


L1 / L106 TYPICAL SCORING PATTERN, SIDEWALKS UP TO 8'-0" WIDTH

SCALE 1" = 10'-0"



K1 / L106 TYPICAL SCORING PATTERN, SIDEWALKS OVER 8'-0" WIDTH

SCALE 1" = 10'-0"

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P.C POINT OF CURVATURE

P.C.C POINT OF COMPOUND CURVATURE

SCALE: 1" = 20'-0"

0' 10' 20' 40'
GRAPHIC SCALE

NORTH

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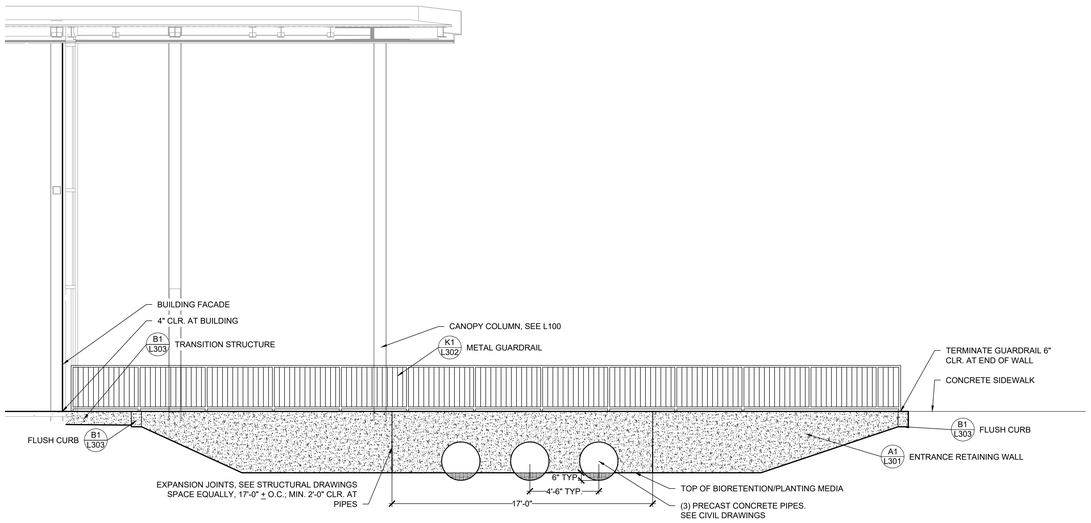
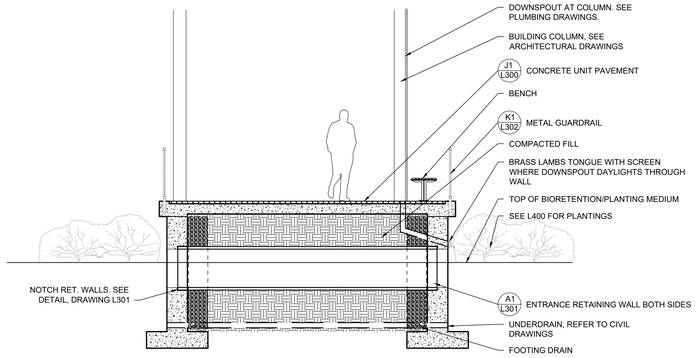
PAVEMENT SCORING PLAN

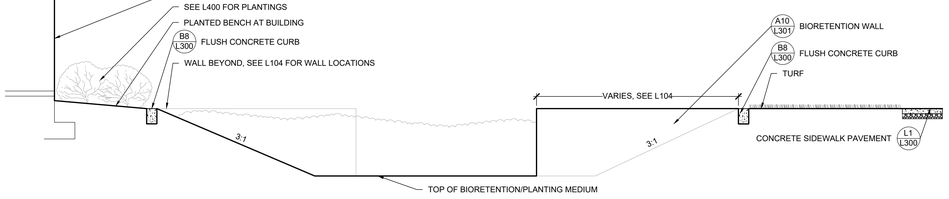
L106



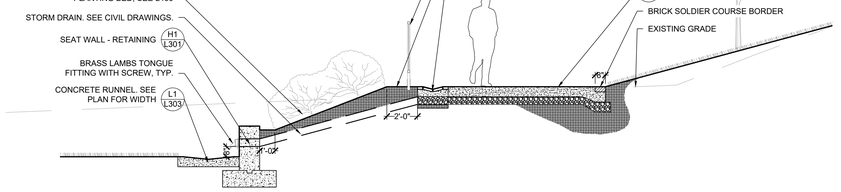
J1 L200 ELEVATION AT ENTRANCE WALKWAY
SCALE 1/4" = 1'-0"



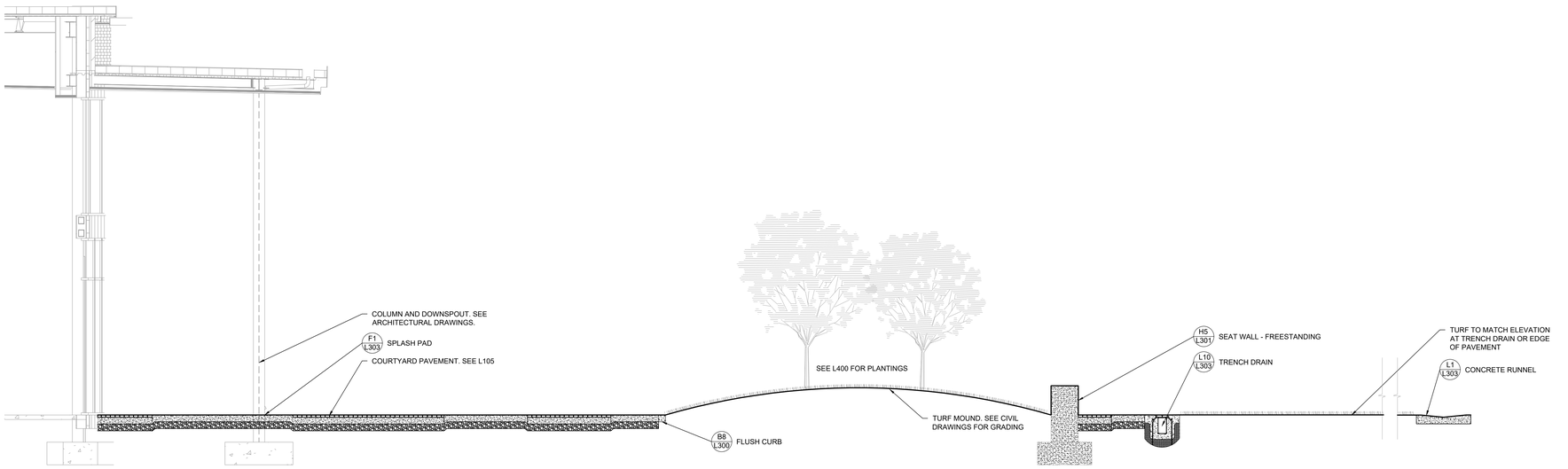
J7 L200 SECTION AT ENTRANCE WALKWAY
SCALE 1/4" = 1'-0"



E1 L200 SECTION AT BIORETENTION BASIN
SCALE 1/4" = 1'-0"



E7 L200 SITE SECTION
SCALE 1/4" = 1'-0"



A1 L200 SECTION AT COURTYARD
SCALE 1/4" = 1'-0"

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2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: JSK
DRAWN BY: HR

QEA No.41911390

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LANDSCAPE SECTIONS

L200

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
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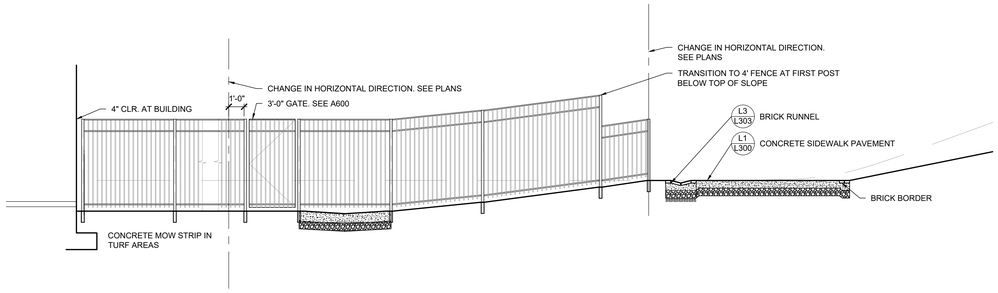
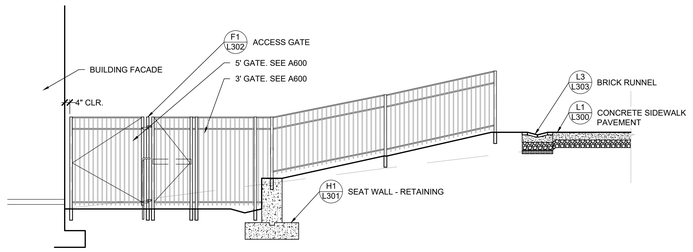


K1 L201 SECTION AT COURTYARD FENCE, NORTH

SCALE 1/4" = 1'-0"



K7 L201 SECTION AT COURTYARD FENCE, SOUTH

SCALE 1/4" = 1'-0"

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Albemarle County Public Schools

2775 Hydraulic Rd.
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: JSK

DRAWN BY: HR

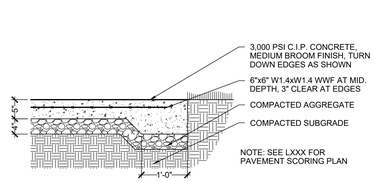
QEA No.41911390

BID DOCUMENTS
10/8/2024

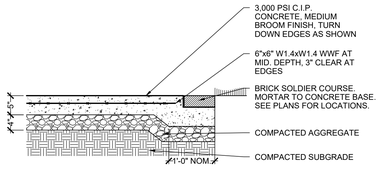
LANDSCAPE SECTIONS

L201

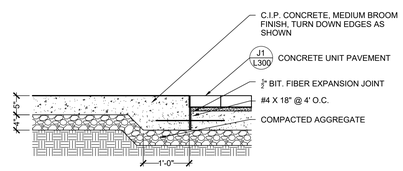
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/ARCH_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 8:37:19 AM



TYPICAL CONDITION



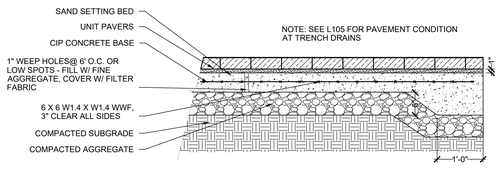
CONDITION WITH BRICK EDGE COURSE



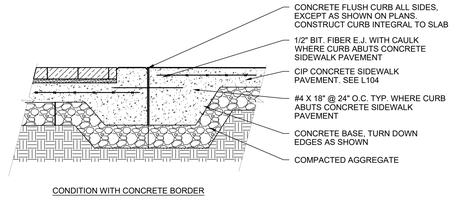
CONDITION ADJACENT CONCRETE UNIT PAVEMENT

L1 / L300 CIP CONCRETE SIDEWALK

SCALE 3/4" = 1'-0"



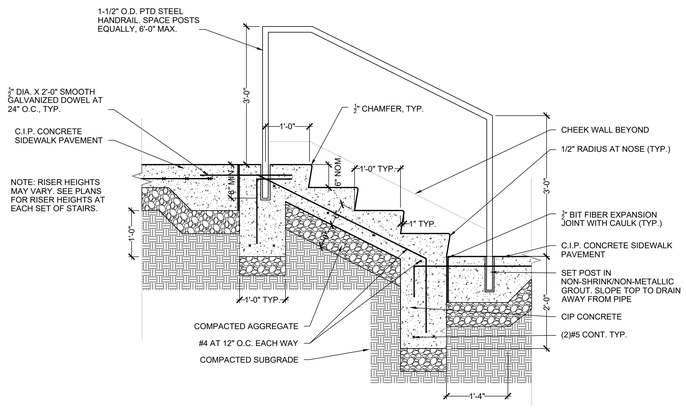
TYPICAL CONDITION

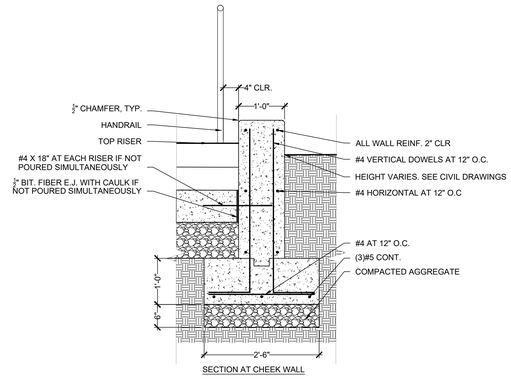


CONDITION WITH CONCRETE BORDER

J1 / L300 CONCRETE UNIT PAVEMENT

SCALE 3/4" = 1'-0"

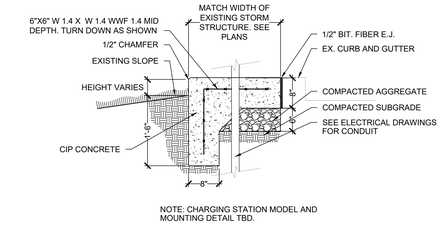




SECTION AT CHEEK WALL

E1 / L300 CIP CONCRETE STAIRS

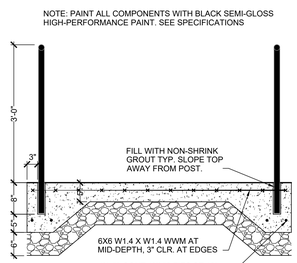
SCALE 3/4" = 1'-0"



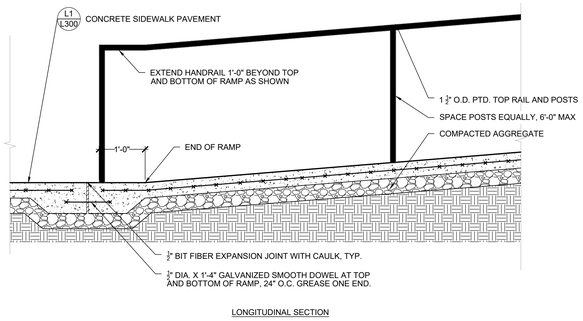
NOTE: CHARGING STATION MODEL AND MOUNTING DETAIL TBD.

E9 / L300 E.V. CHARGING STATION PAD

SCALE 3/4" = 1'-0"



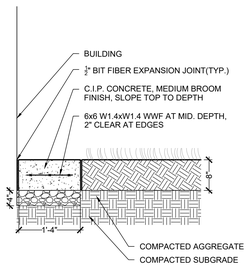
TRANSVERSE SECTION



LONGITUDINAL SECTION

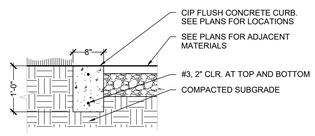
B1 / L300 CIP CONCRETE RAMP

SCALE 3/4" = 1'-0"



B6 / L300 CIP MOW STRIP

SCALE 3/4" = 1'-0"



B8 / L300 CIP FLUSH CURB

SCALE 3/4" = 1'-0"

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SUITE 400
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v 804.788.4774
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COMMONWEALTH OF VIRGINIA
JOHN SYDNEY KNIGHT
Lic. No. 1046
10/04/2024
LANDSCAPE ARCHITECT

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

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Albemarle County Public Schools

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LANDSCAPE DETAILS

L300

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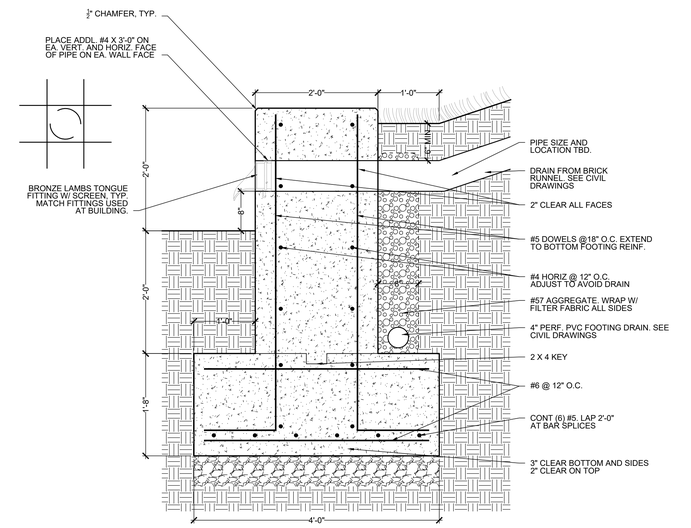
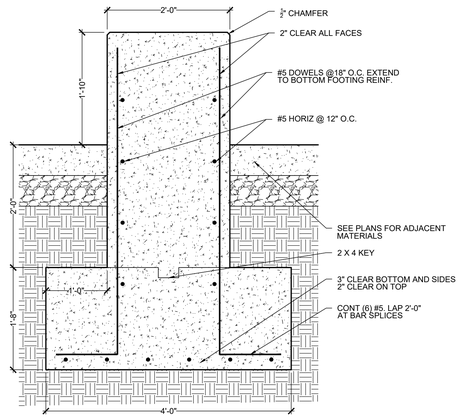
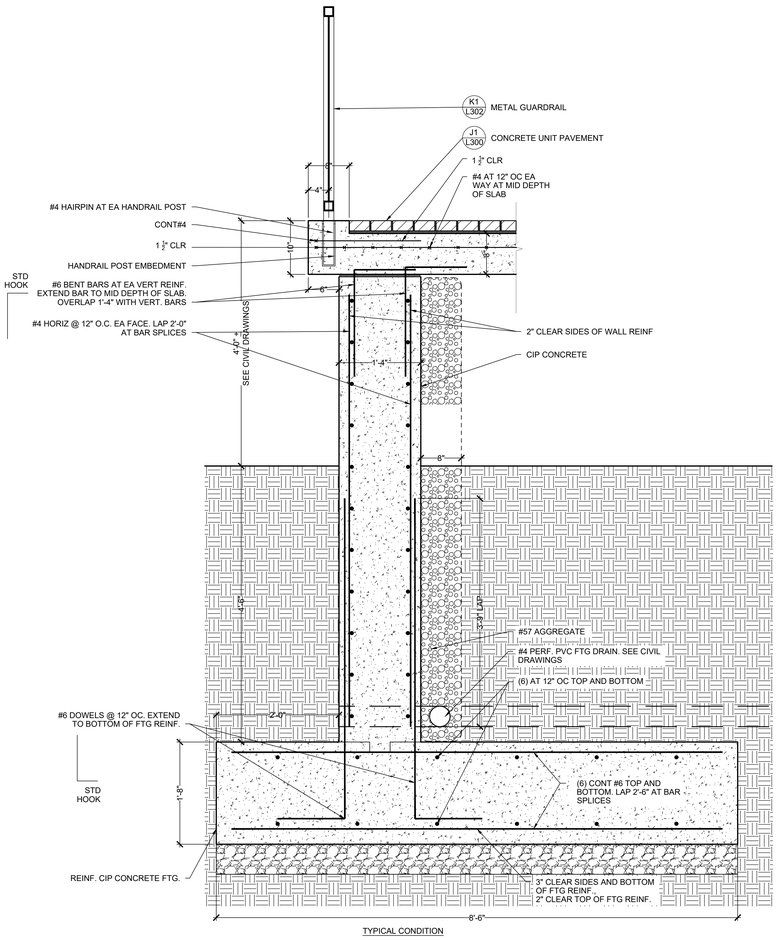


H1 L301 SEAT WALL - RETAINING
SCALE 1" = 1'-0"

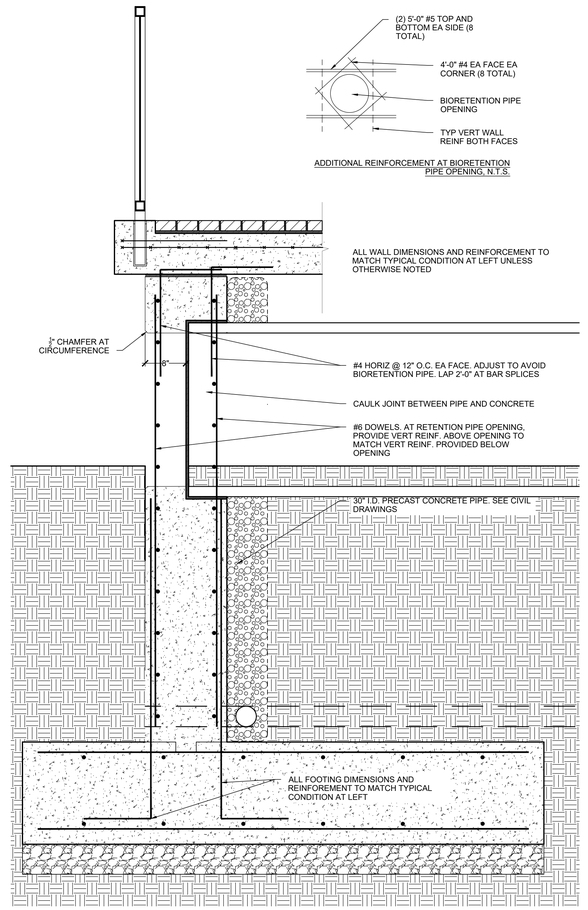


H5 L301 SEAT WALL - FREESTANDING
SCALE 1" = 1'-0"



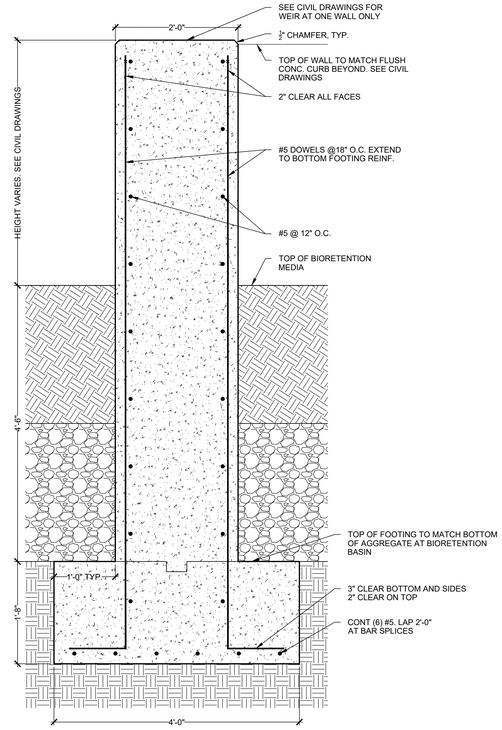
TYPICAL CONDITION

A1 L301 ENTRANCE RETAINING WALL
SCALE 1" = 1'-0"



CONDITION AT CONCRETE PIPES

ADDITIONAL REINFORCEMENT AT BIORETENTION PIPE OPENING, N.T.S.



A10 L301 BIORETENTION WALL
SCALE 1" = 1'-0"

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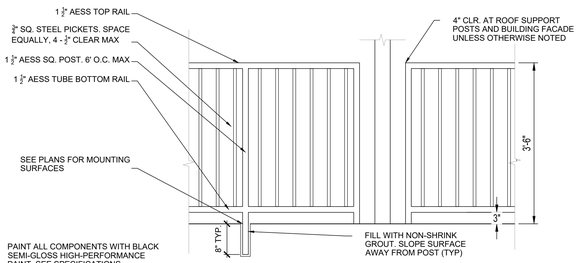
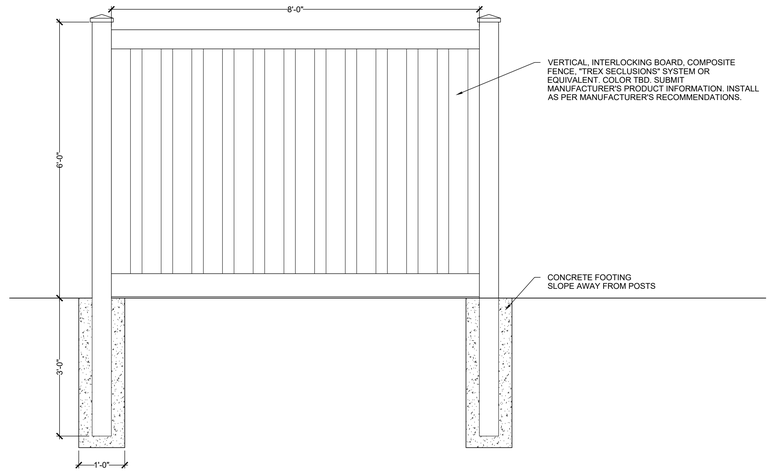
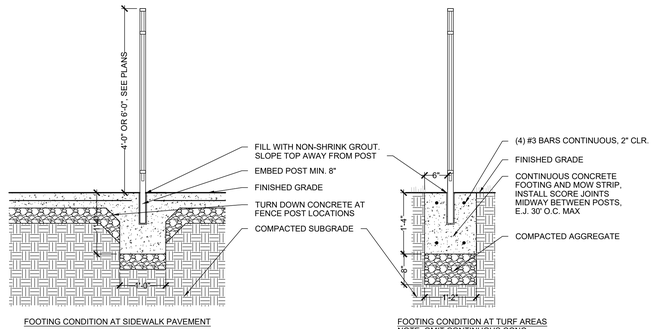
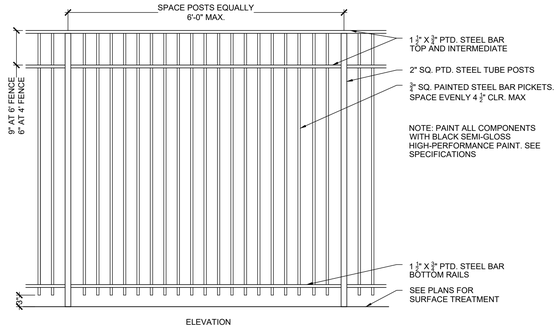


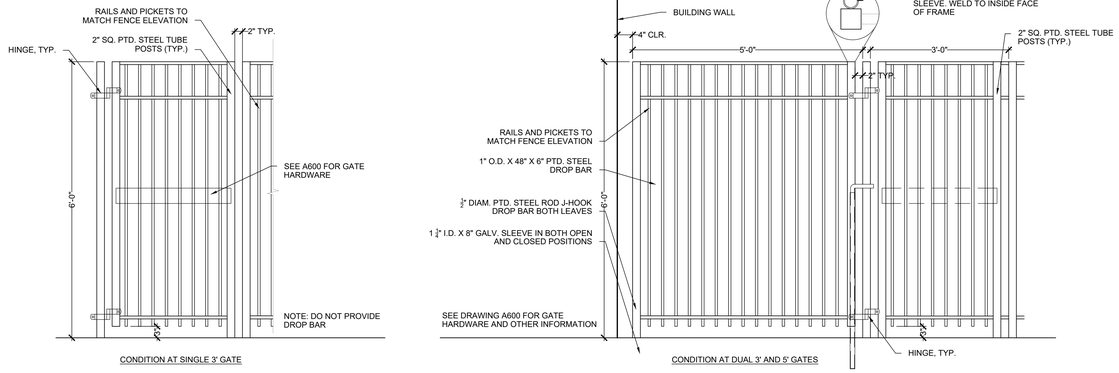
K1 L302 METAL GUARDRAIL
SCALE 3/4" = 1'-0"



J4 L302 PRIVACY FENCE
SCALE 3/4" = 1'-0"







C1 L302 METAL FENCE AND GATE
SCALE 3/4" = 1'-0"

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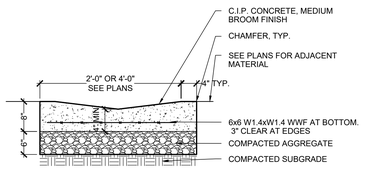
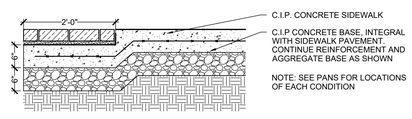
L302

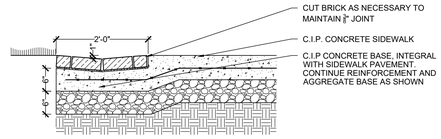


L1 / L303 CONCRETE RUNNEL

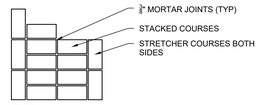
SCALE 3/4" = 1'-0"



CONDITION DOWNSTREAM FROM DRAIN STRUCTURES



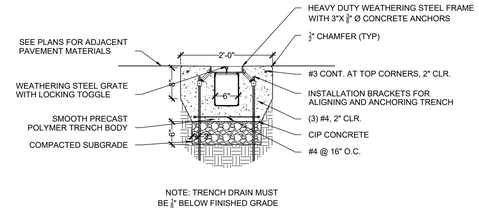
CONDITION UPSTREAM FROM DRAIN STRUCTURES



PLAN

L3 / L303 BRICK RUNNEL

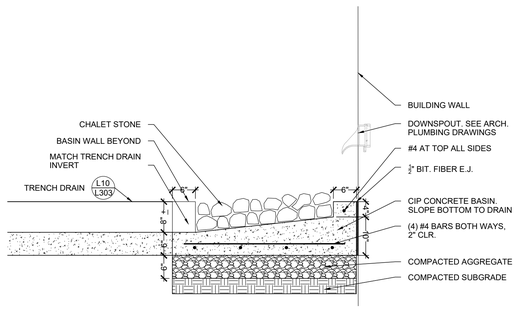
SCALE 3/4" = 1'-0"

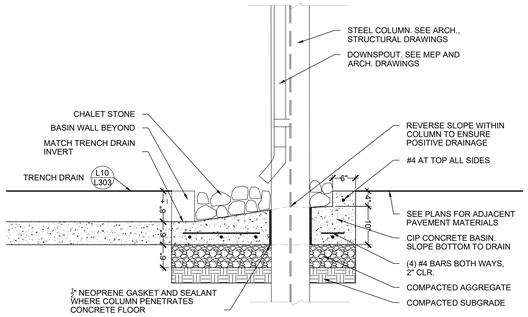


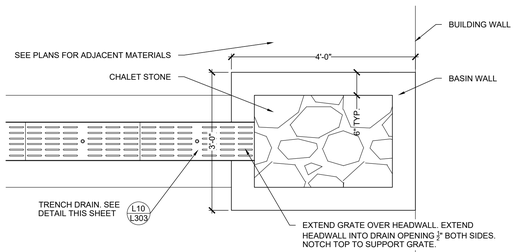
NOTE: TRENCH DRAIN MUST BE ¼" BELOW FINISHED GRADE

L10 / L303 TRENCH DRAIN

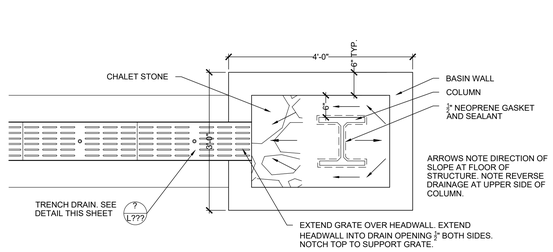
SCALE 3/4" = 1'-0"







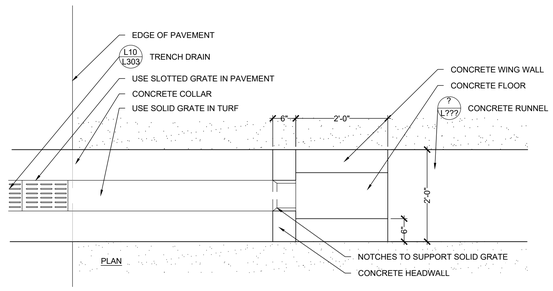
CONDITION AT WALL DRAINS



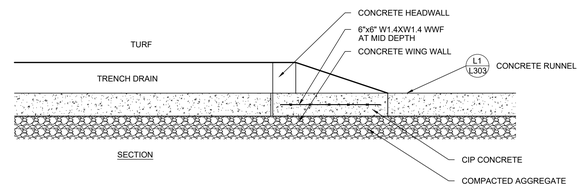
CONDITION AT ROOF COLUMNS

F1 / L303 SPLASH PAD

SCALE 3/4" = 1'-0"



PLAN



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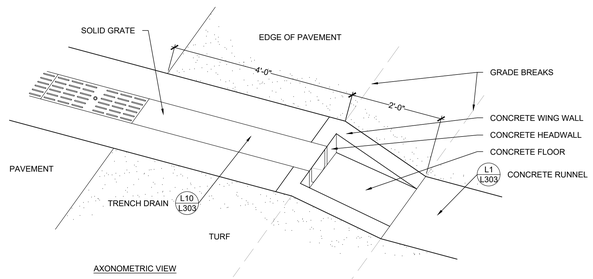

AXONOMETRIC VIEW

B1 / L303 TRANSITION STRUCTURE

SCALE 3/4" = 1'-0"

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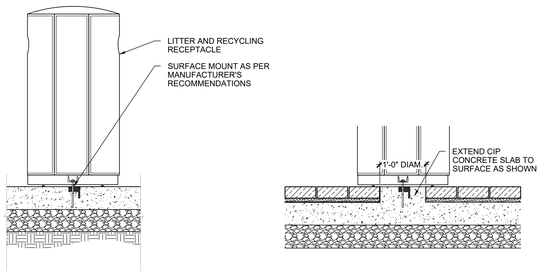
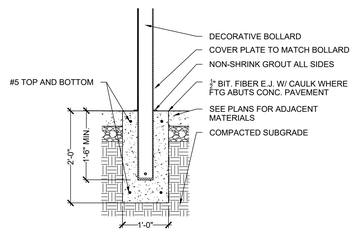
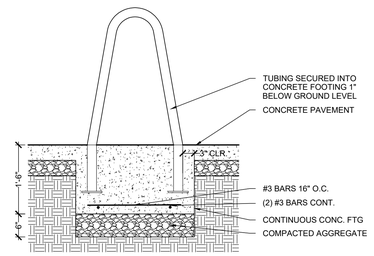
L303



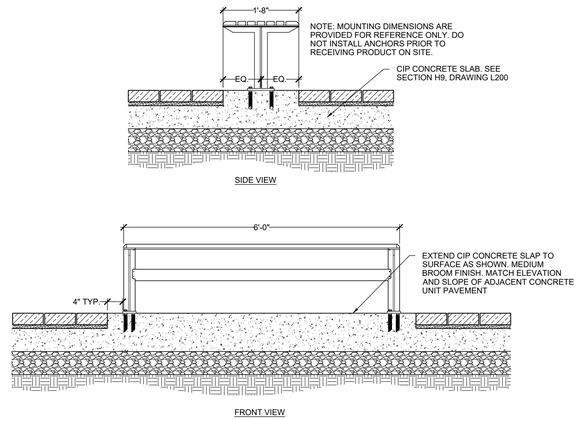
K1 L304 TRASH/RECYCLING CAN
SCALE 3/4" = 1'-0"



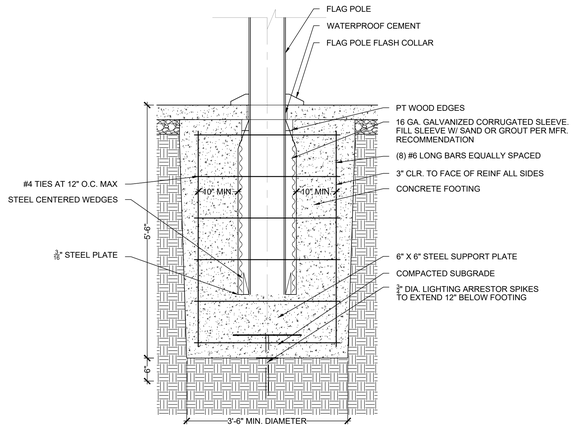
K4 L304 DECORATIVE BOLLARD
SCALE 3/4" = 1'-0"



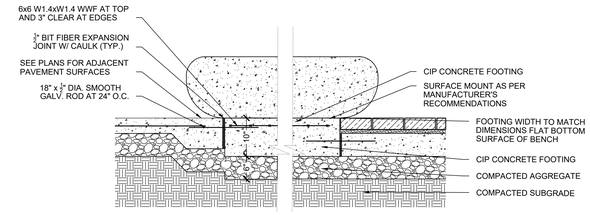
K7 L304 BIKE RACK
SCALE 3/4" = 1'-0"



K9 L304 BENCH 'A'
SCALE 3/4" = 1'-0"



F1 L304 FLAG POLE
SCALE 3/4" = 1'-0"



H4 L304 BENCH 'B'
SCALE 3/4" = 1'-0"

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GENERAL NOTES

1. SEE PLANTING SCHEDULE, DRAWING L403
2. SEE CIVIL DRAWINGS FOR EXISTING CONDITIONS, TREE PROTECTION, AND SITE DEMOLITION
3. ALL LAWN AREAS SHALL RECEIVE MIN. 12" TOPSOIL AND TURF-TYPE GRASS SEED PER SPECIFICATIONS. LAWN AREAS ARE DEFINED AS ANY DISTURBED AREAS WITHIN LIMITS OF WORK NOT DESIGNATED FOR PAVEMENT OR OTHER IMPROVEMENTS.
4. ALL PLANTING BEDS SHALL RECEIVE MIN. 18" PLANTING SOIL UNLESS OTHERWISE NOTED.

2 AMERICAN ELM
4 BLACK GUM
3 SHUMARD OAK
4 SWAMP WHITE OAK
2 WHITE OAK
1 BASSWOOD
BIORETENTION BASIN
3 SWEETBAY MAGNOLIA
7 LONDON PLANETREE, 40' O.C.
2 WILLOW OAK
2 BLACK GUM
6 RED OAK
2 FLOWERING DOGWOOD
SEE SHEET L401 FOR SHRUBS, PERENNIALS, AND GRASSES IN THIS AREA
2 FLOWERING DOGWOOD
3 WILLOW OAK, 40' O.C.
1 LONDON PLANETREE
4 TULIP POPLAR
45 VIRGINIA SWEETSPIRE, 3' O.C.
2 WHITE OAK
3 WILLOW OAK, 40' O.C.
10 BASSWOOD, 40' O.C.
10" DEC
8" RED OAK

SCALE: 1" = 20'-0"
0' 10' 20' 40'
GRAPHIC SCALE
NORTH

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QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

COMMONWEALTH OF VIRGINIA
JOHN SYDNEY KNIGHT
Lic. No. 1046
10/04/2024
LANDSCAPE ARCHITECT

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: JSK
DRAWN BY: HR

QEA No.41911390

BID DOCUMENTS
10/8/2024

PLANTING PLAN

L400

GENERAL NOTES

1. SEE PLANTING SCHEDULE, DRAWING L403
2. SEE CIVIL DRAWINGS FOR EXISTING CONDITIONS, TREE PROTECTION, AND SITE DEMOLITION
3. ALL LAWN AREAS SHALL RECEIVE MIN. 12" TOPSOIL AND TURF-TYPE GRASS SEED PER SPECIFICATIONS. LAWN AREAS ARE DEFINED AS ANY DISTURBED AREAS WITHIN LIMITS OF WORK NOT DESIGNATED FOR PAVEMENT OR OTHER IMPROVEMENTS.
4. ALL PLANTING BEDS SHALL RECEIVE MIN. 18" PLANTING SOIL UNLESS OTHERWISE NOTED.

105 MONARDA, 18" O.C.
30 VIRGINIA SWEETSPIRE, 3' O.C.
195 SHENANDOAH SWICTHGRASS, 18" O.C.
88 BLUE FLAG IRIS, 18" O.C.
134 SHENANDOAH SWICTH GRASS, 18" O.C.
94 BLUE FLAG IRIS, 18" O.C.
221 GRAY'S SEDGE, 18" O.C.
9 VIRGINIA SWEETSPIRE, 3' O.C.
1,868 BUFFALO GRASS, 9" O.C.
31 REDOSIER DOGWOOD, 3' O.C.
65 SWAMP MILKWEED, 18" O.C.
62 BLUE FLAG IRIS, 18" O.C.
BIORETENTION BASIN
7 WINTERBERRY HOLLY (M), 3' O.C.
5 VIRGINIA SWEETSPIRE, 3' O.C.
6 VIRGINIA SWEETSPIRE, 3' O.C.
13 WINTERBERRY HOLLY (F), 3' O.C.
10 WINTERBERRY HOLLY (F), 3' O.C.
6 WINTERBERRY HOLLY (M), 3' O.C.
13 VIRGINIA SWEETSPIRE, 3' O.C.
2 VIRGINIA SWEETSPIRE, 3' O.C.
6 WINTERBERRY HOLLY (F), 3' O.C.
6 VIRGINIA SWEETSPIRE, 3' O.C.
13 SUMMERSWEET, 3' O.C.
14 NORTHERN SEA OATS, 18" O.C.
179 REDOSIER DOGWOOD , 3' O.C.
40 REDOSIER DOGWOOD, 3' O.C.
17 VIRGINIA SWEETSPIRE, 3' O.C.
5 VIRGINIA SWEETSPIRE, 3' O.C.
12 SUMMERSWEET, 3' O.C.
15 NORTHERN SEA OATS, 18" O.C.
8 VIRGINIA SWEETSPIRE, 3' O.C.
14 VIRGINIA SWEETSPIRE, 3' O.C.
FEC-1
UP
DN
SAN
STM
UGP
OHP

SCALE: 1" = 10'-0"
0' 05' 10' 20'
GRAPHIC SCALE
NORTH

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PLANTING PLAN ENLARGEMENT

L401

GENERAL NOTES

1. SEE PLANTING SCHEDULE, DRAWING L403
2. SEE CIVIL DRAWINGS FOR EXISTING CONDITIONS, TREE PROTECTION, AND SITE DEMOLITION
3. ALL LAWN AREAS SHALL RECEIVE MIN. 12" TOPSOIL AND TURF-TYPE GRASS SEED PER SPECIFICATIONS. LAWN AREAS ARE DEFINED AS ANY DISTURBED AREAS WITHIN LIMITS OF WORK NOT DESIGNATED FOR PAVEMENT OR OTHER IMPROVEMENTS.
4. ALL PLANTING BEDS SHALL RECEIVE MIN. 18" PLANTING SOIL UNLESS OTHERWISE NOTED.

3 WILLOW OAK
4 LONDON PLANETREE
1 WILLOW OAK
6 SHUMARD OAK
LIGHT POLE
10 LONDON PLANETREE
5 RED OAK
1 LONDON PLANETREE
3 LONDON PLANETREE
4 WILLOW OAK
1 BASSWOOD
6" DEC.
ASPHALT STAIR
UGP

SCALE: 1" = 10'-0"
0' 2.5' 5' 10'
GRAPHIC SCALE
NORTH

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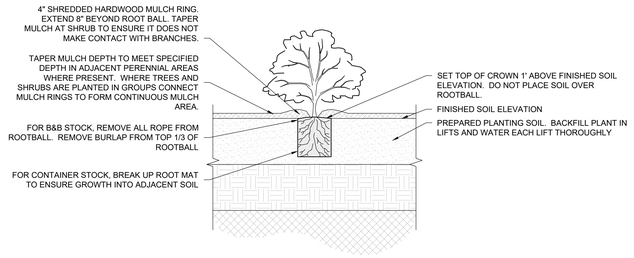
PLANTING PLAN ENLARGEMENT

L402

NOTES:

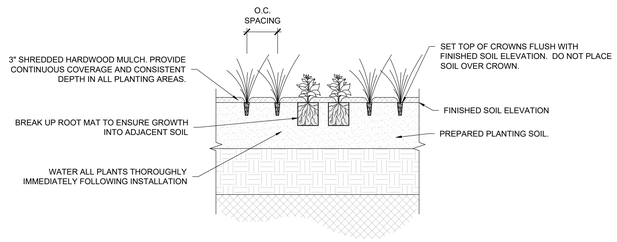
1. LOCATE ALL SHRUBS PER PLAN.
2. DO NOT PRUNE UNLESS DIRECTED TO DO SO BY LANDSCAPE ARCHITECT.



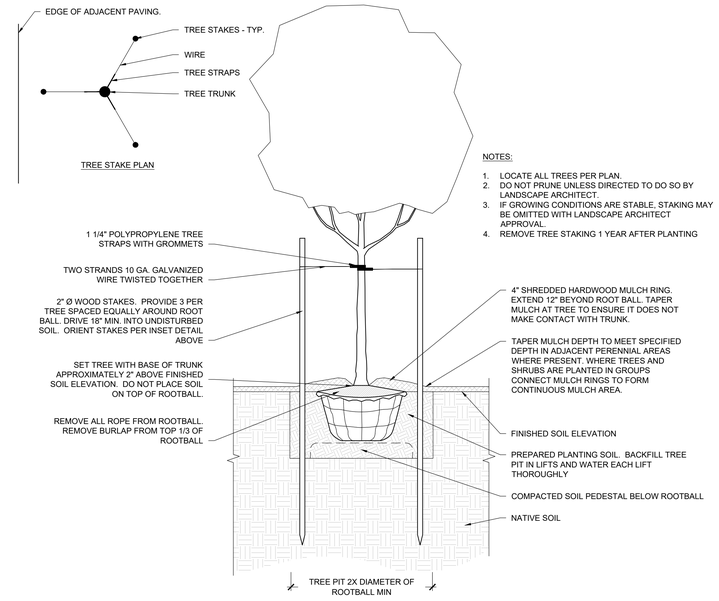
1 L400 SHRUB PLANTING
NOT TO SCALE

NOTES:

1. THIS DETAIL APPLIES TO ALL HERBACEOUS, SEDGE, GROUNDCOVER AND OTHER PERENNIAL SPECIES SHOWN ON THE PLAN.
2. LOCATE ALL PLANTS PER PLAN.
4. FOR SEDGE AND GROUNDCOVER PLANTINGS WHERE INDIVIDUAL PLANTS ARE NOT SHOWN ON THE PLAN, SPACE PLANTS EQUIDISTANT IN A STAGGERED / TRIANGULAR PATTERN.
5. REFER TO PLANT SCHEDULE FOR TYPICAL ON CENTER (O.C.) SPACING.
6. SEE CIVIL DRAWINGS FOR PLANTING MEDIUM IN BIORETENTION BASIN



2 L400 HERBACEOUS PLANTING
NOT TO SCALE



NOTES:

1. LOCATE ALL TREES PER PLAN.
2. DO NOT PRUNE UNLESS DIRECTED TO DO SO BY LANDSCAPE ARCHITECT.
3. IF GROWING CONDITIONS ARE STABLE, STAKING MAY BE OMITTED WITH LANDSCAPE ARCHITECT APPROVAL.
4. REMOVE TREE STAKING 1 YEAR AFTER PLANTING

3 L400 TREE PLANTING
NOT TO SCALE

ALBEMARLE COUNTY LANDSCAPE REQUIREMENTS

LANDSCAPING ALONG INTERIOR ROADS
*PER THE ENTRANCE CORRIDOR REQUIREMENTS OF THE ALBEMARLE ARB DESIGN GUIDELINES

REQUIREMENT	
1 LG TREE PER 40 LF	

INTERIOR PARKING LOT LANDSCAPE AREA REQUIREMENTS
*PER SEC. 32.7.9.6 OF THE ALBEMARLE COUNTY CODE

REQUIREMENT	PARKING LOT AREA	CALCULATIONS	REQUIRED	PROVIDED
5% GROSS PARKING AREA	67,000 (NEW PARKING LOT)	67,000 X 0.05 = 3,350	3,350	4,025

INTERIOR PARKING LOT LANDSCAPE AREA REQUIREMENTS
*PER SEC. 32.7.9.6 OF THE ALBEMARLE COUNTY CODE

REQUIREMENT	PARKING LOT SPACES	CALCULATIONS	REQUIRED	PROVIDED
1 MED-LG SHADE TREE PER 10 PARKING SPACES	193 (NEW PARKING LOT)	193 / 10 = 19.3	20	25

TREE CANOPY COVER
*PER SEC. 32.7.9.8 OF THE ALBEMARLE COUNTY CODE

REQUIREMENT	SITE AREA	CALCULATIONS	REQUIRED	CALCULATIONS (NEW TREES)	PROVIDED
10% CANOPY COVER	402,000 SF (9.22 AC)	406,000/0.10 = 40,600 SF	40,600 SF	SEE PLANT SCHEDULE FOR CALCS	35,778 SF NEW
CREDIT FOR EX. TREES			20 YR. CANOPY x 1.25	SEE PLANT SCHEDULE FOR CALCS	14,106 SF EXISTING
					49,884 SF TOTAL

PLANT SCHEDULE

QUANTITY	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	PLANT SIZE	ROOT	PROJECTED TREE COVER SF (10 YRS)	PROJECTED TREE COVER SF TOTALS	NOTES
Trees								
4	Cornus florida 'Appalachian Spring'	Appalachian Spring Dogwood		6' HT	B&B	124	496	
4	Liriodendron tulipifera	Tulip Poplar		2.5" CAL	B&B	430	1720	
3	Magnolia virginiana	Sweetbay Magnolia		8' HT	B&B	79	237	
6	Nyssa sylvatica 'Wildfire'	Wildfire Blackgum		2" CAL	B&B	151	906	
26	Platanus x acerifolia 'Bloodgood'	Bloodgood London Planetree		2.5" CAL	B&B	422	10972	
4	Quercus alba	White Oak		2.5" CAL	B&B	289	1156	
4	Quercus bicolor	Swamp White Oak		2.5" CAL	B&B	339	1356	
16	Quercus phellos	Willow Oak		2.5" CAL	B&B	419	6704	
11	Quercus rubra	Red Oak		2.5" CAL	B&B	481	5291	
9	Quercus shumardii	Shumard Oak		2.5" CAL	B&B	372	3348	
12	Tilia americana 'Redmond'	Redmond American Basswood		2.5" CAL	B&B	222	2664	
2	Ulmus americana 'Princeton'	Princeton American Elm		2.5" CAL	B&B	464	928	
							35778	TOTAL PROJECTED TREE COVER SF
Shrubs								
25	Clethra alnifolia 'Hummingbird'	Hummingbird Summersweet	#3	24" HT	Container			
250	Cornus sericea 'Kelsey's Dwarf'	Red Osier Dogwood	#3	24" HT	Container			
29	Ilex verticillata 'Berry Poppins'	Winterberry Holly (F)	#3	24" HT	Container			
13	Ilex verticillata 'Mr. Poppins'	Winterberry Holly (M)	#3	24" HT	Container			
120	Itea virginica 'Henry's Garnet'	Virginia Sweetspire	#3	24" HT	Container			
64	Ilex verticillata 'Red Sprite'	Red Sprite Winterberry	#3	24" HT	Container			
89	Itea virginica	Virginia Sweetspire	#3	24" HT	Container			
Groundcover/Grass/Perennial/Vine								
65	Aesclepias incarnata	Swamp Milkweed	#1	PLUG	Container			
29	Chasmanthium latifolium	Northern Sea Oats	#1	PLUG	Container			
244	Iris versicolor	Blue Flag Iris	#1	PLUG	Container			
105	Monarda didyma 'Grand Marshall'	Scarlet Beebalm	#1	PLUG	Container			
329	Panicum virgatum 'Shenandoah'	Shenandoah Switchgrass	#1	PLUG	Container			
1,868	Bouteloua dactyloides	Buffalo Grass	#2	PLUG				
221	Caryx garyi	Gray's Sedge	#1	PLUG	Container			

PRESERVED TREE CANOPY

QUANTITY	BOTANICAL NAME	COMMON NAME	PROJECTED TREE COVER SF (20 YRS)	PROJECTED TREE COVER SF WITH 1.26X CREDIT	PROJECTED TREE COVER SF TOTALS	NOTES
Trees						
8	Unknown	Large Deciduous Tree	315	394	3150	
10	Quercus rubra	Red Oak	600	750	7500	
6	Acer spp.	Unspecified Maple	315	394	2363	
3	Unknown	Coniferous Tree	175	219	656	
2	Ilex spp.	Unspecified Holly	175	219	438	
					14106	TOTAL EXISTING TREE COVER SF

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v 804.788.4774
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QEA No.41911390

BID DOCUMENTS
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PLANTING DETAILS

L403

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GENERAL STRUCTURAL NOTES

GENERAL/BUILDING CODE

GBC-1: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ***2018 VIRGINIA CONSTRUCTION CODE, PART 1 OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (VUSBC), EFFECTIVE JULY 1, 2021.***

GBC-2: NO LOADS IN EXCESS OF THE DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION, UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE LOADS.

GBC-3: IF ANY CHANGES ARE MADE IN WEIGHT AND/OR LOCATION OF POINTS OF SUPPORT OF EQUIPMENT, THE CONTRACTOR SHALL FURNISH DETAILS OF CHANGES TO THE ARCHITECT FOR REVIEW AND NECESSARY MODIFICATIONS.

GBC-4: TEMPORARY BRACING, GUY WIRES, SHORING, ETC., SHALL BE USED AS NECESSARY TO RESIST ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING EQUIPMENT AND ITS OPERATION.

GBC-5: THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. THE ERECTION PROCEDURE AND SEQUENCE INCLUDING THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

GBC-6: STRUCTURAL DRAWINGS DO NOT SHOW ALL OPENINGS, COORDINATE WITH MECHANICAL DRAWINGS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL.

GBC-7: REFER TO ARCHITECTURAL DRAWINGS FOR WATERPROOFING DETAILS.

GBC-8: THE ENGINEER SHALL NOT HAVE THE AUTHORITY OR RESPONSIBILITY TO SUPERVISE OR DIRECT THE CONSTRUCTION WORK.

GBC-9: ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS.

SPECIAL INSPECTIONS

SI-1: SPECIAL INSPECTIONS ARE REQUIRED BY THE BUILDING CODE (CHAPTER 17). REFER TO SECTION 014000 OF THE SPECIFICATIONS FOR THE GENERAL INSPECTION REQUIREMENTS. THE FOLLOWING IS A LIST OF ITEMS THAT REQUIRE SPECIAL INSPECTION. REFER TO THE REFERENCED SPECIFICATION SECTION FOR THE SPECIFIC REQUIREMENTS FOR EACH ITEM. THE INDEPENDENT INSPECTION AGENCY, ENGAGED BY THE OWNER, SHALL REVIEW THE TEST PROCEDURES AND INSPECTIONS WITH THE STRUCTURAL ENGINEER OF RECORD, THE GENERAL CONTRACTOR, AND THE OWNER PRIOR TO CONDUCTING TESTS AND INSPECTIONS.

A.	EARTH MOVING	SECTION 312000
B.	CAST-IN-PLACE CONCRETE	SECTION 033000
C.	CONCRETE UNIT MASONRY	SECTION 042200
D.	STRUCTURAL STEEL FRAMING	SECTION 051200
E.	ARCHITECTURAL EXPOSED STRUCTURAL STEEL FRAMING	SECTION 051213
F.	STEEL JOIST FRAMING	SECTION 052100
G.	STEEL DECKING	SECTION 053100
H.	COLD-FORMED METAL FRAMING	SECTION 054000
I.	METAL FABRICATIONS	SECTION 055000
J.	POST-INSTALLED ANCHORS	(SEE GENERAL NOTE)

SHOP DRAWING SUBMITTALS

SDS-1: THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS, INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATES, INSERTS, ETC. PROMPTLY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR OMISSIONS.

SDS-2: THE CONTRACTOR SHALL VERIFY ALL FLOOR AND ROOF MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS, AND VERIFY ALL ROOF OPENING SIZES AND LOCATIONS, WITH ARCHITECTURAL AND MECHANICAL DRAWINGS AND REVIEWED SHOP DRAWINGS.

SDS-3: REFER TO PROJECT MANUAL FOR SUBMITTAL REQUIREMENTS. IN THE ABSENCE OF A PROJECT MANUAL, PROVIDE (1) ELECTRONIC PDF COPY OF ALL STRUCTURAL SUBMITTALS.

SDS-4: SHOP DRAWINGS ARE TO BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED FOR APPROVAL. SUBMITTED SHEETS SHALL CONTAIN THE CONTRACTOR'S SIGNED AND DATED REVIEW STAMP.

DEFERRED STRUCTURAL SUBMITTALS

DS-1: THE FOLLOWING ITEMS ARE CONSIDERED TO BE DEFERRED STRUCTURAL SUBMITTALS AND SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEW, WHO SHALL REVIEW THEM AND FORWARD THEM TO THE CONTRACTOR WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE CONTRACTOR IS RESPONSIBLE FOR FORWARDING REVIEWED DEFERRED SUBMITTALS TO THE BUILDING OFFICIAL. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE CONTRACTOR. ALL DEFERRED SUBMITTALS SHALL BE SEALED BY THE SPECIALTY STRUCTURAL ENGINEER REGISTERED IN THE JURISDICTION OF THE PROJECT, WHO IS RESPONSIBLE FOR THEIR PREPARATION. REFER TO ARCHITECTURAL DRAWINGS FOR NON-STRUCTURAL DEFERRED SUBMITTALS.

1. STEEL STAIRS AND RAILINGS
2. CURTAIN WALL SYSTEMS AND CONNECTIONS
3. SUPPORT AND CONNECTIONS FOR MECHANICAL, ELECTRICAL, PLUMBING, AND FIRE PROTECTION SYSTEMS
4. COLD-FORMED METAL FRAMING
5. SPECIALTY EQUIPMENT SKIDS
6. CANOPIES AND SUNSHADES
7. OPEN WEB STEEL JOISTS

DESIGN LOADS AND PARAMETERS

DL-1: BUILDING RISK CATEGORY (TABLE 1604.5) = CATEGORY III

DL-2: LIVE LOADS (REFER TO FRAMING PLANS FOR MORE SPECIFIC LOADS)

ROOF	20 PSF
ROOF ABOVE MECH	(20 + 40 MECH) = 60 PSF TOTAL
OFFICE AND CLASSROOMS	50 PSF + 15 PSF PARTITIONS
CORRIDORS (ABOVE 1ST FLOOR)	80 PSF
LOBBIES (MAIN FLOOR)	100 PSF
STAIRS	100 PSF
BALCONIES	75 PSF
STORAGE - LIGHT	125 PSF
MECHANICAL	125 PSF

FLOOR LIVE LOAD REDUCTION (BY EQ 16-23)
ROOF LIVE LOAD REDUCTION (NOT USED)

DL-3: CONCENTRATED LIVE LOADS (OVER 2.5'X2.5' AREA):

300 POUNDS - ROOFS
2000 POUNDS - OFFICES
200 POUNDS - SCUTTLES, SKYLIGHT RIBS, AND CEILINGS WITH ACCESS

DL-4: SNOW LOADS

P_g=30PSF (GROUND SNOW)
C_e=1.0 (SNOW EXPOSURE FACTOR)
C_t=1.0 (THERMAL FACTOR)
I_s=1.1 (SNOW LOAD IMPORTANCE FACTOR: ASCE 7-16 TABLE 1.5-2)
P_f (SNOW LOAD FOR LOW-SLOPE ROOF)=0.7X(C_e)X(C_t)X(I_s)X(P_g) = 0.7X1.0X1.1X30 = 23.1 PSF
TOTAL (LOW-SLOPE ROOF) = 23.1 PSF
MINIMUM P_f (LOW-SLOPE ROOF WHERE P_g> 20.0 PSF) = P_m =(20)X(I_s) = 20.0X1.1 = 22.0 PSF (USE 23.1 PSF)

REFER TO ROOF FRAMING PLAN FOR SNOW DRIFT LOAD DIAGRAM.

DL-5: WIND LOADS

V=120 MPH (BUILDING RISK CATEGORY: III) (BASIC WIND SPEED: 3-SECOND GUST)
V_{asd} = 93 MPH
EXPOSURE C
K_d=0.85 (WIND DIRECTIONALITY FACTOR)
K_{zt}=1.0 (TOPOGRAPHIC FACTOR)
K_e=1.0 (GROUND ELEVATION FACTOR)
GC_{pi}=±0.18 (ENCLOSED BUILDING OR PARTIALLY OPEN BUILDING)

WIND LOAD DETERMINATION BY: ASCE 7-16, CHAPTERS 26, 27, 29, 30 (DIRECTIONAL PROCEDURE)
COMPONENTS AND CLADDING LOADS (STRENGTH LEVEL LOAD INDICATED IN TABLE THIS DRAWING):

DL-6: SEISMIC LOADS

I_e=1.25 (ASCE 7-16 TABLE 1.5-2)
SEISMIC SITE CLASS = D (ASSUMED)

S_s=20.9%G — S_{ms}=(F_a)X(S_s)=(1.6)X(20.9) = 33.44%G
S_1=5.8%G — S_{m1}=(F_v)X(S_1)=(2.4)X(5.8) = 13.92%G
F_a=1.6 — S_{ds}=(2/3)X(S_{ms}) = 22.3%G
F_v=2.40 — S_{d1}=(2/3)X(S_{m1}) = 9.3%G

SEISMIC DESIGN CATEGORY = B

BASIC STRUCTURAL SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE

SEISMIC FORCE-RESISTING SYSTEM: STEEL SYSTEMS NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE
R=(RESPONSE MODIFICATION FACTOR) = 3.0
Ω_o =(SYSTEM OVERSTRENGTH FACTOR) = 3.0
C_d=(DEFLECTION AMPLIFICATION FACTOR) = 3.0
(NO SPECIAL DETAILING REQUIRED PER AISC 341 "SEISMIC PROVISIONS FOR STEEL BUILDINGS")

BASIC STRUCTURAL SYSTEM: BEARING WALL SYSTEMS

SEISMIC- FORCE- RESISTING SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
R= (RESPONSE MODIFICATION FACTOR) = 3.5
Ω_o= (SYSTEM OVERSTRENGTH FACTOR) = 2.5
C_d= (DEFLECTION AMPLIFICATION FACTOR) = 2.25

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE METHOD
STRUCTURAL HEIGHT, h_n = 35 FT
FUNDAMENTAL PERIOD, T = 0.355s
SEISMIC RESPONSE COEFFICIENT, C_s = 0.093
SEISMIC BASE SHEAR (STRENGTH LEVEL LOAD), V = 450 KIPS

HORIZONTAL STRUCTURAL IRREGULARITIES THIS PROJECT (TABLE 12.3-1)

TYPE 1b - EXTREME TORSIONAL IRREGULARITY
TYPE 4 - OUT-OF-PLANE OFFSET IRREGULARITY
TYPE 5 - NON-PARALLEL SYSTEM IRREGULARITY

VERTICAL STRUCTURAL IRREGULARITIES THIS PROJECT (TABLE 12.3-2)

NONE

DL-7: EARTH PRESSURES (EQUIVALENT FLUID PRESSURES)

AT REST (BRACED WALLS)	50 PCF SOIL/42 PSF STONE
ACTIVE (CANTILEVERED WALLS)	33 PCF SOIL/26 PSF STONE
PASSIVE	300 PCF
FRICTION COEFFICIENT FOR SLIDING	0.30

DL-8: ICE LOADS

ICE DENSITY= 56 pcf (ASCE 7-16, SECTION 10.4)
t=1.1" (NOMINAL ICE THICKNESS AT 33' HT, ASCE 7-16 Fig 10.4-2)
CONCURRENT TEMPERATURE = 15 DEGREES F
GUST SPEED = 30 MPH
I_i=1.15 (ICE LOAD IMPORTANCE FACTOR, ASCE 7-16, TABLE 1.5-2)
Z=35' (HT ABOVE GROUND)
f_z=(Z/33)$^{0.10}$ (HT FACTOR, ASCE 7-16 EQ 10.4-4) = (35/33)$^{0.10}$ = 1
K_{zt}=1.0 (TOPOGRAPHIC FACTOR, ASCE 7-16 CH. 26)
t_D=(t)(I_i)(f_z)(K_{zt})$^{0.35}$ (DESIGN ICE THICKNESS, ASCE 7-16 EQ 10.4-5) = (1") (1.15) (1) (1.0)$^{0.35}$ = 1.15"
WEIGHT OF ICE = 1.15"/12 X 56 PCF = 5.37 PSF SURFACE AREA

DL-9: RAIN LOADS

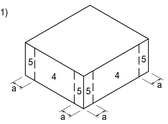
i=3.38 in/hr (VUSBC 2018 FIGURE 1611.1)
A=2,500 SF (WORST CASE AREA PER SECONDARY DRAIN, 4" DIA OUTLET PIPE MIN)
Q=0.0104 (A) (i) (FLOW RATE 7-16 EQ C8.3-1) = 0.0104 (2,500 SF)(3.38 in/hr) = 87.9 GAL/MIN
d_s=1.0" (ASCE 7-16, TABLE C8.3-1)
d_d=2" (DEPTH OF WATER UP TO SECONDARY DRAINAGE INLET)
R=5.2(d_s+d_h) (VUSBC 2018 EQ 16-36. DESIGN RAIN LOAD) = 5.2(2"+1.0") = 15.6 PSF

COMPONENTS AND CLADDING DESIGN WIND PRESSURE TABLE FOR BUILDINGS WITH MEAN ROOF HEIGHT H≤60'

FLAT/HIP/GABLE ROOF (0°≤θ≤7°)

WALL DESIGN PRESSURES (PSF) (FIGURE 30.3-1)

EFFECTIVE WIND AREA (SQ FT)	ZONES 4,5 (+)	ZONE 4 (-)	ZONE 5 (-)
10	34.3	-37.2	-45.8
20	32.8	-35.7	-42.7
50	30.8	-33.7	-38.7
100	29.3	-32.1	-35.7
200	27.8	-30.6	-32.6
500	25.8	-28.6	-28.6



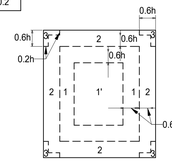
WALL PRESSURE ZONES

FLAT ROOF DESIGN PRESSURES (PSF)
(FIGURE 30.3-2A) ROOF SLOPES < 7 DEGREES)

EFFECTIVE WIND AREA (SQ FT)	ALL ZONES (+)	ZONE 1' (-)	ZONE 1 (-)	ZONE 2 (-)	ZONE 3 (-)
10	16	-34.3	-59.8	-78.8	-107.5
20	16	-34.3	-55.8	-73.8	-97.3
50	16	-34.3	-50.6	-67.1	-83.9
100	16	-34.3	-46.7	-62.0	-73.8
200	16	-29.6	-42.7	-56.9	-63.6
500	16	-23.2	-37.5	-50.2	-50.2

ROOF OVERHANG DESIGN PRESSURES (PSF)
(FIGURE 30.3-2A)

EFFECTIVE WIND AREA (SQ FT)	ZONES 1',1 (-)	ZONE 2 (-)	ZONE 3 (-)
10	-59.8	-78.8	-107.5
20	-58.8	-72.1	-95.6
50	-57.5	-63.2	-80.0
100	-56.6	-56.4	-68.2
200	-48.4	-49.6	-56.3
500	-37.5	-40.7	-40.7



FLAT ROOF AND OVERHANG PRESSURE ZONES (PLAN VIEW)

PARAPET NET DESIGN PRESSURES (PSF)
(FIGURE 30.8-1)

EFFECTIVE WIND AREA (SQ FT)	ZONE 4 (+)	ZONE 5 (+)	ZONE 4 (-)	ZONE 5 (-)
10	101.7	130.4	60.1	68.7
20	95.1	118.7	57.0	64.1
50	86.4	103.3	53.0	58.1
100	79.8	91.6	50.0	53.5
200	73.3	80.0	46.9	49.0
500	64.5	64.5	42.9	42.9

NOTES:
1. h = 35' = MEAN ROOF HEIGHT
2. 0.6h = 21'
3. 0.2h = 7'
4. a = 14'
5. PLUS SIGN (+) SIGNIFIES PRESSURE ACTING TOWARD THE SURFACE.
6. MINUS SIGN (-) SIGNIFIES PRESSURE ACTING AWAY FROM THE SURFACE.
7. ALL PRESSURES INDICATED ARE STRENGTH-LEVEL DESIGN LOADS.

FOUNDATIONS

F-1: FOUNDATIONS FOR THIS STRUCTURE ARE SPREAD FOOTINGS BEARING ON EITHER VIRGIN SOIL OR CONTROLLED COMPACTED FILL WITH AN ASSUMED SOIL BEARING CAPACITY OF 2500 PSF IN ACCORDANCE WITH THE OWNER'S GEOTECHNICAL ENGINEER'S REPORT BY SCHNABEL ENGINEERING, DATED 05/31/2024.

F-2: THE OWNER'S GEOTECHNICAL ENGINEER SHALL VERIFY, PRIOR TO POURING CONCRETE, THAT THE SOIL IS CAPABLE OF SUPPORTING SUCH A LOAD AND IS CONSISTENT WITH THE GEOTECHNICAL REPORT.

F-3: THE CONTRACTOR SHALL PROTECT THE FOOTINGS AND SLABS FROM DAMAGE FROM FROST HEAVE DURING CONSTRUCTION UNTIL THE FINAL DESIGN STRUCTURE IS COMPLETE.

F-4: STEPS IN WALL FOOTINGS SHALL HAVE A MINIMUM SPACING OF DOUBLE THE CHANGE IN ELEVATION.

F-5: BACKFILL AGAINST WALLS SPANNING VERTICALLY BETWEEN FLOORS SHALL NOT BE PLACED UNTIL BOTH FLOORS ARE IN PLACE AND CONCRETE HAS REACHED 75% OF ITS 28-DAY STRENGTH.

F-6: AT NON-RETAINING WALLS BELOW GRADE, BACKFILL AGAINST BOTH SIDES OF WALL SIMULTANEOUSLY SO THAT GRADE DIFFERENCE IS NO MORE THAN 1'-0" AT ANY TIME.

F-7: AT LOCATIONS WHERE THE BUILDING ELECTRICAL GROUND LOOP IS TIED TO FOUNDATION REINFORCING STEEL, CONTINUOUSLY TIE REINFORCING TOGETHER FOR MINIMUM DISTANCE REQUIRED BY ELECTRICAL CODE AND BUILDING OFFICIAL.

CONCRETE

C-1: ALL CONCRETE WORK SHALL CONFORM TO ALL REQUIREMENTS OF ACI 301-10 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" AND ACI 318-14 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

CONCRETE CLASS	PROJECT LOCATION	EXPOSURE CLASS	CONC. WT.	MIN F'c (PSI)	MAX W/CM RATIO	AIR CONTENT
A1	INTERIOR FDNS	F0	NW	3000	NA	≤ 3.0%
A2	EXT AND PERIMETER FDNS	F2	NW	4500	0.45	6.0% ± 1.5%
B	FDN WALLS	F1	NW	3500	0.55	4.5% ± 1.5%
C	INTERIOR SOG	F0	NW	3500	NA	≤ 3.0%
D	INTERIOR SOMD	F0	NW	3500	NA	≤ 3.0%
F	TOPPING SLABS	F0	NW	4000	NA	≤ 3.0%
G	DATA CENTER WALLS AND SLAB	F0	NW	5000	NA	≤ 3.0%
I	METAL STAIR TREADS/LANDINGS	F0	NW	3500	NA	≤ 3.0%
J	EXT WALLS	F2	NW	4500	0.45	6.0% ± 1.5%

C-2: STEEL REINFORCING OF CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS.

- ASTM A615 GRADE 60 (TYPICAL REINFORCING STEEL)
- ASTM A706 (REINFORCING STEEL AT WELDED CONDITIONS)
- ASTM A1064 (PLAIN WELDED WIRE FABRIC - USE FLAT SHEETS ONLY)

C-3: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF DEPRESSIONS FOR SPECIAL FLOOR COVERINGS.

C-4: REFER TO SPECIFICATIONS FOR FINISHES.

C-5: RIGID INSULATION IS USED AS A FORM BELOW NEW SLABS WHERE INDICATED ON PLAN AND IN SECTION AND WILL BE USED TO TRANSFER VERTICAL FORCES TO STRUCTURAL SLAB BELOW. PRODUCT SHALL BE EXPANDED POLYSTYRENE INSULATION (EPS) MANUFACTURED TO MEET ASTM C578 TYPE IX WITH A DENSITY = 1.80 PCF AND A COMPRESSIVE RESISTANCE AT 10% DEFORMATION = 25.0 PSI. PRODUCT SHALL BE SECURED AS NECESSARY TO RESIST DISPLACEMENT DURING PLACEMENT OF CONCRETE SLAB ABOVE.

C-6: NORMAL WEIGHT CONCRETE INDICATED TO HAVE 4.5% AIR MAY BE PROVIDED WITH 6.0% AIR +/- 1.5%.

STRUCTURAL MASONRY

M-1: ALL MASONRY WORK SHALL CONFORM TO THE REQUIREMENTS OF TMS 402/602-16 "BUILDING CODE REQUIREMENTS AND SPECIFICATION FOR MASONRY STRUCTURES."

- ASTM C90 (BLOCK)
- ASTM C270 (MORTAR) - TYPE S (CMU), TYPE N (BRICK)
- ASTM C476 (GROUT) - 2000 PSI MINIMUM COMPRESSIVE STRENGTH
- F'_m=2000 PSI
- ASTM A615 GRADE 60 (REINFORCING)

M-2: SOLIDLY FILL COLLAR JOINTS WITH MORTAR AS THE WORK PROGRESSES.

M-3: PROVIDE STEEL SLEEVES AT PIPE PENETRATIONS (GALVANIZED AT EXTERIOR WALLS AND ALL BELOW GRADE WALLS).

M-4: GROUT ALL CELLS OF FOUNDATION WALLS SOLID UP TO FINISH GROUND FLOOR.

M-5: AT HOLLOW WALLS THAT CHANGE IN THICKNESS OR NUMBER OF WYTHES, PROVIDE A COURSE OF SOLID MASONRY OR GROUT FILLED UNITS BELOW THE TRANSITION.

M-6: ALL BLOCK CONTAINING VERTICAL REINFORCING SHALL HAVE TWO CELLS PER 16" BLOCK. CELLS SHALL ALIGN VERTICALLY AND BE GROUTED SOLID AT ALL REINFORCING LOCATIONS. BARS SHALL BE HELD IN PLACE BY REBAR POSITIONERS OR OTHER SUITABLE DEVICES AND SHALL BE CENTERED IN CMU UNO.

M-7: MASONRY JOINT REINFORCING SHALL BE PROVIDED IN ALL WALLS AT 16" OC MAXIMUM VERTICAL SPACING UNLESS INDICATED TO BE CLOSER TOGETHER ON SECTIONS AND DETAILS OF THE DRAWINGS. JOINT REINFORCING SHALL MEET ASTM A951 AND BE MILL-GALVANIZED AT INTERIOR WALLS AND HOT-DIP-GALVANIZED AT EXTERIOR WALLS. MINIMUM WIRE DIAMETER FOR SIDE RODS AND CROSS RODS SHALL BE 0.148 INCHES UNLESS INDICATED TO BE GREATER IN SECTIONS AND DETAILS OF THE DRAWINGS. PROVIDE PREFABRICATED CORNER AND TEE UNITS FOR WALL INTERSECTIONS. LAP REINFORCING A MINIMUM OF 6 INCHES AT SPLICES.

M-8: IN VERTICALLY REINFORCED WALLS, USE LADDER TYPE (NOT TRUSS TYPE) REINFORCING IN HORIZONTAL MORTAR JOINTS.

M-9: GROUT SLUMP SHALL BE 8" TO 11". PLACE GROUT PER TMS 602 SECTION 3.5 AND CONSOLIDATE BY VIBRATION. RECONSOLIDATE BY VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.

M-10: AFTER STEEL ERECTION IS COMPLETE, FILL ALL POCKETS AT BEARING OF JOISTS AND BEAMS SOLID WITH MASONRY. BUILD TIGHT TO STEEL MEMBER.

STRUCTURAL STEEL

SS-1: ALL STRUCTURAL STEEL AND ARCHITECTURALLY EXPOSED STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". BOLTED CONNECTIONS SHALL BE FULLY PRETENSIONED UNLESS NOTED OTHERWISE ON PLAN. REFER TO DRAWINGS FOR CONNECTIONS. IF CONNECTIONS ARE NOT SHOWN, FABRICATOR SHALL DESIGN CONNECTIONS FOR BEAM UNIFORMLY LOADED TO CAPACITY.

• ASTM A992 (W-SHAPES, WT-SHAPES AND CHANNELS)	F_y = 50 KSI
• ASTM A500 GRADE C (SQUARE AND RECTANGULAR HSS SHAPES)	F_y = 50 KSI
• ASTM A500 GRADE C (ROUND HSS SHAPES)	F_y = 46 KSI
• ASTM A572 GRADE 50 (S, M, AND HP-SHAPES, ANGLES, PLATE AND BAR)	F_y = 50 KSI
• ASTM A36 (OTHER ROLLED STRUCTURAL SHAPES NOT INDICATED ABOVE)	F_y = 36 KSI
• E70XX (SMAW PROCESS WELDING)	
• E6022 (METAL DECK TO OWSJ OR STRUCTURAL STEEL - SMAW PROCESS)	
• E7XT-X (FCAW PROCESS)	
• E80XX (A706 REBAR)	
• ASTM F3125 GRADE A325-N (BOLTS)	
• ASTM F3125 GRADE A490-N (BOLTS)	
• ASTM F3125 GRADE F1852 (TENSION-CONTROL BOLTS A325 EQUIVALENT)	
• ASTM F3125 GRADE F2280 (TENSION-CONTROL BOLTS A490 EQUIVALENT)	
• ASTM A563 (HEAVY HEX NUT)	
• ASTM F436 (HARDENED STEEL WASHER)	
• ASTM F1554 F_y=36 KSI (ANCHOR RODS UNO)	
• ASTM A108 GRADE B (HEADED SHEAR STUDS)	
• ASTM A1064, AWS D1.1, TYPE C (DEFORMED BAR ANCHORS)	

SS-2: UNLESS NOTED OTHERWISE, BOLT SIZES INDICATED FOR CONNECTIONS ON PLANS, SECTIONS, AND DETAILS SHALL BE OF THE FOLLOWING GRADE AND TYPE.
- 3/4" DIAMETER = ASTM F3125 GRADE F1852 (TENSION-CONTROL)
- 1" DIAMETER = ASTM F3125 GRADE F2280 (TENSION-CONTROL)
- 1 1/4" DIAMETER = ASTM F3125 GRADE F2280 (TENSION-CONTROL)

SS-3: DETAILING AND ERECTION OF STRUCTURAL STEEL AND OPEN WEB STEEL JOISTS SHALL COMPLY WITH CURRENT OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY-SUBPART R - STEEL ERECTION.

SS-4: CONTRACTOR SHALL PROVIDE FIELD CURED SAMPLES OF CAST-IN-PLACE CONCRETE IN FOOTINGS, PIERS, AND WALLS AND PRISMS OF MASONRY PIERS AND WALLS IN ACCORDANCE WITH OSHA SECTION 1926.752 TO DETERMINE THAT CONCRETE AND MASONRY HAVE ACHIEVED A MINIMUM OF 75% OF DESIGN STRENGTH PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

SS-5: ALL STEEL COLUMNS AND BEAMS WITHIN WOOD STUD OR STEEL STUD WALLS SHALL MEET CLOSER DIMENSIONAL TOLERANCES OF ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) AS INDICATED IN THE AISC CODE OF STANDARD PRACTICE.

SS-6: WHERE SLIP-CRITICAL CONNECTIONS ARE REQUIRED, PROVIDE CLASS A FAYING SURFACES.

SS-7: FABRICATOR SHALL PROVIDE CHANNELS, ANGLES, ETC., AS REQUIRED FOR STEEL DECK BEARING AT LOCATIONS WHERE TOP OF STRUCTURAL MEMBERS ARE NOT AT DECK BEARING ELEVATION.

SS-8: ALL STEEL MEMBERS AND CONNECTORS EXPOSED TO THE WEATHER SHALL BE HOT-DIP GALVANIZED UNLESS NOTED AS (AESS).

OPEN WEB STEEL JOIST

SJ-1: ALL OPEN WEB STEEL JOIST WORK SHALL CONFORM TO SJI 100-15, "44TH EDITION STANDARD SPECIFICATION LOAD TABLES AND WEIGHT TABLES FOR STEEL JOISTS AND JOIST GIRDERS". ALL COMPOSITE OPEN WEB STEEL JOISTS SHALL CONFORM TO SJI 200-15 "STANDARD SPECIFICATION FOR COMPOSITE STEEL JOISTS". OPEN WEB STEEL JOISTS ARE NOT DESIGNED FOR CONCENTRATED LOADS GREATER THAN 300 LBS EXCEPT AT PANEL POINTS. WHEN HANGING OR SETTING LOADS EXCEEDING 300 LBS, EITHER PLACE THE LOAD AT A PANEL POINT OR FIELD WELD (2) L1 1/4X1 1/4X1/8 ANGLES FROM THE POINT OF THE LOAD TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD.

SJ-2: DESIGN JOISTS FOR 250 LBS CONCENTRATED SERVICE LOAD AT ALL DIAGONAL STRUTS FRAMING TO JOIST CHORDS, UNLESS NOTED OTHERWISE.

SJ-3: PROVIDE JOIST BRIDGING IN ACCORDANCE WITH S.J.I. RECOMMENDATIONS, OSHA REQUIREMENTS, AND AS REQUIRED BY SPECIFIC JOIST DESIGN. ONLY THE EXPECTED DIAGONAL BRIDGING HAS BEEN INDICATED ON PLAN FOR COORDINATION PURPOSES.

SJ-4: DETAILING AND ERECTION OF STRUCTURAL STEEL AND OPEN WEB STEEL JOISTS SHALL COMPLY WITH CURRENT OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY, SUBPART R - STEEL ERECTION.

SJ-5: DESIGN ALL CHORD MEMBERS OF ALL JOISTS FOR AN ADDITIONAL CONCENTRATED VERTICAL DEAD LOAD OF 300 LBS LOCATED ANYWHERE ALONG THE LENGTH OF THE JOIST.

SJ-6: CONTRACTOR SHALL PROVIDE FIELD CURED SAMPLES OF CAST-IN-PLACE CONCRETE IN FOOTINGS, PIERS, AND WALLS AND PRISMS OF MASONRY PIERS AND WALLS IN ACCORDANCE WITH OSHA SECTION 1926.752 TO DETERMINE THAT CONCRETE AND MASONRY HAVE ACHIEVED A MINIMUM OF 75% OF DESIGN STRENGTH PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

SJ-7: SUBMIT CALCULATIONS ON ALL COMPOSITE FLOOR JOISTS AND ROOF JOISTS SEALED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE JURISDICTION OF THE PROJECT, FOR DUNBAR REVIEW PRIOR TO FABRICATION.

SJ-8: ALL OPEN WEB STEEL ROOF JOISTS SHALL BE DESIGNED FOR THE FOLLOWING LOADS:
SNOW LOAD:
- a. DRIFTED SNOW (p_d) + BALANCED SNOW LOAD (p_f) APPLIED PER PLAN EXTENTS GIVEN IN LOADING DIAGRAM ON S403 AND S404
- b. BALANCED MINIMUM SNOW LOAD (p_f) APPLIED OVER ENTIRE ROOF AREA, REF S001

ROOF LIVE LOAD:
- a. REFERENCE GENERAL STRUCTURAL NOTES.

DEAD LOAD:
- a. UNIFORM LOAD OF 31 PSF APPLIED OVER ENTIRE ROOF AREA. (INCLUDES SELF-WT).
- b. MECHANICAL UNIT WEIGHTS INDICATED ON THE ROOF PLAN. 2/3 OF LOAD LISTED TO BE APPLIED ALONG EACH CURB TO ACCOUNT FOR UNBALANCED LOAD DISTRIBUTION. LOCATIONS TO BE COORDINATED WITH MECHANICAL.
- c. REFERENCE SECTIONS AND DETAILS FOR ADDITIONAL DEAD LOADS TO CONSIDER.

WIND LOAD:
- a. REFERENCE "COMPONENTS & CLADDING DESIGN WIND PRESSURE TABLE" FOR NET UPLIFT TO CONSIDER.
- b. REFERENCE SECTIONS AND DETAILS FOR ADDITIONAL WIND LOADS TO CONSIDER.

REFER TO FLOOR FRAMING NOTES FOR DESIGN LOADS FOR COMPOSITE FLOOR JOISTS.

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-6656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PRO

GENERAL STRUCTURAL NOTES

STEEL FLOOR AND ROOF DECK

SD-1: STEEL FLOOR AND ROOF DECK SHALL COMPLY WITH THE FOLLOWING STEEL DECK INSTITUTE PUBLICATIONS:

- ANSI/SDI NC-2017: STANDARD FOR NONCOMPOSITE STEEL FLOOR DECK
- ANSI/SDI RD-2017: STANDARD FOR STEEL ROOF DECK
- ANSI/SDI C-2017: STANDARD FOR COMPOSITE STEEL FLOOR DECK-SLABS

POST-INSTALLED ANCHORS

PA-1: ALL POST-INSTALLED ANCHORS (IN CONCRETE OR CMU) ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING BUT NOT LIMITED TO DRILL BIT SIZE, PROPER CLEANING OF HOLES, INSTALLATION TORQUE, AND TEMPERATURE CONSTRAINTS).

PA-2: WHEN A SPECIFIC PRODUCT AND MANUFACTURER IS REFERENCED IN THE CONTRACT DOCUMENTS, THAT SPECIFIC PRODUCT SHALL BE USED UNLESS AN ALTERNATE PRODUCT IS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. CONTRACTOR SHALL PROVIDE CODE COMPLIANT STRENGTH DESIGN CALCULATIONS DEMONSTRATING THAT THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE PERFORMANCE VALUES OF THE SPECIFIED PRODUCT. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC - ES REPORT SHOWING COMPLIANCE WITH THE RELEVANT BUILDING CODE FOR SEISMIC USES, LOAD RESISTANCE, INSTALLATION CATEGORY, AND AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE AND INSTALLATION TEMPERATURE.

PA-3: THE ANCHOR MANUFACTURER'S REPRESENTATIVE SHALL BE PRESENT DURING THE INITIAL INSTALLATION OF EACH TYPE OF ANCHOR TO REVIEW AND APPROVE OF THE CONTRACTOR'S INSTALLATION PROCEDURES. THE OWNER'S TESTING AGENCY SHALL ALSO OBSERVE THE INITIAL INSTALLATION OF EACH ANCHOR TYPE, AND PROVIDE THE INSPECTION OF ANCHORS DURING INSTALLATION TO VERIFY CONFORMANCE WITH THE MANUFACTURER'S INSTALLATION RECOMMENDATIONS. SUBMIT REPORT FROM MANUFACTURER'S REPRESENTATIVE FOR DUNBAR REVIEW. INSTALLATION OF ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR APPROVED EQUIVALENT. SUBMIT CREDENTIALS OF CERTIFIED INSTALLERS. CONTINUOUS INSPECTION IS REQUIRED FOR ALL HORIZONTAL OR UPWARDLY INCLINED ADHESIVE ANCHORS. REMOVE AND REPLACE MISPLACED OR MALFUNCTIONING ANCHORS. FILL EMPTY ANCHOR HOLES AND PATCH FAILED ANCHOR LOCATIONS WITH HIGH-STRENGTH, NONMETALLIC GROUT.

PA-4: FASTENERS REFERRED TO AS "SCREW ANCHOR" ON THE DRAWINGS SHALL BE ONE OF:

- TITEN HD BY SIMPSON STRONG-TIE
- KWIK HUS-EZ (KH-EZ) BY HILTI
- SCREW-BOLT+ BY DEWALT

FOR THESE SCREW ANCHORS LISTED, USE STANDARD ANSI DRILL BIT (NO SPECIAL BIT REQUIRED). PROVIDE HOLES IN STEEL MEMBERS 1/8" LARGER THAN NOMINAL DIAMETER OF ANCHOR. PROVIDE STD ZINC-PLATED CARBON STEEL ANCHOR UNLESS MECHANICAL GALVANIZED FINISH OR STAINLESS STEEL ANCHOR IS INDICATED ON DRAWINGS.

PA-5: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN HOLLOW MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

- HIT-HY 270 BY HILTI
- SET-3G SYSTEM BY SIMPSON STRONG-TIE
- AC100+ GOLD BY DEWALT

USE SCREEN TUBES BY THE SAME MANUFACTURER WHEN USING THESE ADHESIVES IN MASONRY WITH VOIDS OR HOLLOW CMU. INSTALL USING DRILL IN ROTATION-ONLY MODE TO KEEP FROM DAMAGING INSIDE OF FACE SHELL.

PA-6: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN SOLID OR GROUTED MASONRY GENERICALLY REFERRED TO AS ADHESIVE ANCHORING SYSTEMS SHALL BE ONE OF:

1. SET-3G BY SIMPSON STRONG TIE
2. HIT-HY 270 BY HILTI
3. AC100+ GOLD BY DEWALT

PA-7: CHEMICAL ADHESIVE ANCHORING SYSTEMS USED IN CONCRETE GENERICALLY REFERRED TO AS "ADHESIVE ANCHORS" SHALL BE ONE OF :

- SET - 3G BY SIMPSON STRONG-TIE
- HIT-RE 500-V3 BY HILTI
- HIT-HY 200-V3 BY HILTI
- PURE 220+ BY DEWALT
- AC 200+ BY DEWALT
- KWIK-X BY HILTI

THREADED ROD ANCHORS USED WITH THESE SYSTEMS SHALL BE PROVIDED BY THE ADHESIVE MANUFACTURER AND HAVE A MINIMUM STEEL STRENGTH OF F_y = 36 KSI UNLESS NOTED OTHERWISE.

PA-8: CHEMICAL ADHESIVE ANCHOR SYSTEMS FOR USE WITH REINF STEEL IN CONCRETE SHALL BE ONE OF:

- SET-3G BY SIMPSON STRONG-TIE
- HIT-RE 500-V3 BY HILTI
- PURE 220+ BY DEWALT
- HIT-FP 700R BY HILTI (AT FIRE-RATED CONSTRUCTION ONLY)

UNLESS NOTED OTHERWISE, REINFORCING STEEL USED WITH THESE SYSTEMS SHALL BE ASTM A615 GRADE 60.

PA-9: FASTENERS REFERRED TO AS "EXPANSION ANCHORS" OR "WEDGE ANCHORS" SHALL BE ONE OF:

- KWIK BOLT 1 (KB1) BY HILTI
- STRONG-BOLT 2 BY SIMPSON STRONG-TIE
- POWER- STUD+SD2 BY DEWALT, POWER-STUD+SD6 BY DEWALT (STAINLESS)
- KWIK BOLT TZ2 (KB-TZ2) BY HILTI

WHEN STAINLESS STEEL ANCHOR IS CALLED OUT, PROVIDE TYPE 316. IF KB-TZ2 PRODUCT IS CALLED OUT SPECIFICALLY ON SECTIONS AND DETAILS, ANY PROPOSED SUBSTITUTIONS REQUIRE AN ENGINEERED SOLUTION INDICATING A LARGER QUANTITY OF ANCHORS REQUIRED TO PROVIDE THE SAME CAPACITY AS THE SPECIFIED PRODUCT.

PA-10: FASTENERS GENERICALLY REFERRED TO AS "CONCRETE/MASONRY SCREWS" SHALL BE ONE OF:

1. TITEN TURBO BY SIMPSON STRONG-TIE
2. KWIK-CON II+ BY HILTI
3. ULTRACON+ BY DEWALT

PA-11: ANCHORS OR REINFORCING STEEL SHALL BE INSTALLED ONLY IN DRY CONCRETE A MINIMUM OF 21 DAYS OLD. DRILL AND INSTALL BY ONE OF THE FOLLOWING METHODS:

- USE ONLY A CARBIDE BIT (NO CORE DRILLING) AND CLEAN HOLE FOLLOWING MANUFACTURER'S INSTRUCTIONS USING AIR COMPRESSOR WITH NOZZLE AND WIRE BRUSH PROVIDED BY ADHESIVE MANUFACTURER.
- USE HOLLOW DRILL BIT SYSTEM WITH ACCOMPANYING VACUUM PROVIDED BY THE ADHESIVE MANUFACTURER.

FOR ADHESIVE ANCHORS, OVERHEAD HOLES AND ANY HOLES GREATER THAN 10 INCHES DEEP REQUIRE THE USE OF A PISTON PLUG AT THE END OF THE ADHESIVE APPLICATOR. USE ADHESIVE RETAINING CAP AT OVERHEAD CONDITIONS.

ADHESIVE ANCHORS RANGING IN ORIENTATION FROM HORIZONTAL TO VERTICALLY OVERHEAD SHALL BE INSTALLED BY AN ADHESIVE ANCHOR INSTALLER (AAI) WHO IS CERTIFIED THROUGH ACI/CRSI (ACI 318-19 SECTION 17.2.3). SUBMIT CURRENT CERTIFICATION TO THE ARCHITECT FOR REVIEW PRIOR TO COMMENCEMENT OF INSTALLATION.

PA-12: FASTENERS GENERICALLY REFERRED TO AS "PAF" (POWER ACTUATED FASTENERS) SHALL BE ONE OF :

PAF INTO CONCRETE OR STRUCTURAL STEEL:

	ANCHOR	MANUF	SHANK DIAMETER
1.	X-U	HILTI	0.157"
2.	8 mm HEAD SPIRAL CSI PIN	DEWALT FASTENERS	0.157"
3.	PDPA	SIMPSON	0.157"

USE ONLY HILTI X-U PAF IN STRUCTURAL STEEL GREATER THAN 1/2" THICK. 1/2" MINIMUM POINT PENETRATION IS REQUIRED IN STRUCTURAL STEEL GREATER THAN 1/2" THICK.

PROVIDE MINIMUM 1 1/4" EMBEDMENT OF PAF INTO CONCRETE.

PA-13: OTHER MANUFACTURER'S PRODUCTS MAY BE SUBMITTED AS A FORMAL REQUEST FOR SUBSTITUTION IF REQUIREMENTS ABOVE ARE MET. SIZES AND EMBEDMENTS OF SUBSTITUTE ANCHORS SHALL BE INCREASED AS NECESSARY TO ACHIEVE SHEAR AND TENSION VALUES PUBLISHED FOR LISTED ANCHORS. CONTRACTOR SHALL SUBMIT A COMPLETE SUBSTITUTION LIST FOR ALL ANCHOR SIZES AND SUBSTRATES. DUE TO HIGH VARIABILITY BETWEEN NOMINAL SIZES AND ACTUAL SIZES OF SCREW ANCHORS (AND HOLES REQUIRED), THIS SUBSTITUTION REQUEST SHALL BE SUBMITTED PRIOR TO STEEL SHOP DRAWINGS. ANY PRODUCTS SUBMITTED AS A REQUEST FOR SUBSTITUTION IN CONCRETE SHALL BE COMPLIANT WITH ACI 318-14 CHAPTER 17 AND APPROVED FOR USE IN CRACKED CONCRETE. PROPOSED SUBSTITUTE PRODUCTS SHALL HAVE AN ICC-ES REPORT WHICH CONSIDERS EQUIVALENT EDGE AND SPACING REQUIREMENTS AS THE SPECIFIED PRODUCTS.

ABBREVIATIONS

AB	= ANCHOR BOLT	HT	= HEIGHT
AFF	= ABOVE FINISHED FLOOR	INT	= INTERIOR
APC	= ARCHITECTURAL PRECAST CONCRETE	JBE	= JOIST BEARING ELEVATION
ARCH	= ARCHITECTURAL	JT	= JOINT
BB	= BOND BEAM	LBS	= POUNDS
BLDG	= BUILDING	LL	= LIVE LOAD
BM	= BEAM	LLH	= LONG LEG HORIZONTAL
BOS	= BOTTOM OF STEEL	LLV	= LONG LEG VERTICAL
BOT	= BOTTOM	LSH	= LONG SIDE HORIZONTAL
BRG	= BEARING	LSV	= LONG SIDE VERTICAL
CANT	= CANTILEVER	LVL	= LAMINATED VENEER LUMBER
CFS-S	= COLD-FORMED STEEL- STRUCTURAL	LW	= LIGHT WEIGHT
CFS-NS	= COLD-FORMED STEEL- NON STRUCTURAL	MAS	= MASONRY
CFST	= COLD-FORMED STEEL TRUSS	MAX	= MAXIMUM
CIP	= CAST-IN-PLACE	MC	= MOMENT CONNECTION
CJ	= CONTROL JOINT	MECH	= MECHANICAL
CL	= CENTERLINE	MFR	= MANUFACTURER
CLG	= CEILING	MISC	= MISCELLANEOUS
CLR	= CLEAR	MIN	= MINIMUM
CLSM	= CONTROLLED LOW-STRENGTH MATERIAL	[NC]	= NON-COMPOSITE
CMU	= CONCRETE MASONRY UNIT	NO.	= NUMBER
COL	= COLUMN	NIC	= NOT IN CONTRACT
CONC	= CONCRETE	NTS	= NOT TO SCALE
CONN	= CONNECTION	NW	= NORMAL WEIGHT
CONT	= CONTINUOUS	OC	= ON CENTER
COORD	= COORDINATE	OPP	= OPPOSITE
CSP	= CONCRETE SURFACE PROFILE	OH	= OPPOSITE HAND
DBA	= DEFORMED BAR ANCHOR	OWSJ	= OPEN WEB STEEL JOIST
DET	= DETAIL	PAF	= POWDER ACTUATED FASTENER
DFT	= DRY FILM THICKNESS	PL	= PLATE
DIA	= DIAMETER	PLF	= POUNDS PER LINEAR FOOT
DIAG	= DIAGONAL	POJ	= PLANE OF JOIST
DIM	= DIMENSION	PSF	= POUNDS PER SQUARE FOOT
DL	= DEAD LOAD	PSI	= POUNDS PER SQUARE INCH
DN	= DOWN	REF	= REFERENCE
DWGS	= DRAWINGS	REINF	= REINFORCING
EA	= EACH	REQD	= REQUIRED
EJ	= EXPANSION JOINT	SECT	= SECTION
EL	= ELEVATION	SIM	= SIMILAR
ELEV	= ELEVATOR	SOG	= SLAB-ON-GROUND
EOS	= EDGE OF SLAB	SOMD	= SLAB-ON-METAL DECK
EQ	= EQUAL	SPA	= SPACE
EQUIP	= EQUIPMENT	STD	= STANDARD
EXIST	= EXISTING	STIFF	= STIFFENER
EW	= EACH WAY	TBE	= TRUSS BEARING ELEVATION
EXP	= EXPANSION	T&B	= TOP AND BOTTOM
EXT	= EXTERIOR	T&G	= TONGUE AND GROOVE
FFE	= FINISHED FLOOR ELEVATION	TOA	= TOP OF ANGLE
FLR	= FLOOR	TOB	= TOP OF BEAM
FLT	= FLAT BAR	TOC	= TOP OF CONCRETE
FRT	= FIRE RETARDANT TREATED	TOS	= TOP OF STEEL
FTG	= FOOTING	TYP	= TYPICAL
GA	= GAUGE	UNO	= UNLESS NOTED OTHERWISE
GALV	= GALVANIZED	VERT	= VERTICAL
GC	= GENERAL CONTRACTOR	WCJ	= WALL CONTROL JOINT
GT	= GIRDER TRUSS	WT	= WEIGHT
HK	= HOOK	WWF	= WELDED WIRE FABRIC
HORIZ	= HORIZONTAL	(H)	= HIGH
HS	= HIGH STRENGTH	(L)	= LOW

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
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GENERAL STRUCTURAL NOTES

S002

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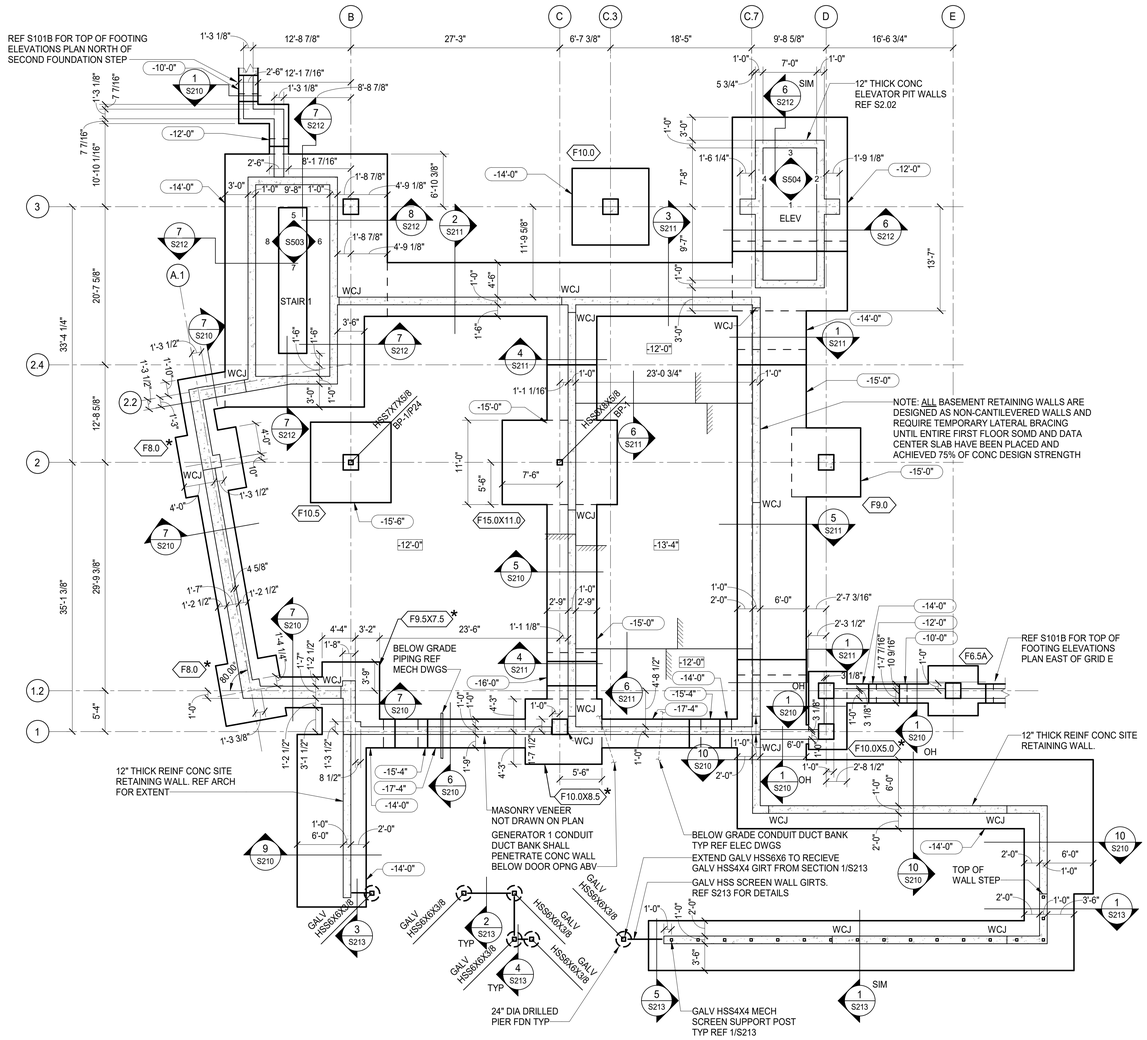

BASEMENT FOUNDATION PLAN

1/8" = 1'-0"

N

BASEMENT FOUNDATION PLAN

1/8"=1'-0"

FD-1: TYPICAL SLAB-ON-GROUND SHALL BE 6" SLAB-0N-GROUND WHERE INDICATED ON PLAN SHALL BE NORMAL WEIGHT CONCRETE WITH 6X6-W2.9XW2.9 WWF 2" FROM TOP OF SLAB, OVER BARRIER OVER 4" POROUS FILL.

FD-2: WCJ INDICATES CONCRETE WALL CONTROL JOINT. REFER TO S601 FOR TYPICAL DETAIL.

FD-3: FOOTING EXCAVATIONS MAY REQUIRE ADDITIONAL UNDERCUT (AS INDICATED BY THE OWNER'S ON-SITE GEOTECHNICAL ENGINEER). BACKFILL EXCAVATION TO DESIGN SUBGRADE USING CLSM OR CONCRETE.

FD-4: REFERENCE 101A FOR ALL OTHER FOUNDATION NOTES.

FD-5: REFERENCE 101B FOR CONCRETE PIER SIZES UNDER STEEL COLUMNS.

FD-6: REFERENCE S601 FOR TYPICAL CIP CONCRETE CONSTRUCTION DETAILS.

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SUITE 400
RICHMOND, VA 23220

v 804.788.4774

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DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
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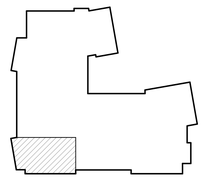
KEY PLAN:



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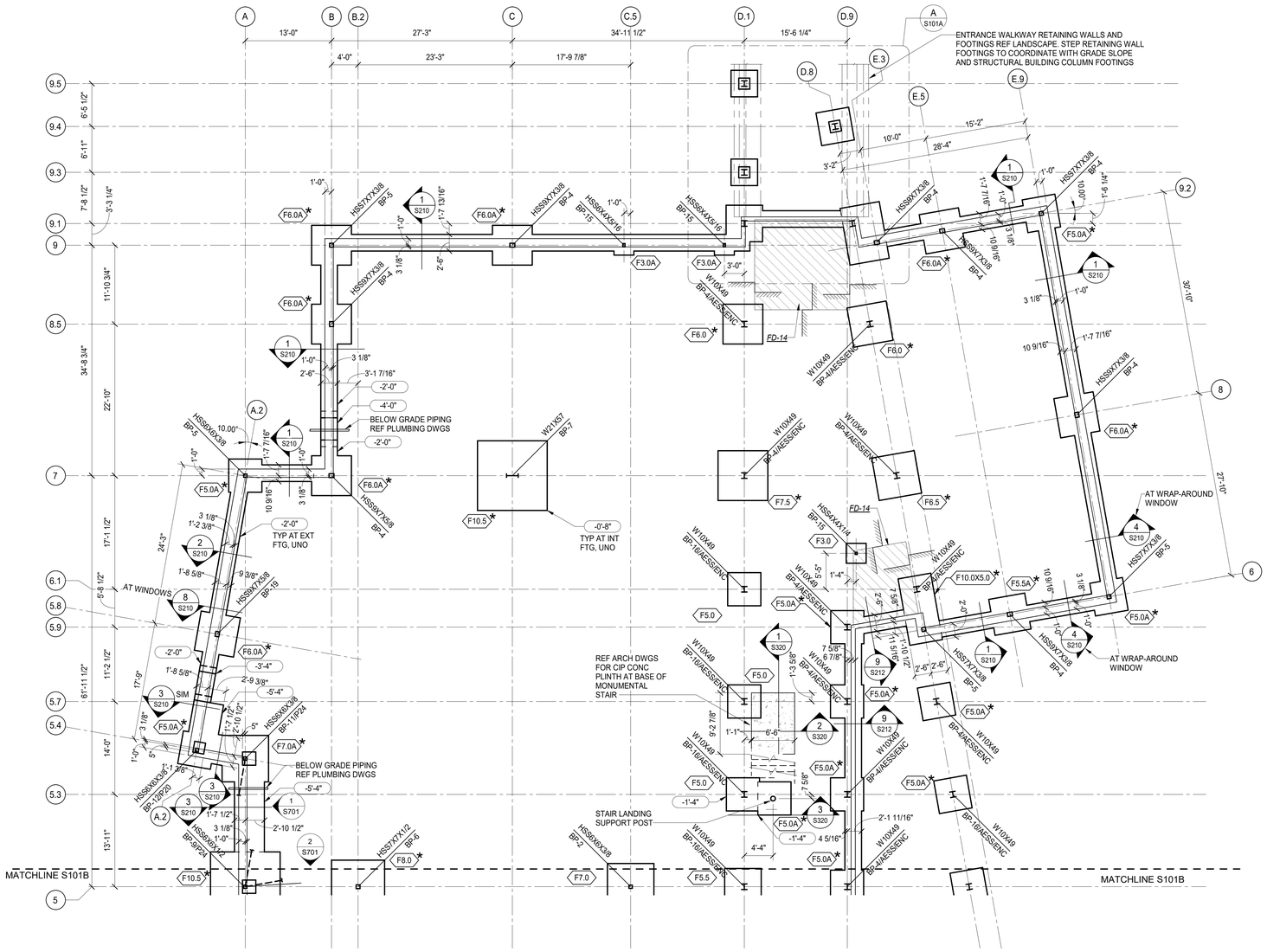
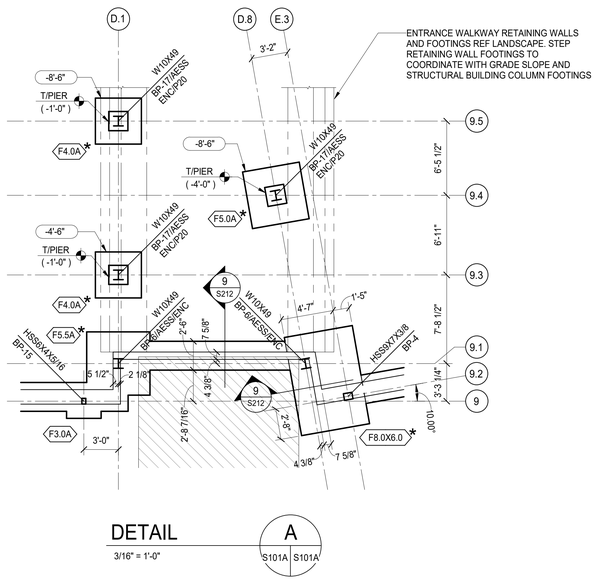
BASEMENT FOUNDATION PLAN

S100B



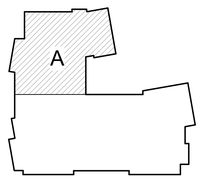
FOUNDATION PLAN -AREA A

1/8" = 1'-0"



DETAIL A

3/16" = 1'-0"



FOUNDATION PLAN

1/8"=1'-0"

FD-1: TYPICAL SLAB-ON-GROUND SHALL BE 4" NORMAL WEIGHT CONCRETE WITH 6X6-W1.4XW1.4 WWF AT MID-DEPTH, OVER VAPOR BARRIER, OVER 4" POROUS FILL. 6" SLAB-0N-GROUND WHERE INDICATED ON PLAN SHALL BE NORMAL WEIGHT CONCRETE WITH 6X6-W2.9XW2.9 WWF 2" FROM TOP OF SLAB, OVER BARRIER OVER 4" POROUS FILL.

FD-2: REFER TO DRAWING S201-203 FOR TYPICAL FOUNDATION DETAILS.

FD-3: TOP OF FOOTING ELEVATIONS INDICATED THUS (X-X") RELATIVE TO TYPICAL FIRST FLOOR ELEVATION 579.00'.

FD-4: TOP OF SLAB ELEVATION INDICATED THUS [X'-XX"] RELATIVE TO TYPICAL FIRST FLOOR ELEVATION 579.00'. COORDINATE ACTUAL SLAB DEPRESSION WITH FLOOR FINISH MANUFACTURER OR EQUIPMENT PROVIDED.

FD-5: FOOTING EXCAVATIONS MAY REQUIRE ADDITIONAL UNDERCUT (AS INDICATED BY THE OWNER'S ON-SITE GEOTECHNICAL ENGINEER). BACKFILL EXCAVATION TO DESIGN SUBGRADE USING CLSM OR CONCRETE.

FD-6: GROUT ALL CMU SOLID BELOW GRADE.

FD-7: EXTEND ALL WALL FOOTINGS A MINIMUM OF 8" BEYOND END OF WALL UNO.

FD-8: REFER TO DRAWING S501 FOR TYPICAL PLAN DETAILS OF REINFORCING IN MASONRY WALLS.

FD-9: ALL STEEL COLUMNS AND BEAMS WITHIN STEEL STUD WALLS SHALL MEET CLOSER DIMENSIONAL TOLERANCES OF CATEGORY 1 ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) AS INDICATED IN THE AISC CODE OF STANDARD PRACTICE.

FD-10: PROVIDE (3) #5 VERTICAL EACH END OF SHEAR WALL WITH MATCHING DOWELS TO FOOTING. GROUT ENTIRE CMU SHEAR WALL SOLID FULL HEIGHT AND LENGTH. DO NOT PLACE ANY WALL CONTROL JOINTS IN SHEAR WALLS.

FD-11: P16 = 16"X16" CAST-IN-PLACE CONCRETE PIER.
P20 = 20"X20" CAST-IN-PLACE CONCRETE PIER.
P24 = 24"X24" CAST-IN-PLACE CONCRETE PIER.
P32 = 32"X32" CAST-IN-PLACE CONCRETE PIER.
REFER TO S201 FOR "TYPICAL CONCRETE PIER" DETAIL.
TOP OF PIER ELEVATION SHALL BE (-0'-8") RELATIVE TO TYPICAL ADJACENT FLOOR UNO.

FD-12: PROVIDE 4'-0" W X 1'-4" D CONCRETE BRACE TIE BEAM WITH (4) #6 BARS TOP AND BOTTOM AND #4 CLOSED TIES AT 24" OC. PROVIDE MECHANICAL COUPLERS AT BAR SPLICES AND EMBED BARS 6'-0" INTO COLUMN FOOTINGS EACH END WITH STANDARD HOOKS. THICKEN ADJACENT COLUMN FOOTINGS AS REQUIRED TO BE 3" THICKER THAN TIE BEAM.

FD-13: REFER TO S701 AND S702 FOR STEEL BRACED FRAME ELEVATIONS.

FD-14: REFER TO ARCH FOR SLAB DEPRESSION EXTENT. COORDINATE WITH ENTRANCE MAT PROVIDER FOR REQUIRED DEPRESSION DEPTH WHERE APPLICABLE. REF S203 FOR TYPICAL DETAIL

FD-15: PROVIDE COLUMN ENCLOSURE PLATES PER THE 'TYPICAL W-SHAPE COLUMN ENCLOSURE PLATE' DETAIL ON S201 AT COLUMNS INDICATED 'ENC'.

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
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PROFESSIONAL ENGINEER
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No	Date	Description

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DRAWN BY: MPK/MKJ

QEA No.41911390

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FOUNDATION PLAN - AREA A

S101A

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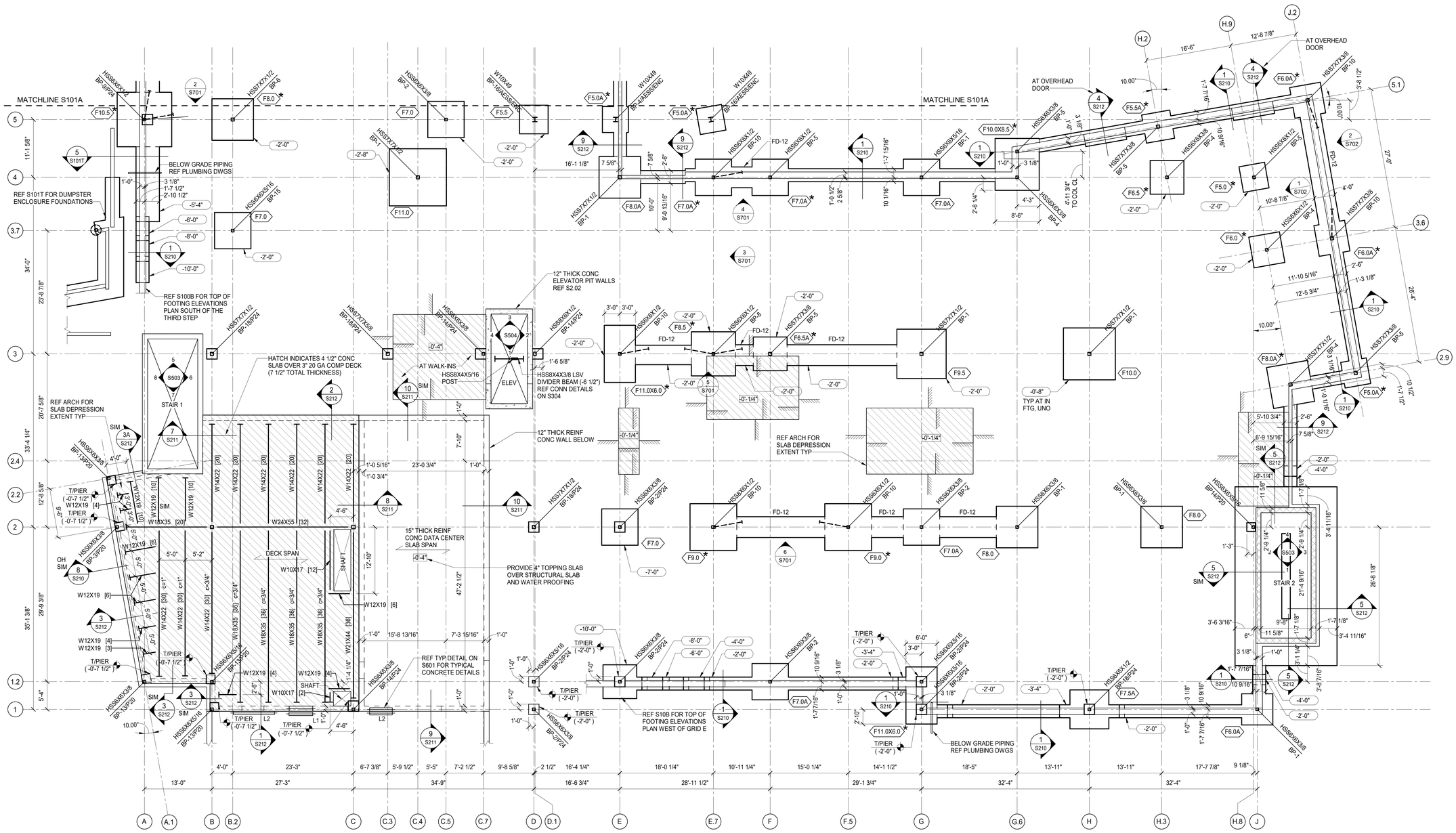

FOUNDATION PLAN - AREA B

1/8" = 1'-0"

N

FOUNDATION PLAN

1/8"=1'-0"

FD-1: FLOOR SLAB OVER DATA CENTER DESIGNED FOR 250 PSF LIVE LOAD ALLOWANCE IN EVENT OF BUILDING DAMAGE ABOVE

FD-2: DOUBLE ANGLE CONNECTION OF STEEL BEAM TO EMBED PLATE IN FACE OF CONCRETE WALL INDICATED THUS ⊢| . REF S304 FOR TYPICAL DETAILS

FD-3: REFERENCE S101A FOR ALL OTHER FOUNDATION NOTES.

FD-4: REFERENCE S102B FOR FLOOR FRAMING NOTES.

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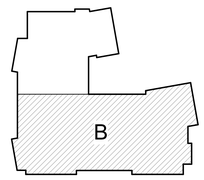

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SUITE 400
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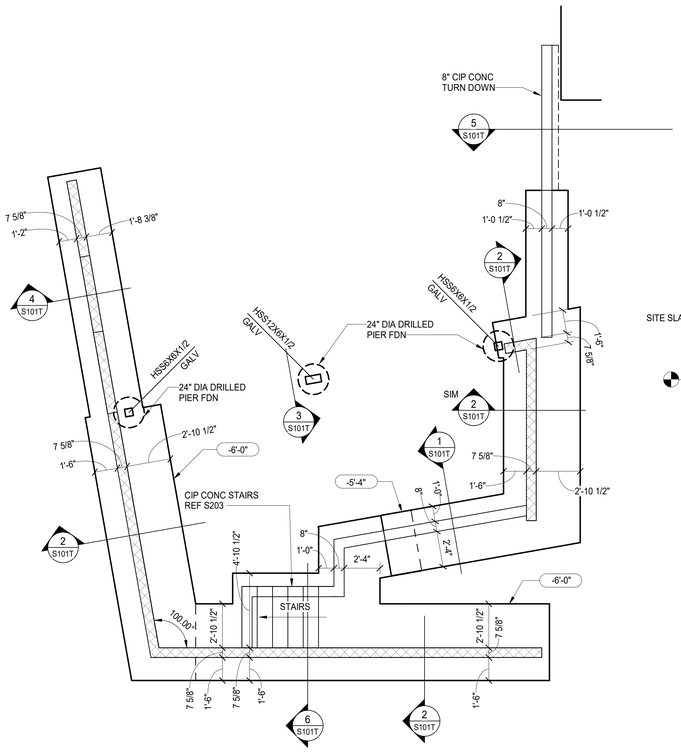
FOUNDATION PLAN - AREA B

S101B

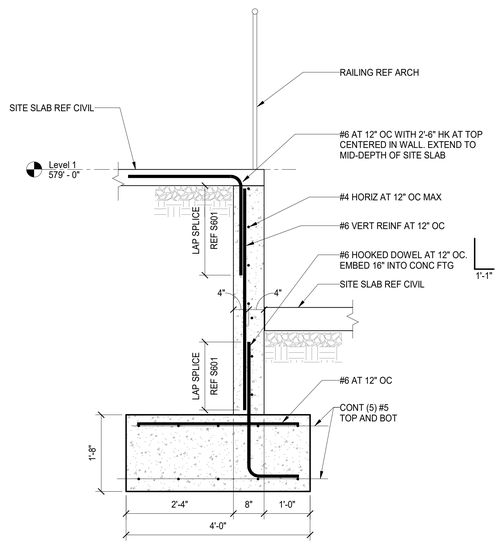


DUMPSTER ENCLOSURE FOUNDATION PLAN

1/4" = 1'-0"

NOTES:

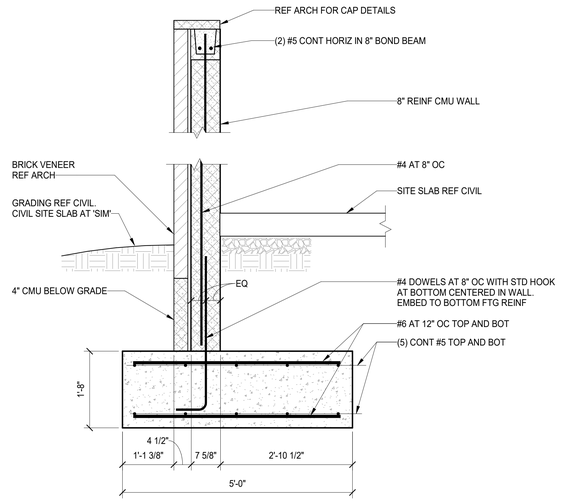
1. REFER TO ARCH DWGS FOR ADDITIONAL DIMENSIONAL LAYOUT INFORMATION



SECTION 1

3/4" = 1'-0"

S101T | S101T



SECTION 2

3/4" = 1'-0"

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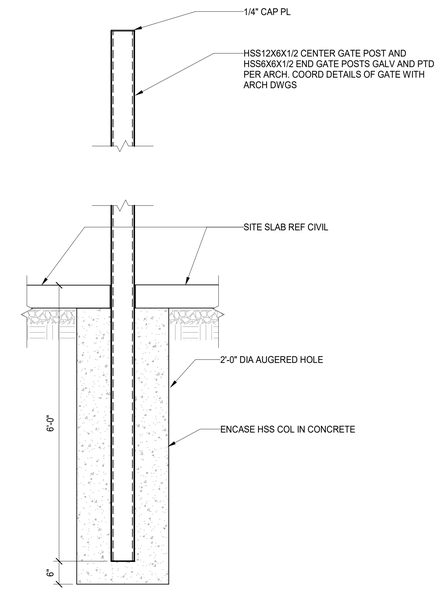

SECTION 3

3/4" = 1'-0"

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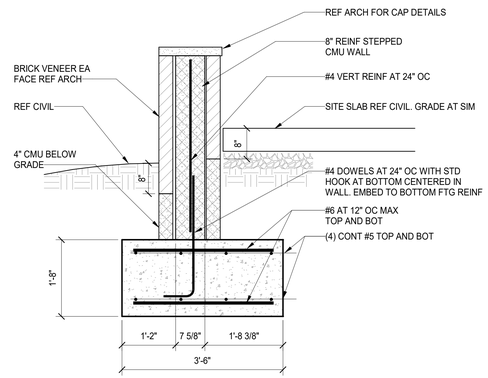

SECTION 4

3/4" = 1'-0"

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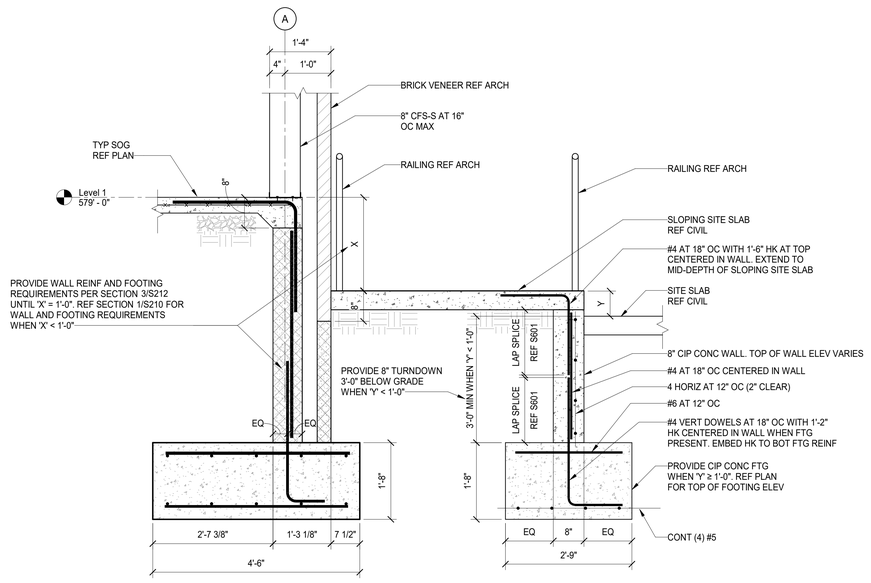
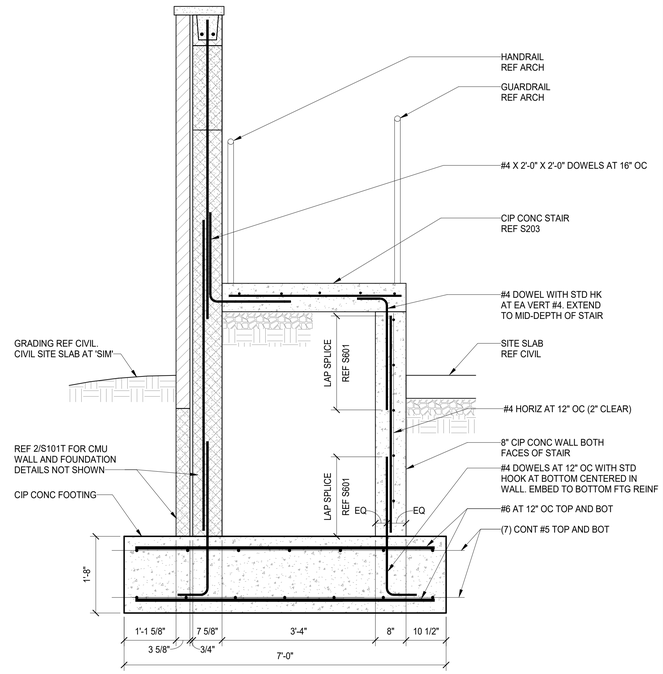


SECTION 5

3/4" = 1'-0"

S101B | S101T



SECTION 6

3/4" = 1'-0"

S101T | S101T

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

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RICHMOND, VIRGINIA 23225
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FOUNDATION PLAN - DUMPSTER ENCLOSURE

S101T

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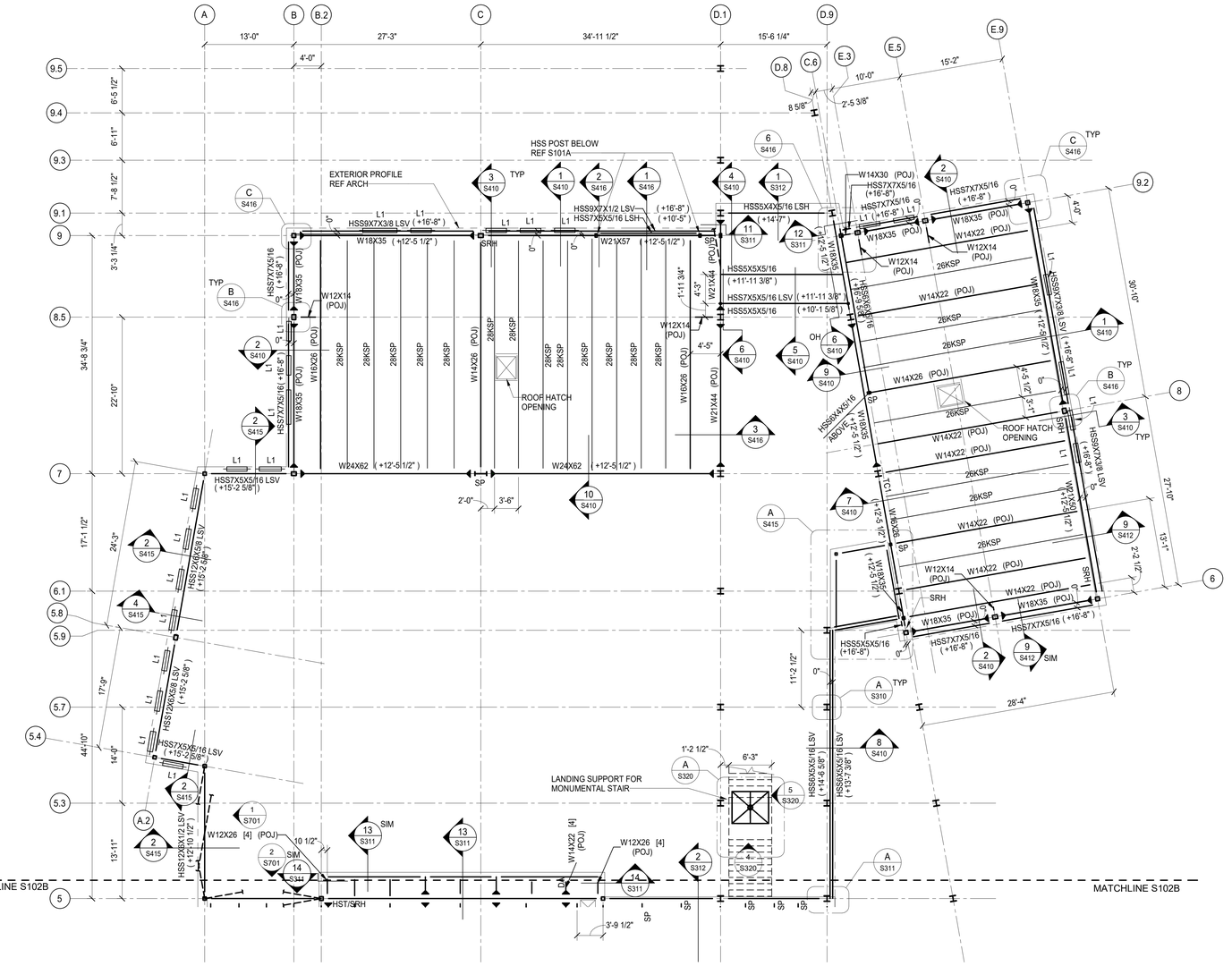


LOW ROOF FRAMING PLAN - AREA A

1/8" = 1'-0"

N

LOW ROOF FRAMING PLAN

R-1: TOP OF ALL STEEL ROOF GIRDERS INDICATED THUS (+XX'-X") RELATIVE TO FIRST FLOOR.

R-2: POJ DENOTES TOP OF BEAM IS IN SAME PLANE AS TOP OF OPEN WEB STEEL JOIST. K-SERIES ROOF JOIST SEAT DEPTH SHALL BE 2 1/2 UNLESS NOTED OTHERWISE. LH-SERIES JOIST SEAT DEPTH SHALL BE 5" UNLESS NOTED OTHERWISE.

R-3: PROVIDE 1 1/2", 22 GAGE, GALVANIZED STEEL ROOF DECK (TYPE B). REFER TO S402 FOR REQUIRED CONNECTIONS TO ROOF FRAMING MEMBERS AS WELL AS MINIMUM REQUIRED STEEL DECK PROPERTIES.

R-4: REFERENCE DRAWING S401 AND S402 FOR TYPICAL ROOF CONSTRUCTION DETAILS.

R-5: ALL OWSJ ON THIS ROOF PLAN ARE SPECIAL DESIGN JOISTS. REFERENCE DRAWING S001 FOR ROOF UPLIFT PRESSURES.

R-6: KCS INDICATES CONSTANT SHEAR CAPACITY OPEN WEB STEEL JOIST.

R-7: W8X10 (S) INDICATES BEAM SLOPES UNIFORMLY BETWEEN SUPPORTING MEMBERS.

R-8: FIELD WELDED FULL MOMENT CONNECTION INDICATED THUS ◀ .
SHOP WELDED FULL MOMENT CONNECTION INDICATED THUS ◁ .

R-9: REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS FOR MECHANICAL AND OTHER PENETRATIONS THROUGH ROOF AND/OR CEILING.

R-10: PROVIDE THE FOLLOWING STEEL FRAMING CONNECTIONS.
- 'S' INDICATES SINGLE SHEAR TAB CONNECTION TO HSS COLUMN OR W-SHAPE GIRDER UNLESS OTHERWISE NOTED.
- 'D' INDICATES DOUBLE ANGLE CONNECTION TO W-SHAPE COLUMN UNLESS NOTED OTHERWISE
- 'DA' INDICATES BEAM CONNECTS TO HSS COLUMN OR W-SHAPE GIRDER WITH DOUBLE ANGLE CONNECTION.
- 'ST' INDICATES BEAM CONNECTIONS TO W-SHAPE COLUMN WITH SHEAR TAB CONNECTION.
- 'HST' INDICATES BEAM CONNECTIONS TO COLUMN WITH HEAVY SHEAR TAB CONNECTION.
- 'DAX' INDICATES DOUBLE ANGLE CONNECTION WITH (X) ROWS OF BOLTS.
- 'CP' INDICATES BEAM BEARS ON TOP OF COLUMN PLATE.
- 'SRH' INDICATES THAT TYPICAL CONNECTION IS TO BE DETAILED WITH STD ROUND HOLES IN ALL CONNECTION PLIES.
- 'TP' INDICATES 3/8" THRU-PLATE CONNECTION WITH STD ROUND HOLES IN ALL CONNECTION PLIES.
- 'SP' INDICATES 3/8" FULL HT STIFF PLATE CONNECTION WITH STD ROUND HOLES IN ALL CONNECTION PLIES.

R-11: 'TC1' INDICATES 3/4" DIA ASTM F1852 TENSION CONTROL BOLTS USED IN CONNECTION. USE 1/2" THICK ANGLES WITH MAXIMUM NUMBER OF BOLT ROWS THAT WILL FIT WITHIN THE BEAM WEB AT 3" OC SPACING.

'TC2' INDICATES 1" DIA ASTM F2280 TENSION CONTROL BOLTS USED IN CONNECTION. USE 5/8" THICK ANGLES WITH MAXIMUM NUMBER OF BOLT ROWS THAT WILL FIT WITHIN THE BEAM WEB AT 3" OC.

R-12: PROVIDE MEMBER BRACING AS FOLLOWS.
- 'DB' INDICATES DIAGONAL BRACE. PROVIDE L2 1/2X2 1/2X1/4 EQUALLY SPACED BETWEEN SUPPORTS.
- 'CDB' INDICATES CROSS BRACING. PROVIDE L2 1/2X2 1/2X1/4 EQUALLY SPACED BETWEEN SUPPORTS.
- 'H' INDICATES END ATTACHMENT TO BEAM TOP FLANGE (HIGH).
- 'L' INDICATES END ATTACHMENT TO BEAM BOT FLANGE (LOW).
- PROVIDE BRACING ANGLE ATTACHMENT TO BEAM FLANGE AS DETAILED ON S401.

R-13: ROOF LOADING USED FOR DESIGN

- DEAD LOAD = 10 PSF ROOF STRUCTURE AND ROOFING
  = 13 PSF SUPERIMPOSED (MEP COMPONENTS AND CEILINGS)
- LIVE LOAD = 20 PSF
- SNOW LOAD = REF S403-S405

R-14: SPACE JOISTS OR BEAMS EQUALLY BETWEEN SUPPORTS UNLESS NOTED OTHERWISE.

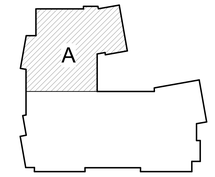
R-15: EXTERIOR CURTAIN WALL CONNECTIONS AT THIS FLOOR SHALL RESIST WIND LOAD ONLY.

R-16: REFER TO S802 FOR LINTEL SCHEDULE

R-17: REFER TO S701 AND S702 FOR STEEL BRACED FRAME ELEVATIONS.

R-18: PROVIDE STEEL ANGLE FRAMES AT ALL ROOF OPENINGS, INCLUDING THOSE FOR ROOF DRAINS AND ROOF OVERFLOW DRAINS. REFER TO ARCHITECTURAL ROOF PLAN FOR LOCATIONS. REFER TO S402 FOR TYPICAL DETAIL OF FRAME.

KEY PLAN:



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QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

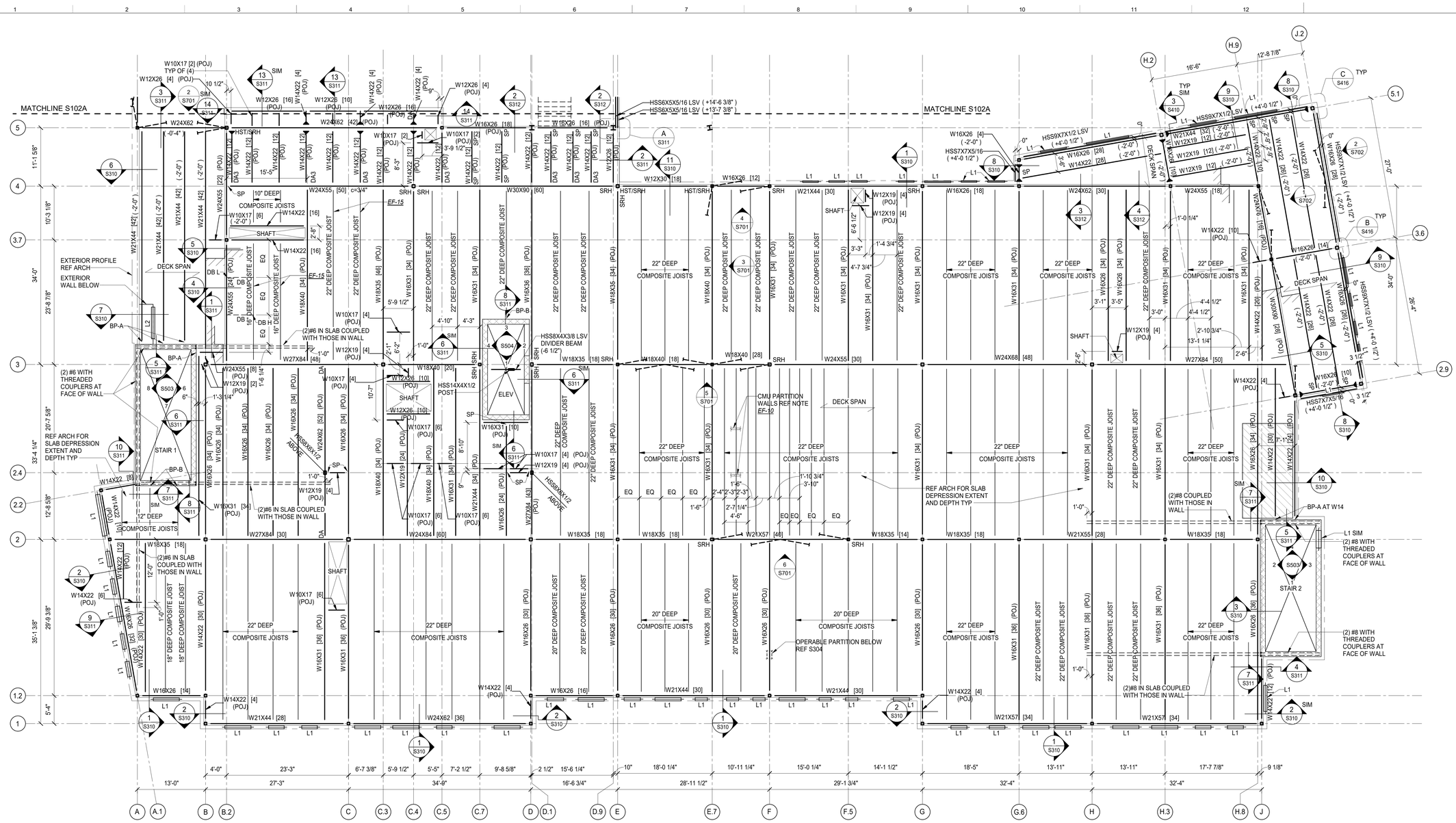
PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

LOW ROOF FRAMING PLAN - AREA A

S102A


MATCHLINE S102A
MATCHLINE S102A
W10X17 [2] (POJ) TYP OF (4)
W12X26 [4] (POJ)
10 1/2"
W24X62 [42]
W24X62 [42] (POJ)
HST/SRH
W10X17 [2] (POJ)
3'-9 1/2"
8'-3"
HSS6X5X5/16 LSV (+14'-6 3/8")
HSS6X5X5/16 LSV (+13'-7 3/8")
W16X26 [18]
W16X26 [12]
W16X26 [4]
(-0'-0")
HSS9X7X1/2 LSV
(+4'-0 1/2")
HSS7X7X5/16
(+4'-0 1/2")
W21X44 [42] (-2'-0")
W21X44 [42] (-2'-0")
W24X55 [22] (POJ)
W14X22 [4] (POJ)
W14X22 [12] (POJ)
DA3
DA
SP
SRH
10" DEEP COMPOSITE JOISTS
W10X17 [6] (-2'-0")
W14X22 [16]
2'-8"
SHAFT
EF-15
W24X55 [50] c=3/4"
W30X90 [60]
HST/SRH
W21X44 [30]
W12X19 [4] (POJ)
6'-6 1/2"
1'-4 3/4"
3'-3"
4'-7 3/4"
W24X55 [30]
W24X68 [48]
W24X55 [18]
1'-0 1/4"
W16X22 [10] (POJ)
W16X26 [14]
(-2'-0")
W14X22 [8] (POJ)
W14X22 [4] (POJ)
W14X22 [26]
W16X26 [28]
W16X26 [34]
W16X26 [36]
W16X26 [38]
W16X26 [40]
W16X26 [41]
W16X31 [34] (POJ)
W16X31 [36] (POJ)
W16X31 [38] (POJ)
W16X31 [40] (POJ)
W16X31 [41] (POJ)
W18X35 [46]
W18X35 [49]
W18X40 [34] (POJ)
W18X40 [41] (POJ)
W18X40 [43] (POJ)
W18X40 [47] (POJ)
W18X40 [49] (POJ)
W18X40 [50] (POJ)
W18X40 [54] (POJ)
W18X40 [55] (POJ)
W18X40 [59] (POJ)
W18X40 [60] (POJ)
W18X40 [62] (POJ)
W18X40 [64] (POJ)
W18X40 [65] (POJ)
W18X40 [66] (POJ)
W18X40 [67] (POJ)
W18X40 [71] (POJ)
W18X40 [72] (POJ)
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W18X40 [74] (POJ)
W18X40 [76] (POJ)
W18X40 [77] (POJ)
W18X40 [78] (POJ)
W18X40 [79] (POJ)
W18X40 [80] (POJ)
W18X40 [81] (POJ)
W18X40 [82] (POJ)
W18X40 [83] (POJ)
W18X40 [84] (POJ)
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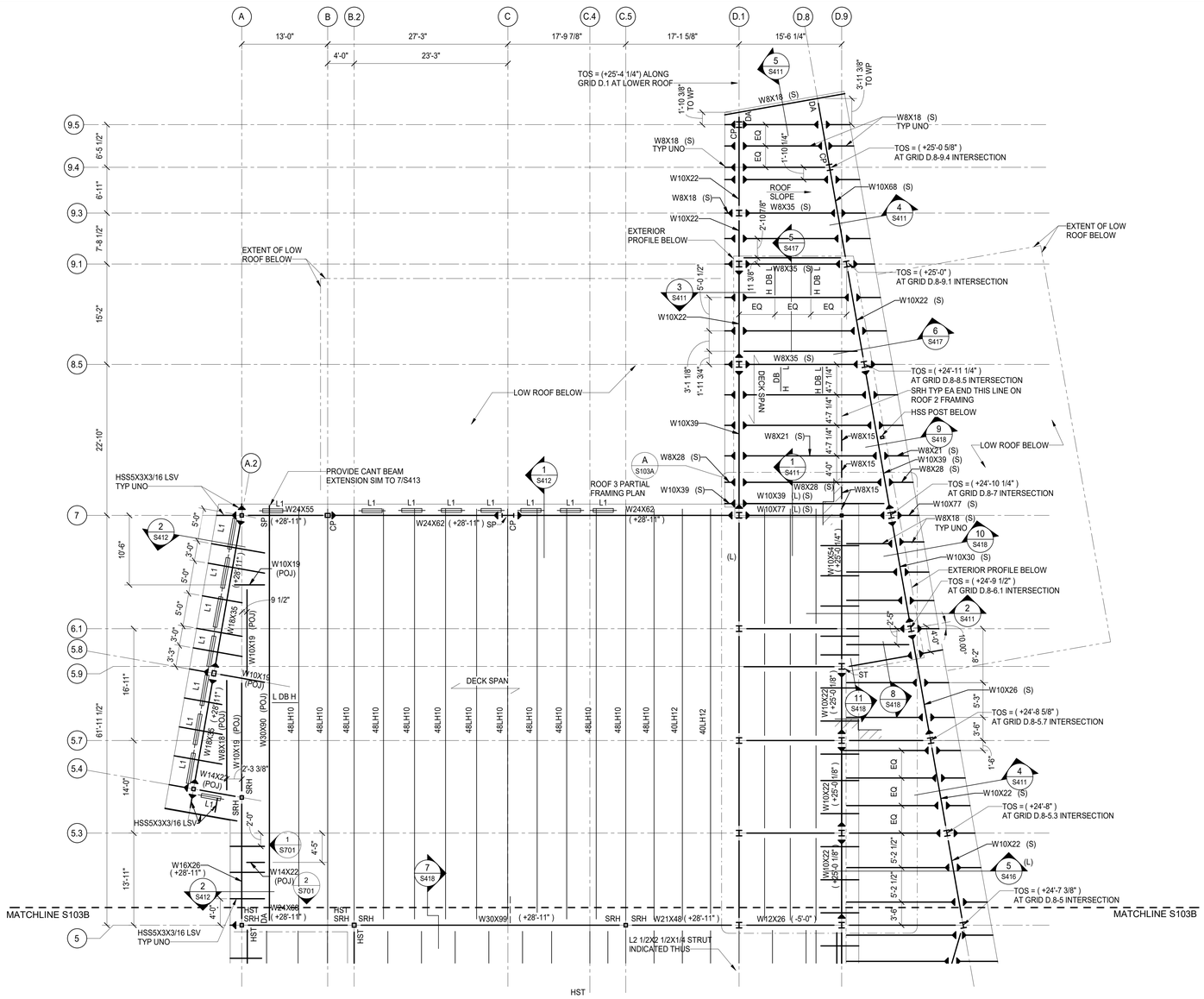
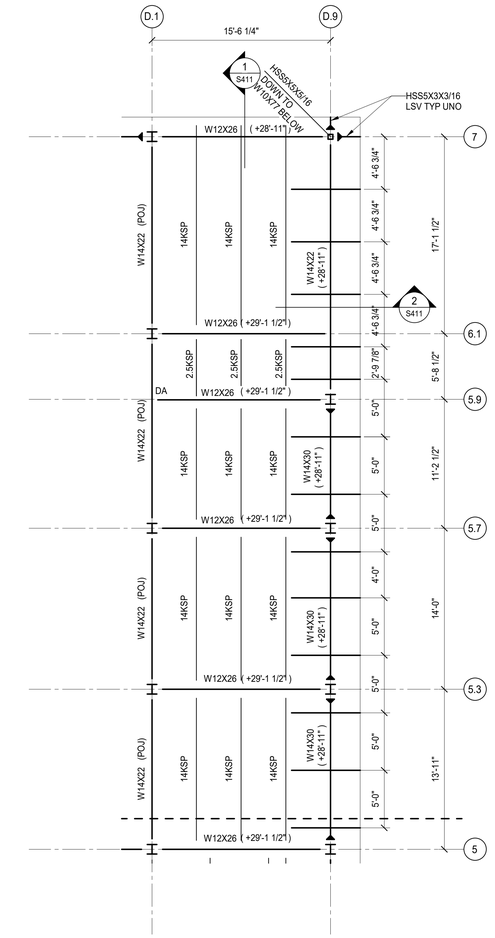
W18X40 [86] (POJ)
W18X40 [87] (POJ)
W18X40 [88] (POJ)
W18X40



HIGH ROOF FRAMING PLAN - AREA A

1/8" = 1'-0"



PARTIAL PLAN A

3/16" = 1'-0"

HIGH ROOF FRAMING PLAN

1/8"=1'-0"

R-1: TOP OF ALL STEEL ROOF GIRDERS INDICATED THUS (+XX'-X") RELATIVE TO FIRST FLOOR.

R-2: POJ DENOTES TOP OF BEAM IS IN SAME PLANE AS TOP OF OPEN WEB STEEL JOIST. K-SERIES ROOF JOIST SEAT DEPTH SHALL BE 2 1/2" UNLESS NOTED OTHERWISE AT INTERIOR CONDITIONS AND 5" AT EXTERIOR WALL CONDITIONS. LH-SERIES JOIST SEAT DEPTH SHALL BE 5" UNLESS NOTED OTHERWISE.

R-3: PROVIDE 1 1/2", 22 GAGE, GALVANIZED STEEL ROOF DECK (TYPE B). REFER TO S402 FOR REQUIRED CONNECTIONS TO ROOF FRAMING MEMBERS AS WELL AS MINIMUM REQUIRED STEEL DECK PROPERTIES.

R-4: REFERENCE DRAWING S401 AND S402 FOR TYPICAL ROOF CONSTRUCTION DETAILS.

R-5: ALL OWSJ ON THIS ROOF PLAN ARE SPECIAL DESIGN JOISTS. REFERENCE DRAWING S001 FOR ROOF UPLIFT PRESSURES.

R-6: KCS INDICATES CONSTANT SHEAR CAPACITY OPEN WEB STEEL JOIST.

R-7: W8X10 (S) INDICATES BEAM SLOPES UNIFORMLY BETWEEN SUPPORTING MEMBERS.

R-8: FIELD WELDED FULL MOMENT CONNECTION INDICATED THUS ◀
SHOP WELDED FULL MOMENT CONNECTION INDICATED THUS ◁ .

R-9: REFER TO ARCHITECTURAL DRAWINGS AND MECHANICAL DRAWINGS FOR DIMENSIONS FOR MECHANICAL AND OTHER PENETRATIONS THROUGH ROOF AND/OR CEILING.

R-10: PROVIDE THE FOLLOWING STEEL FRAMING CONNECTIONS.
- USE SINGLE SHEAR TAB CONNECTION TO HSS COLUMN OR W-SHAPE GIRDER UNLESS NOTED OTHERWISE .
- USE DOUBLE ANGLE CONNECTION TO W-SHAPE COLUMN UNLESS NOTED OTHERWISE.
- 'DA' INDICATES BEAM CONNECTS TO HSS COLUMN OR W-SHAPE GIRDER WITH DOUBLE ANGLE CONNECTION.
- 'ST' INDICATES BEAM CONNECTS TO W-SHAPE COLUMN WITH SHEAR TAB CONNECTION.
- 'HST' INDICATES BEAM CONNECTS TO COLUMN WITH HEAVY SHEAR TAB CONNECTION.
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- 'CP' INDICATES BEAM BEARS ON TOP OF COLUMN PLATE.
- 'SRH' INDICATES THAT TYPICAL CONNECTION IS TO BE DETAILED WITH STD ROUND HOLES IN ALL CONNECTION PLIES.
- 'TP' INDICATES 3/8" THRU-PLATE CONNECTION WITH STD ROUND HOLES IN ALL CONNECTION PLIES.
- 'SP' INDICATES 3/8" FULL HT STIFF PLATE CONNECTION WITH STD ROUND HOLES IN ALL CONNECTION PLIES.

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- 'CDB' INDICATES CROSS BRACING. PROVIDE L2 1/2X2 1/2X1/4 EQUALLY SPACED BETWEEN SUPPORTS.
- 'H' INDICATES END ATTACHMENT TO BEAM TOP FLANGE (HIGH).
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- PROVIDE BRACING ANGLE ATTACHMENT TO BEAM FLANGE AS DETAILED ON S401.

R-13: ROOF LOADING USED FOR DESIGN

- DEAD LOAD = 10 PSF ROOF STRUCTURE AND ROOFING
  = 13 PSF SUPERIMPOSED (MEP COMPONENTS AND CEILINGS)
  = 8 PSF FOR FUTURE SOLAR PANELS
- LIVE LOAD = 20 PSF
- UNIFORM SNOW LOAD = 23.1 PSF
- SNOW DRIFT LOAD = REFER TO S403 AND S404 DIAGRAMS

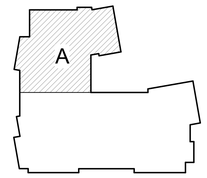
R-14: SPACE JOISTS OR BEAMS EQUALLY BETWEEN SUPPORTS UNLESS NOTED OTHERWISE.

R-15: REFER TO S802 FOR LINTEL SCHEDULE. REFER TO WALL ELEVATIONS FOR LINTELS IN STAIR AND ELEVATOR WALLS.

R-16: REFER TO S701 AND S702 FOR STEEL BRACED FRAME ELEVATIONS.

R-17: PROVIDE STEEL ANGLE FRAMES AT ALL ROOF OPENINGS, INCLUDING THOSE FOR ROOF DRAINS AND ROOF OVERFLOW DRAINS. REFER TO ARCHITECTURAL ROOF PLAN FOR LOCATIONS. REFER TO S402 FOR TYPICAL DETAIL OF FRAME.

KEY PLAN:



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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

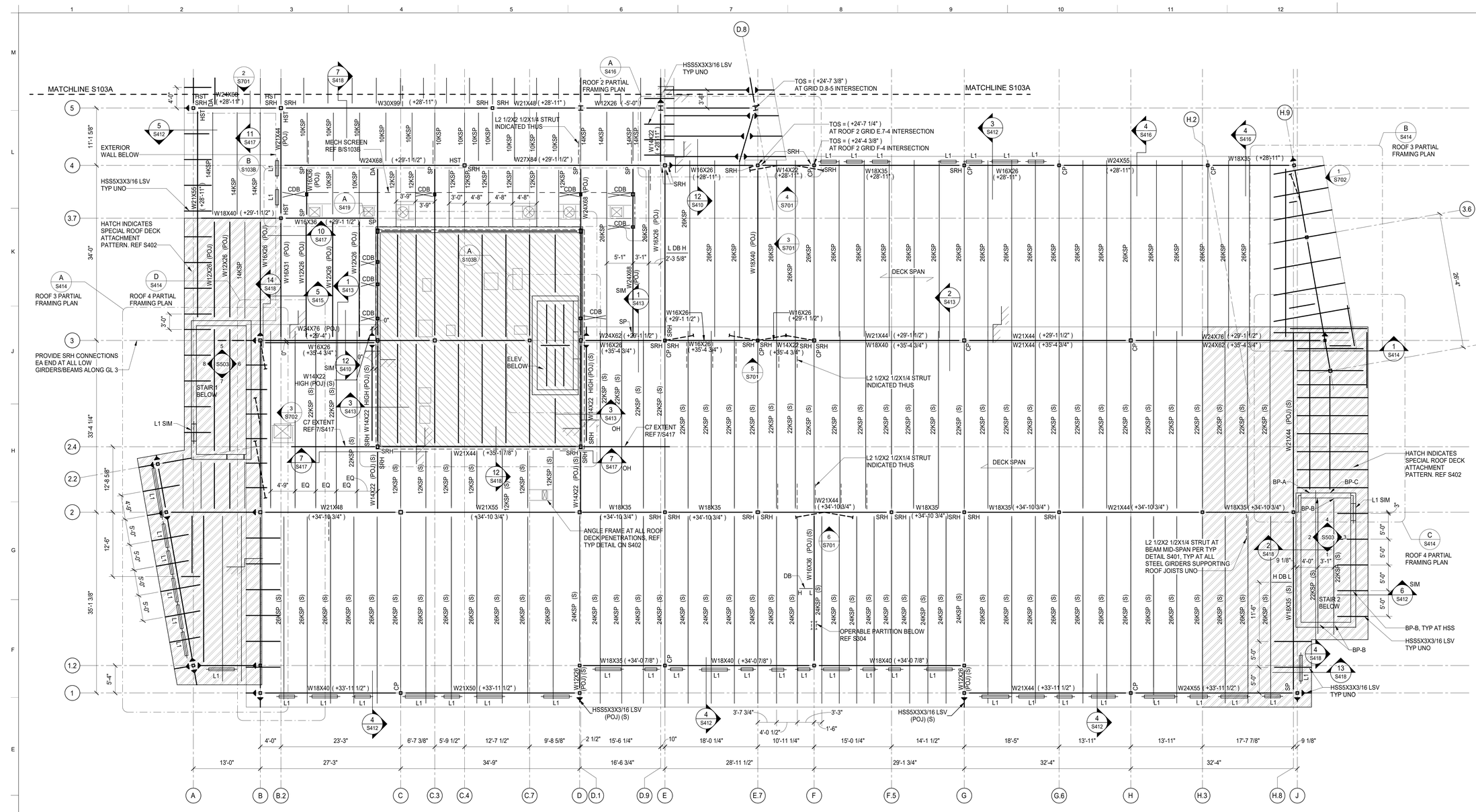
PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

ROOF FRAMING PLAN - AREA A

S103A


MATCHLINE S103A
MATCHLINE S103A
ROOF 2 PARTIAL FRAMING PLAN
HSS5X3X3/16 LSV TYP UNO
TOS = (+24'-7 3/8") AT GRID D.8-5 INTERSECTION
TOS = (+24'-7 1/4") AT ROOF 2 GRID E.7-4 INTERSECTION
TOS = (+24'-4 3/8") AT ROOF 2 GRID F-4 INTERSECTION
L2 1/2X2 1/2X1/4 STRUT INDICATED THUS
MECH SCREEN REF B/S103B
EXTERIOR WALL BELOW
HSS5X3X3/16 LSV TYP UNO
HATCH INDICATES SPECIAL ROOF DECK ATTACHMENT PATTERN. REF S402
ROOF 3 PARTIAL FRAMING PLAN
ROOF 4 PARTIAL FRAMING PLAN
PROVIDE SRH CONNECTIONS EA END AT ALL LOW GIRDERS/BEAMS ALONG GL 3
STAIR 1 BELOW
ELEV BELOW
L1 SIM
C7 EXTENT REF 7/S417
DECK SPAN
ANGLE FRAME AT ALL ROOF DECK PENETRATIONS, REF. TYP DETAIL ON S402
OPERABLE PARTITION BELOW REF S304
L2 1/2X2 1/2X1/4 STRUT AT BEAM MID-SPAN PER TYP DETAIL S401, TYP AT ALL STEEL GIRDERS SUPPORTING ROOF JOISTS UNO
HATCH INDICATES SPECIAL ROOF DECK ATTACHMENT PATTERN. REF S402
STAIR 2 BELOW
BP-A
BP-B
BP-C
BP-B, TYP AT HSS
HSS5X3X3/16 LSV TYP UNO
ROOF 3 PARTIAL FRAMING PLAN
ROOF 4 PARTIAL FRAMING PLAN
HSS5X3X3/16 LSV (POJ) (S)
W18X40 (+29'-1 1/2")
W24X68 (+29'-1 1/2")
W27X84 (+29'-1 1/2")
W30X99 (+28'-11")
W21X48 (+28'-11")
W12X26 (-5'-0")
W24X55 (+28'-11")
W18X35 (+28'-11")
W16X26 (+28'-11")
W18X35 (+34'-0 7/8")
W18X40 (+34'-0 7/8")
W21X44 (+34'-10 3/4")
W18X35 (+34'-10 3/4")
W21X48 (+34'-10 3/4")
W21X55 (+34'-10 3/4")
W18X40 (+33'-11 1/2")
W21X50 (+33'-11 1/2")
W21X44 (+33'-11 1/2")
W24X55 (+33'-11 1/2")
W24X76 (+35'-4 3/4")
W24X62 (+35'-4 3/4")
W21X44 (+35'-4 3/4")
W18X40 (+35'-4 3/4")
W24X76 (+29'-1 1/2")
W24X62 (+29'-1 1/2")
W21X44 (+29'-1 1/2")
W16X26 (+29'-1 1/2")
W16X36 (+29'-1 1/2")
W24X76 (+29'-4")
W16X26 (+35'-4 3/4")
W14X22 HIGH (POJ) (S)
W14X22 (POJ) (S)
W16X36 (POJ) (S)
W24X68 (POJ)
W16X26 (POJ)
W12X26 (POJ)
W16X31 (POJ)
W16X28 (POJ)
W21X55 (POJ)
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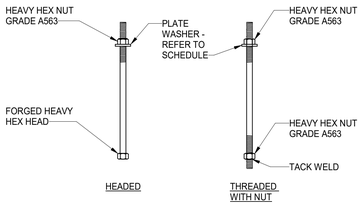
W21X44



CAST-IN-PLACE ANCHOR RODS

STRUCTURAL COLUMN FOOTINGS - 2.5KSF

NOTES:

1. PROVIDE 3" COVER BELOW BOTTOM AND EACH END OF REINFORCING BARS.
2. PROVIDE 2" COVER ABOVE TOP REINFORCING BARS.
3. THIS SCHEDULE IS BASED UPON AN ALLOWABLE SOIL BEARING PRESSURE OF 3000 PSF.
4. AT FOOTINGS INDICATED WITH • NEXT TO FOOTING TAG ON PLAN, PROVIDE REINFORCING INDICATED ON SCHEDULE AT BOTH TOP AND BOTTOM OF FOOTING.
5. TAG (MARK) INDICATES FOOTING TYPE ON FOUNDATION PLAN. REFER TO SCHEDULE BELOW FOR SIZE AND REINFORCING.

SCHEDULE

MARK	SIZE	REINFORCING
F3.0	3' - 0" X 3' - 0" X 1' - 1"	(5) #4 X 2'-6" EACH WAY
F3.0A	3' - 0" X 3' - 0" X 1' - 8"	(6) #5 X 2'-6" EACH WAY
F4.0A	4' - 0" X 4' - 0" X 1' - 8"	(5) #5 X 3'-6" EACH WAY
F5.0	5' - 0" X 5' - 0" X 1' - 1"	(5) #5 X 4'-6" EACH WAY
F5.0A	5' - 0" X 5' - 0" X 1' - 8"	(6) #5 X 4'-6" EACH WAY
F5.5	5' - 6" X 5' - 6" X 1' - 1"	(6) #5 X 5'-0" EACH WAY
F5.5A	5' - 6" X 5' - 6" X 1' - 8"	(7) #5 X 5'-0" EACH WAY
F6.0	6' - 0" X 6' - 0" X 1' - 2"	(7) #5 X 5'-6" EACH WAY
F6.0A	6' - 0" X 6' - 0" X 1' - 8"	(8) #5 X 5'-6" EACH WAY
F6.5	6' - 6" X 6' - 6" X 1' - 4"	(8) #5 X 6'-0" EACH WAY
F6.5A	6' - 6" X 6' - 6" X 1' - 8"	(8) #5 X 6'-0" EACH WAY
F7.0	7' - 0" X 7' - 0" X 1' - 5"	(6) #6 X 6'-6" EACH WAY
F7.0A	7' - 0" X 7' - 0" X 1' - 8"	(7) #6 X 6'-6" EACH WAY
F7.5	7' - 6" X 7' - 6" X 1' - 6"	(7) #6 X 7'-0" EACH WAY
F7.5A	7' - 6" X 7' - 6" X 1' - 8"	(8) #6 X 7'-0" EACH WAY
F8.0	8' - 0" X 8' - 0" X 1' - 8"	(7) #7 X 7'-6" EACH WAY
F8.0A	8' - 0" X 8' - 0" X 2' - 0"	(7) #7 X 7'-6" EACH WAY
F8.0X6.0	6' - 0" X 8' - 8" X 2' - 0"	(9) #7 X 5'-6" SHORT DIRECTION (6) #7 X 7'-6" LONG DIRECTION
F8.5	8' - 6" X 8' - 6" X 1' - 8"	(7) #7 X 8'-0" EACH WAY
F9.0	9' - 0" X 9' - 0" X 1' - 9"	(10) #6 X 8'-6" EACH WAY
F9.5	9' - 6" X 9' - 6" X 1' - 10"	(8) #7 X 9'-0" EACH WAY
F9.5X7.5	7' - 6" X 9' - 6" X 1' - 8"	(9) #7 X 7'-0" SHORT DIRECTION (8) #7 X 9'-0" LONG DIRECTION
F10.0	10' - 0" X 10' - 0" X 2' - 0"	(9) #7 X 9'-6" EACH WAY
F10.0X5.0	10' - 2" X 5' - 0" X 2' - 0"	(12) #6 X 4'-6" SHORT DIRECTION (6) #6 X 9'-8" LONG DIRECTION
F10.0X8.5	8' - 6" X 10' - 0" X 2' - 0"	(10) #7 X 8'-0" SHORT DIRECTION (10) #7 X 9'-6" LONG DIRECTION
F10.5	10' - 6" X 10' - 6" X 2' - 1"	(10) #7 X 10'-0" EACH WAY
F11.0	11' - 0" X 11' - 0" X 2' - 2"	(8) #8 X 10'-6" EACH WAY
F11.0X6.0	6' - 0" X 11' - 0" X 2' - 0"	(11) #6 X 5'-6" SHORT DIRECTION (5) #6 X10'-6" LONG DIRECTION
F15.0X11.0	15' - 0" X 11' - 0" X 3' - 0"	(10) #8 X 10'-6" SHORT DIRECTION (13) #8 X 14'-6" LONG DIRECTION

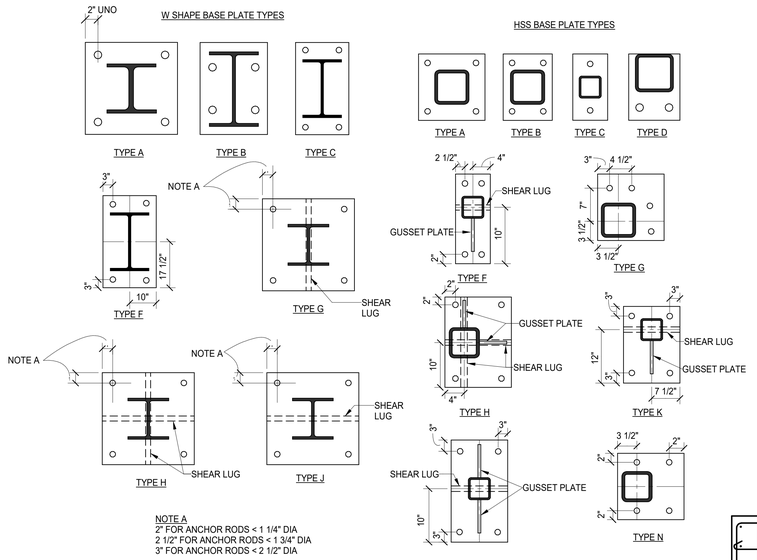
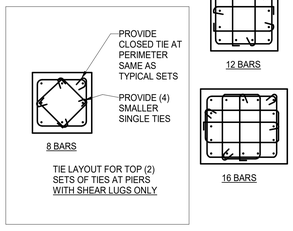


PLATE WASHER TABLE FOR ANCHOR RODS

ANCHOR ROD DIAMETER	PLATE WASHER SIZE
3/4"	2"X1/4"X0'-2"
7/8"	2 1/2"X5/16"X0'-2 1/2"
1"	3"X3/8"X0'-3"
1 1/4"	3 1/2"X1/2"X0'-3 1/2"
1 1/2"	4"X1/2"X0'-4"
1 3/4"	4 1/2"X5/8"X0'-4 1/2"
2"	5"X3/4"X0'-5"

1. PROVIDE STD ROUND HOLES IN PLATE WASHERS
2. PLATE WASHERS TO BE ASTM A36, UNO.
3. PLATE WASHERS ARE NOT TO BE WELDED TO BASEPLATE, UNO.



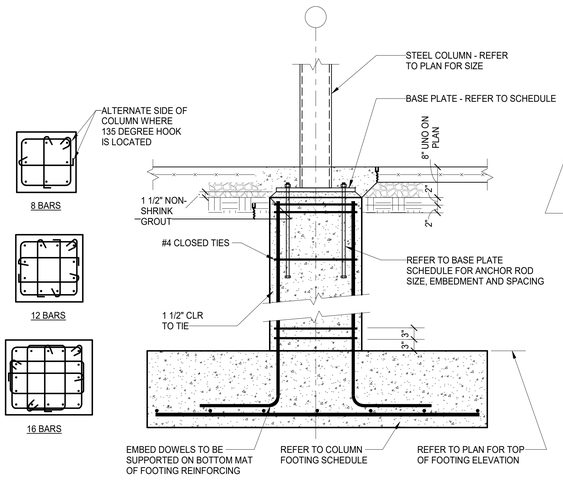
STEEL COLUMN BASE PLATE SCHEDULE

NOTES:

1. ALL ANCHOR RODS SHALL BE ASTM F1554 Fy = 36 KSI, UNO

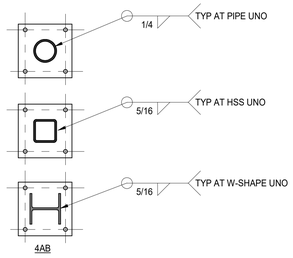
SCHEDULE

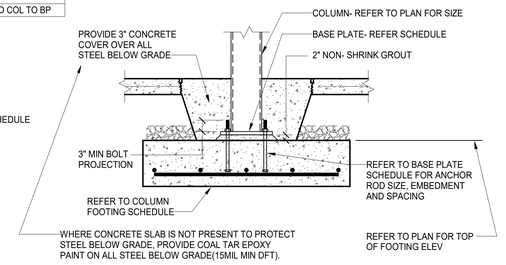
MARK	SIZE	HEADED ANCHOR RODS	ROD EMBED	ROD GAUGE	BASE PL TYPE	COMMENTS
BP-1	1 1/2X18X1'-6"	(4) 3/4" DIA	10 1/2"	14"	A	
BP-2	1X15X1'-3"	(4) 3/4" DIA	9"	11"	A	
BP-3	3/4X18X1'-6"	(4) 3/4" DIA	24"	NA	N	MOMENT CONNECTION DETAIL
BP-4	1 1/4X18X1'-6"	(4) 1" DIA	14"	14"	A	MOMENT CONNECTION DETAIL
BP-5	3/4X15X1'-3"	(4) 3/4" DIA	14"	11"	A	MOMENT CONNECTION DETAIL
BP-6	1X20X1'-8"	(4) 3/4" DIA	14"	16"	A	
BP-7	1 1/2x35x1'-8"	(4) 1 1/4" DIA	14"	29"x14"	F	MOMENT CONNECTION DETAIL
BP-8	1 1/4X20X1'-6"	(4) 1 1/4" DIA	14"	14"X12"	M	SHEAR LUG
BP-9	1 1/4X20X1'-3"	(4) 3/4" DIA	24"	16"X11"	H	SHEAR LUG IN BOTH DIRECTIONS
BP-10	1 1/4X20X1'-3"	(4) 1 1/4" DIA	14"	14"X9"	K	SHEAR LUG
BP-11	1X20X0'-8"	(4) 3/4" DIA	24"	16"X3"	F	SHEAR LUG
BP-12	3/4X15X1'-3"	(4) 3/4" DIA	14"	NA	G	MOMENT CONNECTION DETAIL
BP-13	1X14X1'-2"	(4) 3/4" DIA	24"	NA	G	
BP-14	1X18X1'-6"	(4) 3/4" DIA	24"	NA	N	
BP-15	3/4X13X1-1'"	(4) 3/4" DIA	9"	9"	A	
BP-16	3/4X18X1'-6"	(4) 3/4" DIA	9"	14"	A	
BP-17	1X18X1'-6"	(4) 3/4" DIA	24"	5"	B	
BP-18	1 1/2X18X1'-6"	(4) 3/4" DIA	24"	11"	A	
BP-19	1 1/4X18X16	(4) 1" DIA	14"	14"X12"	B	5/8" WELD COL TO BP



TYPICAL CONCRETE PIER

3/4"=1'-0"





TYPICAL STEEL COLUMN FOOTING

3/4"=1'-0"

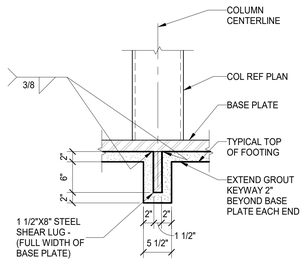
CONCRETE PIER SCHEDULE

MARK	SIZE	VERT REINF	TIES
P16	16"X16"	(8) #6 DOWELS	#4 AT 12" OC
P20	20"X20"	(8) #7 DOWELS	#4 AT 12" OC
P24	24"X24"	(8) #8 DOWELS	#4 AT 12" OC
P32	32"X32"	(12) #9 DOWELS	#4 AT 12" OC

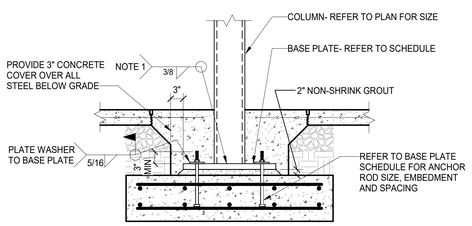
TYPICAL CONCRETE FOOTING, WALL AND SLAB REINFORCING BAR LAP SPLICES

BAR SIZE	BOTTOM BAR LAP SPLICE LENGTH	TOP BAR LAP SPLICE LENGTH
#3	1'-4"	1'-5"
#4	1'-5"	1'-11"
#5	1'-10"	2'-4"
#6	2'-2"	2'-10"
#7	3'-7"	4'-7"
#8	4'-6"	5'-10"
#9	5'-6"	7'-2"

1. LAP SPLICE LENGTHS ARE MINIMUMS FOR FOOTINGS, WALLS AND SLABS IN f'c=3000 PSI NORMAL WEIGHT CONCRETE. MULTIPLY THESE LAP SPLICE LENGTHS BY 1.3 FOR USE IN LIGHTWEIGHT CONCRETE.
2. TOP BAR LAP SPLICES APPLY WHEN 12 INCHES OF CONCRETE OR MORE ARE CAST BELOW THE BARS. THIS ALSO APPLIES TO HORIZONTAL BARS IN WALLS.
3. REFER TO OTHER SECTIONS AND DETAILS FOR MORE STRINGENT REQUIREMENTS.



SHEAR LUG DETAIL

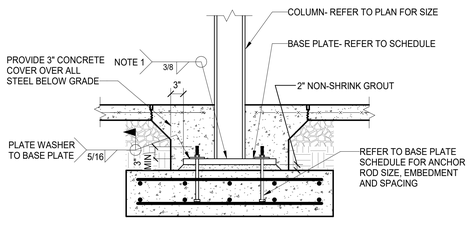


TYPICAL STEEL HSS COLUMN FOOTING - MOMENT CONNECTION

3/4"=1'-0"

NOTES:

1. PROVIDE FILLET WELD SIZE SHOWN IN THE 'STEEL COLUMN BASE PLATE SCHEDULE' ON THIS SHEET IF SPECIFICALLY INDICATED IN THE 'COMMENTS'

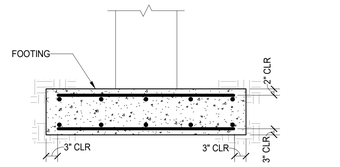


TYPICAL STEEL W-SHAPE COLUMN FOOTING - MOMENT CONNECTION

3/4"=1'-0"

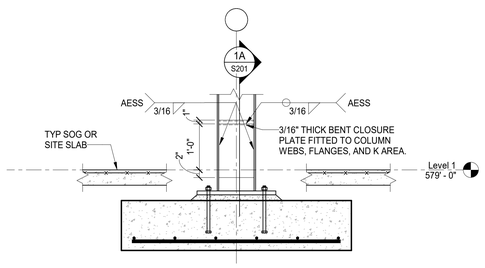
NOTES:

1. PROVIDE FILLET WELD SIZE SHOWN IN THE 'STEEL COLUMN BASE PLATE SCHEDULE' ON THIS SHEET IF SPECIFICALLY INDICATED IN THE 'COMMENTS'



TYPICAL CONCRETE COVER/CLEAR AT FOOTINGS

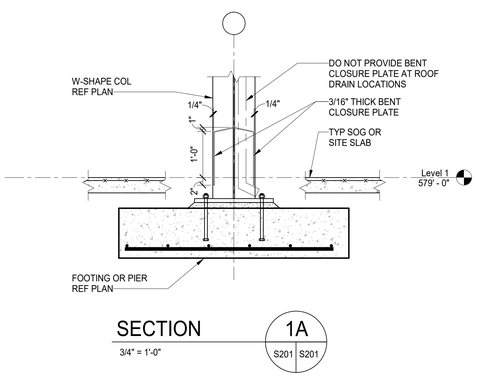
3/4"=1'-0"



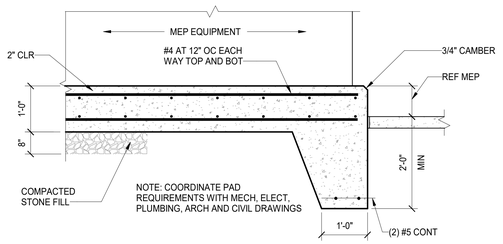
TYPICAL W-SHAPE COLUMN ENCLOSURE PLATE DETAIL

NOTES:

1. APPLIES TO W-SHAPE COLUMN BASES WHERE INDICATED AS 'ENC' ON PLAN

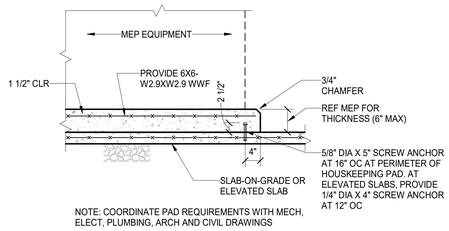


SECTION 1A
3/4" = 1'-0"
S201 S201



TYPICAL EXTERIOR EQUIPMENT PAD DETAIL

3/4" = 1'-0"



TYPICAL HOUSEKEEPING PAD DETAIL

3/4" = 1'-0"

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FOUNDATION DETAILS

S201

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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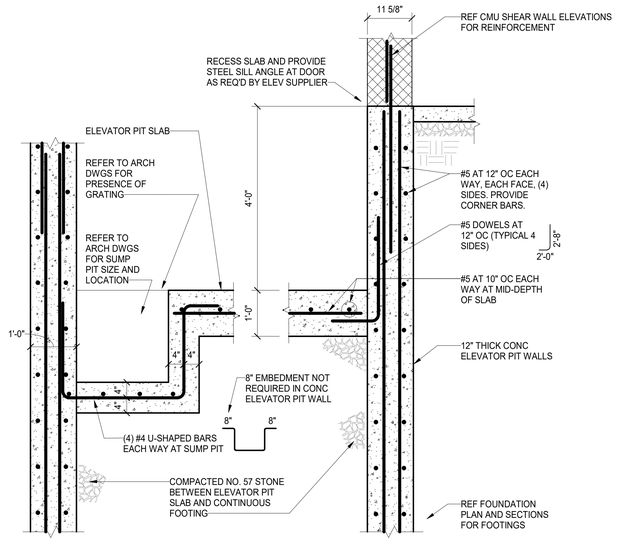
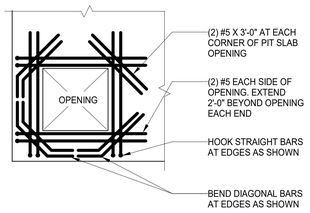
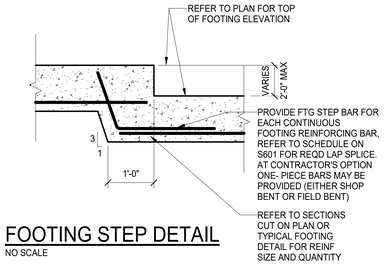


TYPICAL CONCRETE ELEVATOR PIT DETAIL

3/4"=1'-0"

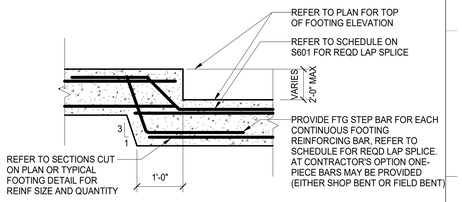


TYPICAL PLAN DETAIL OF REINF AT CORNERS OF OPENING IN ELEVATOR PIT FOOTING



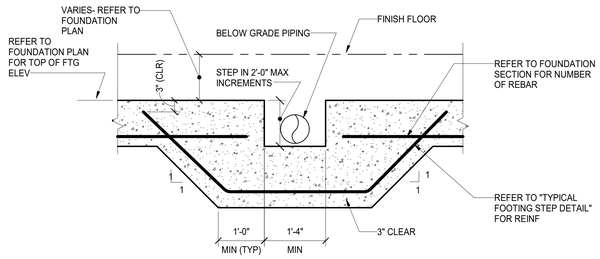
FOOTING STEP DETAIL

NO SCALE



FOOTING STEP DETAIL WITH TOP AND BOT REBAR

NO SCALE

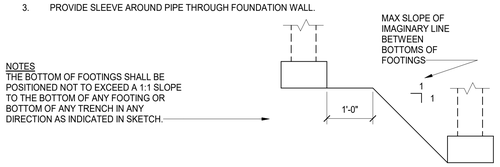


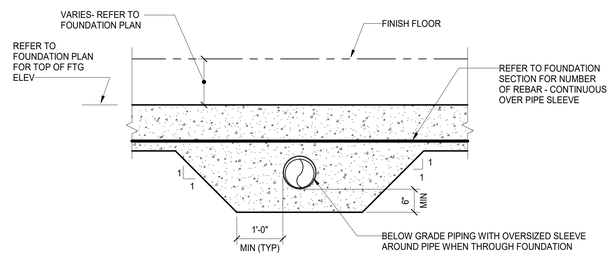
FOOTING STEP FOR BELOW GRADE PIPING

3/4"=1'-0"

NOTES:

1. DETAIL ABOVE APPLIES WHERE UNDERGROUND PIPING CONFLICTS WITH WALL FOOTING. WHERE PIPING WILL PASS UNDER FOOTING WITH A MINIMUM OF 2'-0" CLEARANCE (TOP OF PIPE TO BOTTOM OF FOOTING), STEP IS NOT REQUIRED.
2. COORDINATE PIPING AND FOOTING ELEVATIONS AND STEP FOOTINGS WHERE NECESSARY. STEPS FOR PIPING INDICATED ON THE CONTRACT DOCUMENTS ARE APPROXIMATE AND SHALL BE VERIFIED PRIOR TO POURING CONCRETE.
3. PROVIDE SLEEVE AROUND PIPE THROUGH FOUNDATION WALL.



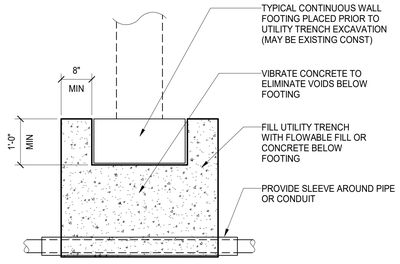


SLEEVE DETAIL BELOW GRADE PIPING

3/4"=1'-0"

NOTES:

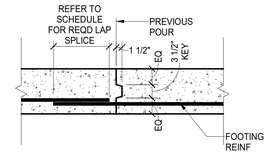
1. DETAIL ABOVE APPLIES WHERE UNDERGROUND PIPING CONFLICTS WITH WALL FOOTING. WHERE PIPING WILL PASS UNDER FOOTING WITH A MINIMUM OF 2'-0" CLEARANCE (TOP OF PIPE TO BOTTOM OF FOOTING), STEP IS NOT REQUIRED.
2. COORDINATE PIPING AND FOOTING ELEVATIONS AND STEP FOOTINGS WHERE NECESSARY. STEPS FOR PIPING INDICATED ON THE CONTRACT DOCUMENTS ARE APPROXIMATE AND SHALL BE VERIFIED PRIOR TO POURING CONCRETE.



NOTE:
THIS ONLY APPLIES AT LOCATIONS WHERE A NARROW UTILITY TRENCH IS EXCAVATED PERPENDICULAR TO A CONTINUOUS WALL FOOTING.

TYPICAL DETAIL AT UNDERMINED FOOTING

3/4"=1'-0"



CONTINUOUS WALL FOOTING CONSTRUCTION JOINT (ELEVATION VIEW)

NO SCALE

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/10/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FOUNDATION DETAILS

S202

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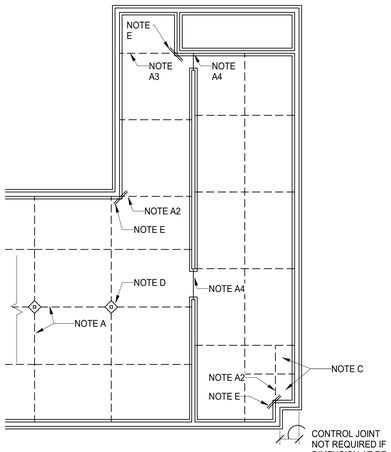
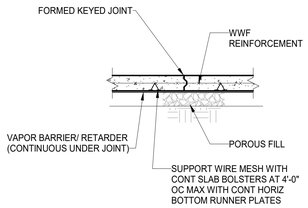


EXAMPLE SLAB-ON-GROUND JOINT LAYOUT
1/16"=1'-0"

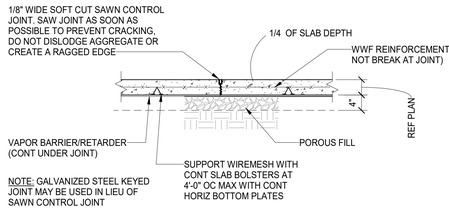
JOINT PLACEMENT GUIDELINE

A. LOCATE CONTROL JOINTS AND/ OR CONSTRUCTION JOINTS AT
  1. COLUMN CENTERLINES
  2. RE-ENTRANT CORNERS OF BUILDING
  3. AT CORNERS OF INTERIOR MASONRY WALLS WITH FOOTINGS
  4. AT OPENINGS IN MASONRY WALLS WITH FOOTINGS
B. SPACE JOINTS NO MORE THAN THE FOLLOWING:
  1. 12 FEET APART- 4" SLABS (10 FEET APART WITH FIBER REINF)
  2. 18 FEET APART- 6" SLABS (15 FEET APART WITH FIBER REINF)
  3. 24 FEET APART- 8" SLABS
C. SUBDIVIDE SLAB AREAS TO LIMIT LENGTH TO WIDTH RATIO OF SLAB AREA TO 2 TO 1 MAXIMUM. PROVIDE SQUARE SLAB AREAS WHERE PRACTICAL.
D. PROVIDE DIAMOND SHAPED JOINT PATTERN AROUND COLUMNS.
E. PROVIDE (2) #4 BARS AT RE-ENTRANT CORNERS OF SLAB PER TYPICAL DETAIL.
F. IN ADDITION TO GUIDELINES ABOVE, COORDINATE CONTROL JOINT LOCATIONS WITH ARCHITECTURAL DRAWINGS AND FINISH FLOORING INSTALLER.



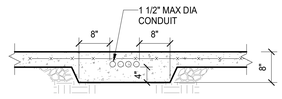
TYPICAL SLAB-ON-GROUND CONSTRUCTION JOINT DETAIL
3/4"=1'-0"

NOTE:
AT CONTRACTOR'S OPTION, 1.5 POUNDS PER CUBIC YARD POLYPROPYLENE MICRO FIBER REINF MAY BE SUBSTITUTED FOR 6X6-W1.4XW1.4 WWF IN 4" SLAB ON GRADE ONLY. AT CONTRACTOR'S OPTION, 3.5 POUNDS PER CUBIC YARD POLYPROPYLENE MACRO FIBER REINF MAY BE SUBSTITUTED FOR 6X6-W2.9XW2.9 WWF IN 6" SLAB-ON-GRADE ONLY. DEFORMED REBAR REQUIRED IN 8" SLAB-ON-GRADE



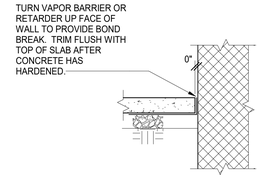
NOTE: GALVANIZED STEEL KEYED JOINT MAY BE USED IN LIEU OF SAWN CONTROL JOINT

TYPICAL SLAB-ON-GROUND AND CONTROL JOINT DETAIL
3/4"=1'-0"

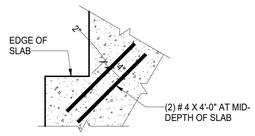


NOTE: COORDINATE CONDUIT REQUIREMENTS WITH ELECTRICAL DRAWINGS

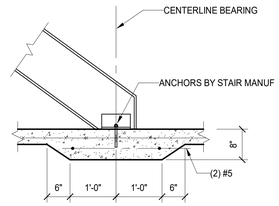
TYPICAL EMBEDDED CONDUIT DETAIL
3/4"=1'-0"



TYPICAL BOND BREAK AT SLAB-ON-GROUND
3/4"=1'-0"

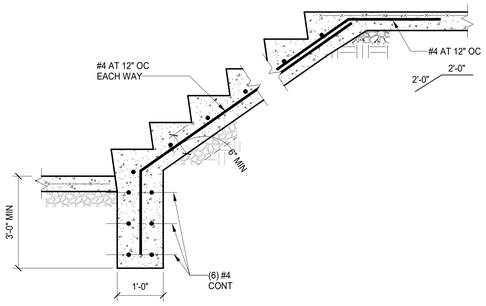


TYP REINF AT RE-ENTRANT CORNERS
3/4"=1'-0"



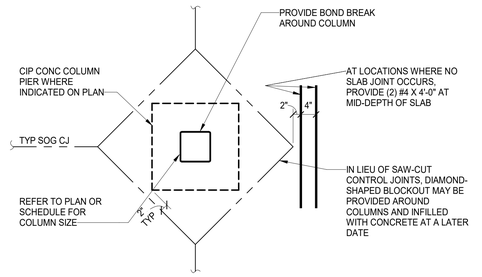
NOTE: THICKENED PORTION TO BE STAIR WIDTH PLUS 1'-0" EA SIDE.

SLAB-ON-GROUND BELOW STAIR STRINGER
3/4"=1'-0"

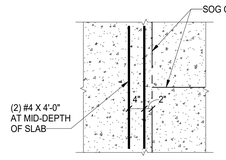


REFER TO ARCH DWGS, FOR SPECIFIC STAIR GEOMETRY.

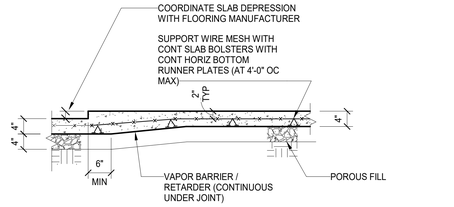
TYPICAL DETAIL AT CONCRETE STAIRS-ON-GRADE
3/4"=1'-0"



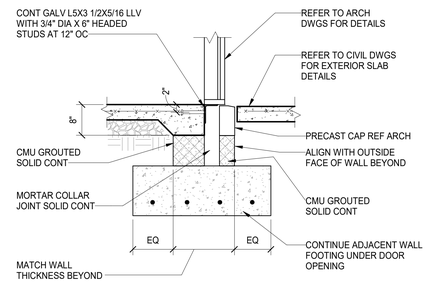
TYPICAL DIAMOND SLAB JOINT AT COLUMNS
NO SCALE



PLAN DETAIL AT DISCONTINUOUS SLAB JOINT
NO SCALE



TYPICAL SHALLOW DEPRESSED SLAB-ON-GROUND (LESS THAN 6" DEPRESSION)
3/4"=1'-0"



TYPICAL FOUNDATION DETAIL AT EXTERIOR DOOR OPENING
3/4"=1'-0"

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

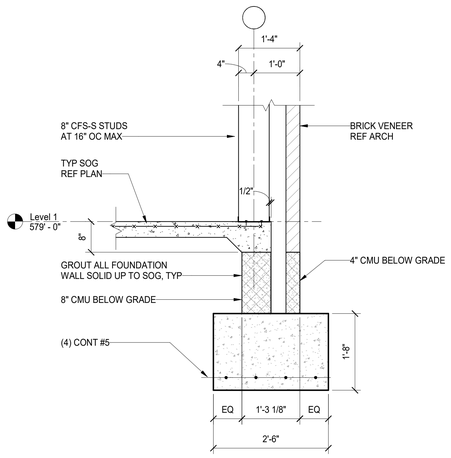
QEA No.41911390

BID DOCUMENTS
10/08/2024

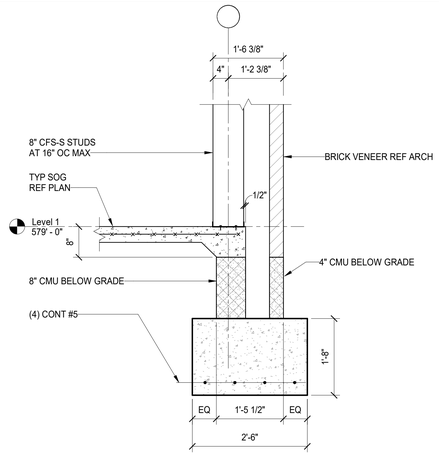
TYPICAL FOUNDATION DETAILS

S203

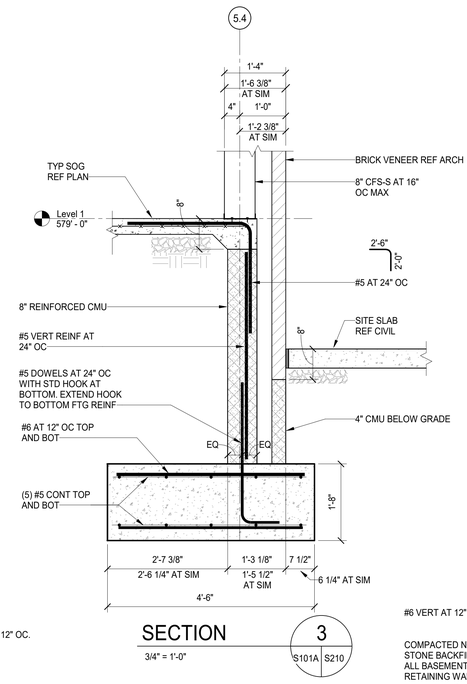
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 9:48:33 AM



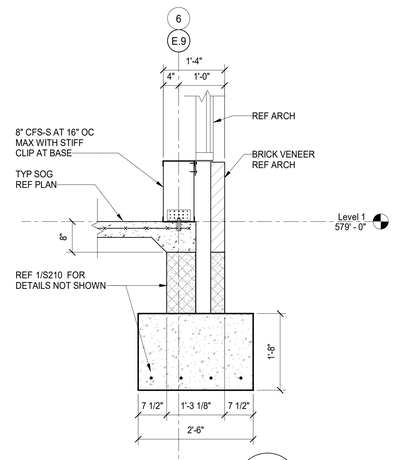
SECTION 1
3/4" = 1'-0"
S100B | S210



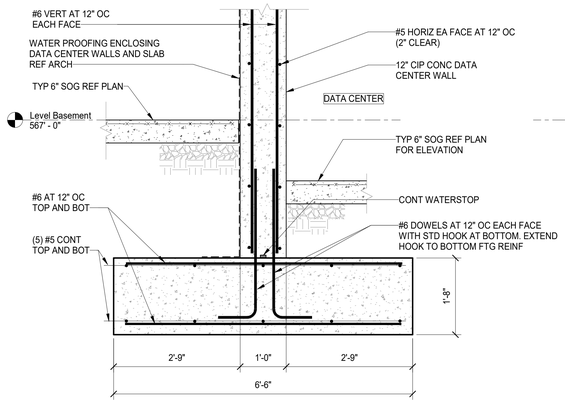
SECTION 2
3/4" = 1'-0"
S101A | S210



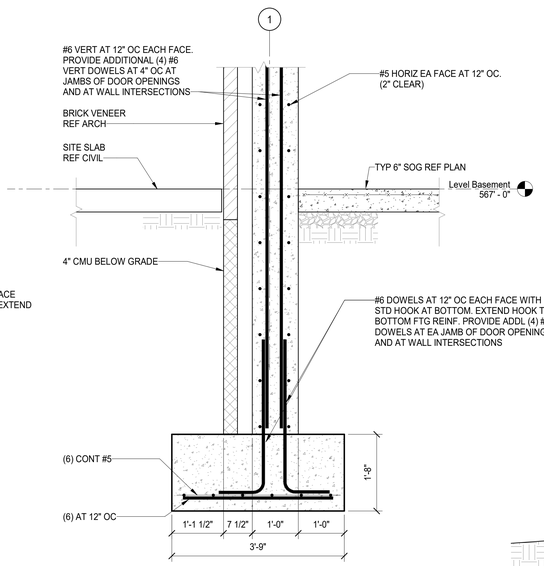
SECTION 3
3/4" = 1'-0"
S101A | S210



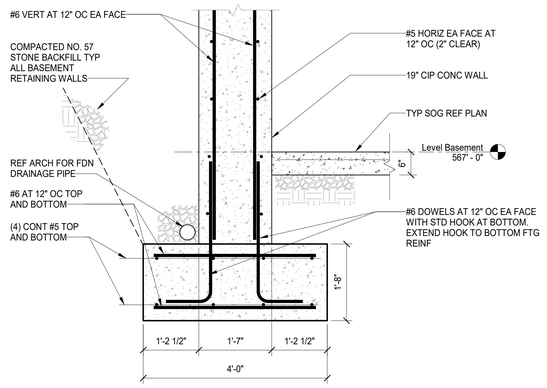
SECTION 4
3/4" = 1'-0"
S101A | S210



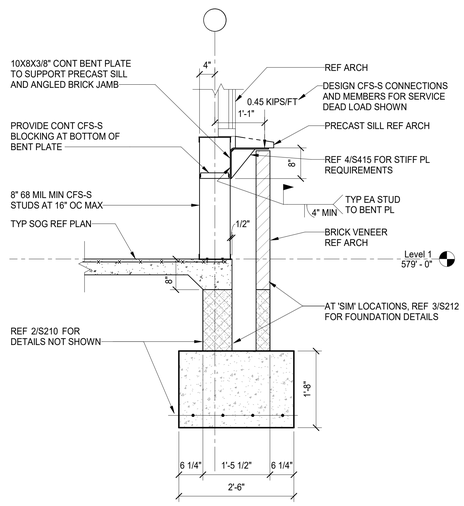
SECTION 5
3/4" = 1'-0"
S100B | S210



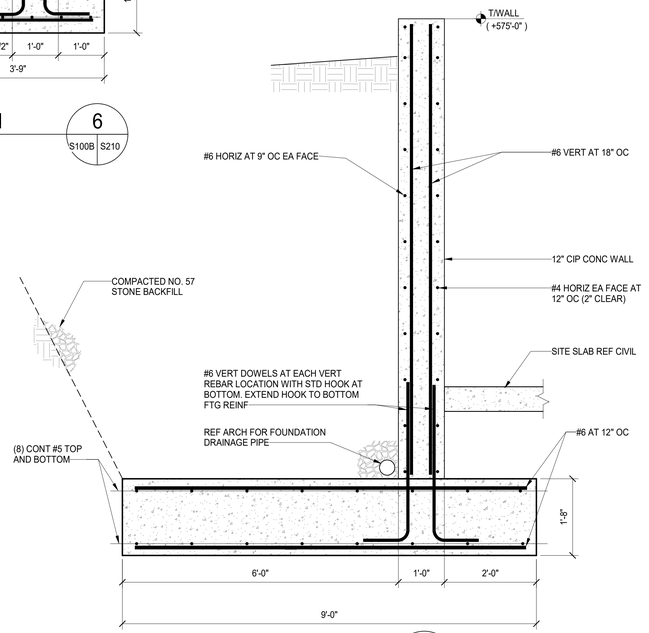
SECTION 6
3/4" = 1'-0"
S100B | S210



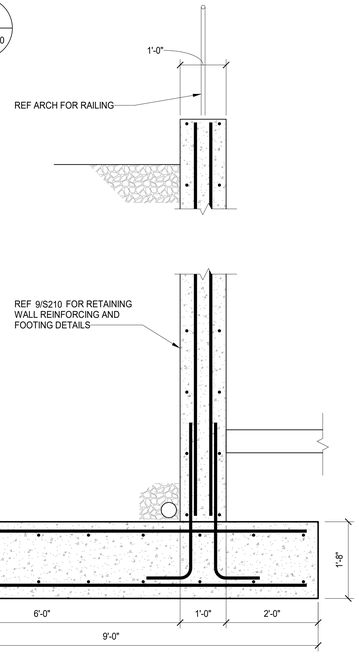
SECTION 7
3/4" = 1'-0"
S100B | S210



SECTION 8
3/4" = 1'-0"
S101A | S210



SECTION 9
3/4" = 1'-0"
S100B | S210



SECTION 10
3/4" = 1'-0"
S100B | S210

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

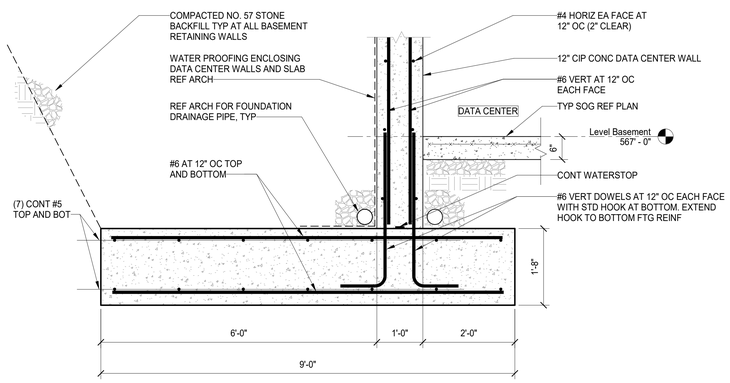
QEA No.41911390

BID DOCUMENTS
10/08/2024

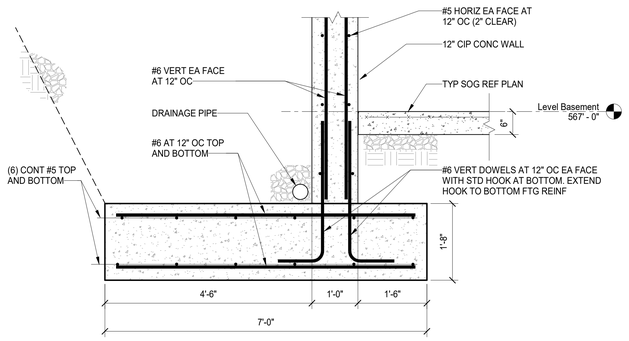
FOUNDATION SECTIONS AND DETAILS

S210

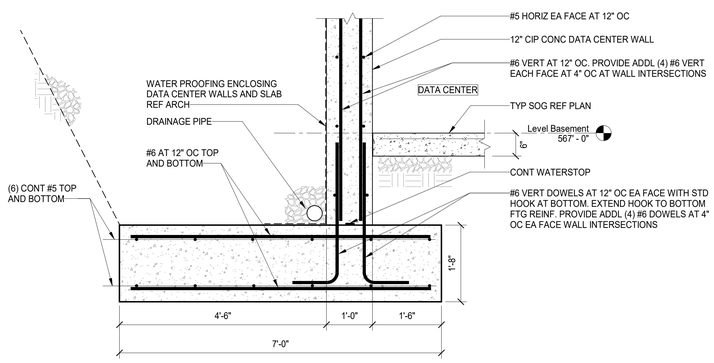
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 9:48:35 AM



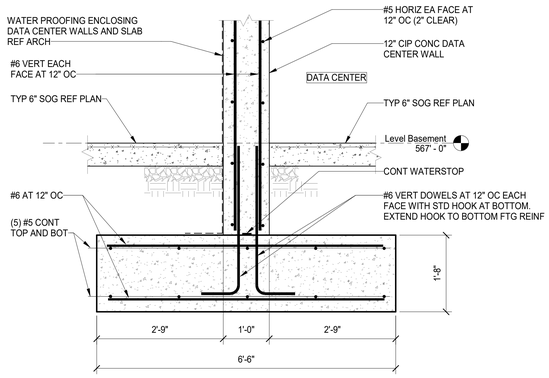
SECTION 1
3/4" = 1'-0" S100B | S211



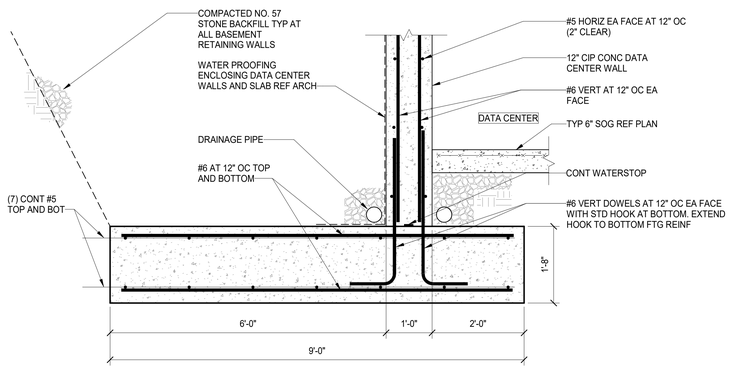
SECTION 2
3/4" = 1'-0" S100B | S211



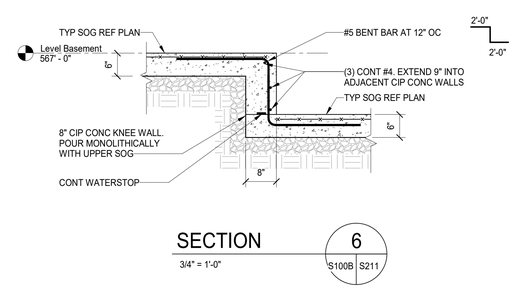
SECTION 3
3/4" = 1'-0" S100B | S211



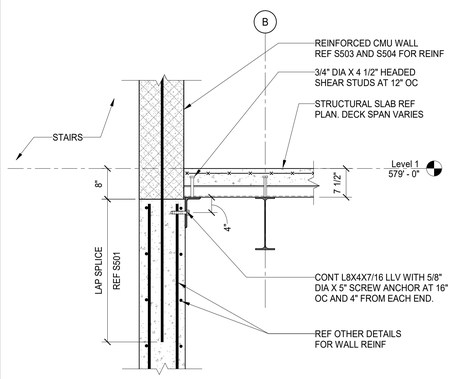
SECTION 4
3/4" = 1'-0" S100B | S211



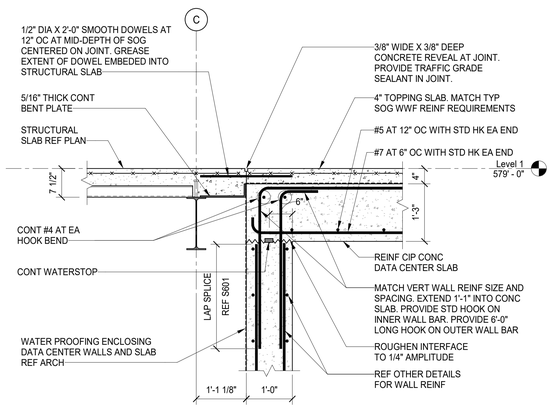
SECTION 5
3/4" = 1'-0" S100B | S211



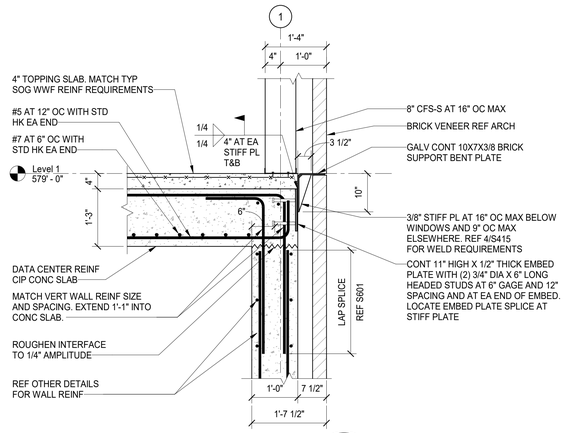
SECTION 6
3/4" = 1'-0" S100B | S211



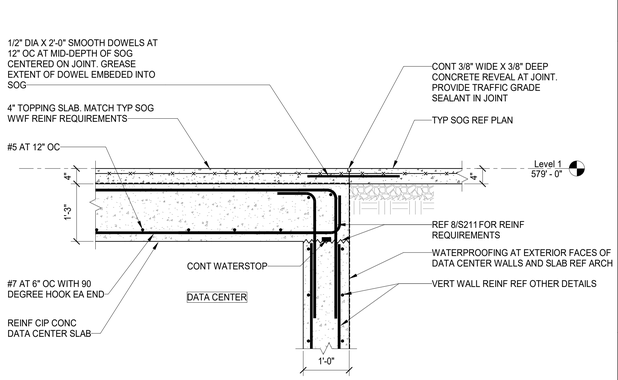
SECTION 7
3/4" = 1'-0" S101B | S211



SECTION 8
3/4" = 1'-0" S101B | S211



SECTION 9
3/4" = 1'-0" S101B | S211



SECTION 10
3/4" = 1'-0" S101A | S211

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
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RICHMOND, VIRGINIA 23225
(804) 323-0656
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PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

FOUNDATION SECTIONS AND DETAILS

S211

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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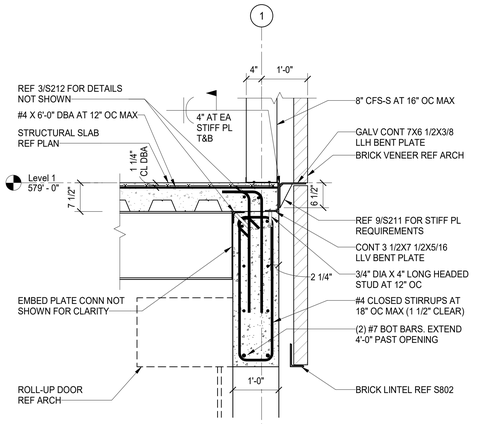
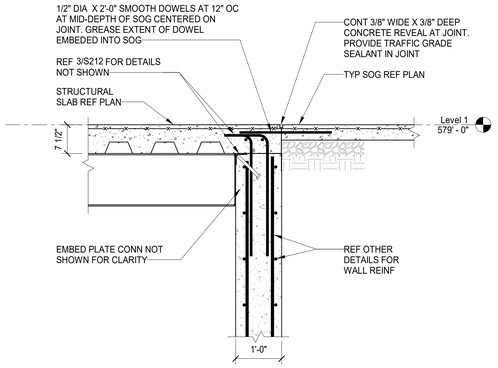
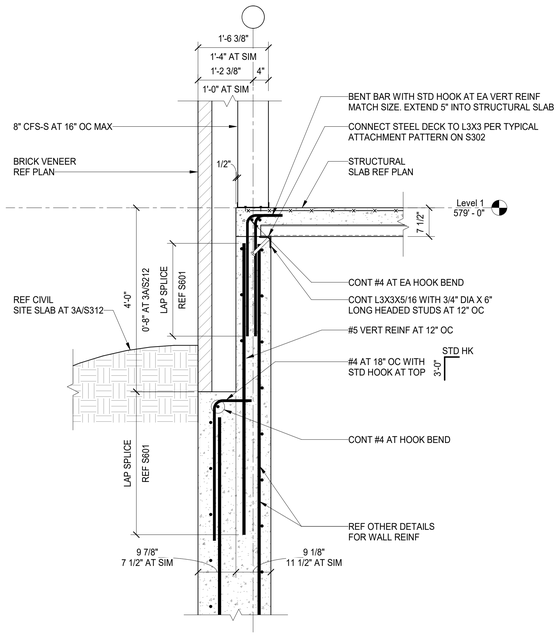


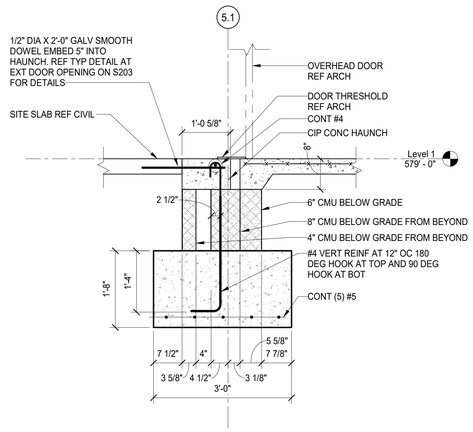
SECTION 1
3/4" = 1'-0"
S101B | S212



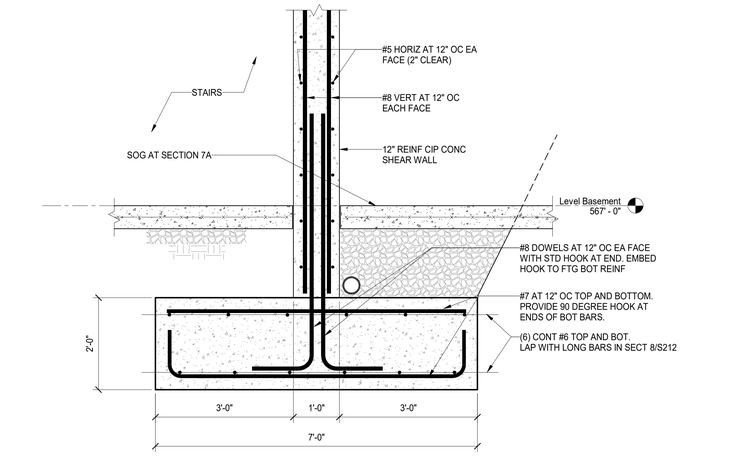
SECTION 2
3/4" = 1'-0"
S101B | S212



SECTION 3 | 3A
3/4" = 1'-0"
S101A | S212 | S101A | S212



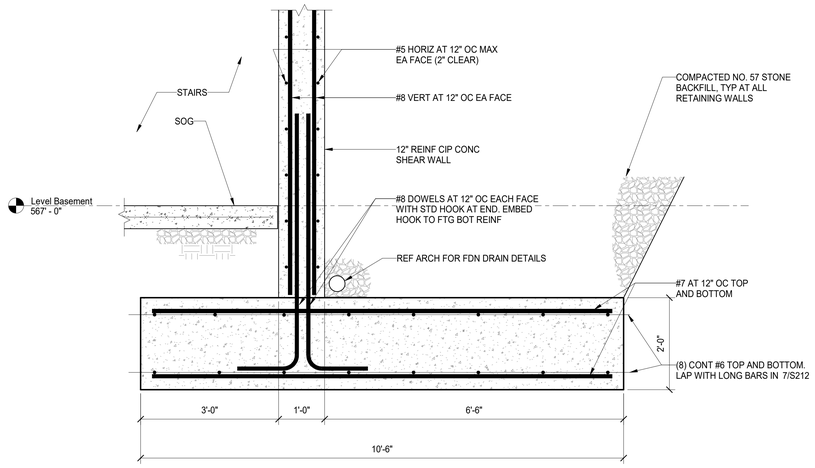
SECTION 4
3/4" = 1'-0"
S101A | S212



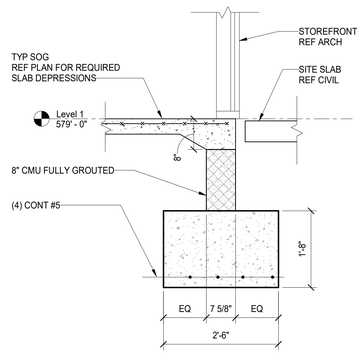
SECTION 5
3/4" = 1'-0"
S101A | S212

SECTION 6
3/4" = 1'-0"
S100B | S212

SECTION 7 | 7A
3/4" = 1'-0"
S100B | S212 | S212



SECTION 8
3/4" = 1'-0"
S100B | S212



SECTION 9
3/4" = 1'-0"
S101A | S212

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 9:48:38 AM

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
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No	Date	Description

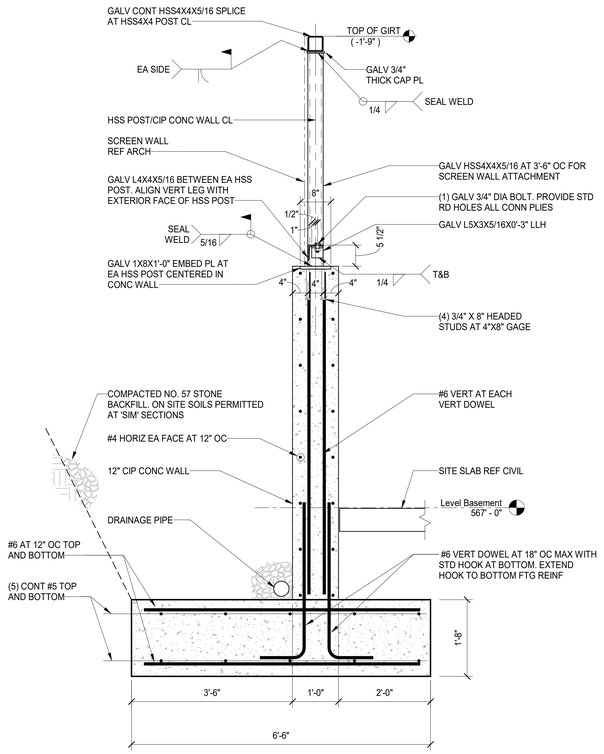
PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

FOUNDATION SECTIONS AND DETAILS

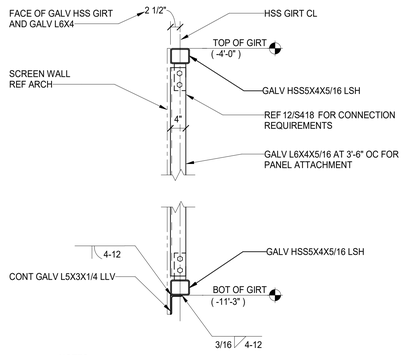
S212



NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

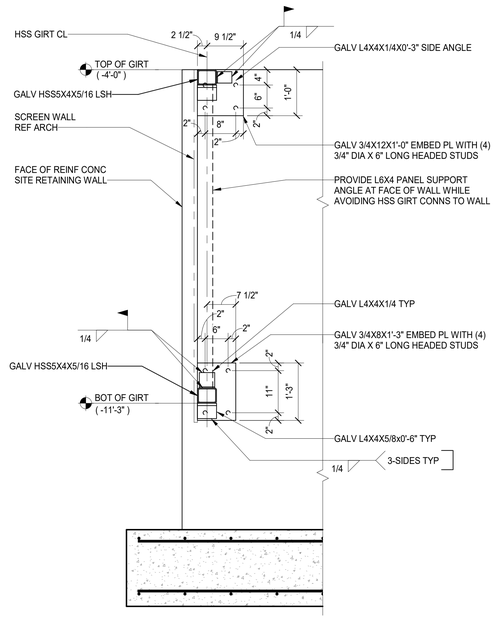
SECTION 1
3/4" = 1'-0"
S100B | S213



NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

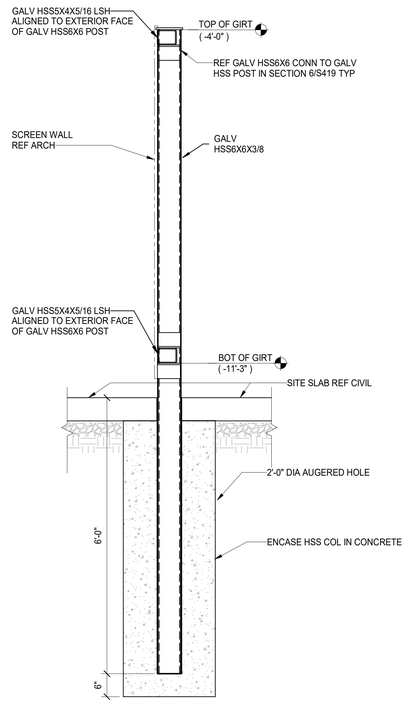
SECTION 2
3/4" = 1'-0"
S100B | S213



NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

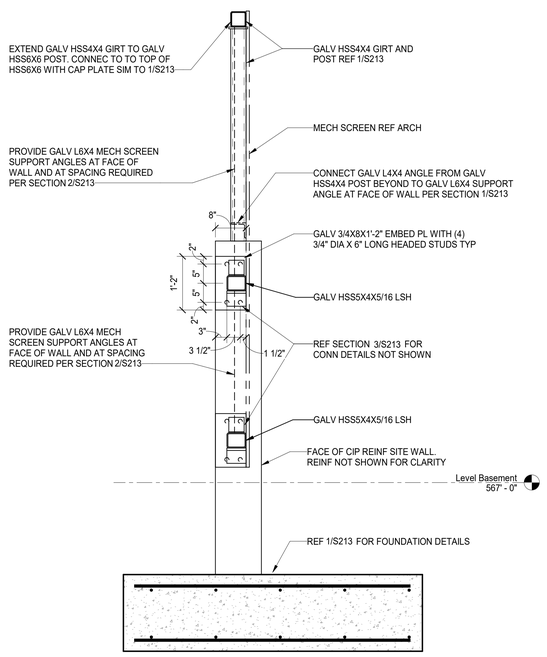
SECTION 3
3/4" = 1'-0"
S100B | S213



NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

SECTION 4
3/4" = 1'-0"
S100B | S213



NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

SECTION 5
3/4" = 1'-0"
S100B | S213

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

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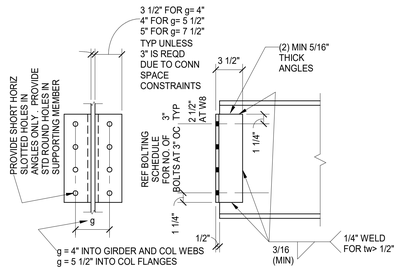
10/08/2024

FOUNDATION SECTIONS AND DETAILS

S213



TYPICAL DOUBLE ANGLE CONNECTION (DA)

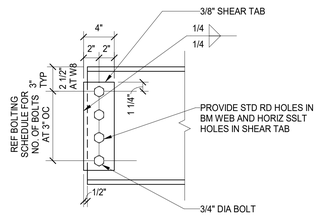
1 1/2"=1'-0"

1. DETAIL APPLIES AT WIDE FLANGE BEAM CONNECTIONS TO WIDE FLANGE COLUMNS AND OTHER WIDE FLANGE BEAMS.
2. AT BEAM TO GIRDER/COLUMN WEB CONNECTIONS, PROVIDE ERECTION SEAT ANGLE FOR ONE BEAM WHERE MEMBERS FRAME OPPOSITE EACH OTHER AND USE SAME NUMBER OF BOLTS.
3. REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF ROWS OF BOLTS.

MINIMUM BOLTING SCHEDULE

BEAM SIZE	# OF BOLTS IN SINGLE SHEAR CONN	# OF BOLT ROWS IN DOUBLE ANGLE CONN
W8	2	2
W10	2	2
W12	3	3
W14	3	3
W16	4	4
W18	5	4
W21	6	5
W24	7	5
W27	8	6
W30	9	6
W33	10	7
W36	10	8
W40	11	9
W44	12	10

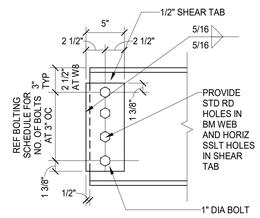
NOTES:
1. REFER TO FRAMING PLAN NOTES FOR INSTRUCTIONS REGARDING LOCATIONS WHERE CONNECTION TYPES ARE TO BE APPLIED.
2. PROVIDE PLATE AND ANGLE CONNECTION MATERIAL MEETING ASTM A572 GRADE 50 KSI STANDARD.
3. AT HEAVY SHEAR TAB (HST) CONNECTION AND SKEWED BENT PLATE (BPL) CONN, PROVIDE 1" DIA ASTM F3125 GRADE F2280 (TENSION-CONTROL) BOLTS.
4. PROVIDE 3/4" DIA ASTM F3125 GRADE F1852 (TENSION-CONTROL) BOLTS AT ALL OTHER CONNECTION TYPES U.N.O.
5. PROVIDE ASTM F436 WASHERS AT ALL BOLTS.
6. REFER TO INDIVIDUAL CONNECTION DETAILS FOR CORRECT LOCATIONS OF STANDARD ROUND HOLES VERSUS SHORT HORIZONTAL SLOTTED HOLES.
7. WHERE SLIP-CRITICAL CONNECTIONS ARE INDICATED ELSEWHERE IN PROJECT-SPECIFIC SECTIONS AND DETAILS, PROVIDE CLASS A FAYING SURFACES.
8. AT PLANE-OF-JOIST (POJ) BEAM CONNECTION TO GIRDER, PROVIDE DOUBLE ANGLE (DA) CONNECTION IN LIEU OF SHEAR TAB (ST) CONNECTION. PROVIDE MAXIMUM NUMBER OF BOLT ROWS AT 3" +/- OC SPACING THAT WILL FIT WITHIN THE REMAINING BEAM WEB.



TYPICAL SHEAR TAB CONNECTION (ST)

1 1/2"=1'-0"

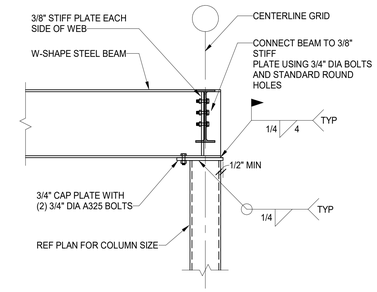
1. DETAIL APPLIES AT WIDE FLANGE BEAM CONNECTIONS TO HSS COLUMNS AND OTHER WIDE FLANGE BEAMS OR GIRDERS.
2. REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF BOLTS.



TYPICAL HEAVY SHEAR TAB CONNECTION (HST)

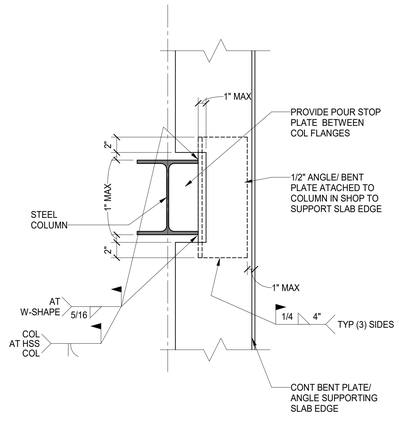
1 1/2"=1'-0"

1. USE WHERE 'HST' CONNECTION TYPE INDICATED ON PLAN.
2. REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF BOLTS.



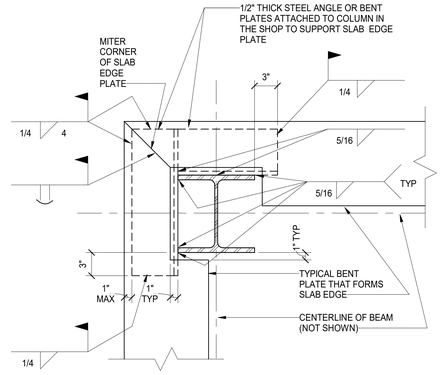
TYPICAL END BEAM OVER COLUMN DETAIL (CP)

3/4"= 1'-0"



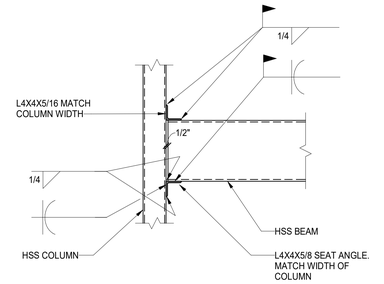
TYPICAL SLAB EDGE SUPPORT DETAIL AT EXTERIOR COLUMNS

1 1/2" = 1'-0"



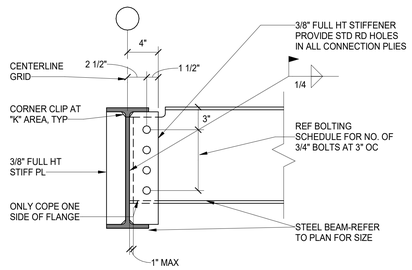
TYPICAL SLAB EDGE SUPPORT DETAIL AT BUILDING CORNERS

1 1/2"=1'-0"



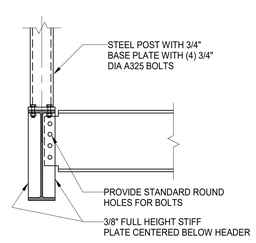
TYPICAL HSS BEAM TO HSS COLUMN CONNECTION

3/4"= 1'-0"



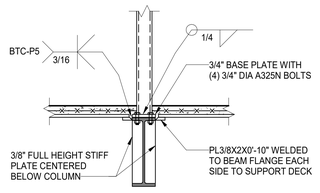
TYPICAL FULL HT STIFFENER PLATE CONNECTION (SP)

1 1/2"=1'-0"



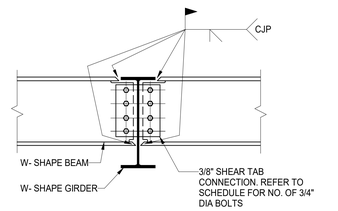
TYPICAL STEEL POST SUPPORT DETAIL

3/4"= 1'-0"



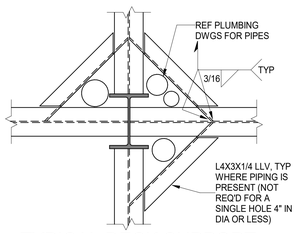
TYPICAL DETAIL AT HSS COLUMN BEARING ON STEEL BEAM

3/4"= 1'-0"



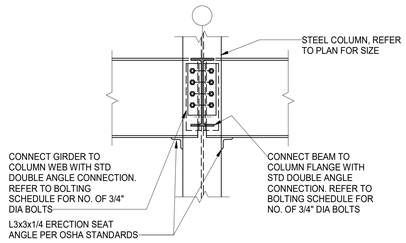
TYPICAL FULL MOMENT CONNECTION BEAM TO GIRDER DETAIL

3/4"= 1'-0"



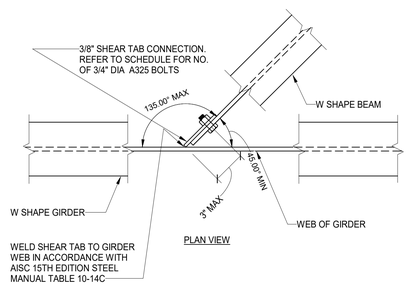
TYPICAL DECK SUPPORT ANGLES AT COLUMN WITH VERTICAL PLUMBING PENETRATIONS

NO SCALE



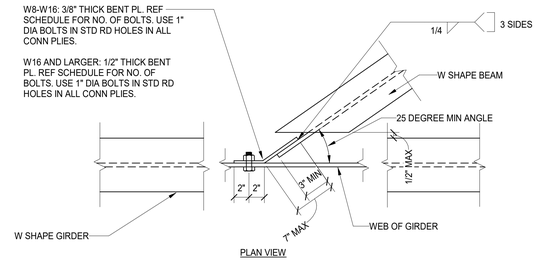
TYPICAL BEAM TO W-SHAPE COLUMN CONNECTION

3/4"=1'-0"



SKEWED BEAM TO GIRDER CONNECTION DETAIL

3/4"=1'-0"



ACUTELY SKEWED BEAM TO GIRDER CONNECTION DETAIL (BPL)

1 1/2"=1'-0"

1. USE ONLY FOR CONNECTION WHERE ANGLE BETWEEN BEAM AND GIRDER IS LESS THAN 45 DEGREES.
2. REFER TO MINIMUM BOLTING SCHEDULE FOR REQUIRED NUMBER OF BOLTS.

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FLOOR FRAMING DETAILS

S301

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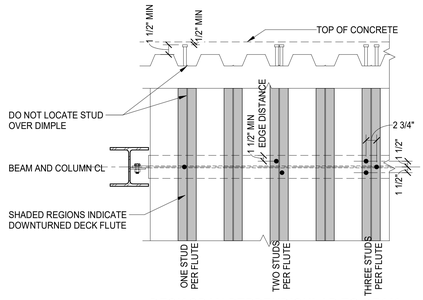
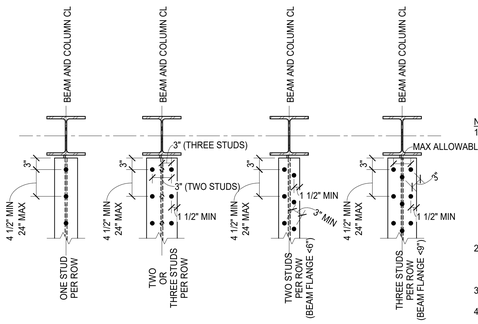


DECK SPAN PERPENDICULAR TO BEAM

NOTES:
1. DISTRIBUTE STUDS AS FOLLOWS:
   - A. LOCATE ONE STUD IN EVERY OTHER FLUTE FOR FULL LENGTH OF BEAM. PROVIDE THIS MINIMUM QUANTITY EVEN IF THE NUMBER OF STUDS SHOWN ON PLAN IS FEWER.
   - B. IF MORE STUDS REMAIN, LOCATE ONE STUD IN REMAINING FLUTES WITHOUT STUDS, STARTING AT THE ENDS OF THE BEAM AND WORKING TOWARD THE CENTER UNTIL EACH FLUTE HAS ONE STUD.
   - C. IF MORE STUDS REMAIN, LOCATE A SECOND STUD IN EACH FLUTE, STARTING AT THE ENDS OF THE BEAM AND WORKING TOWARD THE CENTER UNTIL FLUTE HAS TWO STUDS.
   - D. IF MORE STUDS REMAIN, LOCATE A THIRD STUD IN EACH FLUTE, STARTING AT THE ENDS OF THE BEAM AND WORKING TOWARD THE CENTER UNTIL EACH FLUTE HAS THREE STUDS.
   - E. IF NUMBER OF STUDS SHOWN ON PLAN EXCEEDS THE NUMBER THAT CAN BE PLACED BY THIS METHOD CONTACT SEOR FOR GUIDANCE.
2. REFER TO TYPICAL DETAILS FOR STUD DIAMETER AND LENGTH. REFER TO PLAN FOR NUMBER OF STUDS.
3. MINIMUM STUD SPACING IS 3"
4. STEEL SHOP DRAWINGS SHALL SHOW PLACEMENT OF HEADED STUDS

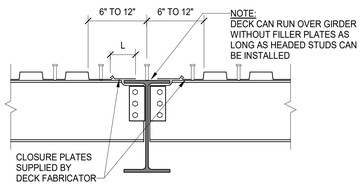


DECK SPAN PARALLEL TO BEAM

NOTES:
1. DISTRIBUTE STUDS AS FOLLOWS:
   - A. STUDS SHALL BE EVENLY SPACED IN ONE ROW IF POSSIBLE WITHIN MINIMUM AND MAXIMUM SPACING REQUIREMENTS.
   - B. IF STUDS CANNOT BE PLACED IN ONE ROW, LOCATE STUDS IN EVENLY SPACED ROWS OF TWO OR THREE STUDS AS REQUIRED
   - C. IF NUMBER OF STUDS SHOWN ON PLAN EXCEEDS THE NUMBER THAT CAN BE PLACED IN THREE ROWS CONTACT SEOR FOR GUIDANCE.
2. REFER TO TYPICAL DETAILS FOR STUD DIAMETER AND LENGTH. REFER TO PLAN FOR NUMBER OF STUDS.
3. MINIMUM STUD SPACING IS 3".
4. STEEL SHOP DRAWINGS SHALL SHOW PLACEMENT OF HEADED STUDS.

TYPICAL STUD LAYOUT AT COMPOSITE BEAMS

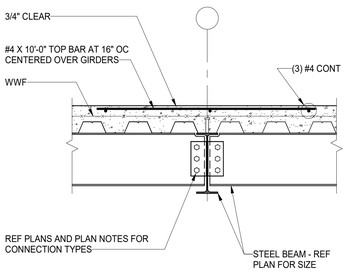
GIRDER FILLER THICKNESS	
L	METAL GAGE
0" TO 5"	20
5" TO 7 1/2"	16
7 1/2" TO 9"	14



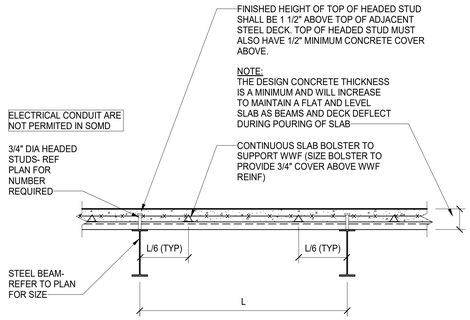
TYPICAL GIRDER FILLER PLATES

NO SCALE

1. CONNECT FILLER PLATE TO BEAM WITH SAME FASTENER AND SPACING AS TYPICAL DECK CONNECTION TO BEAM.
2. CONNECT FILLER PLATE TO DECK WITH TYPICAL SIDELAP FASTENER AND SPACING.

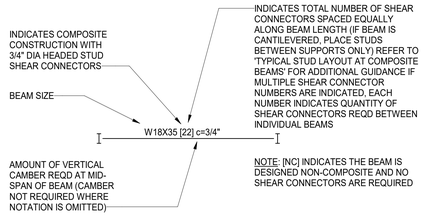


TYPICAL DETAIL AT INTERIOR COMPOSITE GIRDER



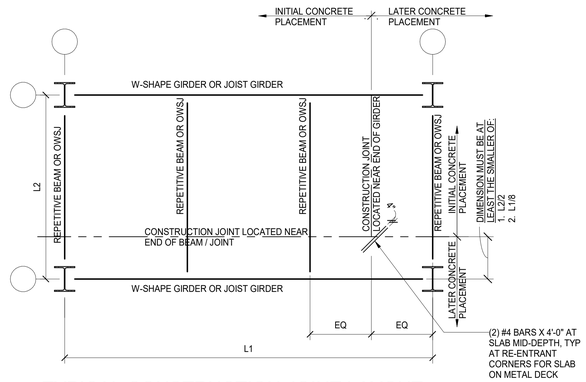
TYPICAL COMPOSITE BEAMS

3/4"=1'-0"



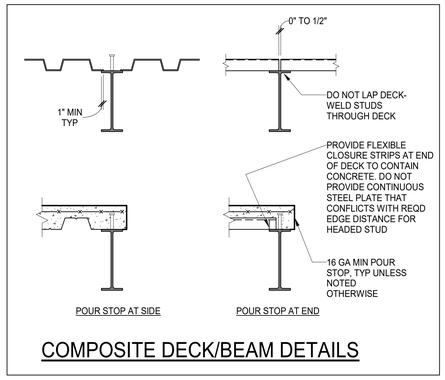
TYPICAL BEAM DESIGNATION DIAGRAM

NO SCALE

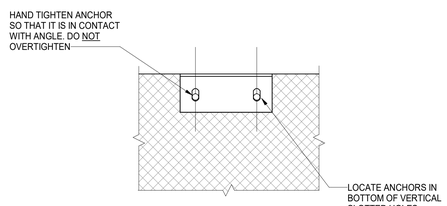


TYPICAL CONSTRUCTION JOINT LAYOUT FOR SLABS ON METAL DECK

NO SCALE

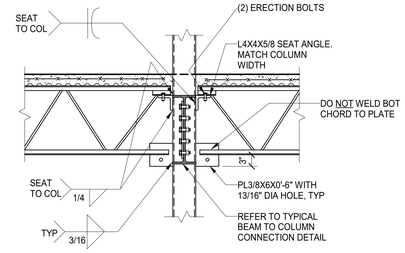


COMPOSITE DECK/BEAM DETAILS



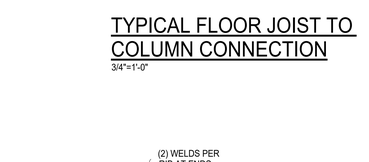
TYPICAL POST-INSTALLED ANCHOR PLACEMENT IN WALL CLIP ANGLES WITH VERTICAL SLOTTED HOLES

1 1/2"=1'-0"



TYPICAL FLOOR JOIST TO COLUMN CONNECTION

3/4"=1'-0"



COMPOSITE SLAB AND DECK DETAIL (7 1/2" TOTAL DEPTH)

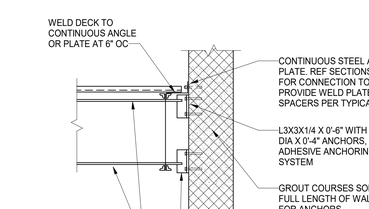
1 1/2"=1'-0"

NOTE:
MINIMUM COMPOSITE FLOOR DECK PROPERTIES PER FOOT SHALL BE AS FOLLOWS:
F_y=50 KSI, I_p=0.919 IN^4, I_n=0.921 IN^4, S_p=0.512 IN^3, S_n=0.539 IN^3

COMPOSITE SLAB AND DECK DETAIL (4" TOTAL DEPTH)

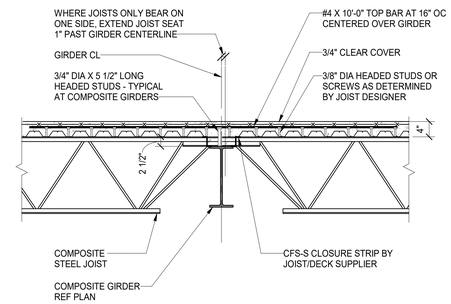
1 1/2"=1'-0"

NOTE:
MINIMUM COMPOSITE FLOOR DECK PROPERTIES PER FOOT SHALL BE AS FOLLOWS:
F_y=50 KSI, I_p=0.197 IN^4, I_n=0.217 IN^4, S_p=0.224 IN^3, S_n=0.229 IN^3



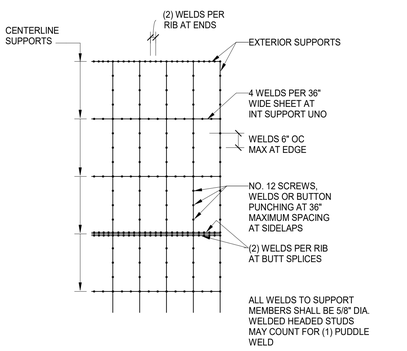
TYPICAL JOIST BRIDGING ANCHORAGE

3/4"=1'-0"



TYPICAL COMPOSITE JOIST AT GIRDER DETAIL

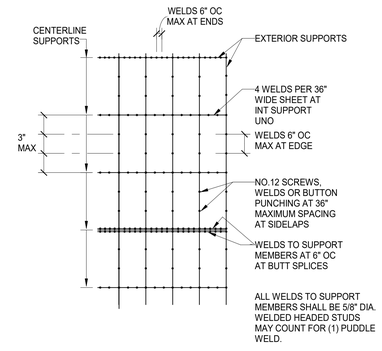
3/4"=1'-0"



TYPICAL 3" COMPOSITE FLOOR DECK WELDS

NO SCALE

NOTES:
1. WELD CAN BE 3 WELDS PER SHEET AT INTERIOR SUPPORTS FOR 24" WIDE SHEETS.
2. PUDDLE WELDS TO SUPPORT MEMBERS MAY BE SUBSTITUTED WITH PAF'S HAVING 0.157" DIA SHANK. PAF'S MUST BE COMPATIBLE WITH STRUCTURAL STEEL SUPPORT THICKNESS



TYPICAL 1 1/2" COMPOSITE FLOOR DECK WELDS

NO SCALE

NOTES:
1. WELD CAN BE 3 WELDS PER SHEET AT INTERIOR SUPPORTS FOR 24" WIDE SHEETS.
2. PUDDLE WELDS TO SUPPORT MEMBERS MAY BE SUBSTITUTED WITH PAF'S HAVING 0.157" DIA SHANK. PAF'S MUST BE COMPATIBLE WITH STRUCTURAL STEEL SUPPORT THICKNESS

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FLOOR FRAMING DETAILS

S302

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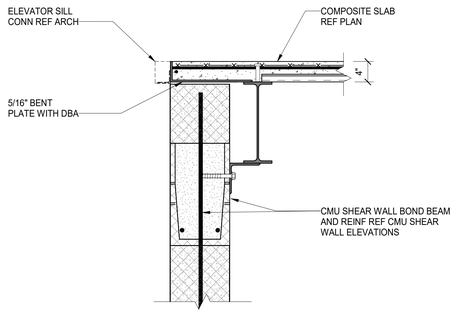
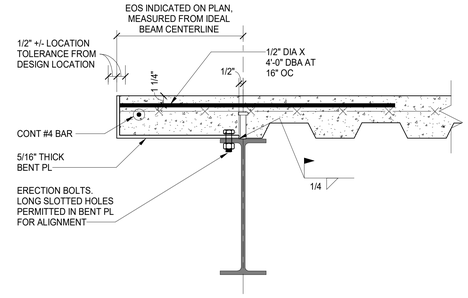
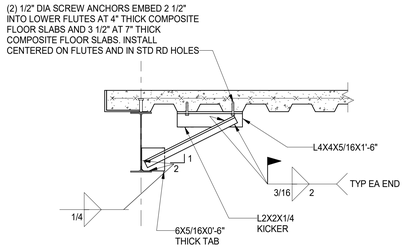


ELEVATOR SILL DETAIL

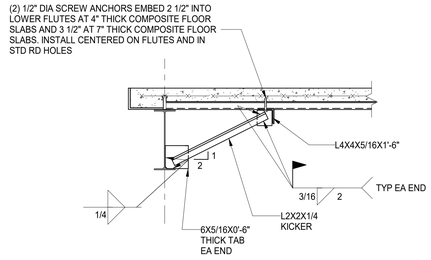


TYPICAL PERIMETER BENT PLATE DETAIL WITH DBA

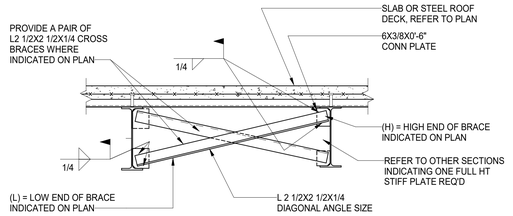
1 1/2" = 1'-0"



TYPICAL BOTTOM FLANGE BRACING TO SLAB-ON-DECK (PARALLEL CONDITION)

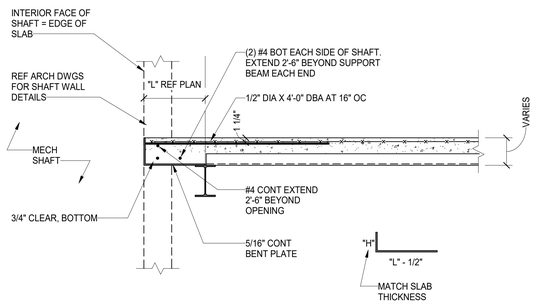


TYPICAL BOTTOM FLANGE BRACING TO SLAB-ON-DECK (PERPENDICULAR CONDITION)

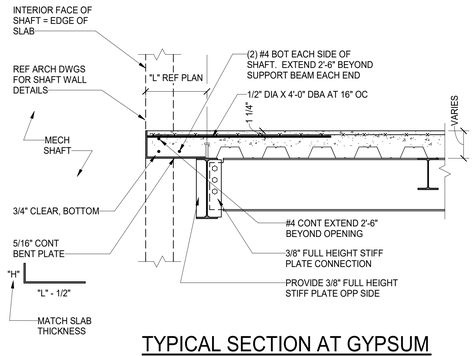


TYPICAL DIAGONAL BEAM BRACING DETAIL (DB & CDB)

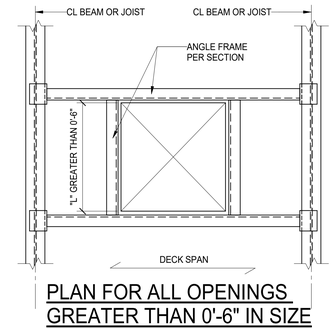
(SINGLE DIAGONAL INDICATED AS 'DB' ON PLANS)
(CROSS BRACING INDICATED AS 'CDB' ON PLANS)



TYPICAL SECTION AT GYPSUM BOARD MECH SHAFT



TYPICAL SECTION AT GYPSUM BOARD MECH SHAFT



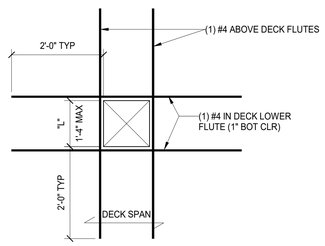
PLAN FOR ALL OPENINGS GREATER THAN 0'-6" IN SIZE

NO SCALE

TYPICAL FLOOR OPENING DETAILS

NOTES:

1. CONTRACTOR SHALL COORDINATE ALL OPENING SIZES AND LOCATIONS WITH ELECTRICAL, MECHANICAL AND PLUMBING SUB-CONTRACTORS PRIOR TO FABRICATION AND INSTALLATION
2. CONTRACT STRUCTURAL ENGINEER IF MULTIPLE FLOOR OPENINGS ARE REQUIRED WITH LESS THAN 2'-0" IN BETWEEN.
3. NO FRAME REQUIRED WHERE "L" < 6"

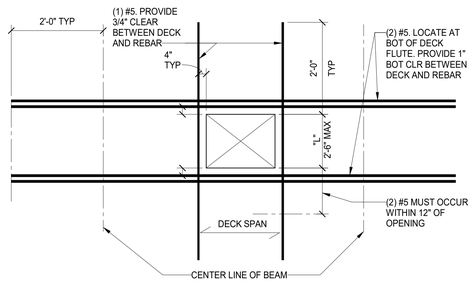


ALTERNATE PLAN DETAIL FOR OPENINGS LESS THAN OR EQUAL TO 1'-4" IN SIZE

NO SCALE

NOTES:

1. NO REINFORCEMENT REQD WHERE "L" IS LESS THAN 6".
2. METAL DECK SHALL BE FIELD CUT AFTER CONCRETE REACHES 75% OF DESIGN STRENGTH

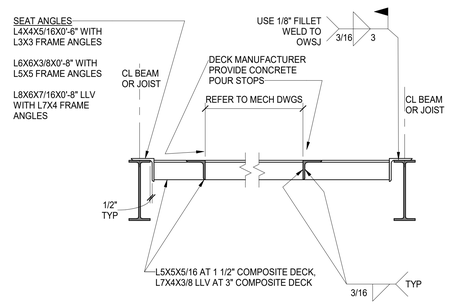


ALTERNATE PLAN DETAIL FOR OPENINGS 1'-4" TO 2'-6" IN SIZE

NO SCALE

NOTES:

1. METAL DECK SHALL BE FIELD CUT AFTER CONCRETE REACHES 75% OF DESIGN STRENGTH



SECTION AT OPENINGS GREATER THAN 0'-6" IN SIZE

NO SCALE

QUINN EVANS

1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO.
002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FLOOR FRAMING DETAILS

S303

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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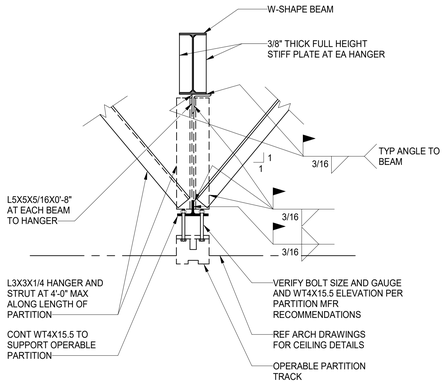
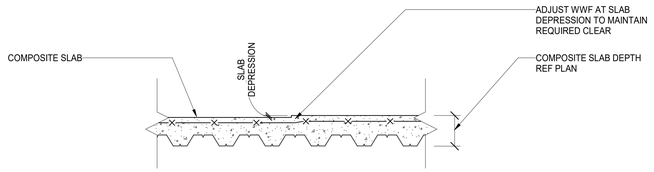
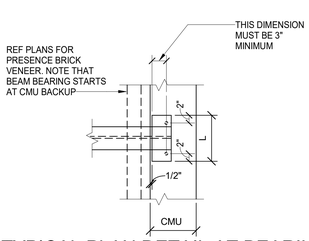


TYPICAL DETAIL AT OPERABLE PARTITION
3/4"=1'-0"

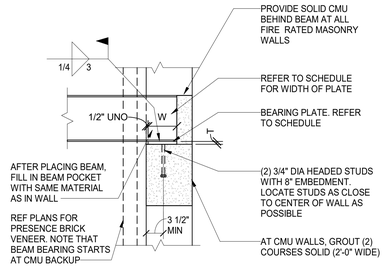


TYPICAL INTERIOR DEPRESSED COMPOSITE SLAB DETAIL

TYPICAL PERIMETER DEPRESSED COMPOSITE SLAB DETAIL



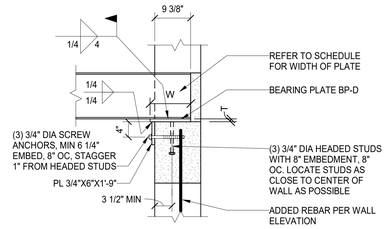
TYPICAL PLAN DETAIL AT BEARING PLATE
3/4"= 1'-0"



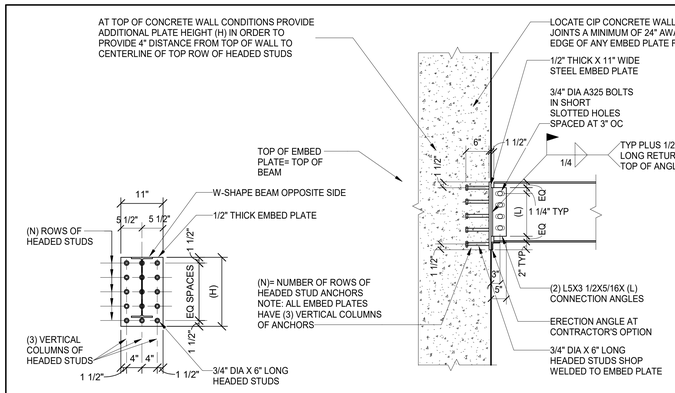
TYPICAL SECTION AT BEARING PLATE WITH HEADED STUDS
3/4"= 1'-0"

NOTE:
DO NOT WELD BEAM UNTIL FINAL STRUCTURAL FRAME ALIGNMENT IS COMPLETE IN THE AFFECTED AREA

STEEL BEAM BEARING PLATE SCHEDULE		
MARK	SIZE (TXWXL)	COMMENTS
BP-A	PL3/4X7X1'-0"	
BP-B	PL1/2X7X1'-0"	
BP-C	PL3/4X8 3/4X1'-7"	ADD VERT PL3/4X7X1'-7", SEE DETAIL
BP-D	PL3/4X10 5/8X1'-7"	WITH (3) HEADED STUDS AT 8" OC; CENTER BETWEEN JOISTS EACH SIDE OF WALL
BP-E		
BP-F		
BP-G		
BP-H		
BP-J		
BP-K		



BP-D



ELEVATION SKETCH OF TYPICAL EMBED PLATE
3/4"=1'-0"

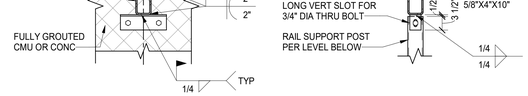
TYPICAL DOUBLE ANGLE TO EMBED PLATE CONNECTION
3/4"= 1'-0"

NOTE:
EMBED PLATE WITH DOUBLE ANGLES INDICATED "EP" ON PLAN.

DOUBLE ANGLE TO EMBED PLATE SCHEDULE			
BEAM SIZE	DOUBLE ANGLE LENGTH (L)	EMBED PLATE HEIGHT (H)	NUMBER OF ROWS OF HEADED STUDS (N)
W8	0'-5 1/2"	0'-10"	2
W10	0'-5 1/2"	1'-0"	2
W12	0'-8 1/2"	1'-2"	3
W14	0'-8 1/2"	1'-4"	4
W16	0'-11 1/2"	1'-6"	5
W18	1'-2 1/2"	1'-8"	6
W21	1'-5 1/2"	1'-11"	6
W24	1'-8 1/2"	2'-2"	7
W27	1'-11 1/2"	2'-5"	8
W30	2'-2 1/2"	2'-8"	9

NOTES:
1. ALL DOUBLE ANGLES SHALL BE L5X3 1/2X5/16X (L) TALL.
2. ALL EMBED PLATES SHALL BE 1/2" THICK X 11" WIDE X (H) TALL .
3. TOP OF EMBED PLATE ELEVATION= TOP OF BEAM.
4. PROVIDE 3/4" DIA X 6" LONG HEADED STUDS (Fu= 60 KSI).
5. ALL EMBED PLATES HAVE (3) VERTICAL COLUMNS OF HEADED STUDS. TOTAL NUMBER OF STUDS= 3X NUMBER OF ROWS (N).

NOTE: AT DIVIDER BEAM AT TOP OF WALL PROVIDE BEARING PLATE PER PLAN



BEAM CONN TO WALL

POST CONN TO DIVIDER BEAM

ELEVATOR DIVIDER BEAM DETAILS
3/4"=1'-0"

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
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PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL FLOOR FRAMING DETAILS

S304

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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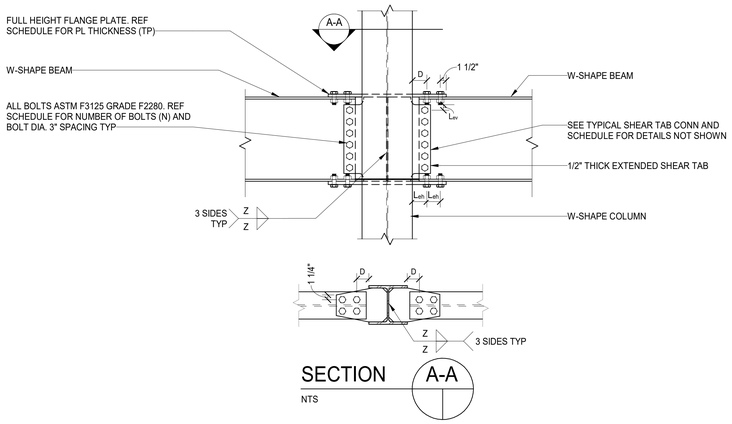


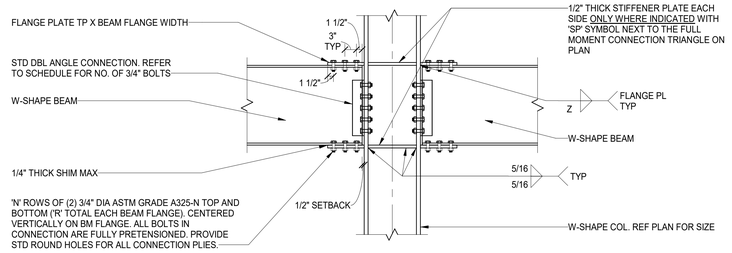
NOTE: INDICATED THUS (◀) ON PLAN.

TYPICAL MOMENT CONNECTION TO W-SHAPE COLUMN WEB

W-SHAPE COLUMN WEB MOMENT FLANGE PLATE SCHEDULE

NOMINAL BEAM SIZE	TP	N	R	D	Z	BOLT DIA
W8	3/8"	2	4	2"	5/16	3/4"
W24	7/8"	7	14	2"	5/16	1"

NOTES:
1. L_{ev} = 1 1/4" AT 3/4" BOLT DIA
   L_{ev} = 1 3/2" AT 1" BOLT DIA
2. L_{eh} = 1 1/2" AT 3/4" BOLT DIA
   L_{eh} = 2" AT 1" BOLT DIA



W-SHAPE COLUMN FLANGE MOMENT FLANGE PLATE SCHEDULE

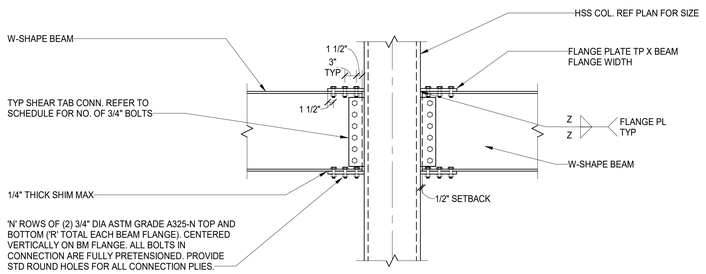
NOMINAL BEAM SIZE	TP	N	R	Z
W10	1/2"	3	6	5/16
W14	1/2"	3	6	5/16
W18	1/2"	4	8	5/16
W21	1/2"	5	10	5/16
W24	7/8"	7	14	3/8

NOTES:

1. CONNECT BEAM TO COL WITH DOUBLE ANGLE BEFORE FLANGE PLATES

NOTE: INDICATED THUS (◀) ON PLAN.

TYPICAL MOMENT CONNECTION TO W-SHAPE COLUMN FLANGE



HSS COLUMN MOMENT FLANGE PLATE SCHEDULE

NOMINAL BEAM SIZE	TP	N	R	Z
W16	1/2"	4	8	5/16
W18	1/2"	4	8	5/16
W21	1/2"	5	10	5/16
W24	7/8"	7	14	5/16

NOTES:

1. CONNECT BEAM TO COL WITH SHEAR TAB BEFORE FLANGE PLATES

NOTE: INDICATED THUS (◀) ON PLAN.

TYPICAL MOMENT CONNECTION TO HSS COLUMN

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
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TYPICAL FLOOR FRAMING DETAILS

S305

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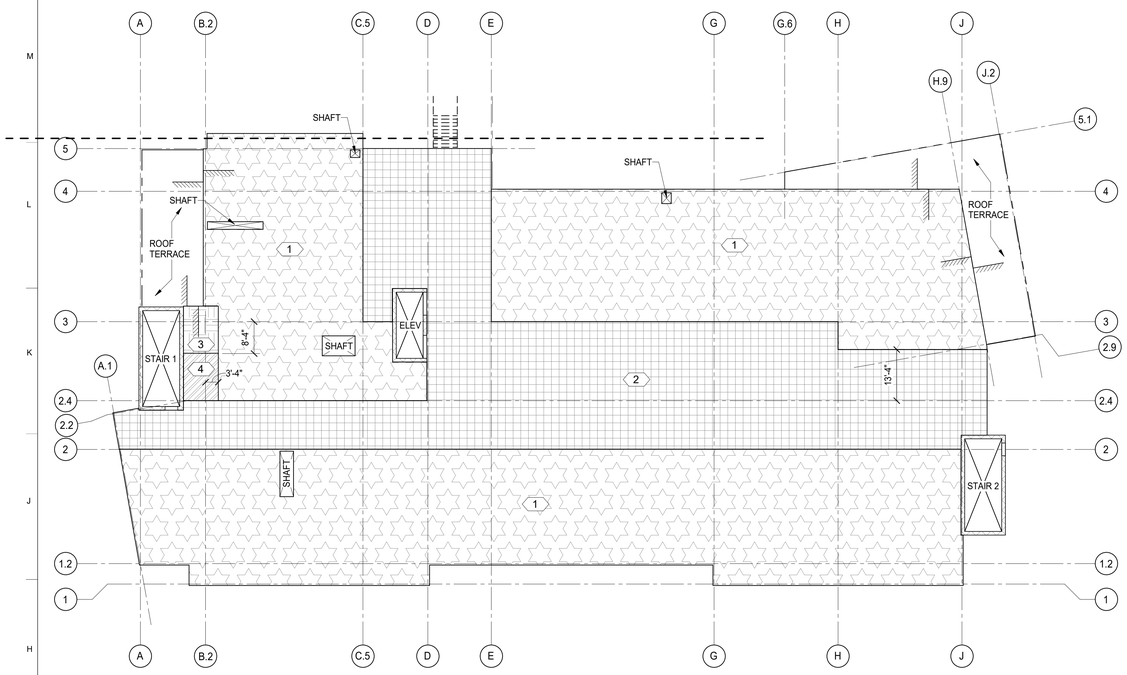


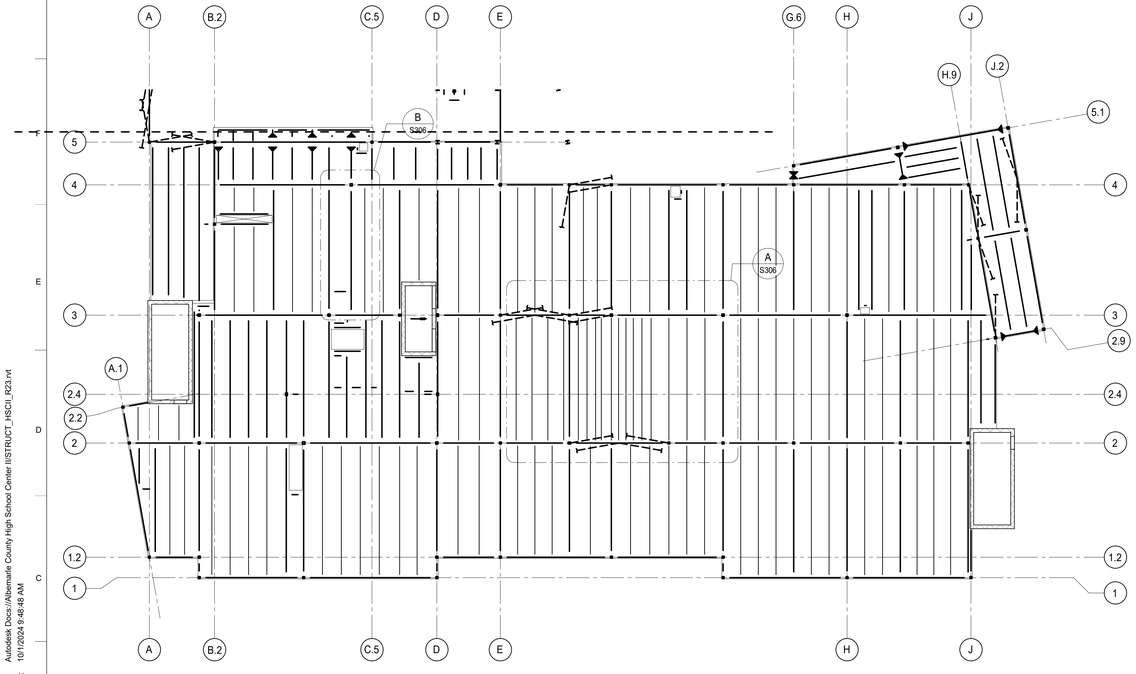
LEVEL 2 LIVE LOAD DIAGRAM

1/16" = 1'-0"

NOTES:
1. THIS DIAGRAM SHOWS THE EXTENT OF DESIGN LIVE LOADS APPLIED ON LEVEL 2
2. REF 'LEVEL 2 SUPERIMPOSED LIVE LOAD KEY' ON THIS SHEET FOR MORE INFORMATION
3. REF S001 FOR LOAD MAGNITUDES FOR EACH OF THE LOADS LISTED IN THE 'LEVEL 2 SUPERIMPOSED LIVE LOAD KEY' ON THIS SHEET

LEVEL 2 SUPERIMPOSED LIVE LOAD KEY

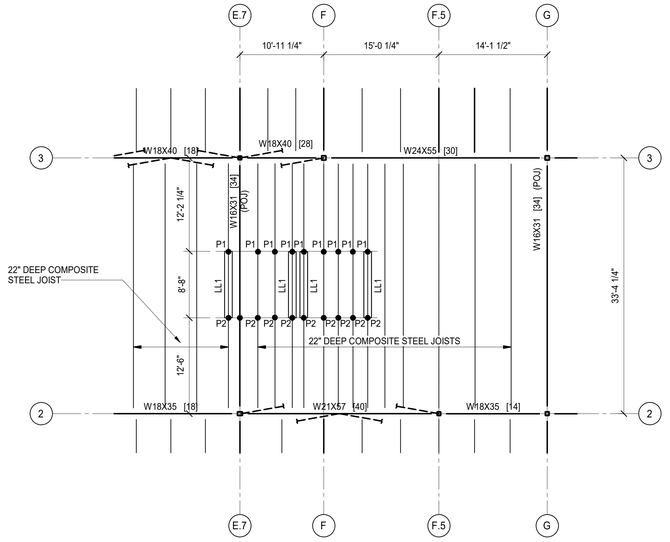
DESCRIPTION	MARK	LIVE LOAD
CLASSROOM	1	50 PSF + 15 PSF PARTITIONS
CORRIDOR	2	80 PSF
LIGHT STORAGE	3	125 PSF
MECHANICAL	4	125 PSF



LEVEL 2 SUPERIMPOSED DEAD LOAD LOADING DIAGRAM

1/16" = 1'-0"

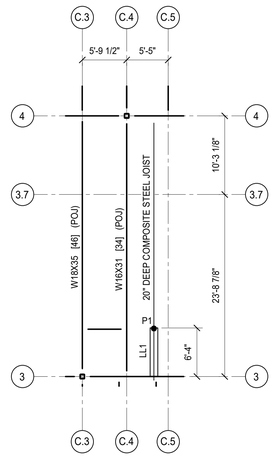
NOTES:
1. THIS DIAGRAM SHOWS THE LOCATIONS OF ADDITIONAL SUPERIMPOSED DEAD POINT LOADS AND DISTRIBUTED LOADS ACTING ON COMPOSITE STEEL JOISTS ON LEVEL 2
2. REFERENCE 'COMPOSITE STEEL JOIST SUPERIMPOSED DEAD LOAD LOADING DIAGRAM' ON THIS SHEET FOR INFORMATION ON HOW EACH LOADING TYPE IS APPLIED TO EACH COMPOSITE STEEL JOIST.
3. REF 'LEVEL 2 SUPERIMPOSED DEAD POINT AND DISTRIBUTED LOAD SCHEDULE' ON THIS SHEET FOR THE MAGNITUDE OF EACH LOADING TYPE LISTED.
4. REF S102B FOR LOCATION OF COMPOSITE STEEL JOISTS.



DETAIL A

1/8" = 1'-0"

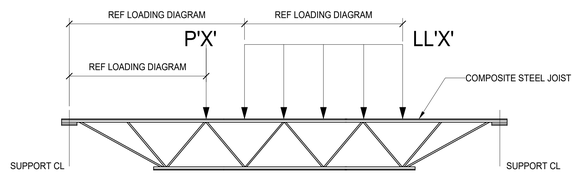
S306 | S306



DETAIL B

1/8" = 1'-0"

S306 | S306



COMPOSITE STEEL JOIST SUPERIMPOSED DEAD LOAD LOADING DIAGRAM

NOTES:
1. P'X' AND LL'X' INDICATE THE ADDITIONAL SUPERIMPOSED DEAD POINT LOADS AND DISTRIBUTED LOADS APPLIED TO COMPOSITE STEEL JOISTS ON LEVEL 2.
2. REF 'LEVEL 2 SUPERIMPOSED DEAD LOAD LOADING DIAGRAM ON THIS SHEET FOR LOCATION OF P'X' AND LL'X'.
3. REF 'LEVEL 2 SUPERIMPOSED DEAD POINT AND DISTRIBUTED LOAD SCHEDULE' ON THIS SHEET FOR THE MAGNITUDE OF EACH LOADING TYPE LISTED.

LEVEL 2 SUPERIMPOSED DEAD POINT AND DISTRIBUTED LOAD SCHEDULE

MARK	LINE OR POINT LOAD
P1	1.2 KIPS
P2	2.4 KIPS
LL1	0.45 KIPS/FT

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

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FLOOR LOADING DIAGRAMS

S306

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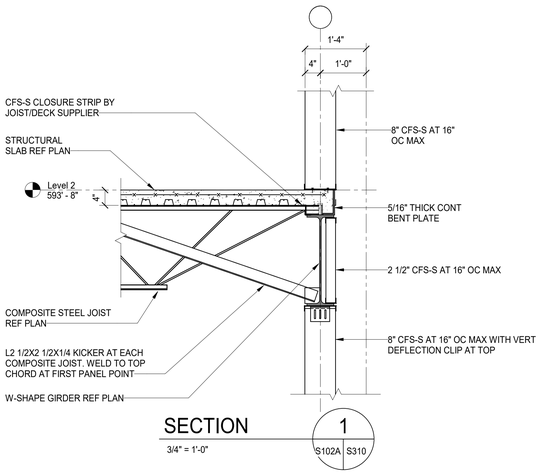
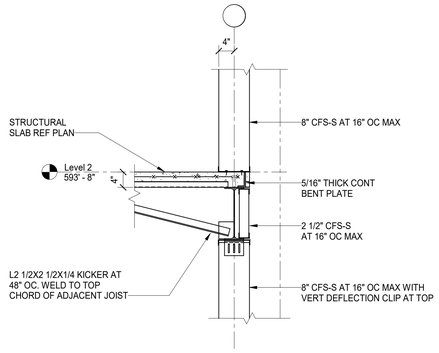
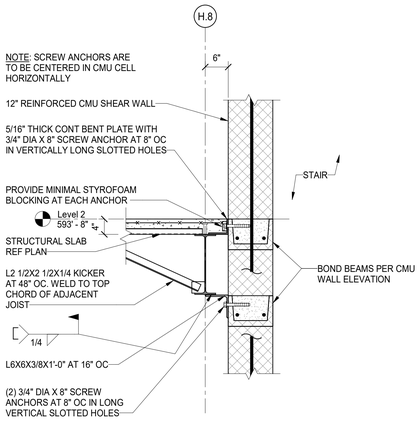


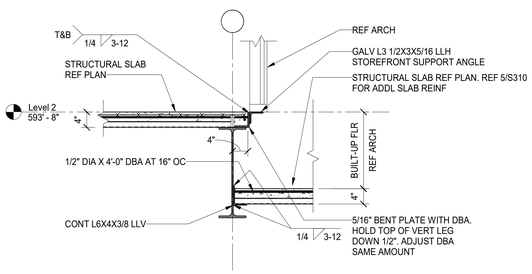
SECTION 1
3/4" = 1'-0" — S102A | S310



SECTION 2
3/4" = 1'-0" — S102A | S310



SECTION 3
3/4" = 1'-0" — S102B | S310



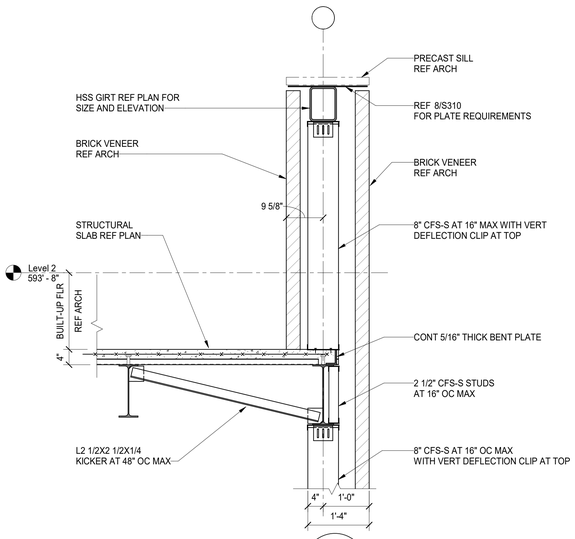
SECTION 4
3/4" = 1'-0" — S102B | S310

SECTION 5
3/4" = 1'-0" — S102A | S310

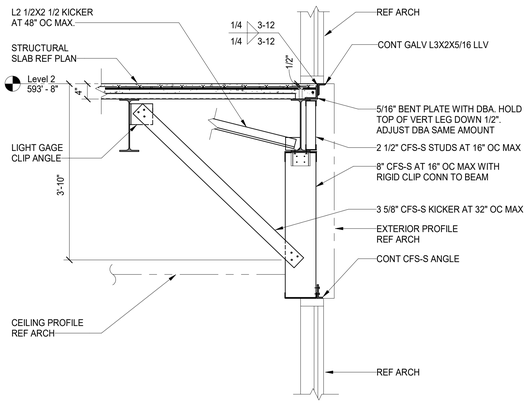
SECTION 6
3/4" = 1'-0" — S102B | S310

SECTION 7
3/4" = 1'-0" — S102B | S310

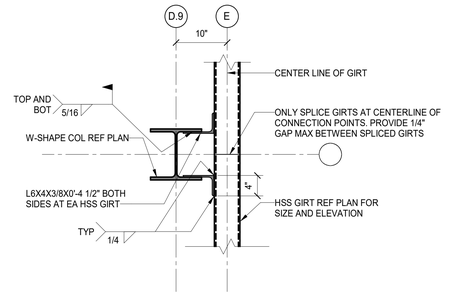
SECTION 8
3/4" = 1'-0" — S102A | S310



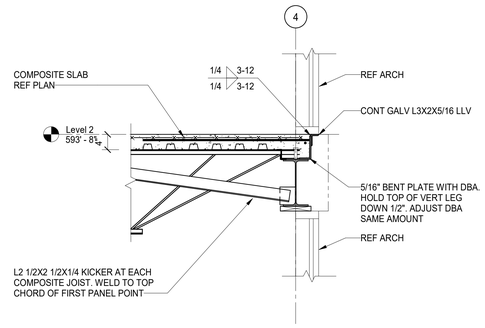
SECTION 9
3/4" = 1'-0" — S102A | S310



SECTION 10
3/4" = 1'-0" — S102B | S310



DETAIL A
1" = 1'-0" — S102A | S310



SECTION 11
3/4" = 1'-0" — S102B | S310

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/8/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

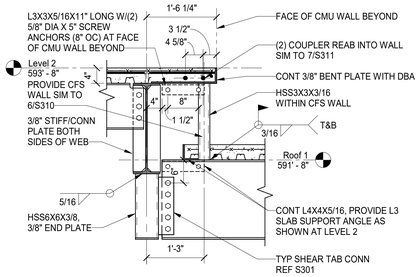
QEA No.41911390

BID DOCUMENTS
10/08/2024

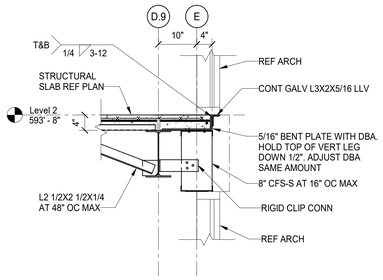
FLOOR FRAMING SECTIONS AND DETAILS

S310

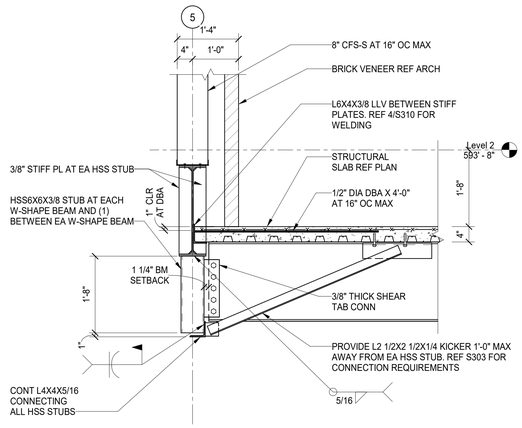
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/10/2024 9:48:51 AM



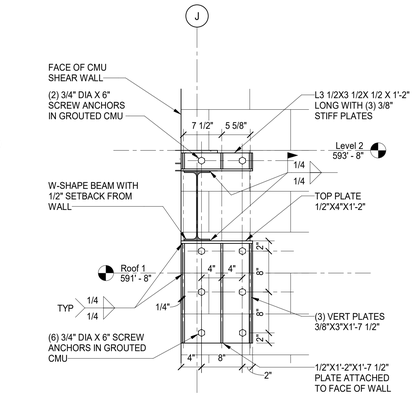
SECTION 1
3/4" = 1'-0" — S102B | S311



SECTION 2
3/4" = 1'-0" — S102B | S311

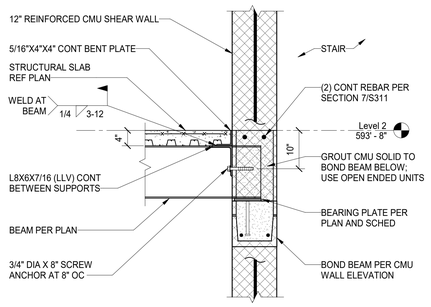


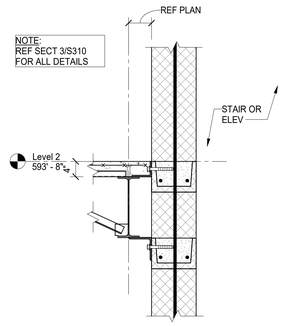
SECTION 3
3/4" = 1'-0" — S102B | S311

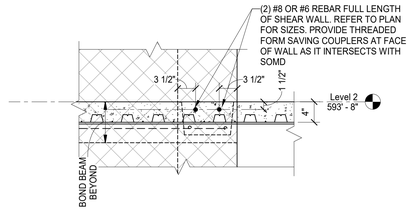


SECTION 4
1" = 1'-0" — S102B | S311

NOTE: SCREW ANCHORS ARE TO BE CENTERED IN CMU CELL HORIZONTALLY

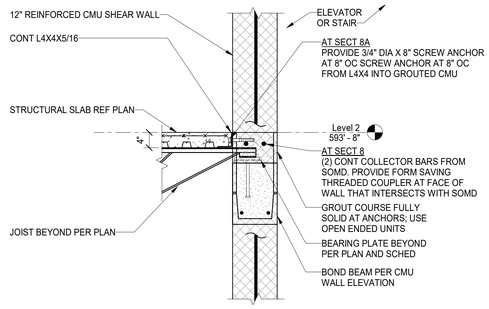




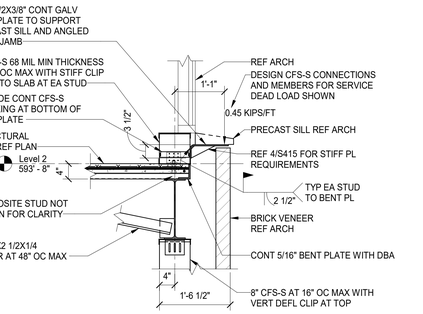


SECTION 7
1" = 1'-0" — S102A | S311

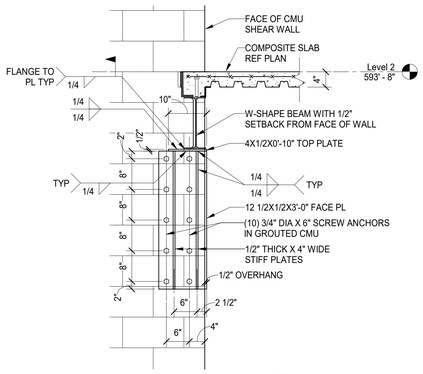
NOTE: SCREW ANCHORS ARE TO BE CENTERED IN CMU CELL HORIZONTALLY



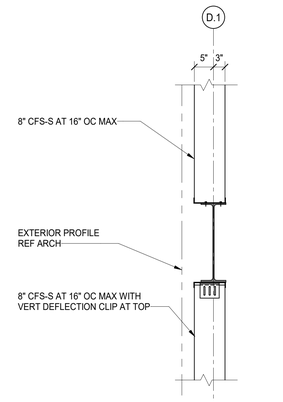
SECTION 8 8A
3/4" = 1'-0" — S102A | S311 | S102A | S311



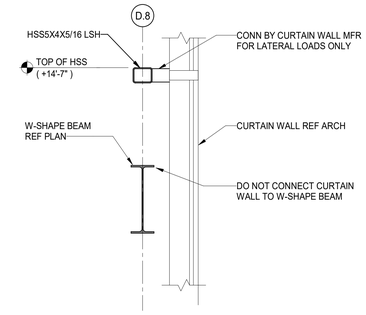
SECTION 9
3/4" = 1'-0" — S102B | S311



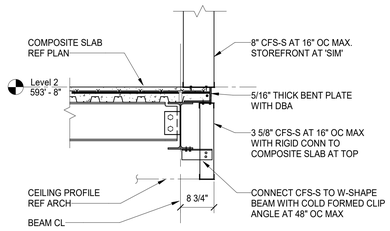
SECTION 10
3/4" = 1'-0" — S102B | S311



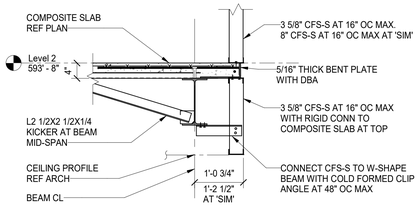
SECTION 11
3/4" = 1'-0" — S102A | S311



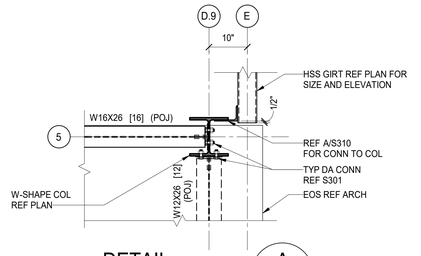
SECTION 12
3/4" = 1'-0" — S102A | S311



SECTION 13
3/4" = 1'-0" — S102A | S311



SECTION 14
3/4" = 1'-0" — S102A | S311



DETAIL A
3/4" = 1'-0" — S102A | S311

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FLOOR FRAMING SECTIONS AND DETAILS

S311

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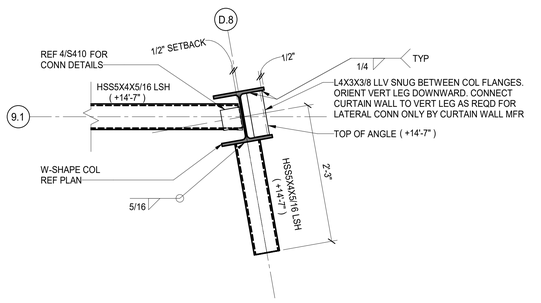
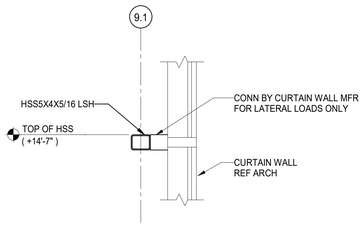
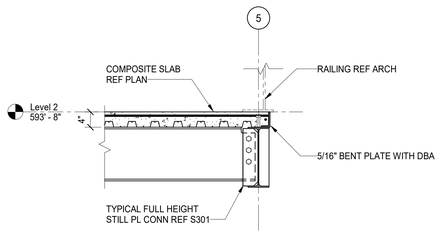


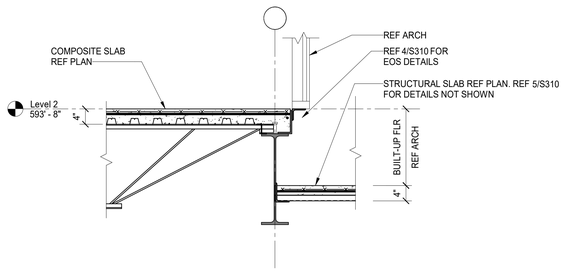
DETAIL A
1" = 1'-0"
S416 | S312



SECTION 1
3/4" = 1'-0"
S102A | S312



SECTION 2
3/4" = 1'-0"
S102A | S312



SECTION 3
3/4" = 1'-0"
S102B | S312

SECTION 4
3/4" = 1'-0"
S102B | S312

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
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JEFFREY S. DAVIS
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Albemarle County Public Schools

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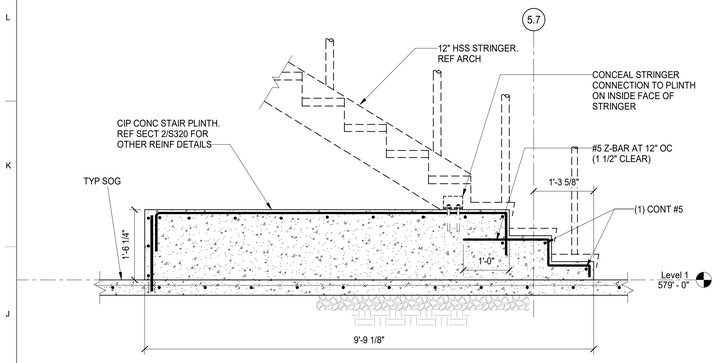
DRAWN BY: MPK/MKJ

QEA No.41911390

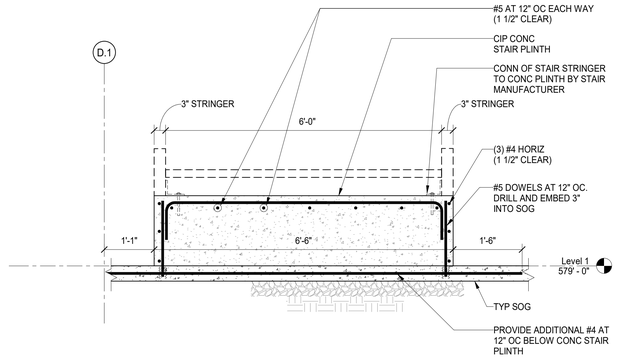
BID DOCUMENTS
10/08/2024

FLOOR FRAMING SECTIONS AND DETAILS

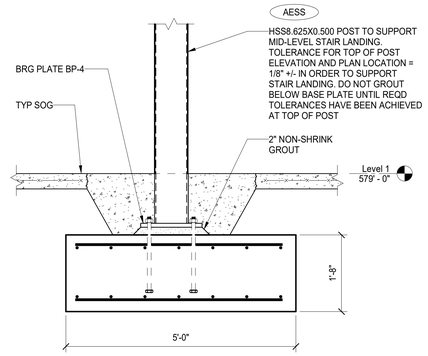
S312



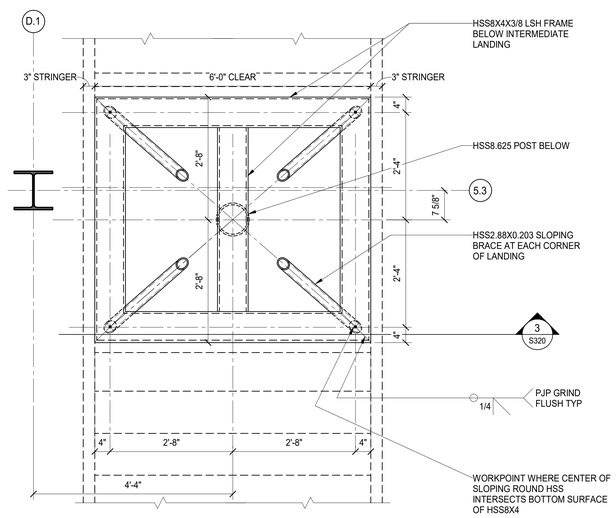
SECTION 1
3/4" = 1'-0"
S101A | S320



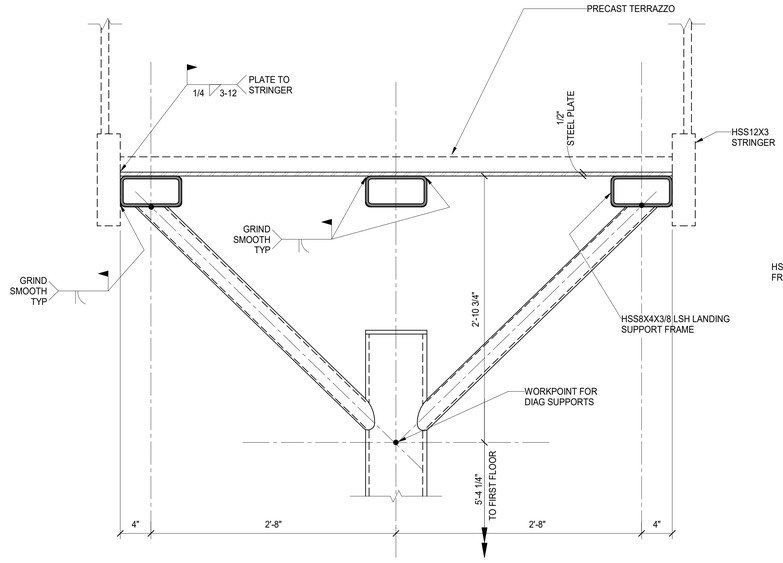
SECTION 2
3/4" = 1'-0"
S101A | S320



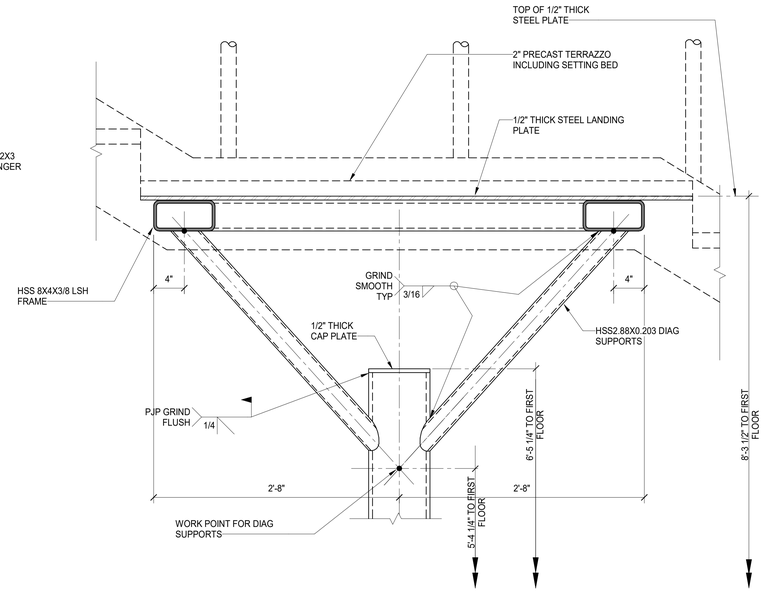
SECTION 3
3/4" = 1'-0"
S101A | S320



DETAIL A
3/4" = 1'-0"
S102A | S320



SECTION 4
1 1/2" = 1'-0"
S102A | S320



SECTION 5
1 1/2" = 1'-0"
S102A | S320

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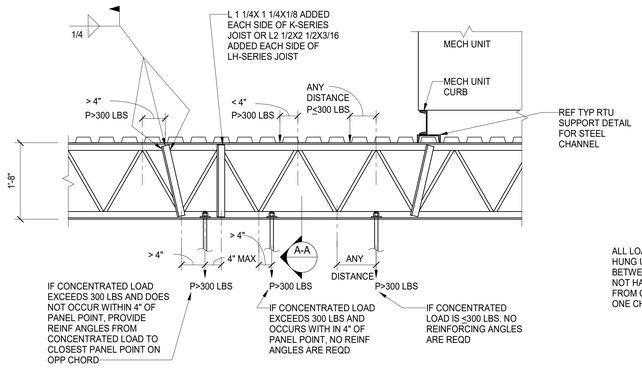
DRAWN BY: JSD/MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

MONUMENTAL STAIR SECTIONS AND DETAILS

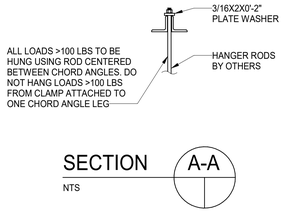
S320

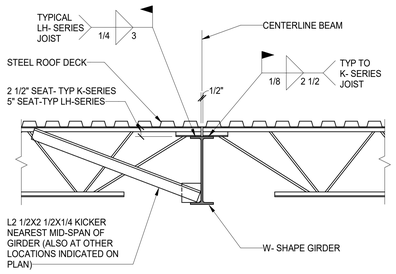


TYPICAL JOIST CHORD REINF DETAIL

NO SCALE

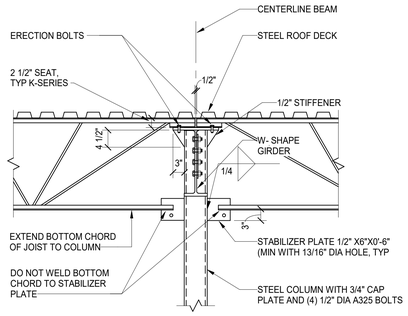
NOTE: JOIST FABRICATOR DESIGN ALL CHORD MEMBERS OF ALL JOISTS FOR ADDITIONAL CONCENTRATED VERTICAL DEAD LOAD OF 300 LBS LOCATED ANYWHERE ALONG THE LENGTH OF THE JOIST





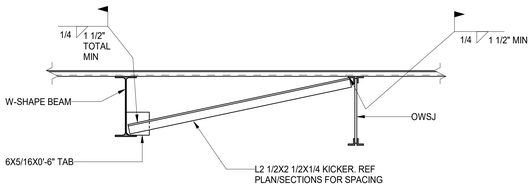
TYPICAL CONNECTION OF OPEN WEB STEEL JOISTS TO STEEL ROOF GIRDER

3/4"= 1'-0"



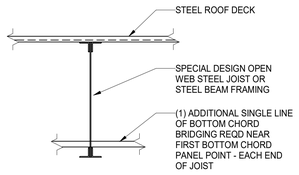
TYPICAL SECTION AT STEEL JOIST LOCATED AT COLUMN

3/4"=1'-0"



TYPICAL BOTTOM FLANGE KICKER DETAIL (PARALLEL CONDITION)

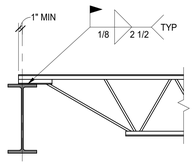
3/4" = 1'-0"



JOIST FABRICATOR:
1. JOIST MUST BE DESIGNED FOR NET UPLIFT LOADS.
2. REFER TO TABLE ON SX.XX FOR UPLIFT FORCES.
3. ONLY COUNT ON JOIST AND STEEL DECK WEIGHTS WHEN CALCULATING NET UPLIFT FOR JOIST DESIGN.

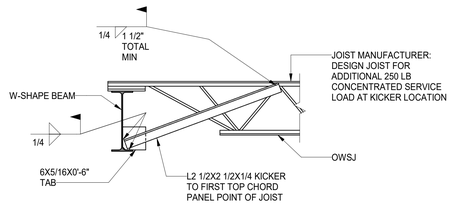
TYPICAL ROOF JOIST UPLIFT

3/4"=1'-0"



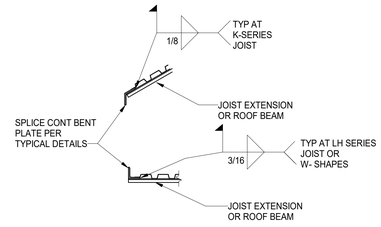
TYPICAL JOISTS BEARING ON ONE SIDE OF BEAM DETAIL

NO SCALE



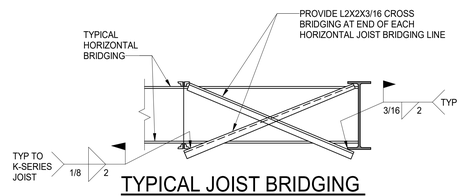
TYPICAL BOTTOM FLANGE KICKER DETAIL (PERPENDICULAR CONDITION)

3/4" = 1'-0"



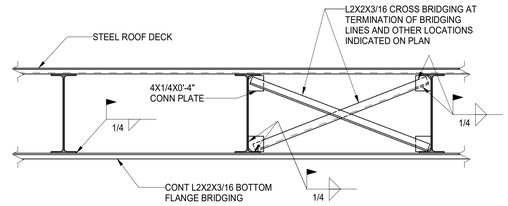
TYPICAL WELDING OF PERIMETER ROOF ANGLES

3/4" = 1'-0"



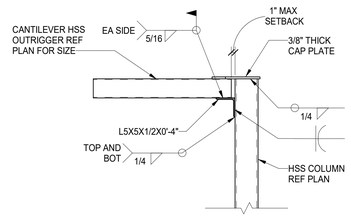
TYPICAL JOIST BRIDGING TERMINATION AT STEEL BEAM

3/4"= 1'-0"



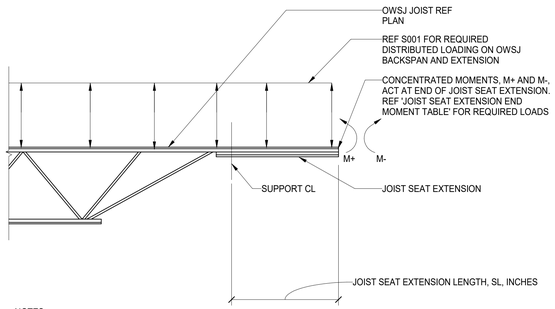
TYPICAL ROOF BEAM BRIDGING

3/4" = 1'-0"



TYPICAL HSS OUTRIGGER-TO-HSS COLUMN MOMENT CONNECTION

3/4" = 1'-0"

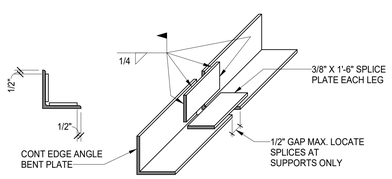


JOIST SEAT EXTENSION END MOMENT TABLE

PARAPET DESIGN PRESSURE ZONE[5]	M-[6], k-ft/ft	M+[6], k-ft/ft
ZONE 4	0.08	0.13
ZONE 5	0.09	0.17

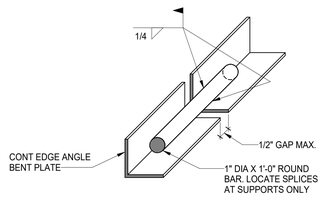
NOTES:
1. LISTED CONCENTRATED MOMENTS ARE STRENGTH LEVEL WIND LOADS
2. THE JOIST SEAT EXTENSION DEFLECTION SHALL BE LIMITED TO SL/200
3. MOMENTS LISTED IN THE 'JOIST SEAT EXTENSION END MOMENT TABLE' CAN BE MULTIPLIED BY 0.42 WHEN DETERMINING DEFLECTION
4. COMBINE M+ AND M- WITH OTHER REQUIRED LOADS TO DEVELOP THE WORST CASE LOADING FOR STRENGTH AND DEFLECTION REQUIREMENTS
5. REFERENCE COMPONENTS AND CLADDING DESIGN WIND PRESSURE TABLE ON S001 FOR PARAPET DESIGN PRESSURE ZONES
6. MULTIPLY THE LISTED M+ AND M- VALUES BY THE JOIST SEAT EXTENSION TRIBUTARY WIDTH TO DETERMINE THE APPROPRIATE DESIGN END MOMENTS AT EACH JOIST SEAT EXTENSION

TYPICAL JOIST SEAT EXTENSION LOADING DIAGRAM



TYPICAL PERIMETER ANGLE SPLICE DETAIL (≥ 4" LEGS)

NTS



TYPICAL PERIMETER ANGLE SPLICE DETAIL (< 4" LEGS)

NTS

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

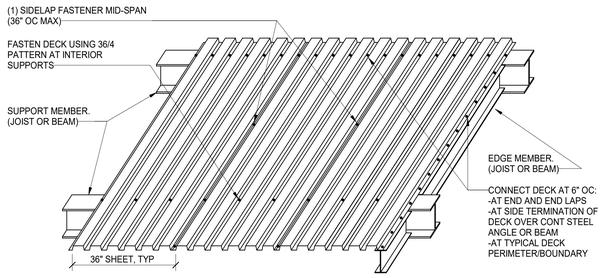
PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL ROOF FRAMING DETAILS

S401



TYPICAL 1 1/2" STEEL ROOF DECK ATTACHMENT

3/4" = 1'-0"

DECK TYPE	CONCURRENT STRENGTH LEVEL LATERAL LOAD CAPACITY	CONCURRENT STRENGTH LEVEL NET UPLIFT LOAD CAPACITY	MAXIMUM STRENGTH LEVEL NET UPLIFT LOAD CAPACITY
22 GA	600 PLF	24 PSF	150 PSF

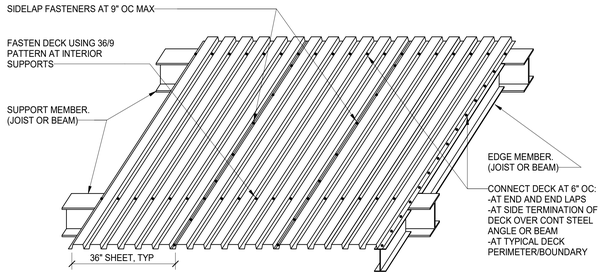
5'-0" BEAM SPACING ASSUMED

IF ALTERNATE ATTACHMENT PATTERN AND/OR ANCHORAGE IS PROPOSED, CONTRACTOR SHALL PROVIDE DOCUMENTATION THAT ALTERNATE ATTACHMENT ANCHORS AND/OR ALTERNATE PATTERN PROVIDE CAPACITIES EQUAL TO OR GREATER THAN LOADS LISTED. LOADS LISTED AS CONCURRENT MUST BE DESIGNED FOR COMBINED SHEAR AND UPLIFT.

ROOF DECK CONNECTOR SCHEDULE

STEEL THICKNESS (INCHES)	HILTI PIN
UP TO 3/8"	X-HSN-24
GREATER THAN 3/8"	X-ENP-19 L15
SIDELAP STITCH FASTENER	HILTI SCREW S-SLC 01 M HWH (20 AND 22 GAGE DECK ONLY)

NOTE: ALTERNATE PIN, SCREW, OR WELDED SYSTEMS MAY BE SUBMITTED AS SUBSTITUTION REQUEST WITH ENGINEERING DATA DEMONSTRATING EQUIVALENT ROOF DECK DIAPHRAGM AND UPLIFT PERFORMANCE



SPECIAL 1 1/2" STEEL ROOF DECK ATTACHMENT - AS INDICATED ON PLAN

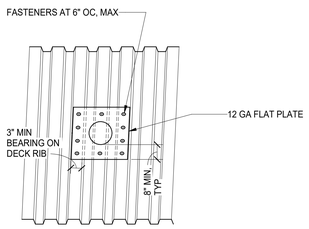
3/4" = 1'-0"

DECK TYPE	CONCURRENT STRENGTH LEVEL LATERAL LOAD CAPACITY	CONCURRENT STRENGTH LEVEL NET UPLIFT LOAD CAPACITY	MAXIMUM STRENGTH LEVEL NET UPLIFT LOAD CAPACITY
22 GA	1560 PLF	21 PSF	350 PSF

5'-0" BEAM SPACING ASSUMED

1 1/2" ROOF DECK ATTACHMENT PATTERNS

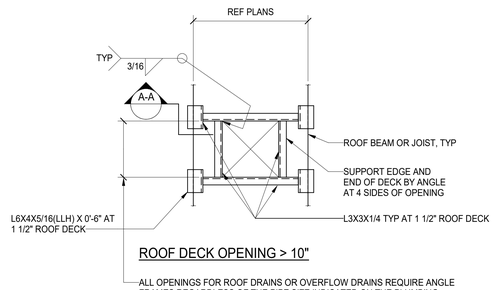
NOTE:
MINIMUM 1 1/2", 22 GA ROOF DECK (TYPE B) PROPERTIES SHALL BE AS FOLLOWS:
F_y=50 KSI, I_p=0.155 IN^4, I_n=0.178 IN^4, S_p=0.169 IN^3, S_n=0.179 IN^3



NOTES:

1. COORD EXACT SIZE AND LOCATION OF OPENINGS WITH ARCH AND MEP.
2. DETAIL OPENINGS SPACED LESS THAN 18" APART AS ONE SINGLE LARGE OPENING WHICH REQUIRES ANGLE FRAME DETAIL.
3. SINGLE 3 1/2" DIAMETER OR SMALLER PENETRATION MAY BE MADE THROUGH THE FLAT PART OF ROOF DECK WITHOUT REQUIRING REINFORCING PLATE.

ROOF DECK OPENING > 3 1/2" AND < 10" (EQUIPMENT WEIGHT < 150 LBS)



ROOF DECK OPENING > 10"

ALL OPENINGS FOR ROOF DRAINS OR OVERFLOW DRAINS REQUIRE ANGLE FRAMES REGARDLESS OF THE PIPE SIZE INDICATED ON THE PLUMBING DRAWINGS.

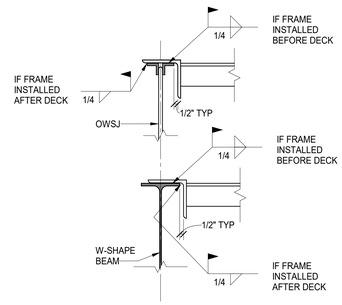
NOTE: THIS "TYPICAL ROOF OPENING FRAMING DETAIL" APPLIES TO ALL OPENINGS IN THE ROOF DECK THAT MAY BE INDICATED ON DRAWINGS OR NOT INDICATED AND ARE CUT IN THE FIELD AS PART OF THE CONSTRUCTION. THE CONTRACTOR SHALL REVIEW STRUCTURAL, ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS TO DETERMINE LOCATION AND SIZES OF OPENINGS THAT CAN BE DETERMINED FROM THE DRAWINGS. THE CONTRACTOR SHALL COORDINATE THE REQUIRED OPENING SIZES FOR EACH REQUIRED PENETRATION AND PROVIDE DECK REINFORCEMENT OR SUPPORT IN ACCORDANCE WITH THIS DETAIL.

IN LIEU OF STEEL ANGLE FRAME, THE FOLLOWING ADJUSTABLE FRAMES MAY BE SUBSTITUTED:

1. L3X3X1/4 CAN BE REPLACED BY A 16GA QUICK FRAME WITH SINGLE 10GA ANGLE END CONNECTORS.
2. L6X4X5/16 CAN BE REPLACED BY A 12GA QUICK FRAME WITH SINGLE 3/16" THICK ANGLE END CONNECTORS.
3. QUICK FRAMES ARE MANUFACTURED BY SOYKO INDUSTRIES, LLC OF MESA, ARIZONA.

TYPICAL ROOF OPENING FRAMING DETAIL

NO SCALE



SECTION A-A

1 1/2" = 1'-0"

S402

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
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COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
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10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

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PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL ROOF FRAMING DETAILS

S402

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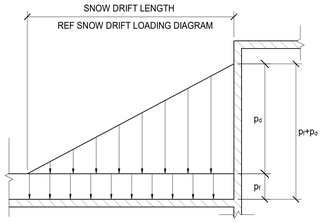
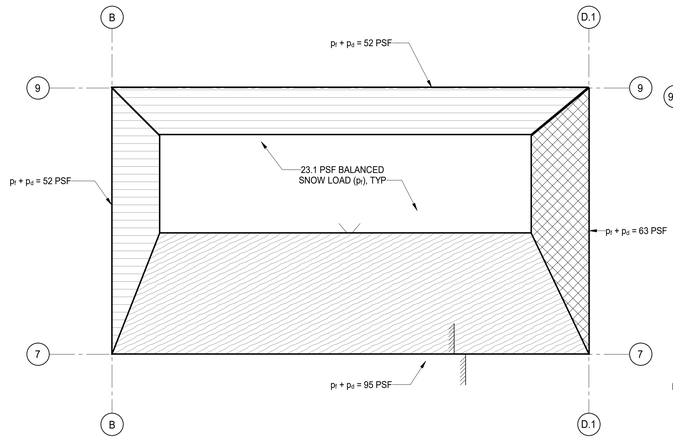
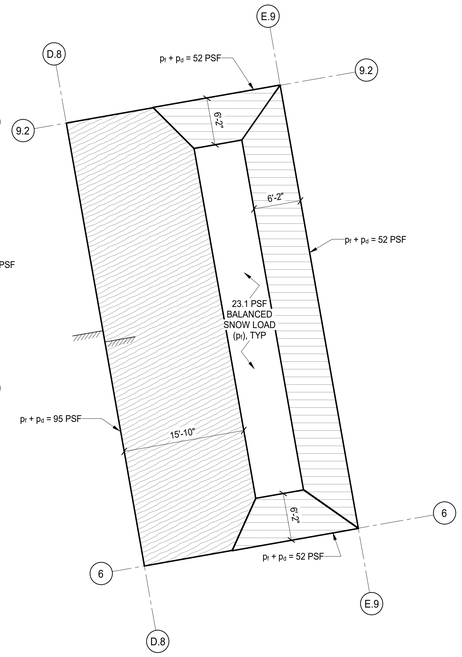
SNOW DRIFT DIAGRAM NOTES

1. THE SNOW DRIFT DIAGRAMS ON THIS SHEET INDICATE THE MINIMUM REQUIRED BALANCED SNOW LOAD AND SNOW DRIFTS TO BE USED IN THE DESIGN OF THE OPEN WEB STEEL JOISTS BY THE DELEGATED DESIGNER. REF S001 FOR MORE INFORMATION.
2. REFERENCE THE 'SNOW DRIFT LOAD MAGNITUDE DIAGRAM' ON THIS SHEET FOR INFORMATION ON SNOW DRIFT ACCUMULATION.



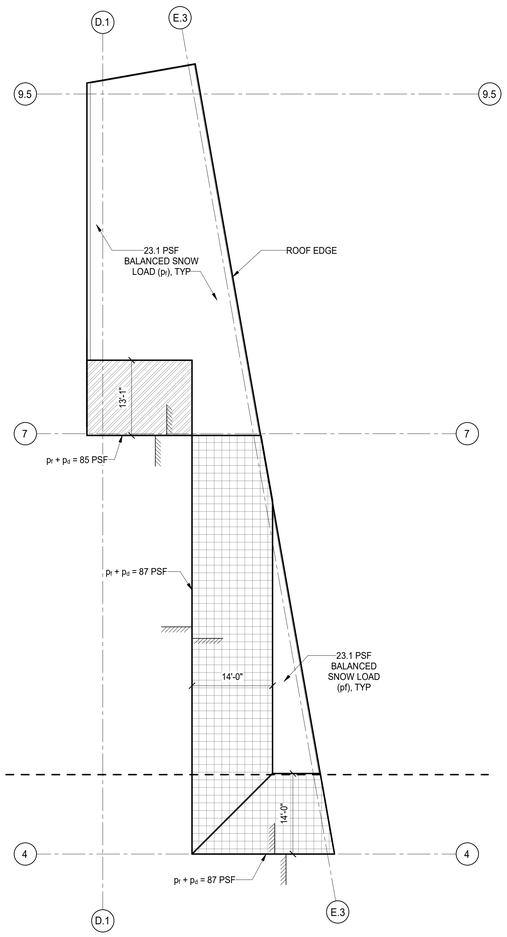
SNOW DRIFT LOAD MAGNITUDE DIAGRAM





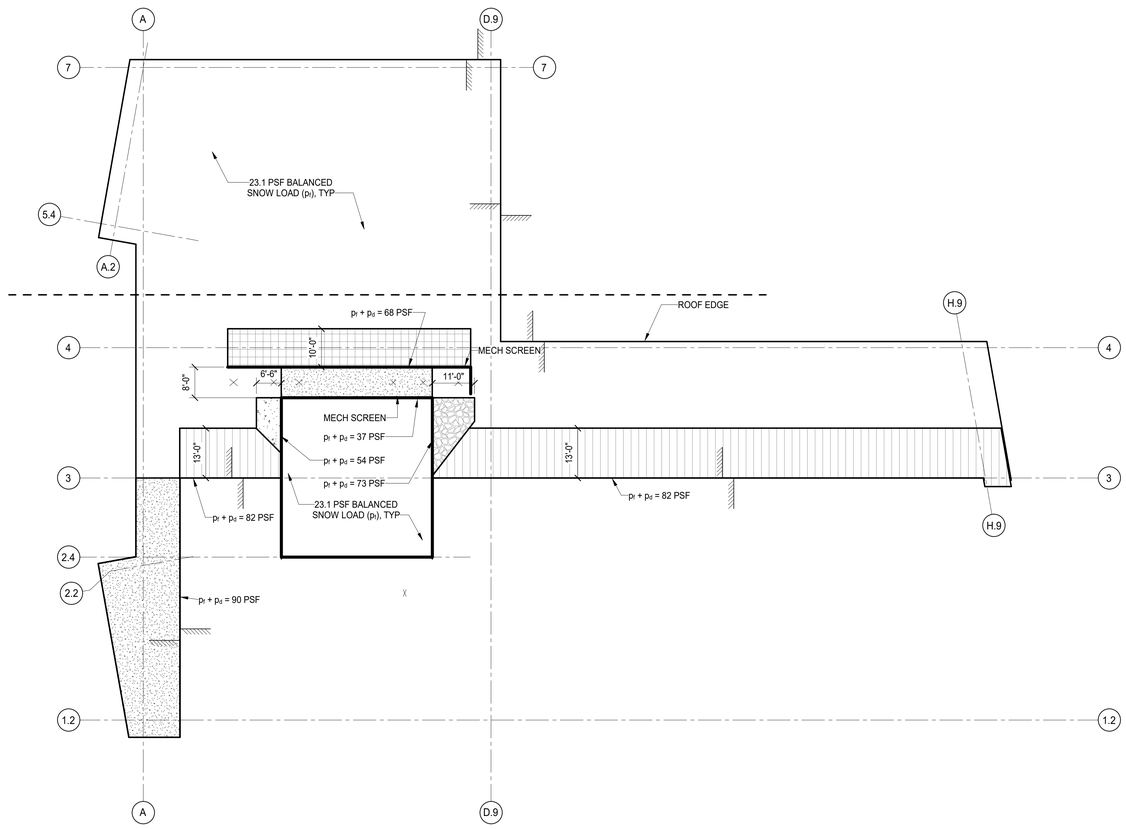
ROOF 1 SNOW DRIFT LOADING DIAGRAM

1/8" = 1'-0"



ROOF 2 SNOW DRIFT LOADING DIAGRAM

3/32" = 1'-0"



ROOF 3 SNOW DRIFT LOADING DIAGRAM

1/16" = 1'-0"

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
10/10/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

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2775 Hydraulic Rd,
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No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MYJ

QEA No.41911390

BID DOCUMENTS
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SNOW DRIFT LOADING DIAGRAMS

S403

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SNOW DRIFT DIAGRAM NOTES

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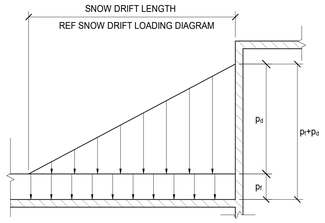
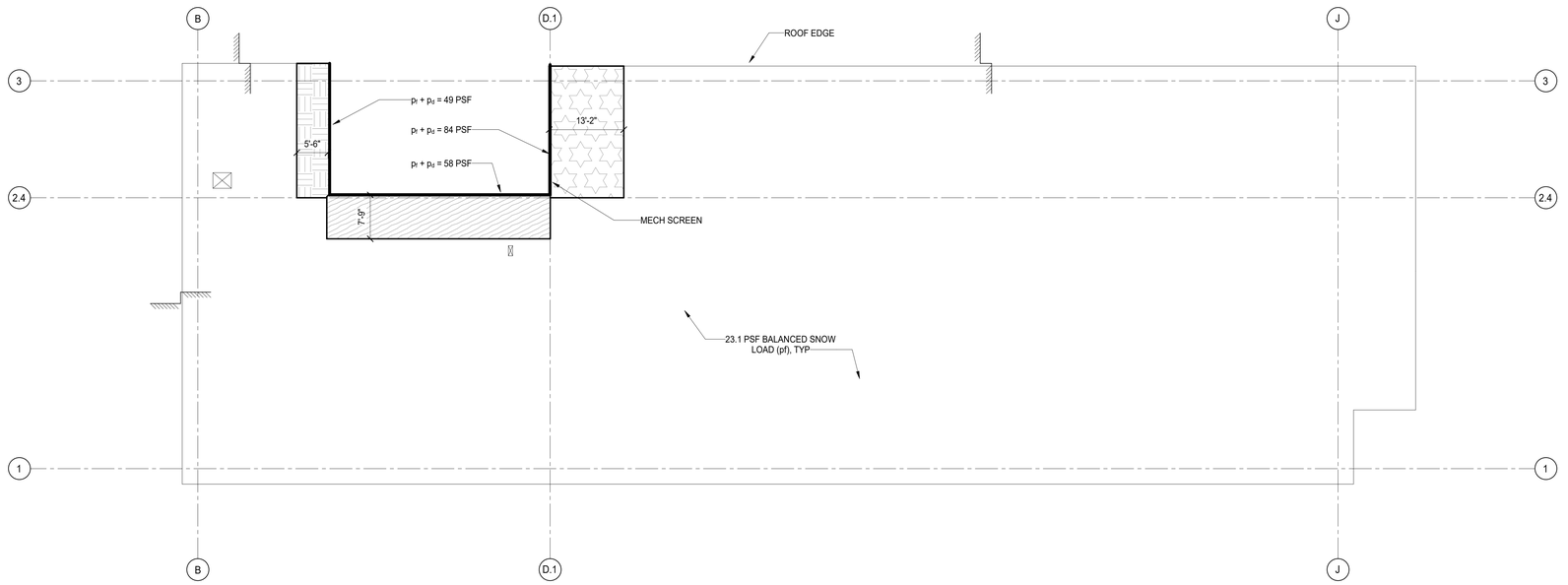
2. REFERENCE THE 'SNOW DRIFT LOAD MAGNITUDE DIAGRAM' ON THIS SHEET FOR INFORMATION ON SNOW DRIFT ACCUMULATION.



SNOW DRIFT LOAD MAGNITUDE DIAGRAM



ROOF 4 SNOW DRIFT LOADING DIAGRAM

3/32" = 1'-0"

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SUITE 400
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1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
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JEFFREY S. DAVIS
Lic. No. 026187
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

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SNOW DRIFT LOADING DIAGRAMS

S404

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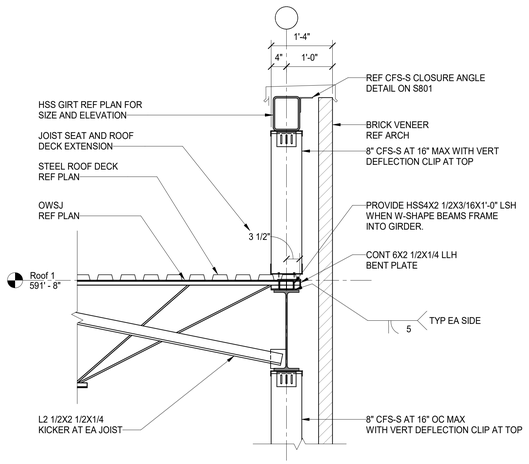
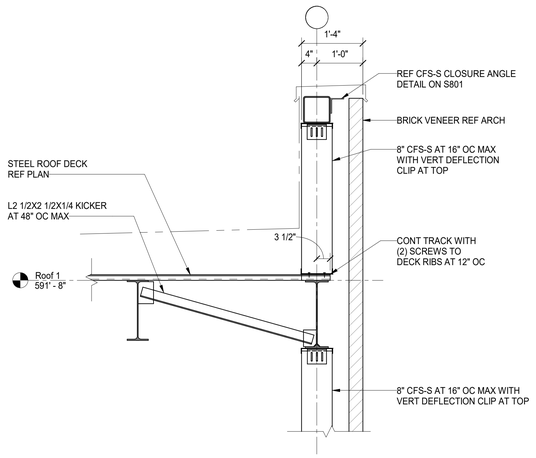
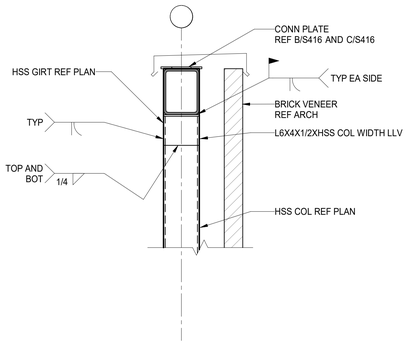


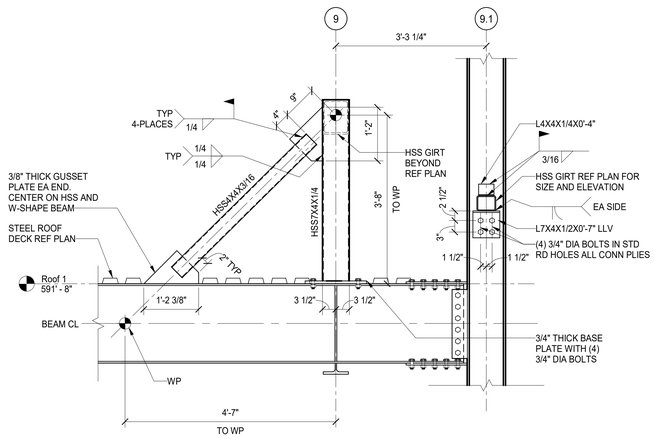
SECTION 1
3/4" = 1'-0"
S102A | S410



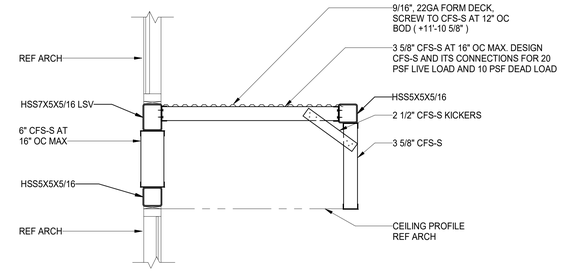
SECTION 2
3/4" = 1'-0"
S102A | S410



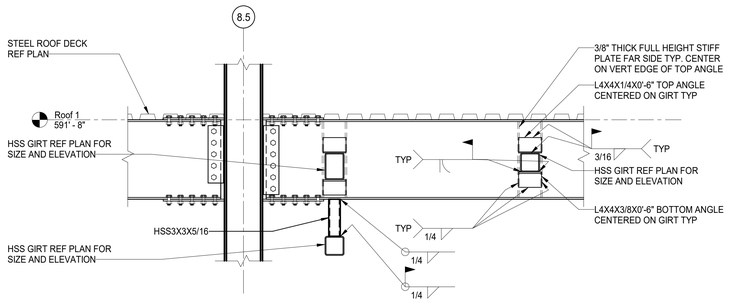
SECTION 3
1" = 1'-0"
S102A | S410



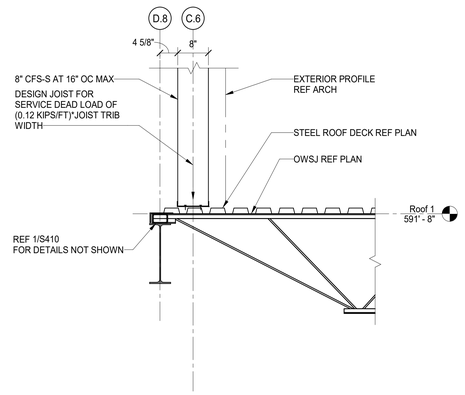
SECTION 4
3/4" = 1'-0"
S102A | S410



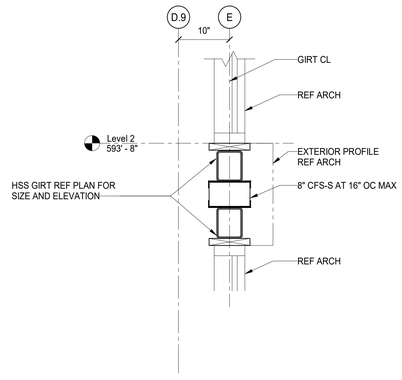
SECTION 5
3/4" = 1'-0"
S102A | S410



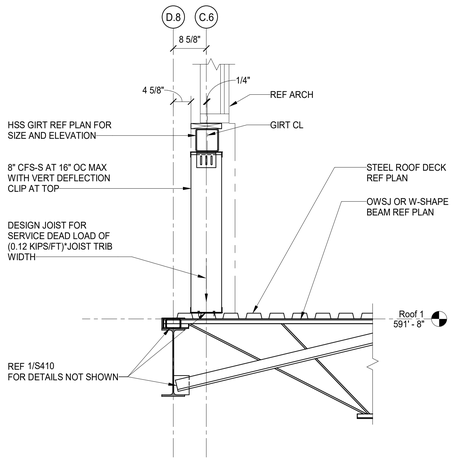
SECTION 6
3/4" = 1'-0"
S102A | S410



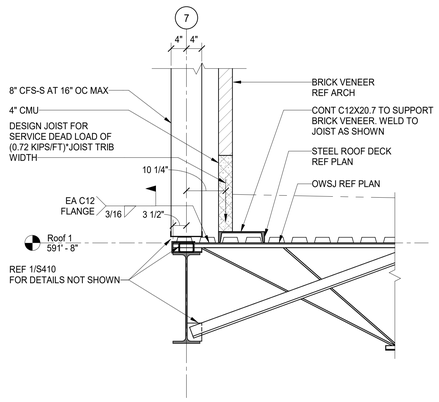
SECTION 7
3/4" = 1'-0"
S102A | S410



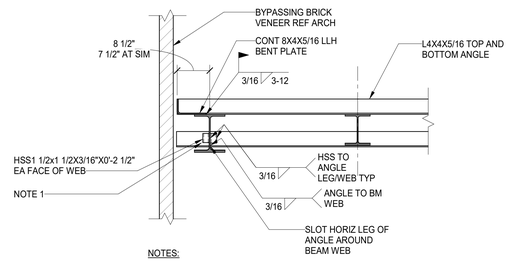
SECTION 8
1" = 1'-0"
S102A | S410



SECTION 9
3/4" = 1'-0"
S102A | S410



SECTION 10
3/4" = 1'-0"
S102A | S410

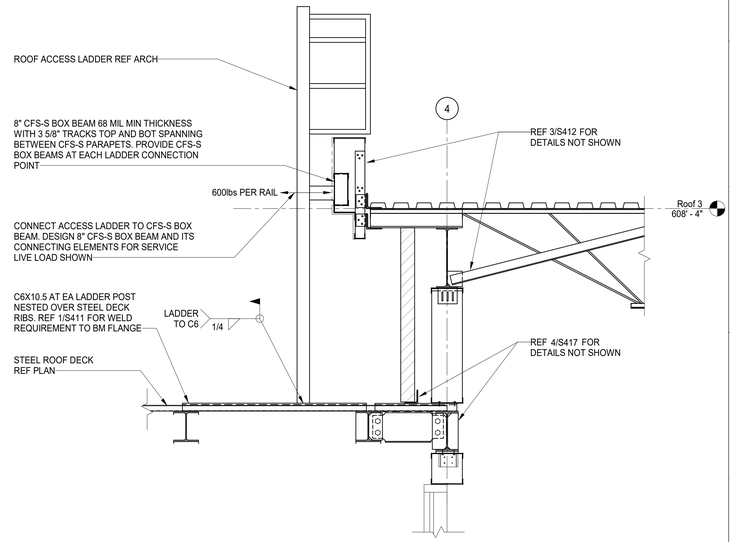


NOTES:

1. THIS DETAIL ALSO APPLIES WHEN BOTTOM ANGLE IS INTERRUPTED BY DEEPER ADJACENT BEAMS ALONG ROOF EDGE.

2. AT 'SIM' LOCATIONS, ADDITIONAL HSS MEMBERS AND ANGLE SLOT DUE TO LARGER ADJACENT BEAM NOT REQD.

SECTION 11
3/4" = 1'-0"
S416 | S410



SECTION 12
3/4" = 1'-0"
S103A | S410

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
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DRAWN BY: MPK/MKJ

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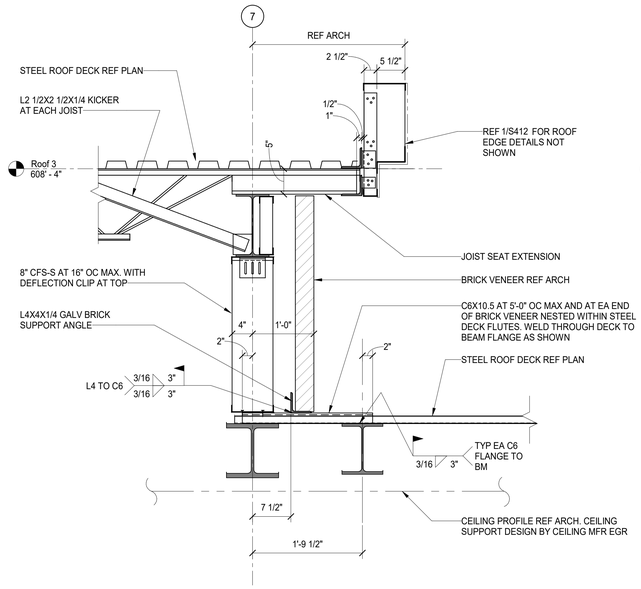
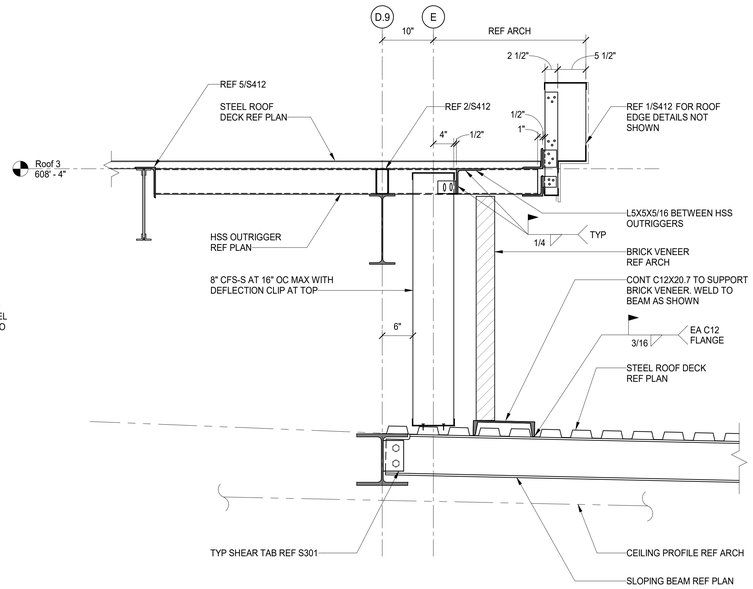
ROOF FRAMING SECTION AND DETAILS

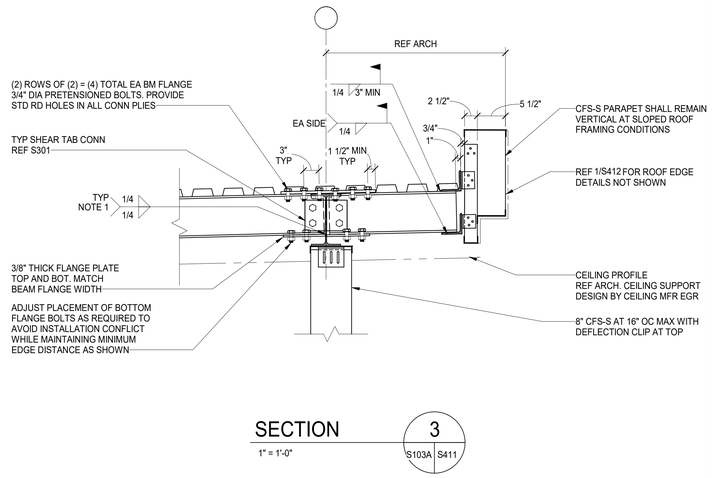
S410



SECTION 1
1" = 1'-0" — S103A | S411

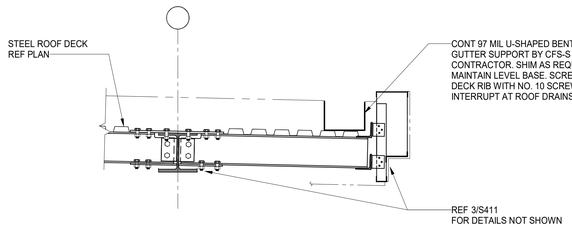


SECTION 2
1" = 1'-0" — S103A | S411

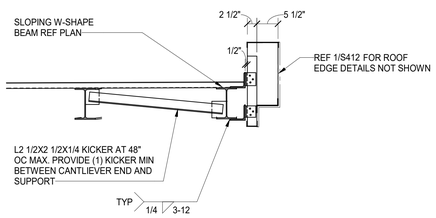


SECTION 3
1" = 1'-0" — S103A | S411

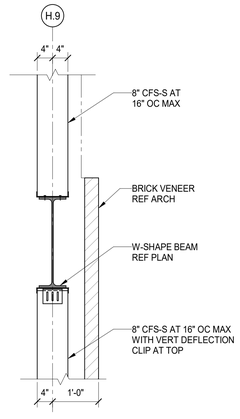
NOTES:
1. PROVIDE CJP GROOVE WELD WHEN FILLET WELD IS NOT ATTAINABLE BY CLEARANCE



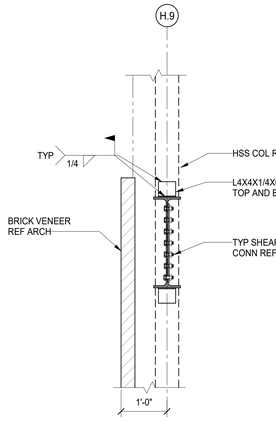
SECTION 4
3/4" = 1'-0" — S103A | S411



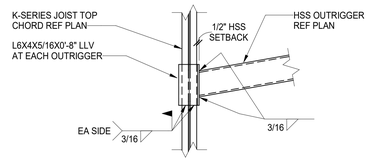
SECTION 5
3/4" = 1'-0" — S103A | S411



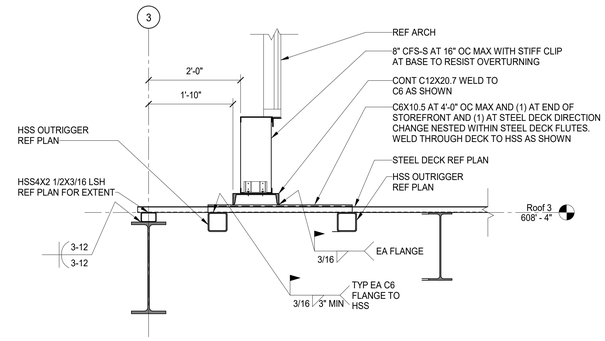
SECTION 6
3/4" = 1'-0" — S414 | S411



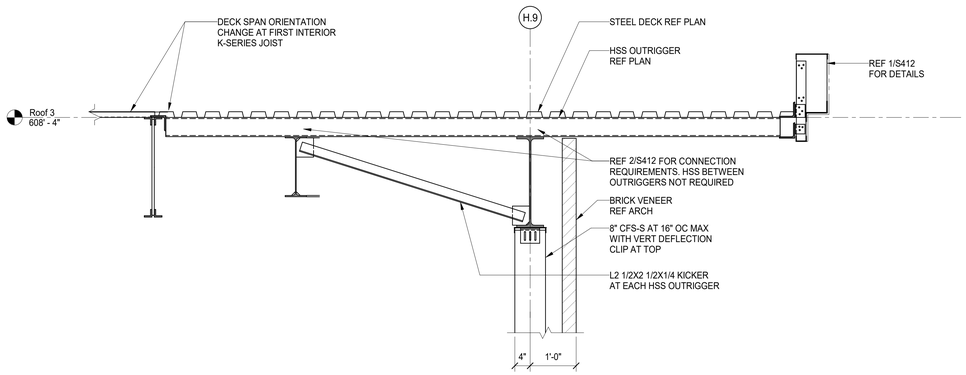
SECTION 7
3/4" = 1'-0" — S414 | S411



DETAIL A
1" = 1'-0" — S414 | S411



SECTION 8
3/4" = 1'-0" — S414 | S411



SECTION 9
3/4" = 1'-0" — S414 | S411

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 9:49:07 AM

QUINN EVANS
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RICHMOND, VA 23220
v 804.788.4774
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RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

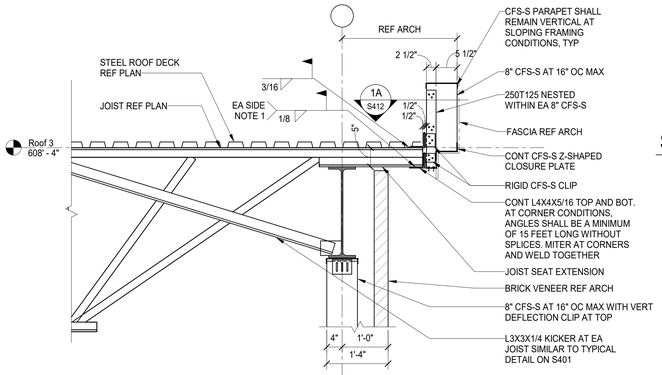
PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

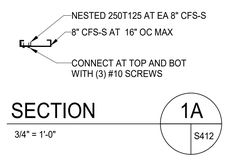
ROOF FRAMING SECTION AND DETAILS

S411

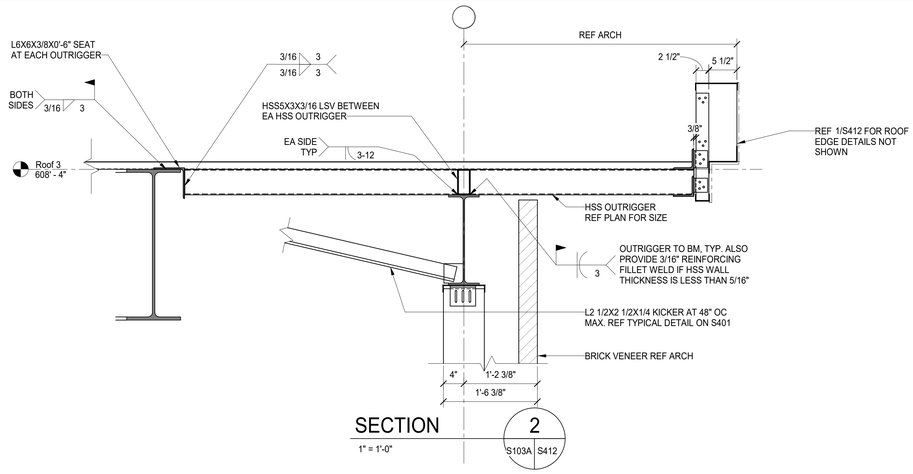


NOTES:
1. AT HSS OUTRIGGERS, PROVIDE A FLARE BEVEL GROOVE WELD EA SIDE
2. REFERENCE 'TYPICAL JOIST SEAT EXTENSION LOADING DIAGRAM' ON S401 FOR JOIST SEAT EXTENSION LOADING REQUIREMENTS

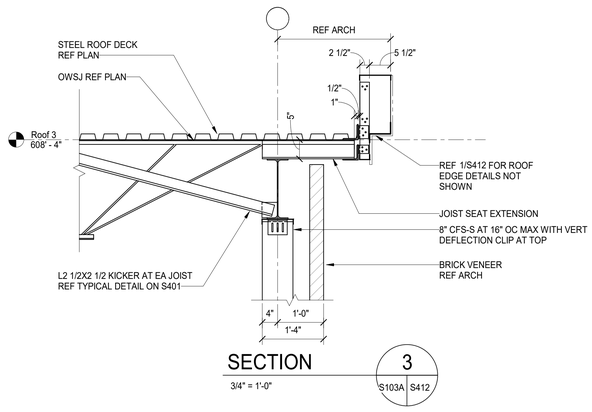
SECTION 1 — 3/4" = 1'-0" — S103A | S412



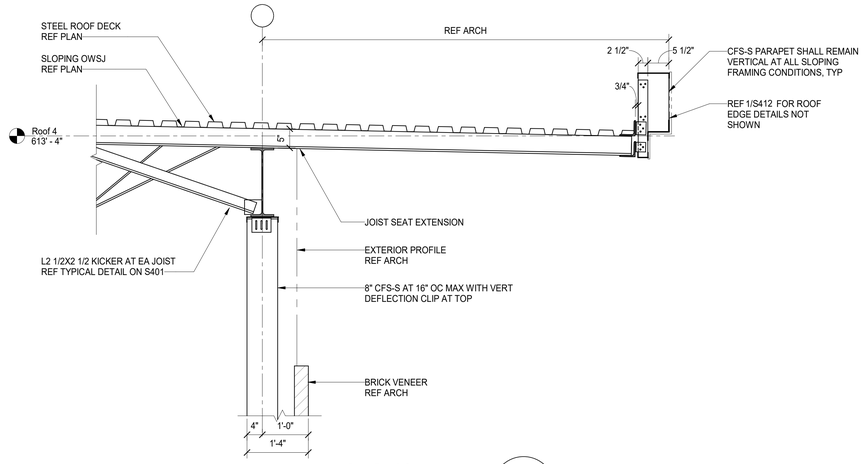
SECTION 1A — 3/4" = 1'-0" — S412



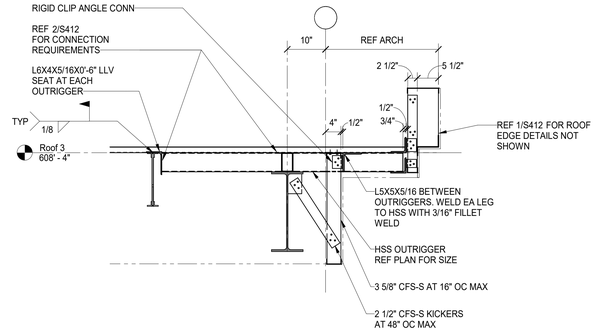
SECTION 2 — 1" = 1'-0" — S103A | S412



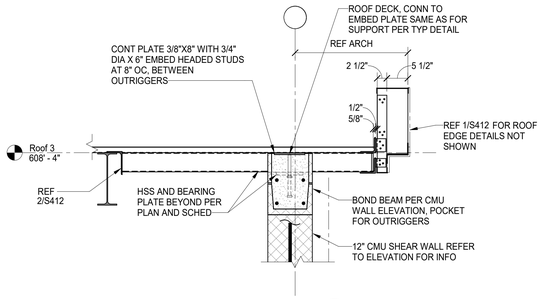
SECTION 3 — 3/4" = 1'-0" — S103A | S412



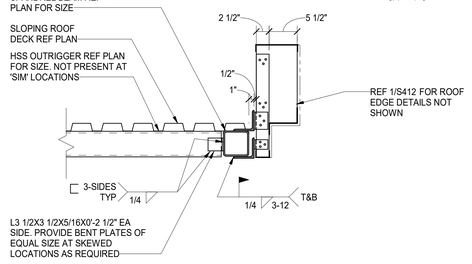
SECTION 4 — 3/4" = 1'-0" — S103A | S412



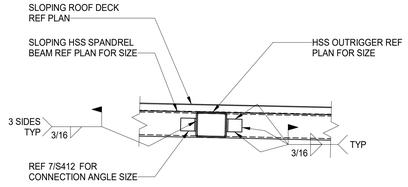
SECTION 5 — 3/4" = 1'-0" — S103B | S412



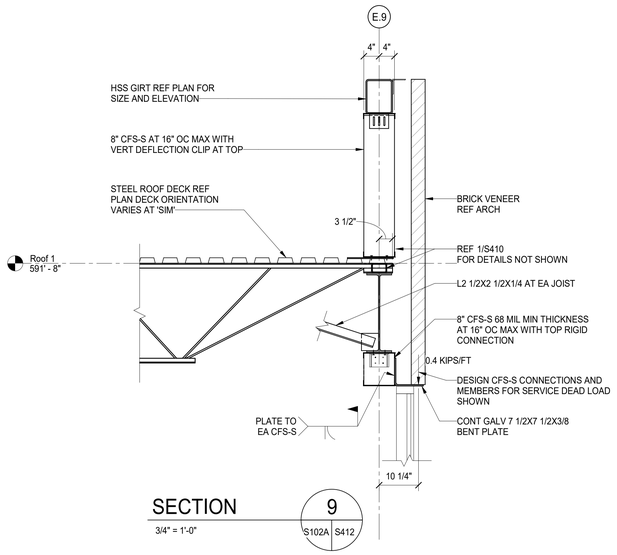
SECTION 6 — 3/4" = 1'-0" — S103A | S412



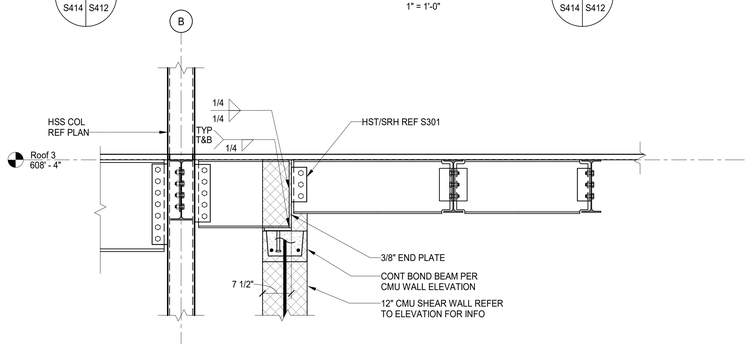
SECTION 7 — 1" = 1'-0" — S414 | S412



SECTION 8 — 1" = 1'-0" — S414 | S412



SECTION 9 — 3/4" = 1'-0" — S102A | S412



SECTION 10 — 3/4" = 1'-0" — S414 | S412

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

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10/08/2024

Albemarle County Public Schools

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No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

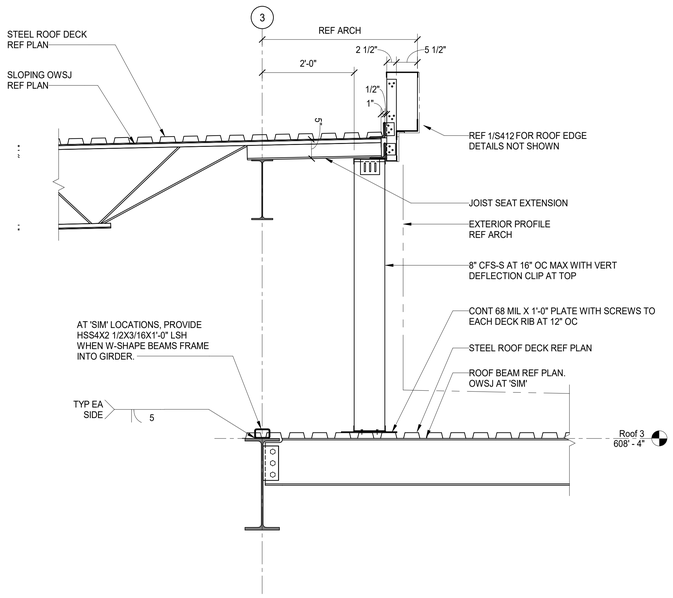
QEA No.41911390

BID DOCUMENTS
10/08/2024

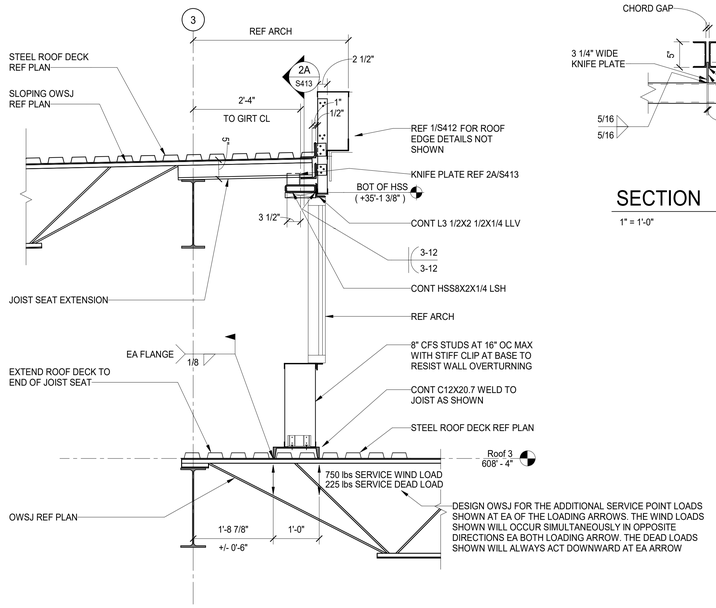
ROOF FRAMING SECTION AND DETAILS

S412

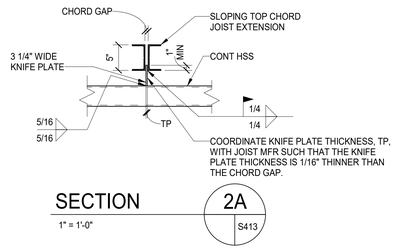
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 8:48:09 AM



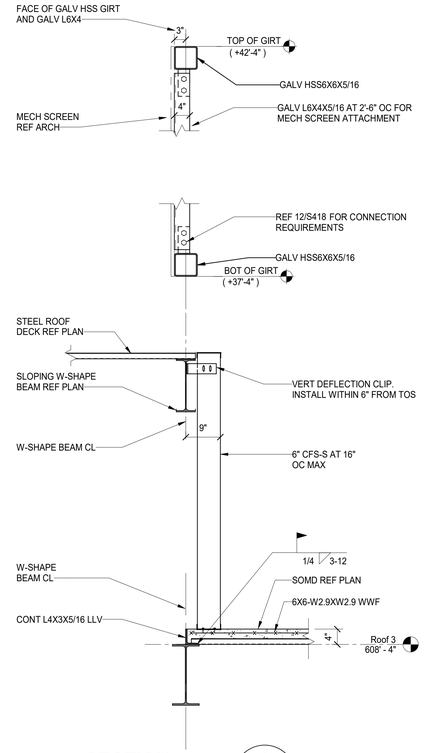
SECTION 1
3/4" = 1'-0"
S103A | S413



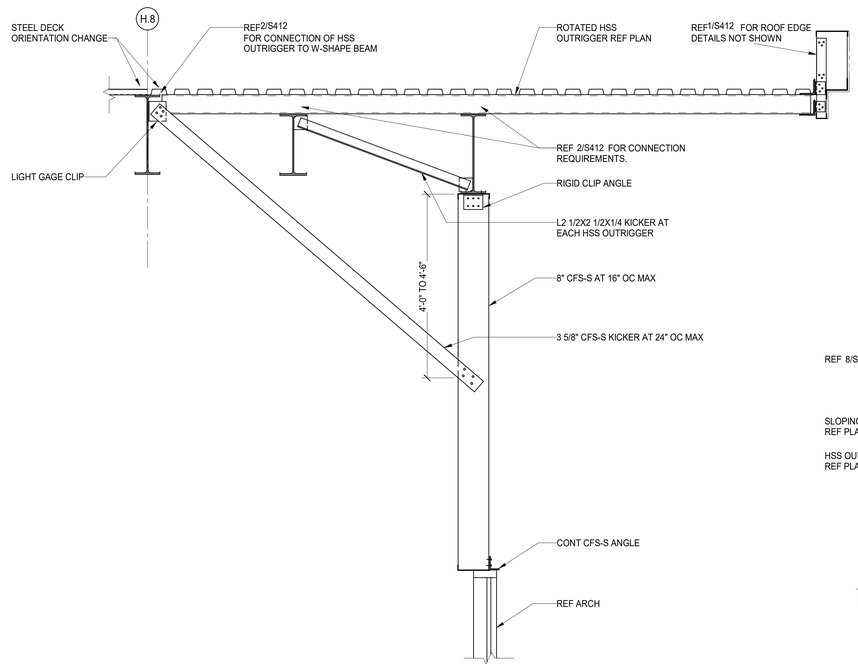
SECTION 2
3/4" = 1'-0"
S103B | S413



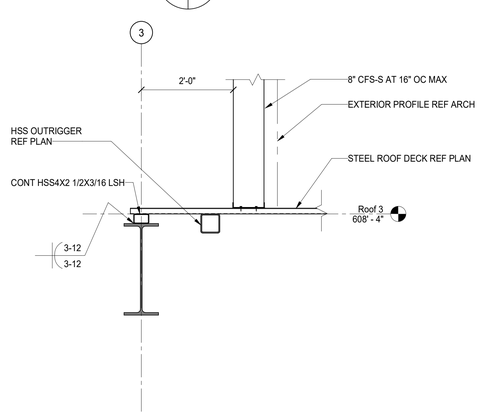
SECTION 2A
1" = 1'-0"
S413



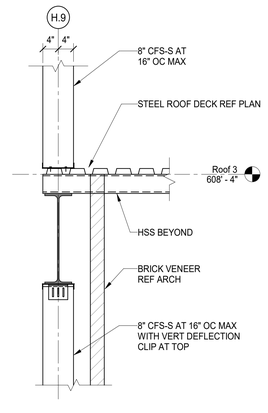
SECTION 3
3/4" = 1'-0"
S103A | S413



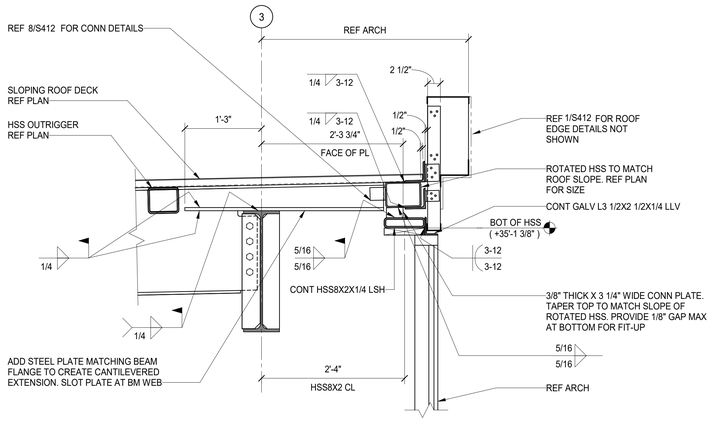
SECTION 4
3/4" = 1'-0"
S414 | S413



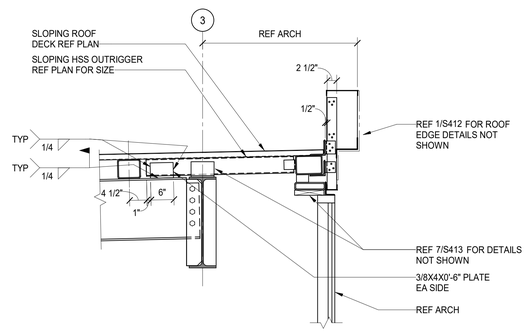
SECTION 5
3/4" = 1'-0"
S414 | S413



SECTION 6
3/4" = 1'-0"
S414 | S413



SECTION 7
1" = 1'-0"
S414 | S413



SECTION 8
3/4" = 1'-0"
S414 | S413

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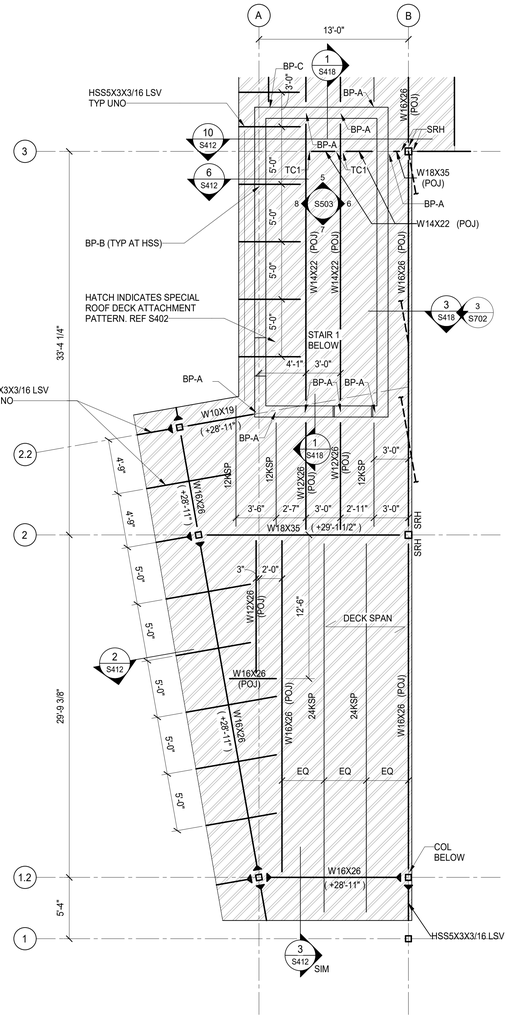
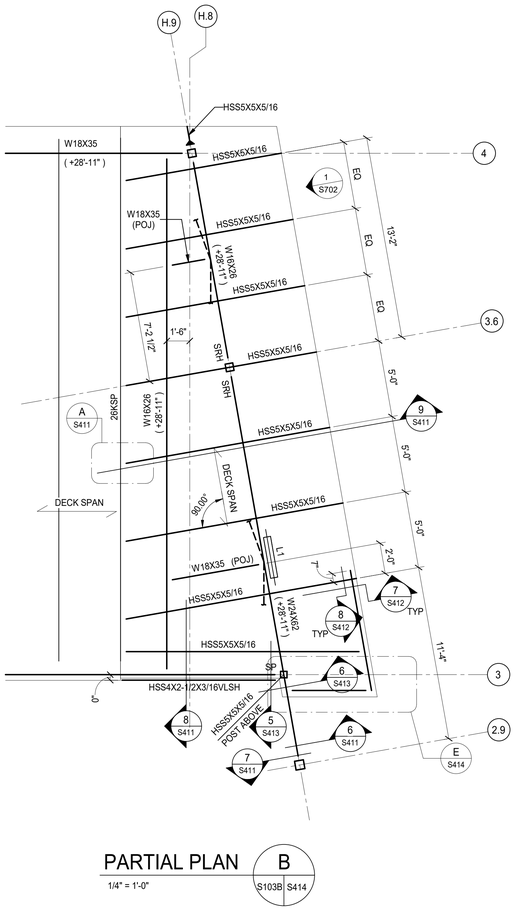
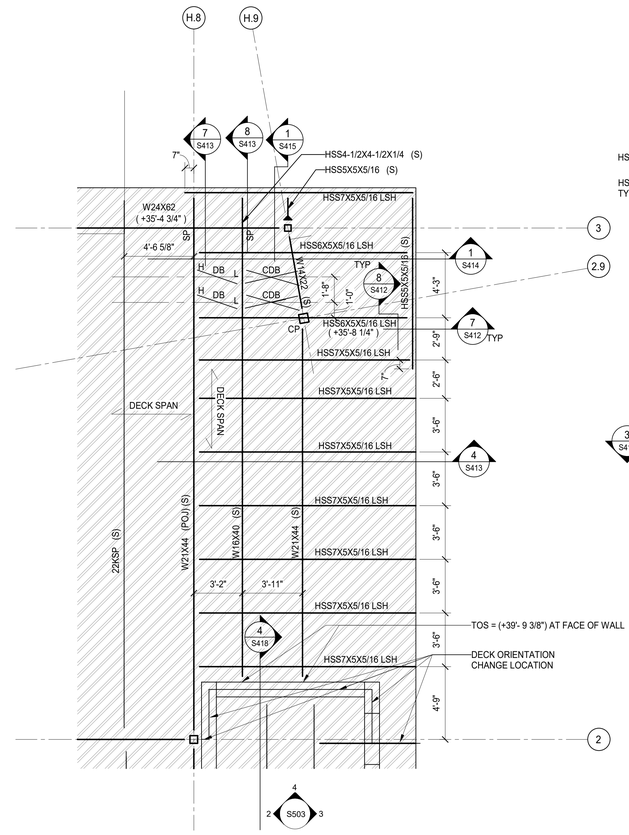
S413



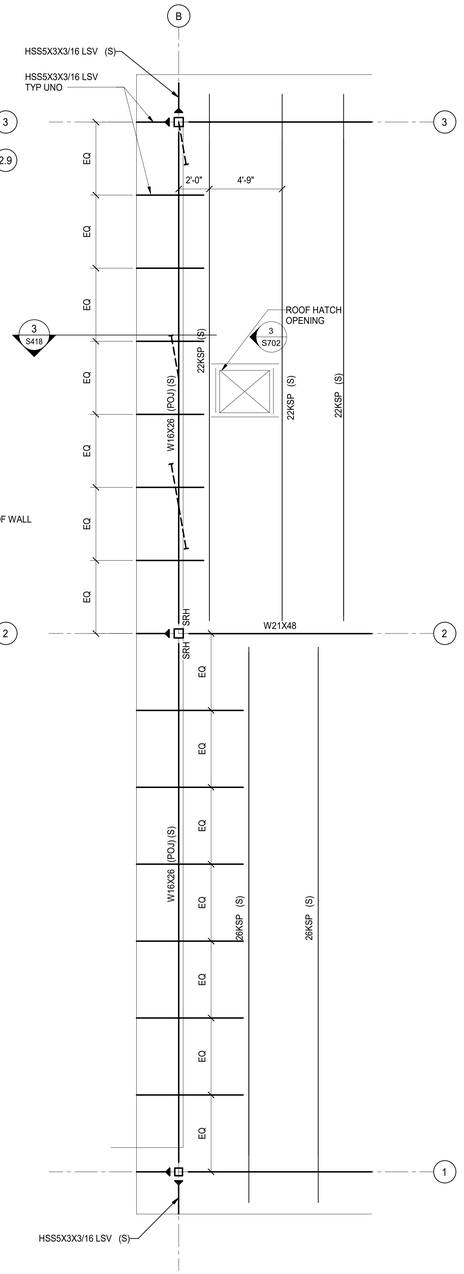
PARTIAL PLAN A
3/16" = 1'-0"
S103B | S414



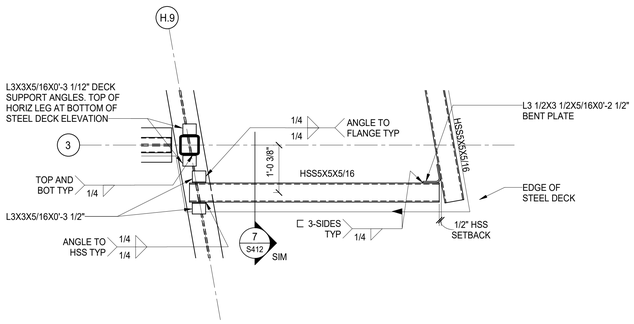
PARTIAL PLAN B
1/4" = 1'-0"
S103B | S414



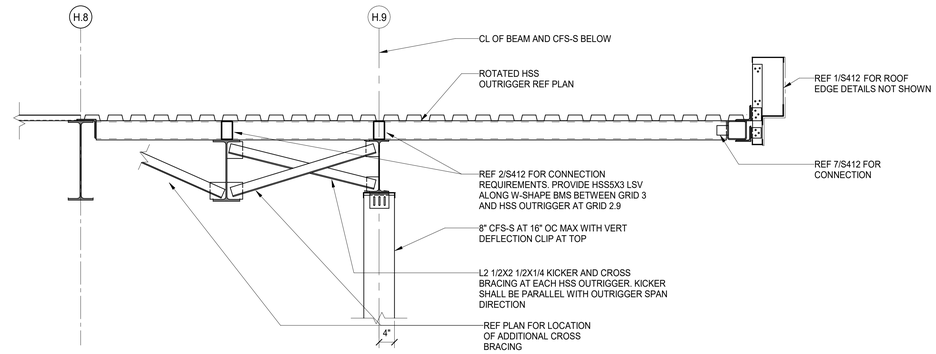
PARTIAL PLAN C
1/4" = 1'-0"
S103B | S414



PARTIAL PLAN D
1/4" = 1'-0"
S103B | S414



PARTIAL PLAN E
3/4" = 1'-0"
S414 | S414



SECTION 1
3/4" = 1'-0"
S103B | S414

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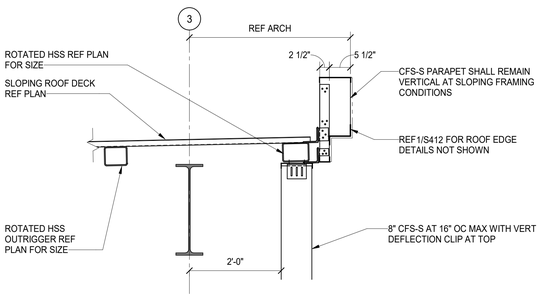
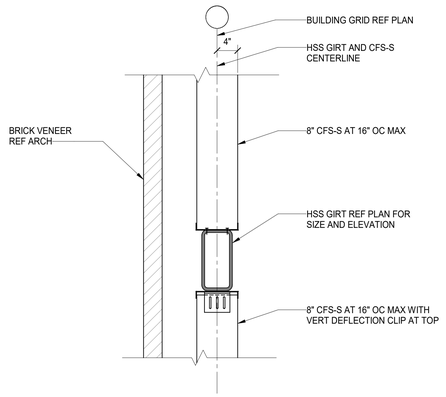
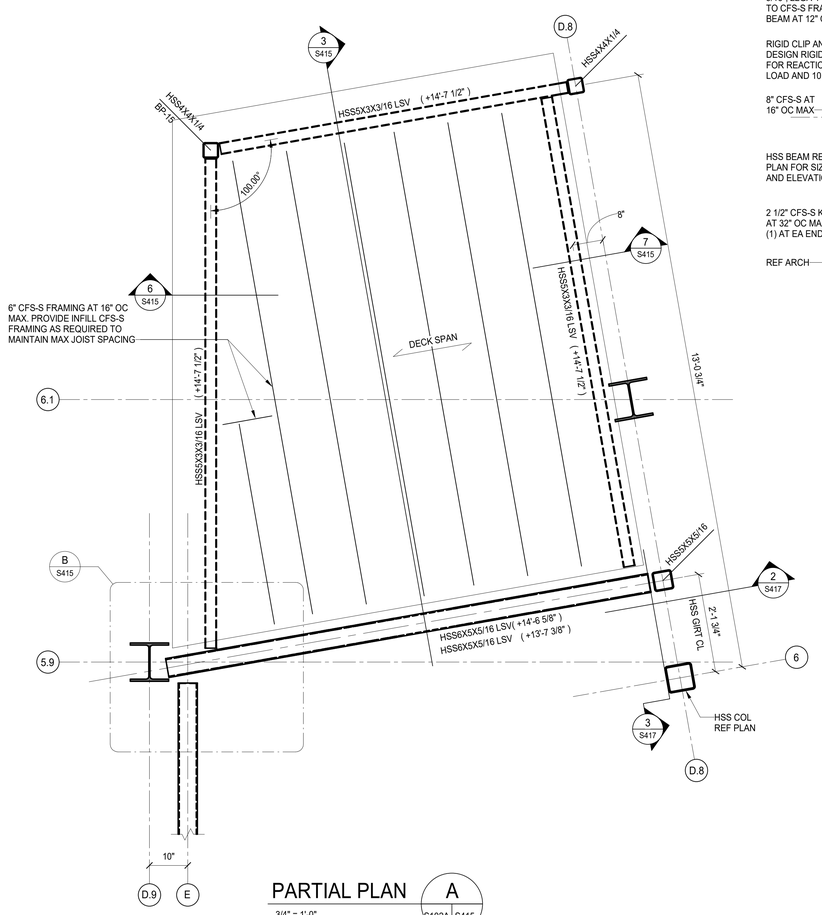


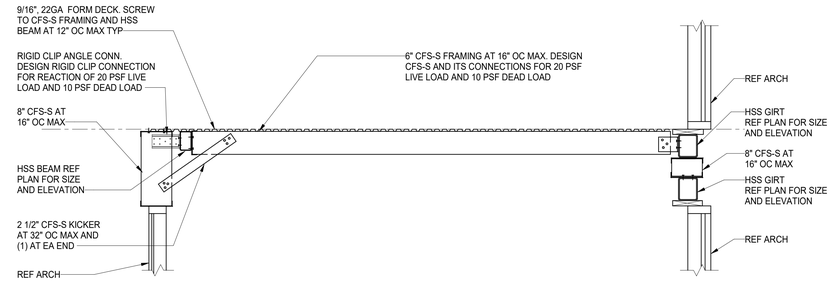
SECTION 1
3/4" = 1'-0"
S414 | S415



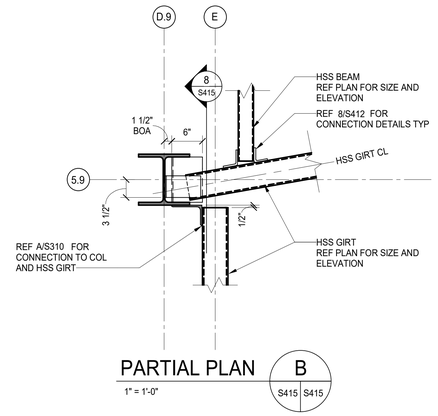
SECTION 2
1" = 1'-0"
S102A | S415



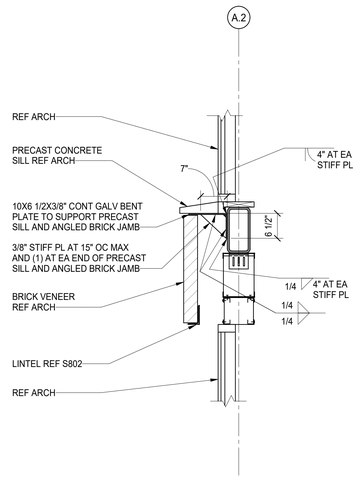
PARTIAL PLAN A
3/4" = 1'-0"
S102A | S415



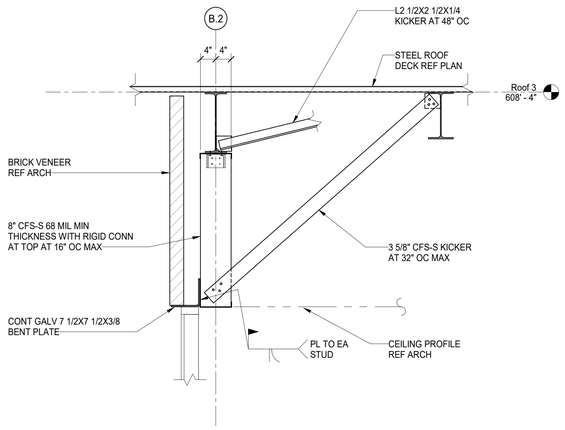
SECTION 3
3/4" = 1'-0"
S415 | S415



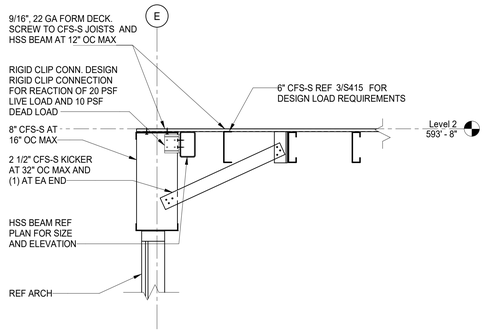
PARTIAL PLAN B
1" = 1'-0"
S415 | S415



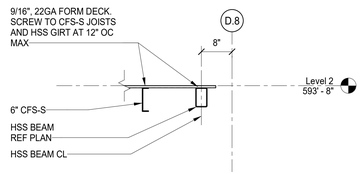
SECTION 4
3/4" = 1'-0"
S102A | S415



SECTION 5
3/4" = 1'-0"
S103B | S415



SECTION 6
1" = 1'-0"
S415 | S415



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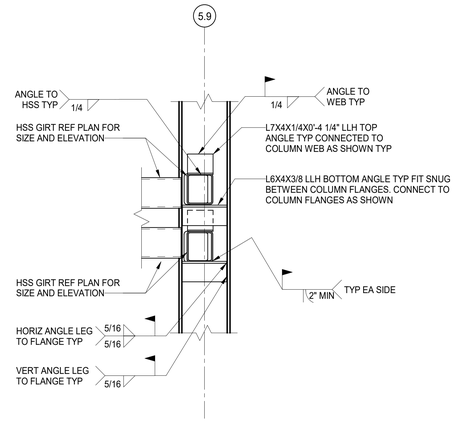
S415 | S415



SECTION 8
1" = 1'-0"
S415 | S415

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
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(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

ROOF FRAMING SECTION AND DETAILS

S415

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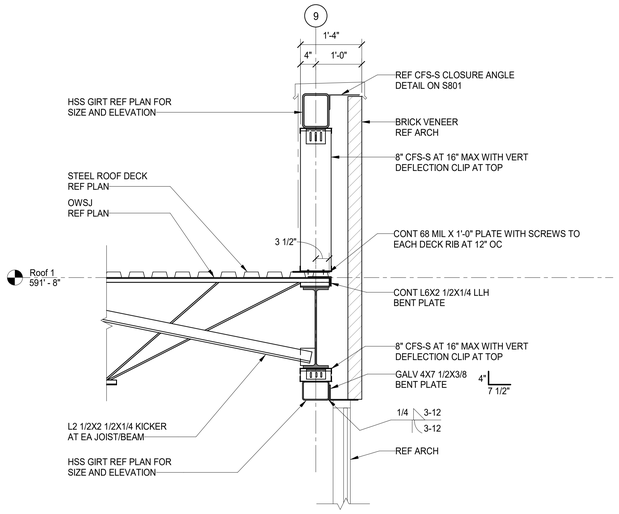
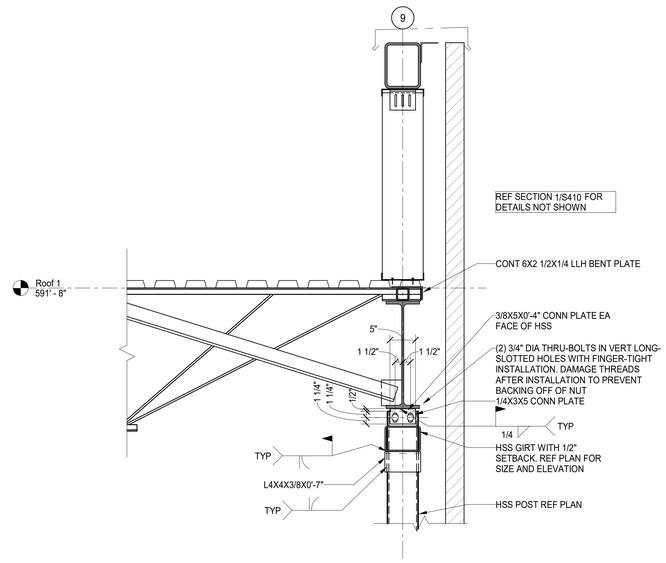


SECTION 1
3/4" = 1'-0"
S102A | S416



SECTION 2
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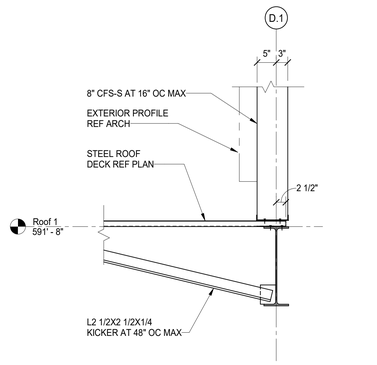
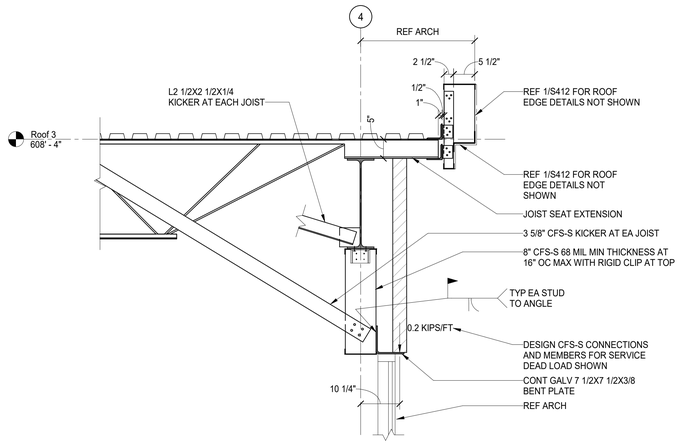
S102A | S416



SECTION 3
3/4" = 1'-0"
S102A | S416



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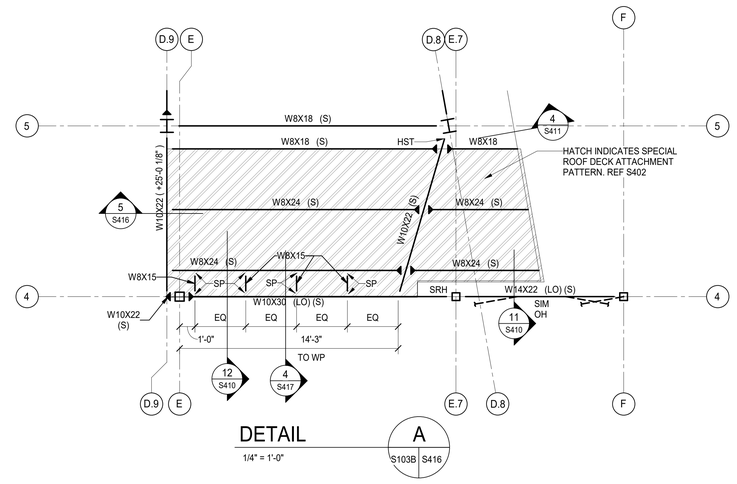
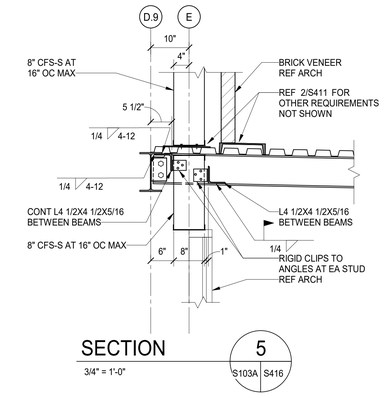
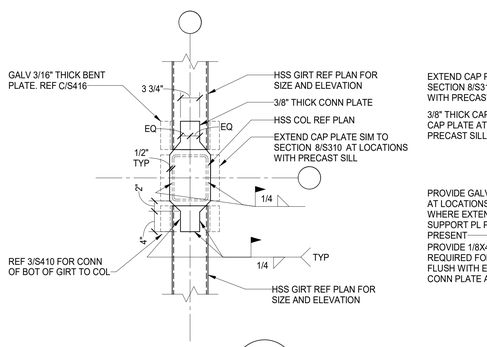
S103A | S416



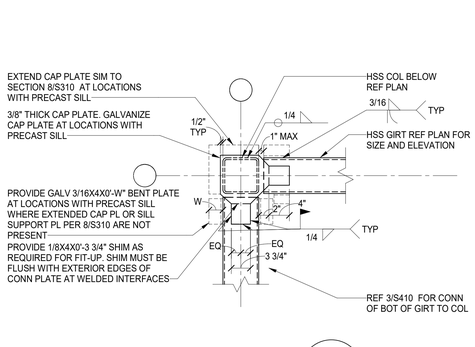
DETAIL A
1/4" = 1'-0"
S103B | S416



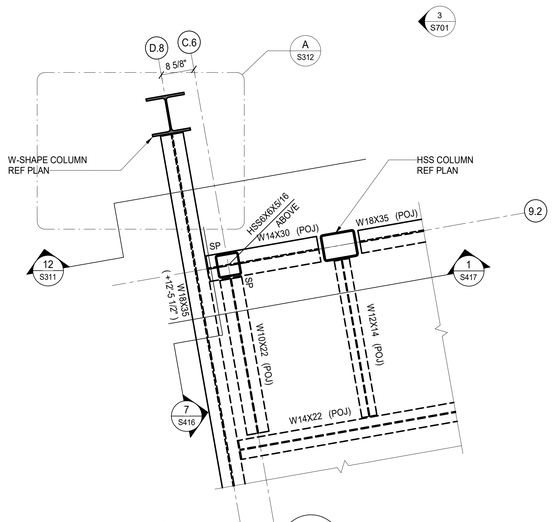
SECTION 5
3/4" = 1'-0"
S103A | S416



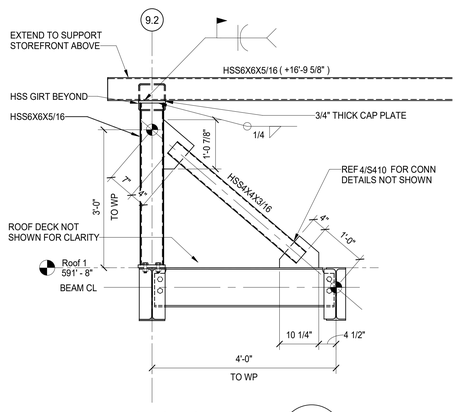
DETAIL B
1" = 1'-0"
S102A | S416



DETAIL C
1" = 1'-0"
S102A | S416



SECTION 6
3/4" = 1'-0"
S102A | S416



SECTION 7
3/4" = 1'-0"
S416 | S416

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Albemarle County Public Schools

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No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

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S416

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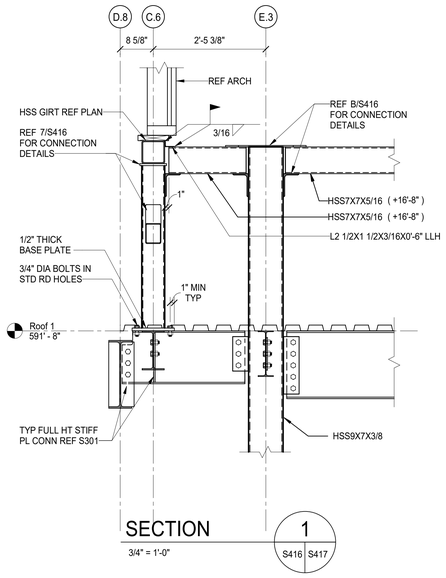
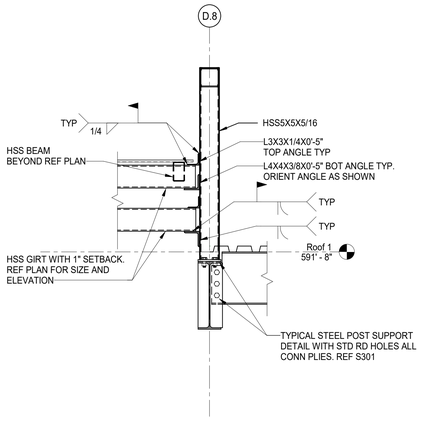
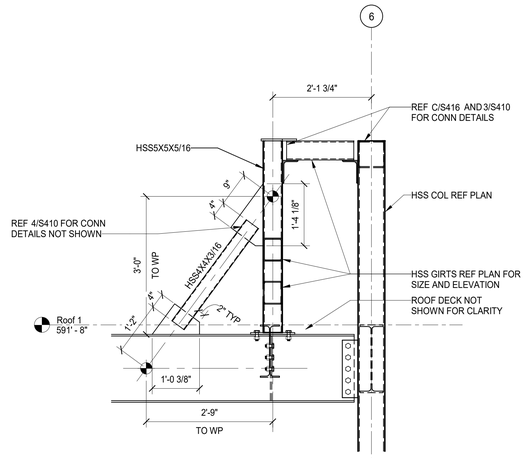


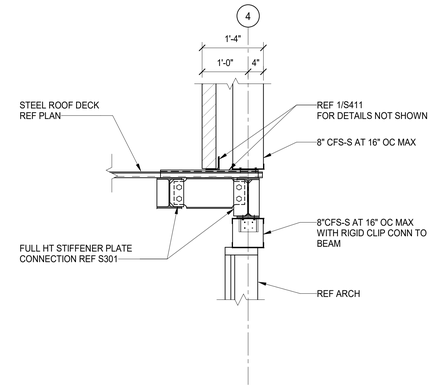
SECTION 1
3/4" = 1'-0"
S416 | S417



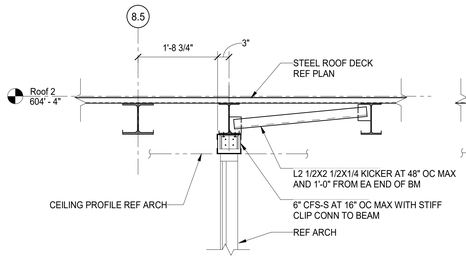
SECTION 2
3/4" = 1'-0"
S415 | S417

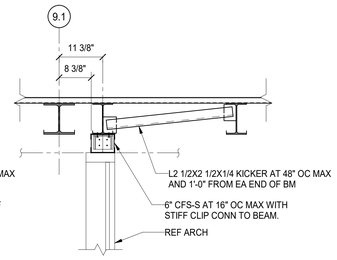


SECTION 3
3/4" = 1'-0"
S415 | S417

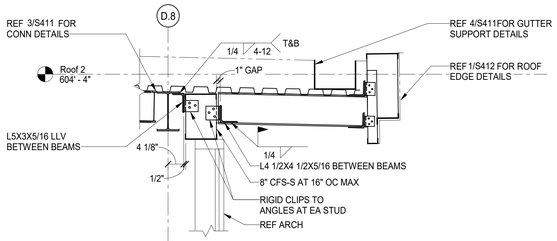


SECTION 4
3/4" = 1'-0"
S416 | S417

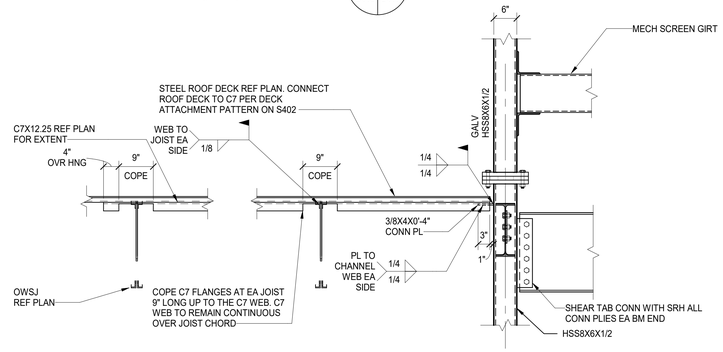




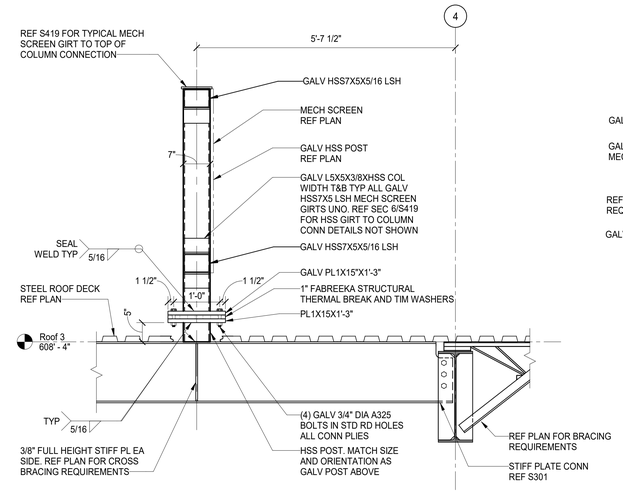
SECTION 5
3/4" = 1'-0"
S103A | S417



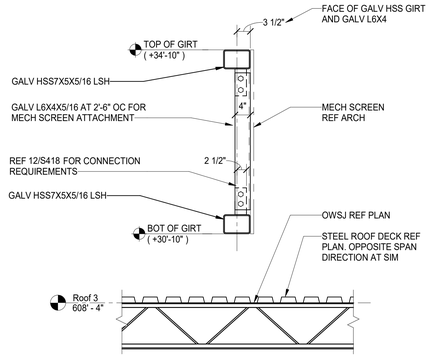
SECTION 6
3/4" = 1'-0"
S103A | S417



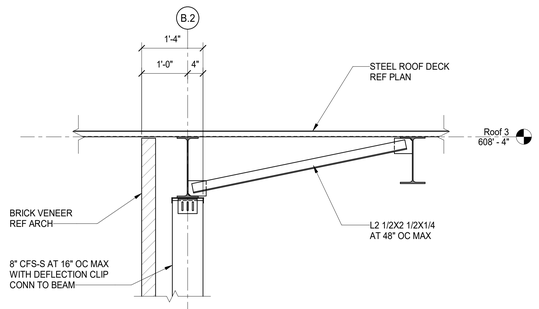
SECTION 7
3/4" = 1'-0"
S103A | S417



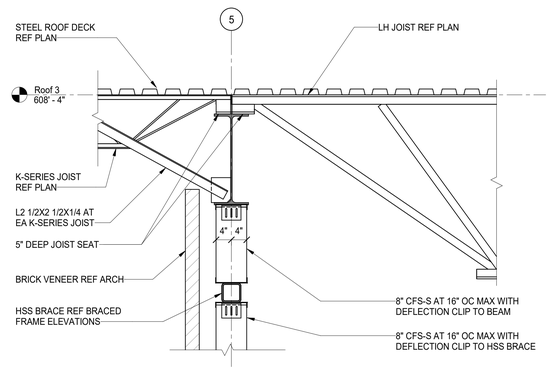
SECTION 8
3/4" = 1'-0"
S103B | S417



SECTION 9
3/4" = 1'-0"
S103B | S417



SECTION 10
3/4" = 1'-0"
S103B | S417



SECTION 11
3/4" = 1'-0"
S103B | S417

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Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
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Albemarle County Public Schools
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No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK/MKJ

QEA No.41911390

BID DOCUMENTS
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ROOF FRAMING SECTION AND DETAILS

S417

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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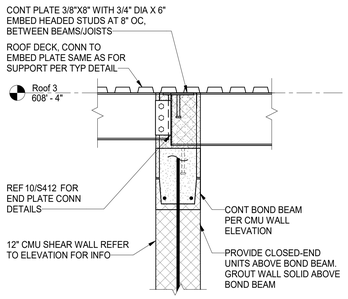
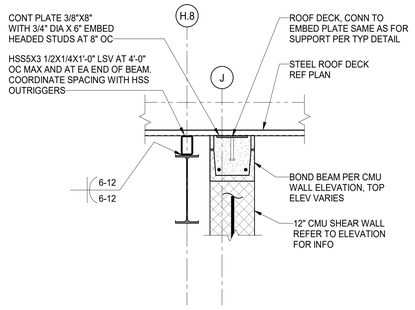
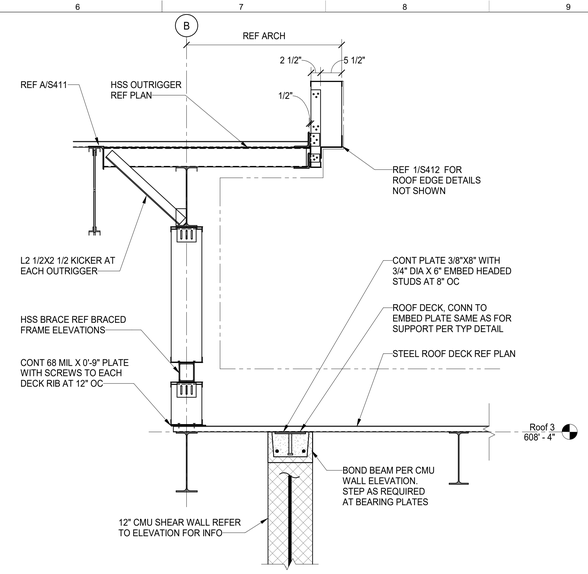


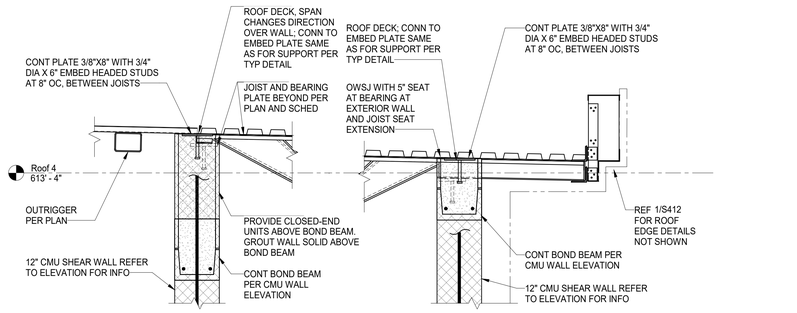
SECTION 1 — 3/4" = 1'-0" — S103A | S418



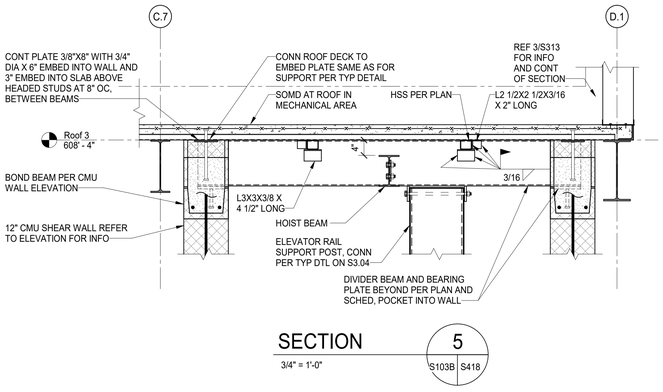
SECTION 2 — 3/4" = 1'-0" — S103B | S418



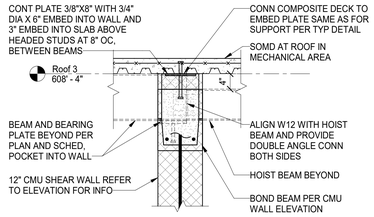
SECTION 3 — 3/4" = 1'-0" — S103A | S418



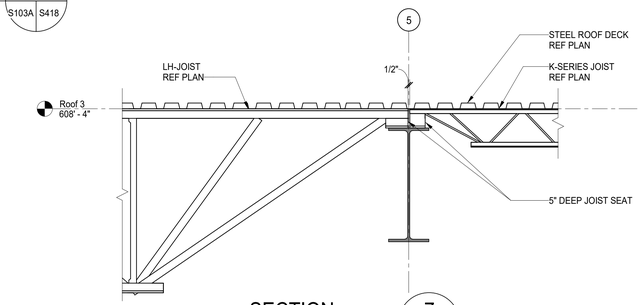
SECTION 4 — 3/4" = 1'-0" — S103B | S418



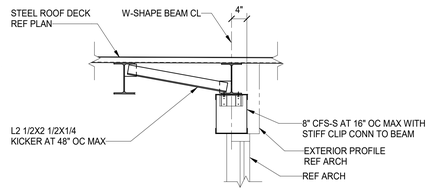
SECTION 5 — 3/4" = 1'-0" — S103B | S418



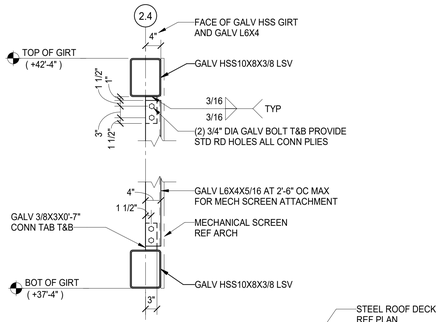
SECTION 6 — 3/4" = 1'-0" — S103B | S418

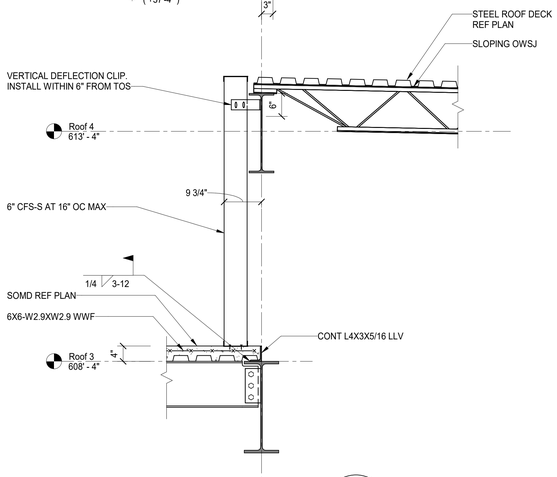


SECTION 7 — 3/4" = 1'-0" — S103A | S418

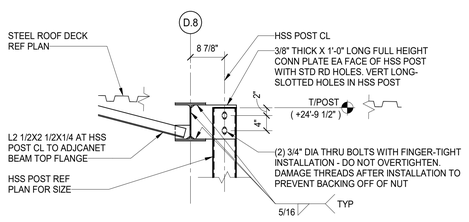


SECTION 8 — 3/4" = 1'-0" — S103A | S418

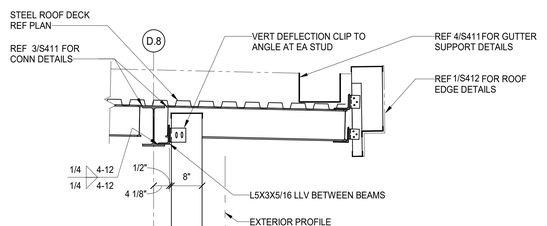




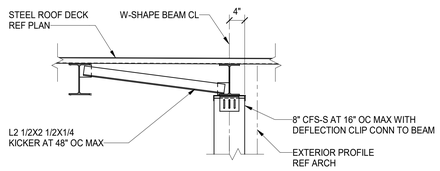
SECTION 12 — 3/4" = 1'-0" — S103B | S418



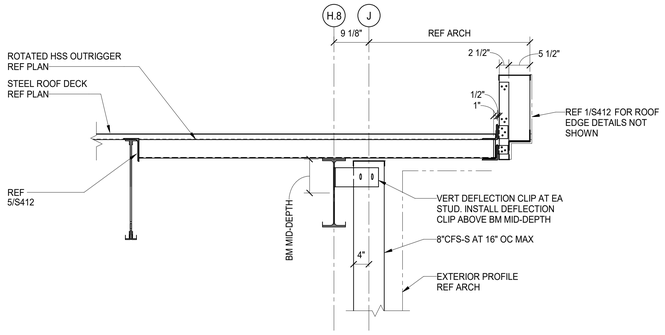
SECTION 9 — 3/4" = 1'-0" — S103A | S418



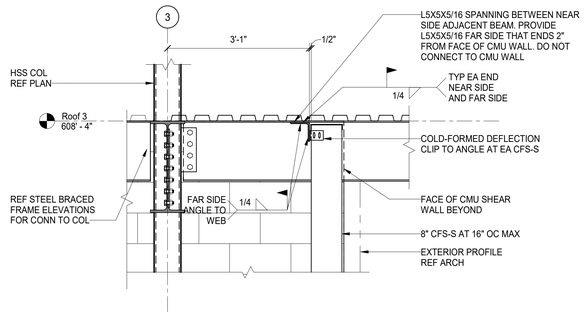
SECTION 10 — 3/4" = 1'-0" — S103A | S418



SECTION 11 — 3/4" = 1'-0" — S103A | S418



SECTION 13 — 3/4" = 1'-0" — S103B | S418



SECTION 14 — 3/4" = 1'-0" — S103B | S418

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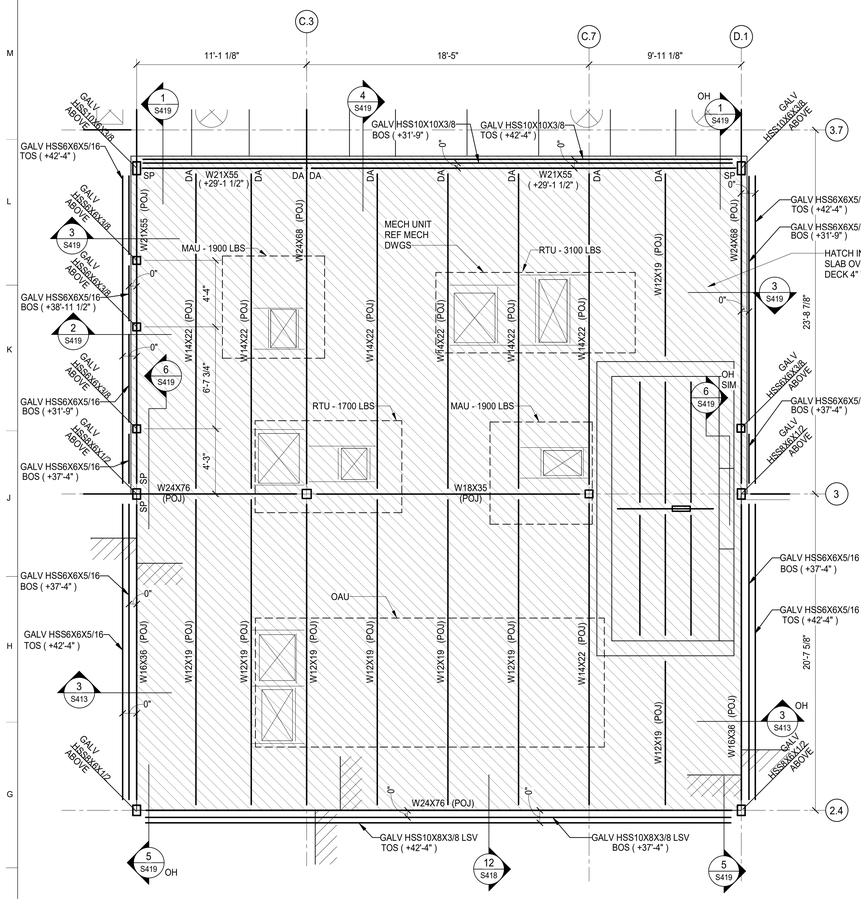
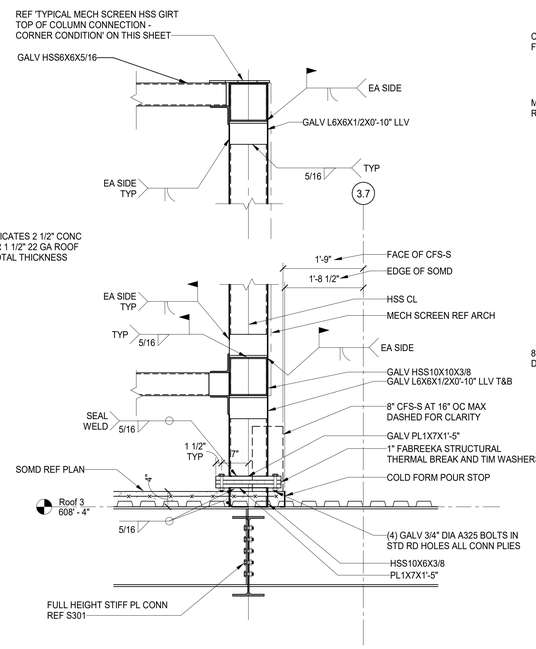


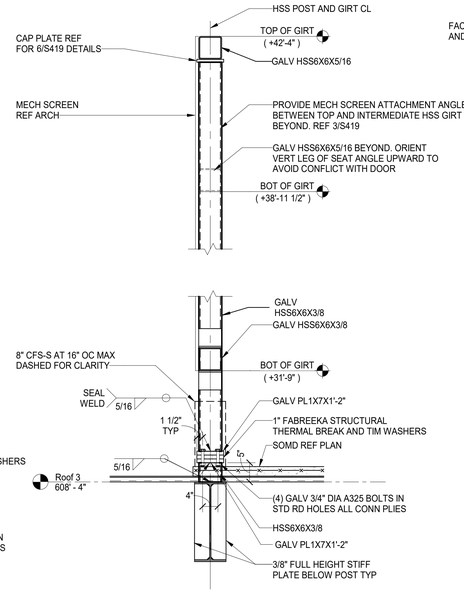
NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

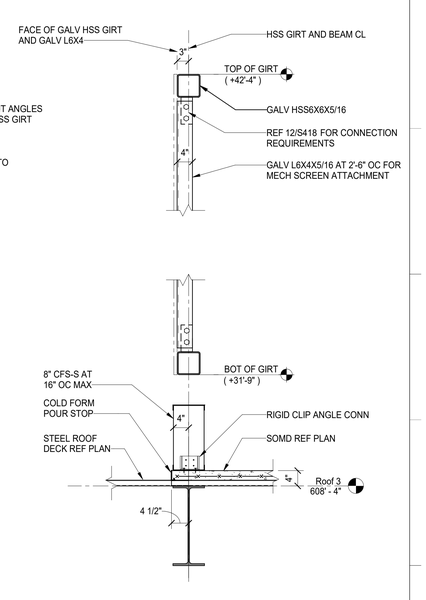
DETAIL A
1/4" = 1'-0"
S103B | S419



SECTION 1
3/4" = 1'-0"
S419 | S419



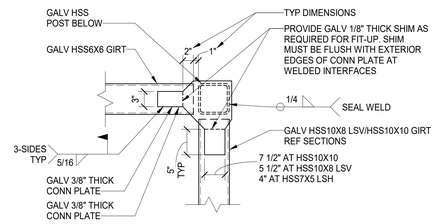
SECTION 2
3/4" = 1'-0"
S419 | S419



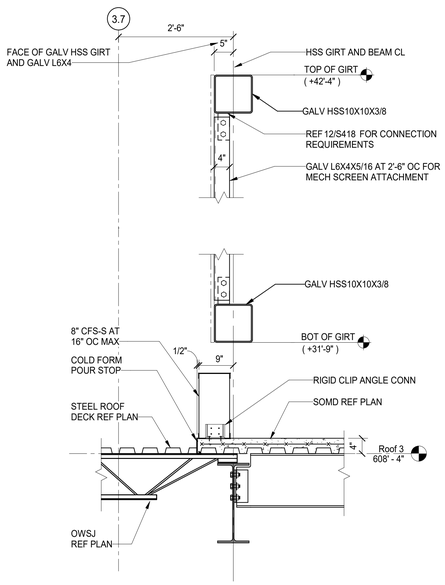
SECTION 3
3/4" = 1'-0"
S419 | S419

SECTION 6
3/4" = 1'-0"
S419 | S419

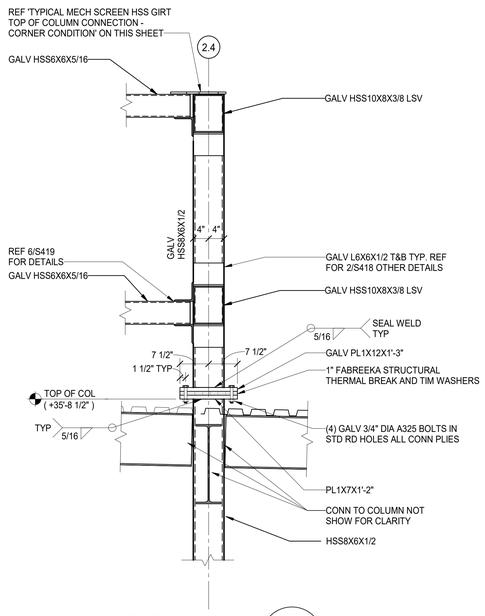
TYPICAL MECH SCREEN HSS GIRT TOP OF COLUMN CONNECTION



TYPICAL MECH SCREEN HSS GIRT TOP OF COLUMN CONNECTION - CORNER CONDITION



SECTION 4
3/4" = 1'-0"
S419 | S419



SECTION 5
3/4" = 1'-0"
S419 | S419

NOTES:

1. HOT-DIP GALVANIZE ALL SCREEN WALL FRAMING AND CONNECTIONS

QUINN EVANS

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SUITE 400
RICHMOND, VA 23220

v 804.788.4774

QUINNEVANS.COM

DUNBAR

1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

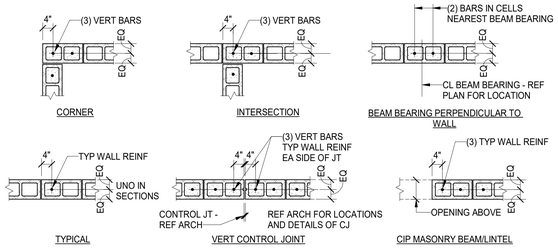
QEA No.41911390

BID DOCUMENTS
10/08/2024

ROOF FRAMING SECTIONS AND DETAILS

S419

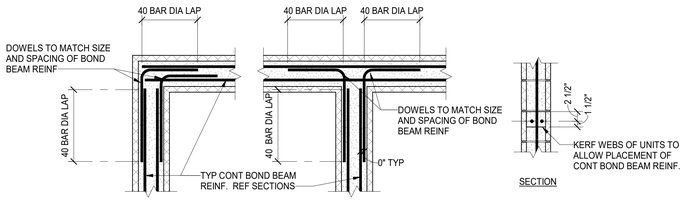
PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
PLOTTING DATE & TIME: 10/1/2024 9:48:24 AM



TYPICAL CONCRETE MASONRY REINFORCING DETAILS

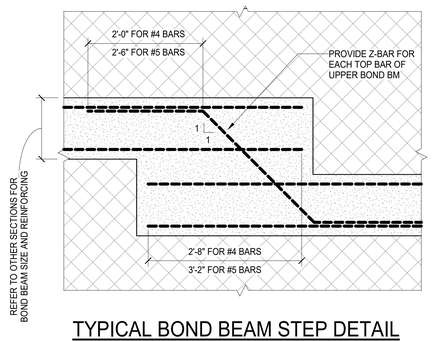
NTS.

1. REINFORCEMENT SHOWN SHALL BE THE SAME SIZE AS INIDCATED IN SECTION FOR THE TYPICAL WALL REINFORCEMENT. IF NOT SHOWN, REINFORCEMENT SHALL BE (1) #5 MIN.
2. REINFORCEMENT SHOWN IS TYPICAL UNLESS OTHERWISE NOTED IN SECTIONS.
3. SOLID GROUT ALL CELLS CONTAINING REINFORCEMENT.
4. PROVIDE DOWELS TO MATCH REINFORCMENT SHOWN INTO FOUNDATION.



TYPICAL BOND BEAM REINFORCING DETAILS

NTS.

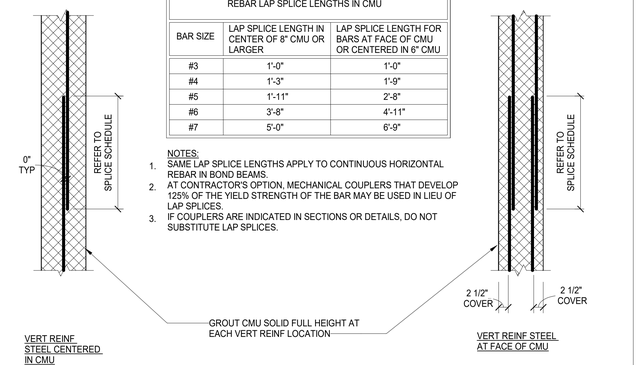


TYPICAL BOND BEAM STEP DETAIL

3/4"=1'-0"

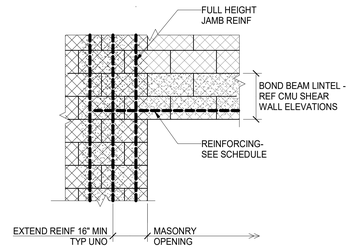
REBAR LAP SPLICE LENGTHS IN CMU		
BAR SIZE	LAP SPLICE LENGTH IN CENTER OF 8" CMU OR LARGER	LAP SPLICE LENGTH FOR BARS AT FACE OF CMU OR CENTERED IN 6" CMU
#3	1'-0"	1'-0"
#4	1'-3"	1'-9"
#5	1'-11"	2'-8"
#6	3'-8"	4'-11"
#7	5'-0"	6'-9"

NOTES:
1. SAME LAP SPLICE LENGTHS APPLY TO CONTINUOUS HORIZONTAL REBAR IN BOND BEAMS.
2. AT CONTRACTOR'S OPTION, MECHANICAL COUPLERS THAT DEVELOP 125% OF THE YIELD STRENGTH OF THE BAR MAY BE USED IN LIEU OF LAP SPLICES.
3. IF COUPLERS ARE INDICATED IN SECTIONS OR DETAILS, DO NOT SUBSTITUTE LAP SPLICES.



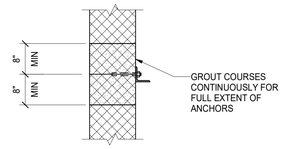
TYPICAL MASONRY WALL REINF DETAILS AND SPLICES

3/4" = 1'-0"



TYPICAL JAMB ELEVATION - REINFORCED MASONRY LINTEL

NO SCALE



TYPICAL WALL GROUTING AT POST- INSTALLED ANCHORS

3/4"=1'-0"

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RICHMOND, VA 23220
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No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

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10/08/2024

TYPICAL CMU WALL DETAILS

S501

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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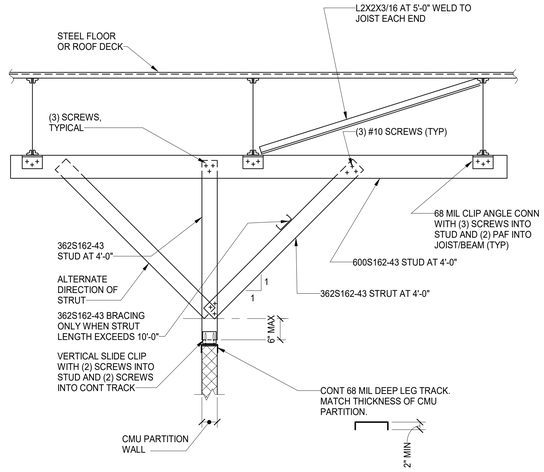
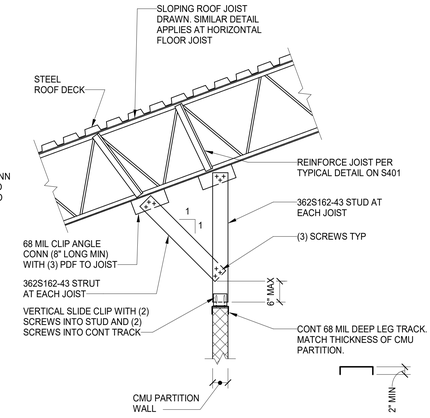


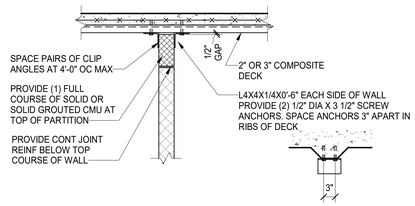
WALL PARALLEL TO JOIST

3/4" = 1'-0"



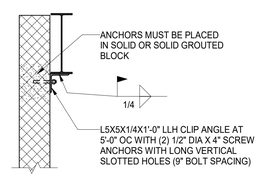
WALL PERPENDICULAR TO JOIST

3/4" = 1'-0"



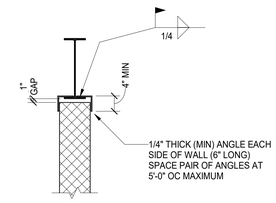
PARTITION WALL BRACING WHERE WALL CAN BE BRACED BY SLAB ABOVE

3/4" = 1'-0"



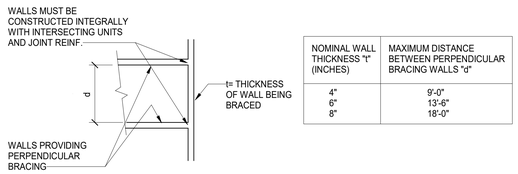
PARTITION WALL BRACING WHERE WALL PASSES CLOSE BY BEAM

3/4" = 1'-0"



PARTITION WALL BRACING WHERE WALL IS CENTERED BELOW BEAM

3/4" = 1'-0"



NOMINAL WALL THICKNESS "t" (INCHES)	MAXIMUM DISTANCE BETWEEN PERPENDICULAR BRACING WALLS "d"
4"	9'-0"
6"	13'-6"
8"	18'-0"

MASONRY PARTITION WALLS BRACED BY INTERSECTING MASONRY WALL (SPANNING HORIZONTALLY)

NOTES:

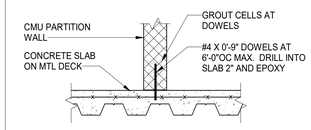
1. **DETAIL DOES NOT APPLY TO WALLS WITH CONTROL JOINTS OR OPENINGS.**
2. BRACE ALL INTERIOR NON-LOAD BEARING MASONRY PARTITION WALLS WITH EITHER INTERSECTING MASONRY PARTITION WALLS (SPANNING HORIZONTALLY) OR WITH BRACES TO STRUCTURAL FRAMING AT TOP OF PARTITION (SPANNING VERTICALLY).
3. BRACE TOP OF PARTITION WALLS SPANNING VERTICALLY BY ONE OF THE METHODS INDICATED IN THESE TYPICAL DETAILS UNLESS OTHERWISE INDICATED.
4. REFER TO ARCHITECTURAL DRAWINGS FOR PARTITION TYPES AND CLOSURE/ FIRE SAFING CONDITIONS AT TOP OF WALL.

NOMINAL WALL THICKNESS "t" (INCHES)	MAXIMUM HEIGHT PARTITION WALL OF UNGROUTED UNITS	MAXIMUM HEIGHT PARTITION WALL OF SOLID OR SOLID GROUTED UNITS
4"	8'-0"	11'-0"
6"	12'-0"	17'-0"
8"	16'-0"	23'-0"

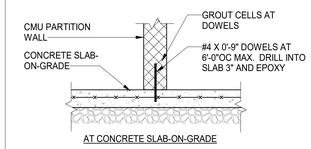
MASONRY PARTITION WALLS BRACED TO FLOOR OR ROOF FRAMING ABOVE (SPANNING VERTICALLY)

NOTES:

1. **DETAIL DOES NOT APPLY TO WALLS WITH CONTROL JOINTS OR OPENINGS.**
2. BRACE ALL INTERIOR NON-LOAD BEARING MASONRY PARTITION WALLS WITH EITHER INTERSECTING MASONRY PARTITION WALLS (SPANNING HORIZONTALLY) OR WITH BRACES TO STRUCTURAL FRAMING AT TOP OF PARTITION (SPANNING VERTICALLY).
3. BRACE TOP OF PARTITION WALLS SPANNING VERTICALLY BY ONE OF THE METHODS INDICATED IN THESE TYPICAL DETAILS UNLESS OTHERWISE INDICATED.
4. REFER TO ARCHITECTURAL DRAWINGS FOR PARTITION TYPES AND CLOSURE/ FIRE SAFING CONDITIONS AT TOP OF WALL.



AT CONCRETE SLAB ON METAL DECK



AT CONCRETE SLAB-ON-GRADE

TYPICAL ANCHORAGE AT BASE OF UNREINFORCED CMU WALLS

NTS

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MPK

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL CMU WALL DETAILS

S502

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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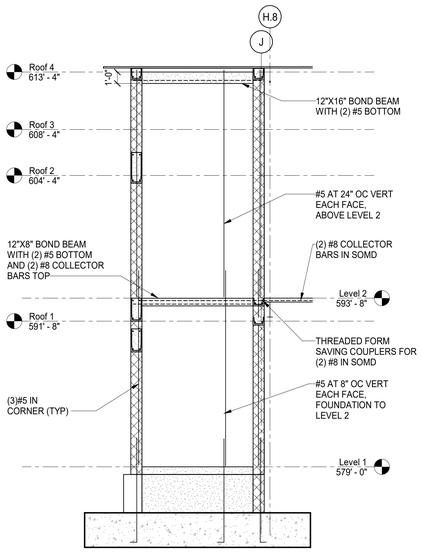
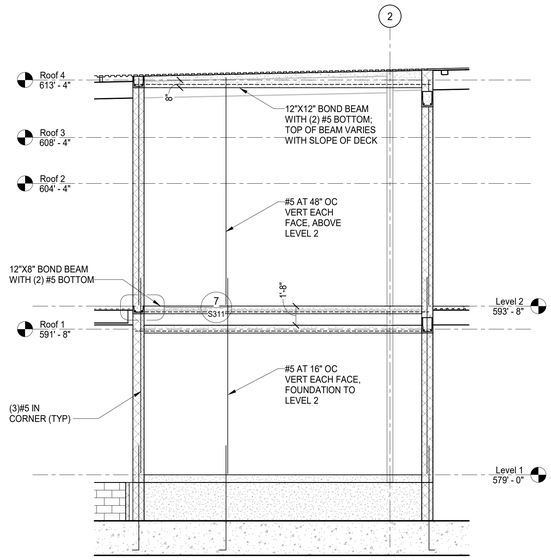


SECTION 1
3/16" = 1'-0"
S101B | S503



SECTION 2
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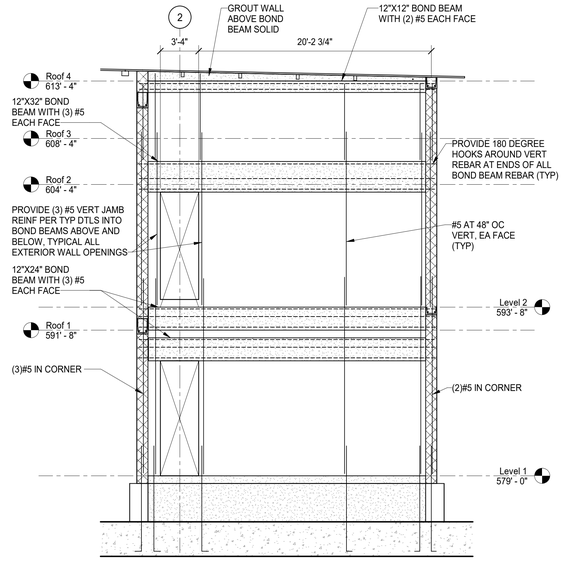
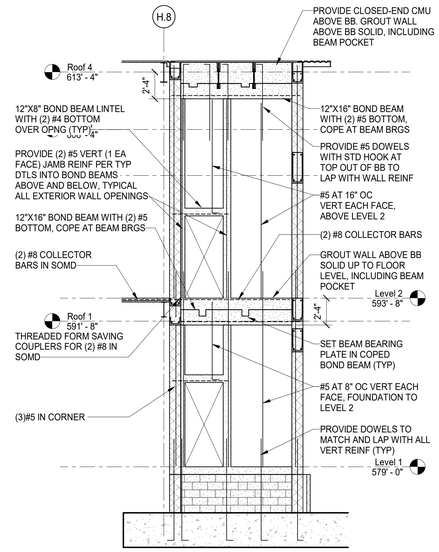
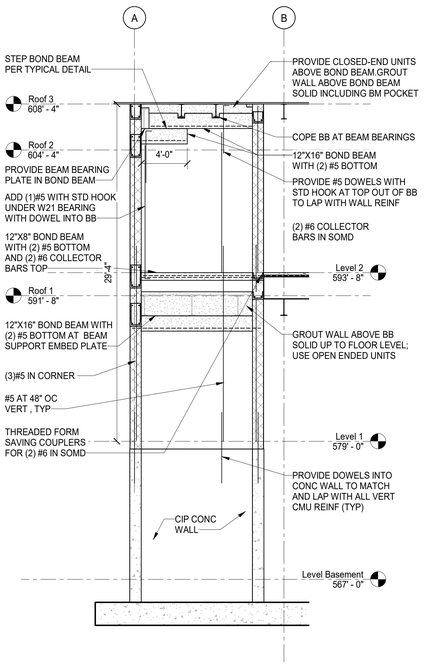
S101B | S503



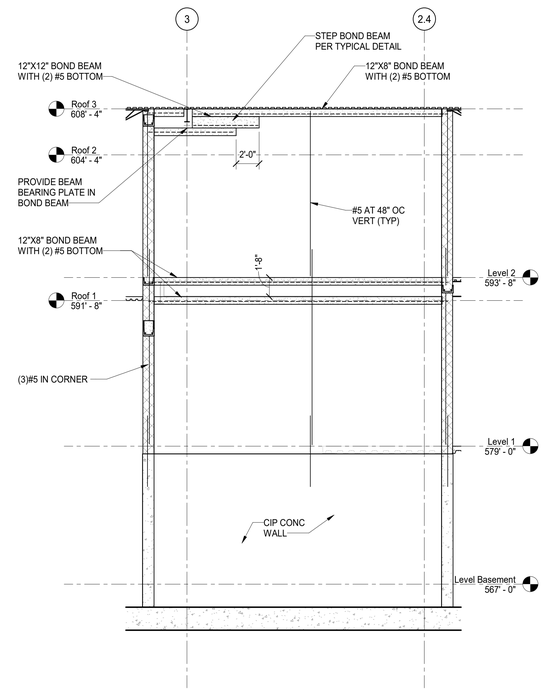
SECTION 3
3/16" = 1'-0"
S101B | S503



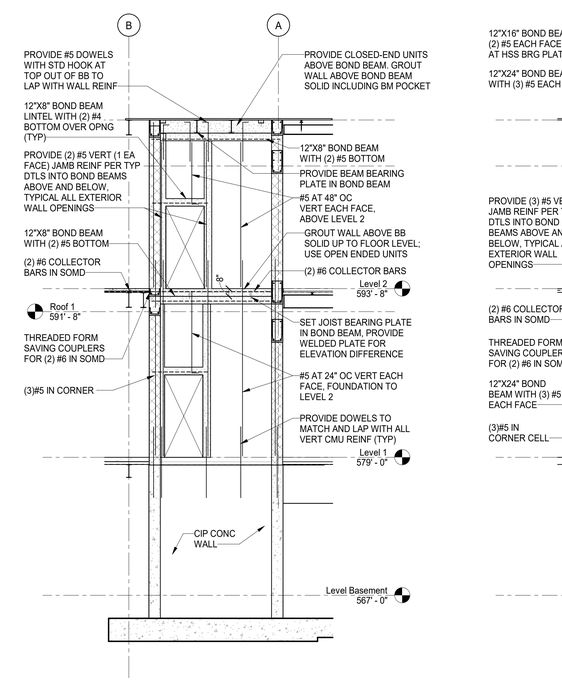
SECTION 4
3/16" = 1'-0"
S101B | S503



SECTION 5
3/16" = 1'-0"
S100B | S503



SECTION 6
3/16" = 1'-0"
S100B | S503



SECTION 7
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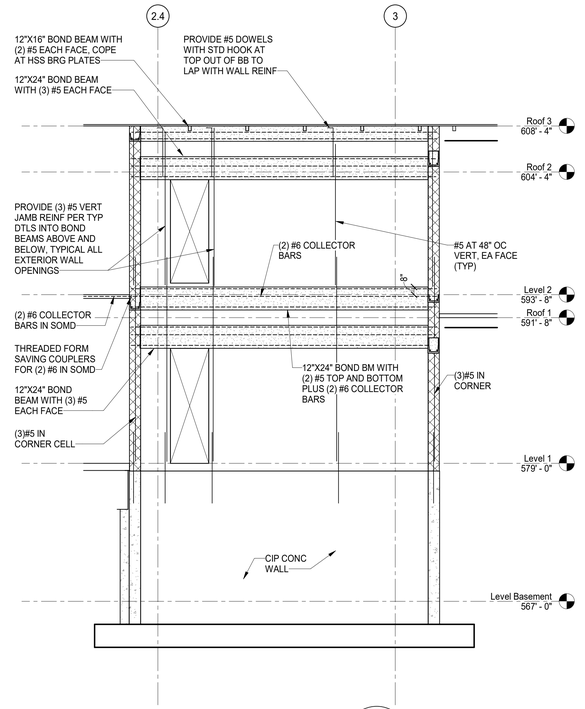
S100B | S503



SECTION 8
3/16" = 1'-0"
S100B | S503

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RICHMOND, VA 23220
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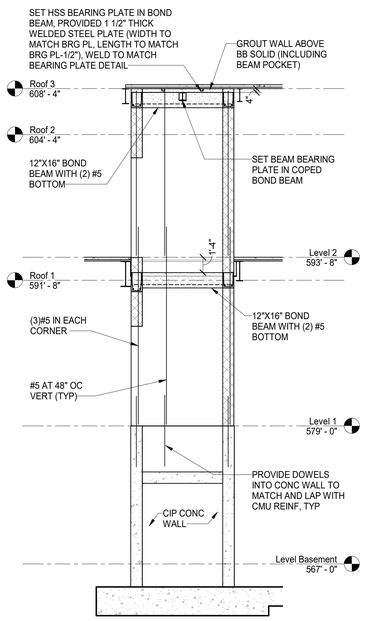
DRAWN BY: TFG

QEA No.41911390

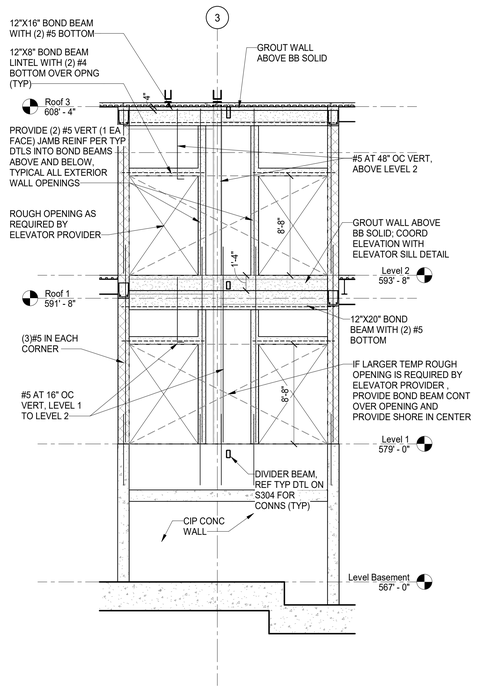
BID DOCUMENTS
10/08/2024

CMU SHEAR WALL ELEVATIONS

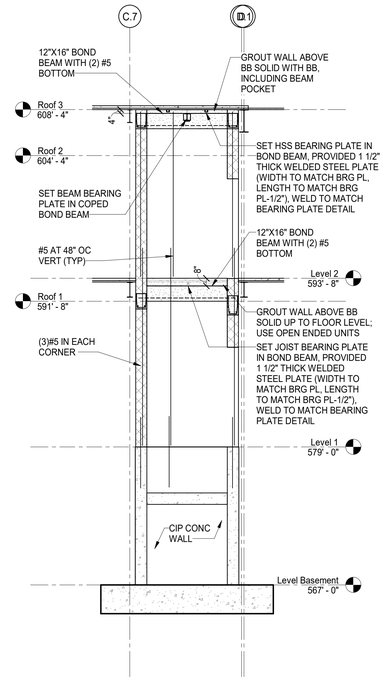
S503



SECTION 1
3/16" = 1'-0"
S100B | S504



SECTION 2
3/16" = 1'-0"
S100B | S504



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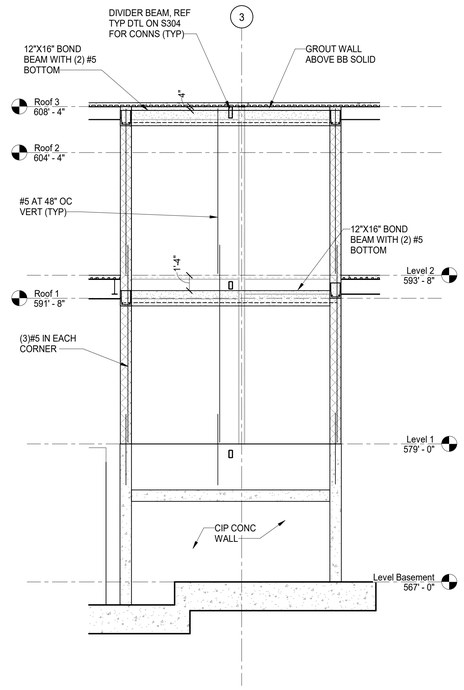
S100B | S504



SECTION 4
3/16" = 1'-0"
S100B | S504

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CMU SHEAR WALL ELEVATIONS

S504

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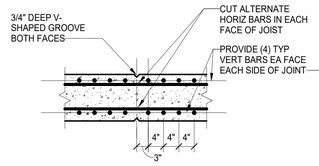
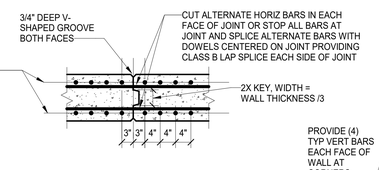


WALL CONTROL JOINT

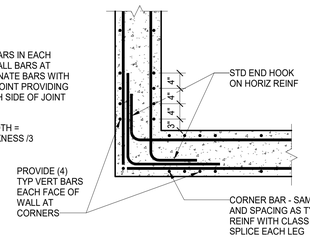
NO SCALE



WALL CONSTRUCTION JOINT

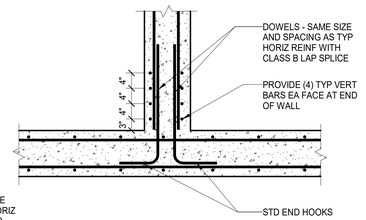
NO SCALE

NOTE:
PLACE WALL CONTROL JOINTS AS INDICATED ON PLAN OR 25'-0" OC (MAX IF NOT INDICATED). LOCATE CONTROL JOINTS A MINIMUM OF 36" FROM EDGE OF ANY EMBED PLATE FOR BEAM-TO-WALL CONNECTION. DO NOT PLACE WALL CONSTRUCTION JOINTS IN SHEAR WALLS UNO.



WALL CORNER

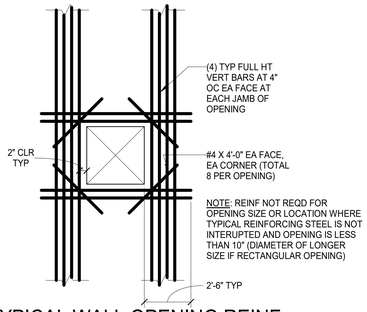
NO SCALE



WALL INTERSECTION

NO SCALE

TYPICAL CONCRETE WALL REINFORCING DETAILS - PLAN VIEWS - TWO LAYERS



TYPICAL WALL OPENING REINF

NO SCALE

TYPICAL CONCRETE WALL REINFORCING BAR LAP SPLICES

BAR SIZE	VERTICAL BAR LAP SPLICE LENGTH	HORIZONTAL BAR LAP SPLICE LENGTH
#4	1'-4"	1'-8"
#5	1'-8"	2'-0"
#6	2'-0"	2'-6"
#7	3'-2"	4'-0"
#8	4'-0"	5'-0"

1. LAP SPLICE LENGTHS ARE MINIMUMS FOR WALLS IN f'c=4000 PSI NORMAL WEIGHT CONCRETE OR GREATER STRENGTH.
2. REFER TO OTHER SECTIONS AND DETAILS FOR MORE STRINGENT REQUIREMENTS.

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools
2775 Hydraulic Rd.
Charlottesville, VA 22901

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MKJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

TYPICAL CONCRETE DETAILS

S601

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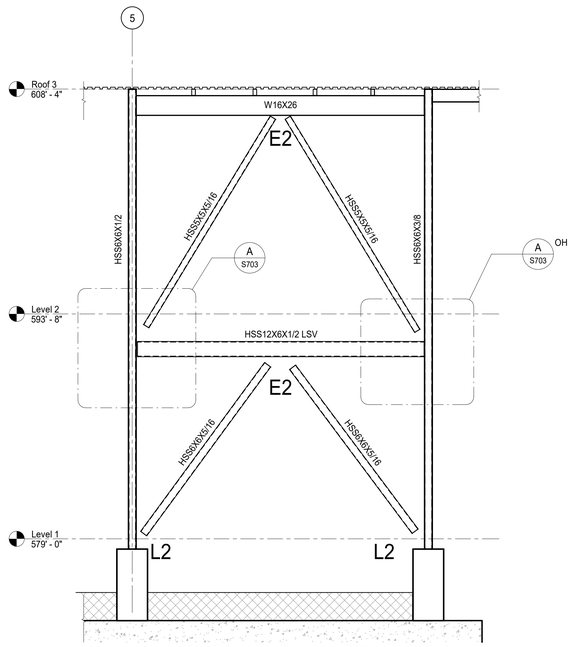
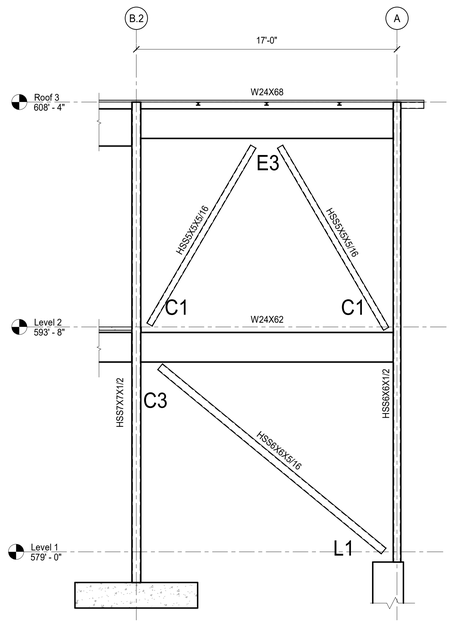


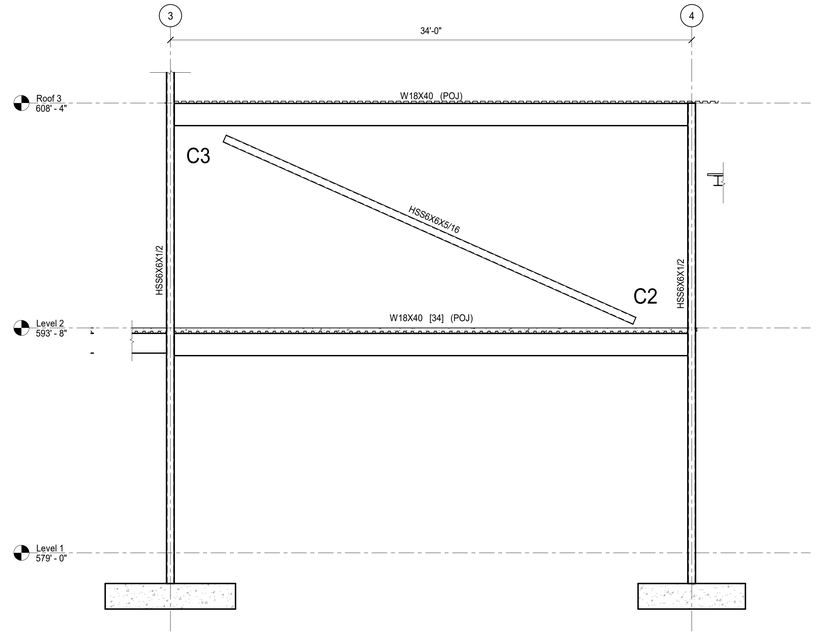
AREA A - BRACED FRAME ELEVATION - GRID LINE 'A'

SBF-1 — 1/4" = 1'-0" — 1 / S101A | S701



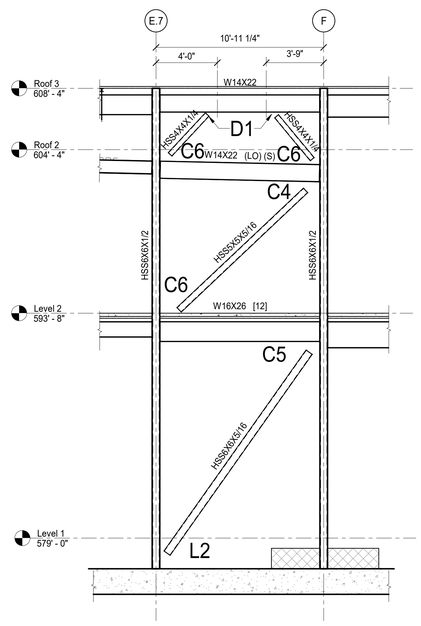
AREA B - BRACED FRAME ELEVATION - GRID LINE '5'

SBF-2 — 1/4" = 1'-0" — 2 / S101A | S701



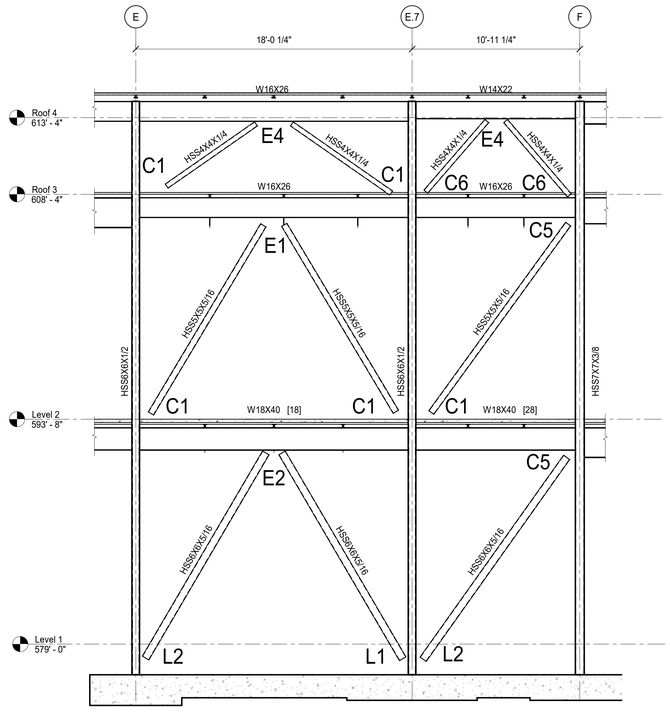
AREA B - BRACED FRAME ELEVATION - GRID LINE 'E.7'

SBF-3 — 1/4" = 1'-0" — 3 / S101B | S701



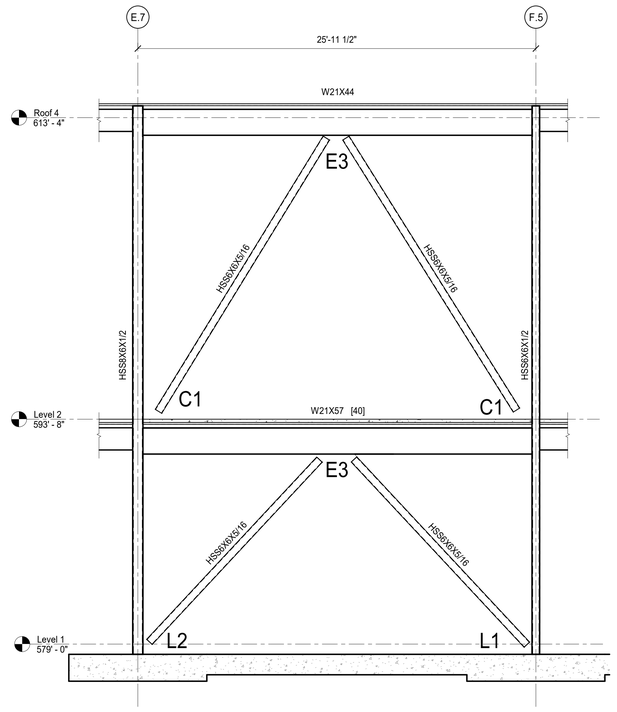
AREA B - BRACED FRAME ELEVATION - GRID LINE '4'

SBF-4 — 1/4" = 1'-0" — 4 / S101B | S701



AREA B - BRACED FRAME ELEVATION - GRID LINE '3'

SBF-5 — 1/4" = 1'-0" — 5 / S101B | S701



AREA B - BRACED FRAME ELEVATION - GRID LINE '2'

SBF-6 — 1/4" = 1'-0" — 6 / S101B | S701

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RICHMOND, VIRGINIA 23225
(804) 323-0656
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COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
10/08/2024
PROFESSIONAL ENGINEER

Albemarle County Public Schools

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IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

Albemarle County Public Schools

2775 Hydraulic Rd,
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No	Date	Description

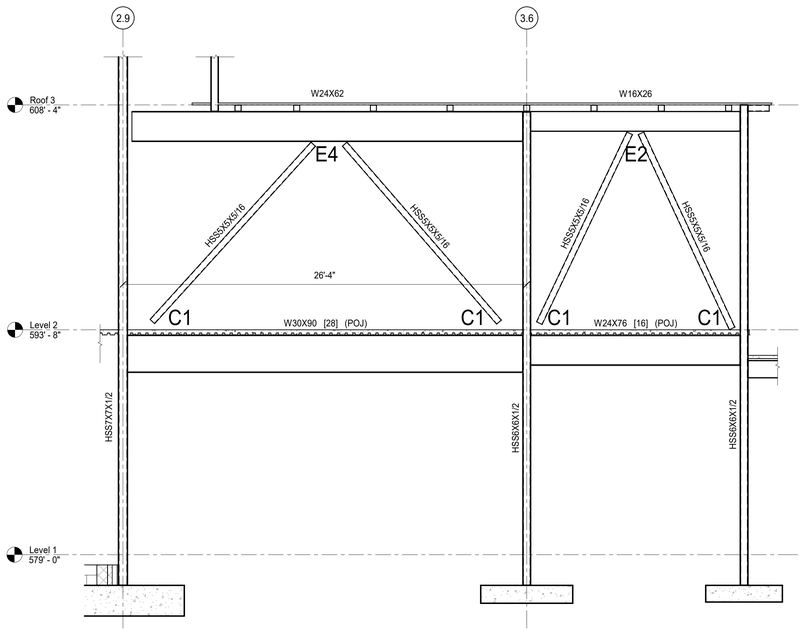
PROJECT MANAGER: MPK
DRAWN BY: MYJ

QEA No.41911390

BID DOCUMENTS
10/08/2024

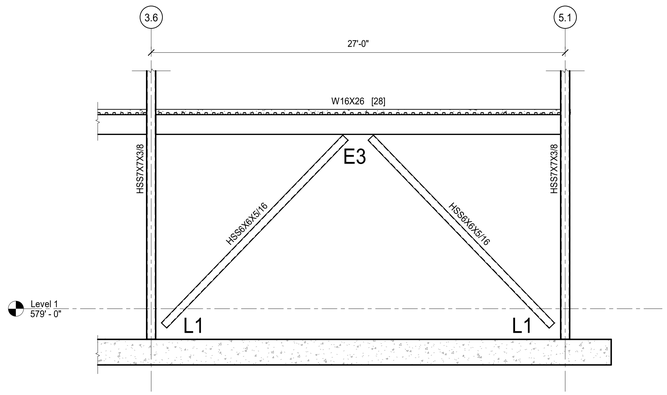
BRACED FRAME ELEVATIONS

S701



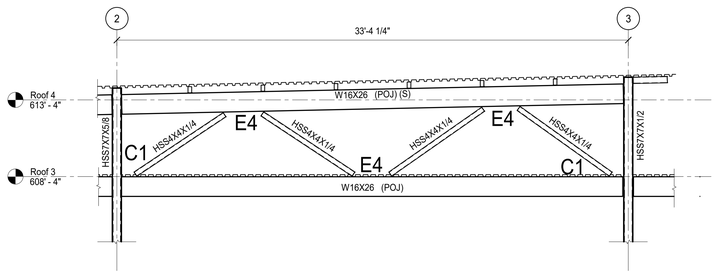
AREA B - BRACED FRAME ELEVATION - GRID LINE 'H.9'

SBF-7 — 1/4" = 1'-0" — 1 / S101B | S702



AREA B - BRACED FRAME ELEVATION - GRID LINE 'J.2'

SBF-8 — 1/4" = 1'-0" — 2 / S101B | S702



AREA B - BRACED FRAME ELEVATION - GRID LINE 'B'

SBF-9 — 1/4" = 1'-0" — 3 / S103B | S702

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RICHMOND, VIRGINIA 23225
(804) 323-0656
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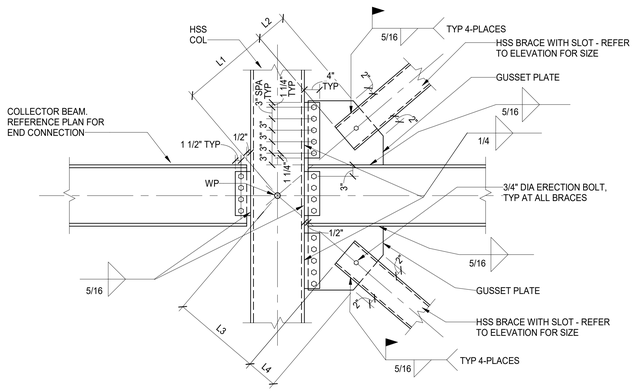
BID DOCUMENTS
10/08/2024

BRACED FRAME ELEVATIONS

S702

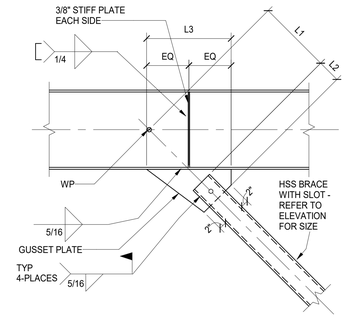


BRACING CONNECTION TYPE C

NOTE:
1. REF 'GENERAL BRACING CONNECTION NOTES' FOR DETAILS NOT INDICATED IN DETAIL/TABLE

2. PROVIDE HST CONN WITH 1" BOLTS AT ALL BEAM CONN TO COLUMNS. USE STD ROUND HOLES IN ALL CONNECTION PLIES.

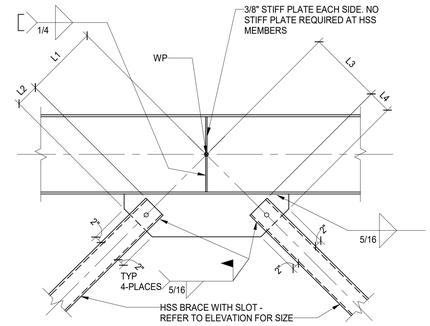
BRACING CONNECTION TYPE C											
	CONNECTION MARK										
DESCRIPTION	C1	C2	C3	C4	C5	C6					
LENGTH FROM WP, L1	2'-1"	2'-9"				1'-6"					
LENGTH OF WELD (BRACE TO GUSSET 1), L2	0'-6"	0'-6"				0'-6"					
LENGTH FROM WP, L3			2'-9"	1'-3"	1'-7"						
LENGTH OF WELD (BRACE TO GUSSET 2), L4			0'-6"	0'-6"	0'-6"						



BRACING CONNECTION TYPE D

NOTE:
REF 'GENERAL BRACING CONNECTION NOTES' FOR DETAILS NOT INDICATED IN DETAIL/TABLE

BRACING CONNECTION TYPE D						
	CONNECTION MARK					
DESCRIPTION	D1					
LENGTH FROM WP, L1	1'-2"					
LENGTH OF WELD (BRACE TO GUSSET), L2	0'-6"					
LENGTH OF WELD (GUSSET TO BM), L3	1'-8"					



BRACING CONNECTION TYPE E

NOTE:
REF 'GENERAL BRACING CONNECTION NOTES' FOR DETAILS NOT INDICATED IN DETAIL/TABLE

BRACING CONNECTION TYPE E					
	CONNECTION MARK				
DESCRIPTION	E1	E2	E3	E4	
LENGTH FROM WP, L1	1'-0"	1'-3"	1'-7"	1'-11"	
LENGTH OF WELD (BRACE TO GUSSET), L2	0'-6"	0'-6"	0'-6"	0'-6"	
LENGTH FROM WP, L3	1'-0"	1'-3"	1'-7"	1'-11"	
LENGTH OF WELD (BRACE TO GUSSET), L4	0'-6"	0'-6"	0'-6"	0'-6"	

GENERAL BRACING CONNECTION NOTES

1. PROVIDE TYP ANGLE SIZES INDICATED BELOW AT ALL SCHEDULED BRACING CONN, UNO:

   TYP AT BEAM TO WIDE FLANGE COLUMN CONN: (2) L4X3 1/2X3/8 TO COL FLANGE
   (2) L3 1/2X3 1/2X3/8 TO COL WEB

   TYP AT GUSSET PLATE TO WIDE FLANGE COLUMN CONN: (2) L4X3 1/2X5/16 TO COL FLANGE
   (2) L3 1/2X3 1/2X5/16 TO COL WEB

   TYP AT BEAM TO HSS COLUMN CONN: 3/8" THICK SHEAR TAB, UNO.

   TYP AT GUSSET PLATE TO HSS COLUMN CONN: 3/8" THICK SHEAR TAB

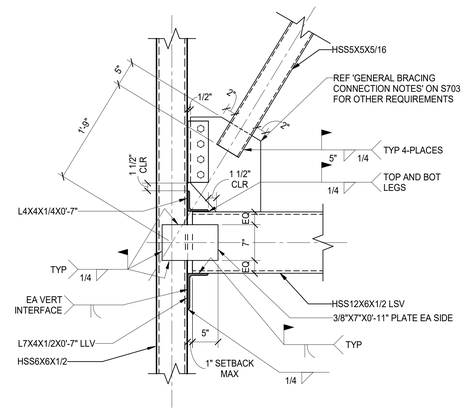
2. ALL ANGLES ARE ASTM A572-GR 50 WITH 3/4" DIA FULLY PRE-TENSIONED BOLTS, UNO. PROVIDE SHORT HORIZONTAL SLOTTED HOLES IN ANGLES ONLY.

3. ALL SHEAR TABS ARE ASTM A572-GR 50 WITH 3/4" DIA BOLTS, UNO.
   PROVIDE STD RD HOLES IN ALL CONN PLIES. ALL HST CONN ARE TO BE MADE WITH 1" DIA BOLTS.

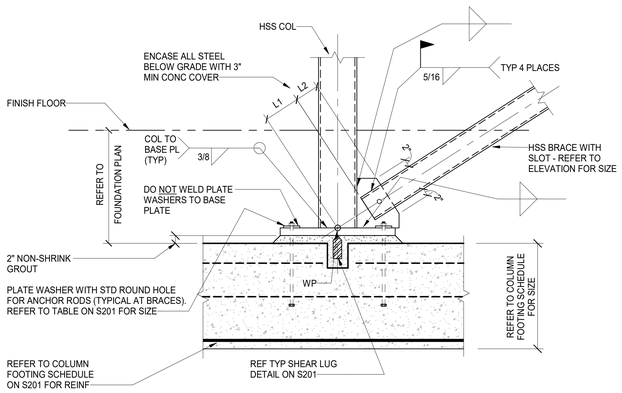
4. AT BEAM TO COLUMN CONNECTIONS:
   PROVIDE MAXIMUM NUMBER OF BOLT ROWS THAT WILL FIT WITHIN THE "T" DIMENSION AT 3" SPACING.

5. AT GUSSET TO COLUMN CONNECTIONS:
   PROVIDE MAXIMUM NUMBER OF BOLT ROWS THAT WILL FIT WITHIN EXTENT OF GUSSET PLATE AT 3" SPACING.

6. ALL GUSSET PLATES ARE ASTM A572-50, 1/2" THICK, UNO.



DETAIL A
1" = 1'-0"
S701 | S703



BRACING CONNECTION TYPE L

NOTES:
REF 'GENERAL BRACING CONNECTION NOTES' FOR DETAILS NOT INDICATED IN DETAIL/TABLE

BRACING CONNECTION TYPE L			
	CONNECTION MARK		
DESCRIPTION	L1	L2	
LENGTH FROM WP, L1	1'-0"	1'-4"	
LENGTH OF WELD (BRACE TO GUSSET), L2	0'-6"	0'-6"	
WELD SIZE (GUSSET TO COL)	5/16	5/16	
WELD SIZE (GUSSET TO BASE PL)	5/16	5/16	

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1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
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BID DOCUMENTS
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BRACED FRAME DETAILS

S703

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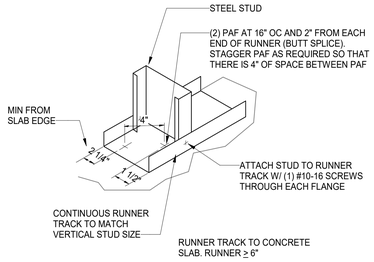
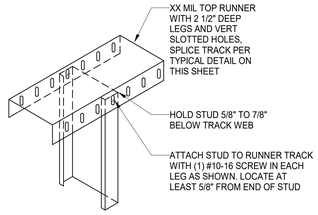
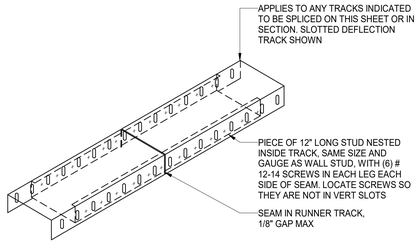


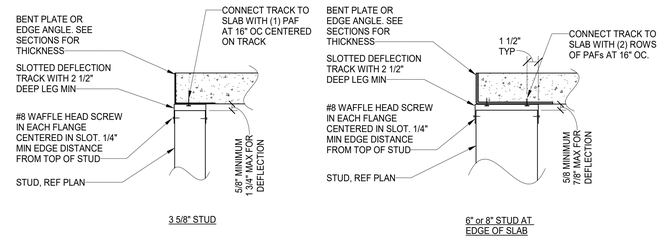
TYPICAL BOTTOM RUNNER TRACK TO CONCRETE SLAB EDGE (STUDS >= 6")



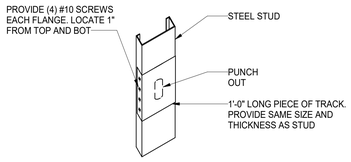
TYPICAL TOP OF STUD TO DEFLECTION TRACK CONNECTION



RUNNER TRACK SPLICE DETAIL

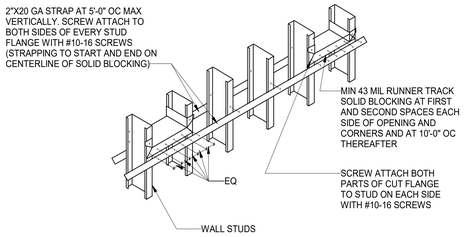


TOP DEFLECTION TRACK TO SLAB EDGE

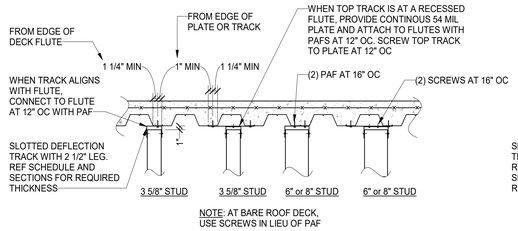


TYPICAL STUD REINFORCING DETAIL

1. APPLIES WHERE PUNCHOUT OCCURS NEAR CLIP ANGLE CONNECTION.
2. APPLIES WHERE PUNCHOUT OCCURS AT KICKER CONNECTION.
3. APPLIES WHERE PUNCHOUT OCCURS AT CONTINUOUS TRACK AT TOP OR BOTTOM OF WALL.

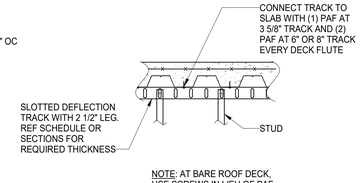


TYPICAL STEEL STUD WALL BRIDGING DETAIL (STUDS GREATER THAN 6" DEEP)



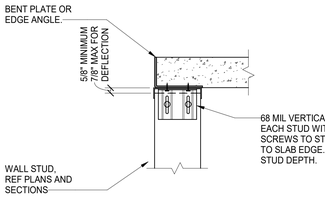
NOTE: AT BARE ROOF DECK, USE SCREWS IN LIEU OF PAF

TOP DEFLECTION TRACK TO COMPOSITE METAL DECK PARALLEL TO STUD WALL

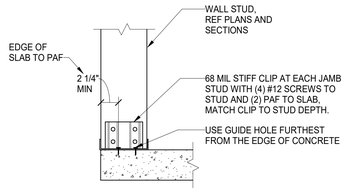


NOTE: AT BARE ROOF DECK, USE SCREWS IN LIEU OF PAF

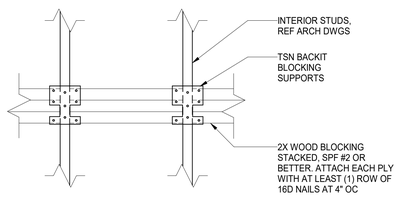
TOP DEFLECTION TRACK TO COMPOSITE METAL DECK PERPENDICULAR TO STUD WALL



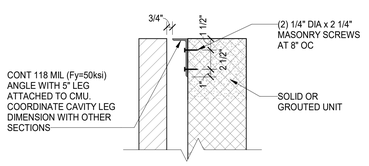
TOP OF EXTERIOR DOOR AND WINDOW JAMB CONNECTION



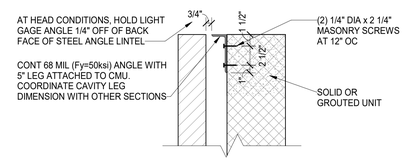
BOTTOM OF EXTERIOR DOOR AND WINDOW JAMB CONNECTION



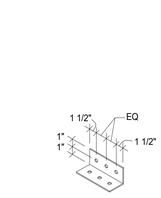
TYPICAL INTERIOR WALL BLOCKING DETAIL FOR CONNECTIONS OF HANDRAILS, GRAB BARS, AND HEAVY WALL MOUNTED OBJECTS



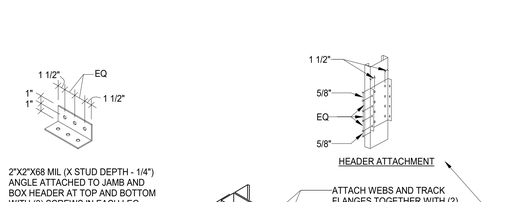
TYPICAL CFS-S CLOSURE ANGLE DETAIL AT ALL SILLS OF MASONRY CAVITY WALLS



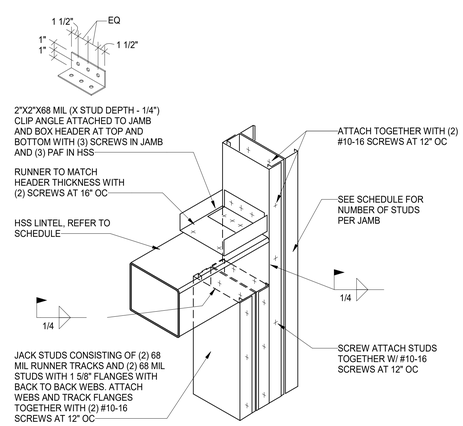
TYPICAL CFS-S CLOSURE ANGLE DETAIL AT ALL JAMBS AND HEADS OF MASONRY CAVITY WALLS



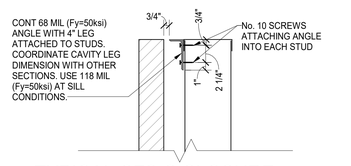
TYPICAL WINDOW SILL TO JAMB CONNECTION (EXTERIOR)



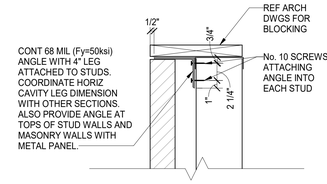
TYPICAL DOOR OR WINDOW HEADER TO JAMB CONNECTION (EXTERIOR)



TYPICAL HSS HEADER TO JAMB CONNECTION (EXTERIOR)



TYPICAL CFS-S CLOSURE ANGLE DETAIL AT ALL SILLS, JAMBS AND HEADS AT STUD WALLS WITH MASONRY VENEER (PROVIDE SIMILAR DETAIL AT METAL PANEL CONDITION)



TYPICAL CFS-S CLOSURE ANGLE DETAIL AT TOP OF PARAPETS OF STUD WALLS

TYPICAL COLD-FORMED STEEL CONNECTION DETAILS INDICATE MINIMUM EXPECTED CONNECTIONS. ACTUAL MEMBER AND CONNECTION DESIGN SHALL COMPLY WITH LOADS INDICATED ON S001.

PATH & FILENAME: Autodesk Docs://Albemarle County High School Center II/STRUCT_HSCII_R23.rvt
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QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER
10/08/2024

Albemarle County Public Schools
2775 Hydraulic Rd,
Charlottesville, VA 22901

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262
STATE PROJECT NO. 002-88-01-100
Albemarle County Public Schools

No	Date	Description

PROJECT MANAGER: MPK
DRAWN BY: MKJ

QEA No.41911390

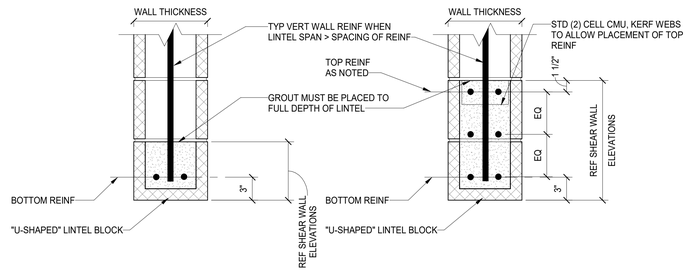
BID DOCUMENTS
10/08/2024

TYPICAL COLD-FORMED STEEL DETAILS

S801

LINTEL SCHEDULE NOTES:

1. ALL STEEL ANGLE LINTELS SHALL BE ASTM A572-50 STEEL. ALL W- SHAPES SHALL BE ASTM A992 STEEL.
2. ALL STEEL LINTELS IN EXTERIOR WALLS SHALL BE GALVANIZED.
3. REINFORCING BARS IN CMU BOND BEAMS SHALL BE ASTM A615 GRADE 60.
4. FILL ALL BOND BEAMS WITH f'c AT 28 DAY, 2000 PSI MINIMUM PORTLAND CEMENT GROUT. SHORE BOND BEAMS UNTIL GROUT HAS CURED.
5. BEAR ALL CMU BOND BEAMS AND STEEL LINTELS 8" ON SOLID MASONRY EACH END UNLESS NOTED OTHERWISE.
6. WHERE STEEL COLUMN DOES NOT ALLOW FULL 8" OF LINTEL BEARING, WELD LINTEL TO COLUMN WITH 3/16" FILLET WELD ALL AROUND, UNLESS NOTED OTHERWISE.
7. WHERE LINTELS BEAR PERPENDICULAR TO CAVITY WALLS, THE BEARING LENGTH BEGINS AT FACE OF CMU INSIDE CAVITY (REF "TYPICAL PLAN DETAIL AT BEARING PLATE" ON S....)
8. ALL STEEL STUD LINTELS SHALL BEAR ON (1) JACK STUD MINIMUM AND FRAME INTO (2) FULL HEIGHT STUDS MINIMUM AT EACH END UNLESS OTHERWISE NOTED.
9. BOX SHAPED STEEL STUD LINTELS SHALL BE COMPRISED OF CONTINUOUS TRACKS AND STUD PIECES. NO SPLICES ARE ALLOWED. CONNECT PIECES OF BOX SHAPED LINTEL TOGETHER WITH NO. 10 SCREWS AT 12" OC. ALL LINTEL MEMBERS SHALL BE UNPUNCHED.
10. REFER TO PLANS FOR OTHER LINTEL LOCATIONS.
11. FOR LINTELS NOT INDICATED (SUCH AS THOSE REQUIRED FOR MECHANICAL DUCTS) USE A SIMILAR LINTEL TYPE INDICATED ABOVE FOR THE SIMILAR WALL TYPE AND SPAN LENGTH.
12. REFER TO S501 FOR MASONRY WALL REINFORCING DETAILS AT JAMBS OF OPENINGS.
13. WHEREVER LINTELS ARE SCHEDULED TO BE USED OVER ELECTRICAL PANEL BOARDS OR ANY RECESSED CABINETS WITH PIPES OR CONDUIT RISING VERTICALLY, INSTALL THE LINTEL A MINIMUM OF 8" (1 FULL BLOCK COURSE) ABOVE THE CEILING.
14. REFER TO SPECIFICATION FOR LINTELS IN NON- BEARING STEEL STUD WALLS.
15. ALL TRADES CUTTING HOLES IN NEW OR EXISTING CMU WALLS SHALL COORDINATE THEIR WORK WITH THE MASON SO THAT AN APPROPRIATE LINTEL MAY BE PROVIDED AT THE OPENING. AT LOCATIONS ABOVE CEILINGS, PRECAST CMU OR PRECAST CONCRETE LINTELS MAY BE SUBSTITUTED FOR BOND BEAM LINTELS INDICATED SO LONG AS THE SAME UNIT SIZE AND REINFORCING STEEL IS PROVIDED.



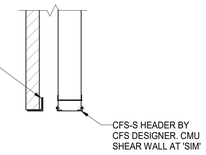
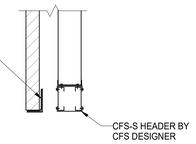
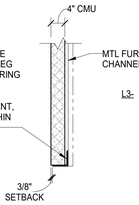
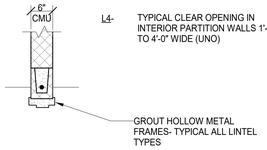
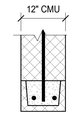
SINGLE LAYER REINFORCING MULTI-LAYERED REINFORCING

TYPICAL REINFORCED CMU LINTEL DETAIL

1 1/2" = 1'-0"

1. REFERENCE CMU SHEAR WALL ELEVATIONS ON S503 AND S504 FOR LOCATION AND REINFORCING

LINTEL SCHEDULE

MARK	CONFIGURATION	LOCATION
L1	L4X4X5/16, EXTEND 8" BEYOND OPENING EACH END 	AS INDICATED ON PLAN
L2	L6X4X5/16 LLV, EXTEND 8" BEYOND OPENING EACH END 	AS INDICATED ON PLAN
L3	L4X4X1/4. ORIENT ANGLE SUCH THAT THE VERT LEG IS WITHIN THE MTL FURRING CHANNEL LAYER. AT LOCATIONS WHERE FURRING IS NOT PRESENT, LOCATE VERT LEG WITHIN UNOCCUPIED SPACE. 	L3- TYPICAL OPENINGS IN 4" CMU PARTITION WALLS UP TO 4'-0" LONG
L4	6" WIDE X 8" DEEP CMU BOND BEAM WITH (1) #4 BOTTOM 	L4- TYPICAL CLEAR OPENING IN INTERIOR PARTITION WALLS 1'-0" TO 4'-0" WIDE (UNO)
L5	12" WIDE X 8" DEEP CMU BOND BEAM WITH (2) #4 BOTTOM 	L5 - TYPICAL CLEAR OPENING IN WALLS 1'-0" TO 4'-0" WIDE (UNO)
L6	12" WIDE X 8" DEEP CMU BOND BEAM WITH (2) #4 BOTTOM 	L6 - TYPICAL CLEAR OPENING IN WALLS 1'-0" TO 4'-0" WIDE (UNO)

QUINN EVANS
1840 WEST BROAD STREET
SUITE 400
RICHMOND, VA 23220
v 804.788.4774
QUINNEVANS.COM

DUNBAR
1025 BOULDERS PKWY, SUITE 310
RICHMOND, VIRGINIA 23225
(804) 323-0656
Project No.: 1912-27

COMMONWEALTH OF VIRGINIA
JEFFREY S. DAVIS
Lic. No. 026187
PROFESSIONAL ENGINEER

Albemarle County Public Schools

NEW CONSTRUCTION HIGH SCHOOL CENTER II

IFB No. 2025-IFB-1007262

STATE PROJECT NO. 002-88-01-100

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2775 Hydraulic Rd,
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PROJECT MANAGER: MPK
DRAWN BY: MKJ

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BID DOCUMENTS
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TYPICAL LINTEL SCHEDULE

S802

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