CITY OF CHARLOTTESVILLE DEPARTMENT OF NEIGHBORHOOD DEVELOPMENT SERVICES STAFF REPORT

APPLICATION FOR APPROVAL OF PRELIMINARY SITE PLAN

PLANNING COMMISSION REGULAR MEETING DATE OF PLANNING COMMISSION MEETING: March 11, 2014

Author of Staff Report: Brian Haluska **Date of Staff Report:** February 26, 2014 **Project Name:** 1000 West Main Street

Applicant: Campus Acquisitions Holdings, LLC

Applicant's Representative: Steve Driver, Terra Engineering

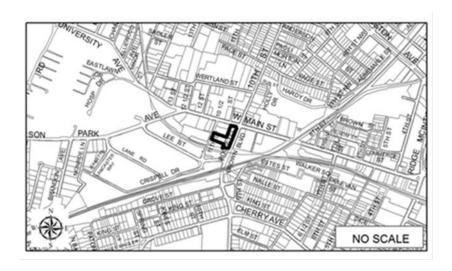
Applicable City Code Provisions: 34-800 - 34-827 (Site Plans), 34-867 (Landscape Plans) **Zoning District:** WMS – West Main South with Architectural Design Control District Overlay

and Parking Modified Zone Overlay

Date of Preliminary Site Plan Submission: October 16, 2013 **Date of Site Plan Review Conference:** November 6, 2013

Reason for Planning Commission Review: In conjunction with a Special Use Permit

Site Map



Legal Standard of Review

Approval of a site plan is a **ministerial** function, as to which the Planning Commission has little or no discretion. When an applicant has submitted a site plan that complies with the requirements of the City's Site Plan Ordinance, then approval of the plan **must** be granted. In the event the Planning Commission determines there are grounds upon which to deny approval of a site plan, the motion must clearly identify the deficiencies in the plan, that are the basis for the denial, by reference to **specific** City Code sections and requirements. Further, upon disapproval of a site plan, the Planning Commission must identify the modifications or corrections that would permit approval of the plan.

Executive Summary

Steve Driver of Terra Engineering, acting as agent for Campus Acquisitions Holdings, LLC, has submitted a site plan for a mixed use building at 1000 West Main Street and 118 11th Street SW. The property is further identified on City Real Property Tax Map 10, Parcels 68 and 70 having frontage on West Main Street, Roosevelt Brown Boulevard, and 11th Street SW.

The site plan proposes the construction of a 101 foot tall building that would contain 246 apartment units, 10,300 square feet of commercial space, and a 211 space parking deck. The site is zoned (WMS) West Main South Corridor and is approximately 1.27 acres.

Site Plan Compliance

The preliminary site plan is currently under review, and the applicant will be required to comply with staff comments. There have been two rounds of review by City reviewers. Site plans are reviewed for compliance with city codes and standards. An overview of site plan requirements and the location of those items on the site are outlined below.

Site Plan Requirements

A. Compliance with applicable zoning district regulations

West Main South - (per Zoning Ordinance §34-636 -- §34-642)

The project received a special use permit from City Council on January 21, 2014 that permits up to 193 units per acre and 101 feet in building height. The project complies with all regulations in the West Main South zoning district.

B. Compliance with the City's Erosion and Sediment Control ordinance, City Code, Chapter 10:

The applicant's erosion and sediment control plan is currently under review, and the applicant will be required to comply with staff comments.

C. Compliance with General Standard for site plans (Sections 34-800 through 34-827)

Section 34-827 Preliminary site plan contents

- 1. General site plan information, including but not limited to project, property, zoning, site and traffic information: Found on the cover sheet.
- 2. Existing conditions and adjacent property information: Found on Sheet C2.0.
- 3. Demolition Plan: Found on sheet C2.0
- **4.** Proposed use, building, improvements, site plan layout and offsite improvements: **Found on sheet C3.0**
- 5. Written schedules or data as necessary to demonstrate that the site can accommodate the proposed use: Found on sheets C1.0 & C3.0
- 6. Phase lines: The project is proposed to be a single phase.
- **7.** Proposed conceptual layout for water and sanitary sewer facilities and storm drain facilities including:

Drainage Plan: Found on sheet C4.1 Utility Plan: Found on sheet C3.0

- 8. Landscape plan: Found on sheet L1.0
- 9. For proposed signs: The signs for this development will be submitted to the zoning administrator under separate application.
- D. Additional information to be shown on the preliminary site plan as deemed necessary by the director or Commission in order to provide sufficient information for the director or Commission to adequately review the preliminary site plan.

No additional information has been required.

- E. Compliance with Additional Standards for Specific Uses (Site Plan Ordinance §§34-930 34-934
 - Section 94-932 Dumpsters: The building does not have a dumpster. The trash receptacles will be housed within the building.
 - Section 94-934 Parking garages: This site does contain a parking garage, however, the zoning administrator has issued a ruling this section only applies to standalone parking structures.

Public Comments Received

A site plan conference was held on November 6, 2013. No comments specific to the site plan were received.

Recommendation

Staff recommends approval of the preliminary site plan for 1000 West Main Street.

1000 WEST MAIN

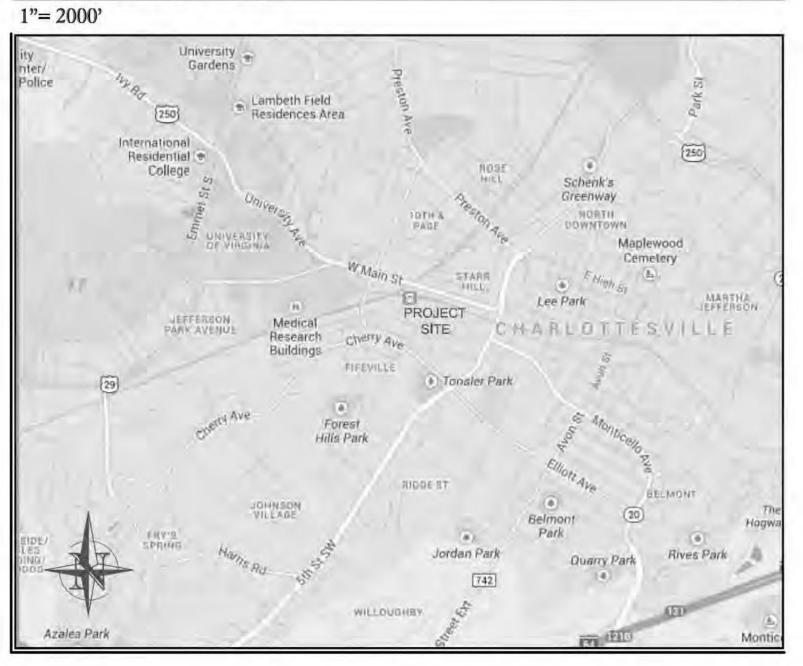
CITY OF CHARLOTTESVILLE, VIRGINIA

PRELIMINARY SITE PLAN



CIVIL ENGINEERS PLANNERS LAND SURVEYORS 2374 STUARTS DRAFT HIGHWAY STUARTS DRAFT, VIRGINIA 22902 PH. 540-337-4591 FAX 540-337-5291 DATE: 10-16-2013

VICINITY MAP



DWELLING UNITS BY TYPE

						4 BEDROC	OMS		3 BE	DROOMS		2 BEDRO	OMS	1 BEC	ROOM	
FLOOR / LEVEL	BUILDING Area* (+/-)	Area* (+/-)	4x4	4x4 EH 1,330 a/ -/	4×4 LOFT 1.274 2f 44	4X4 IS STRETCH 1274 of -/-	4x2 EXTENDED 1,063 et 4/-	4x2 'S CORNER 1,600 af -/-	3X2 970 et +/-	3X2 STRETCH	2X2 739 af 4/-	2X2 EH 1,000 at 4	2X2 HYBRID 000 ef =/-	1×1 470 st -t	STUDIO 280 sf-4/-	TOTAL UNITS PER FLOOR
Level 11 (Loft)	5.613															
Level 10 (Roof)	10,721		0	0	5	0	0	0	0	0	0	0	0	0	0	5
Level 9	27,242		5	0	0	0	5	1	2	0	3	1	1	1	9	28 28
Level 8	27,242		5	0	0	0	5	1	2	0	3	1	9	1	.9	28
Level 7	27,242		5	0	0	0	5	1	2	0	4	1	1	1	7	27
Level 8	26,155		5	0	0	0.	3	1)	1	d	4	1	2	1	7	25 29 28 29
Level 5	32,521		2	1	0	4	5	1	7	1	4	1	1	1.	7	29
Level 4	31,482		4	1	0	2	5 4	1	1	1	3	1	4	1	7	28
Level 3	31,728		.4	1	1	2		1	1	1	3	1	2	1.	7	29
Level 2	30,592		1	1	0	4	6	0	1	4	3	P.	0	2	6	26 21
Mezzanine Level	20,992		1	0	1	0	6	0	3	0	3	1	0	- 1	7	21
Level 1 (Ground Floor)	39,487	10,300									100					0
Parking 2	45,359															0
Parking 1	40,792															0
	Total GSF 397,168	10,300														
	including parking													-		
		(per unit type)	32	4	7	12	44	7	12	4	30	9	9	10	55	246 UNITS
		(per unit type)			106					16		48		10	66	644 BEDS +/
	% of total units	(per unit type)			43.1%					6.5%		19.5%		4.1%	26.8%	
	.0	of total units					49.6%						50.4%			

WATER DEMAND ESTIMATE

COLD WATER DEMAND = TOTAL BUILDING FIXTURE UNITS = 3302 FU FROM DEMAND CURVE CONVERT TO GPM: 475 GPM

FIRE FLOW REQUIREMENTS

MINIMUM REQUIRED FIRE FLOW = 1500 GPM (IN ACCORDANCE WITH INTERNATIONAL FIRE CODE - SECTION B105.2 AND TABLE B105.1)

SHEET INDEX

COVER SHEET
EXISTING CONDITIONS & DEMOLITION PLAN
GRADING AND UTILITIES PLAN
PRE DEVELOPMENT DRAINAGE ANALYSIS
POST DEVELOPMENT DRAINAGE ANALYSIS & SWM PLAN
LANDSCAPE PLAN
LANDSCAPE SCHEDULE
LANDSCAPE DETAILS
CONSTRUCTION DETAILS
CONSTRUCTION DETAILS CONT.
LIGHTING PLAN LEVEL P1
LIGHTING PLAN LEVEL P2
LIGHTING PLAN GROUND LEVEL
GROUND LEVEL LUMINAIRE SCHEDULE
P1 & P2 LUMINAIRE SCHEDULE
00aPARKING LEVEL 1
00bPARKING LEVEL 2
00cGROUND FLOOR
000000000000000000000000000000000000000

REVISIONS

1. 01-27-14 COMMENTS, 11-14-2013 2. 02-28-14 COMMENTS, 02-26-2014 3. 03-05-14 COMMENTS, 02-27-2014

WATER QUALITY ANALYSIS

TOTAL SITE: 1.277 AC. / 55,650 SF PRE-DEVELOPMENT IMPERVIOUS AREA: 1.00 AC. / 43,522 SF POST-DEVELOPMENT IMPERVIOUS AREA: 1.16 AC. / 50,550 SF

Lpre = 2.20 POUNDSIpost = 1.16 / 1.28 = 91%

Lpost = 2.52 POUNDS

Ipre = 1.00 / 1.28 = 78%

RR = 2.52 POUNDS - 2.20 POUNDS = 0.32 POUNDS

AREA TO TREATMENT = 0.80 ACRES IMPERVIOUS AREA TO TREATMENT = 0.80 ACRES

Itreat = 0.80 / 1.28 = 63%Ltreat = 1.12 POUNDS

REMOVAL RATE = 50% BIORETENTION FILTER REMOVAL = 1.12 X 50% = 0.56 POUNDS REMOVED

0.56 POUNDS > 0.32 POUNDS THEREFORE O.K.

LIGHT FIXTURE SUBSTITUTION NOTE:

ALTERNATIVE FIXTURES CAN BE PROVIDED SO LONG AS THEY ARE EQUIVALENT AND APPROVED BY THE ARCHITECT.

TRAFFIC GENERATION FIGURES

Baseline Trip Generation for 1000 West Main

	4.01				A	M PEAK HO	JR	P	M PEAK HO	UR
LAND USE	ITE CODE	AMOUNT	UNITS	AUT	IN	DUT	TOTAL	IN	OUT	TOTA
Viid Rise Apartment	223	246	Apartments		23	51	74	56	40	96
Specialty Retail Center	826	10,300	SF	456		100	*	12	16	28
				TOTAL	23	51	74	68	56	124
	Trip General	tion for 1000	West Main wit	th 30% Redu	ction (per	CA provide	documents	}		
							WEEKDAY			
	3.00			100	A	M PEAK HO	JR	P	M PEAK HO	UR
LAND USE	ITE CODE	AMOUNT	UNITS	ADT	IN.	OUT	TOTAL	IN	DUT	TOTA
	223	246	Apartments		16	36	52	39	28	67
Viid Rise Apartment	223							- 74	51.0	20
Viid Rise Apartment Specialty Retail Center	826	10,300	SF	320	64	9-9-	44	9	11	20
THE P. L. S.	826			TOTAL	16	36	52	9 48	39	87
THE P. L. S.	826		SF on for 1000 Wes	TOTAL	16	36	52			
THE P. L. S.	826			TOTAL	16 City Provi	36	52 ons WEEKDAY	48		87
THE P. L. S.	826			TOTAL	16 City Provi	36 ded Reducti	52 ons WEEKDAY	48	39	87 UR
Specialty Retail Center	826	ip Generatio	n for 1000 Wes	TOTAL t Main with	16 City Provi	36 ded Reducti M PEAK HO	52 ons WEEKDAY UR	48	39 M PEAK HO	87 UR
Specialty Retail Center LAND USE	826 Tr	ip Generatio	n for 1000 Wes	TOTAL t Main with	16 City Provi	36 ded Reducti M PEAK HO	52 ons WEEKDAY JR TOTAL	48 P	39 M PEAK HO	87 UR ∐ TOTA
Specialty Retail Center LAND USE Viid Rise Apartment	Tr. ITE CODE 223	ip Generation AMOUNT 246	un for 1000 Wes UNITS Apartments	TOTAL t Main with o	16 City Provid A IN 23	36 ded Reducti M PEAK HO OUT 51	52 Ons WEEKDAY JR TOTAL 74	48 P IN 56	M PEAK HO	UR TOTA
Specialty Retail Center LAND USE Viid Rise Apartment	826 Tr. ITE CODE 223 826	AMOUNT 246	unitor 1000 Wess UNITS Apartments SF	TOTAL t Main with a	16 City Provid A IN 23	36 ded Reducti M PEAK HO OUT 51	ons WEEKDAY JR TOTAL 74	48 P IN 56 12	M PEAK HO OUT 40 16	87 UR TOTA 96 28
Specialty Retail Center LAND USE Viid Rise Apartment Specialty Retail Center Pass-by Trips	826 Tr. ITE CODE 223 826	AMOUNT 246 10,300 ter - 34%	unitor 1000 Wess UNITS Apartments SF	ADT 456 456	16 City Provi	36 ded Reducti M PEAK HO OUT 51 51	ons WEEKDAY JR TOTAL 74 74	48 P IN 56 12 68	39 M PEAK HO OUT 40 16 56	87 UR TOTA 96 28 124 9
Specialty Retail Center LAND USE Viid Rise Apartment Specialty Retail Center Pass-by Trips- Total	Tri ITE CODE 223 826 Shopping Cen	AMOUNT 246 10,300 ter - 34%	unitor 1000 Wess UNITS Apartments SF	ADT 456 456 155	16 City Provi	36 ded Reducti M PEAK HO OUT 51 51	52 ONS WEEKDAY JR TOTAL 74 74	48 P IN 56 12 68 4	39 M PEAK HO OUT 40 16 56 5	87 UR TOTA 96 28 124 9
Specialty Retail Center LAND USE Viid Rise Apartment Specialty Retail Center Pass-by Trips - Total intern	ITE CODE 223 826 Shopping Cen	AMOUNT 246 10,300 ter - 34%	unitor 1000 Wess UNITS Apartments SF	ADT 456 456 155 301	16 City Provid A IN 23 23 23	36 ded Reducti M PEAK HO OUT 51 51 51	52 ONS WEEKDAY JR TOTAL 74 74 74	48 P IN 56 12 68 4 64	39 M PEAK HO OUT 40 16 56 5	87 UR TOTA 96 28 124 9
Specialty Retail Center LAND USE Viid Rise Apartment Specialty Retail Center Pass-by Trips - Total intern	ITE CODE 223 826 Shopping Cen Primary Trips of Capture - 89 External Trips	AMOUNT 246 10,300 ter - 34%	UNITS Apartments SF TOTAL	ADT 456 456 155 301 24	16 City Provid A IN 23 23 23 2	36 ded Reducti M PEAK HO OUT 51 51 51 51 4	52 ONS WEEKDAY JR TOTAL 74 74 74 6	48 P IN 56 12 68 4 64 5	39 M PEAK HO OUT 40 16 56 5 51 4	87 UR TOTA 96 28 124 9 114 9

SEWAGE FLOW ESTIMATE

TWO EXISTING HYDRANTS ARE IN CLOSE PROXIMITY TO SITE THAT WILL SERVICE BUILDING:

ONE HYDRANT PROPOSED AT THE CORNER OF WEST MAIN ST AND ROOSEVELT BROWN BLVD

2. DIRECTLY ACROSS INTERSECTION (NORTHEAST) AT CORNER 10TH STREET AND WEST MAIN STREET

PROJECT DATA:

1000 WEST MAIN

NORTH - WMN

SOUTH - B-3 EAST - WMS WEST - WMS

10TH & PAGE

(540) 337-4591

NAD 83

NAVD 88

A330900216-00A

VACANT COMMERCIAL MIXED-USE RESIDENTIAL

EAST: COMMERCIAL

246 RESIDENTIAL

+ 18 COMMERCIAL

- 53 REDUCTIONS

264 SPACES

211 SPACES

211 SPACES

0 SPACES

G 2 STD.

2 VAN 8 STD.

276 SPACES

264 SPACES

12 SPACES

MAXIMUM 101'

1.16 ACRE

229 (WITH TANDEM)

P1 1 VAN, 4 STD.

P2 1 VAN, 2 STD.

0.1x 13.089 SF = 1.308 SF

WEST: PARKING GARAGE

2374 STUARTS DRAFT HWY

STUARTS DRAFT, VA 24477

STEVEN DRIVER, P.E., L.S.

WMS

TMP 10-68 (11TH ST SW) & 10-70 (W MAIN ST)

1.278 ACRES (TMP 10-68: 0.486 ACRES, TMP 10-70: 0.791 ACRES)

1.278 ACRES (ON-SITE) 0.06 ACRES (OFF-SITE UTILITIES)

TMP 10-68; 118 11TH ST SW, CHARLOTTESVILLE, VA 22901

TERRA ENGINEERING AND LAND SOLUTIONS, PC

RESIDENTIAL: 246 DWELLING UNITS

COMMERCIAL: 10,300 SF

SOUTH: RAILROAD / COOLING TOWER

IMMEDIATELY NORTHWEST: COMMERCIAL

IMMEDIATELY SOUTHWEST: COMMERCIAL

BREAKDOWN: P1

10% NET SITE AREA; 55,650 SF - 42,561 SF = 13,089 SF

43 DUA (240 DUA ALLOWED BY SPECIAL USE PERMIT)

CHARLOTTESVILLE, VA 22906

CHARLOTTESVILLE, VA 22906

TMP 10-70: ROBERT P. HODOUS & FREDERICK W. PAYNE

BOBHODOUS@PAYNEHODOUS.COM

CAMPUS INVESTORS CHARLOTTESVILLE 1000 WEST MAIN, LLC

AS SUCCESSOR TRUSTEES FOR THE IVY LAND TRUST

HEISCHMAN@GMAIL.COM

ATTN: SW HEISCHMAN

ROBERT P. HODOUS

70' (101' ALLOWED BY SPECIAL USE PERMIT)

CAMPUS ACQUISITIONS HOLDINGS, LLC

161 N. CLARK ST SUITE 4900

SBUS@CA-STUDENTLIVING.COM

TMP 10-68: UNIVERSITY STATION, LLC P O BOX 7324

KIM HEISCHMAN

434-971-9764

P O BOX 7324

434-977-4507

CHICAGO, IL 60601 STEPHEN G. BUS

312-590-9700

92 TOTAL

90 TOTAL

28 TOTAL

0 TANDEM

6 COMPACT

30 COMPACT

28 COMPACT

105 TOTAL W/ TANDEM

96 TOTAL W/ TANDEM

NORTH: COMMERCIAL / RETAIL

TMP 10-70: 1002-06 W MAIN ST, CHARLOTTESVILLE, VA 22901

PROJECT NAME:

EXISTING ZONING:

PROPERTY SIZE:

NEIGHBORHOOD:

LIMITS OF DISTURBANCE:

SOURCE OF BOUNDARY & TOPO:

HORIZONTAL DATUM REFERENCE:

VERTICAL DATUM REFERENCE:

PROPERTY ADDRESS:

MISS UTILITY TICKET #:

PROJECT BREAKDOWN:

CURRENT USE:

PROPOSED USE:

ADJACENT AREA:

REQUIRED:

PROVIDED:

REQUIRED CONTRIBUTION:

TOTAL HC:

BIKE ROOM (SECURE):

ACTUAL PROVIDED:

HC PARKING PROVIDED:

TOTAL BIKE PROVIDED:

OUTDOOR:

LANDSCAPE:

REQUIRED:

PROVIDED:

MAXIMUM:

PROPOSED:

MAXIMUM: PROPOSED:

IMPERVIOUS COVER:

PROPERTY OWNER:

CONTRACT PURCHASER:

1. DIRECTLY ACROSS 11TH STREET

SCAT

DEVELOPER:

GROSS RESIDENTIAL DENSITY:

BUILDING HEIGHT: MINIMUM:

PARKING:

TAX MAP / PARCEL NO:

ZONING SURROUNDING LOTS:

West Wing (11th St. lateral) Discharge Contributing duration, Total flow. Design Units Number of Units** Flow GPD hours GDP Apartments Dwelling Per person 325 100 24 32500 Restaurant/ Shopping Per 1,000 sf 250 centers floor space

	North	Wing (Roos	sevelt Brown B	lvd. later	al)	
Project Use	SCAT Discharge Facility	Contributing Design Units	Number of Units**	Flow GPD	Flow duration, hours	Total flow, GDP
Apartments	Dwelling	Per person	319	100	24	31900
Restaurant/ Retail*	Shopping centers	Per 1,000 sf floor space	10,300	250	12	1287.5

Total flow:		-	
	 0.051	CFS	

Total flow: 0.050 CFS

APPROVALS

DEPARTMENT OF NDS

PLANNER	DATE
ENGINEER	DATE
INSPECTIONS	DATE
DEPARTMENT OF FIRE RESCUE	DATE
VIRGINIA DOT	DATE
HEALTH DEPARTMENT	DATE

STANDARDS AND SPECIFICATIONS

VIRGINIA DEPARTMENT OF TRANSPORTATION (V.D.O.T.) ROAD AND BRIDGE SPECIFICATIONS, DATED 2007. VIRGINIA DEPARTMENT OF TRANSPORTATION (V.D.O.T.) ROAD AND BRIDGE STANDARDS, DATED 2001. VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION, DIVISION OF SOIL AND WATER CONSERVATION, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, 1992. INSTITUTE OF TRANSPORTATION ENGINEERS (ITE MANUAL), TRIP GENERATION, 7TH EDITION.

Client:

Drawing Issue

PER CITY COMMENTS

PER CITY COMMENTS

PER CITY COMMENTS

Date

01-27-14

02-28-14 03-05-14

STUDENT LIVING

OF CHARLOTTESVILLE VA

Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Landscape **Architect:**

7135 Germantown Avenue Philadelphia, PA 19119

MEP/FP/IT

Engineer:

Environetics Design, Inc. One Penn Center 1617 JFK Blvd, Suite 1600

> Structural Englneer:

Philadelphia, PA 19103

O'Donnel & Naccarato 111 S. Independence Mall East Philadelphia, PA 19106

Vertical

Transportation: **CMH Elevator Consultants &** Associates, LLC 325 N. Saint Paul Street, Suite 1380

Civil Consultant:

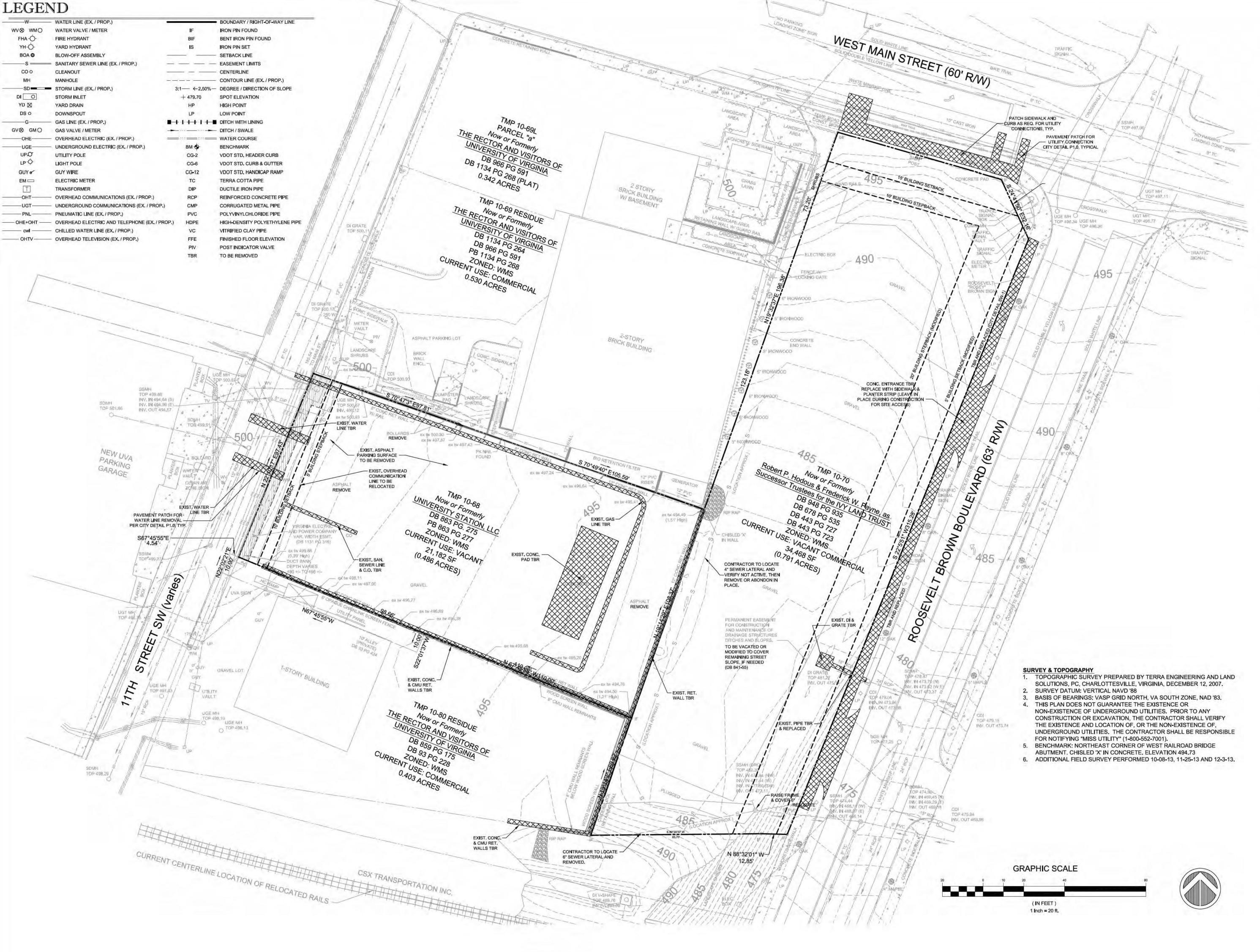
Terra Engineering and Land Solutions, PC 2374 Stuarts Draft Highway Stuarts Draft, VA 24477 540-337-4591 434-244-0600

Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Erdy McHenry Architecture, LLC 915 North Orlanna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

> COVER SHEET

2014 10, 16 AS NOTED PROJECT NO: 1318 DRAWING NUMBER:



CONSTRUCTION AND DEMOLITION NOTES: IFC 1404.1 - SMOKING TO BE ALLOWED ONLY IN DESIGNATED

- SPACES WITH PROPER RECEPTACLES. 2. IFC 1404.2 - WASTE DISPOSAL OF COMBUSTABLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH
- 3. IFC 1401.1 ACCESS TO THE BUILDING DURING DEMOLITION AND CONSTRUCTION SHALL BE MAINTAINED.
- 4. IFC 1404.6 CUTTING AND WELDING. OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 26, OF THE INTERNATIONAL FIRE CODE, ADDRESSING WELDING AND HOTWORK OPERATIONS.
- IFC 1414.1 FIRE EXTINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTABLE MATERIALS HAVE ACCUMULATED.
- REQUIRED VEHICLE ACCESS FOR FIREFIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLOTION SITES. VEHICLE ACCESS SHALL BE PROVIDED TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.
- ALL CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH THE CURRENT INTERNATIONAL FIRE CODE.

DEMOLITION NOTES:

- 1. CONTRACTOR TO LOCATE AND DEMOLISH ALL SANITARY LATERALS BACK TO MAIN (OR MANHOLE). ALL WORK TO BE DONE IN ACCORDANCE WITH CITY DETAIL WW 7.1 OR WW 7.2. AN INSPECTION FROM THE CITY'S UTILITY DEPARTMENT WILL BE REQUIRED.
- 2. CONTRACTOR TO LOCATE AND DEMOLISH ALL WATER LATERALS BACK TO MAIN. ALL WORK TO BE DONE IN ACCORDANCE WITH CITY DETAIL W 7.1. AN INSPECTION FROM THE CITY'S UTILITY DEPARTMENT WILL BE REQUIRED.
- 3. ALL TERMINATION OF EXISTING GAS LINES SHALL BE COORDINATED WITH CHARLOTTESVILLE GAS.

24" RCP*:

24" RCP PIPE EXISTING THE CURB DROP INLET ON THE WESTERN SIDE OF ROOSEVELT BROWN BLVD TO THE NORTH OF CURB CUT HAS THE FOLLOWING PEAK FLOW RATE GIVEN MANNING'S ROUGHNESS OF n=0.013, SLOPE OF 0.007 ft/ft AND FLOWING FULL

Q = 18.92 CFS V = 6.02 FT/SEC

Drawing Issue

Client:



Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Landscape

Architect: Roofmeadow

7135 Germantown Avenue Philadelphia, PA 19119

MEP/FP/IT

Philadelphia, PA 19103

Engineer:

Environetics Design, Inc. One Penn Center 1617 JFK Blvd, Suite 1600

Structural

Englneer: O'Donnel & Naccarato 111 S. Independence Mall East

Philadelphia, PA 19106

Vertical Transportation:

CMH Elevator Consultants & Associates, LLC 325 N. Saint Paul Street, Suite 1380

Civil Consultant:

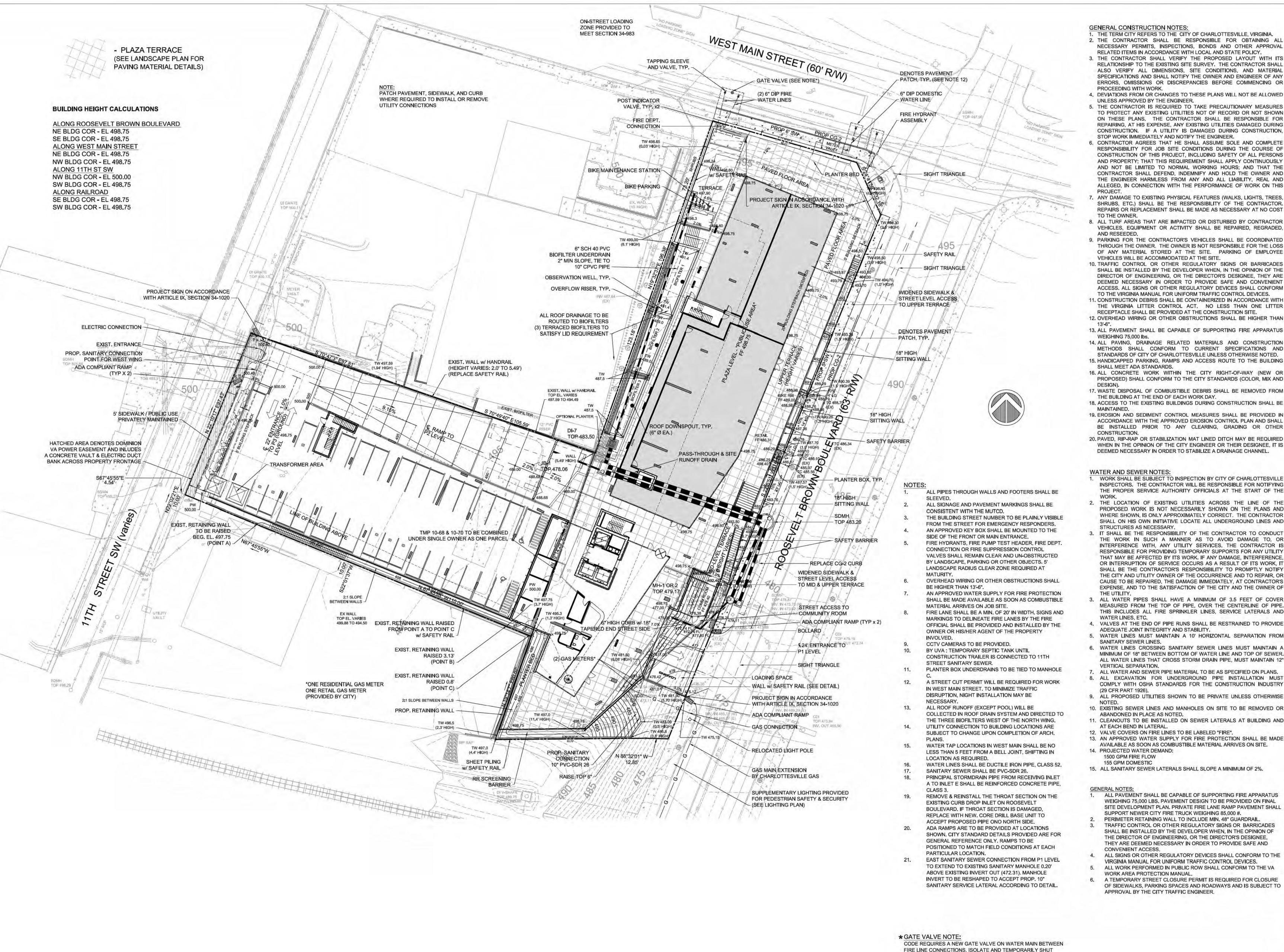
Terra Engineering and Land Solutions, PC 2374 Stuarts Draft Highway Stuarts Draft, VA 24477 540-337-4591 434-244-0600

Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

EXISTING CONDITIONS AND DEMOLITION

2014 02, 20



GENERAL CONSTRUCTION NOTES:

THE TERM CITY REFERS TO THE CITY OF CHARLOTTESVILLE, VIRGINIA. 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS, BONDS AND OTHER APPROVAL

RELATED ITEMS IN ACCORDANCE WITH LOCAL AND STATE POLICY. 3. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. THE CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING OR

PROCEEDING WITH WORK. 4. DEVIATIONS FROM OR CHANGES TO THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER.

5. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING UTILITIES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. IF A UTILITY IS DAMAGED DURING CONSTRUCTION,

STOP WORK IMMEDIATELY AND NOTIFY THE ENGINEER. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS

ANY DAMAGE TO EXISTING PHYSICAL FEATURES (WALKS, LIGHTS, TREES, SHRUBS, ETC.) SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. REPAIRS OR REPLACEMENT SHALL BE MADE AS NECESSARY AT NO COST

TO THE OWNER. ALL TURF AREAS THAT ARE IMPACTED OR DISTURBED BY CONTRACTOR

VEHICLES, EQUIPMENT OR ACTIVITY SHALL BE REPAIRED, REGRADED, AND RESEEDED. 9. PARKING FOR THE CONTRACTOR'S VEHICLES SHALL BE COORDINATED THROUGH THE OWNER. THE OWNER IS NOT RESPONSIBLE FOR THE LOSS

VEHICLES WILL BE ACCOMMODATED AT THE SITE 10. TRAFFIC CONTROL OR OTHER REGULATORY SIGNS OR BARRICADES SHALL BE INSTALLED BY THE DEVELOPER WHEN, IN THE OPINION OF THE DIRECTOR OF ENGINEERING, OR THE DIRECTOR'S DESIGNEE, THEY ARE DEEMED NECESSARY IN ORDER TO PROVIDE SAFE AND CONVENIENT ACCESS. ALL SIGNS OR OTHER REGULATORY DEVICES SHALL CONFORM

TO THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. 11. CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED AT THE CONSTRUCTION SITE.

12. OVERHEAD WIRING OR OTHER OBSTRUCTIONS SHALL BE HIGHER THAN 13. ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS

WEIGHING 75,000 lbs. 14. ALL PAVING, DRAINAGE RELATED MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM TO CURRENT SPECIFICATIONS AND STANDARDS OF CITY OF CHARLOTTESVILLE UNLESS OTHERWISE NOTED. 15. HANDICAPPED PARKING, RAMPS AND ACCESS ROUTE TO THE BUILDING

16. ALL CONCRETE WORK WITHIN THE CITY RIGHT-OF-WAY (NEW OR PROPOSED) SHALL CONFORM TO THE CITY STANDARDS (COLOR, MIX AND DESIGN). 17. WASTE DISPOSAL OF COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM

THE BUILDING AT THE END OF EACH WORK DAY. 18. ACCESS TO THE EXISTING BUILDINGS DURING CONSTRUCTION SHALL BE MAINTAINED.

ACCORDANCE WITH THE APPROVED EROSION CONTROL PLAN AND SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR OTHER CONSTRUCTION.

20. PAVED, RIP-RAP OR STABILIZATION MAT LINED DITCH MAY BE REQUIRED WHEN IN THE OPINION OF THE CITY ENGINEER OR THEIR DESIGNEE, IT IS DEEMED NECESSARY IN ORDER TO STABILIZE A DRAINAGE CHANNEL.

WATER AND SEWER NOTES:

WORK SHALL BE SUBJECT TO INSPECTION BY CITY OF CHARLOTTESVILLE INSPECTORS. THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING THE PROPER SERVICE AUTHORITY OFFICIALS AT THE START OF THE

2. THE LOCATION OF EXISTING UTILITIES ACROSS THE LINE OF THE PROPOSED WORK IS NOT NECESSARILY SHOWN ON THE PLANS AND WHERE SHOWN, IS ONLY APPROXIMATELY CORRECT. THE CONTRACTOR SHALL ON HIS OWN INITIATIVE LOCATE ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY.

3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT THE WORK IN SUCH A MANNER AS TO AVOID DAMAGE TO, OR INTERFERENCE WITH, ANY UTILITY SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORTS FOR ANY UTILITY THAT MAY BE AFFECTED BY ITS WORK, IF ANY DAMAGE, INTERFERENCE, OR INTERRUPTION OF SERVICE OCCURS AS A RESULT OF ITS WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROMPTLY NOTIFY THE CITY AND UTILITY OWNER OF THE OCCURRENCE AND TO REPAIR, OR CAUSE TO BE REPAIRED, THE DAMAGE IMMEDIATELY, AT CONTRACTOR'S EXPENSE, AND TO THE SATISFACTION OF THE CITY AND THE OWNER OF THE UTILITY.

ALL WATER PIPES SHALL HAVE A MINIMUM OF 3.5 FEET OF COVER MEASURED FROM THE TOP OF PIPE, OVER THE CENTERLINE OF PIPE. THIS INCLUDES ALL FIRE SPRINKLER LINES, SERVICE LATERALS AND WATER LINES, ETC.

4. VALVES AT THE END OF PIPE RUNS SHALL BE RESTRAINED TO PROVIDE ADEQUATE JOINT INTEGRITY AND STABILITY. 5. WATER LINES MUST MAINTAIN A 10' HORIZONTAL SEPARATION FROM SANITARY SEWER LINES.

6. WATER LINES CROSSING SANITARY SEWER LINES MUST MAINTAIN A MINIMUM OF 18" BETWEEN BOTTOM OF WATER LINE AND TOP OF SEWER. ALL WATER LINES THAT CROSS STORM DRAIN PIPE, MUST MAINTAIN 12" VERTICAL SEPARATION.

ALL WATER AND SEWER PIPE MATERIAL TO BE AS SPECIFIED ON PLANS. 8. ALL EXCAVATION FOR UNDERGROUND PIPE INSTALLATION MUST COMPLY WITH OSHA STANDARDS FOR THE CONSTRUCTION INDUSTRY

(29 CFR PART 1926). ALL PROPOSED UTILITIES SHOWN TO BE PRIVATE UNLESS OTHERWISE

10. EXISTING SEWER LINES AND MANHOLES ON SITE TO BE REMOVED OR ABANDONED IN PLACE AS NOTED. 11. CLEANOUTS TO BE INSTALLED ON SEWER LATERALS AT BUILDING AND

AT EACH BEND IN LATERAL. 12. VALVE COVERS ON FIRE LINES TO BE LABELED "FIRE".

13. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE. 14. PROJECTED WATER DEMAND:

15. ALL SANITARY SEWER LATERALS SHALL SLOPE A MINIMUM OF 2%.

GENERAL NOTES:

DOWN WATER MAIN TO INSTALL PROPOSED GATE VALVE AND TWO 10" x 6" TEES WITH VALVES AND RE-OPEN WATER MAIN.

ALL PAVEMENT SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS WEIGHING 75,000 LBS. PAVEMENT DESIGN TO BE PROVIDED ON FINAL SITE DEVELOPMENT PLAN. PRIVATE FIRE LANE RAMP PAVEMENT SHALL SUPPORT NEWER CITY FIRE TRUCK WEIGHING 85,000 #.

PERIMETER RETAINING WALL TO INCLUDE MIN. 48" GUARDRAIL TRAFFIC CONTROL OR OTHER REGULATORY SIGNS OR BARRICADES SHALL BE INSTALLED BY THE DEVELOPER WHEN, IN THE OPINION OF THE DIRECTOR OF ENGINEERING, OR THE DIRECTOR'S DESIGNEE, THEY ARE DEEMED NECESSARY IN ORDER TO PROVIDE SAFE AND CONVENIENT ACCESS.

ALL SIGNS OR OTHER REGULATORY DEVICES SHALL CONFORM TO THE VIRGINIA MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. ALL WORK PERFORMED IN PUBLIC ROW SHALL CONFORM TO THE VA

A TEMPORARY STREET CLOSURE PERMIT IS REQUIRED FOR CLOSURE OF SIDEWALKS, PARKING SPACES AND ROADWAYS AND IS SUBJECT TO APPROVAL BY THE CITY TRAFFIC ENGINEER.

Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Date

03-05-14

Drawing Issue

PER CITY COMMENTS

PER CITY COMMENTS

Client:

STUDENT

LIVING

Campus Acquisitions Holdings, LLC

161 N Clark Suite 2050

Landscape

Architect:

7135 Germantown Avenue

MEP/FP/IT

Environetics Design, Inc.

1617 JFK Blvd, Suite 1600

Philadelphia, PA 19103

Structural

Englneer:

O'Donnel & Naccarato

Philadelphia, PA 19106

Associates, LLC

Suite 1380

Solutions, PC

540-337-4591

434-244-0600

325 N. Saint Paul Street,

Civil Consultant:

Terra Engineering and Land

2374 Stuarts Draft Highway

Stuarts Draft, VA 24477

Vertical

111 S. Independence Mall East

Transportation:

CMH Elevator Consultants &

Engineer:

One Penn Center

Philadelphia, PA 19119

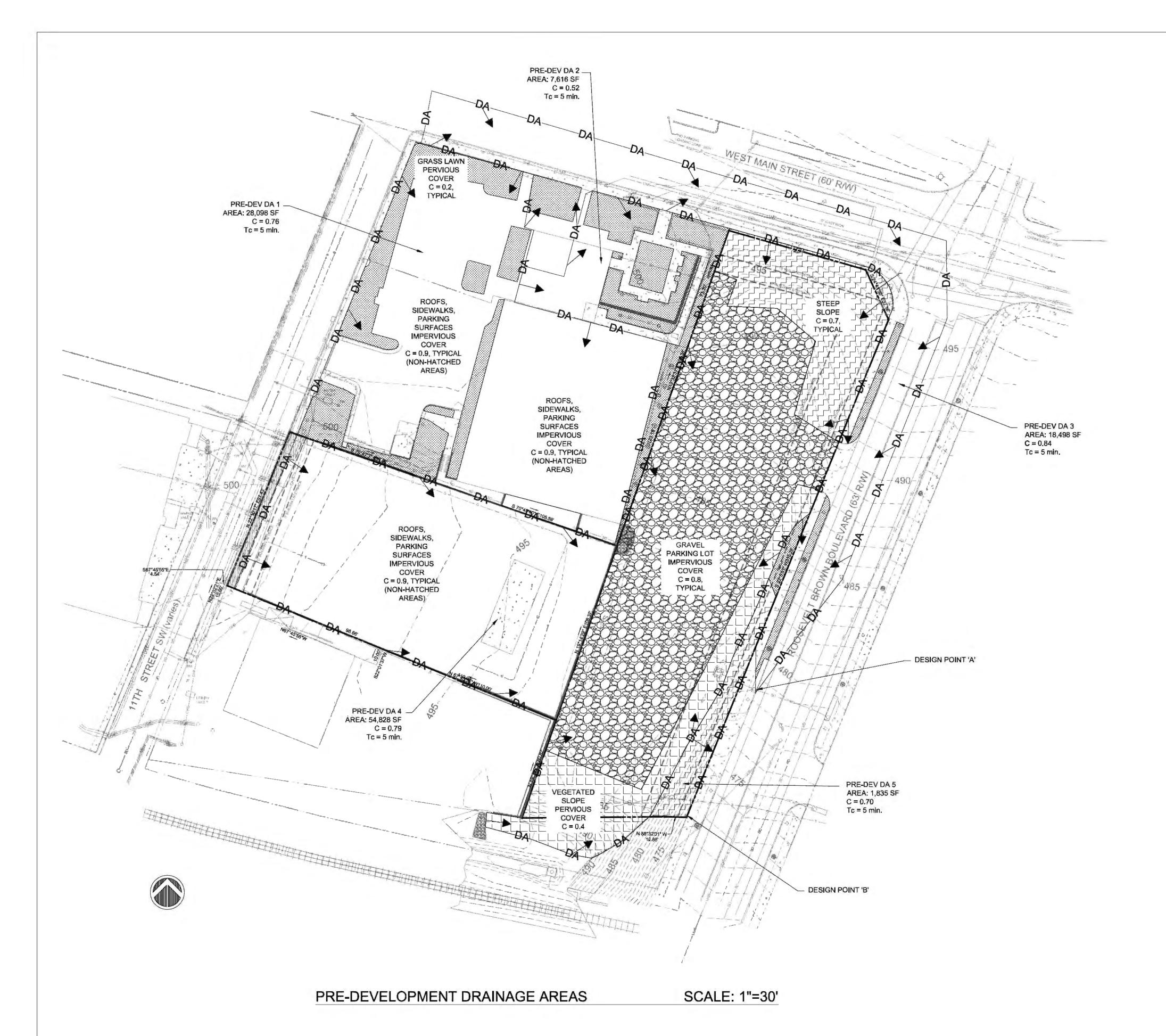
2nd Flr

Chicago, IL 60601 312-994-1874

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

GRADING AND UTILITIES

2013 10, 16 1" = 20' DRAWN BY: PROJECT NO: 1318 ATE DRAWING NUMBER:



PRE vs. POST

TOTAL FLOW TO 24"
RCP - 9.87 cfs

BYPASS - 0.15 cfs

(9.87 + 0.15) x 0.95 = 9.52 cfs

(7.15 + 0.62 + 0.13) x 0.95

10 YEAR TOTAL SITE - 12.64 cfs TOTAL SITE - 9.09 cfs

BYPASS - 0.20 cfs

(12.64 + 0.20) x 0.95 =
12.20 cfs

BYPASS 1 - 0.80 cfs

BYPASS 2 - 0.17 cfs

 $(9.09 + 0.80 + 0.17) \times 0.95$ = 9.56 cfs

= 7.51 cfs

VOLUME

2 YEAR 5,445 cf 3,833 cf 10 YEAR 7,231 cf 5,401 cf

VELOCITY

RATE

2 YEAR MAX. 6.23 fps MAX. 5.74 fps
AVG. 2.42 fps AVG. 2.18 fps

10 YEAR MAX. 6.60 fps MAX. 6.10 fps
AVG. 2.55 fps AVG. 1.78 fps

LOW IMPACT DESIGN WORKSHEET

1000 WEST MAIN

LID Checklist Paints	L ID Measure	Total Points	
5 points or 1 point for each 18% of the total acreage	Compensatory Plantings (see city buffer mitigation manual). 90% of restorable stream buffers restored.		
7 points or 1 point for each 7% of parking and driveway surface area	Pervious pavers for parking and driveways with stone reservoir for storage of 0.5 inches of rainfall per impervious drainage area. Surface area must be >1,000 ft.² or ≥ 50% of the total parking and driveway surface area.		
5 points or 1 point for each 6% of parking surface area eliminated.	Shared parking (must have legally binding agreement) that eliminates > 30% of on-site parking required.	5	Prv'd = 21 P1 = 92
8 points	Impervious Disconnection. Follow design manual specifications to ensure adequate capture of roof runoff. (e.g. cisterns, dry wells, rain gardens).	8	
8 points or 1 point for each 10% of site treated.	Bioretention. Percent of site treated must exceed 80%. Biofilter surface area must be ≥ 5% of impervious drainage area.		
8 points or 1 point for each 10% of lets treated	Rain gardens. All lots, rain garden surface area for each lot ≥ 200 ft. 2.		
8 points or 1 point for each 10% of site treated	Designed/constructed swales. Percent of site treated must exceed 80%, schieve non-erosive velocities, and able to convey peak discharge from 10-year storm.		
8 points or 1 point for each 10% of site treated	Manufactured sand filters, filter vanits (must provide filtering rather than just hydrodynamic). Percent of site treated must exceed 80%. Sizing and volume for water quality treatment based on manufacturer's criteria.		
8 points	Green rooftop to treat ≥ 50% of roof area.		
TBD, not to exceed 8 points	Other LID practices as approved by NDS engineer,		
5 points	Off-site contribution to project in city's water quality management plan. This measure to be considered when on site constraints (space, environmentally sensitive areas, hazards) limit application of LID measures. Requires preapproval by NDS director.		
	TOTAL POINTS (most equal 10 or more)	13	1

PER CITY COMMENTS 01-27-14
PER CITY COMMENTS 03-05-14

Client:

STUDENT LIVING Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Landscape

Architecti

Roofmeadow
7135 Germantown Avenue
2nd Fir
Philadelphia, PA 19119

MEP/FP/IT

Engineer:
Environetics Design, Inc.
One Penn Center
1617 JFK Blvd, Suite 1600
Philadelphia, PA 19103

Structural Englneer:

O'Donnel & Naccarato 111 S. Independence Mall East Suite 950 Philadelphia, PA 19106

Vertical
Transportation:

CMH Elevator Consultants & Associates, LLC 325 N. Saint Paul Street, Suite 1380 Dallas, TX 75201

Civil Consultant:

Terra Engineering and Land Solutions, PC 2374 Stuarts Draft Highway Stuarts Draft, VA 24477 540-337-4591 434-244-0600

Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

PRE
DEVELOPMENT
DRAINAGE
ANALYSIS

SCALE: DATE: 2013 10, 16

DRAWN BY: PROJECT NO: 1318

OR CONSTRUCTION C4.0



NUMBER OF ACRES

OWNER'S SIGNATURE

TREATED BY BMP

0.8 ACRES

DESCRIPTION OF REQUIRED | TO BE PROVIDED WITH SWM/BMP

MAINTENANCE FOR BMP MAINTENANCE AGREEMENT

BY SIGNING, CAMPUS ACQUISITIONS AGREES TO MAINTAIN

STORMWATER MANAGEMENT AND BMP FACILITIES.

01-27-14 PER CITY COMMENTS PER CITY COMMENTS

Client:

STUDENT LIVING

Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Landscape

Architect:

Roofmeadow 7135 Germantown Avenue 2nd Flr Philadelphia, PA 19119

MEP/FP/IT

Engineer:

Environetics Design, Inc. One Penn Center 1617 JFK Blvd, Suite 1600 Philadelphia, PA 19103

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Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

POST DEVELOPMENT DRAINAGE **ANALYSIS**

AS NOTED 2013 10, 16 DRAWN BY: PROJECT NO:

AE DRAWING NUMBER:

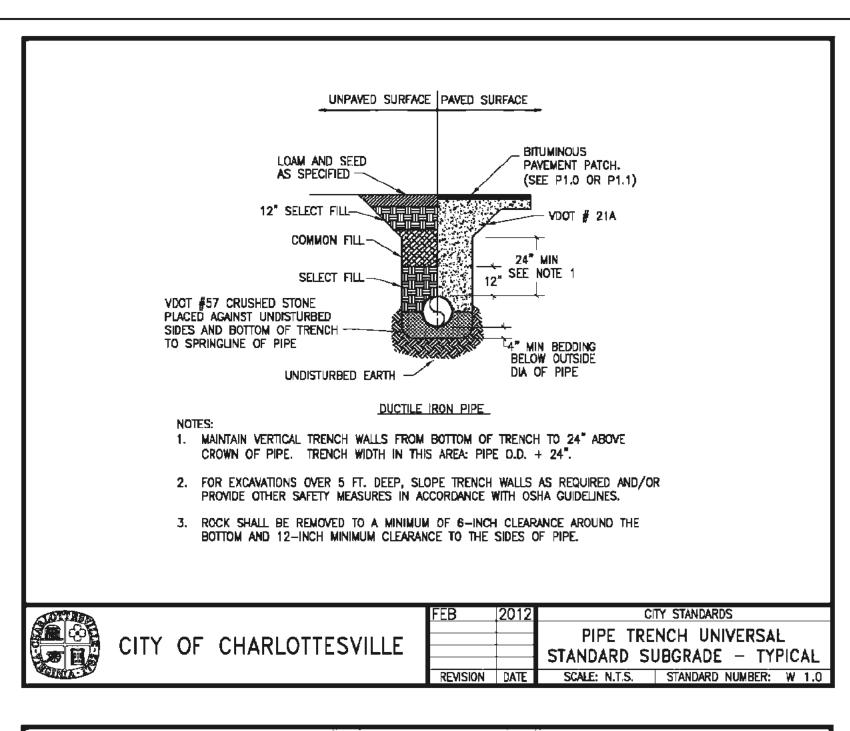
TRENCH DRAIN "G" SPECIFICATION:

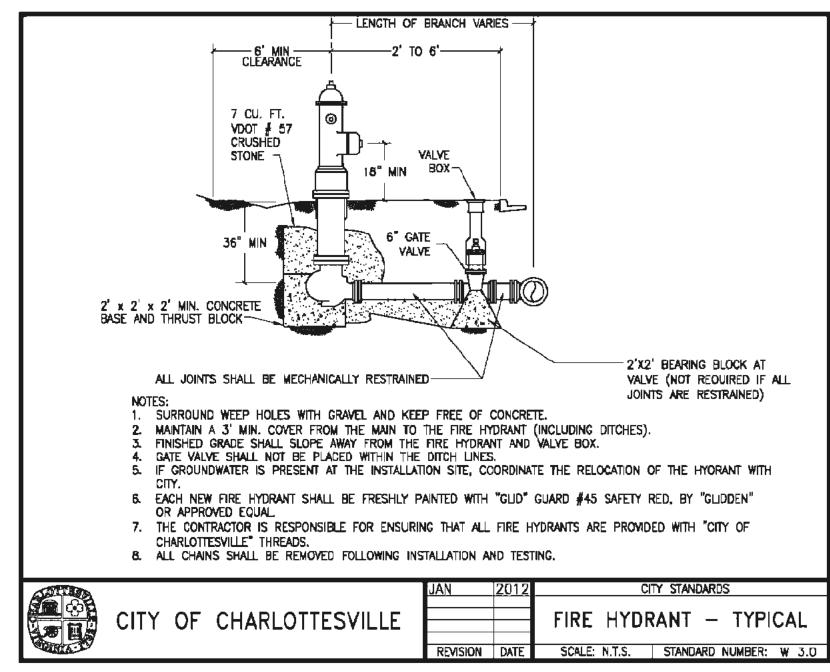
SECTIONS WITH DS-109 THROUGH DS-107 (CUT TO FIT). PROVIDE DURA DRAIN DUCTILE IRON FRAME DS-200.

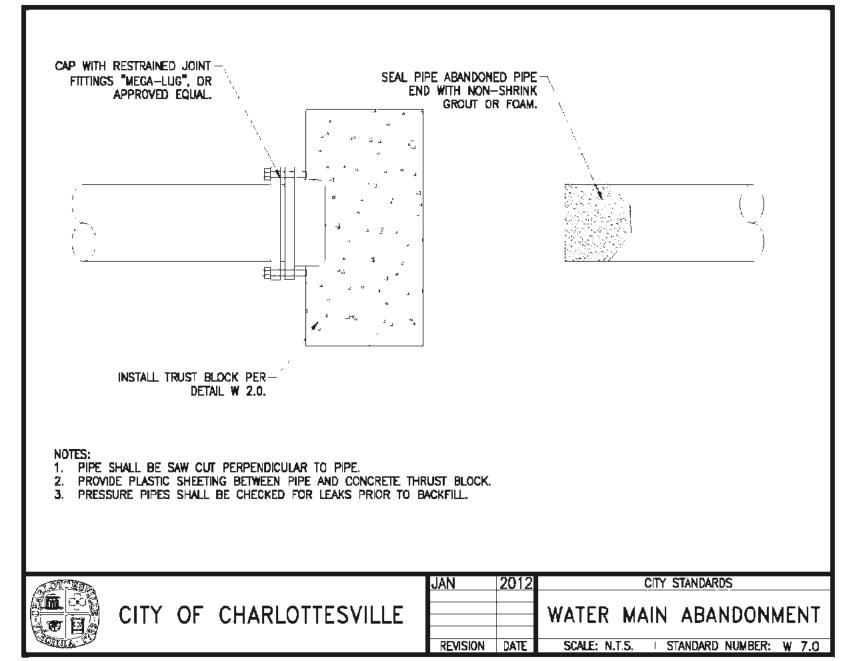
3. PROVIDE DUCTILE IRON GRATE DS-232 (H-20 LOAD RATING).

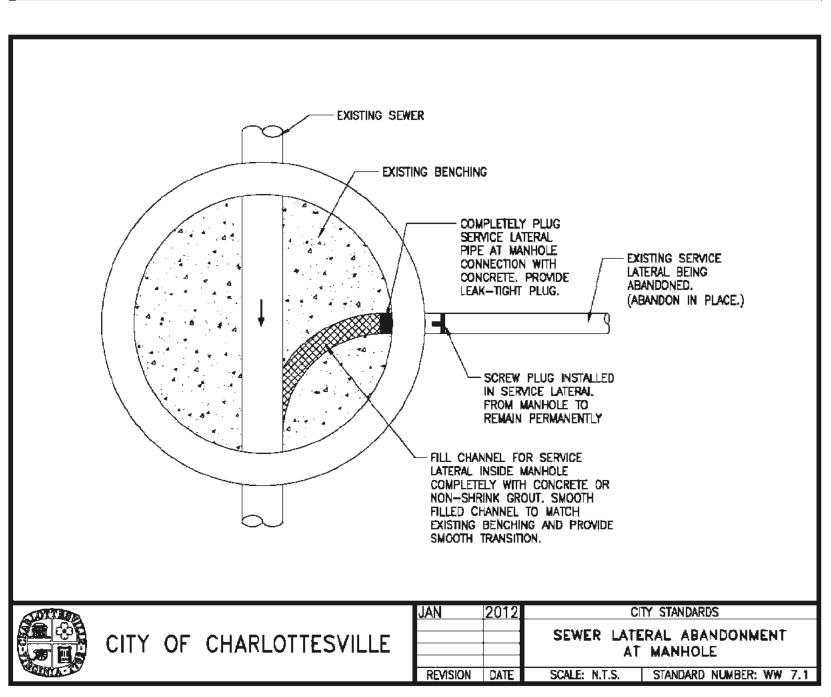
1. BEGINNING AT SOUTH END DRAIN, USE 7 - 4' SECTIONS DS-101 THROUGH DS-109 TO AN NDS

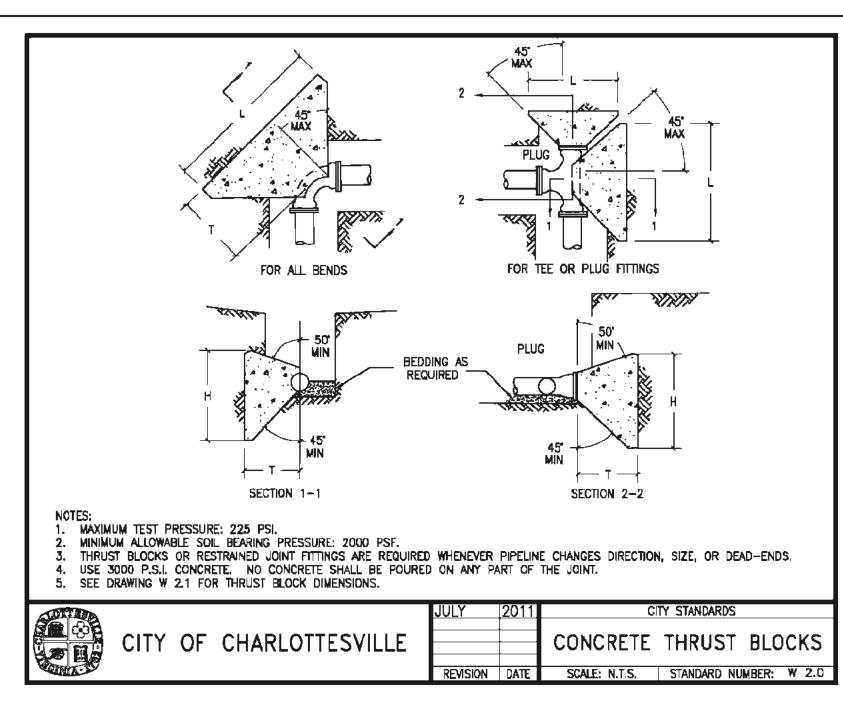
DURA SLOPE IN-LINE CATCH BASIN DS-340 CONTINUING TO NORTH WALL WITH 2 - 4'

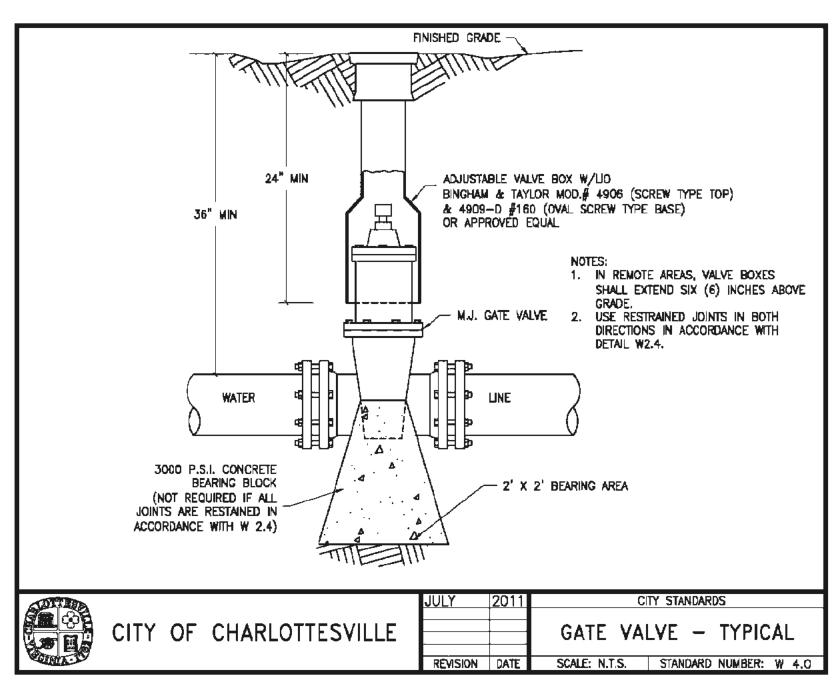


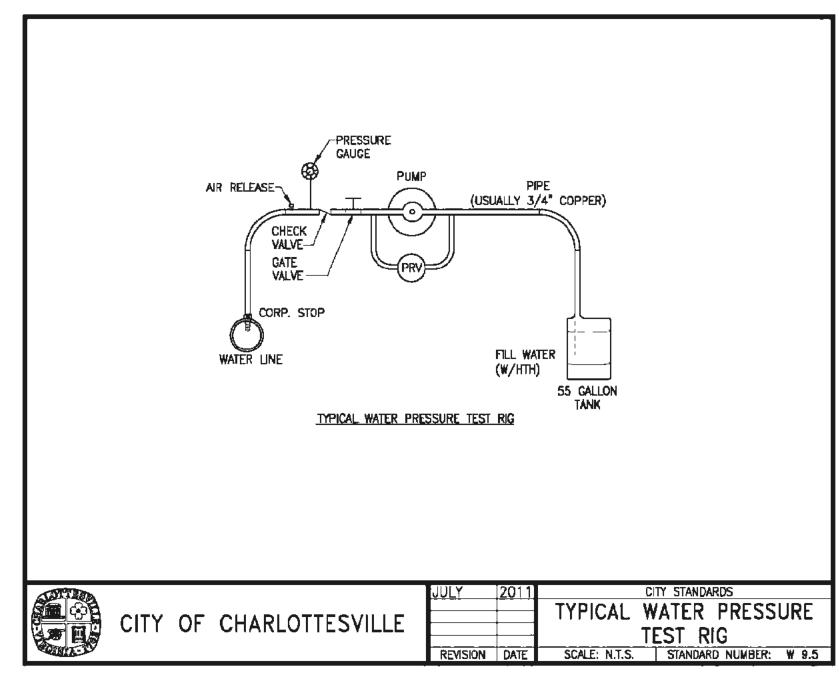


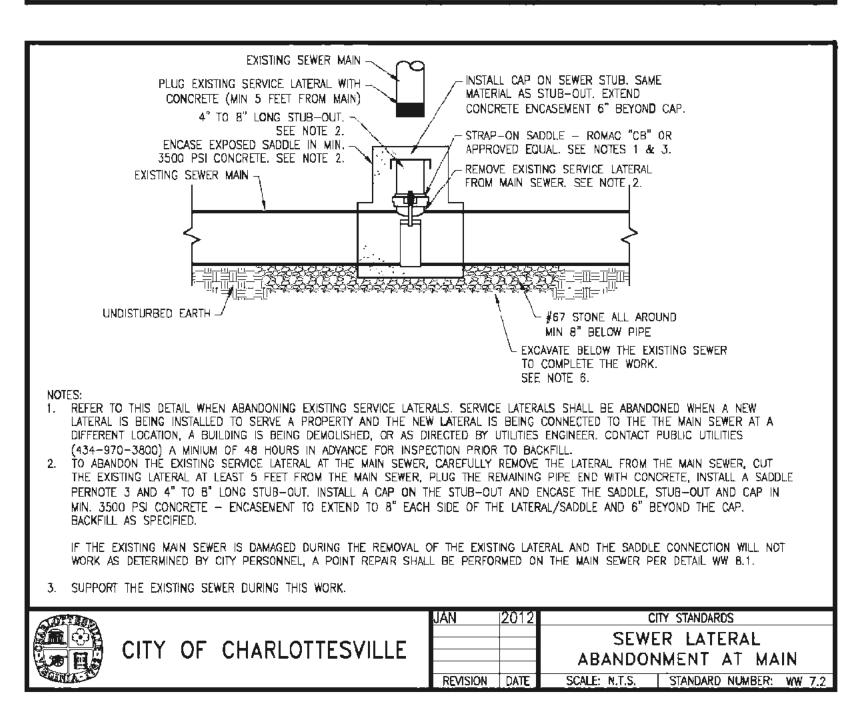


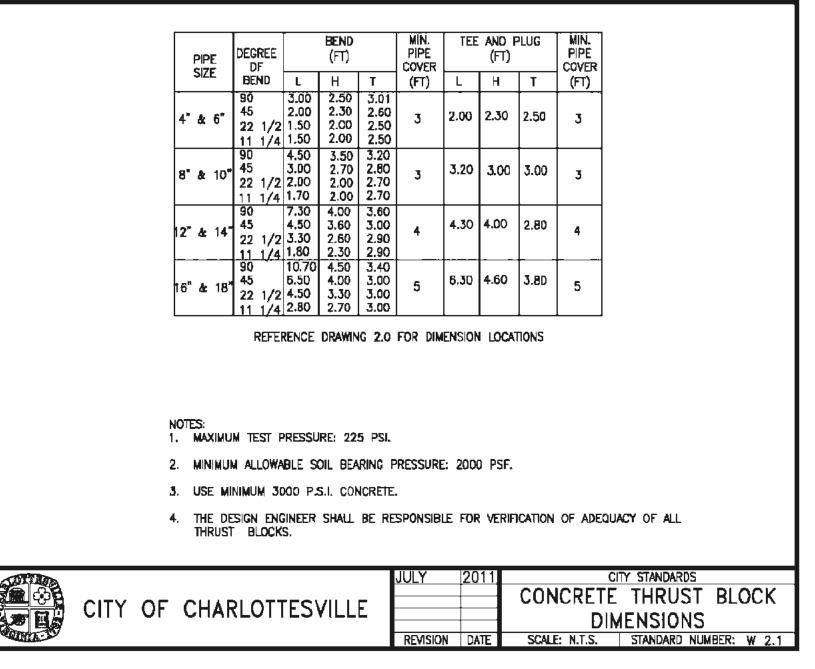


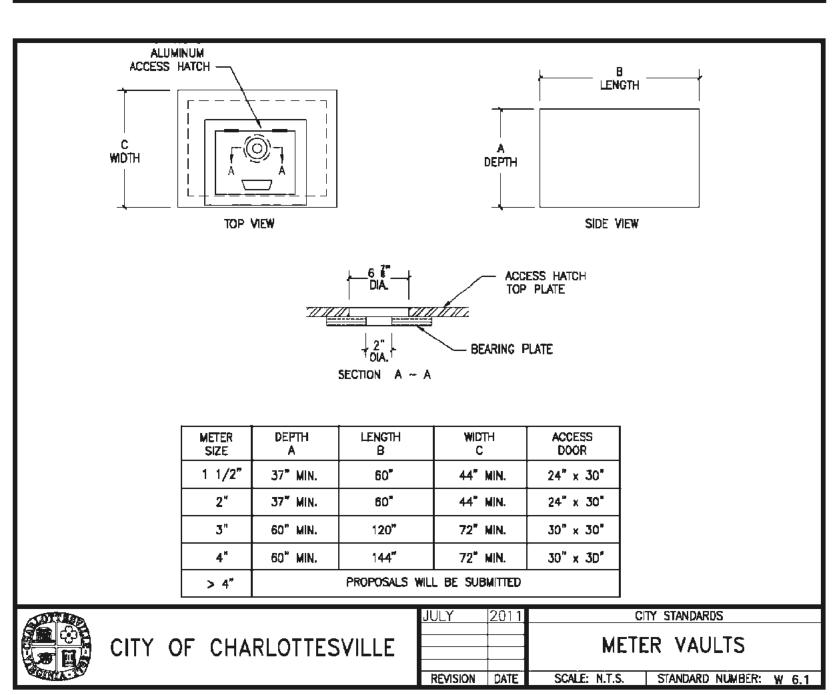


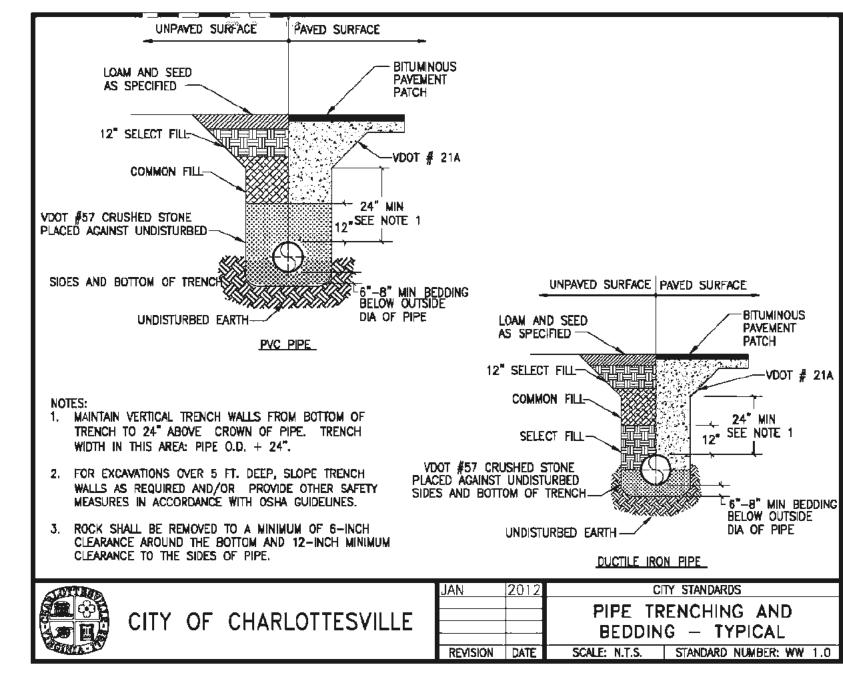


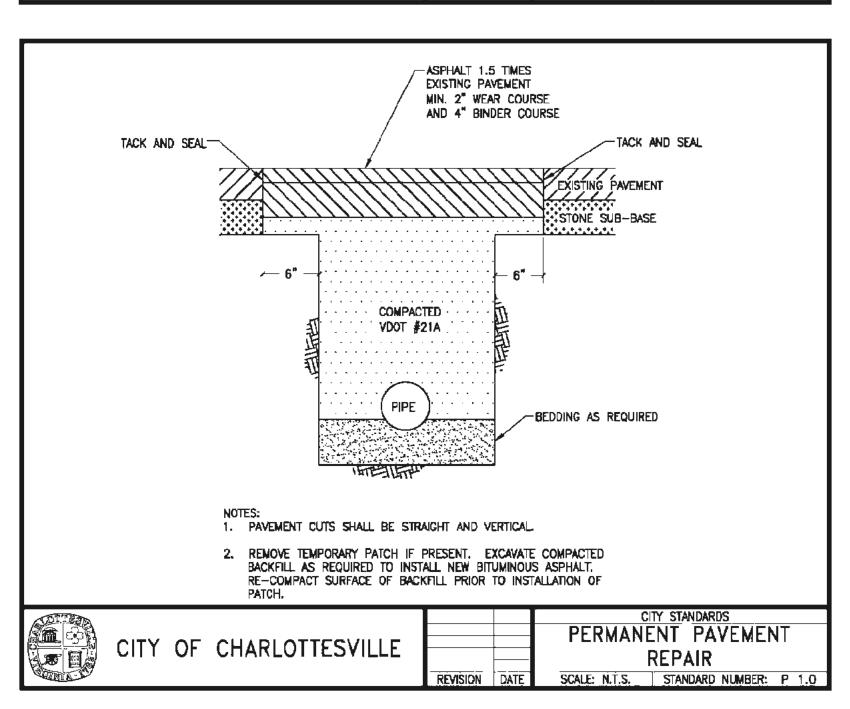


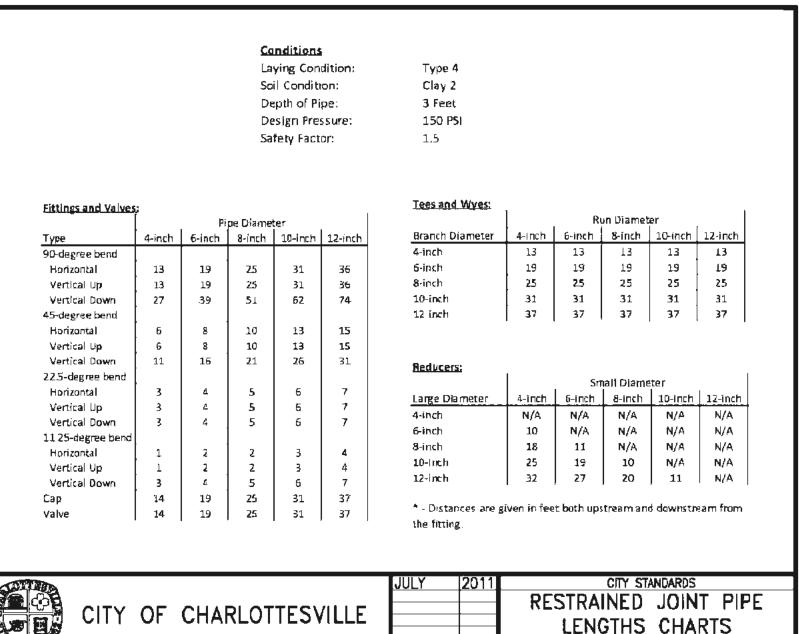


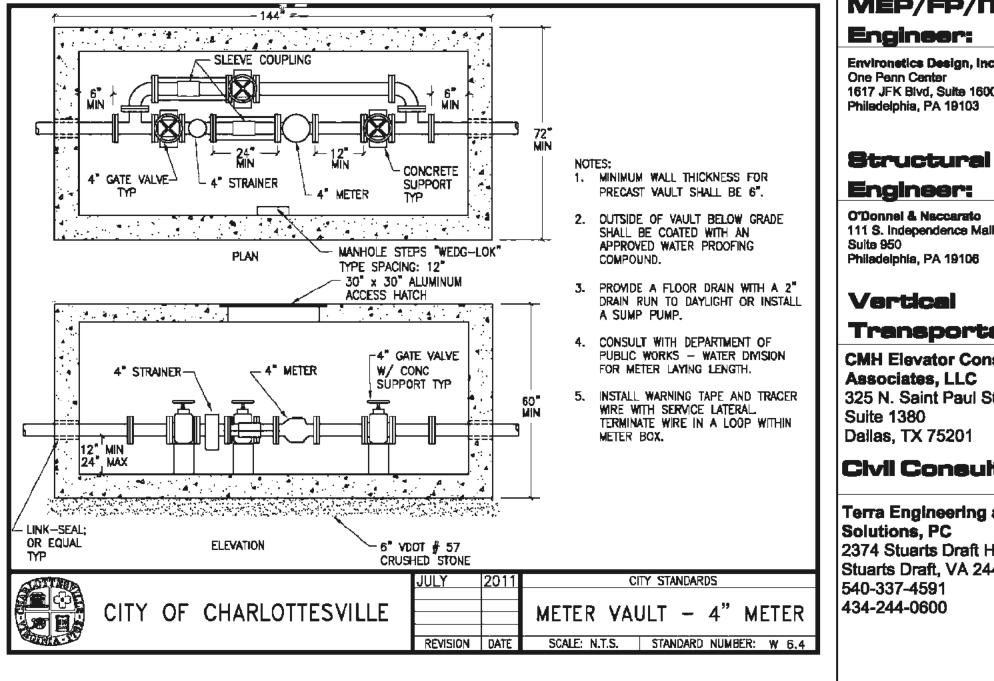


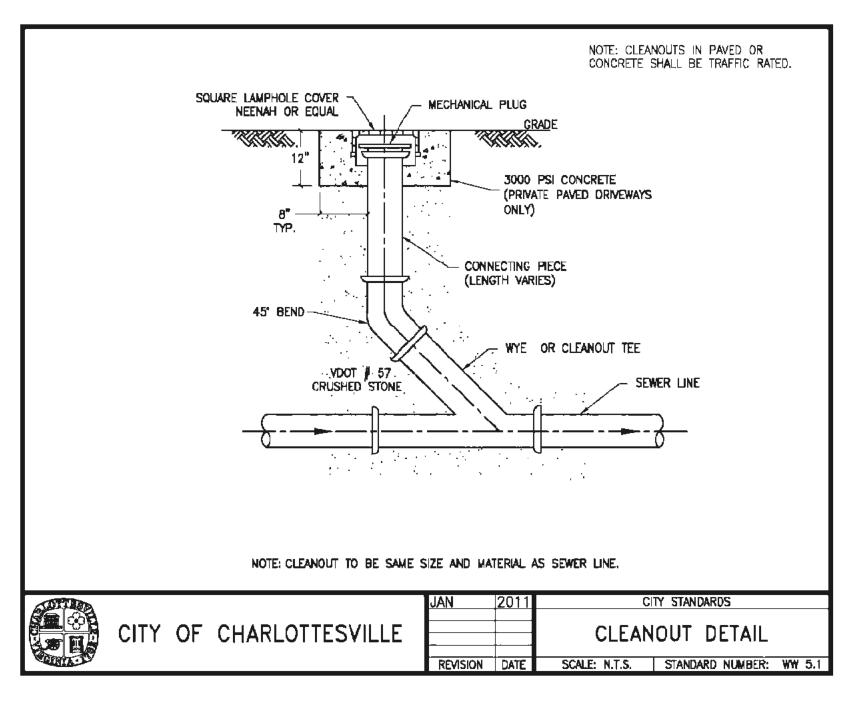


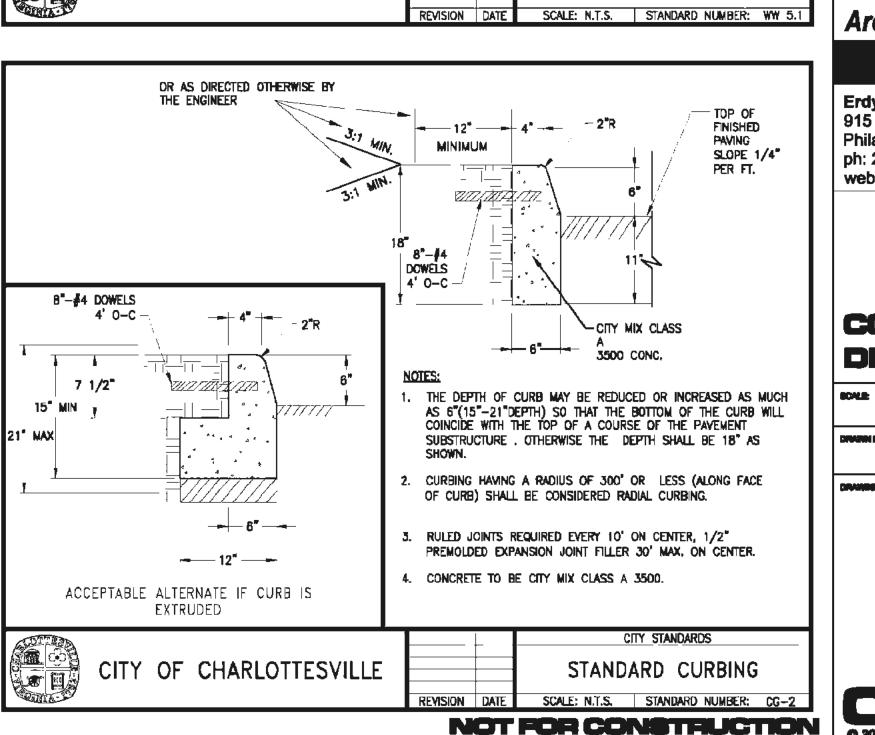


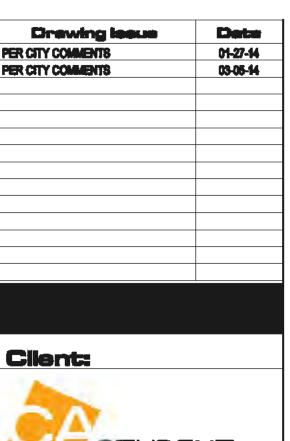














ı	Landscape
1	Architect:
l	Roofmeadow 7135 Germantown Avenue

Philadelphia, PA 19119 MEP/FP/IT Engineer:

SCALE: N.T.S. | STANDARD NUMBER: W 2.4

Environatics Design, Inc. One Penn Center 1617 JFK Bivd, Suite 1600 Philadelphia, PA 19103

Engineer: O'Donnel & Naccarato 111 S. Independence Mall East Suite 950 Philadelphia, PA 19106

Vertical

Transportation: **CMH Elevator Consultants &** Associates, LLC 325 N. Saint Paul Street, Suite 1380 Dallas, TX 75201

Civil Consultant:

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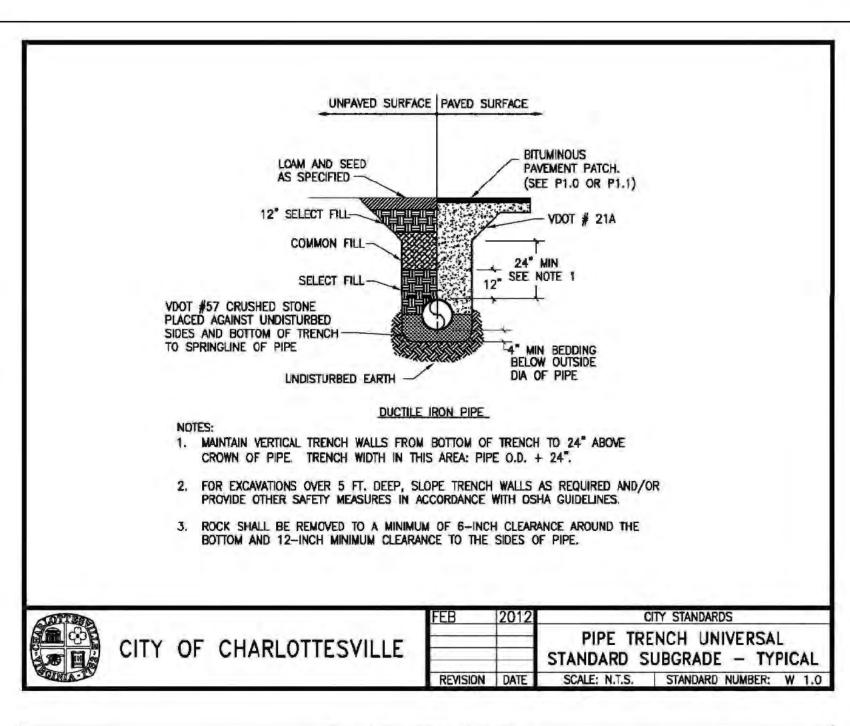
Architect: SCOTT A. ERDY, AIA
DAVID S. MCHENRY, AIA

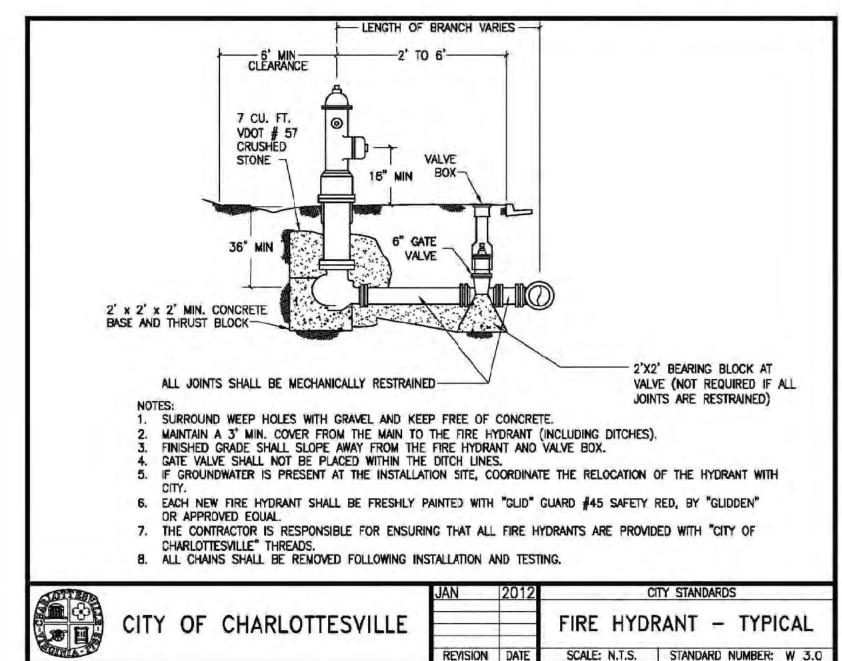
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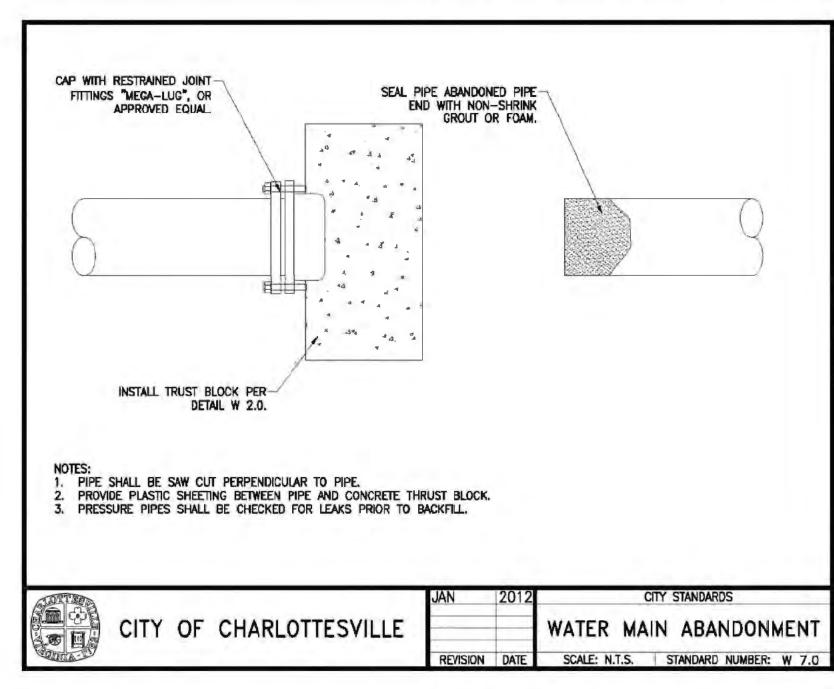
CONSTRUCTION DETAILS

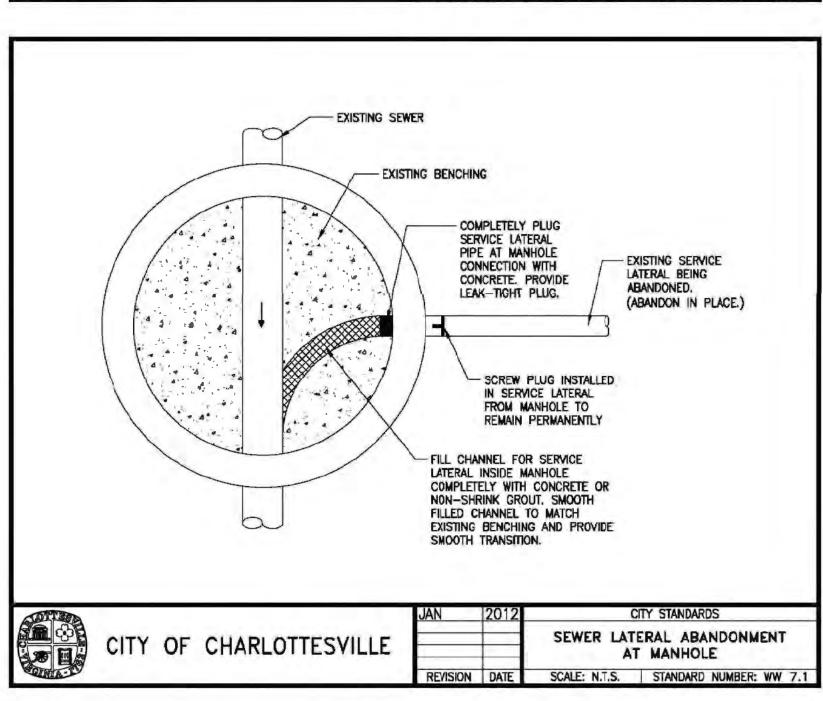
AS NOTED	2013 10, 16
DEVENOUSY: AE	РИОЛИСТ NIX 1318
COMMUNES OLD MINES.	•

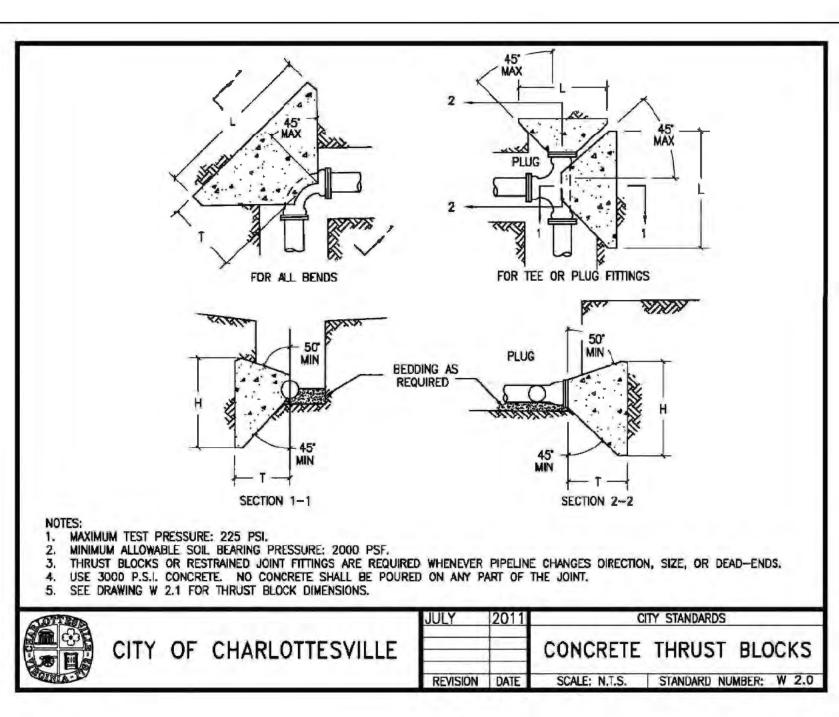
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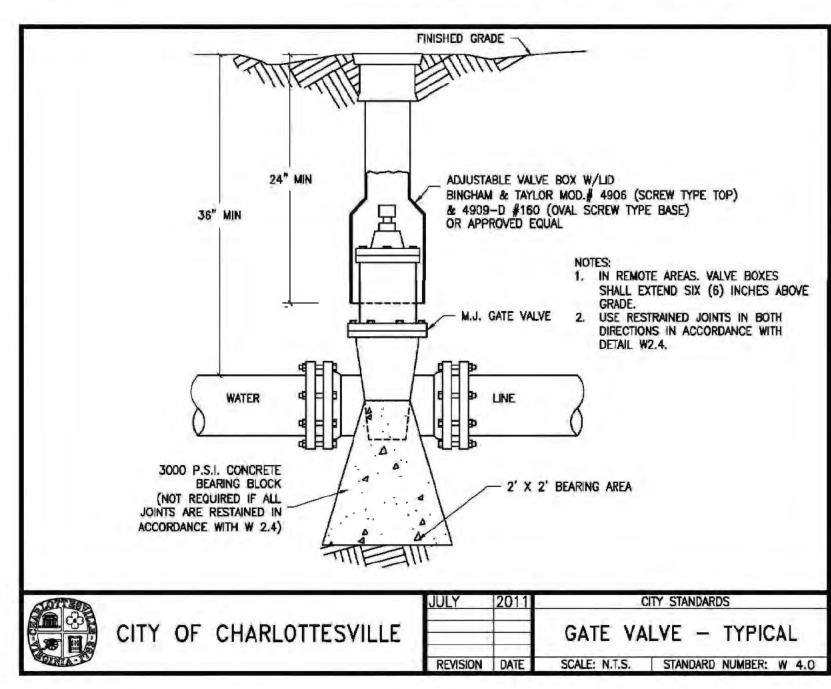


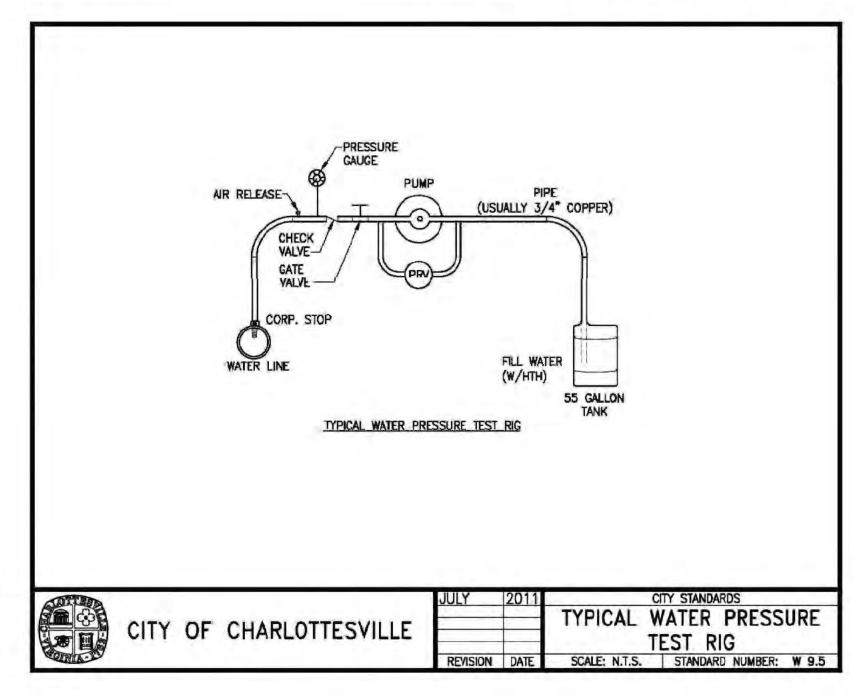


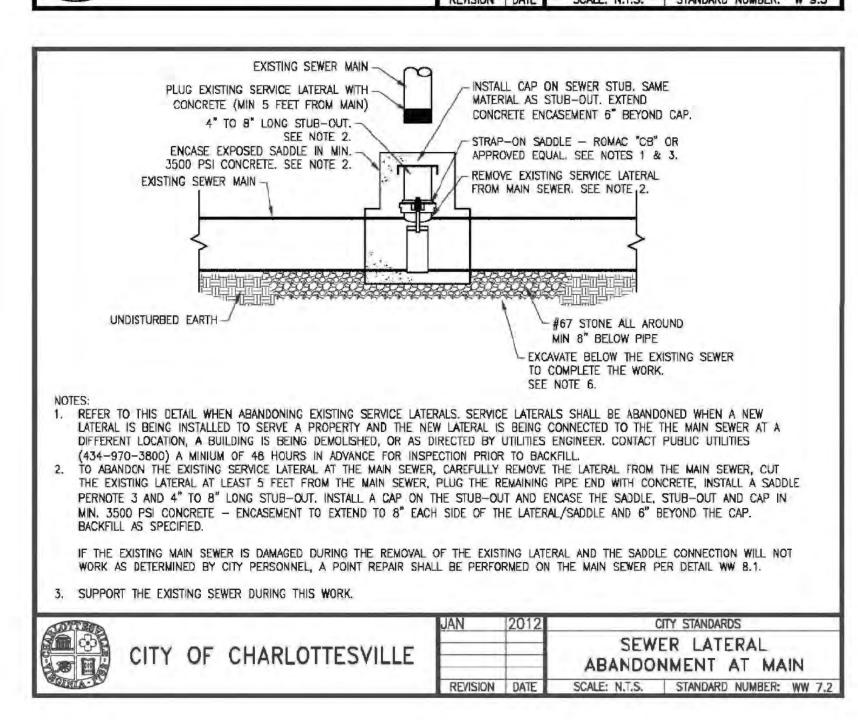


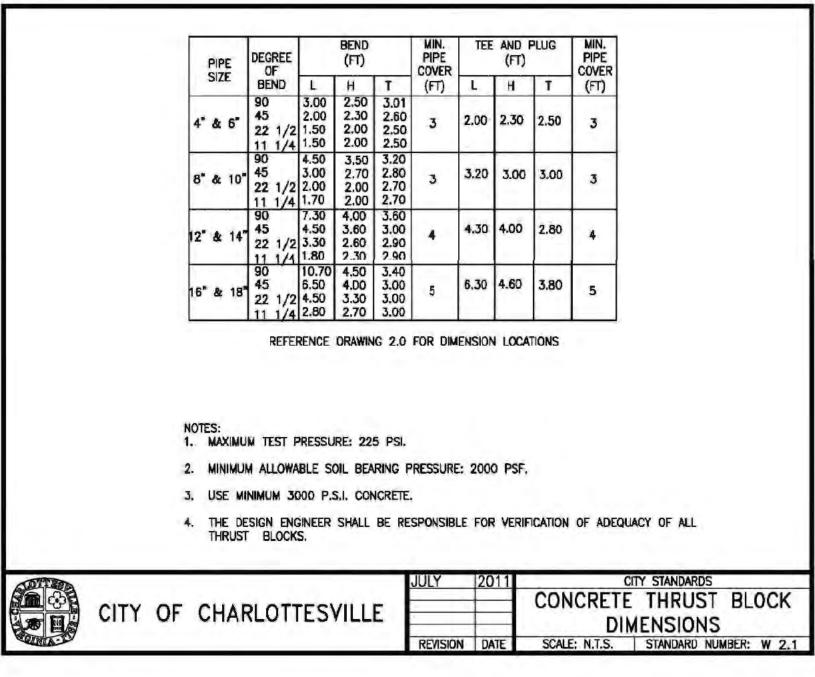


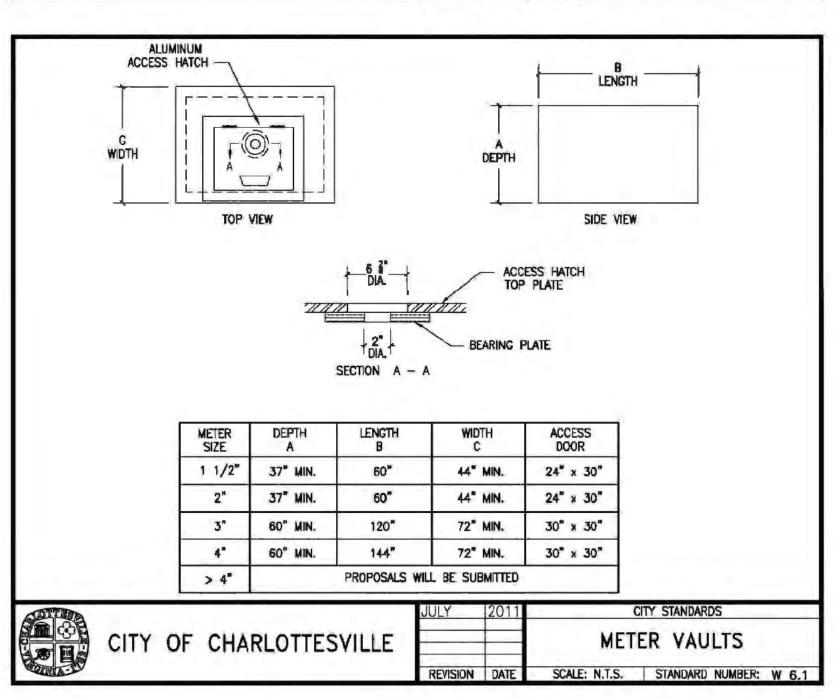


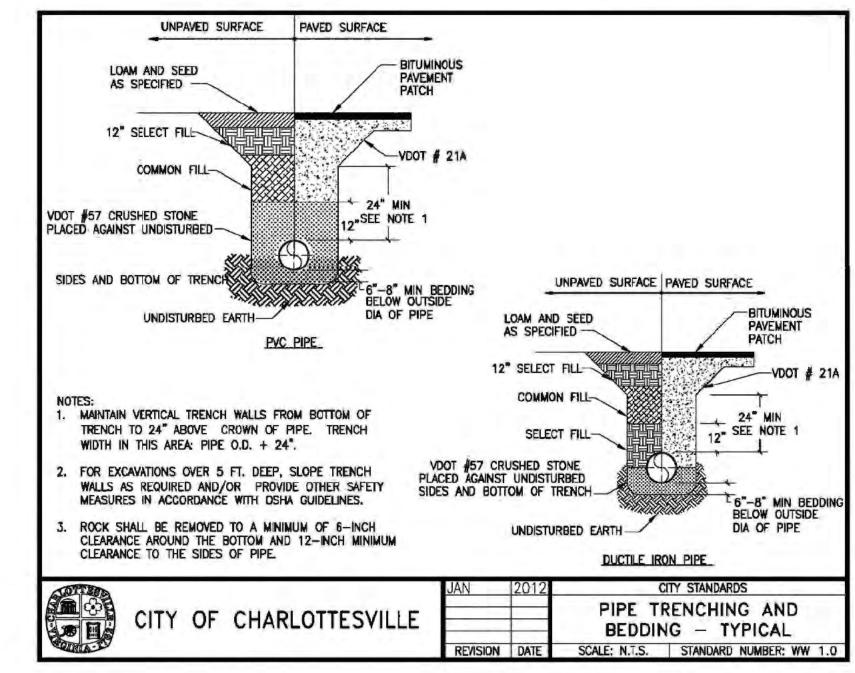


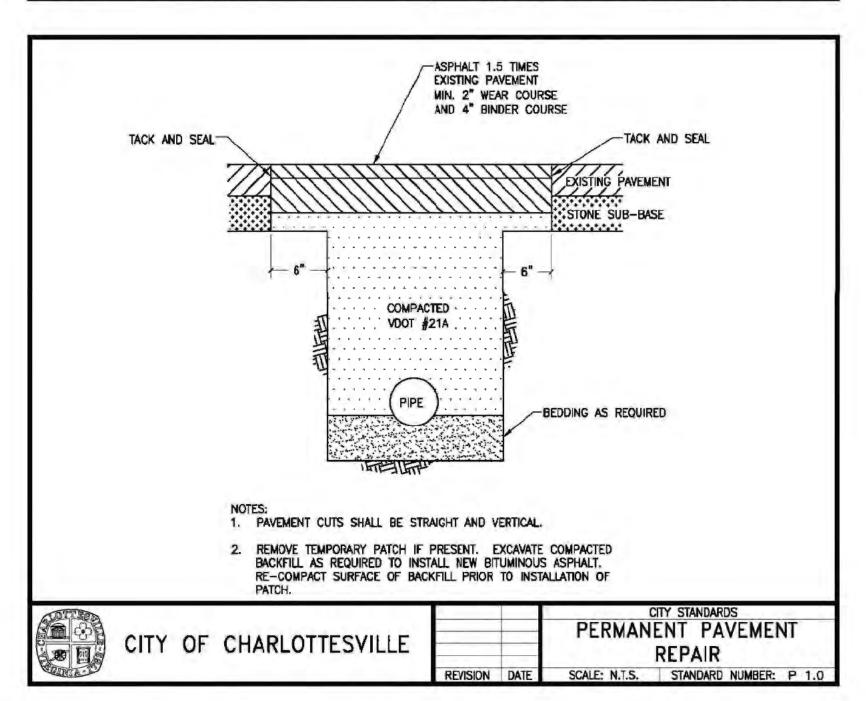


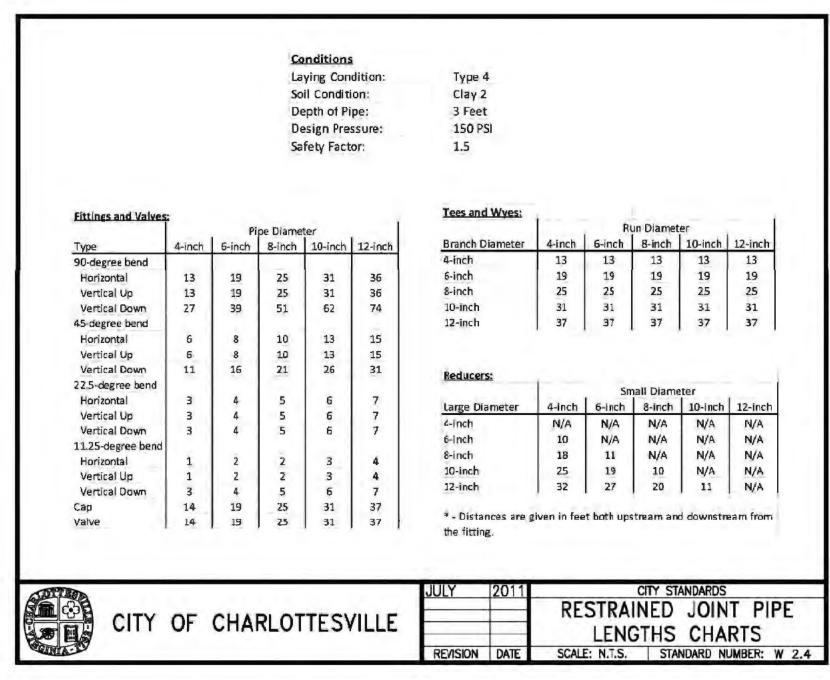


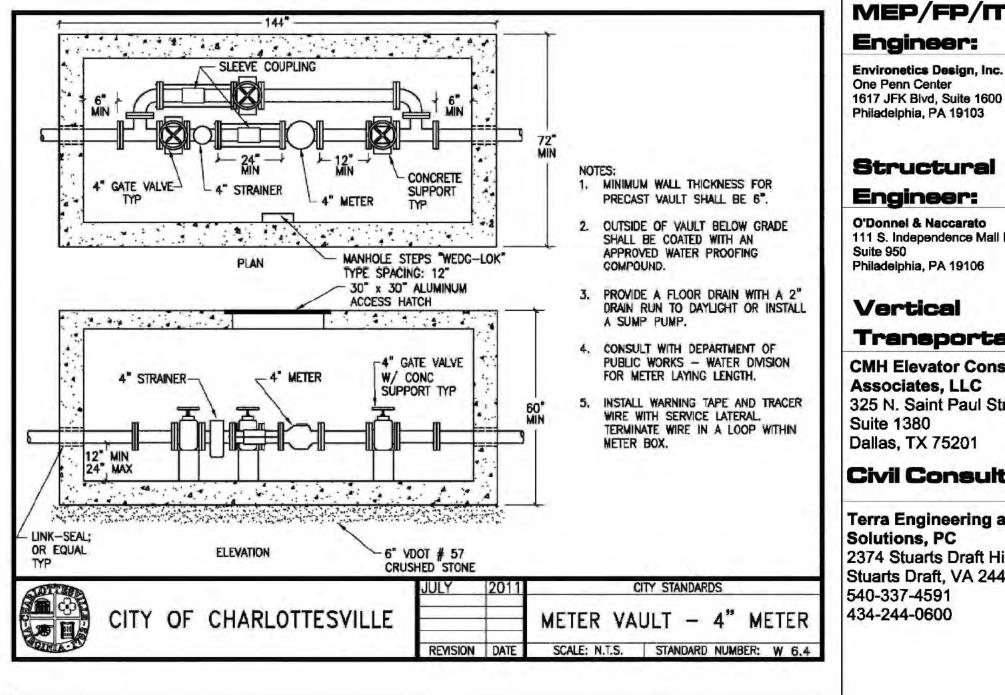


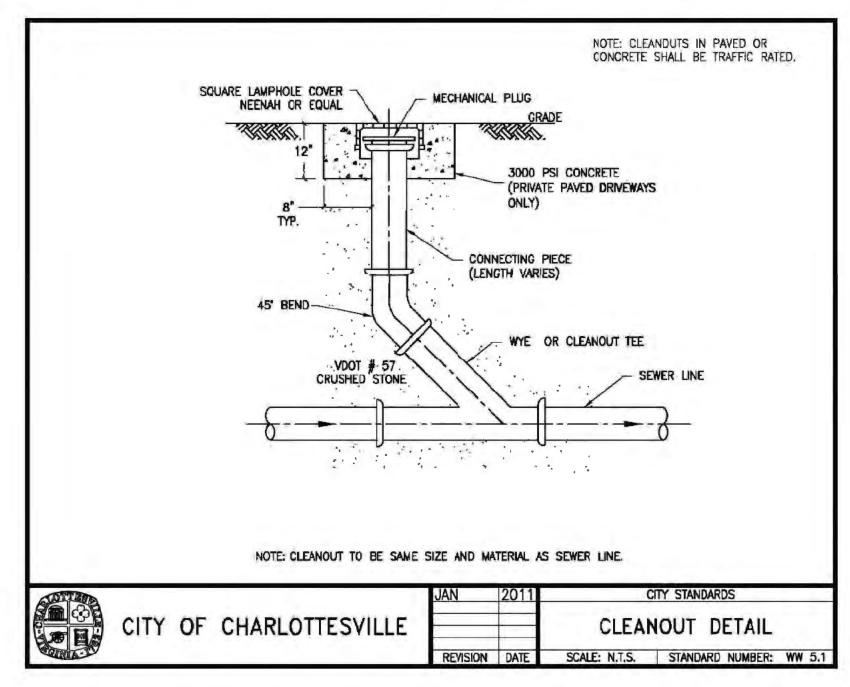


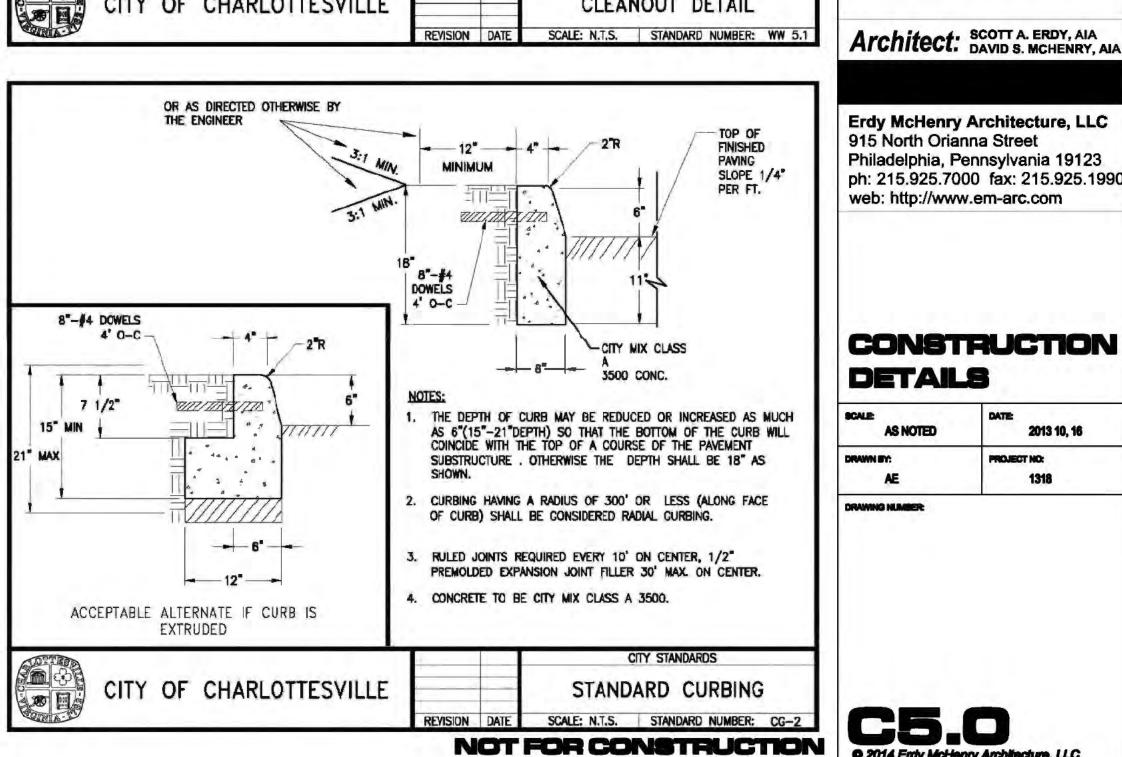


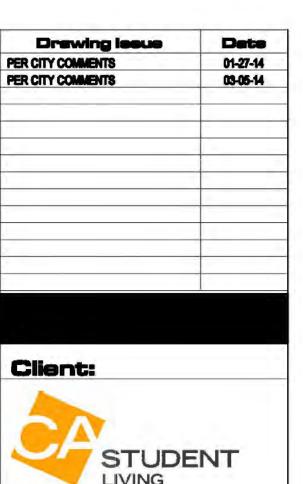














Landscape Architect: 7135 Germantown Avenue

Philadelphia, PA 19119 MEP/FP/IT Engineer: Environetics Design, Inc. One Penn Center

Structural Engineer: O'Donnel & Naccarato

111 S. Independence Mall East Suite 950 Philadelphia, PA 19106

Transportation: **CMH Elevator Consultants &** Associates, LLC 325 N. Saint Paul Street, **Suite 1380**

Dallas, TX 75201 Civil Consultant:

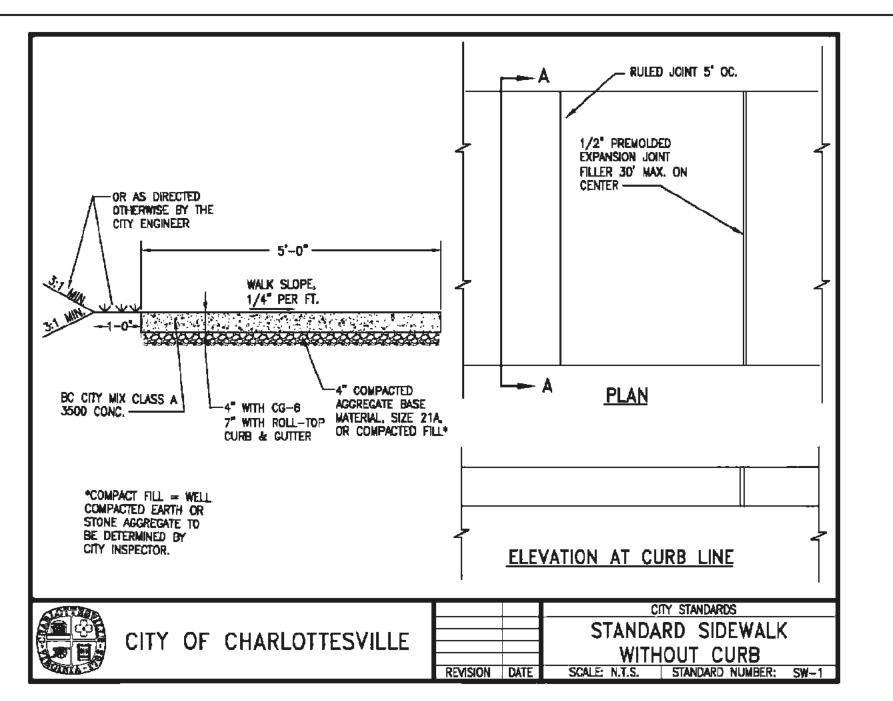
Terra Engineering and Land Solutions, PC 2374 Stuarts Draft Highway Stuarts Draft, VA 24477 540-337-4591 434-244-0600

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

CONSTRUCTION DETAILS

2013 10, 16 AS NOTED PROJECT NO: DRAWING NUMBER:

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PERMISSIBLE CONST.

- STD. CG-2

TRUNCATED DOMES.

CITY STANDARDS

451

Cu. Yorde

.486

JB-1

17.67

53.53

35.83

53.53

108.78

74.78

143.33

09,53

182.90

127.85

227.29

237.42

278.49

287.65

195.09

330.50

342.70

234.02

389.34

402.58

278.49

106,13

VDOT

ROAD AND BRIDGE STANDARDS

REVISION DATE SHEET 4 OF 4

CROSSWALK

TYPICAL PLACEMENT AT

<u>'ARALLEL & PERPENDICULAR</u>

<u>APPLICATION</u>

ROADWAY GRADE <u>MIN. RAMP LENGTH (FT)</u>

_6 _ _ | _ 15 _ _ 15

30*

Out Yords

DISPLACEMENT QUANTITIES FOR PIPE OPENINGS

(TO BE USED WITH STID 48-1 JUNCTION BOX)

15-

Ou. Yarde

.036

.122

.263

.176

.481

1.040

JUNCTION BOX DISPLACEMENT QUANTITIES

FOR 48" - 72" PIPE CULVERTS

VERGINA DEPARTMENT OF TRANSPORTATION

4" CURB 6" CURB 2 4

--- 5' MIN. -

TANGENT PLAN

NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 3.

48:1 MAX.

12:1

—-- 2' MIN. |---

THIS COMBINED (PARALLEL & PERPENDICULAR) DESIGN FOR

ALTERATIONS CAN BE USED WITH ADJOINING BUFFER STRIP

LANDING AT BOTTOM OF TWO SLOPING SIDES WITH 60"X60" MIN.

DIMENSIONS. THE SHORT PERPENDICULAR RUN TO THE STREET

CAN BE PROTECTED BY A LANDSCAPED SETBACK OR

CITY OF CHARLOTTESVILLE

PIPE CLASS

(II, IV, V

IL IV. V

(II, IV, V

III, IV, V

Щ, РУ, У

III, IV. V

W, IV

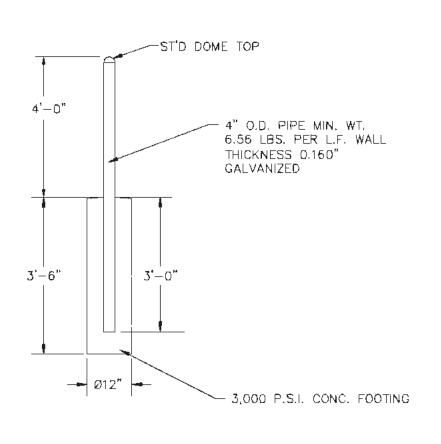
CM

E, IV

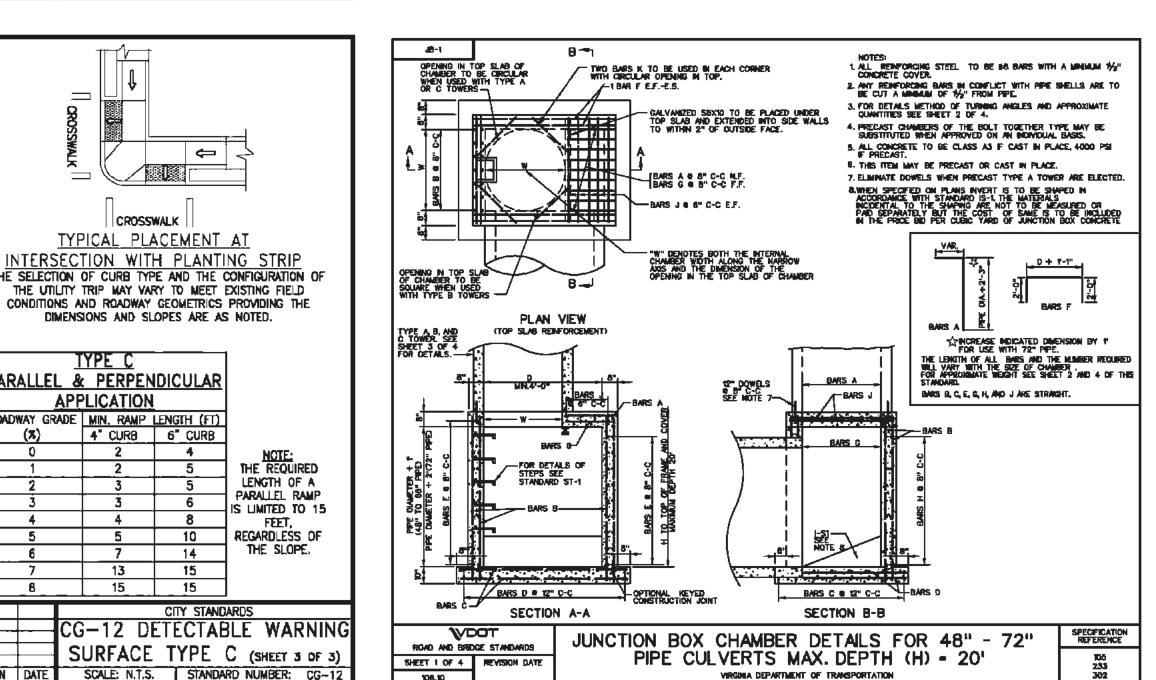
72"

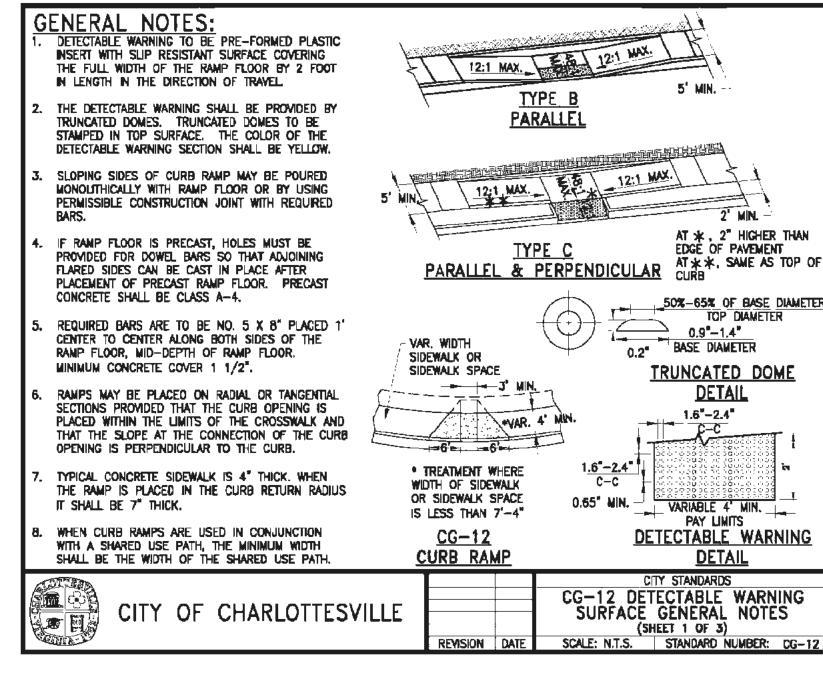
CONNECTED TO THE SIDEWALK WITH A WARPED SURFACE,

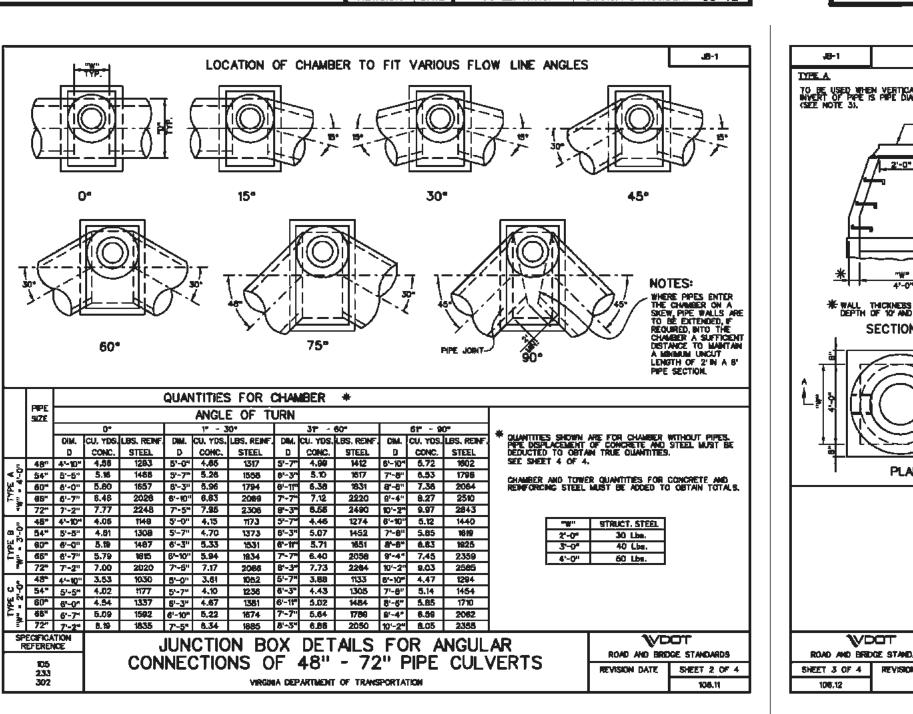
48:1 MAX.

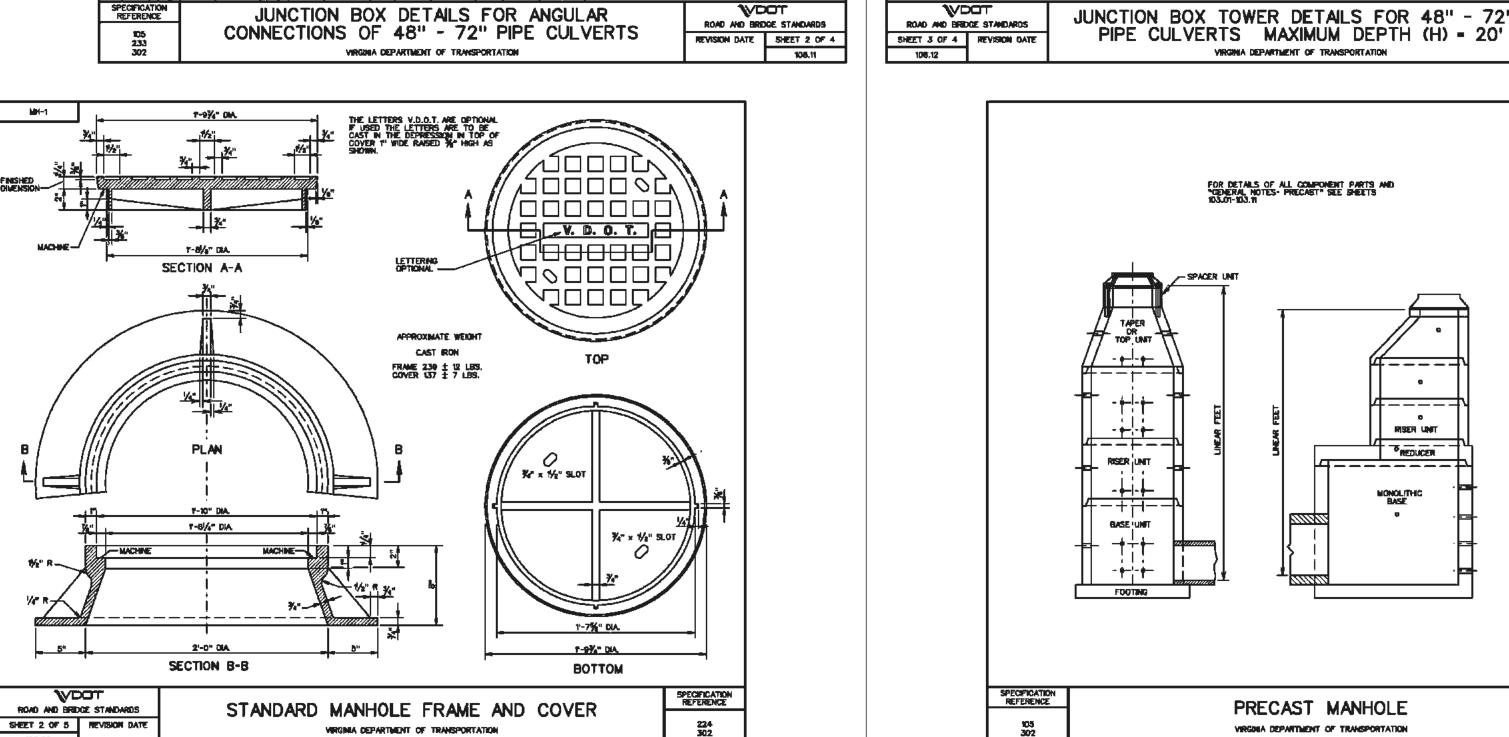




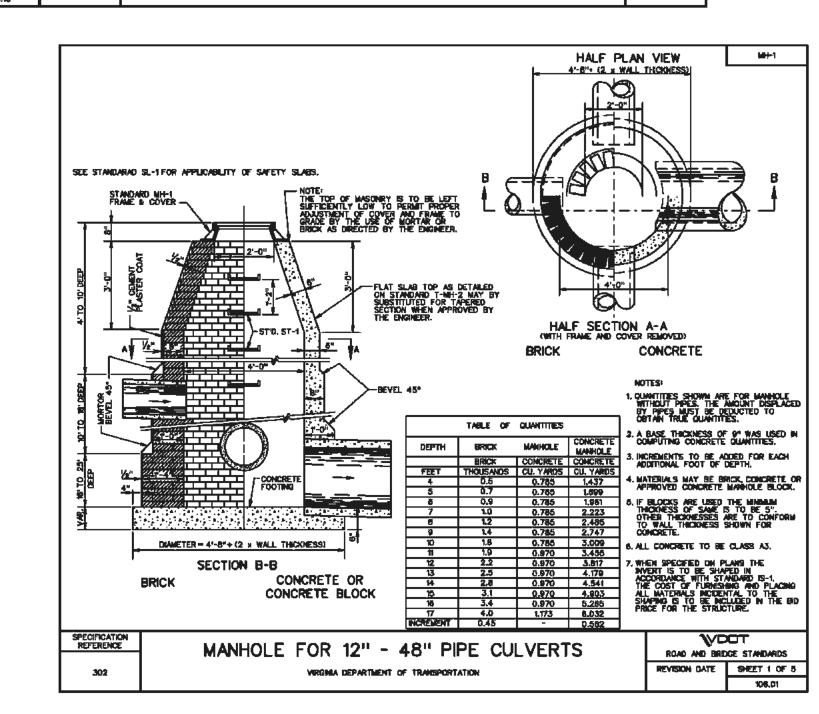


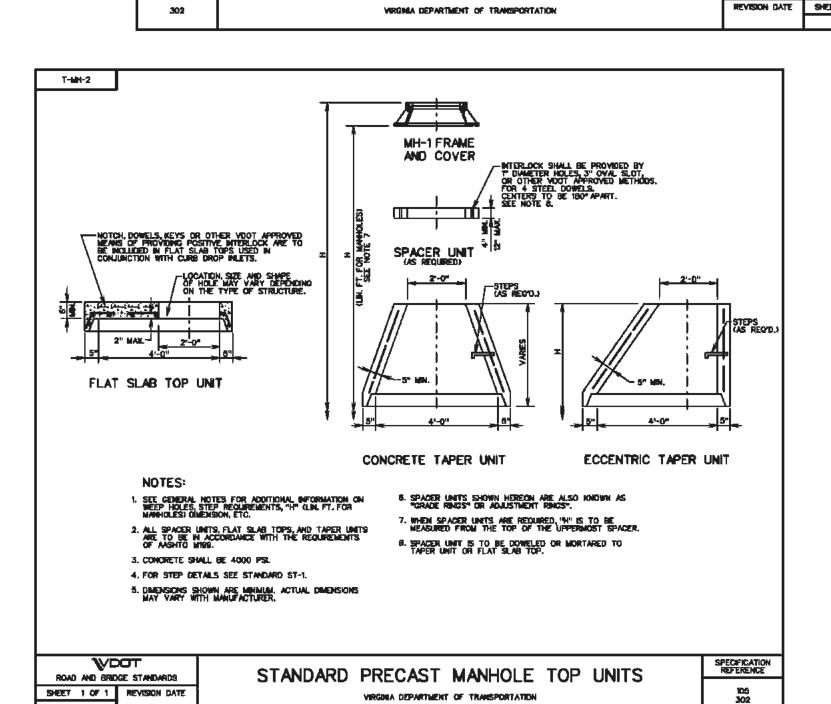


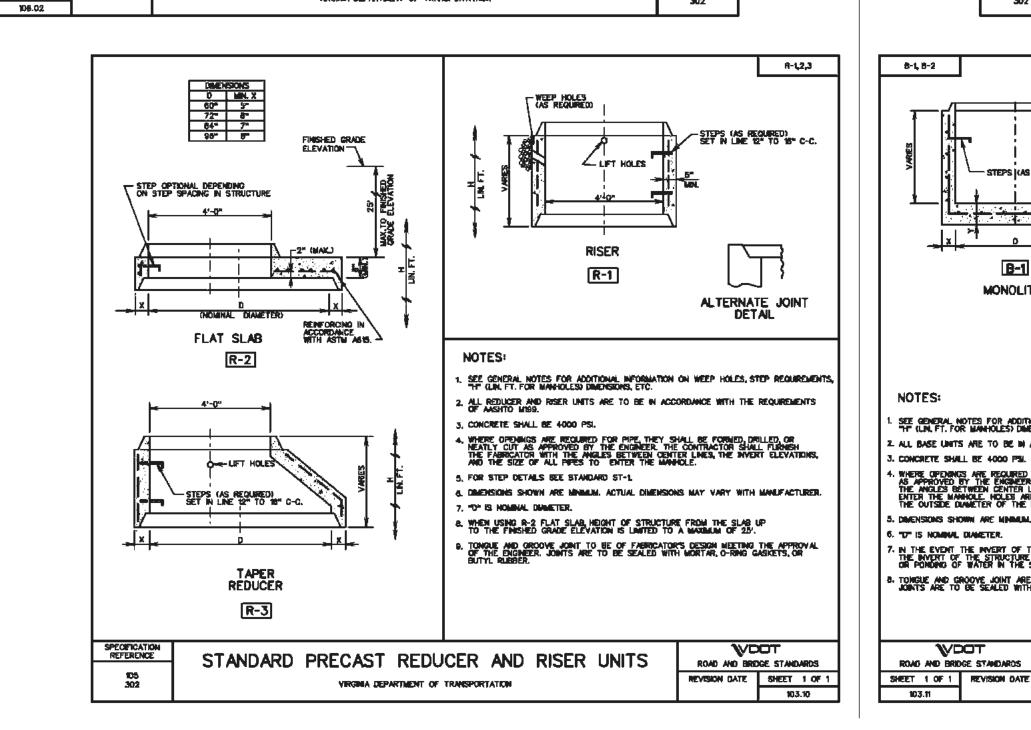


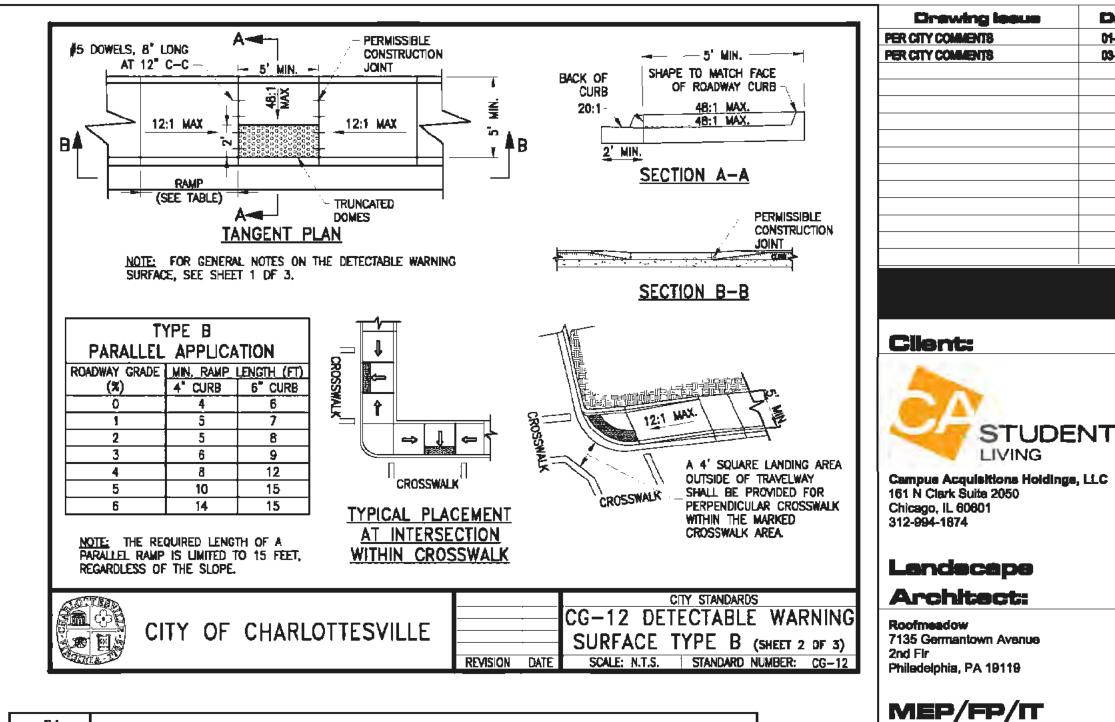


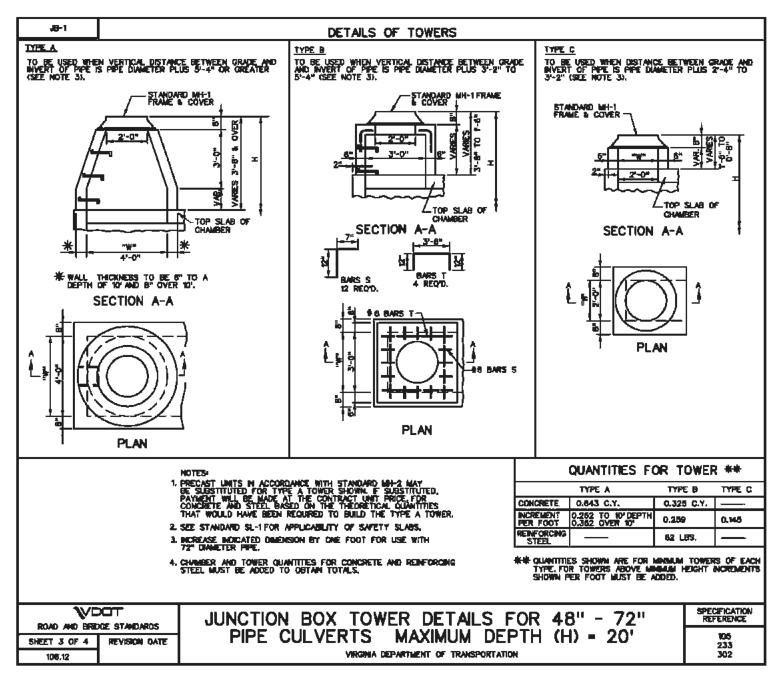
VDOT

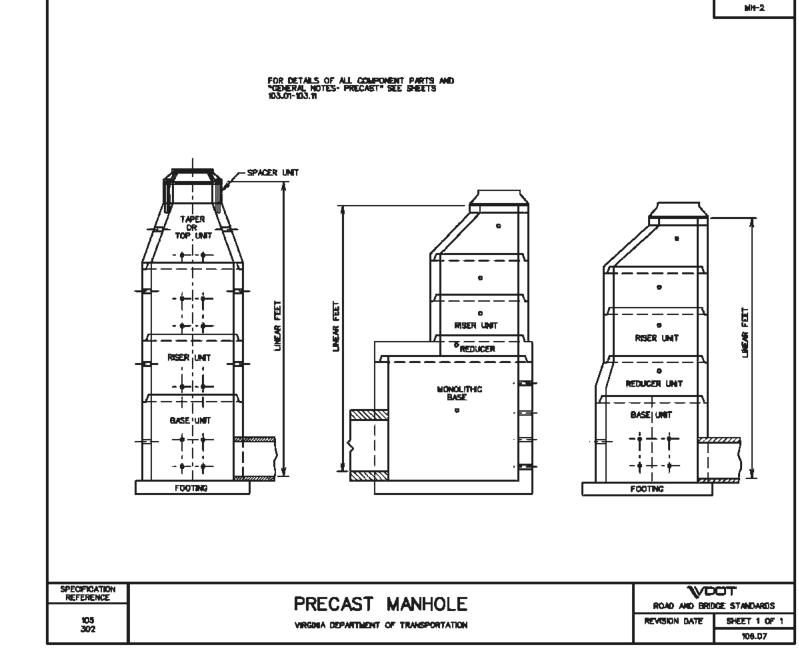


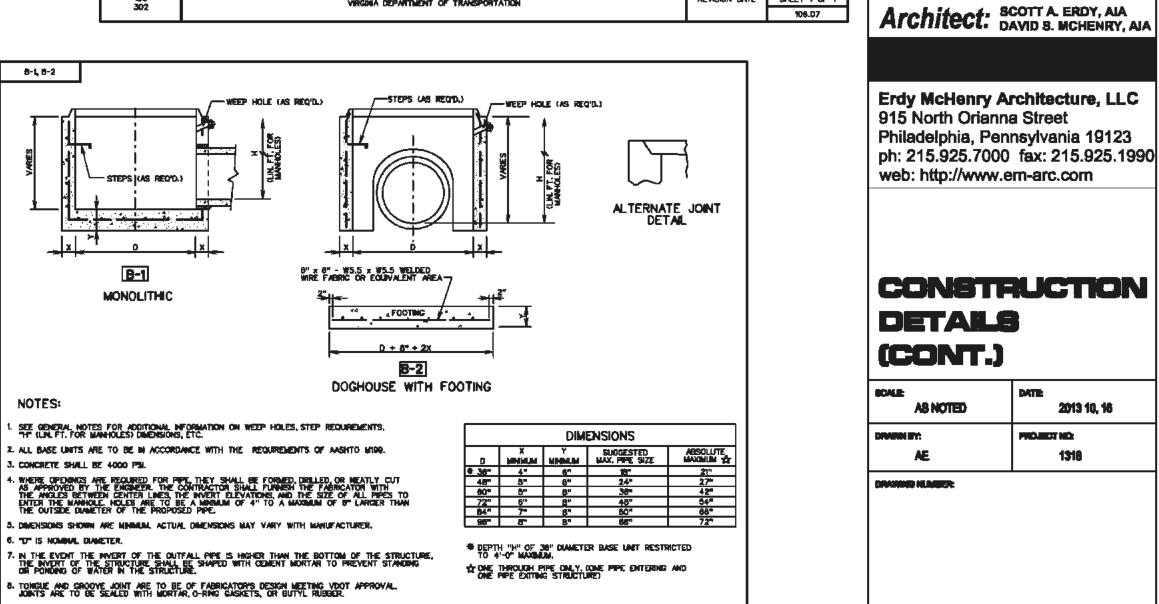








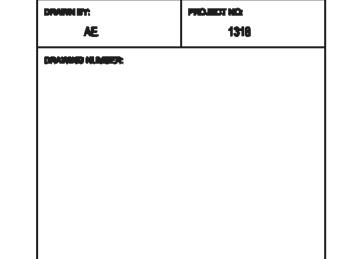




STANDARD PRECAST BASE UNITS

VIRGINA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE



2013 10, 16

Deta 01-27-14

03-05-14

STUDENT

LIVING

Engineer:

One Penn Center 1617 JFK Blvd, Suite 1600

Environetics Design, Inc.

Philadelphia, PA 19103

Structural

Engineer:

Suite 950

O'Donnel & Naccarato

Philadelphia, PA 19106

Associates, LLC

Suite 1380 Dallas, TX 75201

Solutions, PC

540-337-4591

434-244-0600

325 N. Saint Paul Street,

Civil Consultant:

Terra Engineering and Land

2374 Stuarts Draft Highway

Stuarts Draft, VA 24477

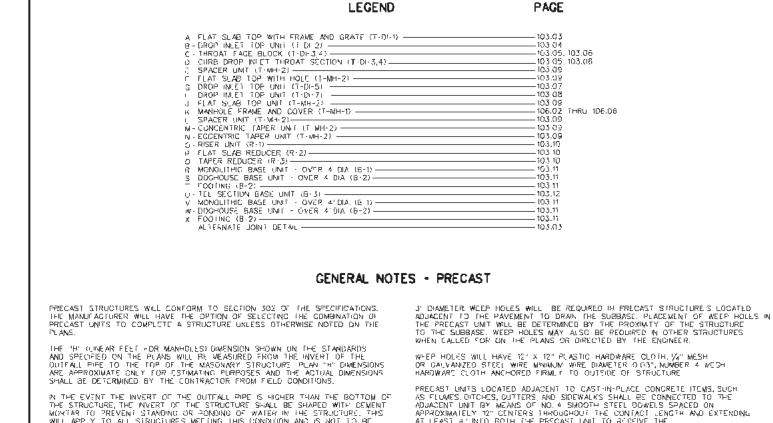
Vertical

111 S. Independence Mall East

Transportation:

CMH Elevator Consultants &

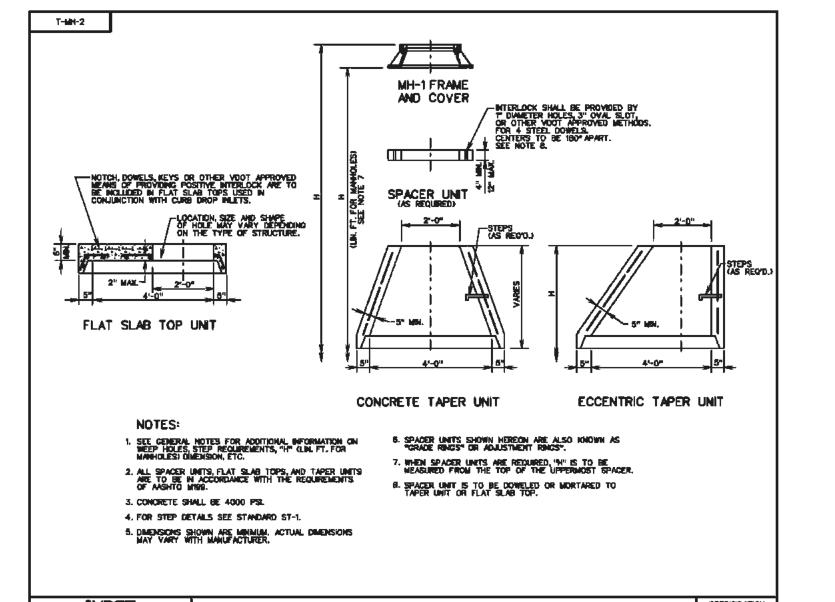
C5.1 NOT FOR CONSTRUCTION © 2014 Erdy MicHenry Architecture, LLC

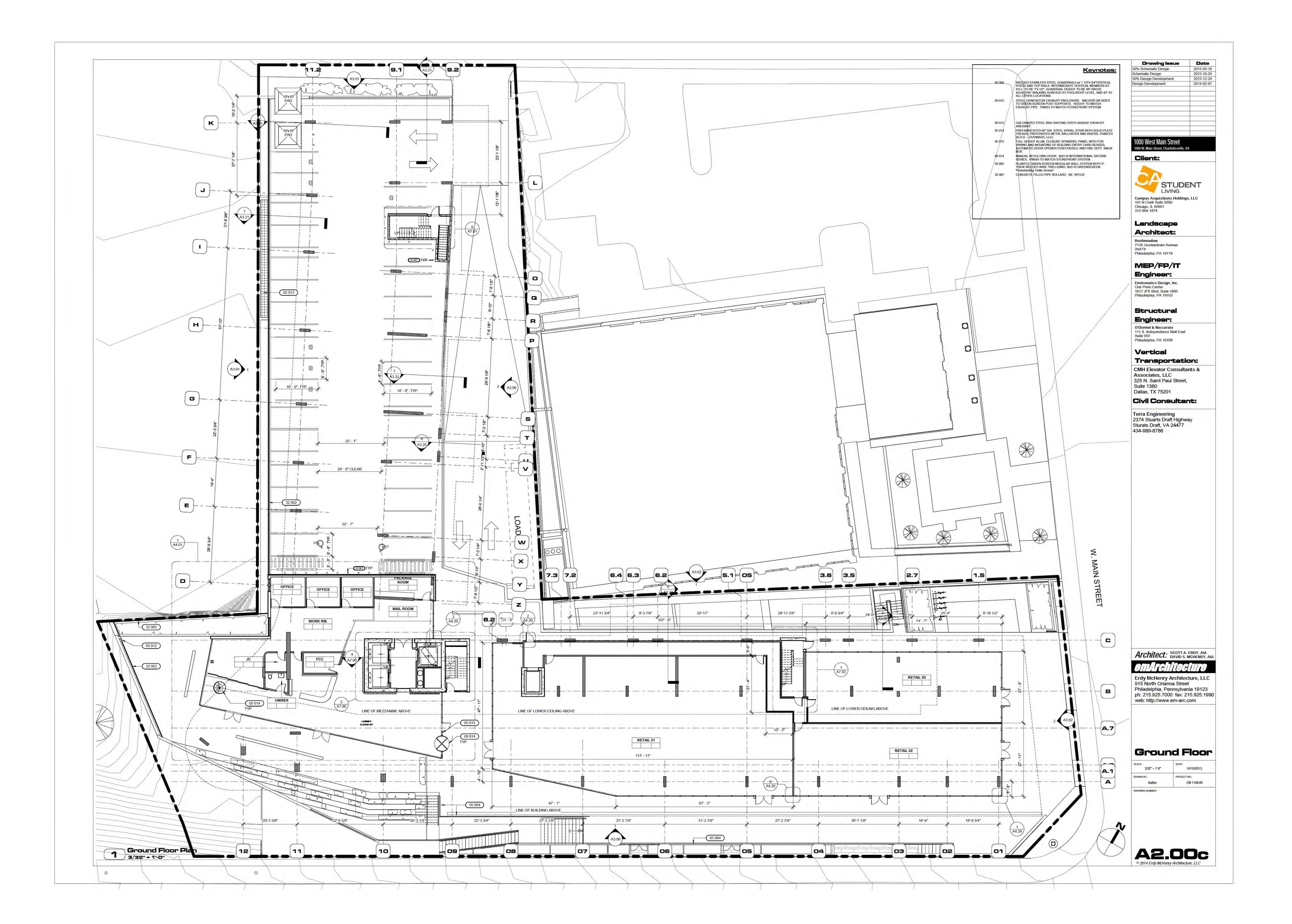


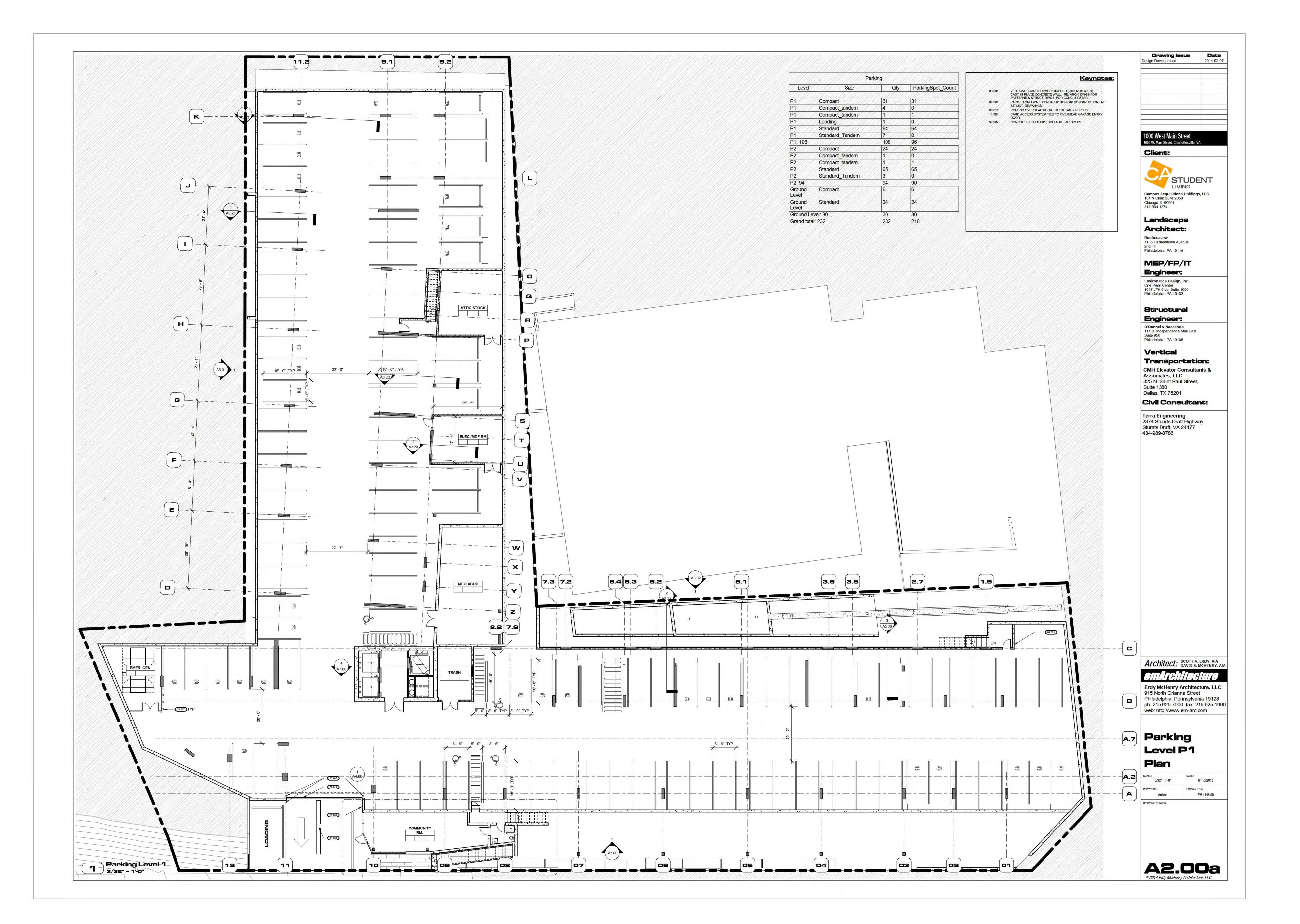
IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH DEMENT MICHAEL PIPE IS HIGHER SHAPED WITH DEMENT MOWTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE, THE CONTROL OF WILL STRUCTURE, THE CONTROL OF WATER IN THE STRUCTURE, THE CONTROL OF WATER IN THE STRUCTURE, THE CONTROL OF WATER IN GOOD OF WATER IN THE STRUCTURE OF THE CONTROL OF WATER OF WATER OF THE CONTROL OF WATER OF WA THE STANDARD SAFETY SLAB (SL-1) IS TO BE USED ONLY WHEN SPECIFIED IN THE PLANS ON THE DRAINAGE DESCRIPTION.
REFER TO STANDARD SL-1FOR SAFETY SLAB INFORMATION.

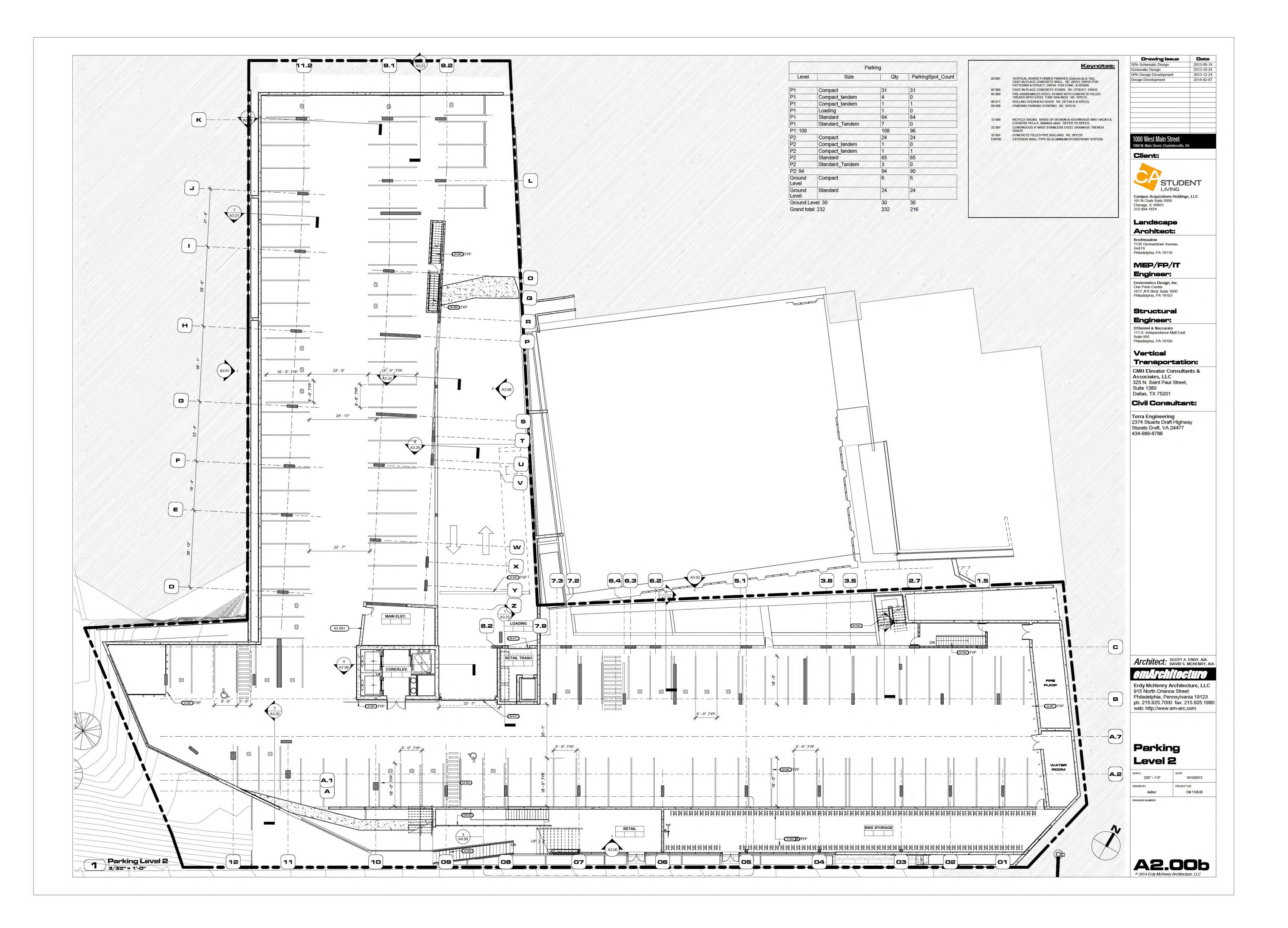
WHEN SPECIFIED ON THE PLANS THE INVERTINE TO BE SHAPLD IN ACCORDANCE WITH STANDARD 6:1 THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE PRICE BID FOR THE STRUCTURE. ୬ GHAMFER MAY BE PROVIDED ON ALL EDGES AT MANUFACTURER'S OPTION. ALL PRECAST STRUCTURES TO BE CONSTRUCTED WITH 4000 PSI MINIMUM CONCRETE.

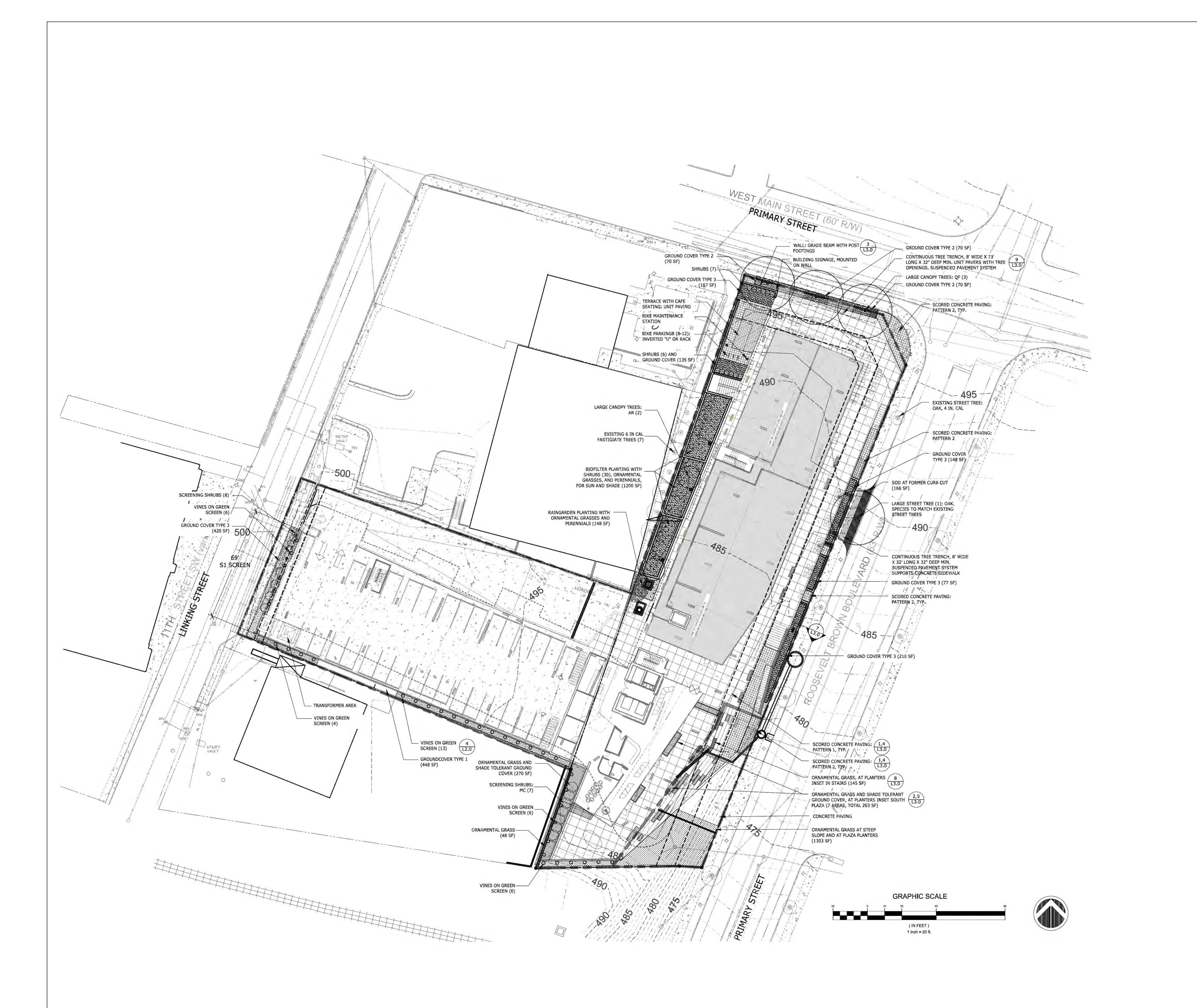
VOOT GENERAL NOTES - PRECAST ROAD AND BRIDGE STANDARDS REVISION DATE SHEET 1 OF 1 077/12 103.02 VIRGINIA DEPARTMENT OF TRANSPORTATION











STUDENT LIVING Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Drawing Issue

Landscape

Architect: Roofmeadow 7135 Germantown Avenue

2nd Flr Philadelphia, PA 19119

Engineer: Environetics Design, Inc. One Penn Center 1617 JFK Blvd, Suite 1600 Philadelphia, PA 19103

MEP/FP/IT

Structural

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111 S. Independence Mall East Suite 950 Philadelphia, PA 19106

Vertical Transportation:

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Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

emArchitecture

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

LANDSCAPE

PLAN

2014.02.28

THIS SHEET FOR LANDSCAPE PURPOSES ONLY

PER CITY COMMENTS

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PLANT SCHEDULE

		SCIENTIFIC NAME	COMMON NAME	QTY	MIN, SIZE	CONDITION	REMARKS
ARGE CANOPY TRE	ES			6			
	AR	Acer rubrum Armstrong	Columnar Red Maple	-	2"- 2.5" cal	B&B	Biofilter area
0.40		Quercus falcata	Southern Red Oak		3.5"- 4" cal	B&B	Street Tree, limb to 6' high clearance
_		Quercus sp.	Oak		2"- 2.5" cal	B&B	Street Tree, species to match existing
_							
RNAMENTAL TREES	s						
_!	MG	Magnolia virginiana var. australis	Sweetbay Magnolia		6'-7' ht.	B&B	Screening tree/ biofilter alternate
HRUBS				68			
	CA	Clethra alnifolia 'Sixteen Candles'	Compact Sweet Pepperbush		18 in. ht.	Container grown	Screening; Biofilter area
_		Hydrangea quercifolia 'Pee Wee'	Dwarf Oakleaf Hydrangea		18 in. ht.	Container grown	Accent plant
_	-	Ilex glabra 'Nigra'	Compact Inkberry		18 in. ht.	Container grown	Hedging; Biofilter area
_		llex verticillata 'Red Sprite' / 'Jim Dandy'	Compact Winterberry		18 in. ht.	Container grown	Screening; Biofilter area
_	V 4.1	Myrica cerifera	Southern Wax Myrtle		36 in. ht.	Container grown	Screening, Evergreen
_		Prunus laurocerasus 'Schipkaensis'	Cherry Laurel		18 in. ht.	Container grown	Screening, Evergreen
_					-		
INES				35			
	CR	Campsis radicans	Trumpet Vine		#2 Container	Container grown	alternate species
	PV	Gelsemium sempervirens	Carolina Yellow Jasmine		#2 Container	Container grown	
_1	PT	Parthenocissus tricuspidata	Boston Ivy		#2 Container	Container grown	alternate species
ERENNIALS, GRASS ND GROUNDCOVER	RS	0	Disable of Codes	5192 SF		9-4-	
_		Carex flaccosperma	Blue Wood Sedge		30 cell	flats	Groundcover accent; dry shade
_		Chelone glabra	White Turtlehead		30 cell	flats	Biofilter area
		Chasmathium latifolium	River Oats	-	72 cell	flats	Biofilter area
_		Dryopteris cultivars	Wood fern cultivars		30 cell	flats	Groundcover accent; dry shade
		Hedera helix	English Ivy		72 cell	flats	Groundcover
· ·		Heuchera villosa	Alum Roof		#1 Container	Container grown	Groundcover accent; massing
	0.1	Iris virginica	Virginia Blue Flag Iris		18 cell	flats	Biofilter area
_		Juncus effusus	Soft Rush		18 cell	flats	Biofilter area
		Onoclea sensibilis	Sensitive Fern		30 cell	flats	Biofilter area
		Perovskia atroplicifolia	Russian Sage		#1 Container	Container grown	Accent; Plaza planters
		Phlox subulata	Moss Phlox		#1 Container	Container grown	Plaza planters
_		Prunus laurocerasus 'Mt Vernon'	Dwarf Cherry Laurel		18 in. ht.	Container grown	Evergreen; low massing
		Panicum virgatum cultivars	Switch Grass		72 cell	flats	Biofilter area; steep slopes
		Seslaria autumanlis	Autumn Moor Grass		30 cell	flats	Plaza planters, sun
_		Senecio aureus (Packera aurea)	Golden Groundsel		30 cell	flats	Groundcover accent
13	SE	Sporobolus heteropliepis	Prairie Dropseed		#1 Container	Container grown	Plaza planters; steep slopes alternat
		A STATE OF THE STA	Compounder	I	#1 Container	Container grown	Diaza plantare alternate to chrube
	TE	Teucrium chamaedrys	Germander		#1 Container	Container grown	Plaza planters, alternate to shrubs

T ITING	GROWTH OVER 20 YRS	HT AT 20 YRS	RATIO CANOPY WIDTH: HT	CANOPY AREA, 20 YRS	QTY	TOTAL CANOPY AREA
10 FT	+ 40 FT	50 FT	25 %	123 FT	2	246 SF
11 FT	+ 40 FT	51 FT	70 %	998 FT	3	2,994 SF

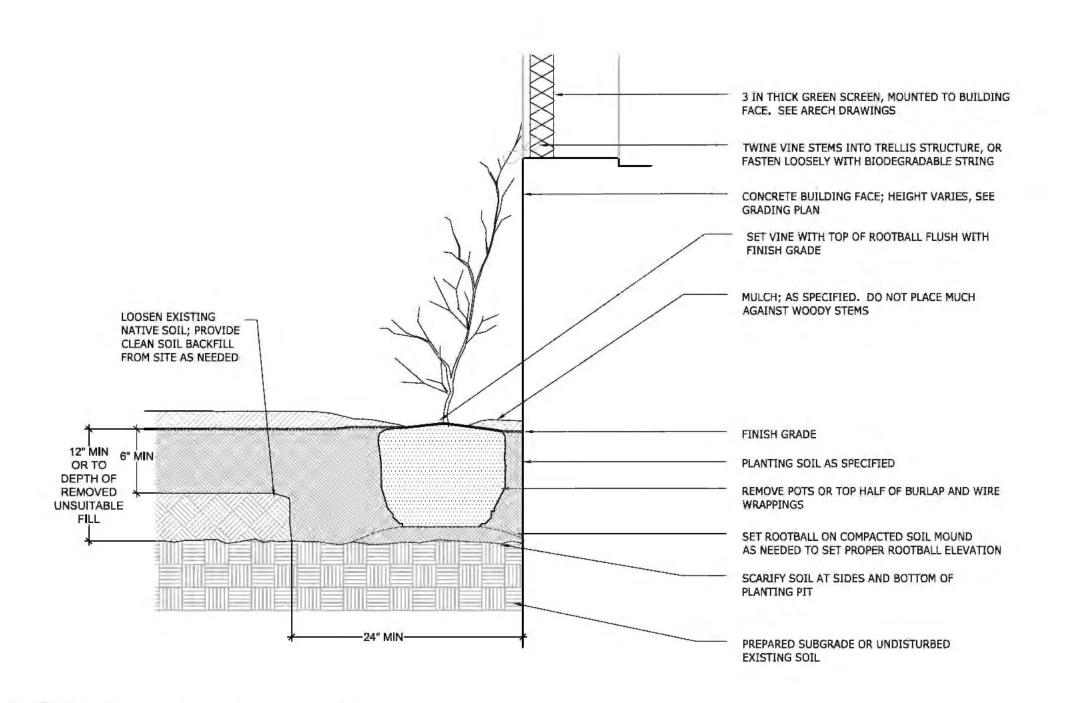
TOTAL CANOPY AREA PROVIDED: 3,240 SF

GROSS SITE AREA: 55,650 SF BUILDING AND DRIVEWAY FOOTPRINT: 42,561 SF NET SITE AREA = 13,089 SF MIN. CANOPY AREA REQUIRED: 10% = 1,308 SF

NOTES:

- MARK UTILITIES IN THE FIELD PRIOR TO PLANTING. ADJUST PLANT LOCATIONS IF NECESSARY IN COORDINATION WITH LANDSCAPE ARCHITECT.
- 2. PROVIDE IRRIGATION FOR PLANTERS AT PLAZA AND STAIRS (PLANTING OVER STRUCTURE). IRRIGATION OPTIONAL (ADD ALTERNATE) FOR STREET TREES AND PLANTERS ON-GROUND.
- 3. PLANT LAYOUT TO BE REVIEWED IN FIELD BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

3 INCH SOIL SAUCER AT OUTSIDE OF ROOT BALL REMOVE EXCESS SOIL FROM TOP OF ROOT BALL TO EXPOSE ROOT FLARE TO 1 INCH ABOVE TOP STRUCTURAL CORRECTED TREE ROOT BALL; SET TOP FLUSH WITH FINISH GRADE MULCH; AS SPECIFIED. DO NOT PLACE MUCH AGAINST TREE TRUNK FINISH GRADE PLANTING SOIL CUT TOP HORIZONTAL WIRES OF WIRE BASKET TO 12 IN MINIMUM AND FOLD DOWN INTO PLANTING SOIL CLEAN SOIL BACKFILL FROM EXCAVATION OF PLANTING PIT. PROVIDE ADDITIONAL PLANTING SOIL IF NEEDED SET ROOTBALL ON COMPACTED SOIL MOUND COMPACT ADDITIONAL SOIL AT SIDES OF ROOTBALL AS NEEDED TO STABILIZE TREE SCARIFY SOIL AT SIDES AND BOTTOM OF PLANTING PIT PREPARED SUBGRADE OR UNDISTURBED EXISTING SOIL -MIN 3X ROOTBALL WIDTH-TYPICAL TREE PLANTING 1) 1YPICAL



VINE PLANTING AT BUILDING FACE

NOT TO SCALE

TOP OF ROOT BALL; FLUSH WITH AS SPECIFIED -SURROUNDING PLANTING SOIL MULCH, AS SPECIFIED. DO NOT PLACE MULCH AGAINST WOODY PLANT STEMS LOOSEN AND SPREAD ROOTS LATERALLY INTO SURROUNDING PLANTING SOIL PLANTING SOIL OR PLANTER MEDIA; COMPRESS BY HAND AT SURFACE AROUND ROOT BALL TO REMOVE AIR POCKETS PREPARED SUBGRADE (AT PLANTING BEDS)
OR FOUNDATION DRAINAGE LAYERS (AT

3 INCH SOIL SAUCER ____ AT OUTSIDE OF SHRUB PLANTING AREA LOOSEN EXISTING SET SHRUB WITH TOP OF ROOTBALL FLUSH WITH NATIVE SOIL; PROVIDE FINISH GRADE CLEAN SOIL BACKFILL FROM SITE AS NEEDED MULCH; AS SPECIFIED. DO NOT PLACE MUCH AGAINST WOODY STEMS FINISH GRADE 12" MIN 6" MIN OR TO DEPTH OF REMOVED UNSUITABLE PLANTING SOIL AS SPECIFIED REMOVE POTS OR TOP HALF OF BURLAP AND WIRE FILL (3'-0" MAX) SET ROOTBALL ON COMPACTED SOIL MOUND AS NEEDED TO SET PROPER ROOTBALL ELEVATION SCARIFY SOIL AT SIDES AND BOTTOM OF PLANTING PIT 12" MIN---PREPARED SUBGRADE OR UNDISTURBED **EXISTING SOIL**

TYPICAL SHRUB PLANTING 2 NOT TO SCALE

Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Drawing Issue

STUDENT

LIVING

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Structural

Engineer:

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STAKE TREE ONLY IF NECESSARY FOR STABILITY

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CMH Elevator Consultants &

Architect:

Date

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

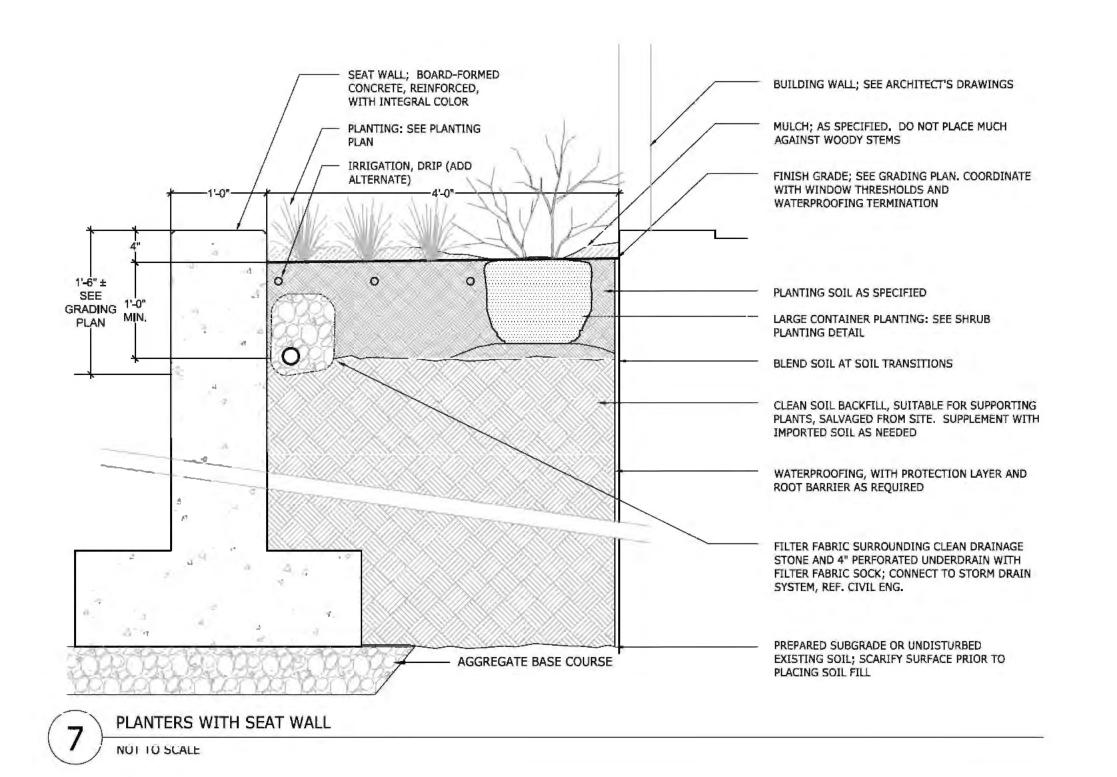
DETAILS

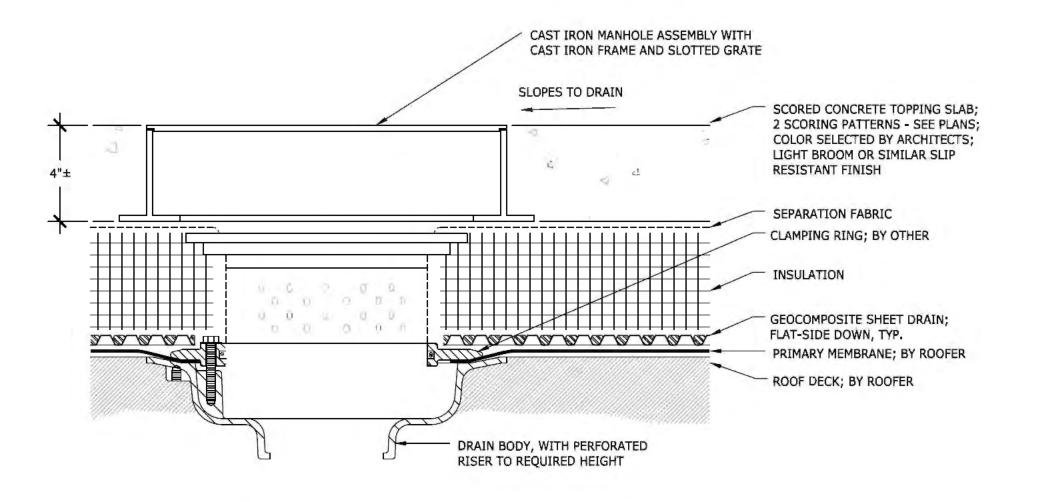
2014.02.28 DRAWN BY: PROJECT NO:

DRAWING NUMBER: PER CITY COMMENTS

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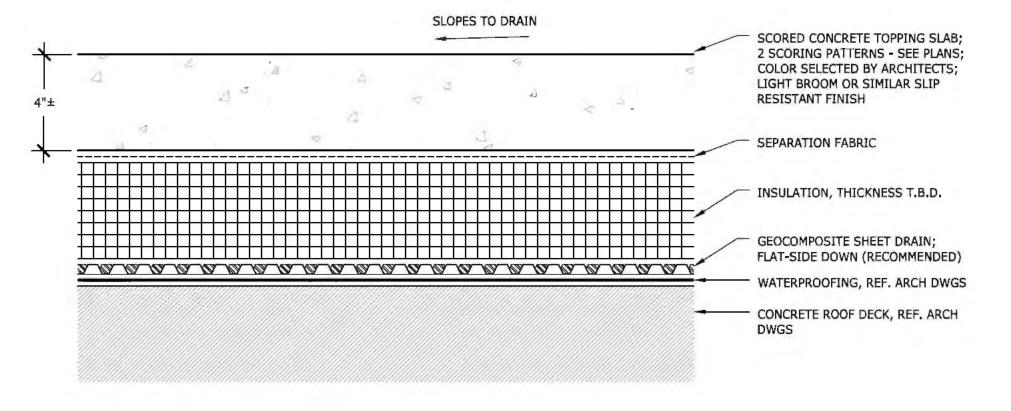
TYPICAL PERENNIAL AND VINE PLANTING 3 TYPICAL
3" = 1'-0"

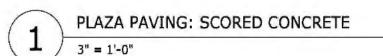


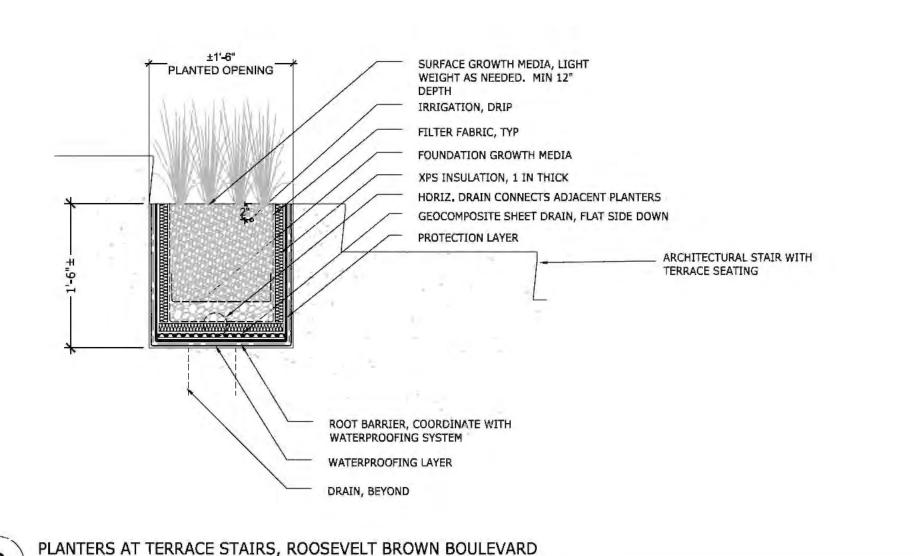


PLAZA DRAIN AT PAVING

3" = 1'-0"

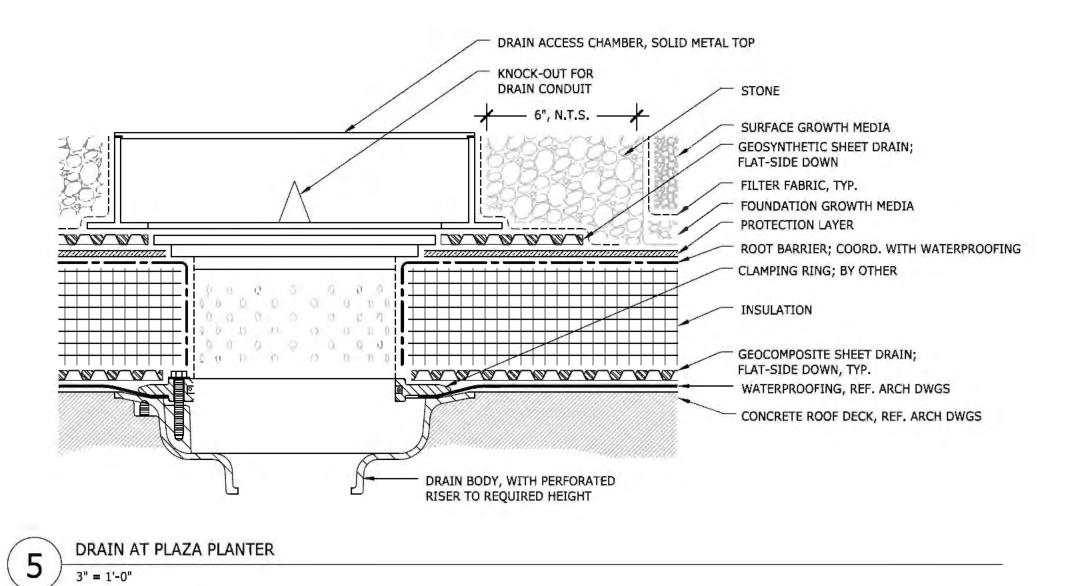


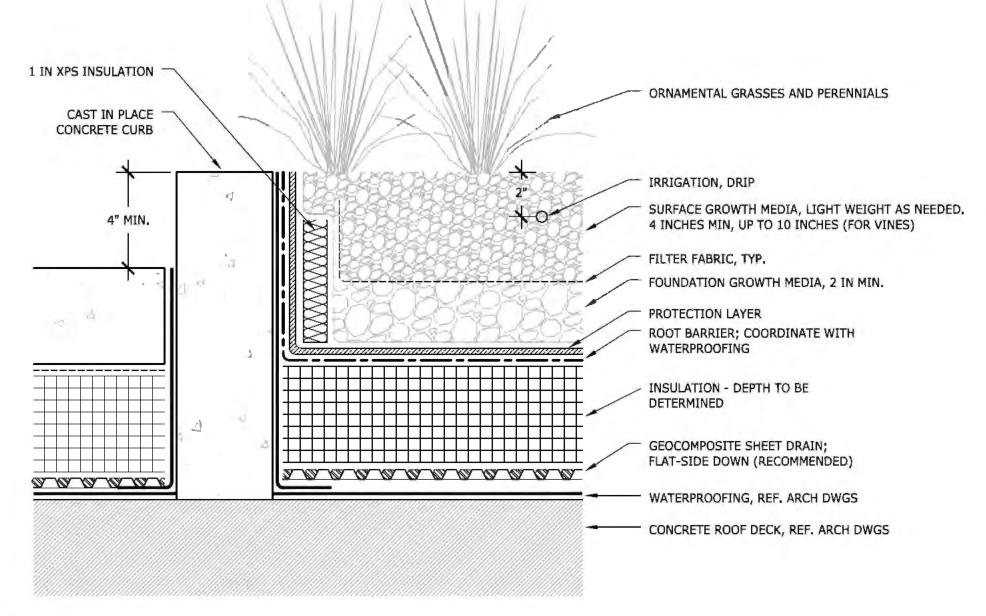




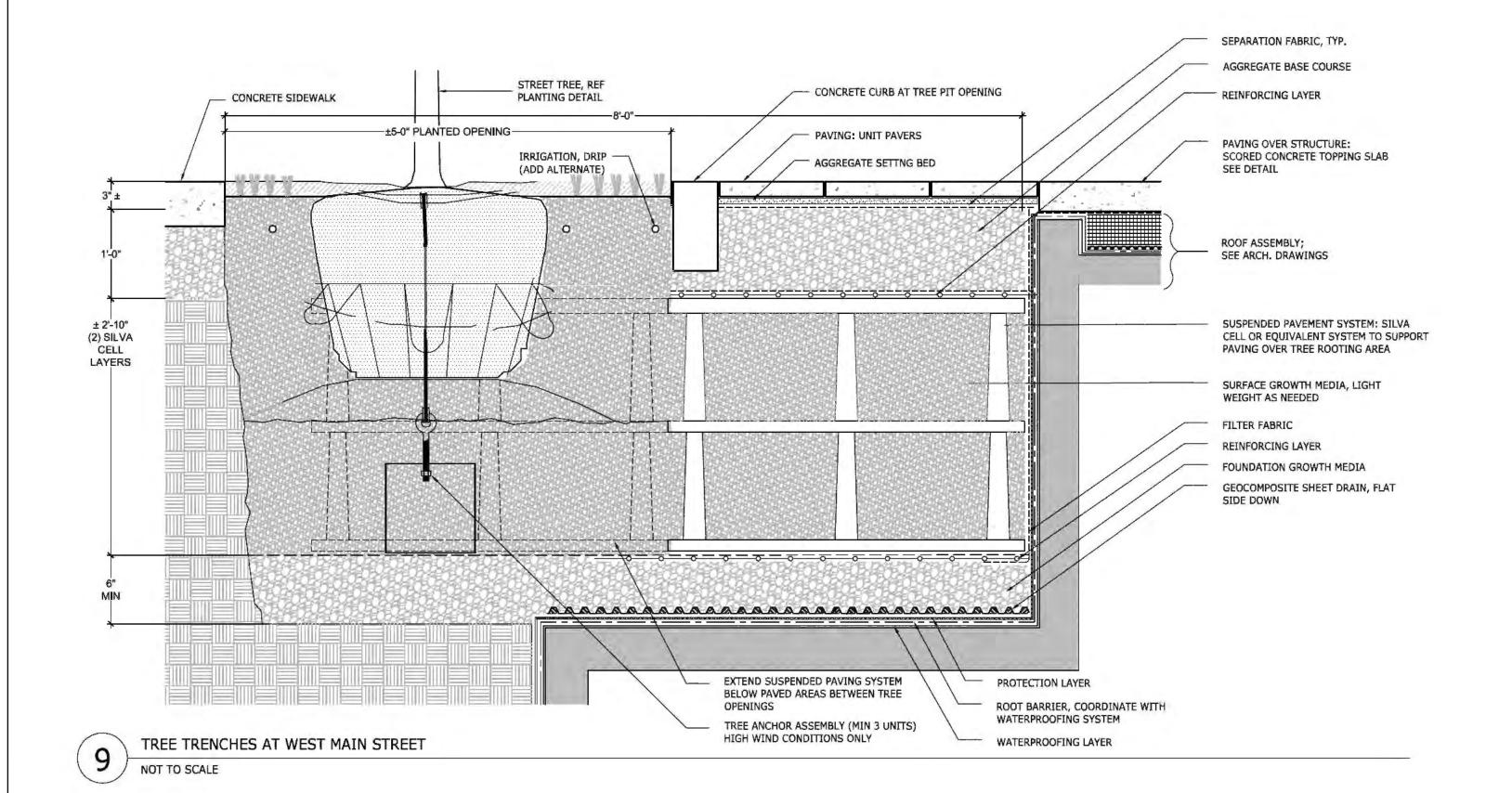
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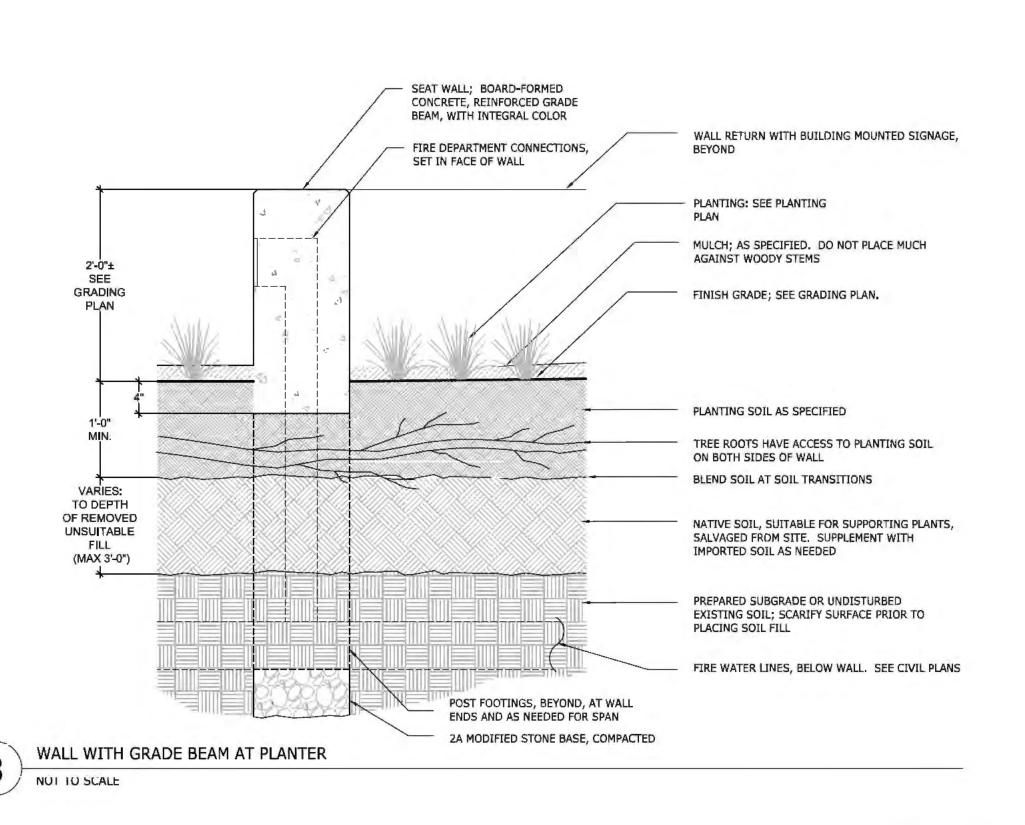
NOT TO SCALE











Architect: SCOTT A. ERDY, AIA DAVID S. MCHENRY, AIA

Drawing Issue

STUDENT

LIVING

Campus Acquisitions Holdings, LLC

161 N Clark Suite 2050

Chicago, IL 60601 312-994-1874

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CMH Elevator Consultants &

Environetics Design, Inc.

Architect:

Roofmeadow

Date

Erdy McHenry Architecture, LLC 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

LANDSCAPE DETAILS

AS NOTED

DRAWN BY:

LH

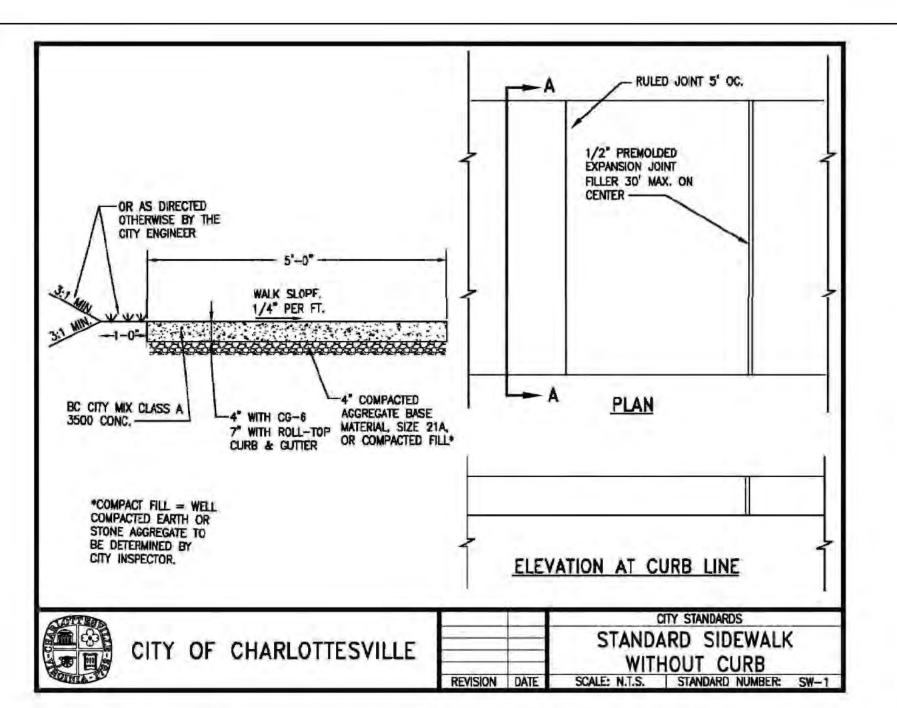
DRAWING NUMBER:

PER CITY COMMENTS

2014.02.28

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PERMISSIBLE CONST.

STD, CG-2

=

CROSSWALK TYPICAL PLACEMENT AT

NTERSECTION WITH PLANTING STRIP

HE SELECTION OF CURB TYPE AND THE CONFIGURATION

THE UTILITY TRIP MAY YARY TO MEET EXISTING FIELD

CONDITIONS AND ROADWAY GEOMETRICS PROVIDING THE

DIMENSIONS AND SLOPES ARE AS NOTED.

PARALLEL & PERPENDICULAR

<u>APPLICATION</u>

4" CURB 6" CURB

2 4

10

SURFACE TYPE C (SHEET 3 OF 3)

LENGTH OF A

REGARDLESS OF

THE SLOPE.

PARALLEL RAMP IS LIMITED TO 15

ROADWAY GRADE MIN. RAMP LENGTH (

JOINT

TRUNCATED DOMES.

TANGENT PLAN

NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 3.

12:17

--- 2' NIN. --

48:1 MAX.

SECTION A-A

THIS COMBINED (PARALLEL & PERPENDICULAR) DESIGN FOR

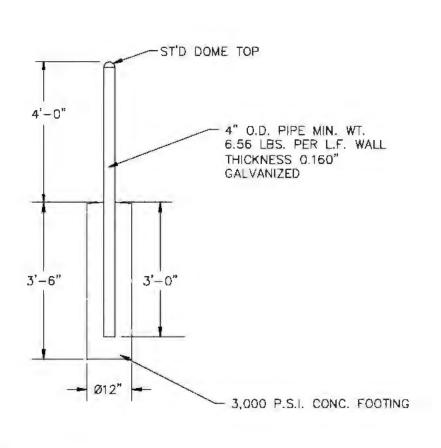
ALTERATIONS CAN BE USED WITH ADJOINING BUFFER STRIP

ANDING AT BOTTOM OF TWO SLOPING SIDES WITH 60"X60" MIN.

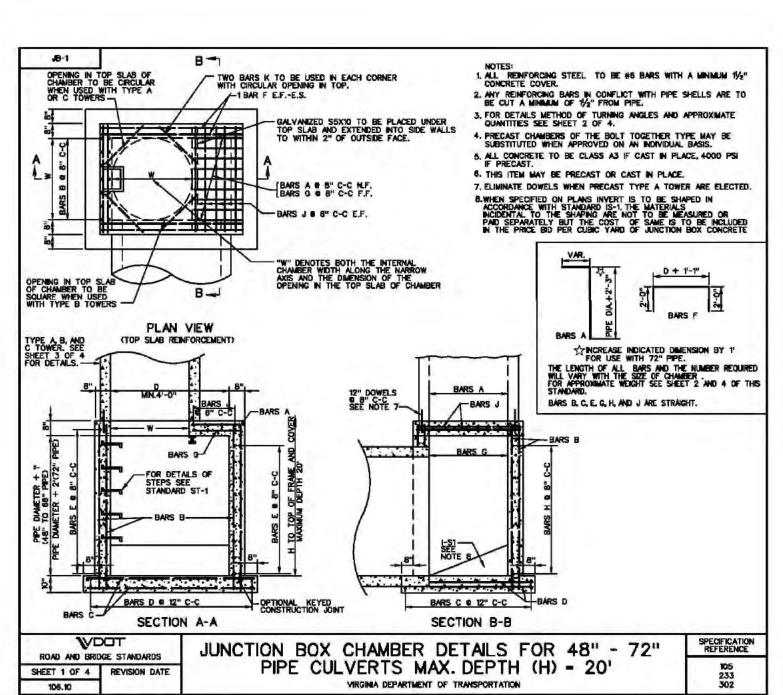
DIMENSIONS. THE SHORT PERPENDICULAR RUN TO THE STREET CAN BE PROTECTED BY A LANDSCAPED SETBACK OR

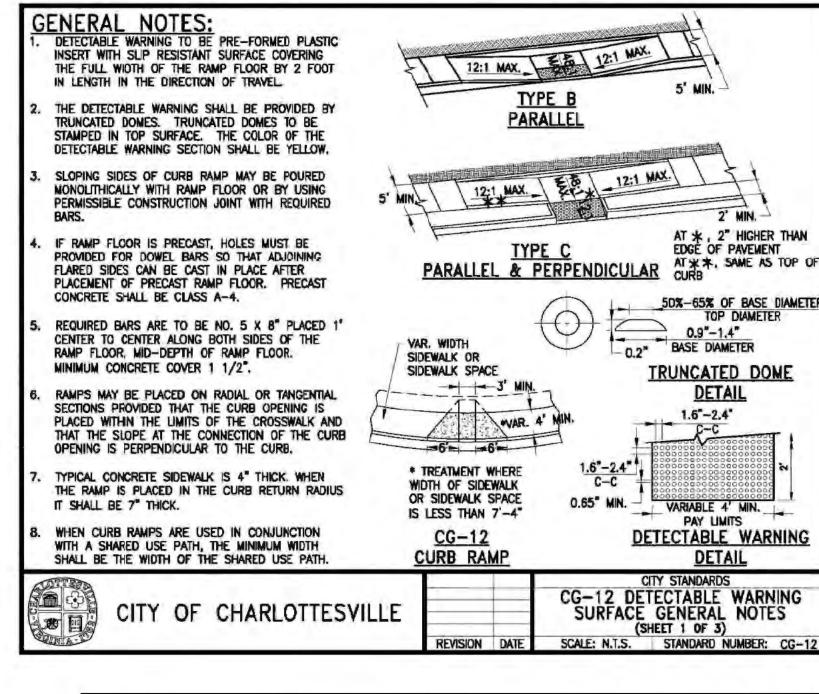
CONNECTED TO THE SIDEWALK WITH A WARPED SURFACE.

CITY OF CHARLOTTESVILLE

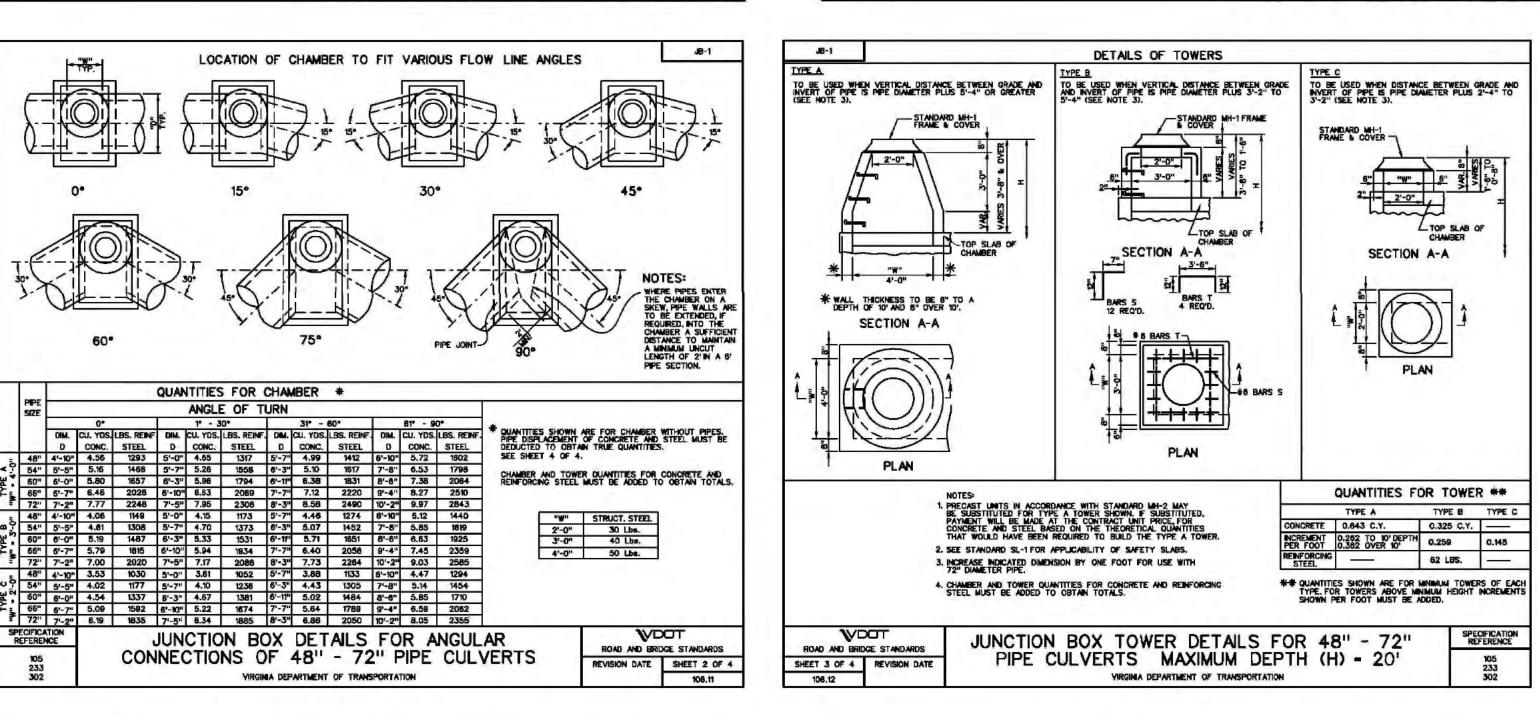








LOCATION OF CHAMBER TO FIT VARIOUS FLOW LINE ANGLES



#5 DOWELS, B' LONG

AT 12" C-C -

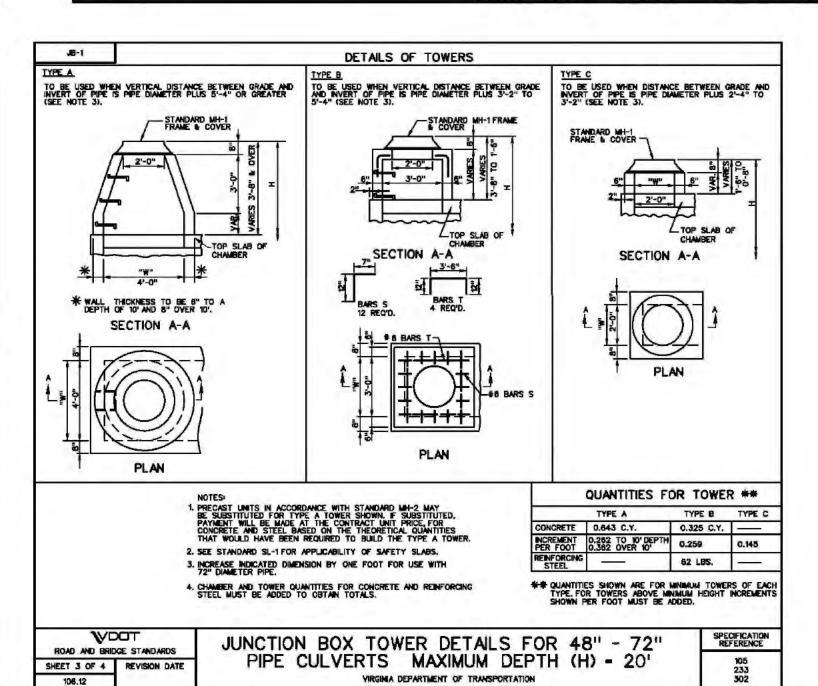
PARALLEL APPLICATION

NOTE: THE REQUIRED LENGTH OF A PARALLEL RAMP IS LIMITED TO 15 FEET,

REGARDLESS OF THE SLOPE.

4" CURB 6" CURB

6 9



CONSTRUCTION

CROSSWALK

YPICAL PLACEMENT

AT INTERSECTION

WITHIN CROSSWALK

DOMES

TANGENT PLAN

NOTE: FOR GENERAL NOTES ON THE DETECTABLE WARNING SURFACE, SEE SHEET 1 OF 3.

SHAPE TO MATCH FACE

SECTION A-A

SECTION B-B

OF ROADWAY CURB

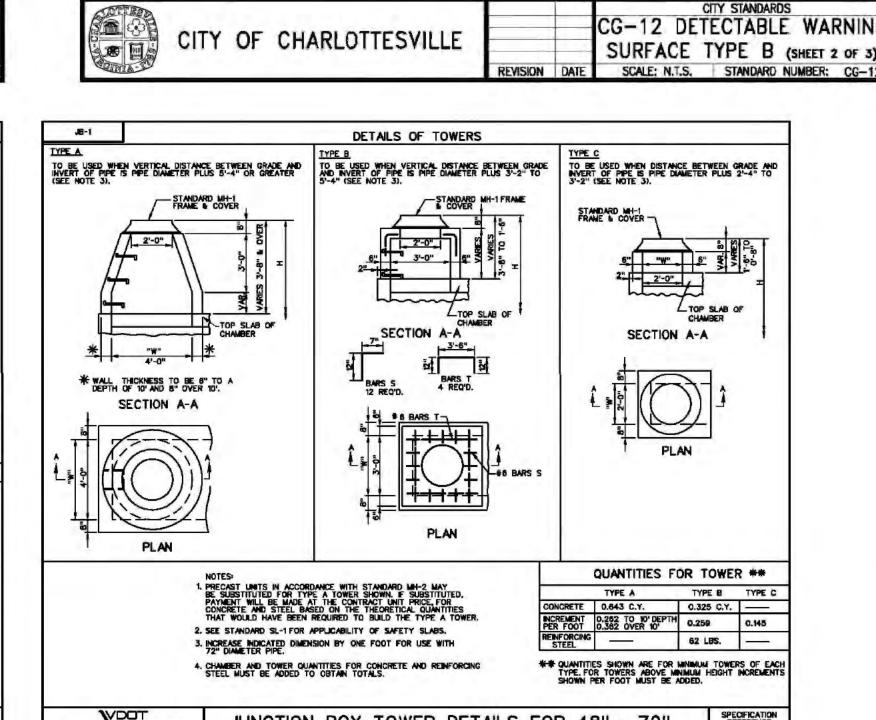
CONSTRUCTION

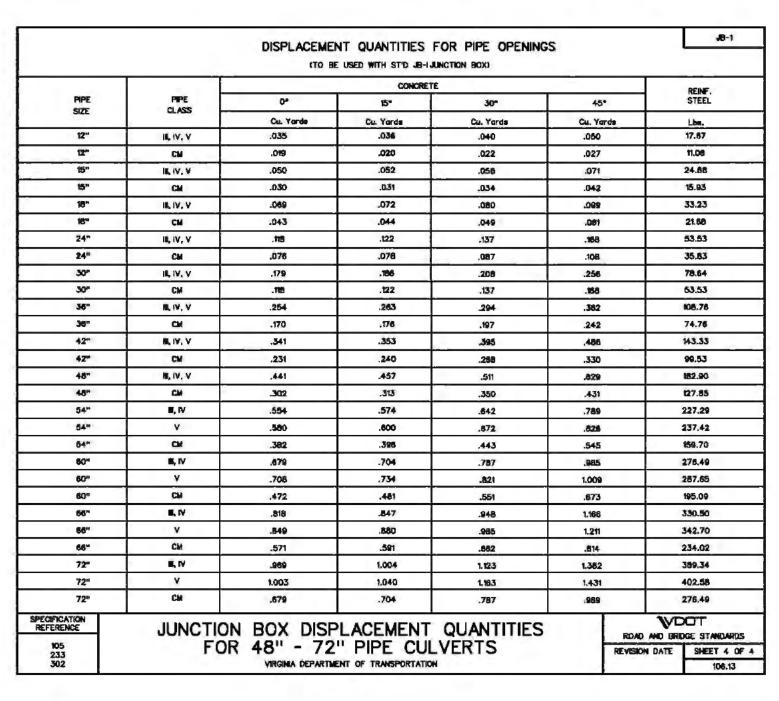
A 4' SQUARE LANDING AREA

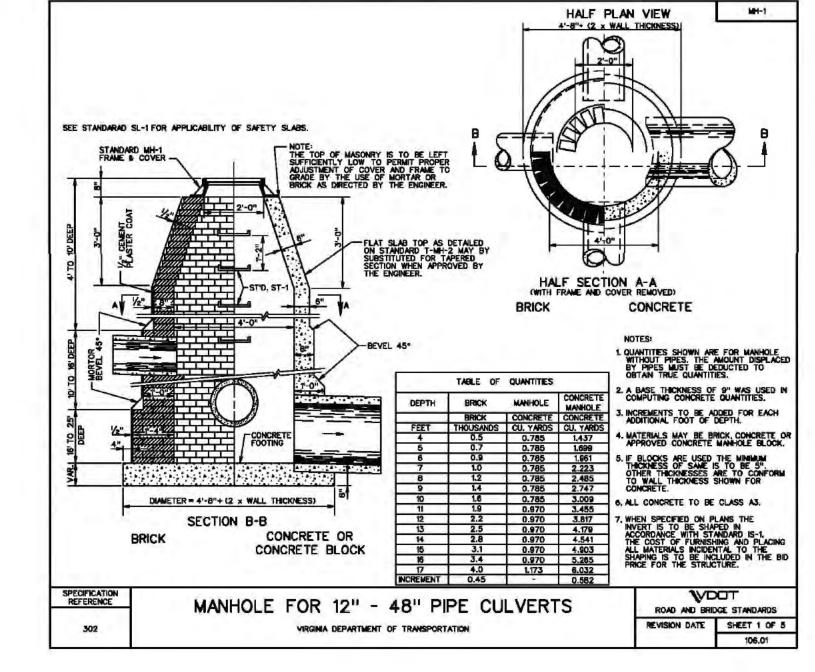
OUTSIDE OF TRAVELWAY

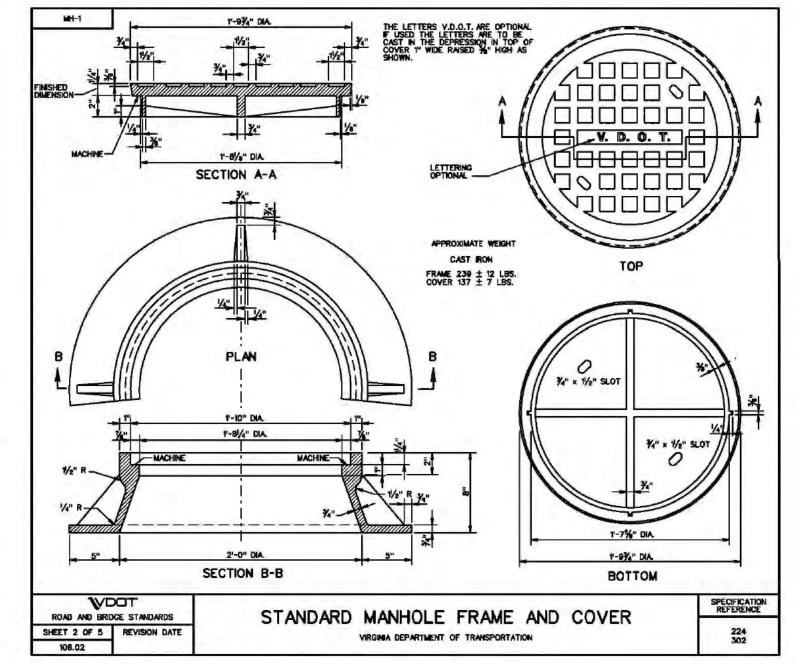
SHALL BE PROVIDED FOR

PERPENDICULAR CROSSWALK







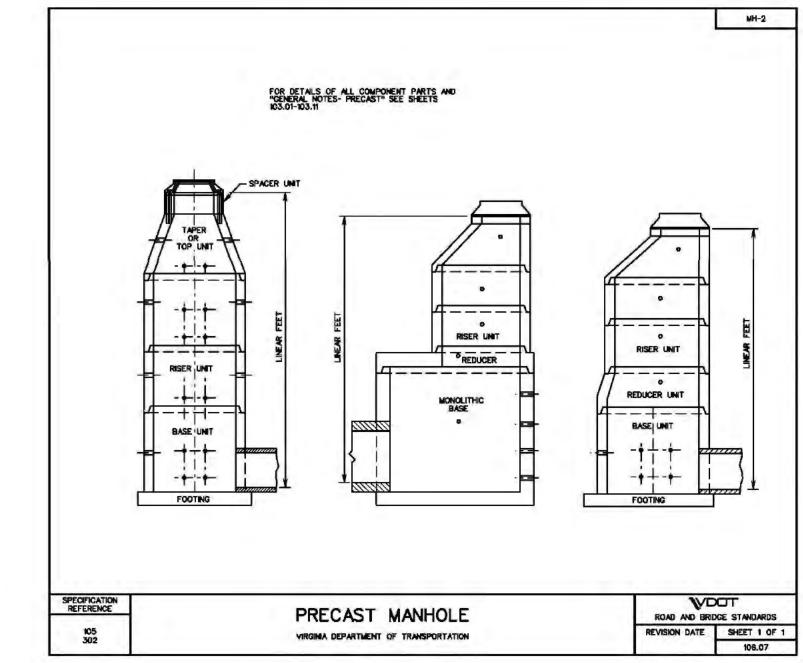


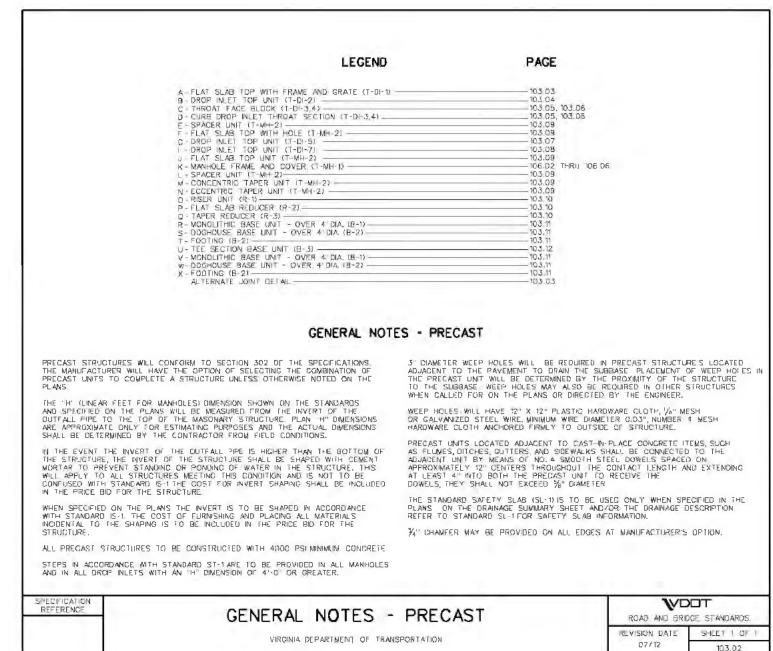
QUANTITIES FOR CHAMBER *

JUNCTION BOX DETAILS FOR ANGULAR

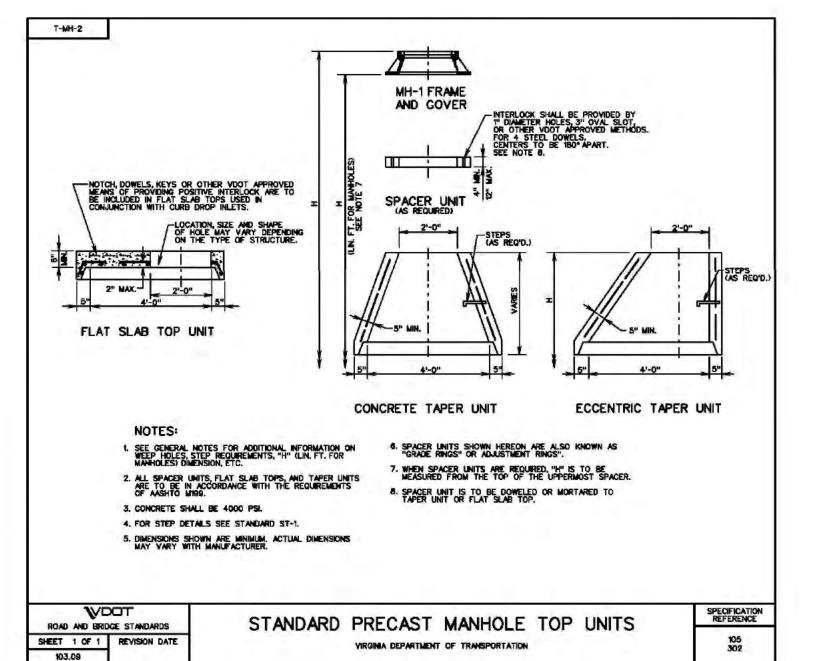
CONNECTIONS OF 48" - 72" PIPE CULVERTS

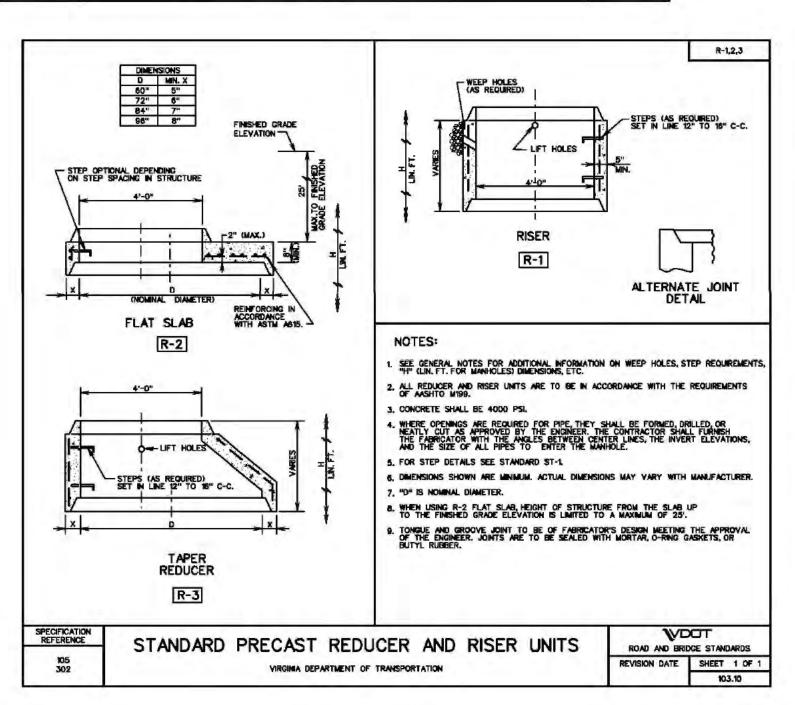
ANGLE OF TURN

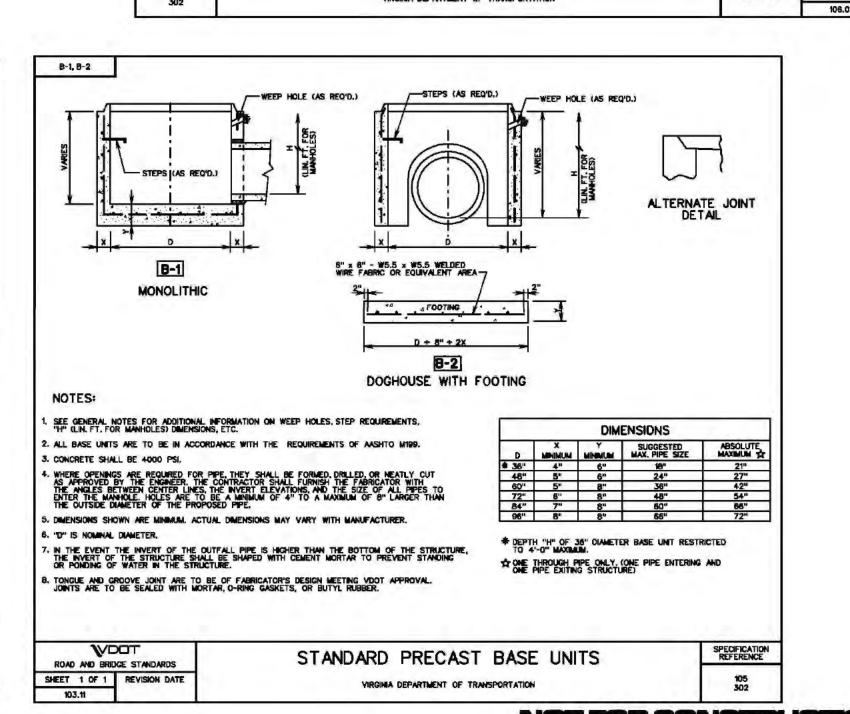


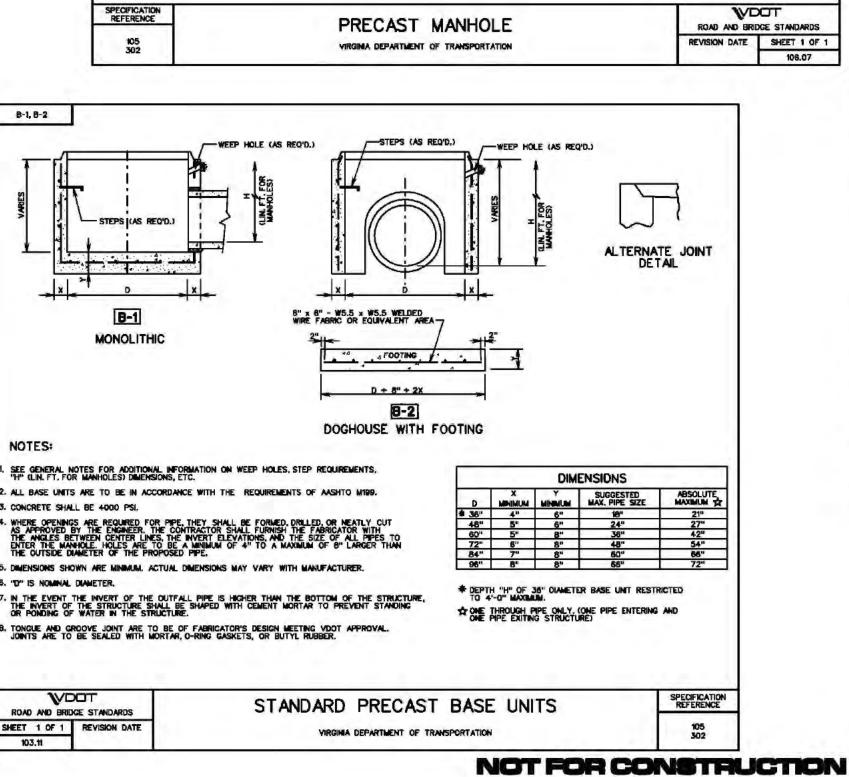


VIRGINIA DEPARTMENT OF TRANSPORTATION









01-27-14 PER CITY COMMENTS 03-05-14 PER CITY COMMENTS STUDENT LIVING Campus Acquisitions Holdings, LLC 161 N Clark Suite 2050 Chicago, IL 60601 312-994-1874

Dete

Landscape Architect: 7135 Germantown Avenue Philadelphia, PA 19119

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Architect: SCOTT A. ERDY, AIA **Erdy McHenry Architecture, LLC** 915 North Orianna Street Philadelphia, Pennsylvania 19123 ph: 215.925.7000 fax: 215.925.1990 web: http://www.em-arc.com

CONSTRUCTION **DETAILS** (CONT.)

AS NOTED	2013 10, 16
DRAWN BY:	PROJECT NO:
AE ORAMING HUMBER	1318

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