



CITY OF WHEELING PLANNING COMMISSION

www.WheelingWV.gov

STAFF REPORT

PROPERTY LOCATION: 17th & Wood Street

NATURE OF REQUEST: Site Plan Review

APPLICANT: City of Wheeling

BACKGROUND & ANALYSIS:

The City of Wheeling is requesting Site Plan approval to develop a new fire station on the south east corner of 17th & Wood Streets. The proposed development includes a 25,805 sq. ft. building and 13 parking spaces, which will occupy the entire property. The new building will serve as the headquarters for the fire department. The current headquarters is located in the Center Wheeling parking garage.

The building will contain training rooms, administrative offices, bunk rooms, a fitness room, kitchen, and equipment storage along with a low vehicle and high apparatus bays. A majority of the building is 1-story, however there is a mezzanine level and a tower.

Public access to the building will be from 17th Street. Emergency vehicles will access the structure from Wood Street. There is also an overflow parking lot on land leased from the Department of Highways across Lane 15. ADA access is achieved via an exterior lift adjacent to the ADA parking spaces in the parking area off of Lane G.

The property is located in the I-2 General Industry zoning district. Municipal Buildings are a Permitted Use. The project requires site plan review because it is larger than 4,000 square feet and includes more than 10 parking spaces.

Variations to reduce the front and side setbacks, allow parking in the setback, increase the maximum lot coverage, and allow gravel parking in the overflow lot will be heard by the Board of Zoning Appeals on November 18, 2021.

STAFF RECOMMENDATION:

The staff recommends approval of the Site Plan.

ATTACHMENTS:

Application for Zoning Compliance
Letter to the Commission
Site Plan Review Checklist
Project Timeline
Aerial Photos (2 pages)
Renderings (2 pages)
Site Plan Sheets (14 pages)

COMMISSION MEMBERS

JEREMY WEST, CHAIR · THOMAS CONNER · RUSTY JEBBLA
HOWARD MONROE · DAVE PALMER · CHRISTINA SCHISSLER · WILLIAM SCHWARZ

STAFF: THOMAS CONNELLY, AICP



APPLICATION FOR CERTIFICATE OF ZONING COMPLIANCE FOR THE USE, ERECTION, ALTERATION, OR REPAIR OF A BUILDING OR LAND

The undersigned applies for a Certificate of Zoning Compliance for the following, said certificate is to be issued on the basis of the information contained within the application. *The applicant hereby certifies that all information and attachments are true and correct.*

- 1. Address of Property: 168 17th St., Wheeling, WV 26003
- 2. Name of Property Owner: City of Wheeling
- 3. Name of Applicant: M&G Architects and Engineers
- 4. Address of Applicant: 1027 Mt. DeChantal Rd., Wheeling, WV 26003
- 5. Applicant Phone: (304) 242-8248 Owner Phone: (304) 234-3617
- 6. Existing Use: Various Residential & Commercial uses
- 7. Proposed Use: Same Other (describe): Fire Department Headquarters
- 8. Number of off-street parking spaces to be provided: 13
- 9. Number of off-street loading berths to be provided: 0

COMPLETE THIS SECTION BELOW FOR THE ERECTION, ALTERATION, OR ADDITION OF A STRUCTURE

Type of improvement:	Residential:
<input checked="" type="radio"/> New Building	Number of existing dwelling units: <u>N/A</u>
<input type="radio"/> Addition	Number of proposed dwelling units: <u>N/A</u>
<input type="radio"/> Alteration / Repair	

Existing Lot Dimensions: Width: 301 ft. x Depth: 125 ft. = lot area: 37625 sq. ft.

Existing Principal Building:
 Dimensions: Width: N/A ft. x Depth: N/A ft. = Total first floor area, including covered porches: N/A sq. ft.
 Setbacks: Front: N/A ft. Rear: N/A ft. Side: N/A ft. Other Side: N/A ft. Height/Stories: N/A

Existing Accessory Building: (garage, carport, shed, pool, etc):
 Dimensions: Width: N/A ft. x Depth: N/A ft. = Total first floor area, including covered porches: N/A sq. ft.
 Setbacks: Front: N/A ft. Rear: N/A ft. Side: N/A ft. Other Side: N/A ft. Height/Stories: N/A

Proposed Construction:
 Dimensions: Width: 231 ft. x Depth: 115 ft. = Total first floor area, including covered porches: 25805 sq. ft.
 Setbacks: Front: 5 ft. Rear: 20 ft. Side: 1.5 ft. Other Side: 25 ft. Height/Stories: 1

Applicant Signature: [Signature] Dan Grant, AIA, Vice President Date: 10/25/21
 Owner Signature: [Signature] Robert Herron, City Manager Date: 10/25/21

Reset Form

Print Form

October 25, 2021

Economic & Community Development Dept.
City of Wheeling
1500 Chapline Street, Room 305
Wheeling, WV 26003

Attention: Mr. Tom Connelly
Assistant Director

Subject: City of Wheeling
Wheeling Fire Department Headquarters
Site Plan Review

Gentlemen:

In keeping with our recent conversations and per your request at our meeting on October 5, 2021, attached you will find the requested documentation related to the site plan review for the above referenced project. These attachments include:

- Application for Certificate of Zoning Compliance
- Project Milestone Schedule Letter
- Two Project Site Aerial Views
- Two Exterior Building Artistic Renderings
- Design Drawing Set (Portions Applicable to Site Plan Review Submission)

In general, the project consists of the design and construction of the new Wheeling Fire Department Headquarters Building and related exterior site work as required to accommodate administrative and staff spaces as well as apparatus bays and training spaces. The exterior site work required includes the construction of one large apparatus apron, one small vehicle apron, outdoor patio area, generator/transformer area, and 13-car parking area with two ADA spaces that will combine with a 15-car gravel overflow parking area to provide a total of 28 parking spaces for the building. The attached drawings illustrate the various aspects of the new building and related exterior site upgrades. We appreciate your consideration of our application and look forward to presenting this information to you and the Planning Commission on November 8, 2021. Please advise our office if any additional information is required.

Respectfully submitted,

M&G ARCHITECTS & ENGINEERS



Dan Grant, AIA
Vice President

cc: Robert Herron
William Lanham
Chief Jim Blazier

Site Plan Review Checklist

1. Legal Data:

- property owners within 100'
- existing zoning and special district boundaries
- boundaries of property, setback lines, existing streets and adjoining lots, reservations, easements, and areas dedicated to public use

2. General Project Site Description:

- map showing entire property, adjacent property and streets at convenient scale
- approximate location and dimension of all existing and proposed structures on adjacent properties and within 100' of site boundary
- name & address of applicant, planners, engineers, architects working on project

3. Preliminary & Final Plans:

- location map: show all roads within 200' of the site.

existing conditions:

- buildings
- water bodies & floodplains
- wooded area, existing vegetative cover and other significant features

development data:

- title, date, north point, scale
- owner information
- project engineer
- vehicular / pedestrian access and circulation
- elevations, building height, floor plans
- walkways & fire lanes
- location of waterlines, valves, hydrants, sewer lines
- location and direction of outdoor lighting within the site and at the boundary if adjacent to residential development.
- grading and drainage
- landscaping plan
- cut and fill of disturbed areas (before and after profiles), E&SC Plan,
- location of sediment sink / setting pond and interceptor swales
- storm water drainage system / computations
- location, size, color illumination of signage
- drains, culverts, walls, and fences
- outdoor storage location
- detailed breakdown of proposed floor space by use
- location and design of energy distribution facilities: electric, gas, solar
- lines and dimensions of property to be dedicated public
- construction schedule
- record of application of necessary permits from federal, state or county
- copies submitted on media 24" x 36", 11" x 17", and digital copy

4. Additional Submissions (special conditions may require additional information)

5. Amendments

Changes / modifications to the approved plans require review by Planning Administrator to determine if an amended site plan review by the Planning Commission is required.



1027 Mt. de Chantal Road, Wheeling, WV 26003
304/242-8248 Fax: 304/242-8249
www.mgarc.com · mg1@mgarc.com

October 25, 2021

City of Wheeling
City Manager's Office
1500 Chapline Street
Wheeling, WV 26003

Attention: Mr. Robert Herron
City Manager

Subject: City of Wheeling
Fire Department Headquarters
Project Milestone Schedule

Gentlemen:

In keeping with our previous discussions, the following represents the project milestone schedule as a frame of reference.

- Schematic Design Phase Submission (Completed)..... December 17, 2020
- Design Development Phase Submission (Completed)..... September 23, 2021
- Owner Final Review Submission January 13, 2022
- AHJ Final Review Submission..... January 27, 2022
- Construction Document Phase Submission, Out to Bid..... February 24, 2022
- Bid Opening March 24, 2022
- Notice to Proceed/Letter of Intent to Award Construction Contract To be determined
- Substantial Completion of Construction (52-week construction period) To be determined

The above represents the anticipated dates for these key project milestones for the purpose of guiding the overall timing of the project. Additional meetings, reviews and approvals will be coordinated with these dates as required for the project. These dates were developed according to the information available at this time and could be impacted by unforeseen circumstances. Please review these dates and contact us if you have any questions.

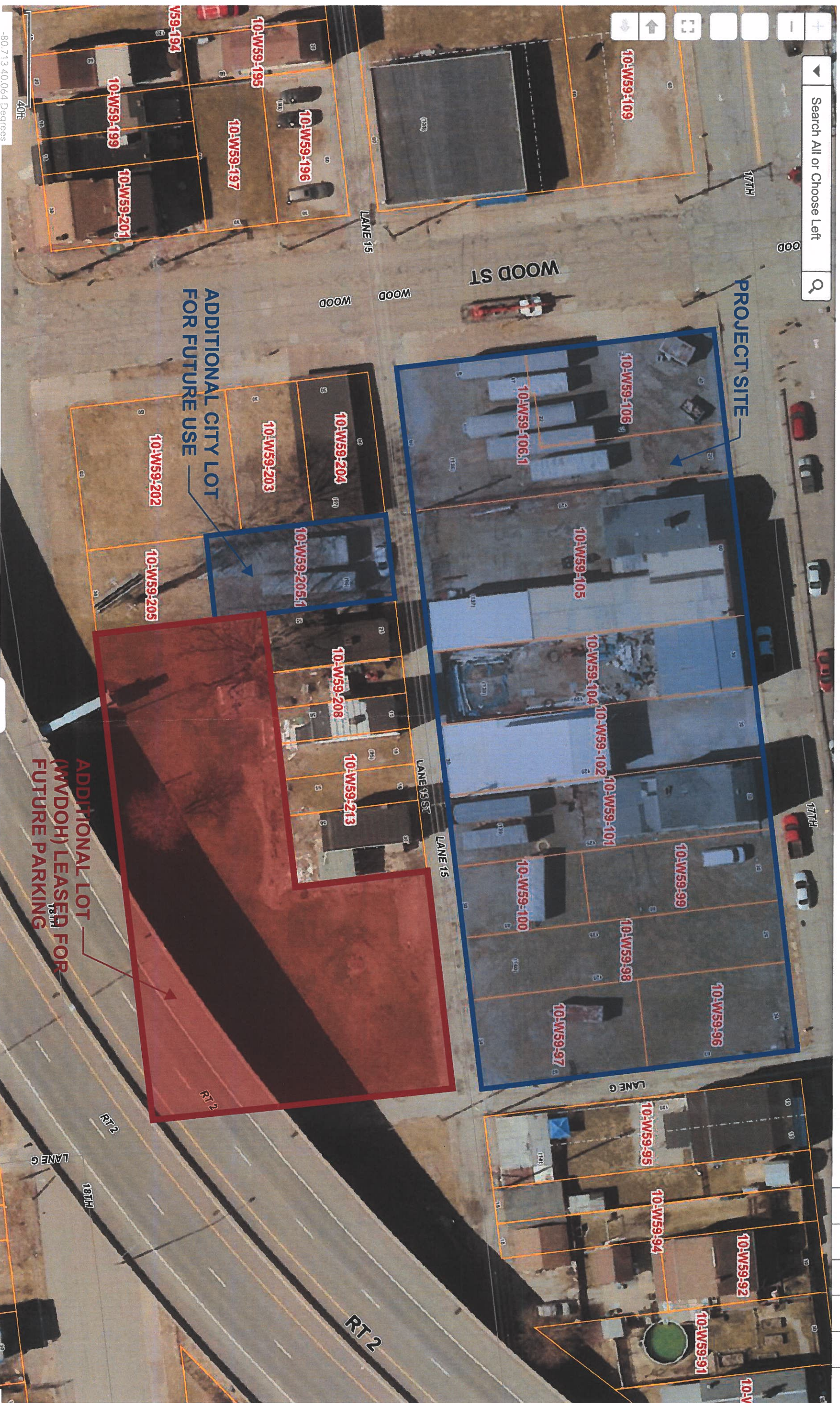
Respectfully submitted,

M&G ARCHITECTS & ENGINEERS

Dan Grant, AIA
Vice President

cc: Eric Matyskiela Chief Jim Blazier
Carla Bronder William Lanham
Nestor Melnyk
Dan Montgomery
Chris Schoonover

Search All or Choose Left



PROJECT SITE

ADDITIONAL CITY LOT FOR FUTURE USE

ADDITIONAL LOT (MVDOH) LEASED FOR FUTURE PARKING

10:W59:109

10:W59:195

10:W59:196

10:W59:199

10:W59:201

10:W59:197

10:W59:203

10:W59:204

10:W59:202

10:W59:205

10:W59:205.1

10:W59:208

10:W59:213

10:W59:106

10:W59:106.1

10:W59:105

10:W59:104

10:W59:102

10:W59:101

10:W59:99

10:W59:98

10:W59:96

10:W59:100

10:W59:97

10:W59:95

10:W59:94

10:W59:92

10:W59:91

LANE 15

LANE 13 ST

LANE 15

LANE G

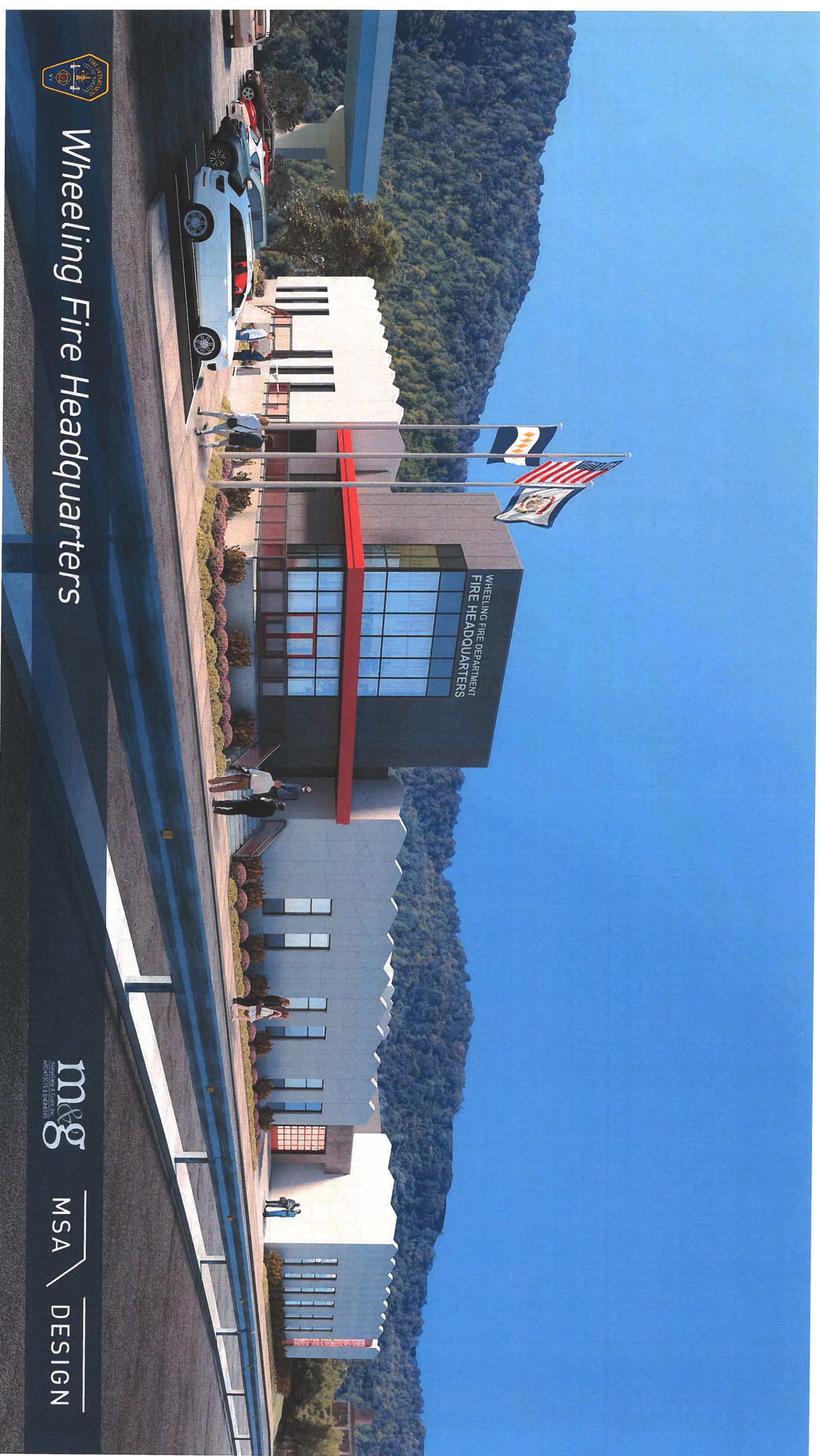
RT 2

18TH

RT 2

-80.713 40.064 Degrees

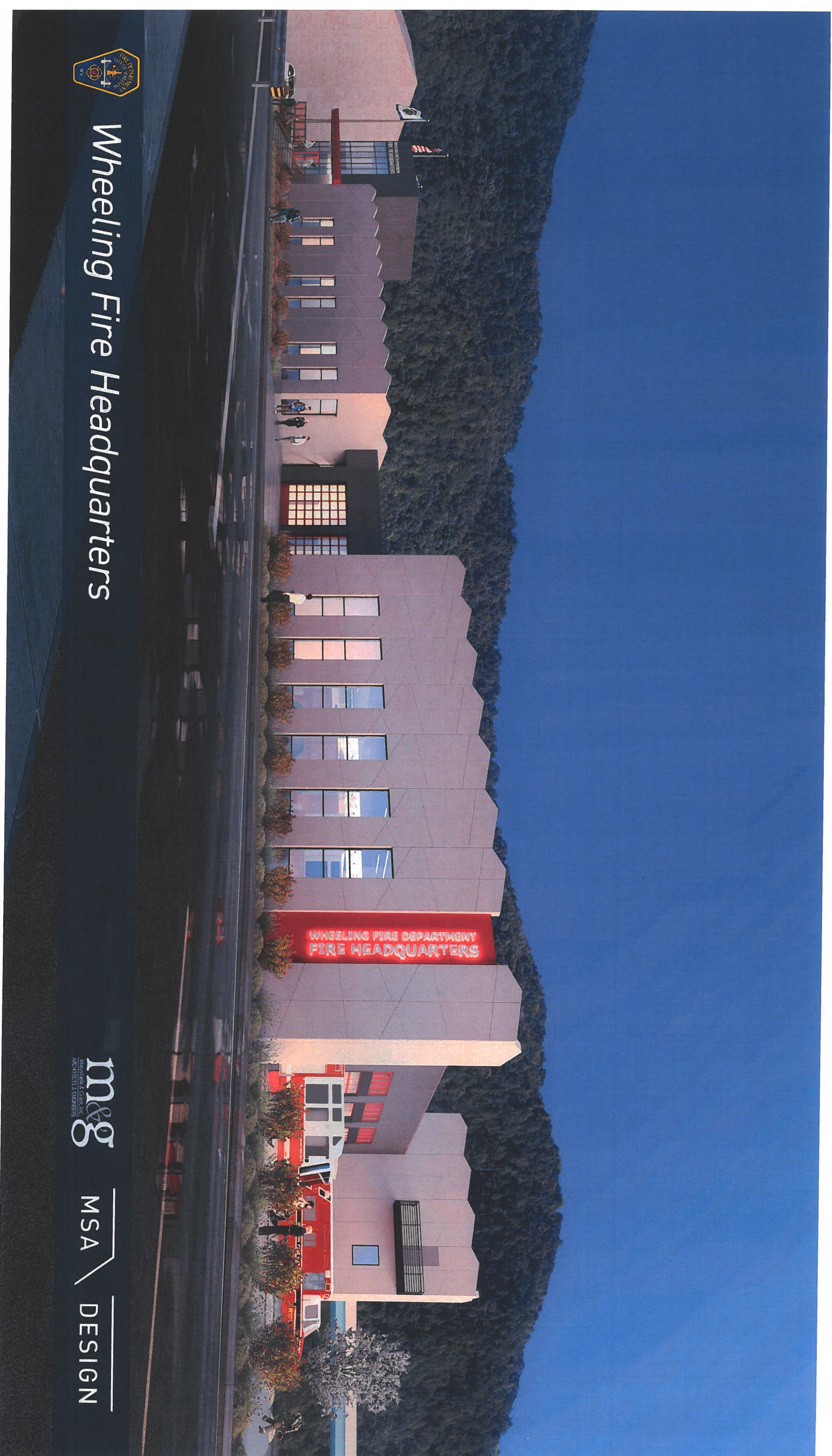
40ft



Wheeling Fire Headquarters

m&g
MARTIN, GRIFFIN & GARDNER, INC.
ARCHITECTS & ENGINEERS

MSA DESIGN



Wheeling Fire Headquarters

m&g
MAYNARD & GARDNER, INC.
ARCHITECTS & DESIGNERS

MSA **DESIGN**



CALL BEFORE YOU DIG.
 WEST VIRGINIA UTILITY SERVICE AUTHORITY
 PLEASE ADVISE 48 HOURS IN ADVANCE FOR CONSTRUCTION PHASE AND 10 DAYS IN ADVANCE FOR STAGE MISS UTILITY OF WEST VIRGINIA, INC.
 1-800-243-4049

STORMWATER MANAGEMENT NOTES

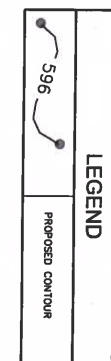
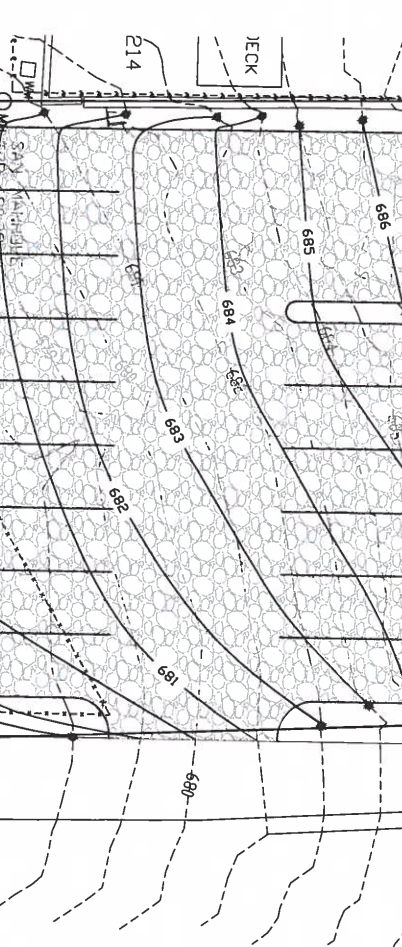
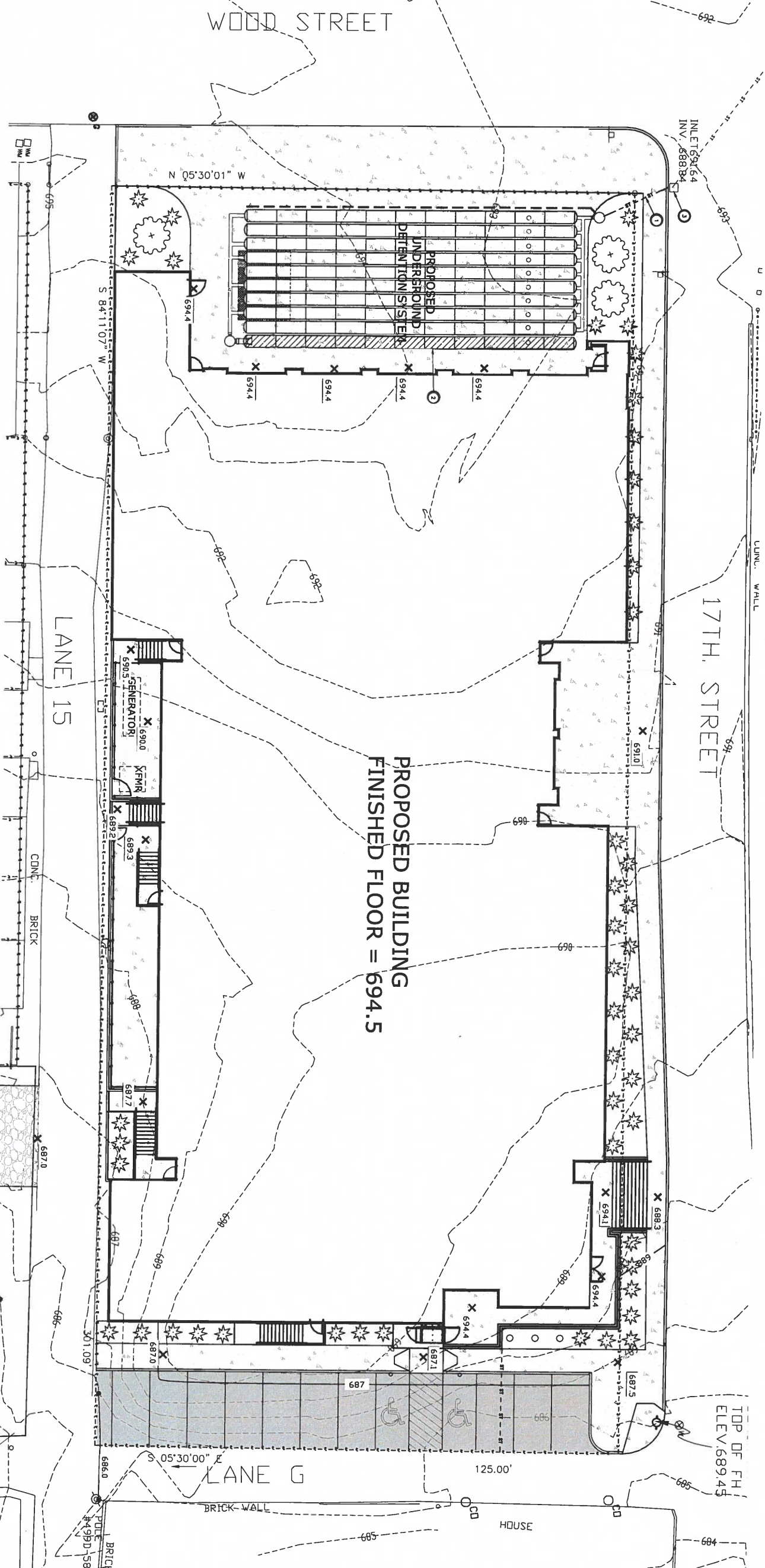
THE PROPOSED UNDERGROUND STORMWATER MANAGEMENT SYSTEM HAS BEEN SIZED TO COMPLY WITH THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT. THE SYSTEM WILL MAINTAIN THE EXISTING RUNOFF FROM THE DEVELOPED PORTION OF THE SITE AND PREVENT THE BUILDING AND THE DETENTION SYSTEM FROM CAUSING ANY ADVERSE EFFECTS ON THE ADJACENT STREETS AND LANE 15. THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS.

CONSTRUCTION NOTES

1. CONTRACTORS SHALL SCHEDULE THEIR OPERATIONS AND CARRY OUT THE WORK IN A MANNER TO CAUSE THE LEAST DISTURBANCE AND/OR INTERFERENCE WITH NORMAL BUSINESS OPERATIONS.
2. THE PROPOSED UNDERGROUND DETENTION FACILITY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF WHEELING AND THE WEST VIRGINIA UTILITY SERVICE AUTHORITY.
3. ALL CONSTRUCTION SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES AND SHALL BE IN ACCORDANCE WITH THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS.
4. CONTRACTORS SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES AND STRUCTURES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. AT A MINIMUM ALL EXCAVATION OR FILL AREAS SHALL BE COMPLETED TO MEET OR EXCEED THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS. ALL FILL SHALL BE COMPACTED TO MEET THE CITY OF WHEELING'S REQUIREMENTS FOR STORMWATER MANAGEMENT SYSTEMS.
6. ELEVATIONS SHOWN ARE AT BOTTOM FACE OF CURB AND/OR FINISHED PAVEMENT UNLESS OTHERWISE SPECIFIED ON GRADING PLAN. ALL FINISH SHALL BE TO THE TOP OF THE CURB AND/OR FINISHED PAVEMENT UNLESS OTHERWISE SPECIFIED ON THE GRADING PLAN. FINISH SHALL BE TO THE TOP OF THE CURB AND/OR FINISHED PAVEMENT UNLESS OTHERWISE SPECIFIED ON THE GRADING PLAN.

CODED NOTES

1. PROPOSED 18" U or 12" STORM SEWER
2. INITIAL UNDERGROUND DETENTION FACILITY PER DETAILS ON SHEET C201 AND C202
3. CLEAN OUT BASIN AT THE END OF THE PROJECT.
4. INSTALL 8" STORM LATERAL TO SERVE COMPARTMENTS.



SITE GRADING AND STORM SEWER PLAN

SCALE: 1" = 20'

PROJECT NO.	20-108B
DATE	9/22/2021
SCALE	AS NOTED
SHEET	C200

CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
 17TH STREET, WHEELING, WV 26003
SITE GRADING AND STORM SEWER PLAN

DRAWING STATUS

- DESIGN STAGES
- SCHEMATIC DESIGN
- DESIGN DEVELOPMENT
- CONSTRUCTION DOCUMENTS
- PRELIMINARY
- REVISION
- CONSTRUCTION

PRELIMINARY
 DO NOT USE FOR CONSTRUCTION
 DATE: 09/22/2021
 BY: S.M. Meyfield
 CHECKED BY: S.M. Meyfield

m&e
 ARCHITECTS & ENGINEERS
 1027 Mt. Pleasant Rd.
 Wheeling, WV 26060
 Tel: (204) 242-4248
 Fax: (204) 242-4249

PROPOSED LAYOUT	CONCEPTUAL ELEVATIONS	PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT	MAX FLOW
109	STORMTECH SC-310 CHAMBERS	9.83				
20	STORMTECH SC-310 END CAPS	3.83				
6	STONE ABOVE (6")	3.33	A	12" BOTTOM PREFABRICATED END CAP PART# SC310BEF12BR / 17" OF ALL 12" ISOLATOR ROW	0.90'	
6	STONE BELOW (6")	3.33	B	12" TOP PREFABRICATED END CAP PART# SC310TEF12BR / 17" OF ALL 12" ISOLATOR ROW	0.90'	
40	STONE VOID	3.33	C	3" X 6" TOP MANIFOLD, MOLDED FITTINGS	3.50'	
3707	INSTALLED SYSTEM VOLUME (CF)	2.33		MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)		2.33 CFS IN
	(PERMETER STONE INCLUDED)	1.83		MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)		
	(COVER STONE INCLUDED)	0.78	D	90° DIAMETER (24.00" SLUMP MIN)		
2637	BASE STONE (INCLUDED)	0.25	E	7" X 7" TOP MANIFOLD INVERT		0.7 CFS OUT
2405	SYSTEM PERIMETER (6")	0.20		12" SOLATOR ROW PLUS INVERT		
		0.20		8" SOLATOR ROW PLUS INVERT		
		0.20		6" SOLATOR ROW PLUS INVERT		
		0.20		UNDERDRAIN INVERT		
		0.20		BOTTOM OF STONE		

SC-310 STORMTECH CHAMBER SPECIFICATIONS

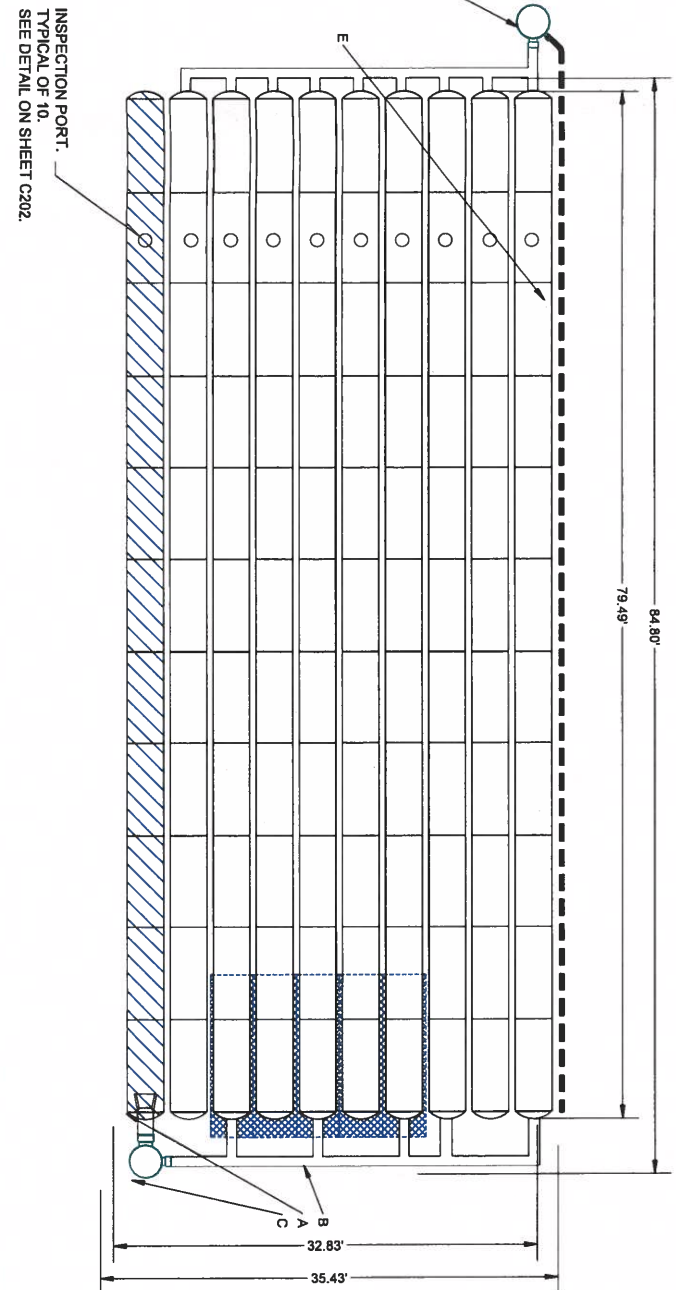
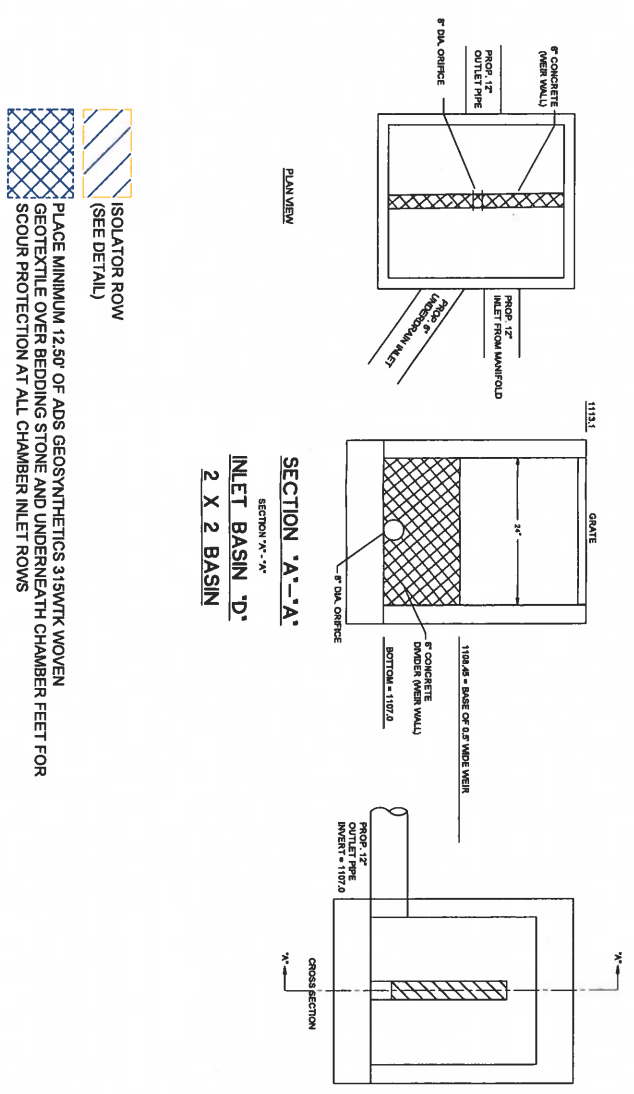
- CHAMBERS SHALL BE STORMTECH SC-310.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLYETHYLENE) OR ASTM F2418-18a (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCE.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-FR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LB/IN/IN, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY SECTION 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

- STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4"-2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- AAS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIERED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT 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 STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2684 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



PRELIMINARY
DO NOT USE FOR
CONSTRUCTION
DATE: 09/22/21
Scheesser
Duckley
SM
MAYFIELD

DRAWING STATUS
DESIGNER: STAGE: _____
CHECKED: _____
APPROVED: _____
DATE: 09/22/21
Scheesser
Duckley
SM
MAYFIELD

CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
17TH STREET, WHEELING, WV 26003
STORMWATER MANAGEMENT PLAN

REVISION

NO.	DATE	DESCRIPTION

SCALE: 20'-108B
DATE: 02/22/21

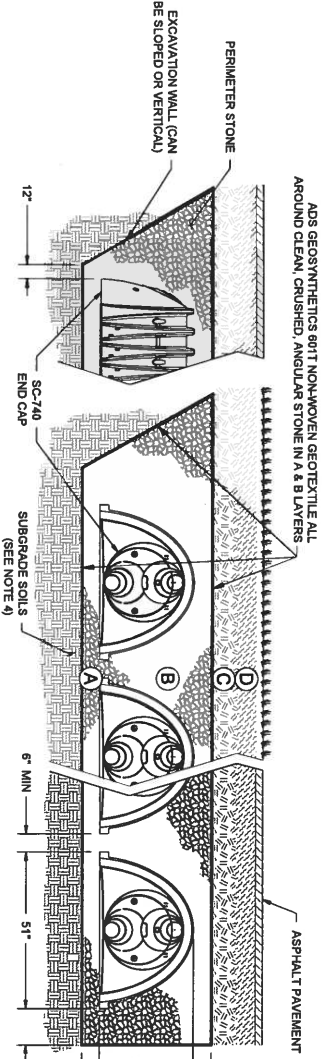
C201

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	ASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (457 mm) ABOVE THE TOP OF THE LAYER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	ASHTO M418 A-1, A-2.4, A-3 OR ASHTO M431	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE SUBGRADE. USE A 150 mm MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 98% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS FORCE NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	ASHTO M431 3.357, 4.497, 5.56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	ASHTO M431 3.357, 4.497, 5.56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.

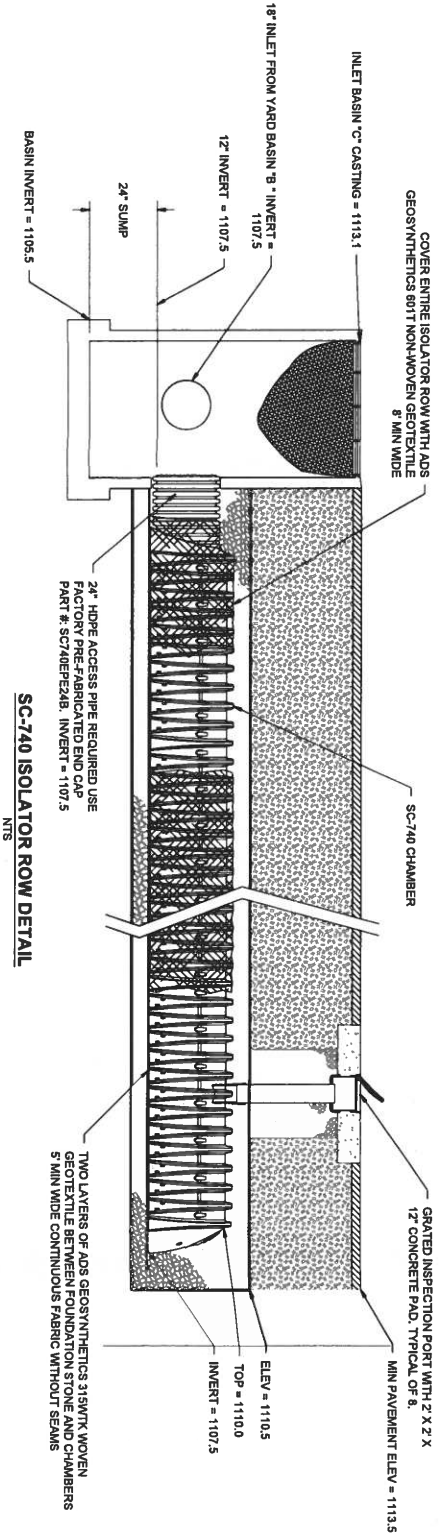
PLEASE NOTE:

1. THE LISTED ASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (ASHTO M43) STONE."
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'X' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
3. COMPACTION REQUIREMENTS MAY BE COMPROMISED BY COMPACTOR DESIGN LOAD CONDITIONS. A FLAT SURFACE MAY BE ACHIEVED BY FINISHING OR DRAGGING WITHOUT COMPACTOR EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOLID MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

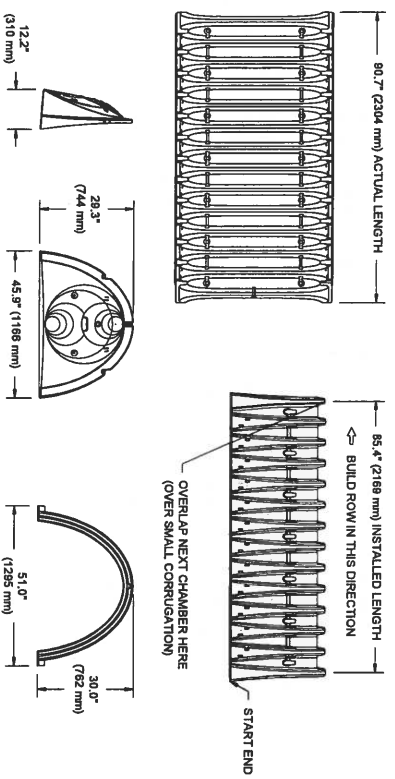


NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS."
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS."
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, A) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 62.2 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN. AND B) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

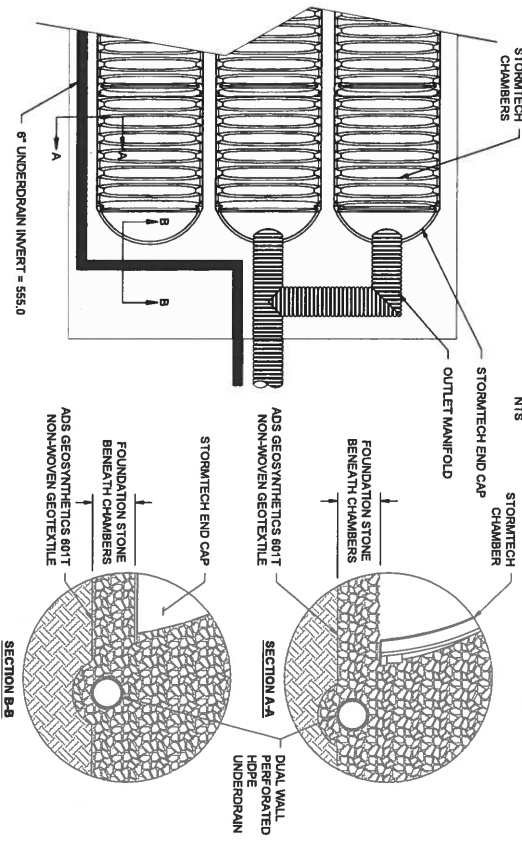


SC-740 TECHNICAL SPECIFICATION NTS



NOMINAL CHAMBER SPECIFICATIONS
 SIZE (W X H X INSTALLED LENGTH)
 51.0" X 80.7" X 55.4"
 1295 mm X 2049 mm X 1407 mm
 MINIMUM INSULATED STORAGE*
 74.9 CU. FEET (2126 cu. m)
 WEIGHT
 75.0 lbs. (33.6 kg)
 *ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

UNDERDRAIN DETAIL NTS



INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS
- A.1. REMOVE/OPEN LID ON ANY/OPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF ABOVE, 3' PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
- B.3. MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY IF ENTERING MANHOLE
- IF SEDIMENT IS AT, OR ABOVE, 3' PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CALVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SLUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT LETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



PRELIMINARY
 DO NOT USE FOR CONSTRUCTION
 DATE: 08/28/21
 DRAWN BY: S.M. KAYLOR

DRAWING STATUS:
 DESIGNED BY: []
 CHECKED BY: []
 IN CHARGE: []
 CONTRACTOR REVIEW: []
 RELEASED FOR: []
 REVISION: []
 CORRECTIONS: []

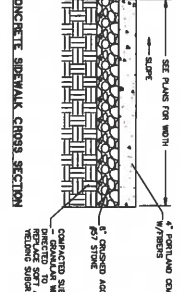
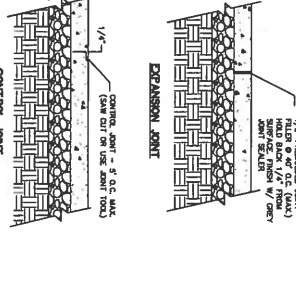
CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
 17TH STREET, WHEELING, WV 26003
STORMWATER MANAGEMENT PLAN

REVISION

NO.	DATE	DESCRIPTION

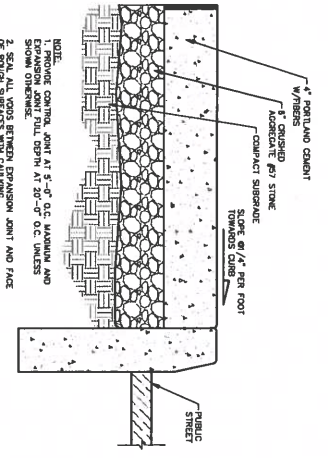
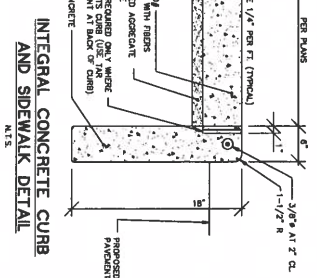
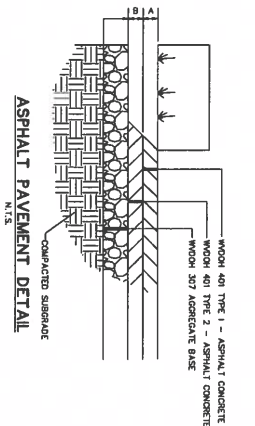
DESIGN BY: KALN
 PROJECT NO: 20-108B
 SCALE: AS NOTED
 SHEET: C202

NOTES
 1. EXPANSION JOINT - 4" O.C. MAX AND 4" MIN. CURBS, WALKS, WALLS AND OTHER FIBER REINFORCED CONCRETE.
 2. CONTROL JOINT - 5' O.C. MAX.
 3. CONCRETE SHALL BE 4" PER FOOT MAX. SLIPFORM CURB FROM 2" FIBER REINFORCED CONCRETE.
 4. REBAR SHALL BE #4.



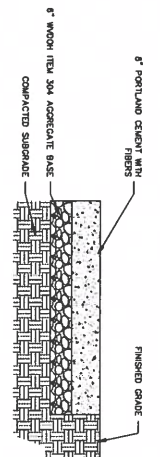
SIDEWALK DETAIL / TYPICAL FOR ONSITE
 N.T.S.

LOCATION	A	B	C
STANDARD DUTY PAVING	1'-1/2"	3'-1/2"	6"

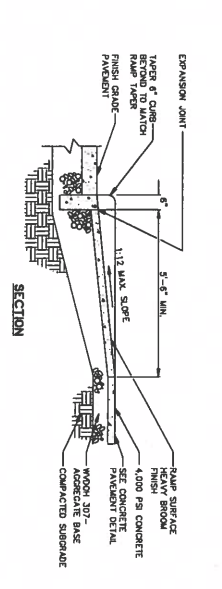


NOTES
 1. 1/2" EXPANSION JOINT IS TO BE PLACED FULL DEPTH EVERY 20 FEET (MAX).
 2. CONTROL JOINT IS TO BE 4' MAX. OR 4000 PSI WITH FIBER FIBERS, AND 3. NEW CONCRETE SHALL BE PROTECTED BY WET BURLAP OR OTHER CURBIC MATERIAL FOR A PERIOD OF THREE DAYS.
 4. SEE SPECIFICATIONS FOR MORE INFORMATION.

TYPICAL FOR SIDEWALK WITHIN ROW
 N.T.S.

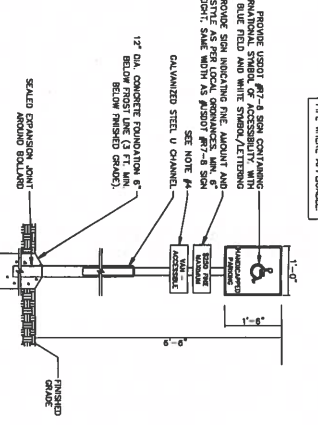


NOTES
 1. PROVIDE WITH CONTROL JOINTS.
 2. FINISH WITH 1/2" SMOOTH FINISH.
 3. FINISH WITH 1/2" SMOOTH FINISH.
 4. FINISH WITH 1/2" SMOOTH FINISH.

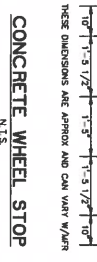


HANDICAPPED PARKING SIGN
 N.T.S.

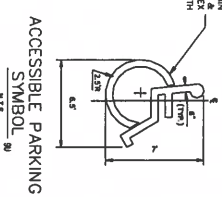
NOTES
 1. SIGN SHALL BE TO CONFORM WITH SPECIFICATIONS FROM THE UNIFORM STANDARDS FOR SIGNAGE.
 2. SIGN SHALL BE U-GRADE CONSTRUCTION.
 3. SIGN SHALL COMPLY TO ALL ADA CODES.
 4. SIGN SHALL BE LOCATED SO THAT THEY CANNOT BE OBTAINED BY A PERSON WITH A WHEELCHAIR.
 5. SIGN SHALL BE 4' HIGH FROM FINISHED GRADE.
 6. SIGN SHALL BE 18" IN DIAMETER.
 7. IF SIGN IS LOCATED TO BE PLACED ON THE BOTTOM OF THE VAN, THE SIGN SHALL BE 18" IN DIAMETER 2'-0" IN A 12" DIA. CONCRETE FOOTING 4'-0" HIGH FROM FINISHED GRADE.



VERTICAL CURB DETAIL
 N.T.S.

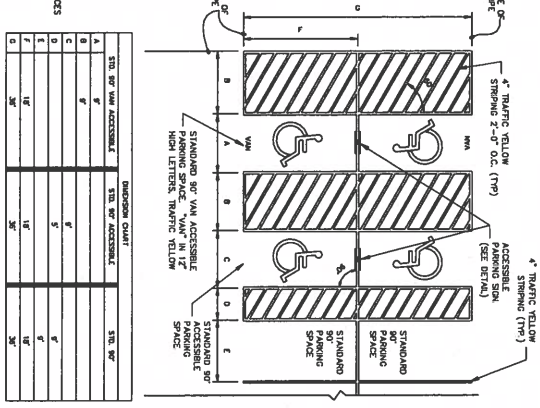


CONCRETE WHEEL STOP
 N.T.S.



NOTES
 1. LOCATE AT EDGE OF PARKING SPACE UNLESS OTHERWISE NOTED BY VAN STRIPING.
 2. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
 3. A MINIMUM OF 18" CLEARANCE SHALL BE MAINTAINED ON ALL SIDES OF THE VAN STRIPING.
 4. SEE SITE PLAN FOR TYPICAL DIMENSIONS OF STANDARD OR PARKING SPACES.

90° PARKING, ACCESSIBLE PARKING AND "VAN" ACCESSIBLE PARKING SPACE STRIPING
 N.T.S.



STRIPE	WIDTH	SPACING	LOCATION
1	4"	12"	EDGE OF PARKING SPACE
2	4"	12"	EDGE OF PARKING SPACE
3	4"	12"	EDGE OF PARKING SPACE
4	4"	12"	EDGE OF PARKING SPACE
5	4"	12"	EDGE OF PARKING SPACE
6	4"	12"	EDGE OF PARKING SPACE
7	4"	12"	EDGE OF PARKING SPACE
8	4"	12"	EDGE OF PARKING SPACE
9	4"	12"	EDGE OF PARKING SPACE
10	4"	12"	EDGE OF PARKING SPACE

m&e
 Mechanical & Electrical
 1027 N. DuPont Blvd.
 Wheeling, WV 26003
 Tel: (204) 242-4244
 Fax: (204) 242-4249

PRELIMINARY
 DO NOT USE FOR
 CONSTRUCTION
 DATE: 08/24/21
 DRAWN BY: SKR/2021
 CHECKED BY: SKR/2021
 S.M. Meyersfield

BALANCE STATUS
 ○ DESIGN STAGES
 ○ DESIGN APPROVAL
 ○ DESIGN DEVELOPMENT
 ○ PRELIMINARY BALANCE
 ○ RELEASED FOR CONSTRUCTION
 ○ AS BUILT

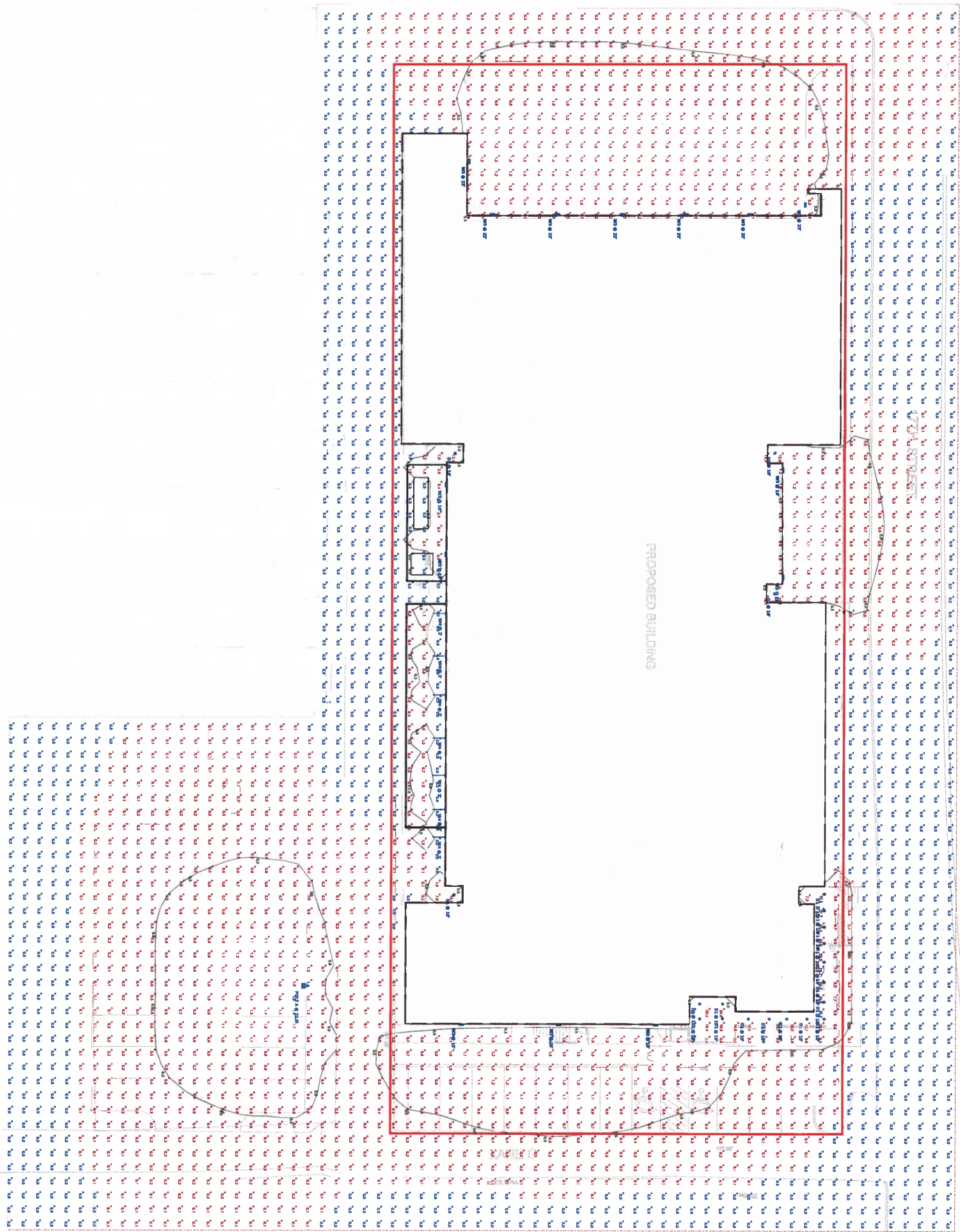
CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
 17TH STREET, WHEELING, WV 26003
SITE DETAILS

C500
 SHEET
 DRAWN BY: KILN
 PROJECT NO: 20-1088
 SCALE: AS NOTED
 DATE: 9/22/2021

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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WOOD STREET

PROPOSED BUILDING



Scale: 1/4" = 1'-0"

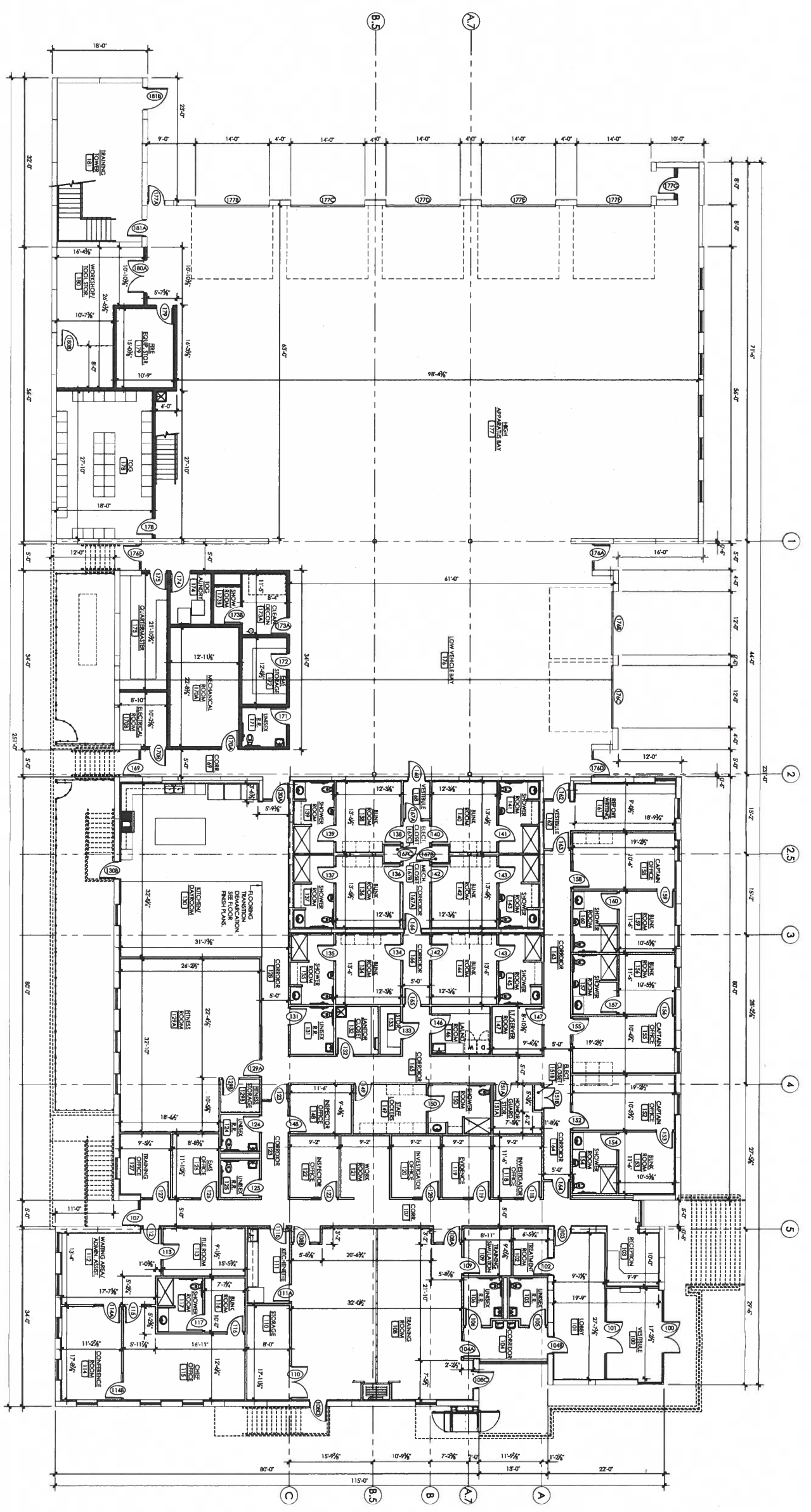
Wheeling Fire Department
Site Photometric



CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
 17TH STREET, WHEELING, WV 26003
FLOOR PLANS

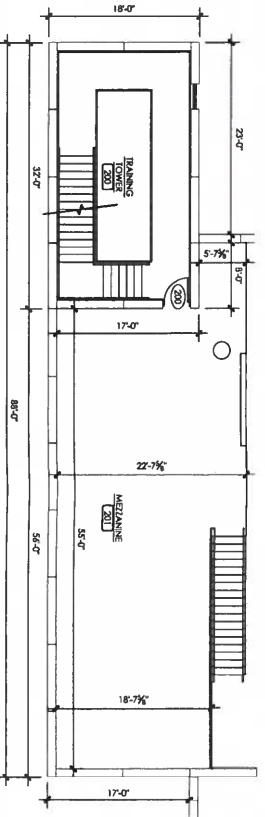
REVISION	DATE	BY

DRAWN BY	DEVELOPED BY
C. BRONKHORST	D. GRANT
PROJECT NO.	DATE
20-108B	9/20/2021
SCALE	AS NOTED

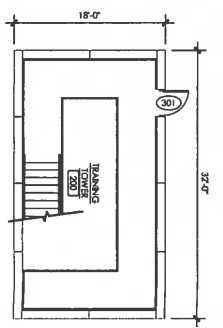


1 FIRST FLOOR PLAN
 A1.1 SCALE 1/8" = 1'-0"

- GENERAL NOTES:**
1. ALL DIMENSIONS UNLESS OTHERWISE NOTED TO INDICATE OTHERWISE.
 2. INTERIOR DIMENSIONS ARE SHOWN TO FACE OF WALL UNLESS NOTED TO THE CONTRARY.
 3. UNLESS OTHERWISE NOTED, ALL WALLS ARE 12" THICK CONCRETE.
 4. CONSTRUCTION OF WALLS TO BE AS SHOWN IN WALL CORNER DETAIL.
 5. ALL EXTERIOR WALLS TO BE TYPE 1 U.N.O.
 6. ALL EXTERIOR WALLS TO BE TYPE 1 U.N.O.
 7. REFER TO SHEET A1.2 FOR REMOTE REFERENCES.



2 MEZZANINE PLAN
 A1.1 SCALE 1/8" = 1'-0"



3 THIRD FLOOR TRAINING TOWER PLAN
 A1.1 SCALE 1/8" = 1'-0"



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- REVISION**
- | NO. | DATE | DESCRIPTION |
|-----|------|-------------|
| | | |
| | | |
| | | |
| | | |
- REVISION**

CITY OF WHEELING
W.P.D. - FIRE HEADQUARTERS
17TH STREET, WHEELING, WV 26003

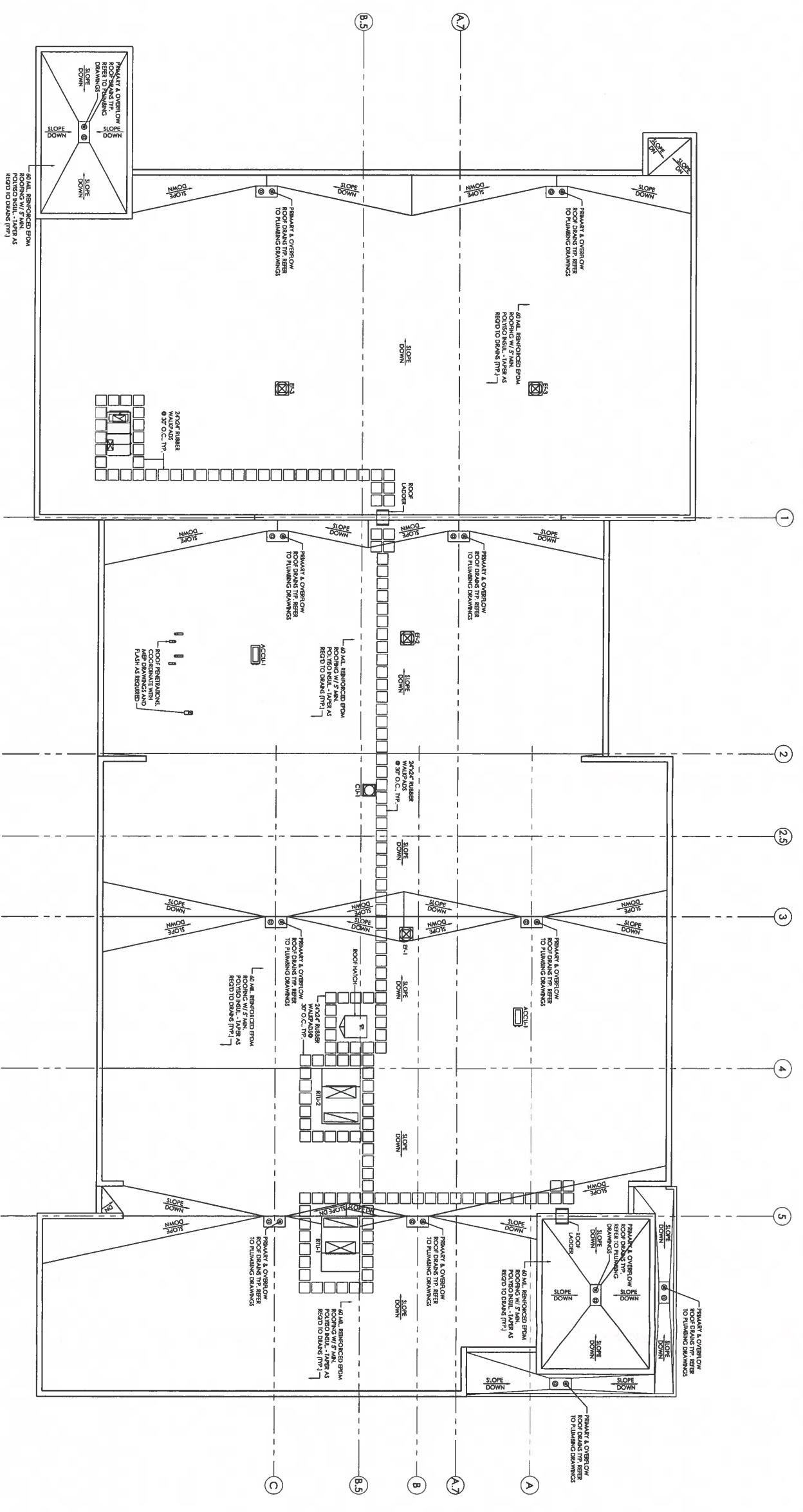
ROOF PLAN

20-108B

DATE: 9/22/2021
SCALE: AS NOTED

DESIGNED BY: D. GRANT
PROJECT NO.: 20-108B
DRAWN BY: C. BRONDER

SHEET: **A1.2**



1 ROOF PLAN
SCALE: 1/8" = 1'-0"

