PLANNING COMMISSION

~ AGENDA ~

PLANNING COMMISSION

312 S. Mildred Street,
Ranson WV 25438
www.ransonwv.gov

March 10, 2025 | 7:00 P.M. | Council Chamber

I. CALL TO ORDER

II. APPROVAL OF MINUTES

1. Minutes - February 3, 2025
   Minutes 232025.docx

III. OLD BUSINESS

IV. PLANNING COMMISSION BUSINESS

1. Public Hearing to accept public comments on a site plan located at 1982 N Mildred Street, Ranson, WV 25438 for a nine-unit apartment complex.
   Legal Notice Bridgeforth Apartments.docx
2. 24-47-CD Consideration- H & W Construction Company - William Aikens, submitted application for James and William Bridgeforth for a site plan located at 1982 N Mildred Street, Ranson WV 25438 for a nine-unit apartment complex.
   24-47-CD-2025-01-28 west branch apartments-bridgeforth construction drawings.pdf
3. Public hearing is to accept public comments on the final plat proposal for Huntwell West Phase 2B and 2C
   Legal Notice Huntwell West 2C plat , dev agreement, bond.docx
4. 25-4-FP- Consideration - Applicant Morris and Ritchie Associates INC submitted application for Huntwell WV LLC, final plat proposal for Huntwell West Phase 2C
   25-4-FP-phase 2c record plat.pdf
   pdf.svg
5. Public Hearing accepting the bond for Huntwell West Phase 2C (Lots 225-242, Lots 450-464),
   Legal Notice Huntwell West 2C plat , dev agreement, bond.docx
6. 25-4-FP- Consideration - Applicant Morris and Ritchie Associates INC submitted application for Huntwell WV LLC, to accept the bond for Huntwell West Phase 2C (Lots 225-242, Lots 450-464),
   PC25-09 Huntwell 2C Bond.docx
7. Public Hearing - Public hearing is to accept public comments on the development agreement for Phase 2C of Huntwell West.

Legal Notice Huntwell West 2C plat , dev agreement, bond.docx

8. 25-4-FP- Consideration - Applicant Morris & Ritchie Associates, INC submitted application for Huntwell WV LLC for an Development agreement for Phase 2B and 2C of Huntwell West.
   PC25-10 Huntwell Phase 2C Development Agreement.docx

9. Public Hearing to accept public comments on the Land Development Plan and Plat for the property known as Shenandoah Springs, parcels 0800080024 and 080008D (consisting of 90.45 acres) located on Mountain Laurel Blvd and Deep Creek Road, Ranson, WV, 25438.
   Legal Notice for LDPP-Shenendoah Springs.docx

10. 24-48-LDPP Consideration - US Home, LLC dba Lennar Corporation for the the Land Development Plan and Plat for the property known as Shenandoah Springs, parcels 0800080024 and 080008D (consisting of 90.45 acres) located on Mountain Laurel Blvd and Deep Creek Road, Ranson, WV, 25438.
    24-48-shen springs ldpp app executed 11-8-24.pdf
    24-48-2024-10-31 shenandoah springs ldpp.pdf

11. Public Hearing - to accept public comments on the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631)
    Legal Notice PP Phase 4.docx

12. 24-52-FP - Consideration - Applicant Morris & Ritchie Associates INC. submitted application for Stanley Martin Companies LLC. for the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631)
    24-52-FP-2025-03-06 presidents point section 4 plat.pdf

13. Public Hearing is to accept public comments for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), entering a development agreement for Phase 4 of President's Pointe.
    Legal Notice PP Phase 4.docx

14. 24-52-FP- Consideration Applicant Stanley Martin Companies LLC, submitted application to enter a Development agreement for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), a development agreement.
    PC25-07 PP Phase 4 Development Agreement.docx
    Presidents Point_Phase4_Development Agreement.docx

15. Public hearing is to accept public comments on accepting the Bond for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), for Phase 4 of President's Pointe.
    Legal Notice PP Phase 4.docx

16. 24-52-FP- Consideration - Applicant Stanley Martin LLC, submitted an application for the Bond for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), for Phase 4 of President's Pointe.
    PC25-08 PP Phase 4 Bond.docx
    24-52-FP-presidents_pointe_phase_4_bond_worksheet (2).pdf

V. ADJOURMENT

AGENDA ITEM II.1

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: APPROVAL OF MINUTES

SUBJECT: Minutes - February 3, 2025

ATTACHMENTS:

Minutes 232025.docx

PLANNING COMMISSION

~ AGENDA ~

PLANNING COMMISSION

312 S. Mildred Street,
Ranson WV 25438
www.ransonwv.gov

February 3, 2025 | 7:00 P.M. | Council Chamber

I. CALL TO ORDER

Mike Anderson, President	Present
Jason Gore, Vice President	Present
Doug Davis	Present
Jaden Bound	Present
Andy Colandrea	Present

II. APPROVAL OF MINUTES

1. December 9, 2024 Minutes

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

III. OLD BUSINESS

IV. PLANNING COMMISSION BUSINESS

1. 2025 Election of Officers
   President Mike Anderson opens the floor for nominations for Planning Commission President and Planning Commission Vice President. Andy Colandrea nominated Mike Anderson as President there were no other nomination for Planning Commission President, Mike Anderson accepted the nomination. President Mike Anderson nominated Jason Gore for Vice President. Jason Gore Accepted the nomination.

2. Public Hearing - Final plat proposal for President's Pointe Phase 5 located off President's Pointe Avenue including 145 lots (Lots 335-480),

   Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

3. 24-30-FP- Consideration - Applicant Stanley Martin Companies, LLC submitted Application for Final plat proposal for President's Pointe Phase 5 located off President's Pointe Avenue including 145 lots (Lots 335-480)

Mike Anderson, President	Abstain
Jason Gore, Vice President	Yes
Doug Davis	Second
Jaden Bound	Yes
Andy Colandrea	Motion

4. Public Hearing - Accepting the bond, President's Pointe Phase 5 located off President's Pointe Avenue including 145 lots (Lots 335-480),

   Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

5. 24-30-FP-Consideration - Applicant Stanley Martin Companies, LLC submitted Application Accepting the bond, President's Pointe Phase 5 located off President's Pointe Avenue including 145 lots (Lots 335-480),

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

6. Public Hearing - Development agreement for Phase 5 of President's Pointe.

   Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

7. PC25-01 - Consideration - Applicant Stanley Martin Companies, LLC submitted Application Development agreement for Phase 5 of President's Pointe.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

8. Public Hearing To accept Land Development Plan and Plat for the property known as Potomac Towne Center Village 1, parcels 088E001700000000, 088000100050000, and088000900020000 (consisting of 191+/- acres) located off Rte. 9 and North Fairfax Blvd, Ranson, WV, 25438.

   Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

9. 24-30-FP-Consideration - Applicant Madison Greens, LLC submitted Application t o accept Land Development Plan and Plat for the property known as Potomac Towne Center Village 1, parcels 088E001700000000, 088000100050000, and088000900020000 (consisting of 191+/- acres) located off Rte. 9 and North Fairfax Blvd, Ranson, WV, 25438.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

10. Public Hearing - Final plat proposal for Lakeland Place at Fairfax Crossing located off North Fairfax Blvd includes Parcels A-C & Residues A-E.

    Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

11. 24-54 Applicant Piedmont Design Group, LLC submitted application for owner Ed Scott Consideration Final plat proposal for Lakeland Place at Fairfax Crossing located off North Fairfax Blvd includes Parcels A-C & Residues A-E.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

12. Public Hearing - to accept public comments on a major subdivision located on parcel 08801850000 on Racetrack Street.

    Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

13. 24-56-MAJ_SUB Consideration - Applicant ILA Properties Inc. submitted application for JBG Homes, LLC to accept public comments on a major subdivision located on parcel 08801850000 on Racetrack Street.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Yes
Doug Davis	Second
Jaden Bound	Motion
Andy Colandrea	Yes

14. 25-2-SP- Consideration - JBG Homes, LLC submitted application to accept public comments on a major subdivision located on parcel 08801850000 on Racetrack Street.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Yes
Doug Davis	Second
Jaden Bound	Motion
Andy Colandrea	Yes

15. Public Hearing- To accept public comments on a release of guarantee for the subdivision Briar Run Phase 6. The release is for as they have satisfied $187,770.94 the entirety of the bond obligation.

Mr. Anderson took a vote to have this item discussed first

Mike Anderson, President	Abstain
Jason Gore, Vice President	Motion
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Second

Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

16. 24-49-BRR Applicant Dan Ryan Builders Group for Consideration to Release of guaranteed bond for the subdivision Briar Run Phase 6. The release is for as they have satisfied $187,770.94 the entirety of the bond obligation.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Motion
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Second

17. Public Hearing to accept public comments on a petition to rezone the following parcels 0810002800000000,0810001300000000,0810001200000000, and 0810001100000000 located off Wiltshire Road and Bassett Lane, Ranson WV 25438 (Consisting of 389.86 acres) from Rural Reserve to R6.

Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

18. 25-1-REZ - Consideration Applicant Integrity Federal Services submitted an application for Allen Lloyd - To petition to rezone the following parcels 0810002800000000, 0810001300000000, 0810001200000000, and 0810001100000000 located off Wiltshire Road and Bassett Lane, Ranson, WV 25438 (Consisting of 389.86 acres) from Rural Reserve to R6.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

19. Public Hearing - To accept public comments on a petition to rezone the following parcel 08 9000200000000 located off Cranes Lane, Ranson, WV 25438 (Consisting of 160.65 acres) from Rural Reserve to SmartCode New Community.

    Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

20. 25-3-REZ-Consideration - To accept public comments on a petition to rezone the following parcel 08 9000200000000 located off Cranes Lane, Ranson, WV 25438 (Consisting of 160.65 acres) from the Rural Reserve to SmartCode New Community.

Mike Anderson, President	Abstain
Jason Gore, Vice President	Yes
Doug Davis	Yes
Jaden Bound	Second
Andy Colandrea	Motion

21. Public Hearing is to accept public comments on the final plat proposal for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

    Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

22. 24-51-FP Applicant K&D Development Services LLC, submitted application for New Vision Development LLC, Consideration to accept public comments on the final plat proposal for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	NO
Andy Colandrea	Motion

23. Public Hearing is to accept public comments on the Development Agreement proposal for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

24. 24-51-FP- Consideration - Applicant K&D Development submitted application for New Vision Development LLC, for Development Agreement proposal for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

25. Public Hearing - Bond for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

Mike Anderson, president of the Planning Commission opens the Public Hearing, No Public Comments, Mr. Anderson closed the Public Hearing for a vote.

26. 24-51-FP- Consideration - Applicant K&D Development Services LLC, submitted application for New Vision Development LLC, Bond for Parkland Meadows Phase 1, located off W Beltline Avenue, S Mildred Street, and N George Street, Ranson WV (Lots T1-T6 & T60 -T73).

Mike Anderson, President	Abstain
Jason Gore, Vice President	Second
Doug Davis	Yes
Jaden Bound	Yes
Andy Colandrea	Motion

V. ADJOURMENT

The meeting was Adjourn at 7:09PM. Motion by Andy Colandrea, second by Jason Gore. Next meeting will be March 10, 2025 at 7:00 PM. Ranson City Hall 312 S. Mildred Street, Ranson WV 25438.

_____

Mike Anderson, President

_____

Planning Commission, Member

AGENDA ITEM IV.1

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing to accept public comments on a site plan located at 1982 N Mildred Street, Ranson, WV 25438 for a nine-unit apartment complex.

ATTACHMENTS:

Legal Notice Bridgeforth Apartments.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on a site plan located at 1982 N Mildred Street, Ranson, WV 25438 for a nine-unit apartment complex. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.2

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 24-47-CD Consideration- H & W Construction Company - William Aikens, submitted application for James and William Bridgeforth for a site plan located at 1982 N Mildred Street, Ranson WV 25438 for a nine-unit apartment complex.

Nine-unit apartment building complex zoned T4 located off Wescott Avenue.

ATTACHMENTS:

24-47-CD-2025-01-28 west branch apartments-bridgeforth construction drawings.pdf

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS

CITY OF RANSON, WEST VIRGINIA

GENERAL NOTES

1. THE PROPERTY DELINEATED HEREON IS NOW IN THE NAME OF JAMES & WILLIAM BRIDGEFORTH AMONG THE LAND RECORDS OF JEFFERSON COUNTY, WEST VIRGINIA.
2. EXISTING TOPOGRAPHY SHOWN IS BASED ON A FIELD RUN SURVEY PERFORMED BY MORRIS & RITCHIE ASSOCIATES, INC. IN MAY 2024. HORIZONTAL DATUM IS BASED ON NAD83 AND VERTICAL DATUM IS BASED ON NAD 88.
3. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED IN ACCORDANCE WITH THE "WEST VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND IN ACCORDANCE WITH THE CITY ORDINANCE 16-113 C.3. EROSION AND SEDIMENT CONTROL.
4. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF WEST VIRGINIA OR ANY OTHER ORDINANCE ENACTED BY THE CITY OF RANSON.
5. ALL UNDERGROUND UTILITIES WITHIN STREET RIGHT-OF-WAYS SHALL BE INSTALLED TO THE REQUIRED DISTANCE BEYOND THE RIGHT-OF-WAY LINE PRIOR TO THE INSTALLATION OF ANY SUB SURFACE MATERIAL, CURB AND GUTTER, OR SIDEWALK.
6. CONTRACTORS SHALL ARRANGE FOR THE LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO THE CONSTRUCTION INCLUDING TEST HOLES TO PHYSICALLY LOCATE UNDERGROUND UTILITIES AS NECESSARY. SEE TEST PIT NOTE ON SHEET 2.
7. THESE PLANS MAKE NO REPRESENTATION AS TO SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES.
8. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES, AS SHOWN HEREON, ARE APPROXIMATE ONLY. NO GUARANTEE IS HEREIN MADE OR IMPLIED THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN. IT SHALL BE THE CONTRACTOR'S AND/OR THE OWNER'S RESPONSIBILITY TO CONTACT UTILITY COMPANIES AND TO VERIFY THE TYPE, SIZE, AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO STARTING THE WORK. ANY DISCREPANCIES IN OR FROM THE INFORMATION SHOWN HEREON SHALL BE REPORTED TO MORRIS & RITCHIE ASSOCIATES, INC. PRIOR TO COMMENCING CONSTRUCTION.
9. IN ORDER TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF A GIVEN UTILITY AND TO ASSIST THE CONTRACTOR AND/OR OWNER IN DETERMINING AREAS OF SPECIAL CONCERN, MORRIS & RITCHIE ASSOCIATES, INC. HAS INDICATED HEREON CERTAIN LOCATIONS WHERE TEST PITS SHOULD BE EXCAVATED PRIOR TO COMMENCING CONSTRUCTION. THESE INDICATIONS ARE NOT INTENDED TO BE ALL INCLUSIVE AND WILL NOT RELIEVE THE CONTRACTOR AND/OR OWNER OF THE RESPONSIBILITY OF DIGGING ADDITIONAL TEST PITS, AS MIGHT BE REQUIRED BY ACTUAL SITE CONDITIONS. ANY DISCREPANCIES FOUND BETWEEN ACTUAL AND ASSUMED CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF MORRIS & RITCHIE ASSOCIATES, INC. SEE TEST PIT NOTE ON SHEET 2
10. APPROVAL OF THIS PLAN DOES NOT GRANT APPROVAL TO TRESPASS ON OFF-SITE PROPERTY.

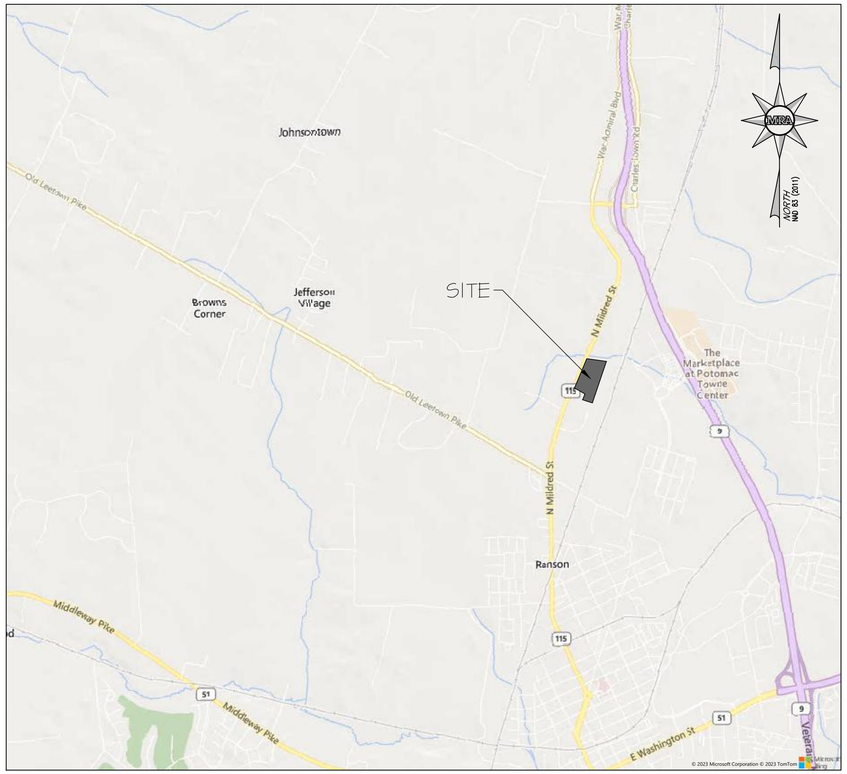
    WATER AND SANITARY SEWER UTILITIES SHALL BE INSTALLED IN CONFORMANCE TO CHARLES TOWN UTILITY BOARD AND WV AMERICAN WATER
11. THE APPROVAL OF THESE PLANS SHALL NOT RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, & FEDERAL REQUIREMENTS.
12. DURING ALL CONSTRUCTION STAGES, ACCESS FOR FIRE AND RESCUE VEHICLES AND ADEQUATE STANDPIPE SYSTEMS WILL BE PROVIDED. THIS COMMITMENT DOES NOT RELIEVE THE OWNERS FROM COMPLYING WITH ALL OTHER LEGAL REQUIREMENTS RELATING TO FIRE AND RESCUE ACCESS AND SYSTEMS.
13. A PRECONSTRUCTION MEETING, INCLUDING MRA, CITY OF RANSON PERSONNEL, CHARLES TOWN UTILITY BOARD AND WV AMERICAN WATER, INC. IS REQUIRED PRIOR TO THE START OF CONSTRUCTION. A 5 DAY MINIMUM NOTICE IS REQUIRED.
14. CONTRACTOR TO SCHEDULE INSPECTIONS WITH CITY STAFF A MINIMUM OF 5 DAYS IN ADVANCE. CONTACT CITY STAFF AT 304-725-1010.
15. NECESSARY PRECAUTIONS SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SERVICES AND MAINS, AND ANY DAMAGE TO THEM DUE TO HIS NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT HIS OWN EXPENSE.
16. THE CONTRACTOR SHALL NOTE THAT IN CASE OF A DISCREPANCY BETWEEN THE SCALED AND THE FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN. MRA SHOULD BE CONTACTED TO RESOLVE DISCREPANCY
17. IT SHALL BE DISTINCTLY UNDERSTOOD THAT FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
18. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
19. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AT LEAST (5) FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
    A. MISS UTILITY 811
    B. WV AMERICAN WATER REQUIRES 2 WEEKS NOTICE FOR INSPECTION OF INSTALLATION. INSPECTION FEES WILL APPLY.
    C. CHARLES TOWN UTILITY BOARD
20. ALL REFERENCES TO TAMPED FILL WITHIN THIS PLAN SET THAT REFER TO AASHTO DESIGNATION T-180 METHOD-C AND/OR ASTM D-1557 SHALL BE COMPACTED TO A MINIMUM DENSITY OF 95% IN ACCORDANCE WITH ASTM D-698 IN MAXIMUM 8 INCH LIFTS. ALL COMPACTION MUST COMPLY WITH ARTICLE 16 SECTION 2-307.
21. THIS PROJECT IS SERVED BY PUBLIC WATER AND SEWER.
22. CONTRACTOR SHALL VERIFY TO HIS SATISFACTION, THE FINAL EARTHWORK NUMBERS PRIOR TO COMMENCEMENT OF SITE WORK. MRA MAKES NO GUARANTEE THAT ON SITE SOILS WILL BE SUITABLE FOR STRUCTURAL FILL, OR THAT THE EARTHWORK WILL BALANCE. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR THE ACTUAL EARTHWORK NUMBERS ENCOUNTERED DURING CONSTRUCTION.
23. ALL SPOT ELEVATIONS ALONG PROPOSED CURB AND GUTTER ARE BOTTOM OF CURB ELEVATIONS UNLESS OTHERWISE NOTED.
24. IF ANY ARCHEOLOGICAL, HISTORIC RESOURCES OR CEMETERIES ARE DISCOVERED DURING EXCAVATION THE CONTRACTOR SHALL STOP WORK IMMEDIATELY IN THE AREA OF DISCOVERY AND NOTIFY THE CITY OF RANSON AND MORRIS & RITCHIE ASSOCIATES, INC. NO FURTHER WORK IN THE AREA SHALL BE PERMITTED UNTIL RELEASED BY THE CITY OF RANSON AND MORRIS & RITCHIE ASSOCIATES, INC.
27. ALL PROPOSED DEVELOPMENT SIGNAGE, BOTH TEMPORARY AND PERMANENT SHALL REQUIRE A SEPARATE BUILDING PERMIT AND SHOULD NOT BE INCLUDED IN THIS APPLICATION. PLEASE REFER TO SECT. 19-15. SIGNS, FOR ALL SIGNAGE REQUIREMENTS AND STANDARDS. ANY MONUMENT SIGNAGE THAT WILL BE LIT MUST BE REVIEWED AND APPROVED BY THE CITY OF RANSON PRIOR TO INSTALLATION.

PLANNING COMMISSION APPROVAL

WITH THE APPROVAL OF A GENERAL DEVELOPMENT PLAN DATED 08-23-15, ASSOCIATED CONSTRUCTION DRAWINGS DATED __ - __ - ____, AND DEVELOPMENT AGREEMENT DATED __ - __ - ____, THIS PLAT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AND HAS BEEN APPROVED FOR RECORDATION BY THE CITY OF RANSON PLANNING COMMISSION.

_____ _____

PLANNING COMMISSION PRESIDENT DATE



VICINITY MAP
SCALE: 1"=2000'

OWNER
JAMES & WILLIAM BRIDGEFORTH
2927 SHAWNEE DR.
WINCHESTER, VA 22601

APPLICANT
(H&W CONSTRUCTION COMPANY)
CONTACT: WILLIAM AIKENS
1025 MARTINSBURG PIKE
WINCHESTER, VA 22603
540-974-2736

PREPARED BY
MORRIS & RITCHIE ASSOCIATES, INC.
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
CONTACT: JON K. ERICKSON
703-994-4047
JERICKSON@MRAGTA.COM

Sheet List Table	
Sheet Number	Sheet Title
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2	SITE NOTES & DETAILS
3	FINAL SITE PLAN
4	EXISTING CONDITIONS OVERVIEW
5	EXISTING CONDITIONS
6	EXISTING CONDITIONS
7	SHEET OVERVIEW
8	LAYOUT & UTILITY PLAN
9	LAYOUT & UTILITY PLAN
10	GRADING PLAN
11	GRADING PLAN
12	ROAD PROFILES
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14	WATERLINE PROFILES
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19	SD HYDRAULIC COMPUTATIONS
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21	SANITARY LATERAL TABLE
22	SANITARY SEWER DETAILS
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26	EROSION & SEDIMENT CONTROL PHASE I
27	EROSION & SEDIMENT CONTROL PHASE 1A
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29	EROSION & SEDIMENT CONTROL DETAILS
30	EROSION & SEDIMENT CONTROL DETAILS II
31	EROSION & SEDIMENT CONTROL NARRATIVE
32	PRE-DEVELOPED DRAINAGE AREA
33	POST-DEVELOPED DRAINAGE AREA
34	SWM NARRATIVE
35	SWM DETAILS
36	SWM POND 1 PROFILE
37	LANDSCAPE DETAILS
38	LANDSCAPE PLAN
39	SIGNAGE PLAN
40	LIGHTING PLAN
41	VEHICLE TRACKING- FIRE TRUCK
42	VEHICLE TRACKING- SCHOOL BUS
43	VEHICLE TRACKING- GARBAGE TRUCK
44	HANDICAP RAMP DETAILS
45	SIGHT DISTANCE PLAN AND PROFILE

PROJECT NOTES

1. TAX PARCEL NUMBER: MAP 8, PARCEL 16
2. PARCEL AREA: 55.81 AC
3. EXISTING USE: FARM/DEVELOPED
4. PROPOSED USE: RESIDENTIAL
5. ZONING: HC (HIGHWAY COMMERCIAL)
6. LOCATION: BETWEEN N MILDRED STREET & WESCOTT DRIVE
7. TOTAL AREA OF DISTURBANCE: 15.09 AC
8. PROPOSED PARCEL AREA: 14.87 AC
9. NUMBER OF UNITS PROPOSED:
   9 MULTIFAMILY APARTMENT BUILDINGS
   237 APARTMENTS
10. DEVELOPMENT PLAN & PLAT APPROVED APRIL 22, 2024
    RZNG-24-14 & LDPP-24-13
11. ESTIMATED WATER CONSUMPTION: 150 GPD X 237 = 35,550
    ESTIMATED SEWER CONSUMPTION: 150 GDP X 237 = 35,550

THE CITY OF RANSON PLANNING APPROVES THESE CONSTRUCTION DRAWINGS ON _____, _____ WITH THE FOLLOWING CONDITIONS:

1) _____
2) _____
3) _____

THE OWNER OF THIS PROPERTY HEREBY AFFIRMS THAT THESE PLANS MEET THE REQUIREMENTS OF THE RANSON ZONING AND SUBDIVISION ORDINANCES AND THE ABOVE CONDITIONS OF APPROVAL SET FROTH BY THE RANSON PLANNING COMMISSION.

_____

OWNER'S SIGNATURE DATE

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
MRAGTA.COM

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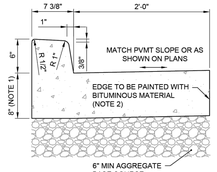
JON K. ERICKSON
LAND REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

COVER SHEET

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	1 OF 45



NOTES:

1. MATCH THICKNESS OF PAVEMENT WHEN ABUTTING CONCRETE PAVEMENT.
2. DOES NOT APPLY WHEN ABUTTING CONCRETE PAVEMENT. INSTEAD A LONGITUDINAL JOINT WITH TIE BARS OR TIE BOLT ASSEMBLIES SHALL BE CONSTRUCTED AT THIS LOCATION.
3. ALL CURB JOINTS SHALL BE MADE BY ACCEPTABLE FORMING METHODS.

NOT TO SCALE

RANSON	COMBINATION CURB AND GUTTER POSTED SPEED ≤ 25 MPH CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		CG-01	1 OF 1	12/1/2023

NOTE: ROADS X AND WESCOTT CONNECTION CURB TO MATCH PAVEMENT SLOPE. FOR PARKING AREAS AND TRAVEL WAYS, SLOPE TO BE 1"=1'

MINIMUM PAVEMENT THICKNESS (NOTE 1)			
SURFACE COURSE	BASE COURSE	AGGREGATE BASE COURSE	SUBGRADE
1 1/2"	3"	6" CLASS 1 OR 4" FREE DRAINING	6"

NOTES:

1. PAVEMENT SHALL BE DESIGNED IN ACCORDANCE WITH WVDOH DESIGN DIRECTIVES DD-644 AND DD-646 BASED ON ANTICIPATED TRAFFIC LOADING AND EVALUATION OF UNDERLYING SOILS BY A LICENSED GEOTECHNICAL ENGINEER.
2. THE PRESENCE OF FAULT LINES AND SOLUTION CHANNELS ASSOCIATED WITH KARST GEOLOGY MAY REQUIRE ADDITIONAL THICKENING OF PAVEMENT ELEMENTS OR OTHER MEASURES TO REINFORCE THE UNDERLYING SOILS PRIOR TO PAVEMENT CONSTRUCTION.

NOT TO SCALE

RANSON	ASPHALT PAVEMENT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		PVT-01	1 OF 1	12/1/2023

NOTES:

1. CONCRETE SLAB WITHIN DUMPSTER ENCLOSURE SHALL BE LEVEL..
2. CONCRETE SLAB OUTSIDE DUMPSTER ENCLOSURE SHALL SLOPE AT NO MORE THAN 2% IN ANY DIRECTION.
3. PAIRS OF PERIMETER BOLLARDS INSIDE ENCLOSURE MAY BE REPLACED WITH A 6" HIGH X 1' DEEP X 3' LONG CURB.
4. CONFIGURATION SHOWN IS FOR FRONT-LOAD DUMPSTERS. FOR SIDE-LOAD DUMPSTERS, ENLARGE ENCLOSURE TO PROVIDE 48" SQUARE ACCESSIBLE LANDING IN FRONT OF DOOR.

NOT TO SCALE

RANSON	DOUBLE DUMPSTER ENCLOSURE CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		ST-03	1 OF 1	12/1/2023

TEST PIT NOTE:

⊕ = TEST PIT REQUIRED
(SEE GRADING SHEETS)

IN ORDER TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF A GIVEN UTILITY AND TO ASSIST THE CONTRACTOR AND/OR OWNER IN DETERMINING AREAS OF SPECIAL CONCERN, MRA.. HAS INDICATED HEREON CERTAIN LOCATIONS WHERE TEST PITS SHOULD BE EXCAVATED PRIOR TO COMMENCING CONSTRUCTION. THESE INDICATIONS ARE NOT INTENDED TO BE ALL INCLUSIVE AND WILL NOT RELIEVE THE CONTRACTOR AND/OR OWNER OF THE RESPONSIBILITY OF DIGGING ADDITIONAL TEST PITS, AS MIGHT BE REQUIRED BY ACTUAL SITE CONDITIONS. ANY DISCREPANCIES FOUND BETWEEN ACTUAL AND ASSUMED CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF MRA BY CALLING 703-994-4047. FURTHERMORE, TEST PITS HAVE BEEN PLACED WHERE KNOWN UTILITIES EXIST. UPON CALLING WV 811, SHOULD THE CONTRACTOR IDENTIFY EXISTING UTILITIES NOT SHOWN ON OUR PLAN, MRA MUST BE CALLED IMMEDIATELY AT 703-994-4047.

GENERAL NOTES:

1. CONTRACTOR TO MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.
2. IF ROAD, SHOULDER, OR SIDEWALK CLOSURES OCCUR WHILE HOMES ARE OCCUPIED, DETOURS SHALL BE IN ACCORDANCE WITH MOWAS.

UTILITY NOTES:

1. ALL SANITARY SEWER MUST BE IN ACCORDANCE WITH CHARLES TOWN UTILITY BOARD SEWER SPECIFICATIONS.
2. ALL SEWER EASEMENTS SHALL BE DEDICATED TO THE CITY OF CHARLES TOWN UTILITY BOARD

ROADWAY NOTES:

1. A SMOOTHING GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE PROPOSED CURB AND GUTTER, TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER ON THE ROADWAY.
2. ADDITIONAL STANDARD GUARDRAIL AND HANDRAIL SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FINAL FIELD INSPECTIONS BY THE CITY OF RANSON OR WVDOH. SHOULDER SHALL BE WIDENED PER WVDOH STANDARDS.
3. SIDEWALKS AND TRAILS SHALL BE CONSTRUCTED ON A SUBGRADE COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT.
4. FOR DITCH AND SHOULDER ROADWAY SECTIONS THE BACK SLOPE OF THE DITCH (NBK) SHALL EXTEND UP AT A SLOPE OF 3:1 FOR A DISTANCE EQUAL TO THE DEPTH OF THE DITCH ASSOCIATED WITH THE FRONT SLOPE (NFRNT).
5. SIDEWALKS SHALL BE CONSTRUCTED ON A FOUR (4") INCH THICK LAYER OF WVDOH BED COURSE MATERIAL CLASS 1 OR 3.
6. PAVEMENT SECTIONS SHOWN ARE "PRELIMINARY ONLY" AND SUBJECT TO REVISION BASED ON FINAL PAVEMENT DESIGN PER GIVEN ROAD CLASSIFICATION UTILIZING ACTUAL FIELD CBR VALUES.

6" COMBINATION CONCRETE REVERSE CURB & GUTTER

NOT TO SCALE

CONCRETE NOTE:

THE CONTRACTOR SHALL VERIFY CONCRETE FORM PLACEMENT TO ASSURE COMPLIANCE WITH CURRENT LOCAL AND STATE ADA AS WELL AS BUILDING CODES.

THE APPLICANT IS RESPONSIBLE FOR ENSURING THAT THE CURB RAMPS ARE INSTALLED CORRECTLY AND MEET ALL LOCAL, STATE AND FEDERAL STANDARDS.

ADA INSPECTION SHALL BE REQUIRED PRIOR TO POURING CONCRETE. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR MEETING ALL APPLICABLE HANDICAP SLOPE AND DISTANCE REQUIREMENTS AS WELL AS OTHER REQUIREMENTS AS STATED IN THE APPLICABLE CODES.

INSPECTION FOR ADA COMPLIANCE SHALL BE PERFORMED BY A 3RD PARTY INSPECTOR. ALL 3RD PARTY TESTS INCLUDING FOR ADA COMPLIANCE SHALL BE PROVIDED TO THE CITY ENGINEERS FOR ACCEPTANCE IN ACCORDANCE WITH 16-63.

ANY DISCREPANCIES FOUND SHOULD BE BROUGHT TO THE SITE ENGINEER'S ATTENTION BEFORE ANY CONCRETE IS PLACED.

UTILITY CONTACT NUMBERS		
UTILITY	UTILITY COMPANY	PHONE NUMBER
WATER	WV AMERICAN WATER	681-240-4192
SANITARY SEWER	CHARLES TOWN UTILITY BOARD	304-725-2316
ELECTRIC	POTOMAC EDISON COMPANY	800-686-0011
CABLE	COMCAST	888-266-2278
PHONE	FRONTIER COMMUNICATIONS	304-728-8500
CABLE/PHONE	SHENTEL	800-743-6835
GAS	THOMPSON GAS	304-725-9776
OTHER	WV 811	811 OR 800-245-4848

WESTCOTT CONNECTION AND ROAD X

6" COMBINATION CONCRETE REVERSE CURB & GUTTER

NOT TO SCALE

LEGEND

- EX. R/W LINE
- EX. PROPERTY LINE
- EX. ADJ. PROPERTY LINE
- EX. 10' CONTOUR
- EX. 2' CONTOUR
- SOILS LINE
- EX. ZONING LINE
- EX. FENCE LINE
- EX. STREAM
- EX. EASEMENT
- EX. POND LINE
- EX. FLOODPLAIN
- EX. FLOODPLAIN BUFFER
- EX. CRITICAL AREA
- EX. FOREST BUFFER
- EX. WETLAND LINE
- EX. OVERHEAD LINE

- I.P.F. IRON PIPE FOUND
- I.P.S. IRON PIPE SET
- I.R.F. IRON REBAR FOUND
- I.R.S. IRON REBAR SET
- 50 EX. SPOT ELEVATION
- PROP. R/W LINE
- PROP. PROPERTY LINE
- PROP. LOT LINE
- PROP. 1' CONTOUR
- PROP. 2' CONTOUR
- PROP. 10' CONTOUR
- PROP. TREE LINE
- PROP. FOREST CONSERVATION LINE
- PROP. BUILDING
- PROP. BLDG SETBACK LINE
- PROP. CURB
- PROP. ROAD CENTER LINE
- LOD PROP. LIMITS OF DISTURBANCE
- PROP. SEPTIC RESERVE AREA
- PROP. EASEMENT LINE
- PROP. METAL FENCE
- PROP. WOOD FENCE
- PROP. SANITARY LINE
- PROP. STORM DRAIN LINE
- PROP. WATER LINE
- OH PROP. OVERHEAD LINE
- UG PROP. UNDERGROUND CONDUIT
- CATV PROP. CABLE TV LINE
- E PROP. ELECTRIC LINE
- GAS PROP. GAS LINE
- RSF REINFORCED SILT FENCE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- PROP. HYDRANT
- PROP. VALVE
- PROP. SIAMESE CONNECTION
- 570.91 PROP. SPOT ELEVATION
- PROP. SIGN
- PROP. LIGHT POLE
- PROP. TRANSFORMER

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
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JOHN K. ERICKSON
REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

SITE NOTES & DETAILS

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	2 OF 45

PROJECT DESCRIPTION

THE SITE IS ZONED HC (HIGHWAY COMMERCIAL) AND PROPOSES A RESIDENTIAL SUBDIVISION CONSISTING OF 9 APARTMENT BUILDINGS AND 237 APARTMENTS WITH ASSOCIATED IMPROVEMENTS. THE TOTAL AREA OF THIS SITE IS 55.8 ACRES.

BUILDING STANDARDS

BUILDING PLACEMENT- PRINCIPAL BUILDING	
ZONE	REQUIRED
T4	FRONT SETBACK– 18' MAX FRONT SETBACK (SECONDARY) – 10' MAX SIDE SETBACK– 0' OR 6' MIN TOTAL REAR SETBACK – 3' MIN

BUILDING FORM- PRINCIPAL BUILDING HEIGHT		
ZONE	REQUIRED	PROVIDED
T4	STORIES–3 TO EAVE – 48' MAX LOT WIDTH– 20' MIN, 96' MAX LOT COVERAGE – 70% MAX FACADE BUILDOUT AT SETBACK– 60% MIN	STORIES– 3 TO EAVE – < 48' LOT WIDTH – 16' MIN, 28' MAX LOT COVERAGE – <70%

PARKING CALCULATIONS

ZONE	REQUIRED	PROVIDED
T4	1.5 PER DWELLING 1.5 * 237 = 356 SPACES	237 APARTMENTS WITH 1.5 PARKING SPACES = 355 SPACES 20 HANDICAP ACCESS PARKING SPACES TOTAL PARKING SPACES = 425 SPACES

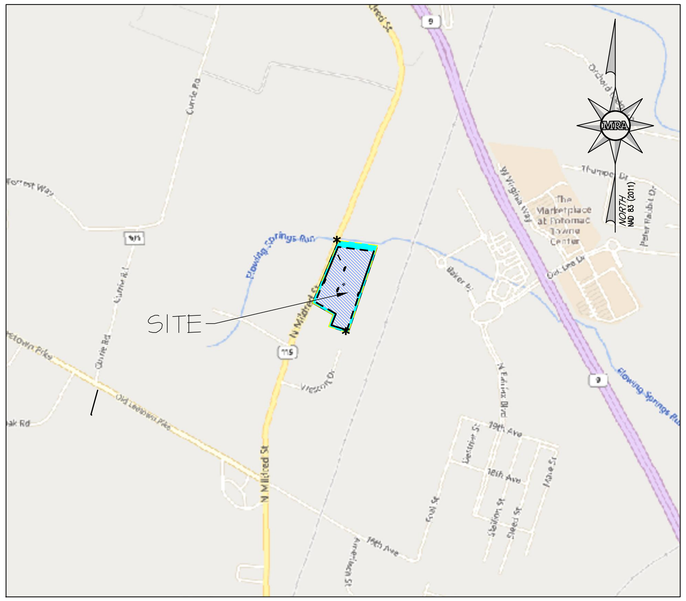
APPROVED DEVIATIONS & WAIVERS

1. WAIVERS AND DEVIATIONS APPROVED PER DEVELOPMENT PLAN & PLAT APPROVED APRIL 2024 RZNG–24–14 & LDPP–24–13.

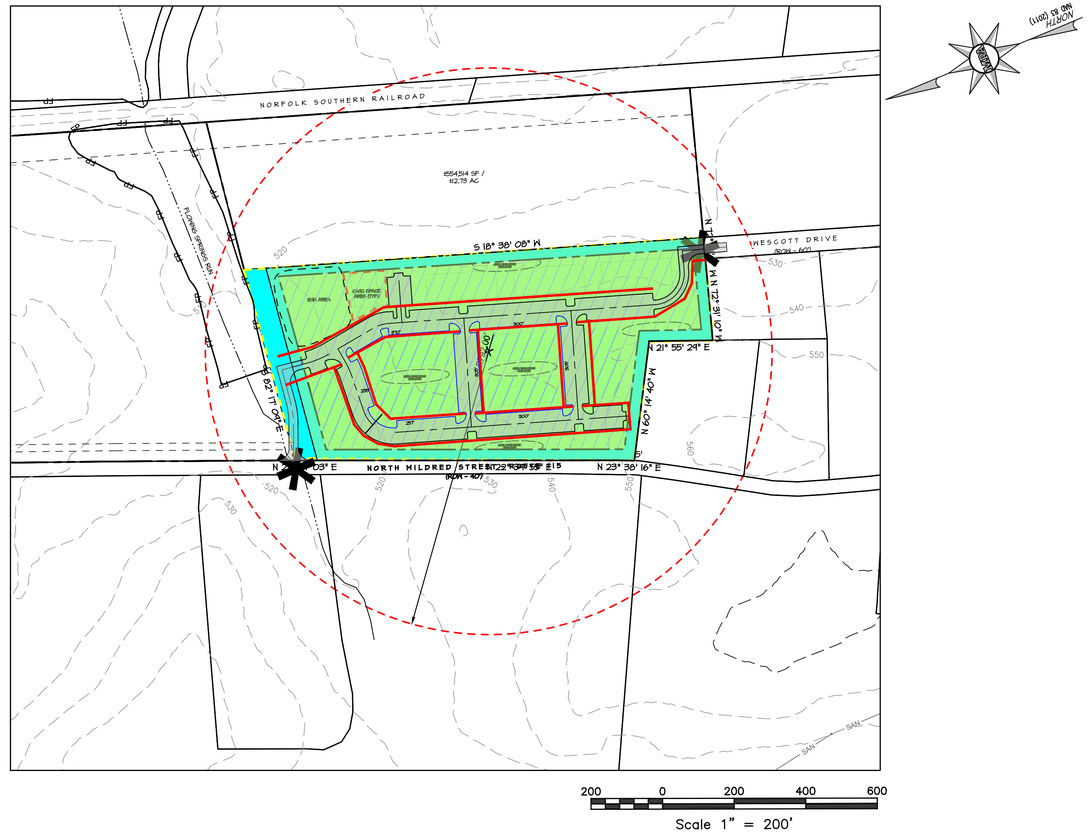
WAIVERS

1. 3.5.4– BLOCKS ADJACENT TO UNDEVELOPED LAND, AREAS UNSUITABLE FOR DEVELOPMENT, OR PRE–EXISTING INCOMPLETE BLOCKS MAY BE EXEMPT FROM BLOCK FACE LENGTH AND BLOCK PERIMETER REQUIREMENTS BE ADMINISTRATIVE WAIVER IN ACCORDANCE WITH 1.5.3.

WAIVER OF BLOCK FACE LENGTH AND BLOCK PERIMETER REQUIREMENTS FOR EXTERIOR BLOCKS.
JUSTIFICATION: PEDESTRIAN PASSAGES AND ALL REQUESTED ROAD CONNECTIONS HAVE BEEN ADDED TO THE PLAN TO BEST COMPLY WITH THE BLOCK LENGTH AND PERIMETER REQUIREMENTS. ALL INTERIOR BLOCKS MEET THE BLOCK FACE AND PERIMETER. THE EXTERIOR ADJACENT LAND IS EITHER UNDEVELOPED LAND OR EXISTING SUBDIVISIONS DEVELOPED UNDER OLD ZONING, WHICH IS NOT CONDUCIVE WITH MAKING PROPOSED CONNECTIONS, THEREFORE REDUCING THE BLOCK LENGTHS. THIS WAIVER IS CONSISTENT WITH SECTION 1.2 INTENT AND THE COMPREHENSIVE PLAN. THE LOCATION AND SIZE OF THE BLOCK STRUCTURE WILL BE CONSISTENT WITH PURPOSES OF THE DISTRICT. BLOCK SIZE ON THE EXTERIOR BLOCKS WILL NOT ADVERSELY AFFECT THE DISTRICT BY IMPEDING WALKABILITY AS THERE ARE MANY PEDESTRIAN PASSAGES AND SIDEWALK CONNECTIONS.



VICINITY MAP
SCALE: 1"= 1000'



200 0 200 400 600
Scale 1" = 200'

THE OWNER OF THIS PROPERTY HEREBY AFFIRMS THAT THESE PLANS MEET THE REQUIREMENTS OF THE RANSON ZONING AND SUBDIVISION ORDINANCES AND THE ABOVE CONDITIONS OF APPROVAL SET FORTH BY THE RANSON PLANNING COMMISSION.

OWNER'S SIGNATURE _____ DATE _____

LEGEND

- OVERALL BOUNDARY
- VILLAGE LIMITS/ PROPERTY BOUNDARY
- OPEN / CIVIC SPACE
- * SHORT PEDESTRIAN SHED
- PLAYGROUND W/ 1000' RADIUS
- MAIN CIVIC SPACE
- T1 ZONING
- T4 ZONING
- OPEN SPACE
- SC-SMARTCODE NEW COMMUNITY
- POINTS OF CONNECTION
- PEDESTRIAN PASSAGE
- BLOCK PERIMETER
- XXX' BLOCK PERIMETER LENGTH
- xxx' BLOCK FACE LENGTH

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
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01/28/25

FINAL SITE PLAN

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
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DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	3 OF 45

NORFOLK SOUTHERN RAILROAD

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-013
DB. 1128 PG. 403

WESTCOTT LLC.
PARCEL ID: 08-80-012
DB. 935 PG. 649

WESCOTT DRIVE
60' ROW
DB. 478 PG. 715

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-015
DB. 1095 PG. 701

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

BRIDEFORTH JAMES S & WILLIAM E III
PARCEL ID: 08-08-016
DB. 1066 PG. 272

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

MITCHELL RAY N
PARCEL ID: 08-10-001
DB. 1262 PG. 96

STRIDER JEFFERSON S-TR
PARCEL ID: 08-10-005
DB. 1258 PG. 54

JEFFERSON COUNTY BOARD OF EDUCATION
PARCEL ID: 08-10-0006
DB. 1200 PG. 194

NORTH MILDRED STREET
ROUTE 115
40' ROW

EX FH

Scale 1" = 60'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

EXISTING CONDITIONS OVERVIEW

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

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SHEET:	4 OF 45

TOP:511.26
IN: 501.36
OUT: 501.61

FLOODPLAIN ZONE AE

TOP:512.45
IN: 503.2
OUT: 503

APPROXIMATE LOCATION OF EX. 18" C909 CL 150 PVC WATERLINE

WILLIAM E III
0-016
272

EX. 60' ACCESS EASEMENT
(DB 948 PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

EX. 15" SDR 35 PVC

EX. GATE
(TO BE REMOVED)

EX. GRAVEL ENTRANCE
(TO BE REMOVED)

TOP:514.60
IN: 504.55
OUT: 504.30

EX. HEADWALL

EX. 14" CMP

EX. 21" CMP

S 18° 40' 59" W
1269.36'

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

BRIDEFORTH JAMES S & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

MATCHLINE SEE SHEET 6

N 22° 19' 55" E
205.26'

NORTH MILDRED STREET
ROUTE 115
40' ROW

NORTH

Scale 1" = 30'

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01/28/25

EXISTING CONDITIONS

WEST BRANCH APARTMENTS

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SHEET:	5 OF 45

MATCHLINE SEE SHEET 5

WESCOTT DRIVE
60' ROW
DB: 973 PG: 715

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-015
DB. 1095 PG. 701

N 73° 07' 51" W
708.38'

177.56'
N 21° 19' 49" E

EX. TREE LINE (TBR.)

N 60° 50' 33" W
239.69'

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

MITCHELL RAY N
PARCEL ID: 08-10-001
DB. 1262 PG. 96

NORTH MILDRED STREET
ROUTE 115
40' ROW

30 0 30 60 90
Scale 1" = 30'

NORTH

DATE	REVISIONS
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01/28/25

EXISTING CONDITIONS

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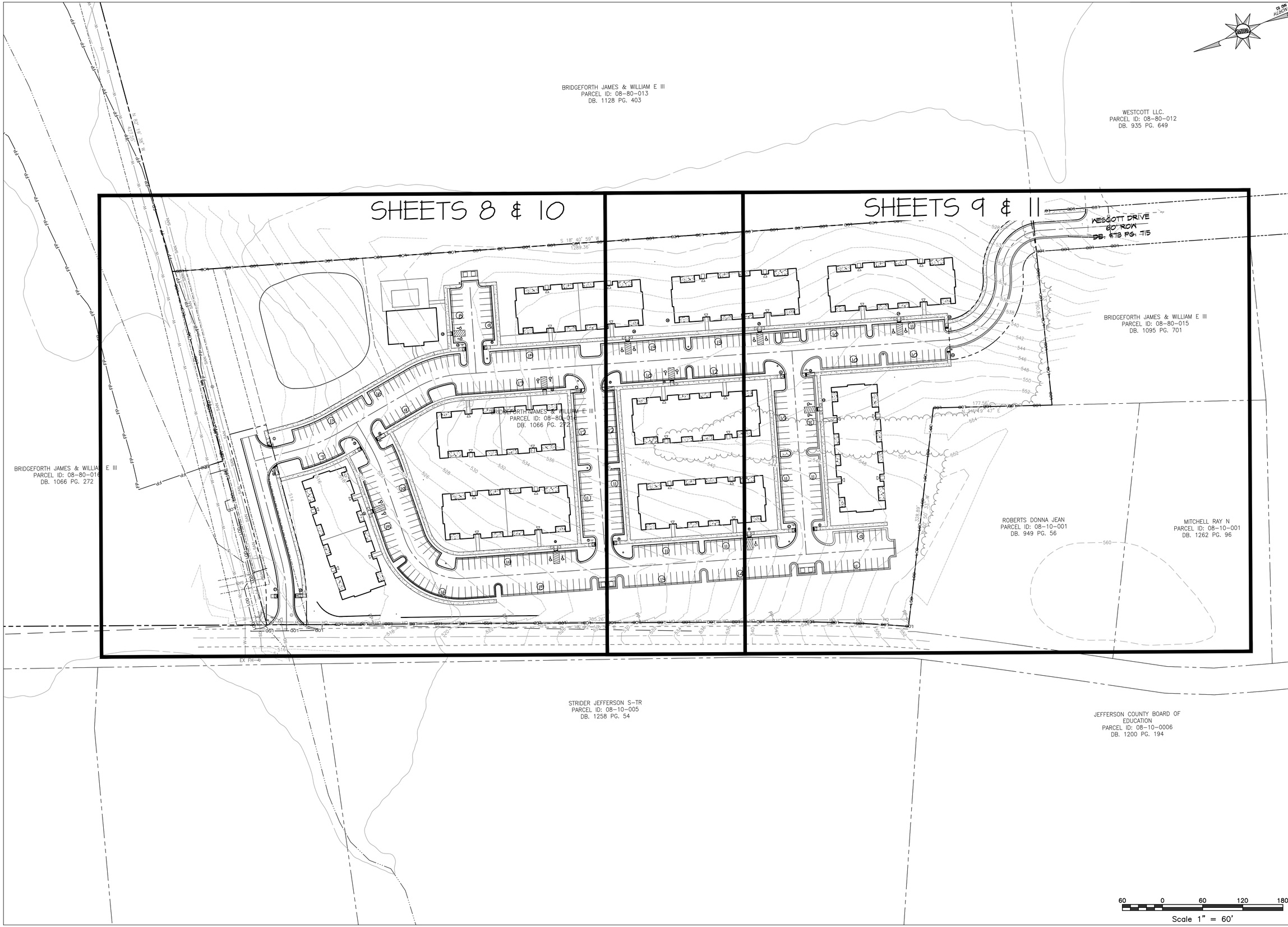

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SHEET OVERVIEW

WEST BRANCH APARTMENTS

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MATCHLINE SHEET 9

PR. SWM EASEMENT

PR. EXTENDED DETENTION SWM POND
2 YR WSE=516.34
10 YR WSE=517.46
25 YR WSE=518.30
100 YR WSE=519.77

CLUB HOUSE

PR. DUMPSTER PAD

PR. DUMPSTERS

ROOF DRAINS (TYP.)

BUILDING #6
3 STORY
(27) UNITS

BUILDING #7
3 STORY
(27) UNITS

BUILDING #5
3 STORY
(27) UNITS

BUILDING #2
3 STORY
(27) UNITS

BUILDING #1
3 STORY
(24) UNITS

BUILDING #3
3 STORY
(21) UNITS

BUILDING #4
3 STORY
(27) UNITS

PR. PROPERTY LINE

APPROXIMATE LOCATION OF EX. 16" DIP WATERLINE PER GDS 150 PVC WATERLINE

EX. 60' ACCESS EASEMENT
(DB 948 PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24' CMP CULVERT
(TO BE REMOVED)

EX. HEADWALL

SIGHT DISTANCE

16"X8" TAPPING SLEEVE AND VALVE

REMOVE BOV, CONNECT TO EXISTING WATERLINE

DOGHOUSE MANHOLE

1-6x6 TEE
3-8" VALVES

1-6" VALVE
1-FH ASSEMBLY

1-8x6 TEE
3-8" VALVES

8" INLINE VALVES

SAMPLING STATION

2" METER (TYP.)

4" FIRE LINE (TYP.)

WATERLINE 1

WATERLINE 2

N 18° 38' 08" E 300.00'

S 18° 38' 08" W 212.50'

N 71° 21' 52" W 1285.00'

S 71° 21' 52" E 1285.00'

S 18° 40' 59" W 1289.36'

N 22° 19' 55" E 705.26'

RETAINING WALL #1

RETAINING WALL #2

NORTH MILDRED STREET
ROUTE 115
40' ROW

NORTH

Scale 1" = 30'

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LAYOUT & UTILITY PLAN

WEST BRANCH APARTMENTS

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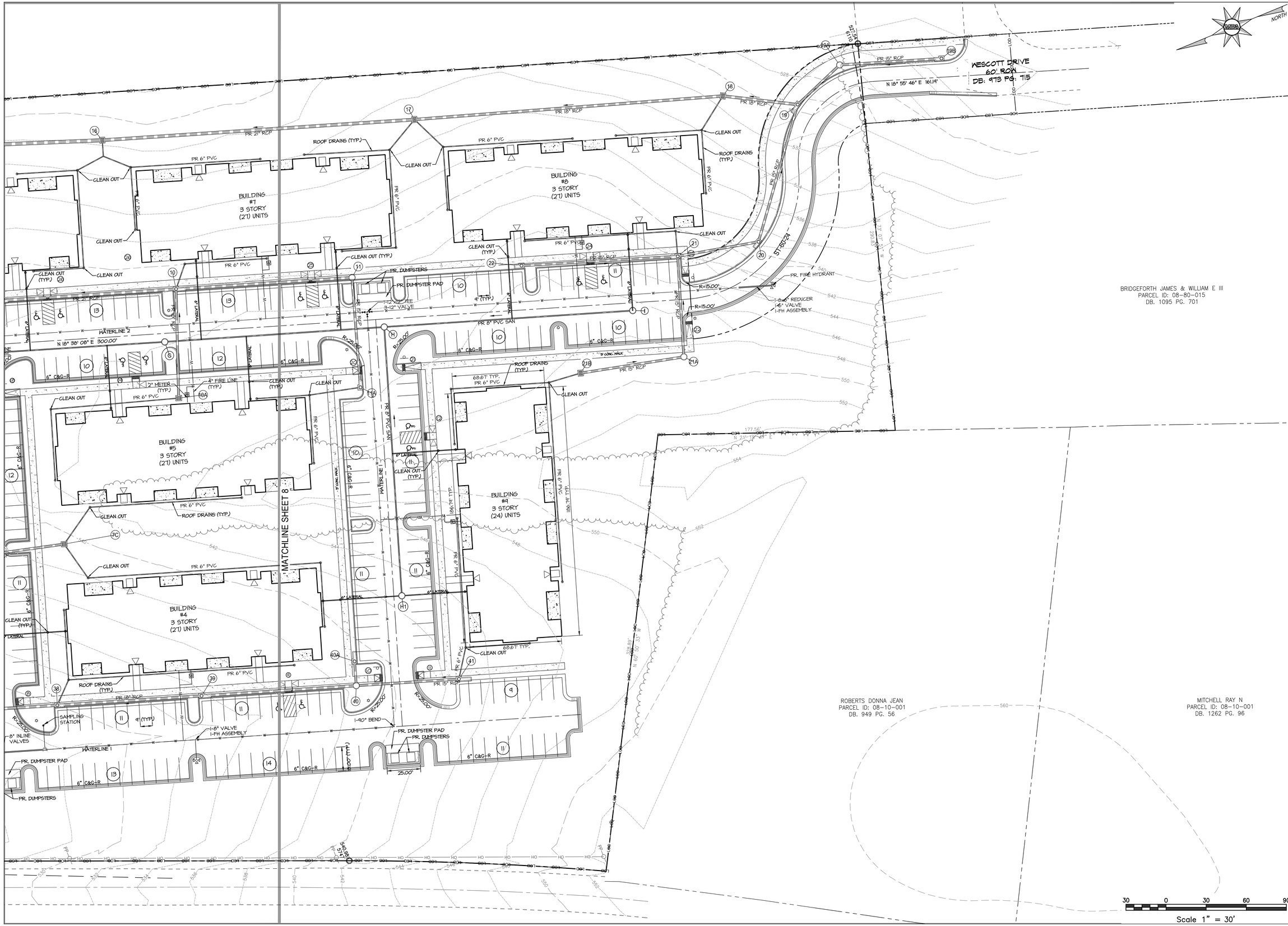
REVIEW BY:	JKE
SHEET:	8 OF 45



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PURCELLVILLE, VA 20132
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DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

JAMES K. ERICKSON JR.
REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

LAYOUT & UTILITY PLAN

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 30'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	9 OF 45

C:\Users\pmoreno\OC\ACCDocs\Morris & Ritchie Associates\Aikens Group\Project Files\LDE\SITE PLAN\SHEETS\22541 LAYOUT & UTILITY PLAN.dwg, 1/28/2025 3:24:23 PM, PMoreno
1:1, Copyright 2025 Morris & Ritchie Associates, Inc.

MATCHLINE SEE SHEET 11

PR. SWM EASEMENT

PR. EXTENDED DETENTION SWM POND
2 YR WSE=516.34
10 YR WSE=517.46
25 YR WSE=518.30
100 YR WSE=519.77

PR. FOREBAY

PR. CUTOFF TRENCH

PR. PROPERTY LINE

CLUB HOUSE
SLAB=526.20

BUILDING #1
3 STORY
(24) UNITS
SLAB=526.80

BUILDING #2
3 STORY
(27) UNITS
SLAB=531.00

BUILDING #3
3 STORY
(27) UNITS
SLAB=533.0

BUILDING #6
3 STORY
(27) UNITS
SLAB=533.0

BUILDING #5
3 STORY
(27) UNITS
SLAB=541.50

BUILDING #4
3 STORY
(27) UNITS
SLAB=540.50

EXPOSED WALL

RETAINING WALL #2

RETAINING WALL #1

NORTH MILDRED STREET
ROUTE 115
40' ROW

EX. 14' CMP

EX. 21' CMP

EX. HEADWALL

EX. 60' ACCESS EASEMENT
(DB 948 PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

EX. 18" PVC SAN

REMOVE BOV, CONNECT TO EXISTING WATERLINE

16"X8" TAPPING SLEEVE AND VALVE

WILLIAM E III
0-016
272

BRIDGEFORTH
PARCEL 3
DB:

Scale 1" = 30'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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GRADING PLAN

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 30'
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DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	10 OF 45

MATCHLINE SEE SHEET 10

BUILDING #1
3 STORY
(27) UNITS
SLAB=540.25

BUILDING #3
3 STORY
(27) UNITS
SLAB=539.00

BUILDING #5
3 STORY
(27) UNITS
SLAB=541.50

BUILDING #4
3 STORY
(24) UNITS
SLAB=543.00

BUILDING #4
3 STORY
(27) UNITS
SLAB=540.50

WESCOTT DRIVE
60' ROW
DB: 973 PG: 715

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-015
DB. 1095 PG. 701

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

MITCHELL RAY N
PARCEL ID: 08-10-001
DB. 1262 PG. 96

Scale 1" = 30'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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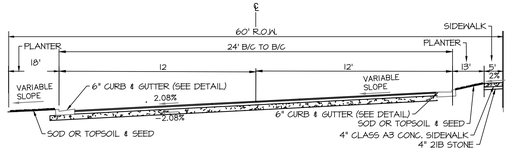
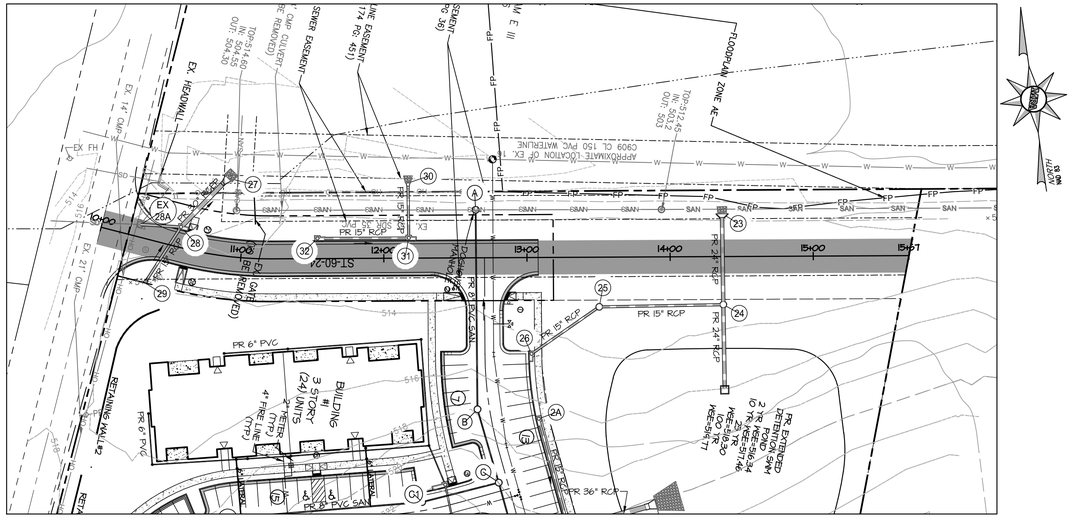
GRADING PLAN

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 30'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	11 OF 45

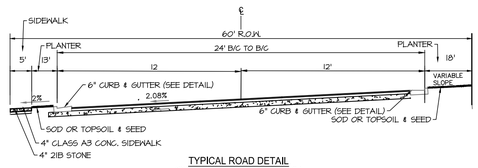


TYPICAL ROAD DETAIL
(60' RIGHT-OF-WAY) ST-60-24
NOT TO SCALE

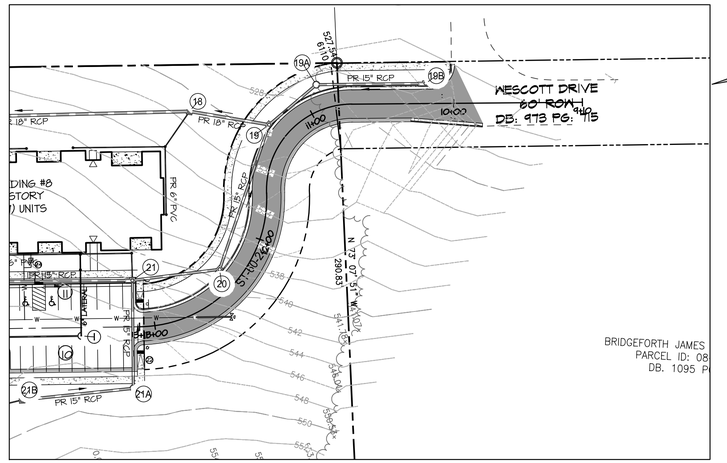


ROAD X
ST-60-24
20 MPH POSTED SPEED

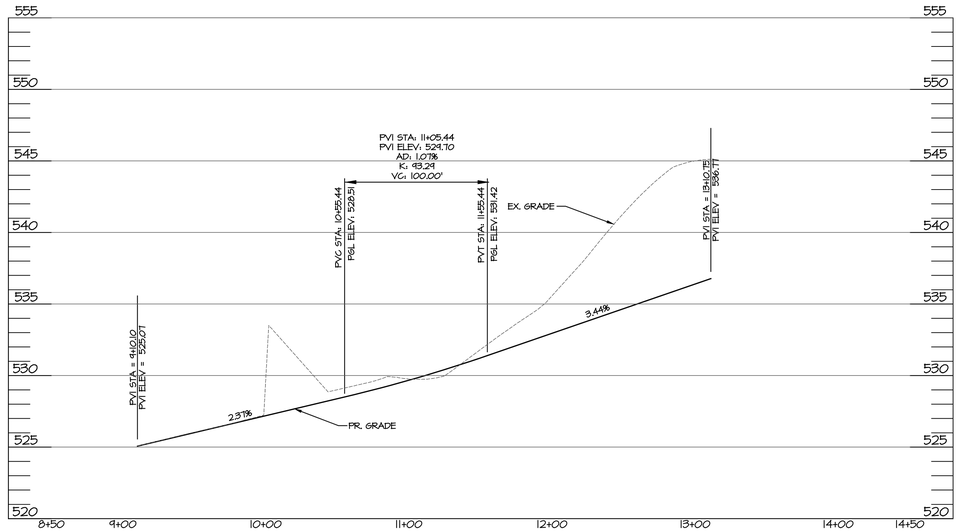
ROAD X PROFILE
SCALE: H: 1"=50'
V: 1"=5'



TYPICAL ROAD DETAIL
(60' RIGHT-OF-WAY) ST-60-24
NOT TO SCALE



WESCOTT DRIVE CONNECTION
ST-60-24
20 MPH POSTED SPEED



WESCOTT CONNECTION PROFILE
SCALE: H: 1"=50'
V: 1"=5'

50 0 50 100 150
Scale 1" = 50'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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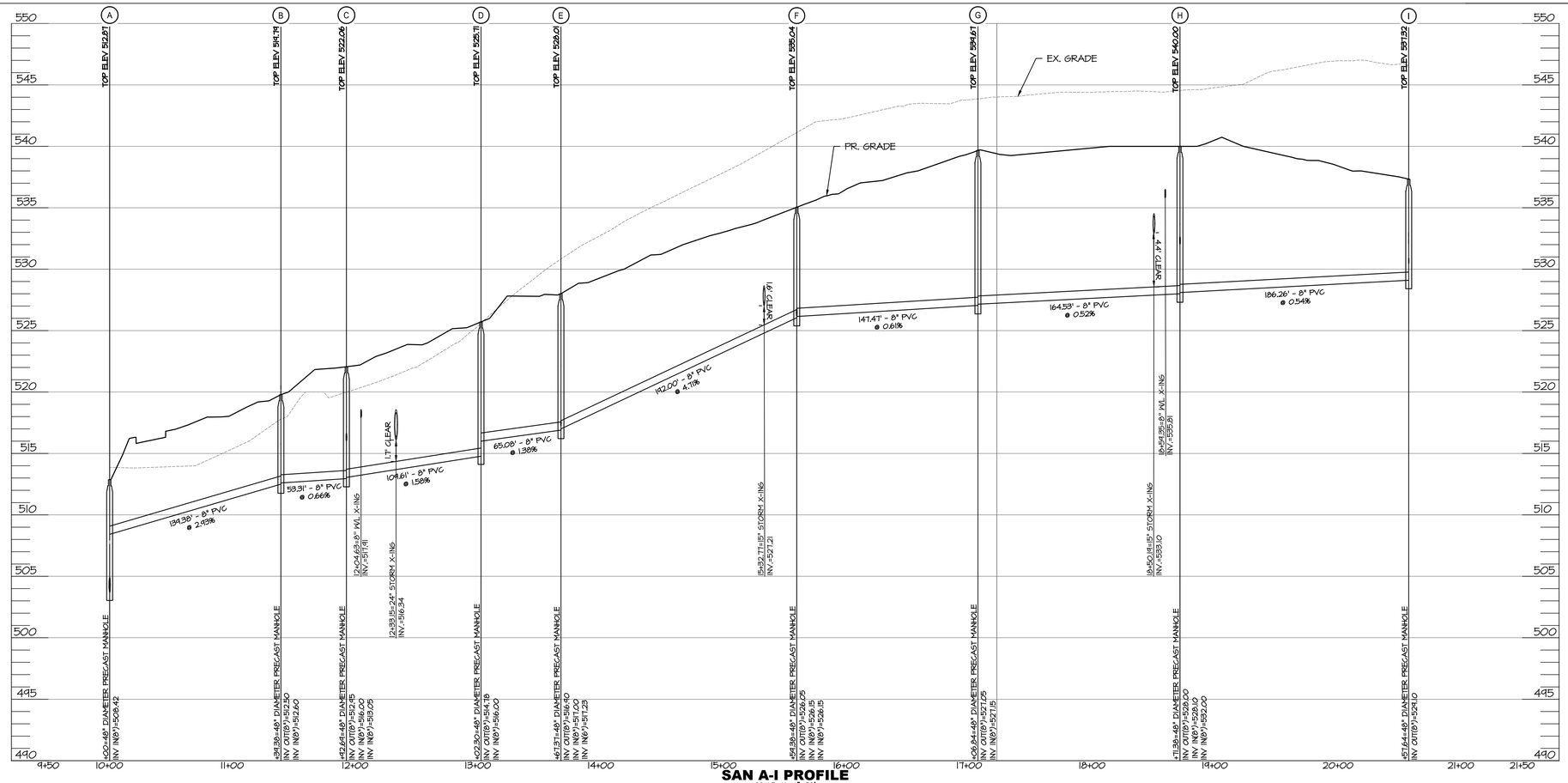
01.28.25

ROAD PROFILES

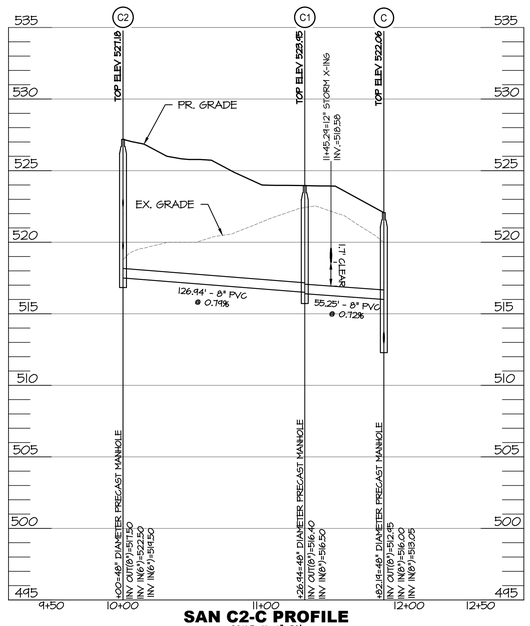
WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	12 OF 45



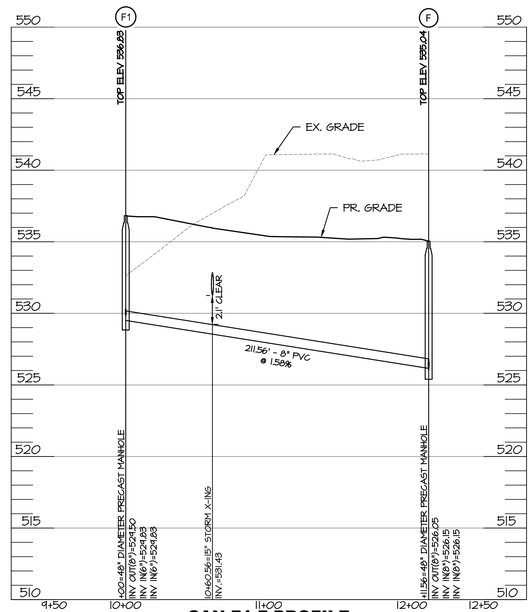
SAN A-I PROFILE

SCALE: H: 1"=50'
V: 1"=5'



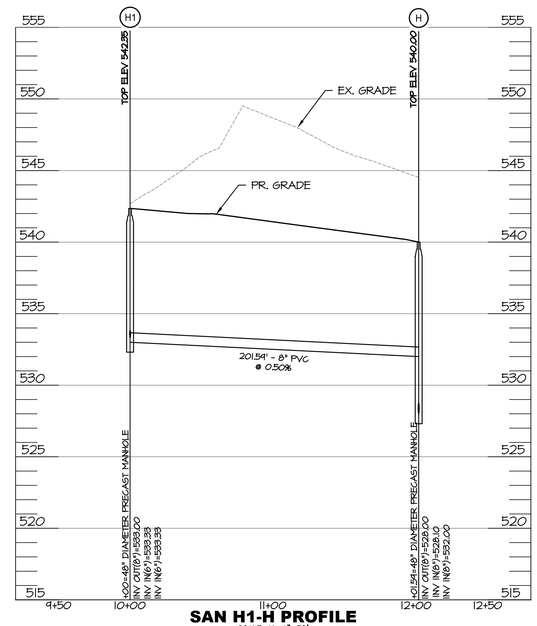
SAN C2-C PROFILE

SCALE: H: 1"=50'
V: 1"=5'



SAN F1-F PROFILE

SCALE: H: 1"=50'
V: 1"=5'



SAN H1-H PROFILE

SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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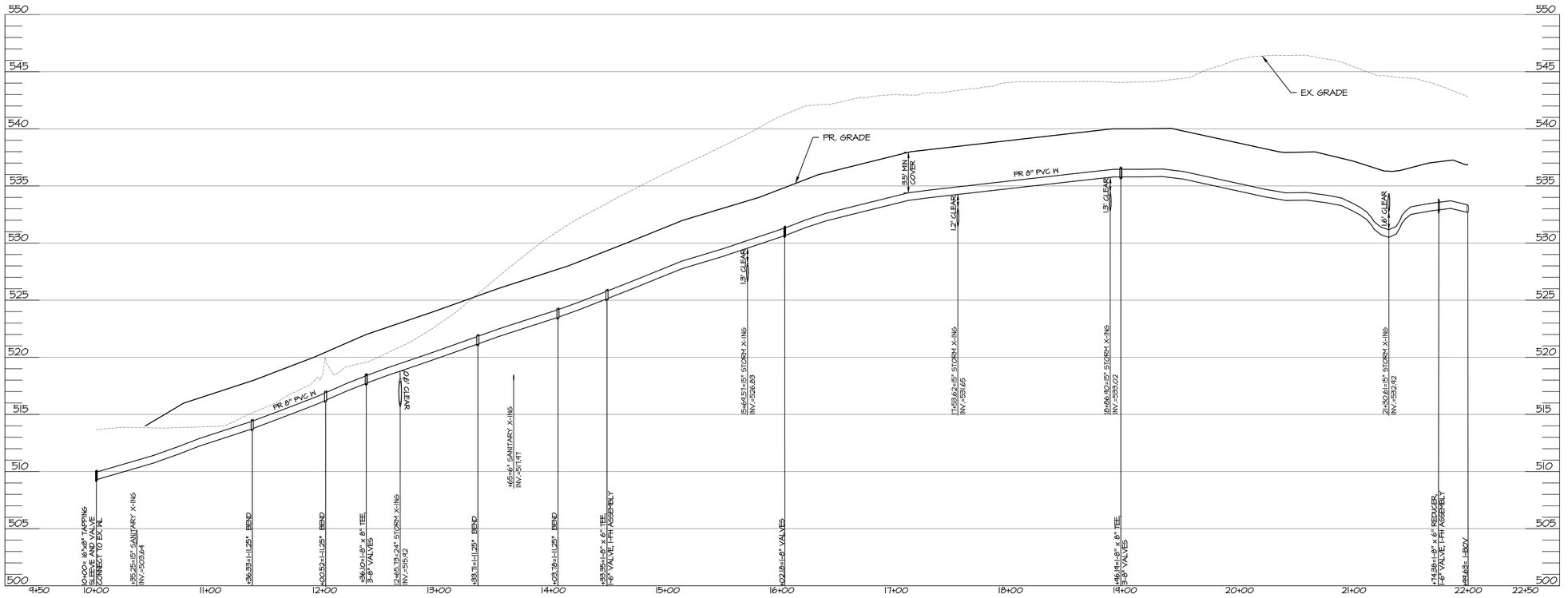
SANITARY PROFILES

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	13 OF 45



WATERLINE PROFILE

SCALE: H: 1"=50'
V: 1"=5'

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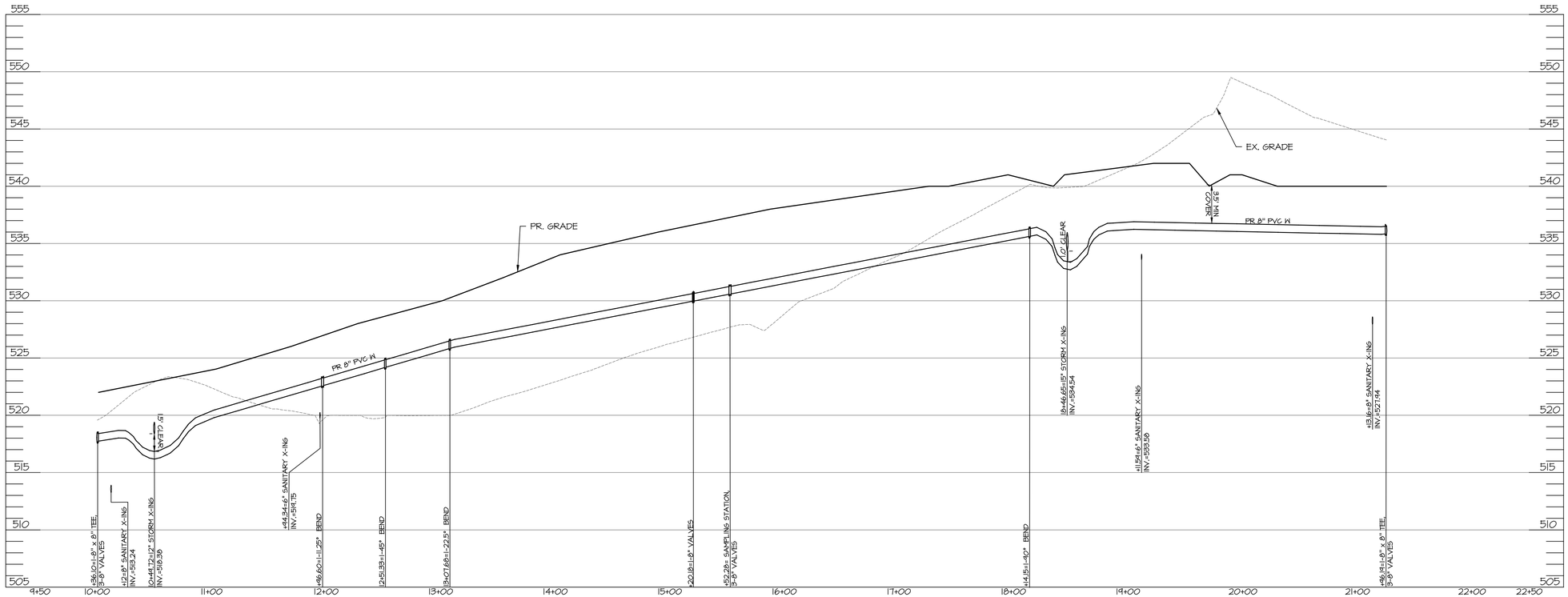
PROFESSIONAL ENGINEER
01/28/25

WATERLINE PROFILES

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	14 OF 45



WATERLINE 1 PROFILE

SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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01/28/25

WATERLINE PROFILES

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	15 OF 45

C:\Users\jomeara\OC\ACCDocs\Morris & Ritchie Associates\Aikens Group\Project Files\L&E\SITE PLAN\SHEETS\22541 UTILITY PROFILES.dwg, 1/28/2025 3:25:50 PM, PDMeara
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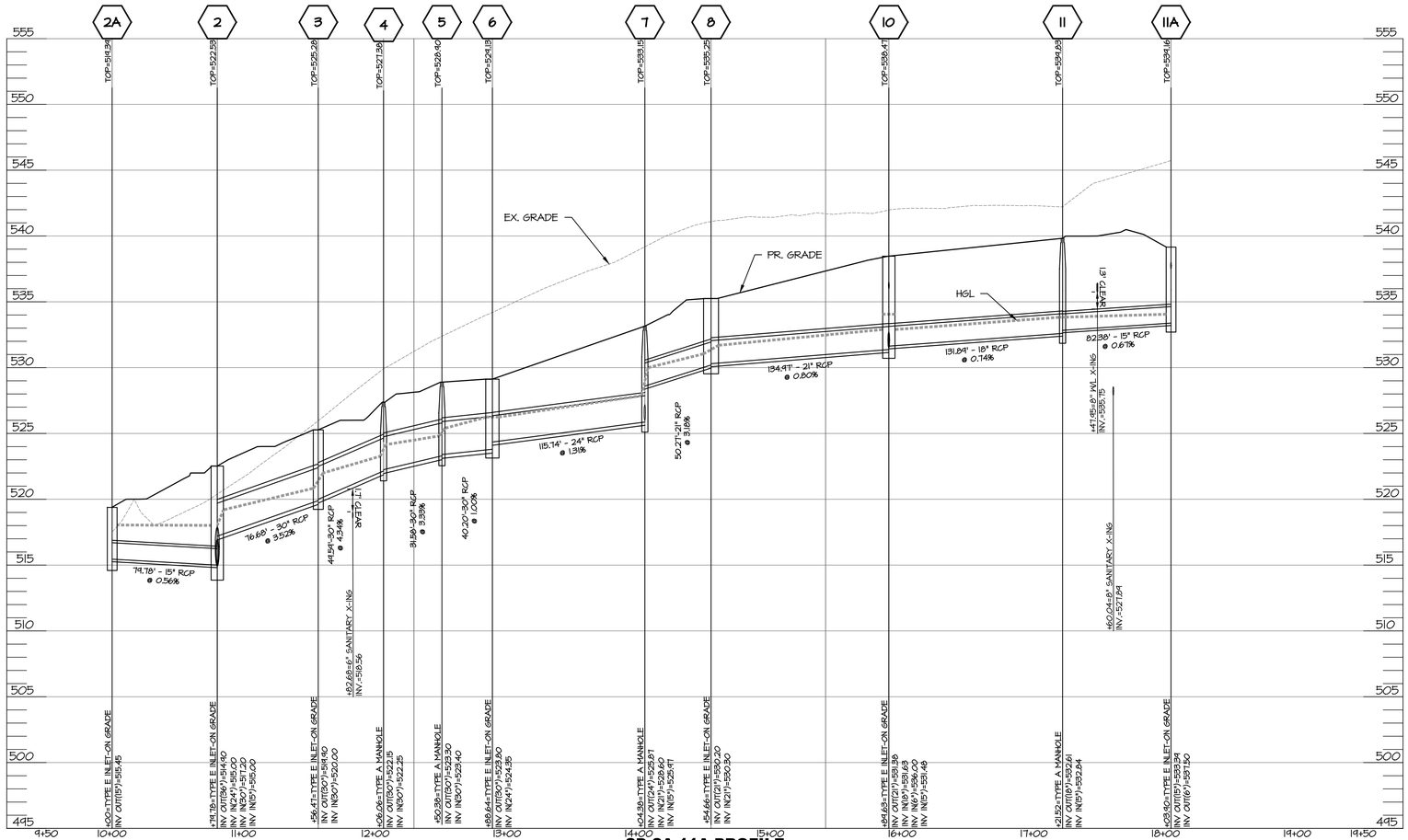
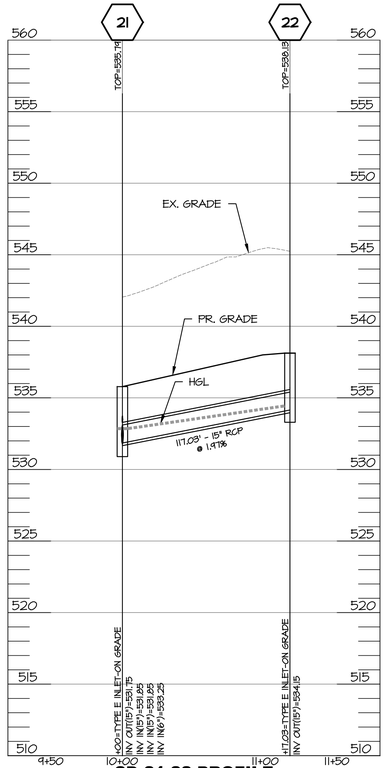
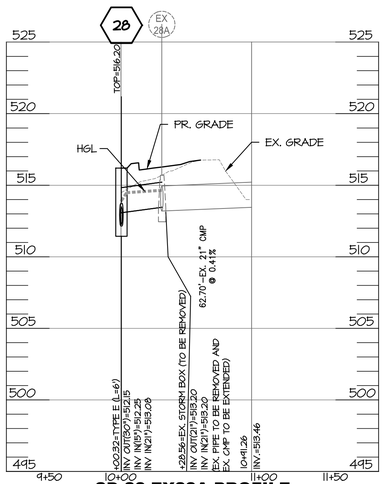


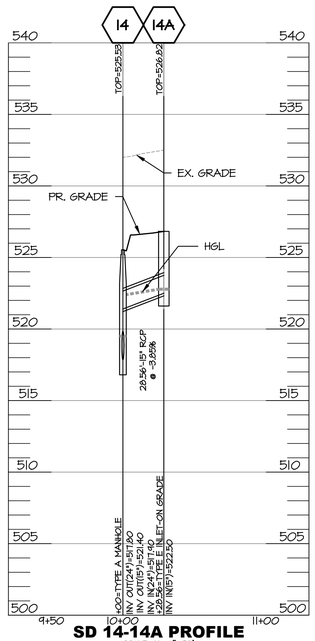
SD 2A-11A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



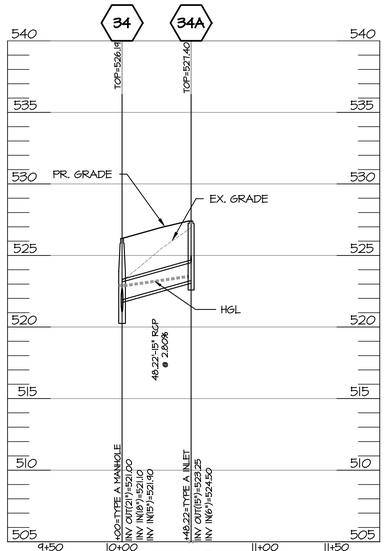
SD 21-22 PROFILE
SCALE: H: 1"=50'
V: 1"=5'



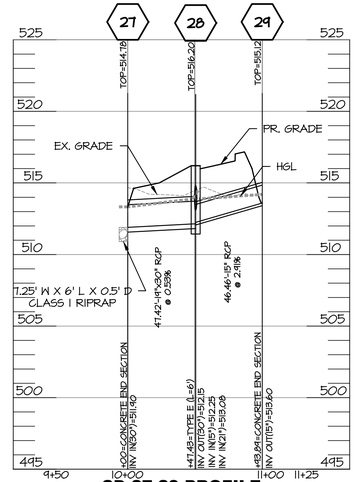
SD 28-EX28A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 14-14A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 34-34A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 27-29 PROFILE
SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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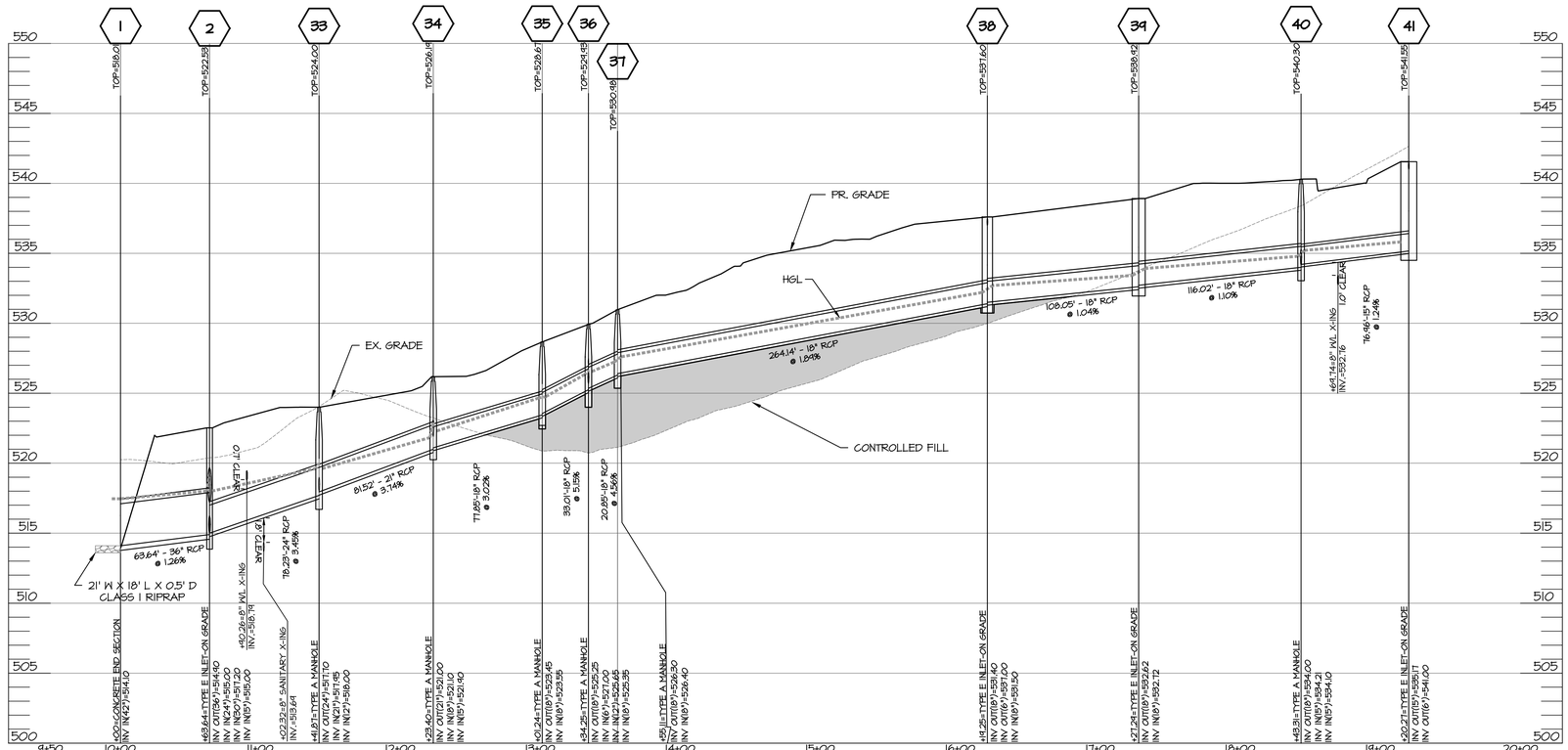
01/28/25

STORM PROFILES

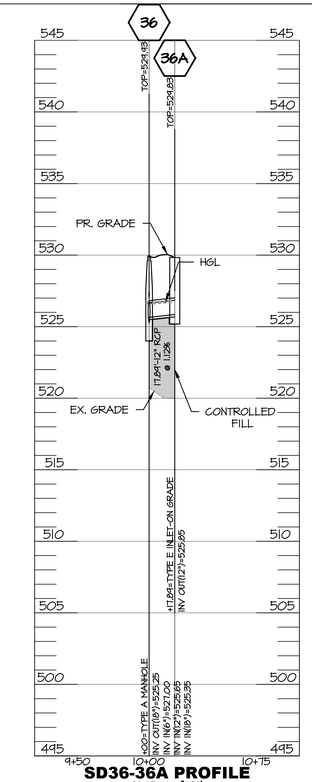
WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	16 OF 45



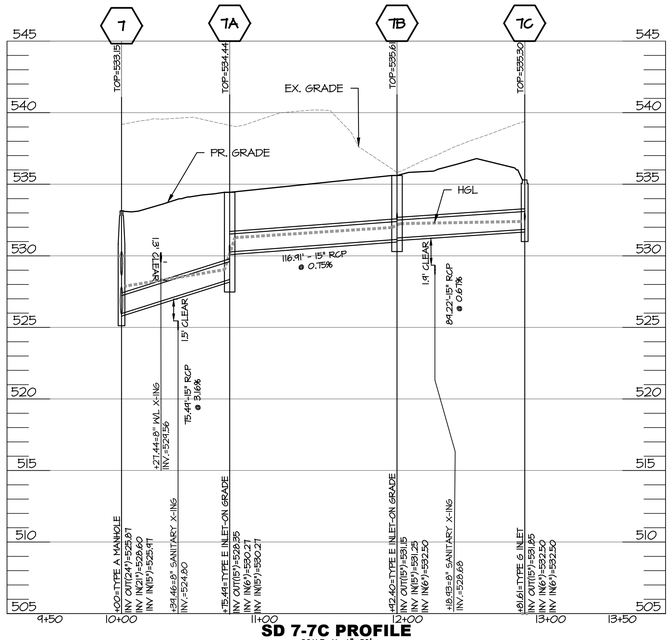
SD 1-41 PROFILE

SCALE: H: 1"=50'
V: 1"=5'



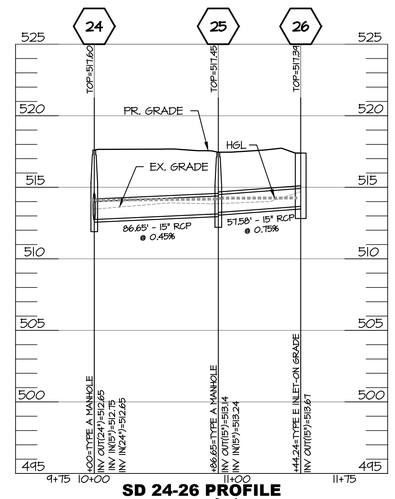
SD36-36A PROFILE

SCALE: H: 1"=50'
V: 1"=5'



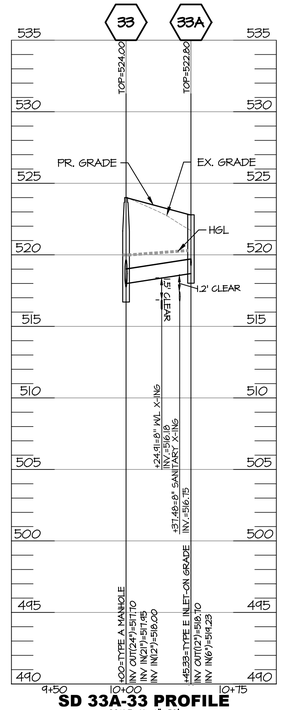
SD 7-7C PROFILE

SCALE: H: 1"=50'
V: 1"=5'



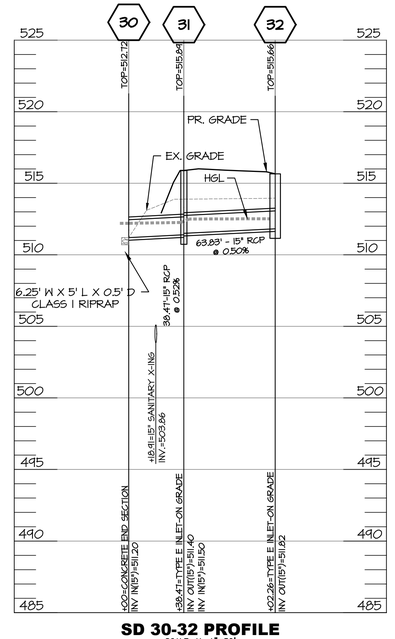
SD 24-26 PROFILE

SCALE: H: 1"=50'
V: 1"=5'



SD 33A-33 PROFILE

SCALE: H: 1"=50'
V: 1"=5'



SD 30-32 PROFILE

SCALE: H: 1"=50'
V: 1"=5'

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DATE	REVISIONS
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JOHN K. ERICKSON
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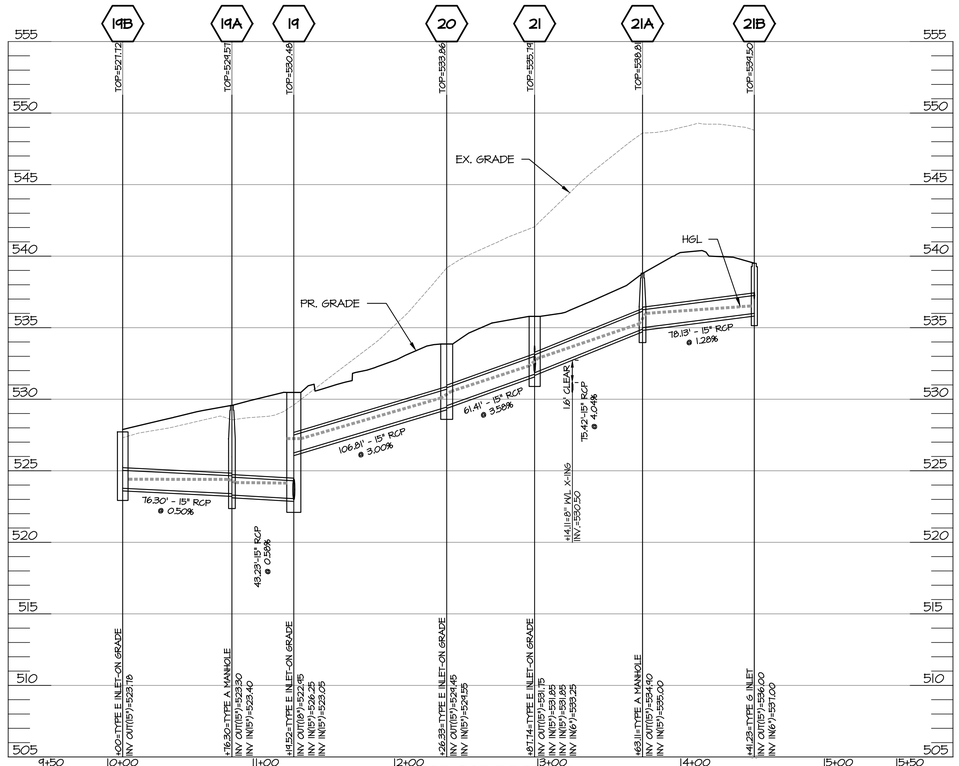
01/28/25

STORM PROFILES

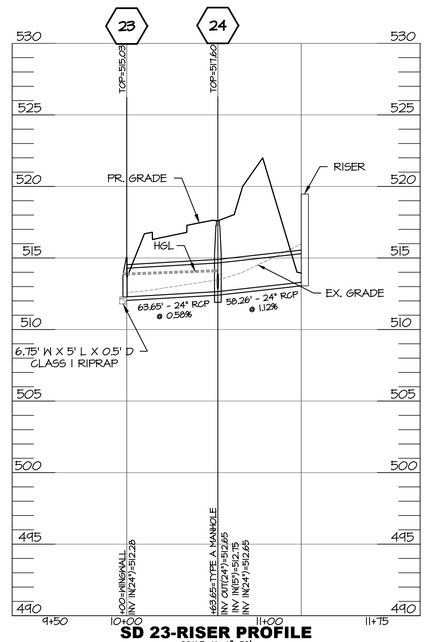
WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

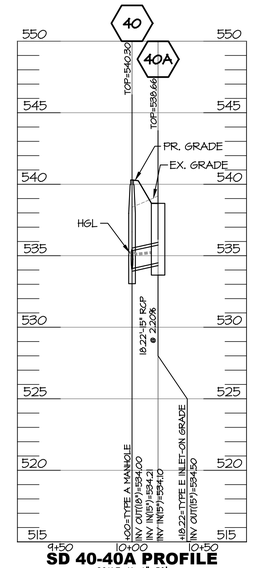
JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	17 OF 45



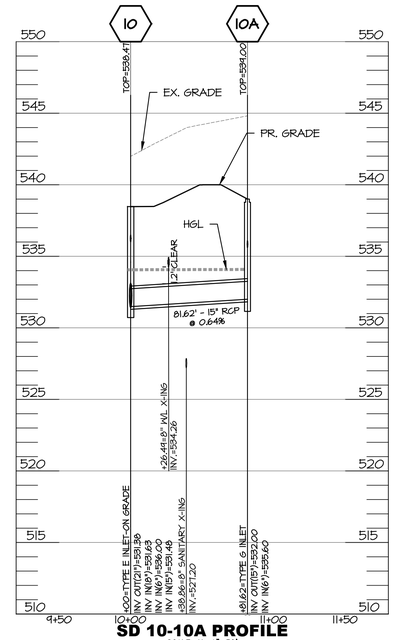
SD 19B-21B PROFILE
SCALE: H: 1"=50'
V: 1"=5'



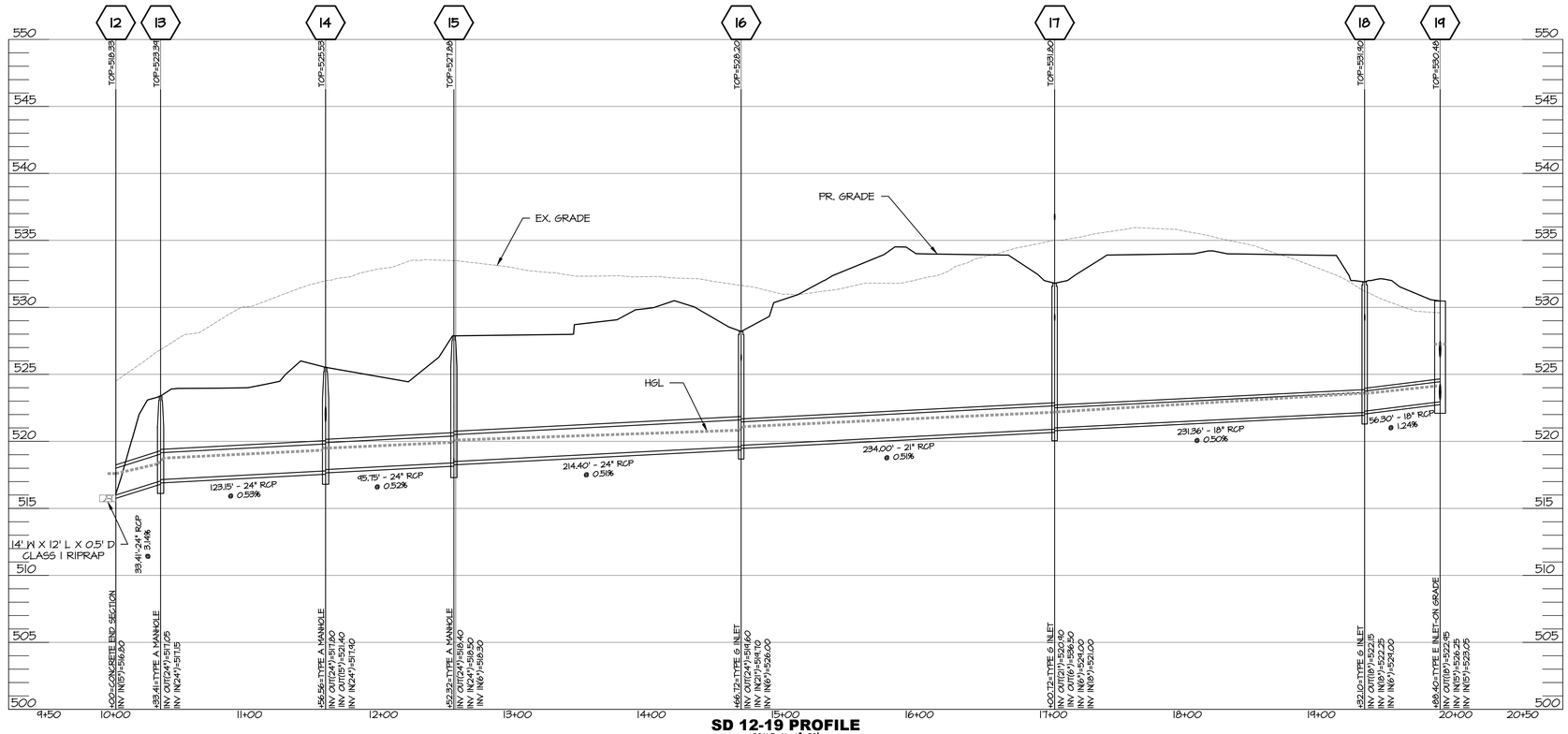
SD 23-RISER PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 40-40A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 10-10A PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SD 12-19 PROFILE
SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
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JON K. ERICKSON
LICENSED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

STORM PROFILES

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	18 OF 45

STORM INLET COMPUTATIONS

INLET NO.			RUNOFF TO INLET							CURB / SUMP INLET COMPUTATIONS																			RUNOFF INTERCEPTED					REMARKS
Inlet Structure No.	Inlet Type	Length (ft)	Drainage Area (ac)	C	CA	Sum CA	I (in/hr)	Q, increm (cfs)	Q, carryover (cfs)	Qt, gutter (cfs)	S, gutter (ft/ft)	Sx, cross slope (ft/ft)	T, spread (ft)	Spread Allowable	Street Type	W (ft)	W/T	Sw (ft/ft)	Sw/Sx	Eo	a (in)	S'w = a/(12W)	Se (ft/ft) = Sx + SwEo	Lt (ft)	P, eff length (ft)	L/Lt	d (ft)	E	h (ft)	Q intercepted	d/h	Qb, carryover (cfs)	d, sump (ft)	T, spread at sag (ft)	
2	TYPE E	8	0.22	0.72	0.16	--	4.00	0.63	0.00	0.63	0.0400	0.0208	1.88	11.50	RA-41-25	2.00	1.06	0.0833	4.00	1.00	3.50	0.15	0.17	6.87	--	1.16	0.16	1.00	0.33	0.63	--	0.00	--	--	--
2A	TYPE E	6	0.13	0.75	0.10	--	4.00	0.39	0.00	0.39	0.0400	0.0208	1.57	11.50	RA-41-25	2.00	1.28	0.0833	4.00	1.00	3.50	0.15	0.17	5.60	--	1.07	0.13	1.00	0.33	0.39	--	0.00	--	--	--
3	TYPE E	6	0.15	0.76	0.11	--	4.00	0.46	0.00	0.46	0.0400	0.0208	1.66	12.00	ST-54-32	2.00	1.20	0.0833	4.00	1.00	3.50	0.15	0.17	5.98	--	1.00	0.14	1.00	0.33	0.46	--	0.00	--	--	--
14A	TYPE E	6	0.20	0.75	0.15	--	4.00	0.60	0.00	0.60	0.0200	0.0208	2.38	14.00	ST-54-34	2.00	0.84	0.0833	4.00	1.00	3.50	0.15	0.17	5.45	--	1.10	0.17	1.00	0.33	0.60	--	0.00	--	--	--
6	TYPE E	8	0.35	0.71	0.25	--	4.00	0.99	0.00	0.99	0.0300	0.0208	3.33	15.00	ST-54-35	2.00	0.60	0.0833	4.00	0.98	3.50	0.15	0.16	7.70	--	1.04	0.19	1.00	0.33	0.99	--	0.00	--	--	--
7A	TYPE E	6	0.28	0.71	0.20	--	4.00	0.80	0.00	0.80	0.0100	0.0208	4.38	16.00	ST-54-36	2.00	0.46	0.0833	4.00	0.93	3.50	0.15	0.16	5.19	--	1.16	0.22	1.00	0.33	0.80	--	0.00	--	--	--
7B	TYPE E	6	0.27	0.71	0.19	--	4.00	0.77	0.00	0.77	0.0100	0.0208	4.26	17.00	ST-54-37	2.00	0.47	0.0833	4.00	0.93	3.50	0.15	0.16	5.09	--	1.18	0.21	1.00	0.33	0.77	--	0.00	--	--	--
8	TYPE E	10	0.39	0.70	0.27	--	4.00	1.09	0.00	1.09	0.0400	0.0208	3.17	18.00	ST-54-38	2.00	0.63	0.0833	4.00	0.98	3.50	0.15	0.16	8.71	--	1.15	0.19	1.00	0.33	1.09	--	0.00	--	--	--
10	TYPE E	8	0.61	0.69	0.42	--	4.00	1.68	0.00	1.68	0.0100	0.0208	6.99	19.00	ST-54-39	2.00	0.29	0.0833	4.00	0.75	3.50	0.15	0.13	7.93	--	1.01	0.27	1.00	0.33	1.68	--	0.00	--	--	--
11A	TYPE E	6	0.23	0.68	0.16	--	4.00	0.63	0.00	0.63	0.0190	0.0208	2.59	20.00	ST-54-40	2.00	0.77	0.0833	4.00	1.00	3.50	0.15	0.17	5.47	--	1.10	0.18	1.00	0.33	0.63	--	0.00	--	--	--
22	TYPE E	6	0.21	0.74	0.16	--	4.00	0.62	0.00	0.62	0.0200	0.0208	2.49	21.00	ST-54-41	2.00	0.80	0.0833	4.00	1.00	3.50	0.15	0.17	5.54	--	1.08	0.18	1.00	0.33	0.62	--	0.00	--	--	--
21	TYPE E	6	0.19	0.75	0.14	--	4.00	0.57	0.00	0.57	0.0230	0.0208	2.01	22.00	ST-54-42	2.00	1.00	0.0833	4.00	1.00	3.50	0.15	0.17	5.56	--	1.08	0.17	1.00	0.33	0.57	--	0.00	--	--	--
20	TYPE E	6	0.07	0.59	0.04	--	4.00	0.17	0.00	0.17	0.0340	0.0208	1.17	23.00	ST-54-43	2.00	1.71	0.0833	4.00	1.00	3.50	0.15	0.17	3.72	--	1.61	0.10	1.00	0.33	0.17	--	0.00	--	--	--
19	TYPE E	8	0.15	0.49	0.07	--	4.00	0.29	0.00	0.29	0.0340	0.0208	3.45	25.00	ST-54-45	2.00	0.58	0.0208	1.00	1.00	2.00	0.08	0.10	6.28	--	1.27	0.12	1.00	0.33	0.29	--	0.00	--	--	--
19B	TYPE E	6	0.08	0.65	0.05	--	4.00	0.21	0.00	0.21	0.0240	0.0208	3.23	26.00	ST-54-46	2.00	0.62	0.0208	1.00	1.00	2.00	0.08	0.10	4.89	--	1.23	0.11	1.00	0.33	0.21	--	0.00	--	--	--
33A	TYPE E	10	0.64	0.65	0.42	--	4.00	1.66	0.00	1.66	0.0300	0.0208	5.01	27.00	ST-54-47	2.00	0.40	0.0833	4.00	0.89	3.50	0.15	0.15	10.07	--	0.99	0.23	1.00	0.33	1.66	--	0.00	--	--	--
36A	TYPE E	10	0.58	0.76	0.44	--	4.00	1.76	0.00	1.76	0.0160	0.0208	6.30	29.00	ST-54-49	2.00	0.32	0.0833	4.00	0.80	3.50	0.15	0.14	9.02	--	1.11	0.26	1.00	0.33	1.76	--	0.00	--	--	--
38	TYPE E	6	0.25	0.81	0.20	--	4.00	0.81	0.00	0.81	0.0120	0.0208	4.15	30.00	ST-54-50	2.00	0.48	0.0833	4.00	0.94	3.50	0.15	0.16	5.48	--	1.09	0.21	1.00	0.33	0.81	--	0.00	--	--	--
39	TYPE E	8	0.37	0.86	0.32	--	4.00	1.27	0.00	1.27	0.0130	0.0208	5.52	31.00	ST-54-51	2.00	0.36	0.0833	4.00	0.85	3.50	0.15	0.14	7.15	--	1.12	0.24	1.00	0.33	1.27	--	0.00	--	--	--
32	TYPE E-SAG	6	0.17	0.65	0.11	--	4.00	0.44	0.00	0.44	0.0010	0.0208	7.78	35.00	ST-54-55	2.00	0.26	0.0208	1.00	--	2.00	--	--	--	9.60	--	0.26	--	0.33	0.44	--	0.00	0.08	1.01	--
31	TYPE E	6	0.14	0.65	0.09	--	4.00	0.36	0.00	0.36	0.0050	0.0208	5.35	36.00	ST-54-56	2.00	0.37	0.0208	1.00	0.99	2.00	0.08	0.10	3.89	--	1.54	0.19	1.00	0.33	0.36	--	0.00	--	--	--
28	TYPE E	6	0.11	0.77	0.08	--	4.00	0.34	0.00	0.34	0.0090	0.0208	4.66	37.00	ST-54-57	2.00	0.43	0.0208	1.00	1.00	2.00	0.08	0.10	4.47	--	1.34	0.16	1.00	0.33	0.34	--	0.00	--	--	--
26	TYPE E	6	0.09	0.75	0.07	--	4.00	0.27	0.00	0.27	0.0400	0.0208	1.36	38.00	ST-54-58	2.00	1.47	0.0833	4.00	1.00	3.50	0.15	0.17	4.80	--	1.25	0.11	1.00	1.33	0.27	--	0.00	--	--	--
40a	TYPE E	8	0.46	0.71	0.33	--	4.00	1.31	0.00	1.31	0.0120	0.0208	5.74	39.00	ST-54-59	2.00	0.35	0.0833	4.00	0.83	3.50	0.15	0.14	7.12	--	1.12	0.24	1.00	2.33	1.31	--	0.00	--	--	--

STORM SEWER CALCULATIONS

STRUCTURE		DRAINAGE AREA (Ac)	RUNOFF COEFF.	"CA"		Tc Pipe (min)	RAIN FALL (in/hr)	RUNOFF "Q" (cfs)	Invert Elevations		PIPE LENGTH (ft)	SLOPE (ft/ft)	MANNING'S n-value	DIAMETER (in)	CAPACITY (cfs)	PARTIAL FLOW VELOCITY (fps)	FLOW TIME (sec)	REMARKS
From	To			Increment	Accumulated				Upper End	Lower End								
19B	19A	0.08	0.65	0.05	0.05	5.00	6.52	0.33	523.78	523.40	76.30	0.0050	0.013	15	4.55	2.2	35	
19A	19	0.00	0.00	0.00	0.05	5.59	6.31	0.33	523.30	523.05	43.23	0.0058	0.013	15	4.91	2.3	19	
21B	21A	0.90	0.30	0.27	0.41	5.00	6.52	2.67	536.00	535.00	78.13	0.0128	0.013	15	7.30	5.5	14	
21A	21	0.00	0.00	0.00	0.41	5.24	6.43	2.67	534.90	531.85	75.42	0.0404	0.013	15	12.98	8.3	9	
22	21	0.21	0.74	0.16	0.16	5.00	6.52	1.04	534.15	531.85	117.03	0.0197	0.013	15	9.05	4.9	24	
21	20	0.19	0.75	0.14	0.85	5.39	6.38	5.54	531.75	529.55	61.41	0.0358	0.013	15	12.21	9.7	6	
20	19	0.07	0.59	0.04	0.89	5.49	6.35	5.80	529.45	526.25	106.81	0.0300	0.013	15	11.17	9.2	12	
19	18	0.15	0.49	0.07	1.01	5.69	6.28	6.58	522.95	522.25	124.42	0.0056	0.013	18	7.87	5.0	25	
18	17	0.11	0.30	0.03	1.11	6.10	6.15	7.23	522.15	521.00	231.36	0.0050	0.013	18	7.40	4.8	48	
17	16	0.27	0.30	0.08	1.41	6.91	5.90	9.19	520.90	519.70	234.00	0.0051	0.013	21	11.35	5.3	44	
16	15	0.22	0.30	0.07	1.74	7.65	5.70	11.34	519.60	518.50	213.00	0.0052	0.013	24	16.26	5.6	38	
15	14	0.00	0.00	0.00	1.86	8.28	5.53	12.12	518.40	517.90	97.06	0.0052	0.013	24	16.24	5.7	17	
14	13	0.00	0.00	0.00	2.07	8.56	5.46	13.49	517.80	517.15	123.15	0.0053	0.013	24	16.44	5.9	21	
13	12	0.00	0.00	0.00	2.34	8.91	5.38	15.25	517.05	516.00	33.40	0.0314	0.013	24	40.13	11.9	3	
10A	10	0.00	0.00	0.00	0.07	5.00	6.52	0.46	532.00	531.48	81.62	0.0064	0.013	15	5.15	2.6	31	
11A	11	0.23	0.68	0.16	0.23	5.00	6.52	1.50	533.39	532.84	77.97	0.0071	0.013	15	5.42	3.8	21	
11	10	0.00	0.00	0.00	1.08	5.34	6.40	7.04	532.61	531.63	131.87	0.0074	0.013	18	9.05	5.7	23	
10	8	0.61	0.69	0.42	1.56	5.73	6.27	10.17	531.38	530.30	134.97	0.0080	0.013	21	14.17	6.4	21	
8	7	0.39	0.70	0.27	1.83	6.08	6.15	11.93	530.20	528.60	50.27	0.0318	0.013	21	28.27	11.3	4	
7C	7B	0.26	0.29	0.08	0.34	5.00	6.52	2.22	531.85	531.25	79.99	0.0075	0.013	15	5.59	4.3	19	
7B	7A	0.27	0.71	0.19	0.67	5.31	6.41	4.37	531.15	530.27	116.91	0.0075	0.013	15	5.60	5.1	23	
7A	7	0.28	0.71	0.20	1.01	5.69	6.28	6.58	528.35	525.97	75.49	0.0315	0.013	15	11.46	9.7	8	
7	6	0.00	0.00	0.00	2.84	6.16	6.13	18.51	525.87	524.35	115.74	0.0131	0.013	24	25.93	9.0	13	
6	5	0.35	0.71	0.25	3.23	6.37	6.06	21.05	523.80	523.40	40.20	0.0100	0.013	30	40.96	8.4	5	
5	4	0.00	0.00	0.00	3.23	6.45	6.04	21.05	523.30	522.25	31.58	0.0332	0.013	30	74.88	13.6	2	
4	3	0.00	0.00	0.00	3.23	6.49	6.03	21.05	522.15	520.00	49.59	0.0434	0.013	30	85.50	14.4	3	
3	2	0.15	0.76	0.11	3.34	6.55	6.01	21.77	519.90	517.20	76.68	0.0352	0.013	30	77.05	13.5	6	
2A	2	0.13	0.75	0.10	0.10	5.00	6.52	0.65	515.45	515.00	79.78	0.0056	0.013	15	4.85	2.8	29	
2	1	0.22	0.72	0.16	7.08	6.64	5.98	46.15	514.90	514.10	63.64	0.0126	0.013	36	74.91	11.2	6	
40A	40	0.46	0.71	0.33	0.33	5.00	6.52	2.15	534.50	534.10	18.22	0.0220	-1.987	15	9.56	6.3	3	
41	40	1.30	0.35	0.46	0.60	5.00	6.52	3.91	535.17	534.21	76.96	0.0125	-0.987	15	7.21	6.0	13	
40	39	0.00	0.00	0.00	0.93	5.21	6.44	6.06	534.00	532.72	116.02	0.0110	0.013	18	11.03	6.4	18	
39	38	0.37	0.86	0.32	1.25	5.52	6.34	8.15	532.62	531.50	108.05	0.0104	0.013	18	10.69	6.7	16	
38	37	0.25	0.81	0.20	1.59	5.79	6.25	10.36	531.40	526.40	264.14	0.0189	0.013	18	14.44	8.9	30	
37	36	0.00	0.00	0.00	1.59	6.28	6.09	10.36	526.30	525.35	20.85	0.0456	0.013	18	22.41	12.5	2	
36A	36	0.58	0.76	0.44	0.44	5.00	6.52	2.87	525.85	525.65	17.89	0.0112	0.013	15	6.82	5.3	3	
36	35	0.15	0.90	0.14	2.31	6.31	6.08	15.06	525.25	523.55	33.01	0.0515	0.013	18	23.82	14.3	2	
35	34	0.00	0.00	0.00	2.31	6.35	6.07	15.06	523.45	521.10	77.85	0.0302	0.013	18	18.24	11.6	7	
34A	34	0.24	0.30	0.07	0.21	5.00	6.52	1.37	523.25	521.90	44.53	0.0303	0.013	15	11.23	6.2	7	
34	33	0.00	0.00	0.00	2.52	6.46	6.04	16.43	521.00	517.95	82.66	0.0369	0.013	21	30.43	12.9	6	
33	2	0.00	0.00	0.00	3.48	6.56	6.00	22.68	517.70	515.00	79.98	0.0338	0.013	24	41.58	13.5	6	
33A	33	0.64	0.65	0.42	0.69	5.00	6.52	4.50	518.70	518.00	45.41	0.0154	0.013	15	8.01	6.7	7	
29	28	1.38	0.41	0.57	0.57	5.00	6.52	3.72	513.60	512.25	47.09	0.0287	0.013	15	10.92	5.7	8	
28	27	0.11	0.77	0.08	1.53	5.14	4.24	9.97	512.15	511.90	40.65	0.0062	0.013	19x30	12.43	5.8	7	
32	31	0.17	0.65	0.11	0.11	5.00	6.52	0.72	511.82	511.50	63.83	0.0050	0.013	15	4.57	2.7	23	
31	30	0.14	0.65	0.09	0.20	5.39	6.38	1.30	511.40	511.20	34.47	0.0058	0.013	15	4.91	3.4	10	
26	25	0.09	0.75	0.07	0.07	5.56	6.32	0.46	513.67	513.24	57.58	0.0075	0.013	15	5.58	2.7	21	
25	24	0.10	0.00	0.00	0.07	5.56	6.32	0.46	513.14	512.75	17.53	0.0222	0.013	15	9.62	4.0	4	
24	23	0.10	0.00	0.00	0.07	5.14	6.47	3.56	512.65	512.28	17.53	0.0211	0.013	24	32.88	6.9	3	
28A	28	2.50	0.35	0.88	0.88	15.00	4.28	5.74	513.46	513.08	91.26	0.0042	0.013	21	6.04	4.4	21	
14A	14	0.20	0.75	0.15	0.21	5.00	6.52	1.37	522.50	521.40	28.56	0.0385	0.013	15	12.66	6.8	4	

GRATE INLET DESIGN COMPUTATIONS

INLET NO.	TYPE	AREA (Ac)	"C"	"I" (in/hr)	GRATE DESIGN				REMARKS
					FLOW (cfs)	$AREA_{50}$ (sf)	$PERIM_{50}$ (ft)	DEPTH (ft)	
34A	TYPE G	0.24	0.30	6.52	0.47	2.20	5.8	0.09	
10A	TYPE G	0.00	0.00	6.52	0.00	2.20	5.8	0.00	
7C	TYPE G	0.26	0.29	6.52	0.49	2.20	5.8	0.09	
18	TYPE G	0.11	0.30	6.52	0.22	2.20	5.8	0.05	
17	TYPE G	0.27	0.30	6.52	0.53	2.20	5.8	0.10	
16	TYPE G	0.22	0.30	6.52	0.43	2.20	5.8	0.08	

Outlet Protection Design Calculations

Structure Number	Tailwater Condition	Outlet Pipe Diameter, Do (in)	Discharge, Q10 (cfs)	Min. Apron Length, La (ft)	Median Stone, d50 (in)	Upstream Apron Width $(ft)^2$	Downstream Apron Width $(ft)^3$
1	MIN	36	46.15	18.00	8	9.00	21.00
12	MIN	24	15.25	12.00	6	6.00	14.00
27	MIN	19x30	9.97	6.00	6	7.50	8.50
30	MIN	15	1.30	5.00	6	3.75	6.25
23	MIN	21	3.56	5.00	6	5.25	6.75

REVISIONS | DATE | COMMENTS
CITY, CTUB, WVAM, WVDOT, DEP | 01/28/25 |

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JOHN K. ERICKSON II
REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

SD HYDRAULIC COMPUTATIONS

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 19 OF 45

HYDRAULIC GRADE LINE COMPUTATIONS

STRUCTURE NO.	OUTLET WATER SURFACE ELEV.	Do (in)	Qo (cfs)	Lo (ft)	Sfo (%)	Hf (ft)	JUNCTION LOSS												FINAL H (ft)	INLET WATER SURFACE ELEV.	RIM ELEV.
							Vo (fps)	Ho (ft)	Qi (cfs)	Vi (fps)	QiVi	$Vi^2/2g$	Hi (ft)	Angle	HΔ (ft)	Ht (ft)	1.3Ht (ft)	0.5Ht (ft)			
2	517.46	36	46.1	64	0.00	0.30	11.2	0.483	0.7	2.8	1.8	0.12	0.04	89	0.07	0.59	--	0.30	0.60	518.06	522.53
2A	518.06	15	0.7	80	0.00	0.01	2.8	0.030	--	--	--	--	0.00	90	0.00	0.03	0.04	0.02	0.03	518.09	519.39
3	519.20	30	21.8	77	0.00	0.21	13.5	0.709	21.1	8.4	177.1	1.10	0.38	89	0.73	1.82	--	0.91	1.12	520.81	525.28
4	522.00	30	21.1	50	0.00	0.13	14.4	0.809	21.1	13.6	285.3	2.85	1.00	10	0.37	2.18	--	1.09	1.22	523.22	527.37
5	524.25	30	21.1	32	0.00	0.08	13.6	0.713	21.1	8.4	177.1	1.10	0.38	35	0.00	1.10	--	0.55	0.63	524.88	528.90
6	525.40	30	21.1	40	0.00	0.11	8.4	0.275	18.5	9.0	166.3	1.25	0.44	67	0.70	1.42	--	0.71	0.81	526.21	529.13
7	526.21	24	18.5	116	0.01	0.77	9.0	0.313	11.9	11.3	114.7	1.97	0.69	17	0.38	1.38	--	0.69	1.46	527.67	533.15
7A	527.67	15	6.6	75	0.01	0.78	9.7	0.364	4.4	5.1	22.1	0.40	0.14	0	0.00	0.50	--	0.25	1.03	529.03	534.44
7B	531.27	15	4.4	117	0.00	0.53	5.1	0.099	2.2	4.3	9.5	0.29	0.10	94	0.00	0.20	--	0.10	0.63	531.98	535.61
7C	532.25	15	2.2	80	0.00	0.09	4.3	0.072	--	--	--	--	0.00	0	0.00	0.07	0.09	0.05	0.14	532.40	535.30
8	530.00	21	11.9	50	0.01	0.28	11.3	0.494	10.2	6.4	65.3	0.64	0.22	2	0.00	0.72	--	0.36	0.64	530.99	535.25
10	531.70	21	10.2	135	0.00	0.55	6.4	0.160	15.3	11.9	181.8	2.21	0.77	1	0.00	0.93	--	0.47	1.02	532.72	538.47
11	532.83	18	7.0	132	0.00	0.59	5.7	0.125	1.5	0.0	0.0	0.00	0.00	90	0.00	0.13	--	0.06	0.65	533.60	539.83
11A	533.84	15	1.5	78	0.00	0.04	3.8	0.056	--	--	--	--	0.00	0	0.00	0.06	0.07	0.04	0.08	533.92	539.16
10A	533.92	15	0.5	82	0.00	0.00	2.6	0.026	--	--	--	--	0.00	0	0.00	0.03	0.03	0.02	0.02	533.94	539.00
13	517.60	24	15.3	33	0.00	0.15	11.9	0.552	13.5	5.9	79.0	0.53	0.19	100	0.37	1.11	--	0.55	0.71	518.31	523.39
14	518.75	24	13.5	123	0.00	0.44	5.9	0.133	11.3	5.6	63.6	0.49	0.17	0	0.00	0.30	--	0.15	0.59	519.34	525.53
15	519.50	24	12.1	97	0.00	0.28	5.7	0.125	9.2	5.3	48.4	0.43	0.15	0	0.00	0.28	--	0.14	0.42	519.92	527.88
16	520.10	24	11.3	213	0.00	0.53	5.6	0.122	9.2	5.3	48.4	0.43	0.15	0	0.00	0.27	--	0.14	0.67	520.83	528.20
17	521.10	21	9.2	234	0.00	0.78	5.3	0.108	5.8	9.2	53.5	1.32	0.46	1	0.00	0.57	--	0.28	1.07	522.17	531.80
18	522.20	18	7.2	231	0.00	1.09	4.8	0.089	5.5	9.7	54.0	1.47	0.52	85	0.00	0.60	--	0.30	1.39	523.59	531.90
19	523.59	18	6.6	124	0.00	0.49	5.0	0.097	--	--	--	--	0.00	0	0.00	0.10	0.13	0.06	0.55	524.14	530.48
20	527.25	15	5.8	107	0.01	0.86	9.2	0.330	5.5	9.7	54.0	1.47	0.52	64	0.82	1.67	--	0.83	1.69	530.09	533.86
21	530.55	15	5.5	61	0.01	0.45	9.7	0.368	1.0	4.9	5.1	0.38	0.13	0	0.00	0.50	--	0.25	0.70	532.34	535.79
22	532.85	15	1.0	117	0.00	0.03	4.9	0.094	--	--	--	--	0.00	31	0.00	0.09	0.12	0.06	0.09	534.44	538.13
21A	532.85	15	2.7	75	0.00	0.13	8.3	0.271	2.7	5.5	14.7	0.47	0.16	0	0.00	0.44	--	0.22	0.35	535.28	538.81
21B	536.00	15	2.7	78	0.00	0.13	5.5	0.118	--	--	--	--	0.00	0	0.00	0.12	0.15	0.08	0.21	536.52	539.50
19A	524.14	15	0.3	43	0.00	0.00	2.3	0.020	0.3	2.2	0.7	0.07	0.03	40	0.03	0.08	--	0.04	0.04	524.18	529.57
19B	524.40	15	0.3	76	0.00	0.00	2.2	0.018	--	--	--	--	0.00	0	0.00	0.02	0.02	0.01	0.01	524.41	527.72
14A	522.40	15	1.4	29	0.00	0.01	6.8	0.178	--	--	--	--	0.00	0	0.00	0.18	0.23	0.12	0.13	522.78	526.82
33	518.06	24	22.7	80	0.01	0.80	13.5	0.712	16.4	12.9	212.2	2.59	0.91	22	0.65	2.27	--	1.13	1.93	519.99	524.00
34	519.99	21	16.4	83	0.01	0.88	12.9	0.648	15.1	11.6	174.1	2.08	0.73	15	0.39	1.77	--	0.88	1.77	521.91	526.19
33A	519.99	15	4.5	45	0.00	0.22	6.7	0.176	--	--	--	--	0.00	0	0.00	0.18	--	0.09	0.31	520.30	522.80
34A	522.90	15	1.4	45	0.00	0.02	6.2	0.150	--	--	--	--	0.00	0	0.00	0.15	0.20	0.10	0.12	523.54	527.40
35	522.30	18	15.1	78	0.02	1.59	11.6	0.519	15.1	14.3	215.3	3.17	1.11	25	0.95	2.58	--	1.29	2.88	525.18	528.67
36	525.18	18	15.1	33	0.02	0.68	14.3	0.794	10.4	12.5	129.2	2.41	0.84	33	0.84	2.48	--	1.24	1.92	527.10	529.93
36A	527.10	15	2.9	18	0.00	0.04	5.3	0.110	--	--	--	--	0.00	0	0.00	0.11	0.14	0.07	0.11	527.21	529.83
37	527.10	18	10.4	21	0.01	0.20	12.5	0.603	10.4	8.9	92.4	1.23	0.43	16	0.23	1.27	--	0.63	0.84	527.94	530.98
38	527.94	18	10.4	264	0.01	2.56	8.9	0.308	8.1	6.7	54.4	0.69	0.24	0	0.00	0.55	--	0.28	2.83	532.34	537.60
39	532.70	18	8.1	108	0.01	0.65	6.7	0.173	6.1	6.4	38.8	0.64	0.22	0	0.00	0.40	--	0.20	0.84	533.60	538.92
40	533.92	18	6.1	116	0.00	0.38	6.4	0.159	3.9	6.0	23.5	0.56	0.20	0	0.00	0.36	--	0.18	0.56	534.79	540.30
41	535.21	15	3.9	77	0.00	0.28	6.0	0.140	--	--	--	--	0.00	0	0.00	0.14	0.18	0.09	0.37	535.82	541.55
40A	535.10	15	2.2	18	0.00	0.02	6.3	0.154	--	--	--	--	0.00	0	0.00	0.15	0.20	0.10	0.12	535.22	538.66
28	513.30	21	10.0	41	0.00	0.16	5.8	0.129	3.7	5.7	21.2	0.51	0.18	33	0.18	0.48	--	0.24	0.40	513.70	516.20
29	513.70	15	3.7	47	0.00	0.16	5.7	0.127	--	--	--	--	0.00	0	0.00	0.13	0.16	0.08	0.24	514.25	516.26
28A	514.48	21	5.7	91	0.00	0.12	4.4	0.075	--	--	--	--	0.00	0	0.00	0.07	0.10	0.05	0.17	514.65	515.21
31	512.20	15	1.3	34	0.00	0.01	3.4	0.045	0.7	2.7	2.0	0.11	0.04	0	0.00	0.08	--	0.04	0.06	512.26	515.89
32	512.50	15	0.7	64	0.00	0.01	2.7	0.029	--	--	--	--	0.00	0	0.00	0.03	--	0.01	0.02	512.52	515.66
24	513.88	24	3.6	18	0.00	0.00	6.9	0.183	0.5	4.0	1.8	0.25	0.09	90	0.17	0.44	--	0.22	0.22	514.10	517.60
25	514.10	15	0.5	18	0.00	0.00	4.0	0.063	0.5	2.7	1.3	0.12	0.04	34	0.04	0.15	--	0.07	0.07	514.18	517.45
26	514.24	15	0.5	58	0.00	0.00	2.7	0.029	--	--	--	--	0.00	0	0.00	0.03	0.04	0.02	0.02	514.26	517.39

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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REGISTERED
16052
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

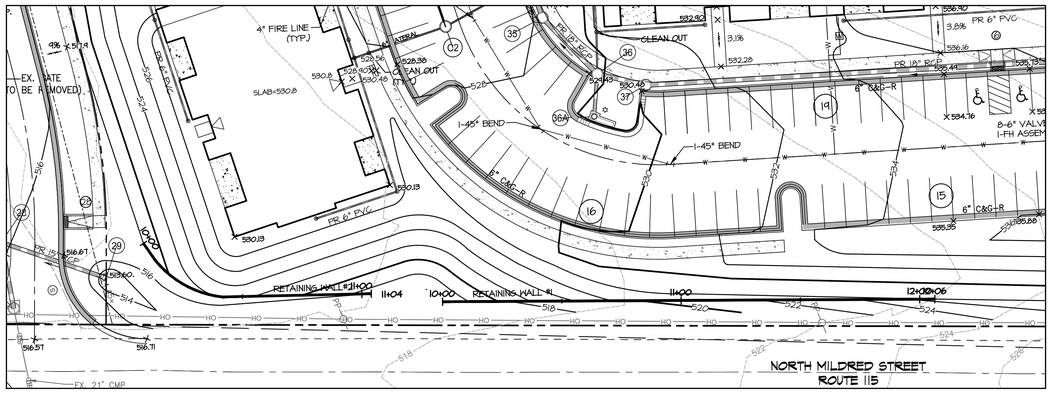
SD HYDRAULIC GRADELINE COMPUTATION

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

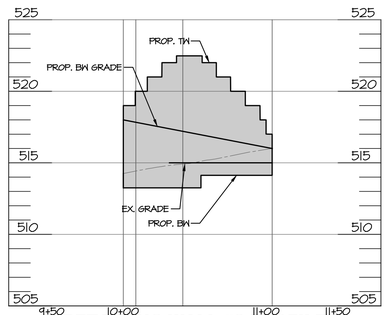
JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 20 OF 45

SANITARY LATERAL TABLE

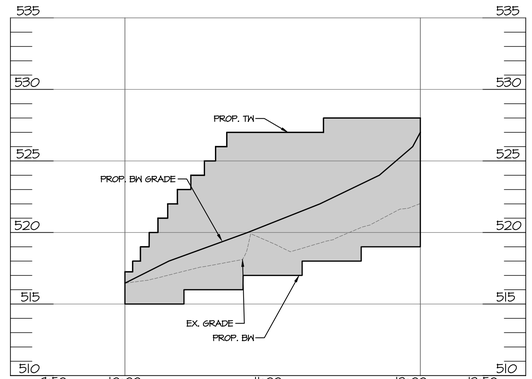
LOT NUMBER	BUILDING	DIST. FROM LOWER MH	MANHOLE FROM	MANHOLE TO	SLOPE FT./FT.	TOTAL LENGTH (FT) at front	TOTAL LENGTH (FT)	LAT INV. @ MAIN CONN.	START STA RISER	RISERS FT	END RISER CONNECT @ 45 BEND INV	CLEANOUT STA	CLEANOUT / END OF LAT. STA	INV @ CLEANOUT	GRADE AT CLEANOUT	START STA RISER	RISERS FT.	BEGIN RISER INV.	END STA RISER	INV @ RISER	LAT CONN. AT BUILDING	SLAB	LAT ELEV. AT END	SLAB-INV @END
BLDG 8 (I)	BLDG 8	186.26	I	H	0.0208	61.09	149.59	529.43	0.00	0.00	529.43	46.21	46.21	530.39	536.70	47.00	3.00	530.41	50.00	533.41	533.64	539.00	535.48	3.52
BLDG 8 (H)	BLDG 8	95.88	I	H	0.0208	59.55	152.30	528.91	0.00	3.00	531.91	46.49	46.49	532.81	538.00	0.00	0.00	0.00	0.00	0.00	533.08	539.00	535.01	3.99
BLDG 4 (H1)	BLDG 4	201.59	H1	H	0.0208	60.54	164.19	533.33	0.00	0.00	533.33	46.13	46.13	534.29	542.10	0.00	0.00	0.00	0.00	0.00	534.59	540.50	536.75	3.75
BLDG 9 (H1)	BLDG 9	201.59	H1	H	0.0208	48.81	138.31	533.33	0.00	0.00	533.33	34.05	34.05	534.04	543.00	36.00	3.00	534.08	39.00	537.08	537.28	543.00	539.14	3.86
BLDG 9 (H)	BLDG 9	95.01	H1	H	0.0208	48.81	132.84	532.80	0.00	1.00	533.80	34.26	34.26	534.49	542.80	36.00	3.00	534.53	39.00	537.53	537.73	543.00	539.48	3.52
BLDG 7 (H)	BLDG 7	132.09	H	G	0.0208	59.73	141.76	528.14	0.00	1.00	529.14	46.13	46.13	530.07	540.00	47.00	4.00	530.09	51.00	534.09	534.27	540.25	535.98	4.27
BLDG 5 (H)	BLDG 5	61.05	H	G	0.0208	47.93	135.83	527.80	0.00	3.00	530.80	34.04	34.04	531.44	540.00	36.00	4.00	531.48	40.00	535.48	535.65	541.50	537.48	4.02
BLDG 7 (G)	BLDG 7	27.39	H	G	0.0208	60.37	148.95	527.62	0.00	1.00	528.62	47.10	47.10	529.58	539.05	47.00	5.00	529.58	52.00	534.58	534.75	540.25	536.59	3.66
BLDG 5 (G)	BLDG 5	104.18	G	F	0.0208	48.48	135.95	527.12	0.00	3.00	530.12	34.08	34.08	530.76	540.00	35.00	5.00	530.78	40.00	535.78	535.96	541.50	537.78	3.72
BLDG 6 (G)	BLDG 6	46.73	G	F	0.0208	59.90	148.04	526.77	0.00	1.00	527.77	46.29	46.29	528.71	536.24	0.00	0.00	0.00	0.00	0.00	528.99	537.00	530.82	6.18
BLDG 4 (F1)	BLDG 4	211.56	F1	F	0.0208	60.65	161.16	530.03	0.00	0.00	530.03	45.95	45.95	530.99	538.16	46.00	3.00	530.99	49.00	533.99	534.23	540.50	536.32	4.18
BLDG 3 (F1)	BLDG 3	211.56	F1	F	0.0208	41.48	143.77	530.03	0.00	0.00	530.03	33.98	33.98	530.74	536.20	0.00	0.00	0.00	0.00	0.00	530.89	537.00	533.02	3.98
BLDG 6 (F)	BLDG 6	131.78	F	E	0.0208	59.77	148.43	523.54	0.00	1.00	524.54	46.27	46.27	525.48	532.40	0.00	0.00	0.00	0.00	0.00	525.76	533.00	527.61	5.39
BLDG 2 (F)	BLDG 2	107.97	F	E	0.0208	48.64	136.73	522.42	0.00	1.00	523.42	34.14	34.14	524.11	533.90	35.00	5.00	524.13	40.00	529.13	529.31	535.00	531.14	3.86
BLDG 2 (E)	BLDG 2	65.08	E	D	0.0208	48.85	130.50	517.23	0.00	3.00	520.23	34.35	34.35	520.88	529.90	36.00	4.00	520.92	40.00	524.92	525.10	531.00	526.80	4.20
CLUB HOUSE	CLUB HOUSE	28.58	E	D	0.0208	67.43	142.36	516.73	0.00	1.00	517.73	51.36	51.36	518.77	527.60	52.00	3.00	518.79	55.00	521.79	522.04	526.67	523.60	3.07
BLDG 3 (C2)	BLDG 3	126.94	C2	C1	0.0208	71.10	177.18	520.00	0.00	0.00	520.00	47.19	47.19	520.98	528.00	34.00	5.00	520.71	39.00	525.71	526.37	533.00	528.58	4.42
BLDG 1 (C2)	BLDG 1	126.94	C2	C1	0.0208	42.33	119.59	518.33	0.00	2.00	520.33	33.40	34.05	521.00	528.90	0.00	0.00	0.00	0.00	0.00	521.13	526.80	522.78	4.02
BLDG 1 (C1)	BLDG 1	36.20	C2	C1	0.0208	40.45	130.16	517.62	0.00	1.00	518.62	34.05	33.40	519.29	525.38	33.00	6.00	519.28	39.00	525.28	525.35	530.80	527.18	3.62



RETAINING WALLS
SCALE: 1"=30'



RETAINING WALL #2 PROFILE
SCALE: H: 1"=50'
V: 1"=5'



RETAINING WALL #1 PROFILE
SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
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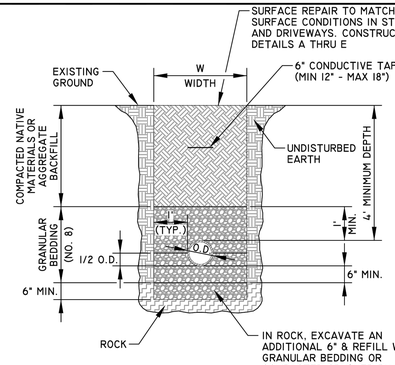
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

SANITARY LATERAL TABLE & RETAINING WALL PROFILES

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

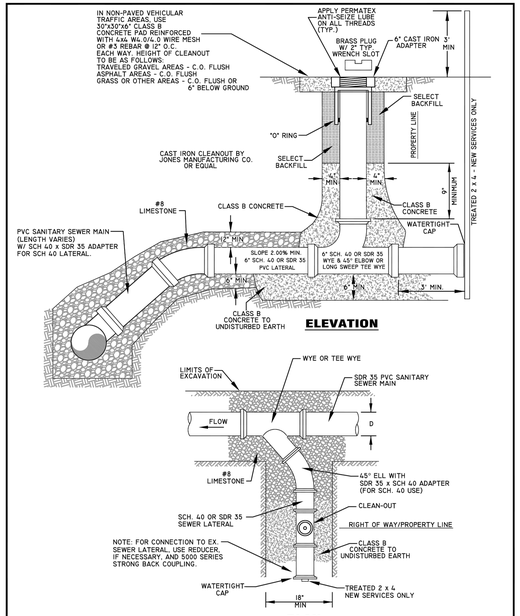
JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	21 OF 45



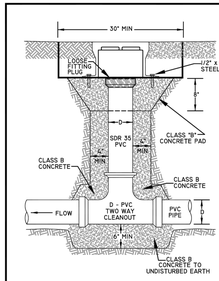
NOTES:

1. W = MAXIMUM PERMISSIBLE TRENCH WIDTH, BASED UPON, W = O.D. + 24", UNLESS APPROVED BY THE ENGINEER.
2. TRENCHES TO BE SHEETED AND BRACED AS REQUIRED.
3. PROVIDE BEARING FOR FULL LENGTH OF BARREL, DIG HOLES FOR THE BELL.
4. BACKFILL ON SIDES TO 1/2 O.D. OF PIPE TO HOLD PIPE IN PLACE PRIOR TO PLACING ADDITIONAL BEDDING.
5. BACKFILL TO BE COMPACTED IN 6" LAYERS TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE (+2%) IN ROADS AND STREETS. COMPACT TO MATCH EXISTING GROUND IN OTHER AREAS.
6. MAINTAIN MINIMUM OF 4' OF COVER TO THE TOP OF PIPE.
7. A CASING PIPE SHALL BE REQUIRED IN ROAD CROSSINGS WHERE SHOWN ON PLANS
8. ALL WATER LINES REQUIRE PERMIT FROM APPLICABLE REGULATORY ENTITIES. PERMIT REQUIREMENTS SUPERCEDE WHAT IS SHOWN ON THIS DETAIL.

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	SEWER LINE TRENCH DETAIL	Standard Detail No. S-1
		NOT TO SCALE
		SEPTEMBER 2015



Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	NEW LATERAL CONNECTION DETAIL	Standard Detail No. S-13
		NOT TO SCALE
		SEPTEMBER 2015

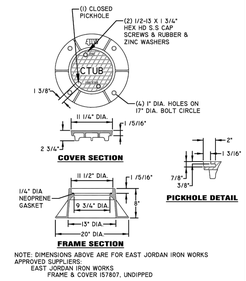


MAIN LINE CLEANOUT

(FOR D ≤ 6")

NOTES:

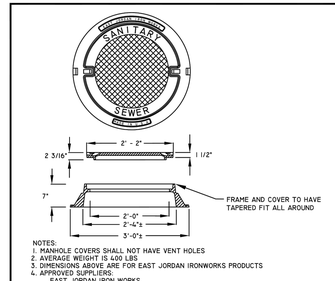
1. CLEANOUT FRAME AND COVER SHALL BE INSTALLED SUCH THAT IT IS LEVEL TO 2" BELOW SURROUNDING SURFACE. CLEANOUTS PROJECTING ABOVE SURFACE ARE UNACCEPTABLE.
2. FOR CLEANOUTS SUBJECT TO VEHICULAR TRAVEL, CONSTRUCT 30"x30"x8" CLASS B CONCRETE PAD. REINFORCE WITH 4#4 W4.0/4.0 WIRE MESH OR #3 REBAR @ 12" C-C EACH DIRECTION.
3. FOR NON-VEHICULAR TRAFFIC AREAS CONCRETE PAD CAN BE ELIMINATED AT DIRECTION OF ENGINEER. BACKFILL TO MATCH SURROUNDING AREA.
4. USE TEE AND PLUG FOR CLEANOUT AT END OF LINE.
5. FOR MAINLINE DIAMETER OF 8" OR GREATER, USE STRAIGHT TEE.



NOTE: DIMENSIONS ABOVE ARE FOR EAST JORDAN IRON WORKS APPROVED SUPPLIERS:
EAST JORDAN IRON WORKS
FRAME & COVER 157807, UNDIPPED

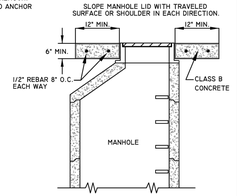
MAIN LINE CLEANOUT FRAME & COVER

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	MAINLINE CLEANOUT & FRAME & COVER DETAIL	Standard Detail No. S-12
		NOT TO SCALE
		SEPTEMBER 2015



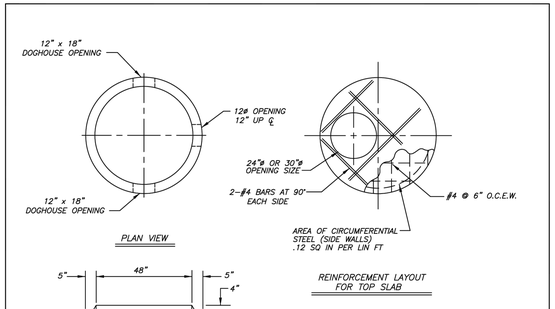
NOTES:
1. MANHOLE COVERS SHALL NOT HAVE VENT HOLES
2. AVERAGE WEIGHT IS 400 LBS
3. DIMENSIONS ABOVE ARE FOR EAST JORDAN IRONWORKS PRODUCTS
4. APPROVED SUPPLIERS:
   EAST JORDAN IRON WORKS
   HIGHWAY: FRAME - PROD. NO. 1045Z UNDIPPED
   COVER - PROD. NO. 1040A UNDIPPED, SELF SEALING
   FRAME & COVER - PROD. NO. 1045AGS UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER PROD. NO. 1045ZPT/1010APT, UNDIPPED
   NEENAH
   HIGHWAY: FRAME & COVER R-1642, UNDIPPED, SELF SEALING
   WATERTIGHT: FRAME & COVER R-1916, UNDIPPED
5. FRAME AND COVER TO COMPLY WITH ASTM A48, CLASS 30 TENSILE STRENGTH.
6. USE THREADED STAINLESS STEEL, STANDARD HEXAGON HEAD BOLTS TO ANCHOR FRAME AND COVER TO MANHOLE.

MANHOLE FRAME AND COVER



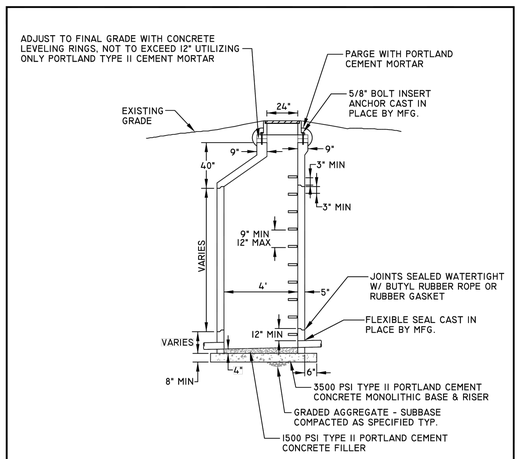
ANCHOR DETAIL FOR FRAME & COVER IN PAVED ROAD SURFACE AREAS AND SHOULDERS OF ROAD

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	MANHOLE FRAME & COVER ANCHOR FOR FRAME & COVER DETAIL	Standard Detail No. S-7
		NOT TO SCALE
		SEPTEMBER 2015



NOTES:
CONCRETE TO TEST 4000 PSI @ 28 DAYS IN CONFORMANCE WITH ASTM C-478

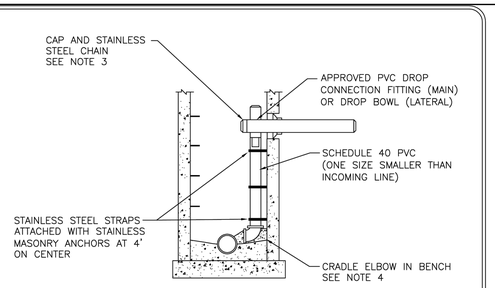
Precast Concrete Sales Co. 123 Route 303 Valley Cottage , N.Y. 10989 Tel. (845) 268-4949 – Fax (845) 268-4376		
CONT.		
JOB		
48" DIA. "DOGHOUSE" MANHOLE		
DATE	DRAWN BY	DRAWING NO.
1/16	CLASSIC DESIGN	3-4D



NOTES:

1. PRECAST MANHOLE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C 478 UTILIZING TYPE II PORTLAND CEMENT. 3500 PSI MIX MINIMUM.
2. 0.1' FALL TYPICAL INVERT IN TO INVERT OUT OR MATCH CROWNS FOR DIFFERING PIPE DIAMETERS.
3. COMPLETE MANHOLE SHALL PASS VACUUM TEST PRIOR TO ACCEPTANCE.

Charles Town Utility Board 832 S. George Street, P.O. Box 359, Charles Town, WV 25414 Phone: (304) 725-2316 •Fax: (304) 725-4313	PRECAST MANHOLE W/ ECCENTRIC TOP DETAIL	Standard Detail No. S-6
		NOT TO SCALE
		SEPTEMBER 2015



NOTES:
1. INSIDE DROP CONNECTION NOT TO BE USED, UNLESS APPROVED BY LOUDOUN WATER FOR THE SPECIFIC APPLICATION.
2. MAXIMUM SLOPE OF INCOMING LINE TO BE 2.0%.
3. THE CAP SHALL BE SECURED TO THE DROP CONNECTION FITTING WITH 2' OF STAINLESS STEEL CHAIN, SECURED WITH STAINLESS MACHINE SCREWS, NUTS, AND WASHERS. THE PIPE SHALL BE BEVELED TO ACCEPT THE CAP.
4. THE ELBOW AT THE BOTTOM OF THE STACK MAY BE EITHER A 45 OR 90-DEGREE BEND, TURNED IN THE DIRECTION OF FLOW. CONSTRUCT CHANNEL TO CONFORM TO THE MANHOLE BENCH.
5. MANHOLE PENETRATIONS TO BE BY CORE BORE AND APPROVED PIPE CONNECTOR. CORE IS TO BE AT LEAST 1' CLEAR OF MANHOLE JOINT.
6. ALL COMPONENTS TO BE IN ACCORDANCE WITH LOUDOUN WATER'S APPROVED MATERIALS LIST.

APR. 2013	INSIDE DROP CONNECTION	S-5

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 594 - 4047
MRAGTA.COM

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JON K. ERICKSON
REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

SANITARY SEWER DETAILS

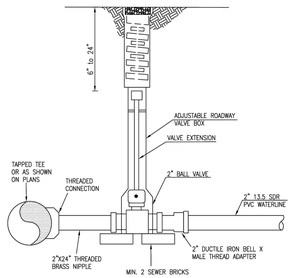
WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	22 OF 45

NOTE:

ALL PIPING SHALL BE INCASED IN 6" STONE DUST ON ALL SIDES.



WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

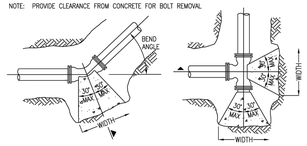
2" VALVE DETAIL

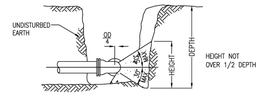
Not to Scale

W-3.01

REVISED:
April 2, 2024

NOTE: PROVIDE CLEARANCE FROM CONCRETE FOR BOLT REMOVAL





TYPICAL SECTION

NOTE: BEARING AREAS ARE BASED ON 225 P.S.I. TEST PRESSURE AND A SOIL RESISTANCE OF 2000 P.S.F. IF WEAK (LESS THAN 2000 P.S.F. RESISTANCE) SOIL POCKETS ARE ENCOUNTERED, INCREASE THE BEARING AREAS SHOWN TO PREVENT MOVEMENT UNDER TEST OR OPERATING PRESSURES.

PIPE SIZE	MINIMUM BEARING AREA (S.F.) = WIDTH X DEPTH				HYD, TEE, CAP
	90° BEND	45° BEND	22-1/2° BEND	11-1/4° BEND	VALVE, PLUG
3"	3	2	1	1	2
4"	4	2	2	1	3
6"	7	4	3	2	5
8"	12	7	5	3	8
10"	19	11	8	4	13
12"	28	15	8	5	18

THRUST BLOCKS TO BE CLASS 3000 PSI CONCRETE (MIN.)

ALL MECHANICAL JOINTS ARE TO BE PROVIDED WITH MEGA LUGE JOINT RESTRAINTS.

WEST VIRGINIA AMERICAN WATER

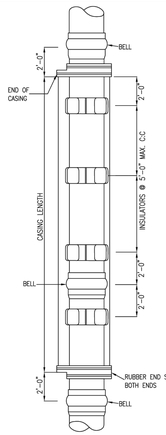
Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

THRUST BLOCK

Not to Scale

W-2.00

REVISED:
April 2, 2024



REQUIRED MINIMUM CASING

CARRIER PIPE	CASING SIZE	CASING WALL	NUMBER INSULATOR SKIDS	BAND WIDTH
2"	8"	0.375	4@90°	8"
4"	10"	0.375	4@90°	8"
6"	12"	0.375	4@90°	8"
8"	16"	0.375	4@90°	8"
10"	20"	0.375	4@90°	8"
12"	24"	0.375	4@90°	8"
16"	30"	0.500	2 ON TOP 4 ON BOTTOM	12"

1. INSULATORS TO BE ADVANCED PRODUCTS MODEL SSIM STAINLESS STEEL CENTERED AND RESTRAINED. SPACED AS SHOWN

2. CASING END SEALS TO BE ADVANCED PRODUCTS MODEL AC

3. CASING REQUIRED FOR STATE HIGHWAY CROSSINGS, UNDER SANITARY SEWERS, UNDER LARGE DIAMETER OR MULTI-BARRELL STORM PIPES, UNDER RAILROAD OR OTHER JOB SPECIFIC SURFACE OBSTRUCTIONS.

4. CASINGS SHALL EXTEND A MINIMUM OF TWO (2) FEET PAST THE EDGE OF PAVEMENT OR OTHER OBSTRUCTION, EXTEND TEN (10) FEET PAST A SEWER UNDER CROSSING, OR SUCH ADDITIONAL DISTANCE AS REQUIRED BY THE HIGHWAY DEPARTMENT OR RAILROAD.

WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

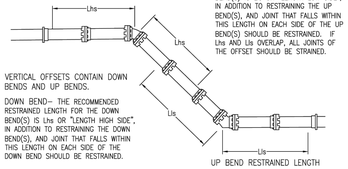
CASING INSTALLATION, OPEN CUT OR BORE AND JACK

Not to Scale

W-4.00

REVISED:
April 2, 2024

DOWN BEND RESTRAINED LENGTH



VERTICAL OFFSETS CONTAIN DOWN BENDS AND UP BENDS.

DOWN BEND– THE RECOMMENDED RESTRAINED LENGTH FOR THE DOWN BEND(S) IS Lhs OR "LENGTH HIGH SIDE", IN ADDITION TO RESTRAINING THE DOWN BEND(S), AND JOINT THAT FALLS WITHIN THIS LENGTH ON EACH SIDE OF THE DOWN BEND SHOULD BE RESTRAINED.

UP BEND– THE RECOMMENDED RESTRAINED LENGTH FOR THE UP BEND(S) IS Ls OR "LENGTH LOW SIDE", IN ADDITION TO RESTRAINING THE UP BEND(S), AND JOINT THAT FALLS WITHIN THIS LENGTH ON EACH SIDE OF THE UP BEND(S) SHOULD BE RESTRAINED. IF Lhs AND Ls OVERLAP, ALL JOINTS OF THE OFFSET SHOULD BE STRAINED.

WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

VERTICAL OFFSET

Not to Scale

W-2.02

REVISED:
April 2, 2024

Kris-Tech Wire Co. — Copper Clad Steel Tracer Wire



Scope:
Single conductor copper clad steel, HMWPE (high molecular weight polyethylene) insulated tracer/locator wire. Together with the high strength of steel, the electrical and corrosion resistant properties of copper and the rugged properties of HMWPE this product is suitable for direct burial use in wet and dry locations, designed to carry an electrical signal for use in locating underground non-metallic pipe. Versions available in 30 volt, 600 volt and 1000 volt.

Applicable Standards and Tests:
ASTM B-227, B-869, B-910/B-910M all for Copper Clad Steel. ASTM D-1248, ICEA S-70-547, ICEA S-61-402/NEMA WC5, ICEA S-95-658/NEMA WC70, UL 83, UL 1581 All products are spark tested at 7500 VAC unless otherwise specified.

Construction:
Conductors: The single conductors 21% conductivity copper clad steel, dead soft annealed (DSA), stress relieved (SR), high strength (HS) and extra high strength (EHS). Other conductivities and break strengths available by request.

Insulation:
Concentrically applied HMWPE insulation in accordance with UL83. High Density HMWPE is available upon request.

Identification and Packaging:
Custom and standard print legends are available. 500 ft/spl-packed 40box, or 2500 feet/spl spools are standard and packaged and labeled with product name, description, AWG, and manufacturer. Custom lengths, non-standard colors, AWG and custom packaging are available by request.

AWG	Breaking Pounds DSA/SR/HS/EHS	Bending Radius (inches)	Insulation Thickness (inches) 30/600/1KV	Nominal Overall Diameter – Inches	Approx. Shipping Weight (Lbs/Mft)
18	63 / 79 / NA / NA	0.64	0.030 / 0.045 / 0.060	0.10 / 0.13 / 0.16	7 / 9 / 12
16	99 / 125 / NA / NA	0.68	0.030 / 0.045 / 0.060	0.11 / 0.14 / 0.17	10 / 13 / 16
14	161 / 187 / 351 / NA	0.72	0.030 / 0.045 / 0.060	0.12 / 0.15 / 0.18	15 / 18 / 21
12	256 / 303 / 558 / 1185	0.80	0.030 / 0.045 / 0.060	0.14 / 0.17 / 0.20	22 / 25 / 29
10	408 / 473 / 887 / 1940	0.88	0.030 / 0.045 / 0.060	0.16 / 0.19 / 0.22	34 / 37 / 41
8	628 / 950 / 1005 / 2785	1.00	0.030 / 0.045 / 0.060	0.19 / 0.22 / 0.25	51 / 55 / 60

P: (315) 339 5268 • F: (315) 339-5277 • sales@kristechwire.com • www.kristechwire.com

Spec: Tracer-CCS
Issued: 05/03/19
Supersedes: 11/21/16

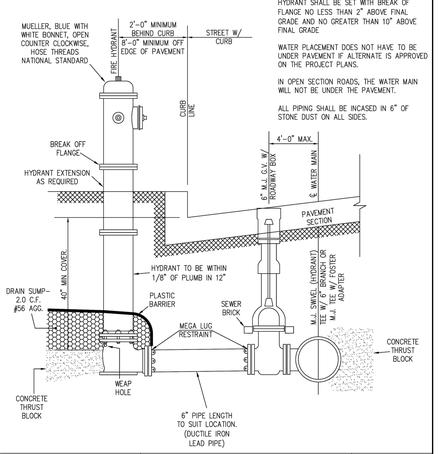
NOTE:

HYDRANT SHALL BE SET WITH BREAK OF FLANGE NO LESS THAN 2" ABOVE FINAL GRADE AND NO GREATER THAN 10" ABOVE FINAL GRADE

WATER PLACEMENT DOES NOT HAVE TO BE UNDER PAVEMENT IF ALTERNATE IS APPROVED ON THE PROJECT PLANS.

IN OPEN SECTION ROADS, THE WATER MAIN WILL NOT BE UNDER THE PAVEMENT.

ALL PIPING SHALL BE INCASED IN 6" OF STONE DUST ON ALL SIDES.



WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

FIRE HYDRANT SETTINGS

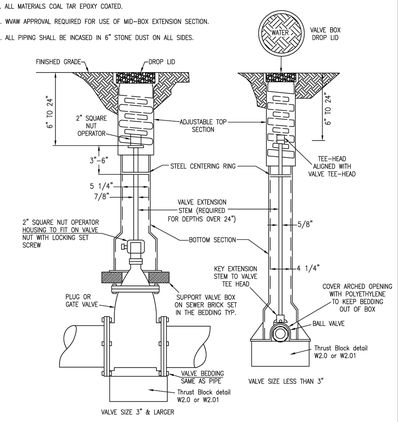
Not to Scale

W-3.02

REVISED:
April 2, 2024

NOTES:

1. ALL MATERIALS COAL TAR EPOXY COATED.
2. WVAW APPROVAL REQUIRED FOR USE OF MID-BOX EXTENSION SECTION.
3. ALL PIPING SHALL BE INCASED IN 6" STONE DUST ON ALL SIDES.



WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

VALVE AND BOX INSTALLATION

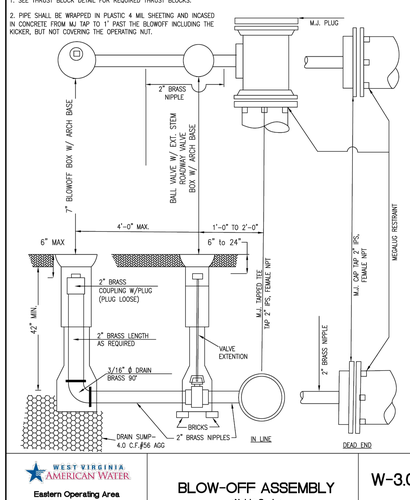
Not to Scale

W-3.00

REVISED:
April 2, 2024

NOTE:

1. SEE THRUST BLOCK DETAIL FOR REQUIRED THRUST BLOCKS.
2. PIPE SHALL BE WRAPPED IN PLASTIC 4 MIL SHEETING AND INCASED IN CONCRETE FROM MJ TAP TO 1" PAST THE BLOWOFF INCLUDING THE KICKER, BUT NOT COVERING THE OPERATING NUT.



WEST VIRGINIA AMERICAN WATER

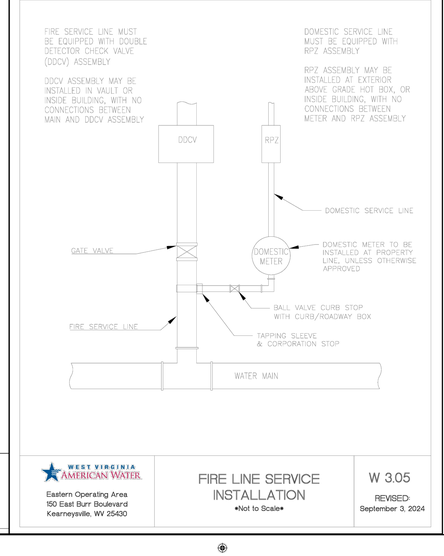
Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

BLOW-OFF ASSEMBLY

Not to Scale

W-3.03

REVISED:
April 2, 2024



WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

FIRE LINE SERVICE INSTALLATION

Not to Scale

W 3.05

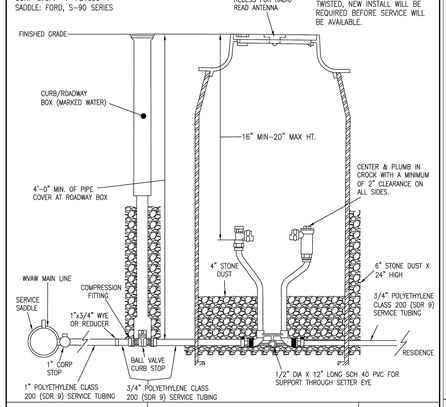
REVISED:
September 3, 2024

NOTES:

BOX: 18X22X30 BULLET METER BOX
LID: AYM 74 MAL 115
SETTER: VBHC 72-12W 44-33 (EITHER 12" OR 16" HIGH)
TUBING: 3/4" AND 1" CTS HDPE TUBING – 200 PSI
METER: 3/4" X 5/8" NEPTUNE R-900i
CORP STOP: 1" FB1000-4
SADDLE: FORD, S-90 SERIES

NOTE:

WHEN INSTALLING THE SETTER, THE USE OF A JUMPER OR IDLER PIPE IS REQUIRED TO ELIMINATE TWISTING OF THE SETTER. WHEN INSPECTION IS COMPLETED BY WVAW STAFF, IF SETTER IS TWISTED, NEW INSTALL WILL BE REQUIRED BEFORE SERVICE WILL BE AVAILABLE.



WEST VIRGINIA AMERICAN WATER

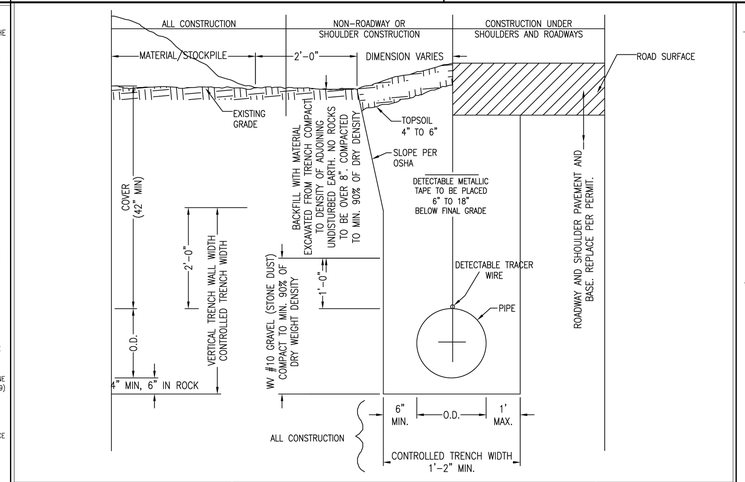
Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

5/8 x 3/4 COPPERSETTER

Not to Scale

W-5.00

REVISED:
April 2, 2024



WEST VIRGINIA AMERICAN WATER

Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

TRENCH DETAIL

Not to Scale

W-1.00

REVISED:
April 2, 2024

Non-Detectable Warning Tape

Material Specifications
- 100% virgin low density polyethylene
- Pigmented with lead-free resins
- Withstands temperature range of -94 F through 200 F
- All colors are consistent with A.P.W.A. color code guidelines
- Manufactured for durability and resistance to the elements

Applications
- Non-detectable warning tape is used for protection, early identification, and accurately locating underground utility installations
- A.P.W.A. color code denotes: Orange--Telecommunication and CATV Lines, Blue--Water Lines, Green--Sewer Lines, Purple--Reclaimed Water Lines, Red--Electrical Lines, Yellow--Gas Lines

Product Analysis

ATTRIBUTE		PROCEDURE	VALUE*
Thickness		ASTM D 2103	4.0 MIL
Elongation		ASTM D 88280A	
	MD		600%
	TD		750%
Density		ASTM D 792-66	0.922 (gm/cc)
Tensile Strength		ASTM D 882	
	MD		3,500PSI
	TD		2,700PSI
Printability		ASTM D 2578	Min .45 Dynes
Flexibility		ASTM D 671-76	Pliable Hand
Graphic Repeat		MFRG. SPECS	Repeat Every 23"
Material		MFRG. SPECS	Virgin LDPE

Endorsements
- Meets federal gas safety regulation S-192-321(E)
- Meets OSHA regulation 1926-956 (C) (I) covering the location of underground utility lines

* Values are a nominal + or - 10% to allow for manufacturing variance

Detectable Warning Tape

Material Specifications
- 5.0 mil overall thickness
- 100% virgin low density polyethylene
- Aluminum center core
- Withstands temperature range of -94 F through 200 F
- Manufactured for durability and resistance to the elements

Manufacturing Specifications
- Subsurface graphics
- Triple-layer lamination

Applications
- Detectable warning tape is used for protection, early identification, and accurately locating underground utility installations
- A.P.W.A. color code denotes: Orange--Telecommunication and CATV Lines, Blue--Water Lines, Green--Sewer Lines, Purple--Reclaimed Water Lines, Red--Electrical Lines, Yellow--Gas Lines

Product Analysis

ATTRIBUTE		PROCEDURE	VALUE*
Thickness		ASTM D 2103	5.0 Overall Thickness
Elongation		ASTM D 88280A	
	MD		80%
	TD		139%
Density		ASTM D 792-66	1.090 (gm/cc)
Coefficient of Friction		ASTM D 3248-73	Static 0.247
Tensile Strength		ASTM D 882	5,800 PSI
Printability		ASTM D 2578	Min .45 Dynes
Flexibility		ASTM D 671-76	Pliable Hand
Graphic Repeat		MFRG. SPECS	Repeat Every 23"

Endorsements
- Meets federal gas safety regulation S-192-321(E)
- Meets OSHA regulation 1926-956 (C) (I) covering the location of underground utility lines

* Values are a nominal + or - 10% to allow for manufacturing variance

Omega Marking Co.
P.O. Box 655 Beaver Dam, WI 53916

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
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DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

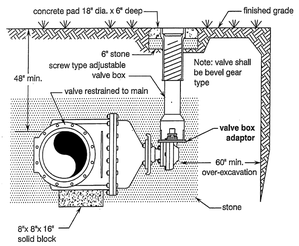
JON E. ERICKSON
REGISTERED
16052
STATE OF
VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

WATERLINE DETAILS

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 23 OF 45



Water

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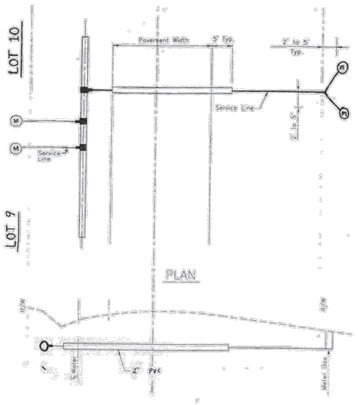
GATE VALVE

16", 18", 20", & 24"



WEST VIRGINIA AMERICAN WATER
Eastern Operating Area
150 East Burr Boulevard
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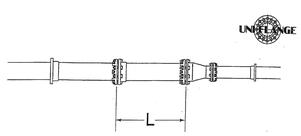
SERVICE LINE AND METER LOCATIONS
Not to Scale



Recommended restrained lengths for reducers are for the large side. In addition to restraining the fitting itself, all joints within the recommended restrained length (L) on the large side of the reducer should be restrained.

Test Pressure	Type Fitting	Restrained Length of Pipe - L - in Feet for Type & Size of Pipe							
		PVC				DIP			
		6"	8"	10"	12"	6"	8"	10"	12"
	To Size	Reducer				Reducer			
150#	6"	0.0	30.5	54.5	76.5	0.0	17.0	30.0	41.5
	8"	0.0	0.0	30.0	55.0	0.0	0.0	16.5	30.5
	10"	0.0	0.0	0.0	30.5	0.0	0.0	0.0	17.0
200#	6"	0.0	41.0	72.5	100.5	0.0	22.5	39.5	55.0
	8"	0.0	0.0	39.5	73.5	0.0	0.0	21.5	40.5
	10"	0.0	0.0	0.0	40.5	0.0	0.0	0.0	22.5
250#	6"	0.0	51.0	90.5	126.0	0.0	28.0	49.5	69.0
	8"	0.0	0.0	49.5	92.0	0.0	0.0	27.0	50.5
	10"	0.0	0.0	0.0	51.0	0.0	0.0	0.0	28.0
300#	6"	0.0	61.0	108.5	151.0	0.0	34.0	59.5	82.5
	8"	0.0	0.0	59.5	110.0	0.0	0.0	32.5	60.5
	10"	0.0	0.0	0.0	61.0	0.0	0.0	0.0	33.5

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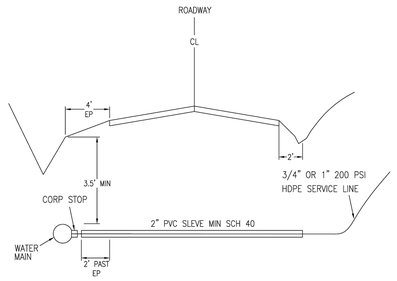
REDUCER

NOTE:

ALL PIPING SHALL BE INCASED IN 6" STONE DUST ON ALL SIDES.



WEST VIRGINIA AMERICAN WATER
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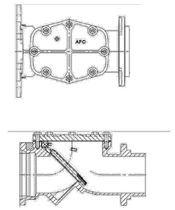
SERVICE LINE CROSSING OF STREETS
Not to Scale

W-4.01
REVISED:
April 2, 2024

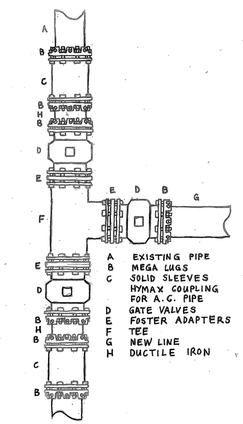


1. Series 2100 Check Valves meet or exceed requirements of ANSI/AWWA C508
2. 250 p.s.i.g. rated working pressure, 500 p.s.i.g test pressure.
3. End Flanges in accordance with ANSI/AWWA C110/A21.10 or ANSI B16.1, Class 125.
4. Body and bonnet coated with fusion bonded epoxy coating in accordance with ANSI/AWWA C550.
5. Valves to have manufacturer's name, pressure class, and year of manufacture cast on body or bonnet
6. 4" thru 16" valves are certified to ANSI/NSF Standard 61

WEST VIRGINIA AMERICAN WATER
Eastern Operating Area
150 East Burr Boulevard
Kearneysville, WV 25430

CHECK VALVE
Not to Scale

W 3.06
REVISED:
January 3, 2025



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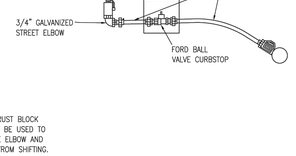
CUT-IN TEE CONNECTION



NOTES: THRUST BLOCK DETAIL MUST BE USED TO ANCHOR THE ELBOW AND STANDPIPE FROM SHIFTING.

WEST VIRGINIA AMERICAN WATER
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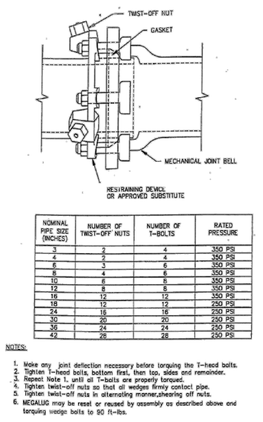
SAMPLING STATION
Not to Scale

W-5.05
REVISED:
April 2, 2024



NOMINAL PIPE SIZE (INCHES)	NUMBER OF TWIST-OFF NUTS	NUMBER OF T-BOLTS	RATED PRESSURE
3	2	4	350 PSI
4	2	4	350 PSI
6	3	6	350 PSI
8	4	6	350 PSI
10	6	8	350 PSI
12	8	8	350 PSI
16	12	12	350 PSI
18	12	12	250 PSI
24	16	16	250 PSI
30	20	20	250 PSI
36	24	24	250 PSI
42	28	28	350 PSI

NOTES:

1. Make any joint deflection necessary before torquing the T-head bolts.
2. Tighten T-head bolts, bottom first, then top, sides and remainder.
3. Repeat Note 1, until all T-bolts are properly torqued.
4. Tighten twist-off nuts so that all wedges firmly contact pipe.
5. Tighten twist-off nuts in alternating manner,shearing off nuts.
6. MEGALUG may be reset or reused by assembly as described above and torquing wedge bolts to 90 ft-lbs.

WEST VIRGINIA AMERICAN WATER
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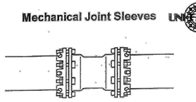
JOINT RESTRAINT DEVICE
Not to Scale

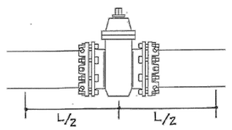
W 2.08
REVISED:
January 3, 2025

Mechanical Joint Sleeves — UNI-FLANGE



Mechanical joint sleeves and bolted, sleeve type pipe couplings should be restrained if they fall within the recommended restrained lengths for fittings. For example, if the recommended restrained length for a 90 degree elbow is 18 feet and a mechanical joint sleeve is within 18 feet of the elbow, it should be restrained.

In Line Valves — UNI-FLANGE



Closed in-line valves can act as dead-ends, particularly if the downstream pipe joints can telescope. This is the case when larger valves are used in PVC piping systems; large thrust forces can cause down stream pipe joints to telescope or "over-bell", possibly causing failure of the pipe or failure at the valve joint if it is not sufficiently restrained.

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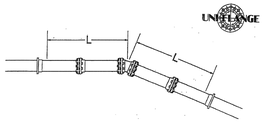
MECHANICAL JOINT SLEEVES AND VALVES
Not to Scale

W 2.07
REVISED:
January 3, 2025



Horizontal bends are the most common examples of changes in direction that require restraint. In addition to restraining each side of the bend, any joints that fall within the recommended restrained length (L) on each side of the bend should be restrained.

Test Pressure	Type Fitting	Restrained Length of Pipe - L - in Feet for Type & Size of Pipe							
		PVC				DIP			
		6"	8"	10"	12"	6"	8"	10"	12"
		Degree	Horizontal Bends			Horizontal Bends			
150#		90	16.5	21.5	26.0	33.0	14.5	19.0	22.5	26.5
		45	7.0	9.0	11.0	17.5	6.0	8.0	9.5	11.0
		22.5	3.5	4.5	5.5	8.5	3.0	4.0	4.5	5.5
		11.25	2.0	2.5	2.5	3.0	1.5	2.0	2.5	3.0
200#		90	25.0	32.0	38.5	44.5	19.5	26.5	30.0	35.5
		45	10.5	13.5	16.0	18.5	8.0	10.5	12.5	15.0
		22.5	5.0	6.5	8.0	9.0	4.0	5.0	6.0	7.0
		11.25	2.5	3.5	4.0	4.5	2.0	2.5	3.0	3.5
250#		90	31.0	40.0	48.0	56.0	24.0	31.5	37.5	44.0
		45	13.0	16.5	20.0	23.5	10.0	13.0	15.5	18.5
		22.5	6.5	8.0	10.0	11.5	5.0	6.5	7.5	9.0
		11.25	3.0	4.0	5.0	5.5	2.5	3.5	4.0	4.5
300#		90	37.0	47.5	57.5	67.0	29.0	38.0	45.0	53.0
		45	15.5	20.0	24.0	28.0	12.0	16.0	19.0	22.0
		22.5	7.5	9.5	11.5	13.5	6.0	7.5	9.0	10.5
		11.25	4.0	5.0	6.0	7.0	3.0	4.0	4.5	5.5

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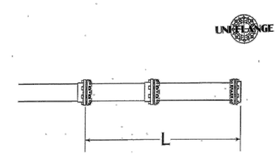
HORIZONTAL BENDS



In addition to restraining the cap / plug / valve, any joint that falls within the recommended length before the dead-end (L) should be restrained.

Design notes:

Test Pressure	Type Fitting	Restrained Length of Pipe - L - in Feet for Type & Size of Pipe							
		PVC				DIP			
		6"	8"	10"	12"	6"	8"	10"	12"
		Dead End				Dead End			
150#		58.0	73.0	88.5	104.0	39.5	49.5	48.5	57.0
200#		79.0	97.5	118.0	138.5	41.0	53.5	64.5	75.0
250#		94.0	121.5	147.0	173.0	51.0	67.0	80.5	95.0
300#		112.5	146.0	178.5	207.5	61.0	80.5	96.5	114.0

should be used for closed in line valves.

WEST VIRGINIA AMERICAN WATER
Eastern Operating Area
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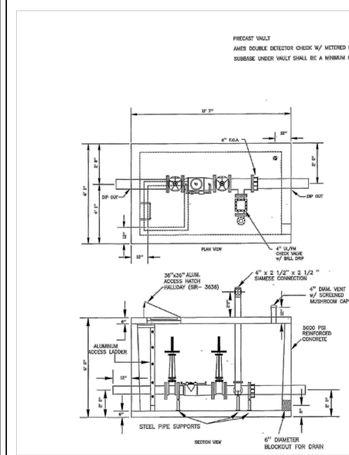
DEAD ENDS, CAPS, PLUGS, AND VALVES
Not to Scale

W 2.06
REVISED:
January 3, 2025



WEST VIRGINIA AMERICAN WATER
Eastern Operating Area
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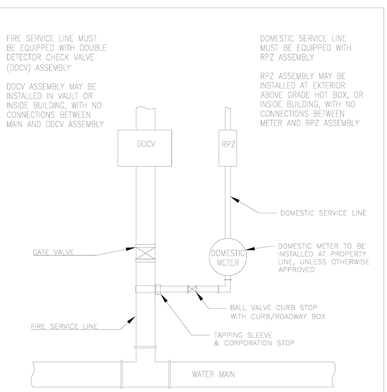
Kearneysville, WV 25430

FIRE LINE SERVICE INSTALLATION
Not to Scale

W 3.04
REVISED:
April 17, 2024



WEST VIRGINIA AMERICAN WATER
Eastern Operating Area
150 East Burr Boulevard
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FIRE LINE SERVICE INSTALLATION
Not to Scale

W 3.05
REVISED:
September 3, 2024

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
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M|R|A

H. ERICKSON JR. REGISTERED 18052 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER 01/28/25

WATERLINE DETAILS

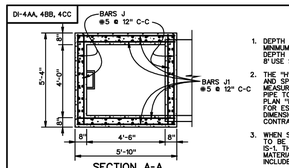
WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

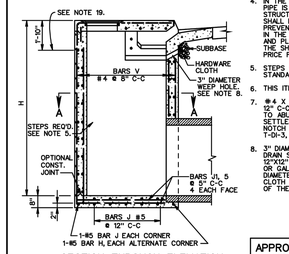
JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE

SHEET: 24 OF 45

DI-4AA, 4BB, 4CC



SECTION A-A



SECTION THROUGH ELEVATION

NOTES

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS. MINIMUM DEPTH (H) TO BE 8'-0" MAXIMUM DEPTH TO BE 20'-0". FOR INLETS LESS THAN 8' USE STANDARD DI-4A, 4B, AND 4C.
2. THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS.
3. WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
4. 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 CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
5. STEPS ARE TO BE PROVIDED. FOR DETAILS SEE STANDARD ST-1.
6. THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
7. #4 X 8" SMOOTH DOWELS AT APPROXIMATELY 12" C-C TO BE PLACED IN ALL AREAS ADJACENT TO ABUTTING CONCRETE TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2" X 4" NOTCH MAY BE PROVIDED. SEE STANDARD T-DI-3, 4 FOR ALTERNATE DESIGN.
8. 3" DIAMETER WEEP HOLE TO BE LOCATED TO DRAIN SUBBASE MATERIAL. WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.037", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
9. ALL REINFORCING STEEL SHALL HAVE A MIN. COVER OF 2".
10. ALL REINFORCING STEEL TO BE CUT CLEAR OF ALL OPENINGS BY 2".
11. CAST-IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
12. LENGTH OF SLOT (L) WILL, IN EVERY CASE, BE SHOWN ON PLANS.
13. IF INLET IS CONSTRUCTED IN MEDIAN CURB OR WITH INTEGRAL CURB, GUTTER IS TO BE OMITTED (SEE DETAIL WITH STANDARD DI-4A, 4B, 4C).
14. IF OPTIONAL CONSTRUCTION JOINT IS USED IT IS TO BE KEYED. ALL SPLICES IN BARS V TO BE A MINIMUM OF 40 DIAMETERS (20").
15. FOR PLAN VIEW OF INLET SEE STANDARD DI-4A, 4B, 4C.
16. QUANTITIES SHOWN ARE FOR MINIMUM INLETS OF EACH TYPE. FOR INLETS OF GREATER DEPTH (H) OR LONGER SLOT (L) INCREMENTS SHOWN PER FOOT MUST BE ADDED. THE AMOUNT OF CONCRETE AND STEEL DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES.
17. FOR NUMBER OF BARS A-H REQUIRED AND LENGTH SEE TABLE OF QUANTITIES FOR STANDARD DI-4A, 4B, 4C.
18. FOR DESCRIPTION AND LOCATION OF DIMENSION L SEE SHEET STANDARD DI-4A, 4B, 4C.
19. FOR ALL DETAILS, DIMENSIONS AND REINFORCING STEEL ABOVE THIS LINE, SEE STANDARD DI-4A, 4B, AND 4C.
20. PROVIDE SAFETY SLABS WHEN SPECIFIED ON THE PLANS.

SCHEDULE OF REINFORCING STEEL
SEE NOTE 17.

BARS J		BARS J1		BARS V	
NO. REQUIRED	LENGTH	NO. REQUIRED	LENGTH	NO. REQUIRED	LENGTH
4X(H + 2)	5'-0"	4H+6	5'-6"	60	H-1'-4"

APPROXIMATE QUANTITIES FOR MINIMUM 8' DEPTH INLET

TYPE	DIMENSION L SEE NOTE 18	REINFORCING STEEL	CONCRETE
DI-	LIN. FT.	LBS.	CU. YDS.
4AA	4'-0"	798	5.14
4BB	6'-0"	856	5.56
4CC	8'-0"	914	5.97

INCREMENTS TO BE ADDED FOR EACH ADDITIONAL FOOT OF DEPTH (H) AND/OR SLOT LENGTH (L)

H		L	
CONCRETE CU. YDS.	STEEL LBS.	CONCRETE CU. YDS.	STEEL LBS.
0.479	84	-	-
0.479	84	0.22	23.5
0.479	84	0.22	23.5

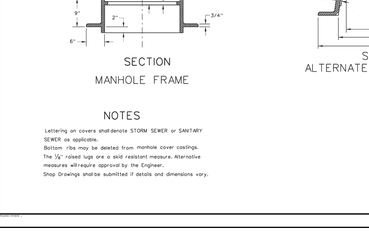
VDOT
ROAD AND BRIDGE STANDARDS

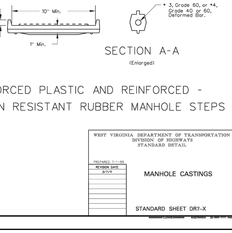
SHEET 1 OF 1 | REVISION DATE
104.17

STANDARD CURB DROP INLET
36" - 48" PIPE: DEPTH (H) 8' TO 20'
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
233
302

2016 ROAD & BRIDGE STANDARDS





NOTES

Type E inlet detailed herein is for use on a grade. It is to be used in a sag (see sketch below) only where ponding occurs without centerline of pipe and length of opening specified.

The covering for reinforcing steel shall be two inches, measured from the surface of the concrete to the face of the bar, unless otherwise shown. All reinforcing steel shall be epoxy-coated and meet the requirements of Section 1022 of the Specifications.

Optional construction joints labeled "C" may be keyed or doweled as per the typical details shown herein or as approved by the Engineer.

If Type E inlet is to be constructed along with a sidewalk, the sidewalk shall be depressed with the top slab on the inlet. The sidewalk shall be reinforced with Type B Fabric placed 2" from bottom of sidewalk and extended into the top slab at the inlet a minimum distance of 5'. Cost of Type B Fabric shall be included in the unit price bid for Concrete Sidewalk.

This inlet shall not be placed in a pedestrian cross walk.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-11-95 | REVISION DATE

TYPE E INLET

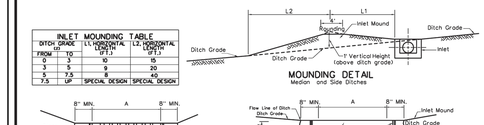
STANDARD SHEET DRI-E

CONCRETE AND REINFORCING STEEL QUANTITIES

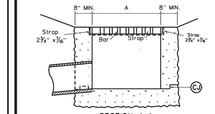
"L" Feet	Concrete C.Y.=	Reinforcing Steel Lbs.	A Bars (Bent) No.	Size	Length	B Bars (Straight) No.	Size	Length	C Bars (Straight) No.	Size	Length	D Bars (Straight) No.	Size	Length	E Bars (Straight) No.	Size	Length	F Bars (Straight) No.	Size	Length	G Bars (Straight) No.	Size	Length	G Bar (Bent) No.	Size	Length	H Bars (Straight) No.	Size	Length	K Bars (Bent) No.	Size	Length
8	2.59	189	4	#5	2'-0" to 3'-4"	2	#5	3'-8"	2	#5	2'-6"	1	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	15	#5	2'-3"
8	3.07	250	9	#5	2'-0" to 3'-4"	2	#5	8'-11"	1	#5	8'-11"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	13	#5	2'-3"
10	3.57	308	13	#5	2'-0" to 3'-4"	2	#5	7'-9"	1	#5	11'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	15	#5	2'-3"
12	4.09	369	17	#5	2'-0" to 3'-4"	2	#5	9'-9"	1	#5	13'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	18	#5	2'-3"
14	4.62	444	21	#5	2'-0" to 3'-4"	2	#5	11'-0"	1	#5	15'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	21	#5	2'-3"
16	5.17	506	25	#5	2'-0" to 3'-4"	2	#5	12'-8"	1	#5	17'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	23	#5	2'-3"
18	5.74	570	29	#5	2'-0" to 3'-4"	2	#5	13'-6"	1	#5	19'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	26	#5	2'-3"
20	6.19	636	33	#5	2'-0" to 3'-4"	2	#5	14'-5"	1	#5	21'-1"	4	#5	2'-6"	4	#5	2'-6"	4	#5	2'-6"	1	#5	8'-0"	2	#7	6'-5"	2	#6	3'-4"	29	#5	2'-3"

* The quantities shown above are for an H of five feet. If deeper inlets are required the quantities must be adjusted accordingly.

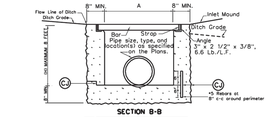
The above table to be used for estimating purposes only.



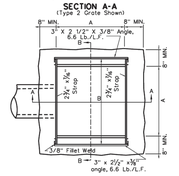
MOUNDING DETAIL
Median and Side Ditches



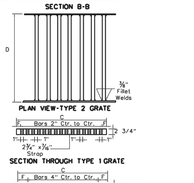
SECTION A-A
(Type 2 Grate Shown)



SECTION B-B



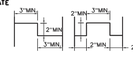
PLAN



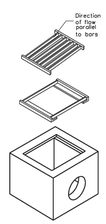
DIMENSIONS						TYPE 2 GRATE FRAME			TYPE 1 GRATE		
Pipe Size	A	B	C	D	W(Min)	F	Bars	WT.	F	Bars	WT.
18"	2'-0"	3'-2"	2'-7 3/4"	3'-1 3/4"	4	2'-0"	3	3/8"	7	223	62
21"	2'-0"	3'-2"	2'-7 3/4"	3'-1 3/4"	4	2'-0"	3	3/8"	7	223	62
24"	2'-0"	3'-2"	2'-7 3/4"	3'-1 3/4"	4	2'-0"	3	3/8"	7	223	62
27"	3'-0"	3'-6"	2'-11 3/4"	3'-5 3/4"	4	2'-0"	3	3/8"	8	279	69
30"	3'-0"	4'-0"	3'-5 3/4"	3'-11 3/4"	4	2'-0"	3	3/8"	9	351	80
33"	3'-0"	4'-3"	3'-8 3/4"	4'-2 3/4"	4	2'-0"	3	3/8"	10	418	85
36"	4'-0"	4'-6"	4'-1 3/4"	4'-5 3/4"	4	2'-0"	3	3/8"	11	488	90
42"	5'-0"	5'-3"	4'-10 3/4"	5'-3 3/4"	4	2'-0"	3	3/8"	12	583	101
48"	5'-0"	5'-6"	4'-11 3/4"	5'-3 3/4"	4	2'-0"	3	3/8"	14	748	112

Table Note: Grate and frame weights are for information only and will increase if larger straps and bars are used.

The following substitutions in dimensions are acceptable for fabricating the grate and frame:
Strap Thickness: 1/2" | Strap Depth: 3" | Bar Depth: 3"



CONSTRUCTION JOINT DETAILS



EXPLODED DETAIL

NOTES

The finalinstalled top surface of inlet and grate shallbe flush with adjacent finished surfaces such as pavement, gutters, curbs, and sidewalks. Top of grate elevation, if shown on the plans, is for information only.

Construction may be cast-in place, precast in one or multiple sections, or any combination of cast-in-place and precast.

Type 2 Grate shallbe used at all locations unless otherwise specified on the Plans. Type 1 Urban Grates shallbe used only at specially designated locations as shown on the plans.

The Contractor, at his option, may omit use of the frame by forming a ledge in the concrete.

Special care shallbe exercised in forming the 2" wide concrete ledge to provide a smooth, even surface for supporting the grates if the shallow frame is not used. no projections shallexist on the bearing surfaces of the ledge or the grates, and the grates shallseat on the ledge without rocking.

The Mounding Detailas shown is not required when an inlet is placed in a sag.

Optional construction joints labeled "CJ" may be roughened concrete, keyed or doweled as per the typicaldetails shown herein or as approved by the Engineer. Non shrink grout meeting the requirements of subsection 715.5 of the specifications may be used to a depth of ½" for leveling between precast sections. Thicker depths will be allowed as per the manufacturer's recommendations.

This inlet is to be installed in roadside or median ditches only. It is not to be placed adjacent to pavement or in the gutter pan of combination curb and gutter.

The minimum distance from the top of any pipe opening to any construction joint above the opening shallbe four (4) inches.

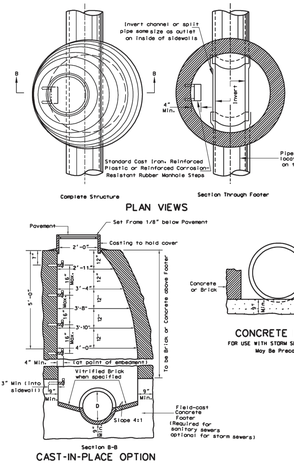
The number and location of pipe openings shallbe as shown in the plans. The contractor at no additionalcost, shallbe responsible for any temporary bracing required to transport precast inlet sections due to multiple openings.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

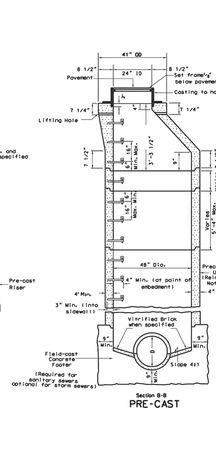
PREPARED 7-11-95 | REVISION DATE

TYPE G INLET

STANDARD SHEET DRI-G



PLAN VIEWS



NOTES

Type A Manholes, when specified on the Plans, may be constructed in either method (cast-in-place or pre-cast option) as shown herein.

Steps, frames, and covers shall be as shown on Standard Sheet DRI-4.

"Keyed" or "doweled" type construction joints, acceptable to the Engineer, may be used in the construction of concrete manholes.

If the cast-in-place manhole is over twelve feet (12') in depth, the sidewalls below that depth will be double thickness.

Pipe at elevations other than shown may be joined to the manhole by cutting a hole the size of the connecting pipe in the manhole. Inserting the pipe the thickness of the manhole shell and closing all openings around the connecting pipe with joint mortar.

Drawing shows pipe entering and leaving manhole in a straight line. However, the pipes may enter or leave at an angle or place as called for or shown on the Plans.

Minimum height of bench wall above flowline of pipe is 25% of the diameter of the pipes.

The use of brick for manhole construction will not be allowed when a manhole is located in the roadway.

The following additional notes are applicable for pre-cast manholes:

Manhole steps shall be placed into plastic concrete wall during manufacture or mortared into holes after the concrete has set.

Sidewall sections may be used in any combination to produce a manhole of desired depth, except the tapered top section shall be retained as shown.

The tapered top section shall be manufactured and meet the same requirements as the manhole's sidewalls, but shall conform to the dimensions detailed herein.

Lifting holes in the tapered top section and the circumferential notches in the manhole cover are for handling purposes only.

The pre-cast sidewall units shall be set in joint mortar or sealed with O-ring gaskets.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-11-95 | REVISION DATE

TYPE A MANHOLE

STANDARD SHEET DR7-A

NOTES

Lettering on covers shalldenote STORM SEWER or SANITARY SEWER as applicable.
Bottom ribs may be deleted from manhole cover castings.
The ½" raised lugs are a skid resistant measure. Alternative measures will require approval by the Engineer.
Shop Drawings shallbe submitted if details and dimensions vary.

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANDARD DETAIL

PREPARED 7-11-95 | REVISION DATE

MANHOLE CASTINGS

STANDARD SHEET DR7-X

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

MISCELLANEOUS DETAILS

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 25 OF 45

EROSION & SEDIMENT CONTROL LEGEND

TITLE	KEY	SYMBOL	UNIT
TEMPORARY STONE CONSTRUCTION ENTRANCE	CE		EA.
SILT FENCE	SF	SF	L.F.
SUPER SILT FENCE	SSF	SSF	L.F.
STORM DRAIN INLET PROTECTION	IP		EA.
CULVERT INLET PROTECTION	CIP		EA.
TEMPORARY DIVERSION DIKE	DD		L.F.
DIVERSION CHANNEL	DV		L.F.
RIGHT-OF-WAY DIVERSION	RWD		L.F.
SEDIMENT TRAP	ST		EA.
SEDIMENT BASIN	SB		EA.
OUTLET PROTECTION	OP		EA.
RIPRAP	RR		LF
EX. SEDIMENT CONTROL	EX.		

NORFOLK SOUTHERN RAILROAD

NORTH

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-013
DB. 1128 PG. 403

WESCOTT DRIVE
60' ROW
DB: 973 PG: 715

DRAINAGE AREA
0.34 AC TO SSF

DRAINAGE AREA
1.43 AC TO ST #1

DRAINAGE AREA
11.21 AC TO SB #1

DRAINAGE AREA
2.50 AC TO ST #2

SB #1

66" RISER

42" CMP

RIPRAP
12L X
27W X
6' D50

ST #1

ST #2

SSF

DD

CE

IP

TOP:511.26
IN: 501.36
OUT: 501.61

TOP:512.45
IN: 503.2
OUT: 503

TOP:514.60
IN: 504.55
OUT: 504.30

FLOODPLAIN ZONE AE

APPROXIMATE LOCATION OF CROSS COUNTRY WATERLINE

EX. 60' ACCESS EASEMENT
(DB 457 PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

EX. HEADWALL

EX. 14" CMP

EX. 21" CMP

EX FH

EX. 15" SSB 35.2 LF

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

NORTH MILDRED STREET
ROUTE 13
40' ROW

50 0 50 100 150
Scale 1" = 50'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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PROFESSIONAL ENGINEER
01/28/25

EROSION & SEDIMENT CONTROL PHASE I

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	26 OF 45

EROSION & SEDIMENT CONTROL LEGEND

TITLE	KEY	SYMBOL	UNIT
TEMPORARY STONE CONSTRUCTION ENTRANCE	CE		EA.
SILT FENCE	SF	SF	L.F.
SUPER SILT FENCE	SSF	SSF	L.F.
STORM DRAIN INLET PROTECTION	IP		EA.
CULVERT INLET PROTECTION	CIP		EA.
TEMPORARY DIVERSION DIKE	DD		L.F.
DIVERSION CHANNEL	DV		L.F.
RIGHT-OF-WAY DIVERSION	RWD		L.F.
SEDIMENT TRAP	ST		EA.
SEDIMENT BASIN	SB		EA.
OUTLET PROTECTION	OP		EA.
RIPRAP	RR		LF
EX. SEDIMENT CONTROL	EX.		

NORFOLK SOUTHERN RAILROAD

NORTH

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-013
DB. 1128 PG. 403

WESCOTT DRIVE
60' ROW
DB: 973 PG: 715

DRAINAGE AREA
0.34 AC TO SSF

DRAINAGE AREA
1.43 AC TO ST #1

DRAINAGE AREA
11.62 AC TO SB #1

DRAINAGE AREA
1.68 AC TO ST #2

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
SB. 1066 PG. 272

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

NORTH MILDRED STREET
ROUTE 13
40' ROW

TOP:511.26
IN: 501.36
OUT: 501.61

TOP:512.45
IN: 503.2
OUT: 503

TOP:514.60
IN: 504.55
OUT: 504.30

FLOODPLAIN ZONE AE

APPROXIMATE LOCATION OF 8" DIA. PVC WATERLINE

EX. 60' ACCESS EASEMENT
(DB PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

EX. GATE
(TO BE REMOVED)

EX. HEADWALL

EX. 14" CMP

EX. 21" CMP

EX FH

RISER

S 18° 40' 59" W
190.36'

N 72° 07' 11" W
290.83'

177.56'
N 21° 19' 47" E

328.89'
N 60° 30' 33" W

705.26'
N 22° 10' 55" E

50 0 50 100 150
Scale 1" = 50'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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01/28/25

EROSION & SEDIMENT CONTROL PHASE 1A

WEST BRANCH APARTMENTS

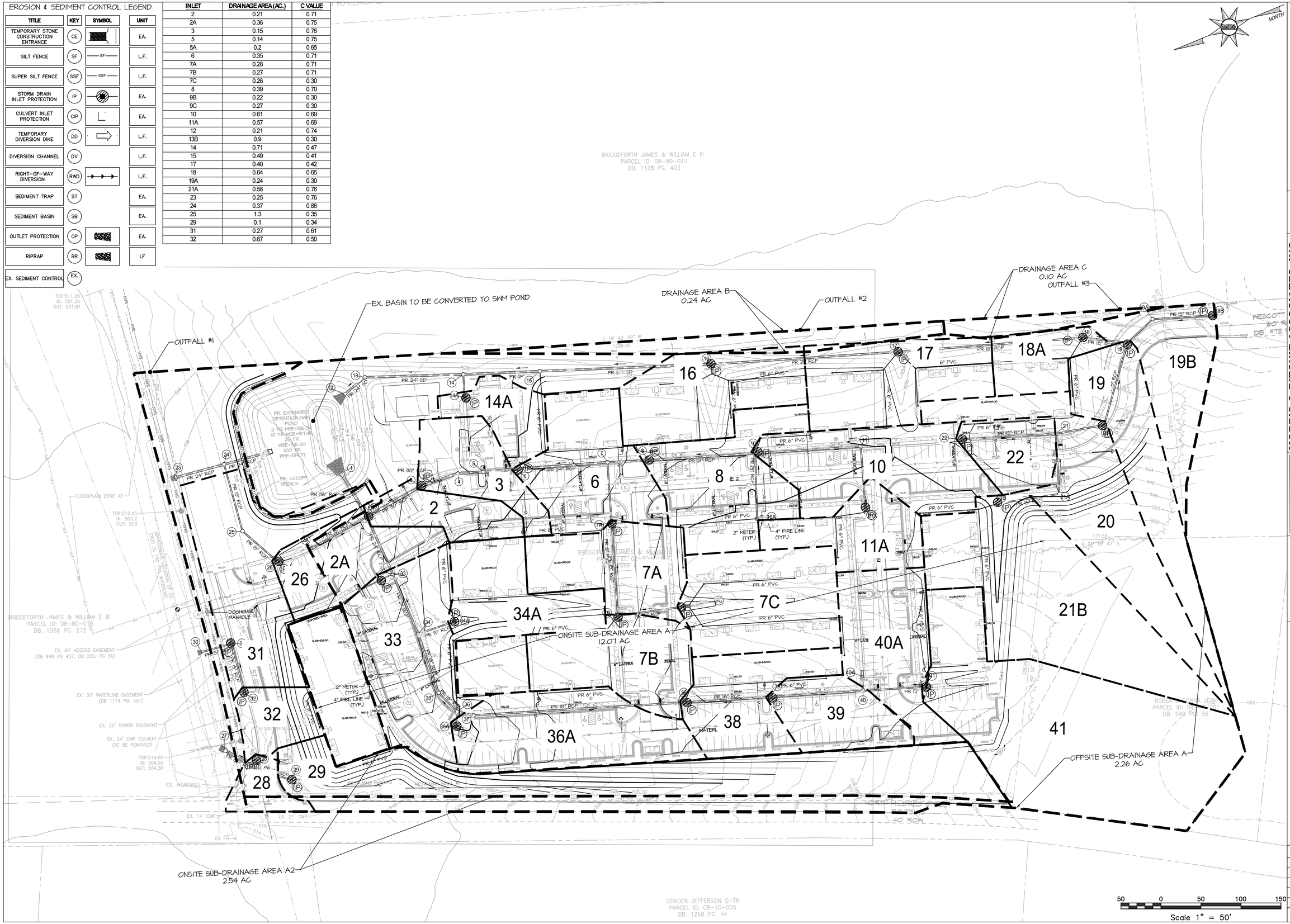
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	27 OF 45

EROSION & SEDIMENT CONTROL LEGEND

TITLE	KEY	SYMBOL	UNIT
TEMPORARY STONE CONSTRUCTION ENTRANCE	CE		EA.
SILT FENCE	SF	SF	L.F.
SUPER SILT FENCE	SSF	SSF	L.F.
STORM DRAIN INLET PROTECTION	IP		EA.
CULVERT INLET PROTECTION	CIP		EA.
TEMPORARY DIVERSION DIKE	DD		L.F.
DIVERSION CHANNEL	DV		L.F.
RIGHT-OF-WAY DIVERSION	RWD		L.F.
SEDIMENT TRAP	ST		EA.
SEDIMENT BASIN	SB		EA.
OUTLET PROTECTION	OP		EA.
RIPRAP	RR		LF
EX. SEDIMENT CONTROL	EX.		

INLET	DRAINAGE AREA (AC.)	C VALUE
2	0.21	0.71
2A	0.36	0.75
3	0.15	0.76
5	0.14	0.75
5A	0.2	0.65
6	0.35	0.71
7A	0.28	0.71
7B	0.27	0.71
7C	0.26	0.30
8	0.39	0.70
9B	0.22	0.30
9C	0.27	0.30
10	0.61	0.69
11A	0.57	0.69
12	0.21	0.74
13B	0.9	0.30
14	0.71	0.47
15	0.49	0.41
17	0.40	0.42
18	0.64	0.65
19A	0.24	0.30
21A	0.58	0.76
23	0.25	0.76
24	0.37	0.86
25	1.3	0.35
29	0.1	0.34
31	0.27	0.61
32	0.67	0.50



REVISIONS

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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01/28/25

EROSION & SEDIMENT CONTROL PHASE II

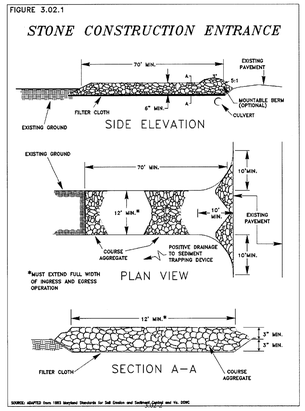
WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

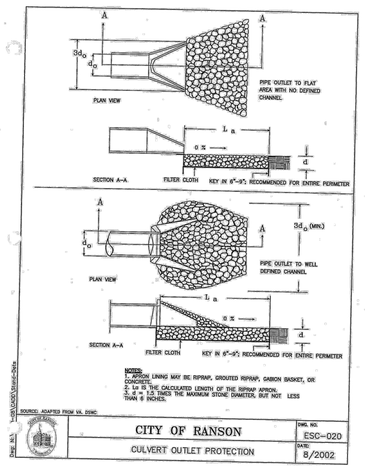
JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	28 OF 45

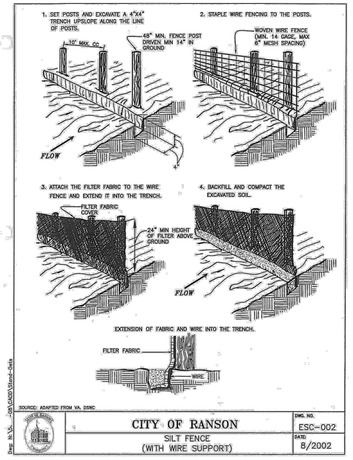
FIGURE 3.02.1

STONE CONSTRUCTION ENTRANCE



SOURCE: adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control and Va. DSWC





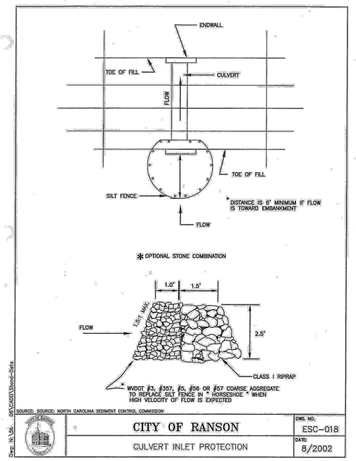
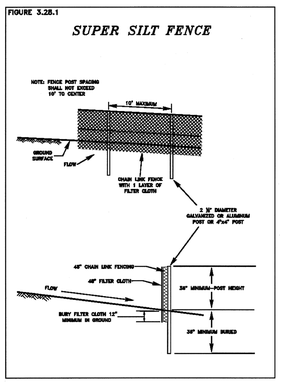


FIGURE 3.28.1

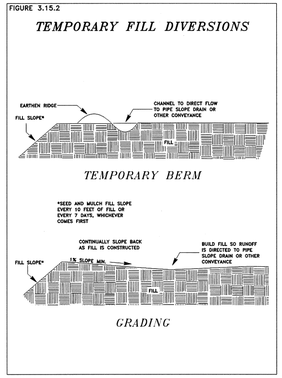
SUPER SILT FENCE



3.28-3

FIGURE 3.15.2

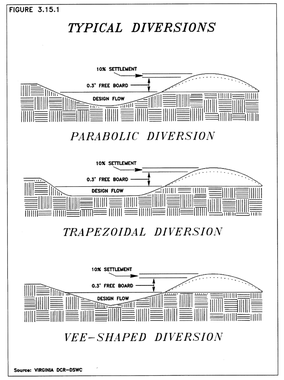
TEMPORARY FILL DIVERSIONS



3.15-9

FIGURE 3.15.1

TYPICAL DIVERSIONS

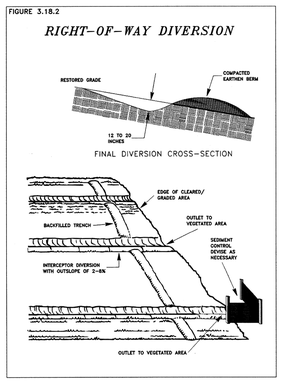


Source: VIRGINIA DCR-DSWC

3.15-8

FIGURE 3.18.2

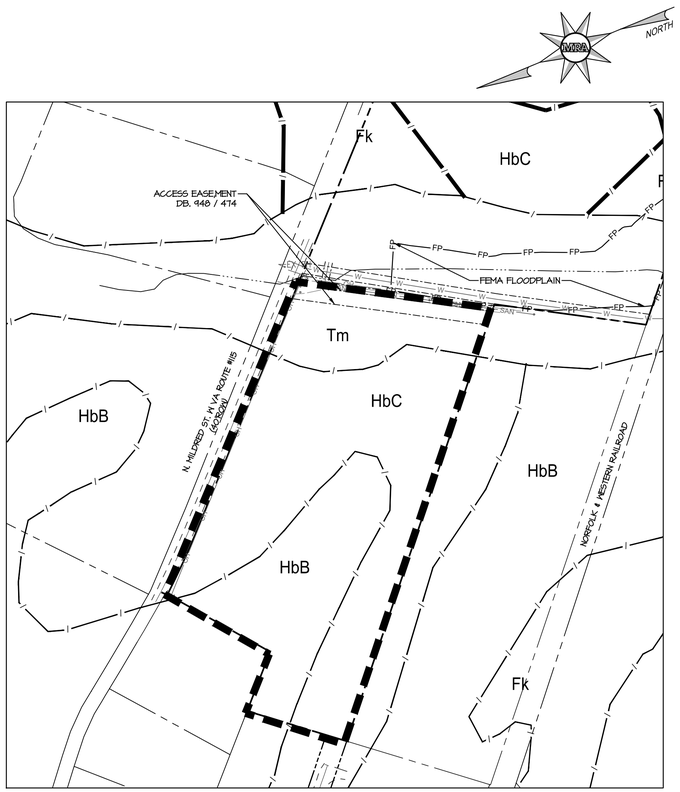
RIGHT-OF-WAY DIVERSION



3.18-4

DIVERSION DITCH COMPUTATIONS

SECTION	DRAINAGE AREA (AC)	C	I10	Q10	DEPTH (10YR)	SLOPE	N	I2	Q2	VELOCITY (2 YR)
A-A	3.30	0.3	6.53	6.46	0.53	1.0%	0.025	4.72	4.67	2.75
B-B	5.95	0.3	6.53	11.66	0.72	1.0%	0.025	4.72	8.43	3.28
C-C	1.24	0.35	6.53	2.83	0.34	2.8%	0.025	4.72	2.05	3.14



SCALE: 1" = 200'

KEY	SOIL TYPE	AREA (AC)	PERCENT
HbB	HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES	4.05	27.1%
HbC	HAGERSTOWN SILT LOAM, 8 TO 15 PERCENT SLOPES	8.45	56.7%
Tm	TOMS SILT LOAM	2.41	16.2%

SOURCE: USDA SOIL SURVEY

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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REGISTERED
16062
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

EROSION & SEDIMENT CONTROL DETAILS

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	29 OF 45

PROJECT **Bridgeforth Property**
BASIN **1** **LOCATION**

TOTAL AREA DRAINING TO BASIN: 12.1 acres

BASIN VOLUME DESIGN

WET STORAGE:

1 MINIMUM REQUIRED VOLUME = 67 cu. yds. x TOTAL DRAINAGE AREA (ACRES)
67 cu. yds. X 12.1 acres = 809 cu. yds.

2 AVAILABLE BASIN VOLUME = 909.0 cu. yds. AT ELEVATION 516.00
(FROM STORAGE - ELEVATION CURVE)

3 EXCAVATE 909.0 cu. yds. To obtain required volume
(ELEVATION CORRESPONDING TO REQUIRED VOLUME = INVERT OF DEWATERING ORIFICE)

4 AVAILABLE VOLUME BEFORE CLEANOUT REQUIRED.
33 cu. yds. X 12.07 Acres = 398 cu. yds.

5 ELEVATION CORRESPONDING TO CLEANOUT LEVEL = 515.00
(FROM STORAGE - ELEVATION CURVE)

6 DISTANCE FROM INVERT OF THE DEWATERING ORIFICE TO CLEANOUT LEVEL = 1.00 Ft.
(MIN. = 1.0 Ft.)

DRY STORAGE:

7 MINIMUM REQUIRED VOLUME = 67 cu. yds. x TOTAL DRAINAGE AREA (ACRES).
67 cu. yds. X 12.1 Acres = 809 cu. yds.

8 TOTAL AVAILABLE BASIN VOLUME AT CREST OF RISER = 1966.4 cu. yds.
(FROM STORAGE - ELEVATION CURVE) AT ELEVATION 518.00
S= 21,835 cu. ft.
Q= 0.13 cfs 48 hour drawdown
h (avg)= 0.25 Ft.
A= 0.0525 SF
d= 0.26 Ft.

9 DIAMETER OF DEWATERING ORIFICE = 3.0 IN.

10 DIAMETER OF OF FLEXIBLE TUBING = 5.0 IN.
(DIAMETER OF DEWATERING ORIFICE PLUS 2 INCHES).

PRELIMINARY DESIGN ELEVATIONS

11 CREST OF RISER = 518.00
TOP OF DAM = 522.00
DESIGN HIGH WATER = 519.00
UPSTREAM TOE OF DAM = 513.40

12 LENGTH OF FLOW (L) = 150 = 1.9
EFFECTIVE WIDTH (W_e) = 79.2
IF > 2, BAFFLES ARE NOT REQUIRED
IF < 2, BAFFLES ARE REQUIRED X

RUNOFF

		AREA		"C"		I			
13	Q_2 =	**12.1**	X	**0.60**	X	**4.72**	=	**34.18**	cfs
14	Q_{25} =	**12.1**	X	**0.60**	X	**7.55**	=	**54.68**	cfs

(FROM CHAPTER 5)

PRINCIPAL SPILLWAY DESIGN

15 WITH EMERGENCY SPILLWAY, REQUIRED SPILLWAY CAPACITY $Q_p = Q_2$ = **34.18** cfs
(RISER & BARREL)
WITHOUT EMERGENCY SPILLWAY, REQUIRED SPILLWAY CAPACITY $Q_p = Q_{25}$ = **54.68** cfs
(RISER & BARREL)

16 WITH EMERGENCY SPILLWAY:
ASSUMED AVAILABLE HEAD (h) = ft. (USING Q_2)
h = CREST OF EMERGENCY SPILLWAY ELEVATION - CREST OF RISER ELEVATION
WITHOUT EMERGENCY SPILLWAY:
ASSUMED AVAILABLE HEAD (h) = **1.00** ft. (USING Q_{25})
h = DESIGN HIGH WATER ELEVATION - CREST OF RISER ELEVATION

17 RISER DIAMETER (D_r) = 66 in. ACTUAL HEAD (h) = 1.0 ft.
(FROM PLATE 3.14-8) **NUMBER OF RISERS=** **1**
NOTE: AVOID ORIFICE FLOW CONDITIONS. **Q / RISER=** 54.68 cfs

18 BARREL LENGTH (l) = 81 ft.
HEAD (H) ON BARREL THROUGH EMBANKMENT = 4.10 ft.
(FROM PLATE 3.14-7) H = Design High Water - Center of barrel elevation

19 BARREL DIAMETER = 36 in. CMP
(PLATE 3.14-A [CORRUGATED PIPE])

20 TRASH RACK ANTI-VORTEX DEVICE
DIAMETER = 72 INCHES
HEIGHT = 21 INCHES
(FROM TABLE 3.14-D)

EMERGENCY SPILLWAY DESIGN

21 REQUIRED SPILLWAY CAPACITY $Q_e = Q_{25} - Q_p$ = N/A cfs

22 BOTTOM WIDTH (b) = 16.00 ft.
THE SLOPE OF THE EXIT CHANNEL (s) = 3.81 ft./foot
AND THE MINIMUM LENGTH OF THE EXIT CHANNEL (X) = 33.00 ft.
(FROM TABLE 3.14-C).

ANTI-SEEP COLLAR DESIGN

23 DEPTH OF WATER AT PRINCIPAL SPILLWAY CREST (Y) = 4.60 ft.
SLOPE OF UPSTREAM FACE OF EMBANKMENT (Z) = 3 :1
SLOPE OF PRINCIPAL SPILLWAY BARREL (S) = -0.0111 ft./foot
LENGTH OF BARREL IN SATURATED ZONED (Ls) = 30.83 ft.

24 NUMBER OF COLLARS REQUIRED = 1
DIMENSIONS = 4.5'X4.5'
(FROM PLATE 3.14-12)

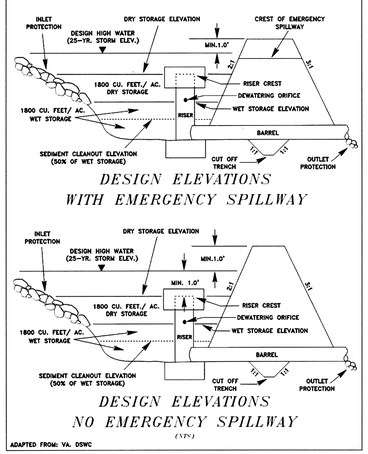
FINAL DESIGN ELEVATIONS

25 TOP OF DAM = 522.00
MIN. TOP of DAM WIDTH 6 ft.
EMBANKMENT SIDE SLOPE (H:V) 3 : 1
DESIGN HIGH WATER = 519.01
EMERGENCY SPILLWAY CREST = N/A
PRINCIPAL SPILLWAY CREST = 518.00
DEWATERING ORIFICE INVERT = 518.00
CLEANOUT ELEVATION = 515.00
ELEVATION OF UPSTREAM TOE OF DAM
OR EXCAVATED BOTTOM OF "WET STORAGE
AREA" (IF EXCAVATION WAS PERFORMED) = 513.40

SEDIMENT BASIN DESIGN	
	1
DA	12.07
Wet Storage Required (cubic yards)	809
Wet Storage Provided (cubic yards)	909.00
Dry Storage Required (cubic yards)	809
Dry Storage Provided (cubic yards)	1057.37
Cleanout Elevation	515.00
Embankment Elevation	522.00
Bottom Elevation	513.40
Design High Water Elevation	519.00
Principal Spillway Elevation	518.00
Dewatering Orifice Invert Elev.	516.00
Dewatering Orifice Diameter	3.00
Diameter of Flexible Tubing	5.00
Riser Diameter (inches)	66.00
Barrel Length (feet)	81.00
Barrel Diameter (inches)	36.00
Slope of Barrel (%)	1.11
Number of Collars	1.00
Collar Dimensions	4.5'X4.5'

FIGURE 3.30.2

SEDIMENT BASIN



DESIGN ELEVATIONS WITH EMERGENCY SPILLWAY

DESIGN ELEVATIONS NO EMERGENCY SPILLWAY

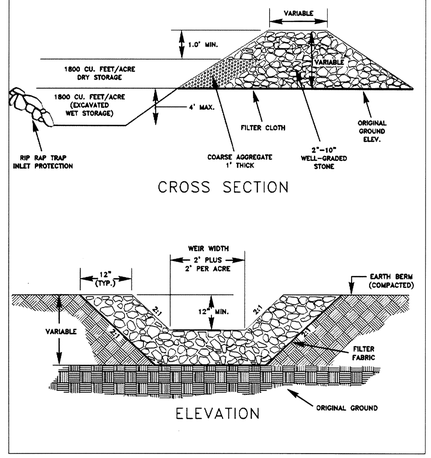
(YES)

ADAPTED FROM: VA. DSWC

SEDIMENT TRAP DESIGN		
	#1	#2
DA	1.43	2.33
Wet Storage Required 67 cy/ac (cubic yards)	96	156
Wet Storage Provided (cubic yards)	130	267
Wet Storage Elevation	530.00	513.75
Dry Storage Required67 cy/ac (cubic yards)	96	156
Dry Storage Provided (cubic yards)	108	280
Dry Storage Elevation	531.00	515.00
Weir Width (ft)	9	14
Weir Elevation	531.00	515.00
Bottom Elevation	528.00	512.00
Cleanout Elevation	529.00	512.75
Embankment Elevation	532.00	516.00
Storage Depth (ft)	3.00	3.00

FIGURE 3.29.1

ROCK OUTLET SEDIMENT TRAP



CROSS SECTION

ELEVATION

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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ERICKSON REGISTERED 16062 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER 01/28/25

EROSION & SEDIMENT CONTROL DETAILS II

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 30 OF 45

SITE SPECIFIC EROSION & SEDIMENT CONTROL NOTES

PROJECT DESCRIPTION:
H&W CONSTRUCTION COMPANY IS PROPOSING TO DEVELOP A RESIDENTIAL APARTMENT COMPLEX WITH ACCESS ROADS, UTILITIES AND DRAINAGE IMPROVEMENTS. ACCESS TO THE SITE WILL BE FROM NORTH MILDRED STREET AND WESCOTT DRIVE AND INCLUDES THE CONSTRUCTION OF ROADS, UTILITIES, GRADING, LANDSCAPING, AND OTHER IMPROVEMENTS ASSOCIATED WITH RESIDENTIAL DEVELOPMENTS. CONSTRUCTION TRAFFIC WILL ACCESS THE SITE FROM NORTH MILDRED STREET. THE LIMIT OF DISTURBANCE IS APPROXIMATELY 15.09 ACRES.

EXISTING SITE CONDITIONS:
THE SUBJECT AREA OF THE SITE DRAINS NORTH INTO THE FLOODPLAIN. THE EAST PORTION OF THE SITE DRAINS INTO VACANT ADJACENT PROPERTY. THE PROPOSED DEVELOPMENT WILL DRAIN INTO PROPOSED STORMWATER MANAGEMENT POND(S). THE SIZE, NUMBER, AND LOCATION OF THE PONDS WILL BE DETERMINED WITH FINAL ENGINEERING. SOME PORTIONS OF THE SITE ARE UNCONTROLLED AND WILL BE ACCOUNTED FOR IN THE DESIGN OF THE PROPOSED STORM WATER MANAGEMENT POND(S). IMPLEMENTATION OF PROPOSED STORM WATER MANAGEMENT POND(S) WILL REDUCE THE POST-DEVELOPED DRAINAGE TO BELOW PRE-DEVELOPED CONDITIONS.

ADJACENT AREAS:
THE SITE IS APPROXIMATELY 55.80 ACRES WITH NORTH MILDRED STREET TO THE WEST, THE MARKETPLACE AT POTOMAC TOWNE CENTER TO THE EAST, AND 16TH STREET TO THE SOUTH.

CRITICAL AREAS:
THERE ARE NO CRITICAL AREAS WITHIN THE PROPOSED DISTURBANCE.

SOILS:
Fk– FUNKSTOWN SILT LOAM, 0 TO 3 PERCENT SLOPES, HYDROLOGIC GROUP C
HbC– HAGERSTOWN SILT LOAM, 8 TO 15 PERCENT SLOPES, HYDROLOGIC GROUP B
HbB– HAGERSTOWN SILT LOAM, 3 TO 8 PERCENT SLOPES, HYDROLOGIC GROUP B
Tm–TOMS SILT LOAM, 3 TO 8 PERCENT SLOPES, HYDROLOGIC GROUP B

ESC MEASURES:
THE FOLLOWING SHALL BE INSTALLED IN ACCORDANCE WITH THE WEST VIRGINIA EROSION AND SEDIMENT CONTROL MANUAL:
1. TEMPORARY STONE CONSTRUCTION ENTRANCE
2. SILT FENCE
3. SUPER SILT FENCE
4. INLET PROTECTION
5. CULVERT INLET PROTECTION
6. DIVERSION DIKE
7. TEMPORARY CHANNEL DIVERSION
8. RIGHT OF WAY DIVERSION
9. SEDIMENT BASIN
10. OUTLET PROTECTION
11. RIPRAP
12. TEMPORARY SEEDING
13. PERMANENT SEEDING

CONSTRUCTION SEQUENCING:
PHASE I
1. HOLD PRE-CONSTRUCTION MEETING. CONTACT CITY STAFF A MINIMUM OF 5 DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. LOCATE ALL UTILITIES. CONTACT WEST VIRGINIA MISS UTILITY AT 800-245-4848, AT LEAST THREE (3) WORKING DAYS PRIOR TO BEGINNING WORK.
2. INSTALL NEW CONSTRUCTION ENTRANCE AND PERFORM NECESSARY MAINTENANCE ON EXISTING CONSTRUCTION ENTRANCE.
3. CLEAR AND INSTALL PERIMETER CONTROLS SUCH AS SILT FENCE, SUPER SILT FENCE, CHANNEL DIVERSION, AND DIVERSION DIKES.
4. MAINTAIN EXISTING SEDIMENT BASIN AND TRAPS.

PHASE II
1. BEGIN SITE GRADING.
2. INSTALL WATER LINES, SANITARY AND STORM SEWER PIPES, AND OTHER UNDERGROUND UTILITIES.
3. INSTALL DRAINAGE FACILITIES INCLUDING STORM SEWER INLETS, CULVERTS, SWALES, AND OTHER DRAINAGE FEATURES, INCLUDING INLET AND OUTLET PROTECTION AS REQUIRED.
4. CONSTRUCT CURBS, ROAD, SIDEWALK, AND OTHER UTILITIES.
5. PERMANENTLY SEED DENUDED AREAS AS SOON AS GRADING IS COMPLETE FOR A GIVEN AREA.
6. CONVERT THE SEDIMENT BASIN INTO THE PERMANENT SWM POND.
7. REMOVE ALL E&S CONTROL MEASURES AFTER AREA IS STABILIZED, BUT ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

STABILIZATION:

THIS WORK SHALL COVER ALL OPERATIONS INCIDENTAL TO THE ESTABLISHMENT OF GRASS AND LEGUME VEGETATION, INCLUDING THE FURNISHING AND SOWING OF SEED, FURNISHING AND APPLYING FERTILIZER, AGRICULTURAL LIMESTONE, AND MULCH MATERIAL.

SEEDING AND MULCHING SHALL BE PERFORMED ON ALL CUT AND FILL SLOPES, INCLUDING CUT AND FILL SLOPES ASSOCIATED WITH WASTE SITES AND BORROW SITES, DURING THE CONSTRUCTION PROCESS. THE SEEDING AND MULCHING OF THESE EXPOSED AND/OR DISTURBED AREAS AS QUICKLY AS POSSIBLE IS ESSENTIAL FOR PROPER EROSION AND SEDIMENT CONTROL. WHEN USING STRAW OR HAY MULCH, THE SEQUENCE OF APPLICATION SHALL BE AS FOLLOWS: (1) SEED AND FERTILIZER SHALL BE SOWN PRIOR TO MULCHING. (2) MULCH AND MULCH BINDER SHALL BE PLACED WITHIN 24 HOURS OF SOWING SEED.

ALL ADDITIONAL DISTURBED AREAS SUCH AS DIVERSION DITCHES, SEDIMENT TRAPS AND BASINS, AREAS AROUND SEDIMENT STRUCTURES, HAUL ROAD CUT AND FILL SLOPES, CLEARED AND GRUBBED AREAS, STORAGE AREAS, BATCH PLANT LOCATIONS, ETC. SHALL BE SEEDED AND MULCHED AS QUICKLY AS POSSIBLE FOLLOWING DISTURBANCE TO MINIMIZE EROSION.

ANY AREAS FAILING TO ESTABLISH A SATISFACTORY STAND OF GRASS DUE TO WEATHER CONDITIONS, ADVERSE SOIL CONDITIONS, OR DUE TO EROSION, SHALL BE RESEEDED, FERTILIZED, AND MULCHED AS DEFINED IN THE SPECIFICATIONS.

SEEDING AND MULCHING OF DISTURBED AREAS SHALL BE DONE AT A MINIMUM OF ONCE EVERY 14 DAYS UNLESS OTHERWISE NOTED IN THE PLANS. WHEN ALL CONSTRUCTION ACTIVITIES IN AN AREA IS PLANNED TO CEASE FOR MORE THAN 14 DAYS, THAT AREA SHALL BE SEEDED AND MULCHED WITHIN FOUR DAYS.

ALL CUT SLOPE BENCH AREAS SHALL BE SEEDED AND MULCHED AFTER COMPLETION OF EACH BENCH, REGARDLESS OF HEIGHT.

ALL DISTURBED AREAS SUCH AS DIVERSION DITCHES, SEDIMENT CONTROL STRUCTURES, HAUL ROAD SLOPES, ETC. ARE TO BE SEEDED AND MULCHED UPON COMPLETION OF EACH OPERATION, INCLUDING MAINTENANCE.

MAINTENANCE: THE EROSION AND SEDIMENT CONTROL MEASURES INSTALLED ON THIS SITE SHALL BE MAINTAINED BY PERFORMING THE FOLLOWING:

1. THE SITE SUPERINTENDENT SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED PERIODS OF RAINFALL. DAMAGED OR DEFICIENT CONTROLS SHALL BE REPAIRED OR IMPROVED IMMEDIATELY.

2. THE SITE SUPERINTENDENT SHALL INSPECT DAILY THE AREAS OF CONSTRUCTION ACTIVITY TO INSURE EROSION CONTROL EFFECTIVENESS. ADDITIONAL MEASURES SHALL BE INSTALLED IMMEDIATELY WHERE DEFICIENCIES ARE FOUND.

EROSION AND SEDIMENT CONTROL NARRATIVE CONT'D:

A. AT A MINIMUM, INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROLS ARE TO CONDUCTED ONCE EVERY 4 CALENDAR DAYS & WITHIN 24 HOURS AFTER ANY STORM EVENT OF 0.25 INCHES OR GREATER OF RAINFALL PER 24 HOURS BY THE SUPERINTENDENT OR HIS REPRESENTATIVE, ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY THE END OF THE WORKING DAY.

B. EXCEPT AS NOTED BELOW, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOUR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN PERMANENTLY CEASED.

C. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 4TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS CONDITIONS ALLOW.

D. CONTROLS MAY BE REMOVED AFTER THE AREAS ABOVE THEM HAVE BEEN STABILIZED AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

E. DEVICES SHOWN ARE TO BE CONSIDERED MINIMUM EROSION AND SEDIMENTATION CONTROLS. ADDITIONAL CONTROLS MAY BE NECESSARY DUE TO CONTRACTOR'S PHASING OR OTHER UNANTICIPATED CONDITIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADDITIONAL DEVICES AS NECESSARY IN ORDER TO CONTROL EROSION AND SEDIMENTATION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION IN THE WEST VIRGINIA EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL.

F. THE CONTRACTOR IS TO PROVIDE ADEQUATE MEANS OF CLEANING AND REMOVING ALL LAYING DUST AS NECESSARY BY APPLYING EITHER MOISTURE, CALCIUM CHLORIDE, OR OTHER APPROVED MATERIALS ALONG THOSE SECTIONS OF THE PROJECT ADJACENT TO EXISTING DWELLINGS OR PUBLIC ACCESS.

G. ALL DEVICES MUST BE CLEANED OUT WHEN SEDIMENT OCCUPIES HALF OF THE WET CAPACITY OF THE STRUCTURE.

H. ALL TRAPPED SEDIMENTS SHALL BE DISPOSED OF IN AN UPLAND AREA WHERE THERE IS NO CHANCE OF ENTERING ANY NEARBY STREAMS.

I. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASES, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY HALTED IS LESS THAN 14 DAYS0 THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THE PORTION OF THE SITE BY THE FOURTH DAY AFTER CONSTRUCTION ACTIVITIES HAVE TEMPORARILY CEASED.

J. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RESEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.

TEMPORARY CRITICAL AREA PLANTING SPECIFICATIONS:

1. DURATION – SEED ALL TOPSOIL PILES, BORROW AREAS, AND CLEARED LAND WHICH WILL NOT BE PAVED, BUILT UPON OR ESTABLISHED IN PERMANENT VEGETATION FOR LONGER THAN THREE WEEKS, BUT LESS THAN A YEAR, AND ALL STEEP CUT AND FILL SLOPES WHERE NO FURTHER ACTIVITY WILL OCCUR UNTIL FINAL GRADING.

2. FERTILIZATION – APPLY 400 POUNDS PER ACRE OF 10-10-10 FERTILIZER.

3. SEEDING METHOD – BROADCAST OR DRILL SEED IMMEDIATELY AFTER DISTURBANCE.

4. MULCHING SEEDING – MULCH THE SEEDING IMMEDIATELY AFTER SEEING WITH TWO (2) TONS OF STRAW OR WEED-FREE HAY PER ACRE, WOOD FIBER OR MULCH NETTING. ANCHOR STRAW OR HAY WITH ASPHALT EMULSION, CHEMICAL ANCHORING SOLUTION, NETTING, OR A MULCH ANCHORING TOOL.

5. MULCHING ALONE – MULCH MAY BE USED ALONE TO PROTECT AREAS FOR LESS THAN THREE WEEKS OR WINTER PROTECTION OF AREAS EXPOSED BETWEEN NOVEMBER 1 AND MARCH 1. THE MULCH RATE SHOULD BE THREE (3) TONS OF STRAW OR HAY PER ACRE WHEN NO SEED IS APPLIED.

6. SPECIES TO SEED, TIME OF SEEDING, AND RATES:

SPECIES TO SEED	SEEDING DATES	POUNDS PER ACRE	POUNDS PER 1000 SQ. FT.
OATS	MARCH 1 TO JUNE 15	96	2.40
REDTOP	MARCH 1 TO JUNE 15	5	0.12
	AUGUST 15 TO SEPTEMBER 15	5	0.12
ANNUAL RYEGRASS	MARCH 1 TO JUNE 15	40	1.00
	AUGUST 15 TO SEPTEMBER 15	40	1.00
MILLET	JUNE 15 TO NOVEMBER 1	168	4.20
WHEAT	AUGUST 15 TO NOVEMBER 1	180	4.50

7. AREAS WHERE THE SEED HAS FAILED TO GERMINATED ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RESEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.

PERMANENT CRITICAL AREA PLANTING SPECIFICATIONS:

HERBACEOUS PLANTS:
1. RUNOFF CONTROL – CONTROL RUNOFF FLOWING ACROSS THE SITE WITH TEMPORARY AND PERMANENT STRUCTURES AS NECESSARY. REFER TO STRUCTURAL MEASURES SECTION OF THE WEST VIRGINIA EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICE MANUAL.

2. TILLAGE – PREPARE THE SEEDBED BY TILLAGE TO A DEPTH OF 4-6 INCHES. APPLY LIME AND FERTILIZER BEFORE THE FINAL TILLAGE OPERATION. CULTIPACK THE SEEDBED.

3. LIMING – APPLY LIME ACCORDING TO A SOIL TEST TO CORRECT THE pH TO 5.5 TO 6.0. IF A SOIL TEST CANNOT BE ANALYZED BEFORE LIME MUST BE APPLIED, APPLY THREE TONS OF GROUND LIMESTONE PER ACRE (150 POUNDS PER 1,000 SQUARE FEET) AND APPLY THE BALANCE RECOMMENDED BY THE SOIL TEST WHEN THE TEST RESULTS ARE AVAILABLE.

4. FERTILIZER – APPLY FERTILIZER ACCORDING TO A SOIL TEST. IF A SOIL TEST CANNOT BE ANALYZED BEFORE FERTILIZER MUST BE APPLIED, APPLY 500 POUNDS OF 1-020-10 (12 POUNDS PER 1,000 SQUARE FEET) AND APPLY THE BALANCE RECOMMENDED BY THE SOIL TEST. IF NITROGEN APPLICATIONS CANNOT BE SPLIT, NITROGEN SHOULD BE APPLIED AS UREA-FORMALDEHYDE, OR SULFUR-COATED UREA.

5. SEEDING METHOD – SOW SEED BE HYDROSEEDER, DRILL, OR BROADCAST AND CULTIPACKED. ALL SPREADERS SHOULD BE CALIBRATED BEFORE USE. FOR EVEN DISTRIBUTION, THE SEED SHOULD BE DIVIDED IN HALF AND SPREAD IN PERPENDICULAR DIRECTIONS.

6. MULCHING – MULCH THE SEEDING IMMEDIATELY AFTER SEEDING WITH TWO TONS OF STRAW OR WEED-FREE HAY PER ACRE, WOOD FIBER, OR MULCH NETTING. ANCHOR THE STRAW OR HAY WITH ASPHALT EMULSION, CHEMICAL ANCHORING SOLUTION, NETTING, OR A MULCH ANCHORING TOOL.

7. SPECIES TO SEED AND RATE OF SEEDING.

SPECIES [2]	SEEDING RATE (# PER ACRE[1])	DRAINAGE ADAPTIONS EXCESSIVELY DRAINED	POORLY DRAINED
TALL FESCUE	60	X	X
TALL FESCUE AND RED FESCUE OR HARD FESCUE	40 10 10	X	X
TALL FESCUE BIRD'S-FOOT TREFOIL[3]	20 6	X	X
RED FESCUE OR HARD FESCUE BIRD'S-FOOT TREFOIL[3]	20 20 6	X	
TALL FESCUE RED FESCUE OR HARD FESCUE SERICEA LESPEDEZA[3]	20 20 20 10		
REED CANARY GRASS	20	X	X
REED CANARY GRASS BIRD'S-FOOT TREFOIL[3]	15 6	X	X
CROWN WETCH[3] AND TALL FESCUE OR RED FESCUE OR HARD FESCUE OR PERENNIAL RYEGRASS	20 20 20 20 20	X	
FLATPEA[3] AND TALL FESCUE OR RED FESCUE OR HARD FESCUE OR PERENNIAL RYEGRASS	40 20 20 20 20	X	
PERENNIAL PEA[3] AND TALL FESCUE OR RED FESCUE OR HARD FESCUE OR PERENNIAL RYEGRASS	40 20 20 20 20	X	
SWITCHGRASS[4] BIRD'S-FOOT TREFOIL[3] OR SERICEA LESPEDEZA[3]	10 6 10	X X X	X X
DEERTONGUE[4]	15	X	
DEERTONGUE[4] BIRD'S-FOOT TREFOIL[3] OR SERICEA LESPEDEZA[3]	15 6 10	X	

[1] USE THIS SPECIES LISTED IN TEMPORARY CRITICAL AREA PLANTING SPECIFICATIONS AS NURSE CROPS AT HALF THE RATE.

[2] CONSULT THE EXTENSION SERVICE FOR FORAGE AND TURF CULTIVAR RECOMMENDATIONS. OTHER SPECIES RECOMMENDATIONS: CROWN VETCH – 'PENNGIFT'; FLATPEA 'LATHCO'; PERRENIAL PEA 'LANCER'; SERICEA LESPEDEZA 'APPALOW'; DEERTONGUE 'TIOGA'; SWITCHGRASS 'BLACKWELL' (EROSION CONTROL), 'SHELTER' (WILDLIFE HABITAT), 'CAVE-IN-ROCK' (FORAGE).

[3] INOCULATE LEGUME SEEDS, USE FOUR TIMES THE NORMAL RATE WHEN HYDROSEEDING.

[4] USE THESE MIXTURES ON GENTLE, LESS EROSIVE SLOPES.

[5] "X" INBDICATED ACCEPTABLE SPECIES FOR CONDITION LISTED.

8. DATE OF SEEDING:
COOL SEASON GRASSES AND LEGUMES
OPTIMUM – MARCH 1 TO APRIL 15
EXTENDED – NOVEMBER 15 TO JUNE 15
AUGUST 15 TO SEPTEMBER 15

WARM SEASON GRASSES (SWITCHGRASS AND DEERTONGUE)
OPTIMUM – MARCH 1 TO APRIL 1
EXTENDED – DECEMBER 1 TO APRIL 15

9. AREAS WHERE THE SEED HAS FAILED TO GERMINATE ADEQUATELY (UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70%) WITHIN 30 DAYS AFTER SEEDING AND MULCHING MUST BE RESEEDED IMMEDIATELY, OR AS SOON AS WEATHER CONDITIONS ALLOW.

WOODY PLANTS:
WOODY PLANTS CAN BE USED FOR EROSION CONTROL ON AREAS WHERE LONG TERM STANDS AREDESIRED, MOWING AND FREQUENT FERTILIZATION CANNOT BE DONE, BARRIERS, WINDBREAKS, AND HEDGES ARE NEEDED AND ALSO FOR SHADE AND GENERAL IMPROVEMENT OF THE APPEARANCE OF THE AREA. RETAINING EXISTING DESIRABLE TREES IS AN IMPORTANT CONSIDERATION DURING SITE DEVELOPMENT. VINES ARE SUITABLE FOR SHORT, STEEP, OR ODD AREAS WHERE MOWING IS NOT FEASIBLE AND WHERE PERMANENT LOW-GROWING VEGETATION IS DESIRED.

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

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EROSION & SEDIMENT CONTROL NARRATIVE

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 31 OF 45

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-013
DB. 1128 PG. 403

OUTFALL #1

OUTFALL #2

OUTFALL #3

TOP:511.26
IN: 501.36
OUT: 501.61

TOP:512.45
IN: 503.2
OUT: 503

FLOODPLAIN ZONE AE

APPROXIMATE LOCATION OF EC
CSDS CL 1 PVC WATERLINE

TH JAMES & WILLIAM E III
CEL ID: 08-80-016
B. 1066 PG. 272

EX. 60' ACCESS EASEMENT
DB 948 PG 457, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

EX. [illegible]
(TO BE REMOVED)

TOP:514.60
IN: 504.55
OUT: 504.30

EX. HEADWALL

EX. 14" CMP

EX. 21" CMP

EX FH

BRIDGEFORTH JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB. 1066 PG. 272

DRAINAGE AREA B
3.25 AC

DRAINAGE AREA C
1.63 AC

ONSITE SUB-DRAINAGE AREA A
10.00 AC

OFFSITE SUB-DRAINAGE AREA A
2.26 AC

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

WESCOTT DRIVE
60' ROW
DB: 973 PG: 715

NORTH MILDRED ST
60' ROW
40' ROW

STRIDER JEFFERSON S-TR
PARCEL ID: 08-10-005
DB. 1258 PG. 54

JEFFER

50 0 50 100 150
Scale 1" = 50'

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01/28/25

PRE-DEVELOPED DRAINAGE AREA

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
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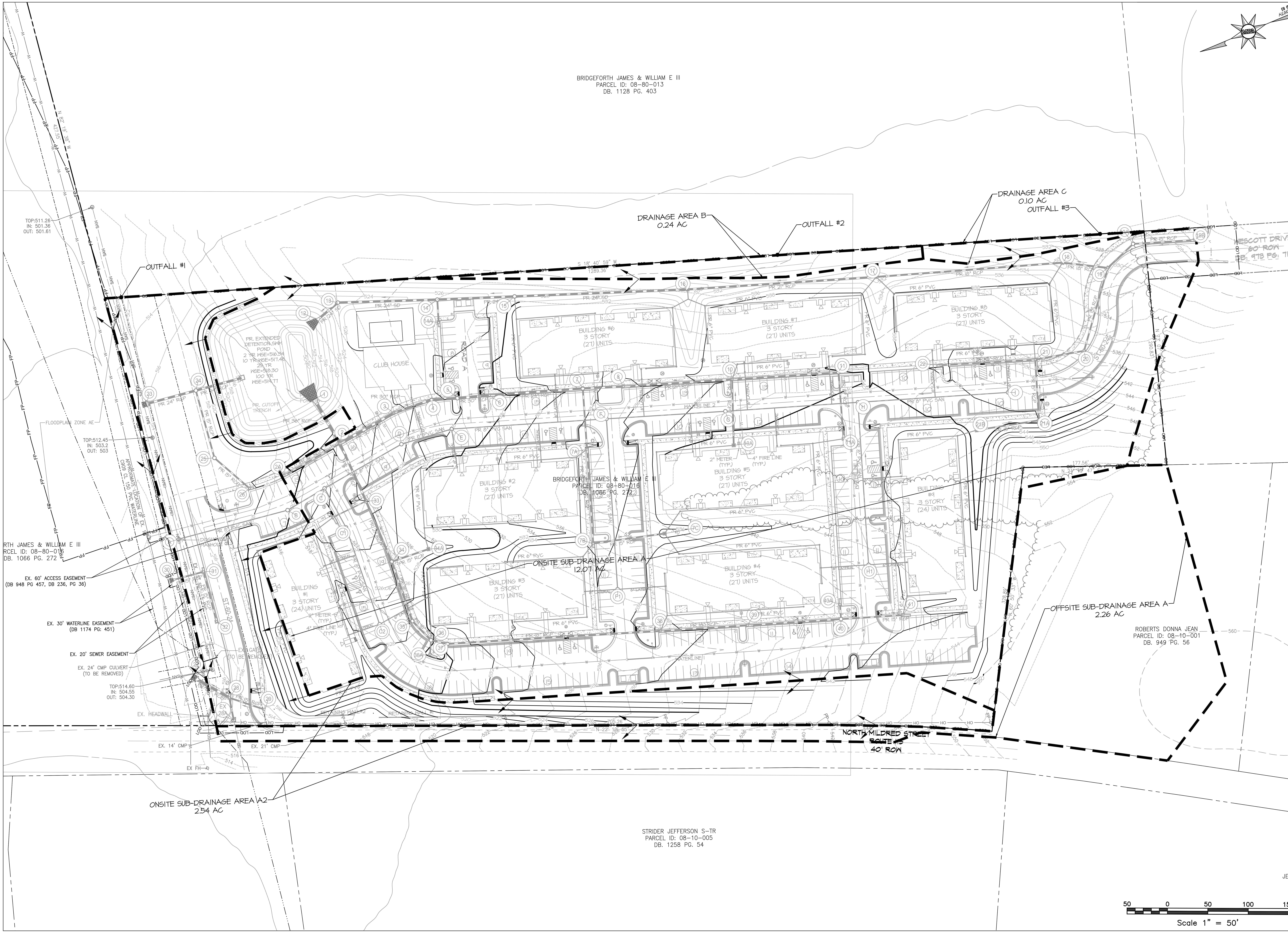
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	32 OF 45



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POST-DEVELOPED DRAINAGE AREA

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: 1"= 50'
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 33 OF 45

SWM NARRATIVE:

THIS SITE PROPOSES THE DEVELOPMENT OF EIGHT APARTMENT BUILDINGS LOCATED IN THE CITY OF RANSON, WEST VIRGINIA. THE EXISTING SITE DRAINS TO THE NORTH TO THE EXISTING FLOODPLAIN. AN ONSITE SWM POND IS PROPOSED TO HANDLE QUALITY AND QUANTITY REQUIREMENTS FROM THE PROPOSED IMPROVEMENTS. STORMWATER MANAGEMENT IMPROVEMENTS HAVE BEEN DESIGNED TO MEET THE CITY OF RANSON STORMWATER MANAGEMENT REQUIREMENTS.

WATER QUALITY:
THE WEST VIRGINIA STORMWATER COMPLIANCE SPREADSHEET HAS USED TO CALCULATED THE REQUIRED TARGET RUNOFF REDUCTION VOLUME OF 30,009 CF. THE PROPOSED SWM IS AN EXTENDED DETENTION POND WHICH PROVIDES 30,252 CF OF STORAGE AND DETAILS AND RELEASES IT OVER A 36 HOUR DRAWDOWN PERIOD.

WATER QUANTITY:

THE PROPOSED SWM POND HAS BEEN DESIGNED TO RELEASE THE 2, 10, AND 100 YEAR STORM EVENTS AT BELOW PRE-DEVELOPED FLOW RATES. RUNOFF GENERATED FROM THE DEVELOPMENT WILL BE COLLECTED VIA UNDERGROUND STORM PIPES AND WILL OUTFALL INTO THE PROPOSED POND. THE POND WILL DISCHARGE WATER NORTH TO THE FLOODPLAIN. THE KARST REDUCTION FACTOR WAS TAKEN INTO ACCOUNT FOR DETERMINING THE REQUIRED TARGET POST-DEVELOPED PEAK DISCHARGE.

A SUMMARY TABLE OF THE RUNOFF FOR THE 24 HOUR STORM EVENTS AT EACH OUTFALL HAS BEEN PROVIDED ON THIS SHEET.

THE EXTENDED DETENTION POND REDUCES THE POST-DEVELOPED PEAK DISCHARGE RATE TO BELOW THE TARGET DISCHARGE RATES AND BASED ON REDUCING THE POST-DEVELOPED PEAK FLOW TO BELOW THE PRE-DEVELOPED PEAK DISCHARGE, STORMWATER MANAGEMENT HAS BEEN MET.

SEE THE STORMWATER MANAGEMENT REPORT FOR DETAILED CALCULATIONS.

SWM Sizing & Discharge Summary Table

Stormwater Quality

Required:	30,009	cfs
Provided:	30,252	cfs

Stormwater Quantity Discharge Summary

	2 YR		10-Yr		25-Yr		100 Year	
	cfs	WSE (ft)	cfs	WSE (ft)	cfs	WSE (ft)	cfs	WSE (ft)
Pre-developed DA-A	13.54	N/A	27.18	N/A	37.15	N/A	56.53	N/A
Pre-developed DA-A(Onsite Target Flow)	4.47	N/A	11.69	N/A	17.46	N/A	28.27	N/A
Pre-developed DA-A(Offsite Flow)	0.79	N/A	2.67	N/A	4.19	N/A	7.39	N/A
Pre-developed Outfall #1	5.26	N/A	14.36	N/A	40.97	N/A	35.66	N/A
Pond Outfall	0.48	516.34	2.43	517.46	4.72	518.30	14.89	519.77
Post-developed Outfall #1	4.48	N/A	10.75	N/A	17.13	N/A	34.04	N/A
Pre-developed DA-B	4.06	N/A	8.61	N/A	11.93	N/A	18.63	N/A
Pre-developed DA-B (Onsite Target Flow)	1.34	N/A	3.70	N/A	5.61	N/A	3.70	N/A
Post-developed at Outfall #2	0.09	N/A	0.34	N/A	0.54	N/A	0.96	N/A
Pre-developed DA-C	2.04	N/A	4.32	N/A	5.98	N/A	9.34	N/A
Pre-developed DA-C (Onsite Target Flow)	0.67	N/A	1.86	N/A	2.81	N/A	4.67	N/A
Post-developed at Outfall #3	0.04	N/A	0.14	N/A	0.22	N/A	0.40	N/A

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01/28/25

SWM NARRATIVE

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
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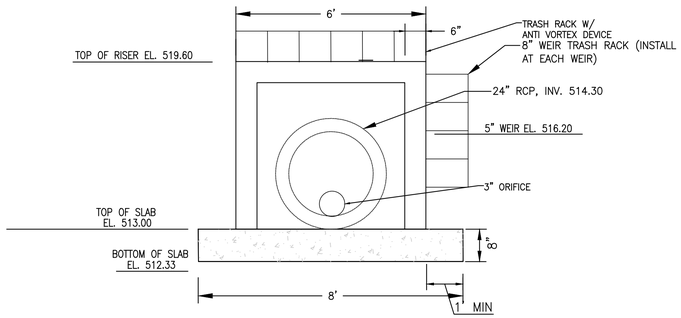
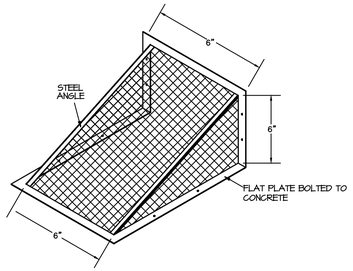
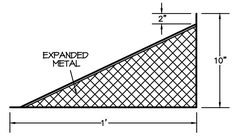
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	34 OF 45



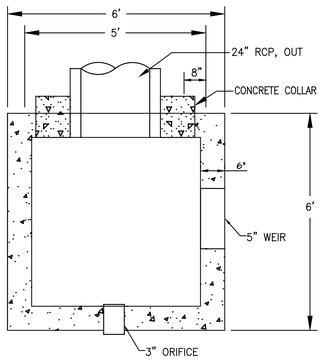
RISER SECTION DETAIL

NOT TO SCALE





TRASH RACK DETAIL
(LOW FLOW ORIFICE)



RISER TOP DETAIL

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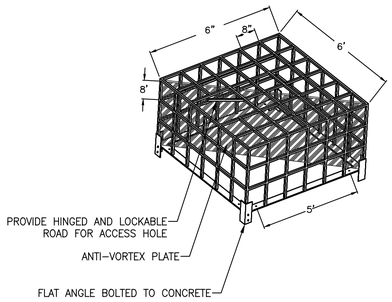
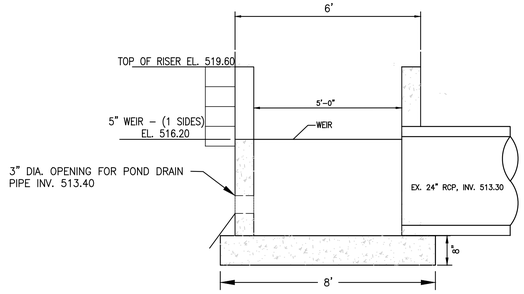
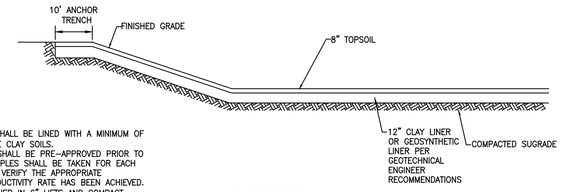


TRASH RACK DETAIL
(TOP OF RISER)



RISER SECTION DETAIL

NOT TO SCALE



NOTE:
1. POND BOTTOM SHALL BE LINED WITH A MINIMUM OF 12" OF SUITABLE CLAY SOILS.
2. ALL MATERIALS SHALL BE PRE-APPROVED PRIOR TO PLACEMENT. SAMPLES SHALL BE TAKEN FOR EACH LIFT PLACED TO VERIFY THE APPROPRIATE HYDRAULIC CONDUCTIVITY RATE HAS BEEN ACHIEVED.
3. INSTALL CLAY LINER IN 6" LIFTS AND COMPACT USING A SHEEPSFOOT ROLLER TO 98% OF MAXIMUM DRY DENSITY AT 2% OPTIMUM MOISTURE CONTENT AS DETERMINED BY STANDARD PROCTOR METHOD ASTM D-698.
4. PLACE 8" LAYER OF TOPSOIL OVER CLAY LINER.

LINER DETAIL
N.T.S.

MAINTENANCE

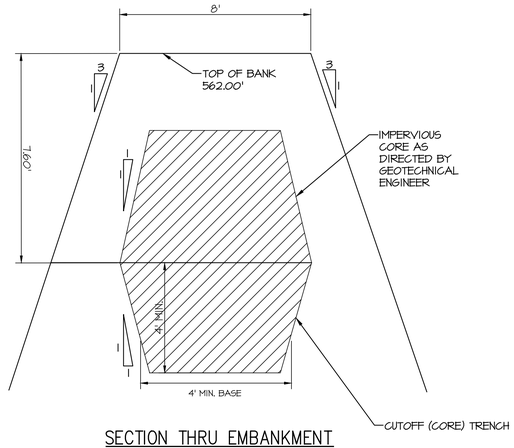
MAINTENANCE SHALL INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING:

1. THE SWM FACILITY SHALL BE INSPECTED ON A SEMI-ANNUAL BASIS AND AFTER ANY STORM WHICH CAUSES THE CAPACITY OF THE FACILITY TO BE EXCEEDED. ANY TRASH AND/OR DEBRIS WITHIN THE FACILITY SHALL BE REMOVED AND PROPERTY DISPOSED OF.
2. THE SWM FACILITY SHOULD BE PERIODICALLY CLEANED OUT EVERY 5-10 YEARS DEPENDING ON SEDIMENT LOADING, SO AS TO REESTABLISH THE ORIGINAL PROPOSED CONTOURS AS SHOWN ON THE PLAN. ALL EXCAVATED AND/OR DREDGE MATERIAL SHALL BE PLACED IN COMMON SPACES AS DESIGNATED BY THE OWNER. THE DISPOSAL AREA SHALL HAVE APPROPRIATE E&S CONTROLS AND SHALL BE IMMEDIATELY STABILIZED.
3. THE EMBANKMENT SHOULD BE MOWED PERIODICALLY DURING THE GROWING SEASON, ENSURING THE LAST CUTTING OCCURS AT THE END OF THE SEASON. THE GRASS SHOULD NOT BE CUT LESS THAN 6 TO 8 INCHES IN HEIGHT.
4. IF NECESSARY, THE EMBANKMENT SHOULD BE LIMED, FERTILIZED AND SEEDED IN THE FALL AFTER THE GROWING SEASON. LIME AND FERTILIZER APPLICATION RATES SHOULD BE BASED ON SOIL TEST RESULTS.
5. ALL EROSION GULLIES NOTED DURING THE GROWING SEASON SHOULD BE BACKFILLED WITH TOPSOIL, RESEEDED AND PROTECTED (MULCHED) UNTIL VEGETATION IS ESTABLISHED.
6. ALL BARE AREAS AND PATHWAYS ON THE EMBANKMENT SHOULD BE PROPERLY SEEDED AND PROTECTED (MULCHED) OR OTHERWISE STABILIZED.
7. ALL ANIMAL BURROWS SHOULD BE BACKFILLED AND COMPACTED AND BURROWING ANIMALS SHOULD BE REMOVED FROM THE AREA.
8. ALL TREES, WOODY VEGETATION AND OTHER DEEP-ROOTED GROWTH, INCLUDING STUMPS AND ROOT SYSTEMS SHOULD BE REMOVED FROM THE EMBANKMENT AND ADJACENT AREAS EXTENDING TO AT LEAST 25 FEET BEYOND THE EMBANKMENT TOE AND ABUTMENT CONTACTS. THE ROOT SYSTEMS SHOULD BE EXTRACTED AND EXCAVATED VOLUME REPLACED AND COMPACTED WITH SIMILAR MATERIAL TO THE SURROUNDING AREA. ALL SEEDLINGS SHOULD BE REMOVED AT THE FIRST OPPORTUNITY. ANY VINE COVER AND BRUSH SHOULD BE REMOVED FROM THE EMBANKMENT TO ALLOW FOR INSPECTIONS
9. ANY REPAIRS MADE TO THE PRINCIPAL SPILLWAY SHOULD BE REVIEWED BY A PROFESSIONAL ENGINEER.

GENERAL SPECIFICATIONS FOR SWM FACILITY

CONSTRUCTION OF EMBANKMENT AND OUTLET STRUCTURE SHALL BE PERFORMED ACCORDING TO THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

1. AREAS UNDER THE EMBANKMENT AND ANY STRUCTURAL WORKS SHALL BE CLEARED, AND STRIPPED OF TOPSOIL, TREES, ROOTS OR OTHER OBJECTIONABLE MATERIAL.
2. AREAS TO BE COVERED BY THE RESERVOIR SHALL BE CLEARED OF ALL TREES, BRUSH, LOTS, FENCES, RUBBISH AND OTHER MATERIALS UNLESS OTHERWISE DESIGNATED ON THE PLANS.
3. THE SUITABILITY AND ACCEPTABILITY OF ALL FILL MATERIALS WILL BE DETERMINED BY REGULAR PERIODIC SOIL ANALYSIS AND COMPACTION TESTS, WHICH SHALL BE MADE BY A QUALIFIED GEOTECHNICAL ENGINEER.
4. TESTS FOR SOIL ANALYSIS, MOISTURE CONTENT, AND COMPACTION ARE TO BE CONDUCTED IN ACCORDANCE WITH THE LATEST APPLICABLE ASTEM STANDARDS AND SPECIFICATIONS.
5. FILL SHOULD BE PLACED IN 8 INCH LOOSE LIFTS AND BE COMPACTED TO AT LEAST 95% OF MAXIMUM DRY DENSITY WITH MOISTURE CONTENT WITHIN 2% OF THE OPTIMUM MOISTURE FOR COMPACTION.
6. A CLAY LINER SHALL BE AT LEAST 12 INCHES THICK INSTALLED ALONG THE EMBANKMENT TO A LEAST A FOOT ABOVE THE 10-YEAR WATER SURFACE ELEVATION.
7. COMPACTION SHALL NOT BE LESS THAN 95% FO THE MAX DRY DENSITY FOR THE GIVEN EMBANKMENT MATERIAL AS DETERMINED BY THE USE OF THE STANDARD PROCTOR METHOD PER ASTM T-99 OR ASTM D-698.
8. IF SUFFICIENT ACCEPTABLE MATERIALS ARE NOT AVAILABLE ON THE SITE TO PROPERLY COMPLETE THE FILL, THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ACCEPTABLE BORROW MATERIAL.



SECTION THRU EMBANKMENT
NOT TO SCALE

DATE	REVISIONS
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SWM DETAILS

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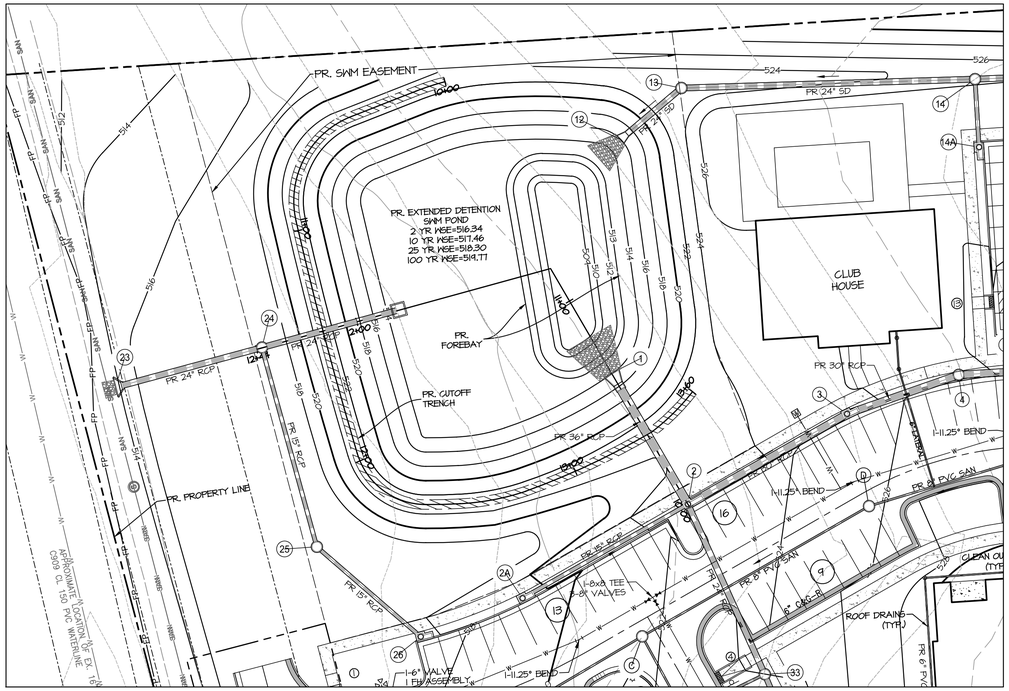
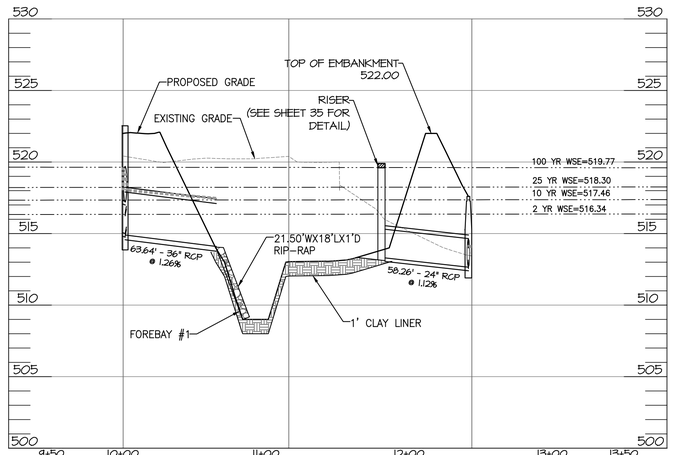
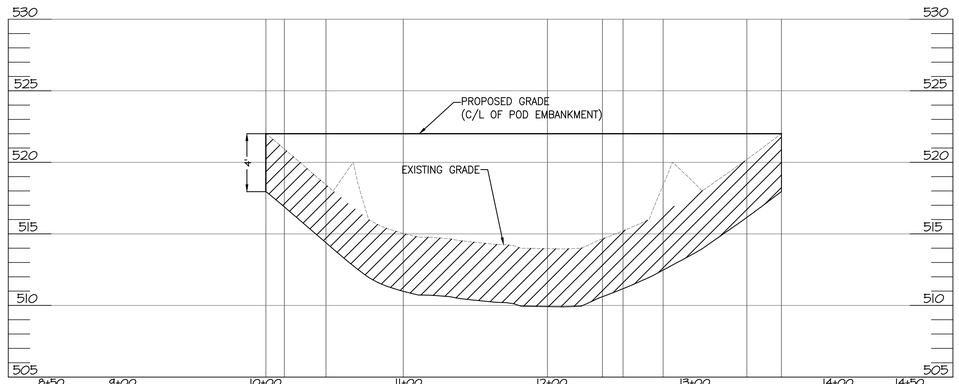


SWM POND #1 DETAIL
SCALE: 1"=50'

50 0 50 100 150
Scale 1" = 50'



POND #1 PROFILE
SCALE: H: 1"=50'
V: 1"=5'



POND #1 CORE TRENCH PROFILE
SCALE: H: 1"=50'
V: 1"=5'

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SWM POND 1 PROFILE

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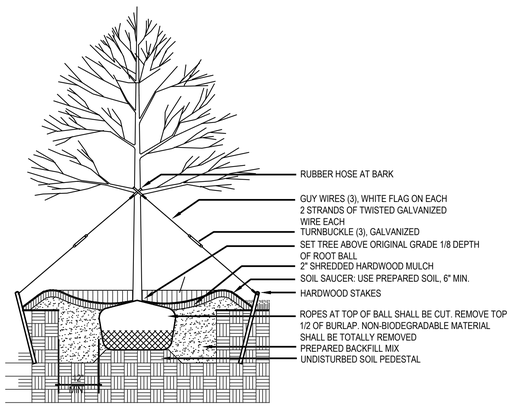

DECIDUOUS SHADE TREE PLANTING
N.T.S.

LANDSCAPING NOTES & STANDARDS:

1) PER RANSON, WV CHAPTER 19A SMARTCODE, ARTICLE 5.10.2; WITHIN DISTRICTS T2, T3, T4 AND T5:

+ PROPOSED TREES AND UNDERSTORY TREES SHALL BE CENTERED HORIZONTALLY AND MINIMALLY...
  - TWO (2) FEET FROM WALKWAYS, CURBING, AND OTHER IMPERVIOUS PAVEMENTS WHEN PLANTED IN A TREE WELL OR CONTINOUS PLANTER;
  - THREE (3) FEET FROM WALKWAYS, CURBING AND OTHER IMPERVIOUS PAVEMENTS WHEN PLANTED IN A CONTINUOUS SWALE;
  - FIVE (5) FEET FROM STREET LIGHTS, UNDERGROUND UTILITIES, UTILITY METERS AND SERVICE LINES, FENCES, WALLS AND OTHER GROUND LEVEL OBSTRUCTIONS;
  - SIX (6) FEET FROM PORCH EAVES, AND AWNINGS AND SIMILAR OVERHEAD OBSTRUCTIONS ASSOCIATED WITH THE GROUND LEVEL OF BUILDINGS;
  - EIGHT (8) FEET FROM BALCONIES, VERANDAS, BUILDING EAVES AND CORNICES, AND SIMILAR OVERHEAD OBSTRUCTIONS ASSOCIATED WITH THE UPPER STORIES OF BUILDINGS.

+ GROUND VEGETATION OR SHRUB PLANTINGS WITH SPINES, THORNS OR NEEDLES THAT MAY PRESENT HAZARDS TO PEDESTRIANS, BICYCLISTS OR VEHICLES ARE PROHIBITED IN THE FIRST TWO (2) FEET OF THE FIRST LAYER.

+ ARTIFICIAL PLANTS OR ARTIFICIAL TURF ARE PROHIBITED, EXCLUDING ACTIVE RECREATION SPORTS FIELDS THAT ARE TYPICALLY SUBJECT TO INTENSE USE AND SOIL COMPACTION WHICH PROHIBITS THE ESTABLISHMENT OF TURFGRASS, AND WHERE PAVING OR GRASS PAVING SYSTEMS WILL NOT SUFFICE GIVEN THE AREA'S PURPOSE AND LEVEL OF USE.

+ BUFFERS AND SCREENING ELEMENTS SHALL BE USED TO SCREEN PARKING AREAS FROM PUBLIC VIEW, TO SCREEN SERVICE YARDS AND OTHER PLACES THAT ARE UNSIGHTLY.

2) PER RANSON, WV CHAPTER 19A SMARTCODE, ARTICLE 7.5.4; WITHIN THE PUBLIC REALM, NO STREET TREE SHALL BE PLANTED CLOSER THAN 35 FEET OF ANY STREET CORNER, MEASURED FROM THE POINT OF THE NEAREST INTERSECTING CURB OR CURBLINE. NO STREET TREES SHALL BE PLANTED CLOSER THAN TEN (10) FEET AWAY FROM ANY FIREPLUG.

3) PER RANSON, WV CHAPTER 19A SMARTCODE, ARTICLE 7.5.5; WITHIN THE PUBLIC REALM, NO STREET TREES OTHER THAN THOSE SPECIES LISTED AS ORNAMENTAL TREES ON TABLE 32 MAY BE PLANTED WITHIN TEN (10) LATERAL FEET OF ANY UNDERGROUND WATER LINE, SEWER LINE, TRANSMISSION LINE, OR OTHER UTILITY.

PLANTING SCHEDULE

	MEDIUM SHADE TREE	Carpinus caroliniana	Hornbeam	2" Cal.	Stong Central Leader, Uniform
	MEDIUM SHADE TREE	Ostrya virginiana	American Hornbeam	2" Cal.	Stong Central Leader, Uniform
	MEDIUM SHADE TREE	Corylus americana	Hazelnut	2" Cal.	Stong Central Leader, Uniform
87	MEDIUM SHADE TREE	Magnolia virginiana	Sweetbay Magnolia	2" Cal.	Stong Central Leader, Uniform
	MEDIUM SHADE TREE	Sophora japonica	Pagoda Tree	2" Cal.	Stong Central Leader, Uniform
	MEDIUM SHADE TREE	Sophora japonica "regent"	Regent Scholar-tree	2" Cal.	Stong Central Leader, Uniform
	MEDIUM SHADE TREE	Prunus sargentii	Sargent Cherry	2" Cal.	Stong Central Leader, Uniform

Notes:
1. Trees planted in public frontages must be a minimum height of 10 feet and 2 inches in calpier when planted. 5 foot trees and 1 inch caliper shall be permitted if a 2 year warranty is provided.
2. All plant material shall meet the specifications of the American Standard for Nursery Stock (ANSI Z60.1-1996)
3. Location of underground utilities shall be determined prior to start of work to avoid damage

STREET TREE PLANTING

STREET NAME	THOROUGHFARE	LINEAR FT.	TREE TYPE	SPECIES ARRANGEMENT	TREE SPACING	REQUIRED TREE QTY.
NORTH MILDRED STREET CONNECTION	ST-60-24	400.65	LARGE SHADE TREE	ALTERNATING	40'	21
WESCOTT DRIVE CONNECTION	ST-60-24	297.35	LARGE SHADE TREE	ALTERNATING	40'	15
ROAD A		128.5'	LARGE SHADE TREE	ALTERNATING	40'	8
ROAD B		1466.91'	LARGE SHADE TREE	ALTERNATING	40'	17
ROAD C		305'	LARGE SHADE TREE	ALTERNATING	40'	4
ROAD D		305'	LARGE SHADE TREE	ALTERNATING	40'	4
ROAD E		950.19'	LARGE SHADE TREE	ALTERNATING	40'	18

Note: Alleys 'J through 'N' are thoroughfare types RA20-18 and do not require street plantings

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
MRAGTA.COM

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JOHN K. ERICKSON
REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

LANDSCAPE DETAILS

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.: 22541
SCALE: AS SHOWN
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 37 OF 45

LEGEND

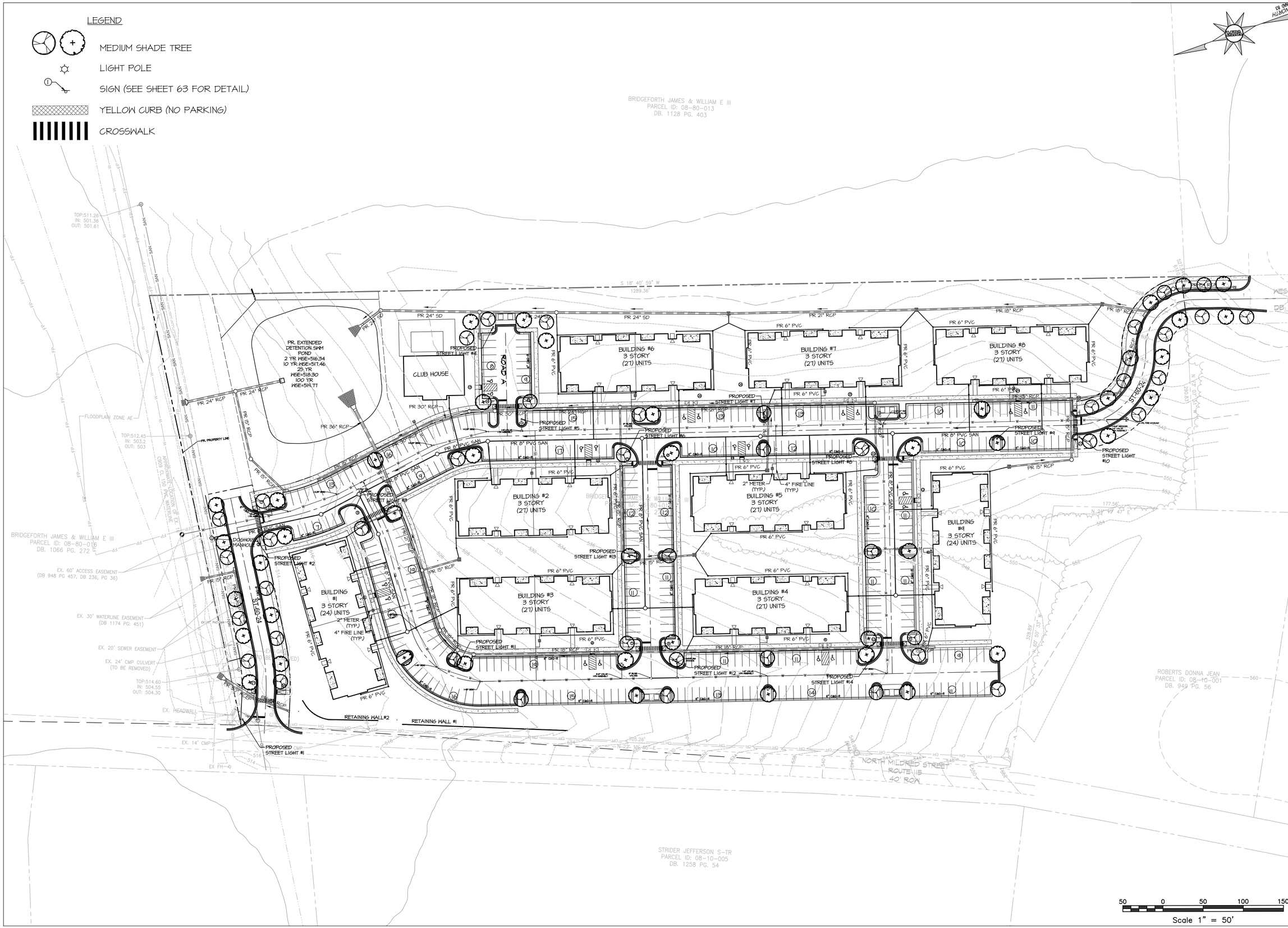
MEDIUM SHADE TREE

LIGHT POLE

SIGN (SEE SHEET 63 FOR DETAIL)

YELLOW CURB (NO PARKING)

CROSSWALK



DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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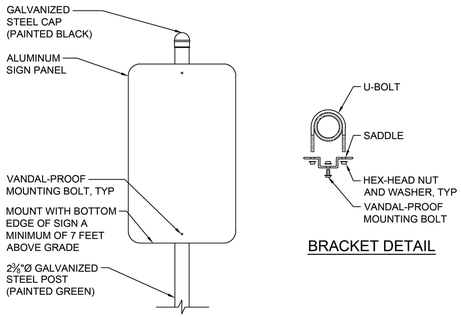
JK ERICKSON REGISTERED 16052 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER 01/28/25

LANDSCAPE PLAN

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	38 OF 45



SIGN MOUNTING DETAIL

BRACKET DETAIL

NOTES:

1. TAPCO SINGLE CLAMP-ON U-BRACKETS (OR APPROVED EQUAL) SHALL BE USED FOR SIGN PANEL ATTACHMENT TO POLE.
2. PAINT MOUNTING BRACKET AND U-BOLT BLACK TO MATCH SIGN POST.
3. SIGN PANELS SHALL COMPLY WITH WVDOH SPECIFICATIONS.
4. ALL BOLT HOLES SHALL BE ⅜" DIAMETER AND SHALL BE DRILLED OR FACTORY PUNCHED TO FINISHED SIZE.
5. SIGN BACKING SHALL BE NON-REFLECTIVE OPAQUE BLACK.
6. SIGN TYPE AS SHOWN ON PLANS. REFER TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR DIMENSIONS AND DETAILS OF SIGN LEGEND.

NOT TO SCALE

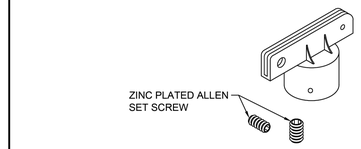
RANSON	SIGN MOUNTING CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-02	1 OF 1	12/1/2023



STOP BAR DETAILS
NOT TO SCALE

NOTES: MATERIAL USED FOR STOP BARS SHALL BE THERMOPLASTIC.

LEGEND	SIGN SUMMARY			
SIGN SYMBOL	MUTCD NUMBER	SPECIFICATION WIDTH	SPECIFICATION HEIGHT	SIGN
1	R1-1	30"	30"	STOP
2	CITY STREET SIGN (SEE THIS SHEET FOR DETAIL)			



POST TOP BRACKET



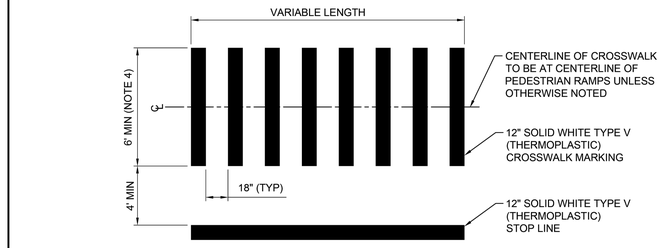
CROSSPIECE BRACKET

NOTES:

1. TAPCO SIGN BRACKETS (OR APPROVED EQUAL) SHALL BE USED FOR STREET SIGN ATTACHMENT TO POLES.
2. PAINT BRACKETS BLACK.

NOT TO SCALE

RANSON	STREET SIGN MOUNTING BRACKET CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-03	1 OF 1	12/1/2023

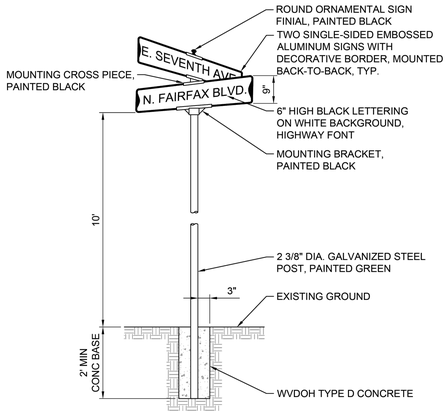


NOTES:

1. MAKE STRIPES PARALLEL TO CURB LINE OF STREET.
2. ALL CURB RAMPS (EXCLUDING ANY FLARED SIDES) MUST BE CONTAINED FULLY WITHIN THE CROSSWALK SERVED. ONE SIDE FLARE MUST ALIGN WITH BACK EDGE OF CROSSWALK IF CROSSWALK WIDTH IS GREATER THAN FIFTEEN FEET.
3. CROSSWALK MARKINGS SHALL BE INSTALLED WITH PREFORMED HEAT APPLIED THERMOPLASTIC OR LIQUID THERMOPLASTIC.
4. 6' MIN CROSSWALK WIDTH ONLY APPLIES WHEN RAMP IS ALIGNED WITH CROSSWALK DIRECTION OF TRAVEL. WHERE RAMP OR CROSSWALK IS SKEWED, WIDEN CROSSWALK TO ACCOMMODATE WHEELCHAIR TURNING SPACE AT BOTTOM OF RAMP. TURNING SPACE MAY NOT ENCROACH ON ADJACENT TRAVEL LANE(S).

NOT TO SCALE

RANSON	HIGH VISIBILITY CROSSWALK CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		PM-01	1 OF 1	12/1/2023



NOTES:

1. SIGN LENGTH SHALL BE A MINIMUM OF 30 INCHES AND A MAXIMUM OF 48 INCHES.
2. REQUEST PAINT COLOR SPECIFICATIONS FROM CITY DEPARTMENT OF PUBLIC WORKS PRIOR TO FABRICATION.
3. PROVIDE SHOP DRAWINGS TO THE CITY FOR APPROVAL PRIOR TO SIGN AND POST FABRICATION.

NOT TO SCALE

RANSON	STANDARD POST MOUNTED STREET NAME SIGN CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		SN-01	1 OF 1	12/1/2023

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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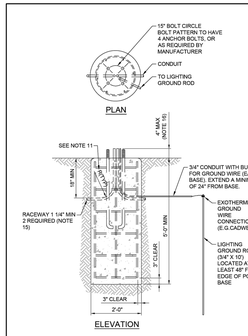
PROFESSIONAL ENGINEER
01/28/25

SIGNAGE PLAN

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	AS SHOWN
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	39 OF 45

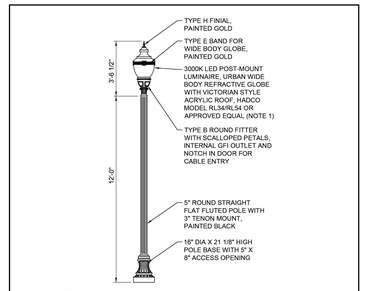


NOTES:

1. ALL EXPOSED CONCRETE SHALL HAVE A NORMAL FINISH.
2. ALL OUTSIDE CONCRETE CORNERS AND EDGES SHALL HAVE A 3/4 " CHAMFER.
3. CONCRETE TO BE RODDED OR VIBRATED WHILE POURING.
4. ALL CONCRETE SHALL BE WVDOH CLASS "B".
5. REINFORCING STEEL SHALL NOT BE CLOSER THAN 3" TO THE OUTSIDE SURFACE OF THE FOOTING AND SHALL BE TIED OR WELDED.
6. VERTICAL BARS SHALL BE TIED WITH #4 HOOP BARS AT 1'-0" ON CENTER. THE #4 HOOP BARS SHALL HAVE A 1'-0" MINIMUM LAP.
7. ALL FOOTINGS IN SIDEWALKS SHALL BE FINISHED FLUSH WITH THE EXISTING SIDEWALKS, UNLESS OTHERWISE SPECIFIED BY THE PROJECT ENGINEER.
8. FOOTINGS SHALL BE CIRCULAR IN CROSS-SECTION.
9. WITH PERMISSION OF THE PROJECT ENGINEER, THE DEPTH OF THE FOOTING MAY BE REDUCED ONE (1) FOOT WHEN THE FOOTING IS PLACED IN A CONCRETE OR ASPHALTIC CONCRETE SIDEWALK OR PAVED SURFACE. THE FOOTINGS MAY BE REDUCED BY ONE (1) FOOT WHEN THE FOOTING IS IN ROCK.
10. NO FORMS MAY EXTEND TO A DEPTH GREATER THAN 12" UNLESS APPROVAL IS GRANTED BY THE CITY ENGINEER.
11. THE RADIUS (R) OF THE CURVE OF THE INNER EDGE OF ANY BEND SHALL NOT BE LESS THAN THE SIZE SPECIFIED IN THE NATIONAL ELECTRICAL CODE.
12. GROUNDING:
    A. THE CONTRACTOR IS TO ENGAGE A QUALIFIED TESTING AND INSPECTION AGENCY TO PERFORM FIELD TESTS AND INSPECTIONS
    B. AFTER INSTALLING GROUNDING SYSTEM BUT BEFORE PERMANENT ELECTRICAL CIRCUITS HAVE BEEN ENERGIZED, TEST FOR COMPLIANCE WITH THE FOLLOWING REQUIREMENTS:
    (1) TEST COMPLETED GROUNDING SYSTEM AT EACH POLE AND AT SERVICE GROUNDING ELECTRODE.
    (2) MEASURE GROUND RESISTANCE NOT LESS THAN TWO FULL DAYS AFTER THE LAST TRACE OF PRECIPITATION AND WITHOUT SOIL BEING MOISTENED BY ANY MEANS OTHER THAN NATURAL DRAINAGE OR SEEPAGE AND WITHOUT CHEMICAL TREATMENT OR OTHER ARTIFICIAL MEANS OF REDUCING NATURAL GROUND RESISTANCE.
    (3) PERFORM THE TEST BY THE FALL-OF-POTENTIAL METHOD ACCORDING TO IEEE STD 81/ANSI/IEEE STD 81/NFPA 781.
    C. INSTALL ADDITIONAL GROUND RODS AS REQUIRED UNTIL MEASURED GROUND RESISTANCE IS 5 OHMS OR LESS.
    D. GROUND RODS ARE TO BE DRIVEN TO A DEPTH OF 2 INCHES BELOW FINISHED GRADE TO TOP OF ROD AND SEPARATED BY A MINIMUM DISTANCE OF 8 FEET.
    E. INTERCONNECT GROUND RODS WITH A #2 AWG BARE, STRANDED COPPER CONDUCTOR BURIED AT 18 INCHES BELOW GRADE.
13. INSTALL POLE, ANCHOR BOLTS, LEVELING SYSTEM, GROUNDING, AND WIRING PER MANUFACTURER SPECIFICATIONS.
14. SEE DETAIL LT-01 FOR CITY STANDARD POST-TOP LIGHT POLE.
15. IF ONE IS SPARE CONDUIT, AN ARROW SHALL BE ETCHED ON THE TOP OF THE BASE TO SHOW THE LOCATION DIRECTION OF THE SPARE CONDUIT.
16. USE 3" MAX WHEN USING TRANSFORMER BASES.

NOT TO SCALE

RANSON	POST TOP STREETLIGHT FOUNDATION - 16' MAX POLE HEIGHT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-04	1 OF 1	12/1/2023

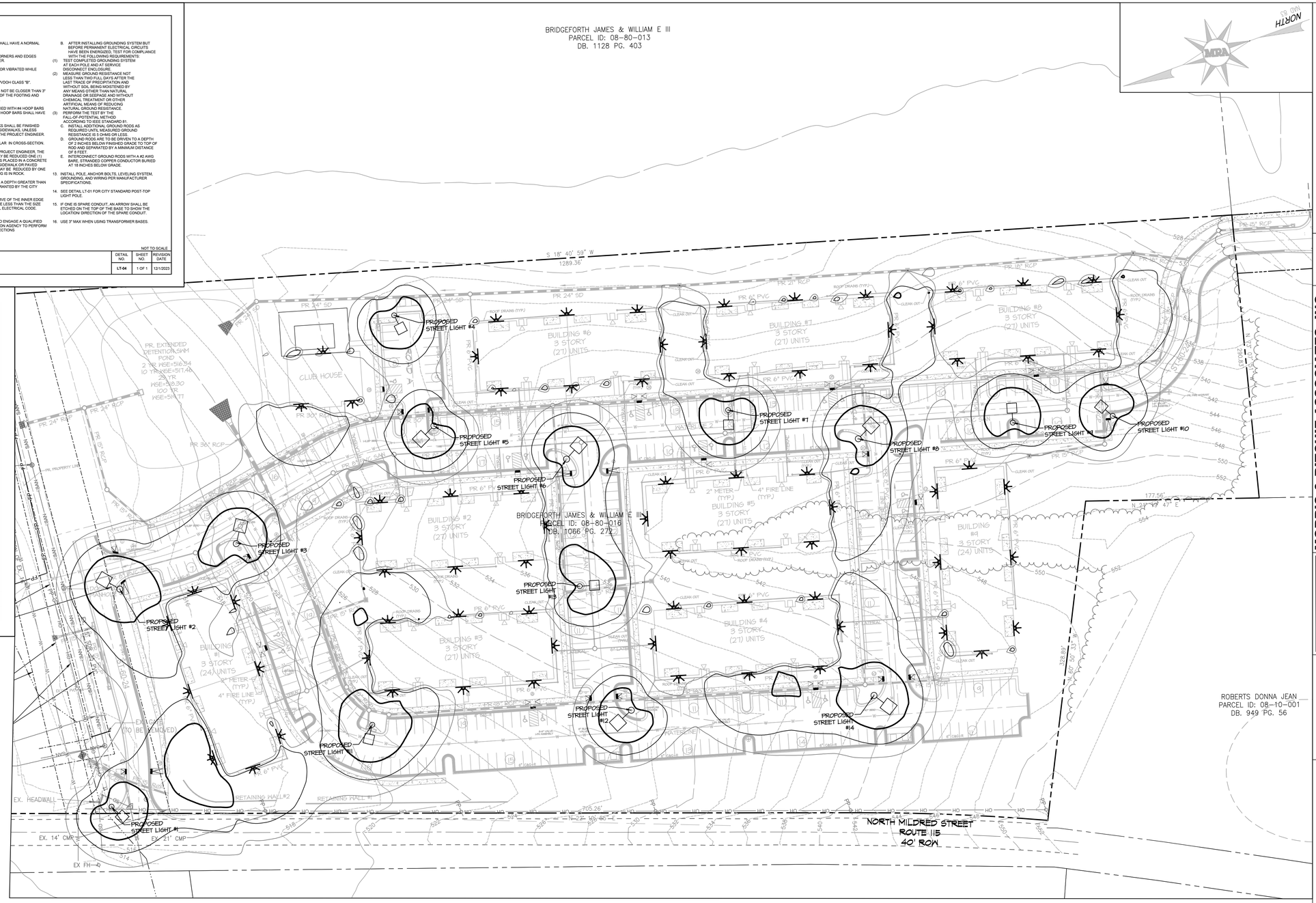


NOTES:

1. PROVIDE TYPE III (RL34) OR TYPE V (RL54) LIGHT DISTRIBUTION AS SHOWN ON PLANS. PROVIDE TYPE V DISTRIBUTION WHERE REQUIRED TO PREVENT LIGHT SPILLOVER ONTO ADJACENT RESIDENTIAL USES.
2. SEE DETAIL LT-04 FOR LIGHT POLE FOUNDATION. DIRECT BURIAL NOT ALLOWED.
3. PROVIDE FIELD ADJUSTMENT SWITCH TO ALLOW THE CITY TO ADJUST ILLUMINATION LEVEL AFTER INSTALLATION. WHERE NEW LIGHTING IS TO BE INSTALLED ON A SEPARATE CIRCUIT, FIELD ADJUSTMENT SWITCH MAY BE LOCATED ON LIGHTING CONTROLLER. WHERE NEW LIGHTING IS TO BE ADDED TO AN EXISTING CIRCUIT, PROVIDE A FIELD ADJUSTMENT SWITCH ON EACH NEW POLE.

NOT TO SCALE

RANSON	RESIDENTIAL POST-TOP STREETLIGHT CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
		LT-01	1 OF 1	12/1/2023



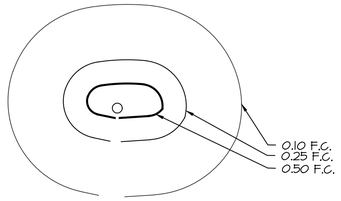
POINT TABLE		
POINT #	NORTHING	EASTING
1	303385.64	2432492.56
2	303293.03	2432695.11
3	303165.17	2432692.69
4	302926.86	2432847.26
5	302932.31	2432727.22
6	302819.81	2432643.98
7	302647.88	2432627.46
8	302535.87	2432549.51
9	302383.40	2432504.54
10	302286.23	2432472.01
11	303107.11	2432468.36
12	302856.34	2432381.22
13	302857.02	2432518.43
14	302620.99	2432300.60

Schedule

Symbol	QTY	Catalog Number	MANUFACTURER	Lamp	Number Lamps	Lumens per Lamp	LLF	Wattage
	75	CREE- THE EDGE 2S LED FLOOD LUMINAIRE	CREE BUILDING MOUNT LIGHT SPECIAL ORDER	LED	1	11211	.84	101
	7	CREE- THE EDGE AREA/FLOOD LED FLOOD LUMINAIRE	CREE BUILDING MOUNT LIGHT SPECIAL ORDER	LED	1	12316	.84	101

TOTAL LUMENS = 161,596

LEGEND



50 0 50 100 150

Scale 1" = 50'

REVISIONS	DATE
CITY, CTUB, WVAM, WVDOT, DEP COMMENTS	01/28/25

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STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

LIGHTING PLAN

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	40 OF 45

PR. EXTENDED DETENTION SWM POND
2 YR WSE=516.34
10 YR WSE=517.46
25 YR WSE=518.30
100 YR WSE=519.11

CLUB HOUSE

ROAD A

BUILDING #6
3 STORY
(27) UNITS

BUILDING #7
3 STORY
(27) UNITS

BUILDING #8
3 STORY
(27) UNITS

BUILDING #2
3 STORY
(27) UNITS

BUILDING #5
3 STORY
(27) UNITS

BUILDING #4
3 STORY
(27) UNITS

BUILDING #3
3 STORY
(27) UNITS

BUILDING #1
3 STORY
(24) UNITS

BUILDING #1
3 STORY
(24) UNITS

WESCOTT DRIVE
50' ROW
DB: 473 PG: 715

S 18° 40' 59" W
1289.36'

N 28° 19' 35" W
427.55'

FLOODPLAIN ZONE AE

TOP:512.45
IN: 503.2
OUT: 503

APPROXIMATE LOCATION OF EX. CPOG CL 150 PVC WATERLINE

WILLIAM E III
80-016
272

ACCESS EASEMENT
7, DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

TOP:514.60
IN: 504.55
OUT: 504.30

EX. HEADWALL

EX. 14" CMP

EX. 21" CMP

EX FH

RETAINING WALL #2

RETAINING WALL #1

BRIDGEFORT JAMES & WILLIAM E III
PARCEL ID: 08-80-016
DB: 1175 PG: 272

BRIDGEFORT
PARCE
DB:

177.56'
N 21° 39' 47" E

328.89'
S 67° 50' 33" W

705.26'
N 22° 10' 55" E

ROBERTS DONNA JEAN
PARCEL ID: 08-10-001
DB. 949 PG. 56

NORTH MILDRED STREET
ROUTE 115
40' ROW

STRIDER JEFFERSON S-TR
PARCEL ID: 08-10-005
DB. 1258 PG. 54

JEFFERSON COUNT
PARCEL ID
DB. 12

FIRE TRUCK CIRCULATION
1"=50'

50 0 50 100 150
Scale 1" = 50'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
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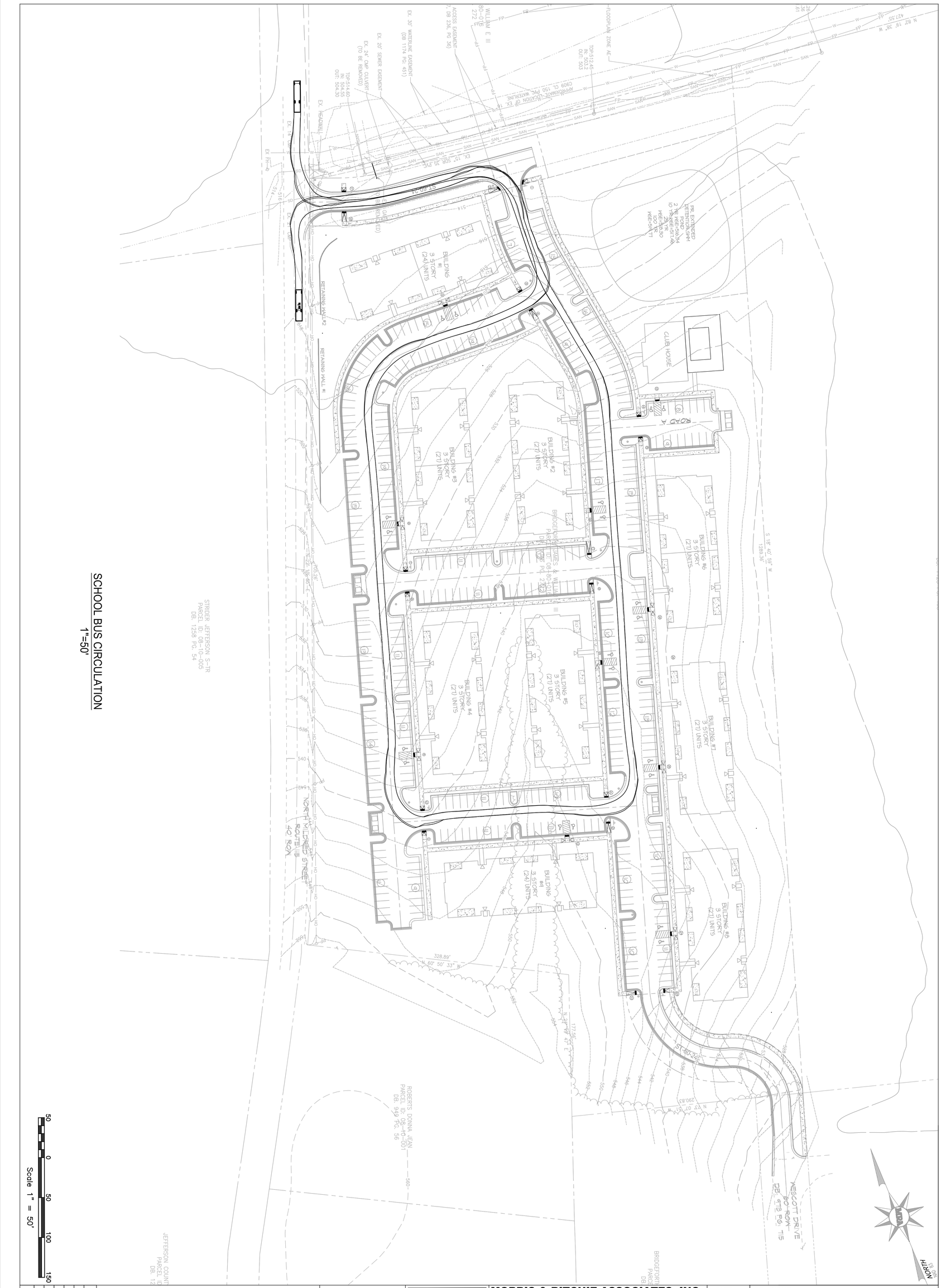
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

VEHICLE TRACKING- FIRE TRUCK

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	41 OF 45



SCHOOL BUS CIRCULATION
1"=50'

Scale 1" = 50'

50 0 50 100 150

VEHICLE TRACKING- SCHOOL BUS

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

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DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

JOB NO.: 22341
SCALE: 1" = 50'
DATE: 10/07/24
DRAWN BY: DLT
DESIGN BY: DLT
REVIEW BY: JKE
SHEET: 42 OF 45

NORTH

FR. EXTENDED DETENTION SWM POND
2 YR WSE=516.34
10 YR WSE=517.48
25 YR WSE=518.30
100 YR WSE=519.77

CLUB HOUSE

ROAD A

BUILDING #6
3 STORY
(27) UNITS

BUILDING #7
3 STORY
(27) UNITS

BUILDING #8
3 STORY
(27) UNITS

BUILDING #2
3 STORY
(27) UNITS

BUILDING #5
3 STORY
(27) UNITS

BUILDING #3
3 STORY
(27) UNITS

BUILDING #4
3 STORY
(21) UNITS

BUILDING #1
3 STORY
(24) UNITS

BUILDING #9
3 STORY
(24) UNITS

WESCOTT DRIVE
50' ROW
DB: 973 PG: 715

S 18° 40' 59" W
1289.36'

N 82° 19' 36" W
417.55'

FLOODPLAIN ZONE AE

TOP:512.45
IN: 503.2
OUT: 503

APPROXIMATE LOCATION OF EX. CMP 12" DIA. C-150 PVC WATERLINE

ACCESS EASEMENT
(DB 236, PG 36)

EX. 30' WATERLINE EASEMENT
(DB 1174 PG: 451)

EX. 20' SEWER EASEMENT

EX. 24" CMP CULVERT
(TO BE REMOVED)

TOP:514.60
IN: 504.55
OUT: 504.30

EX. HEADWALL

EX. 14" CMP

EX. 24" CMP

EX FH

RETAINING WALL #2

RETAINING WALL #1

705.26'

N 22° 55' 05" E

177.56'

N 21° 49' 47" E

328.89'

S 60° 50' 33" W

NORTH MILDRED STREET
ROUTE 15
40' ROW

GARBAGE TRUCK CIRCULATION
1"=50'

50 0 50 100 150
Scale 1" = 50'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
MRAGTA.COM

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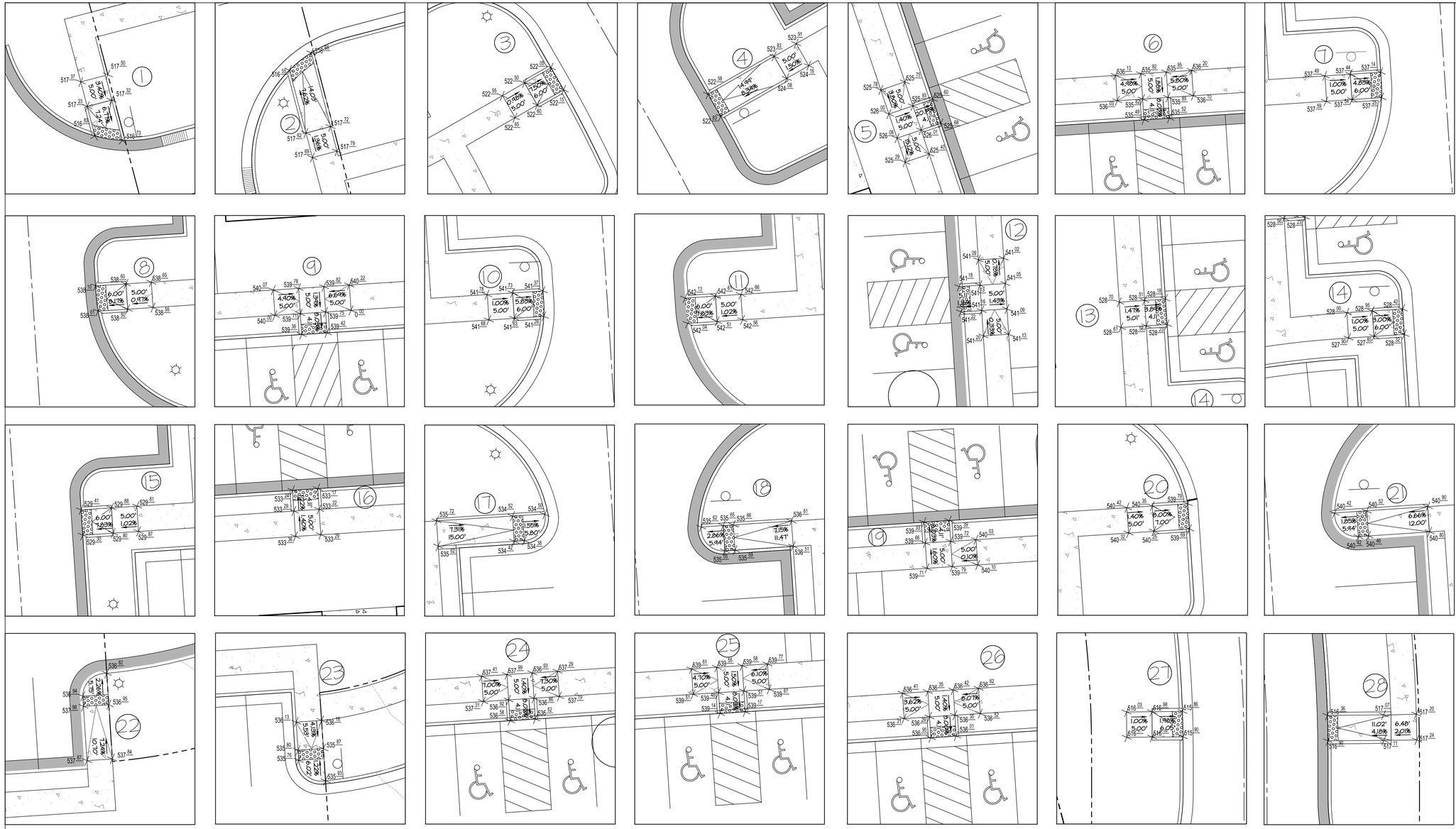
JON K. ERICKSON
LIC. REGISTERED
16052
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

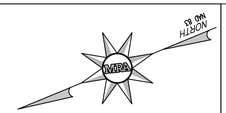
VEHICLE TRACKING- GARBAGE TRUCK

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1" = 50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	43 OF 45





DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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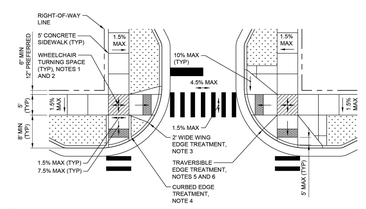
HANDICAP RAMP DETAILS

WEST BRANCH APARTMENTS

CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=10'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	44 OF 45

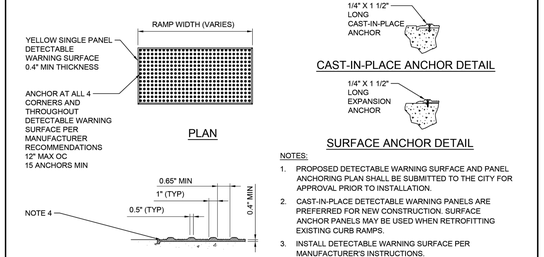


NOTES:

1. MINIMUM DIMENSIONS FOR WHEELCHAIR TURNING AREAS ARE 5'-0" X 4'-0". WHERE BACK OF TURNING AREA IS CONSTRAINED BY A VERTICAL OBSTRUCTION, INCREASE DIMENSIONS TO 5'-0" X 5'-0". WHEN CURB RAMP IS NOT DIRECTLY ALIGNED WITH PATHOF TRAVEL ALONG CROSSWALK, A MINIMUM 4'-0" X 4'-0" TURNING SPACE MUST ALSO BE PROVIDED AT THE BOTTOM OF THE CURB RAMP. TURNING SPACE MUST BE FULLY WITHIN THE CROSSWALK.
2. WHEELCHAIR TURNING AREAS MAY NOT EXCEED 2.0% SLOPE IN ANY DIRECTION. PROVIDE DETAILS DEMONSTRATING EDGE SLOPES OF TURNING SPACE DO NOT EXCEED 1.5% AND DIAGONAL SLOPE FROM HIGHEST TO LOWEST CORNER DOES NOT EXCEED 2%.
3. 2' WIDE WING EDGE TREATMENT MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE.
4. CURBED EDGE TREATMENTS MAY BE USED WHEN RAMP IS ADJACENT TO NON-TRAVERSIBLE VEGETATED SURFACE OR OBSTRUCTION. DO NOT USE CURBED EDGE TREATMENT UNLESS RAMP IS DIRECTLY ALIGNED WITH THE PATH OF TRAVEL ALONG THE CROSSWALK.
5. TRAVERSIBLE EDGE TREATMENT REQUIRED WHEN SIDEWALK IS A MINIMUM OF 10 FEET WIDE AND IMMEDIATELY ADJACENT TO CURB.
6. CURB HEIGHT SHALL INCREASE TO A MINIMUM OF 3 INCHES BETWEEN RAMPS.

NOT TO SCALE

PERPENDICULAR CURB RAMP WITH CURB EXTENSION CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
RANSON	SW-05	1 OF 1	12/1/2023

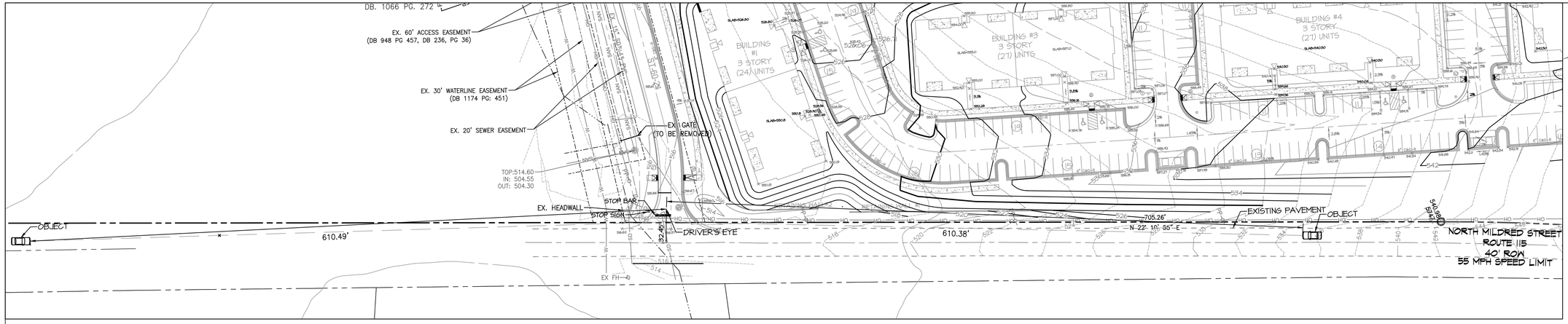


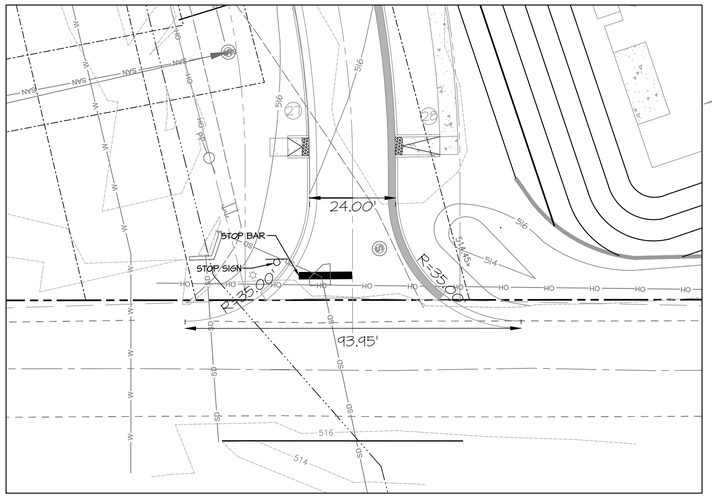
NOTES:

1. PROPOSED DETECTABLE WARNING SURFACE AND PANEL ANCHORING PLAN SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO INSTALLATION.
2. CAST-IN-PLACE DETECTABLE WARNING PANELS ARE PREFERRED FOR NEW CONSTRUCTION. SURFACE ANCHOR PANELS MAY BE USED WHEN RETROFITTING EXISTING CURB RAMPS.
3. INSTALL DETECTABLE WARNING SURFACE PER MANUFACTURER'S INSTRUCTIONS.
4. FOR NEW CONSTRUCTION, DEPRESS CONCRETE UNDER DETECTABLE WARNING PANEL SO PANEL IS FLUSH WITH SURROUNDING CONCRETE. FOR RETROFIT INSTALLATIONS, PROVIDE DETECTABLE WARNING SURFACE WITH BEVELED EDGES TO ENSURE SURFACE DISCONTINUITY IS LESS THAN 0.25"

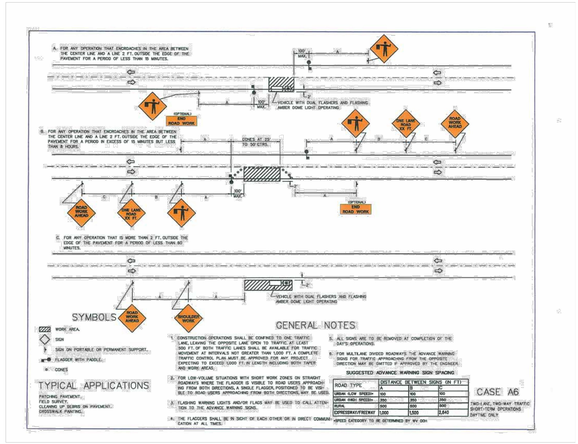
NOT TO SCALE

DETECTABLE WARNING SURFACE CITY OF RANSON, WEST VIRGINIA	DETAIL NO.	SHEET NO.	REVISION DATE
RANSON	SW-03	1 OF 1	12/1/2023



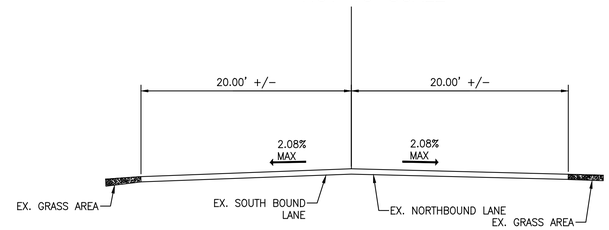


ENTRANCE DETAIL:
SCALE: 1"=20'

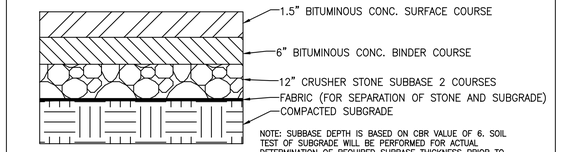


NOTE: SEE SHEET 12 FOR ENTRANCE PROFILE

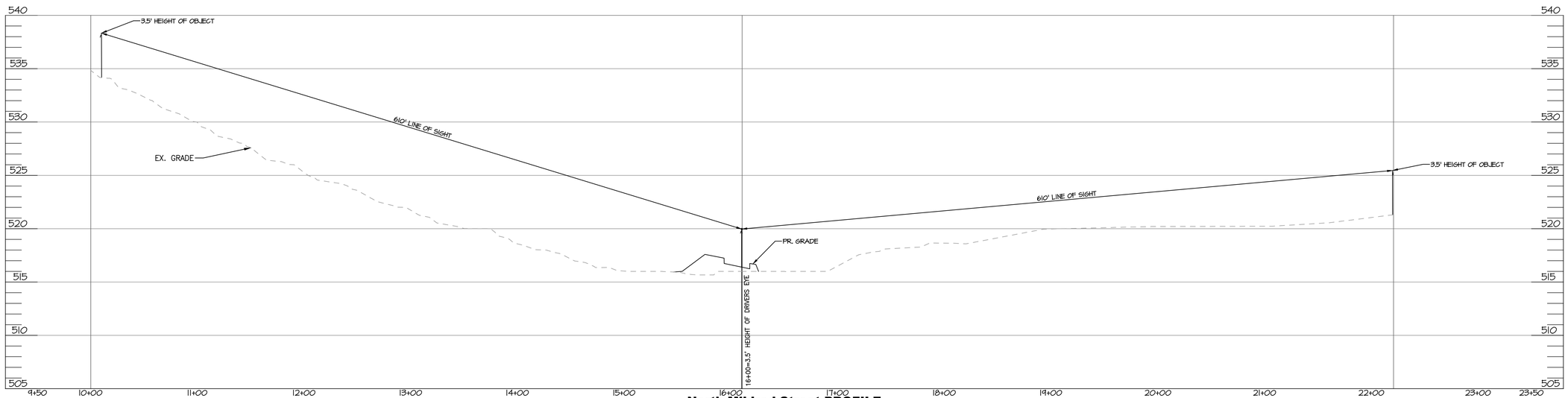
NORTH MILDRED STREET
NOT TO SCALE



ENTRANCE CROSS SECTION A–A



PAVEMENT SECTION DETAIL
N.T.S



North Mildred Street PROFILE
SCALE: H: 1"=50'
V: 1"=5'

DATE	REVISIONS
01/28/25	CITY, CTUB, WVAM, WVDOT, DEP COMMENTS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: (703) 994 - 4047
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JOHN K. ERICKSON
REGISTERED
16062
STATE OF
WEST VIRGINIA
PROFESSIONAL ENGINEER
01/28/25

SIGHT DISTANCE PLAN AND PROFILE

WEST BRANCH APARTMENTS
CONSTRUCTION DRAWINGS
CITY OF RANSON, WEST VIRGINIA

JOB NO.:	22541
SCALE:	1"=50'
DATE:	10/07/24
DRAWN BY:	DLT
DESIGN BY:	DLT
REVIEW BY:	JKE
SHEET:	45 OF 45

AGENDA ITEM IV.3

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public hearing is to accept public comments on the final plat proposal for Huntwell West Phase 2B and 2C

Final Plat Proposal for Huntwell West Phase 2C. Located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464),

ATTACHMENTS:

Legal Notice Huntwell West 2C plat , dev agreement, bond.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for Huntwell West Phase 2C located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464), accepting the bond, and entering a development agreement for Phase 2C of Huntwell West. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.4

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 25-4-FP- Consideration - Applicant Morris and Ritchie Associates INC submitted application for Huntwell WV LLC, final plat proposal for Huntwell West Phase 2C

Phase 2C of the Huntwell Development. 39 Residential Lots (22 single family, 17 town-homes)

ATTACHMENTS:

25-4-FP-phase 2c record plat.pdf
pdf.svg

NOTES

1. THE PROPERTY SHOWN HEREON IS LOCATED ON TAX MAP 9 PARCEL 8 AND IS CURRENTLY ZONED SC–NC.
2. THE PROPERTY DELINEATED HEREON IS IN THE NAME OF HUNTWELL WV, LLC AT D.B. 1272 PG. 420, AMONG THE LAND RECORDS OF JEFFERSON COUNTY, WEST VIRGINIA.
3. PROPERTY OWNER'S ADDRESS: 665 SIMONDS ROAD WILLIAMSTOWN, MA 01267.
4. BOUNDARY INFORMATION AS SHOWN HEREON IS BASED ON EXISTING LAND RECORDS AND SURVEY PERFORMED BY MORRIS & RITCHIE ASSOCIATES, INC. IN DECEMBER 2023. NORTH MERIDIAN INFORMATION AS SHOWN HEREON IS REFERENCED TO THE WEST VIRGINIA STATE GRID, NORTH ZONE AND WAS ESTABLISHED BY GPS METHODS.
5. THE ERROR OF CLOSURE FOR THE EXTERIOR BOUNDARY IS 1 IN 45054447.5 FEET.
6. THIS PLAT HAS BEEN PREPARED WITH THE BENEFIT OF A TITLE REPORT.
7. SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION X – AREAS DETERMINED TO BE OUTSIDE THE 500–YEAR FLOODPLAIN – BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), AS SHOWN ON FLOOD INSURANCE RATE MAP COMMUNITY–PANEL NUMBERS #54037C0130E DATED 12/18/2009 AND #54037C0136E DATED 12/18/2009.
8. THE DEVELOPER, IN SIGNING THIS PLAT, AGREES TO ABIDE BY ALL CONDITIONS TERMS AND SPECIFICATIONS PROVIDED HEREON; AND TO COMPLETE ALL THE IMPROVEMENTS REQUIRED BY THE PRELIMINARY PLAT.
9. PROPERTY CORNERS ARE TO BE SET USING $\frac{5}{8}$" REBAR WITH I.D. CAPS. ALL OTHER CORNERS ARE AS NOTED. CORNERS MARKS TO BE IN PLACED PRIOR TO CONVEYANCE OF INDIVIDUAL LOTS.
10. RELATED APPLICATIONS:
    LDPP–21–025 APPROVED 6/15/21
    RZNG–21–013 APPROVED 6/15/21
11. RELATED PERMITS:
    HEALTH DEPARTMENT: SEWER #20,758, WATER #20,758
    WVDOH: 05–2022–0296
12. THE N/S AND E/W RIGHTS OF WAY ARE DEPICTED HERE TO RESERVE CONNECTING WAYS TO/WITH THE EXISTING CITY ROAD NETWORK. FUTURE RIGHT OF WAY LOCATION/ALIGNMENT ADJUSTMENTS SHALL RECEIVE IMMEDIATE REVIEW BY THE CITY STAFF AND WILL NOT DELAY PROJECT APPROVAL AND COMPLETION.
13. SETBACKS SHOWN HEREIN ARE BASED ON WAVIER LETTER DATED: AUGUST 4, 2023 AND APPROVED ON DECEMBER 1, 2023. FRONT YARD SETBACKS INCREASE FROM 18' MAX TO 30' MAX.
14. THE CURRENT SETBACKS SHOWN HEREIN ARE BASED ON THE CURRENT ZONING ORDINANCE AND ARE SUBJECT TO CHANGE BASED ON FUTURE ZONING CHANGES.

YARD REQUIREMENTS:

T3	REQUIRED	PROVIDED
FRONT:	20' MIN., 30 MAX.	20'
FRONT SECONDARY:	2' MIN	
SIDE:	8' MIN.	8'
REAR:	24' MIN.	24'
T4		
FRONT:	30' MAX (PER APPROVED WAVIER)	30'
FRONT SECONDARY:	10' MAX	
SIDE:	0 OR 6' MIN. TOTAL	0 OR 6' MIN. TOTAL
REAR:	3' MIN.	3'

OWNER'S CERTIFICATION AND DEDICATION

WE, HUNTWELL WV, LLC, OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON CONSENT TO AND ADOPT THIS PLAN OF SUBDIVISION AND INCONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE PLANNING COMMISSION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; AND DEDICATE THE STREETS, WALKWAYS, AND OTHER EASEMENTS, TO PUBLIC USE OTHERWISE NOTED ON THIS PLAT.

THE SUBDIVISION SHOWN HEREON IS SUBJECT TO A DEVELOPERS AGREEMENT DATED __ AND RECORDED AMONG THE LAND RECORDS OF JEFFERSON COUNTY IN BOOK ___, PAGE __ AND ALL APPROVED LAND DEVELOPMENT PLANS AND CONSTRUCTION DRAWINGS APPROVED BY THE CITY OF RANSON.

WE CERTIFY THAT THERE ARE NO SUITS, ACTIONS OF LAWS, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS, OR RIGHT–OF–WAY(S) AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS HEREIN INDICATED, AND THAT THE REQUIREMENT OF THE SUBDIVISION ORDINANCE OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPLIED WITH.

_____
OWNER

_____
DATE

SURVEYOR'S CERTIFICATE

I, HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF ALL OF THE LANDS CONVEYED BY DEED DATED AND RECORDED IN THE LAND RECORDS OF JEFFERSON COUNTY, AT D.B. 1272 PG. 420, AND THAT THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPILED WITH.

_____
JON K. ERICKSON WVLS #2302

_____
DATE

PLANNING COMMISSION APPROVAL

WITH THE APPROVAL OF A GENERAL LAND DEVELOPMENT PLAN DATED, ASSOCIATED CONSTRUCTION DRAWINGS DATED AND DEVELOPMENT AGREEMENT DATED_____, THIS PLAT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AND HAS BEEN APPROVED FOR RECORDATION BY THE CITY OF RANSON PLANNING COMMISSION.

_____
PLANNING COMMISSION PRESIDENT

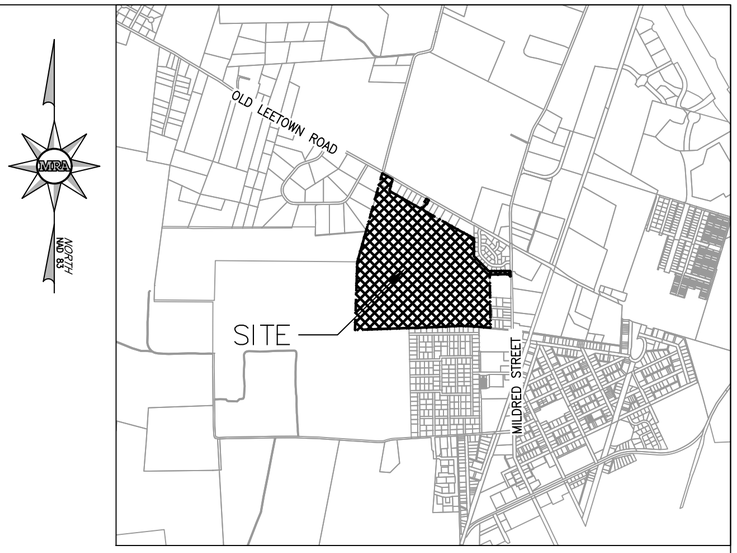
_____
DATE

OWNER/DEVELOPER'S STATEMENT OF ACCEPTANCE

THE OWNER AND DEVELOPER, IN SIGNING THIS PLAT, AGREE TO ABIDE BY ALL CONDITIONS, TERMS, AND SPECIFICATIONS PROVIDED HEREON.

_____
DATE

OWNER/DEVELOPER:
HUNTWELL WV, LLC
665 SIMONDS ROAD
WILLIAMSTOWN, MA 01267



VICINITY MAP
SCALE: 1"=2000'

LEGEND

- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- PROP. R/W LINE
- EX. R/W LINE TO BE REMOVED
- PROP. PROPERTY LINE
- PROP. EASEMENT LINE

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

SUBDIVISION PLAT
HUNTWELL WEST - PHASE 2C
HUNTWELL WV, LLC
DISTRICT: 08, MAP: 09, PARCEL: 08
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
PHONE: 703-994-4047
MRAGTA.COM

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DATE	REVISIONS	JOB NO.:
		SCALE:
		DATE: 01/21/2025
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 1 OF 3

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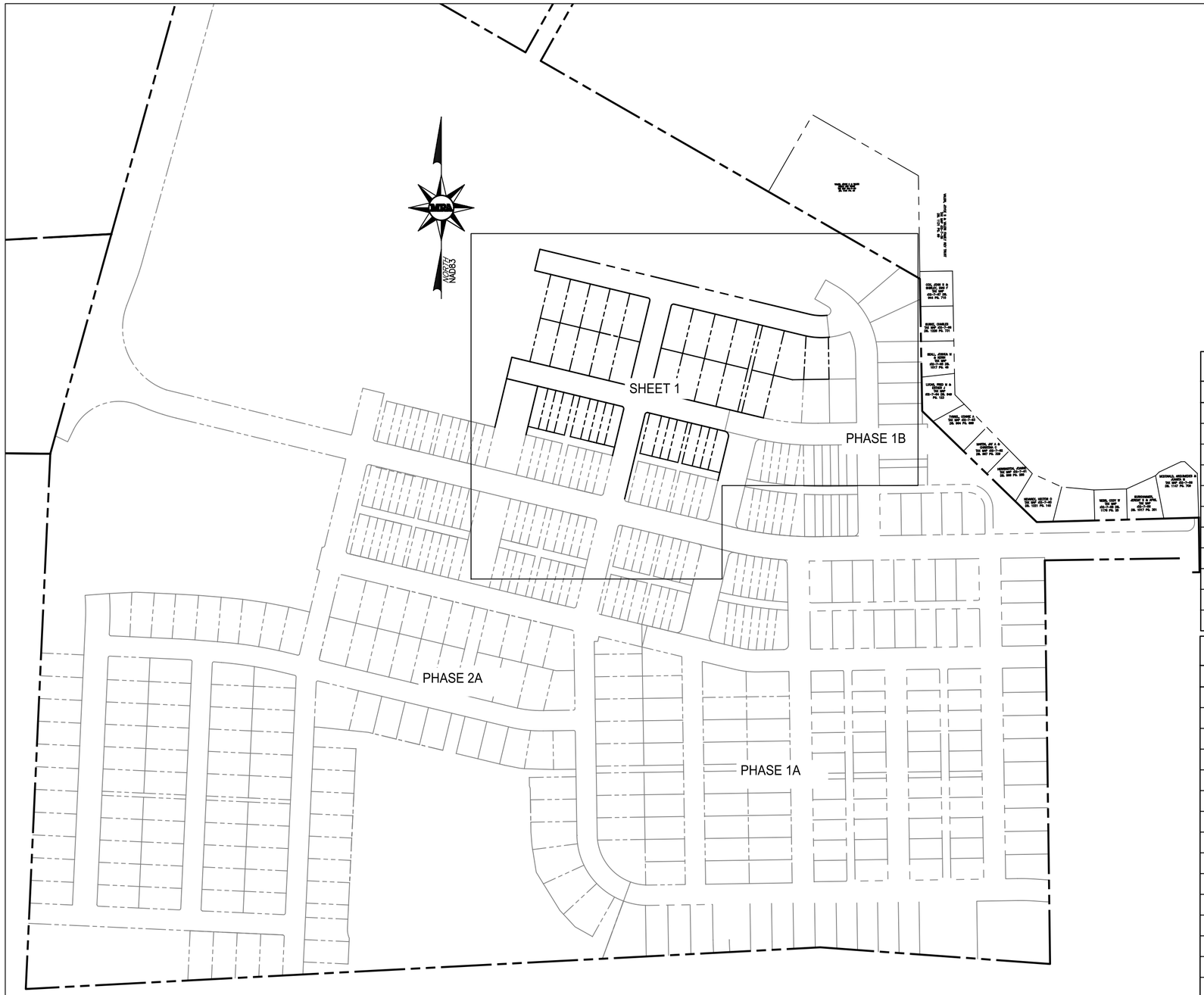

LOT AREA TABLE		
PARCEL	AREA (SF)	AREA (AC)
LOTS	169,917	3.9008
PARCEL H	8,512	0.1954
PARCEL I	27,897	0.6404
PARCEL J	28,459	0.6533
PARCEL K	7,666	0.1760
ROW	81,451	1.8699
RESIDUE 1	1,365,804	31.3546
RESIDUE 2	306,209	7.0296
TOTAL	1,995,915	45.8199

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C–1	42.58'	123.00'	19.84°	S 86° 22' 02" E	42.37'
C–2	3.83'	177.01'	1.24°	S 77° 04' 14" E	3.83'
C–3	55.22'	177.01'	17.88°	S 86° 37' 42" E	55.00'
C–4	2.22'	177.01'	0.72°	N 84° 04' 30" E	2.22'
C–5	9.60'	6.11'	90.00°	S 58° 33' 01" W	8.64'
C–6	9.42'	6.00'	90.00°	N 31° 26' 59" W	8.49'
C–7	9.42'	6.00'	89.99°	N 58° 32' 44" E	8.48'
C–8	18.86'	12.00'	90.04°	S 31° 28' 03" E	16.98'
C–9	9.42'	6.00'	89.99°	S 31° 27' 09" E	8.48'
C–10	9.42'	6.00'	90.00°	N 31° 27' 04" W	8.49'
C–11	8.72'	6.00'	83.30°	S 55° 11' 59" W	7.97'

LINE TABLE		
LINE #	LENGTH	DIRECTION
L–1	20.00	N 76° 26' 59" W
L–2	30.52	N 13° 33' 01" E
L–3	30.52	N 13° 33' 01" E
L–4	220.58	N 13° 33' 01" E
L–5	220.58	N 13° 33' 01" E
L–6	68.25	N 76° 26' 59" W
L–7	68.25	S 76° 26' 59" E
L–8	100.29	S 13° 32' 56" W
L–9	100.29	S 13° 33' 01" W
L–10	100.29	S 13° 33' 06" W
L–11	100.29	S 13° 33' 01" W
L–12	21.13	S 32° 16' 20" E
L–13	22.90	N 60° 23' 10" E
L–14	252.00	N 76° 26' 59" W
L–15	252.00	S 76° 26' 59" E

200 0 200 400 600

Scale 1" = 200'

SUBDIVISION PLAT

HUNTWELL WEST - PHASE 2C

HUNTWELL WV, LLC

DISTRICT: 08, MAP: 09, PARCEL: 08

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON
No. 2302
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 EAST HIRST ROAD, SUITE 106
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DATE	REVISIONS	JOB NO.:
		SCALE: 1"=50'
		DATE: 01/21/2025
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 2 OF 3

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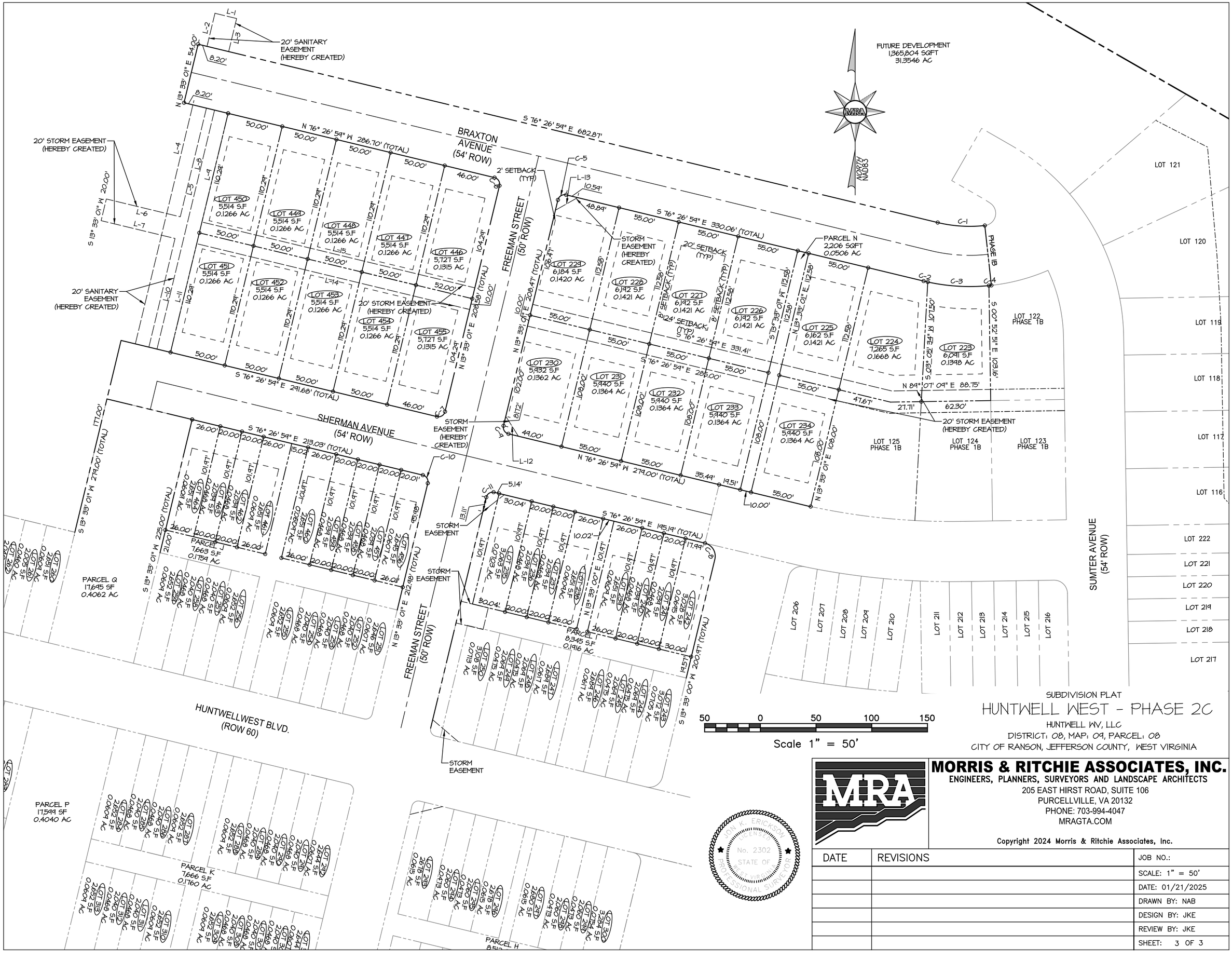

SUBDIVISION PLAT

HUNTWELL WEST - PHASE 2C

HUNTWELL WV, LLC

DISTRICT: 08, MAP: 09, PARCEL: 08

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

205 EAST HIRST ROAD, SUITE 106

PURCELLVILLE, VA 20132

PHONE: 703-994-4047

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JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

DATE	REVISIONS	JOB NO.:
		SCALE: 1" = 50'
		DATE: 01/21/2025
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 3 OF 3

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AGENDA ITEM IV.5

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing accepting the bond for Huntwell West Phase 2C (Lots 225-242, Lots 450-464),

Huntwell West Phase 2C located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464),

ATTACHMENTS:

Legal Notice Huntwell West 2C plat , dev agreement, bond.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for Huntwell West Phase 2C located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464), accepting the bond, and entering a development agreement for Phase 2C of Huntwell West. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.6

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 25-4-FP- Consideration - Applicant Morris and Ritchie Associates INC submitted application for Huntwell WV LLC, to accept the bond for Huntwell West Phase 2C (Lots 225-242, Lots 450-464),

Phase 2C of the Huntwell Development. 39 Residential Lots (22 single family, 17 town-homes). Bond to be held in the amount of
$ 2,051,970.59

ATTACHMENTS:

PC25-09 Huntwell 2C Bond.docx

Resolution #: PC-25-09

A Resolution of the Planning Commission of the City of Ranson to Accept the Guarantee Surety (Bond) for the Required Physical Improvements for the Huntwell West Subdivision Phase 2C.

THE PLANNING COMMISSION OF THE CITY OF RANSON RESOLVES AS FOLLOWS:

Section 1. The Planning Commission accepts the Corporate Surety in lieu of completion of the required on-site improvements as described in 16-82, and as outlined in the revised development agreement presented March 10, 2025, to the Planning Commission, for Phase 2C of the subdivision.

Section 2. The approved bonded amount will be held in the amount of $2,051,970.59

Section 3. This Resolution and a copy of the surety policy is hereby directed to be forwarded to the City Clerk for communication to the Ranson City Council and for recording within the land records of the Jefferson County Clerk.

Signed and approved this 10th day of March 2025.

_____
Mike Anderson, President

ATTEST:

_____
Planning Commission Member

AFFIX CITY SEAL

AGENDA ITEM IV.7

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing - Public hearing is to accept public comments on the development agreement for Phase 2C of Huntwell West.

ATTACHMENTS:

Legal Notice Huntwell West 2C plat , dev agreement, bond.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for Huntwell West Phase 2C located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464), accepting the bond, and entering a development agreement for Phase 2C of Huntwell West. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.8

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 25-4-FP- Consideration - Applicant Morris & Ritchie Associates, INC submitted application for Huntwell WV LLC for an Development agreement for Phase 2B and 2C of Huntwell West.

Huntwell West Phase 2C located off North Mildred Street and Old Leetown Road, Ranson WV (Lots 225-242, Lots 450-464),

ATTACHMENTS:

PC25-10 Huntwell Phase 2C Development Agreement.docx

RESOLUTION#: PC-25-10

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF RANSON APPROVING A DEVELOPMENT AGREEMENT BY AND BETWEEN THE RANSON PLANNING COMMISSION AND CHANDLERS GLEN LLC FOR A SUBDIVISION COMMONLY REFERRED TO AND KNOWN AS "HUNTWELL WEST PHASE 2C".

THE PLANNING COMMISSION OF THE CITY OF RANSON RESOLVES AS FOLLOWS:

Section 1. The Planning Commission of the City of Ranson pursuant to its authority within Ranson Municipal Code 16-60 approves the attached Development Agreement by and between the Ranson Planning Commission and Hunter Wilson with Chandlers Glen, LLC, for a subdivision commonly referred to and known as "Huntwell West Phase 2C"

Section 2. The Planning Commission President is authorized and hereby directed to execute the Development Agreement on behalf of the City of Ranson Planning Commission.

Section 3. The Planning Commission hereby authorizes the City Manager or his designee to execute any and all documents necessary to carry out the conditions of the attached Development Agreement, whether express or implied, and any documents necessary for the transfer of property to Hunter Wilson with Chandlers Glen, LLC, including any documents requested by financial institutions, lenders, attorneys, lienholders, contractors, sureties, and/or third parties.

Section 4. This Resolution and executed Development Agreement is hereby directed to be forwarded to the City Clerk for communication to the Ranson City Council and for recording within the land records of the Jefferson County Clerk.

Signed and approved this 10th day of March 2025.

_____
Planning Commission
President

ATTEST:

_____
Planning Commission Member

AFFIX CITY SEAL

AGENDA ITEM IV.9

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing to accept public comments on the Land Development Plan and Plat for the property known as Shenandoah Springs, parcels 0800080024 and 080008D (consisting of 90.45 acres) located on Mountain Laurel Blvd and Deep Creek Road, Ranson, WV, 25438.

ATTACHMENTS:

Legal Notice for LDPP-Shenendoah Springs.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code § 8A-7-9 et seq., and W. Va. Code § 8A-5-8 et seq., and Ranson Code § 19A-1.3 et seq. The Ranson Planning Commission will hold a public hearing on March 10, 2025 at 7:00 pm at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the Land Development Plan and Plat for the property known as Shenandoah Springs, parcels 0800080024 and 080008D (consisting of 90.45 acres) located on Mountain Laurel Blvd and Deep Creek Road, Ranson, WV, 25438. Copies of the proposed Land Development Plan and Plat are available for inspection during regular office hours of 8:00 am – 4:00 pm weekdays. All persons are invited to attend and make comments about the proposed Land Development Plan and Plat.

If you cannot attend but wish to comment, you may write, and it must be received to the following address prior to March 7, 2025, City of Ranson, Attn: Community Development Director, 312 S. Mildred Street, Ranson, WV 25438 or emailed to cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission and inserted into the official record.

AGENDA ITEM IV.10

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 24-48-LDPP Consideration - US Home, LLC dba Lennar Corporation for the the Land Development Plan and Plat for the property known as Shenandoah Springs, parcels 0800080024 and 080008D (consisting of 90.45 acres) located on Mountain Laurel Blvd and Deep Creek Road, Ranson, WV, 25438.

Land Development Plan and Plat revision to include the 3.0 acre parcel annexed into the City in 2023.

ATTACHMENTS:

24-48-shen springs ldpp app executed 11-8-24.pdf
24-48-2024-10-31 shenandoah springs ldpp.pdf

SMARTCODE LAND DEVELOPMENT PLAN AND PLAT APPLICATION

City of Ranson, West Virginia • Department of Community Development
312 S. Mildred Street, Ranson West Virginia 25438 • Phone: 304-725-1010 • www.cityofransonwv.net

OFFICE USE ONLY
Application # _____

Date Received: _____ Fee: _____

Application Accepted By: _____ Payment Type: _____

Comments:

APPLICANT:
NAME: U.S. Home, LLC dba Lennar Corporation

ADDRESS: 14280 Park Meadow Drive, Ste 108 CITY/STATE Chantilly, Virginia ZIP: 20151

PHONE # 703-449-6538 FAX # _____ EMAIL stuart.hagenlock@lennar.com

PROPERTY OWNERS:
NAME: U.S. Home, LLC

ADDRESS: 14280 Park Meadow Drive, Ste 108 CITY/STATE Chantilly, Virginia ZIP: 20151

PHONE # 703-449-6538 FAX # _____ EMAIL stuart.hagenlock@lennar.com

☐ CHECK HERE IF LISTING ADDITIONAL OWNERS ON SEPARATE PAGE.

ATTORNEY/AGENT (CHECK ONE IF APPLICABLE): ☐ ATTORNEY ☐ AGENT

NAME: _____

ADDRESS: _____ CITY/STATE _____ ZIP: _____

PHONE # _____ FAX # _____ EMAIL _____

SIGNATURES:
APPLICANT SIGNATURE: _____ STUART HAGENLOCK

PROPERTY OWNER SIGNATURE: _____ STUART HAGENLOCK

ATTORNEY / AGENT SIGNATURE: _____

PLEASE DIRECT CORRESPONDENCE TO: ☒ OWNER ☐ AGENT ☐ ATTORNEY

My signature attests to the fact that the attached application package is complete and accurate to the best of my knowledge. I understand that City staff review of this application is dependent upon the accuracy of the information provided that any inaccurate or inadequate information provided by me/my firm/my agent, etc. may delay review of this application.

PLEASE NOTE: INCOMPLETE INFORMATION WILL RESULT IN REJECTION OF THIS SUBMITTAL.
FOR ALL QUESTIONS REGARDING THIS FORM AND FEES, PLEASE CALL: 304-725-1010.
ALL FEES MUST BE PAID WITH APPLICATION SUBMITTAL. PLEASE MAKE ALL CHECKS PAYABLE TO THE **CITY OF RANSON**.

SMARTCODE LAND DEVELOPMENT PLAN AND PLAT APPLICATION

City of Ranson, West Virginia • Department of Community Development
312 S. Mildred Street, Ranson West Virginia 25438 • Phone: 304-725-1010 • www.cityofransonwv.net

LOCATION AND PROPERTY INFORMATION

PROPERTY ADDRESS (FOR ZONING PURPOSES): Mountain Laurel Blvd, Deep Creek Road

MAP AND PARCEL NUMBER(S) FOR CERTIFIED ADDRESS: 19-08-0008-0024, 19-08-0008D

☐ **CHECK HERE IF LISTING ADDITIONAL PARCEL NUMBERS ON SEPARATE PAGE.**

SMARTCODE DESIGNATION:

☑ NEW COMMUNITY (SC-NC) ☐ INFILL COMMUNITY (T1-T5) ☐ TRANSECT ZONES NOT IN A COMMUNITY PLAN (T1-T5)

ZONING DISTRICT(S) SC-NC(T1-T4) TOTAL ACREAGE 90.45

DESCRIBE HOW LAND DEVELOPMENT PLAN AND PLAT IS CONSISTENT WITH COMPREHENSIVE PLAN: The G3 Preferred Growth Sector is a priority expansion area of the 2012 comprehensive plan. This lan encourages the use of Chapter 19A SmartCode and as such, this request conforms with the preferred vision of the Comprehensive Plan.

NARRATIVE DESCRIPTION OF STORMWATER CONTROL MEASURES: A large portion of the site located on the west will be directed to the existing SWM pond that was built to handle the proposed subdivision when the southern portion of the site was constructed. The other areas of the site will drain north and will be directed into proposed SWM ponds.

TOTAL IMPERVIOUS SURFACE SQUARE FOOTAGE: 1,538,820 sf

DESCRIBE HOW THOROUGHFARES, SIDEWALKS, PATHS, AND PASSAGES COORDINATE WITH BORDERING LAND DEVELOPMENT:

Road connections will be provided to Greene Ave, Georgia Ave, Beauregard Blvd, Mountain Laurel Blvd, and Flowing Springs Road.

STATEMENT DEMONSTRATING AVAILABILITY OF UTILITIES: Existing waterline and sanitary utilities are located withing the parcel.

STATEMENT REGARDING PROTECTION OF RARE, THREATENED, OR ENDANGERED SPECIES: A determination from DNR has been provided with this submission.

I CONFIRM THAT I HAVE CONTACTED THE WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES REGARDING THE PRESENCE OF RARE, THREATENED, OR ENDANGERED SPECIES ON THIS PROPERTY: ☑ YES ☐ NO

☐ **CHECK HERE IF ANSWERS TO ANY QUESTION ABOVE APPEAR ON SEPARATE PAGE.**

APPLICATION CONTINUED ON NEXT PAGE

SMARTCODE LAND DEVELOPMENT PLAN AND PLAT APPLICATION

City of Ranson, West Virginia • Department of Community Development
312 S. Mildred Street, Ranson West Virginia 25438 • Phone: 304-725-1010 • www.cityofransonwv.net

INSTRUCTIONS

The application package must consist of seven (7) full-sized complete sets of all items listed below, one of which must contain the original signed forms, plus one (1) 11" x 17" reduced copy.

LAND DEVELOPMENT PLAN AND PLAT APPLICATION CHECKLIST – ATTACH MAP(S) AND OTHER DOCUMENTS INCLUDING THE FOLLOWING INFORMATION:

- ❑ Title, scale, date, and approximate north arrow on all maps

I. Existing Conditions Plan:

- ❑ Existing land conditions and topography at a maximum of 20-foot contour intervals, using USGS topography or other available topographic survey and established or approximated 100-year flood plain limits as shown on the official FEMA flood insurance maps
- ❑ Soil types from USDA
- ❑ Boundary lines of the property (certified boundary not required at this stage)
- ❑ Location map at a scale of 1" = 2,000 feet with north arrow
- ❑ Natural features to be preserved and or removed (i.e. floodplains, wetlands, items on the National Register of Historic Places or within designated historic districts, known sinkholes, etc.).
- ❑ The location and width of each existing easement within the new community land development plan and plat boundaries.
- ❑ The location, width, and name of each existing improved or unimproved street, easement, or alley within 200 feet of the proposed subdivision.
- ❑ Existing zoning of all abutting properties

II. Proposed Community Plan:

- ❑ Designation of community unit type
- ❑ Boundaries of community units based on adjusted pedestrian sheds
- ❑ Total site acreage
- ❑ Transect district locations with acreages and percentages
- ❑ Block sizes
- ❑ Thoroughfares: location and designation of thoroughfare types
- ❑ Civic space types, acreages, percentage and location
- ❑ Special requirements, if applicable (See Section 3.12.)
- ❑ Special district locations with acreages and percentage of community unit, if applicable (See Article 6. Special Districts.)
- ❑ Overlay district locations with acreages and percentage of community unit, if applicable (See Section 3.10 Overlay District Standards.)
- ❑ Any requested administrative waivers or variances (separate application form is required)

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

LAND DEVELOPMENT PLAN AND PLAT APPLICATION

July 18, 2014
Revised January 30, 2015
Revised July 10, 2018
Revised September 10, 2018
Revised September 9, 2019
Revised November 5, 2021
Revised May 26, 2022
Revised June 6, 2022
Revised July 6, 2022
Revised January 3, 2023
Revised June 16, 2023
Revised October 31, 2024

Existing Conditions Narrative:

The properties are located in Ranson Corporation, District 8, of Jefferson County, West Virginia, and are identified as follows: The boundary information for the property was obtained from public records including plats recorded in the Office of Jefferson County in Plat Book 26 page 431 ,Plat Book 3 page 25, Plat Book 26 page 490 and Deed Book 403 page 328. Adjacent parcel and right-of-way locations were obtained from Jefferson GIS data and Tax Map 8D information. The total area of the properties within the limits of the application is approximately 90.45 acres.

Topography was obtained through available public records, GIS, or supplied by the Owner and the City of Ranson. There are a few areas with man-made slopes over 25% associated with the previous rough grading of lots and streets on OSWM that will be re-graded during stormwater management (SWM) facility and house construction, as well as in a small area adjacent to a swale near the northeast portion of Parcel 24 that will be regraded for construction of a SWM facility.

This site currently is zoned to Smart Code New Community in 2015 and has had several minor changes since this original approval. This application is consistent with the urban form, development intensity, and community types, from the original approvals.

The Village of Shenandoah Springs is bounded by the CSX Rail line to the north which is a barrier for connection, and two existing residential neighborhoods to the south, Shenandoah Springs and Patrick Henry Estates, and vacant farmland to the east. Community infrastructure such as stormwater management and utilities were previously installed within a portion of the development, and access to Flowing Springs Road was previously approved by the West Virginia Department of Highways.

Shenandoah Springs and Patrick Henry Estates are existing and established residential neighborhoods composed of a smaller lot, single-family detached and attached homes. Each neighborhood has a network of neighborhood scale streets that stub into the Village of Shenandoah Springs. Both existing neighborhoods have incomplete blocks with lots that back onto the Villages of Shenandoah Springs.

The proposed LDPP within this application is intended to support the City of Ranson's adopted vision and policies for Preferred Growth and Infill Communities. The proposed zoning includes single family zoning on the southern boundary which is consistent with the existing zoning in both Shenandoah Springs and Patrick Henry Estates.



500 0 500 1000 1500

Scale 1" = 500'

THE REVISION PROPOSES THE ADDITION OF THE EASTERN 3 ACRE PARCEL (TAX MAP 8 PARCEL 29.3).

FINAL APPROVAL DATE:

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 E. HIRST ROAD, SUITE 106
PURCELLVILLE, VIRGINIA 20132
PHONE: (703) 994-1047
MRA PROJECT NO. 2014-004
Copyright 2023 Morris & Ritchie Associates, Inc.

THE LAND PLANNING & DESIGN GROUP INC.
5300 Stoneview Drive Suite 103 Frederick, MD 21703
Ph (301) 695-6172 Fax (301) 695-6219
LAND PLANNING • SITE PLANNING • LANDSCAPE ARCHITECTURE

SCALE: AS SHOWN DATE: 03/13/23

REVISIONS	
05/24/19	revise per City comments
08/01/19	revise per City comments
10/01/19	revise per City comments
10/22/19	revise per City comments
11/05/21	revise per Client changes
05/26/22	City comments
06/06/22	City comments
06/16/23	Client rev.
10/31/24	Client rev.
07/06/23	City comments
01/03/24	Client revision

COVER SHEET

SHENANDOAH SPRINGS

RANSON, WEST VIRGINA

Sheet:
CS of 10

Owner:
U.S. Home Corporation
14280 Park Meadow Drive
Chantilly, Virginia 20151

Harry M. Kable and Carol F. Kable
c/o Paul S. Schleifman, Esq.
1600 Wilson Boulevard, Suite 905
Arlington, Virginia 22209

Jeffrey Haymaker
120 N George Street
Charles Town, WV 25414

Prepared By:
The Land Planning & Design Group, Inc.
PO Box 1232
Berlin, Maryland 21811
(301) 695-6172

Morris & Ritchie Associates, Inc.
205 E. Hirst Road, Ste 106
Purcellville, VA 20132
(703) 994-4047

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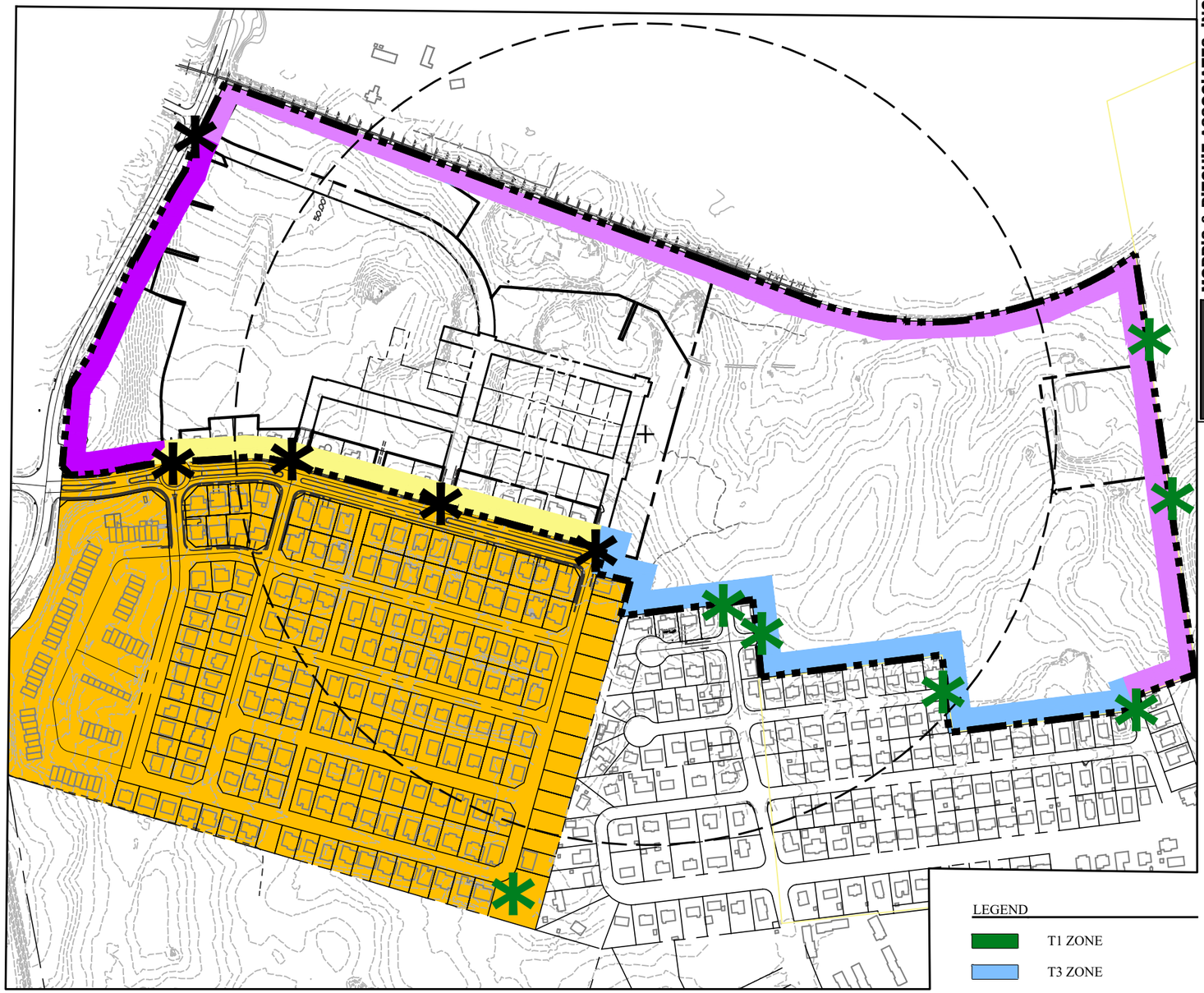
Stormwater and Utilities	8
Proposed Thoroughfares	9
Alley Court Typical	10



TRANSECT DISTRICTS AND EDGE CONDITIONS

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 E. HIRST ROAD, SUITE 106
PURCELLVILLE, VIRGINIA 20132
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07/06/23	City comments
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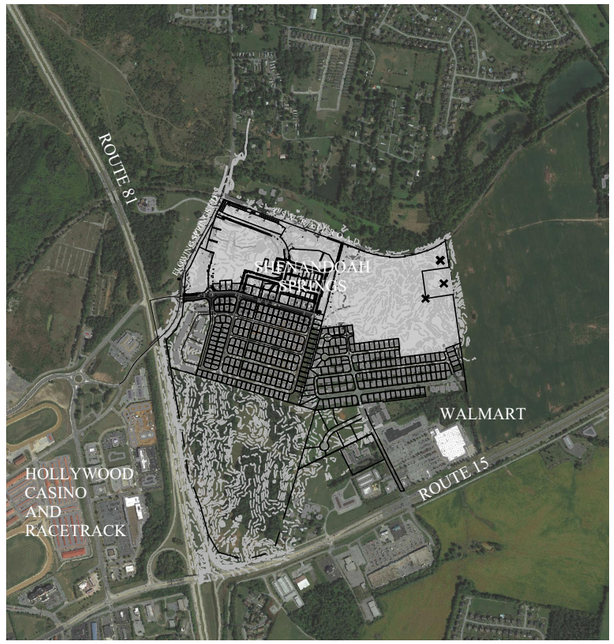
06/16/23	Client rev.
10/31/24	Client rev.

GENERAL INFORMATION

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet:
01 of 10



LOCATION MAP SCALE: 1" = 2000'



EXISTING CONDITIONS

200 0 400 800

NORTH

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 E. HIRST ROAD, SUITE 106
PURCELLVILLE, VIRGINIA 20132
PHONE: (703) 994-1047
MRA-INC.COM

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Phone (301) 695-6172 Fax (301) 695-6219
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06/10/24	Client rev.
10/31/24	Client rev.

EXISTING CONDITIONS TOPOGRAPHY

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet: 02 of 10

L:\Projects\Shenandoah Springs\Land Development Plan and Rezoning\LDP\Plan Sheets\02 EXISTING CONDITIONS TOPOGRAPHY.dwg, 10/30/2024 11:57:55 AM, DWG To PDF-Lines Overwrite.pc3

Jefferson County, West Virginia (WV037)			
Map Unit Symbol	Map Unit Symbol	Acres in AOI	Percent of AOI
Fk	Funkstown silt loam	3.29	3.64
HeB	Hagerstown silt loam, 3 to 8 percent slopes, very rocky	4.03	4.46
HeC	Hagerstown silt loam, 8 to 15 percent slopes, very rocky	31.64	35
HgE	Hagerstown-Opequon-Rock ourcrop complex, 15-35 percent slopes	4.15	4.59
PmB	Poplimento silt loam, 3 to 8 percent slopes	17.68	19.56
PmC	Poplimento silt loam, 8 to 15 percent slopes	25.22	27.9
Uu	Urban land - Udorthents	4.39	4.86
Total Areas of Interest		90.4	100

*INFORMATION OBTAINED FROM USDA's NRCS WEB SOIL SURVEY ON 11/15/2022

3.3 Community Unit Types

3.3.2 Village (VIL)

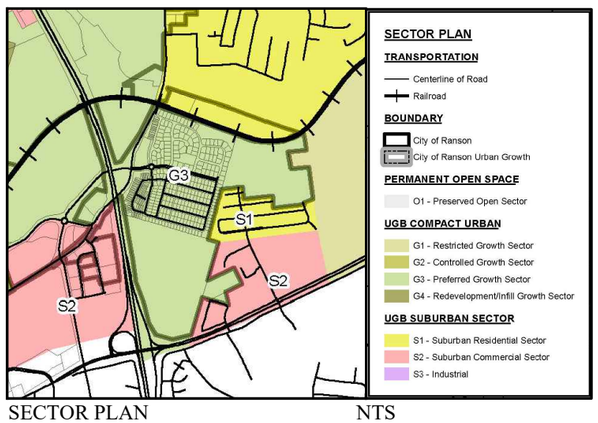
a. The site is a village (VIL) in the G-3 Growth Sector. The site is considered an infill site.

b. The VIL will use a standard pedestrian shed. This VIL is 90.45 acres.

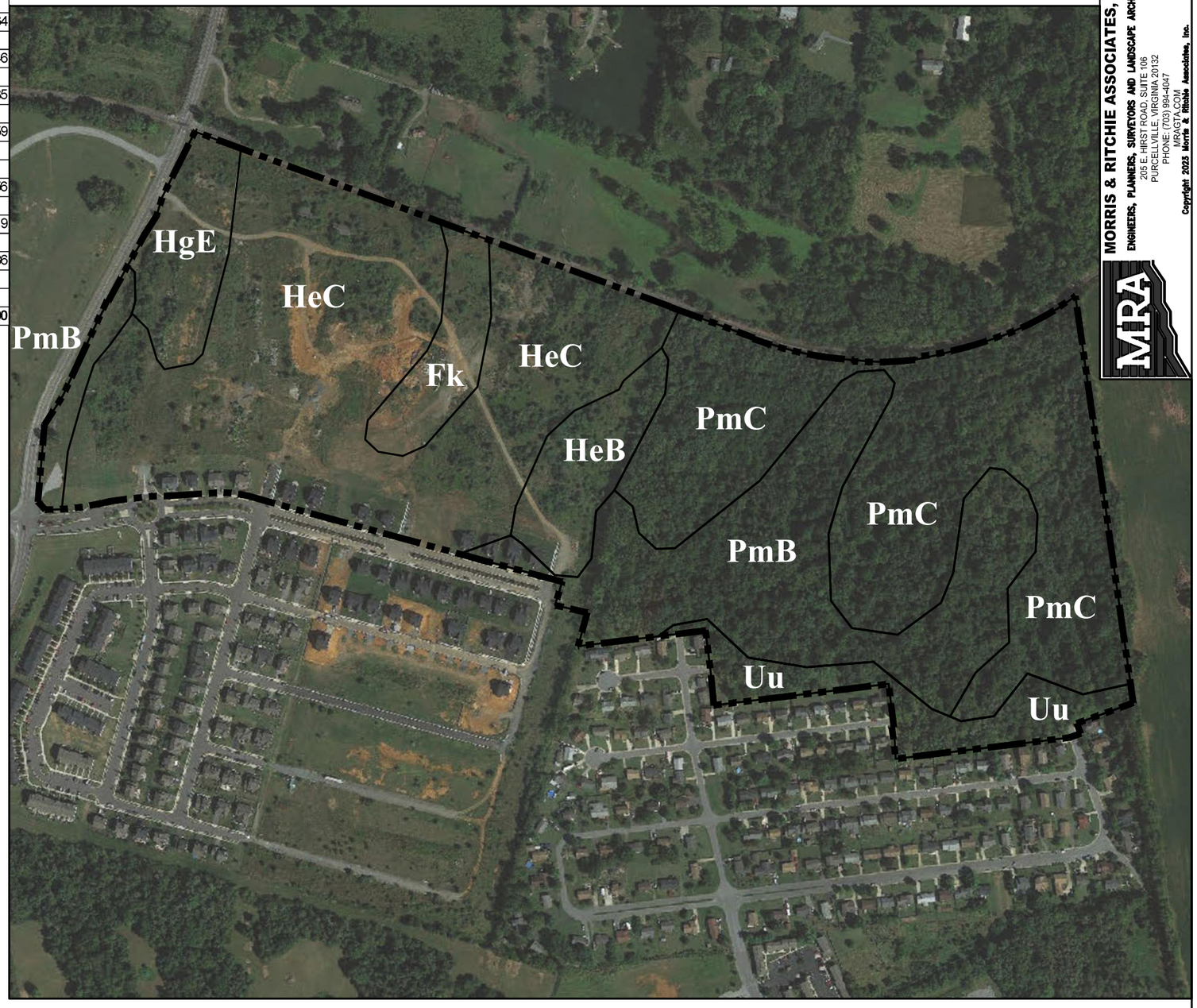
c. A VIL shall include Transect Districts as allocated on Table 3.

Village Medium Intensity (90.45 acres)

Adjacent R6 Shenandoah Springs development: 49.05 acres



SECTOR PLAN NTS



EXISTING CONDITIONS: SOILS

200 0 400 800

NORTH

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 E. HIRST ROAD, SUITE 106
PURCELLVILLE, VIRGINIA 20132
PHONE: (703) 994-1047
MRA PROJECT NO. 23-0001
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5300 Stonewall Drive
Suite 103
Frederick, MD 21703
Phone (301) 695-6172
Fax (301) 695-6219
LAND PLANNING • SITE PLANNING • LANDSCAPE ARCHITECTURE

SCALE: AS SHOWN DATE: 03/13/23

REVISIONS	
05/24/19	revise per City comments
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06/06/22	City comments
07/06/22	City comments
01/03/23	Client revision
06/16/23	Client rev.
10/31/24	Client rev.

EXISTING CONDITIONS SOILS

SHENANDOAH SPRINGS

RANSON, WEST VIRGINA

Sheet: 03 of 10

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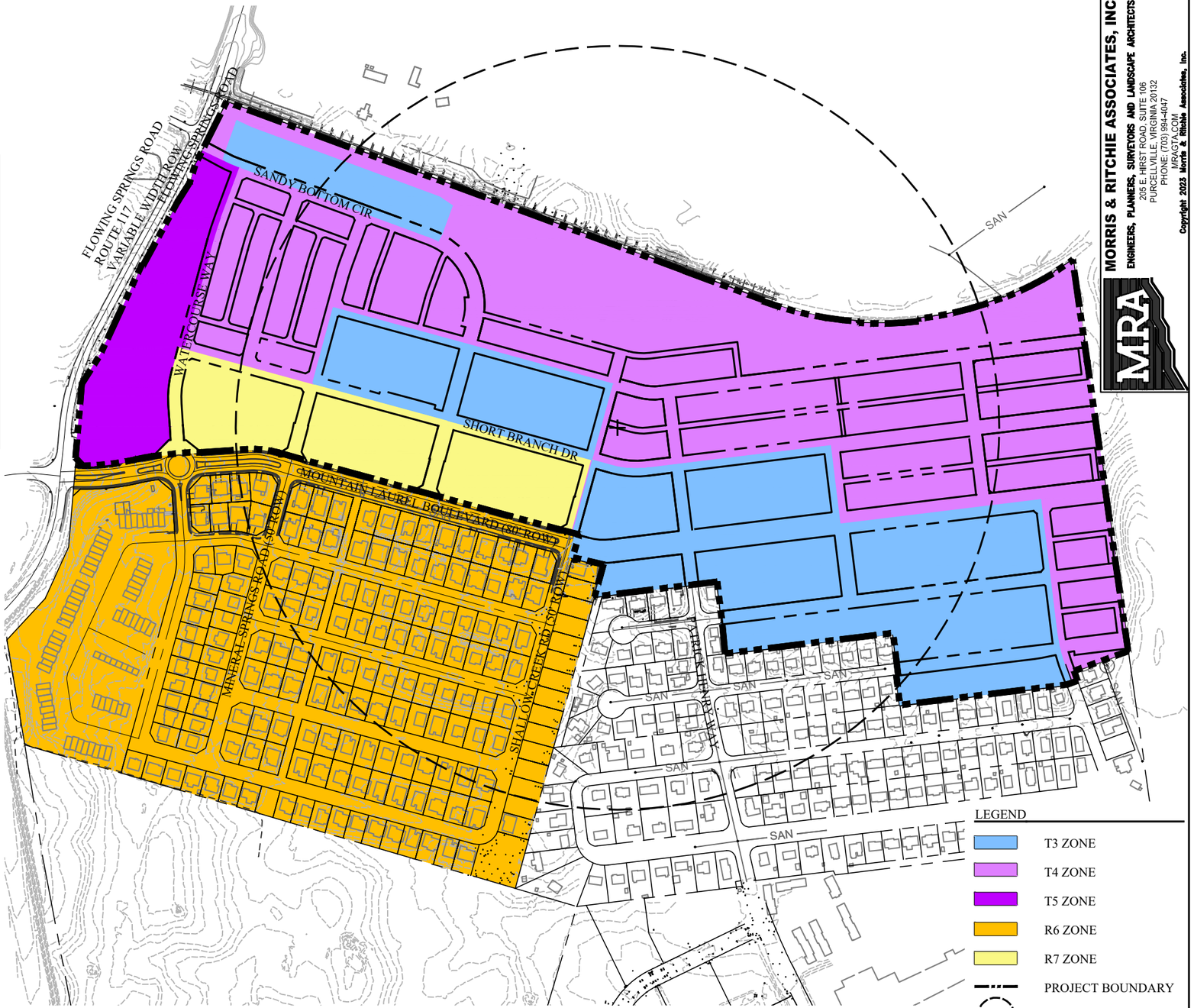
3.4 Transect Districts

3.4.1 Transect District subdistricts are mapped through this regulating plan according to percentages allocated on Table 3.

AREA TABULATION			
ZONE	AREA (ACRES)	PROPOSED %	REQUIRED %
VILLAGE #1 - MEDIUM INTENSITY			
R7	9.30	10%	N/A
T3	29.84	33%	10-50%
T4	45.47	50%	20-50%
T5	5.84	6%	20% MAX
Total	90.45	100.00%	

ADJACENT SHENANDOAH SPRINGS PARCELS		
EXISTING ZONE	ACRES	PERCENTAGE
R6	49.77	N/A
NET SITE AREA	49.77	



TRANSECT DISTRICTS

NOTE: NO CHANGES TO PHASE 1 OF THE DEVELOPMENT

200 0 400 800

NORTH

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 E. HIRST ROAD, SUITE 106
PURCELLVILLE, VIRGINIA 20132
PHONE: (703) 994-0047
MRA PROJECT NO. 2014

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07/06/23	City comments
01/03/24	Client revision

SCALE: AS SHOWN DATE: 03/13/23

TRANSECT DISTRICTS

SHENANDOAH SPRINGS

RANSON, WEST VIRGINA

Sheet: 04 of 10

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3.5 Thoroughfares and Block Standards

This application includes the following administrative waivers:

3.5.4-Blocks adjacent to undeveloped land, areas unsuitable for development, or pre-existing incomplete blocks may be exempt from block face length and block perimeter requirements by administrative waiver in accordance with 1.5.3.

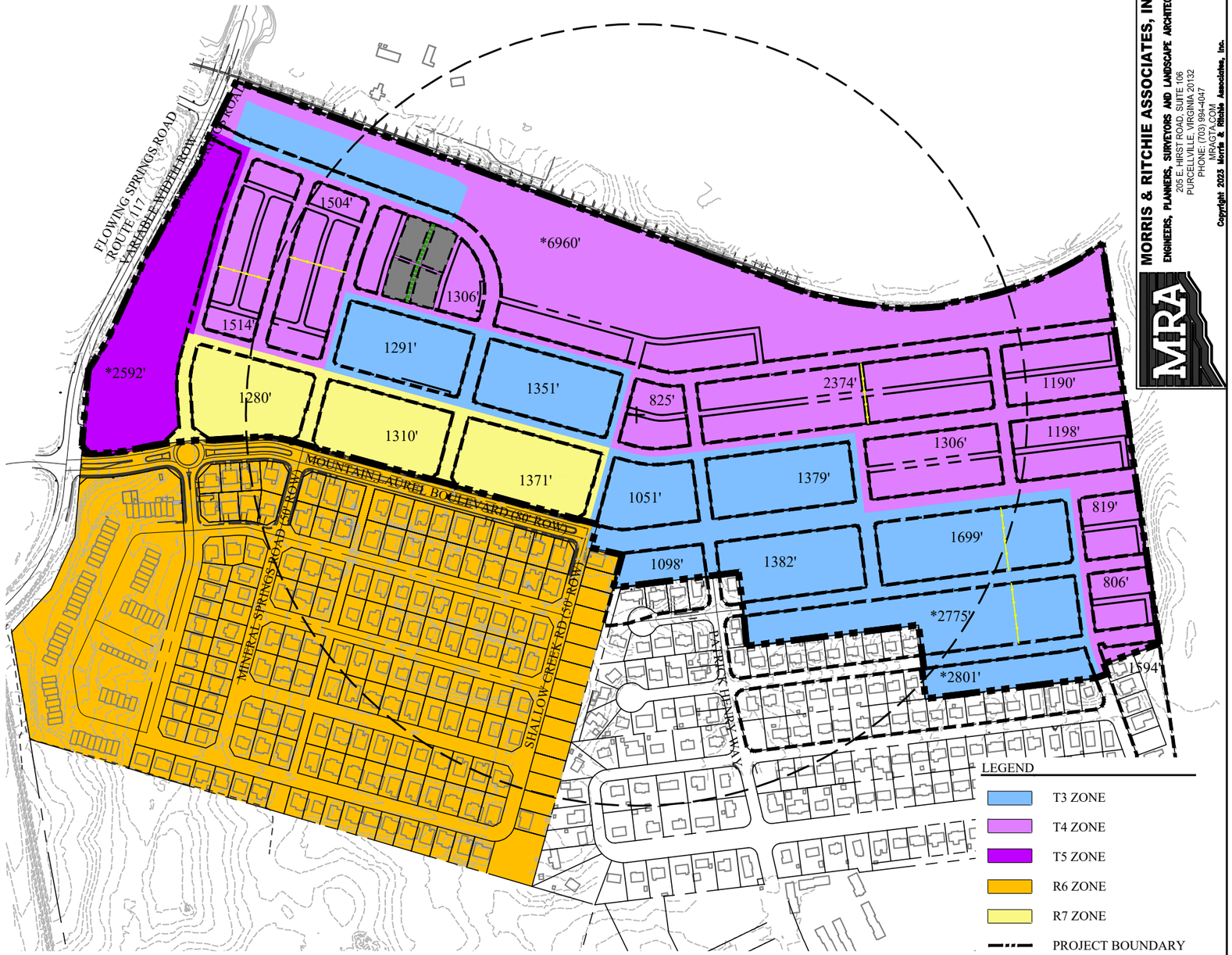
Shenandoah Springs was granted a waiver to exempt the block perimeter requirements for blocks adjacent to pre-existing incomplete blocks as shown and noted within the Land Development Plan and Plat recorded with the Jefferson County's Clerk's Office DB 1233 Page 1.

* = Waiver Granted

LOTS NOT FACING THROUGHFARE	
NUMBER OF LOTS NOT FACING THROUGHFARE	PERCENTAGE
25	4.53%

Pre-Existing Conditions

Shenandoah Springs was granted a waiver to deviate from the private frontage, parking location, and principle building setbacks to allow for front-loaded townhouses as shown and noted within the Land Development Plan and Plat recorded with the Jefferson County Clerks Office DB 1233 Page 1.



THOROUGHFARES AND BLOCK STRUCTURE

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THOROUGHFARES & BLOCK STRUCTURES

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet: 05 of 10

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3.7 Thoroughfare Network Standards

3.7.1 This community plan shows the thoroughfare network plan. Modifications to existing thoroughfares are noted with an astrix and shown on table.

3.7.3 The thoroughfare network must map thoroughfares and intersections according to Section 3.5.1.

a. All mapped thoroughfare assemblies are included with this submission.

b. All proposed thoroughfares connect to existing thoroughfares, forming a network.

c. New thoroughfares do connect where possible to existing thoroughfares outside Shenandoah Springs.

d. All blocks meet Section 3.5.1 except those included in separate administrative waivers.

e. The thoroughfares may deviate from the network outside of the pedestrian shed, to accommodate natural conditions, and to intersect major thoroughfares.

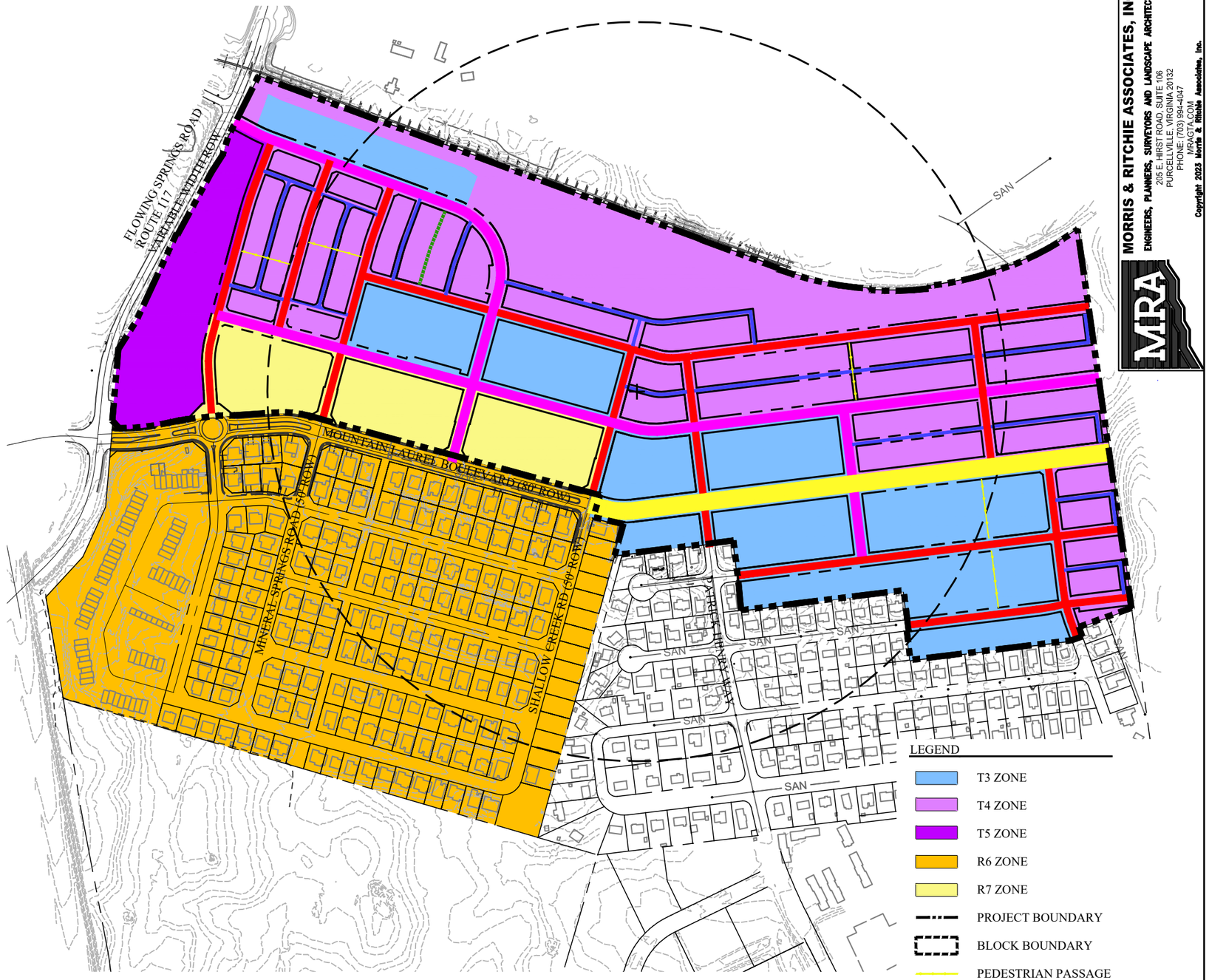
This application continues to maintain points of connection off-site from the previous approvals. No connections are proposed to the north due to the rail lines, but connections are proposed to the east, west, and south. Road connections from the existing communities will be honored and maintained for connectivity, and future inter-parcel connections will be proposed for adjacent property to the East.

WV Access Permit No. 5-03-0385U

VILLAGE: THOROUGHFARE CHART		
Transect Zone Compliance		
Key	**Thoroughfare**	**Approved T-Zones**
	AV-80-40	T3, T4, T4O, R7
	ST-46-24	T3, T4, T5, R7
	ST-54-32	T3, T4, T5, R7
	RA-20-18/20	T4, T4O, T5L, T5

Proposed new assemblies- see Page 12-13

NOTE: THOROUGHFARE TYPE RA-20-20/RA-20-18 TO BE DETERMINED IN FINAL ENGINEER DRAWINGS.



THOROUGHFARES

200 0 400 800

NORTH

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THOROUGHFARE NETWORK STANDARDS

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet: 06 of 10

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3.8.1 Civic Standards

Village: Civic Spaces					
Label	Area (AC)	Perimeter (LF)	Road Frontage (LF)	% Frontage	Type
B	11.90	5861	2225	38%	Green
C	1.24	1333	692	52%	Green
D	0.15	493	286	58%	Playground

Civic Space B. This area is a Green. It contains an existing SWM pond and will contain future SWM ponds. This will have street trees, landscape screening for the CSX Railroad, playground and a trail system that connects with the community sidewalk.

Civic Space C. This park is a Green. It is the main civic space for the community. Located within will be a playground, connecting sidewalks/trails, street trees, and landscape screening.

Civic Space D. This area will contain a playground.

3.8 Civic Standards

3.8.1 Civic Space Specific to T3 - T5 Districts:

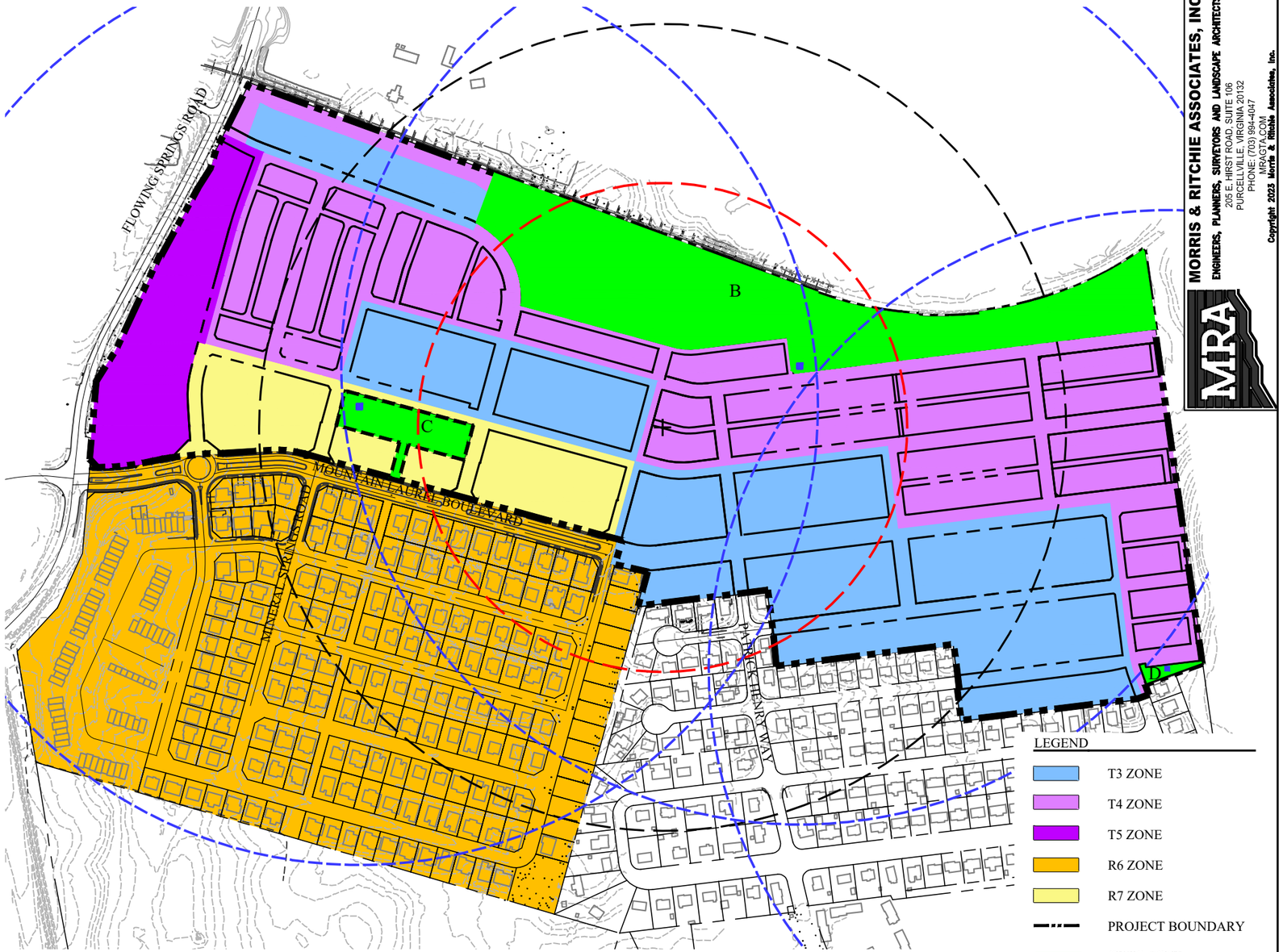
a. Each pedestrian shed shall assign 5 - 20% of its urbanized area to civic space.

CIVIC SPACE		
REQUIRED	PROP (AC)	PROP %
VILLAGE #1 - LOW DENSITY		
5%-20%	13.3	15.2%

3.8.2 Civic Buildings (CB) Specific to T2 - T5 Districts

a. The civic building is a park gazebo that is centrally located with direct connection to community trails and sidewalk systems.

b. The civic building shall not occupy more than 20% of the area of each pedestrian shed.



CIVIC STANDARDS

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CIVIC STANDARDS

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet: 07 of 10

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Stormwater

Stormwater will be directed into a storm sewersystem that will outfall into the proposed SWM ponds and outfall along the northern boundary of the site.

Stormwater management will utilize a variety of techniques. On-site infiltration may be utilized in T1 through T3, and structured systems are likely in T4 and T5. Light imprint techniques will be utilized when possible.

Total impervious cover for this phase of the development will be determined at final site plan. Total impervious cover is expected to be about 70%.

This site has a small floodplain impact in the north eastern corner of the site.

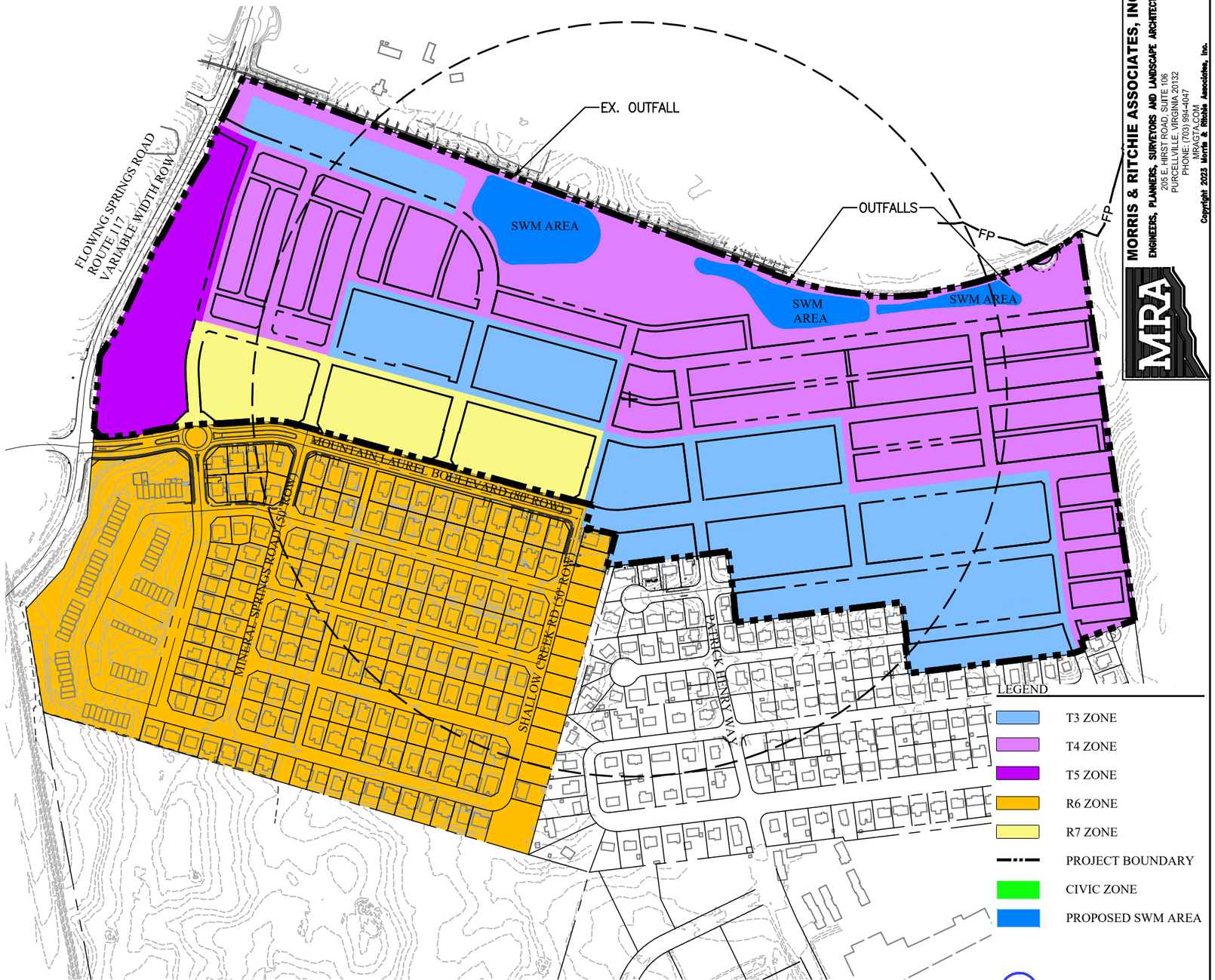
Utilities

Water Service will be provided by Jefferson Utilities.

Sanitary Sewer Service will be provided by the Charles Town Utility Board.

Electric will be provided by Potomac Edison.

WV Utility Permit No. 5-03-0256
NPDES Permit No.is WVR 107030



STORMWATER AND UTILITIES

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STORMWATER MANAGEMENT

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet: 08 of 10

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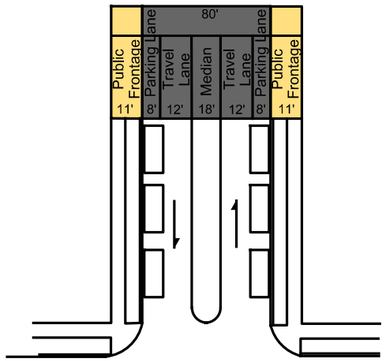
MODIFIED THOROUGHFARE ASSEMBLIES

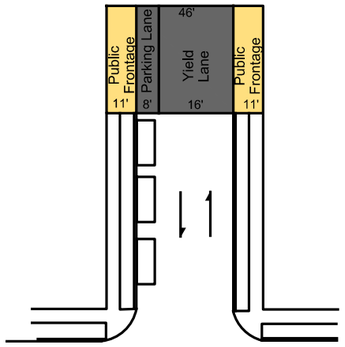
KEY ST-57-20-BL
Thoroughfare Type
Right of Way Width
Pavement Width
Transportation

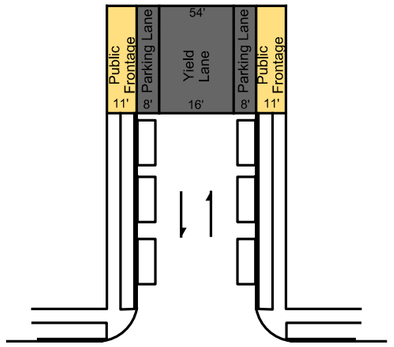
THOROUGHFARE TYPES

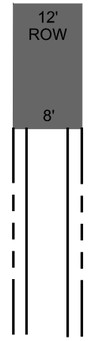
Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Rear Alley:	RA
Rear Lane:	RL

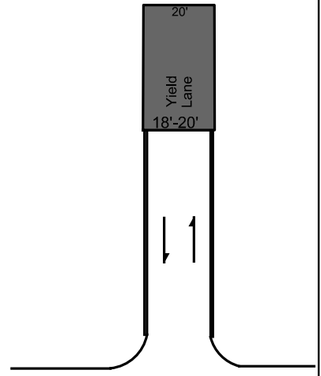
Assembly Designation	AV-80-40	ST-46-24	ST-54-32	PP-12-8	RA-20-18/20
Thoroughfare Type	Avenue	Street	Street	Pedestrian Passageway	Rear Alley
Transect District	T3, T4, T4O, R7	T3, T4, T5, R7	T3, T4, T5, R7	T3, T4, T4O, T5L, T5	T4, T4O, T5L, T5
Right-of-Way Width	80 feet	46 feet	54 feet	12 feet	20 feet
Pavement Width	40 feet (total)	24 feet	32 feet	8 feet	18-20 feet
Transportation Way	Two Lanes; Two way, one lane each way @12 ft.	Yield Lane: Two way @ 16 ft.	Yield Lane: Two way @ 16 ft.	n/a	Yield Lane @ 18 feet
Vehicular Lane(s)	One lane parallel @ 8 ft.	One lane parallel @ 8 ft.	One lane parallel @ 8 ft.	n/a	n/a
Parking Lanes	Optional	Optional	Optional	n/a	n/a
Striping	18'	n/a	n/a	n/a	n/a
Median Width	Optional	n/a	n/a	n/a	n/a
Median Planting	Grass, ground cover and mulch	n/a	n/a	n/a	n/a
Median Surface	25 mph	20 mph	20 mph	n/a	n/a
Target Speed	Shared lane	Shared lane	Shared lane	n/a	n/a
Bicycle Provision	Bus Route	n/a	n/a	n/a	n/a
Transit Provision	D	D	D	n/a	n/a
Public Frontage	11 ft.	11 ft.	11 ft.	n/a	n/a
Assembly Width	D	D	D	n/a	n/a
Public Frontage Type	T3, T4, T4O, R7	T3, T4, T5, R7	T3, T4, T5, R7	n/a	n/a
Transect District				n/a	n/a
Curbing: Type	Raised Curb	Raised Curb	Raised Curb	n/a	Mountable Curb, No Curb; inverted crown
Curbing: Curb Cut Radius	Radius	Radius	Radius	n/a	Taper
Walkway: Width	15 ft.	15 ft.	10 ft.	n/a	n/a
Walkway: Surface	5 ft.	5 ft.	5 ft.	n/a	n/a
Walkway: Type | Size	Concrete	Concrete	Concrete	n/a	n/a
Planter: Arrangement	Continuous | 5 ft.	Continuous | 5 ft.	Continuous | 5 ft.	n/a	n/a
Planter: Species	Regular	Regular	Regular	n/a	n/a
Planter: Spacing	Alternating or Same	Alternating or Same	Alternating or Same	n/a	n/a
Planter: Surface	40 ft. o.c. avg.	40 ft. o.c. avg.	40 ft. o.c. avg.	n/a	n/a
Planter: Street Tree Size	Ground cover or grass	Ground cover or grass	Ground cover or grass	n/a	n/a
Verge: Width	Large Shade	Medium Shade	Medium Shade	n/a	n/a
Verge: Lighting Type	4 ft.	3 ft.	3 ft.	n/a	n/a
Verge: Lighting Spacing	Pole or Column	Pole	Pole	n/a	n/a
	Varies	At intersections	At intersections	n/a	n/a

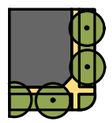


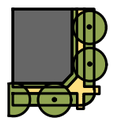


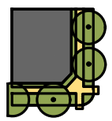












NOTE: NO LIGHTING OR LANDSCAPING PROPOSED FOR PASSAGEWAYS. LIGHTING AND LANDSCAPING FOR PEDESTRIAN PASSAGEWAYS IN PARKS WILL BE SHOWN ON THE PARK PLANS IN CONSTRUCTION DRAWINGS.

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11/05/21	revise per Client changes
05/26/22	City comments
06/06/22	City comments
06/16/23	Client rev.
07/06/23	City comments
10/31/24	Client rev.
01/03/25	Client revision

MODIFIED THOROUGHFARE ASSEMBLIES

SHENANDOAH SPRINGS

RANSON, WEST VIRGINIA

Sheet:
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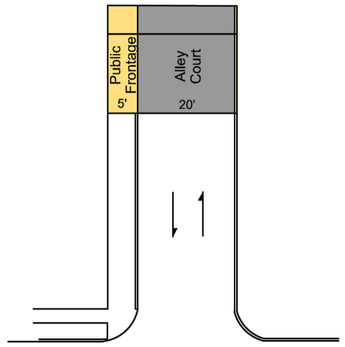
MODIFIED THOROUGHFARE ASSEMBLIES

KEY ST-57-20-BL

Thoroughfare Type
Right of Way Width
Pavement Width
Transportation

THOROUGHFARE TYPES

Avenue:	AV
Commercial Street:	CS
Drive:	DR
Street:	ST
Rear Alley:	RA
Rear Lane:	RL



Assembly Designation	AC-25-20
Transect District	T3, T4, T4O, T5L, T5, R7
Thoroughfare Type	Alley Court
Right-of-Way Width	25 feet
Pavement Width	20 feet
Transportation Way	n/a
Vehicular Lane(s)	Access way @ 20 feet
Parking Lanes	n/a
Striping	n/a
Median Width	n/a
Median Planting	n/a
Median Surface	n/a
Target Speed	n/a
Bicycle Provision	n/a
Transit Provision	n/a
Public Frontage	n/a
Assembly Width	20 ft.
Transect District	n/a
Curbing: Type	Raised Curb or No Curb with Inverted Crown
Curbing: Curb Cut Radius	Taper
Walkway: Width	15 ft.
Walkway: Surface	4-5 ft.
Planter: Type | Size	Concrete
Planter: Arrangement	Continuous | 5 ft.
Planter: Mix	Regular
Planter: Spacing	n/a
Planter: Surface	n/a
Planter: Planting	n/a
Verge: Width	n/a
Verge: Lighting Type	n/a
Verge: Lighting Spacing	n/a

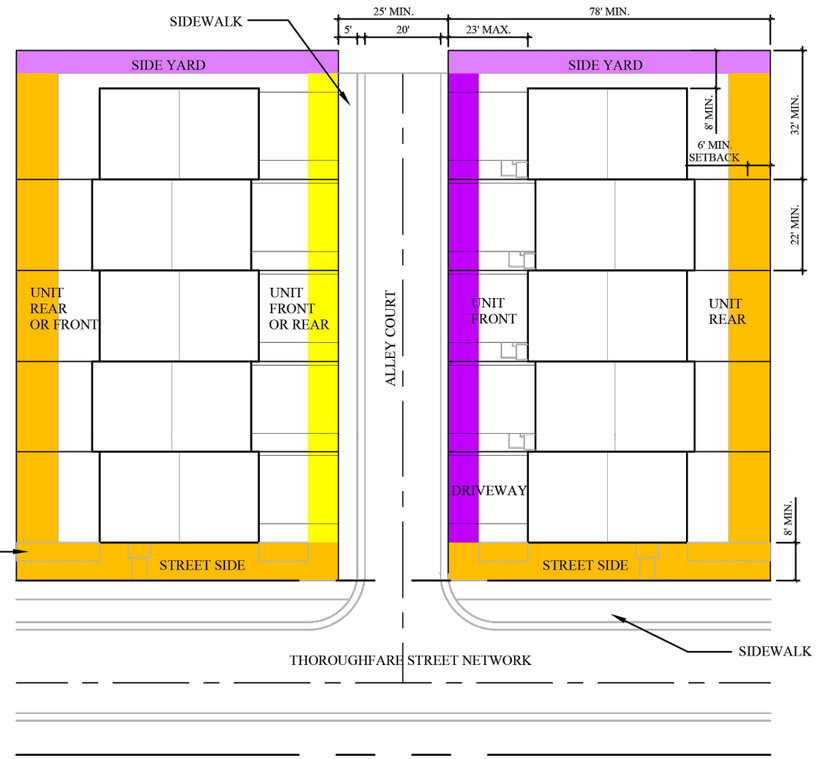
SETBACK

- 1ST LAYER, FRONT, PRIMARY THOROUGHFARE OR CIVIC
- 2ND LAYER
- REAR
- SIDE

STREET SCREEN REQUIRED:

STREET SCREEN SHALL BE A MINIMUM OF 3½' IN HEIGHT AND A MAXIMUM OF 8' IN HEIGHT. STREET SCREEN SHALL BE EITHER A FENCE, SIMILAR BARRIER, OR LANDSCAPING THAT ACHIEVES THE DESIRED HEIGHT REQUIREMENTS.

ALLEY COURT TYPICAL



SCALE: 1" = 40'

ALLEY COURT TYPICAL

Building Height:	**See T4 requirements**
Lot Depth:	**See T4 requirements**
Lot Width:	**22 feet minimum (lot width may be 20 feet minimum when front door faces open space or street)**
Lot Coverage:	**70% maximum**
Parking:	**2 spaces in Garage, maximum 20' width driveway shall be accessed from Alley Court and may occur in Secondary Layer/Front Setbacks**

Setbacks

Front (Principal):	**18 feet maximum**
Front (Secondary):	**10 feet maximum (parking permitted)**
Side:	**0 feet or 6 feet minimum total**
Rear:	**3 feet minimum**

Encroachments

See T4 requirements

1. **Alley Court unit rear yard must face another rear yard. When Alley Court unit front door is not facing alley, front door will be facing open space or street. In this case the rear yard with garage will be facing the alley.**
2. **Street side of unit to have the front door and stoop, windows with shutters and/or additional architectural trim. Covered entries or porch roof is optional.**
3. **Decks and/or patios are permitted in rear yards regardless of unit orientation.**

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MODIFIED TOWNHOUSE TYPICAL

SHENANDOAH SPRINGS

RANSON, WEST VIRGINA

JEFFERSON COUNTY

Sheet:

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AGENDA ITEM IV.11

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing - to accept public comments on the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631)

ATTACHMENTS:

Legal Notice PP Phase 4.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), accepting the bond, and entering a development agreement for Phase 4 of President's Pointe. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.12

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 24-52-FP - Consideration - Applicant Morris & Ritchie Associates INC. submitted application for Stanley Martin Companies LLC. for the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631)

ATTACHMENTS:

24-52-FP-2025-03-06 presidents point section 4 plat.pdf

1. THE PROPERTY SHOWN HEREON IS LOCATED ON TAX MAP 8 PARCEL 1 AND IS CURRENTLY ZONED SC–NC.

2. THE PROPERTY DELINEATED HEREON IS IN THE NAME OF STANLEY MARTIN HOMES, LLC AT DEED BOOK 1230 PAGE 240, AMONG THE LAND RECORDS OF JEFFERSON COUNTY, WEST VIRGINIA.

3. PROPERTY OWNER'S ADDRESS: 11710 PLAZA AMERICA DR STE 1100 RESTON, VA

4. BOUNDARY INFORMATION AS SHOWN HEREON IS BASED ON EXISTING LAND RECORDS AND SURVEY PERFORMED BY MORRIS & RITCHIE ASSOCIATES, INC. IN NOVEMBER 2014 AND JUNE 2015. NORTH MERIDIAN INFORMATION AS SHOWN HEREON IS REFERENCED TO THE WEST VIRGINIA STATE GRID, NORTH ZONE AND WAS ESTABLISHED BY GPS METHODS. COMBINED SCALE FACTOR 0.99993710.

5. THE ERROR OF CLOSURE FOR THE EXTERIOR BOUNDARY IS 1 IN 364,375 FEET.

6. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A CERTIFIED TITLE REPORT AND DOES NOT NECESSARILY INDICATE ALL ENCUMBRANCES ON THE PROPERTY.

7. PORTIONS OF THE SITE ARE LOCATED IN AREA AE, PORTIONS LOCATED WITHIN THE 100 YEAR FLOOD PLAIN BY FEMA PANEL(S) #54037C01303, 54037C0136E, & 54037C01377 DATED 12/18/2009.

8. THE DEVELOPER, IN SIGNING THIS PLAT, AGREES TO ABIDE BY ALL CONDITIONS TERMS AND SPECIFICATIONS PROVIDED HEREON; AND TO COMPLETE ALL THE IMPROVEMENTS REQUIRED BY THE PRELIMINARY PLAT.

9. PROPERTY CORNERS ARE TO BE SET USING $\frac{5}{8}$" REBAR WITH I.D. CAPS. ALL OTHER CORNERS ARE AS NOTED. CORNERS MARKS TO BE IN PLACED PRIOR TO CONVEYANCE OF INDIVIDUAL LOTS.

10. RELATED APPLICATIONS:

LDPP–14–014	APPROVED 3/2/15
RZNG–14–001	APPROVED 3/2/15
RES–PC–19–02	APPROVED 3/4/19
18–9–CD	APPROVED 4/18/19
27–7–CD	APPROVED 7/16/21
22–126–FP	APPROVED 1/13/23
PC–23–9	APPROVED 5/02/23
24–6–CD	APPROVED 5/10/24

11. RELATED PERMITS:
HEALTH DEPARTMENT: SEWER#20829, WATER #20830
WVDOH: #05–2019–0253
WVDEP: #WVR110165

12. RELATED MAINTENANCE AGREEMENT:
RETENTION POND CONSTRUCTION AND EASEMENT AGREEMENT: DATED DECEMBER 16, 2004, RECORDED AS DEED BOOK 1006 PAGE 684.

13. ALL RESIDENTIAL AND NON–RESIDENTIAL BUILDING LOTS SHALL HAVE STABILIZED CONSTRUCTION ENTRANCES AND PERIMETER SILT FENCES INSTALLED PRIOR TO BEGINNING CONSTRUCTION OF THE LOT.

YARD REQUIREMENTS:	T3	T4
FRONT:	20' MIN., 30' MAX.	18' MAX.
FRONT SECONDARDY:	2' MIN, 12' MAX	10' MAX
SIDE:	5 FT.	0' or 6' MIN. TOTAL
REAR:	10' MIN.	3' MIN.

OWNER'S CERTIFICATION AND DEDICATION

WE, STANLEY MARTIN HOMES, LLC, OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON CONSENT TO AND ADOPT THIS PLAN OF SUBDIVISION AND INCONSIDERATION OF THE APPROVAL OF THIS FINAL PLAT BY THE PLANNING COMMISSION, ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES; AND DEDICATE THE STREETS, WALKWAYS, AND OTHER EASEMENTS, TO PUBLIC USE OTHERWISE NOTED ON THIS PLAT.

THE SUBDIVISION SHOWN HEREON IS SUBJECT TO A DEVELOPERS AGREEMENT DATED 12/13/2021 AND RECORDED AMONG THE LAND RECORDS OF JEFFERSON COUNTY IN BOOK 1272, PAGE 505 AND ALL APPROVED LAND DEVELOPMENT PLANS AND CONSTRUCTION DRAWINGS APPROVED BY THE CITY OF RANSON.

WE CERTIFY THAT THERE ARE NO SUITS, ACTIONS OF LAWS, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS, OR RIGHT–OF–WAY(S) AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS HEREIN INDICATED, AND THAT THE REQUIREMENT OF THE SUBDIVISION ORDINANCE OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPLIED WITH.

OWNER

DATE

SURVEYOR'S CERTIFICATE

I, HEREBY CERTIFY THAT THE FINAL PLAT SHOWN HEREON IS CORRECT; THAT IT IS A SUBDIVISION OF A PORTION OF THE LANDS CONVEYED BY DEED DATED AND RECORDED IN THE LAND RECORDS OF JEFFERSON COUNTY, AT PAGE 359, BOOK 1059, AND FURTHER SUBDIVIDED BY D.B. 1232 PG. 11 THAT THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AS ENACTED OR AMENDED SO FAR AS IT MAY CONCERN THE MAKING OF THIS PLAT AND THE SETTING OF MONUMENTS AND MARKERS HAVE BEEN COMPILED WITH.

JON K. ERICKSON PS #2302

DATE

PLANNING COMMISSION APPROVAL

WITH THE APPROVAL OF A GENERAL LAND DEVELOPMENT PLAN DATED, ASSOCIATED CONSTRUCTION DRAWINGS DATED AND DEVELOPMENT AGREEMENT DATED_____, THIS PLAT MEETS THE REQUIREMENTS OF THE SUBDIVISION ORDINANCES OF THE CITY OF RANSON AND HAS BEEN APPROVED FOR RECORDATION BY THE CITY OF RANSON PLANNING COMMISSION.

PLANNING COMMISSION PRESIDENT

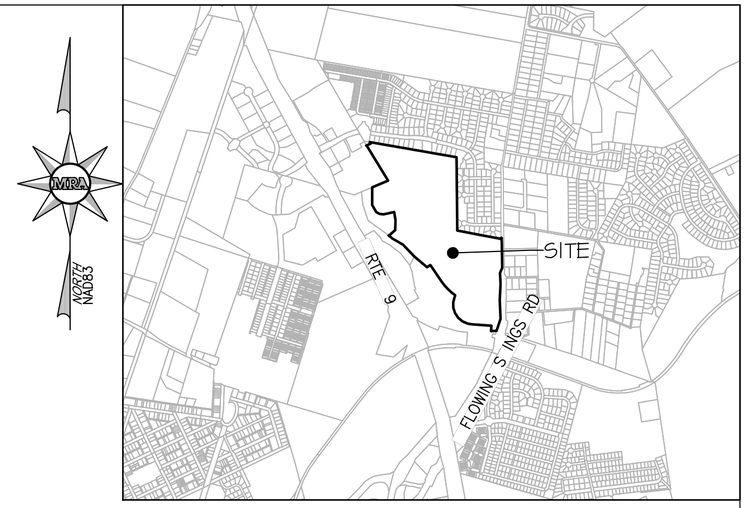
DATE

OWNER/DEVELOPER'S STATEMENT OF ACCEPTANCE

THE OWNER AND DEVELOPER, IN SIGNING THIS PLAT, AGREE TO ABIDE BY ALL CONDITIONS, TERMS, AND SPECIFICATIONS PROVIDED HEREON.

DATE

OWNER/DEVELOPER:
STANLEY MARTIN HOMES, LLC
11710 PLAZA AMERICA DR STE 1100
RESTON VA, 20190
(703)–636–9235



VICINITY MAP
SCALE: 1" = 2000'

LEGEND

- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- PROP.R/W LINE
- PROP.PROPERTY LINE
- PROP.EASEMENT LINE
- IRON PIN TO BE SET
- EX. EASEMENT
- EX. R/W LINE

FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 HIRST RD, SUITE 106
PURCELLVILE, VIRGINIA 20132
PHONE: (703)-994-4047
MRAGTA.COM

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DATE	REVISIONS	JOB NO.: 22479
02/21/25	CITY OF RANSON COMMENTS	SCALE:
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 1 OF 7

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C–1	9.71'	1011.72'	0.55°	S 33° 54' 58" E	9.71'
C–2	20.00'	1011.72'	1.13°	S 34° 45' 28" E	20.00'
C–3	27.54'	1011.72'	1.56°	S 36° 06' 14" E	27.54'
C–4	4.49'	14.00'	18.38°	S 46° 04' 25" E	4.47'
C–5	24.63'	925.00'	1.53°	S 36° 14' 41" E	24.63'
C–6	20.00'	925.00'	1.24°	S 34° 51' 45" E	20.00'
C–7	9.71'	925.00'	0.60°	S 33° 56' 31" E	9.71'
C–8	31.90'	1011.72'	1.81°	S 41° 05' 49" E	31.90'
C–9	20.01'	1011.72'	1.13°	S 42° 34' 01" E	20.00'
C–10	20.00'	1011.72'	1.13°	S 43° 41' 59" E	20.00'
C–11	20.00'	1011.72'	1.13°	S 44° 49' 56" E	20.00'
C–12	30.99'	1011.72'	1.75°	S 46° 16' 34" E	30.98'
C–13	23.99'	925.00'	1.49°	S 46° 19' 32" E	23.99'
C–14	20.00'	925.00'	1.24°	S 44° 57' 48" E	20.00'
C–15	20.00'	925.00'	1.24°	S 43° 43' 27" E	20.00'
C–16	20.01'	925.00'	1.24°	S 42° 29' 07" E	20.01'
C–17	24.42'	925.00'	1.51°	S 41° 06' 34" E	24.42'
C–19	15.54'	2383.28'	0.37°	N 46° 52' 56" W	15.54'
C–20	16.27'	2470.00'	0.38°	N 46° 52' 48" W	16.27'
C–21	13.97'	2470.00'	0.32°	N 46° 31' 45" W	13.97'

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C–22	26.00'	2383.28'	0.63°	N 46° 06' 30" W	26.00'
C–23	20.00'	2383.28'	0.48°	N 45° 33' 19" W	20.00'
C–24	20.00'	2383.28'	0.48°	N 45° 04' 28" W	20.00'
C–25	20.00'	2383.28'	0.48°	N 44° 35' 37" W	20.00'
C–26	20.00'	2383.28'	0.48°	N 44° 06' 46" W	20.00'
C–27	27.45'	2383.28'	0.66°	N 43° 32' 33" W	27.45'
C–28	27.44'	2383.28'	0.66°	N 42° 52' 58" W	27.44'
C–29	20.00'	2383.28'	0.48°	N 42° 18' 45" W	20.00'
C–30	17.48'	2383.28'	0.42°	N 41° 51' 43" W	17.48'
C–31	28.05'	2470.00'	0.65°	N 41° 15' 53" W	28.05'
C–32	20.00'	2470.00'	0.46°	N 41° 49' 19" W	20.00'
C–33	20.00'	2470.00'	0.46°	N 42° 17' 10" W	20.00'
C–34	29.96'	2470.00'	0.69°	N 42° 51' 56" W	29.96'
C–35	29.97'	2470.00'	0.70°	N 43° 33' 38" W	29.96'
C–36	20.00'	2470.00'	0.46°	N 44° 08' 24" W	20.00'
C–37	20.00'	2470.00'	0.46°	N 44° 36' 14" W	20.00'
C–38	20.00'	2470.00'	0.46°	N 45° 04' 05" W	20.00'
C–39	20.00'	2470.00'	0.46°	N 45° 31' 55" W	20.00'
C–40	26.00'	2470.00'	0.60°	N 46° 03' 56" W	26.00'
C–41	86.43'	2342.28'	2.11°	N 42° 43' 00" W	86.43'

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C–42	27.14'	512.66'	3.03°	N 47° 35' 36" E	27.13'
C–43	5.13'	512.66'	0.57°	N 49° 23' 46" E	5.13'
C–44	92.83'	2342.28'	2.27°	N 45° 24' 23" W	92.82'
C–45	18.56'	290.00'	3.67°	N 47° 51' 11" E	18.56'
C–46	17.86'	210.00'	4.87°	N 47° 15' 03" E	17.85'
C–47	15.50'	190.00'	4.67°	S 47° 20' 59" W	15.50'
C–48	34.35'	1052.72'	1.87°	S 46° 08' 02" E	34.35'
C–49	89.94'	1052.72'	4.89°	S 41° 39' 29" E	89.91'
C–50	112.31'	71.50'	90.00°	S 04° 41' 13" W	101.12'
C–51	82.33'	1052.72'	4.48°	S 35° 52' 54" E	82.31'
C–52	147.19'	225.00'	37.48°	S 19° 34' 08" W	144.58'
C–53	22.10'	125.00'	10.13°	N 05° 53' 39" E	22.08'

LINE TABLE		
LINE #	LENGTH	DIRECTION
L–1	7.07	S 85° 18' 47" E
L–2	7.07	N 85° 18' 47" W
L–3	21.21	N 04° 41' 13" E
L–4	27.67	S 40° 18' 47" E
L–5	11.05	N 46° 01' 10" E
L–6	21.21	S 85° 18' 47" E
L–7	35.36	S 04° 41' 13" W
L–8	52.00	S 47° 04' 07" E
L–9	5.94	N 85° 21' 45" W
L–10	36.03	S 49° 41' 13" W
L–11	20.00	S 51° 04' 36" W
L–12	122.06	N 38° 40' 50" W
L–13	21.21	N 06° 19' 29" E
L–14	20.00	N 51° 19' 10" E
L–15	82.70	N 38° 40' 50" W
L–16	21.22	S 83° 40' 31" E
L–17	35.98	S 38° 40' 50" E
L–18	36.00	S 38° 40' 50" E
L–19	95.61	S 38° 40' 50" E
L–20	12.32	S 33° 38' 28" E

LINE TABLE		
LINE #	LENGTH	DIRECTION
L–21	21.21	S 78° 38' 30" E
L–22	21.21	N 11° 21' 32" E
L–23	21.21	S 11° 21' 32" W
L–24	2.22	S 33° 38' 28" E
L–25	53.50	N 56° 21' 32" E
L–26	17.78	S 56° 21' 32" W
L–27	19.14	N 56° 21' 31" E
L–28	42.38	N 04° 14' 27" W
L–29	20.00	N 85° 45' 33" E
L–30	55.16	S 04° 14' 27" E
L–31	33.18	S 25° 41' 27" E
L–32	88.68	S 25° 41' 27" E
L–33	49.31	S 27° 01' 39" E
L–34	44.49	N 41° 35' 48" W
L–35	15.96	S 33° 31' 34" E
L–36	24.83	N 37° 16' 15" E
L–37	3.87	N 56° 21' 32" E
L–38	9.00	N 33° 38' 28" W
L–39	80.00	S 33° 38' 28" E
L–40	80.00	N 33° 38' 28" W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L–41	83.50	S 56° 21' 32" W
L–42	83.50	S 56° 21' 32" W
L–43	83.50	N 56° 21' 32" E
L–44	83.50	S 56° 21' 32" W
L–45	14.86	S 51° 25' 44" W
L–46	0.50	N 38° 36' 49" W
L–47	6.78	S 51° 23' 11" W
L–48	8.48	N 83° 34' 55" W
L–49	14.80	S 45° 43' 30" W
L–50	83.62	S 44° 33' 38" W
L–51	83.62	S 44° 33' 38" W
L–52	34.20	N 72° 23' 35" E
L–53	20.00	S 17° 36' 25" E
L–54	67.19	S 72° 23' 35" W
L–55	29.15	N 26° 08' 48" E
L–56	125.05	N 49° 41' 13" E
L–57	11.00	N 40° 18' 47" W
L–60	18.02	N 49° 37' 24" E
L–61	16.42	N 40° 22' 36" W
L–62	71.65	N 48° 11' 55" W

LINE TABLE		
LINE #	LENGTH	DIRECTION
L–63	12.16	S 02° 41' 59" W
L–64	45.86	S 30° 14' 59" E
L–65	13.85	S 84° 06' 42" E
L–66	83.11	S 40° 01' 20" E
L–67	161.27	S 49° 42' 33" W
L–68	113.00	N 40° 18' 47" W
L–69	112.95	S 40° 25' 29" E
L–70	83.55	S 46° 24' 31" W
L–71	83.55	S 46° 24' 31" W
L–72	93.77	N 40° 30' 25" W
L–73	93.77	S 40° 30' 25" E
L–74	11.06	S 40° 18' 47" E
L–75	15.48	S 56° 28' 26" W
L–76	95.32	S 50° 25' 28" W

LOT AREA TABLE		
PARCEL #	AREA (SF)	AREA (AC)
LOTS 481-631	301,543	6.9225
PARCEL A	2,339	0.0537
PARCEL B	2,216	0.0509
PARCEL C	1,600	0.0367
PARCEL D	1,831	0.0420
PARCEL E	1,835	0.0421
PUBLIC RIGHT-OF-WAY	154,147	3.5387
TOTAL SECTION 4	465,511	10.6867
RESIDUE AREA II	1,903,046	43.6879

FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC

DISTRICT: 08, MAP: 08, PARCEL: 01

CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

205 HIRST RD, SUITE 106

PURCELLVILE, VIRGINIA 20132

PHONE: (703)-994-4047

MRAGTA.COM

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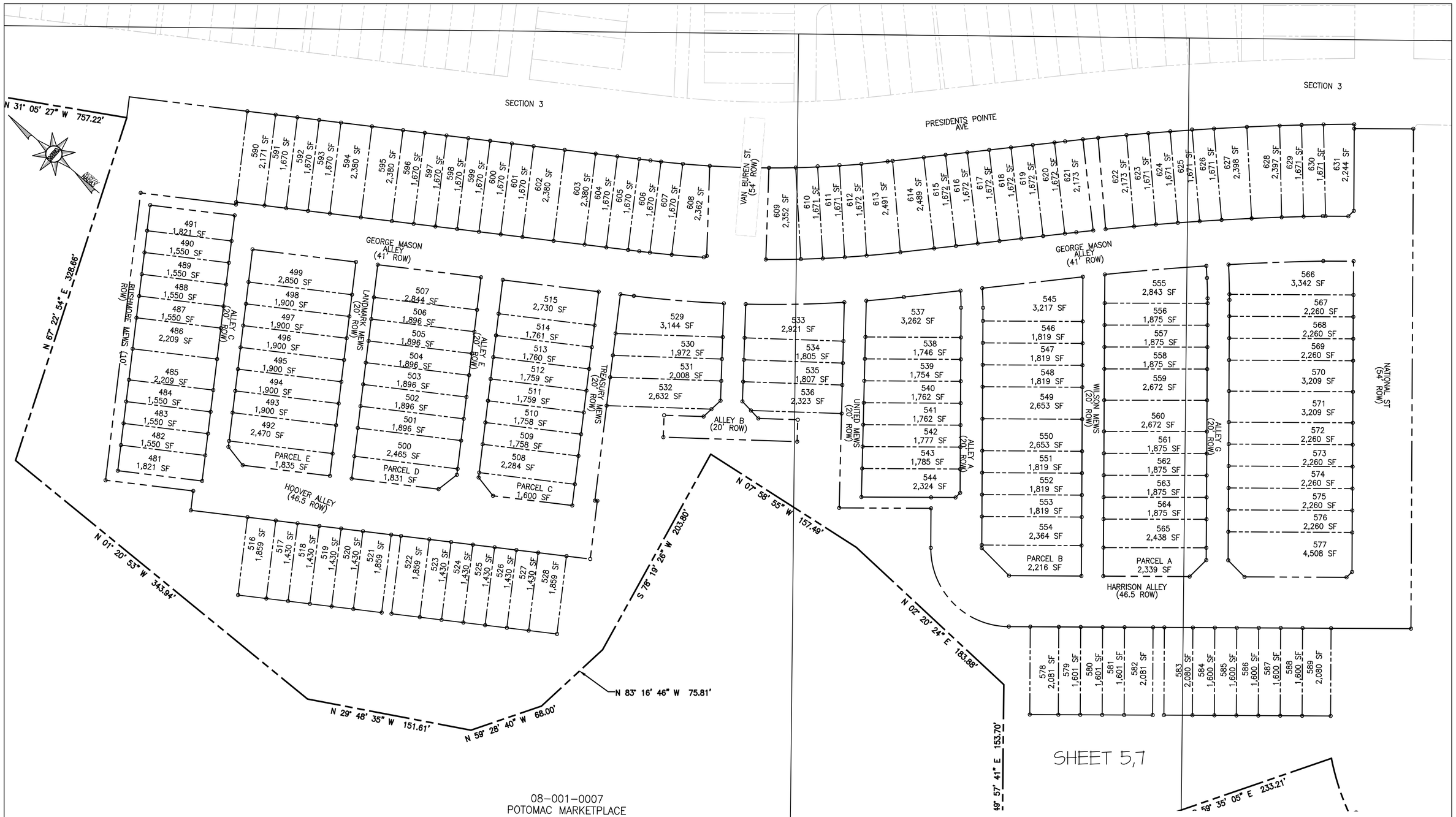
DATE	REVISIONS	JOB NO.: 22479
02/21/25	CITY OF RANSON COMMENTS	SCALE:
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 2 OF 7



08-001-0007
POTOMAC MARKETPLACE
OWNERS ASSOCIATION

FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

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PHONE: (703)-994-4047
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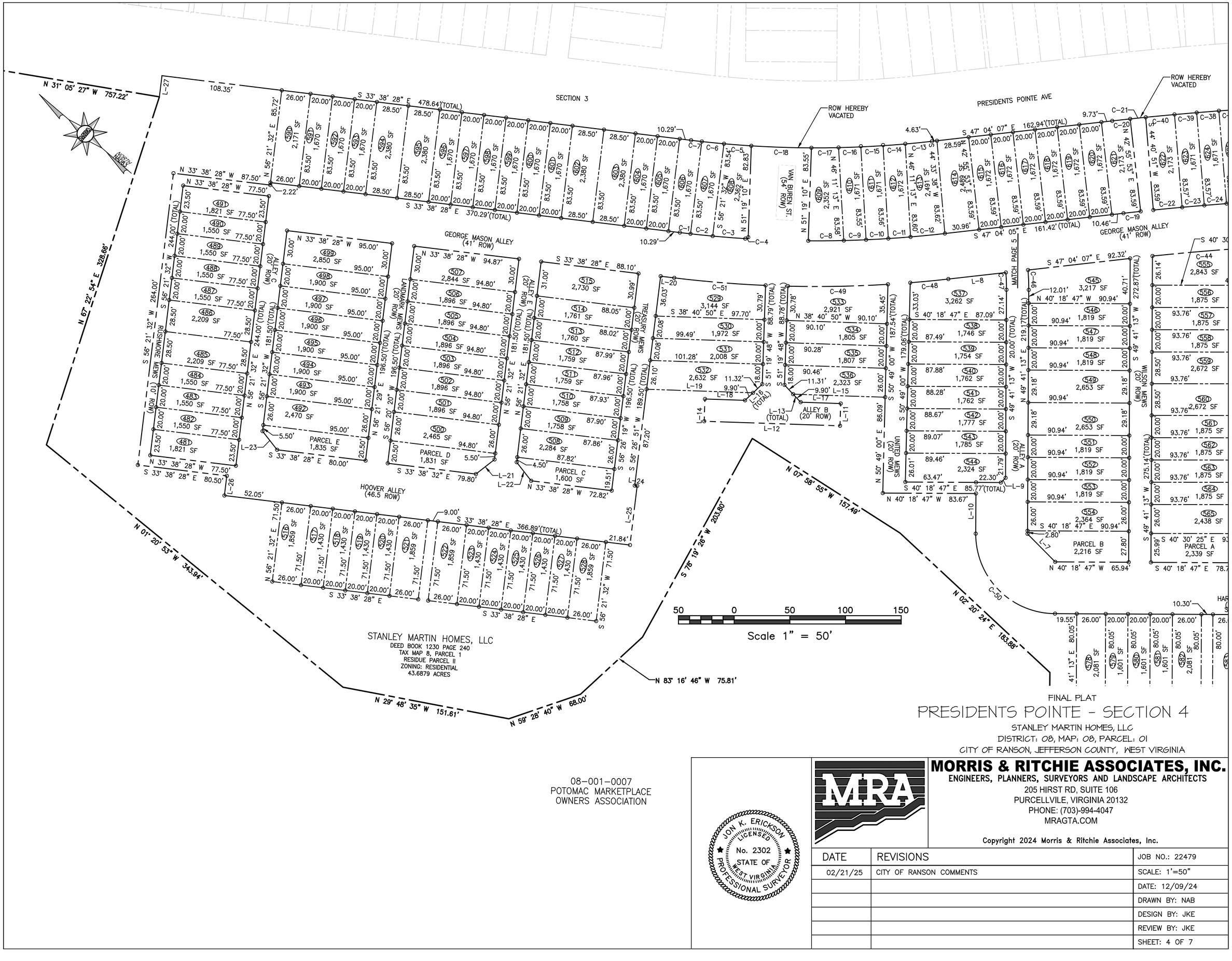
DATE	REVISIONS	
02/21/25	CITY OF RANSON COMMENTS	JOB NO.: 22479
		SCALE: 1"=60'
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 3 OF 7



STANLEY MARTIN HOMES, LLC
DEED BOOK 1230 PAGE 240
TAX MAP 8, PARCEL 1
RESIDUE PARCEL II
ZONING: RESIDENTIAL
43.6879 ACRES

08-001-0007
POTOMAC MARKETPLACE
OWNERS ASSOCIATION

FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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PHONE: (703)-994-4047
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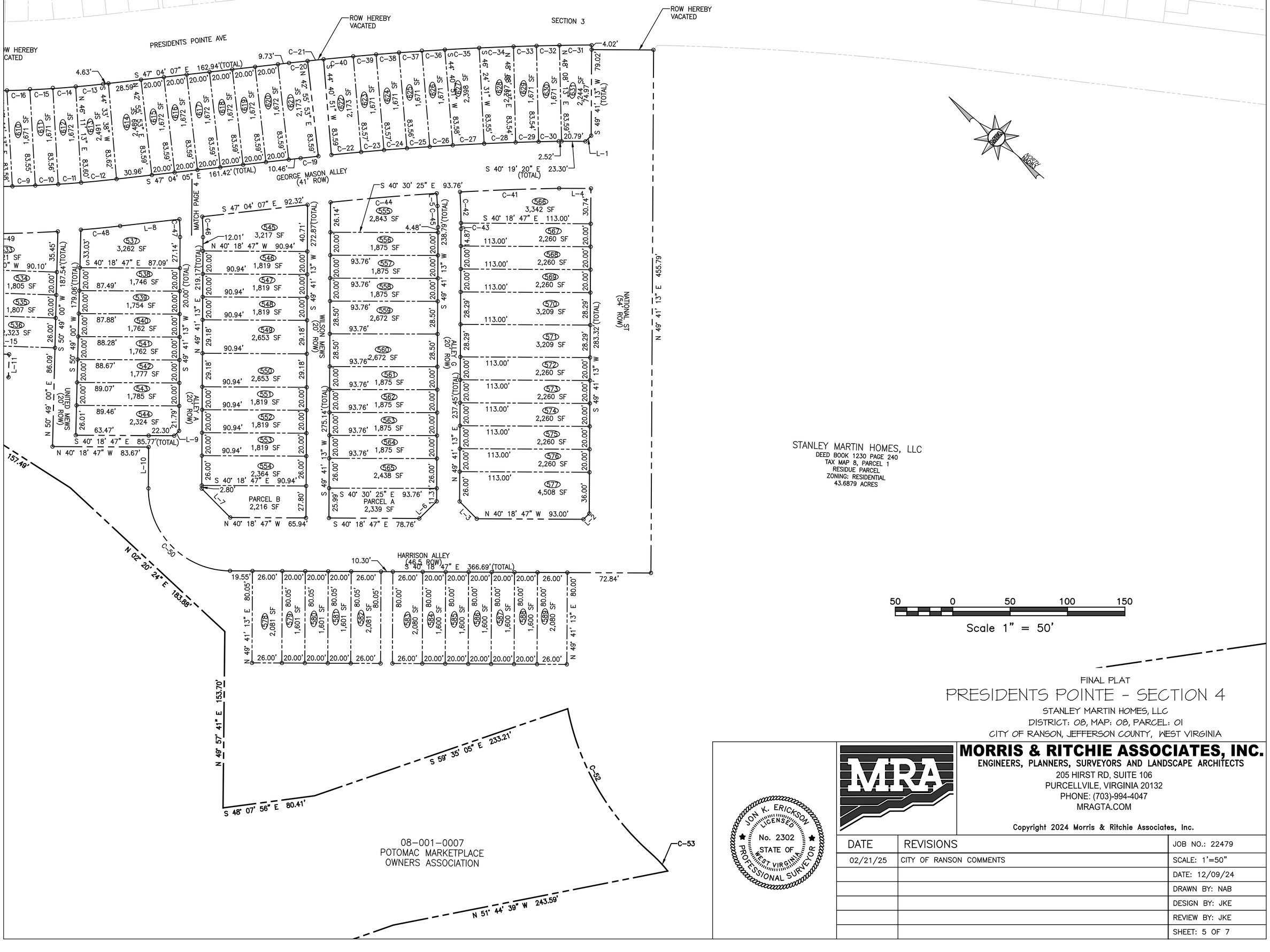
DATE	REVISIONS	JOB NO.: 22479
02/21/25	CITY OF RANSON COMMENTS	SCALE: 1"=50"
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 4 OF 7



FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 HIRST RD, SUITE 106
PURCELLVILE, VIRGINIA 20132
PHONE: (703)-994-4047
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DATE	REVISIONS	
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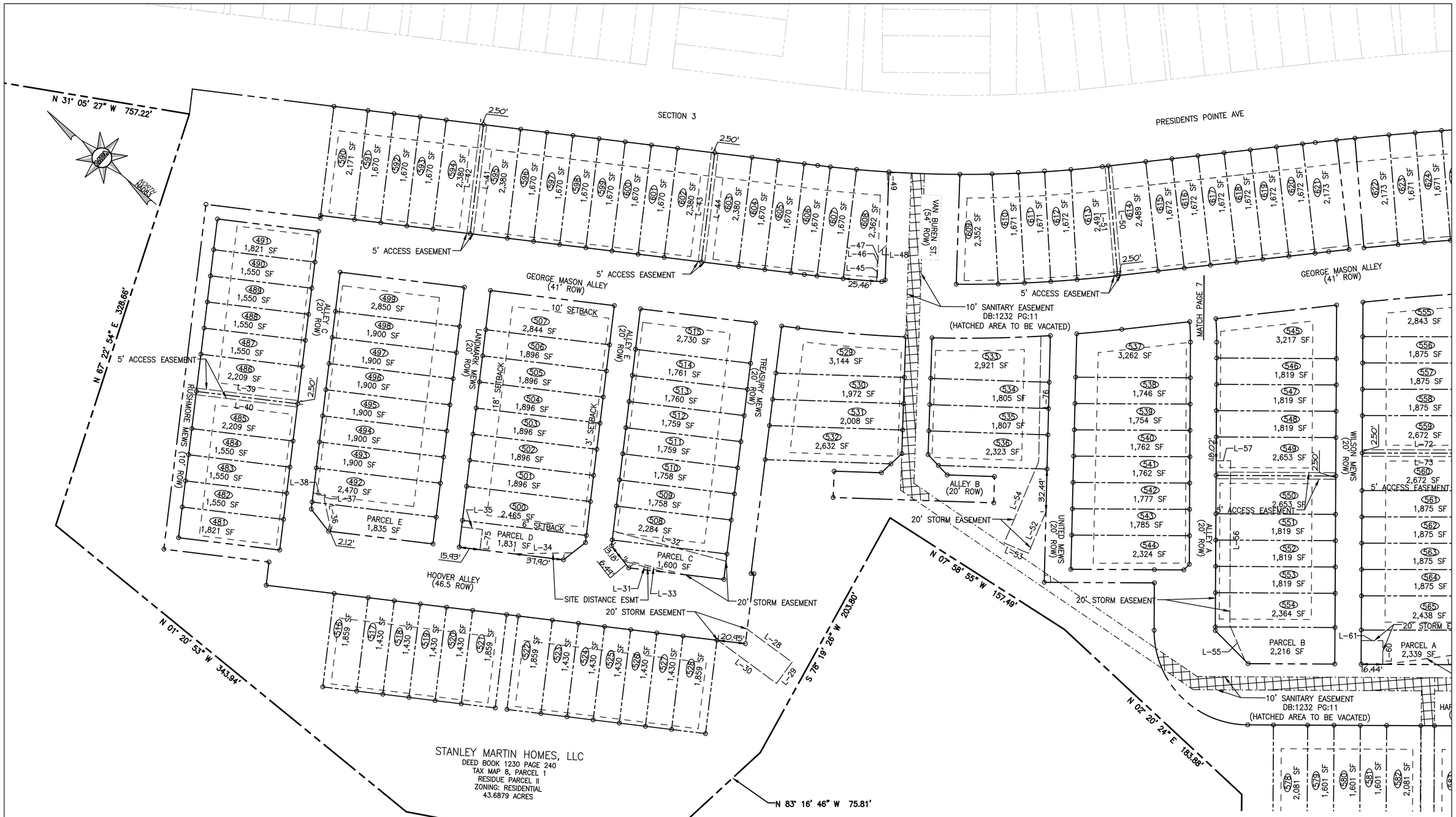
		SCALE: 1"=50"
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 5 OF 7



08-001-0007
POTOMAC MARKETPLACE
OWNERS ASSOCIATION

50 0 50 100 150
Scale 1" = 50'

FINAL PLAT

PRESIDENTS POINTE - SECTION 4

STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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PHONE: (703)-994-4047
MRAGTA.COM

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DATE	REVISIONS	JOB NO.: 22479
02/21/25	CITY OF RANSON COMMENTS	SCALE: 1"=50"
		DATE: 12/09/24
		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 6 OF 7

SECTION 3

PRESIDENTS POINTE AVE

GEORGE MASON ALLEY (41' ROW)

5' ACCESS EASEMENT

SANITARY EASEMENT
DB:1232 PG:11
(HATCHED AREA TO BE VACATED)

MATCH PAGE 6

WILSTON MEWS (20' ROW)

ALLEY 6 (20' ROW)

NATIONAL ST (54' ROW)

UNITED MEWS (20' ROW)

ALLEY A (20' ROW)

STORM WATER MANAGEMENT ESMT DB 26 PG 327

STANLEY MARTIN HOMES, LLC
DEED BOOK 1230 PAGE 240
TAX MAP 8, PARCEL 1
RESIDUE PARCEL
ZONING: RESIDENTIAL
43.6879 ACRES

PARCEL A
2,339 SF

PARCEL B
2,216 SF

20' STORM EASEMENT

10' SETBACK 4,508 SF

6' SETBACK

3' SETBACK

18' SETBACK

10' SANITARY EASEMENT
DB:1232 PG:11
(HATCHED AREA TO BE VACATED)

HARRISON ALLEY (46.5 ROW)

SITE DISTANCE ESMT

GRASS STRIP FILTER EASEMENT

ACCESS EASEMENT
DB 1045 PG 491

20' UTILITY EASEMENT
DB 1009 PG 82

08-001-0007
POTOMAC MARKETPLACE
OWNERS ASSOCIATION

N 02° 20' 24" E 183.88'
N 49° 58' 07" E 16.54'
N 49° 57' 41" E 153.70'
N 16° 31' 43" W 99.69'
N 52° 43' 08" W 212.05'
S 40° 15' 00" E 298.26'
S 49° 47' 13" W 10.86'
S 59° 35' 05" E 233.21'
S 48° 07' 56" E 80.41'
N 51° 44' 39" W 243.59'

50 0 50 100 150
Scale 1" = 50'

FINAL PLAT
PRESIDENTS POINTE - SECTION 4
STANLEY MARTIN HOMES, LLC
DISTRICT: 08, MAP: 08, PARCEL: 01
CITY OF RANSON, JEFFERSON COUNTY, WEST VIRGINIA

JON K. ERICKSON LICENSED No. 2302 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
205 HIRST RD, SUITE 106
PURCELLVILE, VIRGINIA 20132
PHONE: (703)-994-4047
MRAGTA.COM

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DATE	REVISIONS	
02/21/25	CITY OF RANSON COMMENTS	JOB NO.: 22479
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		DRAWN BY: NAB
		DESIGN BY: JKE
		REVIEW BY: JKE
		SHEET: 7 OF 7

AGENDA ITEM IV.13

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public Hearing is to accept public comments for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), entering a development agreement for Phase 4 of President's Pointe.

ATTACHMENTS:

Legal Notice PP Phase 4.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), accepting the bond, and entering a development agreement for Phase 4 of President's Pointe. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.14

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 24-52-FP- Consideration Applicant Stanley Martin Companies LLC, submitted application to enter a Development agreement for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), a development agreement.

ATTACHMENTS:

PC25-07 PP Phase 4 Development Agreement.docx
Presidents Point_Phase4_Development Agreement.docx

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF RANSON APPROVING A DEVELOPMENT AGREEMENT BY AND BETWEEN THE RANSON PLANNING COMMISSION AND STANLEY MARTIN HOMES FOR A SUBDIVISION COMMONLY REFERRED TO AND KNOWN AS "PRESIDENT'S POINTE PHASE 4"

THE PLANNING COMMISSION OF THE CITY OF RANSON RESOLVES AS FOLLOWS:

Section 1. The Planning Commission of the City of Ranson pursuant to its authority within Ranson Municipal Code 16-60 approves the attached Development Agreement by and between the Ranson Planning Commission and Stanley Martin Homes, for a subdivision commonly referred to and known as "President's Pointe Phase 4".

Section 2. The Planning Commission President is authorized and hereby directed to execute the Development Agreement on behalf of the City of Ranson Planning Commission.

Section 3. The Planning Commission hereby authorizes the City Manager or his designee to execute any and all documents necessary to carry out the conditions of the attached Development Agreement, whether express or implied, and any documents necessary for the transfer of property to Stanley Martin Homes, including any documents requested by financial institutions, lenders, attorneys, lienholders, contractors, sureties, and/or third parties.

Section 4. This Resolution and executed Development Agreement shall become effective immediately upon its adoption.

Signed and approved this 10th day of March 2025.

_____
Planning Commission, President

ATTEST:

_____
Planning Commission Member

AFFIX CITY SEAL:

RECORDING REQUESTED By
City of Ranson Planning Commission

WHEN RECORDED RETURN To

City of Ranson
312 S. Mildred Street
Ranson, WV 25438

DEVELOPMENT AGREEMENT FOR PRESIDENTS POINTE PHASE 4

THE CITY OF RANSON AND STANLEY MARTIN COMPANIES

THIS AGREEMENT is made and entered into by and between the City of Ranson Planning Commission, hereinafter referred to as "City" and sometimes "Ranson" and Stanley Martin Companies, hereinafter referred to as "Developer," for a subdivision known as President's Pointe, both of whom understand and agree as follows:

WITNESSETH:

WHEREAS, the City approved the Zoning and Land Development Plan and Plat for President's Pointe recorded at Book 1222, Page 368, in accordance to Chapter 19A of the Ranson Municipal Code;

WHEREAS, the Developer will need to record a Final Plat consistent with the approved Land Development Plan and Plat for each Phase of the Development.

WHEREAS, this agreement is executed pursuant to the provisions of land use planning as set forth in West Virginia Code §8A-1-1 and the Ranson Municipal Code;

NOW THEREFORE, in the best interest of the City of Ranson and in consideration of Developer posting security; and, in order to insure satisfactory performance by Developer of its obligations under Ranson's Land Development ordinances; and to clarify that a recorded final plat for Phase 4 will have to be recorded to ensure consistency with the approved Land Development Plan and Plat, the parties agree as follows:

1. Performance of Work
   Developer will do and perform, or cause to be done and performed, at Developer's own expense, in a good and workmanlike manner and furnish all required materials, all under the direction and to the satisfaction of the City, all of the work and improvements required by the Ranson Planning Commission for this subdivision in accordance with the approved plans and specifications on file as herein specified, or with any changes required or ordered by the City, which in its opinion are necessary or required to complete the work. Any sewer work or water supply work shall be subject to the approval of the respective special districts having to do with the said types of work.

2. Work: Places and Grades to be Approved by Engineer
   All of said work is to be done at the places, of the materials, in the manner, and at the grades, all as shown upon the plans and specifications therefore, heretofore approved by the Ranson Planning Commission and which are now on file in its office, and to the satisfaction of said City. The actual work of surveying shall be performed by the Developer's engineer.

3. Specifications
   The work embraced herein shall be done in accordance with the provisions of all applicable ordinances, regulations and policies adopted by the City of Ranson in effect at the time of building permit issuance, including but not limited to: West Virginia Code §8A, the Ranson Municipal Code, the Ranson Design Guidelines, and/or the Ranson Standard Engineering Detail Manual. In case of conflict between any of the aforementioned authorities, the Ranson standard shall prevail. In case of conflict between any of the aforementioned authorities, the plans and this agreement, the approved plans and this agreement shall take precedence over and be used in lieu of such conflicting portions of the aforementioned authorities.

4. Work: Time for Completion
   City hereby fixes the time for the completion of all public infrastructure improvements in Phase 4 to be within three (3) years after the date of approval of this Agreement unless a written extension is granted by the Planning Commission. However, in no case shall the time of completion for required infrastructure extend beyond four (4) years beyond the date of approval of this Agreement. Absent a written extension by the Planning Commission, the Planning Commission reserve the right to call the bond to complete the infrastructure in accordance with the approved plan. Nothing in this agreement, however, shall be construed to limit the Planning Commission's right to call the bond at any time if exigent circumstances require such action. Such circumstances shall be determined at the sole discretion of the Ranson Planning Commission.

5. Time of Essence – Extension
   Time is of the essence of this agreement; provided, that in the event good cause is shown therefore, the Ranson Planning Commission may extend the time for completion of the improvements hereunder. Any such extension may be granted without notice to the Developer's surety, and extensions so granted shall not relieve the surety's liability on the bond to secure the faithful performance of this agreement. The Ranson Planning Commission shall be the sole and final judge as to whether or not good cause has been shown to entitle Developer to an extension.

6. Repairs or Replacements
   Developer shall replace, or have replaced, or repair, or have repaired, as the case may be, all pipes and monuments shown on the map which have been destroyed or damaged, and Developer shall replace or have replaced, repair, or have repaired, as the case may be, or pay to the owner, the entire cost of replacement or repairs, or any and all property damaged or destroyed by reason of any work done hereunder, whether such property be owned by the United States or any agency thereof, or the State of West Virginia, or any agency or political subdivision thereof, or by the City or by a public or private corporation, or by any person whomsoever, or by any combination of such owners. Any such repair or replacement shall be to the satisfaction, and subject to the approval of the City Engineer.

7. Permits: Compliance with Law
   Developer shall, at Developer's expense, obtain all necessary permits and licenses for the construction of such improvements, give all necessary notices and pay all fees and taxes required by law.

8. Superintendence by Developer or its Designated Representative
   Developer shall give personal superintendence to the work on said improvement, or have a competent foreman or superintendent, satisfactory to the City, on the work at all times during progress, with authority to act for the Developer.

9. Inspection by City of Ranson
   Developer shall at all times maintain proper facilities, and provide safe access for inspection by City, to all parts of the work, and to the shops wherein the work is in preparation.

10. Subdivision Surety
    Developer shall post subdivision surety consistent with Ranson Municipal Code 16-80 et seq. *See Exhibit A for surety documents. for Phase 4.*

11. Hold-Harmless Agreement
    Developer hereby agrees to, and shall, hold City, its elective and appointive boards, commissions, officers, agents and employees, harmless from any liability for damage or claims for damage for personal injury, including death, as well as from claims for property damage which may arise from Developer's or Developer's contractors', subcontractors', agents', or employees' operations under this agreement, whether such operations be by Developer or by any of Developer's contractors, subcontractors, or by any one or more persons directly or indirectly employed by, or acting as agent for Developer or any of Developer's contractors, or subcontractors. Developer agrees to and shall defend City and its elective and appointive boards, commission, officers, agents and employees from any suits or actions at law or in equity for damages caused, or alleged to have been caused, by reason of any of the aforesaid operations; provided as follows: That the aforesaid hold-harmless agreement by Developer shall apply to all damages and claims for damages of every kind suffered, or alleged to have been suffered by reason of any of the aforesaid operations referred to in this paragraph, regardless of whether or not City has prepared, supplied or approved of, plans and/or specifications for the subdivision, or regardless of whether or not any of the insurance policies described herein shall have been determined to be applicable to any of such damages or claims for damages.

12. Developer's Insurance
    Developer shall not commence work under this agreement until Developer shall have obtained all insurance required under this paragraph, nor shall Developer allow any contractor or subcontractor to commence work on his contract or subcontract until all similar insurance required of the contractor or subcontractor shall have been so obtained and approved. All requirements herein provided shall appear either in the body of the insurance policies or as endorsements and shall specifically bind the insurance carrier.

    a. Compensation Insurance
       Developer shall maintain, during the life of this agreement, Workmen's Compensation Insurance for all Developer's employees employed at the site of the improvement, and in case any work is sublet, Developer shall require any contractor or subcontractor similarly to provide Workmen's Compensation Insurance for all contractor's or subcontractor's employees, unless such employees are covered by the protection afforded by Developer. In case any class of employees engaged in work under this agreement at the site of the project is not protected under any Workmen's Compensation Law, Developer shall provide, and shall cause each contractor and subcontractor to provide, adequate insurance for the protection of employees not otherwise protected. Developer hereby indemnifies City for any damage resulting to it from failure of either Developer or any contractor or subcontractor to take out or maintain such insurance.

    b. Public Liability and Property Damage Insurance
       Developer shall take out and maintain during the life of this agreement such public liability and property damage insurance as shall insure City, its elective and appointive

boards, commissions, officers, agents, and employees, Developer and any contractor or subcontractor performing work covered by this agreement from claims for damages for personal injury, including death, as well as from claims for property damage which may arise from Developer's or any contractor's or subcontractor's operations hereunder, whether such operations be by Developer or any contractor or subcontractor, or by anyone directly or indirectly employed by either Developer or any contractor or subcontractor.

c. Contractual Liability Insurance

Developer shall take out and maintain during the life of the agreement an insurance policy insuring City, its elective and appointive boards, commissions, officers, agents and employees, Developer and any contractor or subcontractor performing work covered by this agreement against damages sustained by reason of any action or actions at law or in equity, and/or any claims or demands by reason of any breach or alleged breach of any contract, or provision thereof, or by reason of any contractual liability or alleged contractual liability on any contract, entered into by Developer and/or any of Developer's contractors, subcontractors, agents and/or employees.

In the event that any of the aforesaid insurance policies provided for herein insures any entity, person, board or commission other than those mentioned in this paragraph, such policy shall contain a standard form of cross-liability endorsement, insuring on such policy, City, its elective and appointive boards, commissions, officers, agents and employees, Developer and any contractor or subcontractor performing work covered by this agreement.

13. Title to Improvements

Title to, and ownership of, all street and infrastructure improvements constructed hereunder by Developer shall vest absolutely in City, upon completion of such streets in accordance with the approved plan and acceptance of such improvements by City. All infrastructure shall meet City of Ranson maintenance standards and approved by the City prior to dedication. Developer and City shall work together to turn over improvements in sections as they are completed.

14. Specific Conditions of Development

a. Developer and/or established Homeowners' Association shall be responsible for maintaining and mowing all common areas. Common areas shall include, but not be limited to, all open space, storm water management facilities, and landscaped areas. Homeowners' Association and/or Developer shall be responsible for the perpetual maintenance, trimming, and protection of buffers and landscaped plantings, including trees. Diseased, infested, dying, dead or damaged landscaping shall be replaced by Developer and/or Homeowners' Association as soon as possible but no later than the next planting season.

b. Developer shall make Builders aware that in order to receive a Use & Occupancy Certificate, the City will require
   (1) finished individual driveways to include top coat,
   (2) sod is to be installed on front, rear and side yards along with 4 inches of top soil on residential lots,
   (3) Installation of required street trees as shown on the approved engineering plans,
   (4) Seasonal bonding shall be available to achieve the same result,

c. Developer shall ensure that street lights and community landscaping is installed sequentially as development occurs and structures are built.

d. Vacant lots, and lots adjacent to public infrastructure shall be mowed and maintained

e. Developer shall have a dedicated construction entrance for the use of site and building contractors.

f. The Developer shall be responsible in screening the onsite storage of all site development materials, such as but not limited to utility service pipes, stormwater pipes, gravel and construction material, from the public streets and surrounding residents.

15. Repair or Reconstruction of Defective Work

If, within a period of one year after final acceptance of the work performed under this agreement, and notification by City to Developer, any structure or part of any structure furnished and/or installed or constructed, or caused to be installed or constructed by Developer, or any of the work done under this agreement, fails to fulfill any of the requirements of this agreement or the specifications referred to herein, Developer shall without delay and without any cost to the City, repair or replace or reconstruct any defective or otherwise unsatisfactory part or parts of the work or structure. Should Developer fail to act promptly, or in accordance with this requirement, or should the exigencies of the case require repairs or replacements to be made before Developer can be notified, City may, at its option, make the necessary repairs or replacements or perform the necessary work and Developer shall pay to the City the actual cost of such repairs plus fifteen percent (15%).

16. Developer not Agent of City

Neither Developer nor any of Developer's agents or contractors are or shall be considered to be agents of City in connection with the performance of Developer's obligations under this agreement.

17. Notice of Breach and Default

If after notification, Developer refuses or fails to obtain prosecution of the work, or any severable part thereof, with such diligence as will insure its completion within the time specified, or any extensions thereof, or fails to obtain completion of said work within such time, or if the Developer should be adjudged a bankrupt, or Developer should make a general assignment for the benefit of Developer's insolvency or is Developer, or any of Developer's contractors, subcontractors, agents, or employees, should violate any of the provisions of this agreement, City Engineer, City Manager or his designee or Planning Commission shall serve written notice upon Developer and Developer's surety of breach of this agreement, or of any portion thereof, and default of Developer.

18. Breach of Agreement: Performance by Surety or City of Ranson

In the event of any such notice of breach Developer's surety shall have the duty to takeover and complete the work and the improvement herein specified; provided, however, that if the surety, within sixty (60) days after the serving upon it of such notice of breach, does not give City written notice of its intention to take over the performance of the contract, and does not commence performance thereof within ninety (90) days after notice to City of such election, City may take over the work and prosecute the same to completion, by contract or by any other method City may deem advisable, for the account and at the expense of Developer, and Developer's surety shall be liable to City for any excess cost or damages occasioned City thereby; and, in such event,

City, without liability for so doing, may take possession of, and utilize in completing the work, such materials, appliances, plant and other property belonging to Developer as maybe on the site of the work and necessary therefor.

19. Reduction and Completion

The surety posted by the Developer may be reduced three (3) times prior to acceptance of all required improvements, upon the satisfactory completion of the subdivision improvements shown on the approved construction drawings, as per Ranson City Code 16-83.

Upon completion of all the work described in the said Agreement and upon the City authorizing a written Notice of Completion and Acceptance of said work, the Planning Commission will release all surety to 80% of the surety. The remaining 20% shall be held by the City for a period of one (1) year after the date of the Notice of Completion as a guaranteed bond to secure the performance of this Agreement and shall thereafter be released. The amount specified above for labor and materials shall be held by City for a period of one (1) year after the date official acceptance of the improvements specified in the said Agreement.

20. Enforcement and Guarantees

Pursuant to W. Va. Code § 8A-6-3, failure to meet all conditions in this Agreement shall constitute cause to deny Developer, the issuance of any of the required use, occupancy or improvement local permits, as may be appropriate. Nothing in this Agreement waives any of the remedies the Planning Commission or Ranson possesses to administer and enforce conditions under the authority granted in W. Va. Code § 8A-6-3.

City must notify Developer if requirements are not met or violations exist and Developer shall give the City written notice of its intent to cure within (5) days after the City's notice is provided. If Developer provides its written confirmation to cure to the City, the Developer shall have a 30 day right to cure period. Failure to cure within the 30 day cure period shall constitute cause for the City to withhold issuing building permits, use and occupancy permits and/or approving plats for future phases and calling surety

21. Notices

All notices herein required shall be in writing, and delivered in person or sent by registered mail, postage prepaid. Notices required to be given to City shall be addressed as follows:

City of Ranson
Attn: City Manager
312 South Mildred Street
Ranson, WV 25438

Notices required to be given to Developer shall be addressed as follows:

_____

_____

Provided that any party or the surety may change such address by notice in writing to the other party and thereafter notices shall be addressed and transmitted to the new address.

22. Binding Effect of Agreement

This Agreement shall be binding on and inure to the benefit of the parties to this Agreement and their estates, heirs, personal representatives, successors and assigns. However, the homeowner association or any owner of any unit shall not be deemed a third party beneficiary and not entitled to enforce any provision hereunder.

23. Authority
Any conflict arising from this Agreement shall be governed by and construed in accordance with the laws of the State of West Virginia.

DATED this _____ day of _____, 2025.

RANSON PLANNING COMMISSION

By: _____
Mike Anderson
Its: President

DEVELOPER

By: _____

Its: _____

STATE OF WEST VIRGINIA;
COUNTY OF JEFFERSON; to-wit:

The foregoing instrument was acknowledged before me by Mike Anderson, Ranson Planning Commission President, this ____ day of _____, 2024.

My commission expires: _____

NOTARY PUBLIC

STATE OF _____;
COUNTY OF _____; to-wit:

The foregoing instrument was acknowledged before me by _____.
for_____, its _____, this ____ day of_____, 2016.

My commission expires: _____

NOTARY PUBLIC

AGENDA ITEM IV.15

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: Public hearing is to accept public comments on accepting the Bond for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), for Phase 4 of President's Pointe.

ATTACHMENTS:

Legal Notice PP Phase 4.docx

LEGAL NOTICE
PUBLIC HEARING NOTICE
CITY OF RANSON

In accordance with W. Va. Code §8A-5-8 et seq., the Ranson Planning Commission will hold a public hearing on Monday, March 10, 2025, at 7:00 PM at Ranson City Hall, 312 S. Mildred Street, Ranson, WV. The purpose of the public hearing is to accept public comments on the final plat proposal for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), accepting the bond, and entering a development agreement for Phase 4 of President's Pointe. All persons are invited to attend and make comments about the proposed final plat.

Copies of the proposed plat and bond are available upon request in the Community Development Department. If you cannot attend but wish to comment, you may write and it must be received to the following address: City of Ranson, Attn: Community Development Department, 312 S. Mildred Street, Ranson, WV 25438 or email cityclerk@ransonwv.us. Written Comments received prior to March 7, 2025, will be provided to the Planning Commission, and inserted into the official record.

AGENDA ITEM IV.16

Planning Commission Request for Action

TO:

FROM: Darla Armstrong

ITEM TYPE: PRESENTATION

AGENDA SECTION: PLANNING COMMISSION BUSINESS

SUBJECT: 24-52-FP- Consideration - Applicant Stanley Martin LLC, submitted an application for the Bond for President's Pointe Phase 4 located off President's Pointe Blvd including 150 lots (Lots 481-631), for Phase 4 of President's Pointe.

ATTACHMENTS:

PC25-08 PP Phase 4 Bond.docx
24-52-FP-presidents_pointe_phase_4_bond_worksheet (2).pdf

Resolution #: PC-25-08

A Resolution of the Planning Commission of the City of Ranson to Accept the Guarantee Surety (Bond) for the Required Physical Improvements for the President's Pointe Subdivision Phase 4.

THE PLANNING COMMISSION OF THE CITY OF RANSON RESOLVES AS FOLLOWS:

Section 1. The Planning Commission accepts the Corporate Surety in lieu of the completion of required on-site improvements as described in 16-82, and as outlined in the development agreement presented March 10, 2025, to the Planning Commission, for Phase 5 of the subdivision.

Section 2. The approved bonded amount will be held in the amount of $2,495,975.64

Section 3. This Resolution and a copy of the surety policy is hereby directed to be forwarded to the City Clerk for communication to the Ranson City Council and for recording within the land records of the Jefferson County Clerk.

Signed and approved this 10th day of March 2025.

_____
Mike Anderson, President

ATTEST:

_____
Planning Commission Member

AFFIX CITY SEAL

City of Ranson, West Virginia
Community Development
Construction Bond - Estimate

Project Presidents Pointe _____ Date: 3/7/2025

Section Phase 4 _____ C.O.R. File No. _____

Bond Amount Approved: $ _____

By: _____ **Date:** _____

Official Use Do Not Write In This Box

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.1	**Erosion & Sediment Control**				
1	Stabilized Construction Entrance	EA	$ 2,475.00	1	$ 2,475.00
2	Silt Fence - Standard	LF	$ 4.40		$ -
3	Silt Fence - Super	LF	$ 18.15	2,912	$ 52,852.80
4	Earth Dike Construction (1)	LF	$ 3.96		$ -
5	Inlet Protection Device	EA	$ 388.14	25	$ 9,703.38
6	Outlet Protection Device	EA	$ 385.00	3	$ 1,155.00
7	Stone Check Dams	EA	$ 192.50		$ -
8	Sediment Trap Excavation	CY	$ 15.35		$ -
9	Riser Structure for Sediment Basin/Pond	EA	$ 6,456.24		$ -
10	Impermeable Liner for Sediment Basin/Pond	SY	$ 22.83		$ -
11	Rip-Rap Apron/Plunge Pool	CY	$ 122.72		$ -
12	Grass Waterway/Drainage Swale	LF	$ 11.99		$ -
13	Temporary Seeding (60 lbs/ac)	SF	$ 0.10	582,833	$ 57,700.47
14	Permanent Seeding (98 lbs/ac)	SF	$ 0.12	426,016	$ 51,547.94
15	Mulch, Straw or Hay (2 tn/ac)	TN	$ 550.13		$ -
16	Mulch, Wood Cellulose Fiber (1,500 lbs/ac)	TN	$ 545.34		$ -
17	Mulch, Shredded Bark or Wood Chip (35 cy/ac)	CY	$ 89.10		$ -
18	Sod	SY	$ 5.90		$ -
19	Soil Stabilizing Matt - Biodegradable	SY	$ 4.95		$ -
20	Soil Stabilizing Matt - Non-biodegradable	SY	$ 11.00		$ -
21	Geotextile Fabric	SF	$ 3.30		$ -
22	4 ft Safety Fence	LF	$ 8.84		$ -
23	6 ft Chain Link Safety Fence	LF	$ 11.00		$ -
24	Tree Protection	LF	$ 3.30		$ -
25	Temporary Utility Line Stream Crossing/Diversion	EA	$ 1,375.00		$ -
1.2	**Site Preparation & Demolition**				
1	Clearing & Grubbing - Light Cover	ACRE	$ 7,342.50		$ -
2	Clearing & Grubbing - Moderate Cover	ACRE	$ 10,725.00		$ -
3	Clearing & Grubbing - Heavy Cover	ACRE	$ 13,475.00		$ -
4	Clearing & Grubbing - Very Heavy Cover	ACRE	$ 15,950.00		$ -
5	Sawcut Existing Asphalt Pavement	LF	$ 2.20		$ -
6	Sawcut Existing Concrete Pavement	LF	$ 3.52		$ -
7	Removal of Asphalt Pavement	SY	$ 8.25		$ -
8	Removal of Fencing	LF	$ 5.67		$ -
9	Removal of Power Pole	EA	$ 8,415.00		$ -
10	Removal of Structures/Buildings	EA	Detailed estimate required.		

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
1.3	**Earthwork**				
1	Strip Topsoil	CY	$ 4.13		$ -
2	Common Excavation	CY	$ 25.01	7271	$ 181,876.79
3	Borrow Material - On Site	CY	$ 22.34		$ -
4	Borrow Material - Imported from Off Site	CY	$ 40.26		$ -
5	Rock Excavation	CY	$ 99.00		$ -
6	Furnish Topsoil	CY	$ 52.76		$ -
2.1	**Paved Surface Construction**				
1	Subgrade	CY	$ 73.37	680	$ 49,891.60
2	Fabric for Subgrade Stabilization	SY	$ 3.19		$ -
3	Aggregate Base Course	CY	$ 97.30	680	$ 66,160.60
4	Open Graded Free Draining Base Course	CY	$ 120.89		$ -
5	Free Draining Base Trench	LF	$ 12.08		$ -
6	Outlet Pipe	LF	$ 39.75		$ -
7	Bituminous Asphalt Tack Coat	SY	$ 0.51		$ -
8	Superpave Asphalt Base Course - Type 25	TN	$ 93.50	665	$ 62,177.50
9	Superpave Asphalt Base Course - Type 19	TN	$ 106.70		$ -
10	Superpave Asphalt Surface Course - Type 9.5	TN	$ 117.70	332	$ 39,076.40
11	Reinforced Concrete Pavement	CY	$ 450.55		$ -
12	Standard Milling	SY	$ 7.07		$ -
13	Controlled Low Strength Material	CY	$ 368.98		$ -
14	6" Concrete Entrance Apron - Residential	SY	$ 104.07	665	$ 69,207.22
15	8" Concrete Entrance Apron - Commercial Site	SY	$ 137.50		$ -
16	Concrete Curb & Gutter	LF	$ 66.00	1080	$ 71,280.00
17	Concrete Curb Only	LF	$ 55.00	6928	$ 381,040.00
18	Bituminous Asphalt Walkway	SF	$ 14.85		$ -
19	Concrete Sidewalk	SY	$ 97.13	2810	$ 272,935.30
20	Bed Course Material (for sidewalk)	CY	$ 88.57		$ -
21	Concrete Curb Ramp	EA	$ 2,750.00		$ -
22	Detectable Warning Surface	EA	$ 486.72	24	$ 11,681.21
23	Concrete Precast Wheel Stops	EA	$ 275.00		$ -
24	One Direction Lane Arrow	EA	$ 275.00		$ -
25	Multi Directional Land Arrow	EA	$ 460.90		$ -
26	Bicycle Shared Lane Marking	EA	$ 302.50		$ -
27	Bicycle Lane Marking	EA	$ 302.50		$ -
28	Pavement Letters	EA	$ 82.27		$ -
29	4" Edge/Lane Line - Painted	LF	$ 0.51		$ -
30	6" Edge/Lane Line - Painted	LF	$ 0.66		$ -
31	8" Edge/Lane Line - Painted	LF	$ 0.83		$ -
32	4" Edge/Lane Line - Thermoplastic	LF	$ 0.76		$ -
33	6" Edge/Lane Line - Thermoplastic	LF	$ 1.17		$ -
34	8" Edge/Lane Line - Thermoplastic	LF	$ 1.97		$ -
35	4" Edge/Lane Line - Preformed Thermoplastic	LF	$ 4.95		$ -
36	6" Edge/Lane Line - Preformed Thermoplastic	LF	$ 7.37		$ -
37	8" Edge/Lane Line - Preformed Thermoplastic	LF	$ 9.24		$ -
38	4" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.07		$ -
39	6" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 7.70		$ -
40	8" Edge/Lane Line w/ Contrast - Preformed Thermoplastic	LF	$ 9.90		$ -
41	12" Crosswalk/Stop/Transverse Line - Painted	LF	$ 3.58		$ -
42	12" Crosswalk/Stop/Transverse Line - Preformed Thermoplastic	LF	$ 14.85	204	$ 3,023.91
43	24" Stop Line - Preformed Thermoplastic	LF	$ 24.75	129	$ 3,187.06
44	Handicapped Parking Symbol	EA	$ 341.17		$ -
45	0.08 in Flat Sheet Sign	SF	$ 49.50		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
46	City standard sign post	LF	$ 27.50	11	$ 302.50
47	Sign - Street Name per E911 Addressing Ordinance	EA	$ 467.50	12	$ 5,610.00
48	Guard Rail - Steel Beam & Posts	LF	$ 20.16		$ -
49	Fence - Chain Link 6' High	LF	$ 45.24		$ -
50	Fence - Wood 3-Rail	LF	$ 33.00		$ -
51	Fence - Decorative Iron, 42" High	LF	$ 82.50		$ -
52	Pedestrian/Bicycle Barrier Railing - Wood - 42" high	LF	$ 57.20		$ -
53	Lights - Street and Parking Lot (light fixture, pole, foundation, & wiring)	EA	$ 13,200.00	14	$ 184,800.00
54	Bollards (wood or steel)	EA	$ 495.00		$ -
55	Traffic Control/Stop Light (WVDOH cost estimate)	EA	DOH estimate required.		

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
3.1	**Landscaping**				
1	Transplanting Trees (6' or less)	EA	$ 148.50		$ -
2	Transplanting Shrubs	EA	$ 126.50		$ -
3	Plant Shrubs (Evergreen or Deciduous)	EA	$ 165.00		$ -
4	Plant Tree (2"-3" caliper) - Evergreen	EA	$ 412.50		$ -
5	Plant Tree (2"-3" caliper) - Deciduous	EA	$ 550.00		$ -
6	Plant Tree (2"-3" caliper) - Flowering	EA	$ 330.00	51	$ 16,830.00
7	Plant Ground Cover	EA	$ 7.70		$ -
8	Plant Wetlands or Bioretention Vegetation	EA	$ 27.50		$ -
9	Plant Screen Trees	EA	$ 165.00		$ -
10	Plant Street/Shade Trees	EA	$ 550.00		$ -
11	Mulching (wood landscape mulch in place)	CY	$ 89.10		$ -
4.1	**Sanitary Sewer System**				
1	2" PVC Schedule 80 Pipe (force main)	LF	$ 121.00		$ -
2	6" PVC Schedule 80 Pipe	LF	$ 168.76		$ -
3	8" PVC Schedule 80 Pipe	LF	$ 109.45		$ -
4	10" PVC Schedule 80 Pipe	LF	$ 121.55		$ -
5	Manhole 4' Diameter (6' height or less)	EA	$ 6,674.68		$ -
6	Grease Trap	EA	$ 6,875.00		$ -
7	4" Service Lateral (20' to Edge of R.O.W./Property Line)	LF	$ 68.31		$ -
8	Sanitary Sewer Pump Station (sewage pump)	EA	Detailed estimate required.		
9	Road Bore/Crossing (with Pipe & Steel Casing)	LF	$ 440.00		$ -
4.2	**Potable Water System**				
1	3/4" Copper Service Line	LF	$ 117.76		$ -
2	1" Copper Service Line	LF	$ 193.60		$ -
3	2" Copper Service Line	LF	$ 39.60		$ -
4	4" Ductile Iron Pipe	LF	$ 57.20		$ -
5	6" Ductile Iron Pipe	LF	$ 74.80		$ -
6	8" Ductile Iron Pipe	LF	$ 92.40		$ -
7	10" Ductile Iron Pipe	LF	$ 104.50		$ -
8	12" Ductile Iron Pipe	LF	$ 115.50		$ -
9	Fire Hydrant with 6" line	EA	$ 5,513.77		$ -
10	4" Gate Valve & Box	EA	$ 1,225.13		$ -
11	6" Gate Valve & Box	EA	$ 1,954.65		$ -
12	8" Gate Valve & Box	EA	$ 1,617.98		$ -
13	10" Gate Valve & Box	EA	$ 2,420.00		$ -
14	12" Gate Valve & Box	EA	$ 4,271.09		$ -
15	Pressure Reducing Valve & Vault	EA	Detailed estimate required.		
16	Tapping Sleeve & Valve for Water Service Connection	EA	$ 726.00		$ -
17	Water Meter Setter, Box & Service Line Tap	EA	$ 3,335.29		$ -
5.1	**Storm Water Management & Storm Drainage**				
	SWM Basin/Ponds				
1	Excavation - Basin/Pond	CY	$ 25.01		$ -
2	Excavation - Core Trench	CY	$ 25.01		$ -
3	Embankment Construction - On-Site Material	CY	$ 22.34		$ -
4	Embankment Construction - Imported Material	CY	$ 40.26		$ -
5	Impervious Core	SF	$ 1.98		$ -
6	Concrete Control Structure and Pipe Cradles	CY	$ 1,300.59		$ -
7	Corrugated Metal Pipe Control Structure	EA	$ 6,456.24		$ -
8	Dewatering Pipes or Structures	EA	$ 558.02		$ -
9	Filter Stone for Dewatering Pipe (1" to 2" dia. clean)	CY	$ 53.12		$ -
10	Antiseep Collar	Each per foot of width	$ 165.00		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
11	Trash Rack	Each per inch dia.	$ 55.00		$ -
12	Water Tight Pipe Bands	Each per inch dia.	$ 8.25		$ -
	Low Impact Development BMP				
13	Urban Bioretention Basin (in sidewalk areas)	SF	$ 55.00		$ -
14	Bioretention Basin	SF	$ 38.50		$ -
15	Grass Channel	SF	$ 30.00		$ -
16	Permeable Pavers	SY	$ 50.00		$ -
	PVC Slotted Pipe				
17	4" PVC Slotted or Perforated Drain Pipe	LF	$ 16.50		$ -
18	6" PVC Slotted or Perforated Drain Pipe	LF	$ 17.60		$ -
19	8" PVC Slotted or Perforated Drain Pipe	LF	$ 21.85		$ -
20	12" PVC Slotted or Perforated Drain Pipe	LF	$ 36.30		$ -
	Corrugate Metal Pipe (Circular)				
21	15" Storm Drain Pipe	LF	$ 171.48		$ -
22	18" Storm Drain Pipe	LF	$ 112.79		$ -
23	24" Storm Drain Pipe	LF	$ 173.24		$ -
24	30" Storm Drain Pipe	LF	$ 198.00		$ -
25	36" Storm Drain Pipe	LF	$ 209.06		$ -
26	42" Storm Drain Pipe	LF	$ 244.20		$ -
27	48" Storm Drain Pipe	LF	$ 278.30		$ -
28	54" Storm Drain Pipe	LF	$ 313.50		$ -
29	60" Storm Drain Pipe	LF	$ 352.00		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Pipe (circular)				
30	15" Storm Drain Pipe	LF	$ 118.94	2109	$ 250,832.57
31	18" Storm Drain Pipe	LF	$ 118.94	84	$ 10,030.46
32	21" & 24" Storm Drain Pipe	LF	$ 136.22	178	$ 24,247.87
33	27" & 30" Storm Drain Pipe	LF	$ 180.69	338	$ 61,071.87
34	36" Storm Drain Pipe	LF	$ 259.58		$ -
35	42" Storm Drain Pipe	LF	$ 246.40		$ -
36	48" Storm Drain Pipe	LF	$ 665.17		$ -
37	54" Storm Drain Pipe	LF	$ 316.80		$ -
38	60" Storm Drain Pipe	LF	$ 352.00		$ -
	High Density Polyethlyene (HDPE) Pipe (Circular)				
39	15" Storm Drain Pipe	LF	$ 126.32		$ -
40	18" Storm Drain Pipe	LF	$ 169.63		$ -
41	24" Storm Drain Pipe	LF	$ 180.58		$ -
42	30" Storm Drain Pipe	LF	$ 312.33		$ -
43	36" Storm Drain Pipe	LF	$ 209.91		$ -
44	42" Storm Drain Pipe	LF	$ 250.80		$ -
45	48" Storm Drain Pipe	LF	$ 297.00		$ -
46	54" Storm Drain Pipe	LF	$ 308.00		$ -
47	60" Storm Drain Pipe	LF	$ 319.00		$ -
	End Sections (Circular) - Metal (for CMP and HDPE Pipe)				
48	15" Metal End Section	EA	$ 797.50		$ -
49	18" Metal End Section	EA	$ 697.76		$ -
50	24" Metal End Section	EA	$ 960.88		$ -
51	30" Metal End Section	EA	$ 1,240.92		$ -
52	36" Metal End Section	EA	$ 1,210.00		$ -
53	42" Metal End Section	EA	$ 1,430.00		$ -
54	48" Metal End Section	EA	$ 1,760.00		$ -
55	54" Metal End Section		$ 2,200.00		$ -
56	60" Metal End Section		$ 2,200.00		$ -
	End Sections (Circular) - Concrete				
57	15" RCP End Section	EA	$ 533.50	1	$ 533.50
58	18" RCP End Section	EA	$ 621.50	1	$ 621.50
59	24" RCP End Section	EA	$ 830.50	1	$ 830.50
60	30" RCP End Section	EA	$ 1,314.50		$ -
61	36" RCP End Section	EA	$ 1,941.50	1	$ 1,941.50
62	42" RCP End Section	EA	$ 1,974.50		$ -
63	48" RCP End Section	EA	$ 2,348.50		$ -
64	54" RCP End Section	EA	$ 3,074.50		$ -
65	60" RCP End Section	EA	$ 3,800.50		$ -
	Corrugated Metal Pipe Arch				
66	17" x 13" Storm Drain Pipe	LF	$ 171.48		$ -
67	21" x 15" Storm Drain Pipe	LF	$ 112.79		$ -
68	24" x 18" Storm Drain Pipe	LF	$ 173.24		$ -
69	35" x 24" Storm Drain Pipe	LF	$ 198.00		$ -
70	42" x 29" Storm Drain Pipe	LF	$ 209.06		$ -
71	57" x 38"Storm Drain Pipe	LF	$ 244.20		$ -
72	64" x 43" Storm Drain Pipe	LF	$ 278.30		$ -

Item No.	Description	Unit	2021 Unit Cost	Quantity	Total Cost
	Reinforced Concrete Elliptical Pipe				
73	23" x 14" Storm Drain Pipe	LF	$ 118.94		$ -
74	30" x 19" Storm Drain Pipe	LF	$ 136.22		$ -
75	38" x 24" Storm Drain Pipe	LF	$ 180.69		$ -
76	45" x 29" Storm Drain Pipe	LF	$ 259.58		$ -
77	53" x 34" Storm Drain Pipe	LF	$ 665.17		$ -
78	60" x 38" Storm Drain Pipe	LF	$ 665.17		$ -
79	68" x 43" Storm Drain Pipe	LF	$ 352.00		$ -
	End Sections - Corrugated Metal Pipe Arch (for CMP and HDPE Pipe)				
80	17" x 13" Metal End Section	EA	$ 797.50		$ -
81	21" x 15" Metal End Section	EA	$ 697.76		$ -
82	24" x 18" Metal End Section	EA	$ 709.50		$ -
83	35" x 24" Metal End Section	EA	$ 1,240.92		$ -
84	42" x 29" Metal End Section	EA	$ 1,210.00		$ -
85	57" x 38" Metal End Section	EA	$ 1,760.00		$ -
86	64" x 43" Metal End Section	EA	$ 2,200.00		$ -
	End Sections - Reinforced Concrete Elliptical Pipe				
86	23" x 14" RCP End Section	EA	$ 621.50		$ -
88	30" x 19" RCP End Section	EA	$ 830.50		$ -
89	38" x 24" RCP End Section	EA	$ 1,314.50		$ -
90	45" x 29" RCP End Section	EA	$ 1,941.50		$ -
91	53" x 34" RCP End Section	EA	$ 1,974.50		$ -
92	60" x 38" RCP End Section	EA	$ 2,348.50		$ -
93	68" x 43" RCP End Section	EA	$ 3,074.50		$ -
	Storm Drain Structures				
94	Drop Inlet	EA	$ 3,879.85	2	$ 7,759.71
95	Curb Inlet - 6' Opening	EA	$ 4,620.00	7	$ 32,340.00
96	Curb Inlet - 10' Opening	EA	$ 5,280.00	6	$ 31,680.00
97	Curb Inlet - 12' Opening	EA	$ 6,050.00	6	$ 36,300.00
98	Curb Inlet - 16' Opening	EA	$ 6,820.00		$ -
99	Curb Inlet - 20' Opening	EA	$ 7,370.00		$ -
100	Manhole (4' dia., 6' height or less)	EA	$ 6,674.79	8	$ 53,398.31
	Outfall & Channel Protection				
101	Concrete Endwall/Wingwall	SF	$ 110.00		$ -
102	Gabion Basket Structure	CY	$ 275.50		$ -
103	Rip-Rap Stone - Class 1	CY	$ 122.72		$ -
5.1	**Civc Standards**				
1	Small Playground Tot Lot (< 10 Childred)	EA	$ 19,800.00		$ -
2	Medium Playground Tot Lot (10-50 Childred)	EA	$ 55,000.00		$ -
3	Large Playground Tot Lot (50+ Childred)	EA	$110,000		$ -
6.1	**Miscellaneous Site Construction & Structures**				
1	Bus Stop Enclosure	EA	$ 3,850.00		$ -
2	Mail Box Cluster	EA	$ 1,100.00	5	$ 5,500.00
3	Construction Stake-out	AC	$ 11,000.00		$ -
4	Traffic Control During Construction	LS	Detailed estimate required.		
5	Set Property Corners	EA	$ 132.00	339	$ 44,748.00

Grand Total All Costs	$ 2,156,350.45
Mobilization (5%)	$ 107,817.52
15% Contingency	$ 339,625.20
TOTAL BOND AMOUNT	$ 2,495,975.64