CITY OF CHARLES TOWN
PLANNING COMMISSION
AGENDA • NOVEMBER 30, 2026

Commission/Board Meeting **CITY HALL** **7:00 PM**

101 E Washington Street, Charles Town, WV 25414

1. CALL TO ORDER

2. APPROVAL OF MINUTES

2.1 : DRAFT October 26, 2026 minutes

3. UNFINISHED BUSINESS

4. NEW BUSINESS

4.1 : **Public Hearing**: *SLD2026-02* - Huntfield Phases 9 & 11 - Sketch Plan
1. Staff Report.pdf
2. Application.pdf
3. KH Review.pdf
4. Plan Set.pdf
5. Public Comment.pdf
6. Public Comment.pdf
7. Public Comment.pdf

4.2 : **Public Hearing**: *BR2026-09* - Washington Landing - Land Disturbance Bond Release
1. Staff Report.pdf
2. Application.pdf
3. KH Review.pdf
4. KH Email followup.pdf
5. Original Bond Estimate.pdf

4.3 : **Public Hearing**: *BR2026-10* - Washington Landing - Performance Bond Release
1. Staff Report.pdf
2. Application.pdf
3. KH Review.pdf
4. As-Built Survey.pdf
5. Approved Bond Estimate Sheet.pdf

4.4 : *Commission Review* - BR2026-11 - Norborne-Glebe Phase 10B - Bond Reduction
1. Staff Report.pdf
2._Application.pdf
3._Estimate_Reduction_with_New_Cost_Sheet.pdf
4._Estimate_Reduction_with_Original_Cost_Sheet.pdf
5._KH_Review.pdf

4.5 : *Commission Review* - BR2026-12 - Norborne-Glebe Phase 11- Bond Reduction

1. Staff Report.pdf
2._Application.pdf
3._Bond_Cost.pdf
4._KH_Review.pdf

4.6 : *Commission Review* - BR2026-13 - Norborne-Glebe Phase 12- Bond Reduction
1. Staff Report.pdf
2. Application.pdf
3. Reduction Cost Sheet.pdf
4. KH Review.pdf

4.7 : *Commission Review* - BR2026-14 - Norborne-Glebe Phase 13- Bond Reduction
1. Staff Report.pdf
2. Application.pdf
3. Bond Reduction Cost Sheet.pdf
4. KH Review.pdf

4.8 : *Commission Review*: 2027 Planning Commission Calendar
2027-Planning-Commission DRAFT.pdf

5. ADJOURNMENT

6. NOTICE: The Public May View the Meeting Live by Clicking on the Event Link at:

https://www.charlestownwv.us/government/agendas_minutes.php

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

SCHEDULED

AGENDA ITEM (ID #)

DRAFT October 26, 2026 minutes

ATTACHMENTS:

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
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SCHEDULED

AGENDA ITEM (ID #)

Public Hearing: *SLD2026-02* - Huntfield Phases 9 & 11 - Sketch Plan

ATTACHMENTS:

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- 2. Application.pdf
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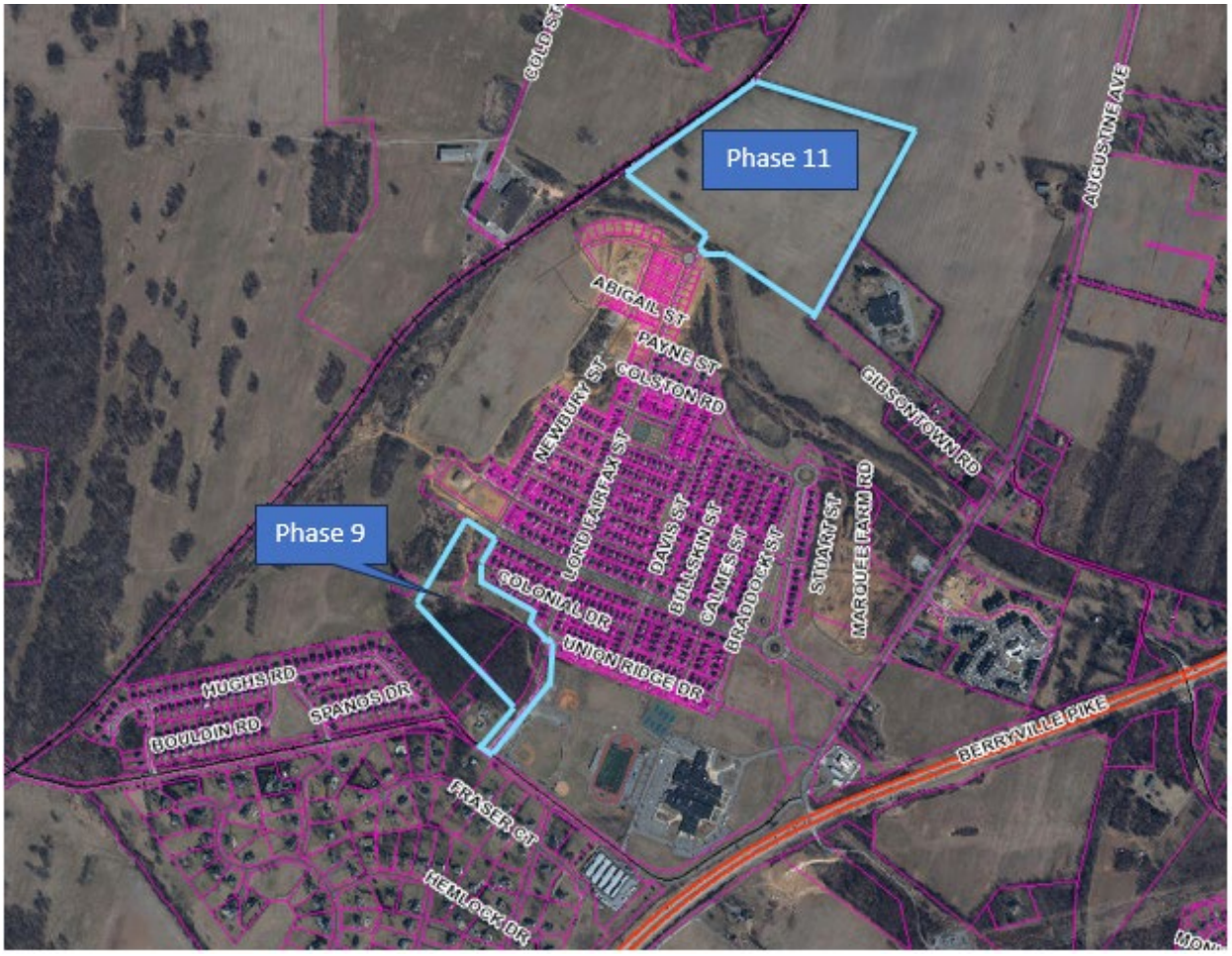
- 7. Public Comment.pdf

Sketch Plan Review
SLD2026-02

Date: For the November 30, 2026 Planning Commission meeting
Applicant: DR Acquisitions LLC
Property Owner: DR Acquisitions LLC
Report by: James Newman, City Planner, Zoning/Subdivision Administrator
Proposal: Major Land Development
Property Location: TD 03 / Map: 11 / Pcl 1
Current Zoning: Neighborhood Residential



PROJECT OVERVIEW

The development of 17.19 acres for 69 single-family detached lots in Phase 9, and 48.25 acres for 92 single-family detached and 93 townhomes in Phase 11.

COMPLETENESS REVIEW

This item was deemed complete by the Planning Commission on October 26, 2026.

ZONING REVIEW

The property is zoned Neighborhood Residential (NR). Per the Zoning Ordinance:

The purpose of the NR District is to provide for a mix of housing types and related services and Uses, including Commercial Uses and office services.

…

The intent is to create a cohesive pattern of primarily residential development that allows a mix of Uses, including neighborhood servicing Commercial and office Uses and/or Commercial and office Uses that complement the primarily residential character of the neighborhood.

DENSITY

Maximum density in NR Zoning is 10 units per acre.

In Phase 9 the buildable land area is 11.44 acres. Applicant proposes 69 units, a density of 6 units per acre.

In phase 11 the net buildable area is 32.91 acres. Applicant proposes 185 units, a density of 5.6 units per acre.

LOT DIMENSIONS

The proposed typical lot dimensions and setbacks adhere to the requirements of the zoning district/Conditions of Annexation.

SIDEWALKS

Sidewalks must be between 5-6 ft. in width. Sidewalks of 5 ft. width are provided on both sides of all roads within the development.

UTILITIES

Water and sewer utility lines are shown; electric line locations are provided by Potomac Edison to the applicant after approval of the plan set by the City. Lines for the provision of propane will follow the electric lines.

BUFFERS

None required.

PARKING

Each single-family detached home is required to have two off-street parking space, and each townhome is required to have 1.8 spots per dwelling, with spaces no further than 200 feet from their unit. Such parking is provided, via driveways and designated on-street parking areas.

STORMWATER

Detailed stormwater management plans are not required at the sketch plan phase. Those details will be required at the Preliminary Plan stage. The City's 3rd party engineering firm, Kimley-Horn, has reviewed the plans and has no comments about storm water management at this stage. Additional review will occur for the Preliminary Plan stage.

TOWNHOME DEVELOPMENT STANDARDS

A. *The overall density in a townhouse project shall not exceed the Maximum Density specified in the Charles Town Zoning Ordinance… Density shall be calculated using the Net Buildable Land Area.*

This criterion is met. Overall density for Phase 11 is 5.6 units an acre.

B. *The Net Buildable Land Area of a townhouse Development shall equal at least 3,500 square feet for each dwelling unit. Each dwelling unit shall have a minimum lot size of 2,000 square feet. The difference between the Net Buildable Land Area and the total area of the dwelling unit Lots shall be allocated to open space common area.*

Not applicable; this is a phase of development within an overall Master Planned community with dedicated areas for open space. Some open space areas are provided adjacent to the townhomes.

C. *Each townhouse development shall have at least 50 foot of street frontage. This does not apply to single or multiple contiguous townhouses on an existing platted street.*

This criterion is met.

D. *The minimum townhouse lot width shall be in accordance with the minimum lot with specified in the Zoning Ordinance... Each Lot on the end of a row of townhouses shall have an additional width necessary to accommodate the required side yard.*

This criterion is met, per the requirements of Conditions of Annexation. Lot frontages are between 20 – 30 feet, with the minimum set by the Conditions being a minimum of 16 feet.

E. *There shall be not be more than ten (10) nor less than three (3) contiguously connected townhouse units.*

This criterion is met.

F. Section 'F' covers setback requirements. These requirements are superseded by those of the Conditions of Annexation, and thus excluded from this analysis.

G. *Access Drives and Off-Street Parking. Off-street parking space shall be provided at the rate of 1.8 spaces per dwelling unit. In a Subdivision/Land Development of townhouse Lots, it will not be necessary that off-street parking be provided on a specific Lot so long as the required number of parking spaces are provided in the Subdivision/Land Development for the number of Lots to be served; provided that, no parking area shall be more than 200 feet from the dwelling unit it serves.*

The required parking for 93 townhomes is 168 spaces. Assuming one vehicle fits in a 25 ft. long driveway, 93 spaces are provided with on-site driveways. 75 parking spaces would

need to be provided off-site [wither with on-street parking or a dedicated parking lot(s)]. More information about on-street parking availability and restrictions will be required to be shown on the Preliminary Plan.

H. *Townhouse garages may be attached to or detached from the townhouse unit and may be accessed from either the front or rear yard. When detached the garage structure must be consistent and compatible with the architecture and materials of the respective townhouse unit.*

Zone 2 as outlined in the Conditions of Annexation permits front loaded garage for any unit type without a recessed garage if the distance is at least 25 feet from the rear of the sidewalk to the front of the garage.

The townhomes appear to meet that 5-foot minimum distance requirement; additional details on garage layout/location must be provided at the Preliminary Plan stage to ensure compliance.

I. *Townhouses abutting each other shall have complimentary but not identical facades.*

This criterion will be verified at the building permit stage of review.

J. *No more than two abutting townhouses shall have a common roof line.*

This criterion will be verified at the building permit stage of review.

K. Section 'K' covers townhomes which do not front on a public road. That is not applicable to this development.

L. *Site Coverage. The minimum townhouse lot width shall be in accordance with the minimum lot with specified in the Zoning Ordinance.*

This criterion is met.

M. *Adequate provision shall be made for storage of collection and refuse where applicants desire a centralized collection point(s) in lieu of curb-side trash pick-up. This area shall be screened and the dumpsters placed on a concrete pad pursuant to Article 1333.23(L) of this Ordinance.*

This criterion is met; collection is done on each site rather than at a central location.

N. *Permeable areas of the site shall be planted with ground cover, shrubs, and trees as required by this Ordinance.*

This criterion is met.

O. *Required Open Space.*

1. The difference between the Net Buildable Land Area of a townhouse Development and the total area of the dwelling unit Lots shall be allocated to open space common area as specified in Section 1333.20(B) above.

As stated earlier, this is a phase of a Master Planned Community with areas already dedicated to open space.

2. In the event that the Planning Commission, by waiver, permits dwelling unit Lots of less than the 2,000 square foot minimum specified in Section 1333.20(B), compensating open space must be established and provided within the project site equal to the aggregate area by which such Lots are under the 2,000 square foot minimum.

Not applicable.

3. In a townhouse Development, open space for the Subdivision/Land Development must at least equal 30 percent of the Net Buildable Land Area of the Subdivision/Land Development. To the fullest extent possible, open space for townhouses must be located near the townhomes.

Open space has been provided adjacent to the townhome units.

P. Section 'P' covers the creation of a Home Owners Association (HOA) to maintain open space. An HOA already exists for Huntfield.

CONDITIONS OF ANNEXATION

City Council approved revisions to the Conditions of Annexation in August 2024.

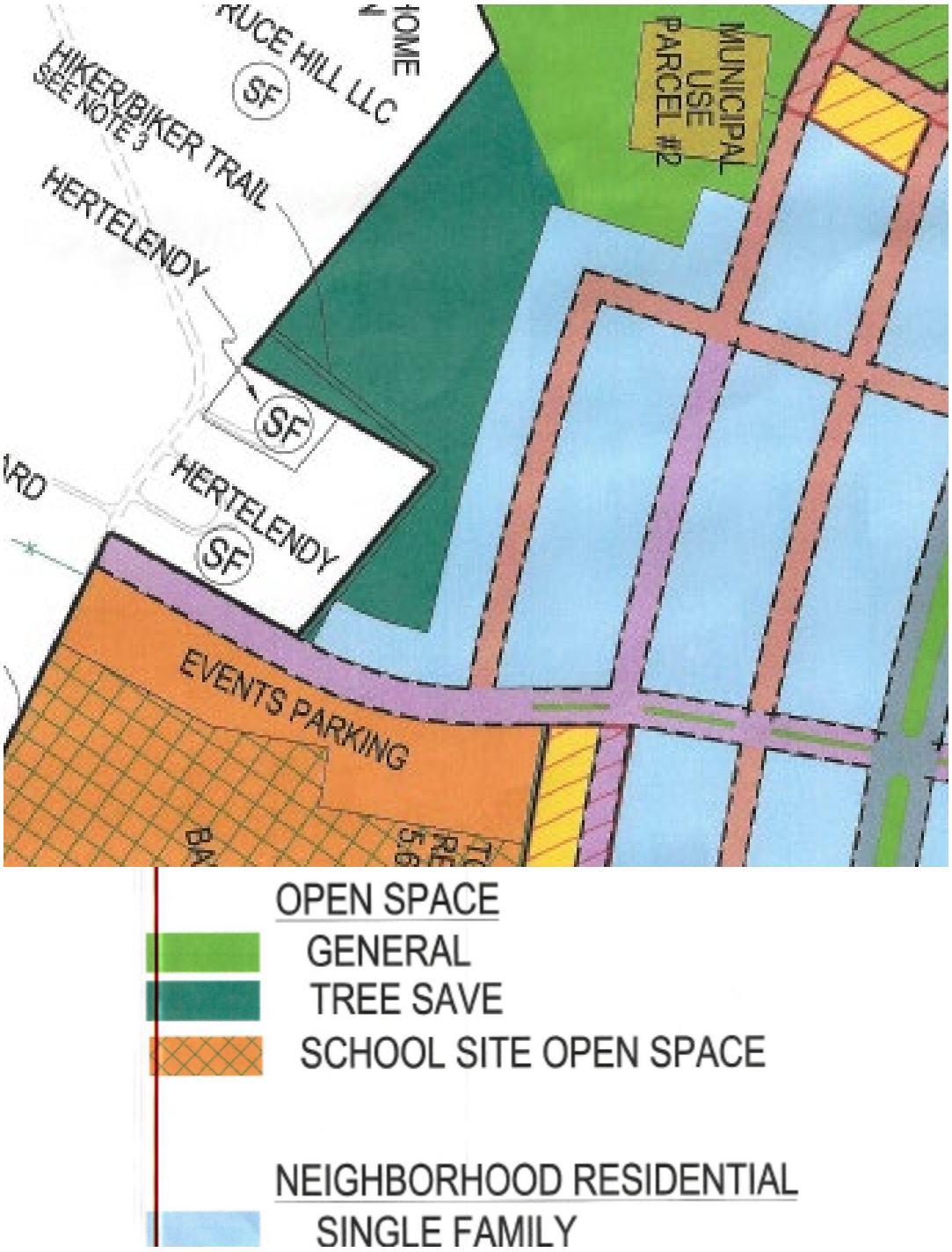
Both Phases are located in Zone 2. Zone 2 permits front loaded garage for any unit type, without a recessed garage if the distance is at least 25 feet from the rear of the sidewalk to the front of the garage. Additional details on garage layout/location must be provided at the Preliminary Plan stage to ensure compliance.

At their meeting on October 5, 2026, City Council discussed this sketch plan in Executive Session. They voted to determine that the application as submitted is substantially in compliance with the 'Education' proffer language.

All other applicable requirements (minimum lot size, road frontage, setbacks) are met.

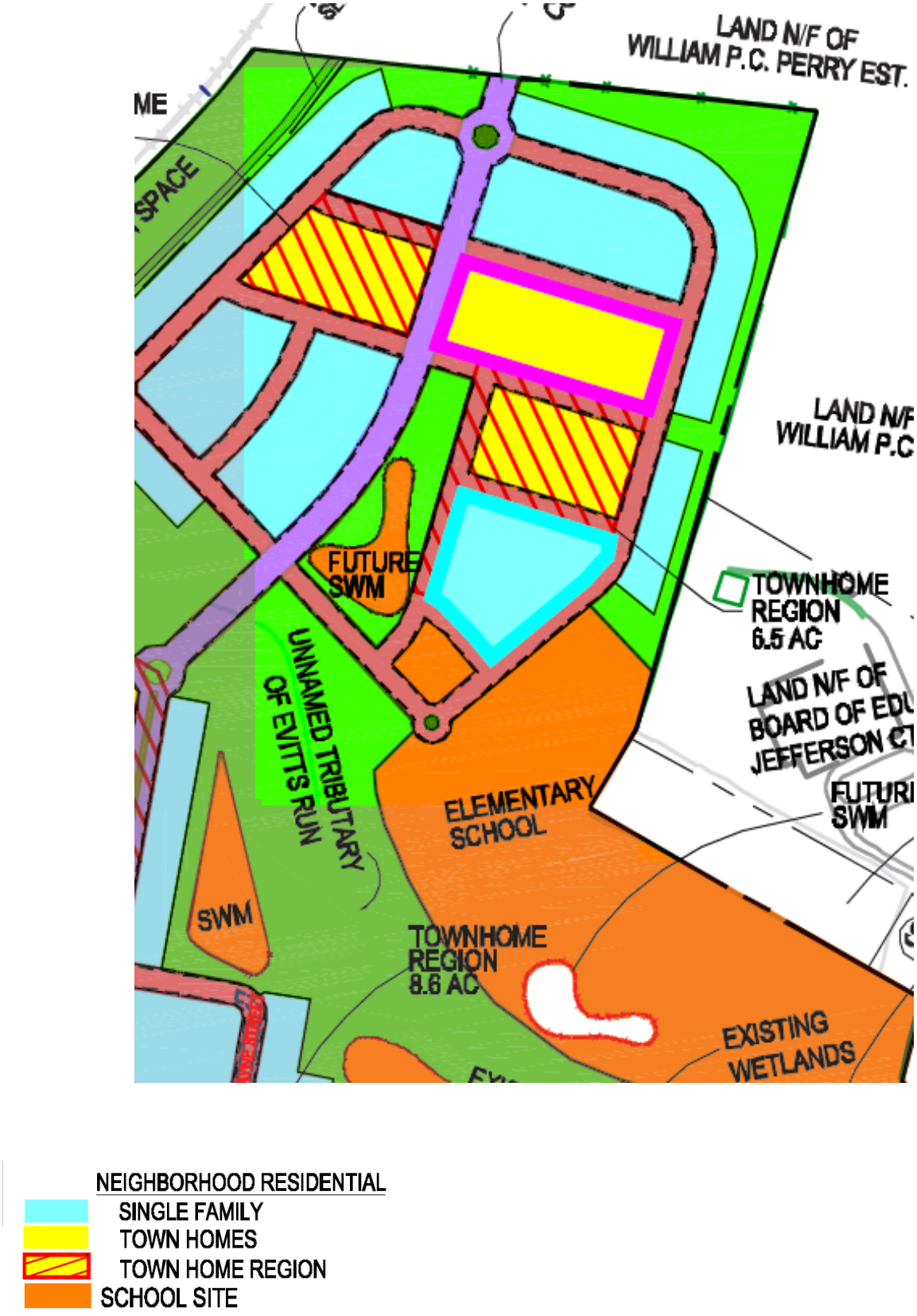
MASTER PLAN

The Master Plan showcases Phase 9 as being for single-family detached homes, with adjacent 'Tree Save' and open space, as such:



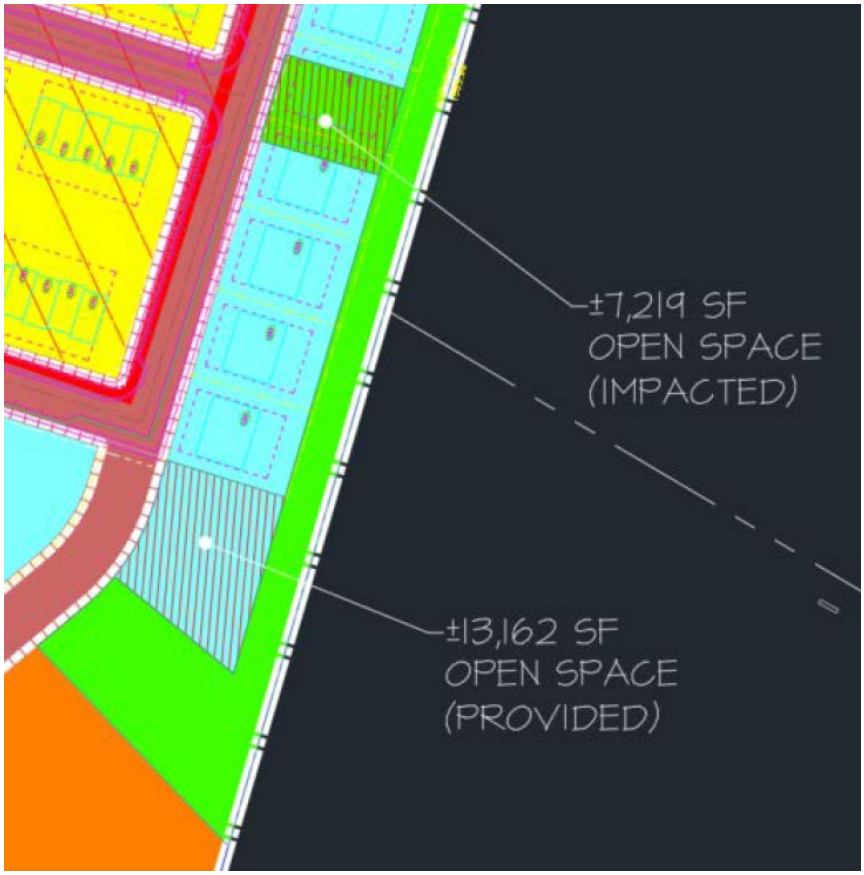
Phase 9 is generally in conformance with the Master Plan.

The Master Plan shows Phase 11being comprised of a mixture of single family detached and townhome units, with open space and a connection to the Page Jackson School property:



Phase 11 is generally in conformance with the Master Plan.

In regards to the open space gap between this phase and the lands of William P.C. Perry Estate to the east, the applicant has filled in that open space gap with single family detached homes. That open space gap of approximately 7,200 sq. ft. (per the applicant) is instead merged with the larger area of open space to the south, for a combined open space area of 13,162 sq. ft. (per applicant. See image below).



CONCLUSION

The applicant is seeking to develop Phase 9 with 69 single family units, and Phase 11 with 92 single family detached units and 93 townhome units. The plan is generally in conformance with the sketch plan requirements, the Conditions of Annexation/Proffer Agreements, and Master Plan.

RECOMMENDATION

Approval

MAJOR SUBDIVISION AND LAND DEVELOPMENT APPLICATION

The submission of this form, along with the prescribed information and required fees, shall serve as the Applicant's Major S/LD Application as required by Ordinance Section 1332.03.

1. SUBMISSION DATE 5/27/2026

2. APPLICATION TYPE
- [x] Sketch Plan
- [ ] Preliminary Plan
- [ ] Final Plan

3. FEES

See next page. Fee is comprised of base fee, additional fees, and legal notice fees.

Sketch and Preliminary Plans each require Class I legal notices, first class mail, and public hearing signs. Final plans are reviewed administratively.

4. SUBMITTAL PACKAGE

Please submit a paper application and one paper plan set with at least dimensions of 24" x 36", as well as a plan set in PDF format.

Fee Schedule

1. BASE FEES

- **Sketch/Preliminary** Plan Review - $300 application fee.

- **Final Plan/ Record Plat** Review Fees: $200 application fee

2. APPLICATION FEES

(1) Single principal structure on a single site - $200 filing fee
(2) < 3 Residential Buildings - $200 filing fee
(3) 3 or more Residential Buildings - $500 filing fee plus $50 per building, minimum of $2000 escrow.
(4) Manufactured (Mobile) Home Park - $500 filing fee plus $50 per dwelling unit, minimum of $2000 escrow.
(5) Commercial and Industrial Buildings - $700 filing fee plus $2000 escrow.
(6) Subdivision only – $200 filing fee

Building Addition:
(1.) Less than 2,5000 sq.ft AND less than 50% increase in impervious area - $200
(2.) More than 2,5000 sq.ft OR more than 50% increase in impervious area - $300

3. LEGAL NOTICE FEES

(1). Newspaper public notice:
A. Class I/I-0 Legal Advertisement- - $25 flat fee
B. Class II/II-0 Legal Advertisement - $50 flat fee
C. Class III/III-0 Legal Advertisement - $75 flat fee

(2). Mailed notice:
A. First class mail - $25 flat fee
B. Certified mail - $75 flat fee

(3). Signage:
A. Public notice signage - $10 flat fee

4. ADDITIONAL FEES

These fees may differ between applications depending on the level of analysis required.

- Legal review fees for zoning and site plan reviews will be will be actual costs incurred based on the -legal review.

- Water and Sewer review fees for zoning and site plan reviews will actual costs incurred based on the review.

- Third-party review fees for zoning and site plan reviews will be actual costs incurred based on the review.

3. APPLICANT'S NAME* DR Acquisitions, LLC

Address: 10313 Arnett Dr, Ste 101, Hagerstown, MD 21740

Telephone Number (240) 420-6046

Email Address _____

4. PROPERTY OWNER'S NAME DR Acquisitions, LLC

Address: 10313 Arnett Dr, Ste 101, Hagerstown, MD 21740

Telephone Number (240) 420-6046

Email Address _____

5. LEGAL DESCRIPTION OF THE SUBJECT PROPERTY (list all parcels that apply)

Property Address: _____

Tax Map # and Parcel: 03 11000100000000

Property Area in Square Feet or Acres: 284.98 Remaining Acres

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

6. FEE CALCULATION (Per Fee Schedule)

BASE: _____

APPLICATION: _____

_____

_____

_____

The City will send out invoices for 3rd party review.

LEGAL (**For sketch and preliminary only**)

MAILING TYPE: $25

LEGAL AD $25

SIGNAGE: $10

AMOUNT DUE: $_____

7. DESCRIPTION OF PROJECT AND PROPOSED USE(S) OF THE PROPERTY:

Sketch plan submission for Phases 9 & 11

8. DESCRIPTION OF THE EXISTING (OR FORMER) USE(S) OF THE PROPERTY AND CURRENT ZONING:

PUD

9. ARE THERE ANY ANTICIPATED WAIVERS OR VARIANCES? IF YES, PROVIDE DETAILS:

No

10. PARCEL HISTORY (List all pending or previously approved applications on the subject parcels inventoried above, including previous site plan applications if this application is a site plan amendment)

Application No.	Project Name and Phase	Status	Approval Date
Huntfield Overall Composite Schematic		Previously Approved	Nov. 2004

11. HAS THE PROPERTY BEEN THE SUBJECT OF ANY COURT ACTION?

☑ No

☐ Yes (Please specify nature of all proceedings and current status)

_____

_____

_____

12. PLAN/PLAT SUBMISSION TO OTHER AGENCIES (Documentation of all required approvals must be attached to this Application or submitted prior to Preliminary S/LD Application approval)

Agency (Specify others as applicable)	Submittal Date	Permit ID/#	Date of Approval/Issuance
City of Charles Town Utility Board			
Jefferson County Addressing Office			
Jefferson County Board of Education			
WV Department of Environmental Protection			
WV Department of Transportation, Division of Highways			
WV State Historic Preservation Office			
WV Office of Environmental Health Services			
U.S. Army Corps of Engineers			
Other (specify each Agency)			

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Section 1332.03 of the Charles Town S/LD Ordinance and relevant provisions of the Charles Town City Code.

Signature of Applicant

_____ Date 4/9/2026

Signature of Property Owner (If different than Applicant)

_____ Date _____

Please submit an original completed Application and specified number of Site Plan copies to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Paid:$_____ Check No._____

Receipt No._____

Subdivision Administrator Approval/Denial:_____ Date:_____

Planning Commission Approval/Denial:_____ Date:_____

Comments/Conditions:_____

_____

_____

_____

Kimley»Horn

Memorandum

To: Morris & Ritchie Associates, Inc.
205 E Hirst Road, Suite 106
Purcellville, VA 20132

From: Mark Phillips, P.E.
Mason Long, EIT

Through: James Newman
City of Charles Town
101 E Washington Street
Charles Town, WV 25414

Date: November 4, 2026

Subject: Huntfield Phases 9 & 11 Sketch Plan Review

This memorandum summarizes our review of the Sketch Plan for the Huntfield Phases 9 & 11 (dated April 2026, prepared by Morris & Ritchie Associates) for a proposed development of 255 residential units on approximately 66.41 acres. The site is currently zoned Neighborhood Residential (NR) per the City of Charles Town Zoning Ordinance dated June 18, 2012 (Rev. February 18, 2025).

Kimley-Horn's review of this application is limited to the Sketch Plan and Application provided. Based upon our review, we have the following comments on the materials provided:

- Please provide a Traffic Impact Study given that the proposed development will generate more than 100 trips during the peak hour per the City SLDO Section 1333.06.B.1.a.
- Please depict any existing easements as applicable on the property (if there are any)
- Please depict any environmentally sensitive areas such as wetlands, streams, forest etc..
- Recommendation – Please review lot 953 – the driveway being placed at a right-angle intersection does not appear feasible or desirable. Please make the intersection of Newbury and Sullivan a curve along the outside or find a better tie-in for the driveway along a tangent or continuous curve.

Thank you for the opportunity to review this Sketch Plan. Please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.

Mark Phillips, P.E.
Project Manager, Associate

SKETCH PLAN
HUNTFIELD PHASES 9 & 11
(PROJECT ID# SLD 2026-02)

CHARLES TOWN CORPORATION

JEFFERSON COUNTY, WV

OVERALL GENERALIZED LAND USE SUMMARY

THE FOLLOWING SUMMARY / DENSITY IS PER APPROVED - SCHM 2003-0003 - HUNTFIELD, COMPOSITE SCHEMATIC 1 DATED:5/28/2003

Use	Required	Provided
Site Area	Min. 5 Acres	998.8 Total Acres
Existing		
Composite Schematic I		313.3 Acres
Proposed:		
Residential (includes rights of way)	499.4 Acres	612.9 Acres
Dedicated School Parcels		74.1 Acres
Municipal Use Parcels		12.9 Acres
Active Community Centers		14.7 Acres
Open Space (Includes open space medians)	149.8 Acres	228.2 Acres
Additional Open Space Provided in School Site		38.5 Acres
Commercial (Includes 44 Live/Work Units) *See "Commercial" Section of this document	99.9 Acres	26.1 Acres

Items Required in the Zoning Ordinance	*HUNTFIELD – Overall Composite Schematic Item Submitted*
Parcels 5 acres or larger	*998.8 Acres*
Mix of uses	*Mixed-Use Development*
Compatible with surrounding uses	*Compatible with existing subdivisions*
50% of total area to be residential	*Required: 499.4 Acres* *Provided: 612.9 Acres includes ROW* ** An additional 74.1 acres not counted towards the Residential Area Requirements has been provided for school facilities* **An additional 12.9 acres not counted towards the Residential Area has been provided in Municipal Use Parcels* **An additional 14.7 acres not counted towards the Residential Area has been provided by parcels designated as Active Community Centers*
15% of area (less streets, sidewalks & drainage) in open space	*Required: 149.8 Acres* *Provided: 228.2 Acres includes open space medians* **An additional 38.5 acres of open space not counted towards the open space requirements is provided within the School Site*
Not less than 10% in office/retail * Includes 44 Live/Work Units	*Required: 99.9 Acres* *Provided: 26.1 Acres* **See "Commercial" Section of this document*
Residential Lots Provided	*1,283 Single Family* *692 Townhomes* *381 Multi-Family* *900 Age-Restricted SFD Lots (Washington Homes)* *44 Live/Work (Counted as Commercial Area)* *3,200 Total Dwelling units*

Items Required in the Zoning Ordinance	*HUNTFIELD – Overall Composite Schematic Item Submitted*
Number of lots: land area in sq. ft. / 10,000 *Note: For Townhome developments, each five (5) acres developed as townhouses constitutes 1 lot	*Required: 4,351 Lots Maximum* *Provided: 2,523 Lots* *Townhome Acreage = 74.6 acres* *Equivalent # Townhome Lots = 74.6 acres/5 = 15 Lots* *Total # Lots = (3,200 Units – 692 Townhomes) + 15 Equivalent # Townhome Lots = 2,523 Lots* *Number of Lots: 43,507,728 sq. ft. / 10,000 = 4,351 Lots*
Overall Maximum Residential Density *Note: For Townhome developments, each five (5) acres developed as townhouses constitutes 1 lot	*Required: Not to exceed 10 Units / Acre* *Provided: 2.5 Units/Acres* *Townhome Acreage = 74.6 acres* *Equivalent # Townhome Lots = 74.6 acres/5 = 15 Lots* *Total # Lots = (3,200 Units – 692 Townhomes) + 15 Equivalent # Townhome Lots = 2,523 Lots* *Overall density: 2,523 Lots / 998.8 Acres = 2.5 Units/Acres*
Maximum Density - Multi-Family	*Required:* not exceed 20 units per acre *Provided: 13.8 units/acre* *381 Units / 27.6 Acres =13.8 units/acre*
Maximum Density - Townhomes	*Required:* not exceed 10 units per acre *(modified per Huntfield proffers to 16 units/acre)* *Provided: 9.3 units/acre* *692 Townhomes / 74.6 Total Acres including ROW = 9.3 Units/Acre*

NOTE:

THE ZONING YIELD PER THE APPROVED PROFFER AMENDMENT #3 (APPROVED 8/9/24) ALLOWS A 3,200 RESIDENTIAL UNITS OF SINGLE FAMILY DETACHED, SINGLE FAMILY ATTACHED AND MULTI-FAMILY.

LAND USE SUMMARY FOR PHASES 9&11

PHASE - 9

GROSS AREA	= ±748,758 SF / ±17.19 AC
1. LESS SENSITIVE AREAS	= N/A
2. LESS ROW	= ±5.75 AC
3. LESS SWM	= N/A
*NET BUILDABLE LAND AREA	= ±11.44 AC

69 TOTAL LOTS
69 - SFD
COMMON OPEN SPACE AREAS = N/A

PHASE - 11

GROSS AREA	= ±48.25 AC / ±2,101,845
1. LESS SENSITIVE AREAS	= N/A
2. LESS ROW	=±13.07 AC
3. LESS SWM	= ±2.27 AC
*NET BUILDABLE LAND AREA	= ±32.91 AC

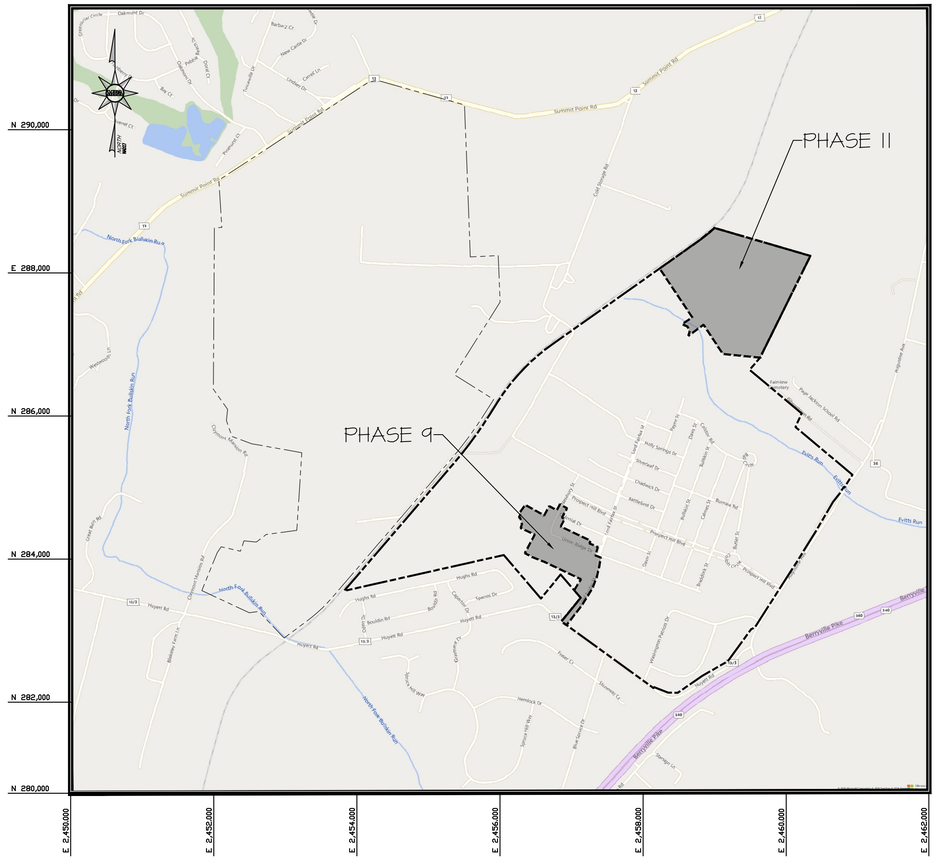
185 TOTAL LOTS
92 - SFD (SINGLE FAMILY DETACHED UNITS)
93 - SFA (SINGLE FAMILY ATTACHED UNITS)

COMMON OPEN SPACE AREAS = ±9.76 AC

*NOTES

NET BUILDABLE LAND AREA - WHEN DETERMINING THE ALLOWED DENSITY FOR ANY GIVEN LOT IN THE CITY, THE NET BUILDABLE LAND AREA OF THE SITE IS USED. NET BUILDABLE LAND AREA, FOR THE PURPOSE OF DETERMINING THE ALLOWED DWELLING UNITS FOR A SITE, SHALL BE CALCULATED BY SUBTRACTING AREAS WHERE BUILDING IS PROHIBITED OR SUBJECT TO SIGNIFICANT RESTRICTIONS FROM THE GROSS LOT AREA. THE AREA REMAINING AFTER THESE EXCLUSIONS FROM THE GROSS LOT AREA REPRESENTS THE NET BUILDABLE LAND AREA. THE FOLLOWING SHALL BE DEDUCTED FROM THE GROSS LOT AREA TO DETERMINE NET BUILDABLE LAND AREA:

1. SENSITIVE AREAS INCLUDING: TYPE I, II, III AND IV WETLANDS, RIPARIAN BUFFERS, FLOODPLAIN AREA, AND SINKHOLES;
2. PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS, AND PRIVATE STREETS AND ACCESS CORRIDORS; AND
3. AREAS DEDICATED TO STORMWATER MANAGEMENT.



VICINITY MAP

SCALE : 1"= 1000'

1000 0 1000 2000 3000

Scale 1" = 1000'

OWNER / DEVELOPER
DR AQUISITIONS, LLC
225 ARMENIAN OAK DRIVE
FREDERICK, MD, 21701

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	NOTES & DETAILS
3	OVERALL PLAN
4	SKETCH PLAN (PHASE 9) – 1
5	SKETCH PLAN (PHASE 9) – 2
6	SKETCH PLAN (PHASE 11) – 1
7	SKETCH PLAN (PHASE 11) – 2

APPLICATION #	ASSOCIATED PROJECT	STATUS	APPROVAL DATE
	HUNTFIELD, PHASE I SCHEMATIC	APPROVED	2/11/2002
STPL 2002-0001	HUNTFIELD, PHASE I (SITE PLAN)	APPROVED	6/24/2002
SBRD 2002-0001	HUNTFIELD, PHASE I RECORD PLAT	APPROVED	7/29/2002
RPOC 2003-0001	HUNTFIELD, PHASE I (RECORD PLAT CORRECTION)	APPROVED	Recorded 9/9/03
	HUNTFIELD, REVISED PHASE 1&2A SCHEMATIC	APPROVED	10/22/2002
SPAM 2003-001	HUNTFIELD, PHASE 1 REVISED (SITE PLAN AMMENDMENT)	APPROVED	5/28/2003
SBDR 2003-0001/RPAM 2003-0001	HUNTFIELD, PHASE 1 REVISED (RECORD PLAT AMMENDMENT)	APPROVED	6/16/2003
SCHM 2003-0003	HUNTFIELD, COMPOSITE SCHEMATIC 1	APPROVED	5/28/2003
SPAM 2003-0002	HUNTFIELD, PHASE 1 BLOCK 1 REVISION (SITE PLAN AMMENDMENT)	APPROVED	10/27/2003
RPAM 2003-0002	HUNTFIELD, PHASE 1 BLOCK 1 REVISION (RECORD PLAT AMMENDMENT)	APPROVED	10/27/2003
STPL 2003-0001	HUNTFIELD, PHASE 2A (SITE PLAN)	APPROVED	5/28/2003
SBRD 2003-0002	HUNTFIELD, PHASE 2A RECORD PLAT	APPROVED	3/30/2004
SCHM 2003-0001	HUNTFIELD, PHASE 2B SCHEMATIC	APPROVED	2/24/2003
STPL 2003-0006	HUNTFIELD, PHASE 2B (SITE PLAN)	APPROVED	8/5/2004
SBRD 2004-0002	HUNTFIELD, PHASE 2B SECTION 1A RECORD PLAT	APPROVED	5/24/2004
SBRD 2004-0002	HUNTFIELD, PHASE 2B SECTION 1B RECORD PLAT	APPROVED	10/25/2004
STPL 2003-0009	HUNTFIELD, PHASE 3A (SITE PLAN)	APPROVED	5/24/2004
SBRD 2004-0003	HUNTFIELD, PHASE 3A SECTION 1 RECORD PLAT	APPROVED	5/24/2004
SBRD 2004-0003	HUNTFIELD, PHASE 3A SECTION 2 RECORD PLAT	APPROVED	6/28/2004
STPL 2004-0006	HUNTFIELD, PHASE 3B (SITE PLAN)	APPROVED	5/22/2006
STPL 2009-0005	HUNTFIELD, PHASE 3A BLOCK 29 REVISION	APPROVED	12/18/2009
STPL 2024-0005	HUNTFIELD, PHASE 3B REVISION	APPROVED	08/26/2024
SLD 2025-07	HUNTFIELD, PHASE 4 (SITE PLAN)	APPROVED	01/28/2026

NOTES:
1. HUNTFIELD COMPOSITE SCHEMATIC 1 (SCHM 2003-0003) REPLACED PREVIOUSLY APPROVED HUNTFIELD SCHEMATICS.
2. THE DATE LISTED FOR THE PHASE 2B SITE PLAN APPROVAL CORRESPONDS TO THE DATE THAT THE REVISED DEPARTMENT OF HIGHWAYS PERMIT WAS ISSUED WHICH COVERED THE OUTSTANDING LOTS IN HUNTFIELD 2B.

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MRAGTA.COM

REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
#2	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	8/09/26
#3	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	11/10/26

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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 1 OF 7	

SHEET TITLE
COVERSHEET

SHEET NUMBER
1

GENERAL NOTES

1. THIS SET OF DRAWINGS PERTAINS TO PHASES 9 & 11 OF HUNTFIELD, WHICH CONSISTS OF A TOTAL COMBINED SITE AREA OF ±65.44 ACRES.(PHASE 9 = 17.19 AC / PHASE 11 = 48.25 AC)

2. PHASE 9 CONTAINS, 69 SFD LOTS RESIDENTIAL LOTS. (14 LOT ARE APPROVED WITH SECTION 2B PLANS DATED:10/27/04

3. PHASE 11 CONTAINS, 92 SFD LOTS AND 93 SFA LOTS FOR A COMBINED TOTAL OF 185 RESIDENTIAL LOTS.

4. REFERENCE WAS MADE TO THE SCHEMATIC PLAN "HUNTFIELD OVERALL COMPOSITE SCHEMATIC PLAN" (SCHM 2004-0002) APPROVED APRIL 12, 2005. NOTE THAT THE "HUNTFIELD COMPOSITE SCHEMATIC" IS COMPOSED OF SEVERAL SITE PLANS. THIS SET OF PLANS PERTAINS TO A SMALL SECTION OF THE SCHEMATIC. THESE PLANS SHALL BE IN CONFORMANCE WITH THE APPROVED SCHEMATIC PLAN & ALL ZONING REQUIREMENTS INCLUDING THOSE MODIFIED IN THE HUNTFIELD PROFFERS. ALL OPEN SPACE, RESIDENTIAL, AND COMMERCIAL REQUIREMENTS SHALL CORRESPOND TO THOSE SET FORTH IN THE SCHEMATIC.

5. THE PROPERTY DELINEATED HEREON IS A PORTION OF PARCEL 1, AS SHOWN ON CHARLES TOWN CORPORATION TAX ASSESSMENT MAP 11, DEED BOOK 1263 PAGE 99, WHICH IS LOCATED AMONG THE LAND RECORDS OF JEFFERSON COUNTY

6. BOUNDARY INFORMATION, SHOWN HEREON, WAS OBTAINED FROM A PLAT SHOWING HUNTFIELD, LC PROPERTY AS RECORDED IN THE OFFICE OF THE CLERK OF THE COUNTY COMMISSION OF JEFFERSON COUNTY, WEST VIRGINIA, IN PLAT BOOK 19, PAGE 49.

7. TOPOGRAPHIC INFORMATION WAS OBTAINED FROM APPALACHIA SURVEY OF WEST VIRGINIA, LLC. BASIS FOR SURVEY WAS NAD'27-NAVD'88 AND FIELD VERIFIED BY MRA, INC.

8. THE PROPERTY SHOWN HEREON WAS ACQUIRED BY DR ACQUISITIONS AS RECORDED IN THE OFFICE OF THE CLERK OF THE COMMISSION OF JEFFERSON COUNTY, WEST VIRGINIA IN DEED BOOK 1263, PAGE 99.

9. THE HOMEOWNER'S ASSOCIATION INC. WILL BE RESPONSIBLE FOR THE MAINTENANCE OF STORM WATER DETENTION/DRAINAGE FACILITIES AND EASEMENTS. IN ADDITION THEY SHALL BE RESPONSIBLE FOR MAINTENANCE OF SIDEWALKS & STREET LIGHTS. THE WEST VIRGINIA DEPARTMENT OF HIGHWAY IS NOT RESPONSIBLE FOR MAINTENANCE OF SIDEWALKS AND STREET LIGHTS. ALL CONSTRUCTION SHALL CONFORM TO CURRENT CITY OF CHARLES TOWN, WVDOH AND SANITATION AUTHORITY STANDARDS AND SPECIFICATIONS.

10. 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 CHARLES TOWN.

11. 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 SUBBASE MATERIAL, CURB AND GUTTER, OR SIDEWALK.

12. THESE PLANS MAKE NO REPRESENTATION AS TO SUBSURFACE CONDITIONS AND THE PRESENCE OF SUBSURFACE WATER OR THE NEED FOR SUBSURFACE DRAINAGE FACILITIES. ANY WELLS OR SEPTIC FIELDS WITHIN THE LIMITS OF THE SITE WILL BE ABANDONED IN PLACE.

13. ACCORDANCE WITH STATE AND LOCAL HEALTH DEPARTMENT REQUIREMENTS AND REGULATIONS PRIOR TO RECORD PLAT APPROVAL. THE SECTION DELINEATED HEREON CONTAINS NO KNOWN ARCHEOLOGICAL OR HISTORICAL LANDMARKS.

14. FINAL HOUSE AND ACCESSORY LOCATIONS ARE SUBJECT TO APPROVAL AT BUILDING PERMIT SUBMISSION.

15. PARKING FOR THIS SITE PLAN WILL BE IN COMPLIANCE WITH ALL REQUIRED REGULATIONS.

16. WETLAND INFORMATION OBTAINED FROM WETLAND DELINEATION REPORT PREPARED BY GREENHORNE AND O'MARA, INC. DATED JULY 14, 2000.

17. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING ALL IMPROVEMENTS AND AREAS UNTIL CONVEYANCE OF THE IMPROVEMENTS TO THE HOME OWNERS ASSOCIATION OR OTHER ENTITY. UPON RELEASE FROM THE ASSOCIATED PERFORMANCE RELATED BOND OR OTHER FORM OF SURETY BOND POSTED WITH THE CITY OR COUNTY, ALL OPEN SPACE PARCELS, ALLEYS, AND OTHER COMMON ELEMENTS SHALL BE CONVEYED TO HUNTFIELD COMMUNITY ASSOCIATION, INC AT WHICH TIME THE ASSOCIATION SHALL BE RESPONSIBLE FOR THE UPKEEP OF SUCH PARCELS. REFERENCE ARTICLE IV, SECTION 4.1, 4.2 AND 4.3 OF THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS FOR THE HUNTFIELD COMMUNITY ASSOCIATION, INC , WHICH WAS RECORDED FEBRUARY 14, 2003 IN DEED BOOK 970 AT PAGE 154.

18. ALL STREETS SHOWN WITHIN THIS PLAN WITH THE EXCEPTION OF LORD FAIRFAX STREET ARE DEFINED AS LOCAL ROADS PER THE CRITERIA LISTED IN SECTION 1333.02 OF THE SUBDIVISION / LAND DEVELOPMENT ORDINANCE.

APPROVED DEVIATIONS & WAIVERS

WAIVERS AND DEVIATIONS
APPROVED PER DEVELOPMENT PLAN & PLAT APPROVED JUNE 16, 2021
RZNG–21–013 & LDPP–21–025.

DEVIATIONS
. 5.5.2f – SETBACKS FOR PRINCIPAL BUILDINGS SHALL BE SHOWN IN TABLE 11–TABLE14 AND/OR TABLE 22 AND TABLE 23. DEVIATION TO ALLOW 7' 2" SIDE SETBACKS FOR THE SINGLE–FAMILY UNITS PROPOSED IN T3.

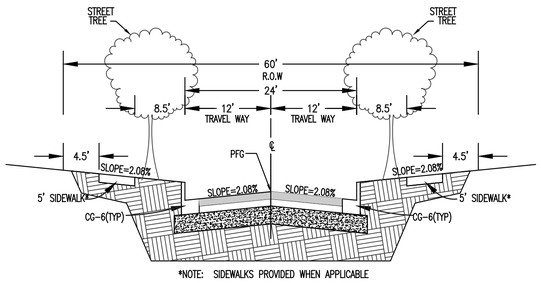
WAIVERS
3.5.4. – BLOCKS ADJACENT TO UNDEVELOPED LAND, AREAS UNSUITABLE FOR DEVELOPMENT, OR PRE–EXISTING INCOMPLETE BLOCKS MAY BE EXEMPT FROM BLOCK FACE LENGTH AND BLOCK PERIMETER REQUIREMENTS BY ADMINISTRATIVE WAIVER IN ACCORDANCE WITH 1.5.3. WAIVER TO ALLOW FOR BLOCKS ADJACENT TO UNDEVELOPED OR UNSUITABLE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

SECONDARY STREETS
TYPICAL SECTION - (NO PARKING)

FOR ILLUSTRATIVE PURPOSES ONLY

FINAL SECTION DETAILS TO BE APPROVED DURING SITE PLAN REVIEW

(NOT TO SCALE)



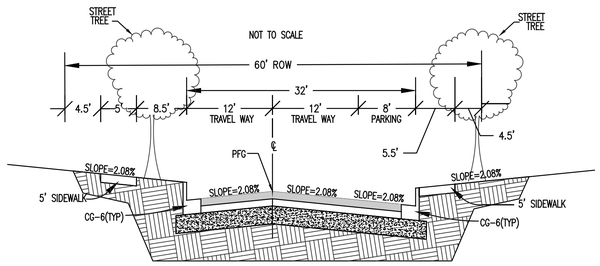
*NOTE: SIDEWALKS PROVIDED WHEN APPLICABLE

SECONDARY STREETS
TYPICAL SECTION - (PARKING ONE SIDE)

FOR ILLUSTRATIVE PURPOSES ONLY

FINAL SECTION DETAILS TO BE APPROVED DURING SITE PLAN REVIEW

(NOT TO SCALE)

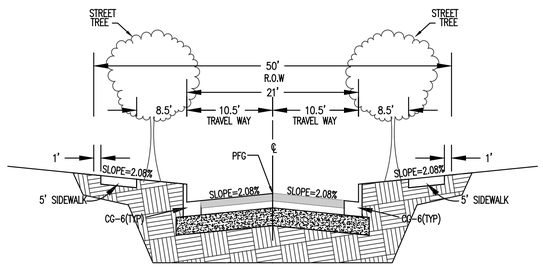


TERTIARY STREETS
TYPICAL SECTION - (NO PARKING)

FOR ILLUSTRATIVE PURPOSES ONLY

FINAL SECTION DETAILS TO BE APPROVED DURING SITE PLAN REVIEW

(NOT TO SCALE)

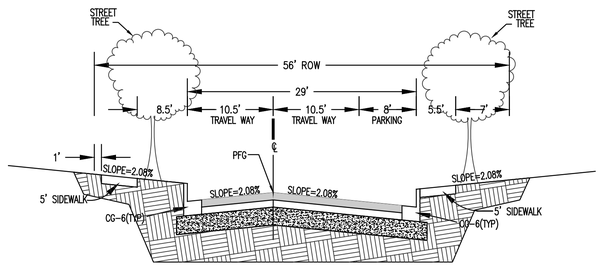


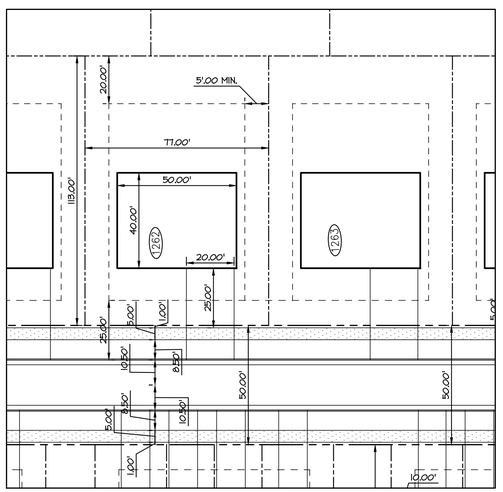
TERTIARY STREETS
TYPICAL SECTION - (PARKING ONE SIDE)

FOR ILLUSTRATIVE PURPOSES ONLY

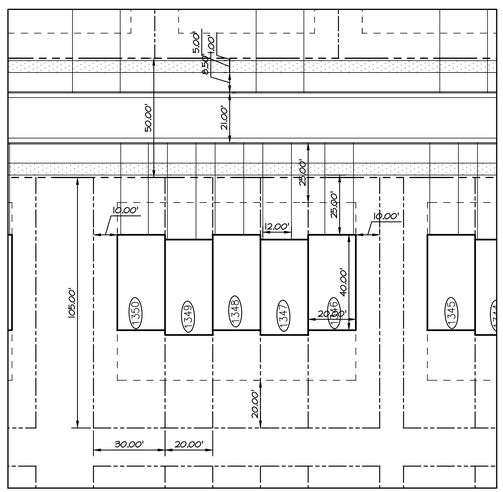
FINAL SECTION DETAILS TO BE APPROVED DURING SITE PLAN REVIEW

(NOT TO SCALE)





TYPICAL SINGLE FAMILY DETACHED LOT DETAIL
SCALE: 1"=30'



TYPICAL SINGLE FAMILY ATTACHED LOT DETAIL
SCALE: 1"=30'

ZONING INFORMATION

DISTRICT – NR (NEIGHBORHOOD RESIDENTIAL)

MODIFIED AS SET FORTH IN THE PROFFERS FOR THE HUNTFIELD DEVELOPMENT IN "LETTER OF CLARIFICATION / HUNTFIELD PROFFER STATEMENT DATED MARCH 28, 2002" & THE AMENDMENT TO THE HUNTFIELD PROFFERS DATED MAY 3, 2004, PROFFER AMENDMENT #2 DATED 8/1/05 AND PROFFER AMENDMENT #3 DATED 8/19/24

PROPOSED USES
SFD – SINGLE FAMILY DETACHED UNITS
SFA – SINGLE FAMILY ATTACHED UNITS (TOWNHOUSES)

NOTES:
1) PER "LETTER OF CLARIFICATION/HUNTFIELD PROFFER STATEMENT" DATED MARCH 28, 2002:
   a) MINIMUM LOT WIDTH SHALL BE REDUCED TO 50 FEET AT THE STREET.
   b) MINIMUM LOT AREA SHALL BE REDUCED TO 5,000 SQUARE FEET.
   c) FRONT YARD SETBACK SHALL BE 25 FEET FROM THE EDGE OF PAVEMENT.
   d) ENCROACHMENT WITHIN THE FRONT YARD SETBACK SHALL BE NO MORE THAN 30% OR 8.34 FEET. (NOTE: THE 30% VALUE APPEARS TO BE A TYPOGRAPHICAL ERROR IN THE PROFFERS THAT SHOULD BE 33%.)
   e) SIDE YARD SETBACKS SHALL BE REDUCED TO 5 FEET MINIMUM.
   f) NO SETBACK FROM THE PROPERTY LINE FOR ACCESSORY STRUCTURES SHALL BE REQUIRED.
   g) MINIMUM PAVING WIDTH SHALL BE 24 FEET.
2) PER THE CITY OF CHARLES TOWN ZONING ORDINANCE, MAXIMUM AREA OCCUPIED BY ACCESSORY STRUCTURES TO BE LESS THAN 25% OF THE REAR YARD. ACTUAL AREA OCCUPIED BY ACCESSORY STRUCTURE WILL BE BASED ON FINAL SELECTION OF TOWNHOME PRODUCT.
3) PER THE CITY OF CHARLES TOWN ZONING ORDINANCE, IMPERVIOUS SITE AREA NOT TO EXCEED REQUIREMENTS SHOWN IN THE TABLE BELOW. ACTUAL IMPERVIOUS SITE AREA TO BE BASED ON FINAL SELECTION OF AND SFD HOUSE TYPES.
4) MAX HEIGHT NOT TO EXCEED 3 STORIES OR 45 FT PER THE AMENDED HUNTFIELD PROFFERS DATED 8/19/24. ACTUAL HEIGHT BASED ON FINAL SELECTION OF HOUSE TYPE.
5) PER THE AMENDED HUNTFIELD PROFFERS DATED MAY 3, 2004, FRONT LOADING GARAGES MAY BE USED FOR NOT MORE THAN 40% OF THE TOTAL NUMBER OF GARAGES PROPOSED IN THE DEVELOPMENT.

SFD Units
** indicates items modified in proffers - see notes*

*Lot Size	Required	Provided
Min (sf)	5,000	> Minimum
*Lot Width		
Min (ft)	50'	> Minimum
Impervious Site Coverage		
Max. Gross Site Area Covered (%)	70%	*See note 3*
*Max Height		
Not to Exceed (stories/ft)	3/45	*See note 4*
*Front Setbacks	25'	25'
*Side Setbacks	5'	5'
Rear Setbacks	20'	20'
*Accessory Structures - See note 2		
No Setback Requirements - see note 1 (f).		
Corner Lots		
Shall have 2 fronts, 1 side, and 1 rear yard.		

SFA Units (Town homes)
** indicates items modified in proffers - see notes*

*Lot Size	Required	Provided
Min (sf)	1,600 SF	> Minimum
*Lot Width		
Min (ft)	16'	20'
Impervious Site Coverage		
Max. Gross Site Area Covered (%)	80%	*See note 3*
*Max Height		
Not to Exceed (stories/ft)	3/45	*See note 4*
*Front Setbacks	25'	25'
*Side Setbacks (at the end of each row)	10'	10'
Rear Setbacks	20'	20'
*Accessory Structures - See note 2		
No Setback Requirements - see note 1 (f).		

PHASE - 9
(±748,758 SF / ±17.19 AC)
69 TOTAL LOTS
69 - SFD

PHASE - 11
(±2,101,845 SF / ±48.25 AC)
185 TOTAL LOTS
92 - SFD
93 - SFA

Total Parking (Phase 9)	Required	Provided
	138	173
*Min. Parking per SFD (2 Spaces / Unit) (69) Units	138	138
**Min. Parking per SFA (1.8 Spaces / Unit) (-) Units	-	-
On-Street Parking	-	35

Total Parking (Phase 11)	Required	Provided
	351	408
*Min. Parking per SFD (2 Spaces / Unit) (92) Units	184	184
**Min. Parking per SFA (1.8 Spaces / Unit) (93) Units	167	186
On-Street Parking	-	38

NOTES:
*ASSUMES (2) PARKING SPACES PER DRIVEWAY
**ASSUMES (1) PARKING SPACE PER DRIVEWAY AND (1) PER GARAGE

NOTES:

ACTUAL LOT DIMENSIONS MAY VARY PROVIDED THE MINIMUM LOT STANDARDS ARE PROVIDED THE APPROVED LETTER OF CLARIFICATION/HUNTFIELD PROFFER STATEMENT" DATED MARCH 28, 2002

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REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
#2	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	8/09/26
#3	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	11/10/26

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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 2 OF 7	

SHEET TITLE
NOTES & DETAILS

SHEET NUMBER
2

NORTH NAD83

TD: 03 / MAP: II / PARCEL: 0003
OWNERSHIP: WINCHESTER COLD STORAGE CO INC
OWNER ADDRESS: O PO BOX 45
CITY, STATE, ZIP: WINCHESTER , VA , 22601
LEGAL DESCRIPTION: 142.67A BYRD COLD STORAGE
DEED BOOK/PAGE: 452/0015

TD: 3 / MAP: II / PARCEL: 2
OWNERSHIP: DR ACQUISITIONS LLC
LEGAL DESCRIPTION: 481.25 AC TRACT B- BYRD
DEED BOOK/PAGE: 1263/99

TD: 03 / MAP: II / PARCEL: 0001
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: 265.34 AC TRACT A - BYRD
DEED BOOK/PAGE: 1263/99

TD: 03 / MAP: II / PARCEL: 0ATT
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: .52 AC TRACT A - BYRD
DEED BOOK/PAGE: 1263/99

TD: 02 / MAP: I5 / PARCEL: 0003
OWNERSHIP: RINDONE SALVATORE J
OWNER ADDRESS: 2009 HUYETT RD
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: .68 AC SINGHAS- PHALEN
DEED BOOK/PAGE: 1216/183

TD: 03 / MAP: IID / PARCEL: PARK
OWNERSHIP: SPRUCE HILL NORTH HOME OWNERS ASSOCIATION INC
OWNER ADDRESS: 835E WASHINGTON ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL: DESCRIPTION: PARK SPRUCE HILL NORTH (1.24AC)
DEED BOOK/PAGE: 1119/462

TD: 03 / MAP: II / PARCEL: 0010
OWNERSHIP: MDH, CHARLES TOWN LLC
OWNER ADDRESS: 786 SPRUCE HILL WAY
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144496
LEGAL DESCRIPTION: 5.41 AC HOWARD
DEED BOOK/PAGE: 1299/457

TD: 2 / MAP: I5 / PARCEL: 3
OWNERSHIP: HERTELENDY KENNETH M & GINDI L
LEGAL DESCRIPTION: 3.51 COLSTON - BYRD
DEED BOOK/PAGE: 874/140

TD: 06 / MAP: 3C / PARCEL: 0041
OWNERSHIP: MOORE THOMAS R III
LEGAL DESCRIPTION: LT #41 SPRUCE HILL
DEED BOOK/PAGE: 1182/520

TD: 06 / MAP: 3C / PARCEL: 0040
OWNERSHIP: DAVIDSON AMBER & MICHAEL
OWNER ADDRESS: 106 FRASER CT
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT #40 SPRUCE HILL
DEED BOOK/PAGE: 1259/528

TD: 06 / MAP: 3C / PARCEL: COMM
OWNERSHIP: SPRUCE HILL ESTATES HOA INC
OWNER ADDRESS: 835E WASHINGTON ST STE 105
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: 40.12 A OPEN SPACE & COMM
DEED BOOK/PAGE: 1031/235

TD: 03 / MAP: IIB / PARCEL: COMM
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: 4.24 AC HUNTFIELD (OPEN SPACE)
DEED BOOK/PAGE: 1263/99

TD: 03 / MAP: IIE / PARCEL: PARK
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: PARK UNION RIDGE TH-HUNTFIELD
DEED BOOK/PAGE: 1263/99

SWM

PHASE 9

PROPERTIES WITHIN 100' PROXIMITY OF PHASE 9

PHASE 4 REC CENTER

PHASE 4

PHASE 3E

PHASE 3B

PHASE 2B

PHASE 3A

SWM

SWM

SWM

SWM

SWM

UNIONRIDGE TOWNHOMES (PHASE 2A-3)

EX. PHASES

PHASE 5A

PHASE 5B

PHASE 11

TD: 3 / MAP: II / PARCEL: 6
OWNERSHIP: JEFFERSON COUNTY BOARD OF EDUCATION
LEGAL DESCRIPTION: 58.00 AC BYRD-HUNTFIELD
DEED BOOK/PAGE: 974/140

TD: 3 / MAP: II / PARCEL: I
OWNERSHIP: DR ACQUISITIONS LLC
LEGAL DESCRIPTION: 265.34 AC TRACT A - BYRD
DEED BOOK/PAGE: 1263/99

TD: 3 / MAP: II / PARCEL: I
OWNERSHIP: DR ACQUISITIONS LLC
LEGAL DESCRIPTION: 265.34 AC TRACT A - BYRD
DEED BOOK/PAGE: 1263/99

TD: 2 / MAP: I5 / PARCEL: II
OWNERSHIP: VENTOSA CEMETERY OF GIBSONTOWN
LEGAL DESCRIPTION: 3.5 A.- VENTOSA
DEED BOOK/PAGE: 10

TD: 2 / MAP: I7 / PARCEL: I
OWNERSHIP: HILL FARM PARTNERS LLC
LEGAL DESCRIPTION: 162.75AC GEORGE SHAULL-HOPKINS
DEED BOOK/PAGE: 1315/620

TD: 2 / MAP: I7 / PARCEL: I
OWNERSHIP: DR ACQUISITIONS LLC
LEGAL DESCRIPTION: 1.00 AC
DEED BOOK/PAGE: 1263/99

TD: 2 / MAP: I5 / PARCEL: I
OWNERSHIP: JEFFERSON COUNTY BOARD OF EDUCATION
LEGAL DESCRIPTION: 12 A.- PERRY (SOLAR SCHOOL)
DEED BOOK/PAGE: 385/526

PROPERTIES WITHIN 100' PROXIMITY OF PHASE 11

INTERNAL ABUTTING OWNERS WITHIN 100'

PHASE - 9

LOT # 163 TD: 03 / MAP: IIB / PARCEL: 0163
OWNERSHIP: BEISNER RALPH E III & PAMELA L
OWNER ADDRESS: 228 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 254142607
LEGAL DESCRIPTION: LOT 163 HUNTFIELD
DEED BOOK/PAGE: 1311/650

LOT # 164 TD: 03 / MAP: IIB / PARCEL: 0164
OWNERSHIP: FARGO TIFFANY
OWNER ADDRESS: 238 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LOT 164 HUNTFIELD
DEED BOOK/PAGE: 1167/275

LOT # 165 TD: 03 / MAP: IIB / PARCEL: 0165
OWNERSHIP: BRAMHALL ANESSA D
OWNER ADDRESS: 242 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LOT 165 HUNTFIELD
DEED BOOK/PAGE: 1042/693

LOT # 278 TD: 03 / MAP: IIB / PARCEL: 0278
OWNERSHIP: KNUTH KAHLIL A & JESSICA L
OWNER ADDRESS: 5030 ISTANBUL PL APT 7B
CITY, STATE, ZIP: DALLES , VA , 201845030
LEGAL DESCRIPTION: LT 278 HUNTFIELD
DEED BOOK/PAGE: 1151/450

LOT # 279 TD: 03 / MAP: IIB / PARCEL: 0279
OWNERSHIP: MELDON TERRY
OWNER ADDRESS: 225 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144420
LEGAL DESCRIPTION: LT 279 HUNTFIELD
DEED BOOK/PAGE: 1213/266

LOT # 280 TD: 03 / MAP: IIB / PARCEL: 0280
OWNERSHIP: RAIMOND SHANE & JESSICA
OWNER ADDRESS: 209 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 280 HUNTFIELD
DEED BOOK/PAGE: 1261/343

LOT # 281 TD: 03 / MAP: IIB / PARCEL: 0281
OWNERSHIP: BOSTIAN JENNIFER
OWNER ADDRESS: 199 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 281 HUNTFIELD
DEED BOOK/PAGE: 1060/21

LOT # 282 TD: 03 / MAP: IIB / PARCEL: 0282
OWNERSHIP: GOSSETT TANYA
OWNER ADDRESS: 187 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144448
LEGAL DESCRIPTION: LT 282 HUNTFIELD
DEED BOOK/PAGE: 1322/624

LOT # 283 TD: 03 / MAP: IIB / PARCEL: 0283
OWNERSHIP: FREE MARGARET M
OWNER ADDRESS: 174 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144448
LEGAL DESCRIPTION: LT 283 HUNTFIELD
DEED BOOK/PAGE: 1314/723

LOT # 284 TD: 03 / MAP: IIB / PARCEL: 0284
OWNERSHIP: HOUSLEY GREGG M & JENNIFER L CAVASINA-HOUSLEY
OWNER ADDRESS: 164 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144448
LEGAL DESCRIPTION: LT 284 HUNTFIELD
DEED BOOK/PAGE: 1216/381

LOT # 285 TD: 03 / MAP: IIB / PARCEL: 0285
OWNERSHIP: MARTINEZ SEVERIANO A JR & KATELYN D JENKINS
OWNER ADDRESS: 151 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 285 HUNTFIELD
DEED BOOK/PAGE: 1206/238

LOT # 286 TD: 03 / MAP: IIB / PARCEL: 0286
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: LT 286 HUNTFIELD
DEED BOOK/PAGE: 1263/99

LOT # 287 TD: 03 / MAP: IIB / PARCEL: 0287
OWNERSHIP: MARTINEZ JOSE R & DANA L
OWNER ADDRESS: 221 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 254142608
LEGAL DESCRIPTION: LT 287 HUNTFIELD
DEED BOOK/PAGE: 1250/574

LOT # 288 TD: 03 / MAP: IIB / PARCEL: 0288
OWNERSHIP: CARDOZO EDWIN
OWNER ADDRESS: 231 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 288 HUNTFIELD
DEED BOOK/PAGE: 1260/140

LOT # 284 TD: 03 / MAP: IIB / PARCEL: 0284
OWNERSHIP: MESSINA GEORGE JR & RENE K
OWNER ADDRESS: 244 LORD FAIRFAX ST
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 284 HUNTFIELD
DEED BOOK/PAGE: 1256/446

OWNERSHIP: WINCHESTER COLD STORAGE CO INC
LEGAL DESCRIPTION: 142.67A BYRD COLD STORAGE
DEED BOOK/PAGE: 452/15

LOT # 247 TD: 03 / MAP: IIB / PARCEL: 0247
OWNERSHIP: BASS JACK L III & GRACE F
OWNER ADDRESS: 220 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 254144419
LEGAL DESCRIPTION: LT 247 HUNTFIELD
DEED BOOK/PAGE: 1285/363

LOT # 248 TD: 03 / MAP: IIB / PARCEL: 0248
OWNERSHIP: BROWN AMANDA B
OWNER ADDRESS: 228 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 248 HUNTFIELD
DEED BOOK/PAGE: 1264/941

LOT # 249 TD: 03 / MAP: IIB / PARCEL: 0249
OWNERSHIP: MATTOS ANA ROSARIO & RICARDO
OWNER ADDRESS: 240 COLONIAL DR
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 249 HUNTFIELD
DEED BOOK/PAGE: 1227/23

LOT # 300 TD: 03 / MAP: IIB / PARCEL: 0300
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: LT 300 HUNTFIELD
DEED BOOK/PAGE: 1263/99

LOT # 301 TD: 03 / MAP: IIB / PARCEL: 0301
OWNERSHIP: PEARSON MATTHEW & MARY E
OWNER ADDRESS: 604 PROSPECT HILL BLVD
CITY, STATE, ZIP: CHARLES TOWN , WV , 254145550
LEGAL DESCRIPTION: LT 301 HUNTFIELD
DEED BOOK/PAGE: 1154/490

LOT # 302 TD: 03 / MAP: IIB / PARCEL: 0302
OWNERSHIP: GOLDEN JUDY & CLARA
OWNER ADDRESS: 591 PROSPECT HILL BLVD
CITY, STATE, ZIP: CHARLES TOWN , WV , 25414
LEGAL DESCRIPTION: LT 302 HUNTFIELD
DEED BOOK/PAGE: 1210/50

LOT # 858 TD: 03 / MAP: IIE / PARCEL: 0858
OWNERSHIP: DAN RYAN BUILDERS WEST VIRGINIA LLC
OWNER ADDRESS: 2091 GAITHER RD STE 600
CITY, STATE, ZIP: ROCKVILLE , MD , 208504018
LEGAL DESCRIPTION: 1858 UNION RIDGE TH-HUNTFIELD
DEED BOOK/PAGE: 1216/527

LOTS # 913 & LOT # 914
TD: 03 / MAP: II / PARCEL: 0001
OWNERSHIP: DR ACQUISITIONS LLC
OWNER ADDRESS: 225 ARMENIAN OAK DR STE 101
CITY, STATE, ZIP: FREDERICK , MD , 217017091
LEGAL DESCRIPTION: 265.34 AC TRACT A - BYRD
DEED BOOK/PAGE: 1263/99

PHASE - II

LOT # 481 TD: 03 / MAP: IIF / PARCEL: 0481
OWNERSHIP: DRB GROUP WEST VIRGINIA LLC
OWNER ADDRESS: 2091 GAITHER RD STE 600
CITY, STATE, ZIP: ROCKVILLE , MD , 208504018
LEGAL DESCRIPTION: LOT 481 HUNTFIELD
DEED BOOK/PAGE: 1342/229

LOT # 482 TD: 03 / MAP: IIF / PARCEL: 0482
OWNERSHIP: DRB GROUP WEST VIRGINIA LLC
OWNER ADDRESS: 2091 GAITHER RD STE 600
CITY, STATE, ZIP: ROCKVILLE , MD , 208504018
LEGAL DESCRIPTION: LOT 482 HUNTFIELD
DEED BOOK/PAGE: 1343/654

LOT # 483 TD: 03 / MAP: IIF / PARCEL: 0483
OWNERSHIP: DRB GROUP WEST VIRGINIA LLC
OWNER ADDRESS: 2091 GAITHER RD STE 600
CITY, STATE, ZIP: ROCKVILLE , MD , 208504018
LEGAL DESCRIPTION: LOT 483 HUNTFIELD
DEED BOOK/PAGE: 1341/88

LOT # 484 TD: 03 / MAP: IIF / PARCEL: 0484
OWNERSHIP: DRB GROUP WEST VIRGINIA LLC
OWNER ADDRESS: 2091 GAITHER RD STE 600
CITY, STATE, ZIP: ROCKVILLE , MD , 208504018
LEGAL DESCRIPTION: LOT 484 HUNTFIELD
DEED BOOK/PAGE: 1342/224

300 0 300 600 900
Scale 1" = 300'

MRA

MORRIS & RITCHIE ASSOCIATES, INC.

ENGINEERS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS

205 E HIRST ROAD, SUITE 106
PURCELLVILLE, VA 20132
703-994-4047 x3103

MRAGTA.COM

REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
#2	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	8/05/26
#3	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	11/10/26

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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 3 OF 7	

SHEET TITLE
OVERALL

SHEET NUMBER
3

NOTES:

LOTS #s EX.266-277 & EX. 286, WERE PREVIOUS APPROVED WITH PHASE 2B STPL 2003-0006 AND ARE NOW INCORPORATED IN THE PHASE 9

EX. 300

EX. ALLEY 2B19

EX. NEWBURY STREET

EX. COLONIAL DRIVE

EX. ALLEY 2A18

EX. ALLEY 2B18

EX. ALLEY 2C18

EX. LORD FAIRFAX STREET

EX.277 EX.276 EX.275 EX.274 EX. 273 EX.272 EX.271 EX.270 EX.269 EX.268 EX.267 EX.266 EX.286

968 967 966 965 964 963 962 961

UNION RIDGE DRIVE

EX. UNION RIDGE DRIVE

960 959 958 957 956 955 954 953

925 924 923 922 921 920 919 918 917 916 915

926 927 928 929 930 931 932 933 934 935 914

952 951 950 949 948 947 946 945 944 943 942 941 940 939 938 937 936

NEWBURY STREET

SULLIVAN STREET

LORD FAIRFAX STREET

SEE SHEET #3 FOR LOCATION OF SWM FACILIY ASSOCIATED WITH THIS PHASE & LIST OF ADJACENT OWNERS WITHIN 100' OF PHASE LIMITS

TREE SAVE AREA PER APPROVED SCHM 2003-0003

APPROX. LOCATION HIKER / BIKER TRAIL

N40°37'47"W 430.05'

S39°18'43"W 434.25'

MATCHLINE (SEE SHEET 5)

50 0 50 100 150

Scale 1" = 50'

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PURCELLVILLE, VA 20132
703-994-4047 x3103

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REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
#2	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	9/09/26
#3	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	11/10/26

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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 4 OF 7	

SHEET TITLE

SKETCH PLAN (PHASE 9) - 1

SHEET NUMBER

4

UNION RIDGE DRIVE

NEWBURY STREET

SULLIVAN STREET

LORD FAIRFAX STREET

EX. HUYETT ROAD

960 959 958 957 956 955 954 953 952 951 950 949 948 947 946 945 944 943 942 941 940 939 938 937 936

925 924 923 922 921 920 919 918 917 916 915 914 926 927 928 929 930 931 932 933 934 935

N40°33'05"W 799.49'

N40°37'47"W 430.05'

S39°18'43"W 434.25'

N39°12'15"E 425.48'

TREE SAVE AREA
PER APPROVED
SCHM 2003-0003

MATCHLINE
(SEE SHEET 4)

APPROX. LOCATION
HIKER / BIKER TRAIL

SEE SHEET #3 FOR
LOCATION OF SWM
FACILIY ASSOCIATED WITH
THIS PHASE & LIST OF
ADJACENT OWNERS WITHIN
100' OF PHASE LIMITS

NOTE:

APPROXIMATE LOCATION OF HIKER/BIKER TRAIL. FINAL LOCATION TO BE DETERMINED WITH FUTURE SITE PLANS & COORDINATED WITH TRAILS ON ADJOINER PARCELS.

50 0 50 100 150

Scale 1" = 50'

MRA

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REV NO.	REVISION	DATE
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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

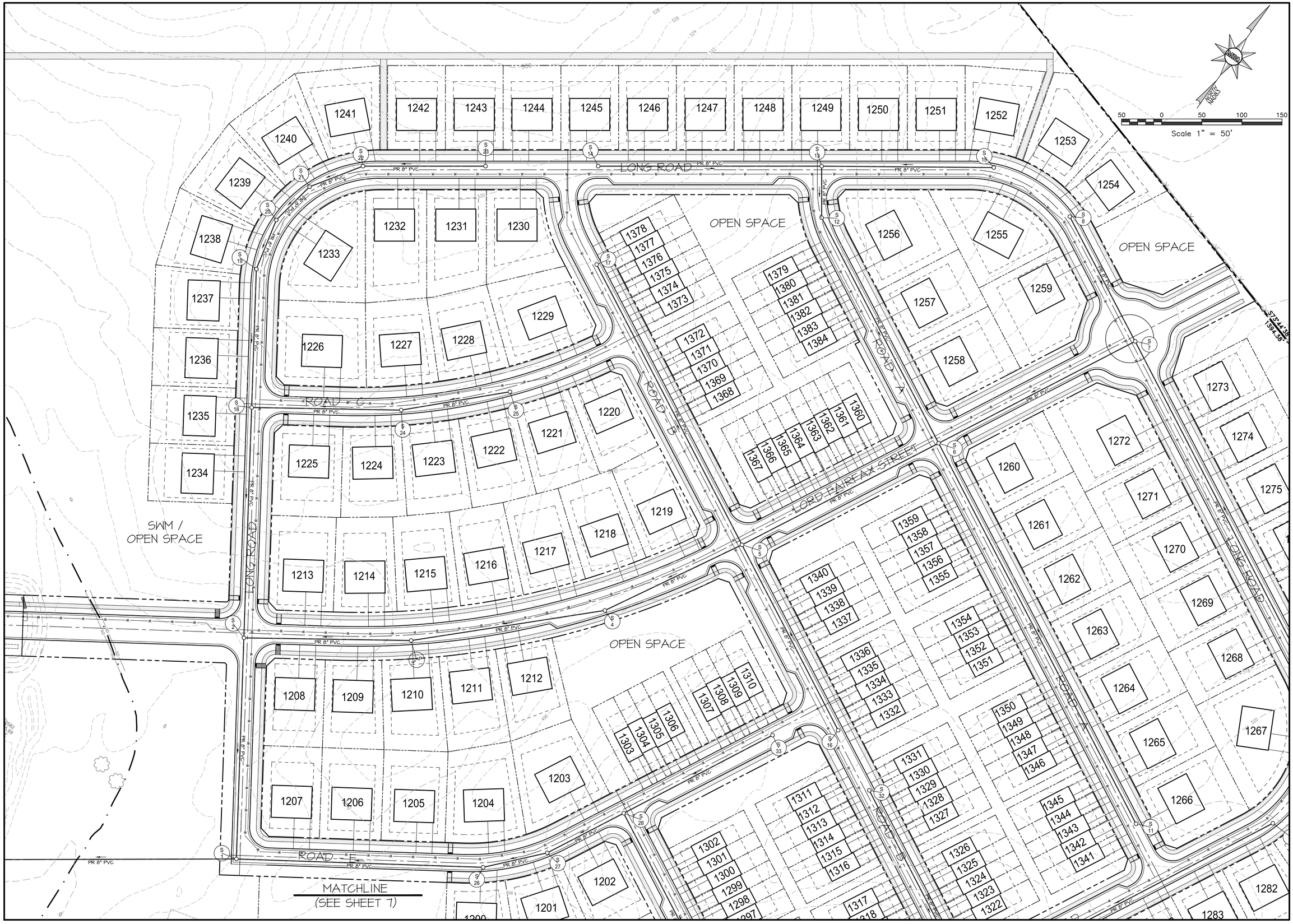
JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 5 OF 7	

SHEET TITLE

SKETCH PLAN (PHASE 9) - 2

SHEET NUMBER

5



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REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
#2	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	9/09/26
#3	REVISED PER CITY OF CHARLES TOWN PLANNING COMMISSION COMMENTS	11/10/26

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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

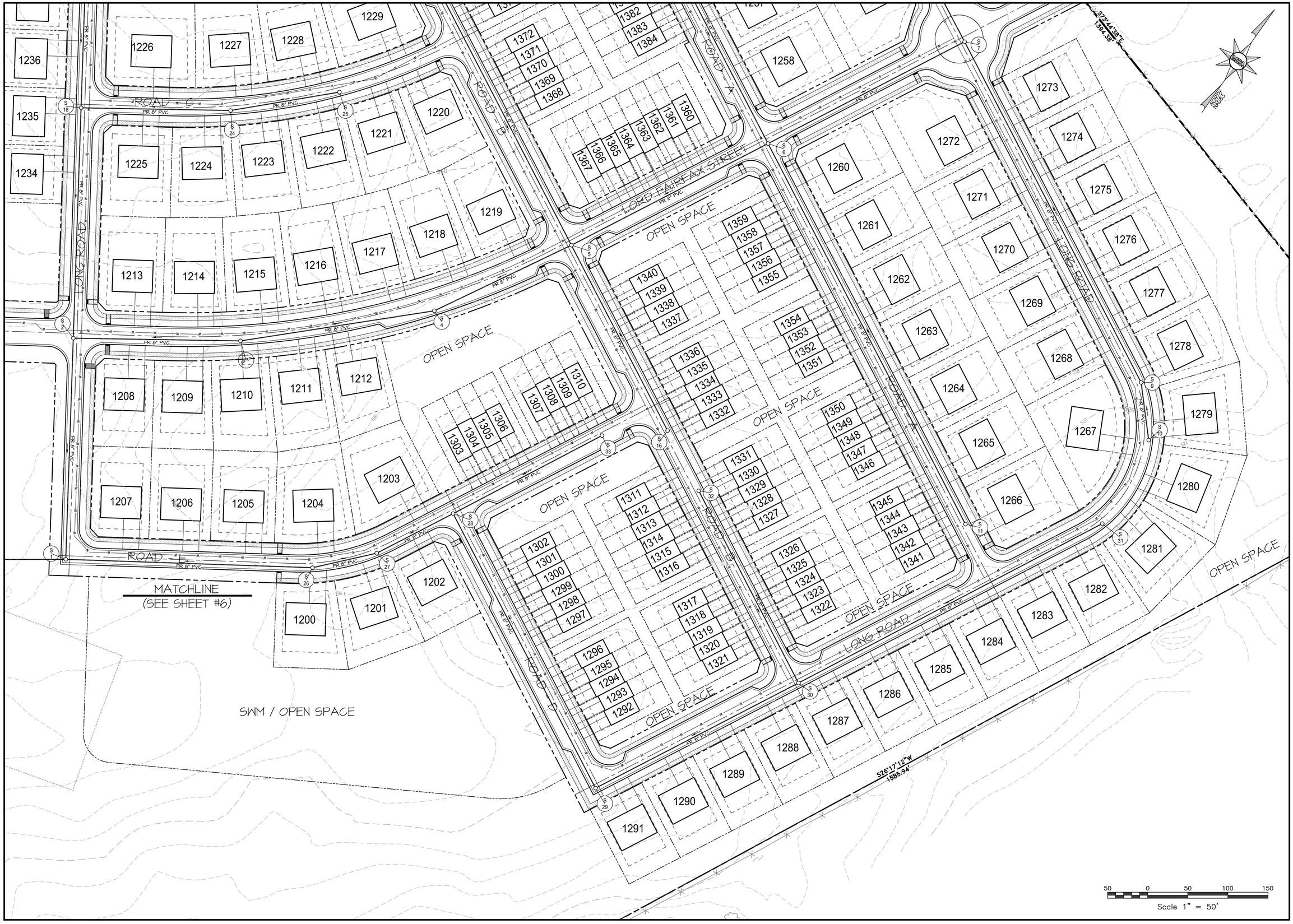
JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 6 OF 7	

SHEET TITLE

SKETCH PLAN (PHASE 11) - 1

SHEET NUMBER

6



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REV NO.	REVISION	DATE
#1	REVISED PER CITY OF CHARLES TOWN COMMENTS	7/24/26
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HUNTFIELD
(PHASES 9 & 11)
SKETCH PLAN
CITY OF CHARLES TOWN, WV

JOB NO.: 23593	DRAWN BY: CDS
SCALE: AS SHOWN	DESIGN BY: CDS
DATE: 04/06/26	REVIEW BY: TDH
SHEET: 7 OF 7	

SHEET TITLE
SKETCH PLAN (PHASE 11) - 2

SHEET NUMBER
7

From: [redacted]
To: James Newman
Subject: SLD2026-02
Date: Monday, November 9, 2026 4:52:47 PM

Dear Mr. Newman and Members of the Charles Town Planning Commission,

I am writing as a homeowner on Hughs Road in Spruce Hill North, whose backyard directly faces the wooded property proposed for development under Huntfield Phase 9.

I am deeply concerned about the potential destruction of this established woodland and the devastating impact it could have on the wildlife that currently inhabits and depends on this area.

Our family has personally observed deer, owls, woodpeckers, frogs or salamanders, rabbits, snakes, raccoons, bats, hawks, and foxes in these woods.

These observations demonstrate that this area supports a diverse wildlife community. The mature trees, understory vegetation, leaf litter, and natural ground cover provide important habitat for feeding, shelter, nesting, and movement. Removing this woodland would eliminate habitat that has taken decades to establish.

I am particularly concerned about the presence of bats, owls, woodpeckers, and amphibians. Certain bat species in West Virginia receive federal protection, and tree removal can affect important roosting and nesting habitats. These potential impacts deserve investigation before development proceeds.

Additionally, Huntfield is already a substantially developed neighborhood with a significant number of existing homes. While I understand that communities grow and additional housing may be needed, I strongly believe that growth should be balanced with responsible land use and environmental preservation.

There appear to be other areas of open, previously cleared land available for potential expansion without destroying an established wooded habitat. I respectfully ask why these alternatives are not being prioritized before considering the removal of mature woodland that supports so many species of wildlife.

Once these trees are removed and the habitat is destroyed, the environmental impact cannot simply be reversed. Building additional homes should not automatically take precedence over preserving one of the remaining wooded areas that provides refuge for local wildlife.

When we purchased our home, we were also told that the wooded area behind our property would remain undeveloped. This assurance was meaningful to our family, and we are extremely disappointed and concerned that this area is now being considered for development.

Before granting sketch-plan approval, I respectfully request that the Planning Commission:

1. Require or obtain an appropriate wildlife habitat assessment, including consideration of protected bat species, nesting birds, and amphibian habitat.

2. Consult the West Virginia Division of Natural Resources and, where appropriate, the U.S. Fish and Wildlife Service.

3. Require the developer to identify the precise limits of tree removal and disclose any existing tree-preservation commitments.

4. Consider preserving a substantial, permanent, connected woodland buffer between Huntfield Phase 9 and Spruce Hill North.

5. Evaluate alternative development locations, particularly existing open or previously cleared land, before approving the destruction of established woodland.

6. Explain why additional wooded acreage must be cleared when substantial residential development already exists within Huntfield.

7. Review the original subdivision approvals and any recorded open-space or conservation designations affecting this property.

8. Clarify whether environmental assessments or protected-species reviews have already been completed.

I respectfully request that these concerns be included in the official public record for the November 30, 2026 hearing and that the Commission thoroughly address these environmental and land-use questions before making its decision.

I am not opposed to responsible community growth. However, I strongly believe that development should be approached thoughtfully, with consideration for existing residents, surrounding neighborhoods, and the wildlife that cannot speak for itself.

These woods are not simply vacant land waiting to be developed. They are an established ecosystem and home to countless animals. Once that habitat is destroyed, it cannot easily be replaced.

Thank you for your time and consideration. I sincerely hope the Commission will recognize the importance of protecting this woodland and explore alternatives that allow our community to grow without unnecessarily sacrificing its natural environment.

Thank you,
Heather Lowery
[redacted]

From: [redacted]
To: James Newman
Subject: Re: SLD2026-02
Date: Wednesday, November 11, 2026 6:03:55 AM

Good morning,

I respectfully request that the Planning Commission consider deferring approval of this proposal until the impacts on existing woodland, wildlife habitat, drainage, and neighboring properties have been fully evaluated.

I have reached out to multiple agencies regarding my concerns about the wildlife and whether there are any protected species living in this wooded area.

I understand that the Huntfield Phases 9 and 11 proposal previously faced concerns regarding changes to the master plan and loss of open space. I would appreciate clarification about how the current proposal addresses those concerns.

I respectfully request:

1. A comparison of the original approved master plan with the current Phase 9 proposal.
2. Documentation identifying any previously designated open space, wooded buffers, and tree-preservation areas.
3. A detailed map showing exactly which trees would be removed behind Spruce Hill North.
4. An assessment of potential wildlife habitat and stormwater impacts.
5. Consideration of alternative development layouts that preserve existing woodland.
6. An opportunity for neighboring homeowners and conservation organizations to review these materials before approval.

I also request that these concerns be included in the official record for the November 30, 2026 public hearing.

Our goal is to preserve an established woodland that provides habitat for wildlife and a natural buffer between existing residential neighborhoods.

Thank you for your consideration.

Heather Lowery

WILDLIFE PHOTO EXHIBIT

Huntfield Phase 9 | Spruce Hill North, Hughs Road

Photographic observations from an adjoining homeowner

These photographs document wildlife observed at or near a residential property bordering the wooded area proposed for Huntfield Phase 9 in Charles Town, WV. They are submitted to support a request to assess wildlife habitat and preserve existing mature woodland where feasible.



PHOTO 01

Northern cardinal near the woodland edge



PHOTO 02

Hawk perched beside mature woodland (species unconfirmed)

Evidence note

Photographs show animals using the property and woodland edge; they do not, by themselves, establish nesting sites, protected species, or locations within the proposed clearing footprint. Photo dates can be supplied if available.

Birds and mammals at the woodland edge



PHOTO 03

Second view of the same hawk

Observed at or near the backyard / woods



PHOTO 04

Raccoon at the residential woodland edge

Observed at or near the backyard / woods



PHOTO 05

Raccoon visiting the backyard

Observed at or near the backyard / woods

WILDLIFE PHOTO EXHIBIT

Huntfield Phase 9 | Spruce Hill North, Hughs Road

Deer and amphibian observations



PHOTO 06

White-tailed deer at the wooded property boundary

Observed at or near the backyard / woods



PHOTO 07

White-tailed deer near the woodland edge

Observed at or near the backyard / woods



PHOTO 08

Tree frog observed on the property (species unconfirmed)

Observed at or near the backyard / woods

WILDLIFE PHOTO EXHIBIT

Huntfield Phase 9 | Spruce Hill North, Hughs Road

Additional wildlife observations



PHOTO 09

Raccoons visiting the property

Observed at the residential woodland edge



PHOTO 10

White-tailed deer near the wooded edge

Observed at the residential woodland edge



PHOTO 11 Tree frog observed near the home



PHOTO 12 Adult deer with spotted fawn at woodland edge



PHOTO 13 Group of deer within the mature woods



PHOTO 14 Pileated woodpecker on fallen wood



PHOTO 15 Pileated woodpecker on standing tree



PHOTO 16 Hawk observed on the property



PHOTO 17 Adult deer and two spotted fawns



PHOTO 18 Deer family at wooded property boundary



PHOTO 19 Blue jays observed in the yard



PHOTO 20 Two salamanders or newts observed near home



PHOTO 21 Antlered white-tailed deer in undergrowth



PHOTO 22 Antlered deer among mature trees in winter



PHOTO 23 Hummingbird photographed during care



PHOTO 24 Several deer, including younger animals, at wooded edge

Planning Commission
101 East Washington Street
Charles Town, WV 25414

SCHEDULED

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

AGENDA ITEM (ID #)

Public Hearing: *BR2026-09* - Washington Landing - Land Disturbance Bond Release

ATTACHMENTS:

- 1. Staff Report.pdf
- 2. Application.pdf
- 3. KH Review.pdf
- 4. KH Email followup.pdf
- 5. Original Bond Estimate.pdf

Bond Release Request
BR2026-09

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Jackson Strout
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: Bond release for the Washington Landing "Land Disturbance" bond

Washington Landing Apartments



Existing Land Disturbance Bond: $301,065.60

BACKGROUND
The applicant has submitted a bond release request for their land disturbance bond for the Washington Landing Apartments.

Upon review of the request the City Engineer, Kimley-Horn, has determined that the bonded items have been installed, however, the original bond sheet does not cover all items shown on the approved plan sets. They conducted an on-site inspection and did not see any deficiencies between the plan set and what has been installed.

The plan set was approved in 2021, with the Land Disturbance Surety Bond dated January 20, 2023. The expiration date was set for January 21, 2023.

BOND PURPOSE
The Land Disturbance Bond's purpose is to cover manmade change to the land surface that potentially changes its runoff characteristics including any clearing, grading, or excavation associated with a construction activity.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. Due to concerns about the missing landscaping the Committee recommended **denial** of the bond release request until the situation could rectified.

Kimley-Horn's letter of Nov. 18 states that the bonded items have been installed, and in a follow-up email stated that all applicable items shown on the plan set have been installed.

STAFF RECOMMENDATION
Recommend **approval** to City Council.

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

☐ Bond Initiation – No application fee

☐ Bond Reduction – No application fee

☐ Bond Extension – No application fee

☑ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE 10/19/2026

2. PROJECT NAME Washington Landing

Address 650 Summerchase Street

3. APPLICANT'S NAME* Washington Landing LLC

Address 1281 Avon Street Ext. Charlottesville, VA 22902

Telephone Number (434) 979-2900

Email Address [redacted]

4. PROPERTY OWNER'S NAME Washington Landing LLC

Address 1281 Avon Street Ext. Charlottesville, VA 22902

Telephone Number (434) 979-2900

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Request for release from Bond K40490413

6. A) CURRENT BOND AMOUNT $301,065.60

B) PROPOSED BOND AMOUNT $0

C) CHANGE IN BONDED AMOUNT $301,065.60

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
03	12000400000000		
03	12000400040000		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
See attached			

9. <u>BOND RELEASE</u> – SUPPLEMENTAL MATERIALS REQUIRED:

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways**, a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

   Before a Performance Agreement and surety for private roadway construction shall be released, a Latent Defects Indemnification Agreement and Bond shall be provided by the applicant/Developer and approved by the Planning Commission. The guarantee provided by such Agreement and Bond must be for a period of two (2) years following the date of performance bond release, and must be in an amount equal to no less than 5% of the original performance bond estimate.

G. **Landscaping Surety** is required to ensure the landscaping shown on a Major S/LD plan is maintained for one (1) year. The one (1) year shall start from the date at which the surety for the site has been released, with the exception of this landscaping surety. The landscaping surety amount shall not be less than $5,000.00 or 10% of the total landscaping cost for the project, which ever is greater.

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

Signature of Applicant

_____ Date 10/20/2026

Signature of Property Owner (If different than Applicant)

_____ Date 10/21/26

Please submit an original completed application to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Check No._____

Receipt No._____

Site Inspection Date:_____ Inspector:_____

Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

_____

_____

_____

_____

Kimley»Horn

Memorandum

To: Washington Landing LLC
1281 Avon Street
Charlottesville, VA 22902

From: Mark Phillips, P.E.

Through: James Newman
City of Charles Town
101 E Washington Street
Charles Town, WV 25414

Date: November 18, 2026

Subject: Washington Landing Bond Release

This memorandum summarizes our review of the Bond Release Request for Washington Landing Bond Release application (dated October 19, 2026, prepared by Washington Landing LLC) for a release of $301,065.60 for the Land Disturbance Bond and $855,602.95 for the Performance Bond. Using the As-Builts dated August 13, 2024, and a site visit conducted on October 26, 2026 it is our opinion that the quantities of work that have been presented on the bond release align with the quantities of work completed in the field.

Kimley-Horn notes that while the quantities provided in the field align or exceed the bond estimate, the Bond Estimate itself is lacking and does not include all of the items provided via the final site plan. So while the Bond quantities are met the final plan design and amenities have not been fully constructed to plan.

Thank you for the opportunity to review this Bond Release Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager, Associate

From: Phillips, Mark
To: James Newman
Subject: Re: Charles Town Review - Washington Landing
Date: Wednesday, November 18, 2026 11:13:14 AM
Attachments: image001.png
image002.png

No beyond landscaping I did not identify any other items missing.

Mark R Phillips, P.E. (VA,WV)
Kimley-Horn | 19775 Belmont Executive Plaza, Suite 250, Ashburn, VA 20147
Direct: 703-870-3631 | Mobile: 540-454-6294
Celebrating 19 years as one of FORTUNE's 100 Best Companies to Work For

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From: James Newman <JNewman@charlestownwv.us>
Sent: Wednesday, November 18, 2026 11:09 AM
To: Phillips, Mark <Mark.Phillips@kimley-horn.com>
Subject: RE: Charles Town Review - Washington Landing

I think that will suffice. Did you notice anything missing (besides landscaping) when looking at the site and comparing it to the final plan and as-built?

From: Phillips, Mark <Mark.Phillips@kimley-horn.com>
Sent: Wednesday, November 18, 2026 11:07 AM
To: James Newman <JNewman@charlestownwv.us>
Subject: Re: Charles Town Review - Washington Landing

Hey James,

Please see attached with additional notes and language related to our chain below.

Let me know if you need anything else.

Mark R Phillips, P.E. (VA,WV)
Kimley-Horn | 19775 Belmont Executive Plaza, Suite 250, Ashburn, VA 20147
Direct: 703-870-3631 | Mobile: 540-454-6294
Celebrating 19 years as one of FORTUNE's 100 Best Companies to Work For

---

From: James Newman <JNewman@charlestownwv.us>
Sent: Wednesday, November 18, 2026 10:01 AM
To: Phillips, Mark <Mark.Phillips@kimley-horn.com>
Subject: RE: Charles Town Review - Washington Landing

Ok. For the Performance Bond I am recommending denial of the release due to the lack of landscaping as required by the plan set.

Washington Landing Erosion & Sediment Control Estimate

9/25/2020

EROSION & SEDIMENT CONTROL ITEMS					**$ 107,871.00**	
Construction Entrance:	1	EA	@	$ 3,800.00 / EA =	$ 3,800.00	
Inlet Protection:	41	EA	@	$ 500.00 / EA =	$ 20,500.00	
Topsoil Stockpile Silt Fence:	450	LF	@	$ 4.00 / LF =	$ 1,800.00	
Temporary Diversion Dike:	1,361	LF	@	$ 6.00 / LF =	$ 8,166.00	
Double Mat Straw Blanket Matting:	11,649	SY	@	$ 5.00 / SY =	$ 58,245.00	
18" ADS Temporary Slope Drain:	96	LF	@	$ 40.00 / LF =	$ 3,840.00	
Rock Splash Pad:	21	SY	@	$ 20.00 / SY =	$ 420.00	
2'X5' Rock Gabion Weir Wall:	43	LF	@	$ 150.00 / LF =	$ 6,450.00	
2'X5.5' Rock Gabion Weir Wall:	31	LF	@	$ 150.00 / LF =	$ 4,650.00	
CLEARING				**$ 34,925.00**		
Clear & Grubb:	10.2	AC	@	$ 2,500.00 / AC =	$ 25,425.00	
Grub & Remove Small Trees:	95	EA	@	$ 100.00 / EA =	$ 9,500.00	
SEEDING				**$ 47,635.00**		
Permanent Seeding:	10.1	AC	@	$ 3,500.00 / AC =	$ 35,420.00	
Temporary Seeding:	3.5	AC	@	$ 3,500.00 / AC =	$ 12,215.00	
GRADING				**$ 37,500.00**		
Volume of Cut-Fill for Sediment Basins:	6,250	CY	@	$ 6.00 / CY =	$ 37,500.00	
WASHINGTON LANDING - E&S BASIN STORM SEWER SYSTEMS				**$ 45,765.00**		
BMP STRUCTURE #1 (CONVERT EXISTING STRUCTURE TO DESIGNED STRUCTURE OR REPLACE)						
OUTLET - 36" ES-2 N/A VF	1	EA	@	$ 1,500.00 / EA =	$ 1,500.00	
60" RISER w/ 3" ORIFACE w/ DI 7.96 VF 10" ORIFACE, 6" ORIFACE w/ FERNCO COUPLING w 8" PERFORATED TUBING, 2' X 2' X4" CONCRETE INVERT PAD	1	EA	@	$ 7,500.00 / EA =	$ 7,500.00	
60" PYRAMID TRASH RACK	1	EA	@	$ 3,850.00 / EA =	$ 3,850.00	
36" ADS N-12 PIPE	35	LF	@	$ 115.00 / LF =	$ 4,025.00	
15" DEPTH CL A1 Riprap Outlet Protection	11	SY	@	$ 20.00 / SY =	$ 220.00	

BMP STRUCTURE #2

OUTLET - 24" ES-2	N/A VF	1	EA	@	$ 1,000.00 / EA =	$	1,000.00
48" RISER w/ 3" ORIFACE w/ DI 10" ORIFACE, 6" ORIFACE w/ FERNCO COUPLING w 8" PERFORATED TUBING, 2' X 2' X4" CONCRETE INVERT PAD	7.48 VF	1	EA	@	$ 6,500.00 / EA =	$	6,500.00
48" PYRAMID TRASH RACK		1	EA	@	$ 3,250.00 / EA =	$	3,250.00
24" ADS N-12 PIPE		61	LF	@	$ 80.00 / LF =	$	4,880.00
15" DEPTH CL A1 Riprap Outlet Protection		11	SY	@	$ 20.00 / SY =	$	220.00

BMP STRUCTURE #3

OUTLET - 18" ES-2	N/A VF	1	EA	@	$ 750.00 / EA =	$	750.00
48" RISER w/ 3" ORIFACE w/ DI 6" ORIFACE 2' X 2' X4" CONCRETE INVERT PAD	4.1 VF	1	EA	@	$ 6,500.00 / EA =	$	6,500.00
48" PYRAMID TRASH RACK		1	EA	@	$ 3,250.00 / EA =	$	3,250.00
18" ADS N-12 PIPE		35	LF	@	$ 60.00 / LF =	$	2,100.00
15" DEPTH CL A1 Riprap Outlet Protection		11	SY	@	$ 20.00 / SY =	$	220.00

TOTAL: $ 273,696

Contingency: 10.00% $ 27,369.60

TOTAL EROSION & SEDIMENT CONTROL MEASURES: $ 301,065.60

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

SCHEDULED

AGENDA ITEM (ID #)

Public Hearing: *BR2026-10* - Washington Landing - Performance Bond Release

ATTACHMENTS:

- 1. Staff Report.pdf
- 2. Application.pdf
- 3. KH Review.pdf
- 4. As-Built Survey.pdf
- 5. Approved Bond Estimate Sheet.pdf

Bond Release Request
BR2026-10

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Jackson Strout
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: Bond release for the Washington Landing "Performance" bond

Washington Landing Apartments



Existing Land Disturbance Bond: $855,602.95

BACKGROUND
The applicant has submitted a bond release request for their performance bond for the Washington Landing Apartments.

Upon review of the request the City Engineer, Kimley-Horn, has determined that the bonded items have been installed, however, the original bond sheet does not cover all items shown on the approved plan sets. They conducted an on-site inspection and stated that not all items required of the plan set have been installed.

The plan set was approved in 2021, with the Performance Surety Bond approve din October 2021.

BOND PURPOSE
The Performance Bond's purpose is to cover the improvements required to be constructed.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. Due to concerns about the missing landscaping the Committee recommended **denial** of the bond release request until the situation could rectified.

Kimley-Horn's letter of Nov. 18 states that the bonded items have been installed, but that the bonded items do not cover all items required on the plan set.

When I visited the site on November 9 I noticed a lack of required landscaping along the commercial lots, the rear of the property, and the front of the property.

STAFF RECOMMENDATION
Recommend **denial** to City Council.

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

- ☐ Bond Initiation – No application fee
- ☐ Bond Reduction – No application fee
- ☐ Bond Extension – No application fee
- ☑ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE 10/19/2026

2. PROJECT NAME Washington Landing

Address 650 Summerchase Street

3. APPLICANT'S NAME* Washington Landing LLC

Address 1281 Avon Street Ext. Charlottesville, VA 22902

Telephone Number (434) 979-2900

Email Address [redacted]

4. PROPERTY OWNER'S NAME Washington Landing LLC

Address 1281 Avon Street Ext. Charlottesville, VA 22902

Telephone Number (434) 979-2900

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Request for release from Bond K40490930

6. A) CURRENT BOND AMOUNT $ 855,602.95

B) PROPOSED BOND AMOUNT $ 0

C) CHANGE IN BONDED AMOUNT $ 855,602.95

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
03	12000400000000		
03	12000400040000		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
See attached			

9. <u>BOND RELEASE</u> – SUPPLEMENTAL MATERIALS REQUIRED:

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways**, a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

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I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

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FOR CITY USE ONLY

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Receipt No._____

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Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

_____

_____

_____

_____

Kimley»Horn

Memorandum

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Through: James Newman
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Thank you for the opportunity to review this Bond Release Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager, Associate

SITE PLAN SHOWING
WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

AS-BUILT SURVEY

TRIAD PROJECT NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM REGISTERED No. 2117 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

GENERAL WVDOT NOTES FOR WORK WITHIN PUBLIC RIGHT-OF-WAY

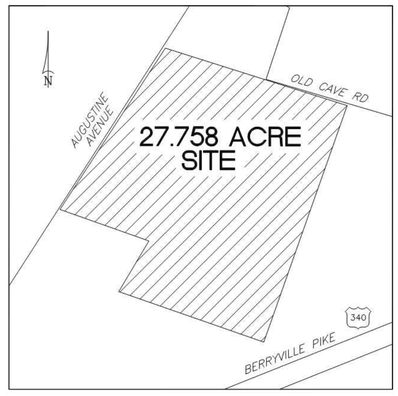
1. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE CURRENT EDITIONS OF AND LATEST REVISIONS TO THE W. VIRGINIA DEPARTMENT OF TRANSPORTATION (WVDOT) ROAD AND BRIDGE SPECIFICATIONS AND STANDARDS, THE W. VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, AND ANY OTHER APPLICABLE STATE, FEDERAL OR LOCAL REGULATIONS. IN CASE OF A DISCREPANCY OR CONFLICT BETWEEN THE STANDARDS OR SPECIFICATIONS AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND WEST VIRGINIA OCCUPATIONAL SAFETY & HEALTH RULES AND REGULATIONS.
3. WHEN WORKING WITHIN WVDOT RIGHT-OF-WAY, ALL TRAFFIC CONTROL, WHETHER PERMANENT OR TEMPORARY, SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF WVDOT'S WORK AREA PROTECTION MANUAL.
4. IF REQUIRED BY THE LOCAL WVDOT RESIDENCY OFFICE, A PRE-CONSTRUCTION CONFERENCE SHALL BE ARRANGED AND HELD BY THE ENGINEER AND/OR DEVELOPER WITH THE ATTENDANCE OF THE CONTRACTOR, VARIOUS COUNTY AGENCIES, UTILITY COMPANIES AND WVDOT PRIOR TO INITIATION OF WORK.
5. THE CONTRACTOR SHALL NOTIFY THE LOCAL WVDOT RESIDENCY OFFICE WHEN WORK IS TO BEGIN OR CEASE FOR ANY UNDETERMINED LENGTH OF TIME. WVDOT REQUIRES AND SHALL RECEIVE 48 HOURS ADVANCE NOTICE PRIOR TO ANY REQUIRED OR REQUESTED INSPECTION.
6. THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL CENTER AT 540-332-9500 FOR ANY TRAFFIC CONTROL PLAN THAT IMPACTS A WVDOT MAINTAINED INTERSTATE OR PRIMARY ROADWAY TO PROVIDE NOTIFICATION OF THE INSTALLATION AND REMOVAL OF THE WORK ZONE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A WVDOT PERMITTED TEMPORARY CONSTRUCTION ENTRANCE IN ACCORDANCE WITH SECTION 3.02 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. FURTHERMORE, ACCESS TO OTHER PROPERTIES AFFECTED BY THIS PROJECT SHALL BE MAINTAINED THROUGH CONSTRUCTION.
8. CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE IS ACHIEVED AND MAINTAINED ON THE SITE DURING AND AT THE END OF CONSTRUCTION.
9. ALL WATER AND SEWER LINES WITHIN EXISTING OR PROPOSED WVDOT RIGHT-OF-WAY SHALL HAVE A MINIMUM FORTY TWO (42) INCHES COVER AND WHEN POSSIBLE SHALL BE INSTALLED UNDER ROADWAY DRAINAGE FACILITIES AT CONFLICT POINTS.
10. ANY UNUSUAL SUBSURFACE CONDITIONS (E.G., UNSUITABLE SOILS, SPRINGS, SINKHOLES, VOIDS, CAVES, ETC.) ENCOUNTERED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER AND WVDOT. WORK SHALL CEASE IN THAT VICINITY UNTIL AN ADEQUATE DESIGN CAN BE DETERMINED BY THE ENGINEER AND APPROVED BY WVDOT.
11. ALL FILL AREAS, BORROW MATERIAL AND UNDERCUT AREAS SHALL BE INSPECTED AND APPROVED BY A WVDOT REPRESENTATIVE PRIOR TO PLACEMENT AND FILL. WHERE CBR TESTING IS REQUIRED, A WVDOT REPRESENTATIVE SHALL BE PRESENT TO INSURE THE SAMPLE OBTAINED IS REPRESENTATIVE OF THE LOCATION. WHEN SOIL SAMPLES ARE SUBMITTED TO PRIVATE LABORATORIES FOR TESTING, THE SAMPLES SHALL BE CLEARLY IDENTIFIED AND LABELED AS BELONGING TO A PROJECT TO BE ACCEPTED BY WVDOT AND THAT TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE WVDOT STANDARDS AND PROCEDURES.
12. ALL ROADWAY FILL, BASE, SUBGRADE MATERIAL, AND BACKFILL IN UTILITY/STORM SEWER TRENCHES SHALL BE COMPACTED IN ACCORDANCE WITH THE LIFT THICKNESS DENSITY AND MOISTURE REQUIREMENTS AS SPECIFIED IN THE CURRENT WVDOT ROAD AND BRIDGE SPECIFICATIONS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO WVDOT DAILY, UNLESS SPECIFIED OTHERWISE.
13. WVDOT STANDARD CD AND UD UNDERDRAINS SHALL BE INSTALLED WHERE INDICATED ON THESE PLANS AND/OR AS SPECIFIED BY WVDOT.
14. A POST INSTALLATION VISUAL/VIDEO CAMERA INSPECTION SHALL BE CONDUCTED BY THE CONTRACTOR ON ALL PIPES IDENTIFIED ON THE PLANS AS STORM SEWER PIPE AND A SELECT NUMBER OF PIPE CULVERTS. FOR PIPE CULVERTS, A MINIMUM OF ONE PIPE INSTALLATION FOR EACH SIZE OF EACH MATERIAL TYPE WILL BE INSPECTED OR TEN PERCENT OF THE TOTAL AMOUNT FOR EACH SIZE AND MATERIAL TYPE SUMMARIZED. ALL PIPE INSTALLATIONS ON THE PLANS NOT IDENTIFIED AS STORM SEWER PIPE SHALL BE CONSIDERED AS CULVERT PIPE FOR INSPECTION PURPOSES. ADDITIONAL TESTING MAY BE REQUIRED AS DIRECTED BY THE AREA LAND USE ENGINEER OR THEIR REPRESENTATIVE.
15. THE INSTALLATION OF ANY ENTRANCES AND MAILBOXES WITHIN ANY DEDICATED STREET RIGHT-OF-WAY SHALL MEET WVDOT MINIMUM DESIGN STANDARDS AND IS THE RESPONSIBILITY OF THE DEVELOPER.
16. PRIOR TO WVDOT ACCEPTANCE OF ANY STREETS, ALL REQUIRED STREET SIGNAGE AND/OR PAVEMENT MARKINGS SHALL BE INSTALLED BY THE DEVELOPER IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
17. AGGREGATE BASE AND SUBBASE MATERIALS SHALL BE PLACED ON SUBGRADE BY MEANS OF A MECHANICAL SPREADER. DENSITY WILL BE DETERMINED USING THE DENSITY CONTROL STRIP IN ACCORDANCE WITH SECTION 304 OF THE WVDOT ROAD AND BRIDGE SPECIFICATIONS AND VTM-10. A CERTIFIED COMPACTION TECHNICIAN SHALL PERFORM THESE TESTS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO WVDOT AT THE END OF EACH MONTH. IN ADDITION TO CHECKING STONE DEPTHS, A WVDOT REPRESENTATIVE SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO BE PRESENT DURING THE CONSTRUCTION AND TESTING OF THE DENSITY CONTROL STRIP.
18. ASPHALT CONCRETE PAVEMENTS SHALL BE PLACED IN ACCORDANCE WITH SECTION 315 OF THE WVDOT ROAD AND BRIDGE SPECIFICATIONS. DENSITY SHALL BE DETERMINED USING THE DENSITY CONTROL STRIP AS SPECIFIED IN SECTION 315 AND VTM-76. A CERTIFIED COMPACTION TECHNICIAN SHALL PERFORM THESE TESTS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO WVDOT DAILY, UNLESS SPECIFIED OTHERWISE. A WVDOT REPRESENTATIVE SHALL BE NOTIFIED AND GIVEN THE OPPORTUNITY TO BE PRESENT DURING THE CONSTRUCTION AND TESTING OF THE CONTROL STRIP.
19. IN ACCORDANCE WITH SECTION 302.03, THE FOUNDATIONS FOR PIPE CULVERTS THIRTY-SIX (36) INCHES AND LARGER SHALL BE EXPLORED BELOW THE BOTTOM OF THE EXCAVATION TO DETERMINE THE TYPE AND CONDITION OF THE FOUNDATION. THE CONTRACTOR SHALL REPORT FINDINGS OF FOUNDATION EXPLORATION TO THE ENGINEER AND WVDOT FOR APPROVAL PRIOR TO PLACING PIPE. FOUNDATION DESIGNS SHALL COMPLY WITH WVDOT ROAD AND BRIDGE STANDARD PB-1. WHERE SOFT, YIELDING, OR OTHERWISE UNSUITABLE FOUNDATION IS ENCOUNTERED, THE FOUNDATION DESIGN AND/OR NEED FOR FOUNDATION STABILIZATION SHALL BE DETERMINED BY THE ENGINEER AND APPROVED BY WVDOT.
20. WVDOT STANDARD GUARDRAIL SHALL BE INSTALLED WHERE WARRANTED AND/OR AS PROPOSED ON THESE PLANS IN ACCORDANCE WITH WVDOT'S INSTALLATION CRITERIA. FINAL APPROVAL OF THE GUARDRAIL LAYOUT TO BE GIVEN BY WVDOT AFTER GRADING IS MOSTLY COMPLETE.
21. APPROVAL OF THESE PLANS SHALL EXPIRE FIVE (5) YEARS FROM THE DATE OF THE APPROVAL LETTER.
22. WVDOT STANDARD CG-12 CURB RAMPS SHALL BE INSTALLED WHERE INDICATED ON THESE PLANS AND/OR AS SPECIFIED BY WVDOT.
23. THE FOUNDATIONS FOR ALL BOX CULVERTS SHALL BE INVESTIGATED BY MEANS OF EXPLORATORY BORINGS ADVANCED BELOW PROPOSED FOUNDATION ELEVATION TO DETERMINE THE TYPE AND CONDITION OF THE FOUNDATION. THE CONTRACTOR SHALL SUBMIT COPIES OF BOREHOLE LOGS AND REPORT FINDINGS OF FOUNDATION EXPLORATION TO THE ENGINEER AND WVDOT FOR APPROVAL PRIOR TO CONSTRUCTING BOX. FOUNDATION DESIGNS SHALL COMPLY WITH WVDOT ROAD AND BRIDGE STANDARD PB-1. CONTRARY TO THE STANDARD, WHERE ROCK IS ENCOUNTERED & CAST-IN-PLACE BOX IS PROPOSED, THE THICKNESS OF BEDDING SHALL BE SIX (6) INCHES. WHERE SOFT, YIELDING, OR OTHERWISE UNSUITABLE FOUNDATION IS ENCOUNTERED, THE FOUNDATION DESIGN AND/OR NEED FOR FOUNDATION STABILIZATION SHALL BE DETERMINED BY THE ENGINEER AND APPROVED BY WVDOT.
24. SEE SHEET C.003 FOR SPECIAL FLOOD AREA DESIGNATION.

GENERAL CONSTRUCTION NOTES

1. ANY DISCREPANCIES FOUND BETWEEN THE DRAWINGS AND SPECIFICATIONS, AND SITE CONDITIONS OR ANY INCONSISTENCIES OR AMBIGUITIES IN DRAWINGS OR SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER IN WRITING WHO SHALL PROMPTLY CORRECT SUCH INCONSISTENCIES OR AMBIGUITIES IN WRITING. WORK DONE BY THE CONTRACTOR AFTER HIS DISCOVERY OF SUCH DISCREPANCIES, INCONSISTENCIES, OR AMBIGUITIES SHALL BE DONE AT THE CONTRACTOR'S RISK.
2. THE LOCATION OF EXISTING UTILITIES AS SHOWN IS APPROXIMATE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PUBLIC OR PRIVATE UTILITIES WHICH LIE IN OR ADJACENT TO THE CONSTRUCTION SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS EXPENSE, ALL EXISTING UTILITIES DAMAGED DURING CONSTRUCTION. THE ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR ANY ADDITIONAL WORK THAT MAY BE NECESSARY DUE TO DIFFERENCES BETWEEN FIELD LOCATED EXISTING UTILITIES AND THE LOCATION SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE AND BEAR THE COST OF ALL ADJUSTMENTS THAT MAY BE NECESSARY IN MANHOLE OR STORM STRUCTURE TOPS TO ACHIEVE THE FINAL FINISHED GRADES AND TYPICAL STREET SECTION. NO ADDITIONAL COSTS WILL BE ALLOWED FOR ANY NECESSARY ELEVATION ADJUSTMENT TO THE STREET CENTER LINE WITH ADDITIONAL EARTHWORK OR STONE BASE. NO ADDITIONAL COSTS WILL BE GRANTED FOR ADJUSTMENT OF WATER LINES DUE TO CONFLICT WITH OTHER UTILITIES. THE ENGINEER IS NOT RESPONSIBLE FOR THESE ELEVATION ADJUSTMENTS.
4. THE CONTRACTOR SHALL CONTACT THE LOCAL WATER & SEWER SERVICE AUTHORITY AT LEAST 48 HOURS PRIOR TO ANY WATER OR SANITARY SEWER CONSTRUCTION.
5. FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION CALL MISS UTILITY 1(800)552-7001.

OWNER / DEVELOPER

WASHINGTON LANDING LLC
ATTN: WILLIAM N. PARK, MANAGER
1821 AVON STREET, SUITE 200
CHARLOTTESVILLE, VIRGINIA 22902
PHONE: 434-979-2900



LOCATION MAP

SCALE 1" = 400'

WATER AND SEWER UTILITIES
CTUB
661 SOUTH GEORGE STREET, SUITE 101
CHARLES TOWN, WV 25414
304-725-2316

PRELIMINARY PLAT NUMBER SLD_2020-03

THE WEST VIRGINIA DEPARTMENT OF HIGHWAYS ENTRANCE PERMIT NUMBER IS _____.
THE WEST VIRGINIA DEPARTMENT OF OF ENVIRONMENTAL PROTECTION (DEP) PERMIT NUMBER IS WVR111087.

HAMRICK ENGINEERING, P.C.
Land Planning • Public Works • Environmental
Brasil W. Hamrick, Jr., P.E.
156 Laurel Hill Road
Route 612 East
Verona, VA 24482
540-248-7407
bwheng@verizon.net

PLAN SHEET INDEX

AS-BUILT SURVEY

SHEET NO.		DESCRIPTION	SHEET NO.	DESCRIPTION
01	1	TITLE SHEET	19	PHASE 1 EROSION AND SEDIMENT CONTROL PLAN
	2	PROJECT NOTES AND DETAILS	20	PHASE 2 EROSION AND SEDIMENT CONTROL PLAN
	3	EXISTING BOUNDARY AND PRELIMINARY SUBDIVISION PLAT	21	EROSION CONTROL NARRATIVE, GENERAL NOTES, AND DETAILS
	4	EXISTING TOPOGRAPHIC SURVEY	22	EROSION CONTROL DETAILS
	5	OVERALL SITE LAYOUT AND DIMENSION PLAN	23	POLLUTION PREVENTION PLAN
02	6	DETAIL SITE LAYOUT AND DIMENSION PLAN	24	STORMWATER MANAGEMENT PLAN
03	7	DETAIL SITE LAYOUT AND DIMENSION PLAN	24A	DETAILED GRADING AND LANDSCAPE PLANS FOR BMP'S
	8	ACCESSIBLE ROUTE PLAN	24B	DETAIL OF STORMWATER MANAGEMENT BMP CONTROL STRUCTURES
	9	OVERALL COMPOSITE UTILITY PLAN	25	LANDSCAPING PLAN
04	10	DETAIL COMPOSITE UTILITY PLAN	26	LANDSCAPING DETAILS
05	11	DETAIL COMPOSITE UTILITY PLAN	27	SITE LIGHTING PLAN
	12	UNDERGROUND CONDUIT AND TRANSFORMER LOCATION PLAN	28	TYPICAL WATER LINE DETAILS
	13	OVERALL GRADING AND DRAINAGE PLAN	29	TYPICAL SEWER LINE DETAILS
06	14	DETAIL GRADING AND DRAINAGE PLAN	30	MISCELLANEOUS DETAILS
07	15	DETAIL GRADING AND DRAINAGE PLAN	31	MISCELLANEOUS DETAILS
08	16	STORM SEWER PROFILES	32	MISCELLANEOUS DETAILS
09	17	WATER LINE AND STORM SEWER PROFILES	33	ENTRANCE DETAIL, PROFILE AND TRAFFIC CONTROL
10	18	SANITARY SEWER PROFILES	34	WVDOT PAVEMENT MARKINGS DETAIL

STATEMENT FOR PRELIMINARY PLAN AND PLAT:
THIS PRELIMINARY PLAN AND PLAT WAS APPROVED BY THE CITY OF CHARLES TOWN, ON THE _____ DAY OF _____, 2020, SUBJECT TO ANY CONDITIONS SPECIFIED HEREON.

ALL EXPENSES INCURRED WITH RESPECT TO IMPROVEMENTS FOR ALL UTILITY SERVICES, PAVING, GRADING, LANDSCAPING, CURBS, GUTTERS, SIDEWALKS, ROAD LIGHTING, ROAD SIGNS, FLOOD PROTECTION DEVICES, DRAINAGE STRUCTURES AND ALL OTHER IMPROVEMENTS THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER AND NOT THE CITY.

SECRETARY OF THE PLANNING COMMISSION — DATE

STATEMENT OF ACCEPTANCE:
THE DEVELOPER IN SIGNING THIS PLAT/PLAN, AGREES TO ABIDE BY ALL CONDITIONS, TERMS AND SPECIFICATIONS PROVIDED HEREON; AND TO COMPLETE ALL THE IMPROVEMENTS REQUIRED BY THE PRELIMINARY PLAT AND PLAN OR SITE PLAN.

FOR WASHINGTON LANDING LLC — DATE

FLOODPLAIN NOTE:
LOTS 1-4 ARE IN FLOOD ZONE X: AREAS OUTSIDE OF THE 100 YEAR FLOODPLAIN. LOT 5 IS WITHIN FLOOD ZONE A: AREA DESIGNATED AS A SPECIAL FLOOD AREA AS SHOWN ON COMMUNITY MAP/PANEL NUMBER 54037C0138E, EFFECTIVE DATE DECEMBER 18, 2009.

REVISIONS TABLE		
DATE	REV. No.	DESCRIPTION

PROJECT LEGEND

SYMBOLS

- W — PROPOSED WATER LINE
- S — PROPOSED SEWER LINE
- EW — EXISTING WATER LINE
- ES — EXISTING SEWER LINE
- EXISTING CONTOURS
- 43 — PROPOSED CONTOURS
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- EXISTING DRAINAGE STRUCTURE
- PROPOSED DRAINAGE STRUCTURE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- FENCE LINE
- UTILITY POLE
- GUY WIRE
- OVERHEAD UTILITY LINE
- U-T — UNDERGROUND TELEPHONE
- UGP — EXISTING POWER UNDERGROUND
- TELEPHONE PEDESTAL
- EG — EXISTING GAS
- SL — PROPOSED SEWER LATERAL
- WS — PROPOSED WATER SERVICE LINE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING CURB & GUTTER
- PROPOSED CURB & GUTTER
- REVERSE CURB & GUTTER

ABBREVIATIONS

CC	CENTER TO CENTER
CG	CURB & GUTTER
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
DIP	DUCTILE IRON PIPE
Δ	DELTA
ESMT	EASEMENT
ELEV.	ELEVATION
EX.	EXISTING
F.H.	FIRE HYDRANT
GR	GROUND SHOT
INV.	INVERT
L	LENGTH
MH	MANHOLE
N/F	NOW OR FORMERLY
O.C.	ON CENTER
℄	PROPERTY LINE
PVMT.	PAVEMENT
EOP	EDGE OF PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
R/W	RIGHT OF WAY
SAN	SANITARY
WM	WATER METER
TBM	TEMPORARY BENCH MARK
F/C	FACE OF CURB
T/C	TOP OF CURB
T/P	TOP OF PAVEMENT
T/S	TOP OF SIDEWALK
T/G	TOP OF GROUND
T/W	TOP OF WALL
B/W	BOTTOM OF WALL
W/	WITH
C.O.	SAN. SEW. CLEAN OUT
IPF	IRON PIN FOUND
IPS	IRON PIN SET

CERTIFICATE OF LAND SURVEYOR:
THIS PLAT REPRESENTS A SURVEY MADE BY HAMRICK ENGINEERING; ALL MONUMENTS INDICATED HEREON ACTUALLY EXIST, AND THEIR LOCATION, SIZE AND MATERIAL ARE CORRECTLY SHOWN AS NOTED HEREIN. I AM FAMILIAR WITH ALL REQUIREMENTS OF THIS ORDINANCE; AND, TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL REQUIREMENTS OF THIS ORDINANCE HAVE BEEN FULLY COMPLIED THEREWITH.

STATEMENT OF ACCURACY:
THE ENGINEER, IN SIGNING THIS PLAN ATTESTS TO THE BEST OF HIS KNOWLEDGE, THE PLAN IS COMPLETE AND ACCURATE.

BRASIL W. HAMRICK REGISTERED 11149 STATE OF WEST VIRGINIA PROFESSIONAL ENGINEER

LAST REVISION 12/02/20
JOB No. 12003.01

AS-BUILT SURVEY

TRIAD PROJECT
NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM
REGISTERED
No. 2117
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

GENERAL NOTES:

1. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB, PROPERTY LINE, EOP, OR FACE OF BUILDING UNLESS OTHERWISE NOTED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS. ANY CONSTRUCTION STAKING COMPLETED BY THE CONTRACTOR OR OWNER BASED ON THE BUILDING CONFIGURATION SHOWN ON THE SITE PLAN DRAWINGS OR ANY CIVIL ELECTRONIC FILES RELIEVES THE ENGINEER FROM ANY LIABILITY RESULTING FROM ERRORS FOUND IN THE BUILDING CONFIGURATION SHOWN ON THE SITE PLAN. THE ARCHITECTURAL PLANS CONTROL THE BUILDING DIMENSIONS.
3. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF UTILITY PENETRATIONS INTO THE BUILDING.
4. HANDICAPPED SPACES TO BE DENOTED AS RESERVED FOR HANDICAPPED W/ VERTICAL SIGNAGE DISPLAYING THE UNIVERSAL SYMBOLS. ACCESS AISLE SHALL BE MARKED W/ STRIPES WHICH CONTRAST THE NORMAL WALKING SURFACE.
6. CURB RADIUS RETURNS ARE 5.0' UNLESS OTHERWISE NOTED.
7. ALL RETAINING WALLS ARE ARCHITECTURAL BLOCK SEGMENTAL WALL SYSTEMS. ALL RETAINING WALLS SHALL ALSO HAVE A 48" TALL VINYL COATED CHAIN LINK GUARD FENCE.

HATCHED AREAS REPRESENT HEAVY DUTY PAVEMENT SECTIONS SEE SHEET C2 FOR DETAIL (TYP)

HAMRICK ENGINEERING, P.C.
Civil Engineers • Land Planners
134 Lovers Lane Street
Boonsboro, MD 21713
Tel: 240-420-1687
Fax: 240-420-1689
hamrickengineering.com

DETAIL GRADING AND DRAINAGE PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.006
02 OF 10

GENERAL NOTES:

1. ALL DIMENSIONS SHOWN ARE TO THE FACE OF CURB, PROPERTY LINE, EOP, OR FACE OF BUILDING UNLESS OTHERWISE NOTED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS. ANY CONSTRUCTION STAKING COMPLETED BY THE CONTRACTOR OR OWNER BASED ON THE BUILDING CONFIGURATION SHOWN ON THE SITE PLAN DRAWINGS OR ANY CIVIL ELECTRONIC FILES RELIEVES THE ENGINEER FROM ANY LIABILITY RESULTING FROM ERRORS FOUND IN THE BUILDING CONFIGURATION SHOWN ON THE SITE PLAN. THE ARCHITECTURAL PLANS CONTROL THE BUILDING DIMENSIONS.
3. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF UTILITY PENETRATIONS INTO THE BUILDING.
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6. CURB RADIUS RETURNS ARE 5.0' UNLESS OTHERWISE NOTED.
7. ALL RETAINING WALL ARE ARCHITECTURAL BLOCK SEGMENTAL WALL SYSTEMS. ALL RETAINING WALLS SHALL ALSO HAVE A 48" TALL VINYL COATED CHAIN LINK GUARD FENCE.

BUILDING 200
HEIGHT = 41'
F.F.E. = 512.50
22 UNITS, 3 STORY, 32,256 G.S.F.

BUILDING 300
HEIGHT = 41'
UPPER F.F.E. = 513.75
LOWER F.F.E. = 502.83
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.

BUILDING 100
HEIGHT = 41'
F.F.E. = 510.09
22 UNITS, 3 STORY, 32,256 G.S.F.

FLOW THRU CURB

SINGLE DUMPSTER ENCLOSURE (SEE SHEET C30 FOR DETAIL)

HATCHED AREAS REPRESENT HEAVY DUTY PAVEMENT SECTIONS SEE SHEET C2 FOR DETAIL (TYP)

NEW 30' WIDE ENTRANCE WITH 50' RADIUS RETURNS

SAW CUT 1.0' OF PAVEMENT AND MILL A 1.0' STRIP PROVIDING A SHIP LAP JOINT BETWEEN NEW AND EXISTING PAVEMENT

EXTEND NEW 12' WIDE TURN LANE 175'

AUGUSTINE AVE. (ROUTE 340/18)

48' TAPER

AS-BUILT SURVEY

TRIAD PROJECT NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM REGISTERED No. 2117 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

HAMRICK
CIVIL ENGINEERS, P.C.
Land Planners • Surveyors
Donald W. Hamrick, P.E., L.S.
130 Howard Street, Suite 2
Bridgeport, WV 26330
304.842.3597
www.hamrickpe.com

DETAIL GRADING AND DRAINAGE PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.007
03 OF 10

AS-BUILT SURVEY

TRIAD PROJECT
NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
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WWW.TRIADENG.COM

DAVID L. GRAHAM REGISTERED No. 2117 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

DAVID L GRAHAM — 8/13/2024
LICENSE NO. 2117 — DATE

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

NOTE: THE FINAL CONNECTION TO THE DOMESTIC WATER SYSTEM WILL BE MADE BY THE PLUMBING CONTRACTOR. THE FINAL CONNECTION TO THE SPRINKLER HEADER WILL BE MADE FIRE SUPPRESSION SUBCONTRACTOR. THE SITE CONTRACTOR WILL INSTALL BOTH THE DOMESTIC AND SPRINKLER HEADER LINE AS SHOWN ON THE DRAWINGS FOR ALL BUILDINGS.

NOTE: THE FINAL CONNECTION TO THE SANITARY SYSTEM WILL BE MADE BY THE PLUMBING CONTRACTOR. THE SITE CONTRACTOR WILL PROVIDE A STUB FROM THE LAST CLEANOUT FOR ALL BUILDINGS. ALL CLEANOUTS TO RECEIVE CONCRETE RING (SEE DETAIL SHEET 32)

BUILDING 600
LOWER F.F.E. = 507.83
HEIGHT = 51'
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
UPPER F.F.E. = 518.75
HEIGHT = 41'

BUILDING 700
LOWER F.F.E. = 504.90
HEIGHT = 51'
UPPER F.F.E. = 515.82
HEIGHT = 41'
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.

BUILDING 800
LOWER F.F.E. = 501.73
HEIGHT = 51'
UPPER F.F.E. = 515.65
HEIGHT = 41'
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.

CLUBHOUSE
F.F.E. = 517.50

MAINTENANCE BUILDING
F.F.E. = 520.00

BUILDING 500
22 UNITS, 3 STORY, 32,256 G.S.F.
HEIGHT = 41'
F.F.E. = 521.50

BUILDING 400
HEIGHT = 41'
UPPER F.F.E. = 522.30
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
LOWER F.F.E. = 511.38
HEIGHT = 51'

BUILDING 200
HEIGHT = 41'
F.F.E. = 512.50
22 UNITS, 3 STORY, 32,256 G.S.F.

BUILDING 300
HEIGHT = 41'
UPPER F.F.E. = 513.75
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
LOWER F.F.E. = 511.38
HEIGHT = 51'

PHASE 2 BUILDING 900
PHASE 2 BUILDING 1,000
PHASE 2 BUILDING 1,100
EXISTING STORMWATER MANAGEMENT BASIN (SEE SHEET C.020 FOR DETAILS)
PHASE 2 SANITARY SEWER
SWIMMING POOL
WATERMAIN A
WATERMAIN B
WATERMAIN C

MATCH LINE SHEET 11

LEGEND

INV	INVERT
DS	DOWN SPOUT (ROOF DRAIN)
	FIRE HYDRANT
	SANITARY CLEAN OUT
S	SANITARY MANHOLE
D	STORM DRAIN MANHOLE
	WATER METER
	WATER VALVE

HAMRICK ENGINEERING, P.C.
Civil Engineers • Land Surveyors
150 Fairfax Road, Suite 1
Stephens City, VA 22655
540-869-1987

DETAIL COMPOSITE UTILITY PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.010
04 OF 10

MATCH LINE SHEET 10

EXISTING STORMWATER MANAGEMENT BASIN (SEE SHEET C.020 FOR DETAILS)

PROPOSED STORMWATER MANAGEMENT BASIN (SEE SHEET C.019 FOR DETAILS)

MH 3 TOP=489.16

MH 2 TOP=490.02

STR 1 INV=488.12

STR 2

STR 3 TOP=506.22

STR 4 TOP=503.59

STR 5 TOP=506.13

MH 5 TOP=508.25

STR 6 TOP=505.62

STR 7 TOP=506.17 INV=504.11

STR 8 TOP=508.58

STR 9 TOP=503.17

STR 9A TOP=503.10

STR 10 TOP=503.29

STR 11 TOP=505.78

STR 12 TOP=505.64

STR 13 TOP=505.55

MH 6 TOP=501.93

STR 6 TOP=499.13

STR 7 TOP=499.12

STR 23 TOP=512.21

MH 1 TOP=487.84

EX MH EX. TOP=484.00 INV=475.90

TOP=477.85

STA 8+23.87
STA 1+00 WATERMAIN B
1-8"x8"x6" TEE
2-8" GATE VALVES

STA 7+82.60
1-8"x8"x6" TEE
1-6" GATE VALVE
1-F.H., 53.09' RT.

STA 7+38.35
1-8" 45° BEND

STA 6+53.37
2" WATER SERVICE CONNECTION

STA 6+46.83
1-8"x8"x4" TEE
1-4" GATE VALVE
1-8" GATE VALVE

STA 6+14.43
1-8" 11.25° BEND

STA 4+86.00
1-8" 22.5° BEND
1-8" 11.25° BEND

STA 4+71.43
1-4"x4"x4" TEE
1-4" GATE VALVE
WATER SERVICE CONNECTION OFF 8" BLIND FLANGE

STA 2+96.62
1-8"x8"x6" TEE
1-6" GATE VALVE
1-F.H., 61.96' RT.

STA 2+73.90
1-8" 45° BEND

STA 2+85.50
1-8" 45° BEND

STA 1+30.44
1-8" 45° BEND

STA 1+00
1-8"x12" TAPPING SLEEVE & VALVE

STA 1+00
BEGIN CONSTRUCTION
WATERMAIN A

WATERMAIN A

WATERMAIN B

4"W WATERMAIN

2"W

8"W

6"W

AUGUSTINE AVE. (ROUTE 340/18)

EXISTING 12" WATER MAIN

12"EW

8"S

6"SL

4"SL

500

BUILDING 200
HEIGHT = 41'
F.F.E. = 512.50
22 UNITS, 3 STORY, 32,256 G.S.F.

510

RD INV= 510.50

520

RD INV= 511.50

530

BUILDING 300
HEIGHT = 41'
UPPER F.F.E. = 513.75
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
HEIGHT = 51'
LOWER F.F.E. = 502.83

RD INV= 500.83

310

300

BUILDING 100
22 UNITS, 3 STORY, 32,256 G.S.F.
HEIGHT = 41'
F.F.E. = 500.09

C.O. INV=501.09

57.73 LF 6" PVC SDD 35% SAN. SEW. LATERAL

RD INV= 500.09

RD INV= 509.71

RD INV= 499.79

RD INV= 499.59

CONFIRM ELEVATION

SEE PROFILE OF LATERAL ON SHEET 17

SEE PROFILE OF LATERAL ON SHEET 18

NOTE: THE FINAL CONNECTION TO THE DOMESTIC WATER SYSTEM WILL BE MADE BY THE PLUMBING CONTRACTOR. THE FINAL CONNECTION TO THE SPRINKLER HEADER WILL BE MADE FIRE SUPPRESSION SUBCONTRACTOR. THE SITE CONTRACTOR WILL INSTALL BOTH THE DOMESTIC AND SPRINKLER HEADER LINE AS SHOWN ON THE DRAWINGS FOR ALL BUILDINGS.

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LEGEND

INV	INVERT
DS	DOWN SPOUT (ROOF DRAIN)
	FIRE HYDRANT
	SANITARY CLEAN OUT
S	SANITARY MANHOLE
D	STORM DRAIN MANHOLE
	WATER METER
	WATER VALVE

AS-BUILT SURVEY

TRIAD PROJECT NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM REGISTERED No. 2117 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

90' 60' 30' 0'

HAMRICK ENGINEERING, P.C.
Land Development • Surveying • Environmental
108 E. Cork St., Suite 2A
Martinsburg, WV 25401
www.hamrickpc.com

DATE	REV. No.	DESCRIPTION

DETAIL COMPOSITE UTILITY PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.011
05 OF 10

AS-BUILT SURVEY

TRIAD PROJECT NUMBER: 07-20-0653

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NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

LEGEND

CL	CENTER LINE OF ROAD
EP	EDGE OF PAVEMENT
TC	TOP OF CURB
TS	TOP OF SIDEWALK

BUILDING 600
LOWER F.F.E. = 507.83
HEIGHT = 51'
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
UPPER F.F.E. = 518.75
HEIGHT = 41'

MAINTENANCE BUILDING
HEIGHT = 14'
F.F.E. = 520.00

BUILDING 500
22 UNITS, 3 STORY, 32,256 G.S.F.
HEIGHT = 41'
F.F.E. = 521.50

BUILDING 700
HEIGHT = 51'
LOWER F.F.E. = 504.90
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
UPPER F.F.E. = 516.82
HEIGHT = 41'

BUILDING 800
HEIGHT = 41'
UPPER F.F.E. = 515.65
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
HEIGHT = 51'
LOWER F.F.E. = 504.73

CLUBHOUSE
F.F.E. = 513.50

SWIMMING POOL

BUILDING 400
HEIGHT = 41'
UPPER F.F.E. = 522.30
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
LOWER F.F.E. = 511.38
HEIGHT = 51'

BUILDING 200
HEIGHT = 41'
F.F.E. = 512.50
22 UNITS, 3 STORY, 32,256 G.S.F.

BUILDING 300
HEIGHT = 41'
UPPER F.F.E. = 513.75
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
HEIGHT = 51'
LOWER F.F.E. =

ROUNDED TRANSITION OFF OF SIDEWALK

2% MAX

PHASE 2 BUILDING 900

PHASE 2 BUILDING 1,000

PHASE 2 BUILDING 1,100

NO.	DESCRIPTION	DATE

HAMRICK — 154 Court Lane, Bldg 2, Suite 201, Winchester, VA 22601, 540.535.3000, www.hamrick.net

DETAIL GRADING AND DRAINAGE PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.014
06 OF 10

BUILDING 200
HEIGHT = 41'
F.F.E. = 512.50
22 UNITS, 3 STORY, 32,256 G.S.F.

BUILDING 300
HEIGHT = 41'
UPPER F.F.E. = 513.75
26 UNITS, 3/4 SPLIT STORY, 37,690 G.S.F.
HEIGHT = 51'
LOWER F.F.E. = 502.83

BUILDING 100
22 UNITS, 3 STORY, 32,256 G.S.F.
HEIGHT = 41'
F.F.E. = 510.09

AUGUSTINE AVE. (ROUTE 340/18)

LEGEND

CL	CENTER LINE OF ROAD
EP	EDGE OF PAVEMENT
TC	TOP OF CURB
TS	TOP OF SIDEWALK

AS-BUILT SURVEY

TRIAD PROJECT
NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM REGISTERED No. 2117 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

DESCRIPTION	REV. No.	DATE

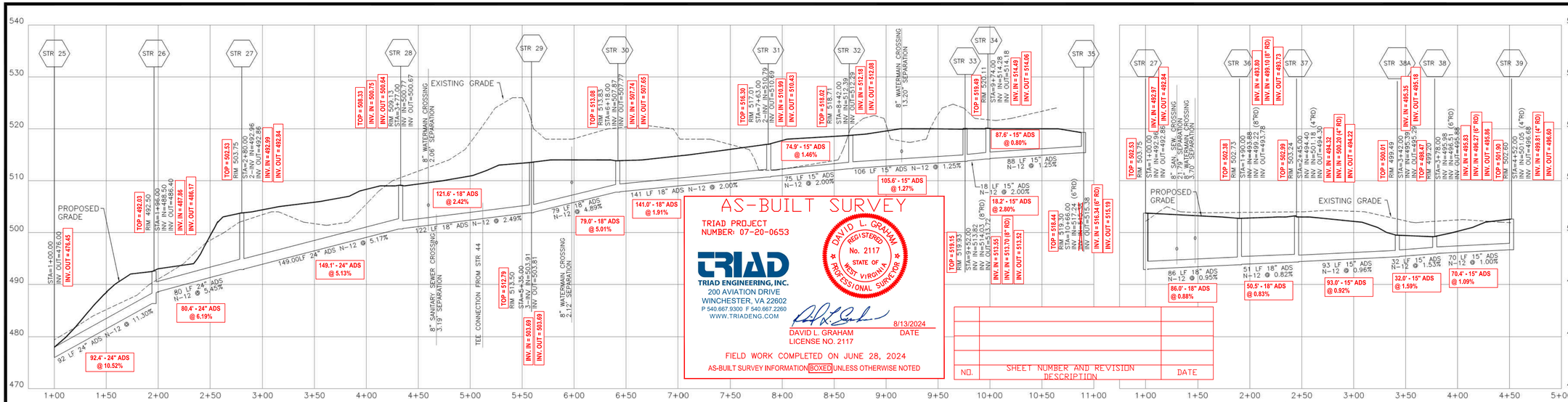
HAMRICK ENGINEERING, P.C.

DETAIL GRADING AND DRAINAGE PLAN

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 30'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.015
07 OF 10

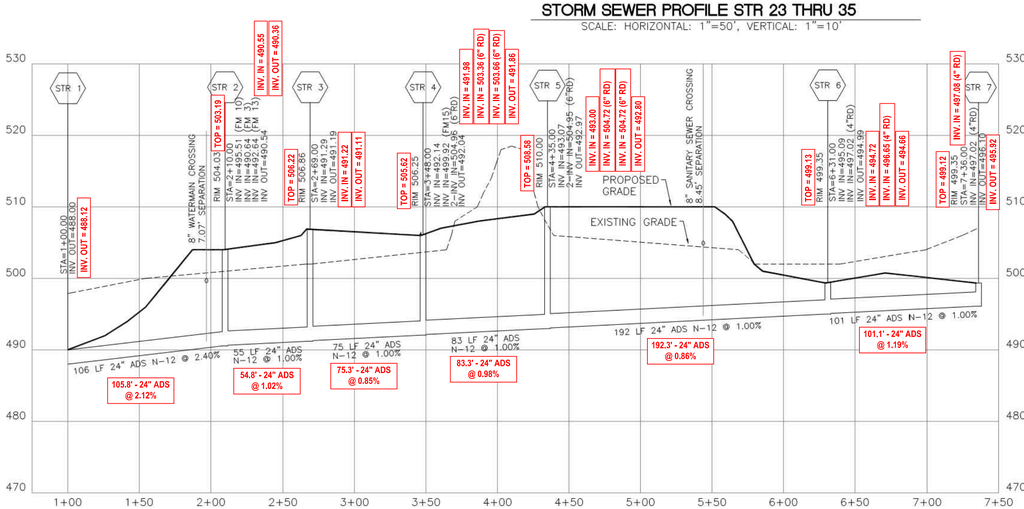


STORM SEWER PROFILE STR 16 AND 24

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

STORM SEWER PROFILE STR 23 THRU 35

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

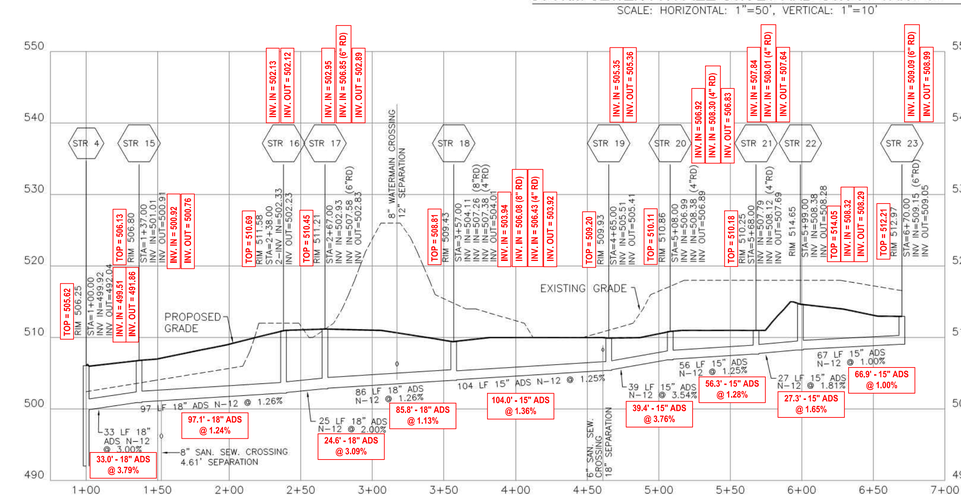


STORM SEWER PROFILE STR 1 THRU 7

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

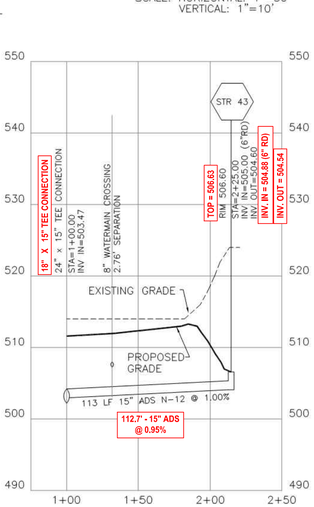
STORM SEWER PROFILE STR 26 AND STR 36 THRU 39

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



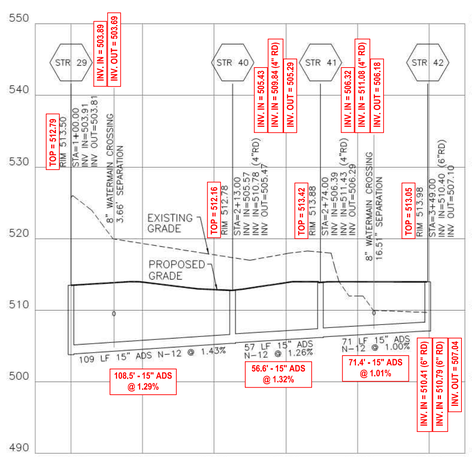
STORM SEWER PROFILE STR 4 AND STR 15 THRU 23

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



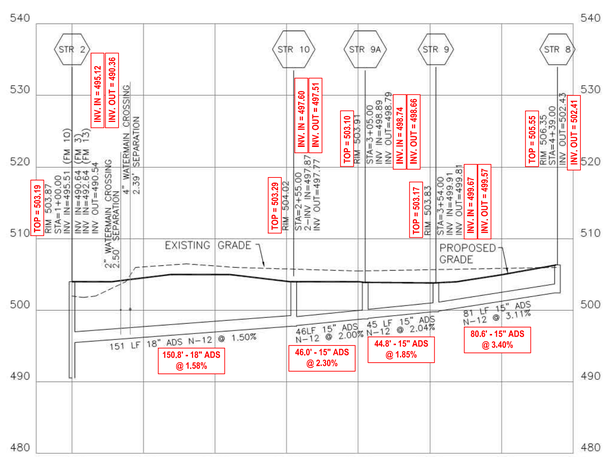
STORM SEWER PROFILE STR 29 AND 43

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



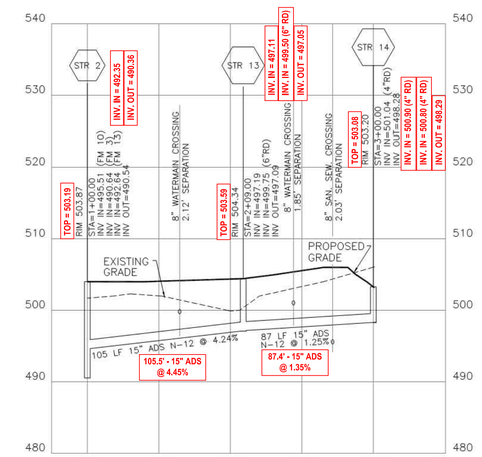
STORM SEWER PROFILE STR 29 AND STR 41 THRU 42

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



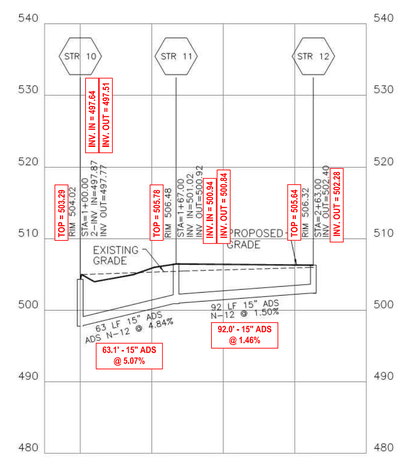
STORM SEWER PROFILE STR 2 AND STR 8 THRU 10

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



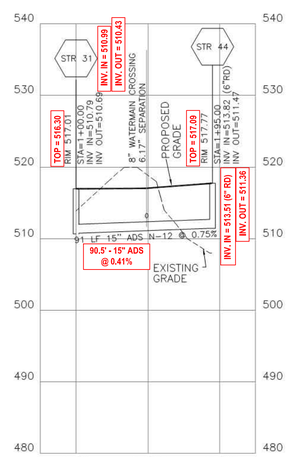
STORM SEWER PROFILE STR 2 AND STR 13 THRU 14

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



STORM SEWER PROFILE STR 10 THRU 12

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



STORM SEWER PROFILE STR 10 AND 44

SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

HAMRICK ENGINEERING, P.C.
Land Planning ▲ Civil ▲ Environmental
Harold W. Hamrick, Jr., P.E.
305 Lowell Land Road
Suite 1
Winchester, VA 22602
540.678.3207
hwhamrick@verizon.net

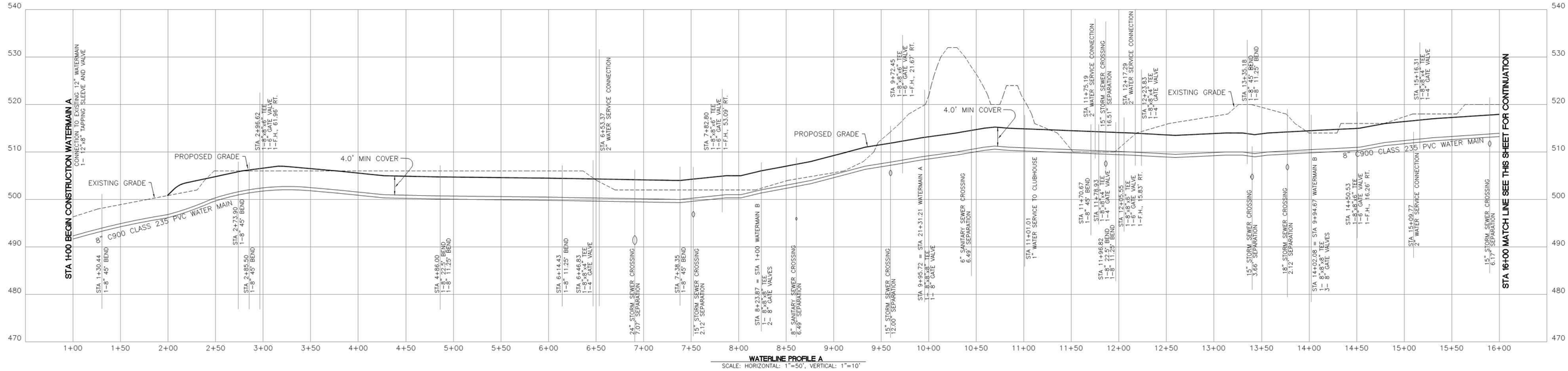
DESCRIPTION | REV. No. | DATE

STORM SEWER PROFILES

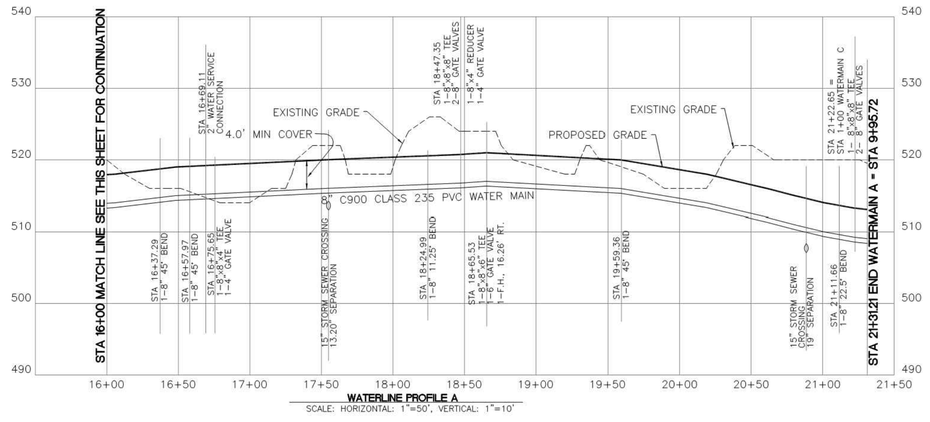
WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 100'
DATE 01/10/2020
REVISION DATES:

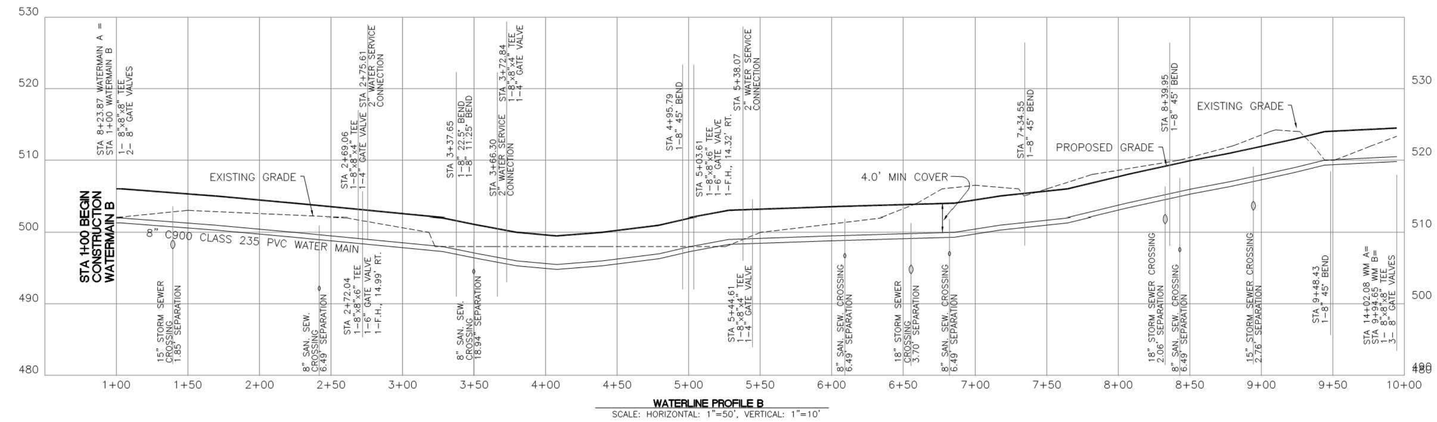
SHEET No.
C.016
08 OF 10



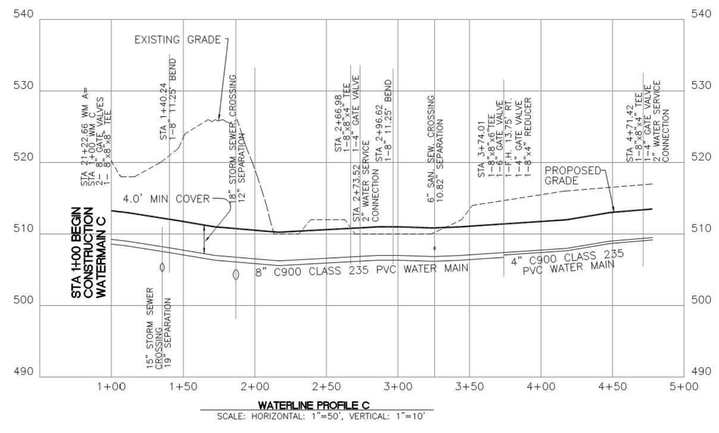
WATERLINE PROFILE A
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



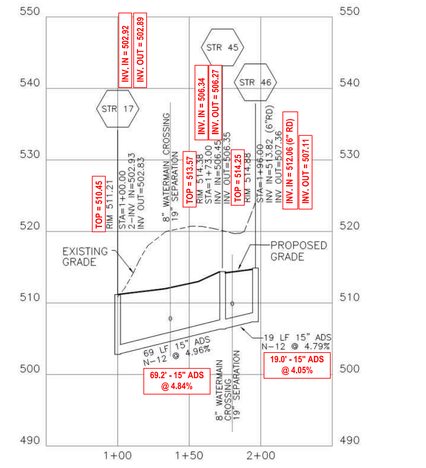
WATERLINE PROFILE A
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



WATERLINE PROFILE B
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



WATERLINE PROFILE C
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



STORM SEWER PROFILE STR 17 AND STR 45 THRU 46
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

AS-BUILT SURVEY

TRIAD PROJECT
NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM
REGISTERED
No. 2117
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

05/08/20

DATE	REV. No.	DESCRIPTION

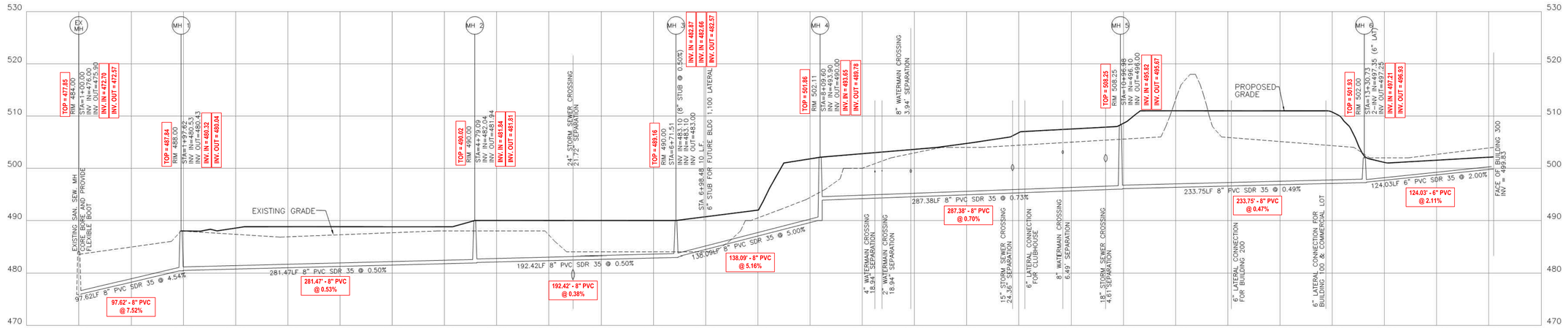
HAMRICK ENGINEERING, P.C.
Land Planning • Public Roads • Environmental
Heidi W. Hamrick, Jr., P.E.
540-216-7027
heidi@hamrickeng.com
105 Laurel Hill Road
Suite 100
Winton, VA 24483

WATER LINE AND STORM SEWER PROFILES

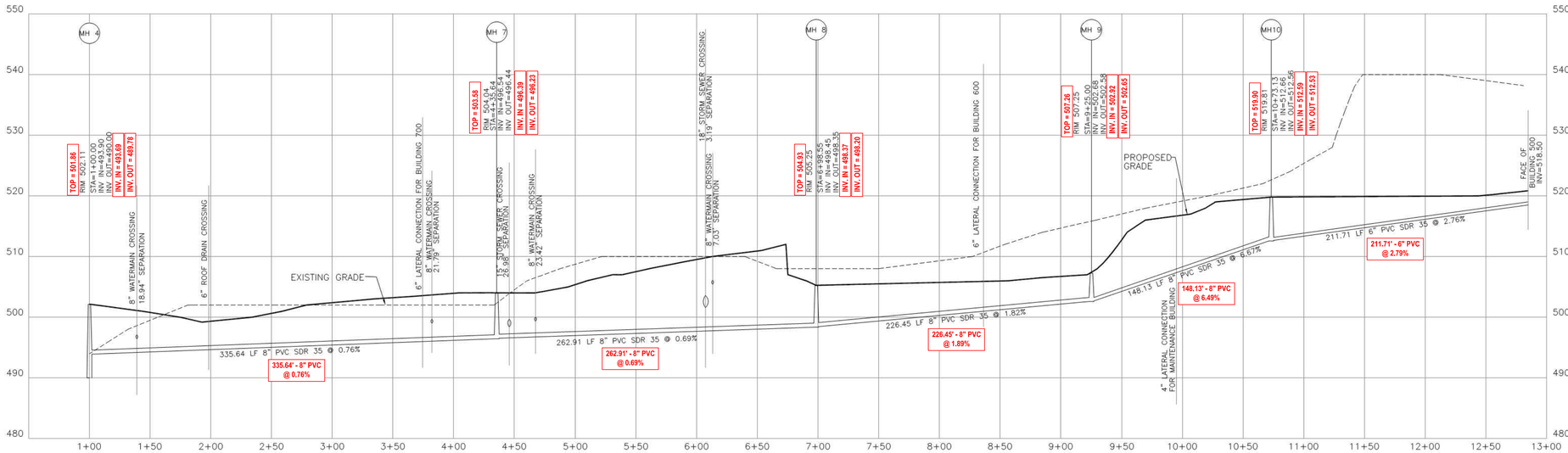
WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 100'
DATE 01/10/2020
REVISION DATES:

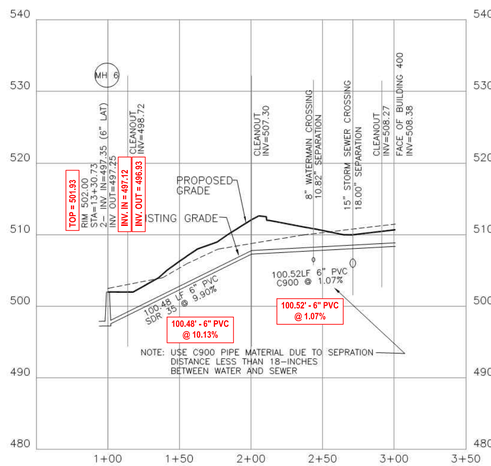
SHEET No.
C.017
09 OF 10



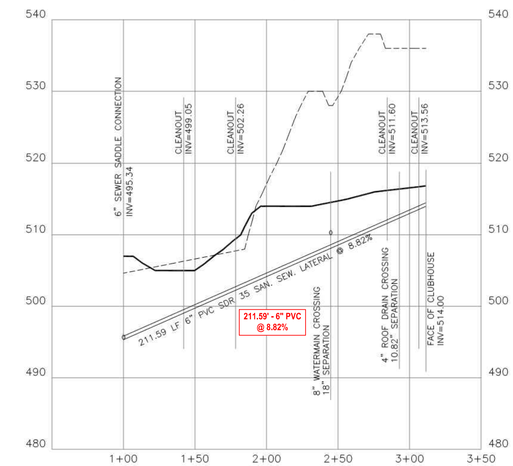
SANITARY SEWER PROFILE
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



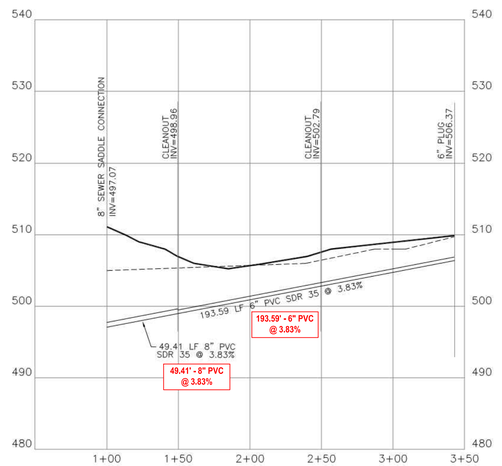
SANITARY SEWER PROFILE
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



BUILDING 400 SANITARY SEWER LATERAL
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



CLUBHOUSE SANITARY SEWER LATERAL
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'



BUILDING 100 SANITARY SEWER LATERAL
SCALE: HORIZONTAL: 1"=50', VERTICAL: 1"=10'

AS-BUILT SURVEY

TRIAD PROJECT
NUMBER: 07-20-0653

TRIAD ENGINEERING, INC.
200 AVIATION DRIVE
WINCHESTER, VA 22602
P 540.667.9300 F 540.667.2260
WWW.TRIADENG.COM

DAVID L. GRAHAM
REGISTERED
No. 2117
STATE OF WEST VIRGINIA
PROFESSIONAL SURVEYOR

8/13/2024
DAVID L. GRAHAM — DATE
LICENSE NO. 2117

FIELD WORK COMPLETED ON JUNE 28, 2024

AS-BUILT SURVEY INFORMATION BOXED UNLESS OTHERWISE NOTED

NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE

HAMRICK ENGINEERING, P.C.
Land Planning, Civil Engineering, Environmental
Richard W. Hamrick, Jr., P.E.
135 Lunsford Road
Suite 2C
Winchester, VA 22602
540.504.1007
hrhenge@verizon.net

DATE	REV. No.	DESCRIPTION

05/08/20

SANITARY SEWER PROFILES

WASHINGTON LANDING
CITY OF CHARLES TOWN
JEFFERSON COUNTY, WEST VIRGINIA

JOB No. 17-0182
SCALE 1" = 100'
DATE 01/10/2020
REVISION DATES:

SHEET No.
C.018
10 OF 10

CITY OF CHARLES TOWN
PUBLIC IMPROVEMENT BOND UNIT COST LIST AND BOND REDUCTION FORM

PROJECT NAME: Washington Landing PROJECT NUMBER:

PREPARED BY: Elizabeth Adamowicz FIRM: HATCH DATE: 09/22/2021

		BOND ESTIMATE			BOND REDUCTION		
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE
MOBILIZATION							
GENERAL							
Mobilization	LS	$6,250.00	1	$6,250.00			
TREES							
6' – 8' (1-2 in. Caliper)	EA	$400.00	4	$1,600.00			
STORM DRAINAGE							
STORM SEWER							
HDPE PIPE							
15" Pipe							
0'-8' Cut	LF	$50.25	1787	$89,796.75			
18" Pipe							
0'-8' Cut	LF	$66.00	871	$57,486.00			
24" Pipe							
0'-8' Cut	LF	$76.90	930	$71,517.00			
STORM STRUCTURES							
END SECTIONS							
End Section (ES-1), Concrete Pipe Size							
24"	EA	$755.00	2	$1,510.00			
MISCELLANEOUS INLETS							
NDS Plastic In-line	EA	$1,000.00	44	$44,000.00			
6'	EA	$1,351.00					
8'	EA	$2,189.00					
10'	EA	$3,269.00					
12'	EA	$4,763.00					
MISCELLANEOUS STORM							
STREET CONSTRUCTION							
ROADS AND PARKING							
Subbase, Aggregated Material							
Base Type I	SY/Inch Depth	$1.75	766	$8,043.00			
Depth (in Inches):	6						
Bituminous Concrete							
Base Course	SY/Inch Depth	$5.59	766	$10,704.85			
Depth (in Inches):	2.5						
Intermediate Course	SY/Inch Depth	$5.49					
Depth (in Inches):							
Top Course	SY/Inch Depth	$5.49	766	$6,308.01			
Depth (in Inches):	1.5						
Concrete Curbing							
Curb & Gutter CG6 & CG7	LF	$22.50	476	$10,710.00			
Miscellaneous							
Street Name Signs	EA	$435.00	1	$435.00			
Traffic Control Signs	EA	$375.00	1	$375.00			
Street Light (pole, bracket, light)	EA	$4,285.00	2	$8,570.00			
SIDEWALKS AND TRAILS							
Sidewalk							
Concrete 4" w/WWF, No base	SY	$45.23	175	$7,915.25			
Special Items							
Water and Sewer System	EA	$443,100.00	1	$443,100.00			
As Built (Record Drawings)	EA	$9,500.00	1	$9,500.00			
Subtotal				**$777,820.86**			

TOTAL ESTIMATE OF COMPLETED WORK:

TOTAL:	$777,820.86
+ 10% CONTINGENCIES:	$77,782.09
GRAND TOTAL:	**$855,602.95**
+ 4% INFLATION FACTOR:	$34,224.12

Planning Commission
101 East Washington Street
Charles Town, WV 25414

SCHEDULED

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

AGENDA ITEM (ID #)

Commission Review - BR2026-11 - Norborne-Glebe Phase 10B - Bond Reduction

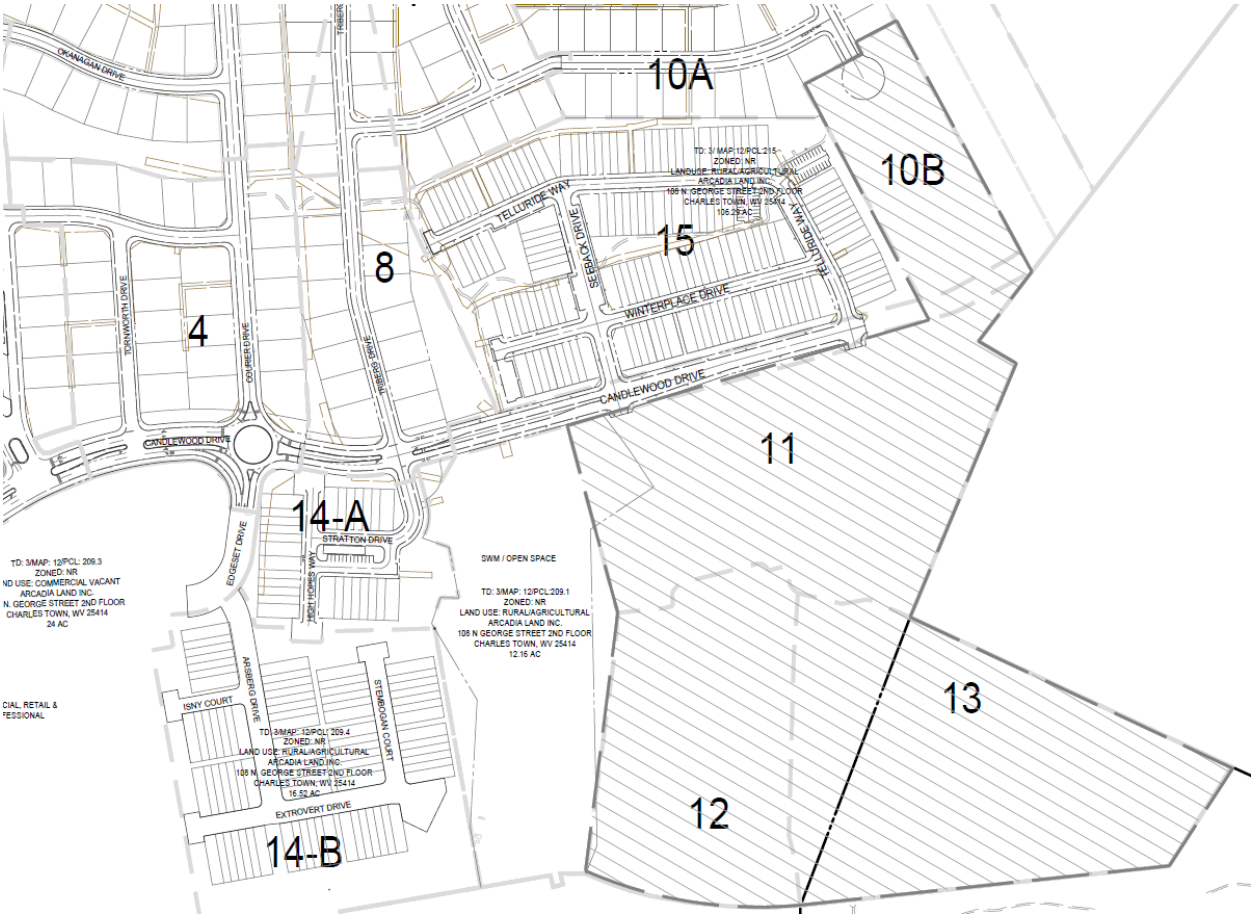
ATTACHMENTS:

- 1. Staff Report.pdf
- 2._Application.pdf
- 3._Estimate_Reduction_with_New_Cost_Sheet.pdf
- 4._Estimate_Reduction_with_Original_Cost_Sheet.pdf
- 5._KH_Review.pdf

Bond Reduction Request
BR2026-11

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Arcadia Land Inc.
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: A bond reduction

Norborne Glebe Phase 10B



BACKGROUND
The applicant is requesting a bond reduction of the performance bond. The preliminary plan for this phase was approved by the Planning Commission on February 26, 2024.

Upon review of the request the City Engineer, Kimley-Horn, has determined that the bond reduction is a reasonable request based on the work completed thus far.

AMOUNT DISCREPENCY
The bond was approved under the City's prior bond sheet, on April 16, 2024. The applicant's request has come in under the new bond sheet, where items cost more due to standard price inflation.

The approved bond was set for $1,079,934.12. Using that bond sheet and the amounts supplied by the applicant, their bond reduction would be from $1,079,934.12 to $65,805.28, which is a reduction of $1,014,1218.84.

Per the application the current bond amount is $2,164,323.98, seeking a reduction of $1,192,697.48 for a total reduced amount of $981,626.50

In requesting the bond reduction, the applicant put the values into the new bond spreadsheet rather than the old one, hence the discrepancy in the amounts.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. The Committee recommends that the applicant correct the bond estimate amounts prior to approval of the reduction by City Council.

STAFF RECOMMENDATION
Tabel Action so that the applicant can correct their bond sheet calculations

10BR

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

☐ Bond Initiation – No application fee

☑ Bond Reduction – No application fee

☐ Bond Extension – No application fee

☐ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE August 7, 2026

2. PROJECT NAME Norborne Glebe Subdivision- Phase 10B

Address N/A

3. APPLICANT'S NAME* Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

4. PROPERTY OWNER'S NAME Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Requesting performance bond reduction for Phase 10B, Norborne Glebe Subdivision

6. A) CURRENT BOND AMOUNT $2,164,323.98

B) PROPOSED BOND AMOUNT $981,626.50

C) CHANGE IN BONDED AMOUNT $1,182,697.48

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
3-12	215		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
SLD-2013-04	Norborne Glebe Phase 5	Approved	01/14/2014
SLD-2017-05	Norborne Glebe Phase 7-8	Approved	09/25/2018
SLD-2016-01	Norborne Glebe Phase 6	Approved	9/25/2018

9. BOND RELEASE – SUPPLEMENTAL MATERIALS REQUIRED:

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways,** a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

   Before a Performance Agreement and surety for private roadway construction shall be released, a Latent Defects Indemnification Agreement and Bond shall be provided by the applicant/Developer and approved by the Planning Commission. The guarantee provided by such Agreement and Bond must be for a period of two (2) years following the date of performance bond release, and must be in an amount equal to no less than 5% of the original performance bond estimate.

G. **Landscaping Surety** is required to ensure the landscaping shown on a Major S/LD plan is maintained for one (1) year. The one (1) year shall start from the date at which the surety for the site has been released, with the exception of this landscaping surety. The landscaping surety amount shall not be less than $5,000.00 or 10% of the total landscaping cost for the project, which ever is greater.

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

Signature of Applicant

Jay [illegible], as Treasurer Date 9/8/2026

Signature of Property Owner (If different than Applicant)

_____ Date _____

Please submit an original completed application to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Check No._____

Receipt No._____

Site Inspection Date:_____ Inspector:_____

Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

_____

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BOND ESTIMATE					BOND REDUCTION						City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	Final Price	QUANTITY COMPLETED (REDUCTION REQUEST)	UNIT COST	PREVIOUS QUANTITY COMPLETED	TOTAL QUANTITY COMPLETED (INCLUDING REDUCTION REQUEST)	EXTENSION	%COMPLETE	%APPROVED
MOBILIZATION GENERAL											
Mobilization	LS	$12,440.00	1	$12,440.00	1	$12,440.00		1		100%	
Field Office	EA	$3,490.00		$0.00		$0.00		0		0%	
Job Sign	EA	$1,340.00		$0.00		$0.00		0		0%	
SURVEYING											
Steel Pipe Property Corner Marker Incl. Survey	EA	$320.38	73	$23,387.74	58	$18,582.04		58		79%	
R.O.W MONUMENTS SURVEYED IN PLACE											
RM--1	EA	$825.00		$0.00		$0.00		0		0%	
RM--2	EA	$764.00		$0.00		$0.00		0		0%	
EARTHWORK EXCAVATION											
Regular Bulk used as Fill	CY	$4.50		$0.00		$0.00		0		0%	
Rock, Rip	CY	$51.50		$0.00		$0.00		0		0%	
Rock, Blast	CY	$55.00		$0.00		$0.00		0		0%	
BORROW MATERIAL											
Buy, Load, Haul 10 Mi. Select Material	CY	$42.00		$0.00		$0.00		0		0%	
Fill and Compaction of On-site Borrow	CY	$11.06		$0.00		$0.00		0		0%	
UNSUITABLE MATERIAL											
Load and Haul, 20 mi R/T	CY	$36.56		$0.00		$0.00		0		0%	
Dump Charge	CY	$62.50		$0.00		$0.00		0		0%	
Site Grading	SY	$1.25		$0.00		$0.00		0		0%	
CLEAR & GRUB											
Light	AC	$14,548.50	9	$130,936.50	9	$130,936.50		9		100%	
Heavy	AC	$26,699.49		$0.00		$0.00		0		0%	
LANDSCAPING											
Seeding	SY	$3.00	24487	$73,461.00	12243	$36,729.00		12243		50%	
Sodding	SY	$8.50	24487	$208,139.50	12243	$104,065.50		12243		50%	
PLANTING SHRUBS											
18"	EA	$70.00		$0.00		$0.00		0		0%	
24"	EA	$90.00		$0.00		$0.00		0		0%	
TREES											
6'-8' (1-2 in. Caliper)	EA	$400.00	124	$49,600.00		$0.00		0		0%	
8'-10' (2.5-3 in. Caliper)	EA	$700.00		$0.00		$0.00		0		0%	
Tree Protection	LF	$11.13		$0.00		$0.00		0		0%	
MISCELLANEOUS SITE IMPROVEMENTS											
Timber Wall (less than 6 ft)	LF	$325.00		$0.00		$0.00		0		0%	
Dry Rubble RW-1 (H=6')	LF	$450.00		$0.00		$0.00		0		0%	
Mortared Rubble RW-1A (H=6')	LF	$535.00		$0.00		$0.00		0		0%	
Concrete Gravity RW-2 (H=6')	LF	$589.50		$0.00		$0.00		0		0%	
Concrete Gravity RW-3 (H=6')	LF	$1,037.50		$0.00		$0.00		0		0%	
FENCING											
Std. Fence (H=5') FR-5	LF	$56.00		$0.00		$0.00		0		0%	
Farm Fence (H=5') FR-3A	LF	$37.50		$0.00		$0.00		0		0%	
Chain Link Fence (H=6') FR 2-B	LF	$62.00		$0.00		$0.00		0		0%	
Board Fence (H=6')	LF	$62.00		$0.00		$0.00		0		0%	
TOTS LOTS											
Tot Lot	EA	$16,495.00		$0.00		$0.00		0		0%	
STORM DRAINAGE											
STORM SEWER											
NOTE: All pipe unit prices include trench, excavation, bedding, pipe, & backfill											
Rock Excavation for All Pipe Types											
Less than 1,500 CY (Blasting)	CY	$110.00		$0.00		$0.00		0		0%	

More than 1,500 CY (Blasting)	CY	$90.00		$0.00		$0.00		0		0%	
Less than 1,500 CY (Hoe Ram)	CY	$220.00		$0.00		$0.00		0		0%	
More than 1,500 CY (Hoe Ram)	CY	$180.00		$0.00		$0.00		0		0%	
Trench De-Watering											
Trench De-Watering	LF	$4.00		$0.00		$0.00		0		0%	
RCP CLASS III ROUND T & G W/MASTIC											
12" Pipe (RCP III)											
0'-8' Cut	LF	$100.00		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$140.00		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$1.90		$0.00		$0.00		0		0%	
O-Ring	LF	$12.36		$0.00		$0.00		0		0%	
15" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00		$0.00		0		0%	
10'-16'	LF	$156.00		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$1.48		$0.00		$0.00		0		0%	
O-Ring	LF	$8.58		$0.00		$0.00		0		0%	
18" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$160.00		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$3.20		$0.00		$0.00		0		0%	
O-Ring	LF	$11.20		$0.00		$0.00		0		0%	
21" Pipe (RCP III)											
0'-8' Cut	LF	$115.00		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$174.80		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$4.40		$0.00		$0.00		0		0%	
O-Ring	LF	$20.80		$0.00		$0.00		0		0%	
24" Pipe (RCP III)											
0'- 10' Cut	LF	$140.00		$0.00		$0.00		0		0%	
10'-16'	LF	$196.00		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$5.04		$0.00		$0.00		0		0%	
O-Ring	LF	$22.40		$0.00		$0.00		0		0%	
27" Pipe (RCP III)											
0'- 10' Cut	LF	$123.20		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$195.03		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$6.40		$0.00		$0.00		0		0%	
O-Ring	LF	$24.00		$0.00		$0.00		0		0%	
30" Pipe (RCP III)											
0'- 8' Cut	LF	$169.40		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$256.66		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$9.60		$0.00		$0.00		0		0%	
O-Ring	LF	$27.60		$0.00		$0.00		0		0%	
33" Pipe (RCP III)											
0'- 10' Cut	LF	$240.00		$0.00		$0.00		0		0%	
10'-16'	LF	$333.00		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$13.50		$0.00		$0.00		0		0%	
O-Ring	LF	$45.80		$0.00		$0.00		0		0%	
36" Pipe (RCP III)											
0'-10' Cut	LF	$249.60		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$363.92		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$12.40		$0.00		$0.00		0		0%	
O-Ring	LF	$36.40		$0.00		$0.00		0		0%	
42" Pipe (RCP III)											
0'- 8' Cut	LF	$289.54		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$413.46		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$19.20		$0.00		$0.00		0		0%	
O-Ring	LF	$56.72		$0.00		$0.00		0		0%	
48" Pipe (RCP III)											
0'-10' Cut	LF	$320.52		$0.00		$0.00		0		0%	
10'-16'	LF	$442.31		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$20.00		$0.00		$0.00		0		0%	
O-Ring	LF	$69.36		$0.00		$0.00		0		0%	

54" Pipe (RCP III)											
0' - 10' Cut	LF	$420.00		$0.00			$0.00		0		0%
10' -16' Cut	LF	$541.38		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$30.00		$0.00			$0.00		0		0%
O-Ring	LF	$70.96		$0.00			$0.00		0		0%
60" Pipe (RCP III)											
0'-10' Cut	LF	$420.00		$0.00			$0.00		0		0%
10' -16' Cut	LF	$498.48		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$36.00		$0.00			$0.00		0		0%
O-Ring	LF	$77.84		$0.00			$0.00		0		0%
ELLIPTICAL PIPE - RCP CLASS III											
23"x14" (18" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00			$0.00		0		0%
10'-16' Cut	LF	$278.60		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$41.60		$0.00			$0.00		0		0%
O-Ring	LF	$109.80		$0.00			$0.00		0		0%
30"x19" (24" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00			$0.00		0		0%
10'-16' Cut	LF	$329.25		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$15.07		$0.00			$0.00		0		0%
O-Ring	LF	$109.79		$0.00			$0.00		0		0%
38"x24" (30" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00			$0.00		0		0%
10'-16' Cut	LF	$423.78		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$21.38		$0.00			$0.00		0		0%
O-Ring	LF	$129.92		$0.00			$0.00		0		0%
45"x29" (36" Equiv- RCP III)											
0'10' Cut	LF	$370.00		$0.00			$0.00		0		0%
10'-16' Cut	LF	$526.88		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$25.45		$0.00			$0.00		0		0%
O-Ring	LF	$119.63		$0.00			$0.00		0		0%
53"X 34" (42" Equiv-RCP III)											
0'12' Cut	LF	$370.00		$0.00			$0.00		0		0%
10'-18' Cut	LF	$528.36		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$38.87		$0.00			$0.00		0		0%
O-Ring	LF	$149.26		$0.00			$0.00		0		0%
60"x38" (48" Equiv- RCP III)											
0'12' Cut	LF	$370.00		$0.00			$0.00		0		0%
10'-18' Cut	LF	$543.90		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$46.46		$0.00			$0.00		0		0%
O-Ring	LF	$177.11		$0.00			$0.00		0		0%
HDPE PIPE											
8" Pipe											
0'-8' Cut	LF	$50.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$75.30		$0.00			$0.00		0		0%
12" Pipe											
0'-8' Cut	LF	$67.50		$0.00			$0.00		0		0%
8'-14' Cut	LF	$100.04		$0.00			$0.00		0		0%
15" Pipe											
0'-8' Cut	LF	$87.08	545	$47,458.60		545	$47,458.60		545		100%
8'-16' Cut	LF	$129.65		$0.00			$0.00		0		0%
18" Pipe											
0'-8' Cut	LF	$114.33	183	$20,922.39		183	$20,922.39		183		100%
8'-16' Cut	LF	$170.69	38	$6,486.22		38	$6,486.22		38		100%
24" Pipe											
0'-8' Cut	LF	$132.62	174	$23,075.88		174	$23,075.88		174		100%
8'-16' Cut	LF	$197.61		$0.00			$0.00		0		0%
30" Pipe											
0'-8' Cut	LF	$157.42	190	$29,909.80		190	$29,909.80		190		100%
8'-16' Cut	LF	$236.13		$0.00			$0.00		0		0%
36" Pipe											

0'-8' Cut	LF	$200.00		$0.00			$0.00		0		0%
8'-16' Cut	LF	$298.00		$0.00			$0.00		0		0%
42" Pipe											
0'-8' Cut	LF	$224.20		$0.00			$0.00		0		0%
8'-16' Cut	LF	$334.06		$0.00			$0.00		0		0%
48" Pipe											
0'-8' Cut	LF	$253.35		$0.00			$0.00		0		0%
8'-16' Cut	LF	$377.49		$0.00			$0.00		0		0%
STORM STRUCTURES											
END SECTIONS											
End Sections (ES-1), Concrete Pipe Size											
15"	EA	$1,389.00		$0.00			$0.00		0		0%
18"	EA	$1,583.46		$0.00			$0.00		0		0%
21"	EA	$1,805.14		$0.00			$0.00		0		0%
24"	EA	$2,057.86		$0.00			$0.00		0		0%
27"	EA	$2,345.97		$0.00			$0.00		0		0%
30"	EA	$2,674.40		$0.00			$0.00		0		0%
36"	EA	$3,048.82		$0.00			$0.00		0		0%
42"	EA	$3,558.50		$0.00			$0.00		0		0%
48"	EA	$4,056.69		$0.00			$0.00		0		0%
54"	EA	$4,624.63		$0.00			$0.00		0		0%
60"	EA	$5,272.07		$0.00			$0.00		0		0%
ENDWALLS											
EW-1 (Pre-Cast) Round Pipe Size											
15"	EA	$2,433.00		$0.00			$0.00		0		0%
18"	EA	$2,724.96		$0.00			$0.00		0		0%
24"	EA	$3,051.96		$0.00			$0.00		0		0%
30"	EA	$3,418.19		$0.00			$0.00		0		0%
36"	EA	$3,828.37		$0.00			$0.00		0		0%
EW-1 Cast in Place [Round Pipe Size]											
15"	EA	$2,591.15		$0.00			$0.00		0		0%
18"	EA	$2,902.08		$0.00			$0.00		0		0%
24"	EA	$3,250.33		$0.00			$0.00		0		0%
30"	EA	$3,640.37		$0.00			$0.00		0		0%
36"	EA	$4,077.22		$0.00			$0.00		0		0%
EW-1A (Pre-Cast) Elliptical Pipe Size											
23" X 14" (18")	EA	$1,335.00		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,495.20		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$1,879.50		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,105.04		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$2,791.50		$0.00			$0.00		0		0%
EW-1A (Cast in Place) Elliptical Pipe Size											
23" X 14" (18")	EA	$1,318.50		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,318.50		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$2,257.00		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,257.00		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$3,217.50		$0.00			$0.00		0		0%
EW-2 (PreCast) Round Size Pipe Size											
42"	EA	$8,324.00		$0.00			$0.00		0		0%
48"	EA	$9,322.88		$0.00			$0.00		0		0%
54"	EA	$10,441.63		$0.00			$0.00		0		0%
60"	EA	$11,694.62		$0.00			$0.00		0		0%
72"	EA	$12,675.50		$0.00			$0.00		0		0%
84"	EA	$14,196.56		$0.00			$0.00		0		0%
EW-2 (Cast in Place) Round Size Pipe Size											
42"	EA	$9,255.50		$0.00			$0.00		0		0%
48"	EA	$10,366.16		$0.00			$0.00		0		0%
54"	EA	$11,610.10		$0.00			$0.00		0		0%
60"	EA	$13,003.31		$0.00			$0.00		0		0%
72"	EA	$15,747.00		$0.00			$0.00		0		0%
84"	EA	$17,636.64		$0.00			$0.00		0		0%

EW-6PC [Double Pipe] Pipe Size											
2-15"	EA	$2,123.00		$0.00			$0.00		0		0%
2-18"	EA	$2,377.76		$0.00			$0.00		0		0%
2-24"	EA	$2,663.09		$0.00			$0.00		0		0%
2-30"	EA	$4,096.00		$0.00			$0.00		0		0%
2-36"	EA	$4,587.52		$0.00			$0.00		0		0%
MANHOLES											
Standard Brick Manhole Std Frame & Cover (MH-1)											
6' Depth	EA	$6,048.00		$0.00			$0.00		0		0%
Depth Below 6'	VF	$230.00		$0.00			$0.00		0		0%
Standard Precast Manhole Std Frame & Cover (MH-2)		$5,337.00	2	$10,674.00		2	$10,674.00		2		100%
Additional Cost (Amount in parentheses to be added to the above unit costs)											
Watertight Fr/Cover (Add 110)	EA	$579.00		$0.00			$0.00		0		0%
Heavy Duty Fr/ Cover (Add 82)	VF	$599.00		$0.00			$0.00		0		0%
Drop Inlets											
Cast in Place 48"											
Drop Inlet (DI-1) 12"-24" Pipe0-10 VF	EA	$7,690.00	3	$23,070.00		3	$23,070.00		3		100%
Drop Inlet (DI-1A) 12"-24" Pipe10-20 VF	EA	$7,690.00		$0.00			$0.00		0		0%
Drop Inlet (DI-2A) 12"-24" Pipe0-10 VF, 10' throat	EA	$9,458.70		$0.00			$0.00		0		0%
Drop Inlet (DI-2A) 12"-24" Pipe10-20 VF, 10' throat	EA	$11,634.20		$0.00			$0.00		0		0%
Curb Drop Inlets											
Curb Drop Inlet (DI-3A)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$7,460.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3AA)											
12"-30" Pipe (Invert Depth (H) =8'-	**EA**	$9,772.60		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3B) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,758.40		$0.00			$0.00		0		0%
6'	EA	$8,534.24		$0.00			$0.00		0		0%
8'	EA	$9,387.66	4	$37,550.64		4	$37,550.64		4		100%
10'	EA	$10,326.43		$0.00			$0.00		0		0%
12'	EA	$11,359.07	4	$45,436.28		4	$45,436.28		4		100%
16'	EA	$12,494.98		$0.00			$0.00		0		0%
20'	EA	$13,744.48		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3BB) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,680.82		$0.00			$0.00		0		0%
6'	EA	$8,448.90		$0.00			$0.00		0		0%
8'	EA	$9,293.79	1	$9,293.79		1	$9,293.79		1		100%
10'	EA	$10,223.17	1	$10,223.17		1	$10,223.17		1		100%
12'	EA	$11,245.48		$0.00			$0.00		0		0%
16'	EA	$12,370.03		$0.00			$0.00		0		0%
20'	EA	$13,607.03		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3C) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$7,204.61		$0.00			$0.00		0		0%
8'	EA	$7,925.07	2	$15,850.14		2	$15,850.14		2		100%
10'	EA	$8,717.57		$0.00			$0.00		0		0%
12'	EA	$9,589.33		$0.00			$0.00		0		0%
16'	EA	$10,548.26		$0.00			$0.00		0		0%
20'	EA	$11,603.09		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3CC) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$8,573.48		$0.00			$0.00		0		0%
8'	EA	$9,430.83		$0.00			$0.00		0		0%
10'	EA	$10,373.91		$0.00			$0.00		0		0%
12'	EA	$11,411.30		$0.00			$0.00		0		0%
16'	EA	$12,552.43		$0.00			$0.00		0		0%
20'	EA	$13,807.68		$0.00			$0.00		0		0%

Curb Drop Inlet (DI-3D)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$6,430.11		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3DD)											
12"-30" Pipe (Invert Depth	**EA**	$7,587.53		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3E) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,460.00		$0.00		$0.00		0		0%	
8'	EA	$7,982.20		$0.00		$0.00		0		0%	
10'	EA	$8,540.95		$0.00		$0.00		0		0%	
12'	EA	$9,138.82		$0.00		$0.00		0		0%	
16'	EA	$9,778.54		$0.00		$0.00		0		0%	
20'	EA	$10,463.04		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3EE) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$11,509.34		$0.00		$0.00		0		0%	
8'	EA	$12,314.99		$0.00		$0.00		0		0%	
10'	EA	$13,177.04		$0.00		$0.00		0		0%	
12'	EA	$14,099.44		$0.00		$0.00		0		0%	
16'	EA	$15,086.40		$0.00		$0.00		0		0%	
20'	EA	$16,142.44		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3F) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$6,855.74		$0.00		$0.00		0		0%	
8'	EA	$7,335.64		$0.00		$0.00		0		0%	
10'	EA	$7,849.14		$0.00		$0.00		0		0%	
12'	EA	$8,398.58		$0.00		$0.00		0		0%	
16'	EA	$8,986.48		$0.00		$0.00		0		0%	
20'	EA	$9,615.53		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3FF) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$14,671.28		$0.00		$0.00		0		0%	
8'	EA	$15,698.27		$0.00		$0.00		0		0%	
10'	EA	$16,797.15		$0.00		$0.00		0		0%	
12'	EA	$17,972.95		$0.00		$0.00		0		0%	
16'	EA	$19,231.06		$0.00		$0.00		0		0%	
20'	EA	$20,577.23		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4A) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4AA) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4B) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$8,802.77		$0.00		$0.00		0		0%	
8'	EA	$9,418.96		$0.00		$0.00		0		0%	
10'	EA	$10,078.29		$0.00		$0.00		0		0%	
12'	EA	$10,783.77		$0.00		$0.00		0		0%	
16'	EA	$11,538.64		$0.00		$0.00		0		0%	
20'	EA	$12,346.34		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4BB) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$17,429.48		$0.00		$0.00		0		0%	
8'	EA	$18,649.55		$0.00		$0.00		0		0%	
10'	EA	$19,955.02		$0.00		$0.00		0		0%	
12'	EA	$21,351.87		$0.00		$0.00		0		0%	
16'	EA	$22,846.50		$0.00		$0.00		0		0%	
20'	EA	$24,445.75		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4C) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$9,418.96		$0.00		$0.00		0		0%	
10'	EA	$10,078.29		$0.00		$0.00		0		0%	
12'	EA	$10,783.77		$0.00		$0.00		0		0%	
16'	EA	$11,538.64		$0.00		$0.00		0		0%	
20'	EA	$12,346.34		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4CC) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
8'	EA	$22,417.13		$0.00		$0.00		0		0%	
10'	EA	$23,986.33		$0.00		$0.00		0		0%	
12'	EA	$25,665.38		$0.00		$0.00		0		0%	
16'	EA	$27,461.95		$0.00		$0.00		0		0%	

20'	EA	$29,384.29		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4D)											
36"-48" Pipe (Invert Depth (H) =8'16') Inlet Length 4'	EA	$8,279.27		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4DD)											
36"-48" Pipe (Invert Depth (H)	**EA**	$16,392.95		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4E) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$9,016.12		$0.00			$0.00		0		0%
8'	EA	$9,647.25		$0.00			$0.00		0		0%
10'	EA	$10,322.56		$0.00			$0.00		0		0%
12'	EA	$11,045.14		$0.00			$0.00		0		0%
16'	EA	$11,818.30		$0.00			$0.00		0		0%
20'	EA	$12,645.58		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4EE) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
6'	EA	$15,688.06		$0.00			$0.00		0		0%
8'	EA	$16,786.22		$0.00			$0.00		0		0%
10'	EA	$17,961.26		$0.00			$0.00		0		0%
12'	EA	$19,218.54		$0.00			$0.00		0		0%
16'	EA	$20,563.84		$0.00			$0.00		0		0%
20'	EA	$22,003.31		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4F) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$10,040.36		$0.00			$0.00		0		0%
10'	EA	$10,743.18		$0.00			$0.00		0		0%
12'	EA	$11,495.20		$0.00			$0.00		0		0%
16'	EA	$12,299.87		$0.00			$0.00		0		0%
20'	EA	$13,160.86		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4FF) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
8'	EA	$15,140.86		$0.00			$0.00		0		0%
10'	EA	$16,200.72		$0.00			$0.00		0		0%
12'	EA	$17,334.77		$0.00			$0.00		0		0%
16'	EA	$18,548.20		$0.00			$0.00		0		0%
20'	EA	$19,846.57		$0.00			$0.00		0		0%
Median Drop Inlets - CIP											
Median Drop Inlets (DI-6A) 12"-24"Pipe Inlet (H=8')	EA	$6,032.00		$0.00			$0.00		0		0%
Median Drop Inlets (DI-6B) 12"-24"Pipe Inlet (H=8')	EA	$6,080.00		$0.00			$0.00		0		0%
Median Drop Inlets (DI-6C) 30"-48"Pipe Inlet (H=10')	EA	$7,737.50		$0.00			$0.00		0		0%
Median Drop Inlets (DI-6D) 30"-48"Pipe Inlet (H=10')	EA	$7,805.00		$0.00			$0.00		0		0%
Median Drop Inlets (DI-7) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00			$0.00		0		0%
Median Drop Inlets (DI-7A) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00			$0.00		0		0%
Median Drop Inlets (DI-7B) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00			$0.00		0		0%
MISCELLANEOUS INLETS											
Median Drop Inlets (DI-5) Type III Top 12"-42" Pipe Inlet (H=8')	EA	$6,569.08		$0.00			$0.00		0		0%
Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)		$5,969.49		$0.00			$0.00		0		0%
Add Yard Inlet Apron	THROAT	$320.54		$0.00			$0.00		0		0%

Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)	EA	$6,444.64		$0.00			$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00			$0.00		0		0%	
Culverts												
Single Box Culvert (BC-1A) Fills to 25'												
4' X 4'	LF	$473.00		$0.00			$0.00		0		0%	
5' X 5'	LF	$563.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$689.00		$0.00			$0.00		0		0%	
8' X 8'	LF	$944.00		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,159.00		$0.00			$0.00		0		0%	
Double Box Culvert (BC-2b) Fills to 25'												
4' X 4'	LF	$792.40		$0.00			$0.00		0		0%	
5' X 5'	LF	$987.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,195.60		$0.00			$0.00		0		0%	
8' X 8'	LF	$1,607.20		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,975.40		$0.00			$0.00		0		0%	
Oversized Single Box Culvert (BBC-1) Fills to 25'												
12' X 6'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 8'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 10'	LF	$1,771.50		$0.00			$0.00		0		0%	
12' X 12'	LF	$1,771.50		$0.00			$0.00		0		0%	
Triple Box Culvert (BC-3B) Fills to 25'												
4' X 4'	LF	$1,129.55		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,399.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,755.95		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,367.85		$0.00			$0.00		0		0%	
10' X 10'	LF	$3,607.60		$0.00			$0.00		0		0%	
Quadruple Box Culvert (BC-4B) Fills to 25'												
4' X 4'	LF	$1,431.15		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,776.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$2,208.35		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,170.65		$0.00			$0.00		0		0%	
10' X 10'	LF	$4,110.75		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (1 Side Only) Height of Box												
4'	EA	$926.50		$0.00			$0.00		0		0%	
5'	EA	$1,390.00		$0.00			$0.00		0		0%	
6'	EA	$1,853.50		$0.00			$0.00		0		0%	
8'	EA	$3,426.50		$0.00			$0.00		0		0%	
10'	EA	$4,558.00		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (BBC-W) Height of Box												
6'	EA	$1,817.00		$0.00			$0.00		0		0%	
8'	EA	$3,007.50		$0.00			$0.00		0		0%	
10'	EA	$4,497.50		$0.00			$0.00		0		0%	
12'	EA	$6,567.00		$0.00			$0.00		0		0%	
MISCELLANEOUS STORM												
Connection to Existing Structure												
15"-36" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
Casing Pipe, Bore and Jack (3/8" wall)												
22" ID (6"-8" Carrier Pipe)	LF	$885.71		$0.00			$0.00		0		0%	
24" ID (10" Carrier Pipe)	LF	$971.91		$0.00			$0.00		0		0%	
30" ID (12" Carrier Pipe)	LF	$1,226.20		$0.00			$0.00		0		0%	
Plug Pipe												
6"-12" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
15"-36" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$574.50		$0.00			$0.00		0		0%	
Pavement Edge Pipe												
Standard Pipe Underdrain	LF	$20.50		$0.00			$0.00		0		0%	

RipRap											
Dry, Class I, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Dry, Class II, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Grouted, Class I, 18"	SY	$84.00		$0.00		$0.00		0		0%	
Filter Fabric											
Class I	SY	$4.13		$0.00		$0.00		0		0%	
Class II	SY	$4.13		$0.00		$0.00		0		0%	
Class III	SY	$4.13		$0.00		$0.00		0		0%	
Gabions (No excavations)											
Mattress	CY	$237.50		$0.00		$0.00		0		0%	
Revetment	CY	$237.50		$0.00		$0.00		0		0%	
Wall	CY	$237.50		$0.00		$0.00		0		0%	
Paved Ditch (4" Thick)											
Concrete (Non-reinforced)	SY	$94.50		$0.00		$0.00		0		0%	
Bituminous Concrete (4")	SY	$43.50		$0.00		$0.00		0		0%	
Sodded Ditch											
Sodded Ditch(Incl Fine Grading)	SY	$15.03		$0.00		$0.00		0		0%	
STREET CONSTRUCTION											
ROADS AND PARKING											
Soil Stabilization											
Cement 6%	SY/ Inch	$20.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Lime 6%	SY/ Inch	$14.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Subbase, Aggregated Material											
Base Type I	SY/ Inch	$12.95	6631	$686,971.60	6631	$85,871.45		6631		100%	
Depth (in Inches):	Depth	8			8						
Bituminous Concrete											
Base Course	SY/ Inch	$7.00	6631	$139,251.00	6631	$139,251.00		6631		100%	
Depth (in Inches):	Depth	3			3						
Intermediate Course	SY/ Inch	$7.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Top Course	SY/ Inch	$7.00	6631	$92,834.00		$0.00		0		0%	
Depth (in Inches):	Depth	2			2						
Prime Coat	SY	$1.38		$0.00		$0.00		0		0%	
Tack Coat	SY	$1.38		$0.00		$0.00		0		0%	
Driveway Restoration											
4" Concrete & 4" Gravel	SY	$75.00		$0.00		$0.00		0		0%	
2" S-5 & 7 6" Gravel	SY	$29.98		$0.00		$0.00		0		0%	
Shoulders, Type I											
Aggregated Base, 4"	SY	$15.00	1680	$25,200.00	1680	$25,200.00		1680		100%	
Concrete Curbing											
Curb & Gutter CG6 & CG7	LF	$31.50	3667	$115,510.50	3667	$115,510.50		3667		100%	
Curb Cut, CG-12 DetectableSurf.	EA	$1,044.00	7	$7,308.00	7	$7,308.00		7		100%	
Entrances/ Driveways											
Commercial Entrance CG-11	SY	$87.00		$0.00		$0.00		0		0%	
Commercial Entrance CG-13	SY	$87.00		$0.00		$0.00		0		0%	
Residential Driveway Apron	EA	$2,254.50		$0.00		$0.00		0		0%	
Guardrails											
Std. Blocked-out W beam(GR2)	LF	$53.50		$0.00		$0.00		0		0%	
Std. W beam, Weak Post GR8	LF	$53.50		$0.00		$0.00		0		0%	
Terminal, GR-6 (L=12'-6")	EA	$3,880.50		$0.00		$0.00		0		0%	
Terminal, GR-7 (L=6'-3")	EA	$3,880.50		$0.00		$0.00		0		0%	
Type I, GR-8 Terminal (L=25')	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, GR-8 Terminal(L=13'-6")	EA	$1,701.00		$0.00		$0.00		0		0%	
Terminal, MB-4 (L=37'-6")	EA	$3,580.50		$0.00		$0.00		0		0%	
Type I, MB-5 Terminal(L=27'-1)	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, MB-5 Terminal(L=13'-6)	EA	$1,701.00		$0.00		$0.00		0		0%	
Miscellaneous											
Trash enclosure - Brick 6' high	LF	$7,336.50		$0.00		$0.00		0		0%	

Reinforced Concrete Pad 6" to 8"	SY	$150.00		$0.00			$0.00		0		0%	
Striping 4" width (VDOT Type	LF	$2.50		$0.00			$0.00		0		0%	
B)												
Concrete Wheel Stops	EA	$90.00		$0.00			$0.00		0		0%	
Parking Lot Striping	EA	$50.00		$0.00			$0.00		0		0%	
Sign Island	EA	$850.00		$0.00			$0.00		0		0%	
Traffic Barricade	EA	$133.50		$0.00			$0.00		0		0%	
Street Name Signs	EA	$594.50	2	$1,189.00		2	$1,189.00		2		100%	
Traffic Control Signs	EA	$512.00	3	$1,536.00		3	$1,536.00		3		100%	
Street Light (pole, bracket,light)	EA	$5,938.00	18	$106,884.00		18	$106,884.00		18		100%	
SIDEWALKS AND TRAILS												
Sidewalk												
Concrete 4" w/WWF, No base	SY	$58.50		$0.00			$0.00		0		0%	
Bitum. Conc, 2" w/4" Base	SY	$42.00		$0.00			$0.00		0		0%	
4" Conc, No Reinf., No Base	SY	$58.50		$0.00			$0.00		0		0%	
HANDRAIL												
Handrail 3 Rail 1-1/4" #4 Finish	LF	$143.00		$0.00			$0.00		0		0%	
Wood Chip Trail												
Trails(Incl Excavation &	SY	$77.00		$0.00			$0.00		0		0%	
Grading) Wood chip, 4' wide	SY	$21.00		$0.00			$0.00		0		0%	
Bituminous Trail												
6' to 10' wide	SY	$22.00		0			$0.00		0		0%	
CRITICAL SLOPE STABILIZATION												
Paved Flume	SY	$100.00		$0.00			$0.00		0		0%	
Stmwtr Conc Channel-Excav	SY	$97.00		$0.00			$0.00		0		0%	
ADD Grass Lined-seeded	SY	$19.00		$0.00			$0.00		0		0%	
ADD Grass Lined-sodded	SY	$26.00		$0.00			$0.00		0		0%	
Outlet Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Concrete 4"	SY	$70.00		$0.00			$0.00		0		0%	
Level Spreader	SY	$5.77		$0.00			$0.00		0		0%	
Struc Streambank Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Gabions	CY	$255.00		$0.00			$0.00		0		0%	
Vegetative Erosion Control												
Sodding incl Fertilizing –Banks	SY	$9.00		$0.00			$0.00		0		0%	
Sodding incl Fertilizing – Flat	SY	$9.00		$0.00			$0.00		0		0%	
Seeding incl Fertilizing	SY	$3.00		$0.00			$0.00		0		0%	
Soding W/Soil Treat &Watering	SY	$9.00		$0.00			$0.00		0		0%	
Seeding W/Soil Treat &Watering	SY	$3.00		$0.00			$0.00		0		0%	
Straw Mulch w/Tack	SY	$2.00		$0.00			$0.00		0		0%	
Jute Mesh	SY	$2.00		$0.00			$0.00		0		0%	
SPECIAL ITEMS												
FEMA ProcessingLOMR/CLOMR	EA	$10,240.00		$0.00			$0.00		0		0%	
As Built (Record Drawings)	EA	$12,967.50	1	$12,967.50		0.75	$9,725.63		0.75		75%	
SWM/BMP POND	LS	$0.00		$0.00			$0.00		0		0%	
SIGNALIZATION	LS	$0.00		$0.00			$0.00		0		0%	

EFFECTIVE PERIOD OF BOND (IN MONTHS)	
TOTAL ESTIMATE OF COMPLETED WORK	**$1,967,567.25**
+ 10% CONTINGENCY	**$196,756.73**
GRAND TOTAL	**$2,164,323.98**
FINAL PRICE (+ 4% ANNUAL INTEREST)	**$2,164,323.98**

EFFECTIVE PERIOD OF BOND (IN MONTHS)	
TOTAL BOND REDUCTION REQUEST	**$1,075,179.53**
+ 10% CONTINGENCY	**$107,517.95**
GRAND TOTAL	**$1,182,697.48**
FINAL BOND REDUCTION REQUEST (+4% ANNUAL INTEREST)	**$1,182,697.48**

TOTAL ESTIMATED - BOND REMAINING	**$981,626.50**

CITY OF CHARLES TOWN

PERFORMANCE BOND UNIT COST LIST AND BOND REDUCTION FORM

This form shall be used to calculate the amount of the bond required to guarantee public improvements to be constructed under the approved Final S/LD Application. This form shall also be used in calculating the amount of bond reductions to be approved by the Planning Commission. **Note**: No bond shall be reduced until completion of at least thirty (30) percent of the physical Improvements secured by the bond.

PROJECT NAME:	Norborne Glebe - Phase 10B
PREPARED BY:	Greenway Engineering
DATE OF SUBMISSION	12/19/2023, Revised 03/08/2024

BOND ESTIMATE					BOND REDUCTION			City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
MOBILIZATION GENERAL								
Mobilization	LS	$6,250.00	1	$6,250.00	1.0	$6,250.00	0%	
Field Office	EA	$3,000.00			0.0	$0.00	0%	
Job Sign	EA	$1,150.00			0.0	$0.00	0%	
SURVEYING								
Steel Pipe Property Corner Marker Incl. Survey	EA	$275.00	73	$20,075.00	58.0	$15,950.00	0%	
R.O.W. MONUMENTS SURVEYED IN PLACE								
RM -- 1	EA	$825.00			0.0	$0.00	0%	
RM -- 2	EA	$575.00			0.0	$0.00	0%	
EARTHWORK EXCAVATION								
Regular Bulk used as Fill	CY	3.86	4,084.00	$15,764.24	0.0	$0.00	0%	
Rock, Rip	CY	17.30			0.0	$0.00	0%	
Rock, Blast	CY	38.48			0.0	$0.00	0%	
BORROW MATERIAL								
Buy, Load, Haul 10 Mi. Select Material	CY	28.90			0.0	$0.00	0%	
Fill and Compaction of On-site Borrow	CY	5.95	704.00	$4,188.80	0.0	$0.00	0%	
UNSUITABLE MATERIAL								
Load and Haul, 20 mi R/T	CY	$21.95			0.0	$0.00	0%	
Dump Charge	CY	37.50			0.0	$0.00	0%	
Site Grading	SY	0.75			0.0	$0.00	0%	
CLEAR & GRUB								
Light	AC	6,675.00	9	$60,075.00	9.0	$60,075.00	0%	
Moderate	AC	9,750.00			0.0	$0.00	0%	

BOND ESTIMATE					BOND REDUCTION			City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
Heavy	AC	$12,250.00			0.0	$0.00	0%	
Very Heavy	AC	$14,250.00			0.0	$0.00	0%	
LANDSCAPING								
Seeding	SY	$0.77	24,487.00	$18,854.99	12,243.0	$9,427.11	0%	
Sodding	SY	$3.64	24,487.00	$89,132.68	12,243.0	$44,564.52	0%	
PLANTING SHRUBS								
18”	EA	$40.00			0.0	$0.00	0%	
24”	EA	$70.00			0.0	$0.00	0%	
TREES								
6’ – 8’ (1-2 in. Caliper)	EA	$400.00	140	$56,000.00	0.0	$0.00	0%	
8’ – 10’ (2.5-3 in. Caliper)	EA	$700.00			0.0	$0.00	0%	
Tree Protection	LF	$9.00			0.0	$0.00	0%	
MISCELLANEOUS SITE IMPROVEMENTS								
RETAINING WALLS								
Timber Wall (Less Than 6 ft)	LF	$325.00			0.0	$0.00	0%	
Dry Rubble RW-1 (H=6')	LF	$450.00			0.0	$0.00	0%	
Mortared Rubble RW-1A (H=6')	LF	$535.00			0.0	$0.00	0%	
Concrete Gravity RW-2 (H=6')	LF	$339.00			0.0	$0.00	0%	
Concrete Gravity RW-3 (H=6')	LF	$378.00			0.0	$0.00	0%	
FENCING								
Std. Fence (H=5’) FR-5	LF	$9.31			0.0	$0.00	0%	
Farm Fence (H=5’) FR-3A	LF	$10.90			0.0	$0.00	0%	
Chain Link Fence (H=6’)FR 2-B	LF	$14.52			0.0	$0.00	0%	
Board Fence (H=6’)	LF	$19.35			0.0	$0.00	0%	
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
TOT LOTS								
Tot Lot	EA	$16,495.00			0.0	$0.00	0%	
STORM DRAINAGE								
STORM SEWER								
NOTE: All pipe unit prices include trench, excavation, bedding, pipe, & backfill								

Rock Excavation for All Pipe Types									
Less than 1,500 CY (Blasting)	CY	$110.00				0.0	$0.00	0%	
More than 1,500 CY (Blasting)	CY	$90.00				0.0	$0.00	0%	
Less than 1,500 CY (Hoe Ram)	CY	$135.00				0.0	$0.00	0%	
More than 1,500 CY (Hoe Ram)	CY	$110.00				0.0	$0.00	0%	
Trench De-watering									
Trench De-watering	LF	$2.95				0.0	$0.00	0%	
RCP CLASS III ROUND T & G W/MASTIC									
12" Pipe (RCP III)									
0' – 8' Cut	LF	$44.50				0.0	$0.00	0%	
8' – 14' Cut	LF	$62.50				0.0	$0.00	0%	
Add cost for Class IV	LF	$0.85				0.0	$0.00	0%	
O-Ring	LF	$5.50				0.0	$0.00	0%	
15" Pipe (RCP III)									
0' – 10' Cut	LF	$49.75				0.0	$0.00	0%	
10' – 16'	LF	$77.50				0.0	$0.00	0%	
Add Cost for Class IV	LF	$0.95				0.0	$0.00	0%	
O-Ring	LF	$5.50				0.0	$0.00	0%	
18" Pipe (RCP III)									
0' – 10' Cut	LF	$50.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$80.00				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Add Cost for Class IV	LF	$2.00				0.0	$0.00	0%	
O-Ring	LF	$7.00				0.0	$0.00	0%	
21" Pipe (RCP III)									
0' – 10' Cut	LF	$57.50				0.0	$0.00	0%	
10' – 16' Cut	LF	$87.50				0.0	$0.00	0%	
Add Cost for Class IV	LF	$2.75				0.0	$0.00	0%	
O-Ring	LF	$13.00				0.0	$0.00	0%	
24" Pipe (RCP III)									
0' – 10' Cut	LF	$67.50				0.0	$0.00	0%	
10' – 16' Cut	LF	$95.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$3.15				0.0	$0.00	0%	
O-Ring	LF	$14.00				0.0	$0.00	0%	
27" Pipe (RCP III)									
0' – 10' Cut	LF	$60.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$95.00				0.0	$0.00	0%	

Add Cost for Class IV	LF	$4.00				0.0	$0.00	0%	
O-Ring	LF	$15.00				0.0	$0.00	0%	
30" Pipe (RCP III)									
0' – 10' Cut	LF	$82.50				0.0	$0.00	0%	
10' – 16' Cut	LF	$125.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$6.00				0.0	$0.00	0%	
O-Ring	LF	$17.25				0.0	$0.00	0%	
33" Pipe (RCP III)									
0' – 12' Cut	LF	$115.00				0.0	$0.00	0%	
10' – 18' Cut	LF	$160.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$6.50				0.0	$0.00	0%	
O-Ring	LF	$21.95				0.0	$0.00	0%	
36" Pipe (RCP III)									
0' – 12' Cut	LF	$120.00				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
12' – 18' Cut	LF	$175.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$7.75				0.0	$0.00	0%	
O-Ring	LF	$22.75				0.0	$0.00	0%	
42" Pipe (RCP III)									
0' – 12' Cut	LF	$140.00				0.0	$0.00	0%	
12' – 18' Cut	LF	$200.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$12.00				0.0	$0.00	0%	
O-Ring	LF	$35.45				0.0	$0.00	0%	
48" Pipe (RCP III)									
0' – 12' Cut	LF	$155.00				0.0	$0.00	0%	
12' – 18' Cut	LF	$215.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$12.50				0.0	$0.00	0%	
O-Ring	LF	$43.35				0.0	$0.00	0%	
54" Pipe (RCP III)									
0' – 12' Cut	LF	$190.00				0.0	$0.00	0%	
12' – 18' Cut	LF	$275.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$18.75				0.0	$0.00	0%	
O-Ring	LF	$44.45				0.0	$0.00	0%	
60" Pipe (RCP III)									
0' – 12' Cut	LF	$225.00				0.0	$0.00	0%	
12' – 18' Cut	LF	$335.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$22.50				0.0	$0.00	0%	
O-Ring	LF	$48.65				0.0	$0.00	0%	
ELLIPTICAL PIPE – RCP CLASS III									

23" X 14" (18" Equiv-RCP III									
0' – 10' Cut	LF	$75.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$110.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$16.45				0.0	$0.00	0%	
O-Ring	LF	$43.35				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
30" X 19" (24" Equiv-RCP III)									
0' – 10' Cut	LF	$90.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$130.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$5.95				0.0	$0.00	0%	
O-Ring	LF	$43.35				0.0	$0.00	0%	
38" X 24" (30" Equiv-RCP III)									
0' – 10' Cut	LF	$120.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$167.50				0.0	$0.00	0%	
Add Cost for Class IV	LF	$8.45				0.0	$0.00	0%	
O-Ring	LF	$51.35				0.0	$0.00	0%	
45" X 29" (36" Equiv-RCP III)									
0' – 10' Cut	LF	$165.00				0.0	$0.00	0%	
10' – 16' Cut	LF	$235.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$11.35				0.0	$0.00	0%	
O-Ring	LF	$53.35				0.0	$0.00	0%	
53" X 34" (42" Equiv-RCP III)									
0' – 12' Cut	LF	$210.00				0.0	$0.00	0%	
10' – 18' Cut	LF	$300.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$15.35				0.0	$0.00	0%	
O-Ring	LF	$58.95				0.0	$0.00	0%	
60" X 38" (48" Equiv-RCP III)									
0' – 12' Cut	LF	$255.00				0.0	$0.00	0%	
10' – 18' Cut	LF	$375.00				0.0	$0.00	0%	
Add Cost for Class IV	LF	$18.35				0.0	$0.00	0%	
O-Ring	LF	$69.95				0.0	$0.00	0%	
HDPE PIPE									
8" Pipe						0.0	$0.00	0%	
0'-8' Cut	LF	$28.65				0.0	$0.00	0%	
8'-14' Cut	LF	$43.15				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved

12" Pipe									
0'-8' Cut	LF	$38.95		$0.00		0.0	$0.00	0%	
8'-14' Cut	LF	$57.75				0.0	$0.00	0%	
15" Pipe									
0'-8' Cut	LF	$50.25	681.00	$34,220.25		545.0	$27,386.25	0%	
8'-16' Cut	LF	$74.85	104.00	$7,784.40		0.0	$0.00	0%	
21" Pipe									
0'-8' Cut	LF	$76.90	84	$6,459.60		0.0	$0.00	0%	
8'-16' Cut	LF	$115.25				0.0	$0.00	0%	
18" Pipe									
0'-8' Cut	LF	$66.00	163.00	$10,758.00		183.0	$12,078.00	0%	
8'-16' Cut	LF	$98.55				38.0	$3,744.90	0%	
24" Pipe									
0'-8' Cut	LF	$76.90	40	$3,076.00		174.0	$13,380.60	0%	
8'-16' Cut	LF	$115.25				0.0	$0.00	0%	
30" Pipe									
0'-8' Cut	LF	$91.33		$0.00		0.0	$0.00	0%	
8'-16' Cut	LF	$137.27	495	$67,948.65		0.0	$0.00	0%	
36" Pipe									
0'-8' Cut	LF	$101.68				0.0	$0.00	0%	
8'-16' Cut	LF	$152.33				0.0	$0.00	0%	
42" Pipe									
0'-8' Cut	LF	$113.99				0.0	$0.00	0%	
8'-16' Cut	LF	$171.00				0.0	$0.00	0%	
48" Pipe									
0'-8' Cut	LF	$129.55				0.0	$0.00	0%	
8'-16' Cut	LF	$195.66				0.0	$0.00	0%	
STORM STRUCTURES									
END SECTIONS									
End Section (ES-1), Concrete Pipe Size									
15”	EA	$485.00		$0.00		0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
18”	EA	$565.00		$0.00		0.0	$0.00	0%	
21”	EA	$645.00				0.0	$0.00	0%	
24”	EA	$755.00		$0.00		0.0	$0.00	0%	
27”	EA	$1,065.00				0.0	$0.00	0%	
30”	EA	$1,195.00		$0.00		0.0	$0.00	0%	
36”	EA	$1,765.00				0.0	$0.00	0%	

42”	EA	$1,795.00				0.0	$0.00	0%	
48”	EA	$2,135.00				0.0	$0.00	0%	
54”	EA	$2,795.00				0.0	$0.00	0%	
60”	EA	$3,455.00				0.0	$0.00	0%	
ENDWALLS									
EW-1(Pre-cast) Round Pipe Size									
15”	EA	$800.00				0.0	$0.00	0%	
18”	EA	$1,337.00				0.0	$0.00	0%	
24”	EA	$2,021.00				0.0	$0.00	0%	
30”	EA	$2,133.00				0.0	$0.00	0%	
36”	EA	$2,366.00				0.0	$0.00	0%	
EW-1 Cast in Place [Round Pipe Size]									
15”	EA	$852.00				0.0	$0.00	0%	
18”	EA	$1,053.00				0.0	$0.00	0%	
24”	EA	$1,495.00				0.0	$0.00	0%	
30”	EA	$2,144.00				0.0	$0.00	0%	
36”	EA	$2,383.00				0.0	$0.00	0%	
EW-1A (Pre-Cast) Elliptical Pipe Size									
23” X 14” (18”)	EA	$695.00				0.0	$0.00	0%	
30” X 19” (24”)	EA	$969.00				0.0	$0.00	0%	
38” X 24” (30”)	EA	$1,165.00				0.0	$0.00	0%	
45” X 29” (36”)	EA	$1,445.00				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
53” X 34” (42”)	EA	$1,840.00				0.0	$0.00	0%	
EW-1A (Cast in Place) Elliptical Pipe Size									
23” X 14” (18”)	EA	$667.00				0.0	$0.00	0%	
30” X 19” (24”)	EA	$939.00				0.0	$0.00	0%	
38” X 24” (30”)	EA	$1,247.00				0.0	$0.00	0%	
45” X 29” (36”)	EA	$1,618.00				0.0	$0.00	0%	
53” X 34” (42”)	EA	$2,109.00				0.0	$0.00	0%	
EW-2 (PreCast) Round Pipe Size									
42”	EA	$5,445.00				0.0	$0.00	0%	
48”	EA	$5,695.00				0.0	$0.00	0%	
54”	EA	$6,660.00				0.0	$0.00	0%	
60”	EA	$7,140.00				0.0	$0.00	0%	
72”	EA	$7,990.00				0.0	$0.00	0%	
84”	EA	$9,490.00				0.0	$0.00	0%	
EW-2 (Cast in Place) Round Pipe Size									

42”	EA	$4,723.00				0.0	$0.00	0%	
48”	EA	$6,039.00				0.0	$0.00	0%	
54”	EA	$6,972.00				0.0	$0.00	0%	
60”	EA	$8,179.00				0.0	$0.00	0%	
72”	EA	$10,713.00				0.0	$0.00	0%	
84”	EA	$12,288.00				0.0	$0.00	0%	
(EW-6PC) [Double Pipe] Pipe Size									
2-15”	EA	$999.00				0.0	$0.00	0%	
2-18”	EA	$1,235.00				0.0	$0.00	0%	
2-24”	EA	$1,510.00				0.0	$0.00	0%	
2-30”	EA	$2,165.00				0.0	$0.00	0%	
2-36”	EA	$2,647.00				0.0	$0.00	0%	
MANHOLES									
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Standard Brick Manhole Std Frame & Cover (MH-1)									
6’ Depth	EA	$3,750.00				0.0	$0.00	0%	
Depth below 6’	VF	$163.00				0.0	$0.00	0%	
Standard Precast Manhole Std Frame & Cover (MH-2)									
6’ Depth	EA	$3,100.00	4	$12,400.00		2.0	$6,200.00	0%	
Depth below 6’	VF	$177.00	19.000	$3,363.00		0.0	$0.00	0%	
Additional Cost (Amounts in parentheses to be added to the above unit costs)									
Watertight Fr/Cover (Add 110)	EA	$579.00				0.0	$0.00	0%	
Heavy Duty Fr/Cover (Add 82)	EA	$599.00				0.0	$0.00	0%	
DROP INLETS									
Cast in Place 48”									
Drop Inlet (DI-1) 12” – 24” Pipe0-10 VF	EA	$3,697.00	2	$7,394.00		0.0	$0.00	0%	
Drop Inlet (DI-1A) 12” – 24” Pipe 10-20 VF	EA	$5,593.00				0.0	$0.00	0%	
Drop Inlet (DI-2) 12” – 24” Pipe0-10 VF, 10’ throat	EA	$6,911.00				0.0	$0.00	0%	
Drop Inlet (DI-2A) 12” – 24” Pipe 10-20 VF, 10’ throat	EA	$8,833.00				0.0	$0.00	0%	
CURB DROP INLETS									
Curb Drop Inlet (DI-3A)									
12”-30” Pipe (Invert Depth (H) =0’-8’) Inlet Length 2’-6”	EA	$4,088.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-3AA)									

12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length 2’-6”	EA	$5,357.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-3B & DI-12) 12”-30” Pipe (Invert Depth (H) =0’-8’) Inlet Length									
4’	EA	$4,279.00		$0.00		0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
6’	EA	$4,573.00		$0.00		0.0	$0.00	0%	
8’	EA	$4,889.00	6	$29,334.00		4.0	$19,556.00	0%	
10'	EA	$5,052.00		$0.00		0.0	$0.00	0%	
12’	EA	$5,227.00	4	$20,908.00		4.0	$20,908.00	0%	
16’	EA	$5,543.00				0.0	$0.00	0%	
20’	EA	$5,859.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-3BB) 12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length									
4’	EA	$4,276.00	1	$4,276.00		0.0	$0.00	0%	
6’	EA	$4,848.00		$0.00		0.0	$0.00	0%	
8’	EA	$5,429.00	3	$16,287.00		1.0	$5,429.00	0%	
10'	EA	$5,732.00	1	$5,732.00		1.0	$5,732.00	0%	
12’	EA	$6,011.00				0.0	$0.00	0%	
16’	EA	$6,296.00				0.0	$0.00	0%	
20’	EA	$6,599.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-3C) 12”-30” Pipe (Invert Depth (H) =0’-8’) Inlet Length									
6’	EA	$4,013.00		$0.00		0.0	$0.00	100%	
8’	EA	$4,588.00	3	$13,764.00		0.0	$0.00	0%	
10'	EA	$4,893.00				0.0	$0.00	0%	
12’	EA	$5,178.00				0.0	$0.00	0%	
16’	EA	$5,766.00				0.0	$0.00	0%	
20’	EA	$6,339.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-3CC) 12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length									
6’	EA	$4,746.00				0.0	$0.00	0%	
8’	EA	$5,293.00				0.0	$0.00	0%	
10'	EA	$5,627.00				0.0	$0.00	0%	
12’	EA	$5,988.00				0.0	$0.00	0%	
16’	EA	$6,772.00				0.0	$0.00	0%	
20’	EA	$7,465.00				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Curb Drop Inlet (DI-3D)									

12”-30” Pipe (Invert Depth (H) =0’-8’) Inlet Length 2’-6”	EA	$3,633.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-3DD)								
12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length 2’-6”	EA	$4,367.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-3E) 12”-30” Pipe (Invert Depth (H) =0’-8’) Inlet Length								
4’	EA	$4,093.00			0.0	$0.00	0%	
8’	EA	$4,756.00			0.0	$0.00	0%	
10'	EA	$5,724.00			0.0	$0.00	0%	
12'	EA	$5,833.00			0.0	$0.00	0%	
16’	EA	$6,072.00			0.0	$0.00	0%	
20’	EA	$6,709.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-3EE) 12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length								
6’	EA	$7,562.00			0.0	$0.00	0%	
8’	EA	$7,869.00			0.0	$0.00	0%	
10'	EA	$7,999.00			0.0	$0.00	0%	
12’	EA	$8,166.00			0.0	$0.00	0%	
16’	EA	$8,471.00			0.0	$0.00	0%	
20’	EA	$8,767.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-3F) 12”-30” Pipe Inlet Length (Invert Depth (H)=0’-8’)								
6’	EA	$3,765.00			0.0	$0.00	0%	
8’	EA	$4,419.00			0.0	$0.00	0%	
10'	EA	$4,749.00			0.0	$0.00	0%	
12’	EA	$5,085.00			0.0	$0.00	0%	
16’	EA	$5,742.00			0.0	$0.00	0%	
20’	EA	$6,395.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-3FF) 12”-30” Pipe (Invert Depth (H) =8’-20’) Inlet Length								
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
6’	EA	$8,077.00			0.0	$0.00	0%	
8’	EA	$8,288.00			0.0	$0.00	0%	
10'	EA	$8,480.00			0.0	$0.00	0%	
12’	EA	$8,669.00			0.0	$0.00	0%	
16’	EA	$9,047.00			0.0	$0.00	0%	
20’	EA	$9,446.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-4A) 36”–48” Pipe (Invert Depth (H)=0’-8’) Inlet Length								
4’	EA	$4,868.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-4AA) 36”–48” Pipe (Invert Depth (H)=0’-8’) Inlet Length								
4'	EA	$6,817.00			0.0	$0.00	0%	

Curb Drop Inlet (DI-4B) 36”-48” Pipe (Invert Depth (H) =0’-8’) Inlet Length									
6’	EA	$5,172.00				0.0	$0.00	0%	
8’	EA	$5,499.00				0.0	$0.00	0%	
10'	EA	$5,698.00				0.0	$0.00	0%	
12’	EA	$5,870.00				0.0	$0.00	0%	
16’	EA	$6,221.00				0.0	$0.00	0%	
20’	EA	$6,571.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4BB) 36”-48” Pipe (Invert Depth (H) =8’-20') Inlet Length									
6’	EA	$10,292.00				0.0	$0.00	0%	
8’	EA	$10,643.00				0.0	$0.00	0%	
10'	EA	$10,810.00				0.0	$0.00	0%	
12’	EA	$10,974.00				0.0	$0.00	0%	
16’	EA	$11,309.00				0.0	$0.00	0%	
20’	EA	$11,669.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4C) 36”-48” Pipe (Invert Depth (H) =0’-8’) Inlet Length									
8’	EA	$5,612.00				0.0	$0.00	0%	
10'	EA	$5,794.00				0.0	$0.00	0%	
12’	EA	$5,968.00				0.0	$0.00	0%	
16’	EA	$6,315.00				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
20’	EA	$6,657.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4CC) 36”-48” Pipe (Invert Depth (H) =8’-20’) Inlet Length									
8’	EA	$13,371.00				0.0	$0.00	0%	
10'	EA	$13,693.00				0.0	$0.00	0%	
12’	EA	$14,097.00				0.0	$0.00	0%	
16’	EA	$14,712.00				0.0	$0.00	0%	
20’	EA	$15,365.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4D)									
36”-48” Pipe (Invert Depth (H) =0’-8’) Inlet Length 4'	EA	$4,933.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4DD)									
36”-48” Pipe (Invert Depth (H) =8’-16’) Inlet Length 4'	EA	$9,455.00				0.0	$0.00	0%	
Curb Drop Inlet (DI-4E) 36”-48” Pipe (Invert Depth (H) =0’-8’) Inlet Length									
6'	EA	$5,267.00				0.0	$0.00	0%	
8’	EA	$5,605.00				0.0	$0.00	0%	
10'	EA	$5,896.00				0.0	$0.00	0%	
12'	EA	$6,233.00				0.0	$0.00	0%	

16’	EA	$6,996.00			0.0	$0.00	0%	
20’	EA	$7,695.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-4EE) 36”-48” Pipe (Invert Depth (H) =8’-16’) Inlet Length								
6’	EA	$9,165.00			0.0	$0.00	0%	
8’	EA	$9,495.00			0.0	$0.00	0%	
10'	EA	$9,839.00			0.0	$0.00	0%	
12’	EA	$10,167.00			0.0	$0.00	0%	
16’	EA	$10,838.00			0.0	$0.00	0%	
20’	EA	$11,483.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-4F) 36”-48" Pipe Inlet Length (Invert Depth (H)=0’-8’)								
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
8’	EA	$5,877.00			0.0	$0.00	0%	
10'	EA	$6,209.00			0.0	$0.00	0%	
12’	EA	$6,568.00			0.0	$0.00	0%	
16’	EA	$7,259.00			0.0	$0.00	0%	
20’	EA	$7,963.00			0.0	$0.00	0%	
Curb Drop Inlet (DI-4FF) 36”-48” Pipe (Invert Depth (H) =8’-16’) Inlet Length								
8’	EA	$8,866.00			0.0	$0.00	0%	
10'	EA	$9,147.00			0.0	$0.00	0%	
12’	EA	$9,435.00			0.0	$0.00	0%	
16’	EA	$9,997.00			0.0	$0.00	0%	
20’	EA	$10,584.00			0.0	$0.00	0%	
Median Drop Inlets - CIP								
Median Drop Inlet **(DI-6A)** 12”-24” Pipe Inlet (H=8’)	EA	$4,205.00			0.0	$0.00	0%	
Median Drop Inlet **(DI-6B)** 12”-24” Pipe Inlet (H=8’)	EA	$4,267.00			0.0	$0.00	0%	
Median Drop Inlet **(DI-6C)** 30”-48” Pipe Inlet (H=10’)	EA	$5,589.00			0.0	$0.00	0%	
Median Drop Inlet **(DI-6D)** 30”-48” Pipe Inlet (H=10’)	EA	$5,692.00			0.0	$0.00	0%	
Median Drop Inlet **(DI-7)** Type III Top 12”-42” Pipe Inlet (H=10’)	EA	$5,748.00		$0.00	0.0	$0.00	100%	
Median Drop Inlet **(DI-7A)** Type III Top 12”-42” Pipe Inlet (H=10’)	EA	$6,338.00			0.0	$0.00	0%	

Median Drop Inlet **(DI-7B)** Type III Top 12"-42" Pipe Inlet (H=10')	EA	$6,797.00			0.0	$0.00	0%	
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
MISCELLANEOUS INLETS								
Ditch Drop Inlet, **(DI-5)** Type III Tip 12"-42" Pipe Inlet (H=8')	EA	$5,226.00			0.0	$0.00	0%	
Standard Yard Inlet **(YI-1)** 12"-48" Pipe (Invert Depth (H)=0'-8') Inlet Length 4'(No Aprons)	EA	$4,749.00		$0.00	0.0	$0.00	0%	
Add Yard Inlet Apron	THROAT	$255.00			0.0	$0.00	0%	
Standard Yard Inlet **(YI-3)** 12"-48" Pipe (Invert Depth (H)=0'-8') Inlet Length 4'(No Aprons)	EA	$5,127.00			0.0	$0.00	0%	
Add Yard Inlet Apron	THROAT	$255.00			0.0	$0.00	0%	
CULVERTS								
Single Box Culvert (BC-1A) Fills to 25'								
4' X 4'	LF	$336.00			0.0	$0.00	0%	
5' x 5"	LF	$410.00			0.0	$0.00	0%	
6' X 6'	LF	$498.00			0.0	$0.00	0%	
8' X 8'	LF	$699.00			0.0	$0.00	0%	
10' X 10'	LF	$845.00			0.0	$0.00	0%	
Double Box Culvert (BC-2b) Fills to 25'								
4' X 4'	LF	$566.00			0.0	$0.00	0%	
5' x 5"	LF	$705.00			0.0	$0.00	0%	
6' X 6'	LF	$854.00			0.0	$0.00	0%	
8' X 8'	LF	$1,148.00			0.0	$0.00	0%	
10' X 10'	LF	$1,411.00			0.0	$0.00	0%	
Oversized Single Box Culvert (BBC-1) Fills to 25'								
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
12' X 6'	LF	$1,026.00			0.0	$0.00	0%	
12' X 8'	LF	$1,144.00			0.0	$0.00	0%	
12' X 10'	LF	$1,239.00			0.0	$0.00	0%	
12' X 12'	LF	$1,348.00			0.0	$0.00	0%	

Triple Box Culvert (BC-3B) Fills to 25'									
4' X 4'	LF	$779.00				0.0	$0.00	0%	
5' x 5"	LF	$965.00				0.0	$0.00	0%	
6' X 6'	LF	$1,211.00				0.0	$0.00	0%	
8' X 8'	LF	$1,633.00				0.0	$0.00	0%	
10' X 10'	LF	$2,488.00				0.0	$0.00	0%	
Quadruple Box Culvert (BC-4B) Fills to 25'									
4' X 4'	LF	$987.00				0.0	$0.00	0%	
5' x 5"	LF	$1,225.00				0.0	$0.00	0%	
6' X 6'	LF	$1,523.00				0.0	$0.00	0%	
8' X 8'	LF	$1,497.00				0.0	$0.00	0%	
10' X 10'	LF	$2,835.00				0.0	$0.00	0%	
Standard Wing for Box Culvert (1 Side Only) Height of Box									
4'	EA	$675.00				0.0	$0.00	0%	
5'	EA	$995.00				0.0	$0.00	0%	
6'	EA	$1,337.00				0.0	$0.00	0%	
8'	EA	$2,489.00				0.0	$0.00	0%	
10'	EA	$3,315.00				0.0	$0.00	0%	
Standard Wing for Oversized Box Culvert(BBC-W) Height of Box									
6'	EA	$1,351.00				0.0	$0.00	0%	
8'	EA	$2,189.00				0.0	$0.00	0%	
10'	EA	$3,269.00				0.0	$0.00	0%	
12'	EA	$4,763.00				0.0	$0.00	0%	
MISCELLANEOUS STORM									
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Connection to Existing Structure									
15"-36" Pipe	EA	$735.00				0.0	$0.00	0%	
42"- 60" Pipe	EA	$1,125.00				0.0	$0.00	0%	
Casing Pipe, Bore and Jack (3/8" wall)									
22" ID (6"-8" Carrier Pipe)	LF	$411.00				0.0	$0.00	0%	
24" ID (10" Carrier Pipe)	LF	$451.00				0.0	$0.00	0%	
30" ID (12" Carrier Pipe)	LF	$569.00				0.0	$0.00	0%	
Plug Pipe									
6" –12" Pipe	EA	$142.00				0.0	$0.00	0%	
15"-36" Pipe	EA	$323.00				0.0	$0.00	0%	
42"- 60" Pipe	EA	$522.00				0.0	$0.00	0%	
Pavement Edge Pipe									
Standard Pipe Underdrain	LF	$19.00				0.0	$0.00	0%	

Riprap									
Dry, Class I, 18”	SY	$47.87		$0.00		0.0	$0.00	0%	
Dry, Class II, 18”	SY	$51.46				0.0	$0.00	0%	
Grouted, Class I, 18”	SY	$69.97				0.0	$0.00	0%	
Filter Fabric									
Class I	SY	$3.50				0.0	$0.00	0%	
Class II	SY	$3.00				0.0	$0.00	0%	
Class III	SY	$2.25				0.0	$0.00	0%	
Gabions (No excavation)									
Mattress	CY	$130.00				0.0	$0.00	0%	
Revetment	CY	$164.33				0.0	$0.00	0%	
Wall	CY	$212.25				0.0	$0.00	0%	
Paved Ditch (4” Thick)									
Concrete (Non-reinforced)	SY	$62.00				0.0	$0.00	0%	
Bituminous Concrete(4”)	SY	$30.00				0.0	$0.00	0%	
Sodded Ditch									
BOND ESTIMATE						**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Sodded Ditch (Incl Fine Grading)	SY	$9.86				0.0	$0.00	0%	
STREET CONSTRUCTION									
ROADS AND PARKING									
Soil Stabilization	**Inches**								
Cement 6%	SY/Inch Depth	$2.70				0.0	$0.00	0%	
Depth (in Inches):									
Lime 6%	SY/Inch Depth	$1.89				0.0	$0.00	0%	
Depth (in Inches):									
Subbase, Aggregated Material									
Base Type I	SY/Inch Depth	$1.75	6,557	$91,798.00		6,631.0	$11,604.25	0%	
Depth (in Inches):		8				3			
Bituminous Concrete									
Base Course	SY/Inch Depth	$5.59	6,557	$109,960.89		0.0	$0.00	0%	
Depth (in Inches):		3							
Intermediate Course	SY/Inch Depth	$5.49				0.0	$0.00	0%	
Depth (in Inches):									

Top Course	SY/Inch Depth	$5.49	6,557	$71,995.86	0.0	$0.00	0%	
Depth (in Inches):		2						
Prime Coat	SY	$1.10			0.0	$0.00	0%	
Tack Coat	SY	$1.10			0.0	$0.00	0%	
Driveway Restoration								
4” Concrete & 4” Gravel	SY	$79.95			0.0	$0.00	0%	
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION	QUANTITY	EXTENSION	%COMPLETE	% Approved
2” S-5 & 7 6” Gravel	SY	$31.96			0.0	$0.00	0%	
Shoulders, Type I								
Aggregated Base, 4” (Sidewalk)	SY	$11.50	1,680.00	$19,320.00	1,680.0	$19,320.00	0%	
Concrete Curbing								
Curb & Gutter CG6 & CG7	LF	$22.50	4,388.00	$98,730.00	3,667.0	$82,507.50	0%	
Curb Cut, CG-12 Detectable Surf.	EA	$569.00	7	$3,983.00	0.0	$0.00	0%	
Entrances/Driveways								
Commercial Entrance CG-11	SY	$52.88			0.0	$0.00	0%	
Commercial Entrance CG-13	SY	$64.67			0.0	$0.00	0%	
Residential Driveway Apron	SY	$51.79			0.0	$0.00	0%	
Guardrails								
Std. Blocked-out W beam (GR2)	LF	$42.50			0.0	$0.00	0%	
Std. W beam, Weak Post GR8	LF	$28.50			0.0	$0.00	0%	
Terminal, GR-6 (L=12’-6”)	EA	$2,929.00			0.0	$0.00	0%	
Terminal, GR-7 (L=6’-3”)	EA	$2,659.00			0.0	$0.00	0%	
Type I, GR-8 Terminal (L=25’)	EA	$1,399.00			0.0	$0.00	0%	
Type II, GR-8 Terminal (L=13’-6”)	EA	$695.00			0.0	$0.00	0%	
Terminal, MB-4 (L=37’-6”)	EA	$3,495.00			0.0	$0.00	0%	
Type I, MB-5 Terminal (L=27’-1)	EA	$2,925.00			0.0	$0.00	0%	
Type II, MB-5 Terminal (L=13’-6)	EA	$1,675.00			0.0	$0.00	0%	
Miscellaneous								
Trash enclosure - Brick 6' high	LF	$325.00			0.0	$0.00	0%	
Reinforced Concrete Pad 6" to 8"	SY	$62.00			0.0	$0.00	0%	
Striping 4" width (VDOT Type	LF	$2.25			0.0	$0.00	0%	
BOND ESTIMATE					**BOND REDUCTION**			**City Use Only**

ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
B)						0.0	$0.00	0%	
Concrete Wheel Stops	EA	$70.00				0.0	$0.00	0%	
Parking Lot Striping	EA	$50.00				0.0	$0.00	0%	
Sign Island	EA	$850.00				0.0	$0.00	0%	
Traffic Barricade	LF	$43.45				0.0	$0.00	0%	
Street Name Signs	EA	$435.00	4	$1,740.00		2.0	$870.00	0%	
Traffic Control Signs	EA	$375.00	4	$1,500.00		3.0	$1,125.00	0%	
Street Light (pole, bracket, light)	EA	$4,285.00	5	$21,425.00		18.0	$77,130.00	0%	
SIDEWALKS AND TRAILS									
Sidewalk									
Concrete 4” w/WWF, No base	SY	$45.23		$0.00		0.0	$0.00	0%	
Bitum. Conc, 2” w/4” Base	SY	$30.00				0.0	$0.00	0%	
4” Conc, No Reinf., No Base	SY	$41.00				0.0	$0.00	0%	
HANDRAIL									
Handrail 3 Rail 1-1/4” #4 Finish	LF	$96.50				0.0	$0.00	0%	
Wood Chip Trail									
Trails(Incl Excavation & Grading) Wood chip, 4’ wide	SY	$17.69				0.0	$0.00	0%	
Bituminous Trail									
6’ to 10' wide	SY	$49.25		$0.00		0.0	$0.00	0%	
CRITICAL SLOPE STABILIZATION									
Paved Flume	SY	$67.00				0.0	$0.00	0%	
Stmwtr Conc Channel-Excav	SY	$7.75				0.0	$0.00	0%	
ADD Grass Lined-seeded	SY	$5.37				0.0	$0.00	0%	
ADD Grass Lined-sodded	SY	$10.89				0.0	$0.00	0%	
Outlet Protection									
Non-grouted Riprap 18”	SY	$52.00		$0.00		0.0	$0.00	0%	
Concrete 4”	SY	$53.50				0.0	$0.00	0%	
BOND ESTIMATE						**BOND REDUCTION**			City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	EXTENSION		QUANTITY	EXTENSION	%COMPLETE	% Approved
Level Spreader	SY	$4.44				0.0	$0.00	0%	
Struc Streambank Protection									
Non-grouted Riprap 18”	SY	$58.00				0.0	$0.00	0%	
Gabions	CY	$147.00				0.0	$0.00	0%	
Vegetative Erosion Control									
Sodding incl Fertilizing – Banks	SY	$7.77				0.0	$0.00	0%	

Sodding incl Fertilizing – Flat	SY	$5.36			0.0	$0.00	0%	
Seeding incl Fertilizing	SY	$2.44			0.0	$0.00	0%	
Soding W/Soil Treat & Watering	SY	$3.25			0.0	$0.00	0%	
Seeding W/Soil Treat & Watering	SY	$6.46			0.0	$0.00	0%	
Straw Mulch w/Tack	SY	$1.40			0.0	$0.00	0%	
Jute Mesh	SY	$1.77			0.0	$0.00	0%	
SPECIAL ITEMS								
FEMA Processing LOMR/CLOMR	EA	$7,500.00			0.0	$0.00	0%	
As Built (Record Drawings)	EA	$9,500.00	1	$9,500.00	0.0	$0.00	0%	
SWM/BMP POND	LS				0.8	$0.00	0%	
SIGNALIZATION	LS				0.0	$0.00	0%	
Subtotal				**$943,998.36**		**$443,238.13**		

TOTAL ESTIMATE OF COMPLETED WORK:		
SubTOTAL:		$943,998.36
CONTINGENCIES:	10.0%	$94,399.84
TOTAL:		$1,038,398.20
INFLATION FACTOR:	4.0%	$41,535.93
Grand Total:		$1,079,934.12

TOTAL ESTIMATE OF REDUCTION:	
SubTOTAL:	$886,476.26
CONTINGENCIES:	$88,647.63
TOTAL:	$975,123.89
INFLATION :	$39,004.96
Grand Total:	$1,014,128.84
Bond Remaining:	**$65,805.28**

Kimley»Horn

Memorandum

To: Jon K Erickson, PE
Morris & Ritchie Associates Inc.
205 E Hirst St
Purcellville VA, 20132

From: Mark Phillips, P.E.

Through: James Newman
City of Charles town
101 E Washington Street
Charles Town, WV 25414

Date: November 10, 2026

Subject: Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction Request Review

This memorandum summarizes our review of the Bond Reduction Request for the Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction application (dated August 7, 2026, prepared by Morris & Ritchie Associates) for a performance bond reduction for the following amounts for each phase:

- Phase 10B - $1,182,697.48
- Phase 11 - $916,001.43
- Phase 12 - $1,344,484.71
- Phase 13 - $2,225,028.23

Using the As-Builts dated September 21, 2026, it is our opinion that the quantities of work that have been presented on the bond reduction are a reasonable representation of the work completed in the field.

Kimley-Horn's review of this application is limited to the Bond Reduction Request and Approved Plan Set provided. Based on our review we have the following comments:

1. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 12 and the Bond Reduction Spreadsheet for Phase 12 which lists the reduction amount at $1,344,484.70 and $1,344,484.71 respectively.
2. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 13 and the Bond Reduction Spreadsheet for Phase 13 which lists the reduction amount at $2,225,028.23 and $2,224,348.69 respectively.

Kimley-Horn recommends that Comments 1 & 2 above be addressed by the Applicant.

Thank you for the opportunity to review this Bond Reduction Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager
Associate

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

SCHEDULED

AGENDA ITEM (ID #)

Commission Review - BR2026-12 - Norborne-Glebe Phase 11- Bond Reduction

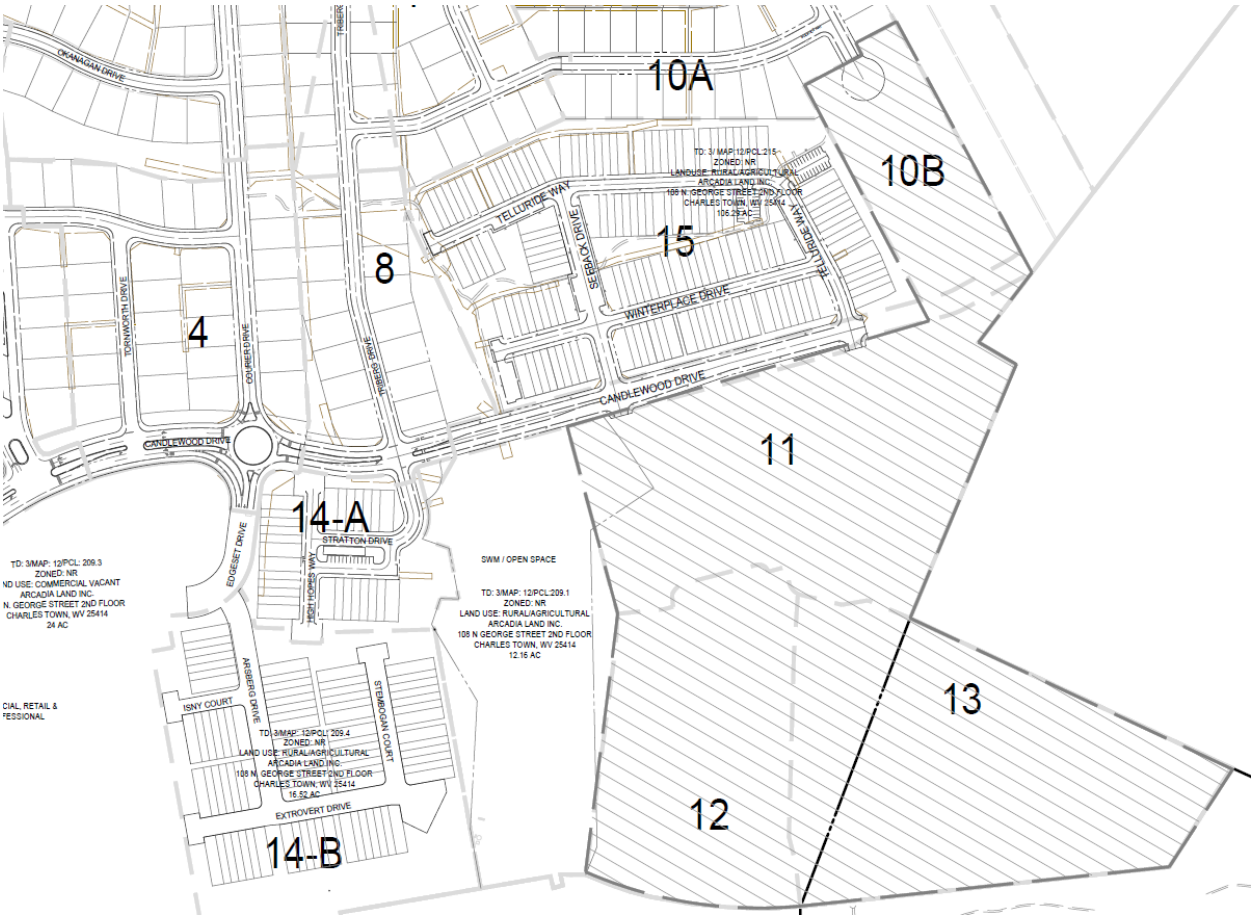
ATTACHMENTS:

- 1. Staff Report.pdf
- 2._Application.pdf
- 3._Bond_Cost.pdf
- 4._KH_Review.pdf

Bond Reduction Request
BR2026-12

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Arcadia Land Inc.
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: A bond reduction of $916,001.43

Norborne Glebe Phase 11



BACKGROUND
The applicant is requesting a combined bond reduction of the performance bond. The preliminary plan for this phase was approved by the Planning Commission on February 26, 2024.

Current Bond Amount: $1,886,150.95
Requested Reduction: $ 916,001.43
Remaining Amount: $970,149.52

ENGINEER REVIEW
Upon review of the request the City Engineer, Kimley-Horn, has determined that the bond amount is a reasonable assessment of the work completed thus far, and recommend approval of the request.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. The Committee recommended approval of the bond reduction request.

STAFF RECOMMENDATION
The City Engineer and City Staff have reviewed the bond reduction request and recommend it be **approved**.

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

- ☐ Bond Initiation – No application fee
- ☑ Bond Reduction – No application fee
- ☐ Bond Extension – No application fee
- ☐ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE August 7, 2026

2. PROJECT NAME Norborne Glebe Subdivision- Phase 11

Address N/A

3. APPLICANT'S NAME* Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

4. PROPERTY OWNER'S NAME Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Requesting performance bond reduction for Phase 11, Norborne Glebe Subdivision

6. A) CURRENT BOND AMOUNT $ 1,886,150.95

B) PROPOSED BOND AMOUNT $ 970,149.52

C) CHANGE IN BONDED AMOUNT $ 916,001.43

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
3-12	215		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
SLD-2013-04	Norborne Glebe Phase 5	Approved	01/14/2014
SLD-2017-05	Norborne Glebe Phase 7-8	Approved	09/25/2018
SLD-2016-01	Norborne Glebe Phase 6	Approved	9/25/2018

9. **BOND RELEASE – SUPPLEMENTAL MATERIALS REQUIRED:**

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways**, a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

   Before a Performance Agreement and surety for private roadway construction shall be released, a Latent Defects Indemnification Agreement and Bond shall be provided by the applicant/Developer and approved by the Planning Commission. The guarantee provided by such Agreement and Bond must be for a period of two (2) years following the date of performance bond release, and must be in an amount equal to no less than 5% of the original performance bond estimate.

G. **Landscaping Surety** is required to ensure the landscaping shown on a Major S/LD plan is maintained for one (1) year. The one (1) year shall start from the date at which the surety for the site has been released, with the exception of this landscaping surety. The landscaping surety amount shall not be less than $5,000.00 or 10% of the total landscaping cost for the project, which ever is greater.

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

Signature of Applicant _____ Date 9/8/2026

Signature of Property Owner (if different than Applicant)

_____ Date _____

Please submit an original completed application to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Check No._____

Receipt No._____

Site Inspection Date:_____ Inspector:_____

Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

_____

_____

_____

_____

BOND ESTIMATE					BOND REDUCTION						City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	Final Price	QUANTITY COMPLETED (REDUCTION REQUEST)	UNIT COST	PREVIOUS QUANTITY COMPLETED	TOTAL QUANTITY COMPLETED (INCLUDING REDUCTION REQUEST)	EXTENSION	%COMPLETE	%APPROVED
MOBILIZATION GENERAL											
Mobilization	LS	$12,440.00	1	$12,440.00	1	$12,440.00		1		100%	
Field Office	EA	$3,490.00		$0.00		$0.00		0		0%	
Job Sign	EA	$1,340.00		$0.00		$0.00		0		0%	
SURVEYING											
Steel Pipe Property Corner Marker Incl. Survey	EA	$320.38	155	$49,658.90		$0.00		0		0%	
R.O.W MONUMENTS SURVEYED IN PLACE											
RM--1		$825.00		$0.00		$0.00		0		0%	
RM--2		$764.00		$0.00		$0.00		0		0%	
EARTHWORK EXCAVATION											
Regular Bulk used as Fill	CY	$4.50		$0.00		$0.00		0		0%	
Rock, Rip	CY	$51.50		$0.00		$0.00		0		0%	
Rock, Blast	CY	$55.00		$0.00		$0.00		0		0%	
BORROW MATERIAL											
Buy, Load, Haul 10 Mi. Select Material	CY	$42.00		$0.00		$0.00		0		0%	
Fill and Compaction of On-site Borrow	CY	$44.00		$0.00		$0.00		0		0%	
UNSUITABLE MATERIAL											
Load and Haul, 20 mi R/T	CY	$36.56		$0.00		$0.00		0		0%	
Dump Charge	CY	$62.50		$0.00		$0.00		0		0%	
Site Grading	SY	$1.25		$0.00		$0.00		0		0%	
CLEAR & GRUB											
Light	AC	$14,548.50	7.22	$105,040.17	7.22	$105,040.17		7.22		100%	
Heavy	AC	$26,699.49		$0.00		$0.00		0		0%	
LANDSCAPING											
Seeding	SY	$3.00	21150	$63,450.00		$0.00		0		0%	
Sodding	SY	$8.50	21150	$179,775.00		$0.00		0		0%	
PLANTING SHRUBS											
18"	EA	$70.00		$0.00		$0.00		0		0%	
24"	EA	$90.00		$0.00		$0.00		0		0%	
TREES											
6'-8' (1-2 in. Caliper)	EA	$400.00	146	$58,400.00		$0.00		0		0%	
8'-10' (2.5-3 in. Caliper)	EA	$700.00		$0.00		$0.00		0		0%	
Tree Protection	LF	$11.13		$0.00		$0.00		0		0%	
MISCELLANEOUS SITE IMPROVEMENTS											
Timber Wall (less than 6 ft)	LF	$325.00		$0.00		$0.00		0		0%	
Dry Rubble RW-1 (H=6')	LF	$450.00		$0.00		$0.00		0		0%	
Mortared Rubble RW-1A (H=6')	LF	$535.00		$0.00		$0.00		0		0%	
Concrete Gravity RW-2 (H=6')	LF	$589.50		$0.00		$0.00		0		0%	
Concrete Gravity RW-3 (H=6')	LF	$1,037.50		$0.00		$0.00		0		0%	
FENCING											
Std. Fence (H=5') FR-5	LF	$56.00		$0.00		$0.00		0		0%	
Farm Fence (H=5') FR-3A	LF	$37.50		$0.00		$0.00		0		0%	
Chain Link Fence (H=6') FR 2-B	LF	$62.00		$0.00		$0.00		0		0%	
Board Fence (H=6')	LF	$62.00		$0.00		$0.00		0		0%	
TOTS LOTS											
Tot Lot	EA	$16,495.00	1	$16,495.00		$0.00		0		0%	
STORM DRAINAGE											
STORM SEWER											
NOTE: All pipe unit prices include trench, excavation, bedding, pipe, & backfill											
Rock Excavation for All Pipe Types											
Less than 1,500 CY (Blasting)	CY	$110.00		$0.00		$0.00		0		0%	

More than 1,500 CY (Blasting)	CY	$90.00		$0.00			$0.00		0		0%
Less than 1,500 CY (Hoe Ram)	CY	$220.00		$0.00			$0.00		0		0%
More than 1,500 CY (Hoe Ram)	CY	$180.00		$0.00			$0.00		0		0%
Trench De-Watering											
Trench De-Watering	LF	$4.00		$0.00			$0.00		0		0%
RCP CLASS III ROUND T & G W/MASTIC											
12" Pipe (RCP III)											
0'-8' Cut	LF	$100.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$140.00		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$1.90		$0.00			$0.00		0		0%
O-Ring	LF	$12.36		$0.00			$0.00		0		0%
15" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10'-16'	LF	$156.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$1.48		$0.00			$0.00		0		0%
O-Ring	LF	$8.58		$0.00			$0.00		0		0%
18" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10' -16' Cut	LF	$160.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$3.20		$0.00			$0.00		0		0%
O-Ring	LF	$11.20		$0.00			$0.00		0		0%
21" Pipe (RCP III)											
0'-8' Cut	LF	$115.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$174.80		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$4.40		$0.00			$0.00		0		0%
O-Ring	LF	$20.80		$0.00			$0.00		0		0%
24" Pipe (RCP III)											
0'- 10' Cut	LF	$140.00		$0.00			$0.00		0		0%
10'-16'	LF	$196.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$5.04		$0.00			$0.00		0		0%
O-Ring	LF	$22.40		$0.00			$0.00		0		0%
27" Pipe (RCP III)											
0'- 10' Cut	LF	$123.20		$0.00			$0.00		0		0%
10' -16' Cut	LF	$195.03		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$6.40		$0.00			$0.00		0		0%
O-Ring	LF	$24.00		$0.00			$0.00		0		0%
30" Pipe (RCP III)											
0'- 8' Cut	LF	$169.40		$0.00			$0.00		0		0%
8'-14' Cut	LF	$256.66		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$9.60		$0.00			$0.00		0		0%
O-Ring	LF	$27.60		$0.00			$0.00		0		0%
33" Pipe (RCP III)											
0'- 10' Cut	LF	$240.00		$0.00			$0.00		0		0%
10'-16'	LF	$333.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$13.50		$0.00			$0.00		0		0%
O-Ring	LF	$45.80		$0.00			$0.00		0		0%
36" Pipe (RCP III)											
0'-10' Cut	LF	$249.60		$0.00			$0.00		0		0%
10' -16' Cut	LF	$363.92		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$12.40		$0.00			$0.00		0		0%
O-Ring	LF	$36.40		$0.00			$0.00		0		0%
42" Pipe (RCP III)											
0'- 8' Cut	LF	$289.54		$0.00			$0.00		0		0%
8'-14' Cut	LF	$413.46		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$19.20		$0.00			$0.00		0		0%
O-Ring	LF	$56.72		$0.00			$0.00		0		0%
48" Pipe (RCP III)											
0'-10' Cut	LF	$320.52		$0.00			$0.00		0		0%
10'-16'	LF	$442.31		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$20.00		$0.00			$0.00		0		0%
O-Ring	LF	$69.36		$0.00			$0.00		0		0%

54" Pipe (RCP III)											
0' - 10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$541.38		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$30.00		$0.00		$0.00		0		0%	
O-Ring	LF	$70.96		$0.00		$0.00		0		0%	
60" Pipe (RCP III)											
0'-10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$498.48		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$36.00		$0.00		$0.00		0		0%	
O-Ring	LF	$77.84		$0.00		$0.00		0		0%	
ELLIPTICAL PIPE - RCP CLASS III											
23"x14" (18" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$278.60		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$41.60		$0.00		$0.00		0		0%	
O-Ring	LF	$109.80		$0.00		$0.00		0		0%	
30"x19" (24" Equiv- RCP III											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$329.25		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$15.07		$0.00		$0.00		0		0%	
O-Ring	LF	$109.79		$0.00		$0.00		0		0%	
38"x24" (30" Equiv- RCP III											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$423.78		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$21.38		$0.00		$0.00		0		0%	
O-Ring	LF	$129.92		$0.00		$0.00		0		0%	
45"x29" (36" Equiv- RCP III)											
0'10' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$526.88		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$25.45		$0.00		$0.00		0		0%	
O-Ring	LF	$119.63		$0.00		$0.00		0		0%	
1											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$528.36		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$38.87		$0.00		$0.00		0		0%	
O-Ring	LF	$149.26		$0.00		$0.00		0		0%	
60"x38" (48" Equiv- RCP III)											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$543.90		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$46.46		$0.00		$0.00		0		0%	
O-Ring	LF	$177.11		$0.00		$0.00		0		0%	
HDPE PIPE											
8" Pipe											
0'-8' Cut	LF	$50.00		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$75.30		$0.00		$0.00		0		0%	
12" Pipe											
0'-8' Cut	LF	$67.50		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$100.04		$0.00		$0.00		0		0%	
15" Pipe											
0'-8' Cut	LF	$87.08	382	$33,264.56	382	$33,264.56		382		100%	
8'-16' Cut	LF	$129.65		$0.00		$0.00		0		0%	
18" Pipe											
0'-8' Cut	LF	$114.33		$0.00		$0.00		0		0%	
8'-16' Cut	LF	$170.69	244	$41,648.36	244	$41,648.36		244		100%	
24" Pipe											
0'-8' Cut	LF	$132.62		$0.00		$0.00		0		0%	
8'-16' Cut	LF	$197.61	349	$68,965.89	349	$68,965.89		349		100%	
30" Pipe											
0'-8' Cut	LF	$157.42		$0.00		$0.00		0		0%	
8'-16' Cut	LF	$236.13	603	$142,386.39	603	$142,386.39		603		100%	
36" Pipe											

0'-8' Cut	LF	$200.00		$0.00			$0.00		0		0%	
8'-16' Cut	LF	$298.00		$0.00			$0.00		0		0%	
42" Pipe												
0'-8' Cut	LF	$224.20		$0.00			$0.00		0		0%	
8'-16' Cut	LF	$334.06		$0.00			$0.00		0		0%	
48" Pipe												
0'-8' Cut	LF	$253.35		$0.00			$0.00		0		0%	
8'-16' Cut	LF	$377.49		$0.00			$0.00		0		0%	
STORM STRUCTURES												
END SECTIONS												
End Sections (ES-1), Concrete Pipe Size												
15"	EA	$1,389.00		$0.00			$0.00		0		0%	
18"	EA	$1,583.46		$0.00			$0.00		0		0%	
21"	EA	$1,805.14		$0.00			$0.00		0		0%	
24"	EA	$2,057.86		$0.00			$0.00		0		0%	
27"	EA	$2,345.97		$0.00			$0.00		0		0%	
30"	EA	$2,674.40		$0.00			$0.00		0		0%	
36"	EA	$3,048.82		$0.00			$0.00		0		0%	
42"	EA	$3,558.50		$0.00			$0.00		0		0%	
48"	EA	$4,056.69		$0.00			$0.00		0		0%	
54"	EA	$4,624.63		$0.00			$0.00		0		0%	
60"	EA	$5,272.07		$0.00			$0.00		0		0%	
ENDWALLS												
EW-1 (Pre-Cast) Round Pipe Size												
15"	EA	$2,433.00		$0.00			$0.00		0		0%	
18"	EA	$2,724.96		$0.00			$0.00		0		0%	
24"	EA	$3,051.96		$0.00			$0.00		0		0%	
30"	EA	$3,418.19		$0.00			$0.00		0		0%	
36"	EA	$3,828.37		$0.00			$0.00		0		0%	
EW-1 Cast in Place [Round Pipe Size]												
15"	EA	$2,591.15		$0.00			$0.00		0		0%	
18"	EA	$2,902.08		$0.00			$0.00		0		0%	
24"	EA	$3,250.33		$0.00			$0.00		0		0%	
30"	EA	$3,640.37		$0.00			$0.00		0		0%	
36"	EA	$4,077.22		$0.00			$0.00		0		0%	
EW-1A (Pre-Cast) Elliptical Pipe Size												
23" X 14" (18")	EA	$1,335.00		$0.00			$0.00		0		0%	
30" X 19" (24")	EA	$1,495.20		$0.00			$0.00		0		0%	
38 X 24" (30")	EA	$1,879.50		$0.00			$0.00		0		0%	
45 X 29" (36")	EA	$2,105.04		$0.00			$0.00		0		0%	
53" X 34" (42")	EA	$2,791.50		$0.00			$0.00		0		0%	
EW-1A (Cast in Place)Elliptical Pipe Size												
23" X 14" (18")	EA	$1,318.50		$0.00			$0.00		0		0%	
30" X 19" (24")	EA	$1,318.50		$0.00			$0.00		0		0%	
38 X 24" (30")	EA	$2,257.00		$0.00			$0.00		0		0%	
45 X 29" (36")	EA	$2,257.00		$0.00			$0.00		0		0%	
53" X 34" (42")	EA	$3,217.50		$0.00			$0.00		0		0%	
EW-2 (PreCast) Round Size Pipe Size												
42"	EA	$8,324.00		$0.00			$0.00		0		0%	
48"	EA	$9,322.88		$0.00			$0.00		0		0%	
54"	EA	$10,441.63		$0.00			$0.00		0		0%	
60"	EA	$11,694.62		$0.00			$0.00		0		0%	
72"	EA	$12,675.50		$0.00			$0.00		0		0%	
84"	EA	$14,196.56		$0.00			$0.00		0		0%	
EW-2 (Cast in Place) Round Size Pipe Size												
42"	EA	$9,255.50		$0.00			$0.00		0		0%	
48"	EA	$10,366.16		$0.00			$0.00		0		0%	
54"	EA	$11,610.10		$0.00			$0.00		0		0%	
60"	EA	$13,003.31		$0.00			$0.00		0		0%	
72"	EA	$15,747.00		$0.00			$0.00		0		0%	
84"	EA	$17,636.64		$0.00			$0.00		0		0%	

EW-6PC [Double Pipe] Pipe Size											
2-15"	EA	$2,123.00		$0.00		$0.00		0		0%	
2-18"	EA	$2,377.76		$0.00		$0.00		0		0%	
2-24"	EA	$2,663.09		$0.00		$0.00		0		0%	
2-30"	EA	$4,096.00		$0.00		$0.00		0		0%	
2-36"	EA	$4,587.52		$0.00		$0.00		0		0%	
MANHOLES											
Standard Brick Manhole Std Frame & Cover (MH-1)											
6' Depth	EA	$6,048.00		$0.00		$0.00		0		0%	
Depth Below 6'	VF	$230.00		$0.00		$0.00		0		0%	
Standard Precast Manhole Std Frame & Cover (MH-2)		$5,337.00	3	$16,011.00	3	$16,011.00		3		100%	
Additional Cost (Amount in parentheses to be added to the above unit costs)											
Watertight Fr/Cover (Add 110)	EA	$579.00		$0.00		$0.00		0		0%	
Heavy Duty Fr/ Cover (Add 82)	VF	$599.00		$0.00		$0.00		0		0%	
Drop Inlets											
Cast in Place 48"											
Drop Inlet (DI-1) 12"-24" Pipe0-10 VF	EA	$7,690.00	1	$7,690.00	1	$7,690.00		1		100%	
Drop Inlet (DI-1A) 12"-24" Pipe10-20 VF	EA	$7,690.00		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe0-10 VF, 10' throat	EA	$9,458.70		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe10-20 VF, 10' throat	EA	$11,634.20		$0.00		$0.00		0		0%	
Curb Drop Inlets											
Curb Drop Inlet (DI-3A)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$7,460.00		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3AA)											
12"-30" Pipe (Invert Depth (H) =8'-	**EA**	$9,772.60		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3B) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,758.40		$0.00		$0.00		0		0%	
6'	EA	$8,534.24	1	$8,534.24	1	$8,534.24		1		100%	
8'	EA	$9,387.66	3	$28,162.98	3	$28,162.98		3		100%	
10'	EA	$10,326.43		$0.00		$0.00		0		0%	
12'	EA	$11,359.07	3	$34,077.21	3	$34,077.21		3		100%	
16'	EA	$12,494.98		$0.00		$0.00		0		0%	
20'	EA	$13,744.48		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3BB) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,680.82		$0.00		$0.00		0		0%	
6'	EA	$8,448.90	1	$8,448.90	1	$8,448.90		1		100%	
8'	EA	$9,293.79	2	$18,587.58	2	$18,587.58		2		100%	
10'	EA	$10,223.17	1	$10,223.17	1	$10,223.17		1		100%	
12'	EA	$11,245.48		$0.00		$0.00		0		0%	
16'	EA	$12,370.03		$0.00		$0.00		0		0%	
20'	EA	$13,607.03		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3C) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$7,204.61		$0.00		$0.00		0		0%	
8'	EA	$7,925.07		$0.00		$0.00		0		0%	
10'	EA	$8,717.57		$0.00		$0.00		0		0%	
12'	EA	$9,589.33		$0.00		$0.00		0		0%	
16'	EA	$10,548.26		$0.00		$0.00		0		0%	
20'	EA	$11,603.09		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3CC) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$8,573.48		$0.00		$0.00		0		0%	
8'	EA	$9,430.83		$0.00		$0.00		0		0%	
10'	EA	$10,373.91		$0.00		$0.00		0		0%	
12'	EA	$11,411.30		$0.00		$0.00		0		0%	
16'	EA	$12,552.43		$0.00		$0.00		0		0%	
20'	EA	$13,807.68		$0.00		$0.00		0		0%	

Curb Drop Inlet (DI-3D)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$6,430.11		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3DD)											
12"-30" Pipe (Invert Depth	**EA**	$7,587.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3E) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,460.00		$0.00			$0.00		0		0%
8'	EA	$7,982.20		$0.00			$0.00		0		0%
10'	EA	$8,540.95		$0.00			$0.00		0		0%
12'	EA	$9,138.82		$0.00			$0.00		0		0%
16'	EA	$9,778.54		$0.00			$0.00		0		0%
20'	EA	$10,463.04		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3EE) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$11,509.34		$0.00			$0.00		0		0%
8'	EA	$12,314.99		$0.00			$0.00		0		0%
10'	EA	$13,177.04		$0.00			$0.00		0		0%
12'	EA	$14,099.44		$0.00			$0.00		0		0%
16'	EA	$15,086.40		$0.00			$0.00		0		0%
20'	EA	$16,142.44		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3F) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$6,855.74		$0.00			$0.00		0		0%
8'	EA	$7,335.64		$0.00			$0.00		0		0%
10'	EA	$7,849.14		$0.00			$0.00		0		0%
12'	EA	$8,398.58		$0.00			$0.00		0		0%
16'	EA	$8,986.48		$0.00			$0.00		0		0%
20'	EA	$9,615.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3FF) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$14,671.28		$0.00			$0.00		0		0%
8'	EA	$15,698.27		$0.00			$0.00		0		0%
10'	EA	$16,797.15		$0.00			$0.00		0		0%
12'	EA	$17,972.95		$0.00			$0.00		0		0%
16'	EA	$19,231.06		$0.00			$0.00		0		0%
20'	EA	$20,577.23		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4A) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4AA) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4B) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$8,802.77		$0.00			$0.00		0		0%
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4BB) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$17,429.48		$0.00			$0.00		0		0%
8'	EA	$18,649.55		$0.00			$0.00		0		0%
10'	EA	$19,955.02		$0.00			$0.00		0		0%
12'	EA	$21,351.87		$0.00			$0.00		0		0%
16'	EA	$22,846.50		$0.00			$0.00		0		0%
20'	EA	$24,445.75		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4C) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4CC) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
8'	EA	$22,417.13		$0.00			$0.00		0		0%
10'	EA	$23,986.33		$0.00			$0.00		0		0%
12'	EA	$25,665.38		$0.00			$0.00		0		0%
16'	EA	$27,461.95		$0.00			$0.00		0		0%

20'	EA	$29,384.29		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4D)											
36"-48" Pipe (Invert Depth (H) =8'16') Inlet Length 4'	EA	$8,279.27		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4DD)											
36"-48" Pipe (Invert Depth (H)	**EA**	$16,392.95		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4E) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$9,016.12		$0.00		$0.00		0		0%	
8'	EA	$9,647.25		$0.00		$0.00		0		0%	
10'	EA	$10,322.56		$0.00		$0.00		0		0%	
12'	EA	$11,045.14		$0.00		$0.00		0		0%	
16'	EA	$11,818.30		$0.00		$0.00		0		0%	
20'	EA	$12,645.58		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4EE) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
6'	EA	$15,688.06		$0.00		$0.00		0		0%	
8'	EA	$16,786.22		$0.00		$0.00		0		0%	
10'	EA	$17,961.26		$0.00		$0.00		0		0%	
12'	EA	$19,218.54		$0.00		$0.00		0		0%	
16'	EA	$20,563.84		$0.00		$0.00		0		0%	
20'	EA	$22,003.31		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4F) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$10,040.36		$0.00		$0.00		0		0%	
10'	EA	$10,743.18		$0.00		$0.00		0		0%	
12'	EA	$11,495.20		$0.00		$0.00		0		0%	
16'	EA	$12,299.87		$0.00		$0.00		0		0%	
20'	EA	$13,160.86		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4FF) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
8'	EA	$15,140.86		$0.00		$0.00		0		0%	
10'	EA	$16,200.72		$0.00		$0.00		0		0%	
12'	EA	$17,334.77		$0.00		$0.00		0		0%	
16'	EA	$18,548.20		$0.00		$0.00		0		0%	
20'	EA	$19,846.57		$0.00		$0.00		0		0%	
Median Drop Inlets - CIP											
Median Drop Inlets (DI-6A) 12"-24"Pipe Inlet (H=8')	EA	$6,032.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6B) 12"-24"Pipe Inlet (H=8')	EA	$6,080.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6C) 30"-48"Pipe Inlet (H=10')	EA	$7,737.50		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6D) 30"-48"Pipe Inlet (H=10')	EA	$7,805.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7A) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7B) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
MISCELLANEOUS INLETS											
Median Drop Inlets (DI-5) Type III Top 12"-42" Pipe Inlet (H=8')	EA	$6,569.08		$0.00		$0.00		0		0%	
Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)		$5,969.49		$0.00		$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00		$0.00		0		0%	

Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)	EA	$6,444.64		$0.00			$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00			$0.00		0		0%	
Culverts												
Single Box Culvert (BC-1A) Fills to 25'												
4' X 4'	LF	$473.00		$0.00			$0.00		0		0%	
5' X 5'	LF	$563.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$689.00		$0.00			$0.00		0		0%	
8' X 8'	LF	$944.00		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,159.00		$0.00			$0.00		0		0%	
Double Box Culvert (BC-2b) Fills to 25'												
4' X 4'	LF	$792.40		$0.00			$0.00		0		0%	
5' X 5'	LF	$987.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,195.60		$0.00			$0.00		0		0%	
8' X 8'	LF	$1,607.20		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,975.40		$0.00			$0.00		0		0%	
Oversized Single Box Culvert (BBC-1) Fills to 25'												
12' X 6'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 8'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 10'	LF	$1,771.50		$0.00			$0.00		0		0%	
12' X 12'	LF	$1,771.50		$0.00			$0.00		0		0%	
Triple Box Culvert (BC-3B) Fills to 25'												
4' X 4'	LF	$1,129.55		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,399.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,755.95		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,367.85		$0.00			$0.00		0		0%	
10' X 10'	LF	$3,607.60		$0.00			$0.00		0		0%	
Quadruple Box Culvert (BC-4B) Fills to 25'												
4' X 4'	LF	$1,431.15		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,776.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$2,208.35		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,170.65		$0.00			$0.00		0		0%	
10' X 10'	LF	$4,110.75		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (1 Side Only) Height of Box												
4'	EA	$926.50		$0.00			$0.00		0		0%	
5'	EA	$1,390.00		$0.00			$0.00		0		0%	
6'	EA	$1,853.50		$0.00			$0.00		0		0%	
8'	EA	$3,426.50		$0.00			$0.00		0		0%	
10'	EA	$4,558.00		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (BBC-W) Height of Box												
6'	EA	$1,817.00		$0.00			$0.00		0		0%	
8'	EA	$3,007.50		$0.00			$0.00		0		0%	
10'	EA	$4,497.50		$0.00			$0.00		0		0%	
12'	EA	$6,567.00		$0.00			$0.00		0		0%	
MISCELLANEOUS STORM												
Connection to Existing Structure												
15"-36" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
Casing Pipe, Bore and Jack (3/8" wall)												
22" ID (6"-8" Carrier Pipe)	LF	$885.71		$0.00			$0.00		0		0%	
24" ID (10" Carrier Pipe)	LF	$971.91		$0.00			$0.00		0		0%	
30" ID (12" Carrier Pipe)	LF	$1,226.20		$0.00			$0.00		0		0%	
Plug Pipe												
6"-12" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
15"-36" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$574.50		$0.00			$0.00		0		0%	
Pavement Edge Pipe												
Standard Pipe Underdrain	LF	$20.50		$0.00			$0.00		0		0%	

RipRap											
Dry, Class I, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Dry, Class II, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Grouted, Class I, 18"	SY	$84.00		$0.00		$0.00		0		0%	
Filter Fabric											
Class I	SY	$4.13		$0.00		$0.00		0		0%	
Class II	SY	$4.13		$0.00		$0.00		0		0%	
Class III	SY	$4.13		$0.00		$0.00		0		0%	
Gabions (No excavations)											
Mattress	CY	$237.50		$0.00		$0.00		0		0%	
Revetment	CY	$237.50		$0.00		$0.00		0		0%	
Wall	CY	$237.50		$0.00		$0.00		0		0%	
Paved Ditch (4" Thick)											
Concrete (Non-reinforced)	SY	$94.50		$0.00		$0.00		0		0%	
Bituminous Concrete (4")	SY	$43.50		$0.00		$0.00		0		0%	
Sodded Ditch											
Sodded Ditch(Incl Fine Grading)	SY	$15.03		$0.00		$0.00		0		0%	
STREET CONSTRUCTION											
ROADS AND PARKING											
Soil Stabilization											
Cement 6%	SY/ Inch	$20.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Lime 6%	SY/ Inch	$14.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Subbase, Aggregated Material											
Base Type I	SY/ Inch	$12.95	3720	$385,392.00	3720	$48,174.00		3720		100%	
Depth (in Inches):	Depth	8				$0.00					
Bituminous Concrete											
Base Course	SY/ Inch	$7.00	3720	$78,120.00	3720	$26,040.00		3720		100%	
Depth (in Inches):	Depth	3				$0.00					
Intermediate Course	SY/ Inch	$7.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Top Course	SY/ Inch	$7.00	3720	$52,080.00		$0.00		0		0%	
Depth (in Inches):	Depth	$2.00				$0.00					
Prime Coat	SY	$1.38		$0.00		$0.00		0		0%	
Tack Coat	SY	$1.38		$0.00		$0.00		0		0%	
Driveway Restoration											
4" Concrete & 4" Gravel	SY	$75.00		$0.00		$0.00		0		0%	
2" S-5 & 7 6" Gravel	SY	$29.98		$0.00		$0.00		0		0%	
Shoulders, Type I											
Aggregated Base, 4"	SY	$15.00	1452	$21,780.00	1452	$21,780.00		1452		100%	
Concrete Curbing											
Curb & Gutter CG6 & CG7	LF	$31.50	2760	$86,940.00	2760	$86,940.00		2760		100%	
Curb Cut, CG-12 DetectableSurf.	EA	$1,044.00	2	$2,088.00		$0.00		0		0%	
Entrances/ Driveways											
Commercial Entrance CG-11	SY	$87.00		$0.00		$0.00		0		0%	
Commercial Entrance CG-13	SY	$87.00		$0.00		$0.00		0		0%	
Residential Driveway Apron	SY	$1,252.00		$0.00		$0.00		0		0%	
Guardrails											
Std. Blocked-out W beam(GR2)	LF	$53.50		$0.00		$0.00		0		0%	
Std. W beam, Weak Post GR8	LF	$53.50		$0.00		$0.00		0		0%	
Terminal, GR-6 (L=12'-6")	EA	$3,880.50		$0.00		$0.00		0		0%	
Terminal, GR-7 (L=6'-3")	EA	$3,880.50		$0.00		$0.00		0		0%	
Type I, GR-8 Terminal (L=25')	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, GR-8 Terminal(L=13'-6")	EA	$1,701.00		$0.00		$0.00		0		0%	
Terminal, MB-4 (L=37'-6")	EA	$3,580.50		$0.00		$0.00		0		0%	
Type I, MB-5 Terminal(L=27'-1)	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, MB-5 Terminal(L=13'-6)	EA	$1,701.00		$0.00		$0.00		0		0%	
Miscellaneous											
Trash enclosure - Brick 6' high	LF	$7,336.50		$0.00		$0.00		0		0%	

Reinforced Concrete Pad 6" to 8"	SY	$150.00		$0.00			$0.00		0		0%	
Striping 4" width (VDOT Type	LF	$2.50		$0.00			$0.00		0		0%	
B)												
Concrete Wheel Stops	EA	$90.00		$0.00			$0.00		0		0%	
Parking Lot Striping	EA	$50.00	20	$1,000.00		20	$1,000.00		20		100%	
Sign Island	EA	$850.00		$0.00			$0.00		0		0%	
Traffic Barricade	EA	$133.50		$0.00			$0.00		0		0%	
Street Name Signs	EA	$594.50	1	$594.50		1	$594.50		1		100%	
Traffic Control Signs	EA	$512.00	4	$2,048.00		4	$2,048.00		4		100%	
Street Light (pole, bracket,light)	EA	$5,938.00	17	$100,946.00		17	$100,946.00		17		100%	
SIDEWALKS AND TRAILS												
Sidewalk												
Concrete 4" w/WWF, No base	SY	$58.50		$0.00			$0.00		0		0%	
Bitum. Conc, 2" w/4" Base	SY	$42.00		$0.00			$0.00		0		0%	
4" Conc, No Reinf., No Base	SY	$58.50		$0.00			$0.00		0		0%	
HANDRAIL												
Handrail 3 Rail 1-1/4" #4 Finish	LF	$143.00		$0.00			$0.00		0		0%	
Wood Chip Trail												
Trails(Incl Excavation &	SY	$77.00		$0.00			$0.00		0		0%	
Grading) Wood chip, 4' wide	SY	$21.00		$0.00			$0.00		0		0%	
Bituminous Trail												
6' to 10' wide	SY	$22.00	69	1518			$0.00		0		0%	
CRITICAL SLOPE STABILIZATION												
Paved Flume	SY	$100.00		$0.00			$0.00		0		0%	
Stmwtr Conc Channel-Excav	SY	$97.00		$0.00			$0.00		0		0%	
ADD Grass Lined-seeded	SY	$19.00		$0.00			$0.00		0		0%	
ADD Grass Lined-sodded	SY	$26.00		$0.00			$0.00		0		0%	
Outlet Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Concrete 4"	SY	$70.00		$0.00			$0.00		0		0%	
Level Spreader	SY	$5.77		$0.00			$0.00		0		0%	
Struc Streambank Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Gabions	CY	$255.00		$0.00			$0.00		0		0%	
Vegetative Erosion Control												
Sodding incl Fertilizing –Banks	SY	$9.00		$0.00			$0.00		0		0%	
Sodding incl Fertilizing – Flat	SY	$9.00		$0.00			$0.00		0		0%	
Seeding incl Fertilizing	SY	$3.00		$0.00			$0.00		0		0%	
Soding W/Soil Treat &Watering	SY	$9.00		$0.00			$0.00		0		0%	
Seeding W/Soil Treat &Watering	SY	$3.00		$0.00			$0.00		0		0%	
Straw Mulch w/Tack	SY	$2.00		$0.00			$0.00		0		0%	
Jute Mesh	SY	$2.00		$0.00			$0.00		0		0%	
SPECIAL ITEMS												
FEMA ProcessingLOMR/CLOMR	EA	$10,240.00		$0.00			$0.00		0		0%	
As Built (Record Drawings)	EA	$12,967.50	1	$12,967.50		0.75	$9,725.63		0.75		75%	
SWM/BMP POND	LS	$0.00		$0.00			$0.00		0		0%	
SIGNALIZATION	LS	$0.00		$0.00			$0.00		0		0%	

EFFECTIVE PERIOD OF BOND (IN MONTHS)	**12**
TOTAL ESTIMATE OF COMPLETED WORK	**$1,648,733.35**
+ 10% CONTINGENCY	**$164,873.34**
GRAND TOTAL	**$1,813,606.69**
FINAL PRICE (+ 4% ANNUAL INTEREST)	**$1,886,150.95**

EFFECTIVE PERIOD OF BOND (IN MONTHS)	
TOTAL BOND REDUCTION REQUEST	**$832,728.58**
+ 10% CONTINGENCY	**$83,272.86**
GRAND TOTAL	**$916,001.43**
FINAL BOND REDUCTION REQUEST (+4% ANNUAL INTEREST)	**$916,001.43**

TOTAL ESTIMATED - BOND REMAINING	**$970,149.52**

Kimley»Horn

Memorandum

To: Jon K Erickson, PE
Morris & Ritchie Associates Inc.
205 E Hirst St
Purcellville VA, 20132

From: Mark Phillips, P.E.

Through: James Newman
City of Charles town
101 E Washington Street
Charles Town, WV 25414

Date: November 10, 2026

Subject: Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction Request Review

This memorandum summarizes our review of the Bond Reduction Request for the Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction application (dated August 7, 2026, prepared by Morris & Ritchie Associates) for a performance bond reduction for the following amounts for each phase:

- Phase 10B - $1,182,697.48
- Phase 11 - $916,001.43
- Phase 12 - $1,344,484.71
- Phase 13 - $2,225,028.23

Using the As-Builts dated September 21, 2026, it is our opinion that the quantities of work that have been presented on the bond reduction are a reasonable representation of the work completed in the field.

Kimley-Horn's review of this application is limited to the Bond Reduction Request and Approved Plan Set provided. Based on our review we have the following comments:

1. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 12 and the Bond Reduction Spreadsheet for Phase 12 which lists the reduction amount at $1,344,484.70 and $1,344,484.71 respectively.
2. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 13 and the Bond Reduction Spreadsheet for Phase 13 which lists the reduction amount at $2,225,028.23 and $2,224,348.69 respectively.

Kimley-Horn recommends that Comments 1 & 2 above be addressed by the Applicant.

Thank you for the opportunity to review this Bond Reduction Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager
Associate

Planning Commission
101 East Washington Street
Charles Town, WV 25414

SCHEDULED

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

AGENDA ITEM (ID #)

Commission Review - BR2026-13 - Norborne-Glebe Phase 12- Bond Reduction

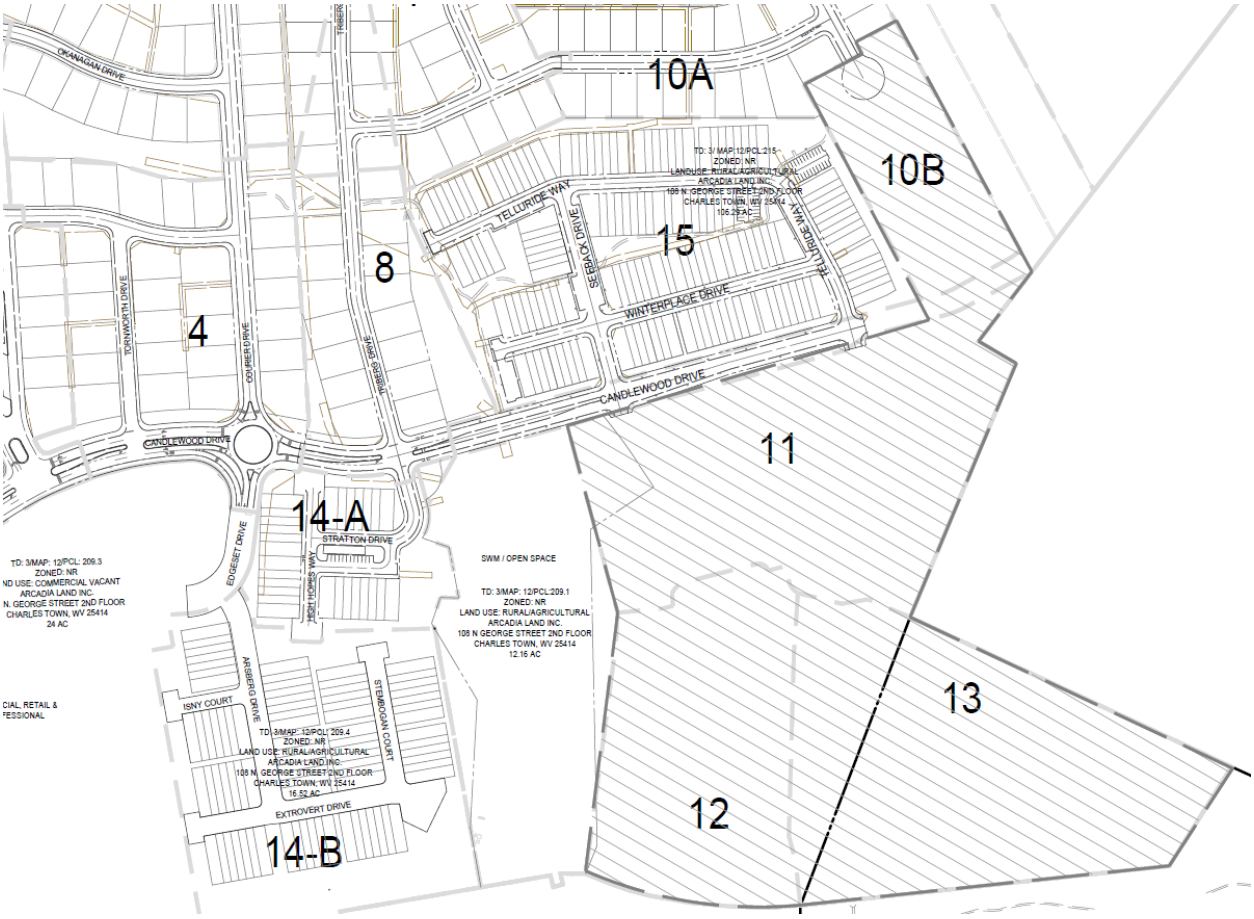
ATTACHMENTS:

- 1. Staff Report.pdf
- 2. Application.pdf
- 3. Reduction Cost Sheet.pdf
- 4. KH Review.pdf

Bond Reduction Request
BR2026-13

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Arcadia Land Inc.
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: A bond reduction in the amount of $1,473,946.79

Norborne Glebe Phase 12



BACKGROUND
The applicant is requesting a bond reduction of the performance bond. The preliminary plan for this phase was approved by the Planning Commission on February 26, 2024.

Current Bond Amount: $2,818,431.50
Requested Reduction: $1,473,946.79
Remaining Amount: $1,344,484.70

Upon review of the request the City Engineer, Kimley-Horn, has determined that the bond reduction is a reasonable request based on the work completed thus far.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. The Committee recommends approval of the bond reduction.

STAFF RECOMMENDATION
Recommend **approval** of the bond reduction to City Council.

PB 12-12

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

- ☐ Bond Initiation – No application fee
- ☑ Bond Reduction – No application fee
- ☐ Bond Extension – No application fee
- ☐ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE August 7, 2026

2. PROJECT NAME Norborne Glebe Subdivision- Phase 12

Address N/A

3. APPLICANT'S NAME* Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

4. PROPERTY OWNER'S NAME Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number (703-771-8000

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Requesting performance bond reduction for Phase 12, Norborne Glebe Subdivision

6. A) CURRENT BOND AMOUNT $ 2,818,431.50

B) PROPOSED BOND AMOUNT $ 1,473,946.79

C) CHANGE IN BONDED AMOUNT $ 1,344,484.7

11/16

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
3-12	215		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
SLD-2013-04	Norborne Glebe Phase 5	Approved	01/14/2014
SLD-2017-05	Norborne Glebe Phase 7-8	Approved	09/25/2018
SLD-2016-01	Norborne Glebe Phase 6	Approved	9/25/2018

9. BOND RELEASE – SUPPLEMENTAL MATERIALS REQUIRED:

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways**, a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

Before a Performance Agreement and surety for private roadway construction shall be released, a Latent Defects Indemnification Agreement and Bond shall be provided by the applicant/Developer and approved by the Planning Commission. The guarantee provided by such Agreement and Bond must be for a period of two (2) years following the date of performance bond release, and must be in an amount equal to no less than 5% of the original performance bond estimate.

G. **Landscaping Surety** is required to ensure the landscaping shown on a Major S/LD plan is maintained for one (1) year. The one (1) year shall start from the date at which the surety for the site has been released, with the exception of this landscaping surety. The landscaping surety amount shall not be less than $5,000.00 or 10% of the total landscaping cost for the project, which ever is greater.

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

Signature of Applicant Treasurer Date 9/8/2026

Signature of Property Owner (If different than Applicant)

_____ Date _____

Please submit an original completed application to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Check No._____

Receipt No._____

Site Inspection Date:_____ Inspector:_____

Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

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BOND ESTIMATE					BOND REDUCTION						City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	Final Price	QUANTITY COMPLETED (REDUCTION REQUEST)	UNIT COST	PREVIOUS QUANTITY COMPLETED	TOTAL QUANTITY COMPLETED (INCLUDING REDUCTION REQUEST)	EXTENSION	%COMPLETE	%APPROVED
MOBILIZATION GENERAL											
Mobilization	LS	$12,440.00	1	$12,440.00	1	$12,440.00		1		100%	
Field Office	EA	$3,490.00		$0.00		$0.00		0		0%	
Job Sign	EA	$1,340.00		$0.00		$0.00		0		0%	
SURVEYING											
Steel Pipe Property Corner Marker Incl. Survey	EA	$320.38	200	$64,076.00	160	$51,260.80		160		80%	
R.O.W MONUMENTS SURVEYED IN PLACE											
RM--1		$825.00		$0.00		$0.00		0		0%	
RM--2		$764.00		$0.00		$0.00		0		0%	
EARTHWORK EXCAVATION											
Regular Bulk used as Fill	CY	$4.50		$0.00		$0.00		0		0%	
Rock, Rip	CY	$51.50		$0.00		$0.00		0		0%	
Rock, Blast	CY	$55.00		$0.00		$0.00		0		0%	
BORROW MATERIAL											
Buy, Load, Haul 10 Mi. Select Material	CY	$42.00		$0.00		$0.00		0		0%	
Fill and Compaction of On-site Borrow	CY	$44.00		$0.00		$0.00		0		0%	
UNSUITABLE MATERIAL											
Load and Haul, 20 mi R/T	CY	$36.56		$0.00		$0.00		0		0%	
Dump Charge	CY	$62.50		$0.00		$0.00		0		0%	
Site Grading	SY	$1.25		$0.00		$0.00		0		0%	
CLEAR & GRUB											
Light	AC	$14,548.50	10.63	$154,650.56	10.63	$154,650.56		10.63		100%	
Heavy	AC	$26,699.49		$0.00		$0.00		0		0%	
LANDSCAPING											
Seeding	SY	$3.00	21780	$65,340.00	10000	$30,000.00		10000		46%	
Sodding	SY	$8.50	21780	$185,130.00	10000	$85,000.00		10000		46%	
PLANTING SHRUBS											
18"	EA	$70.00		$0.00		$0.00		0		0%	
24"	EA	$90.00		$0.00		$0.00		0		0%	
TREES											
6'-8' (1-2 in. Caliper)	EA	$400.00	93	$37,200.00	25	$10,000.00		25		27%	
8'-10' (2.5-3 in. Caliper)	EA	$700.00		$0.00		$0.00		0		0%	
Tree Protection	LF	$11.13		$0.00		$0.00		0		0%	
MISCELLANEOUS SITE IMPROVEMENTS											
Timber Wall (less than 6 ft)	LF	$325.00		$0.00		$0.00		0		0%	
Dry Rubble RW-1 (H=6')	LF	$450.00		$0.00		$0.00		0		0%	
Mortared Rubble RW-1A (H=6')	LF	$535.00		$0.00		$0.00		0		0%	
Concrete Gravity RW-2 (H=6')	LF	$589.50		$0.00		$0.00		0		0%	
Concrete Gravity RW-3 (H=6')	LF	$1,037.50		$0.00		$0.00		0		0%	
FENCING											
Std. Fence (H=5') FR-5	LF	$56.00		$0.00		$0.00		0		0%	
Farm Fence (H=5') FR-3A	LF	$37.50		$0.00		$0.00		0		0%	
Chain Link Fence (H=6') FR 2-B	LF	$62.00		$0.00		$0.00		0		0%	
Board Fence (H=6')	LF	$62.00		$0.00		$0.00		0		0%	
TOTS LOTS											
Tot Lot	EA	$16,495.00		$0.00		$0.00		0		0%	
STORM DRAINAGE											
STORM SEWER											
NOTE: All pipe unit prices include trench, excavation, bedding, pipe, & backfill											
Rock Excavation for All Pipe Types											
Less than 1,500 CY (Blasting)	CY	$110.00		$0.00		$0.00		0		0%	

More than 1,500 CY (Blasting)	CY	$90.00		$0.00			$0.00		0		0%
Less than 1,500 CY (Hoe Ram)	CY	$220.00		$0.00			$0.00		0		0%
More than 1,500 CY (Hoe Ram)	CY	$180.00		$0.00			$0.00		0		0%
Trench De-Watering											
Trench De-Watering	LF	$4.00		$0.00			$0.00		0		0%
RCP CLASS III ROUND T & G W/MASTIC											
12" Pipe (RCP III)											
0'-8' Cut	LF	$100.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$140.00		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$1.90		$0.00			$0.00		0		0%
O-Ring	LF	$12.36		$0.00			$0.00		0		0%
15" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10'-16'	LF	$156.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$1.48		$0.00			$0.00		0		0%
O-Ring	LF	$8.58		$0.00			$0.00		0		0%
18" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10' -16' Cut	LF	$160.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$3.20		$0.00			$0.00		0		0%
O-Ring	LF	$11.20		$0.00			$0.00		0		0%
21" Pipe (RCP III)											
0'-8' Cut	LF	$115.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$174.80		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$4.40		$0.00			$0.00		0		0%
O-Ring	LF	$20.80		$0.00			$0.00		0		0%
24" Pipe (RCP III)											
0'- 10' Cut	LF	$140.00		$0.00			$0.00		0		0%
10'-16'	LF	$196.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$5.04		$0.00			$0.00		0		0%
O-Ring	LF	$22.40		$0.00			$0.00		0		0%
27" Pipe (RCP III)											
0'- 10' Cut	LF	$123.20		$0.00			$0.00		0		0%
10' -16' Cut	LF	$195.03		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$6.40		$0.00			$0.00		0		0%
O-Ring	LF	$24.00		$0.00			$0.00		0		0%
30" Pipe (RCP III)											
0'- 8' Cut	LF	$169.40		$0.00			$0.00		0		0%
8'-14' Cut	LF	$256.66		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$9.60		$0.00			$0.00		0		0%
O-Ring	LF	$27.60		$0.00			$0.00		0		0%
33" Pipe (RCP III)											
0'- 10' Cut	LF	$240.00		$0.00			$0.00		0		0%
10'-16'	LF	$333.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$13.50		$0.00			$0.00		0		0%
O-Ring	LF	$45.80		$0.00			$0.00		0		0%
36" Pipe (RCP III)											
0'-10' Cut	LF	$249.60		$0.00			$0.00		0		0%
10' -16' Cut	LF	$363.92		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$12.40		$0.00			$0.00		0		0%
O-Ring	LF	$36.40		$0.00			$0.00		0		0%
42" Pipe (RCP III)											
0'- 8' Cut	LF	$289.54		$0.00			$0.00		0		0%
8'-14' Cut	LF	$413.46		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$19.20		$0.00			$0.00		0		0%
O-Ring	LF	$56.72		$0.00			$0.00		0		0%
48" Pipe (RCP III)											
0'-10' Cut	LF	$320.52		$0.00			$0.00		0		0%
10'-16'	LF	$442.31		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$20.00		$0.00			$0.00		0		0%
O-Ring	LF	$69.36		$0.00			$0.00		0		0%

54" Pipe (RCP III)											
0' - 10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$541.38		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$30.00		$0.00		$0.00		0		0%	
O-Ring	LF	$70.96		$0.00		$0.00		0		0%	
60" Pipe (RCP III)											
0'-10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$498.48		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$36.00		$0.00		$0.00		0		0%	
O-Ring	LF	$77.84		$0.00		$0.00		0		0%	
ELLIPTICAL PIPE - RCP CLASS III											
23"x14" (18" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$278.60		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$41.60		$0.00		$0.00		0		0%	
O-Ring	LF	$109.80		$0.00		$0.00		0		0%	
30"x19" (24" Equiv- RCP III											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$329.25		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$15.07		$0.00		$0.00		0		0%	
O-Ring	LF	$109.79		$0.00		$0.00		0		0%	
38"x24" (30" Equiv- RCP III											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$423.78		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$21.38		$0.00		$0.00		0		0%	
O-Ring	LF	$129.92		$0.00		$0.00		0		0%	
45"x29" (36" Equiv- RCP III)											
0'10' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$526.88		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$25.45		$0.00		$0.00		0		0%	
O-Ring	LF	$119.63		$0.00		$0.00		0		0%	
1											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$528.36		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$38.87		$0.00		$0.00		0		0%	
O-Ring	LF	$149.26		$0.00		$0.00		0		0%	
60"x38" (48" Equiv- RCP III)											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$543.90		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$46.46		$0.00		$0.00		0		0%	
O-Ring	LF	$177.11		$0.00		$0.00		0		0%	
HDPE PIPE											
8" Pipe											
0'-8' Cut	LF	$50.00		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$75.30		$0.00		$0.00		0		0%	
12" Pipe											
0'-8' Cut	LF	$67.50		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$100.04		$0.00		$0.00		0		0%	
15" Pipe											
0'-8' Cut	LF	$87.08	379	$33,003.32		379	$33,003.32		379		100%
8'-16' Cut	LF	$129.65		$0.00			$0.00		0		0%
18" Pipe											
0'-8' Cut	LF	$114.33	69	$7,888.77		69	$7,888.77		69		100%
8'-16' Cut	LF	$170.69		$0.00			$0.00		0		0%
24" Pipe											
0'-8' Cut	LF	$132.62	340	$45,090.80		340	$45,090.80		340		100%
8'-16' Cut	LF	$197.61	29	$5,730.69		29	$5,730.69		29		100%
30" Pipe											
0'-8' Cut	LF	$157.42	909	$143,094.78		909	$143,094.78		909		100%
8'-16' Cut	LF	$236.13		$0.00			$0.00		0		0%
36" Pipe											

0'-8' Cut	LF	$200.00		$0.00			$0.00		0		0%
8'-16' Cut	LF	$298.00		$0.00			$0.00		0		0%
42" Pipe											
0'-8' Cut	LF	$224.20		$0.00			$0.00		0		0%
8'-16' Cut	LF	$334.06		$0.00			$0.00		0		0%
48" Pipe											
0'-8' Cut	LF	$253.35		$0.00			$0.00		0		0%
8'-16' Cut	LF	$377.49		$0.00			$0.00		0		0%
STORM STRUCTURES											
END SECTIONS											
End Sections (ES-1), Concrete Pipe Size											
15"	EA	$1,389.00		$0.00			$0.00		0		0%
18"	EA	$1,583.46		$0.00			$0.00		0		0%
21"	EA	$1,805.14	1	$1,805.14	1		$1,805.14		1		100%
24"	EA	$2,057.86		$0.00			$0.00		0		0%
27"	EA	$2,345.97		$0.00			$0.00		0		0%
30"	EA	$2,674.40	3	$8,023.20	3		$8,023.20		3		100%
36"	EA	$3,048.82		$0.00			$0.00		0		0%
42"	EA	$3,558.50		$0.00			$0.00		0		0%
48"	EA	$4,056.69		$0.00			$0.00		0		0%
54"	EA	$4,624.63		$0.00			$0.00		0		0%
60"	EA	$5,272.07		$0.00			$0.00		0		0%
ENDWALLS											
EW-1 (Pre-Cast) Round Pipe Size											
15"	EA	$2,433.00		$0.00			$0.00		0		0%
18"	EA	$2,724.96		$0.00			$0.00		0		0%
24"	EA	$3,051.96		$0.00			$0.00		0		0%
30"	EA	$3,418.19		$0.00			$0.00		0		0%
36"	EA	$3,828.37		$0.00			$0.00		0		0%
EW-1 Cast in Place [Round Pipe Size]											
15"	EA	$2,591.15		$0.00			$0.00		0		0%
18"	EA	$2,902.08		$0.00			$0.00		0		0%
24"	EA	$3,250.33		$0.00			$0.00		0		0%
30"	EA	$3,640.37		$0.00			$0.00		0		0%
36"	EA	$4,077.22		$0.00			$0.00		0		0%
EW-1A (Pre-Cast) Elliptical Pipe Size											
23" X 14" (18")	EA	$1,335.00		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,495.20		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$1,879.50		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,105.04		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$2,791.50		$0.00			$0.00		0		0%
EW-1A (Cast in Place)Elliptical Pipe Size											
23" X 14" (18")	EA	$1,318.50		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,318.50		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$2,257.00		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,257.00		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$3,217.50		$0.00			$0.00		0		0%
EW-2 (PreCast) Round Size Pipe Size											
42"	EA	$8,324.00		$0.00			$0.00		0		0%
48"	EA	$9,322.88		$0.00			$0.00		0		0%
54"	EA	$10,441.63		$0.00			$0.00		0		0%
60"	EA	$11,694.62		$0.00			$0.00		0		0%
72"	EA	$12,675.50		$0.00			$0.00		0		0%
84"	EA	$14,196.56		$0.00			$0.00		0		0%
EW-2 (Cast in Place) Round Size Pipe Size											
42"	EA	$9,255.50		$0.00			$0.00		0		0%
48"	EA	$10,366.16		$0.00			$0.00		0		0%
54"	EA	$11,610.10		$0.00			$0.00		0		0%
60"	EA	$13,003.31		$0.00			$0.00		0		0%
72"	EA	$15,747.00		$0.00			$0.00		0		0%
84"	EA	$17,636.64		$0.00			$0.00		0		0%

EW-6PC [Double Pipe] Pipe Size											
2-15"	EA	$2,123.00		$0.00		$0.00		0		0%	
2-18"	EA	$2,377.76		$0.00		$0.00		0		0%	
2-24"	EA	$2,663.09		$0.00		$0.00		0		0%	
2-30"	EA	$4,096.00		$0.00		$0.00		0		0%	
2-36"	EA	$4,587.52		$0.00		$0.00		0		0%	
MANHOLES											
Standard Brick Manhole Std Frame & Cover (MH-1)											
6' Depth	EA	$6,048.00		$0.00		$0.00		0		0%	
Depth Below 6'	VF	$230.00		$0.00		$0.00		0		0%	
Standard Precast Manhole Std Frame & Cover (MH-2)		$5,337.00	2	$10,674.00	2	$10,674.00		2		100%	
Additional Cost (Amount in parentheses to be added to the above unit costs)											
Watertight Fr/Cover (Add 110)	EA	$579.00		$0.00		$0.00		0		0%	
Heavy Duty Fr/ Cover (Add 82)	VF	$599.00		$0.00		$0.00		0		0%	
Drop Inlets											
Cast in Place 48"											
Drop Inlet (DI-1) 12"-24" Pipe0-10 VF	EA	$7,690.00	2	$15,380.00	2	$15,380.00		2		100%	
Drop Inlet (DI-1A) 12"-24" Pipe10-20 VF	EA	$7,690.00		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe0-10 VF, 10' throat	EA	$9,458.70		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe10-20 VF, 10' throat	EA	$11,634.20		$0.00		$0.00		0		0%	
Curb Drop Inlets											
Curb Drop Inlet (DI-3A)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$7,460.00		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3AA)											
12"-30" Pipe (Invert Depth (H) =8'-	**EA**	$9,772.60		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3B) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,758.40		$0.00		$0.00		0		0%	
6'	EA	$8,534.24	2	$17,068.48	2	$17,068.48		2		100%	
8'	EA	$9,387.66	5	$46,938.30	5	$46,938.30		5		100%	
10'	EA	$10,326.43	1	$10,326.43	1	$10,326.43		1		100%	
12'	EA	$11,359.07		$0.00		$0.00		0		0%	
16'	EA	$12,494.98	1	$12,494.98	1	$12,494.98		1		100%	
20'	EA	$13,744.48		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3BB) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,680.82	1	$7,680.82	1	$7,680.82		1		100%	
6'	EA	$8,448.90	2	$16,897.80	2	$16,897.80		2		100%	
8'	EA	$9,293.79	2	$18,587.58	2	$18,587.58		2		100%	
10'	EA	$10,223.17	1	$10,223.17	1	$10,223.17		1		100%	
12'	EA	$11,245.48		$0.00		$0.00		0		0%	
16'	EA	$12,370.03		$0.00		$0.00		0		0%	
20'	EA	$13,607.03		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3C) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$7,204.61		$0.00		$0.00		0		0%	
8'	EA	$7,925.07	2	$15,850.14	2	$15,850.14		2		100%	
10'	EA	$8,717.57		$0.00		$0.00		0		0%	
12'	EA	$9,589.33		$0.00		$0.00		0		0%	
16'	EA	$10,548.26		$0.00		$0.00		0		0%	
20'	EA	$11,603.09		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3CC) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$8,573.48		$0.00		$0.00		0		0%	
8'	EA	$9,430.83		$0.00		$0.00		0		0%	
10'	EA	$10,373.91		$0.00		$0.00		0		0%	
12'	EA	$11,411.30		$0.00		$0.00		0		0%	
16'	EA	$12,552.43		$0.00		$0.00		0		0%	
20'	EA	$13,807.68		$0.00		$0.00		0		0%	

Curb Drop Inlet (DI-3D)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$6,430.11		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3DD)											
12"-30" Pipe (Invert Depth	**EA**	$7,587.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3E) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,460.00		$0.00			$0.00		0		0%
8'	EA	$7,982.20		$0.00			$0.00		0		0%
10'	EA	$8,540.95		$0.00			$0.00		0		0%
12'	EA	$9,138.82		$0.00			$0.00		0		0%
16'	EA	$9,778.54		$0.00			$0.00		0		0%
20'	EA	$10,463.04		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3EE) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$11,509.34		$0.00			$0.00		0		0%
8'	EA	$12,314.99		$0.00			$0.00		0		0%
10'	EA	$13,177.04		$0.00			$0.00		0		0%
12'	EA	$14,099.44		$0.00			$0.00		0		0%
16'	EA	$15,086.40		$0.00			$0.00		0		0%
20'	EA	$16,142.44		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3F) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$6,855.74		$0.00			$0.00		0		0%
8'	EA	$7,335.64		$0.00			$0.00		0		0%
10'	EA	$7,849.14		$0.00			$0.00		0		0%
12'	EA	$8,398.58		$0.00			$0.00		0		0%
16'	EA	$8,986.48		$0.00			$0.00		0		0%
20'	EA	$9,615.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3FF) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$14,671.28		$0.00			$0.00		0		0%
8'	EA	$15,698.27		$0.00			$0.00		0		0%
10'	EA	$16,797.15		$0.00			$0.00		0		0%
12'	EA	$17,972.95		$0.00			$0.00		0		0%
16'	EA	$19,231.06		$0.00			$0.00		0		0%
20'	EA	$20,577.23		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4A) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4AA) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4B) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$8,802.77		$0.00			$0.00		0		0%
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4BB) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$17,429.48		$0.00			$0.00		0		0%
8'	EA	$18,649.55		$0.00			$0.00		0		0%
10'	EA	$19,955.02		$0.00			$0.00		0		0%
12'	EA	$21,351.87		$0.00			$0.00		0		0%
16'	EA	$22,846.50		$0.00			$0.00		0		0%
20'	EA	$24,445.75		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4C) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4CC) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
8'	EA	$22,417.13		$0.00			$0.00		0		0%
10'	EA	$23,986.33		$0.00			$0.00		0		0%
12'	EA	$25,665.38		$0.00			$0.00		0		0%
16'	EA	$27,461.95		$0.00			$0.00		0		0%

20'	EA	$29,384.29		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4D)											
36"-48" Pipe (Invert Depth (H) =8'16') Inlet Length 4'	EA	$8,279.27		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4DD)											
36"-48" Pipe (Invert Depth (H)	**EA**	$16,392.95		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4E) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$9,016.12		$0.00		$0.00		0		0%	
8'	EA	$9,647.25		$0.00		$0.00		0		0%	
10'	EA	$10,322.56		$0.00		$0.00		0		0%	
12'	EA	$11,045.14		$0.00		$0.00		0		0%	
16'	EA	$11,818.30		$0.00		$0.00		0		0%	
20'	EA	$12,645.58		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4EE) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
6'	EA	$15,688.06		$0.00		$0.00		0		0%	
8'	EA	$16,786.22		$0.00		$0.00		0		0%	
10'	EA	$17,961.26		$0.00		$0.00		0		0%	
12'	EA	$19,218.54		$0.00		$0.00		0		0%	
16'	EA	$20,563.84		$0.00		$0.00		0		0%	
20'	EA	$22,003.31		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4F) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$10,040.36		$0.00		$0.00		0		0%	
10'	EA	$10,743.18		$0.00		$0.00		0		0%	
12'	EA	$11,495.20		$0.00		$0.00		0		0%	
16'	EA	$12,299.87		$0.00		$0.00		0		0%	
20'	EA	$13,160.86		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4FF) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
8'	EA	$15,140.86		$0.00		$0.00		0		0%	
10'	EA	$16,200.72		$0.00		$0.00		0		0%	
12'	EA	$17,334.77		$0.00		$0.00		0		0%	
16'	EA	$18,548.20		$0.00		$0.00		0		0%	
20'	EA	$19,846.57		$0.00		$0.00		0		0%	
Median Drop Inlets - CIP											
Median Drop Inlets (DI-6A) 12"-24"Pipe Inlet (H=8')	EA	$6,032.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6B) 12"-24"Pipe Inlet (H=8')	EA	$6,080.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6C) 30"-48"Pipe Inlet (H=10')	EA	$7,737.50		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6D) 30"-48"Pipe Inlet (H=10')	EA	$7,805.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7A) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7B) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
MISCELLANEOUS INLETS											
Median Drop Inlets (DI-5) Type III Top 12"-42" Pipe Inlet (H=8')	EA	$6,569.08		$0.00		$0.00		0		0%	
Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)		$5,969.49		$0.00		$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00		$0.00		0		0%	

Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)	EA	$6,444.64		$0.00			$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00			$0.00		0		0%	
Culverts												
Single Box Culvert (BC-1A) Fills to 25'												
4' X 4'	LF	$473.00		$0.00			$0.00		0		0%	
5' X 5'	LF	$563.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$689.00		$0.00			$0.00		0		0%	
8' X 8'	LF	$944.00		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,159.00		$0.00			$0.00		0		0%	
Double Box Culvert (BC-2b) Fills to 25'												
4' X 4'	LF	$792.40		$0.00			$0.00		0		0%	
5' X 5'	LF	$987.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,195.60		$0.00			$0.00		0		0%	
8' X 8'	LF	$1,607.20		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,975.40		$0.00			$0.00		0		0%	
Oversized Single Box Culvert (BBC-1) Fills to 25'												
12' X 6'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 8'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 10'	LF	$1,771.50		$0.00			$0.00		0		0%	
12' X 12'	LF	$1,771.50		$0.00			$0.00		0		0%	
Triple Box Culvert (BC-3B) Fills to 25'												
4' X 4'	LF	$1,129.55		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,399.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,755.95		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,367.85		$0.00			$0.00		0		0%	
10' X 10'	LF	$3,607.60		$0.00			$0.00		0		0%	
Quadruple Box Culvert (BC-4B) Fills to 25'												
4' X 4'	LF	$1,431.15		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,776.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$2,208.35		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,170.65		$0.00			$0.00		0		0%	
10' X 10'	LF	$4,110.75		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (1 Side Only) Height of Box												
4'	EA	$926.50		$0.00			$0.00		0		0%	
5'	EA	$1,390.00		$0.00			$0.00		0		0%	
6'	EA	$1,853.50		$0.00			$0.00		0		0%	
8'	EA	$3,426.50		$0.00			$0.00		0		0%	
10'	EA	$4,558.00		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (BBC-W) Height of Box												
6'	EA	$1,817.00		$0.00			$0.00		0		0%	
8'	EA	$3,007.50		$0.00			$0.00		0		0%	
10'	EA	$4,497.50		$0.00			$0.00		0		0%	
12'	EA	$6,567.00		$0.00			$0.00		0		0%	
MISCELLANEOUS STORM												
Connection to Existing Structure												
15"-36" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
Casing Pipe, Bore and Jack (3/8" wall)												
22" ID (6"-8" Carrier Pipe)	LF	$885.71		$0.00			$0.00		0		0%	
24" ID (10" Carrier Pipe)	LF	$971.91		$0.00			$0.00		0		0%	
30" ID (12" Carrier Pipe)	LF	$1,226.20		$0.00			$0.00		0		0%	
Plug Pipe												
6"-12" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
15"-36" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$574.50		$0.00			$0.00		0		0%	
Pavement Edge Pipe												
Standard Pipe Underdrain	LF	$20.50		$0.00			$0.00		0		0%	

RipRap											
Dry, Class I, 18"	SY	$82.00	46.67	$3,826.94	46.67	$3,826.94		46.67		100%	
Dry, Class II, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Grouted, Class I, 18"	SY	$84.00		$0.00		$0.00		0		0%	
Filter Fabric											
Class I	SY	$4.13		$0.00		$0.00		0		0%	
Class II	SY	$4.13		$0.00		$0.00		0		0%	
Class III	SY	$4.13		$0.00		$0.00		0		0%	
Gabions (No excavations)											
Mattress	CY	$237.50		$0.00		$0.00		0		0%	
Revetment	CY	$237.50		$0.00		$0.00		0		0%	
Wall	CY	$237.50		$0.00		$0.00		0		0%	
Paved Ditch (4" Thick)											
Concrete (Non-reinforced)	SY	$94.50		$0.00		$0.00		0		0%	
Bituminous Concrete (4")	SY	$43.50		$0.00		$0.00		0		0%	
Sodded Ditch											
Sodded Ditch(Incl Fine Grading)	SY	$15.03		$0.00		$0.00		0		0%	
STREET CONSTRUCTION											
ROADS AND PARKING											
Soil Stabilization											
Cement 6%	SY/ Inch	$20.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Lime 6%	SY/ Inch	$14.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Subbase, Aggregated Material											
Base Type I	SY/ Inch	$12.95	8400	$870,240.00	8400	$108,780.00		8400		100%	
Depth (in Inches):	Depth	8				$0.00					
Bituminous Concrete											
Base Course	SY/ Inch	$7.00	8400	$176,400.00	8400	$58,800.00		8400		100%	
Depth (in Inches):	Depth	3				$0.00					
Intermediate Course	SY/ Inch	$7.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth					$0.00					
Top Course	SY/ Inch	$7.00	8400	$117,600.00		$0.00		0		0%	
Depth (in Inches):	Depth	$2.00				$0.00					
Prime Coat	SY	$1.38		$0.00		$0.00		0		0%	
Tack Coat	SY	$1.38		$0.00		$0.00		0		0%	
Driveway Restoration											
4" Concrete & 4" Gravel	SY	$75.00		$0.00		$0.00		0		0%	
2" S-5 & 7 6" Gravel	SY	$29.98		$0.00		$0.00		0		0%	
Shoulders, Type I											
Aggregated Base, 4"	SY	$15.00	2420	$36,300.00	2420	$36,300.00		2420		100%	
Concrete Curbing											
Curb & Gutter CG6 & CG7	LF	$31.50	4675	$147,262.50	4675	$147,262.50		4675		100%	
Curb Cut, CG-12 DetectableSurf.	EA	$1,044.00	6	$6,264.00	6	$6,264.00		6		100%	
Entrances/ Driveways											
Commercial Entrance CG-11	SY	$87.00		$0.00		$0.00		0		0%	
Commercial Entrance CG-13	SY	$87.00		$0.00		$0.00		0		0%	
Residential Driveway Apron	SY	$1,252.00		$0.00		$0.00		0		0%	
Guardrails											
Std. Blocked-out W beam(GR2)	LF	$53.50		$0.00		$0.00		0		0%	
Std. W beam, Weak Post GR8	LF	$53.50		$0.00		$0.00		0		0%	
Terminal, GR-6 (L=12'-6")	EA	$3,880.50		$0.00		$0.00		0		0%	
Terminal, GR-7 (L=6'-3")	EA	$3,880.50		$0.00		$0.00		0		0%	
Type I, GR-8 Terminal (L=25')	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, GR-8 Terminal(L=13'-6")	EA	$1,701.00		$0.00		$0.00		0		0%	
Terminal, MB-4 (L=37'-6")	EA	$3,580.50		$0.00		$0.00		0		0%	
Type I, MB-5 Terminal(L=27'-1)	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, MB-5 Terminal(L=13'-6)	EA	$1,701.00		$0.00		$0.00		0		0%	
Miscellaneous											
Trash enclosure - Brick 6' high	LF	$7,336.50		$0.00		$0.00		0		0%	

Reinforced Concrete Pad 6" to 8"	SY	$150.00		$0.00		$0.00		0		0%	
Striping 4" width (VDOT Type	LF	$2.50		$0.00		$0.00		0		0%	
B)											
Concrete Wheel Stops	EA	$90.00		$0.00		$0.00		0		0%	
Parking Lot Striping	EA	$50.00	14	$700.00		$0.00		0		0%	
Sign Island	EA	$850.00		$0.00		$0.00		0		0%	
Traffic Barricade	EA	$133.50		$0.00		$0.00		0		0%	
Street Name Signs	EA	$594.50	4	$2,378.00	4	$2,378.00		4		100%	
Traffic Control Signs	EA	$512.00	5	$2,560.00	5	$2,560.00		5		100%	
Street Light (pole, bracket,light)	EA	$5,938.00	22	$130,636.00	11	$65,318.00		11		50%	
SIDEWALKS AND TRAILS											
Sidewalk											
Concrete 4" w/WWF, No base	SY	$58.50		$0.00		$0.00		0		0%	
Bitum. Conc, 2" w/4" Base	SY	$42.00		$0.00		$0.00		0		0%	
4" Conc, No Reinf., No Base	SY	$58.50		$0.00		$0.00		0		0%	
HANDRAIL											
Handrail 3 Rail 1-1/4" #4 Finish	LF	$143.00		$0.00		$0.00		0		0%	
Wood Chip Trail											
Trails(Incl Excavation &	SY	$77.00		$0.00		$0.00		0		0%	
Grading) Wood chip, 4' wide	SY	$21.00		$0.00		$0.00		0		0%	
Bituminous Trail											
6' to 10' wide	SY	$22.00	497	10934	497	$10,934.00		497		100%	
CRITICAL SLOPE STABILIZATION											
Paved Flume	SY	$100.00		$0.00		$0.00		0		0%	
Stmwtr Conc Channel-Excav	SY	$97.00		$0.00		$0.00		0		0%	
ADD Grass Lined-seeded	SY	$19.00		$0.00		$0.00		0		0%	
ADD Grass Lined-sodded	SY	$26.00		$0.00		$0.00		0		0%	
Outlet Protection											
Non-grouted Riprap 18"	SY	$87.00		$0.00		$0.00		0		0%	
Concrete 4"	SY	$70.00		$0.00		$0.00		0		0%	
Level Spreader	SY	$5.77		$0.00		$0.00		0		0%	
Struc Streambank Protection											
Non-grouted Riprap 18"	SY	$87.00		$0.00		$0.00		0		0%	
Gabions	CY	$255.00		$0.00		$0.00		0		0%	
Vegetative Erosion Control											
Sodding incl Fertilizing –Banks	SY	$9.00		$0.00		$0.00		0		0%	
Sodding incl Fertilizing – Flat	SY	$9.00		$0.00		$0.00		0		0%	
Seeding incl Fertilizing	SY	$3.00		$0.00		$0.00		0		0%	
Soding W/Soil Treat &Watering	SY	$9.00		$0.00		$0.00		0		0%	
Seeding W/Soil Treat &Watering	SY	$3.00		$0.00		$0.00		0		0%	
Straw Mulch w/Tack	SY	$2.00		$0.00		$0.00		0		0%	
Jute Mesh	SY	$2.00		$0.00		$0.00		0		0%	
SPECIAL ITEMS											
FEMA ProcessingLOMR/CLOMR	EA	$10,240.00		$0.00		$0.00		0		0%	
As Built (Record Drawings)	EA	$12,967.50	1	$12,967.50	0.75	$9,725.63		0.75		75%	
SWM/BMP POND	LS	$0.00		$0.00		$0.00		0		0%	
SIGNALIZATION	LS	$0.00		$0.00		$0.00		0		0%	

EFFECTIVE PERIOD OF BOND (IN MONTHS)	**12**
TOTAL ESTIMATE OF COMPLETED WORK	**$2,463,663.90**
+ 10% CONTINGENCY	**$246,366.39**
GRAND TOTAL	**$2,710,030.28**
FINAL PRICE (+ 4% ANNUAL INTEREST)	**$2,818,431.50**

EFFECTIVE PERIOD OF BOND (IN MONTHS)	
TOTAL BOND REDUCTION REQUEST	**$1,222,258.82**
+ 10% CONTINGENCY	**$122,225.88**
GRAND TOTAL	**$1,344,484.70**
FINAL BOND REDUCTION REQUEST (+4% ANNUAL INTEREST)	**$1,344,484.70**

TOTAL ESTIMATED - BOND REMAINING	**$1,473,946.79**

Kimley»Horn

Memorandum

To: Jon K Erickson, PE
Morris & Ritchie Associates Inc.
205 E Hirst St
Purcellville VA, 20132

From: Mark Phillips, P.E.

Through: James Newman
City of Charles town
101 E Washington Street
Charles Town, WV 25414

Date: November 10, 2026

Subject: Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction Request Review

This memorandum summarizes our review of the Bond Reduction Request for the Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction application (dated August 7, 2026, prepared by Morris & Ritchie Associates) for a performance bond reduction for the following amounts for each phase:

- Phase 10B - $1,182,697.48
- Phase 11 - $916,001.43
- Phase 12 - $1,344,484.71
- Phase 13 - $2,225,028.23

Using the As-Builts dated September 21, 2026, it is our opinion that the quantities of work that have been presented on the bond reduction are a reasonable representation of the work completed in the field.

Kimley-Horn's review of this application is limited to the Bond Reduction Request and Approved Plan Set provided. Based on our review we have the following comments:

1. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 12 and the Bond Reduction Spreadsheet for Phase 12 which lists the reduction amount at $1,344,484.70 and $1,344,484.71 respectively.
2. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 13 and the Bond Reduction Spreadsheet for Phase 13 which lists the reduction amount at $2,225,028.23 and $2,224,348.69 respectively.

Kimley-Horn recommends that Comments 1 & 2 above be addressed by the Applicant.

Thank you for the opportunity to review this Bond Reduction Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager
Associate

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

SCHEDULED

AGENDA ITEM (ID #)

Commission Review - BR2026-14 - Norborne-Glebe Phase 13- Bond Reduction

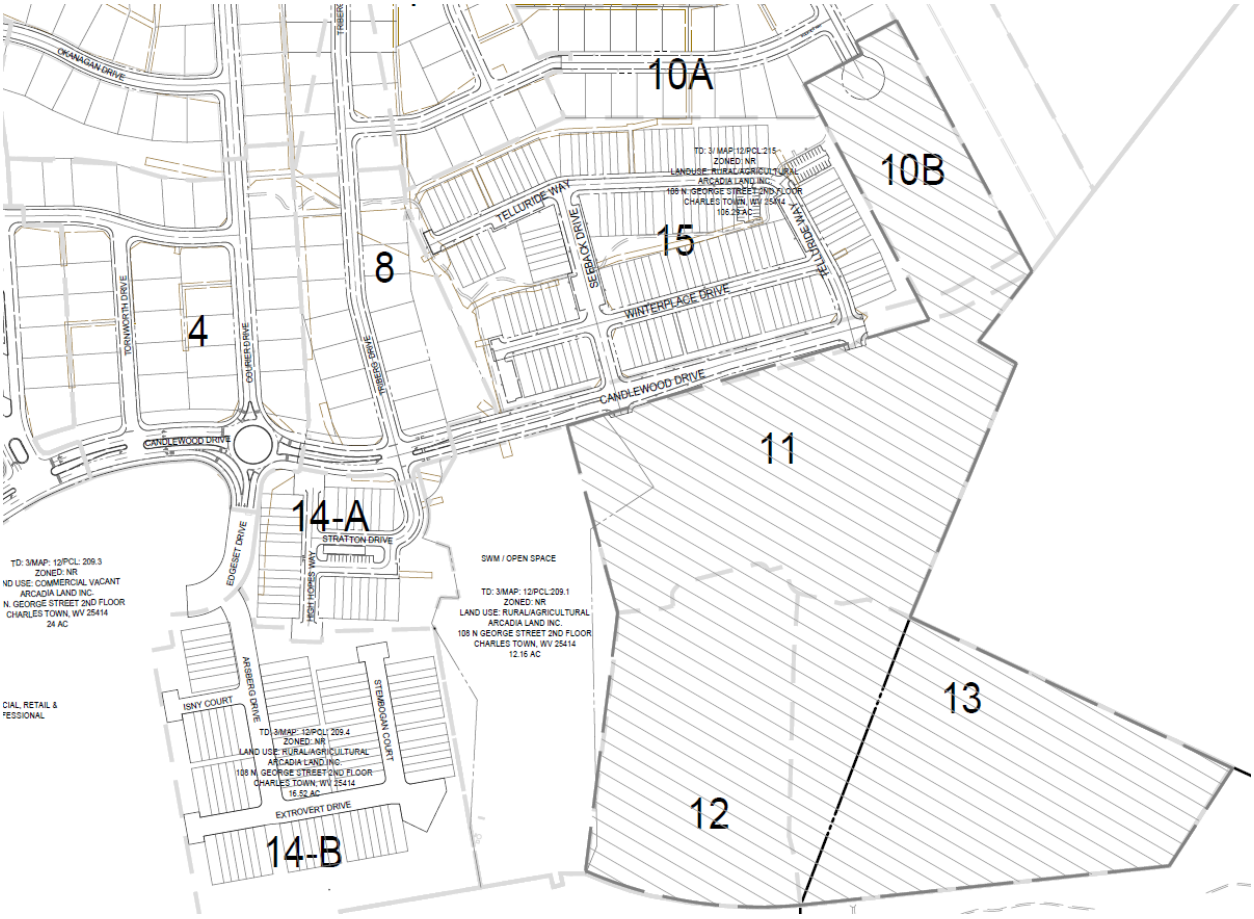
ATTACHMENTS:

- 1. Staff Report.pdf
- 2. Application.pdf
- 3. Bond Reduction Cost Sheet.pdf
- 4. KH Review.pdf

Bond Reduction Request
BR2026-14

Date: For the November 30, 2026 Planning Commission Meeting
Applicant: Arcadia Land Inc.
Report by: James Newman, City Planner, Zoning/Subdivision Administrator.
Proposal: A bond reduction in the amount of $1,473,946.79

Norborne Glebe Phase 13



BACKGROUND
The applicant is requesting a bond reduction of the performance bond. The preliminary plan for this phase was approved by the Planning Commission on February 26, 2024.

Upon review of the request the City Engineer, Kimley-Horn, has determined that the bond reduction is a reasonable request based on the work completed thus far.

AMOUNT DISCREPANCY
The bond was approved on May 5, 2025 in the amount of $3,008,819.37.

Per the bond reduction cost sheet, the current bond amount is $3,008,139.83, a difference of +$679.54. The applicant is seeking to reduce the bonded amount to $2,224,348.69, which is a reduction of $783,791.14.

BOND COMMITTEE
The Bond Committee reviewed this item at their November 16, 2026 meeting. The Committee recommends that the applicant correct the bond estimate amounts prior to approval of the reduction by City Council.

STAFF RECOMMENDATION
Tabel Action so that the applicant can correct their bond sheet calculations

PH 13R

BOND REQUEST AND REDUCTION

1. APPLICATION TYPE :

☐ Bond Initiation – No application fee

☑ Bond Reduction – No application fee

☐ Bond Extension – No application fee

☐ Bond Release – Application Fee: $60

2. FEES

Third-party review fees are assessed separately for each application, and will be sent to the applicant. All fees must be paid prior to approval.

3. PUBLIC NOTICE

Only bond release applications require a public hearing, which is held by the Planning Commission. City Council approval is still required.

4. APPLICATION REQUIREMENTS

Please submit one application set with supporting materials in paper, and one copy in PDF format.

1. DATE August 7, 2026

2. PROJECT NAME Norborne Glebe Subdivision- Phase 13

Address N/A

3. APPLICANT'S NAME* Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number 703-771-8000

Email Address [redacted]

4. PROPERTY OWNER'S NAME Arcadia Land, Inc. Attn: Gary Endler

Address 108 N. George Street- 2nd Floor Charles Town, WV 25414

Telephone Number 703-771-8000

Email Address [redacted]

*Applicants include: Property owner(s), Engineer(s), Surveyor(s), or Consultant(s)

5. DESCRIPTION OF REQUEST:

Requesting performance bond reduction for Phase 13, Norborne Glebe Subdivision

6. A) CURRENT BOND AMOUNT $ 3,008,819.37

B) PROPOSED BOND AMOUNT $ 783,791.14

C) CHANGE IN BONDED AMOUNT $ 2,224,348.69/00 MK

7. PARCEL INVENTORY: (List all parcels that are part of this application):

Tax Map No.	Parcel No.	Tax Map No.	Parcel No.
3-12	215		

8. PARCEL HISTORY: (List all pending or previously approved applications on the subject parcels inventoried above, including previous plat applications if this application is an amendment)

Application No.	Project Name and Phase	Status	Approval Date
SLD-2013-04	Norborne Glebe Phase 5	Approved	01/14/2014
SLD-2017-05	Norborne Glebe Phase 7-8	Approved	09/25/2018
SLD-2016-01	Norborne Glebe Phase 6	Approved	9/25/2018

9. BOND RELEASE – SUPPLEMENTAL MATERIALS REQUIRED:

A. Copies of inspection and test reports if work was inspected and tested by a third-party inspector.

B. Certification that all bonded Improvements, have been completed in accordance with the approved plans, profiles, and specifications and the requirements of any applicable manual.

C. A copy of the City-approved As-Built Drawings as required for facilities within public rights-of-way or Easements.

D. A letter from a Professional Engineer or Professional Land Surveyor certifying that property corners and Monuments have been set as required under this Ordinance.

Continued on next page.

E. Documentation of acceptance by WVDOH for public roadways and rights-of-way, or a maintenance and indemnification agreement and bond approved by the Planning Commission for public roadways that have been completed in accordance with WVDOH standards but which, due to factors other than their quality of construction, are not eligible for acceptance by WVDOH.

F. **For private roadways,** a letter of acceptance by the entity responsible for maintenance and a Latent Defects Indemnification Agreement and Bond.

Before a Performance Agreement and surety for private roadway construction shall be released, a Latent Defects Indemnification Agreement and Bond shall be provided by the applicant/Developer and approved by the Planning Commission. The guarantee provided by such Agreement and Bond must be for a period of two (2) years following the date of performance bond release, and must be in an amount equal to no less than 5% of the original performance bond estimate.

G. **Landscaping Surety** is required to ensure the landscaping shown on a Major S/LD plan is maintained for one (1) year. The one (1) year shall start from the date at which the surety for the site has been released, with the exception of this landscaping surety. The landscaping surety amount shall not be less than $5,000.00 or 10% of the total landscaping cost for the project, which ever is greater.

APPLICANT CERTIFICATION

I certify that, to the best of my knowledge, the submitted information and statements are true and correct. I also certify that I have received and read Article 1335 of the S/LD Ordinance.

Signature of Applicant

Greg L. Corliss, as Treasurer Date 9/8/2026

Signature of Property Owner (if different than Applicant)

_____ Date _____

Please submit an original completed application to the following:

At City Hall:	Or	Via Mail:
Subdivision Administrator City of Charles Town 101 E. Washington Street Charles Town, WV 25414		Subdivision Administrator City of Charles Town PO BOX 14 Charles Town, WV 25414

FOR CITY USE ONLY

Application Number:_____ Date Application Received:_____

Fee: $_____ Check No._____

Receipt No._____

Site Inspection Date:_____ Inspector:_____

Planning Commission Approval:_____ Date:_____

City Council Approval:_____ Date:_____

Comments:_____

_____

_____

_____

_____

BOND ESTIMATE					BOND REDUCTION						City Use Only
ITEM	UNIT	UNIT COST	QUANTITY	Final Price	QUANTITY COMPLETED (REDUCTION REQUEST)	UNIT COST	PREVIOUS QUANTITY COMPLETED	TOTAL QUANTITY COMPLETED (INCLUDING REDUCTION REQUEST)	EXTENSION	%COMPLETE	%APPROVED
MOBILIZATION GENERAL											
Mobilization	LS	$12,440.00	1	$12,440.00	1	$12,440.00		1		100%	
Field Office	EA	$3,490.00		$0.00		$0.00		0		0%	
Job Sign	EA	$1,340.00		$0.00		$0.00		0		0%	
SURVEYING											
Steel Pipe Property Corner Marker Incl. Survey	EA	$320.38	138	$44,212.44		$0.00		0		0%	
R.O.W MONUMENTS SURVEYED IN PLACE											
RM--1	EA	$825.00		$0.00		$0.00		0		0%	
RM--2	EA	$764.00		$0.00		$0.00		0		0%	
EARTHWORK EXCAVATION											
Regular Bulk used as Fill	CY	$4.50		$0.00		$0.00		0		0%	
Rock, Rip	CY	$51.50		$0.00		$0.00		0		0%	
Rock, Blast	CY	$55.00		$0.00		$0.00		0		0%	
BORROW MATERIAL											
Buy, Load, Haul 10 Mi. Select Material	CY	$42.00		$0.00		$0.00		0		0%	
Fill and Compaction of On-site Borrow	CY	$11.06		$0.00		$0.00		0		0%	
UNSUITABLE MATERIAL											
Load and Haul, 20 mi R/T	CY	$36.56		$0.00		$0.00		0		0%	
Dump Charge	CY	$62.50		$0.00		$0.00		0		0%	
Site Grading	SY	$1.25		$0.00		$0.00		0		0%	
CLEAR & GRUB											
Light	AC	$14,548.50	16.4	$238,595.40	16.4	$238,595.40		16.4		100%	
Heavy	AC	$26,699.49		$0.00		$0.00		0		0%	
LANDSCAPING											
Seeding	SY	$3.00	52301	$156,903.00	26150	$78,450.00		26150		50%	
Sodding	SY	$8.50	52301	$444,558.50	26150	$222,275.00		26150		50%	
PLANTING SHRUBS											
18"	EA	$70.00		$0.00		$0.00		0		0%	
24"	EA	$90.00		$0.00		$0.00		0		0%	
TREES											
6'-8' (1-2 in. Caliper)	EA	$400.00	114	$45,600.00		$0.00		0		0%	
8'-10' (2.5-3 in. Caliper)	EA	$700.00		$0.00		$0.00		0		0%	
Tree Protection	LF	$11.13		$0.00		$0.00		0		0%	
MISCELLANEOUS SITE IMPROVEMENTS											
Timber Wall (less than 6 ft)	LF	$325.00		$0.00		$0.00		0		0%	
Dry Rubble RW-1 (H=6')	LF	$450.00		$0.00		$0.00		0		0%	
Mortared Rubble RW-1A (H=6')	LF	$535.00		$0.00		$0.00		0		0%	
Concrete Gravity RW-2 (H=6')	LF	$589.50		$0.00		$0.00		0		0%	
Concrete Gravity RW-3 (H=6')	LF	$1,037.50		$0.00		$0.00		0		0%	
FENCING											
Std. Fence (H=5') FR-5	LF	$56.00		$0.00		$0.00		0		0%	
Farm Fence (H=5') FR-3A	LF	$37.50		$0.00		$0.00		0		0%	
Chain Link Fence (H=6') FR 2-B	LF	$62.00		$0.00		$0.00		0		0%	
Board Fence (H=6')	LF	$62.00		$0.00		$0.00		0		0%	
TOTS LOTS											
Tot Lot	EA	$16,495.00		$0.00		$0.00		0		0%	
STORM DRAINAGE											
STORM SEWER											
NOTE: All pipe unit prices include trench, excavation, bedding, pipe, & backfill											
Rock Excavation for All Pipe Types											
Less than 1,500 CY (Blasting)	CY	$110.00		$0.00		$0.00		0		0%	

More than 1,500 CY (Blasting)	CY	$90.00		$0.00			$0.00		0		0%
Less than 1,500 CY (Hoe Ram)	CY	$220.00		$0.00			$0.00		0		0%
More than 1,500 CY (Hoe Ram)	CY	$180.00		$0.00			$0.00		0		0%
Trench De-Watering											
Trench De-Watering	LF	$4.00		$0.00			$0.00		0		0%
RCP CLASS III ROUND T & G W/MASTIC											
12" Pipe (RCP III)											
0'-8' Cut	LF	$100.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$140.00		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$1.90		$0.00			$0.00		0		0%
O-Ring	LF	$12.36		$0.00			$0.00		0		0%
15" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10'-16'	LF	$156.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$1.48		$0.00			$0.00		0		0%
O-Ring	LF	$8.58		$0.00			$0.00		0		0%
18" Pipe (RCP III)											
0'-10' Cut	LF	$100.00		$0.00			$0.00		0		0%
10' -16' Cut	LF	$160.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$3.20		$0.00			$0.00		0		0%
O-Ring	LF	$11.20		$0.00			$0.00		0		0%
21" Pipe (RCP III)											
0'-8' Cut	LF	$115.00		$0.00			$0.00		0		0%
8'-14' Cut	LF	$174.80		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$4.40		$0.00			$0.00		0		0%
O-Ring	LF	$20.80		$0.00			$0.00		0		0%
24" Pipe (RCP III)											
0'- 10' Cut	LF	$140.00		$0.00			$0.00		0		0%
10'-16'	LF	$196.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$5.04		$0.00			$0.00		0		0%
O-Ring	LF	$22.40		$0.00			$0.00		0		0%
27" Pipe (RCP III)											
0'- 10' Cut	LF	$123.20		$0.00			$0.00		0		0%
10' -16' Cut	LF	$195.03		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$6.40		$0.00			$0.00		0		0%
O-Ring	LF	$24.00		$0.00			$0.00		0		0%
30" Pipe (RCP III)											
0'- 8' Cut	LF	$169.40		$0.00			$0.00		0		0%
8'-14' Cut	LF	$256.66		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$9.60		$0.00			$0.00		0		0%
O-Ring	LF	$27.60		$0.00			$0.00		0		0%
33" Pipe (RCP III)											
0'- 10' Cut	LF	$240.00		$0.00			$0.00		0		0%
10'-16'	LF	$333.00		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$13.50		$0.00			$0.00		0		0%
O-Ring	LF	$45.80		$0.00			$0.00		0		0%
36" Pipe (RCP III)											
0'-10' Cut	LF	$249.60		$0.00			$0.00		0		0%
10' -16' Cut	LF	$363.92		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$12.40		$0.00			$0.00		0		0%
O-Ring	LF	$36.40		$0.00			$0.00		0		0%
42" Pipe (RCP III)											
0'- 8' Cut	LF	$289.54		$0.00			$0.00		0		0%
8'-14' Cut	LF	$413.46		$0.00			$0.00		0		0%
Add cost for Class IV	LF	$19.20		$0.00			$0.00		0		0%
O-Ring	LF	$56.72		$0.00			$0.00		0		0%
48" Pipe (RCP III)											
0'-10' Cut	LF	$320.52		$0.00			$0.00		0		0%
10'-16'	LF	$442.31		$0.00			$0.00		0		0%
Add Cost for Class IV	LF	$20.00		$0.00			$0.00		0		0%
O-Ring	LF	$69.36		$0.00			$0.00		0		0%

54" Pipe (RCP III)											
0' - 10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$541.38		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$30.00		$0.00		$0.00		0		0%	
O-Ring	LF	$70.96		$0.00		$0.00		0		0%	
60" Pipe (RCP III)											
0'-10' Cut	LF	$420.00		$0.00		$0.00		0		0%	
10' -16' Cut	LF	$498.48		$0.00		$0.00		0		0%	
Add Cost for Class IV	LF	$36.00		$0.00		$0.00		0		0%	
O-Ring	LF	$77.84		$0.00		$0.00		0		0%	
ELLIPTICAL PIPE - RCP CLASS III											
23"x14" (18" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$278.60		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$41.60		$0.00		$0.00		0		0%	
O-Ring	LF	$109.80		$0.00		$0.00		0		0%	
30"x19" (24" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$329.25		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$15.07		$0.00		$0.00		0		0%	
O-Ring	LF	$109.79		$0.00		$0.00		0		0%	
38"x24" (30" Equiv- RCP III)											
0'10' Cut	LF	$190.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$423.78		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$21.38		$0.00		$0.00		0		0%	
O-Ring	LF	$129.92		$0.00		$0.00		0		0%	
45"x29" (36" Equiv- RCP III)											
0'10' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-16' Cut	LF	$526.88		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$25.45		$0.00		$0.00		0		0%	
O-Ring	LF	$119.63		$0.00		$0.00		0		0%	
53"X 34" (42" Equiv-RCP III)											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$528.36		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$38.87		$0.00		$0.00		0		0%	
O-Ring	LF	$149.26		$0.00		$0.00		0		0%	
60"x38" (48" Equiv- RCP III)											
0'12' Cut	LF	$370.00		$0.00		$0.00		0		0%	
10'-18' Cut	LF	$543.90		$0.00		$0.00		0		0%	
Add cost for Class IV	LF	$46.46		$0.00		$0.00		0		0%	
O-Ring	LF	$177.11		$0.00		$0.00		0		0%	
HDPE PIPE											
8" Pipe											
0'-8' Cut	LF	$50.00		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$75.30		$0.00		$0.00		0		0%	
12" Pipe											
0'-8' Cut	LF	$67.50		$0.00		$0.00		0		0%	
8'-14' Cut	LF	$100.04		$0.00		$0.00		0		0%	
15" Pipe											
0'-8' Cut	LF	$87.08	1602	$139,502.16	1602	$139,502.16		1602		100%	
8'-16' Cut	LF	$129.65		$0.00		$0.00		0		0%	
18" Pipe											
0'-8' Cut	LF	$114.33	181	$20,693.73	181	$20,693.73		181		100%	
8'-16' Cut	LF	$170.69		$0.00		$0.00		0		0%	
24" Pipe											
0'-8' Cut	LF	$132.62		$0.00		$0.00		0		0%	
8'-16' Cut	LF	$197.61		$0.00		$0.00		0		0%	
30" Pipe											
0'-8' Cut	LF	$157.42		$0.00		$0.00		0		0%	
8'-16' Cut	LF	$236.13		$0.00		$0.00		0		0%	
36" Pipe											

0'-8' Cut	LF	$200.00		$0.00			$0.00		0		0%
8'-16' Cut	LF	$298.00		$0.00			$0.00		0		0%
42" Pipe											
0'-8' Cut	LF	$224.20		$0.00			$0.00		0		0%
8'-16' Cut	LF	$334.06		$0.00			$0.00		0		0%
48" Pipe											
0'-8' Cut	LF	$253.35		$0.00			$0.00		0		0%
8'-16' Cut	LF	$377.49		$0.00			$0.00		0		0%
STORM STRUCTURES											
END SECTIONS											
End Sections (ES-1), Concrete Pipe Size											
15"	EA	$1,389.00	1	$1,389.00		1	$1,389.00		1		100%
18"	EA	$1,583.46	1	$1,583.46		1	$1,583.46		1		100%
21"	EA	$1,805.14		$0.00			$0.00		0		0%
24"	EA	$2,057.86		$0.00			$0.00		0		0%
27"	EA	$2,345.97		$0.00			$0.00		0		0%
30"	EA	$2,674.40		$0.00			$0.00		0		0%
36"	EA	$3,048.82		$0.00			$0.00		0		0%
42"	EA	$3,558.50		$0.00			$0.00		0		0%
48"	EA	$4,056.69		$0.00			$0.00		0		0%
54"	EA	$4,624.63		$0.00			$0.00		0		0%
60"	EA	$5,272.07		$0.00			$0.00		0		0%
ENDWALLS											
EW-1 (Pre-Cast) Round Pipe Size											
15"	EA	$2,433.00		$0.00			$0.00		0		0%
18"	EA	$2,724.96		$0.00			$0.00		0		0%
24"	EA	$3,051.96		$0.00			$0.00		0		0%
30"	EA	$3,418.19		$0.00			$0.00		0		0%
36"	EA	$3,828.37		$0.00			$0.00		0		0%
EW-1 Cast in Place [Round Pipe Size]											
15"	EA	$2,591.15		$0.00			$0.00		0		0%
18"	EA	$2,902.08		$0.00			$0.00		0		0%
24"	EA	$3,250.33		$0.00			$0.00		0		0%
30"	EA	$3,640.37		$0.00			$0.00		0		0%
36"	EA	$4,077.22		$0.00			$0.00		0		0%
EW-1A (Pre-Cast) Elliptical Pipe Size											
23" X 14" (18")	EA	$1,335.00		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,495.20		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$1,879.50		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,105.04		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$2,791.50		$0.00			$0.00		0		0%
EW-1A (Cast in Place) Elliptical Pipe Size											
23" X 14" (18")	EA	$1,318.50		$0.00			$0.00		0		0%
30" X 19" (24")	EA	$1,318.50		$0.00			$0.00		0		0%
38 X 24" (30")	EA	$2,257.00		$0.00			$0.00		0		0%
45 X 29" (36")	EA	$2,257.00		$0.00			$0.00		0		0%
53" X 34" (42")	EA	$3,217.50		$0.00			$0.00		0		0%
EW-2 (PreCast) Round Size Pipe Size											
42"	EA	$8,324.00		$0.00			$0.00		0		0%
48"	EA	$9,322.88		$0.00			$0.00		0		0%
54"	EA	$10,441.63		$0.00			$0.00		0		0%
60"	EA	$11,694.62		$0.00			$0.00		0		0%
72"	EA	$12,675.50		$0.00			$0.00		0		0%
84"	EA	$14,196.56		$0.00			$0.00		0		0%
EW-2 (Cast in Place) Round Size Pipe Size											
42"	EA	$9,255.50		$0.00			$0.00		0		0%
48"	EA	$10,366.16		$0.00			$0.00		0		0%
54"	EA	$11,610.10		$0.00			$0.00		0		0%
60"	EA	$13,003.31		$0.00			$0.00		0		0%
72"	EA	$15,747.00		$0.00			$0.00		0		0%
84"	EA	$17,636.64		$0.00			$0.00		0		0%

EW-6PC [Double Pipe] Pipe Size											
2-15"	EA	$2,123.00		$0.00		$0.00		0		0%	
2-18"	EA	$2,377.76		$0.00		$0.00		0		0%	
2-24"	EA	$2,663.09		$0.00		$0.00		0		0%	
2-30"	EA	$4,096.00		$0.00		$0.00		0		0%	
2-36"	EA	$4,587.52		$0.00		$0.00		0		0%	
MANHOLES											
Standard Brick Manhole Std Frame & Cover (MH-1)											
6' Depth	EA	$6,048.00		$0.00		$0.00		0		0%	
Depth Below 6'	VF	$230.00		$0.00		$0.00		0		0%	
Standard Precast Manhole Std Frame & Cover (MH-2)		$5,337.00	2	$10,674.00	2	$10,674.00		2		100%	
Additional Cost (Amount in parentheses to be added to the above unit costs)											
Watertight Fr/Cover (Add 110)	EA	$579.00		$0.00		$0.00		0		0%	
Heavy Duty Fr/ Cover (Add 82)	VF	$599.00		$0.00		$0.00		0		0%	
Drop Inlets											
Cast in Place 48"											
Drop Inlet (DI-1) 12"-24" Pipe0-10 VF	EA	$7,690.00	2	$15,380.00	2	$15,380.00		2		100%	
Drop Inlet (DI-1A) 12"-24" Pipe10-20 VF	EA	$7,690.00		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe0-10 VF, 10' throat	EA	$9,458.70		$0.00		$0.00		0		0%	
Drop Inlet (DI-2A) 12"-24" Pipe10-20 VF, 10' throat	EA	$11,634.20		$0.00		$0.00		0		0%	
Curb Drop Inlets											
Curb Drop Inlet (DI-3A)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$7,460.00		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3AA)											
12"-30" Pipe (Invert Depth (H) =8'-	**EA**	$9,772.60		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3B) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,758.40		$0.00		$0.00		0		0%	
6'	EA	$8,534.24	2	$17,068.48	2	$17,068.48		2		100%	
8'	EA	$9,387.66	5	$46,938.30	5	$46,938.30		5		100%	
10'	EA	$10,326.43	4	$41,305.72	4	$41,305.72		4		100%	
12'	EA	$11,359.07	1	$11,359.07	1	$11,359.07		1		100%	
16'	EA	$12,494.98		$0.00		$0.00		0		0%	
20'	EA	$13,744.48		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3BB) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,680.82		$0.00		$0.00		0		0%	
6'	EA	$8,448.90		$0.00		$0.00		0		0%	
8'	EA	$9,293.79		$0.00		$0.00		0		0%	
10'	EA	$10,223.17		$0.00		$0.00		0		0%	
12'	EA	$11,245.48		$0.00		$0.00		0		0%	
16'	EA	$12,370.03		$0.00		$0.00		0		0%	
20'	EA	$13,607.03		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3C) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$7,204.61		$0.00		$0.00		0		0%	
8'	EA	$7,925.07		$0.00		$0.00		0		0%	
10'	EA	$8,717.57	2	$17,435.14	2	$17,435.14		2		100%	
12'	EA	$9,589.33		$0.00		$0.00		0		0%	
16'	EA	$10,548.26		$0.00		$0.00		0		0%	
20'	EA	$11,603.09		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-3CC) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$8,573.48		$0.00		$0.00		0		0%	
8'	EA	$9,430.83		$0.00		$0.00		0		0%	
10'	EA	$10,373.91		$0.00		$0.00		0		0%	
12'	EA	$11,411.30		$0.00		$0.00		0		0%	
16'	EA	$12,552.43		$0.00		$0.00		0		0%	
20'	EA	$13,807.68		$0.00		$0.00		0		0%	

Curb Drop Inlet (DI-3D)											
12"-30" Pipe (Invert Depth (H) =0'-8') Inlet Length 2'-6"	EA	$6,430.11		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3DD)											
12"-30" Pipe (Invert Depth	**EA**	$7,587.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3E) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
4'	EA	$7,460.00		$0.00			$0.00		0		0%
8'	EA	$7,982.20		$0.00			$0.00		0		0%
10'	EA	$8,540.95		$0.00			$0.00		0		0%
12'	EA	$9,138.82		$0.00			$0.00		0		0%
16'	EA	$9,778.54		$0.00			$0.00		0		0%
20'	EA	$10,463.04		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3EE) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$11,509.34		$0.00			$0.00		0		0%
8'	EA	$12,314.99		$0.00			$0.00		0		0%
10'	EA	$13,177.04		$0.00			$0.00		0		0%
12'	EA	$14,099.44		$0.00			$0.00		0		0%
16'	EA	$15,086.40		$0.00			$0.00		0		0%
20'	EA	$16,142.44		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3F) 12"-30" Pipe (Invert Depth (H) = 0 '-8') Inlet Length											
6'	EA	$6,855.74		$0.00			$0.00		0		0%
8'	EA	$7,335.64		$0.00			$0.00		0		0%
10'	EA	$7,849.14		$0.00			$0.00		0		0%
12'	EA	$8,398.58		$0.00			$0.00		0		0%
16'	EA	$8,986.48		$0.00			$0.00		0		0%
20'	EA	$9,615.53		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-3FF) 12"-30" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$14,671.28		$0.00			$0.00		0		0%
8'	EA	$15,698.27		$0.00			$0.00		0		0%
10'	EA	$16,797.15		$0.00			$0.00		0		0%
12'	EA	$17,972.95		$0.00			$0.00		0		0%
16'	EA	$19,231.06		$0.00			$0.00		0		0%
20'	EA	$20,577.23		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4A) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4AA) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
4'	**EA**	$10,020.00		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4B) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$8,802.77		$0.00			$0.00		0		0%
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4BB) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
6'	EA	$17,429.48		$0.00			$0.00		0		0%
8'	EA	$18,649.55		$0.00			$0.00		0		0%
10'	EA	$19,955.02		$0.00			$0.00		0		0%
12'	EA	$21,351.87		$0.00			$0.00		0		0%
16'	EA	$22,846.50		$0.00			$0.00		0		0%
20'	EA	$24,445.75		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4C) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$9,418.96		$0.00			$0.00		0		0%
10'	EA	$10,078.29		$0.00			$0.00		0		0%
12'	EA	$10,783.77		$0.00			$0.00		0		0%
16'	EA	$11,538.64		$0.00			$0.00		0		0%
20'	EA	$12,346.34		$0.00			$0.00		0		0%
Curb Drop Inlet (DI-4CC) 36"-48" Pipe (Invert Depth (H) = 8'-20') Inlet Length											
8'	EA	$22,417.13		$0.00			$0.00		0		0%
10'	EA	$23,986.33		$0.00			$0.00		0		0%
12'	EA	$25,665.38		$0.00			$0.00		0		0%
16'	EA	$27,461.95		$0.00			$0.00		0		0%

20'	EA	$29,384.29		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4D)											
36"-48" Pipe (Invert Depth (H) =8'16') Inlet Length 4'	EA	$8,279.27		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4DD)											
36"-48" Pipe (Invert Depth (H)	**EA**	$16,392.95		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4E) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
6'	EA	$9,016.12		$0.00		$0.00		0		0%	
8'	EA	$9,647.25		$0.00		$0.00		0		0%	
10'	EA	$10,322.56		$0.00		$0.00		0		0%	
12'	EA	$11,045.14		$0.00		$0.00		0		0%	
16'	EA	$11,818.30		$0.00		$0.00		0		0%	
20'	EA	$12,645.58		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4EE) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
6'	EA	$15,688.06		$0.00		$0.00		0		0%	
8'	EA	$16,786.22		$0.00		$0.00		0		0%	
10'	EA	$17,961.26		$0.00		$0.00		0		0%	
12'	EA	$19,218.54		$0.00		$0.00		0		0%	
16'	EA	$20,563.84		$0.00		$0.00		0		0%	
20'	EA	$22,003.31		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4F) 36"-48" Pipe (Invert Depth (H) = 0'-8') Inlet Length											
8'	EA	$10,040.36		$0.00		$0.00		0		0%	
10'	EA	$10,743.18		$0.00		$0.00		0		0%	
12'	EA	$11,495.20		$0.00		$0.00		0		0%	
16'	EA	$12,299.87		$0.00		$0.00		0		0%	
20'	EA	$13,160.86		$0.00		$0.00		0		0%	
Curb Drop Inlet (DI-4FF) 36"-48" Pipe (Invert Depth (H) = 8'-16') Inlet Length											
8'	EA	$15,140.86		$0.00		$0.00		0		0%	
10'	EA	$16,200.72		$0.00		$0.00		0		0%	
12'	EA	$17,334.77		$0.00		$0.00		0		0%	
16'	EA	$18,548.20		$0.00		$0.00		0		0%	
20'	EA	$19,846.57		$0.00		$0.00		0		0%	
Median Drop Inlets - CIP											
Median Drop Inlets (DI-6A) 12"-24"Pipe Inlet (H=8')	EA	$6,032.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6B) 12"-24"Pipe Inlet (H=8')	EA	$6,080.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6C) 30"-48"Pipe Inlet (H=10')	EA	$7,737.50		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-6D) 30"-48"Pipe Inlet (H=10')	EA	$7,805.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7A) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
Median Drop Inlets (DI-7B) Type III Top 12"-42" Pipe Inlet (H=10')	EA	$8,548.00		$0.00		$0.00		0		0%	
MISCELLANEOUS INLETS											
Median Drop Inlets (DI-5) Type III Top 12"-42" Pipe Inlet (H=8')	EA	$6,569.08		$0.00		$0.00		0		0%	
Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)		$5,969.49		$0.00		$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00		$0.00		0		0%	

Standard Yard Inlet (YI-1) 12"-48" Pipe (Invert Depth (H)= 0'-8') Inlet Length 4' (No Aprons)	EA	$6,444.64		$0.00			$0.00		0		0%	
Add Yard Inlet Apron	THROAT	$320.54		$0.00			$0.00		0		0%	
Culverts												
Single Box Culvert (BC-1A) Fills to 25'												
4' X 4'	LF	$473.00		$0.00			$0.00		0		0%	
5' X 5'	LF	$563.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$689.00		$0.00			$0.00		0		0%	
8' X 8'	LF	$944.00		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,159.00		$0.00			$0.00		0		0%	
Double Box Culvert (BC-2b) Fills to 25'												
4' X 4'	LF	$792.40		$0.00			$0.00		0		0%	
5' X 5'	LF	$987.00		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,195.60		$0.00			$0.00		0		0%	
8' X 8'	LF	$1,607.20		$0.00			$0.00		0		0%	
10' X 10'	LF	$1,975.40		$0.00			$0.00		0		0%	
Oversized Single Box Culvert (BBC-1) Fills to 25'												
12' X 6'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 8'	LF	$1,488.50		$0.00			$0.00		0		0%	
12' X 10'	LF	$1,771.50		$0.00			$0.00		0		0%	
12' X 12'	LF	$1,771.50		$0.00			$0.00		0		0%	
Triple Box Culvert (BC-3B) Fills to 25'												
4' X 4'	LF	$1,129.55		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,399.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$1,755.95		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,367.85		$0.00			$0.00		0		0%	
10' X 10'	LF	$3,607.60		$0.00			$0.00		0		0%	
Quadruple Box Culvert (BC-4B) Fills to 25'												
4' X 4'	LF	$1,431.15		$0.00			$0.00		0		0%	
5' X 5'	LF	$1,776.25		$0.00			$0.00		0		0%	
6' X 6'	LF	$2,208.35		$0.00			$0.00		0		0%	
8' X 8'	LF	$2,170.65		$0.00			$0.00		0		0%	
10' X 10'	LF	$4,110.75		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (1 Side Only) Height of Box												
4'	EA	$926.50		$0.00			$0.00		0		0%	
5'	EA	$1,390.00		$0.00			$0.00		0		0%	
6'	EA	$1,853.50		$0.00			$0.00		0		0%	
8'	EA	$3,426.50		$0.00			$0.00		0		0%	
10'	EA	$4,558.00		$0.00			$0.00		0		0%	
Standard Wing for Box Culvert (BBC-W) Height of Box												
6'	EA	$1,817.00		$0.00			$0.00		0		0%	
8'	EA	$3,007.50		$0.00			$0.00		0		0%	
10'	EA	$4,497.50		$0.00			$0.00		0		0%	
12'	EA	$6,567.00		$0.00			$0.00		0		0%	
MISCELLANEOUS STORM												
Connection to Existing Structure												
15"-36" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$1,584.00		$0.00			$0.00		0		0%	
Casing Pipe, Bore and Jack (3/8" wall)												
22" ID (6"-8" Carrier Pipe)	LF	$885.71		$0.00			$0.00		0		0%	
24" ID (10" Carrier Pipe)	LF	$971.91		$0.00			$0.00		0		0%	
30" ID (12" Carrier Pipe)	LF	$1,226.20		$0.00			$0.00		0		0%	
Plug Pipe												
6"-12" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
15"-36" Pipe	EA	$444.50		$0.00			$0.00		0		0%	
42"-60" Pipe	EA	$574.50		$0.00			$0.00		0		0%	
Pavement Edge Pipe												
Standard Pipe Underdrain	LF	$20.50		$0.00			$0.00		0		0%	

RipRap											
Dry, Class I, 18"	SY	$82.00	23.33	$1,913.06	23.33	$1,913.06		23.33		100%	
Dry, Class II, 18"	SY	$82.00		$0.00		$0.00		0		0%	
Grouted, Class I, 18"	SY	$84.00		$0.00		$0.00		0		0%	
Filter Fabric											
Class I	SY	$4.13		$0.00		$0.00		0		0%	
Class II	SY	$4.13		$0.00		$0.00		0		0%	
Class III	SY	$4.13		$0.00		$0.00		0		0%	
Gabions (No excavations)											
Mattress	CY	$237.50		$0.00		$0.00		0		0%	
Revetment	CY	$237.50		$0.00		$0.00		0		0%	
Wall	CY	$237.50		$0.00		$0.00		0		0%	
Paved Ditch (4" Thick)											
Concrete (Non-reinforced)	SY	$94.50		$0.00		$0.00		0		0%	
Bituminous Concrete (4")	SY	$43.50		$0.00		$0.00		0		0%	
Sodded Ditch											
Sodded Ditch(Incl Fine Grading)	SY	$15.03		$0.00		$0.00		0		0%	
STREET CONSTRUCTION											
ROADS AND PARKING											
Soil Stabilization											
Cement 6%	SY/ Inch	$20.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Lime 6%	SY/ Inch	$14.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Subbase, Aggregated Material											
Base Type I	SY/ Inch	$12.95	7309	$757,212.40	7309	$757,212.40		7309		100%	
Depth (in Inches):	Depth	8			8						
Bituminous Concrete											
Base Course	SY/ Inch	$7.00	7309	$153,489.00	7309	$153,489.00		7309		100%	
Depth (in Inches):	Depth	3			3						
Intermediate Course	SY/ Inch	$7.00		$0.00		$0.00		0		0%	
Depth (in Inches):	Depth				0						
Top Course	SY/ Inch	$7.00	7309	$102,326.00		$0.00		0		0%	
Depth (in Inches):	Depth	2									
Prime Coat	SY	$1.38		$0.00		$0.00		0		0%	
Tack Coat	SY	$1.38		$0.00		$0.00		0		0%	
Driveway Restoration											
4" Concrete & 4" Gravel	SY	$75.00		$0.00		$0.00		0		0%	
2" S-5 & 7 6" Gravel	SY	$29.98		$0.00		$0.00		0		0%	
Shoulders, Type I											
Aggregated Base, 4"	SY	$15.00	2275	$34,125.00		$0.00		0		0%	
Concrete Curbing											
Curb & Gutter CG6 & CG7	LF	$31.50	4583	$144,364.50	4583	$144,364.50		4583		100%	
Curb Cut, CG-12 DetectableSurf.	EA	$1,044.00	4	$4,176.00	4	$4,176.00		4		100%	
Entrances/ Driveways											
Commercial Entrance CG-11	SY	$87.00		$0.00		$0.00		0		0%	
Commercial Entrance CG-13	SY	$87.00		$0.00		$0.00		0		0%	
Residential Driveway Apron	EA	$2,254.50		$0.00		$0.00		0		0%	
Guardrails											
Std. Blocked-out W beam(GR2)	LF	$53.50		$0.00		$0.00		0		0%	
Std. W beam, Weak Post GR8	LF	$53.50		$0.00		$0.00		0		0%	
Terminal, GR-6 (L=12'-6")	EA	$3,880.50		$0.00		$0.00		0		0%	
Terminal, GR-7 (L=6'-3")	EA	$3,880.50		$0.00		$0.00		0		0%	
Type I, GR-8 Terminal (L=25')	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, GR-8 Terminal(L=13'-6")	EA	$1,701.00		$0.00		$0.00		0		0%	
Terminal, MB-4 (L=37'-6")	EA	$3,580.50		$0.00		$0.00		0		0%	
Type I, MB-5 Terminal(L=27'-1)	EA	$3,580.50		$0.00		$0.00		0		0%	
Type II, MB-5 Terminal(L=13'-6)	EA	$1,701.00		$0.00		$0.00		0		0%	
Miscellaneous											
Trash enclosure - Brick 6' high	LF	$7,336.50		$0.00		$0.00		0		0%	

Reinforced Concrete Pad 6" to 8"	SY	$150.00		$0.00			$0.00		0		0%	
Striping 4" width (VDOT Type	LF	$2.50		$0.00			$0.00		0		0%	
B)												
Concrete Wheel Stops	EA	$90.00		$0.00			$0.00		0		0%	
Parking Lot Striping	EA	$50.00		$0.00			$0.00		0		0%	
Sign Island	EA	$850.00		$0.00			$0.00		0		0%	
Traffic Barricade	EA	$133.50		$0.00			$0.00		0		0%	
Street Name Signs	EA	$594.50	2	$1,189.00		2	$1,189.00		2		100%	
Traffic Control Signs	EA	$512.00	2	$1,024.00		2	$1,024.00		2		100%	
Street Light (pole, bracket,light)	EA	$5,938.00	25	$148,450.00		13	$77,194.00		13		52%	
SIDEWALKS AND TRAILS												
Sidewalk												
Concrete 4" w/WWF, No base	SY	$58.50		$0.00			$0.00		0		0%	
Bitum. Conc, 2" w/4" Base	SY	$42.00		$0.00			$0.00		0		0%	
4" Conc, No Reinf., No Base	SY	$58.50		$0.00			$0.00		0		0%	
HANDRAIL												
Handrail 3 Rail 1-1/4" #4 Finish	LF	$143.00		$0.00			$0.00		0		0%	
Wood Chip Trail												
Trails(Incl Excavation &	SY	$77.00		$0.00			$0.00		0		0%	
Grading) Wood chip, 4' wide	SY	$21.00		$0.00			$0.00		0		0%	
Bituminous Trail												
6' to 10' wide	SY	$22.00	119	2618			$0.00		0		0%	
CRITICAL SLOPE STABILIZATION												
Paved Flume	SY	$100.00		$0.00			$0.00		0		0%	
Stmwtr Conc Channel-Excav	SY	$97.00		$0.00			$0.00		0		0%	
ADD Grass Lined-seeded	SY	$19.00		$0.00			$0.00		0		0%	
ADD Grass Lined-sodded	SY	$26.00		$0.00			$0.00		0		0%	
Outlet Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Concrete 4"	SY	$70.00		$0.00			$0.00		0		0%	
Level Spreader	SY	$5.77		$0.00			$0.00		0		0%	
Struc Streambank Protection												
Non-grouted Riprap 18"	SY	$87.00		$0.00			$0.00		0		0%	
Gabions	CY	$255.00		$0.00			$0.00		0		0%	
Vegetative Erosion Control												
Sodding incl Fertilizing –Banks	SY	$9.00		$0.00			$0.00		0		0%	
Sodding incl Fertilizing – Flat	SY	$9.00		$0.00			$0.00		0		0%	
Seeding incl Fertilizing	SY	$3.00		$0.00			$0.00		0		0%	
Soding W/Soil Treat &Watering	SY	$9.00		$0.00			$0.00		0		0%	
Seeding W/Soil Treat &Watering	SY	$3.00		$0.00			$0.00		0		0%	
Straw Mulch w/Tack	SY	$2.00		$0.00			$0.00		0		0%	
Jute Mesh	SY	$2.00		$0.00			$0.00		0		0%	
SPECIAL ITEMS												
FEMA ProcessingLOMR/CLOMR	EA	$10,240.00		$0.00			$0.00		0		0%	
As Built (Record Drawings)	EA	$12,967.50	1	$12,967.50		0.5	$6,483.75		0.5		50%	
SWM/BMP POND	LS	$0.00		$0.00			$0.00		0		0%	
SIGNALIZATION	LS	$0.00		$0.00			$0.00		0		0%	

EFFECTIVE PERIOD OF BOND (IN MONTHS)	**12**
TOTAL ESTIMATE OF COMPLETED WORK	**$2,629,492.86**
+ 10% CONTINGENCY	**$262,949.29**
GRAND TOTAL	**$2,892,442.15**
FINAL PRICE (+ 4% ANNUAL INTEREST)	**$3,008,139.83**

EFFECTIVE PERIOD OF BOND (IN MONTHS)	
TOTAL BOND REDUCTION REQUEST	**$2,022,135.17**
+ 10% CONTINGENCY	**$202,213.52**
GRAND TOTAL	**$2,224,348.69**
FINAL BOND REDUCTION REQUEST (+4% ANNUAL INTEREST)	**$2,224,348.69**

TOTAL ESTIMATED - BOND REMAINING	**$783,791.14**

Kimley»Horn

Memorandum

To: Jon K Erickson, PE
Morris & Ritchie Associates Inc.
205 E Hirst St
Purcellville VA, 20132

From: Mark Phillips, P.E.

Through: James Newman
City of Charles town
101 E Washington Street
Charles Town, WV 25414

Date: November 10, 2026

Subject: Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction Request Review

This memorandum summarizes our review of the Bond Reduction Request for the Norborne Glebe Subdivision Phases 10B, 11, 12, and 13 Bond Reduction application (dated August 7, 2026, prepared by Morris & Ritchie Associates) for a performance bond reduction for the following amounts for each phase:

- Phase 10B - $1,182,697.48
- Phase 11 - $916,001.43
- Phase 12 - $1,344,484.71
- Phase 13 - $2,225,028.23

Using the As-Builts dated September 21, 2026, it is our opinion that the quantities of work that have been presented on the bond reduction are a reasonable representation of the work completed in the field.

Kimley-Horn's review of this application is limited to the Bond Reduction Request and Approved Plan Set provided. Based on our review we have the following comments:

1. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 12 and the Bond Reduction Spreadsheet for Phase 12 which lists the reduction amount at $1,344,484.70 and $1,344,484.71 respectively.
2. Please correct the total bond reduction request amount between the Bond Reduction Request application for Phase 13 and the Bond Reduction Spreadsheet for Phase 13 which lists the reduction amount at $2,225,028.23 and $2,224,348.69 respectively.

Kimley-Horn recommends that Comments 1 & 2 above be addressed by the Applicant.

Thank you for the opportunity to review this Bond Reduction Request. In the meantime, please feel free to contact us at 703-870-3631 should you have any questions.

KIMLEY-HORN & ASSOCIATES, INC.



Mark Phillips, P.E.
Project Manager
Associate

Planning Commission
101 East Washington Street
Charles Town, WV 25414

Meeting: 11/30/26
Department: Planning Commission
Category: Report
Initiator:

SCHEDULED

AGENDA ITEM (ID #)

***Commission Review*: 2027 Planning Commission Calendar**

ATTACHMENTS:

- 2027-Planning-Commission DRAFT.pdf

CITY OF CHARLES TOWN

Department of Community Development
Division of Planning & Zoning

101 East Washington Street, P.O. Box 14, Charles Town, WV 25414

Phone: (304) 725-2311 ♦ Web: www.charlestownwv.us

2027 MEETING SCHEDULE OF THE CITY OF CHARLES TOWN
PLANNING COMMISSION

Meetings are held in the Council Chambers at City Hall, at 101 E. Washington Street, at 7pm, on the 4th Monday of every month unless otherwise specified.

Scheduled Meetings	**Submission Deadline**
Monday, January 25, 2027	Tuesday, December 1, 2026
Monday, February 22, 2027	Friday, January 1, 2027
Monday, March 22, 2027	Monday, February 1, 2027
Monday, April 26, 2027	Monday, March 1, 2027
Monday May 24, 2027	Thursday, April 1, 2027
Monday, June 28, 2027	Monday, May 3, 2027
Monday, July 26, 2027	Tuesday, June 1, 2027
Monday, August 23, 2027	Thursday, July 1, 2027
Monday, September 27, 2027	Monday, August 2, 2027
Monday, October 25, 2027	Wednesday, September 1, 2027
Monday, November 22, 2027	Friday, October 1, 2027
Monday, December 27, 2027	Monday, November 1, 2027
Monday, January 24, 2028	Wednesday, December 1, 2027

Bold dates - These are the PC's minimum quarterly meeting dates. If additional business is required to be conducted, the other dates are available.

Italicized date - Indicates this meeting is not on the regularly scheduled meetingdate.

Legal ads are published in the *Spirit of Jefferson*

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