



COMMUNITY DEVELOPMENT • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1790

DATE: December 5, 2018

TO: City of Hudson Planning Commission
Meeting Date of December 10, 2018

FROM: Kris McMaster, City Planner
Greg Hannan, Community Development Director

SUBJECT: Revised Preliminary Subdivision Plan Approval for the single-family residential
Open Space Conservation Subdivision known as the Reserve at River Oaks,
Phases I-V.

ZONING: District 3: Outer Village Residential Neighborhood

PC Case No: 2018-5349

Project Introduction

Pulte Homes of Ohio, LLC and Prestige and Premier Companies have applied for the following request:

1. The Phase III Final plat was approved on January 8, 2018. The Preliminary Plan approval will expire on May 18, 2018, one year from the date the Plat was recorded. The request is to Re-Approve the Preliminary Subdivision Plan for the single-family residential Open Space Conservation Subdivision known as the Reserve at River Oaks, Phases 1-5.
2. The applicant is requesting to revise the public open space requirement previously approved to relocate the location of the pedestrian path and water man link that connected Phase 4 to Phase 5. After the detailed review of the wetland conditions with respect with the feasibility to install the path and water main line it was determined that the installation of the path and water main and future maintenance was not advisable. Pulte Homes is requesting to submit a payment in-lieu to allow the city to install as part of upcoming trail projects along Boston Mills Road and to revise the watermain to connect Hudson Industrial Parkway.

A summary of the applicable Planning Commission cases for the Reserve at River Oaks subdivision since the project was resumed in 2013 is listed below:

Case#	Meeting Date	Action
2013-19	September 9, 2013	Preliminary Plan approval for 144 unit, 353 acres
2013-24	December 9, 2013	Site plan approval for tree clearing activities
2013-23	March 10, 2014	Map amendment (request not approved)
2014-01	March 10, 2014	Compatibility review for subject parcel
2014-05	April 14, 2014	Final Plat and Plans for Phase I - 47 sublots
2014-14	August 11, 2014	Map amendment (request approved 10/1/14)
2015-01	January 26, 2015	Preliminary Plan approval for an additional 88 sublots for a total subdivision of 236 sublots.
2015-02	January 26, 2015	Site Plan approval from tree clearing activities
2015-10	May 11, 2015	Final Plat and plans for Phase II (recorded September 11, 2015)
2016-17	July 7, 2016	Grading approval for future phases
2018-2628	January 8, 2018	Preliminary Subdivision Plan Reapproval for [Phases I-V]
2018-2628	January 8, 2018	Final Plat and Improvement plans for Phase III (recorded May 18, 2018)

Adjacent Development:

Across Boston Mills Road to the north is commercial office development within District 6. Hudson Crossing commercial/industrial development within District 6 is immediately south of the subject parcel. The Village of Boston Heights abuts most of the western boundary of the subdivision. The abutting village zoning is large lot residential along Boston Mills Road, general business abutting the central portion of the development, and light industrial abutting the southern portion.

The following information is attached to this report.

1. Revised Preliminary Plan submittal for the approval for the single-family residential Open Space Conservation Subdivision known as the Reserve at River Oaks, Phases I-approval, dated November 2, 2018.
2. Plat and applicable sheets from Site Improvement Plans received November 13, 2018 from Donald G. Bohning & Associates, Inc.
3. Plat approval for Phase III, showing the Pedestrian Path and watermain link, dated December 8, 2017.
4. Letter regarding the estimate and exhibit for the watermain and path improvements, submitted by Donald G. Bohning & Associates, Inc., dated November 20, 2018.
5. Water Resources Permitting Cost Evaluation, submitted by Davey Resource Group, dated November 20, 2018.

6. Letter regarding Reserve at River Oaks Phase 4-Revised Cost Estimates for Proposed Waterline and Path Improvements, submitted by City Engineer, Bradley Kosco, P.E., P.S., dated December 3, 2018.
7. Memorandum regarding Boston Mills Trail, submitted by Trent Wash, dated December 3, 2018.
8. Trail Exhibit

Standards for Review for a Preliminary Subdivision Plan, Section 1204.05(b)

1. The subdivision shall be consistent with the purposes and intent of this Code, and with the policies, goals, and objectives of any applicable community plan, including the City of Hudson Comprehensive Plan, as amended from time to time. Staff finds the plan meets the intent of the Code.
2. The subdivision complies with the subdivision development and design standards as set forth in [Chapter 1208](#) of this Code.
 - a. Lots sizes and building setbacks to conform to the district regulations. There have been no revisions to the proposed lot dimensions previously approved.
3. The subdivision is found to be compatible with surrounding residential development as the subdivision has no changes to the surrounding residential development to the previous approved plat. Plan is acceptable as it matched the previous approved plat and is compatible with the existing subdivision.
4. The site layout is to minimize land disturbance and protect natural features by considering applicable sections of the Zoning Development and Site Plan Standards, Section 1207.
 - a. Stream Corridor Protection: The existing development area includes significant wetland areas adjacent to the sublots. The applicant should verify that the wetland reports are still valid per the US Army Corp of Engineers as part of the final plan application.
 - b. Open Space: The previously approved preliminary plan acknowledged acceptable open space dedication. The reapproval plan has been revised as follows:
 - i. The 8-foot pedestrian path from Phase IV to Phase V has been removed. The applicant has requested to submit a payment fee of \$625,610.94 in lieu of the required path along Boston Mills Road so additional funds can be utilized by the city to extend the trail toward Lake Forest Drive.

- c. Public Open Spaces Dedication: LDC requirements for park land per the following:

236 lots units, 3.1 residents per lot, 732 residents

	Ratio Required	Area Required
Community Parks	10 acres per 1,000 residents	7.32
Passive Open Space	6 acres per 1,000 residents	4.39
Neighborhood parks	3 acres per 1,000 residents	2.20
Total		13.91ac

Approved Pubic Open Space to Date:

- Conservation easement: 88.8 ac. conservation easement (the 444-acre subdivision had a total of 311 acres in easement, beyond the base 50% required – 222 acre)
- Trail: 7,400 ft multipurpose trail connecting Boston Mills Road to West Streetsboro Street.

Proposed:

- Conservation easement: 88 acres
 - The applicant will be providing a payment in lieu for trail construction to be used to install the trail along Boston Mills Road by the City of Hudson. The City will lead the trail project along Boston Mills Road so additional funds can be utilized with a desired extension toward Lake Forest Drive.
- d. Utilities: The water line and electric connections between Boston Mills Road and West Streetsboro Street will still be completed; however, will be routed to the west to link to Hudson Crossings Industrial Parkway. The City of Hudson Engineering Department is acceptable receiving funds in lieu and will complete the installation.
- e. Building Siting and Orientation: The proposed lot widths and areas are generally well beyond the required minimums for an OSCS. This should allow the applicant to accommodate the City's requirements for design variety and orientation.
- f. Pedestrian Linkage and Pathways: The plans submitted are acceptable provided the applicant indicates how the existing widened 8-foot walkway will transition to a 5-foot sidewalk for Phase IV.

- g. Engineering Comments: City Engineer, Brad Kosco has completed a review of the Revised Preliminary Plan and is satisfied with the submitted estimated costs for the improvements to the waterline and pedestrian path.
 - h. Fire Department Comments: Fire inspector Shawn Kasson has completed a review and is satisfied with the submitted plans.
5. Subdivision shall comply with all applicable development regulations, standards, and requirements
Floodplain/Floodway Overlay District- The applicant has proposed a revision to the defined Federal Emergency Management Agency (FEMA) 100-year floodplain and floodway within the eastern phases, outside of the subject property. No additional impacts are proposed with the development of the subject parcel.

Findings: Section 1204.05(b) Preliminary Subdivision Plan

The staff finds that the application complies with the purposes and intent of the code and community plans, subdivision development and design standards, regulations that minimize land disturbance and protect environmental features, and other applicable development regulations as specified in Section 1204.05(b) except as discussed above and recommended below.

Required PC Action, Chapter 1203.10(d)(1)(B)

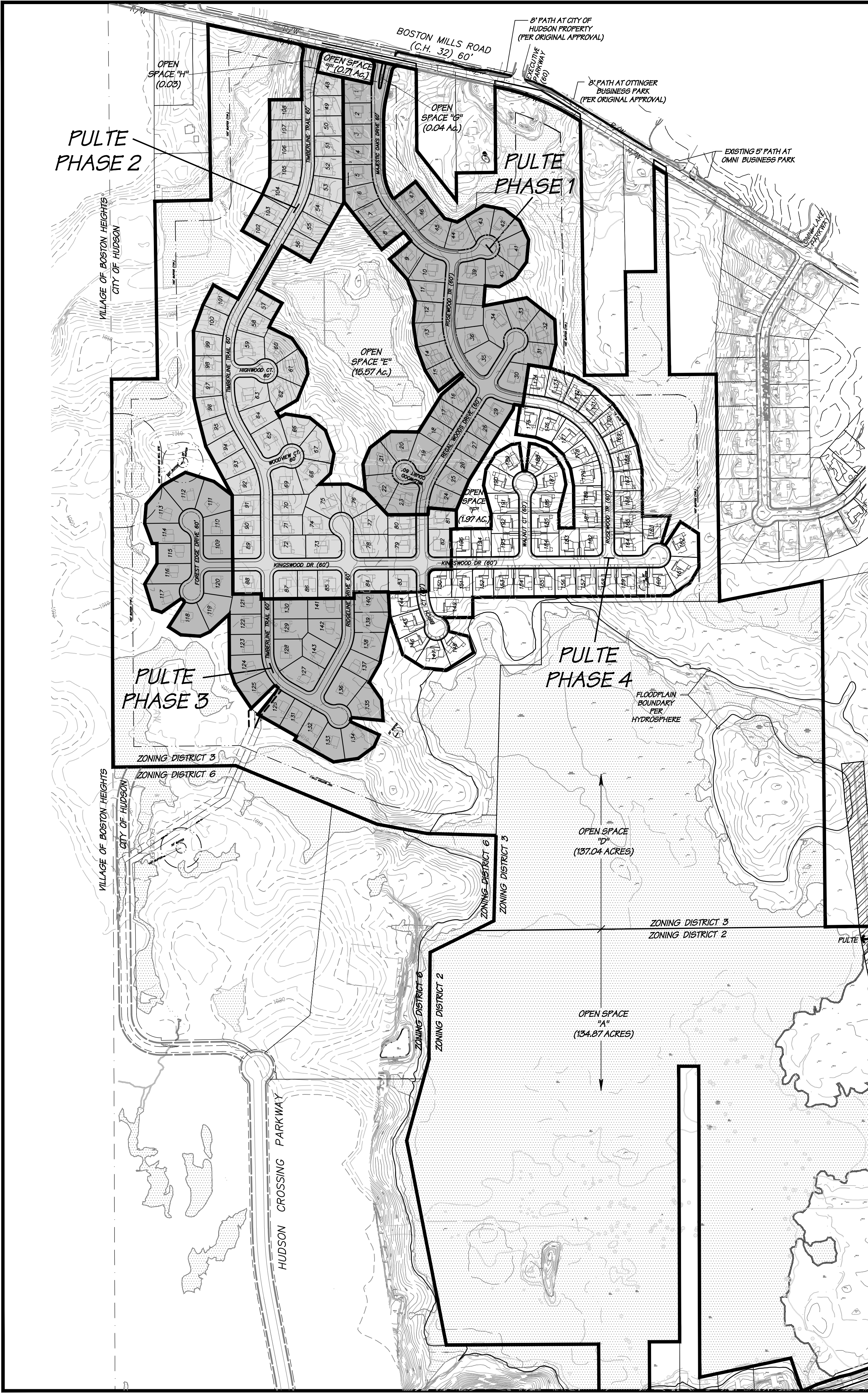
The PC shall take final action on the Preliminary Plan application by reviewing the application and all submitted plans and reports, and then either approving, approving with conditions, or denying the application based on its compliance with the standards summarized in this report.

All decisions of the Commission shall be based on written findings of fact related to the relevant standards of the Code.

Recommendation

Approve the application for Case No. 2018-5349 for a Revised Preliminary Subdivision Plan Approval for the single-family residential Open Space Conservation Subdivision known as the Reserve at River Oaks, Phases 1-5 according to plans dated as received November 2, 2018 with the condition that the applicant must address the following as part of the final plat and improvement plan submissions.

1. Plans must be revised to show the following:
 - a. Submit final subdivision plans for future phases.
 - b. Verify the Wetland documentation is still valid.
 - c. Indicates how the existing widened 8-foot walkway will transition to a 5-foot sidewalk for Phase IV.
 - d. Applicant to submit a cash amount of \$625,610.94 as payment in lieu to comply with the required public open space and utility requirement. City of Hudson will utilize the submitted funds to complete the utility installation and to apply the trail funds toward a larger trail development project along Boston Mills Road.



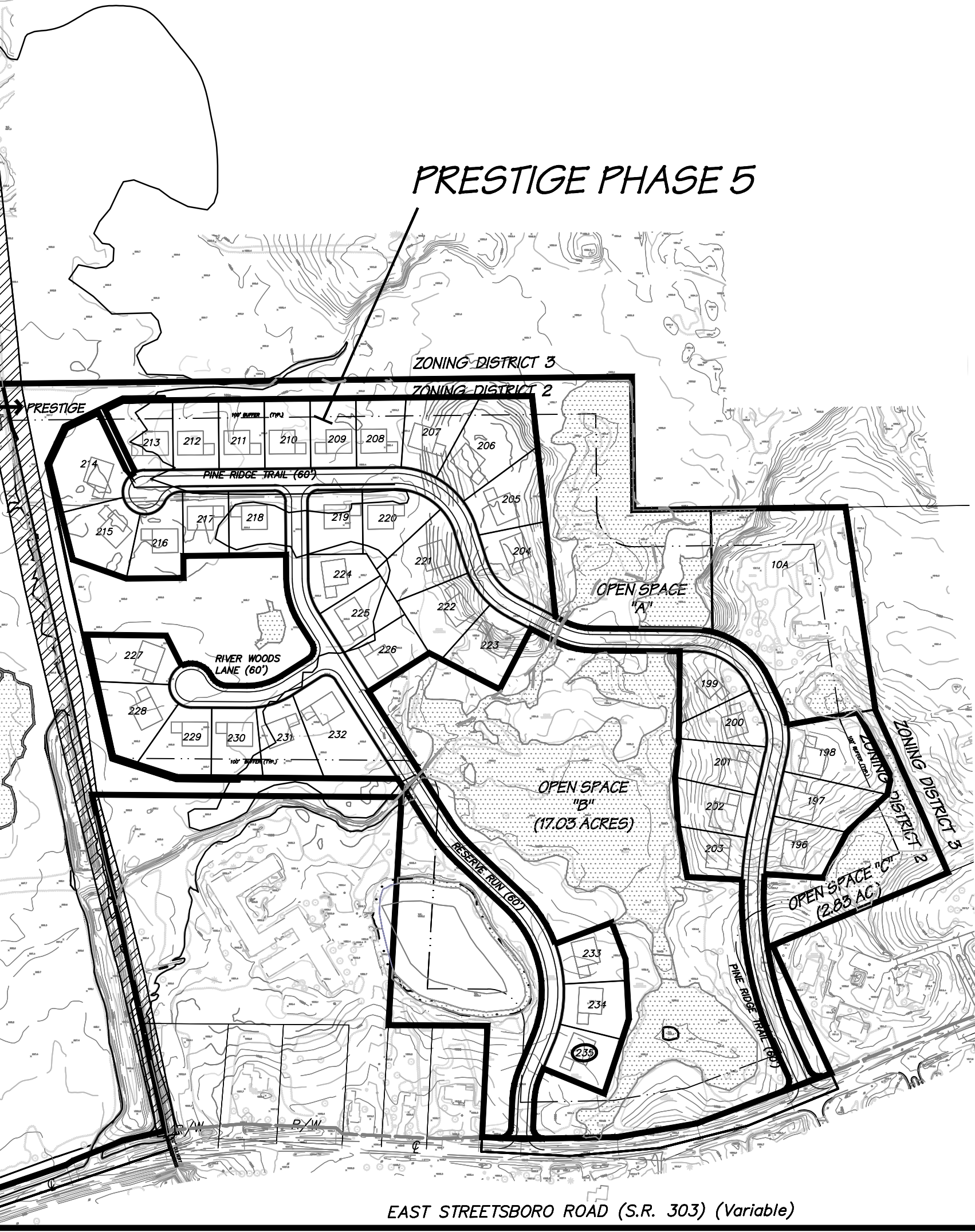
OPEN SPACE CONSERVATION SUBDIVISION (REVISED 9/16)									
	GROSS LAND AREA TO EXTG. R/W	WETLAND & FLOODPLAIN AREA	PROPOSED R/W	NET LAND AREA	SUBLOTS		AREA OF PROPOSED SUBLOTS	OPEN SPACE REQUIRED 50% GROSS LAND	OPEN SPACE PROVIDED
					ALLOWABLE DENSITY	PROPOSED			
DISTRICT 2	193.36 AC.	131.23 AC.	7.94 AC.	54.19 AC.	1 DWELLING UNIT PER 2.5 ACRES 64.19 / 2.5 = 21	40	30.67 AC.	183.56 X 0.5 = 96.68 AC.	A, B, C - 154.75 AC. (80.0%)
DISTRICT 3	249.94 AC.	86.78 AC.	19.70 AC.	143.46 AC.	2.5 DWELLING UNITS PER ACRE 143.46 X 2.5 = 358	195	74.89 AC.	249.94 X 0.5 = 124.97 AC.	D, E, F, G, H, I - 155.35 AC. (62.2%)
OVERALL DEVELOPMENT	443.30 AC.	218.01 AC.	27.64 AC.	197.65 AC.	COMBINED DENSITY 379	235	105.56 AC.	221.65 AC.	310.10 AC. (70.0%)

LANDSCAPE/BUFFERING		
ADJACENT USE	BUFFERYARD REQUIRED	MINIMUM DISTANCE
OAK POINT COMMONS, HUDSON WEST CONDOMINIUMS, AND ANY OTHER RESIDENTIAL DEVELOPMENT	C	15 FT (Minor)
LAUREL LAKE, THE ELMS RETIREMENT FACILITY	D	25 FEET (Substantial)
WBC DEVELOPMENT AT HUDSON CROSSING	E	40 FEET (Major)

PHASING:		
NO.	SUBLOTS	SCHEDULED YEAR OF DEVELOPMENT
PULTE PH. 1	1 - 47	2015
PULTE PH. 2	48 - 108	2016
PULTE PH. 3	109 - 143	2018
PULTE PH. 4	144 - 195	2019
PRESTIGE PH. 5	196 - 235	2019

LEGEND		
ITEM		DESCRIPTION
EXISTING	PROPOSED	
---	—R/W—	RIGHT-OF-WAY
—C/L—	—C/L—	CENTERLINE OF R/W
+ 944		SPOT ELEVATION
— 944 —	— 944 —	CONTOUR LINE
		BUILDING SETBACKS / BLDG. ZONE (NOTE 25' SIDE YARD SETBACK ON CORNER LOTS - TYP.)
		BLDG. NO. DESIGNATION GENERIC HOUSE & 3 CAR SIDE LOAD GARGAE BOX, SEE NOTE 4
		SIDEWALK TO FRONT DOOR
		PROPERTY LINE
		RIGHT-OF-WAY
— SAN —	— SAN —	SANITARY SEWER & MANHOLE
— ST —	— ST —	YARD BASIN, STORM SEWER & MANHOLE
		CURB INLET BASIN
		WETLANDS

- NOTES:
1. WATER MAIN PROPOSED ON STORM SEWER SIDE OF STREET W/ HYDRANTS AT 300' SPACING.
 2. MAXIMUM IMPERVIOUS SURFACE COVERAGE SHALL NOT EXCEED 60% OF THE GROSS AREA FOR EACH LOT.
 3. THE GENERIC HOUSE BOX AND SIDE LOAD GARAGE DRIVE PAD SHOWN ARE FOR REFERENCE PURPOSES ONLY TO HELP BETTER DEPICT THE PROPOSED IMPROVEMENTS AND ARE NOT MEANT TO REPRESENT THE FOOTPRINT OF THE HOUSES THAT WILL ULTIMATELY BE BUILT.
 4. MAINTAIN 50' NATURAL BUFFER ABUTTING WEST POINT DRIVE RESIDENTS & ADD ADDITIONAL PLANTINGS AS REQUIRED.



DEVELOPERS:
PRESTIGE & PREMIER COMPANIES
17 W. STREETSBORO ST.
HUDSON, OHIO, 44236
PHONE (330) 650-2033

PULTE HOMES OF OHIO
387 MEDINA ROAD, SUITE 1700
MEDINA, OHIO 44256
PHONE (330) 849-3476

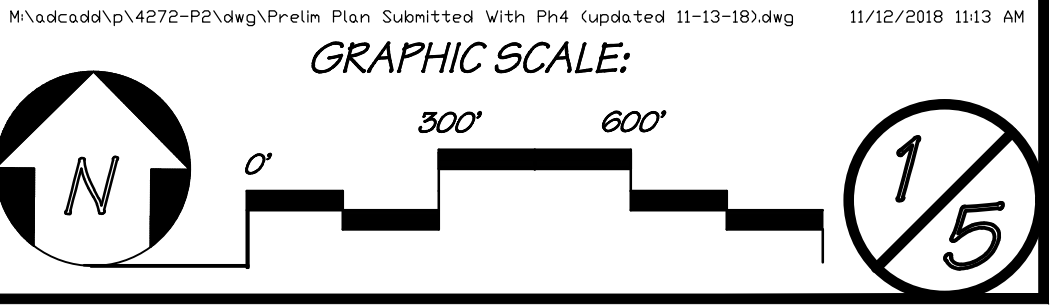
Prepared By:
DONALD G. BOHNING & ASSOCIATES, INC.
7979 HUB PARKWAY
VALLEY VIEW, OHIO, 44125
PHONE (216) 642-1130

OR. NO. 4272-P2 DATE: NOV. 21, 2014
REVISED: JAN. 6, 2015
REVISED: SEPT. 22, 2015
RE-APPROVAL: DEC. 11, 2017
RE-APPROVAL: NOV. 2, 2018

NOTE:
THIS "RE-APPROVAL" IS A TIME PERIOD RE-APPROVAL ONLY OF THE DEVELOPMENT PLAN FOR THE RESERVE AT RIVER OAKS WHICH HAS RECEIVED EARLIER OVERALL APPROVAL.

THE RESERVE AT
RIVER OAKS
EXPANDED
PRELIMINARY PLAN
RE-APPROVAL

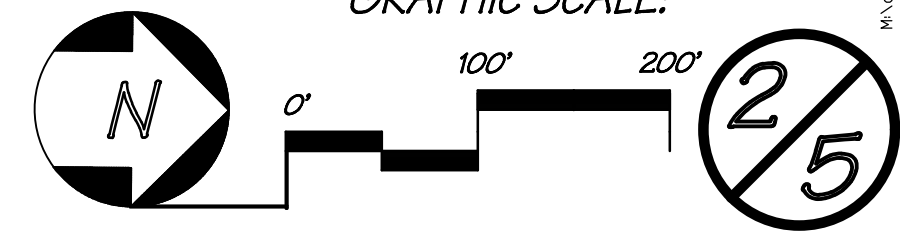
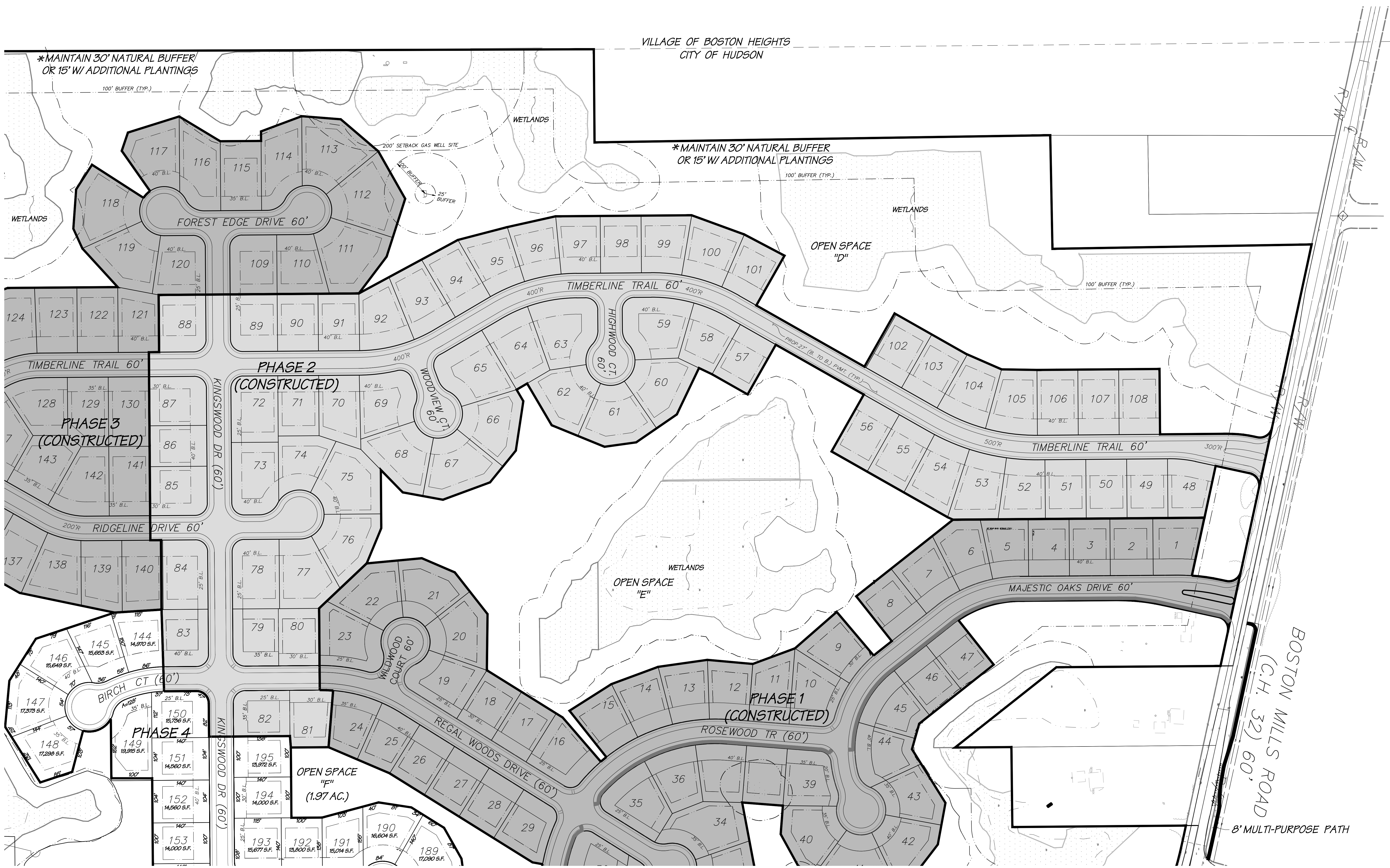
BOSTON MILLS RD. / WEST STREETSBORO RD.
CITY OF HUDSON, SUMMIT COUNTY, OHIO

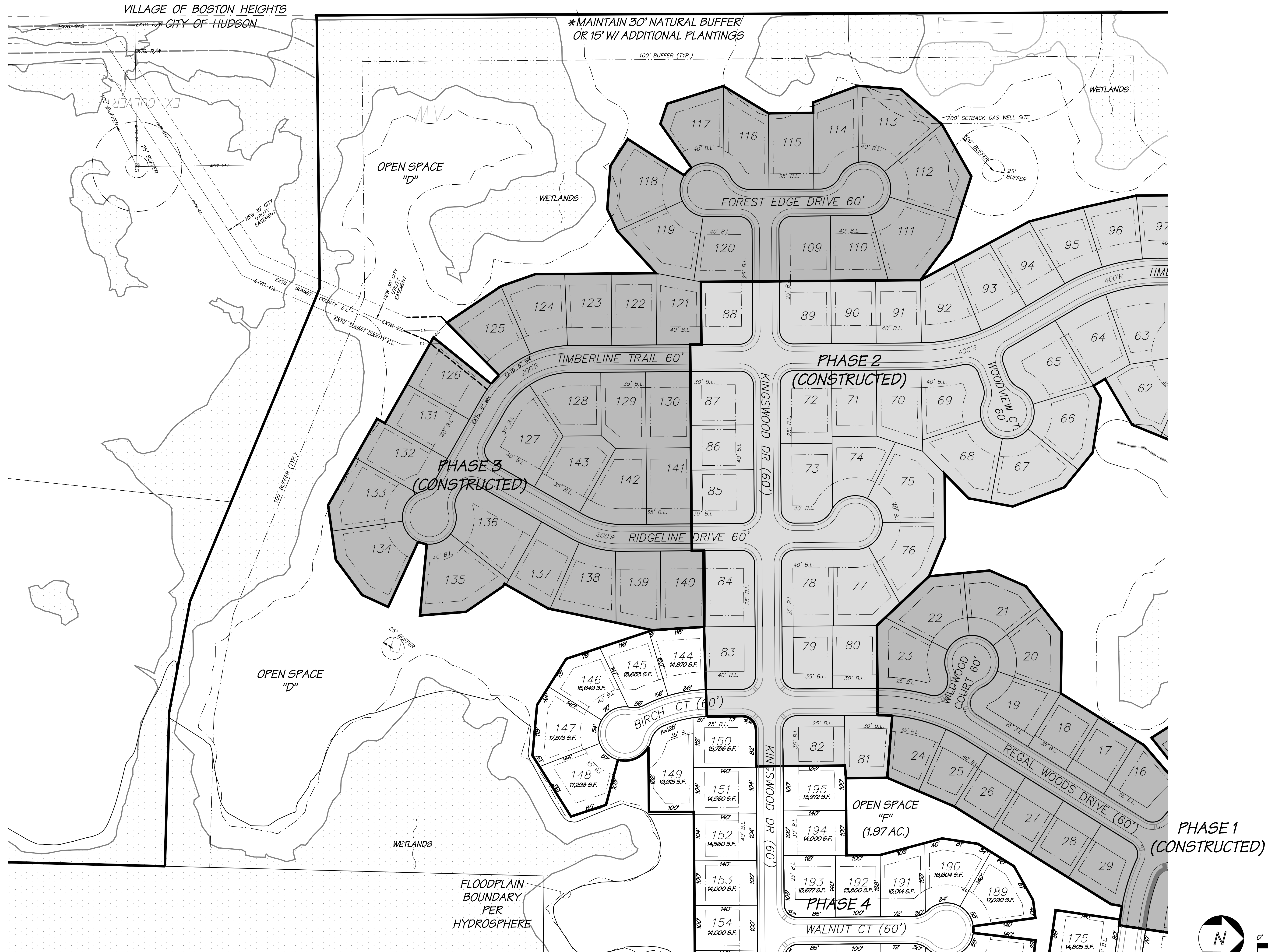


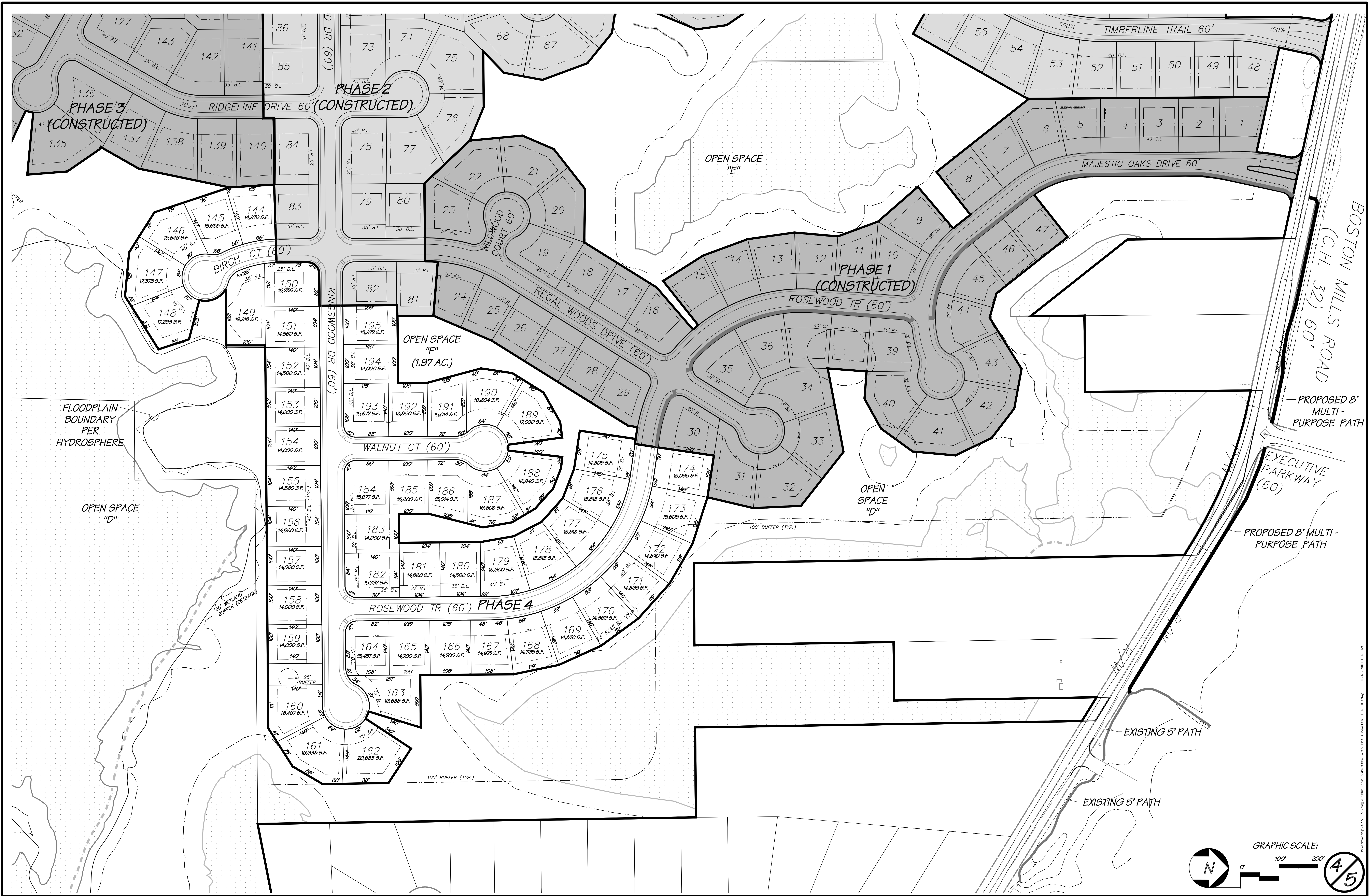
VILLAGE OF BOSTON HEIGHTS
CITY OF HUDSON

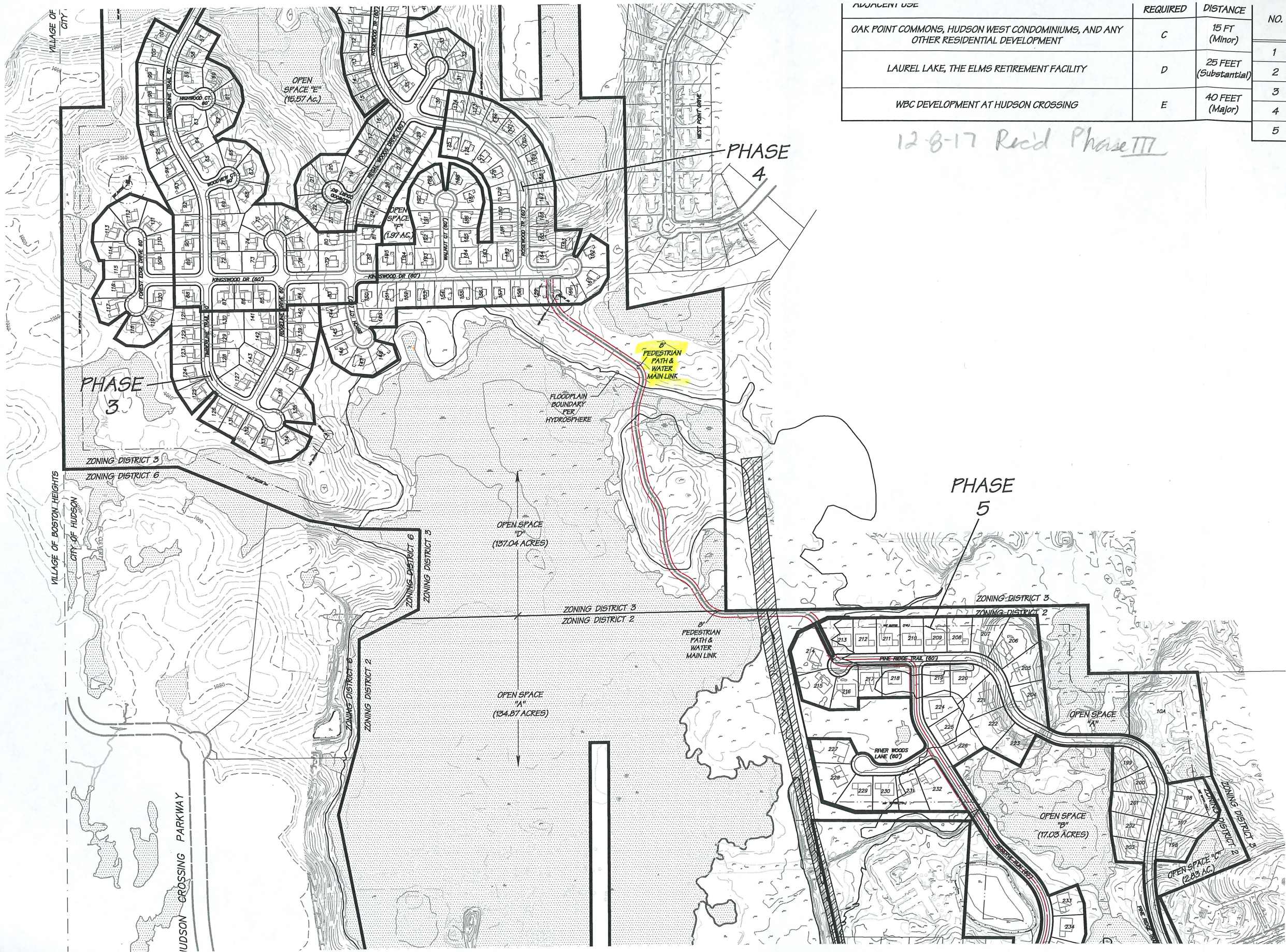
*MAINTAIN 30' NATURAL BUFFER/
OR 15' W/ ADDITIONAL PLANTINGS

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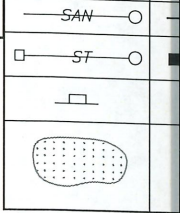


ADJACENT USE	REQUIRED	DISTANCE	NO.	SUBLOTS	SCHEDULED YEAR OF DEVELOPMENT
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LAUREL LAKE, THE ELMS RETIREMENT FACILITY	D	25 FEET (Substantial)	2	48 - 108	2016
WBC DEVELOPMENT AT HUDSON CROSSING	E	40 FEET (Major)	3	109 - 143	2018
			4	144 - 195	2019
			5	196 - 235	2019

12-8-17 Rec'd Phase III

NOTE:

1. WATER MAIN W/ HYDRANTS
2. 8" WATER MAIN & SOUTHERLY
3. MAXIMUM IMPROVEMENT GROSS AREA
4. THE GENERAL IMPROVEMENT FOR REFERENCE IMPROVEMENT HOUSES THAT
5. MAINTAIN 50% ADD ADDITION





DONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
7979 HUB PARKWAY · VALLEY VIEW, OHIO 44125 · (216) 642-1130
FAX · (216) 642-1132

November 20, 2018

City of Hudson
115 Executive Parkway, Suite 400
Hudson, Ohio 44236

ATTENTION: Bradley Kosco, P.E., P.S.
City Engineer

RE: The Reserve at River Oaks Subdivision – Phase 4
Revised Exhibit and Engineers Estimate

Brad:

The included engineer's estimate and exhibit for the watermain and path improvements from River Oaks Phase 4 to Prestige Phase 5 subdivision were revised per your comments in your email dated November 13, 2018. Below is a list of your comments along with a response written in **Bold**:

Cost estimate comments:

1. Pavement – The City's typical pavement build up (Drawing 7.1.5) for walking paths is attached and will need incorporated into the cost estimate.

The path detail on the exhibit was updated per the City's pavement build up and the engineer's estimate was revised.

2. Waterwork – Verify any high spots on waterline alignment (no labels on contours). Blow-off assemblies will be required at high spots.

Contour labels were added to the exhibit. One Air release valve is now shown and has been added to the engineer's estimate.

3. Waterwork – Mainline water valves are required a min. 500 foot intervals (10 State Standards). At 2,900 LF of waterline, a min. of six main valves would have been required for the connection between properties.

Section 8.3 of 10 State Standards lists 800 foot intervals in non-commercial districts and also states "where widely scattered customers and where future development is not expected, the valve spacing should not exceed one mile." Since there wouldn't be any house connections on the circulation main from River Oaks Phase 4 to Phase 5, the main would fall under the minimum spacing criteria of one mile. Two additional valves were added to the plan for maintenance convenience to increase the total number of valves from 2 to 4.

4. Waterwork – Is Dewatering accounted for anywhere?

The engineer's estimate assumed dewatering was included in the price of \$63/LF.



DONALD G. BOHNING & ASSOCIATES, INC.

CIVIL ENGINEERING & SURVEYING

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5. Miscellaneous – Add an inflation cost increase of 3.9% (ODOT projected rate) for 1 year (i.e. Construction Cost Estimate = $\$580,000 \times 0.039 \times 1 = \$22,500+/1$). I suggest one year because Pulte would have likely installed some/most of infrastructure within next 12 months).

Per the provided ODOT documentation, a 4.8 percent inflation rate was applied to the total engineer's estimate. For an estimate total of \$596,957, 4.8 percent would be \$28,653.94, for a total engineer's estimate of \$625,610.94.

6. Notes – Please forward a copy of the "Davey Estimate (2)" outlining the terms of mapping, reporting, permitting for a cost of \$68,500.

An updated copy of the cost breakdown from Davey has been included, which has an estimated cost of \$96,700.

Plan Comments

1. The plan should have included cost to jack and bore casing pipe to avoid wetland disturbance for future maintenance (similar casing pipe install planned for water connection between Hudson Crossing Parkway and River Oaks 3). Please comment.

The engineer's estimate and exhibit assumed the watermain would be open-cut per the wetland permitting. The Davey estimate was updated for category 3 wetlands and the cost increased from \$68,500 to \$96,700.

Please review the supplied data at your earliest convenience.

If you have any questions, or if we can be of any assistance, please don't hesitate to contact our office.

Sincerely,

DONALD G. BOHNING & ASSOCIATES, INC.

Travis Coyne, P.E.

Enclosure

Cc: Cody Bruce, Pulte Homes
File 4272-4

SCHEDULE OF QUANTITIES**WATERMAIN AND PATH EXTENSION PROJECT FROM
RIVER OAKS PHASE 4 TO PRESTIGE SUBDIVISION PHASE 5
HUDSON, OHIO****DGB 4272-3W****OCTOBER 31, 2018****REVISED NOVEMBER 20, 2018****ENGINEER'S ESTIMATE**

NO.	DESCRIPTION	ODOT ITEM	TOTAL QTY.	UNIT	UNIT PRICE	ITEM TOTAL
	<u>EXCAVATION / DEMOLITION / CLEARING</u>					
D1	MOWING AND GRUBBING	201	0.11	AC.	\$ 600.00	\$ 66.00
D2	TREE CLEARING	201	2.55	AC.	\$ 3,500.00	\$ 8,925.00
D3	EXCAVATION INCLUDING EMBANKMENT CONSTRUCTION (1)	203	6,460	C.Y.	\$ 5.00	\$ 32,300.00
D4	TOPSOIL STRIPPED (12") AND TEMPORARILY STOCKPILED OR PLACED IN ITS FINAL DESTINATION	652	3,075	C.Y.	\$ 3.00	\$ 9,225.00
D5	TOPSOIL RESPREAD / FILL IN AREA ADJACENT TO PATH	652	3,075	C.Y.	\$ 3.00	\$ 9,225.00
	SUBTOTAL					\$ 59,741.00
	<u>PAVEMENT</u>					
P1	SUBGRADE EXCAVATION INCL. PREPARATION, COMPACTION & PROOF-ROLLING	203	2,906	S.Y.	\$ 2.00	\$ 5,812.00
P2	4" BITUMINOUS AGGREGATE BASE, LIMESTONE	301	287	C.Y.	\$ 250.00	\$ 71,750.00
P3	4" AGGREGATE BASE, LIMESTONE	304	323	C.Y.	\$ 65.00	\$ 20,995.00
P4	1.5" ASPHALT CONCRETE, INTERMEDIATE COURSE, LIMESTONE TYPE 2	441	108	C.Y.	\$ 325.00	\$ 35,100.00
P5	ADDITIONAL 3' CONCRETE SIDEWALK WIDTH NEEDED AT PRESTIGE SUBDIVISION PATH ROUTE (2,480 LF)	608	7,440	S.F.	\$ 5.00	\$ 37,200.00
	SUBTOTAL					\$ 170,857.00
	<u>EROSION CONTROL</u>					
E1	MAINTENANCE OF EROSION CONTROL ITEMS	207	1	L.S.	\$ 1,000.00	\$ 1,000.00
E2	TEMPORARY SEEDING AND MULCHING	207	1.7	AC.	\$ 2,000.00	\$ 3,400.00
E3	HIGH VISIBILITY ORANGE SILT FENCE INSTALLATION/REMOVAL	207	2,820	L.F.	\$ 2.50	\$ 7,050.00
E4	CONSTRUCTION ROAD STABILIZATION INCL. CONSTRUCTION STAGING (703.01), INSTALLATION AND REMOVAL	703	200	TON	\$ 35.00	\$ 7,000.00
	SUBTOTAL					\$ 18,450.00
	<u>WATERWORK</u>					
W1	REMOVE FLUSH PIPE AND INSTALL 8" LINE VALVE AND BOX	SPEC	1	EA.	\$ 1,650.00	\$ 1,650.00
W2	FLUSH PIPE AND BOX ASSEMBLY	SPEC	1	EA.	\$ 750.00	\$ 750.00
W3	FLUSH PIPE AND BOX ASSEMBLY INSTALLED IN PHASE 4	SPEC	1	EA.	\$ 750.00	\$ 750.00
W4	8"X8"X8" TEE INSTALLED IN PHASE 4	SPEC	1	EA.	\$ 400.00	\$ 400.00
W5	30' WATERMAIN INSTALLED IN PHASE 4 (CL 52 DIP)	SPEC	30	L.F.	\$ 63.00	\$ 1,890.00
W6	8" WATERMAIN (CL. 52 DIP)	SPEC	2,913	L.F.	\$ 63.00	\$ 183,519.00
W7	8" LINE VALVE AND BOX	SPEC	3	EA.	\$ 1,300.00	\$ 3,900.00
W8	8" - 11 1/4 DEGREE HORIZ. BEND	SPEC	2	EA.	\$ 400.00	\$ 800.00
W9	8" - 22 1/2 DEGREE HORIZ. BEND	SPEC	2	EA.	\$ 400.00	\$ 800.00
W10	8" - 45 DEGREE HORIZ. BEND	SPEC	1	EA.	\$ 400.00	\$ 400.00
W11	AIR RELEASE VALVE AT HIGH POINT	SPEC	1	EA.	\$ 2,000.00	\$ 2,000.00
	SUBTOTAL					\$ 196,859.00

SCHEDULE OF QUANTITIES
WATERMAIN AND PATH EXTENSION PROJECT FROM
RIVER OAKS PHASE 4 TO PRESTIGE SUBDIVISION PHASE 5
HUDSON, OHIO
DGB 4272-3W
OCTOBER 31, 2018 **REVISED NOVEMBER 20, 2018**

ENGINEER'S ESTIMATE

NO.	DESCRIPTION	ODOT ITEM	TOTAL QTY.	UNIT	UNIT PRICE	ITEM TOTAL
	<u>MISCELLANEOUS</u>					
M1	PRECONSTRUCTION VIDEO RECORDING	SPEC	1	L.S.	\$ 500.00	\$ 500.00
M2	MAINTENANCE BOND (+/- 1 percent)	SPEC	1	L.S.	\$ 4,500.00	\$ 4,500.00
M3	CONSTRUCTION LAYOUT / AS-BUILT	SPEC	1	L.S.	\$ 3,600.00	\$ 3,600.00
M4	INSPECTION, PERMITS AND TESTING FEES (estimated at +/- 3 percent)	SPEC	1	L.S.	\$ 13,450.00	\$ 13,450.00
M5	ENGINEERING AND TOPOGRAPHIC SURVEY (estimated at +/- 7 percent)	SPEC	1	L.S.	\$ 31,400.00	\$ 31,400.00
M6	EPA PERMIT APPLICATION FEE	SPEC	1	L.S.	\$ 900.00	\$ 900.00
M7	WETLAND DELINIATION, MAPPING & REPORT, PERMITTING, AND MITIGATION - DAVEY ESTIMATE (2)	SPEC	1	L.S.	\$ 96,700.00	\$ 96,700.00
M8	INFLATION COST INCREASE : \$596,957 X 4.8 PERCENT PER ODOT PROJECTED RATE FOR 2019	SPEC	1	L.S.	\$ 28,653.94	\$ 28,653.94
	SUBTOTAL					\$ 179,703.94
	<u>SUMMARY</u>					
	EXCAVATION / DEMOLITION / CLEARING					\$ 59,741.00
	PAVEMENT					\$ 170,857.00
	EROSION CONTROL					\$ 18,450.00
	WATERWORK					\$ 196,859.00
	MISCELLANEOUS					\$ 179,703.94
	TOTAL					\$ 625,610.94
NOTES:						

(1) ESTIMATED EXCAVATION/EMBANKMENT QUANTITY WAS AN AVERAGE OF 2' PER DISTURBED AREA.

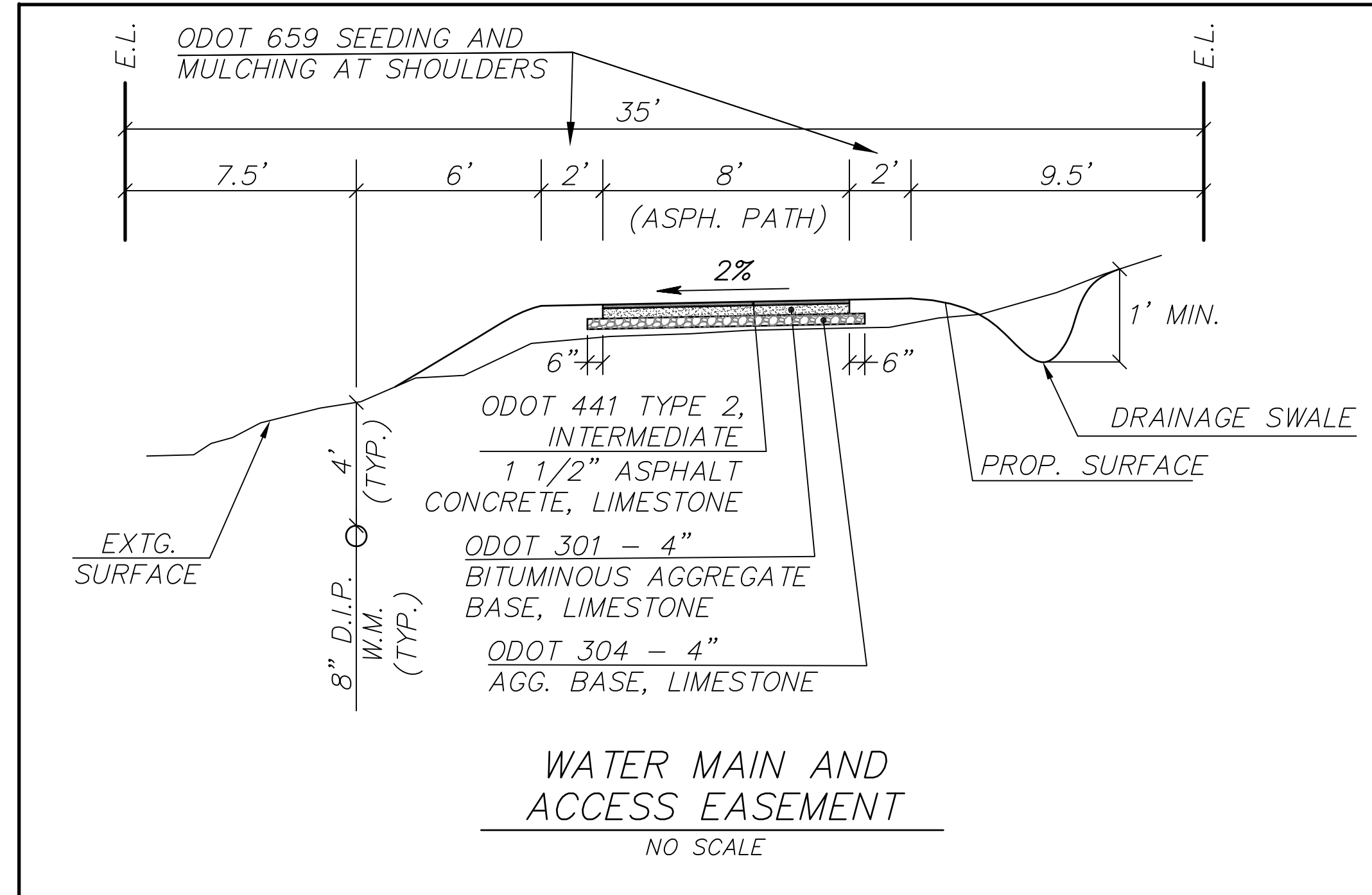
(2) LUMP SUM PRICE INCLUDES DELINEATION AND PERMITTING REQUIRED FOR CONSTRUCTION OF PATH AND OPEN-TRENCHING WATER MAIN THROUGH WETLANDS. WETLANDS SHOWN ON EXHIBIT ARE PER 2010 CVE WETLAND DELINEATION AND ARMY CORP PERMIT WHICH DOES NOT SPECIFY CATEGORY RATING OF WETLANDS.

PATH AND WATERMAIN FROM RIVER OAKS SUBDIVISION
(PHASE 4) TO PRESTIGE SUBDIVISION (PHASE 5)

SUMMARY OF ESTIMATED COSTS:

- EXCAVATION/DEMOLITION/CLEARING: \$59,741.00
- PAVEMENT: \$170,857.00
- EROSION CONTROL: \$18,450.00
- WATERWORK: \$196,859.00
- MISCELLANEOUS: \$179,703.94

TOTAL: \$625,610.94



459 LF - 8' ASPHALT PATH (PRESTIGE)

463 LF - 8" WATER MAIN (PRESTIGE)

WETLAND DISTURBANCE
0.2780 ACRES

AIR RELEASE VALVE

2,447 LF - 8' ASPHALT PATH (PULTE)

2,450 LF - 8" WATER MAIN (PULTE)

8" LINE VALVE

8" LINE VALVE

WETLAND DISTURBANCE
0.0690 ACRES

EXCESS TOPSOIL RE-SPREAD

REMOVE PH4
FLUSH PIPE
AND INSTALL
8" LINE VALVE

22.5° BEND

TEE AND 30' - 8" WM INSTALLED IN PHASE 4

ZONING DISTRICT 3
ZONING DISTRICT 2

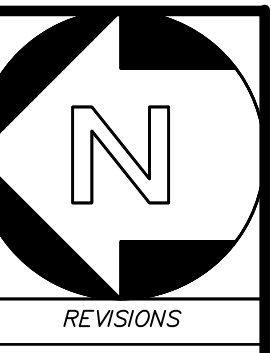
2,001 LF - 3' ADDITIONAL
WIDTH AT CONCRETE SIDEWALK
(PRESTIGE)

479 LF - 3' ADDITIONAL WIDTH
AT CONCRETE SIDEWALK
(PRESTIGE)

FLUSH PIPE & BOX
8" LINE VALVE AND BOX

45° & 11.25° BENDS

(PRESTIGE)
(PULTE)



PROPOSED PATH AND WATER MAIN FROM RIVER OAKS
PHASE 4 TO PRESTIGE SUBDIVISION PHASE 5
BOSTON MILLS ROAD AND RIVER OAKS SUBDIVISION
WATERMAIN AND PATH EXHIBITS
CITY OF HUDSON - SUMMIT COUNTY, OHIO

DONALD G. BOHNING & ASSOCIATES, INC.
CIVIL ENGINEERING & SURVEYING
7979 HUB PARKWAY • VALLEY VIEW, OHIO 44125
PHONE: (216) 642-1130 FAX: (216) 642-1132
11/28/2018 11:12 AM

GRAPHIC SCALE
0' 60' 120'
HORIZ. SCALE
1"=120'
VERT. SCALE

DRN
T.M. OKD.
T.C.
DATE
NOV., 2018
ORDER NO.
4272-3W

1
1



Corporate Headquarters

1500 North Mantua Street

PO Box 5193

Kent, Ohio 44240-5193

330.673.5685

Toll Free 1.800.828.8312

Fax 330.673.0860

November 20, 2018

Cody Bruce, Land Project Manager
Pulte Homes of Ohio, LLC
387 Medina Road, Suite 1700
Medina, Ohio 44256

RE: *Water Resources Permitting Cost Evaluation* — River Oaks Subdivision Waterline and Walking Path, Boston Mills Road, Hudson, Summit County, Ohio

Dear Mr. Bruce:

As requested, Davey Resource Group, Inc., has prepared a cost estimate associated with aquatic resources evaluations, permitting, and compensatory mitigation for the historically proposed water line and walking path that were to extend southeast of the River Oaks Subdivision to SR 303 (W. Streetsboro Street) in Hudson.

The table presented below provides a summary of site evaluation, permitting, and compensatory mitigation costs that would be required to obtain appropriate federal and state wetland authorizations for permanent fill of 0.347 acre of Category 3 wetlands for the original waterline and walking path. Please note that these values are based upon Davey Resource Group's professional experience conducting Clean Water Act Section 404/401 permitting for similar projects across Ohio.

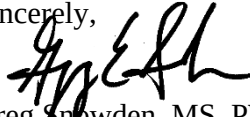
Table 1. Cost Estimates

Task	Estimated Cost
Delineation Fieldwork and Mapping	\$1,500.00
Delineation Report and Aquatic Resource Assessments	\$1,850.00
Delineation Verification Site Visit	\$750.00
Permitting - U.S. Army Corps of Engineers, Nationwide Permit and Ohio EPA 401 Water Quality Certification	\$20,000.00
Wetland Mitigation (0.347 acre x 3:1 ratio = 1.041 credits, rounded up to 1.1 x \$66,000/credit)	\$72,600.00
<i>Total</i>	<i>\$96,700.00</i>

Cody Bruce
Pulte Homes of Ohio, LLC
November 20, 2018
Page 2.

If you have any questions regarding the content of this letter, please contact me at 800-828-8312, extension 8008 or by email at greg.snowden@davey.com. Thank you for allowing us to assist you with this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Snowden", written over the printed name.

Greg Snowden, MS, PWS, Senior Biologist
Natural Resource Consulting



ENGINEERING • 115 Executive Parkway, Suite 400 • Hudson, Ohio 44236 • (330) 342-1770

Date: December 3, 2018

To: Kris McMaster, City Planner

C: Greg Hannan, Director of Community Development

From: Bradley Kosco PE., PS., City Engineer

Re: **Reserve at River Oaks Phase 4 – Revised Cost Estimates for Proposed Waterline and Path Improvements**

Kris

On November 20, 2018, Pulte Homes design consulting engineer, Donald G. Bohning & Associates submitted a cost estimate and supporting documentation for the proposed waterline and path projects linking the River Oaks Phase 4 and future phase off of W. Streetsboro Road.

I have reviewed the cost estimate in the amount of \$625,610.94 along with the supporting documentation and find the estimate of construction cost acceptable.

Respectfully,

A handwritten signature in blue ink, appearing to read "Bradley Kosco".

Bradley Kosco, P.E., P.S.
City Engineer



PUBLIC WORKS • 1769 Georgetown Road • Hudson, Ohio 44236 • (330) 342-1750

MEMORANDUM

Date: December 3, 2018
To: Greg Hannan, Director of Community Development
From: Trent Wash, Assistant Director of Public Works
Re: Boston Mills Trail

Greg, The Park Board discussed the Boston Mills Trail at the November 19th meeting. They are in full support of the development of the trail and assisting with funding. They were encouraged that they have input and that Lake Forest would be in view on the proposed trail routing. Please let me know if you have any other concerns.

Thank you, Trent Wash
Assistant Director of Public Works

Trail for River Oaks to meet requirement for pedestrian accommodations along frontage. (Design complete and scheduled for install in 2019 by Pulte)

Lake Forest Country Club

Trail requirement for Danbury of Hudson development. (Currently under construction)

Reserve at River Oaks

Proposed trail requirement to be funded with payment in lieu by Pulte Homes as part of revised public open space dedication. (Design in 2019-2020 and construction in 2021-2022)

Laurel Lake

