



**TOWN OF DAVIDSON
PLANNING BOARD
Board Room
Davidson Town Hall
April 30, 2018**

PLANNING BOARD MEETING - 7:00 PM

(Held in the Town Hall Board Room)

- I. CALL TO ORDER**
- II. SILENT ROLL CALL AND DETERMINATION OF QUORUM**
- III. CHANGES TO THE AGENDA**
- IV. REVIEW/APPROVAL OF THE MINUTES**
 - (a) Minutes: March 26, 2018
- V. B.O.C. LIAISON REPORT**
- VI. OLD BUSINESS**
 - (a) Mobility Plan Update
 - (b) Planning Board Ordinance Committee Update
- VII. NEW BUSINESS**
 - (a) Davidson Springs Master Plan FYI Update
- VIII. OTHER ITEMS**
- IX. B.O.C. LIAISON SELECTION**
- X. ADJOURNMENT**



Agenda Title: Minutes: March 26, 2018

Summary: The Planning Board will review the draft Minutes from the March 26, 2018 meeting and will vote on approving the Minutes.

ATTACHMENTS:

Description	Upload Date	Type
☐ March 27, 2018 Minutes	4/26/2018	Cover Memo

MEETING MINUTES

Planning Board
Town of Davidson, NC
March 26, 2018

A meeting of the Davidson Planning Board was held at 6:00 p.m. in the Davidson Town Hall Board Room.

I. CALL TO ORDER: 6:02 pm

II. SILENT ROLL CALL AND DETERMINATION OF QUORUM

- **Present Board Members:** Kelly Ross; Susan Cooke; Mickey Pettus (Chair); Mike Minett; Matt Dellinger; Ellen Donaldson; John Swope; Michael Flake (via phone); Bob Miller
- **Absent Board Members:** Lindsey Williams; Shawn Copeland
- **Town Representatives:** Travis Johnson, Trey Akers, Lindsay Laird

III. CHANGES TO THE AGENDA: None

IV. REVIEW/APPROVAL OF THE MINUTES

a. Approval of Minutes from 2/26/18

- Motion to Approve: Mike Minett
- Second: John Swope
- Vote: 8-0 (Minutes Approved; Williams/Copeland Absent, Flake on Phone)

V. OLD BUSINESS:

- a. **Mobility Plan Committee Update:** Travis Johnson provided an update on the Mobility Plan, indicating that additional public engagement opportunities would be given to citizens prior to the charrette. He also described the Mobility Plan subcommittee's current task: To review the synopsis of previous plans reviewed and summarized by the consultant. He explained that this document was a summary of previous plans and did not propose any new ideas; he showed board members where previous plans could be located online. The subcommittee will provide feedback on the synopsis, which will be given to the consultant for revisions as needed.
- b. **Planning Board Ordinance Committee Update:** Staff members Trey Akers and Lindsay Laird, along with Planning Board member Ellen Donaldson, led a discussion of the proposed changes to the watershed ordinance. To summarize:
 - The discussion highlighted changes made and/or topics considered since the previous Planning Board meeting. Staff explained that the items reflected the input of various citizens, Board of Commissioner members, Planning Board Ordinance Committee members, and staff since the previous meeting, including: Revisions to clarify the definition of and criteria for expansions; the proposed removal of exemptions; limiting BUA consideration to adjoining and adjacent parcels that are part of the same development proposal; and, increased discretion allocated to the Board of Adjustment in making decisions concerning Built Upon Area Averaging (a.k.a. Density Averaging).

- Ellen Donaldson noted that the Averaging process gave her concerns, esp. if it allowed proposals inconsistent with the town's values to be approved. Staff mentioned the increased ability of the Board of Adjustment to deny a proposal and described the difficulty/legality of identifying additional criteria that would let only certain types of proposals pursue Averaging. Mickey Pettus stated that the committee should work on the issue further and return to the Planning Board with an update; he also announced that the PBOC would meet following the Planning Board meeting that night to answer citizen questions and listen to feedback.

VI. NEW BUSINESS: N/A [No Items]

VII. OTHER ITEMS:

- a. **Affordable Housing:** Trey Akers noted that staff was working to follow up on the Planning Board's February request for more information and a potential tour of sites.

VIII. SELECTION OF BOARD OF COMMISSIONERS LIAISON: N/A

IX. ADJOURNMENT: 6:42 pm

- Motion to Adjourn: Mike Minett
Second: Ellen Donaldson

APPROVAL OF MEETING MINUTES

Signature/Date
Mickey Pettus
Planning Board Chair



Agenda Title: Mobility Plan Update

Summary: Mobility Plan Project Manager Travis Johnson will provide an update on the Mobility Plan, including public engagement events.



Agenda Title: Planning Board Ordinance Committee Update

Summary: The Planning Board Ordinance Committee (PBOC) will provide an update on their review of the proposed Watershed Text Amendments. Staff liaisons Trey Akers and Lindsay Laird, along with PBOC members, will give an overview of topics discussed since the March Planning Board meeting. Note: The PBOC will host an open house prior to the Planning Board meeting from 4:30-6:30 pm to discuss the proposed changes as well as answer citizen questions and listen to their comments.

ATTACHMENTS:

Description	Upload Date	Type
❑ Watershed Amendments Memo	4/26/2018	Cover Memo
❑ DPO 17 Watershed Amendments Annotated	4/26/2018	Cover Memo



WATERSHED ORDINANCE SUMMARY

Date: April 30, 2018
To: Planning Board
From: Planning Board Ordinance Committee
Re: DPO Section 17 (Watershed Ordinance) - Text Amendments

Note: The following highlight discussion topics related to DPO Section 17 occurring since the Planning Board of Commissioners last reviewed substantive changes on March 26, 2018.

1. OVERVIEW

- **Purpose:** The standards, in place since 1993, maintain clean water in Lake Norman by requiring vegetative buffers and limiting the amount of "built-upon-area" (BUA) placed on a lot.
- **Background:** In March 2017 Mecklenburg Co., our partner in administering the ordinance (with oversight from NCDEQ), requested that Davidson: Update/clarify standards; address persistent issues and inconsistencies; and, remove inapplicable sections.
- **Equal Application of Standards:** The proposed amendments apply the standards more equally across all lot types, afford sufficient development rights for each lot type, and are guided by adopted plan and policy aims.
- **Scale/Character:** The proposed amendments reinforce the character of existing development.

2. OUTSTANDING TOPICS/RESOLUTION

SECTION 17.8.2.B.6: BUILT-UPON AREA AVERAGING/ELIGIBILITY

- **Uses:** Comments from the Board of Commissioners and PBOC recommended applying a filter to allow only certain types of uses promoting an identified public interest to utilize the averaging process. The text amendments propose allowing the following uses to be considered eligible for the averaging program: Residential uses intended to meet an identified housing need (i.e. less than 120 percent of AMI), or Civic/Educational/Institutional uses as defined by the Davidson Planning Ordinance. Additional uses may be considered by the Board of Adjustment on a case by case basis.

SECTION 17.8.2.B.6: BUILT-UPON AREA AVERAGING/PROCESS

- **Board of Adjustment (BOA) Decision:** Comments requested that the changes consider shifting approval from the BOA to the Board of Commissioners (BOC). Draft text was drafted, reviewed, and withdrawn – the decision's quasi-judicial nature limits the BOC's ability to engage with citizens to discuss any case. However, to address concerns about incompatible development being approved, the amendments now include revised language clarifying the BOA's ability to

deny a proposal based on adopted plans and policies. In sum: 1. The BOA would only review a BUA Averaging request/plan that had received approval through the requisite development process – complete with public input, staff review, and Planning Board comment; and, 2. Based on the proposed changes, even after that initial approval the BOA's discretion to deny the proposal has been expanded.

CHAPTER 17: Watershed Protection Overlay District - Update (April 18, 2018)

[Insert map showing critical watershed area]

17.1 Authority and Enactment

The Legislature of the State of North Carolina has, in Chapter 160A, Article 8, Section 174, General Ordinance Authority; and in Chapter 143, Article 21, Watershed Protection Rules, delegated the responsibility or directed local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The Davidson Board of Commissioners does hereby ordain and enact into law the text contained herein to satisfy said statutory requirements.

17.2 Jurisdiction

The provisions of this section shall apply only within areas designated as Water Supply Watersheds by the NC Environmental Management Commission and shall be depicted on the Town of Davidson's Watershed map. Where there is a conflict between the regulations contained in this section and any other portion of the Planning Ordinance, the provision of this section shall apply to properties located within a designated Water Supply Watershed area.

17.3 Definitions

For the purpose of interpreting this section, certain words or terms are herein defined. Except as defined herein, or in Section 16 - Definitions, all other words shall have their everyday dictionary definition. Where a term is defined in this section and in Section 16 Definitions, the definition in this section shall apply to this section only.

Agricultural Use: The use of waters for stock watering, irrigation, and other farm purposes.

Animal Unit: A unit of measurement developed by the US Environmental Protection Agency that is used to compare different types of animal operations.

Buffer, Vegetative: An area of natural or planted vegetation through which stormwater runoff flows in a diffused manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants. The buffer is measured landward from the normal pool elevation of Lake Norman and from the top of the bank on each side of streams.

Built-Upon Area: Built-upon areas shall include that portion of a development project that is covered by impervious or partially impervious cover including buildings, pavement, gravel roads, recreation facilities (e.g. tennis courts), etc. (Note: Wooden slatted decks and the water area of a swimming pool are considered pervious.) Built upon areas shall be determined on a project-by-project basis.

Cluster Development: ...

Composting Facility: A facility in which only stumps, limbs, leaves, grass and untreated wood collected from land clearing or landscaping operations is deposited.

Commented [LL1]: Remove definition—Cluster Developments aren't an allowed development type in Davidson.

Critical Area: The area adjacent to a water supply intake or reservoir where risk associated with pollution is greater than from the remaining portions of the watershed. The critical area is defined as extending either one-half mile from the normal pool elevation of the reservoir in which the intake is located or to the ridge line of the watershed (whichever comes first); or one-half mile upstream from the intake located directly in the stream or river (run-of-the-river), or the ridge line of the watershed (whichever comes first). Major landmarks such as highways or property lines may be used to delineate the outer boundary of the critical area if these landmarks are immediately adjacent to the appropriate outer boundary of one-half mile.

Development: Any land disturbing activity which adds to or changes the amount of impervious cover on a land area or which otherwise decreases the infiltration of precipitation into the soil.

Discharging Landfill: A facility with liner, monitoring equipment and other measures to detect and/or prevent leachate from entering the environment and in which the leachate is treated on site and discharged to a receiving stream.

Expansion: Any walled and roofed extension of or increase in the floor area or height of an existing building connected by a load-bearing wall; and/or, an increase in the built-upon area to site components such as parking, improvements, or other structures.

Existing Development: Projects that are built or projects that have established a vested right under North Carolina zoning law as of the effective date of this ordinance (October 1, 1993) based on at least one of the following criteria:

- (a) Having an approved site specific or phased development plan; or
- (b) Having an outstanding valid building permit; or
- (c) Substantial expenditures of resources (time, labor, money) based on a good faith reliance upon having received a valid local government approval to proceed with the project.

Existing Lot of Record: A lot which is part of a subdivision, a plat of which has been recorded in the Office of the Register of Deeds prior to October 1, 1993 of this ordinance, or a lot described by metes and bounds, the description of which has been recorded prior to October 1, 1993. (Note: This definition containing the October 1, 1993 stipulation shall be applicable only to Section 17 of this ordinance.)

Hazardous Material: Any substance listed as such in: SARA Section 302, Extremely Hazardous Substances, CERCLA Hazardous Substances, or Section 311 or CWA (oil and hazardous substances).

High Density Option: Any development which exceeds 24 percent built-upon area (BUA), requiring engineered stormwater control devices approved by the Town of Davidson as prescribed by the Environmental Management Commission's adopted Water Supply Watershed Protection rules.

Industrial Development: Any non-residential development that requires an NPDES permit for an industrial discharge and/or requires the use or storage of any hazardous material for the purpose of manufacturing, assembling, finishing, cleaning, or developing any product or commodity.

Landfill: A facility for the disposal of solid waste on land in a sanitary manner in accordance with Chapter 130A, Article 9 of the N.C. General Statutes. For the purpose of Section 17, this term does not include compost facilities.

Commented [LL2]: This definition was added to help distinguish between what constitutes an expansion and a demolition.

Commented [LL3]: A definition for Existing Development was added per Meck. County recommendation. This was not previously defined in Section 17 of the ordinance, but the term is referenced several times in this section.

Commented [LL4]: NCDEQ suggested this revision— In the current ordinance, the definitions of high/low density are based on whether or not a development contains engineered stormwater. In practice, however, a development is determined to be high or low density based on the proposed built-upon area (BUA). If a development is over 24% BUA it's high density. Then because it is high density, engineered stormwater is required. The revisions clarify the criteria are based on BUA and not engineered stormwater.

Low Density Option: Any development which does not exceed 24 percent built-upon area (BUA).

Plat: A map or plan of a parcel of land which is to be, or has been subdivided.

Protected Area: The area adjoining and upstream of the critical area in a WS-IV water supply in which protection measures are required. The boundaries of the protected areas are defined as extending five miles upstream and draining to water supply reservoirs (measured from the normal pool elevation) or to the ridge line of the watershed (whichever comes first); or ten miles upstream and draining to the intake located directly in the stream or river (run-of-the-river), or to the ridge line of the watershed (whichever comes first). Major landmarks such as highways or property lines may be used to delineate the outer boundary of the protected area if these landmarks are immediately adjacent to the appropriate outer boundary of five or ten miles. In some cases the protected area will encompass the entire watershed.

Redevelopment: Rebuilding activities, including demolition, on land containing built upon area as of the effective date of this ordinance (October 1, 1993).

Residential Development: Buildings for residence such as attached and detached single-family dwellings, apartment complexes, condominiums, townhouses, cottages, etc. and their associated outbuildings such as garages, storage buildings, gazebos, etc. and customary home occupations.

Toxic Substance: Any substance or combination of substances (including disease causing agents), which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, has the potential to cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions or suppression in reproduction or growth) or physical deformities in such organisms or their offspring or other adverse health effects.

Variance, Major: A variance from the minimum Town's watershed protection rules that results in any one or more of the following:

1. The relaxation by a factor greater than five percent of any buffer, density or built-upon area requirement under the high density option;
2. Any variation in the design, maintenance, or operation requirements of approved stormwater management systems;
3. The relaxation by a factor greater than 10 percent of any buffer, density or built-upon area requirement under the low density option.

Variance, Minor: A variance from the minimum Town's watershed protection rules that results in any one or more of the following:

1. The relaxation by a factor of up to, and including, five percent of any buffer, density or built-upon area requirement under the high density option;
2. The relaxation by a factor up to, and including, 10 percent of any buffer, density or built-upon area requirement under the low density option.

Watershed: The entire land area contributing surface drainage to a specific point (e.g. the water supply intake).

Commented [LL5]: NCDEQ suggested this revision—see comment for High Density Option definition.

Commented [LL6]: Definition added per Meck. County recommendation. Redevelopment is not defined in the current version of Section 17.

Commented [LL7]: NCDEQ suggested this revision—The definition for Variance, Major was revised to match the Environmental Management Commission's (EMC) definition. The EMC would not issue a decision on a variation that is not a major variance as they define in 15A NCAC 2B .0202(42):

Major variance means a variance from the minimum statewide watershed protection rules that results in the relaxation, by a factor greater than five percent of any buffer, density or BUA requirements under the high density option; any variation in the design, maintenance or operation requirements of a wet detention pond or other approved stormwater management system; or relaxation by a factor greater than 10 percent of any management requirement under the low density option.

Commented [LL8]: This was added to clarify that the variance is from a town standard, which are often more stringent than state standards. This change also applies to the Variance, Minor definition.

Commented [LL9]: NCDEQ suggested this revision to match the EMC's definition in 15A NCAC 2B .0202(43):

Minor variance means a variance from the minimum statewide watershed protection rules that results in a relaxation, by a factor of up to five percent of any buffer, density or BUA requirement under the high density option; or that results in a relaxation by a factor up to 10 percent of any management requirement under the low density option.

Example: Under the current Section 17, a request to increase BUA by less than 10 percent under the low density option would be considered a major variance to the Town but a minor variance by the EMC's rule.

Commented [LL10]: This language was added to be consistent with Item 1. in each definition, Variance Major/Minor. The previous language was inconsistent and not clear ("...land management requirement...").

17.4 Effective Date and Adoption Date

Section 17 shall take effect and be in force on October 1, 1993. The Davidson Board of Commissioners adopted it on September 14, 1993.

17.5 Rules Governing the Interpretation of Watershed District Boundaries

Where uncertainty exists as to the boundaries of the watershed areas, as shown on the Davidson Watershed Map, the following rules shall apply:

1. Where watershed district boundaries are indicated as approximately following either street, alley, railroad or highway lines or center lines thereof, such lines shall be construed to be the watershed district boundaries.
2. Where watershed district boundaries are indicated as approximately following lot lines, such lot lines shall be construed to be the watershed district boundary. However, a surveyed plat prepared by a registered land surveyor may be submitted to the Planning Director as evidence that one or more properties along these boundaries do not lie within the watershed area.
3. Where the watershed district boundary lies at a scaled distance of more than 25 feet from an adjoining lot line, the location of the watershed district boundary shall be determined by use of the scale appearing on the map.
4. Where the watershed district boundaries lie at a scaled distance of twenty-five (25) feet or less from any parallel lot line, the location of watershed area boundaries shall be construed to be the lot line.
5. Where other uncertainty exists, the Planning Director shall interpret the Davidson Watershed Map to determine the location of such boundaries. This decision may be appealed to the Board of Adjustment.

Commented [LL11]: Added per Meck. County recommendation to clarify the procedure for when the watershed boundary lies 25 feet or less from any parallel lot line.

Commented [LL12]: Added per Meck. County recommendation to clarify the procedure for when other uncertainty exists.

17.6 Exceptions to Applicability

Nothing contained herein shall repeal, modify, or amend any Federal or State law or regulation, or any ordinance or regulation pertaining thereto except any ordinance which these regulations specifically replace; nor restrict any provisions of the Davidson Planning Ordinance; however, the adoption of the Watershed Protection Ordinance shall and does amend any and all ordinances, resolutions, and regulations in effect within the planning jurisdiction of the Town of Davidson (as depicted in the Davidson Planning Areas map) at the time of the adoption of the ordinance that may be construed to impair or reduce the effectiveness of this ordinance or to conflict with any of its provisions.

It is not intended that these regulations interfere with any easement, covenant or other agreements between parties. However, if the provisions of these regulations impose greater restrictions or higher standards for the use of a building or land, then the provisions of these regulations shall control.

Nonconformities shall follow the requirements of Section 12 of the Davidson Planning Ordinance.

Commented [LL13]: This statement was moved to the start of 17.6 since it applies to the entire section rather than just 17.6.1-2.

Commented [LL14]: Section revised per Meck. County recommendation. Under the current Section 17, "Expansions to structures classified as existing development on any lot other than a lot containing a single-family residence as the principle use must meet the requirements of this ordinance..."

The suggested revision removes the exemption for expansions to existing single-family residential development.

17.6.1 Expansions to Existing Development

Existing development, as defined in this ordinance, is not subject to the requirements of this section. Expansions to structures classified as existing development must meet the requirements of this section, however the built-upon area of existing development is not required to be included in the impervious

calculations. If structures classified as existing development are removed, the parcel's built-upon-area must comply with the standards of this ordinance.

For expansions to existing development that do not qualify as high-density, enhanced stormwater practices shall be used to treat stormwater runoff. Practices must be approved by the Planning Director, in consultation with Charlotte-Mecklenburg Stormwater Services. These practices shall be appropriately-scaled and tailored to each site, and include but are not limited to: Installation of a rain garden, bioswale, vegetated swale, infiltration trench/drain (i.e. French drain), or downspout modification (i.e. distribution to a garden, trench, or rain barrel).

Commented [LL15]: This text was added so that expansions, that will result in more than 24% BUA on a site, are required to provide some level of low-cost, targeted stormwater treatment to help compensate for the additional BUA on a lot.

17.6.2 Existing Lot of Record

17.6.3 Nonconforming Situations

17.6.4 Existing Development

Commented [LL16]: In order to treat residential lots equally, the text has been revised to remove exemptions for lot of record.

17.6.3 Redevelopment

- A. Redevelopment, as defined in this ordinance, shall comply with the Davidson Planning Ordinance subject to item B. below.
- B. Redevelopment, as defined in this ordinance, is not subject to the requirements of this ordinance if located in the following planning areas and meeting the specified conditions:
1. Area A:
 - a. Location: Village Commerce or Village Center parcels within the block bounded by Depot, Main, and Jackson Streets.
 - b. Conditions:
 1. The redevelopment will not result in a net increase in built upon area from the previous development and will provide greater or equal storm water control than the previous development; or
 2. The redevelopment will result in the disturbance of less than one acre.
 2. Area B:
 - a. Location: Village Center parcels along the north side of Depot Street and Village Commerce parcels west of Jackson Street.
 - b. Conditions:
 1. The redevelopment will not result in a net increase in built upon area from the previous development and will provide engineered stormwater controls if the built-upon area exceeds 24%; or
 2. The redevelopment will result in the disturbance of less than one acre.

Commented [LL17]: Remove per Meck. County recommendation as this section is not applicable and conflicts with DPO Section 12 Nonconformities

Commented [LL18]: Remove—this section is a repeat of Section 17.6.1

Commented [LL19]: Section added based on feedback from Meck. County and land owners in the Village Center/Village Commerce Planning Areas. Allows for flexibility in meeting watershed requirements for properties in downtown within the statewide watershed protection rules.

17.7 Watershed Subareas Established

The purpose of this section is to list and describe the various watershed subareas herein created. The following subareas shall be in place and are depicted on the Davidson Watershed Map:

- a) Critical Area: The Critical Area is defined as the land area which begins at the normal pool elevation of Lake Norman and extends one-half mile inland or to the ridgeline, whichever is closest, as shown more specifically on the Town of Davidson watershed map.
- b) Protected Area: There is no Lake Norman Protected Area located within the jurisdiction of the Town of Davidson.

Commented [LL20]: Revised per Meck. County recommendation to clarify that there is no Protected Area within the town (NOTE: Protected Areas are geographically determined and because all Davidson's land is so close to the lake it's all considered Critical Area).

17.7.1 Critical Area (CA)

The intent of these regulations is to require higher standards in the Critical Area of the Lake Norman Watershed because of the greater risk of degradation of the drinking water supply from pollution. All uses permitted in the Critical Area are subject to the standards of the both the watershed subarea and underlying zoning district. In every case the more restrictive standard controls.

Commented [LL21]: Revised per Meck. County recommendation to clarify the intent of the watershed regulations.

17.7.1.1 Allowed Uses (Only if Permitted in the Underlying Planning Area)

- A. Agriculture subject to the provisions of the Food Security Act of 1985 and the Food, Agriculture, Conservation and Trade Act of 1990. Agricultural activities conducted after January 1, 1993 shall maintain a minimum ten foot vegetative buffer, or equivalent control as determined by the Soil and Water Conservation Commission, along all perennial waters indicated on the most recent versions of U.S.G.S. 1:24,000 (7.5 minute) scale topographic maps. Animal operations with greater than 100 animal units shall employ Best Management Practices by July 1, 1994 as recommended by the Soil and Water Conservation Commission. (Note: The Soil and Water Conservation Commission is the designated management agency responsible for implementing the provisions of Section 16 relating to agricultural activities.)
- B. Silviculture, subject to the provisions of the Forest Practices Guidelines Related to Water Quality (15 NCAC 11.6101-0209).
- C. Residential development.
- D. Non-residential development (i.e. commercial, institutional, or industrial development) excluding: (i) the storage of toxic and hazardous materials unless a spill containment plan is implemented; (ii) landfills; and (iii) sites for land application of sludge/residuals or petroleum contaminated soils.

17.7.1.2 Built-Up Area Limits

All development must comply with the built-upon area limits of either the Low Density or High Density Option as described below. When calculating the built-upon area, total project area shall include total contiguous acreage of the adjacent or adjoining tract(s) on which the project is to be developed. Note: For the purposes of the watershed ordinance, the terms Low and High Density describe a site's built-upon area (i.e. land coverage); they do not describe units per acre.

- A. **Low Density Option:** Development shall not exceed a built-upon area of 24 percent on a project by project basis.
- B. **High Density Option:** Development shall not exceed a built-upon area of 50 percent on a project-by-project basis. Note: Control structures must be used to treat storm water as explained in Section 17.7.3.
- C. **Reserve Built-Up Area:** Development or redevelopment of a Detached House, Attached House, or Townhome approved after (effective date of ordinance revision) shall reserve, at minimum, 1% of the lot area but not less than 150 sq. ft. impervious area per lot to allow for addition of future impervious areas by homeowner/occupant. Such reserve built-upon area shall be treated as part of the built-upon area for the purposes of calculating the 24 percent and 50 percent maximum BUA set forth in A. and B. of this Section 17.1.1.2.

Commented [LL22]: Revised per Meck. County recommendation.

Language referencing a maximum of two dwelling units per acre for residential development was removed. We do not differentiate residential development from other development types in regards to maximum BUA requirements.

Meck. County suggested adding a Reserve Built-Up Area requirement for residential development to allow for homeowners to add additional BUA in the future and still be within the maximum 24% BUA (i.e. patios).

Commented [LL23]: Including this language clarifies that only the actual project site is used to determine BUA limits. This prevents projects with multiple, non-contiguous parcels from using the BUA from nearby but undeveloped parcels to build more on the project site parcel.

Commented [LL24]: This sentence clarifies that these terms refer to the amount of hardscape on a site (i.e. land coverage) and not units/acre.

Commented [LL25]: Remove per Meck. County recommendation. Cluster Developments have not been applied in Davidson.

17.7.2 Cluster Development

17.7.3 High Density Option

A. General Requirements

The Planning Director may approve a project using the high-density option consistent with the following standards:

1. **Critical Area:** Engineered storm water controls shall be used to control runoff from the first inch of rainfall for development which contains a built-upon area of greater than 24 percent to 50 percent on a project-by-project basis. **Individual** single-family detached houses are not eligible to utilize engineered stormwater controls to meet this section's requirements.
2. **Protected Area:** There is no Lake Norman Protected Area located within the jurisdiction of the Town of Davidson.

Commented [LL26]: Revised per Meck. County recommendation. Clarifies that Davidson has no Protected Area within our jurisdiction. See comment for 17.7 for further explanation.

Commented [LL27]: Meck. County does not allow these property types to install stormwater facilities for credit towards the requirements because they would require legal agreements with Meck. County for their design, operations, inspections and maintenance.

B. Inspection Fees

The Town reserves the right to conduct inspections in accordance with this ordinance. A fee in accordance with the fee schedule approved by the Planning Director shall be required to be paid by the owning entity prior to each inspection being conducted.

C. Operation and Maintenance Plan

1. Any stormwater control structure approved by the Planning Director shall be prepared by a North Carolina registered professional engineer or landscape architect (to the extent that the General Statutes allow) and predicated on the developer and the Town entering into a binding operation and maintenance plan. The plan shall require the owning entity of the structure(s) to maintain, repair, and, if necessary, reconstruct said structure(s) in accordance with the operation and maintenance plan provided by the developer to the Town. The plan must be approved by the Planning Director prior to, or in conjunction with, approval of the high density option for said project.
2. A separate plan must be provided by the developer for each stormwater control structure, containing, at a minimum, what operation and maintenance actions are needed and will be undertaken, what specific quantitative criteria will be used for determining when those actions are to be taken, and who is responsible for such actions. The Plan shall clearly indicate what steps will be taken for restoring a stormwater control structure to design specifications if a failure occurs.
3. Amendments to the plan and/or specifications of the stormwater control structure(s) may only be approved by the Planning Director. Proposed changes shall be prepared by a North Carolina registered professional engineer or landscape architect, (to the extent that the General Statutes allow) and submitted to the Planning Director for approval. Such amendments shall be accompanied by all information and fees prescribed by this ordinance.
4. If the Planning Director finds that the plan, once approved, is inadequate for any reason, the Planning Director shall notify the owning entity of any changes mandated by the Town and a time-frame in which changes to the plan shall be made.

D. Post of Financial Securities

All new stormwater control structures approved employing the high density option shall be conditioned on the posting of adequate financial assurances for the purpose of constructing, maintaining, repairing or reconstructing said devices.

1. A surety bond or equivalent security shall be posted in accordance with Davidson Planning Ordinance requirements (6.11 Improvement Guarantees).
2. Once the stormwater control structure(s) has been constructed and inspected in the manner provided for in this ordinance, and approved by the Planning Director, the Planning Director may authorize the release of up to 75 percent of the surety bond or other equivalent security outlined above. The remaining portion of the surety bond or equivalent security may be released to the owning entity in accordance with this ordinance.
3. Prior to said release, the applicant shall be required to deposit with the Town either cash or a similar instrument approved by the Planning Director in an amount equal to 15 percent of the total construction cost or 100 percent of the cost of maintaining, repairing, or reconstructing said structure(s) over a 20-year period, whichever is greater. The estimated cost of maintaining the stormwater control structure(s) shall be consistent with the approved Operation and Maintenance Plan provided by the applicant as outlined in this section.

Commented [LL28]: This text was added to reference existing Town of Davidson requirements, ensuring that the bond fees paid are consistent with established processes.

E. Default

1. Upon default of the applicant to complete the stormwater control structure(s) as detailed in the surety bond or other equivalent security, the Planning Director may obtain and use all or any portion of the funds necessary to complete the improvements based on actual construction costs. The Planning Director shall return any funds not spent in completing the improvements to the owning entity.
2. Upon default of the owning entity to maintain, repair and, if necessary, reconstruct the stormwater control structure in accordance with the approved Operations and Maintenance Plan, the Planning Director shall obtain and use any portion of the cash security outlined in Section 17.7.3.E to make necessary improvements based on an engineering estimate provided by the Town.

F. Vegetation and Grounds Management

1. Landscaping and grounds management shall be the responsibility of the owning entity of said structure(s). Vegetation shall not be established or allowed to mature to the extent that the integrity of the structure(s) is in any way threatened or diminished, or to the extent of interfering with any easement or access to the structure.
2. Except for routine landscaping and grounds maintenance, the owning entity shall notify the Planning Director prior to any repair or reconstruction of the structure. All improvements shall be consistent with the approved plan and specifications for that structure. After notification by the owning entity, the Town shall inspect the completed improvements and inform the owning entity of any required additions, changes, or modifications needed to complete said improvements. A fee, in accordance with a fee schedule adopted by the Planning Director shall be charged to the owning entity for any inspections (and re-inspections). A time period for making such changes shall also be stipulated by the Town.

G. Inspections

1. Inspections of Newly Constructed Stormwater Structures

All new stormwater control structures shall be inspected by the Planning Director or his/her designee after the owning entity notifies the Planning Director that all construction has been completed. At this inspection the owning entity shall provide:

- a. The signed deed, related easements, and survey plat for the structure in a manner suitable for filing with the Register of Deeds, if ownership of the stormwater control structure(s) is to be transferred to another person, firm or entity. (This requirement will be waived for any repair work when such deed has previously been filed.)
- b. A certification by a professional engineer or landscape architect (to the extent allowable by the North Carolina General Statutes) stating that the stormwater control structure is complete and consistent with the approved plan and all specifications previously stipulated by the Town.
- c. The Planning Director shall review the materials submitted by the owning entity along with the Town's inspection for approval. If the Planning Director approves the inspection report and accepts the certification, deed, and easements, the Planning Director shall file said deed and easements with the Register of Deeds. Release of up to 75 percent of the surety bond or other equivalent security called for in Section 17.7.3.C shall be made in a manner as prescribed in this ordinance.
- d. If deficiencies are found as a result of the inspection, the Planning Director shall direct the owning entity to make necessary improvements. Re-inspections will be made thereafter. No release of any funds shall be made by the Town until all deficiencies are properly addressed to the Town's satisfaction.
- e. No sooner than one year after approval of the stormwater control structure(s) by the Town, the owning entity may petition the Planning Director to release the remaining value of the surety bond or equivalent security called for in Section 17.7.3.C. Upon receipt of said petition, the Town shall inspect the stormwater control structure(s) to determine whether the structure(s) is performing as designed and intended. Once the inspection is made, the Planning Director shall present the inspection report and recommendations to the Board of Commissioners.
- f. An occupancy permit shall not be issued for any building within the permitted development until the Planning Director has approved the stormwater control structure(s) in a manner as herein prescribed.

2. Annual Inspection of Stormwater Structures

- a. All stormwater control structures shall be inspected by the Town or their designated agents on an annual basis to determine whether the structures are performing as designed and intended. Records of inspection shall be maintained as approved by the Planning Director. Annual inspections shall begin one year after approval of the stormwater control structure(s) by the Planning Director. A fee, in accordance with

a fee schedule adopted by the Planning Director, may be charged to the owning entity for annual inspections (and re-inspections). A copy of each inspection report shall be filed with the Planning Director.

b. In the event the Town's report indicates the need for corrective action or improvements, the Planning Director shall notify the owning entity of the needed improvements and the date by which such improvements are to be completed. All improvements shall be consistent with the adopted Operation and Maintenance plan and specifications. Once such improvements are made, the owning entity shall forthwith contact the Planning Director and ask that an inspection be made.

H. Stormwater Control Structure Specification

1. All stormwater control structures shall be designed by either a North Carolina registered professional engineer or a landscape architect (to the extent that the General Statutes allow).
2. Stormwater control structures shall treat the runoff generated from the first inch of rainfall.
3. Stormwater control structures used to meet these requirements shall be designed to have a minimum of 85% average annual removal for Total Suspended Solids.
4. Stormwater control structures shall be installed to control the volume leaving the project site at post-development for the 1-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 24 hours, but not more than 120 hours.
5. Stormwater control structures shall be designed in accordance with the Charlotte-Mecklenburg BMP Design Manual.
6. In addition to the required vegetative filters, all land areas outside of the pond shall be provided with a ground cover sufficient to restrain erosion within 30 days after any land disturbance. Upon completion of the stormwater control structure, a permanent ground cover shall be established and maintained as part of the Operation and Maintenance plan described in this ordinance.
7. A description of the area containing the stormwater control structure(s) shall be prepared and recorded as a separate deed with the Register of Deeds along with any easements necessary for general access to the stormwater control structure(s) should ownership (and maintenance) of the stormwater control structure(s) be transferred to another person, firm or entity. The deeded area shall include the detention pond, vegetative filters, all pipes and water control structures, berms, dikes, etc., and sufficient area to perform inspections, maintenance, repairs, and reconstruction.

Commented [LL29]: Section revised based on Meck. County stormwater control requirements (Charlotte-Mecklenburg BMP Design Manual).

I. Planning Director Approval Process on High Density Application

The Planning Director shall either approve an application for the high density option, approve the application with fair and reasonable conditions, or disapprove such an application based upon the applicable criteria contained in this Ordinance.

1. If the Planning Director approves the application, such approval shall be predicated on: a) the owning entity and the Town entering into a binding Operation and Maintenance plan as indicated in Section 17.7.3.B and b) the posting of a surety bond or other equivalent security as provided in Section 17.7.3.C. Such approval shall be indicated on the application and on both copies of the plans submitted with the application. A copy of the approved application and one copy of the plans shall be returned to the applicant.
2. If the Planning Director disapproves the application, the reasons for such action shall be sent by personal delivery, electronic mail, or first class mail by the Planning Director to the applicant within five working days of the disapproval. The applicant may make revisions or changes and submit a revised plan. The application fee may be waived if the Planning Director determines the changes are not substantial.

17.7.4 Buffer Areas Required

A. Vegetative Buffers

Developments must place or maintain undisturbed vegetative buffers, except as specifically provided in this section, along the shoreline of Lake Norman measured horizontally by a licensed land surveyor from the full pond elevation (760' contour) and along each side of all perennial streams (as indicated on the most up-to-date version of a U.S.G.S. 1:24,000-7.5 minute map or as otherwise determined by local government studies) measured from the top of the bank on each side on the stream. Minimum buffer widths are 40 feet if the low density option is used or 100 feet if the high density option is used.

The following actions may not be undertaken without Planning Director approval:

- Restoration: Desirable artificial stream bank or shoreline stabilization.
- Removal: The removal of dead or diseased trees. Removal of underbrush is not permitted in the buffer except at approved pathways and locations.
- Tree Limbing: At approved locations, trees may be limbed up to half the distance of their height, not to exceed 15 feet above grade.

B. Development in the Buffer

No new development is allowed in the vegetative buffer area except for public projects such as road crossings and greenways, where no practical alternative exists. These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the utilization of stormwater Best Management Practices.

17.7.5 Public Health Regulations

No activity, situation, structure or land use shall be allowed within a WS district which poses a threat to water quality and the public health, safety, and welfare. Such conditions may arise from inadequate on-site sewage systems which utilize ground absorption; inadequate sedimentation and erosion control measures; the improper storage or disposal of junk, trash, or other refuse within a buffer area; the absence or improper implementation of a spill containment plan for toxic and hazardous materials; the improper management of stormwater runoff; or any other situation found to pose a threat to water quality.

Commented [LL30]: Revised per Meck. County recommendation to clarify how buffers are measured and what actions may be undertaken within buffer areas with Planning Director approval.

The Planning Director shall monitor land use activities within all WS districts to identify situations that may pose a threat to water quality. The Planning Director shall report all findings to the proper agency to handle the threat and/or the Board of Commissioners. The Planning Director may consult with any public agency or official and request recommendations. Where the Planning Director finds a threat to water quality and the public health, safety, and welfare, the Planning Director shall institute any appropriate action or proceeding to restrain, correct or abate the condition and/or violation as herein authorized.

17.7.6 Amendments to Regulations Pertaining to a WS District

Under no circumstances shall the Board of Commissioners adopt any amendment, addition, or deletion that would cause these regulations to violate the watershed protection rules as adopted by the NC Environmental Management Commission. Any amendment to the boundaries of any particular Water Supply Watershed District shall be referred to the NC Division of Environmental Management, NC Division of Environmental Health, and the NC Division of Community Assistance for their review prior to adoption. Otherwise, amendments to the regulations contained in Section 17 shall follow procedures prescribed in Section 14.

17.7.7 Variances

The following sub-sections describe the process for pursuing a variance within the Lake Norman Critical Watershed. Approval of both minor and major variance requests as defined in this ordinance and subject to the regulations contained herein may only be granted upon a 4/5 affirmative vote of the Board of Adjustment.

A. Minor Variance:

1. **Application Form & Fee:** An application for a minor variance shall be on a form prescribed by the Town and shall be accompanied by a fee, the amount of which is in accordance with a fee schedule established by the Town. An application will not be considered complete unless it contains all information required and is accompanied by said fee. The application shall be accompanied by a map clearly identifying the subject property and all contiguous pieces of properties (including all properties traversed and/or separated by a road, stream, right-of-way or any similar natural or man-made configuration). In addition, a list of names and addresses of the owners of said properties, from the most recent official tax records, shall be provided by the applicant. All applications shall be submitted to the Planning Director.
2. **Application Completeness Determined:** Once having received an application, the Planning Director shall have five working days to determine its completeness. If he determines that the application is not complete, he shall serve a written notice on the petitioner specifying the application's deficiencies. The Planning Director shall take no further action on the application until the deficiencies are remedied. If the Planning Director fails to so notify the petitioner, the application shall be deemed complete. Once the application is deemed complete, the Board of Adjustment shall hold a public hearing on the application.
3. **Scheduling the Board of Adjustment Meeting:** The Planning Director, having determined that an application is complete, shall place the application on the agenda of the next Board of Adjustment regular or special meeting occurring at least fifteen days thereafter.

Commented [LL31]: This section was largely reorganized to provide clarification on the process for Board of Adjustment hearings for both major and minor watershed variance requests.

4. **Public Hearing Notification:** Notification of said Board of Adjustment public hearing shall be as follows:

- a. **Preparation/Content:** Notices shall include a description of the minor variance request; indicate the nature of the public hearing; and, list and the date, time, and place at which the hearing is to occur. Notices shall be prepared by the applicant using text provided by the Town.
- b. **Recipients:** Notices shall be sent by first class mail to the following:
 - i. **Local Governments:** The Clerk of all municipal and county governments having jurisdiction within the same watershed; and
 - ii. **Major Water Consumers:** Any major consumer of water whose point of intake lies within the same watershed.
- c. **Mailing/Date:** Notices shall be sent by the Town by first class mail at least 10 days prior to the public hearing.
- d. **Comments Received:** Any comments received from notified local governments or major water consumers regarding a minor variance request shall become part of the record of proceedings.

Commented [LL32]: This section was added to clarify the content requirements of public notification letters for Board of Adjustment hearings

5. **Public Hearing:** The Board of Adjustment shall conduct the public hearing in a quasi-judicial manner. All persons giving evidence shall be sworn in by the board Chair. In all matters coming before the Board of Adjustment, the applicant shall have the burden of providing clear, competent and material evidence in support of the application. The Board of Adjustment shall base their recommendation on the testimony given at the public hearing and on any comments received from notified local governments or major water consumers regarding the major variance request. The testimony, comments and evidence shall become part of the record of proceedings.

6. **Board of Adjustment Recommendation:** The Board of Adjustment shall make a recommendation on a minor variance involving property located within a Water Supply Watershed Overlay District no later than 30 days from the close of the public hearing. The Board of Adjustment may recommend a variance only after each of the findings found in Section 14 of the Planning Ordinance are found in the affirmative. Recommendations shall be in one of the following forms:

- a. Recommend approval of the variance if the findings of fact in Section 14 are found in the affirmative; or
- b. Recommend approval of the variance with fair and reasonable conditions attached if the findings of fact in Section 14 are found in the affirmative; or
- c. Recommend denial of the variance if at least one finding of fact in Section 14 is found in the negative.

The concurring vote of four-fifths (4/5) of the voting members of the Board of Adjustment shall be necessary to make a recommendation for approval of a minor variance application involving property located within a Watershed Protection Overlay District.

7. **Record of Decision:** If the Board of Adjustment makes a favorable recommendation on a major variance application (with or without additional conditions or safeguard) or fails to make any recommendation on the major variance application within the specified time period, the Planning Director shall prepare a record of the public hearing which shall include the following:

- a. The variance application;

- b. Evidence that proper notification of the public hearing has been made;
- c. A summary of evidence presented, including comments submitted from other local governments or major water consumers within the same watershed jurisdiction;
- d. Proposed findings and exceptions;
- e. The Board of Adjustment's recommendation, if one is submitted within the 30 day time period, including all conditions proposed to be added to the permit.

A copy of the record of decision shall be filed with the Board of Adjustment case materials and one copy presented to the applicant. The approval, with any additional conditions or safeguards, shall become part of any zoning permit issued by the Planning Director.

B. Major Variance:

1. **Application Form & Fee:** An application for a major variance shall be on a form prescribed by the Town and shall be accompanied by a fee, the amount of which is in accordance with a fee schedule established by the Town. An application will not be considered complete unless it contains all information required and is accompanied by said fee. The application shall be accompanied by a map clearly identifying the subject property and all contiguous pieces of properties (including all properties traversed and/or separated by a road, stream, right-of-way or any similar natural or man-made configuration). In addition, a list of names and addresses of the owners of said properties, from the most recent official tax records, shall be provided by the applicant. All applications shall be submitted to the Planning Director.
2. **Application Completeness Determined:** Once having received an application, the Planning Director shall have five working days to determine its completeness. If he determines that the application is not complete, he shall serve a written notice on the petitioner specifying the application's deficiencies. The Planning Director shall take no further action on the application until the deficiencies are remedied. If the Planning Director fails to so notify the petitioner, the application shall be deemed complete. Once the application is deemed complete, the Board of Adjustment shall hold a public hearing on the application.
3. **Scheduling the Board of Adjustment Meeting:** The Planning Director, having determined that an application is complete, shall place the application on the agenda of the next Board of Adjustment regular or special meeting occurring at least fifteen days thereafter.
4. **Public Hearing Notification:** Notification of said Board of Adjustment public hearing shall be as follows:
 - a. **Preparation/Content:** Notices shall include a description of the major variance request; indicate the nature of the public hearing; and, list and the date, time, and place at which the hearing is to occur. Notices shall be prepared by the applicant using text provided by the Town.
 - b. **Recipients:** Notices shall be sent by first class mail to the following:
 - i. Nearby Property Owners: All adjacent and abutting property owners.
 - ii. Local Governments: The Clerk of all municipal and county governments having jurisdiction within the same watershed; and
 - iii. Major Water Consumers: Any major consumer of water whose point of intake lies within the same watershed.
 - c. **Mailing/Date:** Notices shall be sent by the Town by first class mail at least 10 days prior to the public hearing.

Commented [LL33]: This section was added to clarify the content requirements of public notification letters for Board of Adjustment hearings

- d. **Comments Received:** Any comments received from notified local governments or major water consumers regarding a minor variance request shall become part of the record of proceedings.
5. **Public Hearing:** The Board of Adjustment shall conduct the public hearing in a quasi-judicial manner. All persons giving evidence shall be sworn in by the board Chair. In all matters coming before the Board of Adjustment, the applicant shall have the burden of providing clear, competent and material evidence in support of the application. The Board of Adjustment shall base their recommendation on the testimony given at the public hearing and on any comments received from notified local governments or major water consumers regarding the major variance request. The testimony, comments and evidence shall become part of the record of proceedings.
8. **Board of Adjustment Recommendation:** The Board of Adjustment shall make a recommendation on a major variance involving property located within a Water Supply Watershed Overlay District no later than 30 days from the close of the public hearing. The Board of Adjustment may recommend a variance only after each of the findings found in Section 14 of the Planning Ordinance are found in the affirmative. Recommendations shall be in one of the following forms:
- Recommend approval of the variance if the findings of fact in Section 14 are found in the affirmative; or
 - Recommend approval of the variance with fair and reasonable conditions attached if the findings of fact in Section 14 are found in the affirmative; or
 - Recommend denial of the variance if at least one finding of fact in Section 14 is found in the negative.
- The concurring vote of four-fifths (4/5) of the voting members of the Board of Adjustment shall be necessary to make a recommendation for approval of a minor variance application involving property located within a Watershed Protection Overlay District.
6. **Preliminary Record of Decision:** If the Board of Adjustment makes a favorable recommendation on a major variance application (with or without additional conditions or safeguard) or fails to make any recommendation on the major variance application within the specified time period, the Planning Director shall prepare a record of the public hearing which shall include the following:
- The variance application;
 - Evidence that proper notification of the public hearing has been made;
 - A summary of evidence presented, including comments submitted from other local governments or major water consumers within the same watershed jurisdiction;
 - Proposed findings and exceptions;
 - The Board of Adjustment's recommendation, if one is submitted within the 30 day time period, including all conditions proposed to be added to the permit.
- If the Board of Adjustment recommends that an application for a major variance involving property within a Watershed Protection Overlay District should be denied, then the application shall not be forwarded to the Environmental Management Commission, and shall be considered denied by the Board of Adjustment. The Planning Director shall send written notice of the denial by personal delivery, electronic mail, or first class mail to the applicant within five working days of the Board's decision.

7. **Environmental Management Commission Decision:** The preliminary record shall be sent to the Environmental Management Commission for its review. If the Environmental Management Commission concludes from the preliminary record that the variance qualifies as a major variance, the Commission shall make a final decision on the request and mail it to the Planning Director.
- a. **Approval:** If the Environmental Management Commission upholds the Board of Adjustment's recommendation for approval of a major variance, the Planning Director shall forward the Environmental Management Commission's decision to the applicant by personal delivery, electronic mail, or first class mail within five working days of receipt of the decision from the Commission. The approval, with any additional conditions or safeguards, shall become part of any zoning permit issued by the Planning Director. A copy of the record of decision shall be filed with the Board of Adjustment case materials.
 - b. **Denial:** If the Environmental Management Commission overturns the Board of Adjustment's recommendation for approval of a major variance, the Planning Director shall send the decision by personal delivery, electronic mail, or first class mail to the applicant within five working days of receipt of the decision from the Environmental Management Commission. The materials must state that the major variance request was denied and list the reasons for such denial. A copy of the record of decision shall be filed with the Board of Adjustment case materials.

17.7.8 Enforcement

- A. These regulations shall be enforced by the Planning Director. In addition to other duties, the Planning Director shall keep records regarding any expansions approved to structures classified as existing development, so that the maximum coverage of all new expansions do not exceed that allowed in this ordinance.
- B. The Planning Director shall maintain a file on all applications for minor and major variances. A copy of information pertinent to any minor variance application request (including minutes of the hearing, findings made by the Board of Adjustment, actions taken by the Board of Adjustment, names and addresses of all persons giving evidence at the public hearing) shall be submitted annually during the last week of December to the Division of Environmental Management, Supervisor of the Classification and Standards Group.
- C. The penalties and fines described in Section 14 and Section 15 are applicable to this section.

17.8 BUILT-UPON AREA AVERAGING (DENSITY AVERAGING)

Built-Upon Area (BUA) Averaging allows parcels located within the Lake Norman Critical Watershed to obtain additional development rights through an increase in a site's built-upon-area (BUA) by averaging the total BUA of the developing lot (i.e. "receiving lot") with the total BUA of an undeveloped/less developed lot within the same watershed and jurisdiction ("donating lot"). This is accomplished by transferring undeveloped area on a donating lot to a receiving lot via a BUA Averaging Certificate, which includes a non-revocable easement, metes and bounds description, and recorded plat of the area(s) to remain undisturbed. The BUA Averaging Certificate requires approval by the Watershed Review Board, a

Commented [LL34]: This entire section was reworked/reorganized to clarify the purpose, eligibility, process, and documentation requirements for Density Averaging.

sub-set of the Board of Adjustment; for the purposes of this ordinance, the Board of Adjustment may act as the Watershed Review Board.

17.8.1 PURPOSE & ELIGIBILITY, PROCESS, DOCUMENTATION

- A. Purpose:** The purpose of this provision is to preserve open space in the more sensitive areas of the watershed, and to ensure orderly and planned development throughout the watershed.
- B. Uses:** The participating parcels may include or be developed for residential or non-residential purposes under the Individual Building and Master Plan processes. Individual parcels whose principal use is or will be single-family residential are not eligible to be considered receiving parcels if the total built-upon area (BUA) would exceed 24 percent; this includes uses within the Single-Family Detached House building type.
- C. Requirements:** The following requirements must be met by all parcels:
1. **Ownership:** Only the owner(s) of the participating parcels may submit a Density Averaging Certificate application. Areas subject to easements, covenants, and/or development restrictions not legally controlled by the owner may not be included as donated parcel area; this includes right-of-way area.
 2. **Pre-Existing Variance:** No parcel for which a watershed variance has been granted, or would be required, may be included as a donating or receiving parcel.
 3. **Location:** Participating parcels shall be located in the same water supply watershed and preferably in the same drainage area of the watershed. All parcels must be located within the Town of Davidson's planning jurisdiction.
 4. **Transferability:** A property in a more restricted watershed area shall not acquire BUA from a property in a less restricted watershed area.
 5. **Overall Area:** The cumulative BUA of all participating parcels shall not exceed the BUA that would be allowed if the parcels were developed separately.
 6. **Buffers:** On all participating parcels buffers shall at least meet the applicable, minimum ordinance requirements for parcels located in water supply watersheds.
 7. **Preservation:** The donated area shall remain in an undisturbed vegetated or natural state. Previously developed or graded lots may be used as donating parcels so long as the donated area of the lot is revegetated according to Davidson Planning Ordinance requirements. The donated area shall be irrevocable unless amended per the requirements of this ordinance prior to the undertaking of any development activity on the participating parcels.
 8. **Required Features:** When the donated area of a parcel abuts street frontage or right-of-way, the preserved area shall feature park or public space amenities as determined by the Planning Director.

9. **Stormwater Design:** All participating parcels must meet the applicable buffer and engineered stormwater controls as outlined in the ordinance. Parcels shall be controlled by on-site facilities in accordance with the criteria specified in the Davidson Water Quality Design Manual and the Davidson Planning Ordinance for high-density development. Development permitted under BUA averaging and meeting applicable low density requirements shall transport stormwater runoff by vegetated conveyances to the maximum extent practicable.
10. **Design:** Built-upon areas shall be designed and located to minimize stormwater runoff impact to the receiving waters, minimize concentrated stormwater flow, maximize the use of sheet flow through vegetated areas, and maximize the flow length through vegetated areas.

17.8.2 PROCESS

A Built-Upon Area (BUA) Averaging Certificate shall be obtained from the Watershed Review Board (Board of Adjustment) to ensure that all participating parcels considered together meet the standards of the ordinance and that potential owners have a record of how the watershed regulations were applied to each parcel.

- A. **Applicability:** All participating parcels may be processed under a single BUA Averaging Certificate, and will be considered as one development for the purpose of counting total built-upon-area. One BUA Averaging Certificate will be issued per application. Unless otherwise specified, the application shall follow the rules and procedures specified by the Board of Adjustment and Appeals & Variances sections of this ordinance.
- B. **Process:** The following steps outline the typical process for obtaining a BUA Averaging Certificate. Note: Application preparation is considered an iterative process; an application must be deemed complete by the Planning Director and all revisions addressed in order for a Board of Adjustment hearing to be scheduled. Incomplete, improperly formatted, or documentation errors may require revision prior to acceptance by the Planning Director.
 1. **Lot Identification:** The applicant shall identify participating lots, prepare draft plats, and complete a BUA Averaging Form.
 2. **Pre-Application Meeting:** The applicant must set up an appointment with the Planning Director. At the initial meeting the Planning Director will explain the BUA averaging process and review with the applicant the appropriate ordinances, documents, and plans relevant to the project. Additional meetings may be required prior to application submission, as deemed necessary by the Planning Director.
 3. **Submit Application & Fee:** The applicant must submit the following documents (see the Documentation section for further information):
 - Town of Davidson Application and Application Fee
 - Surveys of Existing Conditions
 - Existing Plats and Deeds
 - Metes & Bounds Description(s)

- Final Plats (Drafts)
 - Existing Development Materials (as applicable)
 - Preliminary Sketch Plan (if required)
 - Public Notice Materials
4. Application Review: Staff will review the application and determine whether the materials constitute a complete submittal. Application revisions, and additional meetings, may be required by the Planning Director prior to the application being deemed complete. Once the application is determined to satisfy the requirements, a Board of Adjustment hearing may be scheduled.
5. Board of Adjustment Hearing: A hearing shall be scheduled no later than 45 days after a complete application has been accepted by the Planning Director.
6. Board of Adjustment Decision: The Board of Adjustment shall issue a decision within 31 days of the close of the public hearing. The board shall make written findings supported by appropriate calculations and documentation that the participating parcels as a whole conform to the intent and requirements of this Article and Section, and that the proposed agreement assures protection of the preserved area. The request must be consistent with adopted plans and/or policies, approved development plans, Davidson Planning Ordinance requirements, and the Board of Adjustment's determination based on these resources that the proposal achieves an identified public interest.
7. Certificate Issued: If approved, the Town of Davidson will issue a BUA Averaging Certificate to the applicant. The BUA Averaging Certificate shall constitute the Board of Adjustment decision, staff approval letter, and application documentation.
8. EPM Submission: If approved by the Board of Adjustment, the applicant must submit the following documents to Mecklenburg County via the online EPM system:
- Mecklenburg County Application
 - Deeds
 - Final Plats
9. Plat Approval/Signature: Once approved in EPM, the applicant must submit a mylar copy of each plat to the Town of Davidson, Mecklenburg County LUESA, and the Register of Deeds for signature. A digital copy of each plat included in the application and filed with the Register of Deeds must be provided to the Town of Davidson for filing.
10. NC Division of Water Quality Submission: Upon issuance of the BUA Averaging Certificate and signed plat, one copy must be sent to the NC Division of Water Quality (DWQ). Included with the BUA Averaging Certificate will be the following:
- Site Plans;
 - Registered plats for both properties;
 - Description of both properties;
 - Documentation reflecting the development restrictions all participating parcels, including restrictions for all donated areas.

Commented [LL35]: This text clarifies the Board of Adjustment's ability to deny a proposal based on adopted plans and policies.

11. Amendment: If a certificate is approved by the Board of Adjustment, no change in the development proposal authorized for participating parcels shall be made unless the certificate is amended by the Board of Adjustment.

17.8.3 DOCUMENTATION REQUIREMENTS

The following documentation shall be provided to constitute a complete built-upon area (BUA) averaging application:

A. Administrative:

1. Town of Davidson Application: A completed BUA Averaging Form, including:
 - a. Description: A description of all participating properties' and their existing conditions.
 - b. Chart: A chart summarizing the existing and proposed BUA for all participating properties.

2. Fee: A remitted fee of \$150 High-Density Residential; \$300 Commercial.

B. Surveys: Surveys of all participating parcels showing current BUA and current maximum BUA allowances, along with easements and/or development restrictions. The surveys must be performed by a licensed surveyor.

C. Existing Plats & Deeds: Copies of the existing, registered plats and deeds for all participating parcels.

D. Metes & Bounds Description (Donating Parcel): A metes and bounds description of the undisturbed natural area intended for recordation. The description must specify any limits on use and shall be recorded on the plat, in homeowner covenants (if applicable), and on the donating parcel's individual deed and shall be irrevocable unless amended per the ordinance.

E. Final Plats (Draft): Revised plats for all participating parcels. The plats must show all components as required in the ordinance, in a format approved by staff. Additionally, the plats must include:

1. Purpose Statement: Recommended text is as follows:

Donor Parcels: *The purpose of this plat is to allocate built-upon-area from this parcel to another parcel of land located within the same watershed. The remaining built-upon-area for this lot is XXXX. The donated [lot/area] is to remain in an undisturbed vegetated state in perpetuity.*

Receiving Parcels: *The purpose of this plat is to receive on this parcel built-upon-area from another parcel of land located within the same watershed. The resulting built-upon-area for this lot is XXXX.*

2. Site Data: Tax Parcel ID#s; Physical Addresses; Planning Area Designation (i.e. Zoning); Acreage.
3. Metes/Bounds Description: Metes/bounds description(s) of designated undisturbed natural area(s).
4. Designation in Perpetuity: A note that the natural area will remain undisturbed in perpetuity.
5. BUA Values: Existing and proposed maximum BUA allowances for all participating parcels.
6. Watershed Designation: The Watershed Overlay District for both parcels.
7. Buffer Delineation: Show any S.W.I.M., watershed, and post-construction buffers.
8. Floodplain/Community Encroachment Area: Show the line(s) associated with any base flood levels potentially affecting the site.

9. **BUA Averaging Certification:** In addition to certifications required by the ordinance, please include the following certifications on each plat:

Density Averaging/Built-Upon-Area Transfer Plat

This plat represents a transfer of built-upon-area through preservation of a dedicated, undisturbed natural area for properties within the jurisdiction of the Town of Davidson. The resulting action may or may not create tracts of land that are compliant with the Davidson Planning Ordinance (DPO). This parcel is subject to the DPO built-upon area averaging standards: Any change to the development proposal affecting the approved built-upon-area allowance requires amendment to the existing Built-Upon Area Averaging Certificate and approval by the Davidson Board of Adjustment. The Planning Director reserves the right to make periodic site inspections to ensure compliance with these conditions.

Date

Planning Director, Town of Davidson

- F. Existing Development:** If a participating parcel(s) is part of an existing development, then the following documentation shall be provided:
1. **Approved Stormwater Mitigation Plan:** A storm water mitigation plan approved by Mecklenburg County Storm Water Services, Water Quality Program, for the receiving parcel based on the pathway pursued:
 - a. **Buffer/Vegetative Conveyances:** Must meet all applicable ordinance requirements for parcels located in water supply watersheds.
 - b. **Engineered Stormwater Controls:** Must confirm the following:
 - The effected BMP(s) has been designed to handle the additional BUA.
 - All participating lots are in the same drainage basin.
 - Verified as-built information of the existing, approved BMP.
 - Sealed engineer calculations to prove existing and future compliance with the water quality requirements based on the proposed BUA to be transferred.
 2. **Homeowner's Covenant Agreements:** A draft of revised covenant documents reflecting the additional BUA and other pertinent information for all affected parcels.
- G. Preliminary Sketch Plan:** At the Planning Director's discretion, a Preliminary Sketch Plan of the donating and/or receiving parcel showing available details related to the parcel's conceptual development.
- H. Public Notice Materials:** If application is accepted, then the following shall be provided:
1. **Address List and Envelopes/Letters (Postage Pre-paid):** An address list as well as stamped envelopes and notice letters for all adjacent property owners. Draft copies of the letter can be obtained from the Planning Department.
 2. **Noticing Fee:** Reimbursement of fees incurred in fulfillment of statutory noticing requirements.



Agenda Title: Davidson Springs Master Plan FYI Update

Summary: Project Manager Chad Hall will provide an update on the proposed master plan, including comments received at the recent Public Input Session. The Planning Board will not take any action.

ATTACHMENTS:

Description	Upload Date	Type
▣ Davidson Springs Master Plan - Staff Analysis	4/26/2018	Cover Memo
▣ Davidson Springs Master Plan - Master Plan	4/26/2018	Exhibit
▣ Davidson Springs Master Plan - Site Features	4/26/2018	Exhibit
▣ Davidson Springs Master Plan - Street Frontage Alternatives	4/26/2018	Exhibit



STAFF ANALYSIS

Date: April 25, 2018
To: Planning Board (April 30, 2018)
From: Chad Hall, Senior Planner
Re: Davidson Springs, Phases 3 and 4, Master Plan

1. INTRODUCTION

APPLICANT INFO

- **Owners:** John Marshall Custom Homes, Inc.
- **Developer:** Rodney Graham (John Marshall Homes)
- **Consultant:** Tim Derylak (Dewberry Engineering)
- **Location:** West of Walnut Street and south of James Alexander Way
(not including Lassiter property)
(Parcel ID: 00705121, 00705122, 00705123)
- **Planning Area(s):** Village Infill (Green Overlay)
- **Area:** 4.56 acres

REQUEST

The applicant proposes a Master Plan for development of Phases Three and Four of Davidson Springs. Properties included are located west of Walnut Street and south of James Alexander Way on 4.56 acres. The overall master plan illustrates eight single-family detached home lots and eight townhome units. Phase Three is a singular lot, fronting Walnut Street and north of the Lassiter property. Phase Four includes seven single-family detached home lots and eight townhome units.

The development will front Walnut Street and the proposed James Alexander Way extension. Included with the Master Plan is the provision of a greenway through the site (Kincaid Trail extension), common open space with a greenway connector and adequate tree save areas.

The Master Plan features two options for Walnut Street, which are discussed further in the Summary of Petition below.

SUMMARY OF PETITION

The applicant proposes a master plan for Davidson Springs, Phases Three and Four. Process B of the master plan process includes a Public Input Session (held April 9, 2018) followed by Planning Board review and comment. Planning staff will conduct a technical review concurrently with Mecklenburg County.

The proposed Master Plan for Davidson Springs, Phases Three and Four illustrate 16 total lots. Phase 3 is a singular lot, fronting Walnut Street and north of the Lassiter property; the parcel is 0.27 acre in size and has approximately 100' of frontage on Walnut Street. Phase 4 includes seven single-family detached home lots and eight townhome units.

The townhomes fronting Walnut Street are proposed with two options:

- Front a Pedestrian Way along Walnut Street (Option A)
- Front Walnut Street extension (Option B)

For Walnut Street, there is an existing easement where several property owners will need to agree to the terms of the change of easement. The two options are a means to allow for development of the townhomes with different frontage conditions. Though listed as Options A and B, the applicant has not expressed a preference. Option A will front a pedestrian way, currently labeled at seventeen feet in width; this area may need more embellishment with hardscape and landscape in order to meet the spirit of the ordinance definition of a pedestrian way. Option B fronts Walnut Street, extended, with a typical planting strip and sidewalk.

The townhomes are alley-loaded and are 26'-wide units; these units will be housed into two, four-unit townhome buildings. Each unit will have a detached garage, as currently proposed.

Single-family lot frontages range from approximately sixty feet wide (Lots 2 and 3) to a lot larger than 100 feet (Lot 8), with a majority of lots approximate 70' in width (Lots 4-7).

The master plan provides a density of 3.51 units per acre with an overall open space of +/- 0.81 acres (17.8 percent) on the 4.56 acre site. The open space is quantified as 17.8 percent, over the 10 percent common open space requirement for the Village Infill Planning Area. The Park/Public Open Space requirement of 0.36 acre has been met, including greenway connector.

There is a Tree Save requirement to preserve twenty (20) percent of existing mature trees on the site. Tree save is indicated at 25% of existing mature tree canopy (44 of 173 trees). The overall 4.56 acre parcel requires 57 large maturing trees, of which new plantings may contribute. To satisfy the difference of 13 large maturing trees, 14 large maturing trees are being added in the park area (eight) and along the streetscape in front of the townhomes (six). Additionally, twenty-five small maturing trees will be added to the streetscape of James Alexander Way (extension) in addition to the individual tree requirements per each single-family lot.

A greenway/multiuse path is illustrated traversing the site along its western boundary. This route essentially follows an existing sewer line easement. This portion is part of the Randall Kincaid Greenway Extension (South St to Spring St) and a segment of the Mooresville-Charlotte Trail. This greenway section is a High/Near-term priority per the Walks and Rolls Plan.

A Transportation Impact Analysis (TIA) is not required for sixteen units, but the applicant will be making a contribution into the Connectivity and Traffic Calming Plan at a rate of \$500 per lot, per the Davidson Planning Ordinance. Attendees of the PIS suggested using those monies to improve the sidewalk system in the area or to install speed reduction devices to slow traffic.

A total of two affordable units are required based upon 16 total units. Payment-in-lieu is an option to providing the required units; the developer has indicated they plan to make payment-in-lieu.

The applicant has met the documentation and public notice requirements as set forth in the Davidson Planning Ordinance (DPO).

2. PLANNING STAFF PRELIMINARY REVIEW

BACKGROUND

The applicant's design team met with planning staff several times prior to submitting the Master Plan application for Davidson Springs, Phases Three and Four.

The property is within the Village Infill Planning Area (Green Overlay). The required open space for developments in this planning area is 10 percent.

This proposal was deemed to be a complete application on November 22, 2017. This review considers compliance with the DPO adopted May 1, 2015, as amended.

A Public Input Session was held on April 9, 2018. Approximately 40 people were in attendance. A vast majority of comments at the PIS regarded concerns over transportation, particularly concern over the extension of James Alexander Way. Additional transportation comments were related to the greenway construction, with many wondering when the greenway portion from Parks/Rec to NC115 – which crosses this site – would be complete.

Other primary comments/questions from the PIS ranged from the provision of affordable housing to making sure stormwater is controlled, particular as it may impact Vernon and the greenway.

PLANNING and DEVELOPMENT STANDARDS

Below is a summary of the staff analysis. A more detailed technical review, conducted concurrently with Mecklenburg County, will follow.

LAND USE

The proposed master plan for Davidson Springs, Phases 3 and 4 illustrates 16 total units, with 8 detached homes on varying lot sizes. There are also eight townhome lots located at the corner of Walnut Street with Vernon Drive. Detached house and townhouse are permitted building types in the Village Infill Planning Area. A greenway and required open space has been provided, including acceptable tree save areas.

At the Public Input Session (PIS), three alternatives for the townhomes were presented with two options fronting Walnut Street and one fronting the greenway. Staff and a majority of participants voiced a preference for fronting Walnut Street.

ACCESS and TRANSPORTATION, including GREENWAYS, MULTI-USE PATHS and SIDEWALKS

The homes will have frontage on Walnut Street and James Alexander Way (extended). Sidewalks will continue on James Alexander Way as will sidewalks along Walnut Street. Additionally, a portion of the Randall Kincaid Greenway Extension (from South St to Spring St) shall be constructed as part of this development project. A Transportation Impact Analysis (TIA) is not required; the applicant will be making a contribution into the Connectivity and Traffic Calming Plan at a rate of \$500 per lot, per the Davidson Planning Ordinance.

OPEN SPACE and PARKS

The Village Infill Planning Area requires 10 percent open space, with 5 percent being park/public space. The proposed site plan indicates 17.8 percent open space as being preserved, including functional and riparian spaces. A small park area is being created off of James Alexander Way, near the proposed mail kiosk and greenway connector.

TREE PRESERVATION, LANDSCAPING and SCREENING

There is a Tree Save requirement to preserve twenty (20) percent of existing mature trees on the site. Tree save is indicated at 25 percent of existing mature tree canopy (44 of 173 trees). Street trees will need to be provided per the ordinance. Additionally, the landscaping installed to each building lot will be vital for creating tree canopy in the future. Each lot in the Village Infill Planning Area should have approximately 20-40 percent tree canopy at maturity.

AFFORDABLE HOUSING

A total of two (2) affordable units are required based upon 16 total units. The affordable units have not been identified on the master plan. Payment-in-lieu is an option to providing the required units. The developer has indicated they plan to make payment-in-lieu.

3. PLANS AND POLICIES

Below is a list of town-adopted plans and policies summarizing each document's applicability to the proposed Master Plan:

- The ***Davidson Comprehensive Plan (2010)*** contains several recommendations and initiatives relevant to this proposal. The Targeted Growth Plan Livability Themes state:
 - A. SUPPORT SAFE AND VIBRANT PUBLIC SPACES AND NEIGHBORHOODS. GOAL 3: Provide Safe and Secure Neighborhoods, Streets, Parks and Greenways. Initiatives include:
 - Build off-road greenways, trails, and bike improvement projects per the bicycle master plan.
 - Development should be walkable with vibrant public spaces.
 - Growth should support and enhance existing neighborhoods.
 - B. MAINTAIN QUALITY DESIGN AND SOUND PLANNING PRINCIPLES. GOAL 1: Prioritize Infill and Mixed-Use Development Within or Near Already Developed Areas, stating:
 - Continue to allow for limited single-family infill development and redevelopment in the Village Infill Planning Area.
 - Growth should create high-quality pedestrian environments.

As identified above, the comprehensive plan supports development that is walkable and safe. The plan also supports the dissemination of all transportation modes through multiple route options.

- The ***Davidson Planning Ordinance (2015)*** contains several references that speak directly to this proposal, including:

Principles

- We must preserve Davidson's character and sense of community: Enhanced by developments with open space and a street, sidewalk and greenway network that knits the community together (General Principles Item 1);
- We must encourage alternative means of active transportation: The built environment can enhance the use of alternatives to the car and increase our physical health (General Principles Item 3).

Village Infill (Green Overlay) Planning Area, Description

- The Village Infill Planning Area comprises Davidson's traditional, residential neighborhoods and provides for infill development surrounding the historic town center. Streets, sidewalks and greenways in the Village Infill Planning Area must be interconnected. A range of housing types is encouraged. Buildings are restricted in size to promote a local orientation, to be pedestrian-oriented, to be compatible with the scale of surrounding residences, and to limit any adverse impacts on residential development. (2.2.4.A).

- The ***Davidson Walks and Rolls Active Transportation Master Plan (2013)*** contains several references that speak directly to this proposal, including the continuation of a key corridor greenway path along the western edge of the property.

These references underscore the DPO's emphasis on interconnected policies and land use patterns that support the diversity of residential areas with the provision of community amenities, such as greenways.

4. STAFF FINDINGS

The proposed Master Plan illustrates building types and permitted uses consistent with existing plans and policies. The plan indicates 16 total units, eight which are detached single-family and eight townhomes.

The primary frontage of the site is along Walnut Street. There is also access to the site via an extension of James Alexander Way.

Open space is provided above the required 10 percent for the Village Infill Planning Area. This includes a neighborhood park internal to the site and additional land preserved along the western boundary. The site plan also illustrates a greenway along the western boundary along an existing sewer easement.

There is a Tree Save requirement to preserve twenty (20) percent of existing mature trees on the site. Tree save is indicated at 25 percent of existing mature tree canopy (44 of 173 trees).

With a total of sixteen lots/units, there is an affordable housing requirement of two units. The developer has indicated that they will provide a payment-in-lieu, as permitted by the DPO.

A Transportation Impact Analysis (TIA) is not required; the applicant will be making a contribution into the Connectivity and Traffic Calming Plan at a rate of \$500 per lot, per the Davidson Planning Ordinance.

In conclusion, the proposed master plan for Davidson Springs, Phases 3 and 4 is for 16 total homes with a mixture of single-family homes and townhomes, consistent with the Comprehensive Plan and DPO. Staff supports the general intent of the master plan, understanding that detailed ordinance requirements will be addressed during the technical review.

5. RESOURCES & ATTACHMENTS

- Resources: Links to referenced policy documents.
 - Davidson Planning Ordinance (2015): <http://www.ci.davidson.nc.us/DocumentCenter/View/8499>
 - Comprehensive Plan (2010): <http://www.townofdavidson.org/340/Davidson-Comprehensive-Plan>
- Maps:
 - 20180207_Walnut_Street_Master_Plan_2nd_Submittal (Proposed Davidson Springs Phases 3 and 4 Master Plan with environmental inventory, street sections, notes, etc.)
 - 20180409_Davidson Springs Site Improvements (Proposed features of the Master Plan)
 - 20180409_Davidson Springs Townhome Lots Options REV 04-09-2018 (Townhome frontage options)

NO.	DATE	BY	DESCRIPTION

NO.	DATE	BY	DESCRIPTION
REVISIONS			

DRAWN BY BML

APPROVED BY TJD

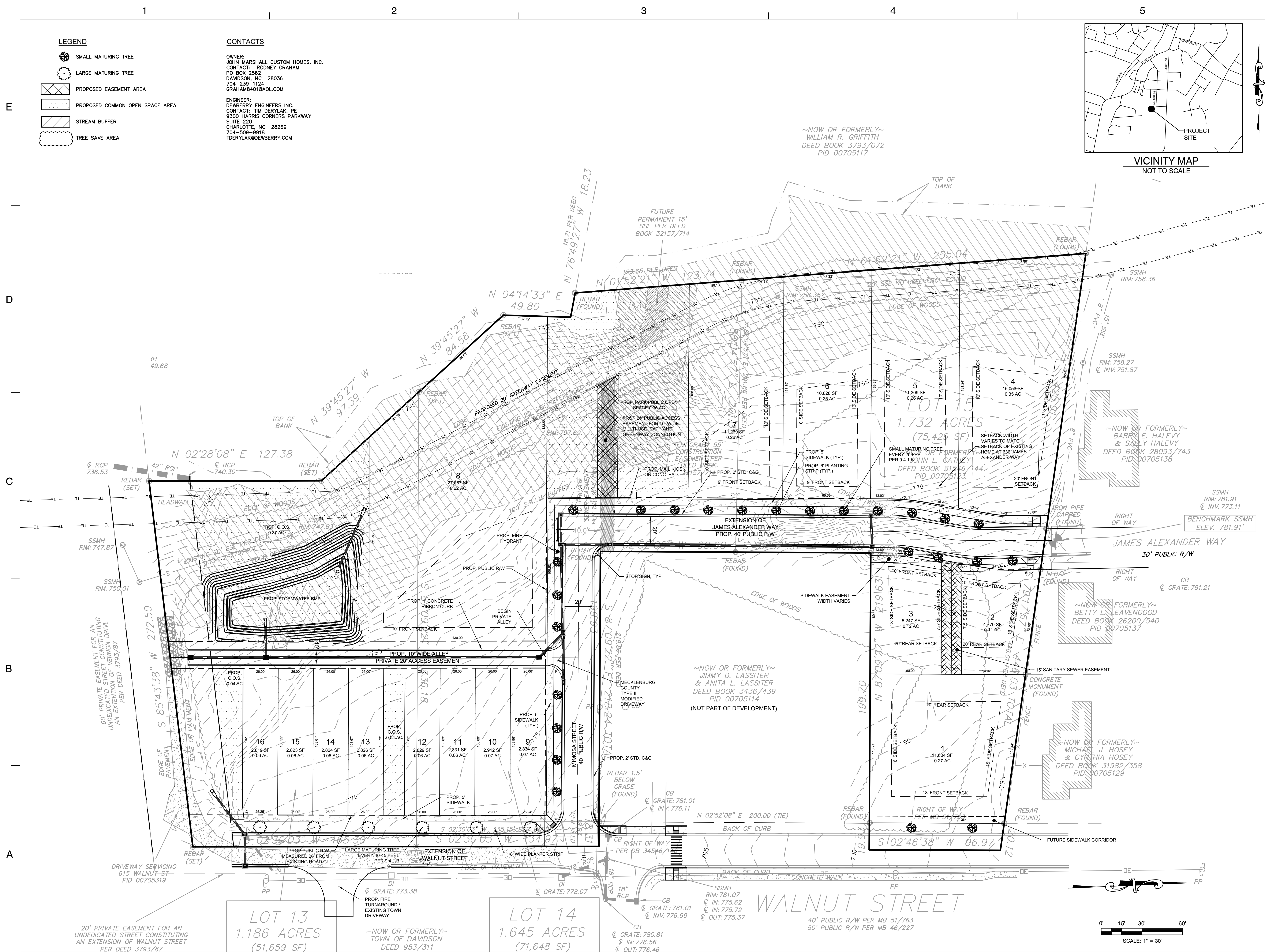
— CHECKED BY TJD

DATE FEBRUARY 7, 2018

TITLE _____

MASTER PLAN
SITE PLAN

PROJECT NO. 50098744



E

D

C

B

A

SETBACK NOTES:

- ALL FRONT YARD SETBACKS BASED ON ADJACENT HOMES WITHIN 500' PER TOWN OF DAVIDSON VIP ZONING REQUIREMENTS.
- ALL LOTS FOR SINGLE FAMILY HOMES TO HAVE MINIMUM 20' REAR YARD SETBACK.
- ALL LOTS FOR SINGLE FAMILY HOMES TO HAVE MINIMUM 5' SIDE YARD SETBACK AND MINIMUM SIDE YARD SETBACKS TO TOTAL 30% OF LOT WIDTH.

OPEN SPACE:

TOTAL EXISTING SITE AREA:	4.56 ACRES
PROPOSED COMMON OPEN SPACE:	0.81 ACRES
REQUIRED COMMON OPEN SPACE:	10.0%
REQUIRED UNDISTURBED OPEN SPACE:	17.5%
PROPOSED COMMON OPEN SPACE:	17.8%

LOT SCHEDULE:

WIDTH(FT)	QTY	COMMENT
50-60	2	SINGLE FAMILY HOMES, LOTS 2-3
60-70	4	SINGLE FAMILY HOMES, LOTS 4-7
90-100	1	SINGLE FAMILY HOMES, LOT 1
>100	1	SINGLE FAMILY HOMES, LOT 8
TH	8	TOWNHOMES, LOTS 9-16

PHASING:

PHASE III : LOT 1
PHASE IV: LOTS 2-16

LEGEND

- SMALL MATURING TREE
- LARGE MATURING TREE
- PROPOSED EASEMENT AREA
- PROPOSED COMMON OPEN SPACE AREA
- STREAM BUFFER
- TREE SAVE AREA

STORMWATER MANAGEMENT NOTES:

- ONSITE STORMWATER MANAGEMENT WILL BE DESIGNED TO MEET THE REQUIREMENTS AS SET FORTH IN TOWN OF DAVIDSON POST-CONSTRUCTION STORM WATER ORDINANCE.
- THE FINAL STORM ROUTING WILL BE BASED UPON THE FINAL LOCATION OF ON-SITE FEATURES.
- BMP'S WERE PRELIMINARILY SIZED TO CONTAIN THE DIFFERENCE IN VOLUME BETWEEN THE PREDEVELOPMENT AND POST DEVELOPMENT 50 YEAR STORMS AND THE WATER QUALITY VOLUME. THE BMP WAS ALSO SIZED TO HOLD AN APPROXIMATED VOLUME FOR WATER QUALITY VOLUME, CHANNEL PROTECTION VOLUME, AND PERMANENT POOL VOLUME. THE APPROX. REQUIRED STORAGE VOLUME IS 53,000 CF (50 YR POST DEVELOPMENT VOLUME) - 39,400 CF (PRE-DEVELOPMENT VOLUME) = 13,600 CF

DRAINAGE AREA CALCULATIONS

TOTAL DRAINAGE AREA: TO BMP: 3.39 AC	
PRE-DEVELOPMENT:	POST-DEVELOPMENT:
DRAINAGE AREA: 3.39 AC	DRAINAGE AREA: 3.39 AC
CN: 69	CN: 80
TC: 11 MIN.	TC: 5 MIN.
Q50: 13 CFS	Q50: 22 CFS
VOLUME: 39,400 CF	VOLUME: 53,000 CF
APPROX. STORAGE = 53,000 CF (POST) - 39,400 CF (PRE) = 13,600 CF	

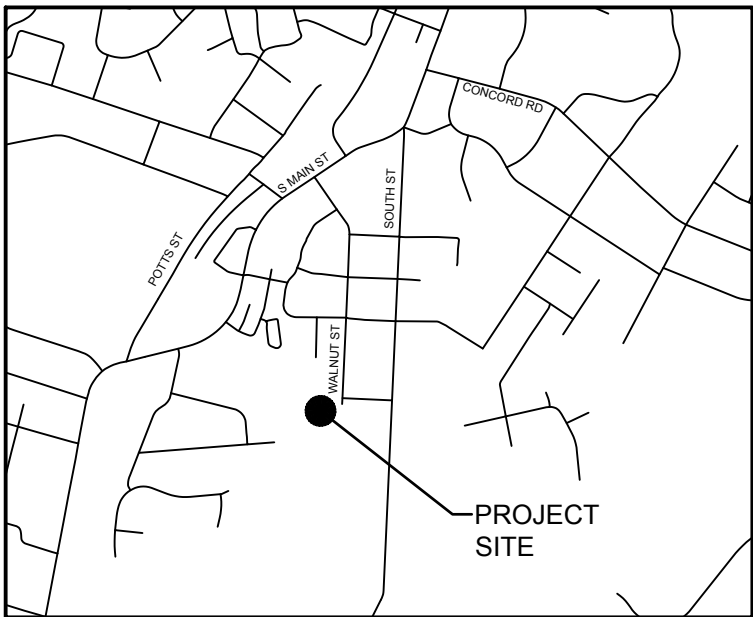
IMPERVIOUS AREA CALCULATIONS

PRE-DEVELOPMENT:	POST-DEVELOPMENT:
PERVIOUS: 4.53 AC (99.4%)	PERVIOUS: 3.07 AC (67.3%)
IMPERVIOUS: 0.03 AC (0.6%)	IMPERVIOUS: 1.49 AC (32.7%)
TOTAL: 4.56 AC	TOTAL: 4.56 AC

SITE PLAN DATA TABLE

PROJECT NAME:
PARCEL NUMBERS:
TOTAL ACREAGE:
TOTAL SQUARE FEET:
PRINCIPAL USES:
EXISTING ZONING DISTRICT:
PERCENTAGE OF BUA ALLOWED:
PERCENTAGE OF BUA ESTIMATED:
TIME FRAME:
STREAM WATERSHED:
REGULATED DRINKING WATERSHEDS:

DAVIDSON SPRINGS PHASE III & IV
007-05-121, 007-05-122, 007-05-123
4.56 AC
198,634 SF
SINGLE FAMILY RESIDENTIAL
VILLAGE INFILL
N/A
32.7%
2018
ROCKY RIVER
LAKE NORMAN



VICINITY MAP
NOT TO SCALE

TRANSPORTATION IMPACT ANALYSIS

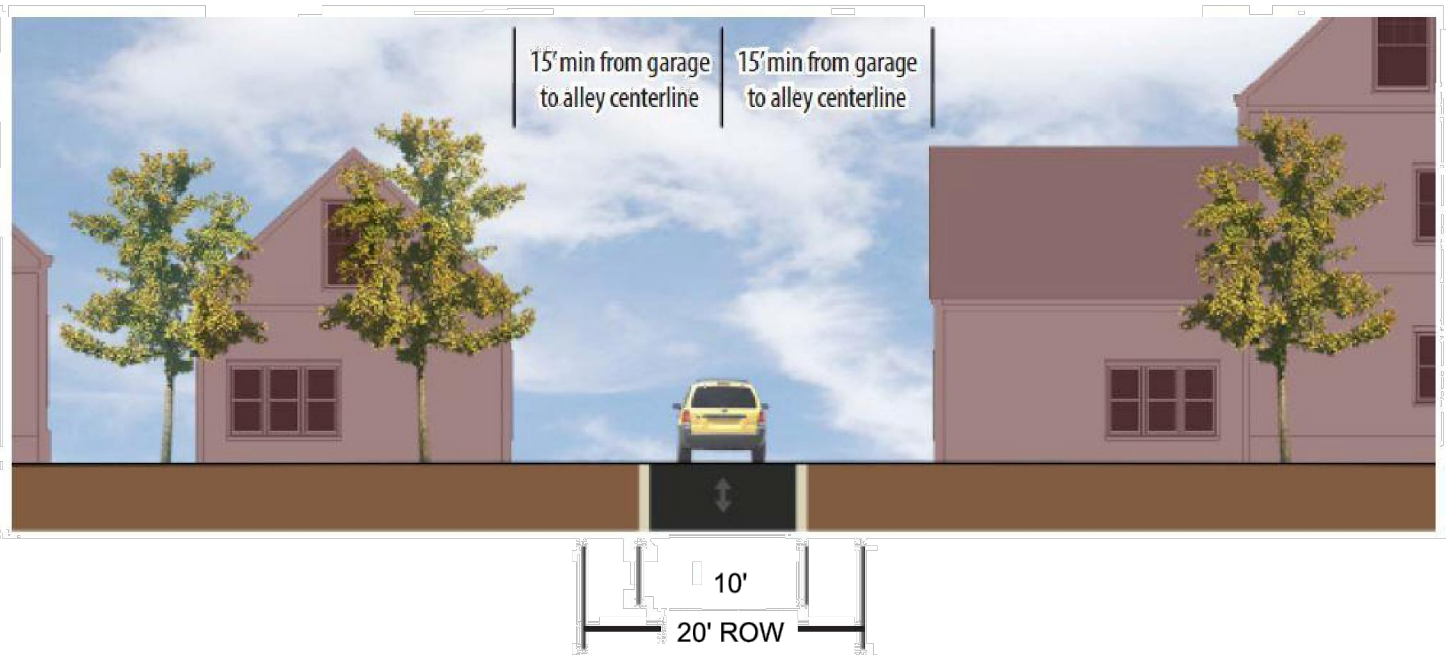
TIA FEE = \$500 X 16 = \$8,000

AFFORDABLE HOUSING

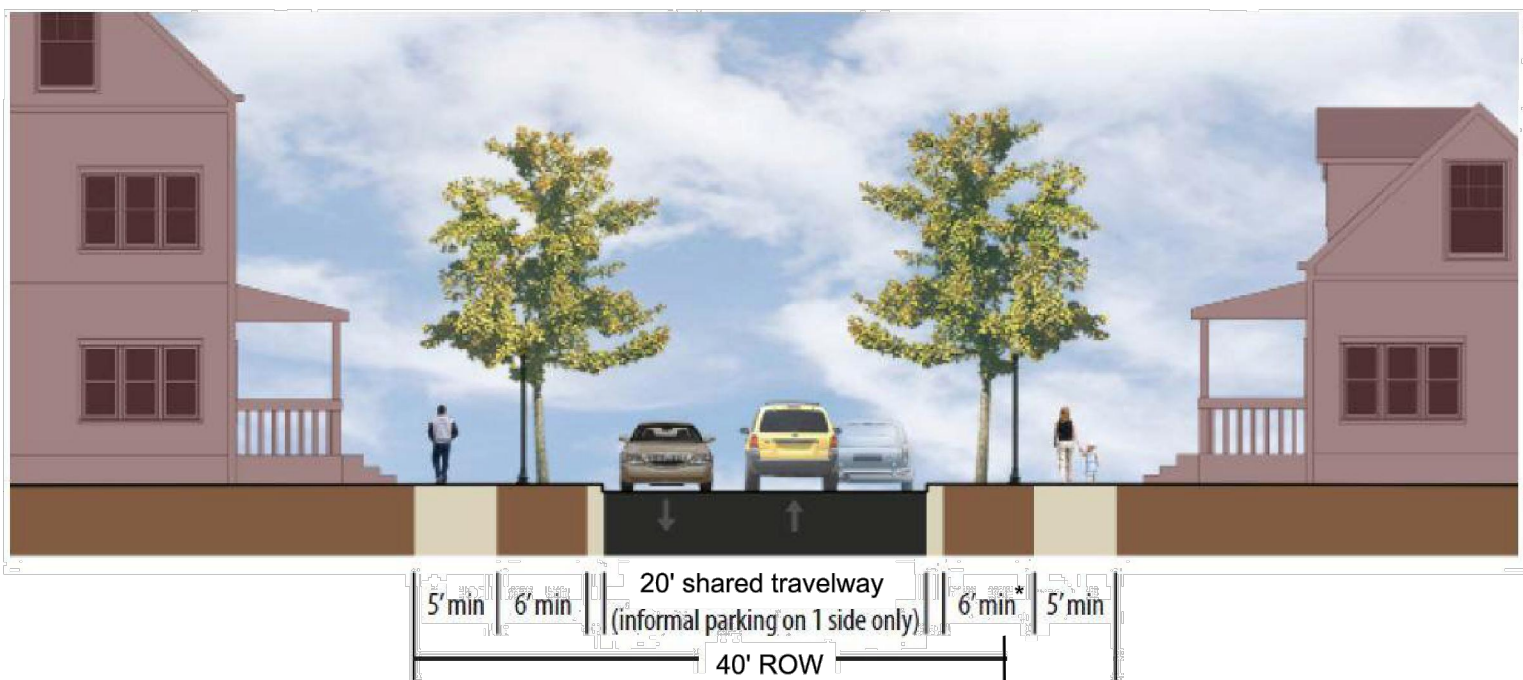
OWNER SHALL MAKE PAYMENT IN LIEU OF AFFORDABLE HOUSING MITIGATION PER TOWN OF DAVIDSON ORDINANCE PRIOR TO ANY FINAL PLAT APPROVAL.

FIRE NOTES

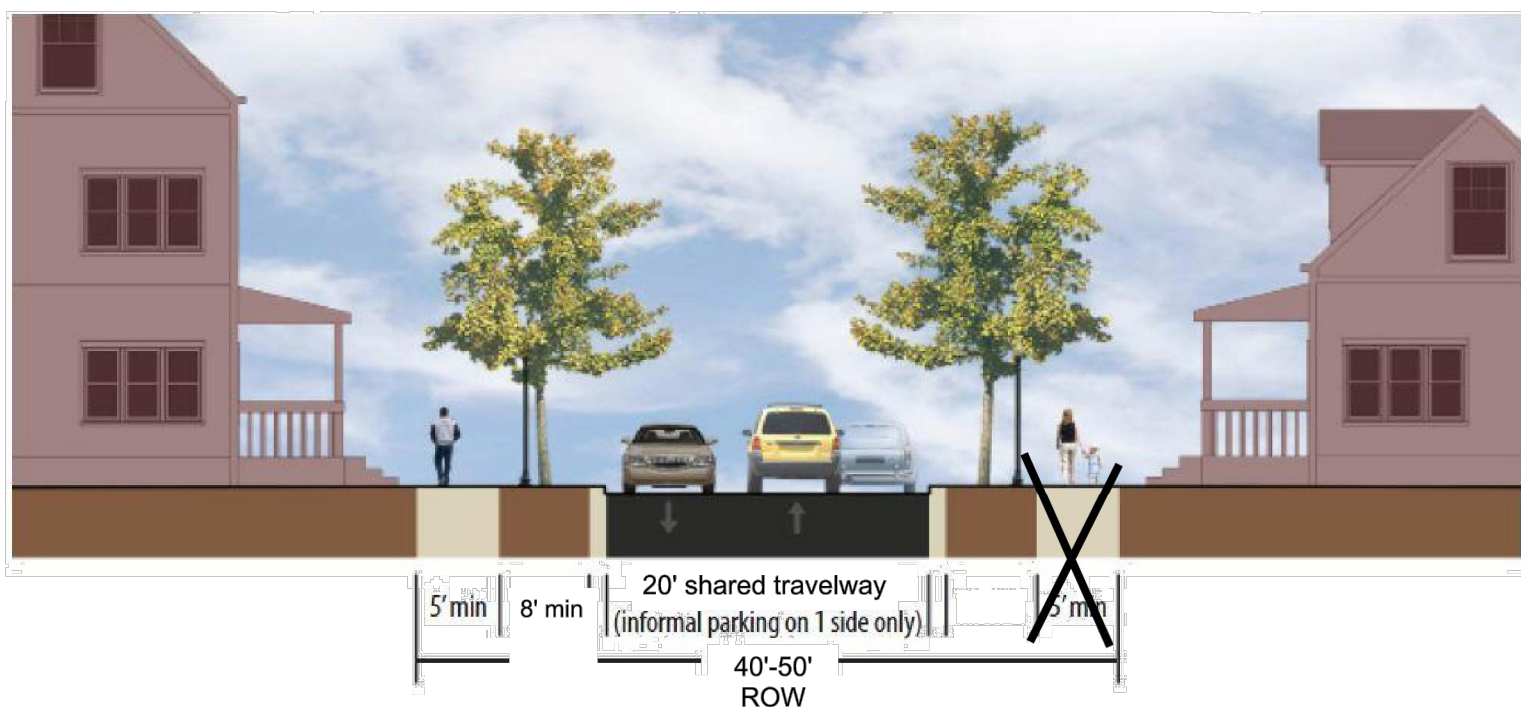
FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS OF 80,000 POUNDS.



PRIVATE ALLEY TYPICAL STREET CROSS SECTION



JAMES ALEXANDER WAY AND MIMOSA STREET
TYPICAL STREET CROSS SECTION

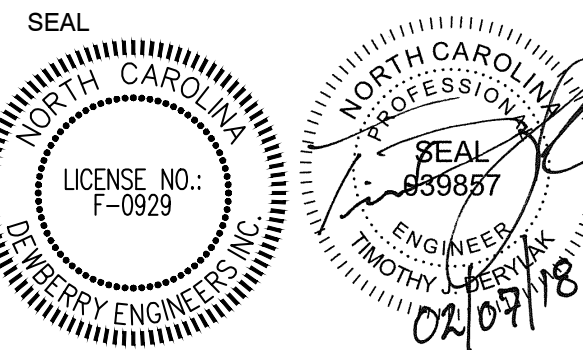


WALNUT STREET TYPICAL STREET CROSS SECTION



Dewberry Engineers Inc.
9300 Harris Corner Parkway
Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
NCBELS #F-0929

DAVIDSON SPRINGS
PHASE III & IV
DAVIDSON, NORTH CAROLINA



KEY PLAN

NO.	DATE	BY	DESCRIPTION

DRAWN BY: BML
APPROVED BY: TJD
CHECKED BY: TJD
DATE: FEBRUARY 7, 2018

TITLE
MASTER PLAN
GENERAL NOTES

PROJECT NO. 50098744



Connecting path to the
greenway

Construct extension of
the Kincaid Trail
greenway

Common open space



Display about the
history of the Griffith
family (1)

Dedication of right of
way and construction
of sidewalk

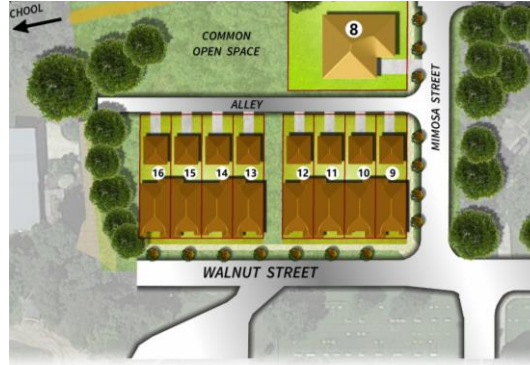
Improvement of
Walnut Street
including the Town's
portion (2)



Site Highlights and Contributions

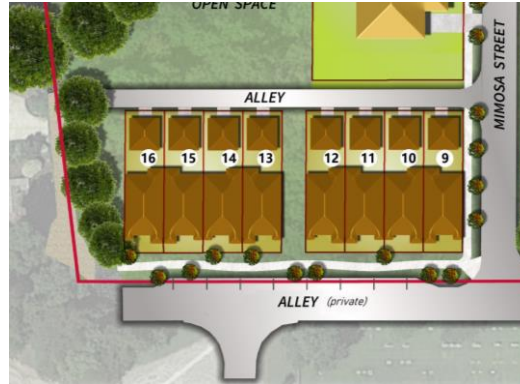
NOTES:

- (1) If approved by the family
- (2) If accepted by the Town

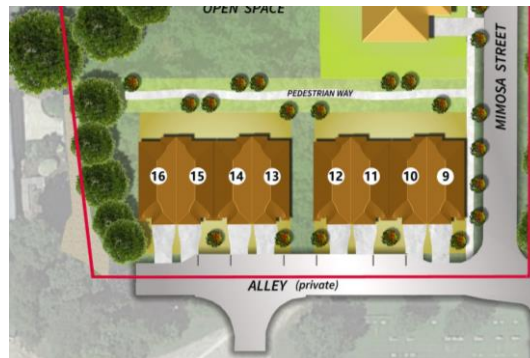


OPTIONS FOR TOWNHOME LOTS

In this option we improve the extension of Walnut Street and the Town accepts it as public right of way. The extension and associated parking may be used by the public. We also improve the Town side of Walnut Street.

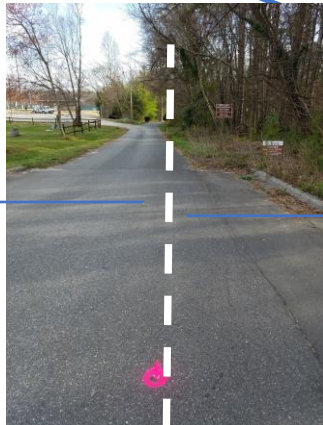


In this option we improve the extension of Walnut Street but it is a private road. Parking is signed to be private. We do not improve the Town side of Walnut Street.



This option is similar to the above, except that the extension of Walnut Street is used as an alley and the townhomes front a pedestrian way facing the common open space. This option improves the view of those using the greenway.

Town of
Davidson



John
Marshall
Custom
Homes