

TOWN OF DAVIDSON BOARD OF COMMISSIONERS

Town Hall Board Room - 216 S. Main Street June 5, 2018

- I. CALL TO ORDER
- II. ANNOUNCEMENTS
- III. CHANGES/ADOPTAGENDA
- IV. DISCUSSION Items for discussion are typically when the board will engage on a topic and no vote is planned.
 - (a) North Harbor Club CPA: Pre-Development Consultation Planning Director Jason Burdette

Summary: The owners of North Harbor Club would like to expand their kitchen and convert the second story into a banquet space (Building 100). The restaurant is located in a Special Use Permit District (SUP) c. 1983. Any changes to the SUP require a rezoning. Staff offers a pre-development consultation with the Board of Commissioners for potential conditional rezonings and plan amendments. Since coming before the board in January 2018, North Harbor Club has modified its expansion plans to also include Building 400. Staff determined that this change merited additional consultation with the board.

(b) Joint Board of Commissioners/PBOC Work Session:
Proposed Watershed Ordinance Text Amendments
Planning Board Ordinance Committee: Shawn Copeland, Ellen
Donaldson

Staff: Jason Burdette, Trey Akers, Lindsay Laird Summary: The Board of Commissioners requested a joint work session with the PBOC to discuss the proposed watershed text amendments.

- (c) Water/Sewer/Annexation Policy Resolution
 Town Attorney Cindy Reid and Town Manager Jamie Justice
 Summary: Discussion of a proposed water/sewer/annexation policy
- (d) Planning Department Work Plan
 Planning Director Jason Burdette
 Summary: The Board of Commissioners will prioritize the
 department's work plan based upon the Strategic Plan initiatives.

(e) Comprehensive Parking Study Economic Development Manager Kim Fleming Summary: This study was conducted in 2017 as a part of the public facilities project and was funded with a grant from the Lake Norman Economic Development Commission. It updates the previous 2011 parking study and focuses on downtown and the surrounding areas. It provides short-term and long-term recommendations.

- (f) Miscellaneous/Open Discussion
- V. SUMMARIZE MEETING ACTION ITEMS
- VI. ADJOURN



Agenda North Harbor Club CPA: Pre-Development Consultation Title: Planning Director Jason Burdette

Summary: The owners of North Harbor Club would like to expand their kitchen and convert the second story into a banquet space (Building 100). The restaurant is located in a Special Use Permit District (SUP) c. 1983. Any changes to the SUP require a rezoning. Staff offers a pre-development consultation with the Board of Commissioners for potential conditional rezonings and plan amendments. Since coming before the board in January 2018, North Harbor Club has modified its expansion plans to also include Building 400. Staff determined that this change merited additional consultation with the board.

Summary:

ATTACHMENTS:

	Description	Upload Date	Type
D	North Harbor Club CPA: Pre-Development Consultation Summary Memo	5/31/2018	Cover Memo
D	North Harbor Club - Presentation	5/31/2018	Presentation
D	Building 100 Plans	5/31/2018	Exhibit
D	Building 400 Plans	5/31/2018	Exhibit
D	Building 400 Survey	5/31/2018	Exhibit



North Harbor Club CPA: Pre-Development Consultation

To: Davidson Board of Commissioners
From: Planning Director Jason Burdette, AICP

Date: June 5, 2018

Re: Changes to North Harbor Club's proposed Conditional Planning Amendment (CPA)

1. OVERVIEW

This Conditional Planning Area map amendment proposes to re-designate an approximately 2.60 acre area located in Davidson Landing from Special Use to Conditional Planning Area. This area is currently part of a Special Use Permit granted on May 18, 1983. The existing property owner would like to make improvements to the North Harbor Club restaurant located at 100 North Harbor Place (Parcel ID 00118397), including a kitchen expansion. The existing property owner would also like to add banquet hall space to the building located at 400 North Harbor Place (Parcel ID 00118398). Both proposals differ from the plans and specifications submitted with the original Special Use Permit for this area.

The existing building at 100 North Harbor Place is two stories with the North Harbor Club restaurant on the first floor and offices on the second floor. The property owner would like to expand the kitchen on the first floor. There will be no increase in impervious area with this addition as proposed.

The existing building at 400 North Harbor Place is three stories. The property owner would like to build an addition to the existing structure to allow for banquet space on the second floor of the building. The proposal includes a two-story addition. There will be an increase in impervious area with this addition, which appears to meet watershed ordinance requirements.

2.RELATED TOWN GOALS

Economic Development Strategy: The Town of Davidson will use existing assets and manage growth to encourage an appropriate mix of residential and commercial development.

Core Value: Davidson's economic health is essential to its remaining a sustainable community, so town government will judiciously encourage and guide the location of new business opportunities.

3. OPTIONS/PROS & CONS

Pros: Supports the expansion of a long-standing Davidson business.

Cons: Potential noise and or inconvenience for current businesses during construction.

4. FYI or RECOMMENDED ACTION

This is an FYI. Staff has yet to receive an application and review the proposal. However, the proposed plan appears to be consistent with (a) the Davidson Comprehensive Plan, as adopted by the Board of

Commissioners and amended from time to time; and, (b) all other officially adopted plans and the Planning Ordinance.

5. NEXT STEPS

Provide feedback to potential applicant regarding the potential conditional planning area.

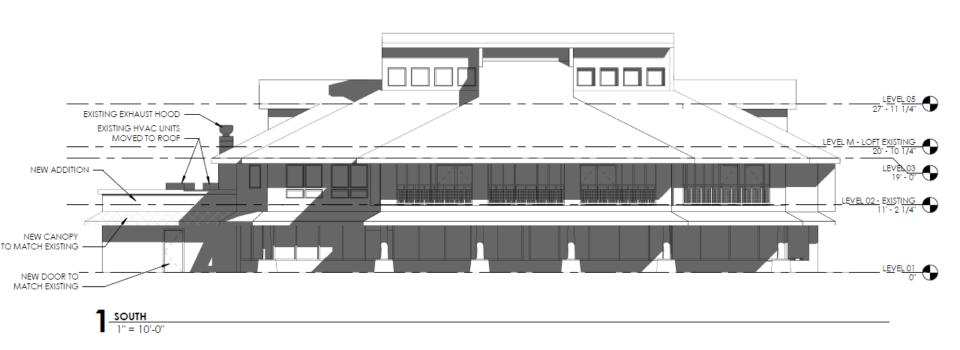
NORTH HARBOR CLUB CPA





NORTH HARBOR CLUB CPA

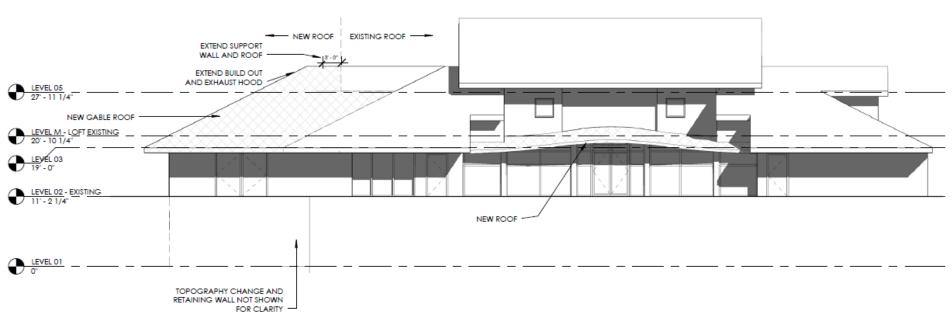
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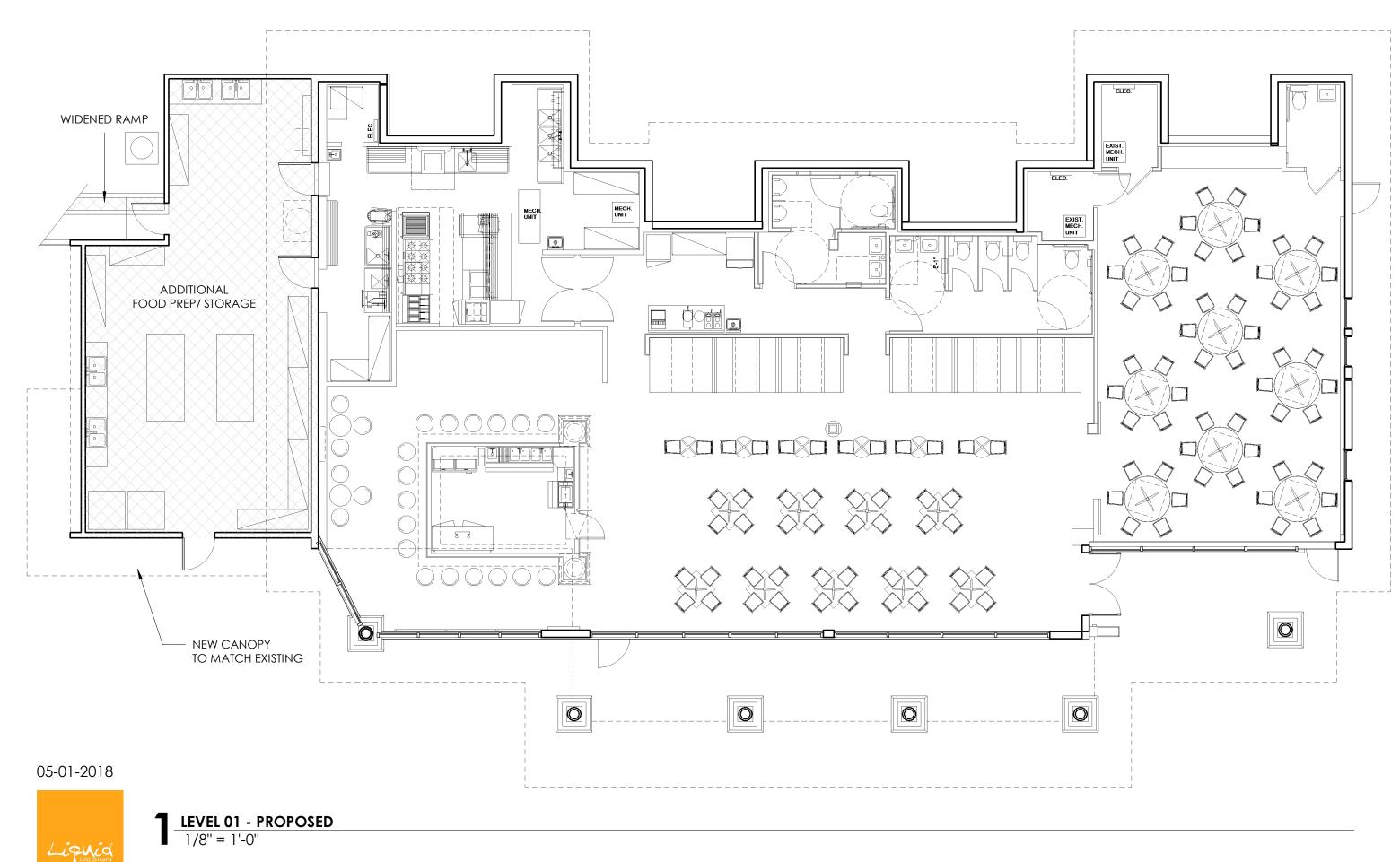
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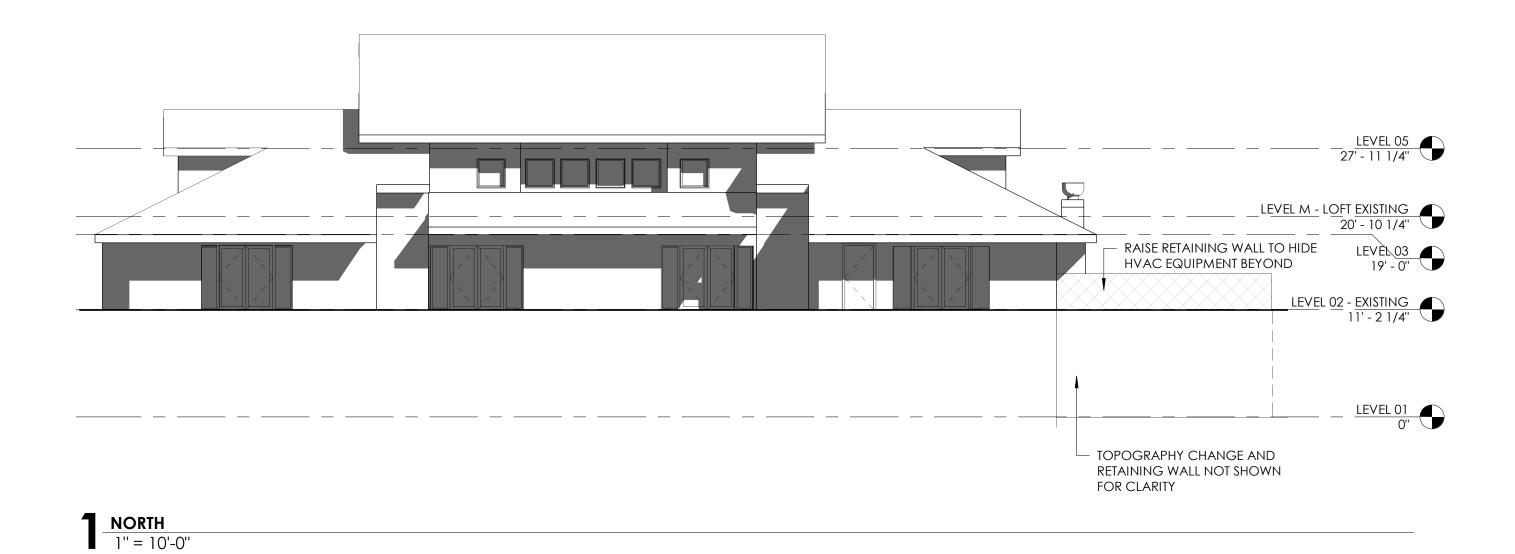
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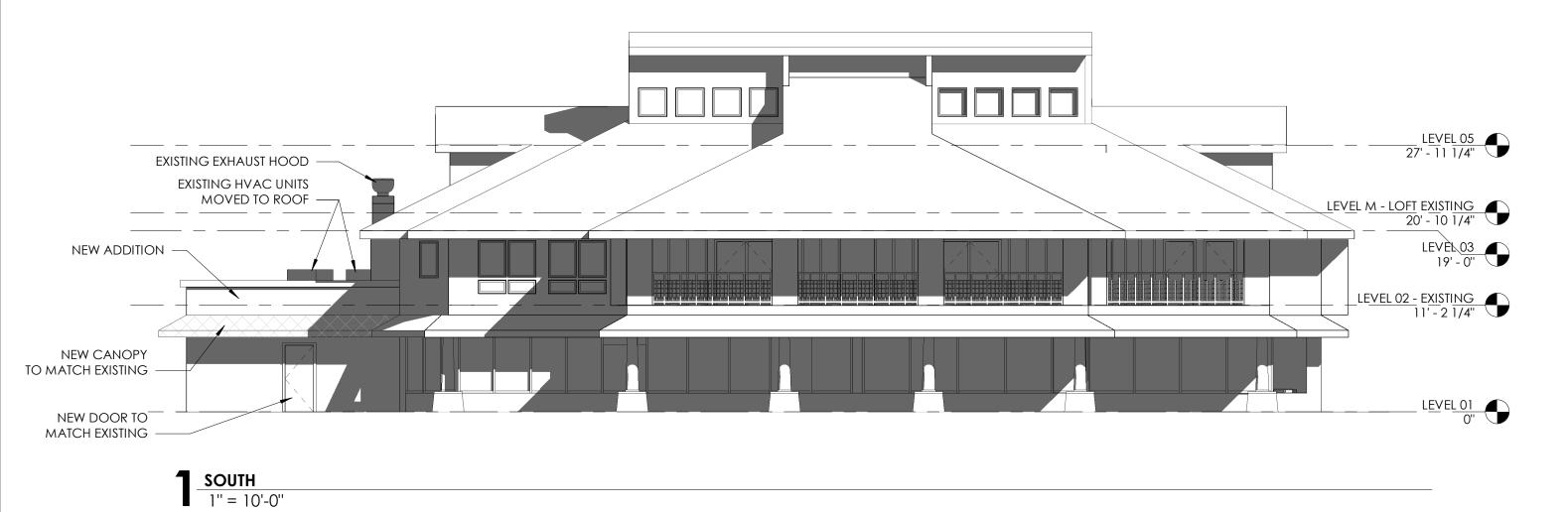




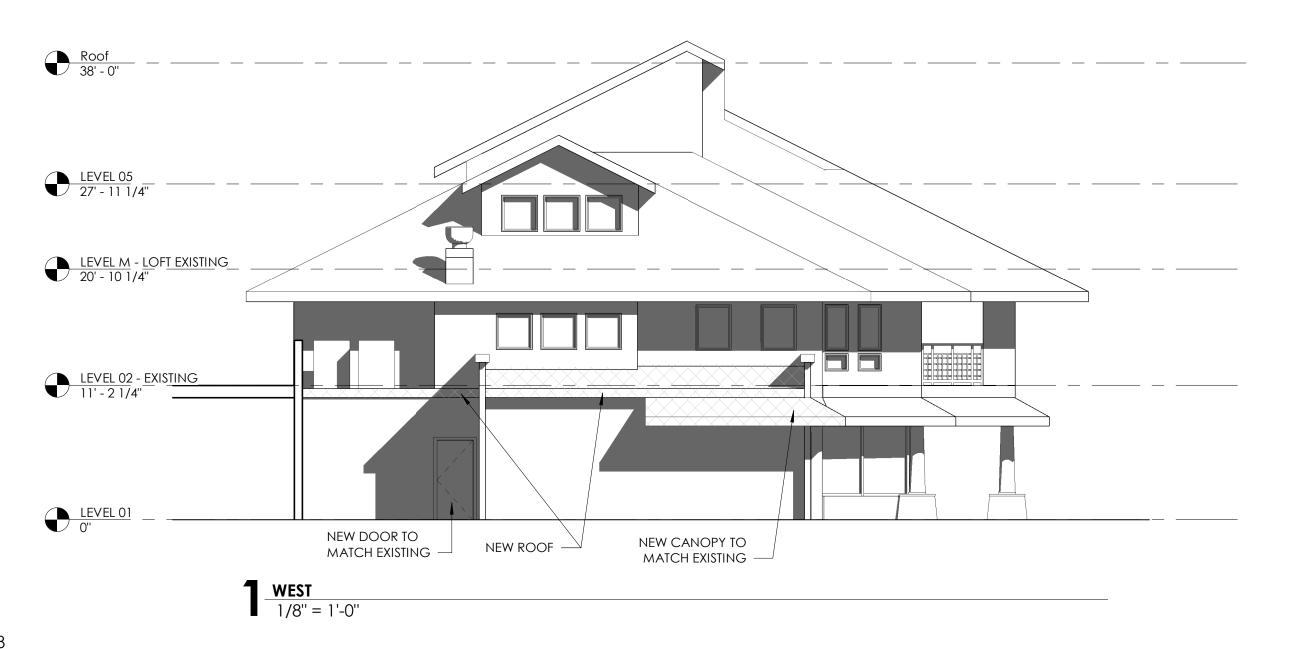




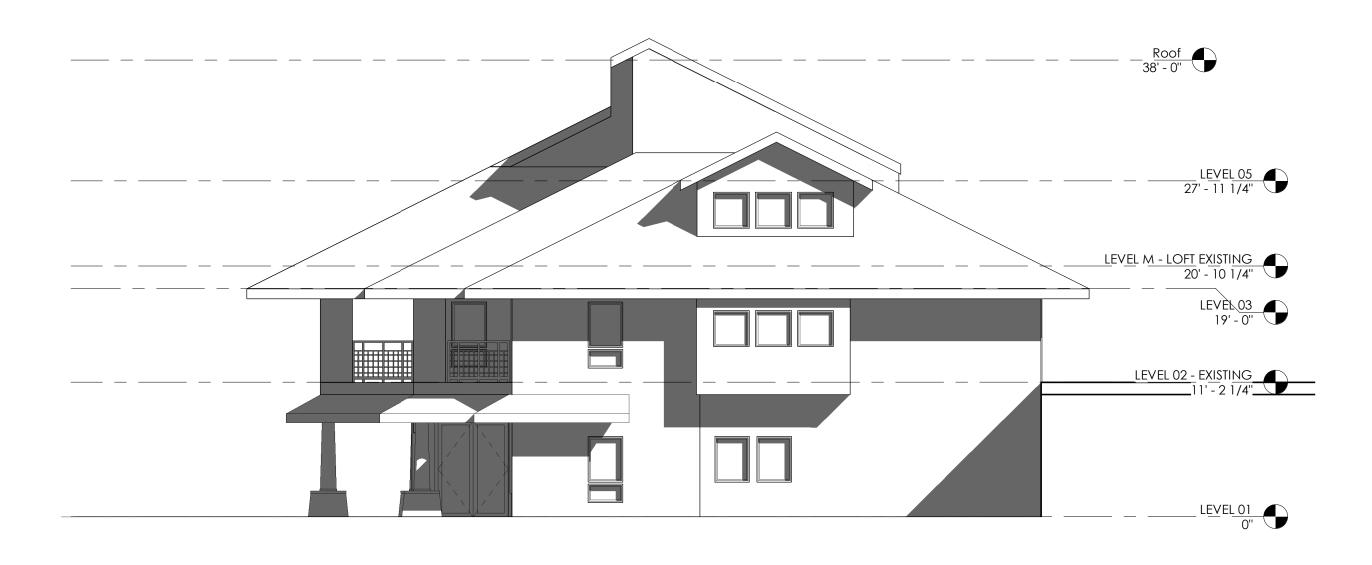






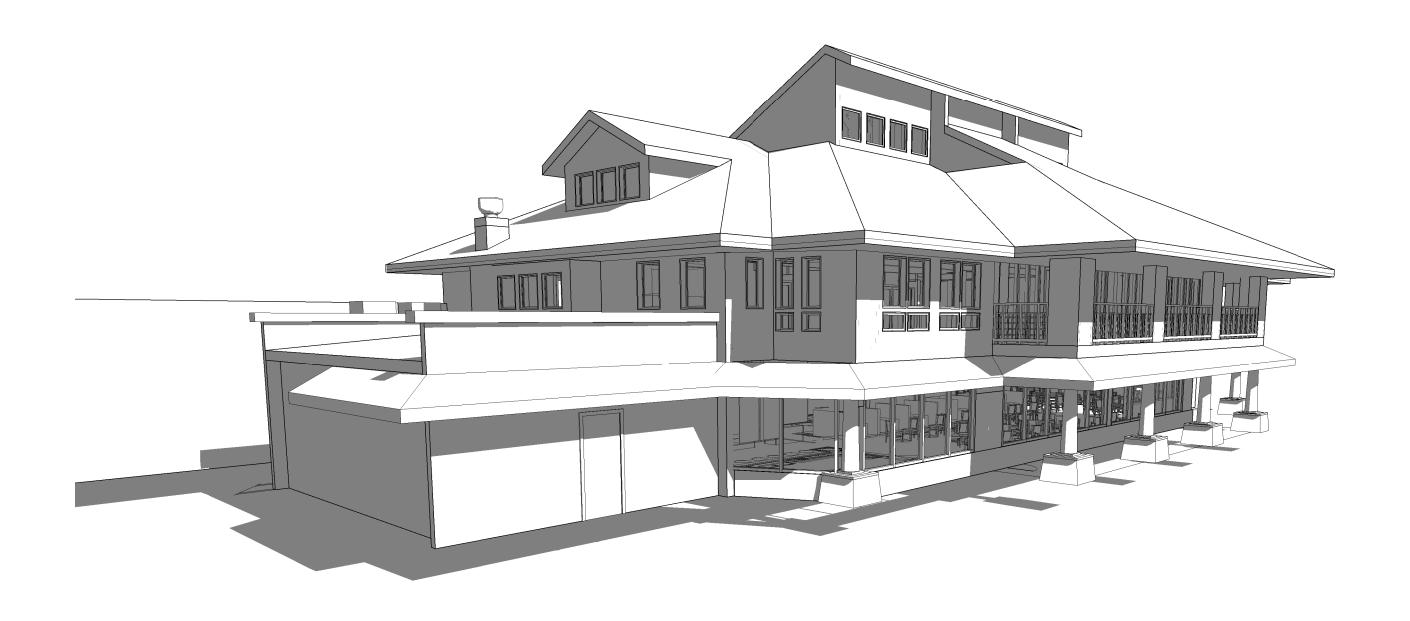






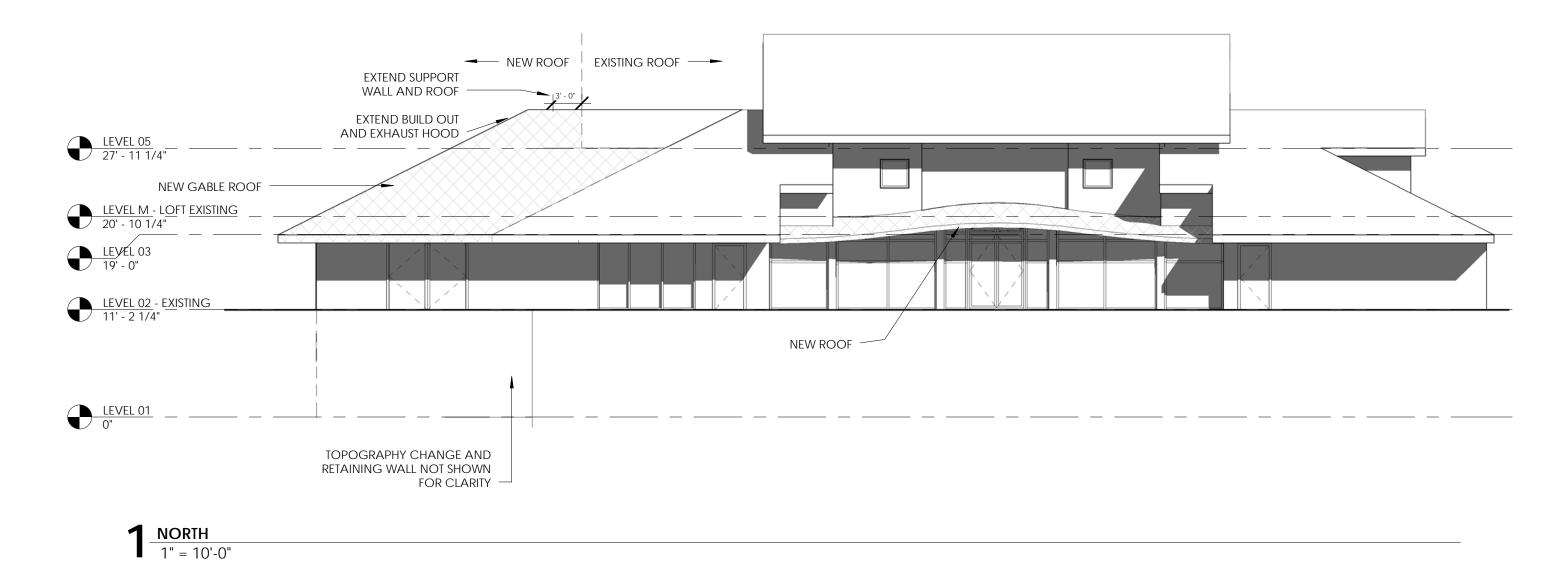
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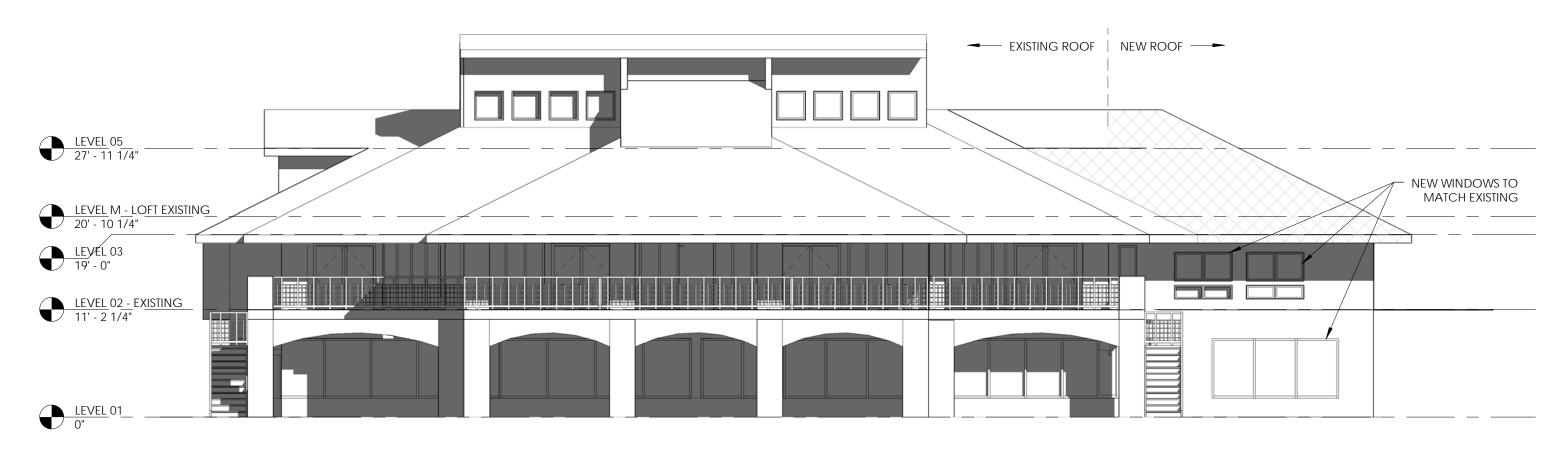




NORTH HARBOR

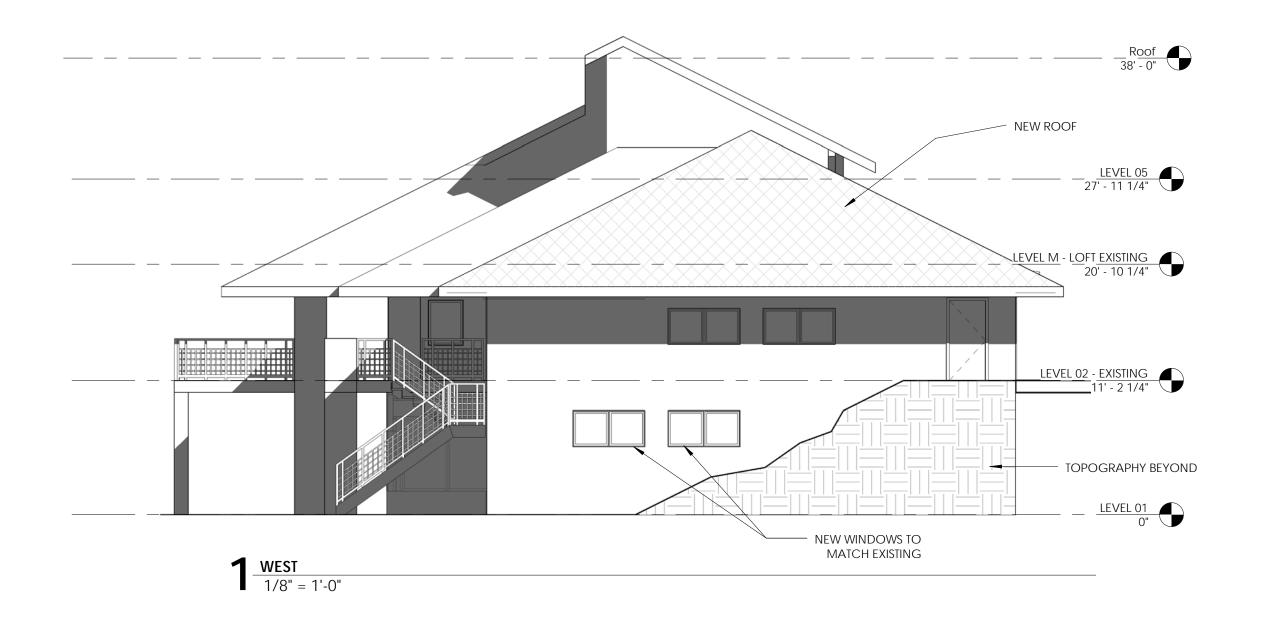




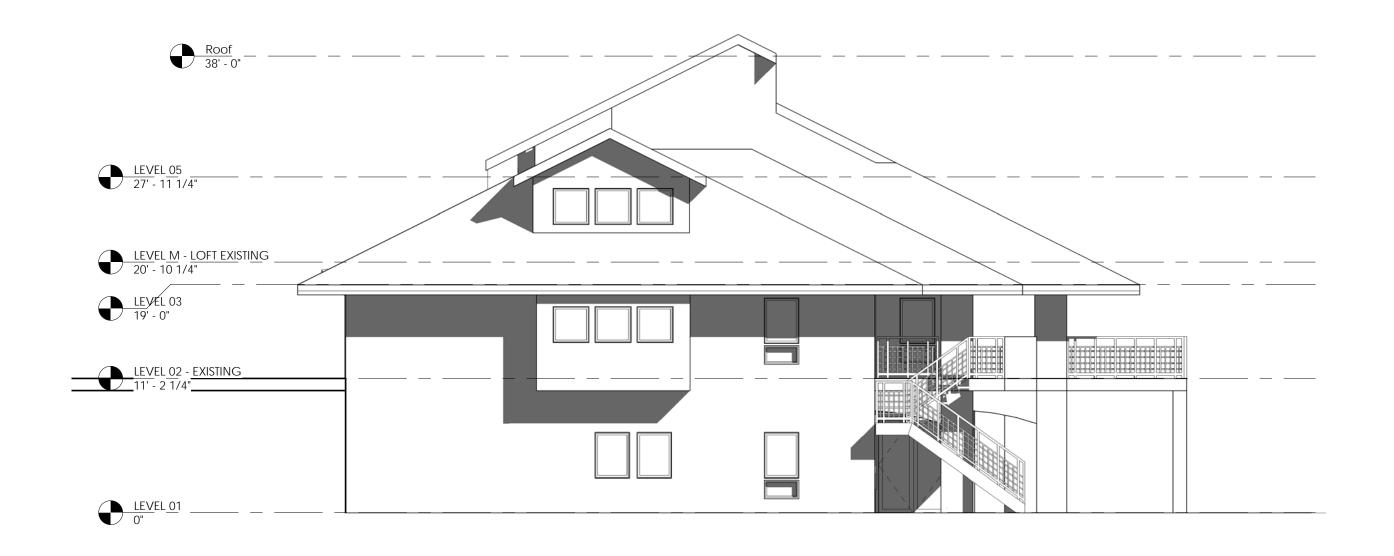


1 south 1" = 10'-0"



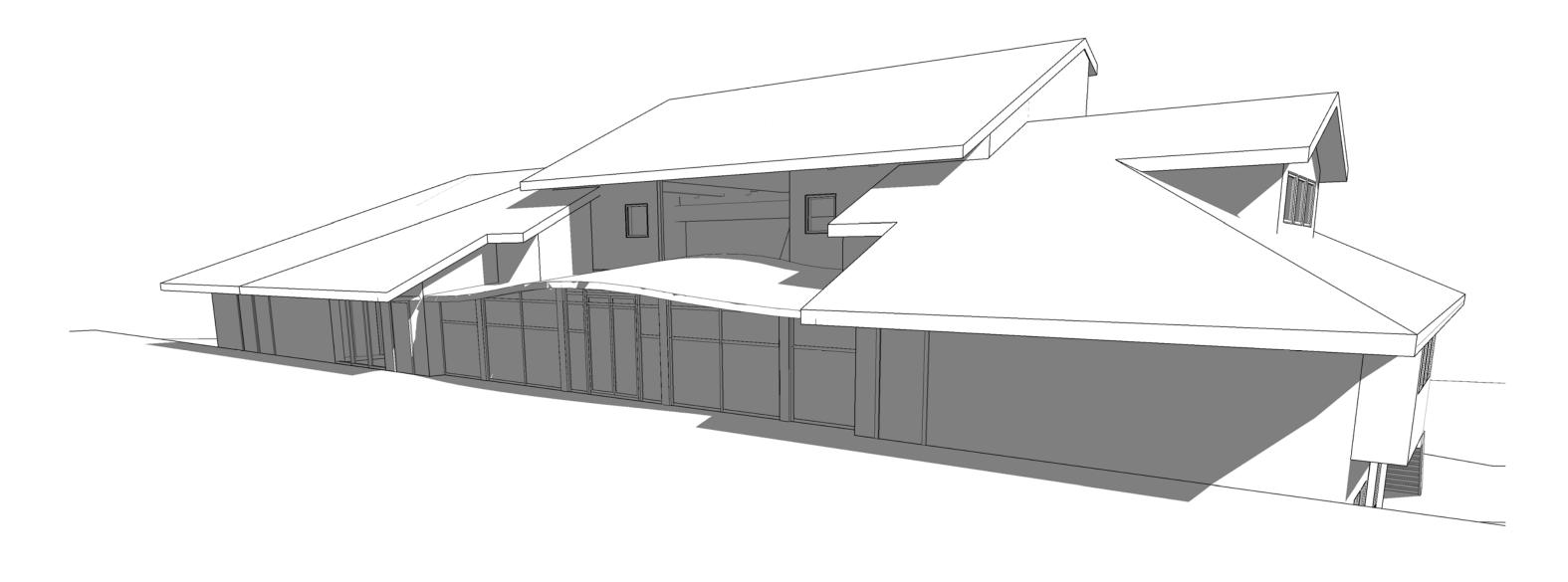




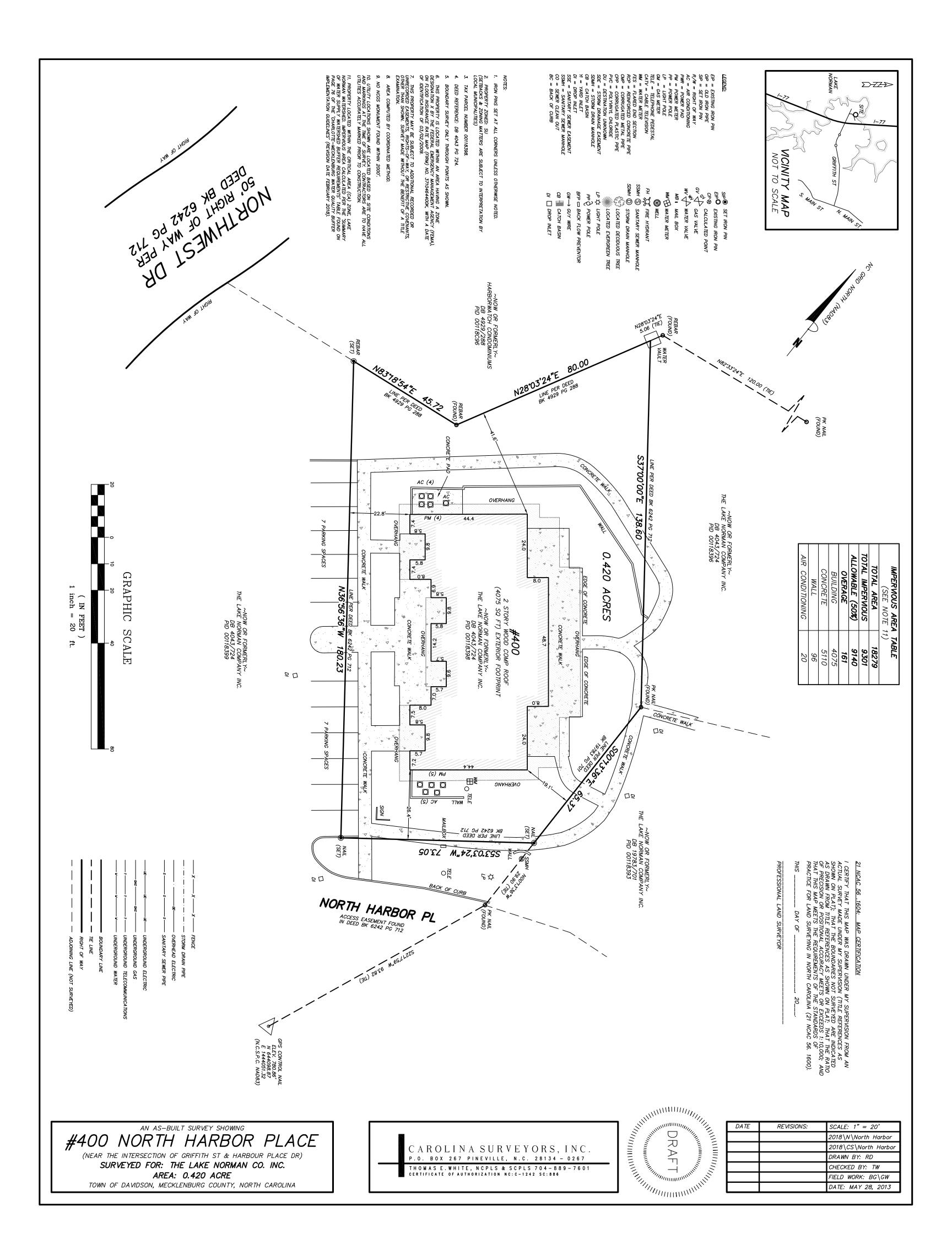


1 EAST 1/8" = 1'-0"











Agenda Joint Board of Commissioners/PBOC Work Session: Proposed Watershed

Title: Ordinance Text Amendments

Planning Board Ordinance Committee: Shawn Copeland, Ellen Donaldson

Staff: Jason Burdette, Trey Akers, Lindsay Laird

Summary: The Board of Commissioners requested a joint work session with the PBOC

to discuss the proposed watershed text amendments.

Summary:

ATTACHMENTS:

	Description	Upload Date	Type
D	Joint Work Session Summary Memo	6/1/2018	Cover Memo
D	Joint Work Session Presentation	6/1/2018	Presentation
D	Watershed Text Amendments - Staff Analysis	6/1/2018	Backup Material
D	DPO Section 17 Annotated Text	6/1/2018	Backup Material
D	FAQs [Updated]	6/1/2018	Backup Material
D	Planning Board Recomendation	6/1/2018	Backup Material
ם	Planning Board Consistency Statement + Conditions	6/1/2018	Backup Material
D	NCDEQ Preliminary Approval	6/1/2018	Backup Material



MEMO: JOINT WORK SESSION: WATERSHED ORDINANCE TEXT AMENDMENTS

Date: June 5, 2018

To: Board of Commissioners

From: Jason Burdette, Planning Director

Re: DPO Section 17 (Watershed Ordinance) - Text Amendments

1. OVERVIEW

BACKGROUND

- **Purpose:** The watershed 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.

ATTACHMENTS

- Staff Analysis: Provides an overview and brief discussion of the proposed changes.
- **Frequently Asked Questions:** A summary of questions and topics discussed. This document has been updated since the public hearing.
- **Supporting Graphics:** Illustrate existing conditions, outcomes of proposed standards, and alternative site designs for lots subject to the standards.
- Annotated Watershed Ordinance: A draft ordinance highlighting/explaining proposed changes.
- Planning Board Recommendation: The Planning Board provided a recommendation and consistency statement from their May 21 meeting.

2. UPDATES SINCE 5/8/18

The Planning Board Ordinance Committee has been working on a revised set of standards since the 5/8/2018 public hearing. The proposed revisions are summarized below:

17.6.1 EXPANSIONS TO EXISTING DEVELOPMENT

Phased Transition, Single-Family Expansions: Lots where a pre-1993 single-family residence is the principal use shall not be required to meet the built-upon area expansion requirements until July 1, 2025; however, these expansions must meet the applicable buffer and enhanced stormwater requirements – as will all other lot types exceeding 24% built-upon area.

17.6.2 EXPANSIONS TO EXISTING DEVELOPMENT

■ Phased Transition, Pre-1993 Single-Family Lots: Until July 1, 2025 a lot of record may be developed or used for single-family residential purposes subject to applicable buffer requirements, the enhanced stormwater strategies described in 17.6.1, and a maximum built-upon area of 34 percent. This allocates these properties an additional 10% built-upon area — the equivalent of a minor variance. The transition period allows landowners time to plan and make decisions about their property without the immediacy of a sunset date closing in soon.

3. RELATED TOWN GOALS

The primary goal is to <u>protect water quality</u>. This is a stated goal in the town's core values and in the comprehensive plan. Ancillary impacts of adopting the watershed text amendments touch on a number of items identified in the strategic plan.

STRATEGIC PLAN ALIGNMENT

- Land Use Strategy: The proposed standards will help align land use policies to manage residential growth, reduce the scale of future development, and enhance downtown.
- Community Engagement Strategy: Since January 2018 the amendments have been discussed monthly/bi-monthly at Planning Board and Board of Commissioners meetings, with the Planning Board Ordinance Committee hosting additional meetings including an open house to meet with citizens directly. Multiple digital and print notifications have also been provided.
- **Historic Preservation Strategy:** The standards allow for the preservation of existing homes through expansion incentives, which are balanced with rainwater management strategies.
- Affordable Housing Strategy: The standards allow for projects meeting an identified housing need (i.e. less than 120% Area Median Income) to pursue special approval for additional land coverage, if needed. All rainwater management requirements must still be met. Additionally, the standards allow an array of rainwater management tools rather than a one-size-fits-all approach, which has complicated recent affordable housing efforts.
- Economic Development Strategy: The standards afford flexibility in areas prioritized by the Comprehensive Plan for investment (discussed in the Comprehensive Plan sub-section below).
- Partnerships: The formation of the Planning Board Ordinance Committee (PBOC) has been critical to these amendment's development. Additionally, staff repeatedly engaged Mecklenburg County and the NC Dept. of Environmental Quality to provide insight into and feedback concerning the standards.

CORE VALUES

- Open Communication: The PBOC has played an instrumental role in reviewing/revising standards and engaging citizens. In fact, most changes made since January 2018 are a result of citizen feedback. Feedback has been solicited through consistent, direct engagement with the Board of Commissioners, Planning Board, county/state agencies, and citizens. A variety of means, meeting formats, and engagement strategies ranging from digital/print announcements, public meetings, meetings with citizens/landowners, and an open house have been used to engage landowners in the watershed.
- **Historic Mix of People:** The expansion provisions for single-family lots give long-standing owners a viable option to remain in their house and modify it if desired.
- **Economic Health:** The standards afford flexibility in areas cited by the Comprehensive Plan as important locations for new business opportunities both downtown and elsewhere.

- **Healthy Environment:** The standards help to protect the Lake Norman watershed by limiting the amount of built-upon-area (BUA) on a site and maintaining buffers around the lake and streams. The proposed changes ensure these standards are applied consistently throughout the watershed.
- Interjurisdictional Cooperation: The proposed amendments are the result of collaboration amongst town, county, and state officials and are in accordance with federal laws intended to protect drinking water supplies (i.e. the Safe Drinking Water Act, as amended).

COMPREHENSIVE PLAN

- Enable Faithful Stewardship, Goal 3 Sustain/Enhance Air & Water Quality: This goal recommends working with Mecklenburg County on regulations for water quality/conservation measures. It also states that residents could positively impact the environment by adapting their properties to implement water saving practices, such as those included in the proposed amendments (i.e. rain gardens, rain barrels/downspout modification, French drains). It lists the following as on-going initiatives to pursue: Protect ground/surface water; encourage rainwater capture/reuse in all new development; and, mitigate sources of groundwater contamination.
- Maintain Quality Design/Sound Planning Goal 1 Prioritize Infill/Mixed Use Development Within or Near Already Developed Areas: This goal recommends facilitating reinvestment in the Village Center Planning Area (i.e. downtown). The proposed standards allow flexibility on the downtown block bounded by Main, Jackson, and Depot Streets and appropriately accommodate redevelopment on adjacent blocks (i.e. the Depot building and Sadler Square) by requiring engineered stormwater controls if these blocks redevelop beyond 24% BUA.

CONSTIUENTS SERVED

- All Citizens: Residents across town are impacted by the water quality of Lake Norman, which serves as a drinking water supply for the region. This applies to businesses, too, that depend on clean water for their operations.
- Non-Residential Landowners/Businesses: The proposed standards treat their expansion options consistently with other lots types and also remove barriers to investment in areas identified by the Comprehensive Plan.
- Residential Landowners: The proposed standards treat residential lots more consistently compared to the current standards, which exempt select lots based on their pre-1993 existence while holding newer lots or older lots that were subdivided to different standards. The standards also afford expansion options for long-standing owners that desire to remain in their house. Generally, the proposed standards give the expansion/preservation option greater viability compared to redevelopment (i.e. demolition) when compared to the current standards.
- Administration/Government: The proposed amendments increase administrative clarity, including
 application of standards and processes, compared to the current standards. This benefits
 landowners, too, who will have a better idea of steps needed to obtain approval.

4. OPTIONS/PROS & CONS

OPTIONS

The PBOC reviewed various options for several of the major amendments topics, two of which are summarized in the Staff Analysis (17.6.2 Existing Lots of Record/Exemptions; 17.8 Built-Upon Area Averaging). In each case the PBOC was able to reach a consensus about the best way forward. Overall, the proposed amendments as listed in the draft ordinance reflect the PBOC's recommendations for the Watershed Ordinance revisions.

PROS & CONS

PROS:

- Environmental Regulations: Up-to-Date, Effectively/Fairly Applied
 - » The amendments will bring the watershed ordinance up to date, significant portions of which haven't changed since the 1990s.
 - » The amendments will treat landowners more consistently across and within lots types (i.e. residential, non-residential).
- Exemptions Removed: Expansions & Demolitions Avoiding BUA Criteria
 - » The amendments address a long-standing disparity in the current standards that allows some older properties to exceed 24% BUA while holding new lots and older lots that have been subdivided to the 24% BUA limit. The standards propose holding all residential lots to 24%.
- Measured Flexibility Downtown: Village Center + Village Commerce
 - » The standards afford flexibility in areas prioritized by the Comprehensive Plan for investment.
- Increased Administrative Clarity: Improve Consistency, Reduce Landowner Frustration
 - » The reorganization of sections and clarifications of process will lead to clearer criteria and more consistent treatment of properties.
- Maintains Landowner Stability/Existing Character: Affirms/Clarifies Options of Long-standing Owners and Supports Existing Development's Character
 - » The proposed standards give the expansion/preservation option greater viability compared to redevelopment (i.e. demolition) when compared to the current standards.
 - » The proposed amendments indirectly reinforce the scale and character of existing streets throughout the watershed, which the current standards/exemptions do not.

CONS:

- Inaction: Persistence of Exemptions/Regulatory Disparity for Decades
 - » With recent development pressures and the conversion of entire sections of streets into new housing, the enduring disparity in treatment of older vs. newer lots has become more pronounced. That these disparities would continue if adequate measures are not adopted is important to consider.
- Additional Design: Post-1993 Lots Require Focused Design
 - » The proposed amendments will treat lots more consistently. For currently unrestricted older residential lots, this means being held to the same standards as newer lots or older lots that subdivide (i.e. 24%). In these cases, thorough site design becomes especially important as site features included in conventional building (driveway, walkway, house, patio, etc.) may need to be carefully evaluated and designed to meet the buffer and BUA standards. The supporting illustrations of case studies show viable, realistic scenarios in which comparable levels of site and housing design can be achieved.

5. FYI/RECOMMENDED ACTION

Provide feedback on proposed watershed text amendments.

6. NEXT STEPS

- June 5, 2018: Joint work session with Board of Commissioners and PBOC.
- **June 12, 2018:** The Commissioners will hear/review the Planning Board's recommendation and may take action on the proposed amendments.

DPO 17 UPDATE: WATERSHED ORDINANCE



TEXT AMENDMENTS – OVERVIEW

TOPICS COVERED

- 1. Purpose & Background
- 2. What's Not Changing
- 3. Public Engagement
- 4. Strategic Plan/Core Value/Comp. Plan Alignment
- 5. Amendment Highlights, Major Topics/Resolutions
- 6. Options Summary
- 7. What's Changing/Details
- 8. Pros & Cons
- 9. Outstanding Questions
- 10. Where We've Been & Next Steps



PURPOSE

- Intent: To keep drinking water clean, require higher standards for properties near Lake Norman (17.7.1).
- Accomplished By:
 - 1. Vegetated Buffers On-Site (near streams/lake)
 - 2. Limiting Amount of Built-Upon Area [BUA] on a Lot
 - BUA = Hardscape (i.e. driveways, building footprint; not fences, decks)
- Addresses: Runoff carrying pollutants into water.
- Applies: To properties within 0.5 mi. of Lake Norman (i.e. west of Main St.)



BACKGROUND

In March 2017, Charlotte-Mecklenburg Stormwater Services (CMSS) suggested that Davidson update our Watershed Ordinance to:

- 1. Clarify Standards (i.e. Single family residential development exemption)
- 2. Address Inconsistencies (i.e. Remove repeating "Existing Development" section)
- 3. Remove Inapplicable Sections (i.e. Cluster Developments)

Additionally, staff worked with CMSS to identify/resolve Davidson-specific issues, including:

- Expansions that exceeded the BUA criteria;
- Demolitions that avoided the BUA criteria; and,
- Tailoring standards to fit downtown.



WHAT'S NOT CHANGING

- Environmental Rigor: Emphasis on Clean Drinking Water
- Maximum BUA Limits: Thresholds + Requirements = Same for Post-1993 Lots
 - Low-Density: 24% BUA + Buffer
 - High-Density: 50% BUA + Stormwater Controls + Buffer
- Buffer Requirements: Distance from Lake/Perennial Stream
 - Low-Density: 40'
 - High-Density: 100'

*Note: Terms such as low- and high-density are retained for consistency with Meck. County and state statute. The BUA density terms describe land coverage and stormwater controls; they do not describe units/acre.



PUBLIC ENGAGEMENT / SINCE JAN. 2018

Planning Board Ordinance Committee:

- Sub-set of Planning Board, Citizen Volunteers
- Review/Draft Amendments; Facilitate Citizen Meetings
- Bi-Weekly Meetings, Citizen Meetings, Public Meetings after Planning Board
- Open House: Presentation, Extended Q&A
- Planning Board: Discussed at 2018 Meetings January, February, March, April
- Board of Commissioners: Discussed at 2018 Meetings January, February, April
- Citizen Meetings: February, March, April, May
- Digital + Print Media:
 - E-Crier Notifications: Monthly, Open House (Specific)
 - Website: Updates Tab
 - Planning Board/Board of Commissioner Agendas
 - Town Messenger Newsletter (All Households)



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

POLICY ALIGNMENT

Strategic Plan:

Primary: Land Use, Community Engagement; Secondary: Historic Preservation,
 Affordable Housing, Economic Development, Partnerships

Core Values:

 Healthy Environment, Open Communication, Historic Mix of People, Traditional Character, Economic Health, Interjurisdictional Cooperation

Comprehensive Plan:

- Enable Faithful Stewardship
 - » Goal 3 Sustain/Enhance Air & Water Quality
- Maintain Quality Design/Sound Planning Principles
 - » Goal 1 Prioritize Infill/Mixed Use Development Within or Near Already Developed Areas
- Encourage Committed Civic Involvement & Responsibility
 - » Goal 2 Sustain + Promote More Resident Volunteerism/Involvement



AMENDMENT HIGHLIGHTS

SUMMARY OF PROPOSED SUBSTANTIVE CHANGES:

- Section 17.3: Definitions
 - Existing Development; Redevelopment; Variances
- Section 17.6: Exceptions to Applicability
 - Expansions; Existing Lots of Record; Redevelopment
- Section 17.8: Built-Upon Area Averaging (i.e. "Density Averaging")
 - Reorganization, Increase BOA Direction to Deny; Signal Preferred Proposals

*Note: These highlight substantive changes to DPO Section 17. Additional changes are being proposed to clarify definitions, standards, and address inconsistencies; these are detailed in the Board of Commissioners and Planning Board agendas.



MAJOR TOPICS + RESOLUTIONS

TOPIC

- Definitions: Existing Development,
 Redevelopment, Variance
- Expansion/Single-Family Exempt: All
 Other Lots Limited to 24% Expansion
- Exemption/Lots of Record: No BUA
 Limit on Pre-1993 Lots (i.e. Regulatory
 Disparity)
- Built-Upon Area Measurement: Noncontiguous Ambiguity
- Built-Upon Area Averaging:
 Transactional, Little Board of Adjustment Discretion

RESOLUTION

- » Added Definitions, Tweaked/Aligned with State
- » All Lots Buffer/Enhanced Rainwater Mgt.
- » Single-Family Unlimited BUA Exemption Until 2025
- » All Single-Family Pre-1993 Lots 34% BUA Until 2025 (i.e. Undeveloped <u>and</u> Developed)
- » Properties Must be Contiguous, Adjoining, Adjacent for BUA Calculation
- » Increase Board of Adjustment Discretion
- » DPO Signals Preferred Projects



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

OPTIONS SUMMARY

Built-Upon Area Averaging ("Density" Averaging):

- A. Do Not Modify
- B. Require Board of Commissioners Decision
- C. Enhance Board of Adjustment Discretion
- D. Signal Preferred Projects in DPO Text
- E. Remove from the Ordinance
 - *PBOC Recommendation: Options C + D Address Need for Increased Oversight

Exemptions (Existing Lots of Record):

- A. Retain Exemption
- B. Remove Exemption/Include Sunset Clause
- C. Remove Exemption (Equalizes All Lots 24% Now)
- D. Modify Exemption (Tenure, 34% BUA Until 2025/Equalizes All Lots 24% 2025)
 - *PBOC Recommendation: Option D Addresses Citizen Concerns



OPTIONS SUMMARY

No Action:

- **A. General Comment:** Persistent errors, inconsistencies, and inapplicable sections *not* addressed
- **B.** Expansions/Single-Family Exempt: Exemption for expansions to pre-1993 single-family homes remains; All other lots limited to 24% expansion + buffers
- **C.** Exemption/Lots of Record: No BUA limit or buffer requirements on pre-1993 lots for single-family development
- D. Redevelopment: Not addressed
- E. Built-Upon Area Measurement: Non-contiguous ambiguity remains
- **F. Built-Upon Area Averaging:** Permitted without increased scope of the Board of Adjustment; Transactional



OPTIONS SUMMARY

- Mecklenburg County Action Only:
 - **A. General Comment:** Persistent errors, inconsistencies, and inapplicable sections addressed *somewhat*
 - **B. Expansions/Single-Family Exempt**: Expansions to pre-1993 single-family homes must meet the requirements of the ordinance; 24% expansion + buffers
 - C. Exemption/Lots of Record: No BUA limit or buffer requirements on undeveloped pre-1993 lots for single-family development; Exemption does not apply to a pre-1993 lot on which a structure has been demolished
 - **D. Redevelopment:** Defined; Flexibility in meeting watershed requirements for targeted area (i.e. Village Commerce and Village Center Planning Areas)
 - E. Built-Upon Area Measurement: Non-contiguous ambiguity remains
 - **F. Built-Upon Area Averaging:** Permitted without increased scope of the Board of Adjustment; Transactional



OPTIONS SUMMARY

Full Adoption of Proposed Amendments:

- **A. General Comment:** Persistent errors, inconsistencies, and inapplicable sections addressed *completely*
- **B. Expansions/Single-Family Exempt**: [COMPROMISE] Expansions to pre-1993 single-family homes exempt from BUA requirements until 2025; buffers + enhanced rainwater strategies required
- **C. Exemption/Lots of Record:** [COMPROMISE] For single-family development, pre-1993 lots (undeveloped AND developed) may go to 34% + buffers + enhanced rainwater strategies until 2025
- **D. Redevelopment:** Defined; Flexibility in meeting watershed requirements for targeted area (i.e. Village Commerce and Village Center Planning Areas)
- **E. Built-Upon Area Measurement:** Properties must be contiguous, adjoining, or adjacent for BUA calculation
- **F. Built-Upon Area Averaging:** Permitted with increased scope of the Board of Adjustment and preferred projects listed



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

RULES NOW / WHAT'S CHANGING - FULL ADOPTION

CURRENT

- Expansion Non-Residential/Non-Single
 Family Residential: No Rainwater
 Management
- Expansion Single-Family Exempt: No BUA Expansion Limit; No Buffer or Enhanced Rainwater Mgt.
- Single-Family Lot of Record: No Buffer or BUA Limit on Pre-1993 Lots
- Single-Family Not Lot of Record: 24%
 BUA Limit on Post-1993; Buffer Required

PROPOSED

- » Enhanced Rainwater Management for Low-Density
- » Single-Family BUA Exemption Until 2025; Afterwards 24% BUA Expansion Max.
- » Buffer/Enhanced Rainwater Mgt.
- » All Single-Family Lots of Record 34% BUA Until 2025 (i.e. Undev. & Developed); Minor Variance Equivalent
- » After 2025 <u>All</u> Single-Family Lots 24% BUA Max.
- » All Lots Buffer/Enhanced Rainwater Mgt. if Over 24% BUA



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

PROS & CONS

PROS:

- Environmental Regulations: Up-to-Date, Effectively/Fairly Applied
- Exemptions Modified: Expansions & Demolitions Avoiding BUA Criteria
- Measured Flexibility Downtown: Village Center + Village Commerce
- Increased Administrative Clarity: Improve Consistency, Reduce Frustration
- Maintains Stability: Affirms/Clarifies Options of Long-standing Owners and Supports Existing Development's Character

CONS:

- Inaction: Persistence of Exemptions/Regulatory Disparity for Decades
- Additional Design: Post-1993 Lots Require Focused Design



OUTSTANDING QUESTIONS

 Different Circumstances: Why does the DPO differentiate between Existing Lots of Record and Existing Development (expansions vs. demolitions)?
 Response: These are different conditions. The proposed standards – based on citizen/PB/BOC input – recommend treating landowners equally for each condition, removing the regulatory disparity that currently exists.

EXISTING DISPARITIES				
	Pre-1993 Structure	Post-1993 Structure	Pre-1993 Lot	Post-1993 Lot
Existing Development (Expansions)	46%	24%	N/A	N/A
Demolition + Rebuild	N/A	N/A	34%	24%



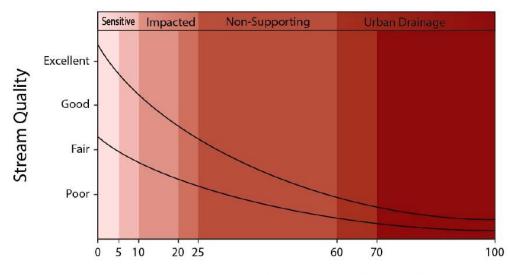
OUTSTANDING QUESTIONS

Equal Treatment at 34%: Can every lot (both existing lots of record and lots created after 1993) be held to a 34% BUA limit?
Response: The 24% limit is set by state law; the recommended changes propose a temp. transition period to 2025 that expands exemptions in order to allow landowners time to plan. In 2025, all lots would be treated equally (i.e. 24% BUA).



OUTSTANDING QUESTIONS

Environmental Data: Is there information to support a 24% BUA limit? Response: According to NOAA, sensitive waters such as streams can be impacted by as little as 5-10% impervious surface area, with greater impairments expected when rates exceed 20-25%.







Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

OUTSTANDING QUESTIONS

- Wet Detention Pond: Why is the reference to a wet detention pond as the primary stormwater treatment facility being removed from the ordinance?
 Response: NCDEQ proposes to revise the mandatory wet detention pond requirement to allow for different approaches (i.e. referencing the Meck. County Stormwater Manual that lists a variety of treatment strategies rather than prescribing one that may not fit a site's context).
- Shared BMPs: Can individual property owners with existing single-family residences join together to pay for engineered stormwater?
 Response: Meck. County has not heretofore allowed such an arrangement. This approach is difficult for many reasons, including: The acquisition of land by participating landowners and formation of a legal entity to manage the facility; incomplete participation by all adjacent properties; the creation of easements; the physical installation of facilities (including grading within space constraints and the high cost of construction); associated/on-going maintenance to ensure performance; and, eventual facility replacement (est. every 20 years).



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018

WHERE WE'VE BEEN & NEXT STEPS

■ **BOC Public Hearing:** 5/8/18

Planning Board Review + Recommendation: 5/21/18

■ Board of Commissioners Joint Work Session: 6/5/18

■ **BOC Action (Potential)**: 6/12/18



QUESTIONS



Board of Commissioners & PBOC Work Session Section 17 Watershed Protection Overlay District Planning Ordinance - Text Amendments June 5, 2018



STAFF ANALYSIS: WATERSHED ORDINANCE TEXT AMENDMENTS

Date: May 21, 2018
To: Planning Board

From: Jason Burdette, Planning Director

Re: Davidson Planning Ordinance Section 17 (Watershed Ordinance) - Text Amendments

Note: The following summary reviews the purpose and history of the proposed changes; highlights substantive changes; and, includes discussion topics related to Davidson Planning Ordinance (DPO) Section 17. Proposed changes are annotated in the draft DPO accompanying these materials.

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. PROPOSED CHANGES

SECTION 17.3: DEFINITIONS

- Remove "Cluster Development" Definition: Cluster Developments aren't an allowed development type in Davidson.
- Add "Expansion" Definition (not previously defined): The definition is needed so that a building can't be taken down to all but its foundation or a single wall and then claimed as an expansion, which in some cases affords more BUA to be put on a site compared to a demolition.
- Add "Existing Development" and "Redevelopment" Definitions: Both definitions do not currently exist and were added per Meck. County recommendation.
- Revise "Low-Density" and "High-Density" Definitions: 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.

■ Revise "Variance" Definitions: Made sure that same language is used in each and clarified that variances are from "Town" standards, which are stricter than state standards in some instances. Additionally, the definitions were revised to match the Environmental Management Commission's (EMC) definitions. 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).

SECTION 17.6.4 EXISTING DEVELOPMENT

• Remove Section: This is a repeat of Section 17.6.1.

SECTION 17.6.1: EXPANSIONS TO EXISTING DEVELOPMENT

- **Shift Non-Conformities Statement:** This statement was moved to the start of 17.6 since it applies to the entire section rather than just 17.6.1-2.
- Include Single-Family Residential in Expansion Standards, Effective 2025: Currently non-single family residential buildings are held to the expansion standards, while existing single-family residences are not. The proposed amendments will include single-family residential buildings in these standards beginning in 2025, which means expansions to these structures may extend 24% beyond the existing development footprint.
- Enhanced Stormwater Practices for Expansions: Expansions result in the preservation of existing buildings, a supported policy aim. Their BUA is also treated differently expansions get 24% BUA beyond the current pre-1993 structure, meaning they may put more than 24% BUA on a site. Currently, they don't have to treat any of the existing or extra BUA. So, to account for this extra BUA and achieve the ordinance's environmental aims, text requiring the inclusion of a vegetated swale, french drain, etc. on site has been included. This will help treat stormwater runoff for low-density expansions where it's currently not required, while still fostering preservation. It also provides owners that wish to remain on their lot a viable way to do so rather than having to pursue demolition or sale/demolition.

SECTION 17.6.2: LOTS OF RECORD

- Initially Modify, then Remove Exemptions:
 - Currently a regulatory disparity exists between residential lots within the watershed some lots that redevelop as low density are held to the 24% BUA limit (i.e. newer lots or older lots that are subdivided) and others are not (properties whose lot lines have not changed since 1993); this disparity has existed for 25 years. The options weighed by the PBOC included:
 - A. Retain Exemption: Continue to allow some older properties to exceed 24% BUA, holding new lots and older lots that have been subdivided to the 24% BUA limit;
 - B. Remove Exemption/Include Sunset Clause: Allow the exemption to continue for a certain period of time, then remove the exemption.
 - C. Remove Exemption: Remove the exemption, holding all residential lots that choose to demolish a structure and/or construct a new house to the same 24% BUA max. standard.
 - D. Modify Exemption: Revise text to create transition period that allows lots of record up to 34% built-upon area until 2025, after which time these lots become subject to the 24% maximum built-upon area to which post-1993 lots are currently held.
 - The PBOC explored a number of ways to continue or modify the current exemptions, balancing the exemptions with feedback received from the Board of Commissioners, Planning Board, and citizens that the proposed amendments should seek to treat landowners consistently. The PBOC drafted language that would have exempted select lots based on long-standing ownership (i.e. "grandfathering"). This seemed to be a promising alternative;

- however, NC case law clearly indicates that such a practice would be difficult to defend legally because it treats landowners differently based on tenure. Likewise, various sunset measures were considered such as exemption removal 6-12 months after ordinance adoption, or requiring landowners to apply for a specific exemption period after ordinance adoption but were determined to work against the standards' purpose by inciting building in excess of 24% on remaining lots or treating landowners differently.
- After further exploring lots and performing case studies, the idea of creating a transitional period allowing exemption up to 34% was conceived. This would allow pre-1993 lots that are both undeveloped and already developed to expand up to 34% built-upon area until 2025 the maximum amount of built-upon area attained through a minor variance. After 2025 these lots would be subject to the same standards as pre-1993 lots 24% maximum built-upon area. The transition period affords landowners additional time to plan for and make decisions on their lots while ultimately recognizing the importance of treating all similar lot types the same (i.e. in 2025). Couple with all residential lots meeting the buffer and rainwater management strategies, it represents an incremental approach to achieving regulatory aims and parity.
- Therefore, the proposed standards reflect Option D and would allow all residential lots of record redeveloping via the low density option to go up to a 34% BUA limit. Note: Landowners unable to find a suitable site layout may pursue a major variance for more than 34% BUA coverage. Post-1993 lots would still be held to 24% BUA.

SECTION 17.6.3: NONCONFORMING SITUATIONS

- Remove Nonconforming Section: This section was removed because it conflicted with DPO 12 Nonconformities; referencing only one set of standards is important in providing clear guidance. Additionally, a statement noting that nonconformities are dealt with in DPO 12 was included at the start of 17.6.1.
- Include Redevelopment Section: This section was added based on feedback from Meck. County and land owners in the Village Center/Village Commerce Planning Areas. The proposed standards allow flexibility on the downtown block bounded by Main, Jackson, and Depot Streets if redevelopment results in no net increase in BUA or the disturbed area is less than one acre; and, the standards appropriately accommodate redevelopment on adjacent blocks (i.e. the Depot building and Sadler Square) by requiring engineered stormwater controls if these blocks pursue redevelopment beyond 24% BUA.

SECTION 17.7 WATERSHED SUBAREAS ESTABLISHED

• **Update Geographic Terms:** This proposed text clarifies that there is no Lake Norman Protected Area located within the jurisdiction of the Town of Davidson.

SECTION 17.7.1 CRITICAL AREA (CA)

 Update Intent: The proposed text clarifies the intent of the Watershed Ordinance standards and removes the maximum of two dwelling units per acre rule because the standards do not differentiate residential development from other development types in regards to maximum BUA requirements.

SECTION 17.7.1.1 ALLOWED USES

• **Revise Subsection C:** Language referencing specific residential uses was removed. Specific residential uses permitted in the watershed are outlined in Section 2 of the planning ordinance.

SECTION 17.7.1.2 BUILT-UPON AREA LIMITS:

- Remove Dwelling Unit Text, Clarify "Low-Density" & "High-Density" Terms: Language related to a maximum of two dwelling units per acre rule was removed because the standards are not based on use but land coverage. Similarly, a sentence was added clarifies that these terms refer to the amount of hardscape on a site (i.e. land coverage) and not units/acre.
- Include Contiguous Tract Requirement: The proposed text includes specific language ensuring that only contiguous parcels that are part of the same plan can be used in determining BUA. 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.
- Add Reserve BUA Criteria: Meck. County requested adding a 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. patio construction).

SECTION 17.7.2 CLUSTER DEVELOPMENT

• Remove Section: These aren't an allowed development type in Davidson.

SECTION 17.7.3 HIGH-DENSITY OPTION

- **Update Geographic Terms:** This proposed text clarifies that there is no Lake Norman Protected Area located within the jurisdiction of the Town of Davidson (17.7.3.A).
- Engineered Stormwater/Single-Family Lots: Language was added to clarify Meck. County does not allow these property types to install stormwater facilities for credit towards the BUA requirements because they would require legal agreements with Meck. County for their design, operations, inspections and maintenance. Also, for individual homeowners they are expensive to construct and maintain (17.7.3.A.1).
- Bond/Security Standard: This text was added to reference existing Town of Davidson requirements, ensuring that the bond fees paid are consistent with established processes (17.7.3.D).
- Stormwater Control Structure Specification: The text was modified to reference the Meck. County's Stormwater Design Manual, which includes an array of stormwater control devices including but not limited to wet detention ponds. The current language is limiting because it recognizes only one control structure whereas, in practice, multiple approaches can be/are used on the same site (i.e. a wet detention pond, a sand filter, drainage swale) as part of a complete treatment system. The language allows flexibility in what devices are selected to meet the required treatment criteria (17.7.3.H).
- Remove Incorrect References: Incorrect ordinance references/citations throughout 17.7.3 High Density Option were removed.

SECTION 17.7.4 BUFFER AREAS REQUIRED

Update Measurement Techniques/Management Requirements: This language was revised per Meck. County's recommendation to clarify how buffers are measured and what actions may be undertaken within buffer areas with Planning Director approval. The new text further limits undesirable clearing of shoreline areas and requires additional approval.

SECTION 17.7.7 VARIANCES/PROCESS

Reorganized: This section was largely reorganized to provide clarification on the process for Board of Adjustment hearings for both major and minor watershed variance requests. Based on experience with recent variances, a Preparation/Content description was added to clarify the content requirements of public notification letters for Board of Adjustment hearings (17.7.7.4.a).

SECTION 17.8.1.B: BUILT-UPON AREA AVERAGING/ELIGIBILITY & USES

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 automatically 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 will be considered by the Board of Adjustment on a case by case basis (since state law allows any applicant to make a request to purse the program). Importantly, the text signals the types of proposals the Board of Adjustment would entertain; paired with the 17.8.2.B.6 revision this represents an increase in the board's oversight.
- The language also clarifies Meck. County's policy that individually-owned single-family residences are not eligible to be receiving sites due to the on-going operations, maintenance, and inspection requirements of engineered stormwater (see 17.7.3.H above for a fuller explanation).

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

- 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.
- **To Summarize 17.8.1.B & 17.8.2.B.6:** The PBOC extensively debated the merits of this program and/or how to improve it. Options considered were:
 - A. Do Not Modify: Leave unchanged within the ordinance;
 - B. Require Board of Commissioners (BOC) Approval: Shift decision-making away from BOA and give to BOC;
 - C. Enhance Board of Adjustment (BOA) Discretion: Give the BOA greater discretion in reviewing/denying proposals;
 - D. Signal Preferred Projects: Clearly identify example projects advancing clearly-identified town aims for participation in the program;
 - E. Remove from the Ordinance: Take it out/do not allow it at all.

Through the course of research and discussions with the NC Department of Environmental Quality, the PBOC learned that even if the BUAA program were removed from the Town of Davidson Watershed Ordinance, landowners would still have the option to utilize the program because it's state law – and, in doing so, they would utilize it according the state's parameters, some of which the PBOC found inconsistent with town aims. Therefore, the PBOC opted to pursue Options C-D.

In sum, as a result of the proposed amendments:

- 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;
- 2. Based on the proposed changes, even after that initial approval the BOA's discretion to deny the proposal has been expanded; and

3. The following uses are considered preferred candidates 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 will be considered by the Board of Adjustment on a case by case basis (this is both practical – in the event an unforeseen but exceptional project emerges – and legally-advisable, since state law does not restrict potential applicants).

CHAPTER 17: Watershed Protection Overlay District - Update (May 22, 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]: All comments below are labeled NCDEQ, MC, or PBOC to identify the party responsible for each suggested revision. These abbreviations mean the following:

-NCDEQ for NC Department of Environmental Quality
 -MC for Mecklenburg County

-PBOC for Planning Board Ordinance Committee

Comments summarize the reason for each proposed change.

Commented [LL2]: [PBOC] 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. For the purpose of the watershed ordinance, any expansion shall be required to have preserved at least 50% of the interior heated floor area.

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 written 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 new 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.

Commented [LL3]: [PBOC] This definition was added to help distinguish between what constitutes an expansion and a demolition.

Commented [LL4]: [MC] Existing Development was not previously defined in Section 17 of the ordinance, but the term is referenced several times in this section.

The proposed definition is taken directly from state statute (G.S. 15A NCAC 02B .0202) $\,$

Commented [LL5]: [NCDEQ] 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.

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.

Low Density Option: Any new 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;
- 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 builtupon 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.

Commented [LL6]: [NCDEQ] see comment for High Density Option definition.

Commented [LL7]: [MC] Redevelopment is not defined in the current ordinance.

County's initially suggest text is as follows:

"Redevelopment: Rebuilding activities on lands containing built upon area as of the effective date of this ordinance."

Commented [LL8]: [NCDEQ] 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)

Commented [LL9]: [PBOC] "Town's" was added to clarify that a variance is from town standards, which are often more stringent than state standards. This change also applies to the Variance, Minor definition.

Commented [LL10]: [NCDEQ] See comment for Variance, Major

Commented [LL11]: [PBOC] 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...").

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

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.
- 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.
- 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.
- 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.

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 [LL12]: [MC] Clarifies the procedure for when the watershed boundary lies 25 feet or less from any parallel lot line.

Commented [LL13]: [MC] Clarifies the procedure for when other uncertainty exists.

Commented [LL14]: [PBOC] This statement was moved to the start of 17.6 since it applies to the entire section rather than just 17.6.1-2.

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. Lots where a single-family residence is the principal use, and the residence is defined as existing development, shall not be required to meet the built-upon area expansion requirements until July 1, 2025; however, these expansions must meet the applicable buffer and enhanced stormwater requirements. Beginning July 1, 2025 all expansions to existing development must comply with the build-upon area limits established in this section.

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).

17.6.2 Existing Lots of Record

Until July 1, 2025, an existing lot of record, regardless of whether or not a vested right has been established, may be developed or used for single-family residential purposes subject to applicable buffer requirements, the enhanced stormwater strategies described in 17.6.1, and a maximum built-upon area of 34 percent. Note: Multiple contiguous lots of record under single ownership must conform to the watershed ordinance criteria. Beginning July 1, 2025 all existing lots of record must comply with the built-upon area limits established in Section 17.7.1.2.

17.6.3 Nonconforming Situations

17.6.4 Existing Development

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:
 - 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:

Commented [LL15]: [MC] 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

Commented [LL16]: [PBOC] This language was added to extend the single-family expansion exemption from BUA limits until July 1, 2025 to provide for a transition period for home owners.

Commented [LL17]: [PBOC] This text was added so that expansions resulting 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.

Commented [LL18]: [MC] Exact suggested text from 8/22/17 is as follows:

"An existing, undeveloped lot (lot of record) as defined in this ordinance, regardless of whether or not a vested right has been established, may be developed or used for single-family residential purposes subject only to the buffer requirements and not subject to the other provisions of this ordinance. However, this exemption shall not be applicable to an existing lot of record on which a structure has been demolished, or multiple contiguous lots under single ownership developed collectively as part of the same development process."

[PBOC]

This section was modified further to allow Lots of Record being developed for single-family residential purposes (whether developed or undeveloped) to build up to 34% BUA (what would be permitted under a minor variance), subject to buffers and enhanced stormwater requirements. The PBOC proposes extending this 34% BUA allowance for Lots of Record until July 1, 2025. After this date, this exemption will expire and all lots will be subject to the same BUA limits.

Commented [LL19]: [MC] Remove-this section is not applicable and conflicts with DPO Section 12 Nonconformities

Commented [LL20]: [MC] Remove-this section is a repeat of Section 17.6.1

Commented [LL21]: [MC & PBOC] Section added based on feedback from Meck. County and land owners in the Village Center/Village Commerce Planning Areas. Davidson is unique in that much of our downtown is located within the critical watershed. The revised language was drafted in coordination with the county to allow for flexibility in

- 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.

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.

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.

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-Upon 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

Commented [LL22]: [MC] Clarifies 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).

Commented [LL23]: [MC] Clarifies the intent of the watershed regulations.

Commented [LL24]: [MC] Language referencing a max. 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.

A Reserve Built-Upon Area requirement for residential development was added to allow for homeowners to build additional BUA in the future and still be within the maximum 24% BUA (i.e. patios).

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-Upon Area: Development or redevelopment of a Detached House, Attached House, or Townhome approved after (<u>effective date of ordinance revision</u>) 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.

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:

- 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.

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

- 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.
- 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

Commented [LL25]: [PBOC] 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 [LL26]: [PBOC] This sentence clarifies that these terms refer to the amount of hardscape on a site (i.e. land coverage) and not units/acre.

Commented [LL27]: [MC] Remove—Cluster Developments have not been applied in Davidson.

Commented [LL28]: [MC] Clarifies that Davidson has no Protected Area within our jurisdiction. See comment for 17.7 for further explanation.

Commented [LL29]: [MC] The 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.

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.

- 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.

E. Default

- 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.
- 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

Commented [LL30]: [PBOC] This text was added to reference existing Town of Davidson requirements, ensuring that the bond fees paid are consistent with established processes.

Section 17.7.3.E to make necessary improvements based on an engineering estimate provided by the Town.

F. Vegetation and Grounds Management

- 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 reinspections). 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

- 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.
- Stormwater control structures shall be designed in accordance with the Charlotte-Mecklenburg BMP Design Manual.
- 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

Commented [LL31]: [MC] Section revised based on county stormwater control requirements (Charlotte-Mecklenburg BMP Design Manual).

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.

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.

- 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.

Commented [LL32]: [MC] Clarifies how buffers are measured and what actions may be undertaken within buffer areas with Planning Director approval.

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 onsite 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.

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 pursing 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-

Commented [LL33]: [PBOC] This section was largely reorganized to provide clarification on the process for Board of Adjustment hearings for both major and minor watershed variance requests.

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.** <u>Scheduling the Board of Adjustment Meeting</u>: 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. <u>Public Hearing Notification</u>: 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:
 - 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.
 - 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.
- 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:

Commented [LL34]: [PBOC] This section was added to clarify the content requirements of public notification letters for Board of Adjustment hearings

- 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
- 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;
 - 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. <u>Application Completeness Determined</u>: 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. <u>Public Hearing Notification</u>: 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.
 - 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.
- 6. 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:
 - 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.

Commented [LL35]: [PBOC] This section was added to clarify the content requirements of public notification letters for Board of Adjustment hearings

- 7. 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:
 - a. The variance application;
 - b. 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;
 - 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.

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.

- 8. 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. <u>Approval</u>: 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. <u>Denial</u>: 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 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. To be eligible to pursue the averaging process, the parent parcel must first have received approval through the required development approval process.

Eligible uses permitted to utilize this program include but are not limited to: 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 will be considered by the Board of Adjustment on a case by case basis.

Note: Individual parcels whose principal use is or will be single-family residential are not eligible to be considered as receiving parcels if the total built-upon area (BUA) would exceed 24 percent; this includes uses within the Single-Family Detached House building type. This does not apply to parcels owned and managed by non-profit entities whose mission is to provide affordable housing.

- **C. Requirements:** The following requirements must be met by all parcels:
 - 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.

Commented [LL36]: [PBOC] This entire section was reworked/reorganized to clarify the purpose, eligibility, process, and documentation requirements for Built-Upon Area Averaging.

Commented [LL37]: [PBOC] This language was added as a result of discussions with the Planning Board, PBOC, and Board of Commissioners, each of which expressed a desire to limit the types of uses that may pursue BUA averaging. The proposed eligible uses include residential uses intended to meet an identified housing need and civic/educational/institutional uses.

- 2. <u>Pre-Existing Variance</u>: No parcel for which a watershed variance has been granted, or would be required, may be included as a donating or receiving parcel.
- **3.** <u>Location</u>: 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.** <u>Transferability</u>: 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.** <u>Buffers</u>: 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. <u>Stormwater Design</u>: 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. <u>Design:</u> 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 builtupon-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. <u>Lot Identification</u>: 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. <u>Submit Application & Fee</u>: 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)
 - Approved Development Plan
 - Public Notice Materials
 - 4. <u>Application Review</u>: 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. <u>Board of Adjustment Hearing</u>: 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

Commented [LL38]: [PBOC] This text clarifies the Board of Adjustment's ability to deny a proposal based on adopted plans and policies.

requirements, and the Board of Adjustment's determination based on these resources that the proposal achieves an identified public interest.

- 7. <u>Certificate Issued</u>: 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.** <u>EPM Submission</u>: 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. <u>Plat Approval/Signature</u>: 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 Department of Environmental Quality Submission: Upon issuance of the BUA Averaging Certificate and signed plat, one copy must be sent to the NC Department of Environmental Quality (DEQ). 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.
- 11. <u>Amendment</u>: 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. <u>Town of Davidson Application</u>: 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
- 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

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);
- 3. Metes/Bounds Description: Metes/bounds description(s) of designated undisturbed natural
- **4.** <u>Designation in Perpetuity</u>: 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.

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. <u>Homeowner's Covenant Agreements</u>: A draft of revised covenant documents reflecting the additional BUA and other pertinent information for all affected parcels.
- **G.** Approved Development Plan: An approved development plan illustrating the receiving parcel's approved conceptual development. At the Planning Director's discretion, a Preliminary Sketch Plan of the donating parcel showing available details related to the parcel's existing and future conditions shall be provided.
- **H. Public Notice Materials:** If application is accepted, then the following shall be provided:
 - 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.
 - Noticing Fee: Reimbursement of fees incurred in fulfillment of statutory noticing requirements.

Commented [LL39]: [PBOC] This language was modified to clarify what documentation is required of the receiving parcel and donating parcel to constitute a complete BUA averaging application.

WATERSHED ORDINANCE TEXT AMENDMENTS

Frequently Asked Questions 5/24/18

These questions were produced by the Planning Board Ordinance Committee (PBOC), which is comprised of Planning Board members (i.e. citizens) that volunteer their time to work with staff in reviewing proposed text amendments. The information below includes responses to questions/topics frequently raised as well as general information about the watershed amendments and process. Abbreviations are used as follows: Board of Adjustment (BOA); Built-Upon Area (BUA); Davidson Planning Ordinance (DPO).

I. OVERVIEW

1. SUMMARY: What is the Watershed Ordinance?

<u>Response</u>: The Watershed Ordinance is Section 17 of the DPO. The DPO contains the rules by which development may occur in Davidson; Section 17's regulations govern parcels within town near Lake Norman. The standards apply to properties within 0.5 mi. of the lake (i.e. the "critical area"), which is generally everything west of Main Street.

2. PURPOSE: What is the purpose of the Watershed Ordinance?

<u>Response</u>: 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, residential or non-residential. The less buffers and more BUA a lot contains then the more runoff containing dirt, fertilizer, chemicals from cars, etc. washes off onto our streets and gets into the lake. The Watershed Ordinance helps to manage these issues.

3. BUILT-UPON-AREA (BUA): What is BUA?

<u>Response</u>: BUA is hardscape surfaces, like a driveway or building footprint, that generally repel, rather than absorb, rainwater. BUA does not include structures like fences or decks that have grass, mulch, or earth underneath them.

4. ORIGIN: How did we get the standards?

<u>Response</u>: The standards come from state legislation that was passed in the early 1990's. They were adopted in Davidson (and across the state) in 1993. These rules relate to the Safe Drinking Water Act passed by the federal government in the 1970's, as amended over the years. Note: The watershed's extent is defined by state law and Mecklenburg County specifically delineates the boundaries of the watershed in accordance with this statute.

5. REASONS FOR AMENDMENTS: Why is the town undertaking changes to the Watershed Ordinance?

<u>Response</u>: In March 2017 Mecklenburg County, our partner in administering the ordinance (with oversight from the NC Department of Environmental Quality), requested that

Davidson: Update/clarify standards; address persistent issues and inconsistencies; and, remove inapplicable sections.

6. PROPERTIES AFFECTED: How can I tell if my property is within the watershed?

Response: See Mecklenburg County's Polaris 3G website. Type an address into the search bar, and scroll down the left side of the page to Environmental Information – if the field next to the row saying Regulated Drinking Watershed Class says "CA" then that means the property is located within the Critical Area of the watershed and subject to the ordinance.

II. REGULATIONS

- 7. DEVELOPMENT ALLOWED: What types of development are allowed in the watershed? How does the Watershed Ordinance classify development within the watershed? <u>Response</u>: Most of the types of development allowed generally in Davidson (see specific uses and building types addressed in DPO Section 2) are also allowed in the watershed. The Watershed Ordinance classifies development within the watershed as either "Low Density" or "High Density." Importantly, these terms as used in the Watershed Ordinance
 - Density" or "High Density." Importantly, these terms as used in the Watershed Ordinance do not describe a site's building units per acre. Instead, the terms Low Density and High Density describe a site's BUA (i.e. land coverage). Our Watershed Ordinance uses these terms to align with state law.
- **8. BUA LIMITS:** What are the limits for the amount of BUA on a site? Is there an overall maximum?
 - Response: Low Density proposals can cover up to 24% of their lot with BUA; High Density proposals can cover up to 50% of their lot with BUA, but they must have engineered stormwater controls to capture and treat rainwater on-site. These are the maximum limits allowed, subject to the ability of landowners to obtain a variance (see FAQ Item 9) or to secure approval from the BOA to use Built-Upon Area Averaging (see FAQ Item 10). Note: The amendments do not propose changing the 24% and 50% thresholds.
- **9. VARIANCE:** If for some reason a landowner can't meet the maximum BUA limit, is there a process to build more BUA on a site than what is typically allowed?
 - <u>Response</u>: Yes. The landowner may pursue a variance. Variances are decided by the Board of Adjustment, a group of citizen volunteers made of Planning Board members. Specific types of variances are:
 - a. Minor: What if a landowner wants to construct a single-family detached house that exceeds the maximum BUA allowed for the low-density option (24%) What if a citizen wants to build a home that would be 28% impervious? What is the process?

 Response: Minor variances of up to 10% may be granted for low-density proposals, and up to 5% for high-density proposals. For example, if a landowner wants to construct a single-family detached house that exceeds the maximum BUA allowed for the low-density option (24%), they can apply for a variance with the BUA for permission to put up to 34% BUA on their site. For a high-density proposal, the request would be for up to 55% BUA on a site.

- **b. Major:** Major variances exceed 10% for low-density proposals and 5% for high-density proposals. For example, if a landowner wants to construct a single-family detached house that covers 35% of the lot, they follow the same process as a minor variance they apply to the Board of Adjustment (BOA). For a high-density proposal of 56% it's the same process, too; but, these proposals also require the state Department of Environmental Quality to approve the major variance.
- **10. BUILT-UPON AREA AVERAGING:** What is BUA Averaging? Will the amended version of the Watershed Ordinance continue to allow it?

Response: BUA Averaging, currently known as "Density Averaging," allows one parcel in the watershed to set aside undeveloped land in a non-revocable easement and transfer the area of this easement to another lot in the watershed, thereby increasing the amount of BUA that may be built on the receiving lot. This program is allowed by the state law. The proposed amendments continue to allow this program with two important revisions:

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. In effect, this means that such proposals must be approved twice.

Additionally, the proposed changes identify certain project types believed to be suitable for the program – those meeting a clearly identified public interest (i.e. one supported in the Comprehensive Plan/DPO). The draft language identifies the following as suitable projects: Residential proposals geared towards affordable or workforce housing; and, Civic/Institutional/Educational uses as defined by the DPO. The language would also allow the BOA to consider other types of proposals on a case by case basis.

11. NON-CONTIGUOUS PARCELS & BUILT-UPON AREA: Can parcels that are part of the same development proposal but not next to each other share the total built-upon area between parcels?

<u>Response</u>: Outside of the built-upon area averaging program described in Item 10, no: The proposed changes allow only contiguous parcels that are adjoining (share a boundary) or adjacent (share a boundary across a right-of-way/street) to be considered one project in terms of built-upon area. The proposed change addresses ambiguity in the current ordinance and is stricter than Mecklenburg County's standard.

12. EXEMPTIONS: Are there any exemptions for properties that would allow landowners to exceed the BUA limits without obtaining a variance or approval for BUA Averaging?

Response: There is currently an exemption for properties whose lot lines have not changed since 1993. The proposed amendments recommend phasing out this exemption because this allows these lots to exceed the amount of BUA criteria (24% or 50%) to which other lots are held. This is based on feedback received from the Planning Board and the Board of Commissioners, who have expressed a desire that the updated standards treat similar lots equally to the greatest extent possible. Therefore, until July 1, 2025 pre-1993

lots would be allowed to construct up to 34% built-upon area on a site – the same amount

permitted as a minor variance. After 2025, all lots pursuing the low-density option would be held to 24% built-upon area.

For further context: Currently a regulatory disparity exists between residential lots within the watershed – some lots that redevelop as low density are held to the 24% BUA limit and others are not; this disparity has existed for 25 years. The proposed standards would hold all residential lots redeveloping via the low density option to a 24% BUA limit starting in 2025, equalizing the treatment of all residential lots. This is an important consideration the PBOC has heard citizens, Planning Board members, and Commissioners articulate throughout the process. The PBOC drafted language that would have exempted select lots based on long-standing ownership (i.e. "grandfathering"), but this was determined not to be supported legally.

- 13. RESIDENTIAL VS. NON-RESIDENTIAL PROPERTIES: Do the proposed amendments treat residential properties differently than non-residential properties within the watershed?

 Response: Both the current and proposed amended standards apply the 24% and 50% BUA limits to all properties within the watershed regardless of whether they are residential or non-residential. The proposed amendments, however, recommend flexibility in meeting watershed requirements on the block bounded by Main/Depot/Jackson Streets and adjacent properties. This is supported by the Comprehensive Plan, which cites the importance of removing barriers to development in already developed areas to allow investment to occur.
- **14. RAINWATER MITIGATION:** What are measures that any/all current or prospective single-family homeowners in the watershed area can do to help mitigate stormwater runoff issues?

Response: There are a variety of low-cost measures that residents can utilize to manage rainwater. These range from rain gardens and French drains to disconnected downspouts and rain barrels capturing rain from a roof. Many of these measures are being implemented already by residents throughout town for environmental and aesthetic reasons. By installing and redirecting rainwater towards these facilities residents can increase rainwater infiltration on-site and reduce the amount of pollutants from fertilizers and car chemicals being washed off site during rain events. The proposed amendments would require expansions resulting in more than 24% built-upon area and the redevelopment of single-family lots to install some of these features as part of permit approval. Examples are included in the resources materials on the Map & Text Amendments webpage.

15. ENGINEERED STORMWATER FACILITIES: What are these facilities and when are they required?

<u>Response</u>: These are specific structures designed to treat prescribed amounts of rainwater and remove a certain level of pollutants before infiltrating or discharging the captured rainwater. These are expensive, rigorously designed devices that must be constructed by projects pursuing the high-density option (i.e. for projects that construct between 24-50 percent built-upon area on site that are not otherwise exempt from the standards). Examples include underground storage vaults made of concrete and

sophisticated rain gardens or infiltration trenches. While some strategies are also described above in the rainwater mitigation question, the difference is that engineered stormwater facilities must meet certain design/treatment standards approved by Meck. County – the proposed standards described in the rainwater mitigation question do not (i.e. they're low-cost treatment strategies that many citizens are already implementing).

16. OTHER DEVELOPMENT STANDARDS: If the Watershed rules apply to my property, do they limit what you can build? Are the Watershed criteria the only rules that determine what can be built on a property?

Response: The watershed standards allow low-density proposals to cover up to 24% of their lot with BUA; high-density proposals can cover up to 50% of their lot with BUA. Each of these thresholds permits a range of development opportunities on each site. Moreover, the DPO also contains standards concerning setbacks, building height, building volume (i.e. floor area ratio), tree planting requirements, and parking standards – among many others – that determine what can be built on a site. In many cases these matter more than the watershed criteria in determining what can be done on a site. The proposed amendments allow flexibility for a variety of designs on both residential and non-residential parcels. Additionally, conversations related to the watershed ordinance have raised interest in evaluating criteria related to some of these other site design standards.

17. REGULATORY DISPARITY/DESIGN SOLUTIONS: If my lot is impacted by the proposed changes, will I still be able to develop a sufficiently-sized single-family house?

Response: The Planning Board Ordinance Committee (PBOC), comprised of staff and citizens, recognizes the concern of landowners regarding future site designs and the ability to develop a property as a single-family home. Yes, each lot will be able to develop in a manner that suits the landowner's interests and is comparable to existing/new construction in the vicinity. This can be accomplished through a variety of strategies, each tailored to the particular features of a specific lot. For example, use of an attached rather than detached garage, shorter rather than longer driveway, and installation of a deck rather than a patio are all viable strategies to reduce a site's BUA while still providing high-quality housing and site design that meet DPO requirements.

Additionally, existing features like a driveway may be able to be considered existing BUA and therefore not count against the site's existing BUA limit. Each case is different and with thoughtful design landowners will be able to achieve solutions that work for their site in a manner that is consistent with the character of existing/recent homes. The proposed standards are supported by case studies of specific properties illustrating comparable levels of development under the current and proposed standards.

III. PUBLIC INPUT & RESOURCES

18. PUBLIC ENGAGEMENT: How much public discussion has occurred regarding the proposed amendments? How have citizens been made aware of the proposed amendments? How have citizens' comments been solicited and incorporated into the proposed amendments?

Response: Beginning in the fall of last year the Board of Commissioners has discussed the proposed amendments four times at work sessions/public meetings – once in the fall of 2017 and three times in the winter of 2018. In addition, the Planning Board has discussed the proposed amendments at each of its four meetings in 2018, with the Planning Board Ordinance Committee (PBOC) hosting meetings with citizens before or after each meeting in order to hear comments and answer questions about the proposed changes. The PBOC will also host an open house on Monday, 4/30 to answer questions and hear comments. In between all these events staff as well as PBOC members have held numerous meetings with interested citizens and landowners. In fact, the majority of changes proposed since January 2018 have been in response to citizen comments concerning the regulatory disparities amongst residential lots (i.e. equality of treatment), built-upon area averaging, and expansions (i.e. preservation), among others.

Each of the official meeting events are advertised in the Board of Commissioners and Planning Board agendas. Further notice of the proposed changes has been provided via various media channels, including E-Crier announcements, Planning Dept. webpage Updates, and the upcoming Town Messenger newsletter, which is mailed to each residence. Together, these measures significantly exceed the minimum state requirements concerning text amendments, which require only a single public hearing.

19. DRAFT AMENDMENTS: Where can I see the proposed changes?

<u>Response</u>: The <u>Map & Text Amendments webpage</u> contains an annotated copy of the DPO and highlights proposed changes. It also contains an overview of the changes and a timeline of the proposed changes' history. This information has been updated consistently since January 2018.

20. ADDITIONAL RESOURCES: Are there additional resources that would help me understand the proposed changes?

Response: The Map & Text Amendments webpage contains several resources noted above. It also includes diagrams to help illustrate the proposed changes; these are all based on a low density, maximum BUA limit of 24%. Additionally, citizens may view the Planning Board agendas from each of the four meetings in 2018 to see the "Handout" summarizing various changes/topics discussed at each meeting.

IV. MISCELLANEOUS

21. STATE LEGISLATION: Are the proposed text amendments compliant with state legislation? Isn't the Dept. of Environmental Quality (DEQ) updating their standards now? Why change our standards before theirs are updated?

<u>Response</u>: Yes, the proposed amendments are compliant with current and future state legislation. The state legislature requires all state agencies to re-adopt all of their rules every 10 years or the rules would expire; DEQ has elected to update its standards effective 1/1/19 and has put out their proposed changes for public comment.

The DEQ has reviewed each iteration of Davidson's proposed changes and has not found anything that needs to be changed as a result of the DEQ's proposed amendments. In fact,

Davidson is already anticipating the proposed changes in some ways. For example, the state proposes to revise the mandatory wet detention pond requirement to allow for different approaches (just like Davidson proposes to reference the Meck. County Stormwater Manual that lists a variety of treatment strategies rather than prescribing one that may not fit a site's context).



PLANNING BOARD RECOMMENDATION: WATERSHED TEXT AMENDMENTS

Date: May 21, 2018

To: Board of Commissioners

From: Planning Board

Re: DPO Section 17 (Watershed Ordinance) - Text Amendments

In addition to the Consistency Statement approved by the Planning Board, members offer the following points to consider as part of their recommendation:

1. Proposed Amendments Reflect High Level of Collaboration: Since January, numerous interactions and communications between the Planning Staff, the Planning Board Ordinance Committee ("PBOC"), citizens, Town of Davidson, and state and county officials have shaped the proposed DPO 17 (Watershed Ordinance) text amendments.

As a result, the proposed text amendments provide greater flexibility and transition period for citizens with pre-1993 single-family lots of record (with or without structures on the lots and including expansions) to address their wants/needs for home building/expansion, while ensuring a consistent, fair approach beginning in 2025 for pre-1993 lots.

Additionally, by requiring enhanced water runoff management practices (e.g., mulch/plant catchment areas, French drains) for single-family lots with more than 24% BUA, the proposed amendments promote environmental aims for the watershed in a manner that is relatively low-cost to homeowners. Environmentally-conscious citizens who – based on the BUA of their particular property – may not be *required* to implement them, may nevertheless find these simple enhanced water runoff management practices sufficiently economical and attractive to install on a voluntary basis.

- 2. Proposed Amendments Address Issues Associated with "BUA/Density Averaging": By enhancing the role of the Board of Adjustment to render decisions on proposed high-density projects that seek to utilize BUA/density averaging, coupled with a statement of preferred project types (such as civic/educational), the proposed amendments provide greater consistency with key elements of the Davidson Comprehensive Plan. Specific elements include encouraging committed civic involvement and responsibility, and enabling faithful stewardship of natural resources.
- **3. Coherent Set of Amendments:** The proposed amendments work together as a whole to clarify the processes for conservation and development in the watershed, and carefully coordinate the phased-in transition of standards over a seven-year horizon. This integrated set of standards may be adjusted and has been revised and/or tweaked extensively for four months in response to Board of Commissioner, Planning Board, and citizen input but should be adopted as a whole to

ensure consistency of regulation. Sections considered to be essential to the overall functioning of the ordinance include: 17.3 Definitions; 17.6 Exemptions; 17.7.1.2 Built-Upon Area Limits; 17.8 Built-Upon Area Averaging; among other sections containing basic standards.

4. Measured Flexibility Downtown: The proposed amendments afford flexibility in areas prioritized by the Comprehensive Plan for investment (i.e. in/around the downtown, Village Center + Village Commerce Planning Areas). Section 17.6.3 wisely balances the need to promote environmental objectives with the reality (not faced by other municipalities within the Lake Norman watershed) that our Town's iconic and historic downtown is situated almost entirely within the critical watershed.

TOWN OF DAVIDSON PLANNING BOARD

CONSISTENCY STATEMENT

PROPOSAL

Davidson Planning Ordinance Section 17 Update – Watershed Text Amendments

SUMMARY OF ACTION TAKEN BY BOARD

Vote: 9-0

Description of Action: The Planning Board finds the proposed amendments to Section 17 of the Davidson Planning Ordinance ("DPO"), as set forth in the proposed amended and restated DPO Section 17 attached hereto as Exhibit A, <u>consistent</u> with adopted plans and policies of the Town of Davidson. The Planning Board attaches the following conditions to this approval: A clarifying statement must be added to Section 17.6.1 stating the requirements for an expansion to existing development after the 2025 deadline; A minor revision to the definition for "existing development" should be made requiring a valid local government written approval; The January 1, 2025 deadline should be extended to July 1, 2025.

PROPOSAL / REQUEST

The proposed text amendments update/clarify standards; address persistent issues and inconsistencies; and remove inapplicable sections.

SUMMARY OF PETITION / PROPOSAL

In March 2017, Mecklenburg County, our partner in administering the watershed ordinance – with oversight from the North Carolina Department of Environmental Quality ("NCDEQ") – requested that the Town of Davidson: update/clarify standards; address persistent issues and inconsistencies; and remove inapplicable sections. The standards, in place since 1993, are designed to maintain clean water in Lake Norman by requiring vegetative buffers and limiting the amount of "built-upon-area" ("BUA") placed on a lot.

The proposed amendments cover many topics; among the more prominent are:

- The addition of new definitions related to existing development, redevelopment, and the modification of the variance definitions to be clearer and aligned with relevant state law and regulations;
- The phasing-out (in 2025) of the current exemption for expansions to single-family homes that existed prior to 1993;
- The modification and phasing-out of the current exemption for existing lots of record, such that pre-1993 lots – both undeveloped and developed – may be used for single-family residential purposes with a maximum BUA limit of 34 percent until 2025, and 24 percent thereafter;
- The inclusion of rainwater management strategies for expansions to both residential and non-residential structures existing prior to 1993;
- The modification of standards in the downtown area to allow properties in these areas to redevelop up to certain BUA limits, depending on their location;
- The clarification that property must be contiguous, adjoining, or adjacent to be included in

- calculation of a project area's BUA;
- The modification of the BUA averaging (formerly known as "Density Averaging") program to (a) increase and clarify the Board of Adjustment's discretion in deciding cases, and (b) express a preference for the types of proposals appropriate for this program.

Balancing a range of interests, the proposed amendments strive to apply the standards more equally across all lot types, afford sufficient development rights for each lot type, reinforce the character of existing development, and are guided by adopted plan and policy aims.

CONSISTENCY STATEMENT

The Planning Board finds that the proposed watershed text amendments are consistent with the Davidson Comprehensive Plan, as adopted by the Board of Commissioners and amended from time to time. The areas in which watershed text amendments are <u>consistent</u> with the Davidson Comprehensive Plan and all other officially adopted plans are as follows:

Consistent with the Davidson Comprehensive Plan (August 2010):

- a. Encourage Committed Civic Involvement & Responsibility, Goal 2 Sustain and Promote More Resident Volunteerism and Involvement: This goal notes the importance of local advisory boards being more engaged and influential concerning short-term and long-term decisions. The proposed amendments are the product of extensive involvement on the part of the Planning Board Ordinance Committee, which collaborated with staff in reviewing/revising the amendments beginning early in the process, and met with citizens individually and collectively (including hosting an open house) to solicit and incorporate their feedback. The proposed amendments thus reflect significant and meaningful citizen input.
- b. Enable Faithful Stewardship, Goal 3 Sustain/Enhance Air & Water Quality: This goal recommends working with Mecklenburg County on regulations for water quality/conservation measures. It also states that residents could positively impact the environment by adapting their properties to implement water saving practices, such as those included in the proposed amendments (i.e. rain gardens, rain barrels/downspout modification, French drains). It lists the following as on-going initiatives to pursue: Protect ground/surface water; encourage rainwater capture/reuse in all new development; and, mitigate sources of groundwater contamination. The proposed amendments are the result of close collaboration with Mecklenburg County and further the initiatives listed above through a mix of land coverage and site design criteria.
- c. Maintain Quality Design/Sound Planning, Goal 1 Prioritize Infill/Mixed Use Development Within or Near Already Developed Areas: This goal recommends facilitating reinvestment in the Village Center Planning Area (i.e. downtown). The proposed standards allow flexibility on the downtown block bounded by Main, Jackson, and Depot Streets and appropriately accommodate redevelopment on adjacent blocks (i.e. the Depot building and Sadler Square) by requiring engineered stormwater controls if these blocks redevelop beyond 24% BUA.





MICHAEL S. REGAN
Secretary

WILLIAM E. (TOBY) VINSON, JR.
Interim Director

June 1, 2018

Lindsay Laird Town of Davidson P.O. Box 579 Davidson, NC 28036

Subject: Preliminary Approval of Watershed Protection Ordinance

Dear Ms. Laird:

The purpose of this letter is to inform you that the Division of Energy, Mineral and Land Resources (DEMLR) has reviewed and preliminarily approved the amendments to the Town of Davidson's Watershed Protection Overlay District (Chapter 17 of Planning Ordinance) received by our office on May 31, 2018. We agree that the proposed amendments equal or exceed the statewide minimum requirements pursuant to NCGS 143-214.5 and 15A NCAC 02B .0100 and .0200.

Please note that this approval is considered preliminary. Upon adoption, the Town must provide the adopted ordinance to DEMLR for approval in accordance with 15A NCAC 2B .0104(b).

We acknowledge that the amendments to the Town's ordinance are intended to balance the need for protection of Lake Norman water quality with the need for development flexibility within the critical area which includes the village center and numerous undeveloped lots of record. We are pleased that you are proposing to incorporate the requirements from the Mecklenburg County Design Manual, as those are consistent with our State Stormwater

Program, and they will provide opportunities to be more flexible and cost effective while also being more environmentally protective.

Thank you for the opportunity to review your proposed ordinance amendments in advance of adoption. Please let me know if our office can be of further assistance.

Sincerely,

Julie Ventaloro

WSWP Program Coordinator

Julie Ventaloro

cc: DEMLR Stormwater Program files



Agenda Title: Water/Sewer/Annexation Policy Resolution

Town Attorney Cindy Reid and Town Manager Jamie Justice

Summary: Discussion of a proposed water/sewer/annexation policy

Summary:

ATTACHMENTS:

	Description	Upload Date	Type
D	Water Sewer Agreement 1984	6/1/2018	Cover Memo
D	DRAFT - Water/Sewer/Annexation Policy Resolution	6/5/2018	Cover Memo

COUNTY OF MECKLENBURG

AGREEMENT

This Agreement is made and entered into by and between the Town of Davidson, a municipal corporation, duly organized and existing under the laws of the State of North Carolina, hereinafter referred to as the "TOWN", and the City of Charlotte, a municipal corporation, duly organized and existing under the laws of the State of North Carolina, hereinafter referred to as the "CITY".

- 1. The TOWN, acting by and through its Board of Commissioners, and the CITY, acting by and through its City Council, have determined that it is in the best interests of their citizens and their water and sewer customers for the CITY to acquire, maintain and operate a water and sewer system within the TOWN, as set forth in the attached agreement (hereinafter referred to as the "Water and Sewer Agreement"), reference to which is hereby made.
- 2. If the entire Water and Sewer Agreement is declared void, invalid or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction notwithstanding the provisions of Paragraph 29 of the Water and Sewer Agreement, it is the express intent of the parties that this Agreement shall take effect and shall govern the division of all water and sewer facilities between the TOWN and the CITY and shall also govern the division between the TOWN and the CITY of all duties, responsibilities, obligations and liabilities for providing water and sewer service within the corporate limits of the TOWN.
- 3. The following words and phrases are defined as set forth below when used in this Agreement, unless a contrary meaning is clearly required by the context in which the word or phrase is used:
- a) "Facility" refers to any portion of the water and sewer system:
 1) located within the corporate limits of the TOWN or its extra-territorial
 jurisdiction; or 2) which was owned or operated by the CITY prior to or after
 the effective date of the Water and Sewer Agreement.
- b) "New Facility" refers to any facility constructed or installed pursuant to the Water and Sewer Agreement.
- c) "Cost" shall mean the total, original cost of the construction of any facility, including but not limited to, land or right-of-way acquisition, engineering services, etc., but not including any item donated toward construction of any facility and not including the portion of the total, original cost of the construction of any facility financed by State or Federal grants. Cost does not include debt service expenses. Cost shall be reduced by depreciation on any facility on a straight line basis; provided that the portion of the cost of any facility incurred for land or right-of-way acquisition shall not be reduced for depreciation. Facilities constructed above ground, such as pump stations, shall be depreciated using a thirty (30) year period. Facilities

constructed below ground, such as water and sewer lines, shall be depreciated using a fifty (50) year period.

- d) "Improvement" means the replacement of any facility with a substantially larger facility or the construction or installation of a facility in a location where no facility previously existed, such as but not limited to the replacement of a water and sewer pipe with a larger pipe or the re-location of all or a portion of any water and sewer line, regardless of the condition of the line which was replaced or relocated.
- e) "Subject water and sewer system" shall have the same meaning in this Agreement as said phrase has in the Water and Sewer Agreement.
- 4. No consideration, monetary or otherwise, is to be given for the transfer of any facility as set forth below unless consideration is expressly required. Any required, monetary consideration shall be paid over a five (5) year period in five (5) equal payments, with a payment to be made at the end of each year during said five (5) year period. No interest shall be due on such payments.
- 5. If the entire Water and Sewer Agreement is declared void, invalid or otherwise unenforceable as set forth above, the following provisions shall govern:
- a) Any facility owned by the CITY prior to the date of transfer under the Water and Sewer Agreement shall remain under the ownership of the CITY. Any customers who may lawfully continue service from said facility and who desire to continue service from CMUD through said facility may continue said service, notwithstanding that said facility, customer or the property being served is located wholly or partly within the corporate limits of the TOWN and notwithstanding any objection by the TOWN to the continuation of such service. Both parties shall be free to serve those customers which each party was serving prior to the date of transfer under the Water and Sewer Agreement.
- b) The subject water and sewer system shall be transferred to the TOWN; provided that, the TOWN shall agree to pay the CITY the total amount of any lease payments from the CITY to the TOWN made pursuant to Paragraph 3(b) of the Water and Sewer Agreement and the cost of any improvements made to the subject water and sewer system; and provided further that, there shall be deducted from such amount any interest which was actually paid by the TOWN on funds borrowed to construct the facilties to be transferred pursuant to this subsection. The TOWN shall not be required to pay for all or any portion of the cost of any improvements financed by the TOWN and for which it has not been previously reimbursed or otherwise repaid by the CITY in any manner.
- c) New facilities not financed by the TOWN which are located within the corporate limits of the TOWN shall be transferred to the TOWN; provided that the TOWN shall agree to pay the CITY the cost of such facilities.
- d) New facilities financed by the TOWN which are located within the corporate limits of the TOWN shall be transferred to the TOWN; provided that, the TOWN shall agree to pay the CITY any amounts paid by the CITY to the TOWN under the provisions of Paragraphs 13(a) and/or 26(f) of the Water and Sewer Agreement; provided that the amount to be paid to the CITY by the

TOWN shall be reduced by depreciation in the same manner as set forth in Section 3(c) above so that any payments by the TOWN to the CITY shall include only the amount by which the former payments exceed depreciation.

- e) New facilities located within the TOWN's extra-territorial jurisdiction shall be the property of the CITY; provided that the CITY shall agree to pay the TOWN the cost of said facilities to the extent financed by the TOWN and not previously reimbursed or otherwise re-paid by the CITY to
- f) At such point(s) as facilities of the CITY and TOWN connect, one or more meters or other measuring devices shall be installed. Such meters or measuring devices shall be operated and maintained by the party providing service(s) to the other party and shall be the basis upon which bills are sent to the other party for payment for said service. The CITY agrees to pay such rate for water and sewer service from the TOWN and to abide by such terms and conditions for said service as the TOWN may lawfully impose. So long as said rate is paid and said terms and conditions are satisfied by the CITY, the TOWN may not involuntarily terminate said service. The TOWN agrees to pay such rate for water and sewer service from the CITY and to abide by such terms and conditions for said service as the CITY may lawfully impose. So long as said rate is paid and said terms and conditions are satisfied by the TOWN, the CITY may not involuntarily terminate said service.
- g) The TOWN shall assume all duties, obligations and liabilities of the CITY for providing water and sewer services to customers connected to facilities transferred from the CITY to the TOWN. The TOWN shall assume all duties, obligations and liabilities of the CITY for the extension and construction of facilities within the corporate limits of the TOWN, including but not limited to contracts for the extension of facilities.
- h) Such documents and records as are described in Paragraph 18(a) of the Water and Sewer Agreement shall be transferred from the CITY to the TOWN for such facilities as are transferred from the CITY to the TOWN. The deposits and advance payments that shall have been made to the CITY by customers or users connected to facilities that are to be transferred from the CITY to the TOWN shall be transferred from the CITY to the TOWN and shall become subject to the sole custody of the TOWN. The designee of the CITY and the designee of the TOWN shall be responsible for determining all other details related to the transfer of facilities and assumption of duties, obligations and liabilities as are set forth in this Agreement which are not specifically addressed herein, including but not limited to the date on which such transfers are to be made.
- 6. It is expressly understood that the CITY has the authority under the Water and Sewer Agreement to convey, transfer or abandon such portions of the subject water and sewer system and any new facilities acquired by the CITY which are subsequently determined by the CITY to be unnecessary to the proper operation of a water and sewer system for the foreseeable future under the Water and Sewer Agreement within the corporate limits of the TOWN and the TOWN'S extra-territorial jurisdiction. The CITY shall have no obligation to re-acquire such facilities which may be conveyed, transferred or abandoned or to account to the TOWN for any consideration received from the conveyance, transfer or abandonment of any facility or portion thereof prior to the termination of the

Water and Sewer Agreement or upon the termination of the Water and Sewer Agreement.

- 7. Such facilities as are not expressly transferred to the TOWN under this Agreement shall remain the property of the CITY and shall remain under the CITY's full control and ownership.
- 8. Any facility required to be transferred from the CITY to the TOWN by this Agreement which is subject to debt shall not be immediately transferred but shall remain the property of the CITY. Such facility shall be leased to the TOWN until the debt on such facility is retired. The TOWN shall agree as part of such a lease to make payments to the CITY of sums sufficient to pay all of the CITY's debt service on said facilities on an annual basis as and when such becomes due and payable. Upon the expiration of this lease arrangement, title to said facility shall pass to the TOWN upon the payment of One Dollar (\$1.00) to the CITY.
- It is hereby declared to be the intention of the TOWN and the CITY that the paragraphs, sections, sentences, clauses and phrases of this Agreement are severable. If one or more paragraphs, sections, sentences, clauses or phrases shall be declared void, invalid or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction, such judgment or decree shall not affect the remaining provisions of this Agreement and the same shall continue to be fully effective and enforceable on the basis that said remaining provisions would have been agreed to by the CITY and the TOWN without the incorporation of such void, invalid or otherwise unenforceable paragraph, section, sentence, clause or phrase. If this entire Agreement is declared void, invalid, or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction notwithstanding the immediately preceeding provisions of this Paragraph, it is the express intent of the parties that said court should be guided by the terms of this Agreement and the express intent of the parties in formulating such relief as the court determines to be appropriate.
- 10. This Agreement shall have no force and effect concerning the transfer of any water and sewer facility or the duties, obligations and liabilities for providing water and sewer service in the TOWN until and unless the Water and Sewer Agreement is declared to be void, invalid or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction. The remaining provisions of this Agreement are effective upon the effective date of the Water and Sewer Agreement.
- 11. a) This Agreement shall be perpetual in duration. The parties hereby agree that such perpetual duration is reasonable in light of the purposes of this Agreement.
 - No joint agency is established by this Agreement.
- c) Each party shall have the sole responsibility and authority to appoint or otherwise employ the personnel necessary for the implementation of this Agreement.
- d) Each party shall have the responsibility for financing the construction, operation and maintenance of the facilities which are transferred

to it under Paragraph 5 above. Each party shall be entitled to the receipt of all revenues from the facilities transferred to it under Paragraph 5 above.

- e) This Agreement may be amended only by a document in writing, approved by the City Council of the CITY and the Board of Commissioners of the TOWN, and executed by the Mayors of the CITY and TOWN.
- f) This Agreement shall be terminated only upon the agreement of the CITY and TOWN following the procedure described for amending this Agreement.
- g) Prior to this Agreement taking effect for purposes of transferring facilities, duties, obligations and liabilities as set forth above, this Agreement shall remain binding upon the parties and shall not be subject to termination or amendment except as set forth above.
- 12. This Agreement contains the sole and entire agreement between the TOWN and the CITY regarding the consequences of the entire Water and Sewer Agreement being declared void, invalid or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction.

This the 14 day of <u>August</u>, 1984.

ATTEST:

APPROVED AS TO FORM:

One City Attorney

TOWN OF DAVIDSON

CITY OF/CHARLOTTE

ATTEST:

Town Clerk COMMISSER HER

APPROVED AS TO FORM:

W.E. Brannon, Town Clerk

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

AGREEMENT

This Agreement is made and entered into by and between the Town of Davidson, a municipal corporation, duly organized and existing under the laws of the State of North Carolina, hereinafter referred to as the "TOWN" and the City of Charlotte, a municipal corporation duly organized and existing under the laws of the State of North Carolina, hereinafter referred to as the "CITY".

- 1. The TOWN, acting by and through its Board of Commissioners, has determined that it is in the best interests of its citizens and water and sewer customers that the TOWN discontinue the operation of the TOWN's water and sewer system and transfer said system to the CITY pursuant to the terms and conditions hereinafter set forth. The CITY, acting by and through its City Council has determined that it is in the best interests of the citizens of the City of Charlotte and the customers of the Charlotte-Mecklenburg Utility Department, hereinafter referred to as "CMUD", to accept such transfer and to operate and maintain the TOWN's water and sewer system. This Agreement is undertaken pursuant to applicable law, including N.C.G.S. §§ 160A-274 and
- 2. The following words and phrases are defined as set forth below when used in this Agreement, unless a contrary meaning is clearly required by the context in which the word or phrase is used:
- a) "Effective date of this Agreement": The date by which all events described in Paragraph 31(a) of this Agreement have occurred.
- b) "Date of transfer": The date on which title or leasehold to the subject water and sewer system passes from the TOWN to the CITY, which shall be a reasonable time after the effective date of this Agreement as set forth in Paragraph 19.
- c) "Subject water and sewer system": The real and personal property forming a part of the TOWN's water and sewer system which is to be transferred to the CITY pursuant to this Agreement.
- d) "Subject water intake and treatment facilities": The following real property and improvements, which are a part of the subject water and sewer system: the real property, including improvements thereto or used in conjunction therewith, which constitutes the raw water intake facility at Lake Norman (except such portion of the adjacent real property as is separately described in Exhibit A); the real property and improvements thereto which constitute the water treatment plant; the raw water main and all interests in real property associated therewith connecting the raw water intake facility and the water treatment plant; and the transfer from the TOWN to the CITY of all of the TOWN's right to remove water from Lake Norman.

- e) "First year": The remainder of the fiscal year in which the date of transfer occurs.
- f) "Inside prevailing rate": The rate(s) charged by the CITY to water and sewer customers inside the municipal boundaries of the CITY.
- g) "Extra-territorial jurisdiction": The area outside the boundaries of the TOWN within which it has exercised its extra-territorial zoning authority, as such may be changed from time to time throughout the term of this Agreement.
- h) "TOWN limits": The municipal boundaries of the TOWN as such may change during the term of this Agreement.
- 3. a) The TOWN shall transfer and convey, through the execution of appropriate deeds, bills of sale and other documents, to the CITY all real and personal property presently owned and utilized by the TOWN, as part of its water and sewer operation, except for such property as is described in Exhibit A; provided that such property as is subject to debt shall be transferred to the CITY as set forth in sub-section (b) below. Such property as is described in Exhibit A shall remain the property of the TOWN. Title to such real property shall pass to the CITY upon the payment of One Dollar (\$1.00) and such other consideration as is shown in Exhibit B to the TOWN. Appropriate documents needed for passage of title shall be prepared by the CITY and thereafter executed by the Mayors of the TOWN and CITY. Any and all interests in real property acquired by the TOWN after the date of transfer through dedication or gift for water or sewer purposes shall be transferred to the CITY for no additional consideration.
- b) All real property, including water and sewer facilities affixed thereto, currently owned or utilized by the TOWN for the subject water and sewer system which was financed by debt of the TOWN, the transfer of which would constitute a breach of the debt instrument, shall be leased to the CITY for the consideration set forth in Exhibit B until all debt on each such property has been retired, at which time title to each will pass to the CITY upon payment of One Dollar (\$1.00) to the TOWN. The lease term for currently owned or utilized properties which are subject to debt shall begin upon the date of transfer. Appropriate documents as may be needed to memorialize the lease may be prepared thereafter and executed by the Mayors of the CITY and the TOWN without further approval of the governing boards thereof.
- c) Also included in Exhibit B is the amount of monetary consideration to be paid by the CITY to the TOWN which is attributable solely to the transfer of the subject water intake and treatment facilities ("water system consideration"). The TOWN may, in its sole discretion, give written notice signed by its Mayor directing that all or some specified portion of the water system consideration be applied as a credit to water bills from CMUD to water customers of the subject water and sewer system and any extensions thereof within the TOWN Limits ("TOWN water customers"). Such credits shall reduce the amount of the water system consideration owing from the CITY to the TOWN as fully as if equal amounts of money had been paid by the CITY to the TOWN. In the event the TOWN elects to apply a portion of this monetary consideration as a credit to the TOWN water customers, then the City will credit interest to the Town quarterly based on outstanding principle balance and determined by

the six month U.S. Treasury note rate published as of July 1 of each year. No credit will be made by the CITY, unless directed to do so by the TOWN; provided that, credits will be made by the CITY only if the following conditions are satisfied: written notice from the TOWN directing that such credits be made as received by the CITY at least thirty days after the effective date of this Agreement; the CITY and TOWN agree on the method of computing and applying such credits, including the date after which such credits are to be made; the TOWN directs that such credits are to be made to all TOWN water customers without exception; the CITY will never be required by virtue of the credits provided for in this paragraph to make any direct payment to any TOWN water customer or any other person or entity; such credits are not transferable from one account to another, from one customer to another or on any other basis; if at any time for any reason the current credit to be made exceeds the current water bill for any TOWN water customer, such excess credit will be carried over to apply to future water bills, if any, for such customer; any credits made under the provisions of this paragraph will terminate automatically when the total water system consideration has been satisfied by direct payment to the TOWN and/or by making such credits as are set forth in this paragraph, or earlier upon written notice from the TOWN signed by its Mayor with the effective date of such termination being agreed upon between the TOWN and the CITY; under no circumstances will the CITY be required to make credits to TOWN water customers under the provisions of this paragraph for more than eight years from and after the date of transfer; under no circumstances will the TOWN's direction that credits, as described in this paragraph, be made by the CITY to TOWN water customers be construed to create any rights in said TOWN water customers which are enforceable against the CITY or the TOWN; and the provisions of this paragraph are for the sole and exclusive benefit of the TOWN and the CITY. The TOWN represents that it owns marketable title to the subject water intake and treatment facilities and that the same will be transferred by a good and sufficient deed in fee simple with general warranty and free from incumbrances.

With respect to that portion of the 11.9 acre parcel conveyed to the TOWN from Duke Power Company dated August 20, 1962, and further separately described in Exhibit A as not conveyed to the CITY as part of the water intake and treatment facilities, the TOWN hereby grants to the CITY the first right of refusal to purchase such property which shall operate as follows: in the event the TOWN elects to sell such property or any portion thereof it shall deliver to the CITY written offer to sell the property to the CITY which shall set forth a description of the property, the selling price and terms of sale at which the TOWN will sell the property. The CITY shall have sixty (60) days thereafter to exercise its first refusal option to purchase the property by delivering written acceptance to the TOWN of its offer. Thereafter, the TOWN and the CITY shall effect a conveyance of the property within a reasonable time. Such conveyance shall be by good and sufficient deed in fee simple with good warranty and free of incumbrances, unless the TOWN's offer expressly provides otherwise. If the CITY fails to accept such offer within such sixty (60) day period or delivers a written rejection of the offer prior to the expiration of such sixty (60) day period, the TOWN shall be free within the next six (6) month period to enter into a contract to sell such property to any third party at a price equal to or greater than the price offered by the TOWN to the CITY and upon terms no less favorable to the TOWN than those contained in its offer to the CITY. No reduction in price below that offered to the CITY nor the granting of more favorable terms shall be made until a new offer with such price reduction

and/or more favorable terms is first offered to the CITY in accordance with the procedure set forth hereinabove.

- e) If the CITY purchases some but not all of the property subject to the first refusal right herein granted, such right shall continue to apply to the remainder of the property. If the CITY fails to accept or reject an offer and the TOWN does not thereafter contract for the sale of the property within six (6) months and transfer such property thereafter in accordance with such contract, such property shall remain subject to the first refusal right herein granted.
- f) The right of first refusal shall terminate twenty (20) years after the date of transfer.
- g) The Mayors of the CITY and the TOWN shall execute a Memorandum of the terms of the first refusal for recording in the Mecklenburg County Public Registry as either party shall desire.
- h) The CITY acknowledges that the TOWN may wish to develop and sell the remaining portion of that 11.9 acre parcel identified in subparagraph 3(d) above subject to the rights of the CITY thereunder. The CITY agrees that in the event the TOWN's plan of development for such property includes the relocation of the existing road, the CITY will (i) grant to the TOWN without cost a right of way for street purposes across CITY's water intake property acquired hereunder, and (ii) relocate the raw water distribution line running from the water intake facility to Torrence Chapel Road across the TOWN's property at no cost to the TOWN.
- The transfer of all property, whether real or personal, under a) this Agreement is in an "as is" condition, as of the effective date of this Agreement, except as expressly set forth herein. Any documents needed to memorialize this passage of title shall not be required to contain any warranties of condition or title, except as expressly set forth herein. A quitclaim deed shall be executed by the TOWN to convey all interests in real property and improvements thereto which are subject to this Agreement; except as provided in Paragraphs 3(d) and 4(c). A Bill of Sale shall be executed by the TOWN to transfer ownership of all personal property subject to this Agreement. Such documents shall be sufficient to convey to the CITY all of the TOWN's right, title, and interest in and to the subject water and sewer system, including easements and rights-of-way, whether or not recorded. rights-of-way shall include the right to operate and maintain the subject water and sewer system within any public streets within the TOWN. The TOWN shall cooperate with the CITY in establishing title to any portion of the subject water and sewer system which may be contested and shall take no position inconsistent with the unconditional right of the CITY without the payment of damages and just compensation to operate and maintain any portion of the subject water and sewer system. During the ten (10) year period immediately preceeding the date of transfer, the TOWN covenants and warrants that it has not acquired any interest in any real or personal property to be transferred hereunder except by operation of law, purchase, gift or the exercise of its powers of eminent domain in compliance with relevant provisions of the North Carolina General Statutes or private acts of the North Carolina General Assembly applicable to the TOWN. All deeds and bills of sale transferring and conveying the subject Water and sewer system shall

be subject to this covenant and warranty. The TOWN shall be liable for one-half of the amount of any monetary damages suffered by the CITY for breach of this covenant and warranty on account of any claim or demand presented to the City within two years after the date of transfer. This paragraph shall not apply to any claim, demand or action, or portion thereof, seeking the recovery of damages for the negligent construction, operation or maintenance of the subject water and sewer system and which is not based upon allegations in the nature of inverse condemnation.

- Prior to the date of transfer, the TOWN will be responsible for maintaining the subject water and sewer system in reasonable condition. TOWN will be solely responsible for the expenses incurred in such maintenance. If subject water and sewer system is damaged prior to the date of transfer by a catastrophic event, the TOWN shall make the necessary repairs. The CITY will be obligated to reimburse the TOWN for the reasonable expenses incurred by the TOWN in making the necessary repairs caused by a catastrophic event, provided that: 1) such repairs are made according to applicable standards of CMUD; 2) such repairs are inspected and approved by the Director of CMUD (or his designee), such approval not to be withheld unreasonably; and 3) this Agree-ment becomes effective as provided in Paragraph 31, below. Any payment from the CITY to the TOWN under this sub-paragraph is due within sixty (60) days after the date of transfer. For purposes of this sub-paragraph, "catastrophic event" means a natural catastrophy such as abnormal and unforeseeable weather and does not include any intentional, unintentional or negligent act or failure to act by one or more persons, corporations, associations, governments or other entities, including but not limited to the TOWN, its officers, agents, and employees. This sub-paragraph will be effective immediately upon the execution of this Agreement, as set forth in Paragraph 31(b).
- c) The subject water intake and treatment facilities shall be conveyed by good and sufficient deed in fee simple with general warranty and free of incumbrances.
- 5. In consideration of the transfer of ownership of the subject water and sewer system, and for future construction financed pursuant to Paragraph 7 below, the CITY shall make such payments to the TOWN at such times as are set forth in Exhibit B. At no point in time shall any obligation, debt, bond, or other liability of the TOWN arising from the construction, operation or maintenance of any portion of the subject water and sewer system be construed to be an obligation, debt, bond or other liability of the CITY, it being the intent and purpose of this Agreement that there be no transfer in any manner of such obligation, debt, bond, or other liability from the TOWN to the CITY.
- 6. In further consideration for this Agreement, the CITY and TOWN are entering into a separate agreement (hereinafter referred to as "annexation agreement") designating areas which are not subject to annexation by one or more of the municipalities participating in the annexation agreement, a copy of which is attached hereto as Exhibit D. The annexation agreement is an essential element of this Agreement.
- 7. Any TOWN water and sewer bonds, which are authorized for sale but have not yet been sold, may be sold by the TOWN for the purpose of providing funds for constructing water and sewer facilities within the TOWN listed in

- Exhibit E. Any funds already on hand from the sale of TOWN water and sewer bonds shall be utilized for constructing or completing construction of the water and sewer facilities within the TOWN. Any investment earnings on unexpended funds from TOWN water and sewer bonds shall be used to pay for current debt service costs on said bonds. The CITY will assume responsibility for the construction of these facilities effective upon the date of transfer. When design for each of these facilities is completed and ready to be constructed, funds for construction will be transferred from the TOWN to the CITY prior to the start of construction. Upon completion of said facilities, ownership shall remain with the TOWN until said bonds are retired. facilities shall be leased to the CITY prior to being placed into operation through a new lease in compliance with the relevant provisions of Paragraph 3(b) above or by an addendum to any existing lease executed pursuant to said Paragraph. Each such new lease or addendum shall provide for payments by the CITY to the TOWN of sums sufficient to pay all of the TOWN's debt service on said bonds on an annual basis as and when such become due and payable. Upon the expiration of said lease arrangement, title to said facility shall pass to the CITY upon payment of One Dollar (\$1.00) to the TOWN.
- 8. a) Upon the date of transfer, the CITY, through CMUD, shall have the immediate and sole duty and responsibility for planning, constructing, operating and maintaining the subject water and sewer system and any extensions thereof throughout the jurisdiction of the TOWN. Prior to the date of transfer, the TOWN will be responsible for the operation and maintenance of the subject water and sewer system as set forth in Paragraph 4(b) above. From and after the date of transfer, the subject water and sewer system shall be fully incorporated into the water and sewer system operated and maintained by CMUD. Said duty and responsibility shall be in accordance with current and future policies and procedures of CMUD which shall be applied in the TOWN to the same extent and in the same manner as applied in the CITY.
- b) The CITY agrees to provide users of the subject water and sewer system and any extensions thereto service of a quality at least equal to the quality of service provided to water and sewer customers within the municipal boundaries of the CITY. The CITY specifically agrees that the geographical location of the water and sewer customers in the TOWN shall not have any substantial effect on the quality of service or timing of repairs to be made by CMUD.
- 9. Subject to the provisions hereof, it is intended that the operation and maintenance of CMUD shall be on a self-sustaining basis. All revenues of CMUD shall be used exclusively by the utility fund and shall not be used to subsidize any other operations. The schedule of rates, fees, charges and penalties currently charged by CMUD for water and sewer service shall apply to all customers of the subject water and sewer system except as set forth in Paragraph 10. Said schedule of rates, fees, charges and penalties shall not be changed except in accordance with such policies and procedures as apply to all other portions of the water and sewer system operated and maintained by CMUD except as set forth in paragraph 10.
- 10. a) The CITY shall be authorized to charge customers within the TOWN for water and sewer service based on fixed and variable rates not to

exceed the following multiples of rates charged within the CITY and based on the following time schedule:

Applicable Effective Date of Rate Factor to be Applied to Inside Prevailing Rate

First year Second year Third year Fourth year Fifth year	1.9 1.8 1.7 1.6
Sixth year Seventh year Eighth year Ninth year Remaining Term of Agreement	1.5 1.4 1.3 1.2 1.1

- b) If more than one rate is established by the CITY for water service or sewer service provided to water and sewer customers within the municipal boundaries of the CITY, the rate(s) for such service applicable to water and sewer customers in the TOWN shall be the same rate for substantially equivalent service provided to water and sewer customers within the municipal boundaries of the CITY. In no event will any rate for water or sewer service to a water or sewer customer in the TOWN be based upon: the distance of such customer from the CITY or any portion of the water and sewer system operated and maintained by CMUD; or any other geographical factor.
- c) For purposes of determining charges for water and sewer customers within the TOWN, the CITY shall apply the factor for the first year set forth above on the date of transfer. The remaining factors shall be applied at the beginning of the appropriate fiscal year, as set forth in sub-section (a) above. From and after the ninth year, the CITY shall not charge higher rates than are charged for water and sewer service within the CITY to customers of the subject water and sewer system and any extensions thereof within the TOWN.
- 11. a) In the event of a default by either party hereunder, the non-defaulting party shall give written notice of such default (hereinafter "default notice") to the defaulting party, who shall have a reasonable time (depending upon the nature of the default) thereafter to cure such default. The default notice shall contain a description of the alleged default, the amount of money (if any) involved, and the remedy sought. If the default is not cured within the time period specified, the non-defaulting party shall be entitled to pursue any one or more of the following remedies, which are deemed to be cumulative:
- i) specific performance, including the right to a temporary restraining order where conditions dictate immediate action;
 - ii) monetary damages; and
- iii) if the default consists in whole or in part of a failure by a party to perform an act which can be adequately, efficiently, and responsibly performed by the non-defaulting party, the right (but not the obligation) to perform the act and charge the reasonable cost thereof to the defaulting party.

- b) The parties agree that neither party shall be entitled to terminate this Agreement as a consequence of a default hereunder or for any other reason because of the nature of this Agreement, the extreme change in position to be undertaken by both parties hereafter, and the need to protect and preserve the health and safety of the public.
- Any arbitratible claim or controversy arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration in accordance with the applicable Arbitration Rules of the American Arbitration Association (said Association hereinafter referred to as "AAA"), and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. For purposes of this sub-section, "arbitratible claim or controversy" shall mean any claim or controversy limited to factual disputes and which does not involve the interpretation or construction of this Agreement. Any party desiring to initiate arbitration under this sub-section shall file with the other party written notice of intention to arbitrate (hereinafter "arbitration notice") and submit to the AAA such copies of the arbitration notice and such additional information and payment as the AAA shall require. The arbitration notice shall be filed within 180 days of the default notice. The arbitration notice shall contain a description of the alleged default, the amount of money (if any involved), and the remedy sought. The preceeding sub-sections of this Paragraph shall apply equally to arbitratible as well as non-arbitratible claims or controversies.
- d) In any proceeding to enforce the terms of this Agreement, whether review is effected through arbitration or in court, the CITY and the TOWN irrevocably consent to the intervention as a party of one or more other Towns, if said terms are substantially similar to the terms of an agreement(s) between the CITY and said other Town(s). The TOWN hereby irrevocably consents to being added as an additional party in any proceeding to enforce the terms of an agreement, whether review is effected through arbitration or in court, between the CITY and any other Town(s), if said terms are substantially similar to terms in this Agreement. It is the intent of the parties to minimize disputes between the CITY, the TOWN and other Towns having similar agreements to this Agreement by including all affected Towns in the resolution of any dispute arising under this Agreement and similar agreements, regardless of the circumstances under which said dispute first arises.
- 12. The TOWN represents and warrants to the CITY that there is no discriminatory agreement between the TOWN and any customer or user of the subject water and sewer system which will or may survive this Agreement and be binding upon the CITY with the sole exception of the TOWN's agreement to sell water to the Town of Cornelius. For purposes of this Agreement, a discriminatory agreement is any agreement, contract or other understanding between the TOWN and any customer or user of the subject water and sewer system that provides that: water and/or sewer service be extended and/or provided in a different manner than such service is extended and/or provided to the remaining customers or users of the subject water and sewer system as to quality, quantity, or any other aspect of extending and/or providing such service; or water and/or sewer service be extended and/or provided upon the payment of a different schedule of rates, fees, charges, or penalties and/or at a different cost or schedule for reimbursement of costs or any other aspect of paying for the extension and/or provision of water and/or sewer service than is imposed

upon the remaining customers or users of the subject water and sewer system. In the event that a discriminatory agreement exists which survives this Agreement and is binding upon the CITY, the TOWN shall indemnify and hold the CITY harmless from any and all demands, claims, or actions (including the reasonable costs, expenses and attorney fees incurred by the CITY), of whatever nature or kind, arising in whole or in part from the existence of such discriminatory agreement, without regard to the relief sought or awarded and without regard to whether the claim, demand or action is raised by a party to the discriminatory agreement.

- Subject to the provisions of this Paragraph and Paragraph 27 13. below, developer extensions of the subject water and sewer system or extensions requested by the TOWN shall be made under the policies now published and used by CMUD and shall be uniform throughout the CMUD system and the TOWN. The CITY may make such changes to these extension policies as the CITY determines to be appropriate only after following such policies and procedures as apply to all other portions of the water and sewer system operated and maintained by CMUD. No extension policy will be adopted which treats the TOWN and/or the area reserved for annexation to the TOWN as defined in the annexation agreement, or any developer or user within the TOWN and/or within the area reserved for annexation to the TOWN as defined in the annexation agreement differently than the CITY or any user or developer within the CITY without the prior written consent of the TOWN. "Extension policy" shall be construed to include within its meaning, but is not limited to, a geographical moratorium on extensions of water and/or sewer lines unless said moratorium is required under applicable State or Federal law, unless said moratorium applies throughout the CMUD system within Mecklenburg County, or unless emergency action is required in the form of a temporary moratorium to avoid an imminent and substantial threat to the health of the residents of the area subject to the moratorium.
- b) Property located entirely within the TOWN, its extra-territorial jurisdiction and/or Iredell County may not be served with water or sewer service by the extension of any line without written approval of the TOWN signed by the Mayor thereof or his/her designated representative. No approval of the TOWN is required to serve any other property, even if a water and/or sewer line must be extended through the TOWN or its extra-territorial jurisdiction in order to serve such property. No approval of the TOWN is required for a service connection to any existing or future line, regardless of the location of the property to be served.
- c) The TOWN agrees to indemnify and hold the CITY and CMUD harmless from any and all liability arising in any manner from the inability of the CITY and CMUD to provide water and/or sewer service to any person, partner—ship, association, corporation or other entity because the TOWN has not given the approval required by Paragraph 13(b) above. For purposes of this paragraph, "liability" includes but is not limited to damages, punitive damages, treble (or any other multiple) damages, court costs and all other reasonable costs and expenses, including attorney fees, incurred by the CITY and CMUD in any judicial or administrative proceeding or in preparation

- 14. Any water and/or sewer line operated and maintained by the CITY which is not an extension of the subject water and sewer system and which is located in an area annexed by the TOWN after the date of transfer shall be and remain the property of the CITY without any further consideration to the TOWN. Water and sewer customers located in any area annexed to the TOWN will be subject to the same schedule of rates, fees, charges and penalties that is charged to other water and sewer customers located within the TOWN. Any extensions of the subject water and sewer system financed by the CITY shall be and remain the pro-perty of the CITY without any further consideration to the TOWN, but shall otherwise be subject to this Agreement.
- The TOWN hereby irrevocably grants and permits the CITY the right to operate and maintain all portions of the subject water and sewer system in, on, and under any and all real property, including streets, dedicated streets or rights-of-way, which are owned by the TOWN or to which the TOWN claims an interest. The TOWN hereby irrevocably grants and permits the CITY the right and permission to construct, operate, maintain and perform all related activity for future water and/or sewer lines in, on, and under TOWN streets and dedicated streets or rights-of-way. In all instances, the CITY or its authorized contractor shall be required to restore and repair any street or other property of the TOWN upon the completion of any construction, operation, maintenance or related activity causing damage thereto. At or before such time as the TOWN shall close any street or sell any interest in any property in which a water and/or sewer line subject to this Agreement is actually located, the TOWN shall take such action as is necessary to protect as a matter of record the rights and interests previously transferred to the CITY pursuant to this Agreement, including but not limited to reserving the necessary easements and rights-of-way for the operation and maintenance of said line. The Director of the Charlotte-Mecklenburg Utility Department shall specify the necessary rights-of-way to be reserved, in accordance with engineering standards adopted by CMUD and which shall be parallel to the existing line. The TOWN shall also make adequate reservation for the necessary rights-of-way for all planned water and/or sewer lines prior to closing any street. If the TOWN fails to comply with the provisions of this paragraph, the TOWN shall reimburse the CITY in full for all expenses incurred in acquiring the necessary right-of-way by purchase or condemnation.
- The TOWN represents that it has not awarded by franchise or otherwise conveyed in the past and agrees that it will not award by franchise or otherwise convey in the future rights to any third party to use any real property, including streets, dedicated streets or rights-of-way, owned or claimed by the TOWN in a manner which would unreasonably interfere with or impair the ability of the CITY to operate and maintain the subject water and sewer system or to construct, operate and maintain extensions thereof. future franchises which are renewed or awarded by the TOWN will be made expressly subject to the CITY's rights to operate and maintain the subject water and sewer system and to construct, operate and maintain extensions thereof. Franchisees of the TOWN, such as but not limited to operators of cable television systems, will be permitted to cross or encroach upon any portion of the subject water and sewer system or any extensions thereof which are located within streets, dedicated streets, rights-of-way, or other real pro-perty owned by the TOWN for con-structing, maintaining and operating authorized facilities of the franchisee at no cost to said franchisee upon reasonable terms and conditions; provided that, such crossing or encroachment

will not impair the CITY's ability to operate and maintain the portion of the water and sewer system affected. Any expense resulting from encroachment upon the subject water and sewer system or any extension thereof by said franchisee which results in impairment to the subject water and sewer system and any extensions thereof will be at said franchisee's expense. If any franchisee of the TOWN shall refuse to allow the CITY to cross or encroach upon property of the franchisee under the same terms and conditions as set forth above in this sub-section, the CITY shall have no obligation to permit said franchisee to cross or encroach upon the CITY's water and sewer system.

- The CITY agrees to allow and permit the TOWN in the future to cross 16. or encroach upon any portion of the subject water and sewer system or any extensions thereof for constructing and maintaining public streets or utility facilities at no cost to the TOWN upon reasonable terms and conditions; provided that, such crossing or encroachment will not impair the CITY's ability to operate and maintain the portion of the water and sewer system affected. Any expenses resulting from an encroachment upon the subject water and sewer system or any extensions thereof by the TOWN which results in impairment to the subject water and sewer system or any extension thereof will be at the The TOWN agrees to allow and permit the CITY in the future to TOWN's expense. cross or encroach upon any portion of any future street or dedicated street or right-of-way or utility easement owned by the TOWN for the purpose of constructing, maintaining, and operating any extension of the subject water and sewer system, at no cost to the CITY upon reasonable terms and conditions; provided that, such crossing or encroachment will not impair the TOWN's ability to operate and maintain the portion of its street system or utility system which is affected. Any temporary impairment resulting from construction and maintenance activity shall not be a basis for not allowing or permitting such crossing or encroachment. All construction and maintenance activities shall be performed in a timely manner so as not to unduly or unnecessarily impair the use of the TOWN's street system or utility system or the use of the CITY's water and sewer system. For purposes of this Paragraph, "utility" refers to any system(s) operated by the TOWN for: production processing and distribution; the generation, transmission, and/or distribution of electric power or any related activity; and/or communication purposes, such as but not limited to telephone service and any related activity.
- 17. a) The CITY's duties and responsibilities for planning, constructing, operating and maintaining the subject water and sewer systems and any extensions thereof throughout the jurisdiction of the TOWN shall include the use of the subject water system for the consumption and use of water for residential, commercial, industrial, manufacturing, institutional, governmental and all other similar or related purposes. In the area of fire protection services, the CITY's duties and responsibilities to the TOWN are limited solely to operating and maintaining in a reasonable manner the subject water system and any extensions thereof with the TOWN's corporate limits at a level substantially equal to the level of the TOWN's maintenance of the subject water system on the effective date of this Agreement. The TOWN or any authorized volunteer fire department may secure water from the subject water system and any extensions thereof for active fire fighting purposes under the same policies of the City as apply to the water system of the CITY in the unincorporated areas of Mecklenburg County.

- b) Fire hydrants will be installed and maintained by the CITY under the same policies that apply in the unincorporated areas of Mecklenburg County. No additional fire hydrants will be installed to the subject water system, unless the TOWN agrees to bear the full expense of installing and main-taining such additional fire hydrants.
- 18. It is the intent of the TOWN and the CITY that the rights of any third party to recover in any action arising from the construction, operation and maintenance of the subject water and sewer system and any extensions thereof shall not be increased or decreased by the existence of this Agreement.
- The TOWN shall transfer to the CITY reproducible copies of any and all records arising from the construction, operation and maintenance of the subject water and sewer systems and any other related activity, including but not limited to the following: construction contracts, drawings, maps, and all other related documents evidencing the condition or location of any portion of the subject water and sewer systems including such documents as may be in the possession of any engineer or other consultant of the TOWN; billing, collection and payment records on all present and past customers of the subject water and sewer systems; contracts or agreements for the supply of materials; pending applications for water and/or sewer service; contracts or agreements to provide water and/or sewer service currently in effect; receipts, accounts and other records of deposits made by all present and past customers of the subject water and sewer systems; repair and maintenance records and any warranty information on any property transferred to the CITY pursuant to this Agreement; repair and maintenance records for all portions of the subject water and sewer systems; plans, specifications, surveys, etc. for water and sewer facilities listed in Exhibit E. The TOWN shall also provide copies of such records as are necessary to inform the CITY of the location of all facilities of the TOWN for other utility operations. The Director of CMUD for the CITY and an appropriate designee for the TOWN shall determine mutually satisfactory, administrative details for the transfer of the above-referenced records, including but not limited to establishing the method for determining and rendering final water and/or sewer bills to customers of the subject water and sewer systems which are payable to the TOWN. Water and sewer services provided to customers of the subject water and sewer systems thereafter shall be payable to the CITY. The CITY may provide reasonable assistance to the TOWN in the TOWN's efforts to collect any final unpaid water and/or sewer bill of the TOWN, including but not limited to terminating water and/or sewer service to any delinquent cus-tomer or user. If such service is terminated, the CITY shall be under no obligation to renew or reconnect service to such customer or user until such unpaid bills from the TOWN and from the CITY have been fully satisfied. The Director of CMUD for the CITY and an appropriate designee for the TOWN shall also be responsible for determining all other details related to this transfer Agreement not specifically addressed in this Agreement, including, but not limited to, the date of transfer. Determining the date of transfer shall not be delayed unreasonably by either Party. Any agreement(s) necessary to effect the transfer of the subject water and sewer system, deposits, and any other assets to be transferred will be finalized and executed prior to the date of transfer.

- b) Immediately upon the execution of this Agreement, the TOWN shall allow the CITY access to all portions of the subject water and sewer systems for purposes of inspecting the condition thereof. This sub-paragraph will be effective immediately upon the execution of this Agreement, as set forth in Paragraph 31(b).
- 20. After the date of transfer, all requests for new service installation shall be made directly to the CITY. Prior to the date of transfer and thereafter, the TOWN agrees to provide, or otherwise cooperate with the CITY in providing, information to residents of the TOWN and to customers or users of the subject water and sewer system concerning applicable procedures for requesting maintenance of service from the CITY.
- 21. Any and all deposits and advance payments made by customers or users of the subject water and sewer system to the TOWN shall be transferred to and shall become subject to the sole custody of the CITY. Such deposits and advance payments shall be treated by the CITY in the same manner as other deposits and advance payments made to the CITY by customers or users of the water and sewer system operated and maintained by the CITY within the CITY. The CITY will indemnify and hold the TOWN harmless for any claims against the TOWN for the refund of any deposit transferred to the CITY which the CITY wrongfully refuses to refund.
- Within ten (10) days after the effective date of this Agreement, a) the TOWN shall identify all persons employed by the TOWN on a permanent, fulltime basis who have substantial duties in the operation and maintenance of the subject water and sewer system as of the effective date of this Agreement. For each TOWN employee who wishes to transfer employment to the CITY and who con-sents, a complete copy of the personnel file of each such employee shall be provided along with such identification. The CITY will offer to hire each such employee in as similar position as possible to the position held with the TOWN and for which such employee is qualified. TOWN employees shall have fifteen (15) days to accept such offer. All TOWN employees who accept such offer will not suffer any loss in pay, annual or sick leave. Effective upon the date of transfer, such employees shall be employees of the CITY and shall be subject to all rules and regulations applicable to other employees of the CITY and CMUD. Prior to the date of transfer and after the acceptance of the CITY's offer of employment by each such employee, the TOWN shall transfer to the CITY any and all funds necessary for the payment of any accrued leave for each such employee. In the event an employee's salary is higher than the similar position into which he is being transferred, the employee's pay will be frozen at that level until such time as the maximum level for the particular position reaches or exceeds the employee's salary.
- b) As a result of the transfer of employment of any TOWN employee pursuant to this Paragraph, the CITY shall not assume or be responsible in any manner for any benefits to which such employee may be entitled as a result of his/her employment with the TOWN. The CITY shall cooperate with the TOWN and such employee in determining the retirement benefits to which such employee is entitled from the TOWN. No determination of such benefit shall be made without the agreement of the TOWN, the CITY and such employee. Upon the effective transfer of such employee to the CITY, such employee shall become a member of the North Carolina Local Government Retirement System and shall make the necessary contributions thereto.

- 23. As of the date of transfer, all customers or users of the subject water and sewer system shall become subject to all rules, regulations and ordinances of the CITY as the same apply to all users and customers of the water and sewer system of the CITY, and as same are now or may hereafter be amended. Such rules, regulations and ordinances and schedule of rates, fees, charges and penalties shall constitute a part of the agreement between the CITY and any customer or user of the subject water and sewer system and any extensions thereof for the provision of water and/or sewer service.
- Prior to the date of transfer and as a condition of entering into this Agreement, the TOWN shall adopt such ordinance or ordinances as are reasonably necessary to regulate the proper use of the subject water and sewer system and any extensions thereof by the customers and users within the jurisdiction of the TOWN. Any ordinance(s) adopted by the TOWN which is in substantial conformance with the ordinances of the CITY (Chapter 16 of the Code of the City, Exhibit C) regulating the use of the water and sewer system of the CITY shall be deemed to be in compliance with this Paragraph. The TOWN shall maintain and enforce such ordinance or ordinances. The CITY shall reimburse the TOWN for the reasonable expenses of enforcing such ordinance or ordinances. In the alternative, the TOWN may, by agreement with the CITY, designate one or more appropriate employees, officers or representatives of the CITY to enforce such ordinance or ordinances. event of substantial changes by CITY in Chapter 16 of the Code of the CITY, TOWN agrees to adopt comparable changes in TOWN code within sixty (60) days after notification by CITY.
- 25. a) The TOWN shall take such action as is reasonably necessary to assist the CITY in applying for and obtaining financial assistance, including Federal and/or State funds, for improving, maintaining or operating water and/or sewer facilities in or near the TOWN.
- b) The TOWN and CITY shall take such actions as are reasonably necessary to comply with all applicable portions of this Agreement. The TOWN shall, if necessary, institute such civil or criminal actions, including condemnations, or shall consent to become a party in any action to which the CITY is a party, as may be necessary or expedient to implement this Agreement and/or to permit the operation and maintenance of any portion of the subject water and sewer system or the construction, operation and maintenance of any exten-sion thereof.
- 26. a) Upon the date of transfer, the TOWN will discontinue the operation of a water and sewer system.
- b) Such discontinuance is permanent and irrevocable, except as set forth herein.
- c) No person or entity shall be allowed to operate or maintain a water and/or sewer system within the jurisdiction of the TOWN without a franchise to do so. This provision shall have no effect upon any person or entity lawfully operating a water and sewer system within the jurisdiction of the TOWN prior to the execution of this Agreement; provided that no extension of such water and/or sewer system shall be made without a franchise.

- The TOWN shall not award a franchise to operate any water and/or sewer system within the TOWN in areas served by the CITY. If the CITY shall fail to provide water and/or sewer service to any area within the TOWN within a reasonable time after such request is made in accordance with the CITY's established extension policies or if reimbursement of a reimbursable extension under established extension policies is not sufficient, based upon reasonable forecast, to reimburse the cost of a reimbursable extension, the TOWN may award a franchise to operate a water and/or sewer system within the TOWN to serve only those areas which CMUD has failed to serve. For purposes of this Paragraph, "reasonable forecast" means a reasonable estimate by the Director of CMUD of the future revenues to CMUD to be generated by the requested reimbursable extension and the portion of said revenues which are reimbursable under established extension policies. The propriety of such determination by the Director of CMUD shall be an arbitratible claim or controversy under Paragraph 11. Said forecast shall be made in the same manner as the financial feasibility of extensions are determined under Paragraph 27(f)(iii). Reimbursement shall be deemed sufficient for purposes of this Paragraph if said reimbursement equals ninety percent (90%) of the cost of the reimbursable extension. Any franchise awarded by the TOWN for a water and/or sewer system shall require the owner and operator of the franchised system to: (1) secure all necessary permits prior to beginning operation; (2) operate in compliance with all applicable statutes, ordinances and regulations; (3) construct the distribution and/or collector portion of the franchised system according to standards adopted by CMUD at the time the franchise is awarded, begin construction on the franchised system within one year of the award of the franchise and complete construction within a reasonable time thereafter, construct extensions from the franchised system according to CMUD standards adopted at the time such extension is approved by the TOWN, and maintain and operate the franchised system in a reasonable and prudent manner; (4) connect to the water and/or sewer system of CMUD within one (1) year whenever any portion thereof is located within five hundred feet of the franchised system's treatment facility at the sole expense of the owner of the franchised system, subject to reimbursement under any applicable established extension policy, and cease operation of the treatment facility thereafter; and (5) transfer said system to the CITY for incorporation into the CMUD system upon the payment by the CITY to said owner of One Dollar (\$1.00) and thereafter, said franchised system shall be fully subject to this Agreement.
- 27. To the extent any provision of this Agreement is authorized solely by Article 20, Part 1 of Chapter 160A of the North Carolina General Statutes or other similar statutory authority authorizing interlocal cooperation between units of local government, the following provisions shall apply:
- a) The purpose of this Agreement is to provide safe and sanitary water and sewer service within the TOWN, while relieving the TOWN of the finan-cial burden of operating the subject water and sewer system and any extensions thereof, with the exception of provision 27(f) below.

- b) This Agreement shall be perpetual. The TOWN and the CITY hereby agree that such perpetual duration is reasonable in light of the purposes of this Agreement.
 - c) No joint agency is established by this Agreement.
- d) The CITY shall have the sole responsibility and authority to appoint or otherwise employ the personnel necessary for the implementation of this Agreement.
- e) The responsibility for financing the construction, operation and maintenance of the subject water and sewer system and any extensions thereof shall be in accordance with the terms of this Agreement. The CITY shall be entitled to the receipt of all revenues from the subject water amd sewer system and any extensions thereof.
- extensions thereof required by the TOWN shall be financed by the TOWN and shall be accomplished by contract between the TOWN and the CITY. Reasonable notice to proceed with such extensions will be provided to the CITY by the TOWN, such that applicable time limitations can be met; provided that, under no circumstances shall the CITY be liable to the TOWN for the payment of damages, penalties, fines or any other monetary recovery as a result of any failure to satisfy such time limitations.
- ii) Reimbursement, if any, of the costs for such extensions will be provided by the CITY in accordance with established extension procedures which are otherwise applicable to customers of CMUD or to developers.
- As an alternative to the provisions of sub-section (f)(ii) above, the TOWN may finance under this sub-section any water and/or sewer system expansion or improvement which would be reimbursable under established exten-sion procedures within the corporate limits of the TOWN or its extra-territorial jurisdiction which has the prior approval of the Director of CMUD based on technical engineering and financial feasibility, said approval not to be withheld unreasonably. If the TOWN finances said expansion or improvement by the issuance of general obligation bonds of the TOWN, said expansion or improvement shall be the property of the TOWN until said bonds are retired. Said expansion or improvement shall be leased to the CITY prior to being placed into operation through a new lease in compliance with the relevant provisions of Paragraph 3(b) above or by an addendum to any existing lease executed pursuant to said Para-graph. Each such new lease or addendum shall provide for payments by the CITY to the TOWN of sums sufficient to pay all of the TOWN's debt service on said bonds on an annual basis as and when such becomes due and payable. Upon the expiration of each lease arrangement, title to said expansion or improvement shall pass to the CITY upon payment of One Dollar (\$1.00) to the TOWN. All expenses of the TOWN in securing authority to issue said bonds and in issuing said bonds shall be the sole responsibility of the TOWN and shall not be reimbursed by the CITY in any manner. If the TOWN finances said expansion or improvement by any means other than the creation of debt, the preceeding provisions of this sub-section shall fully apply; provided that, the term of the lease shall be fifteen (15) years with CITY making fifteen (15) equal payments,

one at the end of each year of the lease. Such payments shall total the cost of said expansion or improvement. If the TOWN proposes to use general obligation bonds to finance said expansion or improvement and after the TOWN has secured authority to issue said bonds, the TOWN shall notify the CITY in writing at least 60 days, but no less than 120 days, before the actual issuance of said bonds. Said notice shall contain the terms and conditions under which said bonds will be issued, including but not limited to the expected interest rate for said bonds. The CITY may, in its sole discretion, decide to finance said expansion or improvement through the issuance of general obligation bonds of the CITY or the use of any other available funds or means of financing said expansion or improvement. If the CITY decides to finance said expansion or improvement, written notice of such decision shall be given to the TOWN at least 30 days before the TOWN's issuance of its bonds or 30 days after receipt of the TOWN's notice of its intent to use bond financing, whichever date is later. Upon receipt of such notice the TOWN shall not issue such bonds. The CITY's decision to finance said expansion or improvement shall not unreasonably delay the beginning of construction thereof.

- g) This Agreement may be amended only by a document in writing, approved by the City Council of the CITY and the Board of Commissioners of the TOWN, and executed by the Mayors of the CITY and TOWN.
- h) This Agreement shall be terminated only upon the agreement of the CITY and TOWN following the procedure described for amending this
- 28. Except as set forth in Paragraph 12, the CITY shall assume and honor all existing (as of the date of transfer) contracts and agreements with third parties previously entered into by the TOWN concerning the subject water and sewer system; provided that such contracts that require expenditure of CITY funds shall be reimbursed by TOWN in full within thirty (30) days after demand by CITY. Any such contract or agreement with third parties entered into by TOWN between the execution of this Agreement and the date of transfer shall require approval by the CITY.
- 29. All prior agreements and contracts between the CITY and TOWN regarding water and sewer service are rescinded as of the date of transfer. This Agreement contains the sole and entire agreement between the TOWN and the CITY regarding the provision of water and sewer service.
- 30. It is hereby declared to be the intention of the TOWN and the CITY that the paragraphs, sections, sentences, clauses and phrases of this Agreement are severable. If one or more paragraphs, sections, sentences, clauses, or phrases shall be declared void, invalid or otherwise unenforceable for any reason by the valid, final judgment or decree of any court of competent jurisdiction, such judgment or decree shall not affect the remaining provisions of this Agreement and the same shall continue to be fully effective and enforceable on the basis that said remaining provisions would have been agreed to by the CITY and the TOWN without the incorporation of such void, invalid or otherwise unenforceable paragraph, section, sentence, clause or phrase.

- This Agreement shall become effective upon the following: approval by the North Carolina General Assembly of a bill authorizing municipalities within Mecklenburg County to enter into agreements concerning annexation (Exhibit F or any bill substantially similar thereto); (2) approval by the TOWN and the CITY of a separate agreement designating areas which are not subject to annexation by one or more of the participating municipalities (Exhibit D); (3) adoption of a TOWN ordinance outlined in Paragraph 24 above; (4) approval and execution of this Agreement; (5) approval and execution by CITY and Mecklenburg County of an amendment to The Agreement Between the City of Charlotte and Mecklenburg County With Respect to the Establishment of a City-County Utility Department, dated January 17, 1972, that requires TOWN approval of utility extensions within area defined in the annexation agreement; the TOWN's extra territorial jurisdiction; (6) approval and execution of a substantially similar water and sewer agreement (except for the purchase of water intake and treatment facilities) with the Town of Cornelius and approval and execution of similar water and/or sewer agreements by each of the other four TOWNS in Mecklenburg County; and (7) approval by the voters of the TOWN of the transfer of the water system to the CITY under the terms of this Agreement. The TOWN and the CITY will use their best efforts to secure the passage of said bill (Exhibit F or any bill substantially similar thereto).
- b) Notwithstanding the provisions of Paragraph 31(a) above, the provisions of Paragraphs 4(b) and 19(b) above shall be effective immediately upon the execution of this Agreement.
- c) If this Agreement takes effect pursuant to the provisions of Paragraph 31(a) above, the earlier agreement between the TOWN and the CITY transferring the TOWN's sewer system only to the CITY shall be rescinded automatically and shall have no force and effect. No additional action by the TOWN and the CITY shall be necessary to rescind said earlier agreement. If this Agreement does not take effect pursuant to the provisions of Paragraph ment shall not be rescinded in any manner but shall remain in full force and effect according to its provisions.
- 32. Whenever written notice is required under this Agreement, said notice shall be sufficient when received by the municipal clerk of the party for whom such notice was intended. Said notice may be mailed or hand-delivered but shall not be effective unless actually received. If notice is mailed to the CITY, it shall be addressed as follows:

City Clerk City Hall 600 East Trade Street Charlotte, North Carolina 28202

If notice is mailed to the TOWN, it shall be addressed as follows:

Town Clerk Town Hall Davidson, North Carolina 28036

Either party may change its mailing address, by giving written notice of the new address. Unless so changed, the addresses set forth above shall apply.

This the 14th day of Avgust	, 1984.
	CITY OF CHARLOTTE
ATTEST:	BY: Mayor
Pat Sharlous City Clerk	Mayor
APPROVED AS TO FORM:	
Dynky City Attorney	
	TOWN OF DAVIDSON
ATTEST:	BY: Mancy H. Mer Cormac Mayor
Fown Clerk	
APPROVED AS TO FORM:	
Fished J Klin E Town Actorney	*
Town Actorney	



DRAFT - 6/5/2018

A RESOLUTION OF THE TOWN OF DAVIDSON SETTING FORTH A WATER AND SEWER EXTENSION POLICY

WHEREAS, the Town of Davidson and the City of Charlotte entered into an Agreement, a copy of which is attached to this Resolution, in which the Town and City agreed that, as consideration for transfer of the Town's water and sewer system to the City that the Town would retain the right to approve or deny water and sewer extensions to property located within the Town, or its extraterritorial jurisdiction, and

WHEREAS, property located within Town, or its extra territorial jurisdiction, may not be served with water or sewer service by the extension of any line without written approval of the Town, and.

WHEREAS, the Town Board of Commissioners has authority to limit extension of water and sewer services so long as they do not act for personal gain or in an arbitrary or discriminating manner, and,

WHEREAS, the Comprehensive Plan states that growth should not negatively impact sensitive environmental resources and growth should not place significant additional burdens on public services or infrastructure, and,

WHEREAS, the Town Board of Commissioners desires to control how and when urban growth occurs within its borders by instituting local growth measures, which include adoption of a water and sewer extension policy.

NOW, THEREFORE, BE IT RESOLVED by the Board of Commissioners of the Town of Davidson that:

1. Statement of Intent.

As stated in the Davidson Planning Ordinance, Davidson is a livable and walkable community because it chooses to rigorously manage growth. The Town of Davidson intends to permit the extension of water and sewer services so as to provide for managed growth that is in the best interests of the citizens of the Town.

2. Policy Statement.

The Town Board shall consider water and sewer requests for developments that adhere to the requirements of the Davidson Planning Ordinance. In addition, the Board may approve or deny requests based on whether the extension is in the best interests of the community and in compliance with all the terms and conditions of the Davidson Planning Ordinance.



3. Rationale.

In making that determination, the Board may consider factors such as current traffic congestion in the area of the new lines and whether construction of new lines traversing town blocks will significantly increase traffic congestion, extra costs to the Town associated with traffic control during installation, the effect of new lines on the existing natural environment, particularly the loss of trees, other health and safety concerns of citizens in the immediate vicinity of the new lines and/or development, the burden on existing infrastructure of new development which can occur at higher densities with the provision of water and sewer.

4. Applicable Areas to this Policy.

The terms of this Policy shall apply to the extension of water and sewer lines to serve all vacant land, houses, buildings, and all other real property, located within the Town limits, and the Town's extra-territorial jurisdiction not presently served with water and/or sewer. This Policy will not apply to development projects with previously established vested rights.

5. Effective Date.

The provision of this Policy shall take effect as of the date of this Resolution.

6. Severability.

If any term or provision of this Resolution or if any rule or regulation is found to be invalid or unenforceable by a court of competent jurisdiction or by operation of applicable law, such invalid or unenforceable term or provision shall not affect the validity of the remainder of this Resolution.

2018.		
	Rusty Knox, Mayor	
rk		
		Rusty Knox, Mayor



Agenda Planning Department Work Plan Title: Planning Director Jason Burdette

Summary: The Board of Commissioners will prioritize the department's work plan based

upon the Strategic Plan initiatives.

Summary:

ATTACHMENTS:

	Description	Upload Date	Type
D	Planning Department Workplan Summary Memo	5/31/2018	Cover Memo
D	DRAFT Workplan	6/4/2018	Backup Material



Planning Department Workplan Prioritization

To: Davidson Board of Commissioners From: Planning Director Jason Burdette

Date: June 5, 2018

Re: Prioritizing the Planning Department Workplan

1. OVERVIEW

The Board of Commissioners' Strategic Plan has a number of tactical priorities and action steps as it relates to land use strategy, historic preservation, community engagement, and mobility/transportation. The Planning Department requests guidance in prioritizing the departmental workplan for the coming year.

2.RELATED TOWN GOALS

STRATEGIC PLAN ALIGNMENT

- Land Use Strategy: The Town of Davidson will align land use policies... to preserve our architectural history, manage residential growth, reduce the scale of future development, and enhance downtown.
- Community Engagement: The Town of Davidson will have inclusive engagement with the community to encourage substantive, respectful, and open dialogue, increase participation, and foster a sense of belonging.
- **Historic Preservation:** The Town of Davidson will preserve our historically significant structures to retain our authenticity as a historic, small college town.
- **Mobility/Transportation:** The Town of Davidson will enable citizens to move freely about town via transit, car, bicycle, and on foot.

CORE VALUE ALIGNMENT

- Davidson's traditional character is that of a small, historic college town, so land planning will
 reflect its historic patterns of village-centered growth including connection of neighborhoods,
 preservation of our historic resources, conservation of rural area, and provision of public spaces.
- Citizens need to move easily throughout the town and region, so government will provide a variety of options, such as sidewalks, bike paths, greenways, connected streets, and transit.

3. OPTIONS/PROS & CONS

Pro: Achieve identified goals outlined in strategic plan. Prioritize goals and agree upon a departmental work plan.

Cons: Based upon the board's prioritization, some tactical priorities will be achieved ahead of others. Tactical items take significant time and manpower to achieve.

4. FYI or RECOMMENDED ACTION

Prioritize the workplan.

5. NEXT STEPS

Planning Department gets to work.

	PLANNING DEPARTMENT	WORKPLAN 2018-1	9: PRIORITIZATION	N	
Land Use Strategies Tools	Description of the Tools	How Does Tool Manage Growth?	Tactical Priority from Strategic Plan	Feasibility	Time/ Process
	HIG	HEST PRIORITIES			
Watershed Ordinance	Limits Built-Upon-Area for Development; Reduces existing exemptions for lots of record	Incentivizes expansions vs. tear downs	Change land use regulations (G1.2)	Almost completed	May: Public Hearing; June: Action
	Expansion of Local Historic District	Codifies preservation regulations in a larger area	Create/expand local historic district (G3.1)	Feasible	8-12 months
Historic Preservation Strategy	Explore other tools (i.e. conservation districts, tax credit education, landmarks, CLG, saving contributing structures, legislation)	Incents preservation; Educates	Investigate historic preservation tools (G3.2)	Feasible	4-6 months; partially complete
	Create Historic Preservation Plan	Consolidated strategy to incent preservation	Investigate historic preservation tools (G3.2)	Feasible	Comp Plan
Create Davidson Mobility Plan	Community-wide mobility plan (ped, bike, auto, transit)	Provides options for improved mobility throughout town (projects and policy)	Continue work with consults. Include town walks with citizens, charette process and citizen input (G7.1)	Feasible	6 months
		Mobility vision included in long range planning document	Fold Mobility Plan into Comprehensive Plan (G7.2)	Feasible	6 months

	Present Comp Plan options and timeline to board	Provides baseline understanding for existing processes	Begin Comp Plan Update (G1.3)	Feasible	Completed
	Write RFP for consultants, post FRP, interview and hire consultants	Provides scope for comp plan work	Begin Comp Plan Update (G1.3)	Feasible	2-3 months
Comprehensive Plan	Host symposium on historic preservation, growth management strategies, and traditional town planning	Helps community visioning	Begin Comp Plan Update (G1.3)	Feasible	Comp Plan
	Determine citizen committees for Comp Plan	Citizen engagement	Begin Comp Plan Update (G1.3)	Feasible	Comp Plan
	Review Rural Area Plan	Determines land use vision for town	Begin Comp Plan Update (G1.3)	Feasible	Comp Plan
	Explore options for the VIP (limit tear downs, limit exempt subdivisions, eliminate or modify multi-family)	Tools could preserve character of Village Infill	Change land use regulations (G1.2); Investigate historic preservation tools (G3.2)	Feasible	Various
Neighborhood Character	Review height limits in Lakeshore & CBD	Reduces scale/density	Change land use regulations (G1.2)	Feasible	4-6 months
	Tree Ordinance: Strengthen tree ordinance requirements	Increases onus upon developers to preserve/enhance tree canopy	Change land use regulations (G1.2)	Feasible	6 months
Review Development Processes	Present existing process to board	Provides understanding of current regulatory framework	Review and develop options to change planning processes (G1.1)	Feasible	Completed

Review Development Processes	Consider changing development processes (i.e. add neighborhood meeting, charrette, school capacity req.)	Slows down process; engages more citizens	Review and develop options to change planning processes (G1.1)	Feasible	6-10 months (depends on scope)
	SECO	NDARY PRIORITIES			
Other Growth Management Tools	Explore other potential tools (urban growth boundaries, moratoria, water and sewer policy, buffers)	Tightens restrictions on development	Change land use regulations (G1.2)	Feasible	4-6 months
	N	OT PRIORITIZED			
Other Text Amendments	Environmental Overlay (EPA), Small Cell wireless, Mail Kiosk Design Criteria, Greenway and Multi-use Path Conditions (P&R), Street Top Coating (PW), Lighting (PW), Park Definitions (P&R), Hotel Parking requirements, expedited exempt subdivision review (NCGA), Sign Ordinance (and town banners)	Strengthens regulatory framework	Review and develop options to change planning processes	Not feasible to accomplish all	TBD

PL	PLANNING DEPARTMENT WORKPLAN 2018-19: ONGOING INITIATIVES			
Initiative	Description of the Initiative Tactical Priority from Strategic Plan		Feasibility	Time/ Process
		INITIATIVES		
Review and update community engagement process	Initiate monthly e-crier updates; topic specific e-criers; neighborhood meetings at project onset	Discuss current community engagement process (G2.2)	Feasible	Partially complete
Focus on Commercial Growth	Incent commercial development in targeted growth nodes	Connect North and South Main Streets, examine Jackson, NC 73, Circles @30 (G6.3)	Feasible	Comp Plan
Development Project Management	Required technical reviews with County for residential and commercial projects	The Town of Davidson will maintain organizational excellence through superior service to the community (G*)	Feasible	Ongoing
CATS LYNX System Update	CATS is studying the north corridor to review potential viability of mass transit and/or other solutions	The Town of Davidson will enable citizens to move freely throughout town via transit, car, bicycle, and foot (G7)	Feasible	6 months
LNTC North Corridor Mobility Study	Working with neighboring communities to look at north/south mobility options on the eastern edge of respective towns	The Town of Davidson will enable citizens to move freely throughout town via transit, car, bicycle, and foot (G7)	Feasible	Ongoing
Mooresville Sphere of Influence MOU	Improve delineation between respective spheres of influence	The Town of Davidson will build on existing relationships to strengthen partnerships with strategic organizations and institutions (G9)	Unsure	Not prioritized
Update Kannapolis MOU	Outdated MOU needs updating	The Town of Davidson will build on existing relationships to strengthen partnerships with strategic organizations and institutions (G9)	Unsure	Not prioritized

NC73 Council on Planning	Quarterly meetings with planning directors and NCDOT	The Town of Davidson will build on existing relationships to strengthen partnerships with strategic organizations and institutions (G9)	Feasible	Ongoing
Planning Coordinators Committee	Quarterly meetings with regional planning directors and governing bodies	The Town of Davidson will build on existing relationships to strengthen partnerships with strategic organizations and institutions (G9)	Feasible	Ongoing
Technical Coordinating Committee (CRTPO)	Regional transportation network	The Town of Davidson will build on existing relationships to strengthen partnerships with strategic organizations and institutions (G9)	Feasible	Ongoing
Annexation hole correction	Several annexation holes exist. Need to be corrected	The Town of Davidson will maintain organizational excellence through sound financial management (G8)	Unsure	Not prioritized
Housing Counts Database	Update all approved permits and certificates of occupancy in a database; public works uses this for trash collection	The Town of Davidson will maintain organizational excellence through sound financial management (G8)	Feasible	Ongoing

5.31.2018

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Agenda Comprehensive Parking Study

Title: Economic Development Manager Kim Fleming

Summary: This study was conducted in 2017 as a part of the public facilities project and was funded with a grant from the Lake Norman Economic Development Commission. It updates the previous 2011 parking study and focuses on downtown and the surrounding areas. It provides short-term and long-term recommendations.

S	ummary:

ATTACHMENTS:

	Description	Upload Date	Type
D	Parking Study Agenda Memo	6/1/2018	Cover Memo
D	Comprehensive Parking Study	5/31/2018	Cover Memo



Comprehensive Parking Study

To: Davidson Board of Commissioners From: Jamie Justice, Town Manager

Date: June 5, 2018

Re: Comprehensive Parking Study

1. OVERVIEW

Recent discussions about the proposed Main/Concord intersection project with the loss of 10 on-street parking spaces led to a question about the recent parking study. This study was conducted in 2017 as a part of the public facilities project and was funded with a grant from the Lake Norman Economic Development Commission. It updates the previous 2011 parking study and focuses on downtown and the surrounding areas. It provides short-term and long-term recommendations.

2.RELATED TOWN GOALS

List strategic plan item: Economic development goal Mobility/Transportation goal

List core value(s):

Davidson's economic health is essential to its remaining a sustainable community, so town government will judiciously encourage and guide the location of new business opportunities.

Citizens need to move easily throughout the town and region, so government will provide a variety of options, such as sidewalks, bike paths, greenways, connected streets, and transit.

List which constituents are served:

All citizens.

3. OPTIONS/PROS & CONS

N/A

4. FYI or RECOMMENDED ACTION

FYI.

5. NEXT STEPS

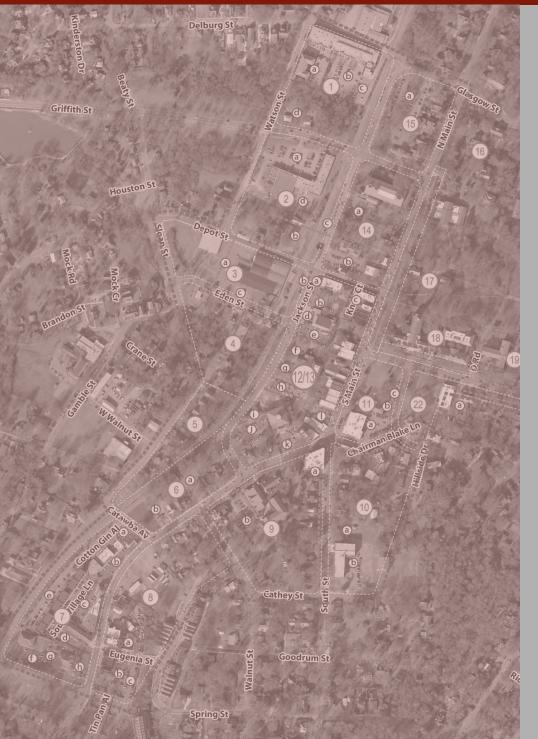
None. Receive as information.





COMPREHENSIVE PARKING STUDY

The Town of Davidson, North Carolina / 2017













TOWN STAFF AND PROJECT TEAM

The Town of Davidson

John Woods, Mayor Stacey Anderson, Commissioner Beth Cashion, Commissioner Jim Fuller, Commissioner Rodney Graham, Commissioner Brian Jenest, Commissioner



Town Staff

Jamie Justice, Town Manager
Dawn Blobaum, Assistant Town Manager
Doug Wright, Public Works Director
Kim Fleming, Economic Development Director
Cristina Shaul, Public Information Officer

Project Team

Stantec Urban Places Group: Craig Lewis, Mike Rutkowski, Chandler Hagen, Dylan McKnight, Ashley Bonawitz, and Bria Prioleau

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IMPLEMENTATION STRATEGIES	45			



INTRODUCTION



chapter

#1

This study, prepared for the Town of Davidson, updates the previous parking study completed by Rich and Associates in 2011. It reviews the existing parking conditions in downtown Davidson and the surrounding areas, and makes short-term and long-term recommendations for resolving parking issues for existing and planned development. Many issues were examined including, existing supply and demand, wayfinding and parking signage, and the exploration of additional parking solutions. Three public engagement sessions were held as a part of the Town's Public Facilities Study that analyzed not only parking needs but public space improvements and new space for Town Hall, Police, and Fire. The final recommendations for this parking study were created with the input from the public, assistance of town staff, and in collaboration with Creech & Associates.

IN THIS CHAPTER

Definitions	6
Study Area	7



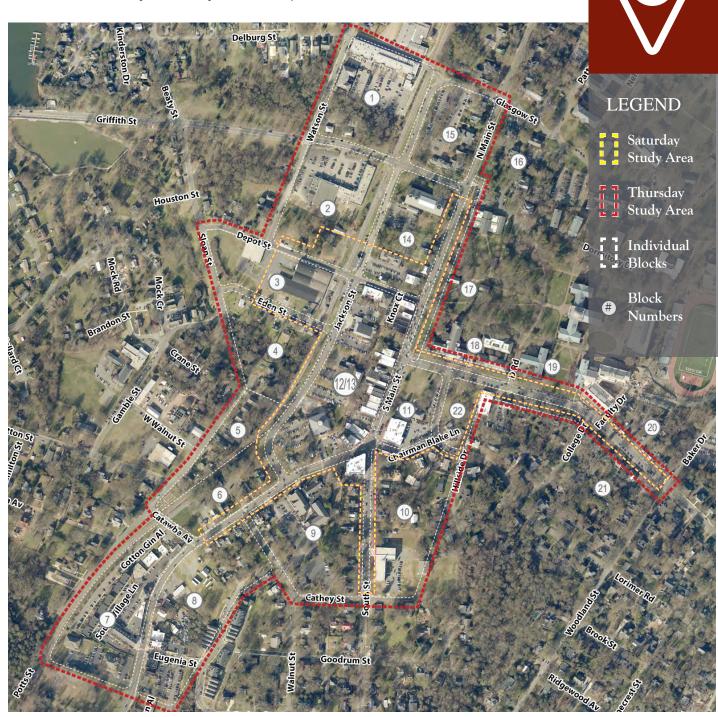
DEFINITIONS

- » Parking Supply: The number of parking spaces available for use by a specified group or groups of individuals (i.e. shoppers, employees, etc.).
- » Occupancy: The number of vehicles observed in a specific lot or block face represented as a percentage of spaces occupied.
- » Occupancy Rate: The percentage of all parking spaces with vehicles parked in them at a given time.
- » Circuit: A circuit refers to the two-hour period between observances of any one particular parking space. For the turnover and occupancy study, a defined route was developed for each survey vehicle. One circuit of the route took approximately two hours to complete and each space was observed once during that circuit.
- » Block Face: A number was assigned to each block within the study area. Each block is then referenced by its block number and by a letter (A, B, C or D). The letter refers to the cardinal face of the block; with (A) being the north face, (B) the east face, (C) the south face and (D) the west face. Therefore, a block designated as 1A would refer to the north face of block 1.
- » **Modal Split**: Fractional split identifying what percentage of people travel by a certain transportation type (i.e. automobile, mass or public transit, walking, train, etc.).
- » Parking Demand: The number of parking spaces generated by a single purpose building, multi-purpose building, group of buildings or outdoor amenity.
- » Parking Need: Represents the number of parkers who need to be accommodated in a given block after the use of alternative parking facilities is considered. Use is affected by price, location, accessibility and user restriction.
- » **Parking Surplus:** The number of parking spaces within the study area boundaries that surpass the parking demand.
- » Parking Deficit: The number of insufficient parking spaces within the study area based on the parking demand.

STUDY AREA

The study area consists of the historic Downtown and surrounding blocks. In 2011, Rich & Associates evaluated the parking conditions, parking supply, and parking activity in the roughly 22 block study area. Areas outside of the study boundaries were also examined for parking supply opportunities and potential impacts on parking (Rich & Associates, 2011).

Stantec used the same process to update the study in 2017.





EXISTING CONDITIONS



chapter

#2

Existing parking conditions were documented during two site visits and data was also analyzed that had been collected by town staff. To better divide the information for the field studies, each "block" in downtown and the surrounding area was numbered 1-22 beginning on the northwest side of town going southward, then traveling northward on Main Street to document the east side of town. The parking supply for each block was then calculated and compared to the 2011 study. The parking demand was calculated using traditional suburban parking requirements and projected future demands.

IN THIS CHAPTER

Parking Supply					
Parking Supply Map	11				
Parking Demand					
Parking Demand by Block Map	13				









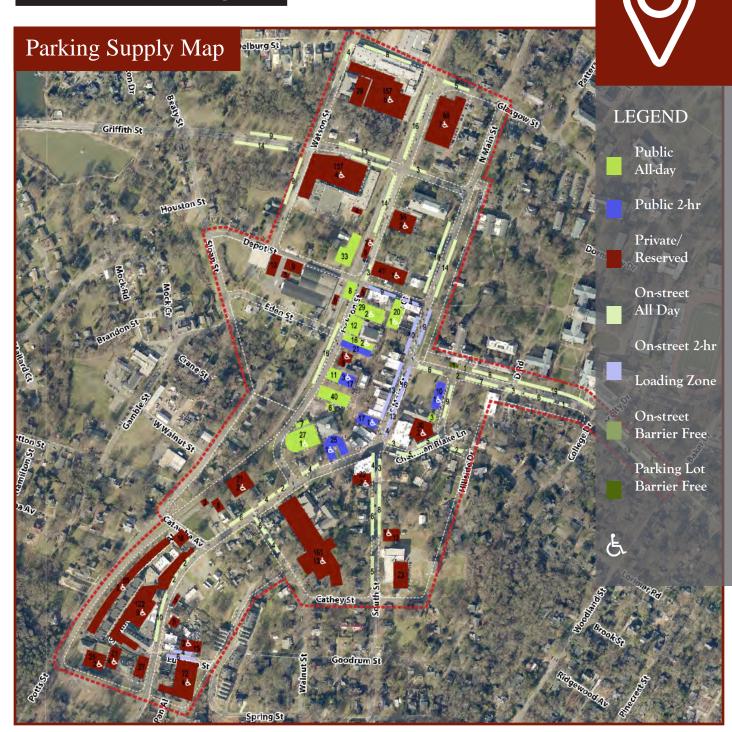
PARKING SUPPLY



Field work for this study entailed a review of the buildings and parking within the study area. There are a total of 1,930 parking spaces in the primary study area. Of these spaces, 371 are on-street and 298 are off-street public spaces. There are 1,231 private off-street spaces. Spaces that were not clearly marked were estimated. For the purpose of the study, any parking marked 'reserved' or 'privately owned' was designated as private parking. Also, any parking lots owned by the town, but used for specific public services (e.g., Town Hall) were counted as public all day. Parking available for use by the general public was designated as public parking. The Town of Davidson manages and controls 35 percent of the parking in the study area; however, the best practice to successfully manage municipal parking in small downtowns is for the municipality to have control of at least 50 percent of the parking supply. This allows the municipality to effectively manage parking in terms of allocation, reaction to changing demand, market pricing, and allows the parking to be enforced with greater efficiency (Rich & Associates, 2011).

Parking Supply Chart by Block																				
Block	1	2	3	4	6	7	8	9	10	11	12/ 13	14	15	17	18	19	20	21	22	
On-Street																				
2 Hour							10			33	36			9						88
All Day	41	20		16	12	14	10	15	18	14	4	18	8	14	8	19	8	14	26	279
Loading Zone															1				2	3
Barrier Free															1					1
Total On-S	treet																			371
Off-Street																				
Public																				
2 Hour										10	80									90
All Day			8							19	167									151
Barrier Free										3	11									14
Total Publi	c																			298
Private																				
Private/ Reserved	185	179	30		32	266	97	183	34	14	14	76	88							1,198
Barrier Free	5	6			2	17	6	15	1		1	3	7							63
Total Private											1,231									
TOTAL SUPPLY	231	205	38	16	46	297	123	213	53	93	313	97	103	23	10	19	8	14	28	1,930

Parking Supply Chart Summary							
Parking Type	Number of Spaces						
Public On-Street	371						
Public Off-Street	328						
Private Off-Street	1,231						
TOTAL SUPPLY	1,930 spaces						



PARKING DEMAND

Projections were made to determine the current and future parking demands. The floor area and use of every building in the core study area were collected and compiled to calculate the parking demand on a block-by-block basis. The gross floor area of each property can be found in the Mecklenburg County Property Ownership and Land Records Information System.

Using the same methodology as in the 2011 study, parking demand based on land use is calculated with two methods. First, a mathematical or hypothetical model of parking demand is generated based on the building gross floor area. The mathematical model multiplies a parking demand generation ratio by the floor area of specific land uses to derive the number of spaces needed. The second is a method of using field observations to calibrate the mathematical model and help to establish projected parking spaces needed. Future parking demand was determined by the assumption of vacant space re-occupancy at a rate of 40 percent in five years and 80 percent in ten years.

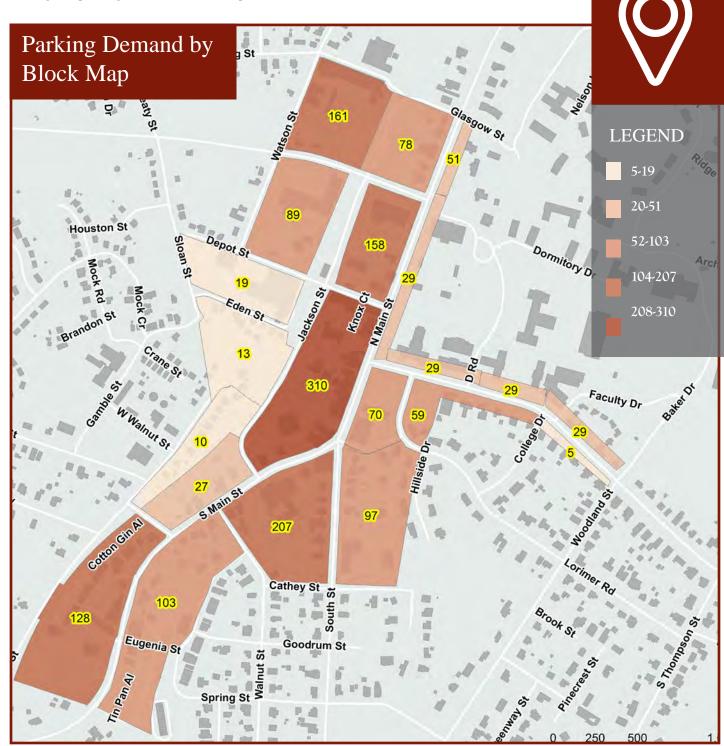
The parking spaces required for the study area were determined through an analysis of the number of parking spaces demanded and/or needed to serve the size and type of buildings present in the study area and for future re-occupancy planned or proposed. Most parking requirements are based on the gross floor area of a particular development and the actual generation rate or parking ratio is tied to the land use type (Rich & Associates, 2011).

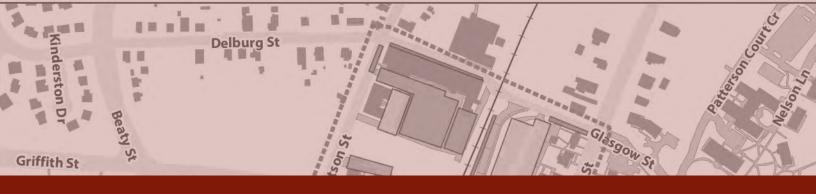
The overall parking demand above shows the typical demand for a suburban community like Davidson based on typical parking space requirements per 1,000 square feet by land use type. The areas calculated are divided by 1,000 square feet and then multiplied by the number of spaces required by code to create an overall raw number of needed parking spaces. The overall raw number of spaces needed is only 703 parking spaces.



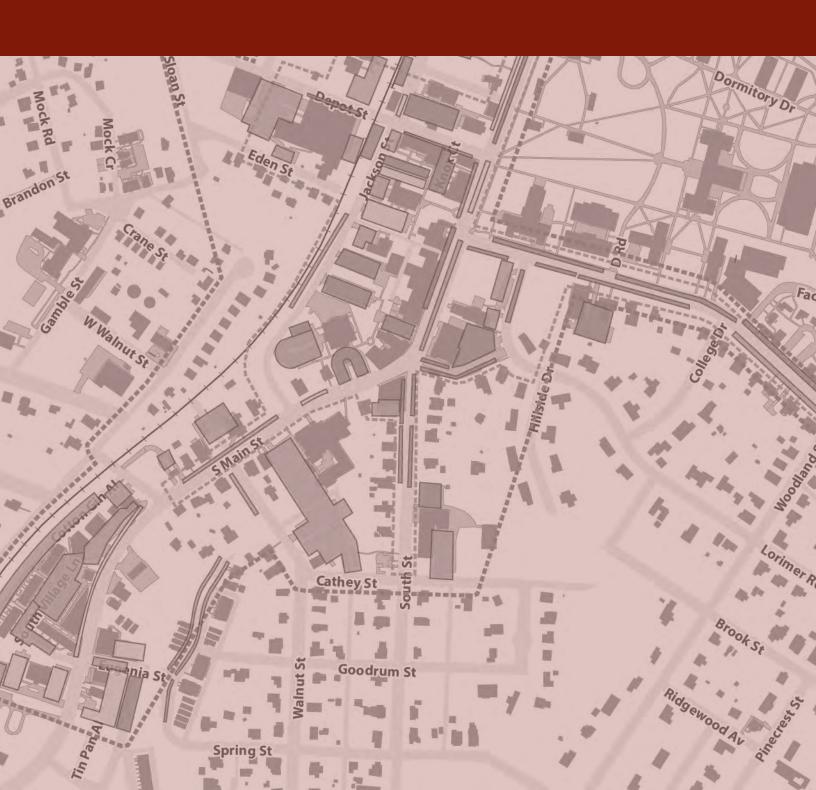
Typical Suburban Demand Chart							
Use	Calculation	Area					
Office	4 spaces/1,000 sf	92,172					
Retail	4 spaces/1,000 sf	28,786					
Restaurant	4 spaces/1,000 sf	24,546					
Institutional	3 spaces/1,000 sf	29,550					
Hotel	2 spaces/1,000 sf	12,156					
Other (Dance)	2 spaces/1,000 sf	4,193					
Total Demand		193,964					
TOTAL RAW NEED		703 SPACES					

Since 2011, downtown has seen seven new restaurants open, dramatically changing peak parking demand. The map below illustrates the same parking demand process but for the projected analysis and future demand required by re-occupancy of vacant developments. The data is broken down by the number of spaces needed for each block of the study area. Lower demand is shown in beige color while darker red indicates higher demand. The blocks in the southern areas on the west side of the train tracks have the lowest demand. Block 12/13 at the center of community has the highest parking demand, where shops and restaurants are most concentrated.





PARKING STUDY



chapter

#3

To update the 2011 occupancy study, the data collected during the field studies on a weekday and weekend were used to find peak occupancies and study how predicted demand holds up against the existing capacity. Each lot within the twenty-two blocks was assigned a letter and all on-street parking was assigned a cardinal direction (north, south, etc.) in regards to its orientation on the block. The results of these studies will determine the subsequent recommendations and strategies for the future of parking in downtown Davidson.

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OCCUPANCY STUDY

Occupancy studies were conducted via site visits and similar day/time variables were used as those in the 2011 study in order to generate an accurate comparison. The weekend circuit was completed on Saturday, April 1, 2017 from 8:30 A.M. to 1:30 P.M. This date corresponded with the first Farmer's Market of the season. The weather during this occupancy count was sunny and warm. During the circuit, both public and private on-street and off-street parking in the downtown were observed. The results revealed a surge in occupancy during the 10:30 A.M. block, when the Farmer's Market attendance was at it's peak.

Occupancy counts were taken again on Thursday, April 6 from 8:00 A.M. to 8:00 P.M. The day began windy and cool, but turned warm and cloudy. On-street and off-street parking was observed in the core of downtown and the surrounding area for this count. Three circuits showed high contrast between public and private occupancies: after the commute at 10:00 A.M; during lunch at 12:00 P.M; and during dinner at 6:00 P.M.

Occupancy is an important aspect of parking because it helps us to understand the dynamic of how parking demand fluctuates throughout the day. Likewise, the occupancy can be used to illustrate how parking demand is impacted by events in the downtown area. Overall, the occupancy data is used to calibrate the parking demand model (Rich & Associates, 2011).

Occupancy Results

Saturday, April 1, 2017 | 8:30 A.M. to 1:30 P.M.



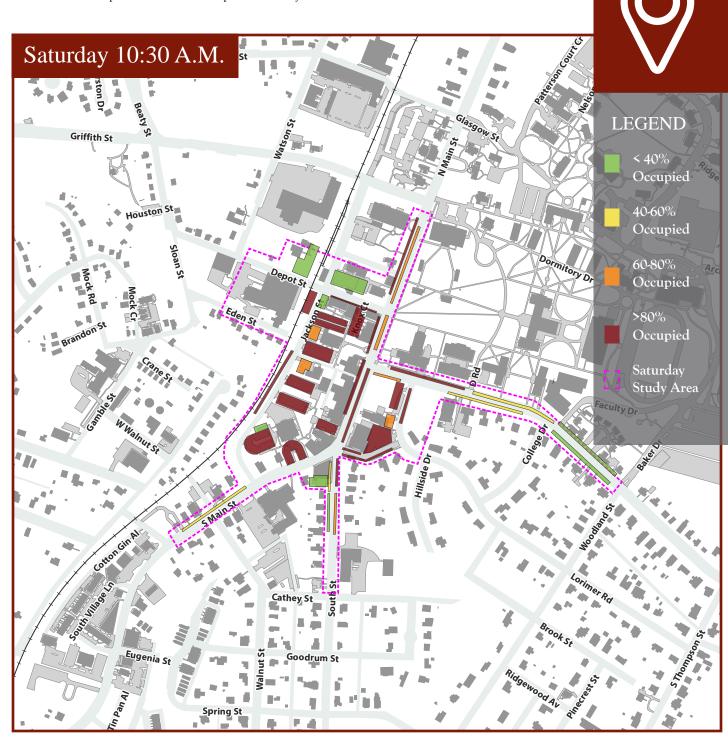
An occupancy observation was completed on Saturday April 1st, 2017 from 8:30 A.M. to 1:30 P.M. This was the season opening of the Davidson Farmer's Market. The counts were done in the core downtown every hour to compare a weekend day to the next study conducted on a weekday. A summary of the results from the observations is in the chart below and a 'heat map' of the occupancy for the peak time of 10:30 to 11:30 P.M. is illustrated in the map on the next page. The chart shows the observed occupancy with parking separated by type: on-street, off-street, public and private. The map combines all parking types but separates them into occupancy levels ranging from less than 40% to over 80% occupied.

The full occupancy results can be found in Appendix A.

Saturday Occupancy Chart											
Description	# Spaces	8:30	Occ.	9:30	Occ.	10:30	Occ.	11:30	Occ.	12:30	Occ.
Public On-Street	273	165	60%	187	68%	199	73%	180	66%	135	49%
Public Off-Street	311	233	75%	258	83%	262	84%	245	79%	179	58%
Private Off-Street	110	23	21%	48	44%	54	49%	53	48%	50	45%
TOTALS	694	421	61%	493	71%	515	74%	478	69%	364	52%

The occupancy key observations:

- » The overall peak observed occupancy was 74 percent at 10:30 A.M.
- » Several of the on-street parking areas were at or near 100 percent occupancy
- » A majority of the public lots were at the highest occupancy in the core, within view of the Farmer's Market
- » The Farmer's Market stalls occupied 28 spaces in the public lot adjacent to the Fire Station and all 15 spaces in the 2-hour public lot adjacent to Summit Coffee



Thursday, April 6, 2017 | 8:00 A.M. to 8:00 P.M.

The next occupancy study was conducted on Thursday, April 6th, 2017 from 8:00 A.M. to 8:00 P.M. in two-hour circuits. The study area was expanded to include the downtown core and surrounding blocks, consistent with the 2011 study. A summary of the occupancy results can be found in the chart below. Peak occupancy diagrams are shown on the following pages for two circuits: 10:00 A.M. to 12:00 P.M. and 12:00 P.M. to 2:00 P.M. These are the time frames when most employees are in the city for work and/or lunch. To continue studying the flow of the average local employee, the circuit from 6:00 P.M. to 8:00 P.M. was documented. This circuit had high occupancy rates for public on-street parking but low private parking numbers, which could be due to patrons parking close to restaurants and bars at the end of the workday.

The full occupancy results are found in Appendix B.

Saturday Occupancy Chart													
Description	# Spaces	8:00	Occ.	10:00	Occ.	12:00	Occ.	2:00	Occ.	4:00	Occ.	6:00	Occ.
Public On-Street	419	202	48%	263	63%	286	68%	219	52%	174	48%	226	54%
Public Off-Street	509	256	50%	300	59%	332	65%	292	57%	261	51%	194	38%
Private Off-Street	1,116	433	39%	567	51%	592	53%	577	52%	544	49%	427	38%
TOTALS	2,044	891	44%	1130	55%	1210	59%	1088	53%	979	48%	847	41%

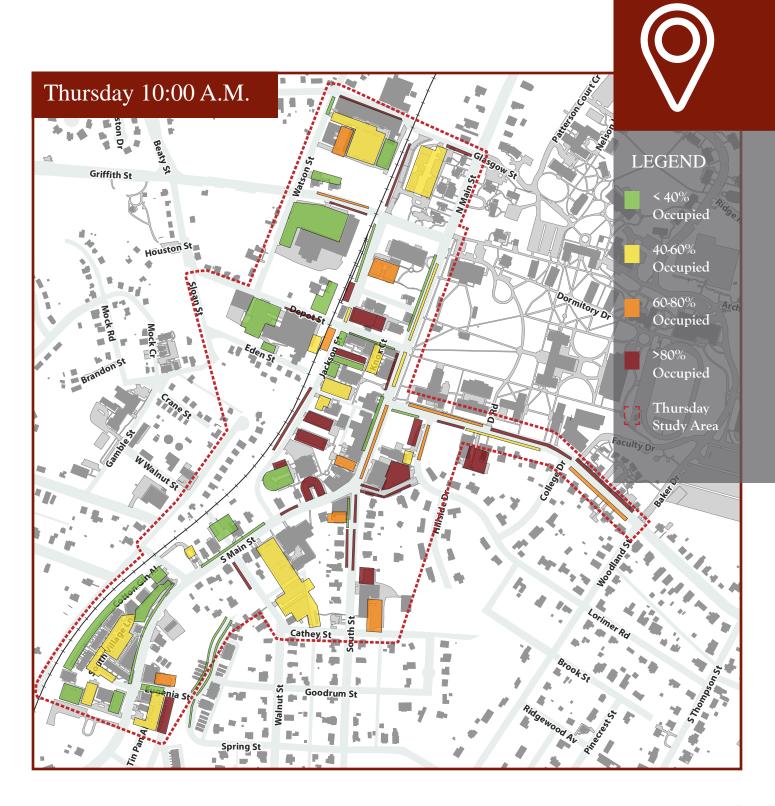


The overall occupancy key points:

- » The overall peak observed occupancy was 59 percent at 12:00 P.M.
- » The occupancy in the core was 52 percent at 12:00 P.M.
- » Several of the on-street parking areas were at or near 100 percent occupancy
- » The public parking had higher overall occupancy levels than the private parking with the highest levels for each reaching: On-Street = 68%, Public Off-Street = 65%, Private = 53%

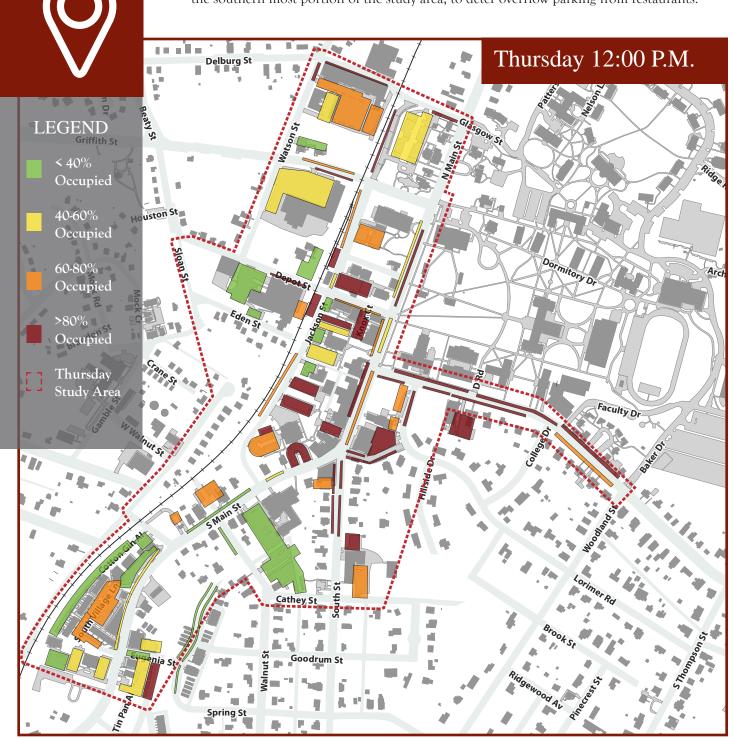
The 10:00 A.M. occupancy key observations:

- » The 8:00 to 9:00 A.M. data was skewed due to employees arriving to work during the study time. Most seemed to have parked in private office lots by the 10:00 A.M. study time.
- » The private CVS parking lot, despite posted 'CVS Customer Parking Only' signs, seemed to be full at this time with other business' patrons in addition to CVS patrons and employees.
- » The occupancy of on-street parking along Concord Road is much greater than on Saturday, likely due to the proximity to Davidson College.
- » Many parents were observed parking in the Library public lot and on-street parking along Lorimer Road then walking their kids across Concord Road to school.
- » This time frame was the only point at which the Davidson United Methodist Church parking lot was over 40% capacity, mainly due to children being dropped off for school.
- » During school hours, the Lake Norman Christian School parking appeared to spill out from the school's two private lots into the public on-street parking along South Street and in informal grass lots.



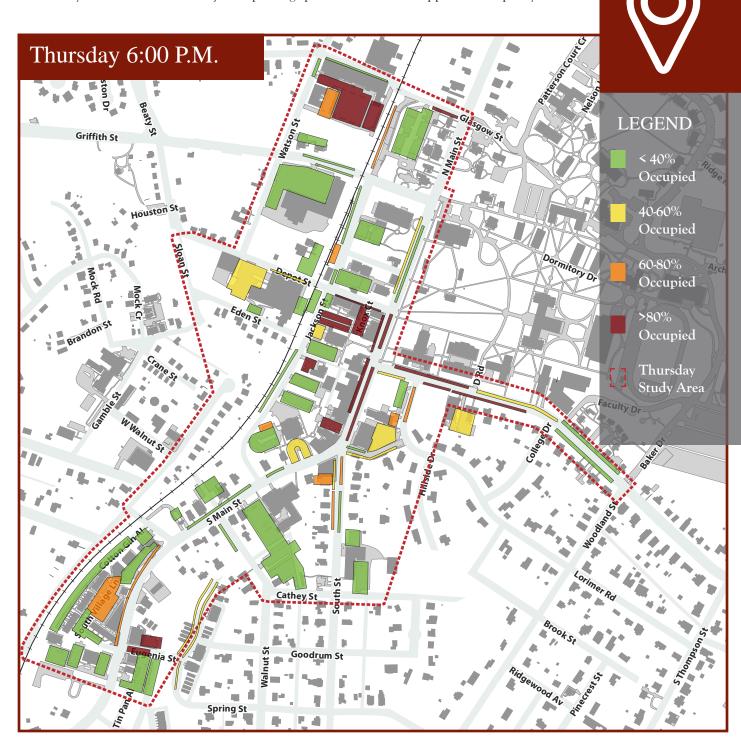
The 12:00 P.M. occupancy key observations:

- » This time frame, for every parking type, had the highest occupancy of the day.
- » Much of the study area's occupancy appears to be driven by an influx of restaurant patrons.
- » The core 12/13 block steadily increased in occupancy until this time frame, peaking at 75%, then steadily decreased again to the lowest occupancy at 6:00 P.M. with only 49%.
- » 'Reserved Parking' signs were recently added to the private lots in South Main Square, on the southern most portion of the study area, to deter overflow parking from restaurants.



The 6:00 P.M. occupancy key observations:

- » The data may be slightly skewed due to employees and restaurant customers still transitioning during the study time.
- » Public and private lot parking reached the lowest occupancy during this time frame, both with only 38%.
- » Many parking spaces around restaurants reached the highest occupancy rate of over 80%.
- » Many office and school adjacent parking spots decreased or dropped in occupancy.



DEMAND VS. CAPACITY

The total supply of on-street and off-street public parking was used to compare the demand for parking in each block. The difference is either positive, meaning there is a surplus of parking, or negative, which shows a parking deficit. Overall, the lots with surplus parking outweigh those with a deficit; however, the core blocks have the greatest deficits. This can cause a perception that there is an overall parking deficit in downtown because there is not enough parking in the core activity areas. Recommendations have been outlined later in the document which may resolve that perception.



Demand vs. Capacity Chart							
	Parking Spa	ices	Estimated				
Zone	On-Street	Lot	Total	Demand	Difference		
1	46	204	250	161	+89		
2	21	182	203	89	+114		
3	6	64	70	19	+51		
4	19	0	19	13	+6		
5	0	0	0	10	-10		
6	12	30	42	27	+15		
7	17	286	303	128	+175		
8	46	99	145	103	+42		
9	18	199	217	207	+10		
10	16	37	53	97	-44		
11	47	46	93	70	+23		
12/13	55	260	305	310	-5		
14	22	84	106	158	-52		
15	6	88	94	78	+16		
16	0	0	0	51	-51		
17	24	0	24	29	-5		
18	10	0	10	29	-19		
19	19	0	19	29	-10		
20	8	0	8	29	-21		
21	14	0	14	5	+9		
22	28	31	59	59	0		
TOTAL	434	1610	2034	1699	333		

The key points:

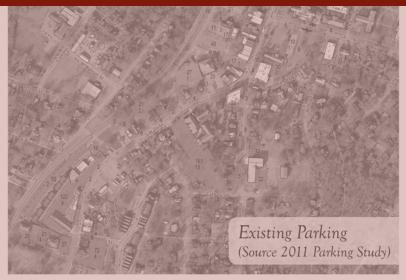
- » In the study area, there is an overall surplus of 333 parking spaces.
- » Based on the current Town of Davidson demand projection model, the deficit in block 12/13 has been reduced to -5 spaces (as compared to a -91 deficit in the 2011 study).
- » The blocks with the largest deficits based on the modeled demand are block 14 (-52), block 16 (-51), and block 10 (-44).
- » Blocks 5 and 10 have a demand but zero capacity.
- » The blocks with the largest surpluses are block 1 (+89), block 2 (+114), and block 7 (+175).







PUBLIC ENGAGEMENT





In 2011, Davidson's parking supply was:

Public on street 371

Public off street

Private off street 1,261

Total 1,930

Weekday peak occupancies were 51% and 62-64% for private and public spaces respectively. Weekend occupancy was 72% overall.



Parking decks vary in size and cost, but a standard size is 240 feet by 120 feet and cost is \$15,000 per parking spot.



This diagram represents a typical parking deck footprint scaled to fit the map above



Mixed use buildings can screen decks from street vieu



Decks can be designed to look like traditional buildings and/or decorated with art or greenery.



Do we need a parking deck downtown?

Would you park in a deck downtown?

Where could a deck be located downtown?

no
<u>:</u>







chapter

#4

Public engagement for the study was completed in conjunction with the public facilities planning process. Three workshops were held where participants visited stations to cast votes, ask questions, and interact with maps. One station at each workshops was dedicated to parking and mobility to give participants the opportunity to discuss parking issues and receive information on the parking study including current parking inventory and demand, details of parking deck cost and design, and new technological solutions for parking management.

Meeting #1

Date: March 9, 2017 **Time:** 6:00 - 7:30pm

Location: Davidson College Presbyterian

Church's Congregation House

218 Concord Road

Meeting #2

Date: April 6, 2017 **Time:** 6:00 - 7:30pm

Location: Davidson College Presbyterian

Church's Congregation House

218 Concord Road

Meeting #3

Date: May 11, 2017 **Time:** 6:00 - 7:30pm

Location: DUMC Fellowship Hall

233 South Main Street

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WORKSHOP #1 OVERVIEW

More than 75 individuals attended the first workshop. At the "Parking & Mobility" station, executive summary details from the 2011 parking study were shared with participants, as well as general details on the costs of surface parking versus structured parking. Attendees were asked to respond to a few questions as well. The resulting responses are as follows:

Parking

» Where is the greatest parking need in downtown?

Generally near Summit Coffee and Town Hall

» Do we need a parking deck downtown?

$$Yes = 21$$
; $No = 6$

» Would you park in a deck downtown?

$$Yes = 16$$
; $No = 2$

» Would you pay to park in a deck downtown?

$$Yes = 7$$
; $No = 10$

Mobility

» Which mode do you most often use to get downtown?



WALK

36



21



BIKE

14

» What could we do to encourage you to come downtown without your car?

Implement a downtown/neighborhoods shuttle Increase protected bike facilities into downtown Increase greenways into downtown



Takeaways

- » Participants seemed OK with the idea of a parking deck and at this point thought one was necessary.
- » They seemed generally opposed to paying to park in a deck.
- » Several comments collected suggested a thorough evaluation of other options before looking further at building a deck.
- » Regarding mobility, several comments suggested a shuttle system to connect surrounding neighborhoods to downtown.
- » If the shuttle system were of high quality and service were frequent enough, many citizens commented that it might be a more convenient option to travel downtown than the personal car.

WORKSHOP #2 OVERVIEW

This station was primarily designed to inform participants of the preliminary observations from the field study on Saturday, April 1, to show a high level cost analysis for a parking deck and present emerging ideas for short term parking solutions.

Key Comments:

- » Need employees to park further away
- » App that shows all available parking in town
- » We have enough parking, but people need to understand where it is and become OK with parking a few blocks away.

Management Changes To Improve Parking Efficiency



▲ Subsidized Ride Sharing



▲ Fixed-Route Trolley



Metered/Fee-Based Parking



Enhanced Bike Facilities



▲ Autonomous Transit

Takeaways

- » Contrary to Workshop #1, participants at this meeting overwhelmingly thought a parking deck was not a good solution.
- » Overall, people were astounded to learn the cost of a parking deck, to see how long the town would be paying for the facility, and how much it could raise taxes.
- » Participants were generally supportive of implementing new parking areas where possible, such as renovating the lots off of Jackson Street to add parking spots and adding on street parking in select locations.
- » Comments were recorded that noted a need for more disabled parking.



WORKSHOP #3 OVERVIEW

The third public workshop also covered the broader Public Facilities Planning along with Parking Strategies. The resulting responses are as follows:

Shared Parking Opportunities

» Begin conversations with Post Office to discuss opportunities with their lot.

Those conversations are underway and town staff are leading the effort.

» Davidson United Methodist lot contains 175 spaces. The busy times for this lot are:

Evenings generally from 4pm to 8pm Monday, Wednesday, Thursday, Friday and Saturday Sunday from 7am - 1pm

Various mornings times during the school year for preschool service

Occasional Saturday weddings

Public Parking Enhancements

- » Color code signs based on 2 -hour all-day lots
- » Use pervious paving in potential library lot expansion
- » Regarding Jackson Street lot, could the curbs be removed and pavers used from building edge to building edge? Essentially this treatment would make the lot flexible for use as a public gathering space at times.
- » Where should pick-up/drop-off spots be located for rideshare services?
- » Investigate EasyMile as another SAV shuttle service



Takeaways

- » DUMC's parking lot has considerable daytime availability. But, a more detailed analysis of its occupancy is necessary. Such data can then be used to discuss more specific shared parking arrangements.
- » Rather than simply renovating and combining the two Jackson Street public lots to add more spaces, could the combined lot be a flexible curbless space with a paver base rather than using traditional asphalt and concrete curb and gutter? This flexible treatment would allow the space to be used for a variety of purposes, not only parking.

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SIGNAGE



chapter

#5

Signage and wayfinding are critical parts of a functional parking system. Users should be able to find appropriate parking locations for their specific needs with relative ease. Less complicated and more predictable signage creates a more user friendly and efficient parking system.

Aligning with the walkability of downtown, signage should encourage "park once" or "park and walk" behavior. Many of Davidson's wonderful and eclectic public parking lot signs do this very well. However, there are some aspects of the signage program that could be improved.

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EXISTING PUBLIC SIGNS

Most of Davidson's public parking lot and wayfinding signs are high quality and have a consistent graphic appearance. However, other public parking signage is sometimes inconsistent or unclear. Easy to read and understand parking and wayfinding signage is a critical piece of a functional parking system. It can reduce customer confusion, which may impact whether or not a visitor decides to return to do business in Davidson. Clear signage can increase efficient use of parking spaces. Visitors are less likely to park in spaces that are not clearly marked, leaving such spaces unused.

In some locations in the study area, parallel on street parking areas and signage are confusing and/or not clearly marked (see bottom right image). Signage may not align with pavement markings or the pavement markings may be worn and difficult to read. In other cases, it is difficult to determine which parallel spaces a nearby sign applies to.







Typical public sign



Directional and informational public sign

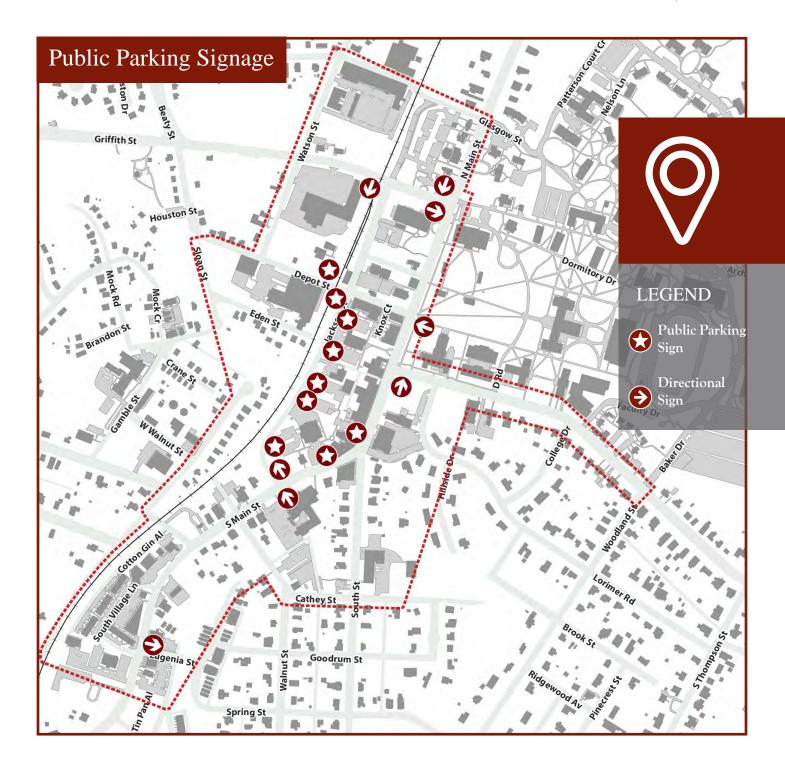


2-hour on-street sign



△ Confusing parking sign





EXISTING PRIVATE LOT SIGNS

On the private side, downtown Davidson has a broad and inconsistent mix of parking signage with different color schemes, formats, information, and fonts. All of these issues make it harder for visitors to determine which spaces are available for what purposes. This impacts the entire parking system. To the greatest extent possible, private parking spaces should have simplified regulations and signs should have a consistent layout, only including essential information. Additionally, some private lots have clearly visible signage at the entry to the lot letting visitors know that it is only available for private businesses. Many other private lots do not have these simple signs, rather they have individual spaces marked as private and others marked for public use. This highly variable situation serves to further confuse visitors and frustrate them, especially if they accidentally park in the wrong space and are fined or towed.





























STRUCTURED PARKING



chapter

#6

Structured public parking decks have been used in cities and towns as a parking solution. By stacking parking areas floor by floor vertically, the need for sprawling surface parking lots can be minimized and the quality of the public realm can be maintained; however, with construction costs continuing to rise, the costs of parking decks is becoming more prohibitive. Additionally, communities are changing their behavior when it comes to owning a car and driving. Across the U.S. car ownership is declining and people are driving less, as well as choosing other mobility options over the single occupancy vehicle. These trends are especially evident in walkable areas like downtown Davidson. Still, the feasibility of a public parking deck as a parking management solution is worth evaluating.

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DECK DESIGN

The following deck design analysis on pages 36-39 is provided by Rich & Associates for the Comprehensive Parking Study, 2011.

Selecting a site for a parking structure on blocks in the downtown must take into account the potential for development and redevelopment on the blocks surrounding each potential site. In addition, there are minimum site dimensions that are required for an efficient and cost effective parking structure design.

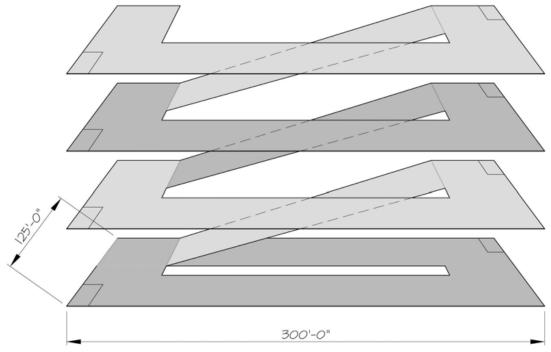
Two Module Flat Floor / Sloped Floor

The general deck designs are as follows:

- » The optimal site length for a Flat Floor/Sloped Floor, exclusive of setbacks, is +/- 300 feet and a width of +/- 125 feet for a two module layout (see diagram below).
- » A flat floor/sloped floor system allows one long dimension elevation to be flat and can maximize occupied space on the ground floor. Only the ends of the building will be flat.
- » This layout can accommodate an occupied ground floor use on one side (the flat floor side of the parking structure).



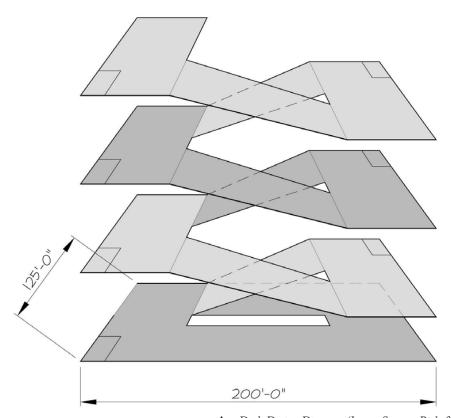
In general, the flat floor/sloped floor layout is the most efficient layout as measured by square foot per parking space.



▲ Deck Design Diagram (Image Source: Rich & Associates)

Sloped Floor / Sloped Floor

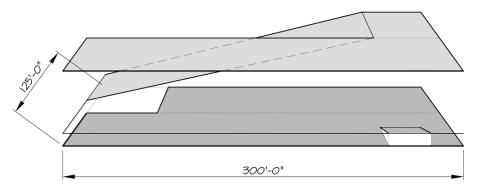
- » To design a sloped floor/sloped floor parking structure the optimal site length, exclusive of setbacks, is +/- 200 feet and a width of +/- 125 feet for a two module layout (see diagram below).
- » A sloped floor/sloped floor parking structure will have no flat facades on the long dimension and only the ends of the building will be flat.
- » In general, the sloped floor/sloped floor layout is an efficient layout as measured by square foot per parking space.



▲ Deck Design Diagram (Image Source: Rich & Associates)

Table Top Parking

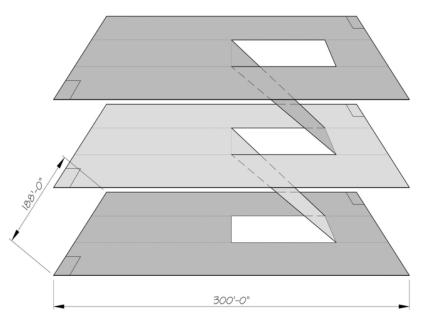
- » Another option is a table top parking structure. This structure type generally does not have an internal ramp connecting the ground floor to the second floor. It is usually used on sloped sites to avoid any ramps at all. In these cases, the first floor may be partially below grade and accessed from the lowest point on the site while the second floor is accessed from the highest point.
- » The diagram below shows a table top deck that fits roughly on half a block, it can be designed for a quarter block site as well.



▲ Deck Design Diagram (Image Source: Rich & Associates)

Three Module with Express Ramp

» This can only be done with a site that is +/- 188 feet wide and ideally at least 300 feet long exclusive of setbacks (see diagram below).



▲ Deck Design Diagram (Image Source: Rich & Associates)

Other Site and Design Criteria

- » Other site dimensions are possible, especially if they are incorporated with a building, though their efficiency will be less than either the flat floor/sloped floor or the sloped floor/sloped floor layout.
- » Underground parking structures, especially those below a building, will generally be less efficient than any other type of parking facility (more square feet per parking space) and the construction costs are at least 150 percent of an above grade parking structure.
- » Additionally, an underground parking structure will have higher operating costs due to mechanical ventilation and additional lighting that run more hours of the day.
- » In general, both an underground and above grade parking structure with another building type above it will require fire suppression (sprinklers), which adds to the overall construction and operating costs.
- » To incorporate ground floor commercial/retail or office there needs to be +/- eight feet of clear head room which translates into a height of +/- 12 feet for the first finished floor. This can be done easiest in a flat floor/sloped floor scheme.

Additional criteria to consider:

- » Distance from key intersections (ingress/egress considerations and stacking of vehicles)
- » Traffic flow on adjacent streets
- » Distance from key intersections with respect to demand generators plan on a +/- 350 foot walk from parking to destination
- » How the parking structure will fit into surrounding context respects historic character of downtown and won't overwhelm existing development's "small town" charm

DECK LOCATION

Ideal Deck Location

The publicly owned land on Jackson Street, currently the location of two surface parking lots, is the most appropriate location for a potential parking deck. It is centrally located, publicly owned land, and does not front onto a major street. However, the area on which a deck could be built is roughly a maximum of 205 feet by 245 feet (see diagram below.) Such a building envelope would remove some of the public space currently used for Farmer's Market programming. Nonetheless, this area is not large enough to accommodate all of the deck typologies discussed in the previous section.

The most efficient deck typology to fit in this area is the sloped floor/sloped floor design. This design is not as efficient as a flat floor design, but still fairly efficient. The general footprint is 125 feet x 200 feet. Additionally, Section 3.2.26 of Davidson's Planning Ordinance requires a parking deck as a principal use to be screened on the Jackson Street frontage by an active use, such as retail or multifamily. The Ordinance also limits the height of the building to 3 stories. These requirements limit the amount of parking spaces that can fit in the deck, as well as raise the cost of design and construction, further reducing the feasibility. Additionally, this typology does not lend itself to adaptive reuse like other deck designs do. In other words, the deck would be difficult to retrofit into a different use at a later point as mobility choices increase.



Potential Site Layouts

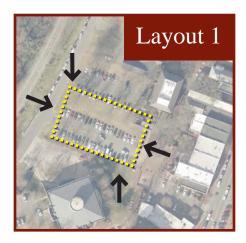
The diagrams below illustrate three different potential site layouts for a sloped floor/sloped floor deck with dimensions of roughly 125 feet by 200 feet.

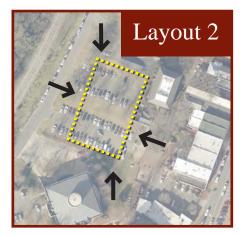
In Layout 1, the surface lot to the north would remain unchanged, but the deck would have very little setback from the street and the Farmer's Market public space to the east. Layout 2 gives more setback on the street side and the public space side on the east, but the northern surface lot would not remain and the deck would have very little separation from Dance Davidson's building to the north.

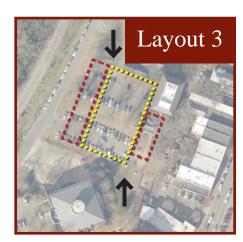
Both layouts have similar issues and conflicts. The unsightly deck facades would be visible (illustrated by the black arrows) from Jackson Street and adjacent neighborhoods to the west and Town Hall, as well as from the Farmer's Market area behind Summit Coffee, thus creating a sub par public realm experience for pedestrians. While green walls and artistic elements could be used to screen the facades, they would also significantly add cost to the project.

Layout 3 illustrates the most ideal option. Lining the parking deck with mixed use buildings on the east and west facades is possible. This would serve to screen the parking deck from view on the respective facades, but does leave the northern and southern facades visible from key public areas.

Layout 3 isn't without issues. The added cost of lining these edges with development would be potentially prohibitive and further reduces the feasibility of building such a deck on this location. Furthermore, some of the existing public space utilized by the Farmer's Market would be removed. In this option, the most efficient deck design could provide approximately 100 spaces per floor.







COST ESTIMATE & EVALUATION

Cost Estimate

It has been determined that the most efficient deck design would not fit in the most ideal deck location on Jackson Street. But, for the purposes of estimating a ball park cost, the sloped floor/sloped floor deck at 125 feet by 200 feet will be used. Such a deck could provide approximately 100 spaces per floor. The Planning Ordinance limits the height to 3 floors, so the maximum number of potential spaces is 300. A conservative construction estimate for the deck alone is \$18,000 per space making the total cost of the deck approximately \$5.4 million. Additional soft costs required would be approximately \$1.1 million, bringing the total to about \$6.5 million. The debt service per year over 25 years for this amount would be approximately \$603,000. This would bring more than a \$0.03 increase in the Ad Valorem tax rate



Number of Parking Spaces in an Efficient Deck 3 floors x 100 spaces = 300 spaces

Total Hard Cost | Multiple Number of Spaces by Average Cost per Space 300 spaces x \$18,000 = \$5.4 million

Total Cost | Add Hard and Soft Costs \$5.4 + \$1.1 soft costs = \$6.5 million total

Cost Evaluation

Constructing a parking deck is NOT recommended at this time for the following reasons:

- 1. There is currently a surplus of 333 parking spots in downtown. While there are some blocks that have more demand for parking spots during peak times than the block itself supplies, there are several underutilized parking areas immediately adjacent to those high deficit blocks.
- The real demand for parking is during the weekday at lunch time. As all-day parking is more likely to use a deck, it would displace more convenient surface lot spaces for short term patrons.
- 3. Shared parking opportunities (further described in Chapter 7) have great potential to add significant parking supply. Two privately owned parking lots are well located and best suited for shared parking opportunities. Together, mostly during evening and weekend hours, those lots could provide around 215 parking spots within a 3 minute walk of the downtown's core.
- 4. Opportunities to add small amounts of new public parking in strategic locations are less costly and easier to implement (further described in Chapter 7). For approximately \$990,000, the town could implement around 120 new public parking spots, versus spending \$6.5 million for 300 spots in a deck. The cost per space of implementing the "opportunity" parking areas is approximately \$8,000 per spot versus more than \$18,000 per spot for structured parking.
- 5. The relevance of a parking deck in 20 years is questionable. A deck is cost prohibitive for a town like Davidson. The grand total of approximately \$6.5 million plus interest would need to be paid over 25 years and local taxes would likely need to rise significantly to cover the annual debt service of approximately \$603,000. With driving rates dropping annually and autonomous vehicles on the horizon, it is questionable whether the demand for parking spots will continue to rise, remain relatively stable, or potentially fall over time. Add to this the continuing trend of walkable and bikable communities, along with Davidson's support for alternative mobility options, and it seems unlikely that the town would get the return on investment for a parking deck.
- 6. Given the uncertainty of future demand for a deck, structured parking could be built in such a way to make adaptive reuse highly feasible. However, the cost of such a design would be well above the estimated \$6.5 million for a basic design.
- 7. Constructing a deck in the most feasible location identified would drastically disrupt the currently cohesive urban design and small town feel that downtown Davidson enjoys. The scale of a parking deck would massively overshadow the intimacy and human scale of Davidson's downtown as it is today. It is likely that such a move would degrade the quality of life in Davidson, especially given that community engagement completed during this planning process determined that the small town feel is one of the most beloved qualities by Davidson residents.





IMPLEMENTATION STRATEGIES



chapter

#7

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REVIEW OF 2011 RECOMMENDATIONS

Since the 2011 parking study, some recommendations have been implemented while others remain on-going. Over the last few years, the town has implemented recommendations that included both public and private parking solutions. The downtown has also seen 7 new restaurants open, changing the activity level and parking demand rather significantly.

Implemented since 2011

- » Conversion of some all day spaces to 2 hour spaces
- » Formed a partnership with the Presbyterian Church on Depot Street to share parking
- » Placed new signage at all of the public lots, including some fun artistic ones (i.e. the Farmer's Market truck on top of the parking sign in the 2-hour lot used for the market)
- » The recycling center has been reconfigured

On-going Issues

- » Communication/wayfinding
- » There are less complaints about visitor tickets, but many more complaints about employee parking in public spaces.
- » The Post Office is not a town lot and so the parking is not enforced.
- » The town have been unsuccessful in getting management over the CVS and the Post Office lots.
- » There is some desire for 3 hour spaces.
- » Some employees move their cars around from 2-hour spot to another 2-hour spot throughout the day.

OTHER CONSIDERATIONS IN UPDATE

Meetings were conducted with town staff and a consultant team to suggest future considerations in this update of the 2011 parking study. There are currently a few initiatives the town as implemented that were not mentioned in the previous study and wish to move forward with in the update. There are also other considerations and observations outlined that influence new recommendations.

Other Initiatives

- » Moving from paper tickets to Passport parking would let the town charge for parking in the future.
- » If needed, the town likes the idea of metered parking using technology instead of installing meters.
- » The Passport system can have variable pricing without meters based on peak hours.
- » The town evaluated adding 17 spaces on Jackson Street ,but constructed a new, wide sidewalk instead.
- » The town tested using the Parks and Rec shuttle for the Farmer's Market. The route started with the east side neighborhoods and had good ridership.
- » Citizens previously voiced concern over traffic congestion and parking concerns downtown and cited a circulating trolley as a potential solution. The town began a pilot project running a trolley on Saturday morning from 8 A.M. to 12 P.M. in east and west side neighborhoods, as well as on Friday evenings. The service used general fund dollars for the trolleys and was free of charge. Unfortunately, the service did not accommodate pets and children in car seats.

Other Considerations

- » The current parking enforcement manager only works 10 A.M. to 2 P.M.
- » Ride share vehicles (Uber, Lyft, etc.) have begun lining up outside of restaurants at peak hours
- » With the addition of so many new restaurants, the number of truck deliveries has increased, which can be problematic on Main Street.
- » The town is interested in using alternative shared vehicle or public transportation options like a shared autonomous vehicle (e.g., Olli).

SHORT TERM RECOMMENDATIONS

1. Clarify Wayfinding Signage for Parking

1.1. Strategy

Continue to upgrade wayfinding signage with uniform and easily identifiable public parking signs to guide visitors, as well as clearly mark private lots.

1.2. Issues and Opportunities

- » The Town's parking lots are not named and are difficult to identify as public parking areas. This lack of identification creates issues with marketing and wayfinding.
- » There are opportunities to install pedestrian wayfinding signs further away from the Main Street shops, along Concord Road, for example, to let people know that parking areas which seem further away from the downtown shops are actually only a 5 minute walk.
- » Ensure that each parking area is clearly noted with pavement markings and visible signage is obviously associated with respective parking spaces.
- » Identify parking areas with faded pavement markings and update, enhance or re-paint the markings to make them more visible.
- » Explore enhancing the visibility of existing public parking signage by increasing contrast and/or changing color schemes.



Existing high quality locational signage, which would benefit from increased contrast and "motivational information"



▲ Addition of directional sign including minutes and steps to get to a public facility (3 minutes or 330 steps to The Green), a brighter red field, and inverting the center to the "P" is black and stands out more



 Sign with brighter, higher contrasting colors can be more noticeable to a driver

Best Practices

The following are established best practices for vehicle and pedestrian wayfinding signage. These were developed after studying successful signage in other communities and their signage programs. There are four types of parking signs that increases drivers' wayfinding experience that are recommended. Communities often miss the important role that signs play in making visitors comfortable with their surroundings and the effect that signs can have on vehicle travel and parking use efficiency. Additionally, pedestrian wayfinding signs help manage the driver/passenger transition from vehicular to pedestrian modes. It should be noted that sign color, size, design, and placement may be impacted by local, county, or state highway department's regulations.

Davidson draws a significant amount of visitors from dozens of nearby cities and towns, especially during evenings and weekends. Such signs would help those visitors understand the high degree of walkability that Davidson offers and could make them more amenable to parking a few blocks away from their ultimate destination. Similarly, such signs may help to change the behavior of resident visitors to downtown. Rather than expecting to park in front of their destination, they may become more comfortable parking further away if they understood that most parking areas are within 3-5 minutes walk of any location in downtown (Rich & Associates, 2011).

Quality Sign Elements

- » Use of common logos and colors
- » Placement at or near eve level
- » Use of reflective, durable material
- » All four types used in conjunction to guide motorist and pedestrian activity
- » All gateways to the downtown should have wayfinding signage
- » All parking areas should have identification signage
- » All routes through the downtown need to have directional and location signage oriented on the same side of the street as vehicles are traveling
- » All pedestrian routes to and from major customer/visitor parking areas need to have wayfinding signs
- » The identification signs located at parking areas need to convey parking rates, hours of operation, and maximum durations (Rich & Associates, 2011)





Existing Directional



▲ Existing

Identification Sign

Different Sign Types

- » Direction/location Distinct in color, size, and logo, it directs drivers to offstreet parking areas. Parking location signage complements the directional parking signage. The signs have arrows pointing to off-street lots and are mounted on poles at standard heights at the back of curb. Many of these have already been implemented in downtown.
- » Identification Placed at the entry of each parking lot. The name of the parking area is identified and the type of parking available, as well as hours of enforcement and the hours of lot operation are listed. The identification signage is distinctive in color and size, and it is located on a pole at a lower height.
- » Vehicular wayfinding signs are placed at strategic points in downtown to lead visitors to places of interest and parking locations. These signs point out the various landmarks or attractions that can be found. They are placed at locations easily found by motorists and are intended to help visitors orient themselves to the downtown area.
- » Pedestrian wayfinding Signs or kiosks placed at points of pedestrian entry/exit to parking areas. Typically they include a map of the downtown area that highlights various shops or attractions. This sign type is placed at locations easily found by pedestrians and is intended to inform them of downtown amenities, locate their destination and easily locate their parked vehicles upon departure (Rich & Associates, 2011).



▲ Directional Sign





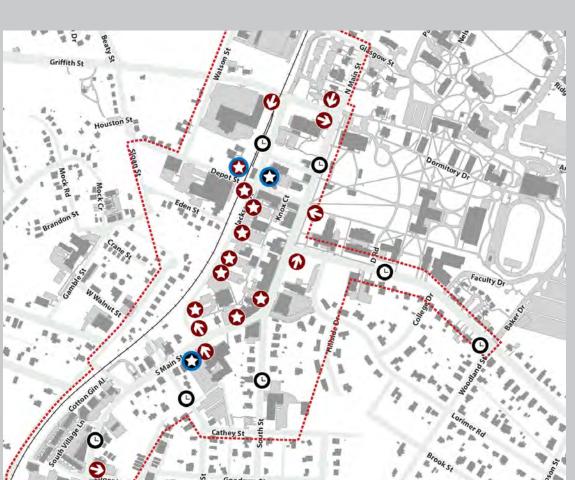
▲ Vehicular Wayfinding Sign



▲ Pedestrian Wayfinding Sign

1.4. Recommendations

- A. Develop a cohesive family of direction/location, identification, and vehicle wayfinding signage.
- B. Increase the number of directional/locational signs in downtown, especially signs that lead drivers from Depot and Griffith Streets to Jackson Street. These signs should identify customer/visitor parking areas.
- C. Add "behavioral information" motivation signs to public parking signs in strategic locations, denoting walking distances to important public landmarks and/ or facilities (e.g., The Green, Farmer's Market).
- D. Name all the parking lots and use identification signs that let users know which lots are public, the duration of parking, and hours of operation. Naming the parking lots based on street location is preferable.
- E. Encourage private lot owners to post clear signage at the entryways to their lots (or in other high visibility areas).
- F. Monitor tree growth and trim foliage that blocks signage in lots and on-street.
- G. Install pedestrian wayfinding signs in parking areas and along Main Street and Jackson Street.
- H. Install at least two kiosks with a map, business listings, and parking directions.





LEGEND

Existing Public
Parking Sign

Existing
Directional
Sign

New Public
Parking Sign

New
Motivational
Sign (On-Street)

Add Motivational Sign (Lots)

New parking sign map with additional public parking lots marked at the Davidson I.T.
Lot and the Methodist Church Lot, as well as new timed or distance sign opportunities.

Construct Additional Public Parking



2.1. Strategy

Better utilize public land and right-of-way to increase public parking, on and off the street. This can be done by converting parallel on-street parking to angled or reverse angled where possible and re-configuring inefficient parking lots.

2.2. Issues and Opportunities

- » Most on-street parking spots are currently parallel, except for those on Main Street in front of the Green, Libray, and CVS.
- » Many off-street lots are not designed to maximize available spaces. For example, the two public lots off of Jackson Street could be expanded and connected to create more parking. There were many cars observed during the parking audit parked informally along the perimeter of the Town Hall/Police lot off of Jackson Street. These areas could be formalized and marked to create more spots, similar to the striping along the interior of the Town Hall horseshoe lot along Main Street.
- » There is limited space for additional public parking on public land but there is an opportunity to begin communications with private land-owners for future shared parking arrangements.
- » Employers should encourage employees to park further away from the core (block 12/13) to make these premium spaces available to visitors.



- ▲ Existing parking lot
- New parking log with 24 more spaces



2.3. Recommendations

- A. Partner with private parking lot owners to create shared parking opportunities. Such lots could be opened up for public parking during strategic times.
- B. Connect, expand, and/or renovate poorly designed public parking lots, like the two on Jackson Street. A new lot design would gain 24 spaces and improve circulation, making it safer and more convenient. In places that are more environmentally sensitive or culturally significant consider using a lighter footprint.
- C. Add parking spaces to existing lots of access drives where appropriate. For example, 16 spaces can be added to the library lot. However, it's adjacency to the Green requires a softer parking solution and materials, like pervious pavers or crushed stone.
- D. Convert parallel on-street parking to angled or reverse angled where appropriate. More spaces can be gained from these re-designs, as well as make the on-street parking environment safer for drivers and pedestrians.





3. Facilitate Shared Parking Opportunities



3.1. Strategy

Shared parking, an arrangement where different land uses occupy the same parking spaces at different times, is one of the most efficient ways to manage existing parking resources. Successful shared parking depends on attention to implementation and enforcement of effective agreements between partners. As mentioned in the 2011 parking study, an optimum downtown parking system is one where the municipality is in control of at least 50 percent of the available parking so shared use is possible for a majority of the spaces (Rich & Associates, 2011).

3.2. Issues and Opportunities

- » Davidson falls short of the ideal shared parking strategy, controlling only 35 percent of the parking downtown.
- » Currently, of the 35 percent controlled by the town, some remain reserved for specific facility uses (e.g., the Police reserved spots in the Town Hall lot off of Jackson Street). Many of these spots were observed at low occupancies during the field studies.
- » Shared parking requires partnerships between public and private entities, which can sometimes be difficult to manage.

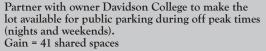
3.3. Effective Agreements

- » Use clear language to establish the rights of each party to the parking inventory at specific times.
- » Define exclusive and shared portions of the parking facility, payments between parties for use, collection, and disposition of revenues, etc.
- » Consider facility maintenance, utilities, and taxes, signage, insurance, passive and active security, indemnification, termination, and supplemental covenants.
- » Define enforcement mechanisms, such as requests to comply with parking security personnel, time limits, length-of-stay fees, validation strategies, designated parking areas, various levels of parking reservations, physical separations, identifying placards or stickers accompanied by enforcement, tracking of repeat offenders, license plate recognition, rightto-tow, and any other mechanisms.
- » Provide procedures for preventing parking intrusion from uses that are not part of the shared agreement.
- » Coordinate mechanisms between the parties to monitor data about sharing, identifying, and resolving operational issues, establishing communications mechanisms, and regular meetings to adjust and monitor process.
- » Ensure parking proximity and site design makes walking between the parking and the uses sharing it convenient and pleasurable.

3.4. Recommendations

- A. Continue conversations with CVS to create a partnership and use their private lot for 2-hour public parking.
- B. Partner with Davidson College to use their I.T. Lot as public parking, for nights and weekends only.
- C. Partner with the Davidson United Methodist Church to use their private lot as all day employee parking.
- D. In approaching new shared parking partnerships, the Town should consider developing possible incentives such as revenue share, tax breaks, and contributions to maintenance, landscaping, and redesign expenses.
- E. Continue to discourage the development of any new private parking lots in downtown. Davidson College has several lots close to downtown that would be model candidates for downtown employee parking.







Partner with owner Davidson United Methodist Church to make spaces available for public parking during select times, particularly for all day employee parking.

Gain = 175 shared spaces



4. Support Ride Sharing & Valet Parking Through Design and Policy



4.1. Strategy

» Create pick-up and drop-off zones for shared parking services and subsidize shared rides to lower parking demand.

4.2. Issues and Opportunities

- » There is already a constrained amount of space on Main Street so that unloading of trucks has become an issue. Implementing other drop-off zones may prove difficult as well. Consider changing zones to accommodate both unloading and ride sharing services.
- » With the introduction of alternative transportation options on the rise, the future decline in driving and parking necessities is likely. Any new facilities and/or policies should be flexible and consider many different alternatives to the traditional idea of single-occupant, personal vehicles and suburban parking requirements.

4.3. Pick-up and Drop-off Zones

The support of driving alternatives, including temporary car rental programs, ride share services, transit, walking, and bicycling, is an important component of parking management. Loading or drop-off zones reserve short-term parking to the benefit of businesses who experience frequent deliveries or shipments. Rather than creating loading zones on Main Street, trucks could be directed to unload in lots off Jackson Street instead of occupying potential customer spaces in the front of the businesses. Similarly, spaces could be reserved for pick-up/drop-off via high-occupancy vehicles, taxis, or ride share services (i.e., Uber, Lyft.) near convenient destinations, ideally located on Main Street. On South Main, one option is the restricted space in front of the fire hydrant and Wells Fargo. Reserving a pick-up/drop-off zone on North Main would likely require removing two parking spaces and would ideally be located near the intersection with Depot Street.



Potential location for pick-up/drop-off area on South Main Street



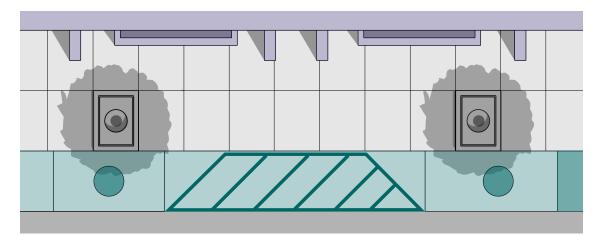
 Bus turn out lane for pick-up & drop-off (Charlotte, NC)



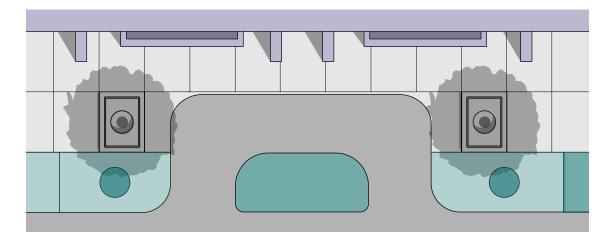
▲ Bus pick-up & drop-off loop (Charlotte, NC)



Fire Station driveway loop (Charlotte, NC)



▲ Diagram for loading zones in line with parallel on-street parking. The length of these zones depends on the length of vehicles being accommodated (i.e. delivery trucks or ridesharing vehicles). On average a loading zone may take up 1 or 2 spaces and could have flexible time restrictions (e.g., 2 hour parking during work hours and no parking during peak evening hours for rideshare drop-offs.)



Properly designed drop off loops can have a minimal impact on the public realm like tree planting zones and other amenities.

4.4. Recommendations

- A. Create strategically placed pick-up, and drop-off zones for valet and ridesharing services.
- B. The town can contract with a ridesharing service like Uber or Lyft to provide subsidized transportation around town with steeper discounts given to trips originating or ending in downtown.
- C. Ridesharing policies should plan for adaptability and evolution into shared autonomous vehicle services in the future. One option to consider is Local Motor's Olli, an autonomous mini-bus with the ability to adapt to customer's specific needs and concerns.





Case Study: Altamonte Springs Subsidized Ride Share

A few towns in the U.S. have begun to look to shared ride service providers like Uber and Lyft to enhance their public transit systems. The city of Altamonte Springs, in central Florida, has a population of 42,000 and is likely the first town in the nation to enter into an agreement with Uber as a public transit provider. The city had issues landing state or federal funding for public transit, so they reached out to the private market. The city had a plan for an on-demand bus service that would cost approximately \$1.5 million for one year, but they've budgeted 1/3 of that to subsidize ride sharing in the city through Uber. The city would pay 20% of the cost of the ride if it begins and ends within the city limits and 25% if it begins and ends at the local light rail station.

Offical Word from the City of Altamonte Springs Website:



Uber and the City of Altamonte Springs have partnered to create a landmark pilot project where the City will integrate Uber's ride-share technology to boost SunRail ridership and address transportation needs. This convenient service eliminates worry over finding parking at popular venues, allows individuals who can't drive the ability to get around the City and provides solutions to urgent situations such as car repair, health care, etc.

The City is providing a 20% discount on all Uber trips that both begin and end in the city limits, meaning riders pay less. As an added benefit to encourage increased SunRail ridership, all trips starting or ending at the Altamonte Springs SunRail station will receive a 25% discount.

To use the new feature, riders must enter the promo code "altAMONTE" and choose the Altamonte option to receive the discounted services. The app will recognize if the user is within the Altamonte Springs city limits. The subsidized portion of rides is automatically deducted from the rider's cost of the trib.







6. Use App-Based Parking Occupancy Sensors

6.1. Strategy

Technology is improving parking management by providing convenient access to space availability and price data. The Town of Davidson can manage parking by implementing parking occupancy sensors that pair with the "Passport" mobile app, which the town has already purchased. The sensors connect to the software application to allow customers to locate available spaces on their cell phones. They also can flag meter maids when a car has overstayed the posted time limit.

6.2. Issues and Opportunities

- » Current practices are inefficiently enforcing time limits and limiting turnover.
- » The Town staff is already using a compatible app.
- » Parking sensors are relatively inexpensive compared to many other solutions.
- » An app's ability to direct visitors to real-time available spaces could reduce confusion, underutilized spaces and parking violations.
- » Apps can access real-time data that allows for accurate and immediate analysis to inform decision making of parking policy issues.
- » As a relatively new concept in parking management, adoption of the new technology will require marketing, communications, and outreach to maximize user participation.
- » Digital signage with real-time space availability can be placed at the entry to larger parking lots



 Occupancy sensors can be easily applied to existing parking spaces



▲ Parking sensors applied to each spot can transmit occupancy via bluetooth capability

7.3. Recommendation

- A. Purchase and install occupancy sensors in public parking spaces and connect to the Passport app to show real-time availability of parking spaces.
- B. Install digital signage at the entryway to larger public parking lots, like those on Jackson Street, that pairs with the Passport app and occupancy sensors to display real-time availability in those lots.





7. Continue and Expand Fixed Route Trolley Services

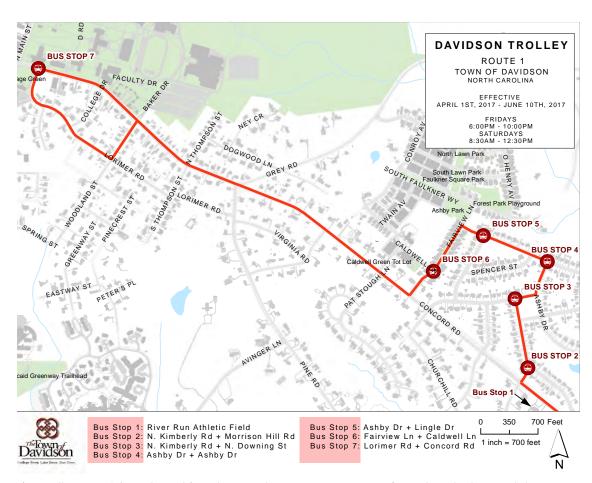


7.1. Strategy

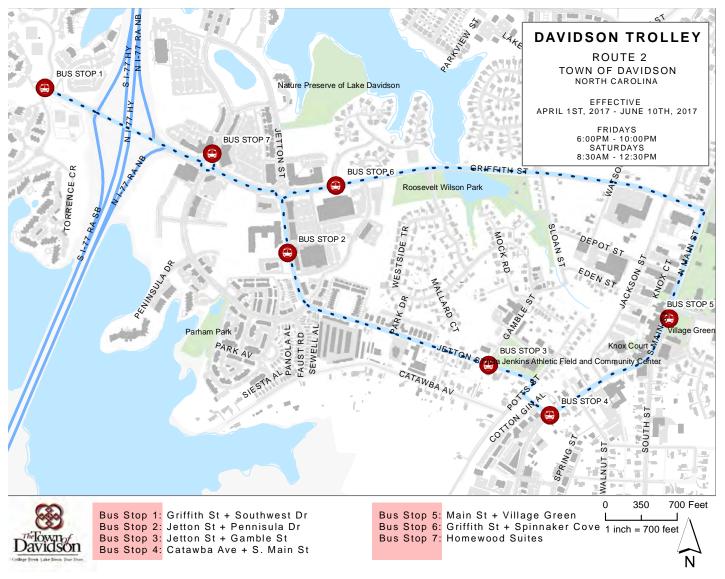
Continue and expand the fixed trolley pilot program, including the two current routes operating on Friday evenings and Saturday mornings and consider future expansion as a shared autonomous vehicle (SAV).

7.2. Issues and Opportunities

- » The two current routes are within a 5-minute walk of a high percentage of the in-town residents.
- » The route is fixed and less adaptable or user friendly than other recommended services, like ridesharing.
- » The expansion of public transportation is especially important during downtown festivities like the Farmer's Market on Saturdays.



▲ Trolley Route 1 for Friday and Saturdays, mainly running east to west on Concord Road. This route helps connect downtown to the neighborhoods in the east.



▲ Trolley Route 2 for Friday and Saturdays, mainly looping from Griffth to Jetton Street. This route helps connect downtown with neighborhoods to the west.

7.3. Recommendation

- A. The town should continue the trolley program and extend the hours of operation to make the service more predictable and convenient for potential users at lunch time.
- B. Explore the possibility of expanding this transportation service with SAVs.



LONG TERM RECOMMENDATIONS

1. Enhance Bicycling Infrastructure

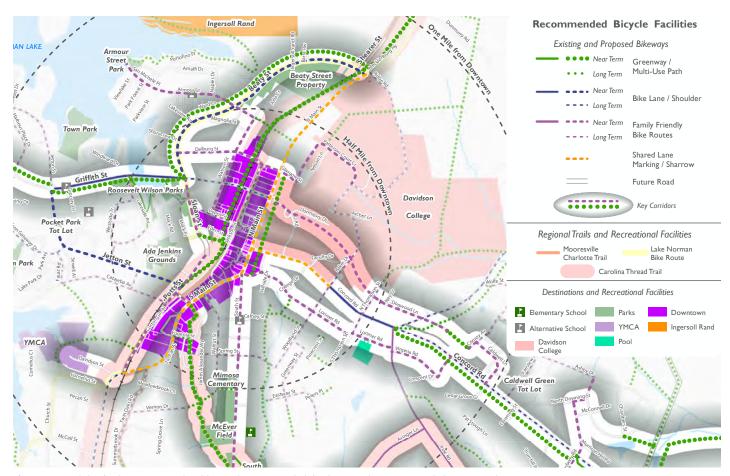


1.1. Strategy

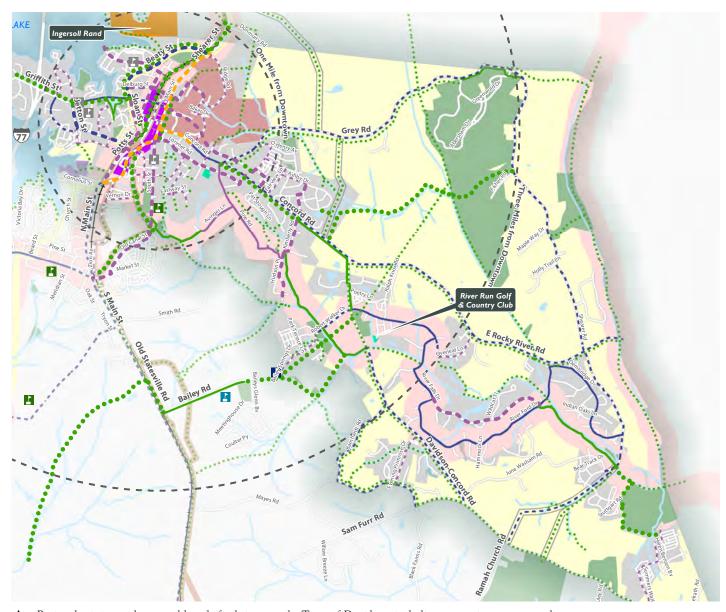
Find opportunities to implement new and enhance existing bicycle infrastructure.

1.2. Issues and Opportunities

- » Facility improvements were planned for downtown and the surrounding area in 2013 and have progressed since the planning phase, including the greenway along Jackson Street.
- » There is a town-wide regional bike facility plan to lay out important connections and corridors in a greater context than downtown.
- » Incorporate a bike share program with stations around key destinations at the core of downtown and strategic points along major bicycle routes.



▲ Existing bike facilities map with additional recommended facilities in downtown and the surrounding area



▲ Regional existing and proposed bicycle facilities map the Town of Davidson, including connections to surrounding towns

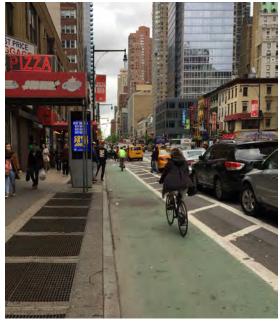
Benefits of Protected and Separated Bike Lanes

In order to promote bicycling to downtown as an alternative mobility choice to the personal single occupant car and reduce traffic congestion and parking demand in downtown, Davidson could implement new and/or enhance existing on-street bike facilities. Specifically, protected and/or separated facilities are recommended versus a standard unprotected bike lane. According to the National Association of City Transportation Officials (NACTO), benefits of protected and/or separated cycle track facilities over standard bike lanes are:

- » Provide some form of physical protection from passing vehicular traffic
- » Dedicate space for cyclists
- » Improve perceived comfort and safety for cyclists
- » Eliminates risk and fear of collisions with over-taking
- » Reduces risk of cyclist colliding with doors opening from adjacent parked cars or "dooring"
- » Prevents double parking in bike lanes
- » Low implementation costs by making use of existing pavement
- » More attractive for bicyclists of all ages and abilities



Protected one way cycle track in Minneapolis, MN



 Parking protected one way buffered cycle track in New York, NY

1.3. Bike Share Program

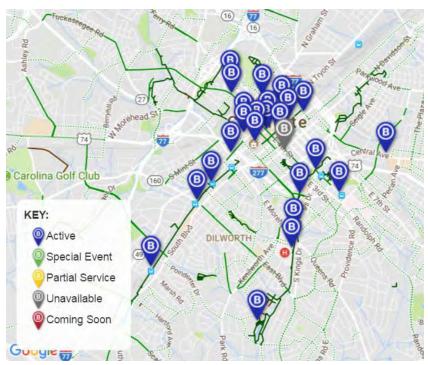
Another growing public bike facility is a bike share program. The largest bike sharing operation in the southeast, B-Cycle, is located in Charlotte. Bike sharing eliminates the cost of owning, maintaining, and storing a bike, as well as promoting health and wellness. Typical bike sharing programs provide memberships for purchase that allow free rides for a specified period of time. Bikes are picked up and dropped off at docking stations placed in strategic areas around town. In Charlotte, the program has become so popular that developers are paying to have docking stations installed with their projects, whereas at the start of the program, all stations and bikes were funded by donations and sponsors.



▲ B-Cycle headquarters in Charlotte



▲ A B-Cycle station on the Rail Trail in Charlotte



▲ B-Cycle station map for Charlotte

1.4. Recommendations

- A. Continue to implement bicycle improvement plans in Davidson.
- B. Upgrade standard bike lanes to buffered bike lanes or parking protected bike lanes where possible. This solution predominately requires restriping, not altering curb and gutter.
- C. Implement a bike share program.







2.1. Strategy

Charge for on-street public parking using the pay-by-phone app and parking sensors.

2.2. Issues and Opportunities

- » The town currently does not require payment for public parking and during public workshops, citizens expressed reluctance to pay for parking downtown.
- » Parking management would involve less infrastructure than physical meters and be fairly easy to monitor, collect fees from and ticket violators with the app and sensor combination.
- » On-street parking near shops and restaurants should be charged at a premium.
- » The revenue should be used to cover parking operative expenses and any net revenue can go back into downtown through improvements to sidewalks, signs, lighting, etc.
- » Charging for parking can encourage turnover, which should increase availability for visitors while employees will be encouraged to park in all-day lots.



Passport Parking App



2.3. Recommendation

A. Begin metering on-street parking and progress to public or shared lots, in proximity to the highest demand locations. These locations include Main Street (from Depot Street to South Street) and Concord Road (Main Street to College Drive), as well as parking lots on Main Street and Jackson Street between Depot Street and Walnut Street. Use the Passport app and invest in a robust marketing campaign to promote the new program.

3. Shared Autonomous Transit

3.1. Strategy

Over time, replace the fixed trolley vehicles with shared autonomous vehicles (SAV).

3.2. Issues and Opportunities

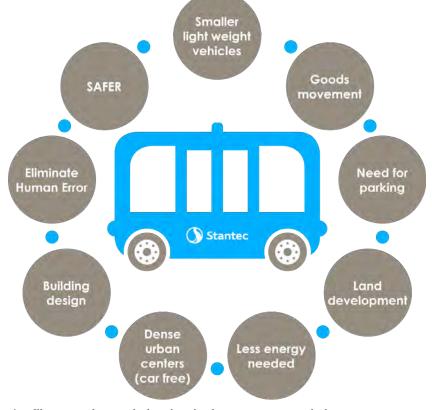
- » Currently SAVs have a high capital cost, but it is expected to drop.
- » SAVs have lower operational costs than the fixed trolley system.
- » At first, it will need a dedicated path, but over time it will be able to run in mixed traffic.





▲ Olli (Local Motors)

- » SAVs like the Olli can carry 8-12 passengers depending on the type
- » They are monitored by human operators remotely at all times.
- » SAVs are electric vehicles with a typical operating range of 14 hours.
- » Top speed is about 25 mph
- » They're equipped with 360 degree sensors



▲ Illustration showing the benefits of utilizing autonomous vehicles

3.3. Recommendation

A. When appropriate, explore the replacement of trolleys with SAVs.



Downtown Davidson Parking Survey Saturday April 1, 2017

Block/ Face	Description	# of Spaces	8:30 am	9:30 am	10:30 am	11:30 am	12:30 am	(4) 2HZ 35pc.
3	Unmarked Corner lot	8						
4B	On-Street no time limit	16						830
CD	On Character attended	/12	_		1		0	7

SATURDAY PARKING STUDY

110	On-Street no time limit (why?)	√3	3	3	3	3	2	(A)
110	On-Street no time limit (why?)	√ 5	5	5	5	4	2	EBCOS NTL 4
11D	On-Street 2hr	33			-,-			82/1 2
11	Library Public Lot (2hr)	√11	9	9	11	幽儿	8	930 4
11	Library Employee	√ 3	3	3	2	2		1030 4
12/13	Dance Lot	9						1130 3
12/13	Public 3hr Lot	18				7		1230 2
12/13 k	Town Hall 2 hr Lot	√ 26	26 24	23	23	21	22	2 no barrier
12/13	Public Long Term/2 hr lot	31						la I
12/13	Farmers Market Lot	2440						Summarked 1 police
12/13	Town Hall/Police Lot (2H)	28 29	20	2.7		25000 \$	10-	-2 Hell to I posed
12/13 名;	Police Only	√ 7	4	4	2	3	3	- Sparked in un marked
12/13	Public Lot off Depot	21						Production of the Art
12/13	Public lot behind Inn	31						22 4?
12/13	Post Office Lot reserved	1815						101 0
12/13	Post Office Lot 2hr ?	2140						736
12/13	Insurance Lot private	5						
12/13A	On-Street 2hr	1811						
12/13B	On-Street 2hr	10						
12/13B	On-Street 2hr	13						7
14	College IT Lot private	42						
14B	On-Street no time limit 2hr	16 18				F.		
17D	On-Street 2hr	9				1		90
17D	On-Street no time limit	14	h					√?
18C	On-Street no time limit 2HR	10 9	4	7	9	7	(0	MANTLY 9 SPC
190	On-Street no time limit	16) 19	13	12	9	9	10	FATT A
20C	On-Street no time limit	18	2	1	2	3	1	1879/
21A	On-Street no time limit	19 14)	70-4	124	4	1		430/ 7
22A	On-Street no time limit 214R	2711	4	8	9	87 2	3年	101/6 / 2
22D	On-Street no time limit 24R	88	8	8	8	7 2	多餐	1130 #
(7)	Town Hall on sheet	4	2.				3	1230 2

Walnut South orde no time limit

3 0

* 19C add 1 3 spots avail after construct.

8

3

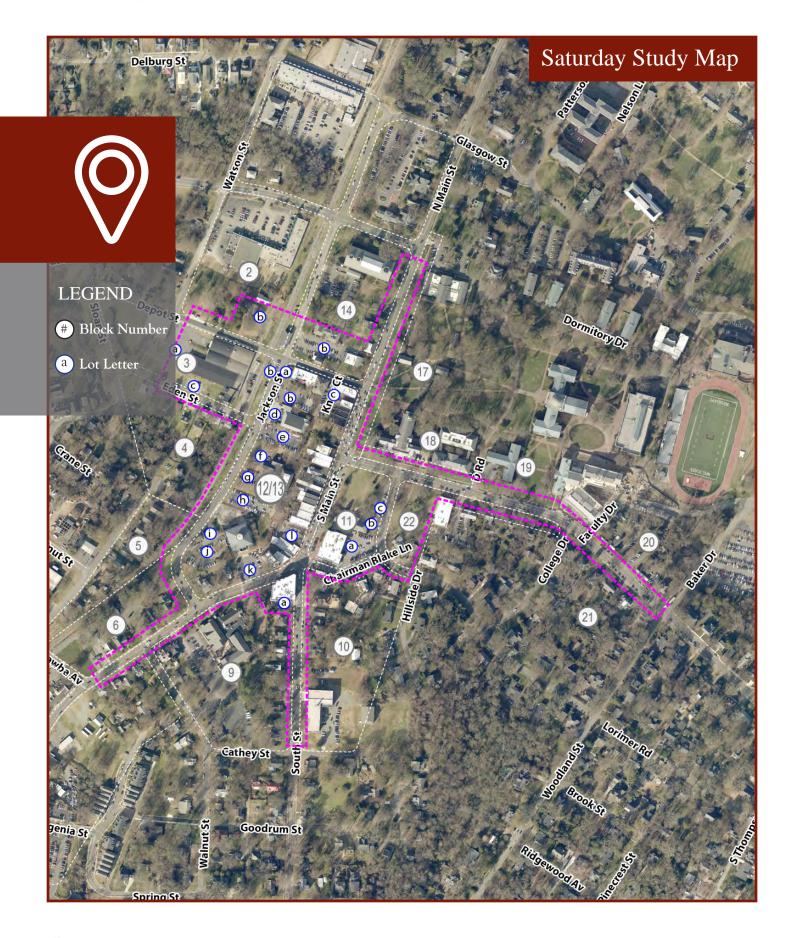
appendix



Two auditors divided the Saturday study area in the core of downtown, to complete one circuit every hour on the thirty-minute mark starting at 8:30 A.M. and ending at 1:30 P.M. The area was divided into blocks by numbers, off-street lots by letters, and on-street parking by the cardinal directions. Special conditions were noted including: informal parking outside of pavement markings, existing parking signs, reserved or permit only zones, loading zones, accessible parking spaces, public vs. private lots, and time limited zones.

IN THIS APPENDIX

Saturday Study Map	10
Saturday Parking Survey	11
Saturday Parking	
Occupancies	13



SATURDAY APRIL 1, 2017 PARKING SURVEY

Block/ Face	Description	# of Spaces	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:20 PM
2	Church lot	30	1	4	3	10	6
3	Unmarked Corner lot	9	9	9	9	7	6
4B	On-Street no time limit	19	16	18	19	16	10
6B	On-Street no time limit	12	0	1	6	6	2
9	Stowe's Private Lot	24	7	9	5	12	14
9B	On-Street 2 hr	12	9	8	7	4	4
9B	On-Street no time limit	11	10	3	4	2	3
9B	On-Street unmarked	2	0	0	0	2	2
10A	On-Street no time limit	5	3	5	5	4	4
10D	On-Street 2 hr	3	1	2	3	2	1
10D	On-Street no time limit	8	4	6	5	3	1
11	CVS parking lot	32	13	29	30	23	17
11A	On-Street 2 hr	6	4	3	4	5	2
11C	On-Street no time limit	3	3	3	3	3	2
11C	On-Street no time limit	5	5	5	5	4	2
11D	On-Street 2hr	33	27	33	32	33	30
11	Library Public Lot 2 hr	11	9	9	11	11	8
11	Library Employee	3	3	3	2	2	1
12/13	Dance Lot	7	2	4	5	4	2
12/13	Public Lot 2 hr (Summit Lot)	15	15	15	15	15	9
12/13	Town Hall 2 hr Lot	26	24	24	23	21	22
12/13	Public Lot 2 hr	31	25	29	28	22	13
12/13	Farmers Market Lot	40	38	40	40	40	29
12/13	Town Hall/Police Lot	29	20	27	27	25	10
12/13	Town Hall/Police Lot (unmarked)	6	0	0	5	6	5
12/13	Police Only	7	4	4	2	3	3
12/13	Public Lot off Depot (Unrestricted)	16	15	16	15	13	16
12/13	Public Lot off Depot (Restricted)	4	1	0	2	3	1
12/13	Public lot behind Inn no limit	18	15	16	18	16	12
12/13	Public lot behind Inn 2 hr	13	13	13	13	12	8

Block/ Face	Description	# of Spaces	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:20 PM
12/13	Post Office Lot reserved	13	10	10	10	5	2
12/13	Post Office Lot	40	31	39	39	34	28
12/13	Insurance Lot private	5	0	0	1	1	1
12/13A	On-Street 2hr	11	10	11	11	9	7
12/13B	On-Street 2hr	11	8	8	10	11	8
12/13B	On-Street 2hr	13	12	12	13	13	9
14	College IT Lot private	42	1	6	13	13	16
14B	On-Street 2 hr	16	7	15	13	13	13
17D	On-Street 2 hr	10	9	10	7	9	6
17D	On-Street 2 hr	14	1	2	9	6	5
18C	On-Street 2 hr	10	4	7	9	7	6
19C	On-Street no time limit	16	13	12	9	9	10
20C	On-Street no time limit	8	2	1	2	3	1
21A	On-Street no time limit	19	4	4	4	1	1
22A	On-Street 2 hr	11	4	8	9	7	2
22A	On-Street no time limit	9	1	2	2	1	1
22D	On-Street 2 hr	8	8	8	8	7	3
	TOTALS	694	421	493	515	478	364

SATURDAY APRIL 1, 2017 OCCUPANCIES

Block/ Face	Description	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:20 PM
2	Church lot	3%	13%	10%	33%	20%
3	Unmarked Corner lot	100%	100%	100%	78%	67%
4B	On-Street no time limit	84%	95%	100%	84%	53%
6B	On-Street no time limit	0%	8%	50%	50%	17%
9	Stowe's Private Lot	29%	38%	21%	50%	58%
9B	On-Street 2 hr	75%	67%	58%	33%	33%
9B	On-Street no time limit	91%	27%	36%	18%	27%
9B	On-Street unmarked	0%	0%	0%	100%	100%
10A	On-Street no time limit	60%	100%	100%	80%	80%
10D	On-Street 2 hr	33%	67%	100%	67%	33%
10D	On-Street no time limit	50%	75%	63%	38%	13%
11	CVS parking lot	41%	91%	94%	72%	53%
11A	On-Street 2 hr	67%	50%	67%	83%	33%
11C	On-Street no time limit	100%	100%	100%	100%	67%
11C	On-Street no time limit	100%	100%	100%	80%	40%
11D	On-Street 2hr	82%	100%	97%	100%	91%
11	Library Public Lot 2 hr	82%	82%	100%	100%	73%
11	Library Employee	100%	100%	67%	67%	33%
12/13	Dance Lot	29%	57%	71%	57%	29%
12/13	Public Lot 2 hr (Summit Lot)	100%	100%	100%	100%	60%
12/13	Town Hall 2 hr Lot	92%	92%	88%	81%	85%
12/13	Public Lot 2 hr	81%	94%	90%	71%	42%
12/13	Farmers Market Lot	95%	100%	100%	100%	73%
12/13	Town Hall/Police Lot	69%	93%	93%	86%	34%
12/13	Town Hall/Police Lot (unmarked)	0%	0%	83%	100%	83%
12/13	Police Only	57%	57%	29%	43%	43%
12/13	Public Lot off Depot (Unrestricted)	94%	100%	94%	81%	100%
12/13	Public Lot off Depot (Restricted)	25%	0%	50%	75%	25%
12/13	Public lot behind Inn no limit	83%	89%	100%	89%	67%
12/13	Public lot behind Inn 2 hr	100%	100%	100%	92%	62%

Block/ Face	Description	8:30 AM	9:30 AM	10:30 AM	11:30 AM	12:20 PM
12/13	Post Office Lot reserved	77%	77%	77%	38%	15%
12/13	Post Office Lot	78%	98%	98%	85%	70%
12/13	Insurance Lot private	0%	0%	20%	20%	20%
12/13A	On-Street 2hr	91%	100%	100%	82%	64%
12/13B	On-Street 2hr	73%	73%	91%	100%	73%
12/13B	On-Street 2hr	92%	92%	100%	100%	69%
14	College IT Lot private	2%	14%	31%	31%	38%
14B	On-Street 2 hr	44%	94%	81%	81%	81%
17D	On-Street 2 hr	90%	100%	70%	90%	60%
17D	On-Street 2 hr	7%	14%	64%	43%	36%
18C	On-Street 2 hr	40%	70%	90%	70%	60%
19C	On-Street no time limit	81%	75%	56%	56%	63%
20C	On-Street no time limit	25%	13%	25%	38%	13%
21A	On-Street no time limit	21%	21%	21%	5%	5%
22A	On-Street 2 hr	36%	73%	82%	64%	18%
22A	On-Street no time limit	11%	22%	22%	11%	11%
22D	On-Street 2 hr	100%	100%	100%	88%	38%
	TOTALS	61%	71%	74%	69%	52%

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Downtow	n Davidson Parking Surve	y		Thursday	April 6, 2	2017	位	+21+ 16	,
3A	ON TIKEET IN FROM	WA	0	5	6	5 1	2	13	
Block/ Face	Description	# of Spaces	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	
1a	Apartment Lot $28 \in$	14	21	17	15	21	21	22	23
1b	Cotton Mill	1 36	38	78	90	68	100	114	
4	DD Control L	121		-		M	00	0	134

THURSDAY PARKING STUDY

	20	INN Tacting grass for	II/a		7	()	0	9	242	
11/1	2d	Market back lot	NA							
	2A	On-Street (Griffith) , 6 ←		4	5	5	5	3		
2	2A	On-Street semi-marked (Griffith)	n/a	-		7	0	0	0	
	2B	On-Street (Jackson)	13	0	8	9	L	3	2	19443 tis
0	3a	Crossfit Lot	28	0	9	2	3	10214	14	43
	3b	Unmarked Corner lot	9	6	14	19	12	6	7	STA_
	3c	Eden St facing lot	8	0	0		U	1	0	_ 52
	4B	On-Street no time limit (Jackson)	19	10	19	14	10	0	聖書	57 爱
	6a	DUMC Chapel lot	23	2	3	16	1	1	1	
	6b	Lake Normán Realty lot	7	3	4	5	3	2	0	. <- +
	6B	On-Street no time limit (Main)	12	0	3	2	23		0	7-
	7a	Catawba Ave Lot	15		2	3	3	2	2	-
	7b	Large Central Lot 1	33	9	4	8	0	10	13	1
	7c	Large Central Lot 2	74	24	12	42	54	11111111111111111111111111111111111111	99	~
	7d	Large Central Lot 3	32	10	18	21	18,	12	9	
	7e	RR facing lot	56	19	19	20	14	VV	21	Lt
	7f	Professional Park Lot 1	27	B	5	8	10		富工	
	7g	Professional Park Lot 2	25	13	14	11	1.7	13	3	5
	7h	Professional Park Lot 3	27	14	8	16	1,1	10	2	5
	7B	On-Street (Main)	17	4	6	10	7	8		th.
	8a	Carruburritos Lot	17,	10	11	9	11	8	14	913
	8b	Dental Office Lot	5/48/1	19	30	58 r	1400	40	12)) -
	8c	Griffth Village Ln Lot	31	18	28	26	27	24	10	(1)
5	8A	On-Street semi-marked (Walnut)	n/a	0	3	0	0	0.	1	
1/	8B	On-Street West side (Goodrum)	14	10	1	1	U	5	10	
1	<u>8B</u>	On-Street East side (Goodrum)	13/12	5			4	5	0	
	8B	On-Street (Spring)	6	3	131	41	1	3	3	
2	80	On-Street (Village)	121		2	2	喷5	3	10	
7	9a	Stowe's Private Lot	24	12	18	16	15	17	16	
b	9b	Methodist Church front lot	116	31	48	30	900	20	25	
	9b	Methodist Church back lot	501	23	24	23	12	0	10	
	9B	On-Street 2 hr (South)	12 (13?)	3	5	8	5	6	, 第5	
		EDEN ST MARKET	NOT	6	4	6	96001	14	2:	
	ld .	OFFICES / /	14	6	5	2	10	U	0	
		4.		tal		1		Les W	1	

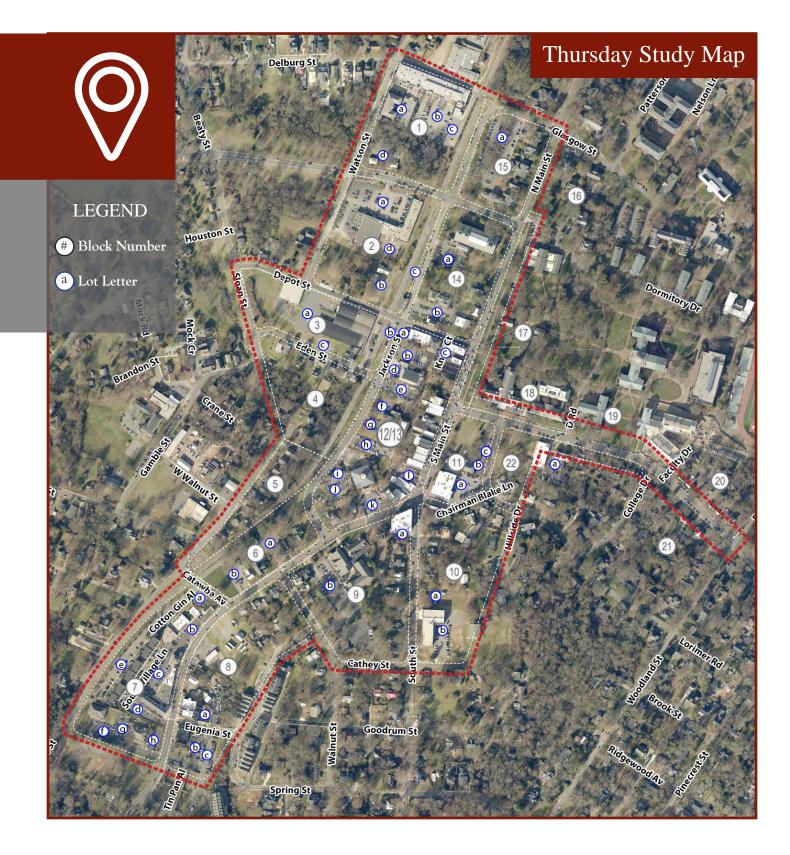
appendix

B

Two auditors divided the Thursday study area in the core of downtown and the surrounding area, to complete one circuit every 2-hours on the hour mark starting at 8:00 A.M. and ending at 8:00 P.M. The area was divided into blocks by numbers, off-street lots by letters, and on-street parking by the cardinal directions. Special conditions were noted including: informal parking outside of pavement markings, existing parking signs, reserved or permit only zones, loading zones, accessible parking spaces, public vs. private lots, and time limited zones.

IN THIS APPENDIX

Thursday Study Map	80
Thursday Parking Survey	81
Thursday Parking	
Occupancies	84



THURSDAY APRIL 6, 2017 PARKING SURVEY

Block/ Face	Description	# of Spaces	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
1a	Apartment Lot	28	21	17	15	21	21	22
1b	Cotton Mill	136	38	78	90	68	100	114
1c	RR facing lot	26	0	7	17	7	25	23
1d	Office Lot	14	6	5	2	6	6	0
1A	On-Street (Delburg)	10	5	9	10	5	7	3
1B	On-Street semi-marked (Jackson)	20	16	20	20	16	15	14
1C	On-Street (Griffith)	14	10	9	10	5	7	3
1D	On-Street unmarked (Watson)	2	0	0	2	2	1	0
2a	Market Lot	144	40	46	60	49	68	44
2b	Church Lot	30	2	4	4	1	1	7
2c	RR facing grass lot	8	4	7	8	8	6	5
2A	On-Street (Griffith)	6	4	5	5	5	3	1
2A	On-Street semi-marked (Griffith)	2	0	0	0	0	0	0
2B	On-Street (Jackson)	13	0	8	9	4	3	2
3a	Crossfit Lot	28	0	4	2	3	14	14
3b	Corner lot	19	6	14	19	12	8	7
3c	Eden St facing lot	8	0	0	1	4	1	0
3d	RR facing lot	9	5	4	6	9	4	2
3A	On-street unmarked (Depot)	6	0	5	6	5	2	3
4B	On-Street no time limit (Jackson)	19	10	19	14	16	6	5
6a	DUMC Chapel lot	23	2	3	16	1	1	1
6b	Lake Norman Realty lot	7	3	4	5	3	2	0
6B	On-Street no time limit (Main)	12	0	3	2	2	1	0
7a	Catawba Ave Lot	15	1	2	3	3	2	2
7b	Large Central Lot 1	33	0	4	8	9	10	13
7c	Large Central Lot 2	71	24	43	43	54	58	44
7d	Large Central Lot 3	32	10	18	21	18	12	9
7e	RR facing lot	56	19	19	20	14	16	21
7f	Professional Park Lot 1	27	8	5	8	10	11	1
7g	Professional Park Lot 2	25	13	14	11	17	13	3
7h	Professional Park Lot 3	27	14	8	16	11	16	2

Block/ Face	Description	# of Spaces	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
7B	On-Street (Main)	17	4	6	10	7	8	11
8a	Carrburritos Lot	17	10	11	9	11	8	14
8b	Dental Office Lot	51	19	30	28	41	40	12
8c	Griffith Village Ln Lot	31	18	28	26	27	24	10
8A	On-Street semi-marked (Walnut)	3	0	3	0	0	0	1
8B	On-Street West side (Goodrum)	14	6	1	2	4	5	6
8B	On-Street East side (Goodrum)	12	5	2	1	4	5	6
8B	On-Street (Spring)	6	3	0	1	1	3	3
8C	On-Street (Village)	11	1	2	2	5	3	10
9a	Stowe's Private Lot	24	12	18	16	15	17	16
9b	Methodist Church front lot	116	31	48	30	19	20	25
9b	Methodist Church back lot	59	23	24	23	12	6	6
9B	On-Street 2 hr (South)	10	3	5	8	5	6	5
9B	On-Street no time limit (South)	2	0	2	2	1	1	0
9B	On-Street unmarked (South)	4	0	4	0	2	2	3
9C	On-Street semi-marked (Walnut)	2	0	0	0	0	0	0
10a	Christian School side lot	11	10	11	11	9	4	3
10b	Christian School back lot	26	26	17	19	22	13	10
10A	On-Street no time limit (Chairman)	5	4	5	5	5	1	2
10D	On-Street 2 hr (South)	3	2	3	3	1	2	2
10D	On-Street no time limit (South)	8	4	8	8	6	3	2
11a	CVS parking lot	32	31	29	28	22	26	13
11b	Library Public Lot 2 hr	11	9	6	7	7	9	1
11c	Library Employee	3	2	3	3	1	2	2
11A	On-Street 2 hr (Concord)	6	4	1	6	3	1	3
11C	On-Street no time limit (Chairman)	3	3	3	2	1	1	1
11C	On-Street no time limit (Lorimer)	5	4	5	5	3	3	4
11D	On-Street 2hr (Main)	33	21	23	20	20	13	33
12/13a	Insurance Lot private	5	0	2	1	1	0	1
12/13b	Public lot behind Inn no limit	18	13	16	15	14	10	16
12/13b	Public lot behind Inn 2 hr	13	0	2	6	3	8	12
12/13c	Public Lot off Depot	16	5	9	16	4	9	15
12/13c	Public Lot - permit spots	4	0	0	0	1	0	0

Block/ Face	Description	# of Spaces	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
12/13d	Post Office Lot reserved	13	13	5	4	8	7	7
12/13e	Post Office Lot	40	15	17	17	15	8	5
12/13f	Dance Lot	7	2	3	2	3	5	6
12/13g	Public Lot 2 hr	31	16	28	28	27	18	9
12/13h	Farmers Market Lot	40	40	40	40	34	21	15
12/13i	Police Only	7	5	7	7	7	5	5
12/13j	Town Hall/Police Lot	29	25	28	27	28	24	8
12/13j	Town Hall/Police unmarked	11	7	4	8	11	6	1
12/13k	Town Hall 2 hr Lot	26	22	25	24	21	22	12
12/131	Public Lot 2 hr	15	14	11	13	14	5	13
12/13A	On-Street 2hr (Depot)	11	2	3	7	2	5	9
12/13B	On-Street 2hr (Main)	11	6	10	8	2	2	8
12/13B	On-Street 2hr (Main)	13	13	5	11	4	5	12
12/13C	On-Street no time limit (Main)	5	5	4	2	1	0	0
14a	Satellite Lot	42	6	26	26	34	10	11
14b	College IT Lot private	42	36	38	37	33	10	6
14B	On-Street 2 hr (Main)	18	2	7	9	6	3	9
14D	On-Street semi-marked (Depot)	4	1	2	2	0	0	0
15a	Public Radio lot	88	34	46	51	74	61	19
15A	On-Street semi-marked (Delburg)	6	5	6	6	6	5	6
17D	On-Street 2 hr (Main)	10	2	6	8	6	1	3
17D	On-Street 2 hr (Main)	14	2	7	8	3	2	12
18C	On-Street 2 hr (Concord)	10	3	7	10	5	10	9
19C	On-Street no time limit (Concord)	19	14	16	16	17	13	10
20C	On-Street no time limit (Concord)	8	7	7	8	8	6	3
21A	On-Street no time limit (Concord)	14	10	11	10	9	7	2
22a	Congressional House lot	31	29	29	27	23	12	14
22A	On-Street 2 hr (Concord)	11	7	9	11	9	5	10
22A	On-Street no time limit (Concord)	9	9	7	9	9	6	3
22D	On-Street 2 hr (Lorimer)	8	5	5	8	4	2	7
	TOTALS	1460	719	859	887	836	677	577

THURSDAY APRIL 6, 2017 OCCUPANCIES

Block/ Face	Description	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
1a	Apartment Lot	75%	61%	54%	75%	75%	79%
1b	Cotton Mill	28%	57%	66%	50%	74%	84%
1c	RR facing lot	0%	27%	65%	27%	96%	88%
1d	Office Lot	43%	36%	14%	43%	43%	0%
1A	On-Street (Delburg)	50%	90%	100%	50%	70%	30%
1B	On-Street semi-marked (Jackson)	80%	100%	100%	80%	75%	70%
1C	On-Street (Griffith)	71%	64%	71%	36%	50%	21%
1D	On-Street unmarked (Watson)	0%	0%	100%	100%	50%	0%
2a	Market Lot	28%	32%	42%	34%	47%	31%
2b	Church Lot	7%	13%	13%	3%	3%	23%
2c	RR facing grass lot	50%	88%	100%	100%	75%	63%
2A	On-Street (Griffith)	67%	83%	83%	83%	50%	17%
2A	On-Street semi-marked (Griffith)	0%	0%	0%	0%	0%	0%
2B	On-Street (Jackson)	0%	62%	69%	31%	23%	15%
3a	Crossfit Lot	0%	14%	7%	11%	50%	50%
3b	Corner lot	32%	74%	100%	63%	42%	37%
3c	Eden St facing lot	0%	0%	13%	50%	13%	0%
3d	RR facing lot	56%	44%	67%	100%	44%	22%
3A	On-street unmarked (Depot)	0%	83%	100%	83%	33%	50%
4B	On-Street no time limit (Jackson)	53%	100%	74%	84%	32%	26%
6a	DUMC Chapel lot	9%	13%	70%	4%	4%	4%
6b	Lake Norman Realty lot	43%	57%	71%	43%	29%	0%
6B	On-Street no time limit (Main)	0%	25%	17%	17%	8%	0%
7a	Catawba Ave Lot	7%	13%	20%	20%	13%	13%
7b	Large Central Lot 1	0%	12%	24%	27%	30%	39%
7c	Large Central Lot 2	34%	61%	61%	76%	82%	62%
7d	Large Central Lot 3	31%	56%	66%	56%	38%	28%
7e	RR facing lot	34%	34%	36%	25%	29%	38%
7f	Professional Park Lot 1	30%	19%	30%	37%	41%	4%

Block/ Face	Description	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
7g	Professional Park Lot 2	52%	56%	44%	68%	52%	12%
7h	Professional Park Lot 3	52%	30%	59%	41%	59%	7%
7B	On-Street (Main)	24%	35%	59%	41%	47%	65%
8a	Carrburritos Lot	59%	65%	53%	65%	47%	82%
8b	Dental Office Lot	37%	59%	55%	80%	78%	24%
8c	Griffith Village Ln Lot	58%	90%	84%	87%	77%	32%
8A	On-Street semi-marked (Walnut)	0%	100%	0%	0%	0%	33%
8B	On-Street West side (Goodrum)	43%	7%	14%	29%	36%	43%
8B	On-Street East side (Goodrum)	42%	17%	8%	33%	42%	50%
8B	On-Street (Spring)	50%	0%	17%	17%	50%	50%
8C	On-Street (Village)	9%	18%	18%	45%	27%	91%
9a	Stowe's Private Lot	50%	75%	67%	63%	71%	67%
9b	Methodist Church front lot	27%	41%	26%	16%	17%	22%
9b	Methodist Church back lot	39%	41%	39%	20%	10%	10%
9B	On-Street 2 hr (South)	30%	50%	80%	50%	60%	50%
9B	On-Street no time limit (South)	0%	100%	100%	50%	50%	0%
9B	On-Street unmarked (South)	0%	100%	0%	50%	50%	75%
9C	On-Street semi-marked (Walnut)	0%	0%	0%	0%	0%	0%
10a	Christian School side lot	91%	100%	100%	82%	36%	27%
10b	Christian School back lot	100%	65%	73%	85%	50%	38%
10A	On-Street no time limit (Chairman)	80%	100%	100%	100%	20%	40%
10D	On-Street 2 hr (South)	67%	100%	100%	33%	67%	67%
10D	On-Street no time limit (South)	50%	100%	100%	75%	38%	25%
11a	CVS parking lot	97%	91%	88%	69%	81%	41%
11b	Library Public Lot 2 hr	82%	55%	64%	64%	82%	9%
11c	Library Employee	67%	100%	100%	33%	67%	67%
11A	On-Street 2 hr (Concord)	67%	17%	100%	50%	17%	50%

Block/ Face	Description	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
11C	On-Street no time limit (Chairman)	100%	100%	67%	33%	33%	33%
11C	On-Street no time limit (Lorimer)	80%	100%	100%	60%	60%	80%
11D	On-Street 2hr (Main)	64%	70%	61%	61%	39%	100%
12/13a	Insurance Lot private	0%	40%	20%	20%	0%	20%
12/13b	Public lot behind Inn no limit	72%	89%	83%	78%	56%	89%
12/13b	Public lot behind Inn 2 hr	0%	15%	46%	23%	62%	92%
12/13c	Public Lot off Depot	31%	56%	100%	25%	56%	94%
12/13c	Public Lot - permit spots	0%	0%	0%	25%	0%	0%
12/13d	Post Office Lot reserved	100%	38%	31%	62%	54%	54%
12/13e	Post Office Lot	38%	43%	43%	38%	20%	13%
12/13f	Dance Lot	29%	43%	29%	43%	71%	86%
12/13g	Public Lot 2 hr	52%	90%	90%	87%	58%	29%
12/13h	Farmers Market Lot	100%	100%	100%	85%	53%	38%
12/13i	Police Only	71%	100%	100%	100%	71%	71%
12/13j	Town Hall/Police Lot	86%	97%	93%	97%	83%	28%
12/13j	Town Hall/Police unmarked	64%	36%	73%	100%	55%	9%
12/13k	Town Hall 2 hr Lot	85%	96%	92%	81%	85%	46%
12/131	Public Lot 2 hr	93%	73%	87%	93%	33%	87%
12/13A	On-Street 2hr (Depot)	18%	27%	64%	18%	45%	82%
12/13B	On-Street 2hr (Main)	55%	91%	73%	18%	18%	73%
12/13B	On-Street 2hr (Main)	100%	38%	85%	31%	38%	92%
12/13C	On-Street no time limit (Main)	100%	80%	40%	20%	0%	0%
14a	Satellite Lot	14%	62%	62%	81%	24%	26%
14b	College IT Lot private	86%	90%	88%	79%	24%	14%
14B	On-Street 2 hr (Main)	11%	39%	50%	33%	17%	50%
14D	On-Street semi-marked (Depot)	25%	50%	50%	0%	0%	0%
15a	Public Radio lot	39%	52%	58%	84%	69%	22%
15A	On-Street semi-marked (Delburg)	83%	100%	100%	100%	83%	100%
17D	On-Street 2 hr (Main)	20%	60%	80%	60%	10%	30%
17D	On-Street 2 hr (Main)	14%	50%	57%	21%	14%	86%

Block/ Face	Description	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM
18C	On-Street 2 hr (Concord)	30%	70%	100%	50%	100%	90%
19C	On-Street no time limit (Concord)	74%	84%	84%	89%	68%	53%
20C	On-Street no time limit (Concord)	88%	88%	100%	100%	75%	38%
21A	On-Street no time limit (Concord)	71%	79%	71%	64%	50%	14%
22a	Congressional House lot	94%	94%	87%	74%	39%	45%
22A	On-Street 2 hr (Concord)	64%	82%	100%	82%	45%	91%
22A	On-Street no time limit (Concord)	100%	78%	100%	100%	67%	33%
22D	On-Street 2 hr (Lorimer)	63%	63%	100%	50%	25%	88%
	TOTALS	49%	59%	61%	57%	46%	40%







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Agenda Title: Miscellaneous/Open Discussion

Summary:

ATTACHMENTS:

Description Upload Date Type

No Attachments Available