



Mayor and City Council Regular Meeting

Thursday, November 02, 2023 at 7:00 PM

Dacula City Hall, Council Chambers

442 Harbins Rd. | P.O. Box 400 | Dacula, Georgia 30019 | (770) 963-7451

Agenda

CALL TO ORDER AND ROLL CALL OF MEMBERS:

INVOCATION:

PLEDGE OF ALLEGIANCE:

PUBLIC SERVICE DEDICATION:

1. Harold Edwards

CONSENT AGENDA:

2. Approval of Minutes from the Regular Council Meeting on October 5, 2023
3. Transmit Comprehensive Plan to DCA and ARC
4. Ordinance to amend Chapter 10, Article II – Floodplain Management / Flood Damage Prevention
5. Resolution to urge the United States FDA to prioritize and increase enforcement against vaping manufacturers
6. Maxey Street Sewer Improvement Project Intergovernmental Agreement
7. Brookton Place Subdivision road improvements bid package
8. Whisper Way storm drainage replacement design proposal
9. City Branding Guidelines

OLD BUSINESS:

NEW BUSINESS:

STAFF COMMENTS:

MAYOR AND COUNCIL COMMENT(S):

PUBLIC COMMENTS:

EXECUTIVE SESSION: Real property matters

ADJOURNMENT:

**A RESOLUTION
OF THE MAYOR AND CITY COUNCIL OF THE CITY OF DACULA
FOR PUBLIC SERVICE MEMORIAL AWARD TO HAROLD EDWARDS**

WHEREAS, the City of Dacula's Public Service Memorial Award is intended to recognize outstanding service to the City and its citizens; and

WHEREAS, Harold Bobby Edwards was employed by the City of Dacula from 1980 through 2004 and was promoted to Director of the Public Works Department after 17 years with the City. He oversaw the City's water system until it was sold to Gwinnett County. He started the leaf collection service provided to residents free of charge, and he took the time to mentor children within the City, showing them City equipment and teaching them about City services. Harold was also a friend and mentor to our current Public Works Director, Chris Parks. Harold passed down a legacy of dedication to public service to City employees who followed him. He was a member of Ewing Chapel Baptist Church and served faithfully as a deacon for over 50 years. He enjoyed coaching softball for many years and loved bird hunting. He was dedicated to his wife, daughters, and grandchildren. We remember his friendship and service to the citizens of the City, and recognize his contributions by adopting this resolution.

NOW THEREFORE, THE MAYOR AND COUNCIL OF THE CITY OF DACULA, hereby resolves and ordains that the City's Public Service Memorial Award is hereby granted in favor of Harold Bobby Edwards in recognition of his outstanding service to the City.

SO RESOLVED, this 2nd day of November, 2023 by the Governing Authority of the City of Dacula.

AYES: ____

NAYES: ____

Hugh D. King, III, Mayor
City of Dacula

Brittini Nix
City Administrator

CITY OF DACULA

442 Harbins Rd
P. O. Box 400
Dacula, GA, 30019

COUNCIL MEETING MINUTES

October 5, 2023

I. CALL TO ORDER AND ROLL CALL OF MEMBERS:

Mayor Trey King called the October 5, 2023 meeting to order at 7:01 p.m. and a roll call of the members was taken. A quorum was present. He welcomed everyone to the meeting.

City Council Present:

Mayor Trey King
Councilmember Sean Williams
Councilmember Daniel Spain
Councilmember Ann Mitchell
Councilmember Denis W. Haynes, Jr.

City Staff Present:

Brittni Nix, City Administrator
Jack Wilson, City Attorney
Courtney Mahady, Administrative Clerk
Amy Morris, Director of Human Resources & Business Services
Dana Stump, Administrative Assistant for Planning & Zoning
Stephen Mayer, Director of Finance
Hayes Taylor, City Planner
Amy White, City Marshal

II. INVOCATION:

Pastor Mark Chandler gave invocation.

III. PLEDGE OF ALLEGIANCE:

Mayor King led the Pledge of Allegiance.

IV. CONSENT AGENDA:

1. Approval of the Minutes from the Regular Meeting on September 7, 2023
2. Ordinance to amend Chapter 13, Article III - Noise and delete Sec. 18-76 of the City Code
3. Ordinance to amend Chapter 12, Article XVI - Body Art Studios and Body Artists
4. Brookton Place Subdivision FFY-2024 LMIG Application

Councilmember Haynes, Jr. motioned to approve the consent agenda items. Councilmember Mitchell seconded. Motion passed unanimously.

V. OLD BUSINESS:

None

VI. NEW BUSINESS:

- 5. PUBLIC HEARING: 2023-CD-RZ-02;** Applicant: Fransisco Garcia, Owner: Fransisco Garcia requests rezoning from OI Office-Institutional District to C-3 Central Business District and Heavy Commercial District. The property is located in Land Lot 302A of the 5th District and contains 0.83 acres more or less.

Councilmember Spain motioned to open the public hearing. Councilmember Williams seconded. Motion passed unanimously.

City Planner, Hayes Taylor, presented the staff case report for the rezoning application. The applicant has requested rezoning from Office-Institutional District to Central Business District and Heavy Commercial District to allow for an animal hospital and copy shop. Mr. Hayes stated staff recommend denial of the rezoning application.

Applicant representative, Fransisco Garcia, 2528 Pharr Avenue, Dacula, Georgia 30019, requests rezoning for his property to move forward with relocating the Dacula Animal Hospital located on Winder Highway.

Comment in opposition

Wes Shelton, 306 Church Street, Dacula, Georgia 30019, stated that a commercial property on his street would generate more traffic.

Jonathan Biren, 301 Church Street, Dacula, Georgia 30019, stated that an animal hospital on a residential street would generate more traffic as well as devalue the properties. Mr. Biren then submitted a petition signed by his neighbors to deny the application.

Laneta Cornell, 309 Church Street, Dacula, Georgia 30019, expressed her concern that a commercial property would increase more traffic and speeding along Church Street.

Jessica Bell, 309 Church Street, Dacula, Georgia 30019, stated that the traffic would increase if an animal hospital was built.

Councilmember Spain motioned to close the public hearing. Councilmember Haynes, Jr. seconded. Motion passed unanimously.

- 6. Rezoning Application: 2023-CD-RZ-02;** Applicant: Fransisco Garcia, Owner: Fransisco Garcia requests rezoning from OI Office-Institutional District to C-3 Central Business District and Heavy Commercial District. The property is located in Land Lot 302A of the 5th District and contains 0.83 acres more or less.

Councilmember Williams motioned to deny rezoning application 2023-CD-RZ-02. Councilmember Haynes, Jr. seconded. Motion passed unanimously.

7. PUBLIC HEARING: Ordinance to amend Article VII and Article XVII of the Zoning Resolution

Councilmember Spain motioned to open the public hearing. Councilmember Mitchell seconded. Motion passed unanimously.

City Attorney, Jack Wilson, presented the staff report for the Ordinance to amend Article VII and Article XVII of the Zoning Resolution to update the City's zoning procedures to be consistent with changes in State law. Mr. Wilson stated staff recommend approval of the amendments.

No public comments

Councilmember Haynes, Jr. motioned to close the public hearing. Councilmember Mitchell seconded. Motion passed unanimously.

8. Ordinance to amend Article VII and Article XVII of the Zoning Resolution

Councilmember Spain motioned to approve ordinance amendment. Councilmember Williams seconded. Motion passed unanimously.

9. PUBLIC HEARING: Ordinance to amend Article IV of the Development Regulations

Councilmember Mitchell motioned to open the public hearing. Councilmember Haynes, Jr. seconded. Motion passed unanimously.

City Attorney, Jack Wilson, presented the staff report for the Ordinance to amend Article IV of the Development Regulations to update the Final Plat Approval procedures to align with current City practices. Mr. Wilson stated staff recommend approval of the amendment.

Councilmember Haynes, Jr. inquired whether the Mayor and Council would be notified of any Final Plat approvals.

Ms. Nix stated that Mayor and Council would still be updated on Final Plat approvals as well as any other major development updates.

No public comments

Councilmember Haynes, Jr. motioned to close the public hearing. Councilmember Williams seconded. Motion passed unanimously.

10. Ordinance to amend Article IV of the Development Regulations

Councilmember Mitchell motioned to approve the ordinance amendment. Councilmember Spain seconded. Motion passed unanimously.

VII. STAFF COMMENTS:

None

VIII. MAYOR AND COUNCIL COMMENT(S):

11. Submission of the FY-2024 Proposed Budget and FY-2023 Budget Adjustment to City Council and the citizens of Dacula.

Mayor King submitted the FY-2024 Proposed Budget and FY-2023 Budget Adjustment to City Council and the citizens of Dacula for review. He also noted that Public Hearings for the budget are scheduled for 6:30 p.m. on November 2, 2023 and December 7, 2023.

IX. PUBLIC COMMENTS:

Andrew Burnett, 2875 Superior Drive, commented that he would urge the Firework Ordinance not be amended.

State Representative for District 111, Rey Martinez, P.O. Box 3118, Loganville, Georgia 30052, stated that he feels honored to represent the City of Dacula in Atlanta. Mr. Martinez noted that if there was any concerns at the State level to let the Mayor and Council know.

Sandy Donatucci, 2756 Great Falls Xing, Buford, Georgia 30519, stated that she is running for the House of Representatives in District 105 and welcomed any questions.

X. EXECUTIVE SESSION: Personnel and real property matters

Councilmember Williams motioned to exit out of regular session and enter into executive session. Councilmember Haynes, Jr. seconded. Motion passed unanimously. Regular session adjourned and executive session began for the purposes of real property acquisition and personnel matters at 7:36 p.m.

Councilmember Spain motioned to exit executive session and reconvene regular session. Councilmember Haynes, Jr. seconded. Motion passed unanimously. Regular session reconvened at 7:57 p.m.

City Attorney, Jack Wilson, reported there were no votes taken in executive session. The Council met to discuss real property acquisition and personnel matters as allowed by the Open Meetings Act.

Mayor King called for a motion to amend the agenda to add the contract to purchase property on Wilson Street.

Councilmember Mitchell motioned to amend the agenda. Councilmember Spain seconded. Motion passed unanimously.

City Attorney, Jack Wilson, discussed that the City has been in negotiations with the Williams regarding the potential sale of two properties along Wilson Street. Mr. Wilson stated the negotiations have gone well and the family has agreed to sell the two lots to the city for the price of \$350,000 and a motion could be made for the Mayor approve the agreement and to sign the contract if everyone was ready to move forward with the sale.

Mayor King called for a motion to approve the agreement with Evelyn Knight to purchase property on Wilson Street and authorize the Mayor to sign it.

Councilmember Haynes, Jr. motioned to approve the agreement. Councilmember Williams seconded. Motion passed unanimously.

XI. ADJOURNMENT:

Councilmember Haynes, Jr. motioned to adjourn. Councilmember Spain seconded. Motion passed unanimously. Meeting adjourned at 7:59 p.m.

Minutes approved

Date

Signature

TO: Mayor and City Council of the City of Dacula

FROM: Hayes Taylor, City Planner

DATE: December 7, 2023

SUBJECT: 2050 Comprehensive Plan Presentation

Marilyn Hall with Hall Consulting will present the 2050 Comprehensive Plan draft. The Plan was based upon input from the Steering Committee and must be submitted to the Department of Community Affairs (DCA) and the Atlanta Regional Commission (ARC) by February 29, 2024 for review and approval. The purpose of the presentation is to address any final questions and comments before the plan is transmitted to DCA and ARC for review.

RESOLUTION

A RESOLUTION AUTHORIZING TRANSMITTAL OF THE DRAFT CITY OF DACULA COMPREHENSIVE PLAN FOR REVIEW BY THE ATLANTA REGIONAL COMMISSION AND DEPARTMENT OF COMMUNITY AFFAIRS BY THE MAYOR AND COUNCIL OF THE CITY OF DACULA, GEORGIA

WHEREAS, the 1989 Georgia Planning Act requires that all local governments submit a comprehensive plan; and

WHEREAS, the last full update Comprehensive Plan was developed in 2008 and then updated in 2019; and

WHEREAS, since the issues and challenges facing the community continue to change from when the Goals and Objectives were updated in the last 2019 Comprehensive Plan; and

WHEREAS, the City of Dacula has updated the Comprehensive Plan to address housing, transportation, economic development, community facilities, broadband, land use, and civic engagement; and

WHEREAS, this document was prepared according to the Standards and Procedures for Local Comprehensive Planning effective October 1, 2018 and established by the Georgia Planning Act of 1989, and the required public hearing was held on November 2, 2023; and

WHEREAS, The Atlanta Regional Commission and the Georgia Department of Community Affairs must review the draft Comprehensive Plan to ensure consistency with neighboring jurisdictions, consistency with regional plans, and verify compliance with the Georgia Minimum Standards and Procedures for Local Comprehensive Planning;

BE IT THEREFORE RESOLVED, that the Mayor and City Council of the City of Dacula hereby transmit the City of Dacula Comprehensive Plan Update to the Atlanta Regional Commission and the Georgia Department of Community Affairs for official review.

SO ORDAINED by the governing authority of the City of Dacula, this 2nd day of November, 2023.

AYES: ____

NAYES: ____

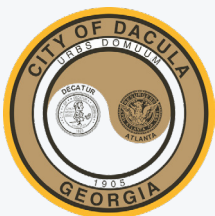
HUGH D. KING, III
MAYOR, CITY OF DACULA

ATTEST:

BRITTNI NIX
CITY ADMINISTRATOR



DACULA 2050 COMPREHENSIVE PLAN UPDATE



The City of Dacula

Prepared by Hall Consulting, Inc.

**Adopted
2024**

ACKNOWLEDGEMENTS

City of Dacula Mayor and City Council

Trey King, Mayor
Denis W. Haynes, Jr.
Ann Mitchell
Daniel Spain
Sean Williams

City of Dacula Staff

Brittni Nix, City Administrator
Hayes Taylor, City Planner
Greg Chapel / Amy White, Marshals

City of Dacula Comprehensive Plan Steering Committee

Trey King, Mayor
Danny Spain, Council
Sean Williams, Council
Ann Mitchell, Council
Denis Haynes, Council
Mark Chandler, Planning Commission
Myra Montalbano, Planning Commission
Gene Greeson, Planning Commission
Lisa Bradberry, Planning Commission

Monica Francis, Planning Commission
Brittni Nix, Staff
Hayes Taylor, Staff
Greg Chapel/Amy White, Staff
James Clinkscales, Community Member
Arlene Clinkscales, Community Member
Phyllis Lamme, Community Member
Ellis Lamme, Community Member
Joey Murphy, Community Member

Consulting Team

Marilyn Hall, Hall Consulting, Inc.
Robert Sills, Nelsnick Enterprises
Mel Cochran Davis, Maypop Collaborative

CONTENTS

Item 3.

Introduction 4

Purpose of Plan 4

About Dacula 5

Recent and Ongoing Planning Efforts 6

Public Engagement 21

Community Vision 22

Vision Statement 22

Needs and Opportunities 23

Goals and Policies 27

Elements 28

1 - Population and Housing 28

2 - Transportation 37

3 - Economic Development 43

4 - Community Facilities 47

5 - Broadband 52

6 - Land Use 54

7 - Community Building and Civic Engagement 70

Community Work Program 73

Appendices 94

Introduction

Purpose of this plan

This comprehensive plan envisions the long-term future of the City of Dacula and outlines its implementation. Over time, this plan will serve as a guide for cooperation and coordination between the City, its service providers, partners, and current and future property owners. The goals and strategies contained in this plan have been carefully crafted to support new development and redevelopment that is beneficial to the community and maintains its vision. The plan should be used to support decisions regarding growth management, transportation, housing, economic development, and quality of life over the next few decades. Furthermore, this plan fulfills Georgia Department of Community Affairs (DCA)'s requirements for local comprehensive planning and the requirements to maintain the City of Dacula's status as a Qualified Local Government which provides eligibility for financial incentives from DCA, the Department of Natural Resources (DNR), the Georgia Environmental Finance Authority (GEFA), and the One Georgia Authority.

Plan Organization

This chapter introduces the comprehensive plan and briefly reviews the history of Dacula and previous planning efforts.

The next section describes the extensive public engagement effort that served as the foundation of this plan.

The Community Vision Chapter provides the Vision Statement, Needs and Opportunities, and overarching goals and policies of the City based on public engagement, the Community Vision, and analysis of data and trends. Among the Elements section of the plan is the Land Use Element,

The Land Use Element includes Character Areas. These play a pivotal role in shaping Dacula's future by preserving its quality of life and promoting sustainable growth. Character Areas will allow local authorities and residents to carefully consider the distinct historical and community building features of different areas within Dacula, whether it be the historic downtown, residential suburbs, or developing corridors.

By identifying and delineating these character areas, the comprehensive plan empowers Dacula to craft tailored land use policies, infrastructure improvements, and zoning regulations that cater to the specific needs and aspirations of each area, thereby safeguarding the city's character, fostering community cohesion, and ensuring that future development aligns with the cherished values of its residents.

About Dacula

Dacula is located in eastern Gwinnett County, with U.S. Route 29 Business/Georgia State Route 8 (Winder Highway) the main road through the center of town. Business 29/SR 8 leads west 6 miles to Lawrenceville, the county seat, and east 11 miles to Winder. U.S. Route 29/SR 316 (University Parkway) is a four-lane highway that bypasses downtown to the south, with access from Harbins Road. University Parkway leads east 34 miles to Athens and west 12 miles to Interstate 85, which leads an additional 25 miles southwest to downtown Atlanta. University Parkway divides Dacula and provides opportunities and challenges for the city.

The vicinity of Dacula was one of the first areas in present-day metropolitan Atlanta to be settled around the time of the War of 1812, but the area remained mostly undeveloped until the late 20th century. The Dacula area is home to some of the oldest buildings in greater Atlanta, such as the Elisha Winn House, which originally acted as the courthouse for Gwinnett County.

Dacula itself began in the late 1800s near the community of Chinquapin Grove, where Dacula Elementary now stands. The town was originally named “Hoke”, after a Seaboard Air Line Railroad executive, but that name was changed due to the Post Office Department’s protest. Dacula’s name was formed from letters in Decatur and Atlanta, two cities to the west that were already prospering at the time of Dacula’s founding. The city was once home to a train station on a CSX line through northeast Georgia, although the station closed in the mid-1950s.



Figure 1 Elisha Winn House Source: <http://creativecommons.org/licenses/by-sa/3.0>

Recent and Ongoing Planning Projects

Approved in 2020, Rowen is a new 2,000-acre development bordering Dacula to the east. It is being promoted as Georgia's hub for environmental, agricultural and medical innovation. Gwinnett County has committed to the project as demonstrated by the \$125 million Eastern Regional Infrastructure Project that provides sewer upgrades and trail amenities in the area. Although there is no master plan for Rowen, the project is expected to include offices, research facilities, public parks, and residences along State Route 316. It is expected that the project will serve as an international destination for research in the fields of agriculture, the environment, and medicine, creating approximately 18,500 jobs and bring \$1.65 billion in income to Gwinnett county by 2035, and up to 100,000 jobs at buildout.

The site will eventually include more than 22 million square feet of lab, office and civic spaces alongside a mix of multi-family residential, cafes, start-up hubs, parks and public trails. Initial work will include horizontal infrastructure such as SITES-certified complete streets, trails, sidewalks and a variety of utilities. The new roads will create access to the Rowen Village area as well as medium- and low-density areas of the site for development.

As a visionary knowledge community, Rowen plans to bring together entrepreneurs, researchers, and innovators from around the world and more than 50 research and educational institutions across Georgia.

A considerable part of the project is recognizing the site's rich history, which dates back 200 years. In the early 1800s, the land held a grist mill which the project plans to preserve the associated dam linking it to a planned trail along the river.

Additional components of the project, marked as key priorities to Rowen, include:

- The reforestation and ecological enhancement in conjunction with the open space designed for people-oriented spaces
- The support of agricultural and food source education
- Providing a living laboratory for continued research on the relationship between the built and natural worlds
- Establishing a large-scale site providing comfort, interest and beauty throughout the year

Rowen

An overlay district with Design Guidelines was approved by Gwinnett County in 2022. The Design Guidelines establish a framework for all planning, design and placemaking associated with the development of Rowen. As the time frame for Rowen may span decades, the framework speaks to principles, components, place and scale - not style. The overlay will function as a form based code, allowing developers to be creative with design and function within a framework of sustainability, public place making, complete streets, and walkability.



Figure 2 - Rowen Overlay District - Source: ROWEN Design Guidelines, 2022

Gwinnett County Transit Development Plan

Gwinnett's transit plan shows a Transit Transfer Facility in Dacula to be implemented in 2027. Gwinnett County Transit Development Plan was approved in September 2023 and aspires to:



- Increase mobility options for all Gwinnett residents
- Improve access to mobility options to connect people to more places, more jobs, and support economic development
- Enhance the user's experience by making transit easy to use, safe, and comfortable
- Create vibrant multimodal places that generate a variety of activities
- Minimize environmental impact by reducing cars on the road and using cleaner technology
- Provide robust information about mobility alternatives and their benefits to all residents

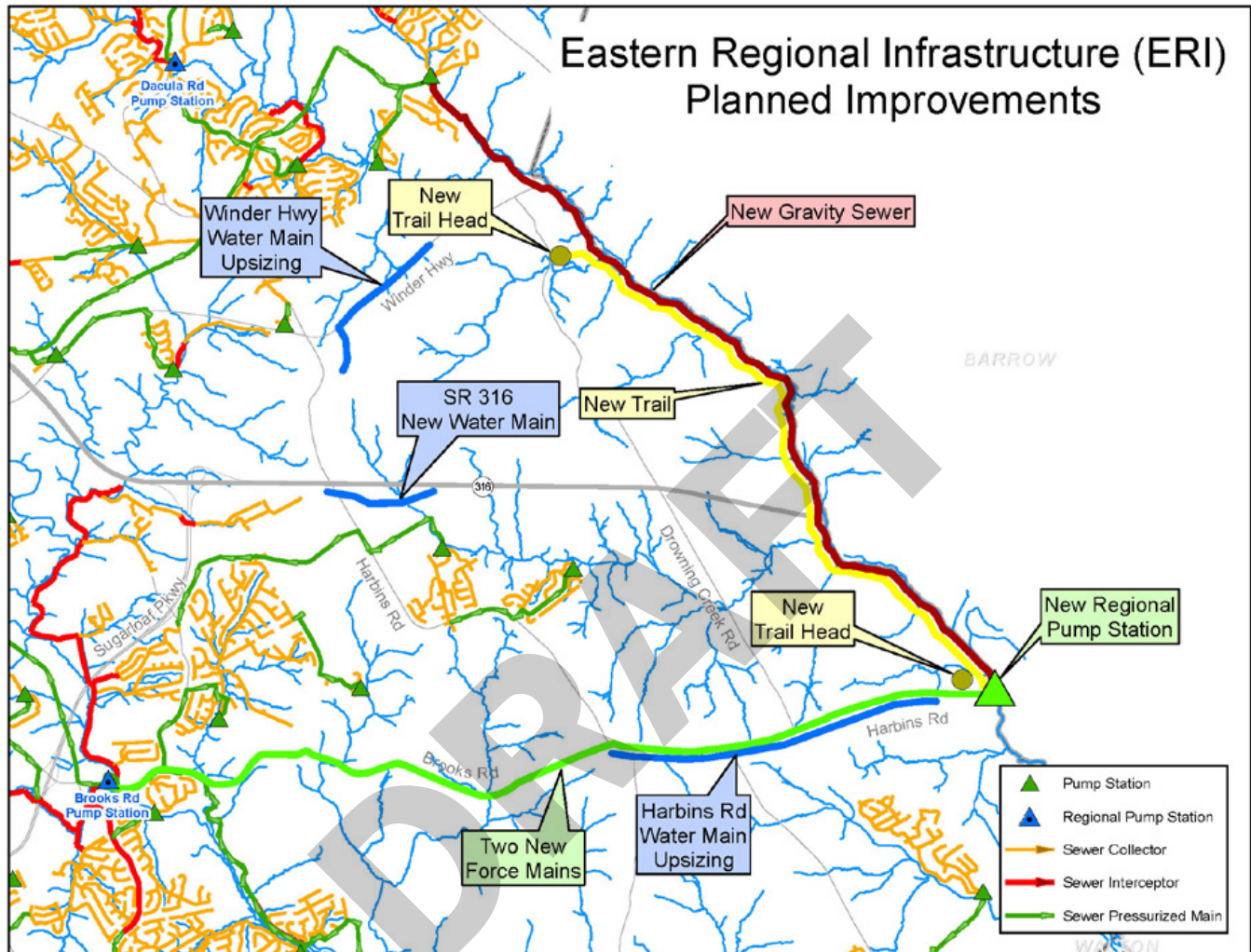
Gwinnett County 2045 Unified Plan

The Gwinnett County 2045 Unified Plan is the County's Comprehensive Plan Update. It is underway and will be adopted at the approximately the same time as the Dacula Comprehensive Plan. As such, this plan incorporates the most up to date draft information that was available at the time of this writing. As of August 15, 2023, there were two major themes to the County's Comprehensive Plan. To become more people-centered and intentional when planning for future development and to orient future development around the idea of the "Daily Community, strengthening neighborhoods and providing community anchors for Gwinnett's diverse neighborhoods. "Daily Community" is defined as A community in which a resident can access work, goods, and services within a reasonable distance of their home (~15 minutes).

Benefits of the Daily Community

- Less traffic
- More walkable destinations
- Shorter commutes
- Public health
- Community strength
- Keeps \$\$ within Gwinnett
- More amenities/things to do

Gwinnett Eastern Regional Infrastructure (ERI) Project



The Eastern Regional Infrastructure (ERI) Project will provide sewer service and upgrades to water service along the eastern boundary of Gwinnett County utilizing sustainable construction practices that promote environmental stewardship and innovation.

The Gwinnett County Board of Commissioners awarded a \$125 million contract for the design and construction of the ERI Project to John D. Stephens, Inc (JDS). The project is funded by the departments of Water Resources and Community Services, including revenue from the 2017 SPLOST. Construction started in late 2021 and will be completed in early 2024.

The ERI project includes approximately:

- Five miles of new and upsized water mains
- Six miles of new gravity sewer along the Apalachee River
- Seven miles of parallel wastewater force mains along Harbins Road and Brooks Road
- A new 14 million-gallon-per-day regional sewer pump station on Harbins Road
- Five miles of new public greenway trails and two new trailheads

Public Engagement

Public engagement and input are the cornerstones to a successful comprehensive planning process. The City of Dacula kicked off the process by laying out the foundation in a Community Engagement Plan. The plan was introduced to the City Council at a work session on June 1, 2023, and included workshops, website, survey, fliers, social media, steering committee, and interviews as described in the following pages.



Community Engagement Schedule



Date/Time	Event	Purpose	Location
July 25 6:00 pm	Visioning Workshop	Develop a Vision for the future of Dacula	City Hall
September 14 6:00 pm	Strategic Framework Workshop	Discuss Strategies for Reaching the Vision	Maple Creek Park
October 19 4:00 - 8:00 pm	Open House Drop In	Refine Strategies and Implementation plan	City Hall

Website

The project website, www.daculacompplan.com was host to general information about the comprehensive planning process and public input opportunities. It also hosted an interactive story map and advertised upcoming events. An email portal allowed members of the community to ask questions or leave comments.



OPEN HOUSE

HELP REFINE THE STRATEGIES AND IMPLEMENTATION STEPS FOR THE COMPREHENSIVE PLAN

October 19, 2023
4:00 pm to 8:00 pm

Dacula City Hall
442 Harbins Road
Dacula, GA 30019

OCT 19

Drop-In Open House

4:00 PM – 8:00 PM
Dacula City Hall (map)

We invite you to an exciting drop-in open house session where you can review and provide feedback on the strategies and implementation steps for the Comprehensive Plan. This is your chance to actively participate in refining the blueprint for the community based on your valuable insights and comments. Together, we can shape a bright future for Dacula!

[View Event →](#)

THURSDAYS

AT MAPLE CREEK

PARK

Come engage with your Dacula Mayor and City Council.

03.16.23 05.18.23 09.14.23 11.16.23

@ 6:30 PM

Strategic Framing Workshop

6:00 PM – 8:00 PM
Maple Creek Park (map)

Help shape the future of Dacula at this special edition of Thursdays at Maple Street Park! Come out early (6:00 pm) and join us for an inclusive and engaging workshop, where you will explore strategies for the 30-year blueprint for the city's future. The community-driven event is open to all! Be a part of the conversation and contribute your insights to the Comprehensive Planning process.

[View Event →](#)

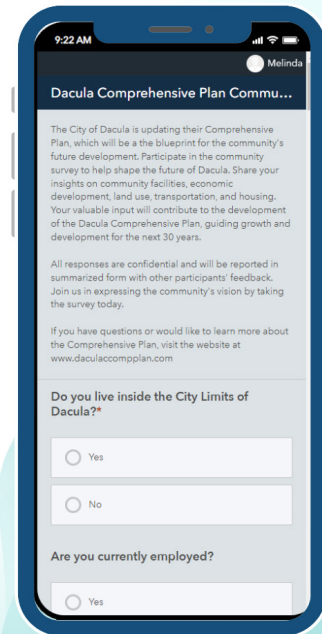
Online Survey

Survey

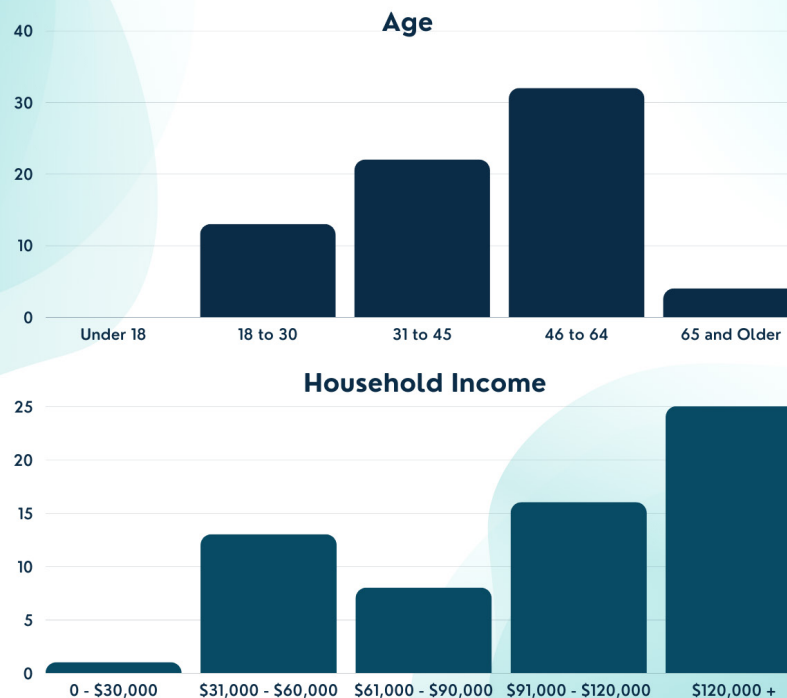
Open From June 2 - July 11

76 Responses

- 76% Live inside City Limits
- 63% Employed outside City Limits
- 30% Employer in Gwinnett County
- 24% Employer in a surrounding County

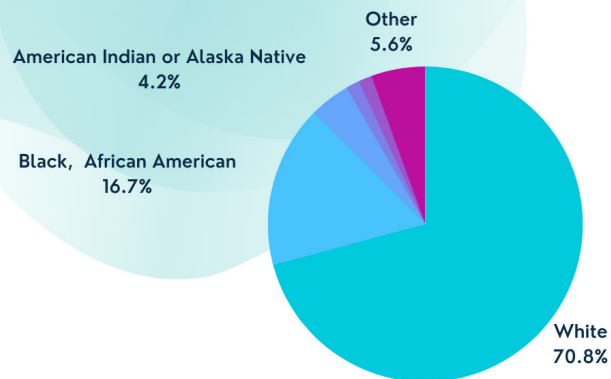


Survey Demographics

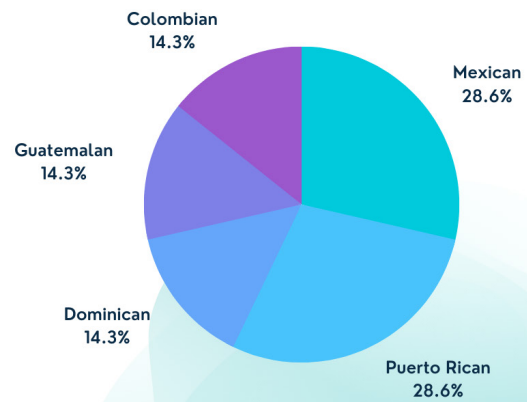


Online Survey (continued)

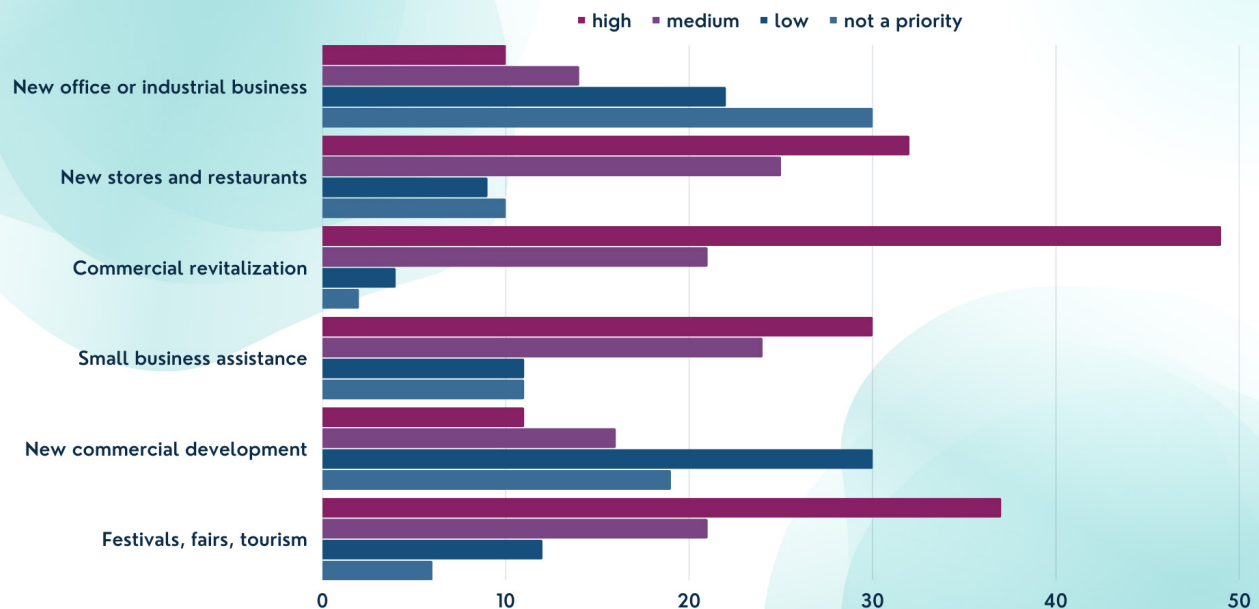
Survey Demographics



Race and Ethnicity

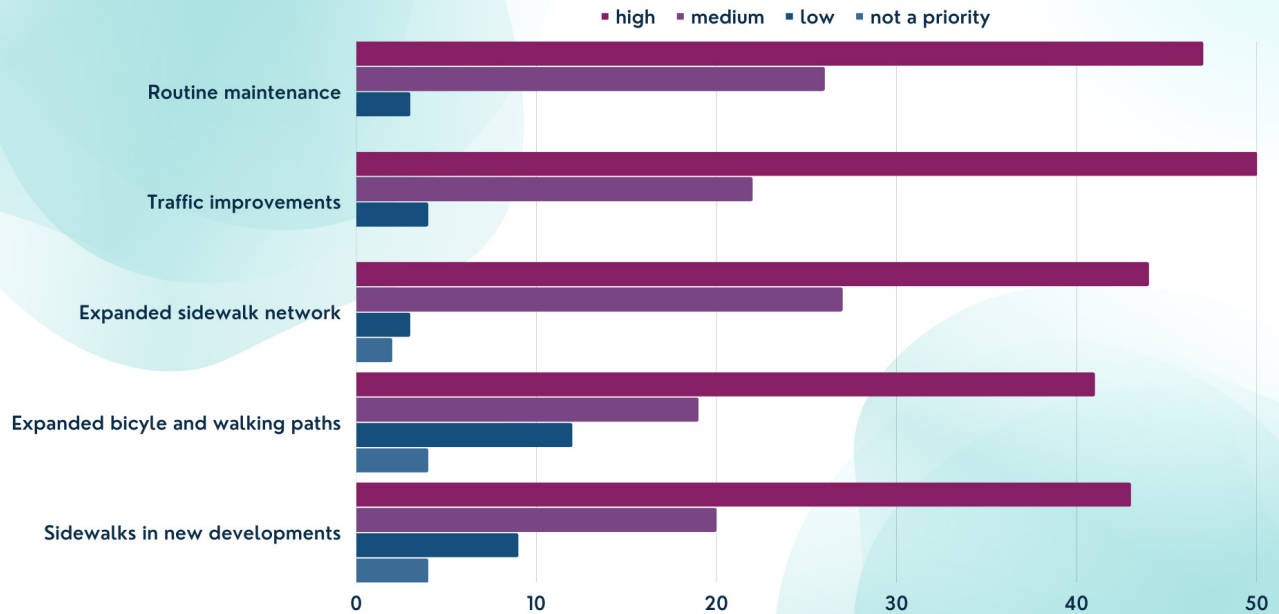


Economic Development Priorities

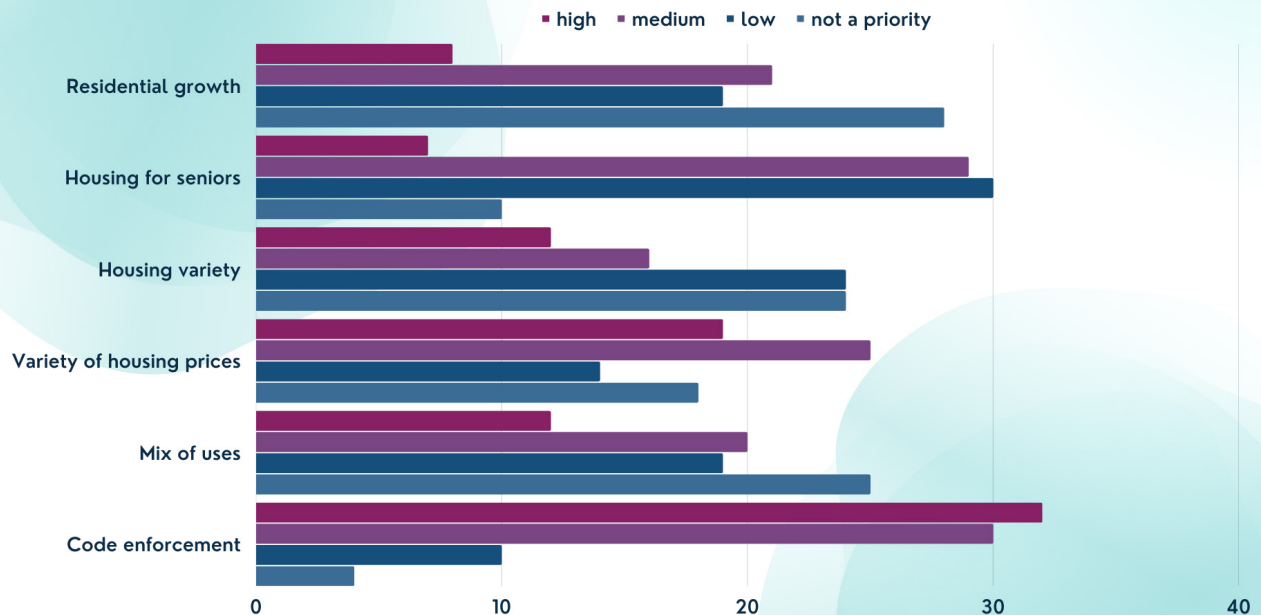


Online Survey (continued)

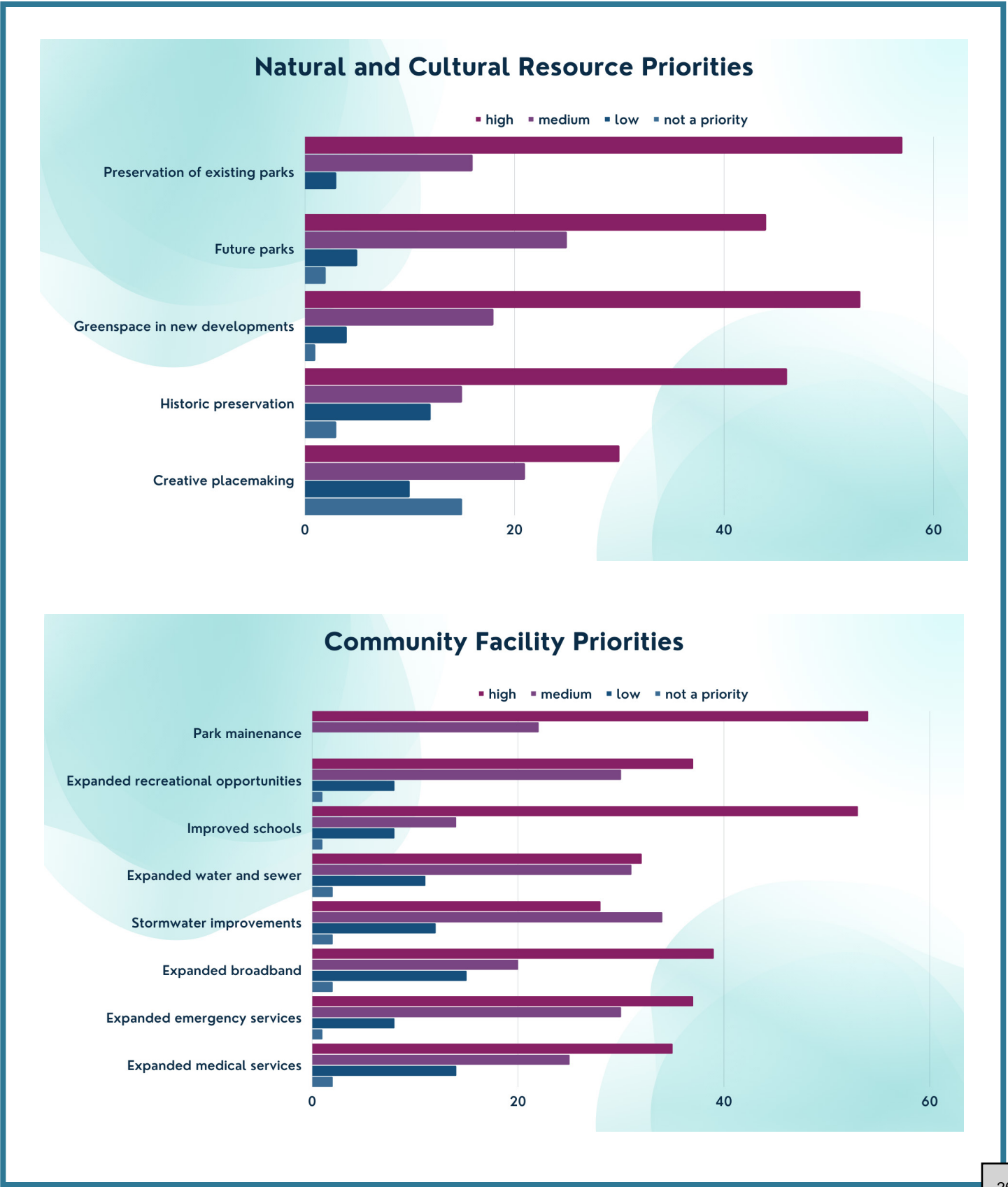
Transportation Priorities



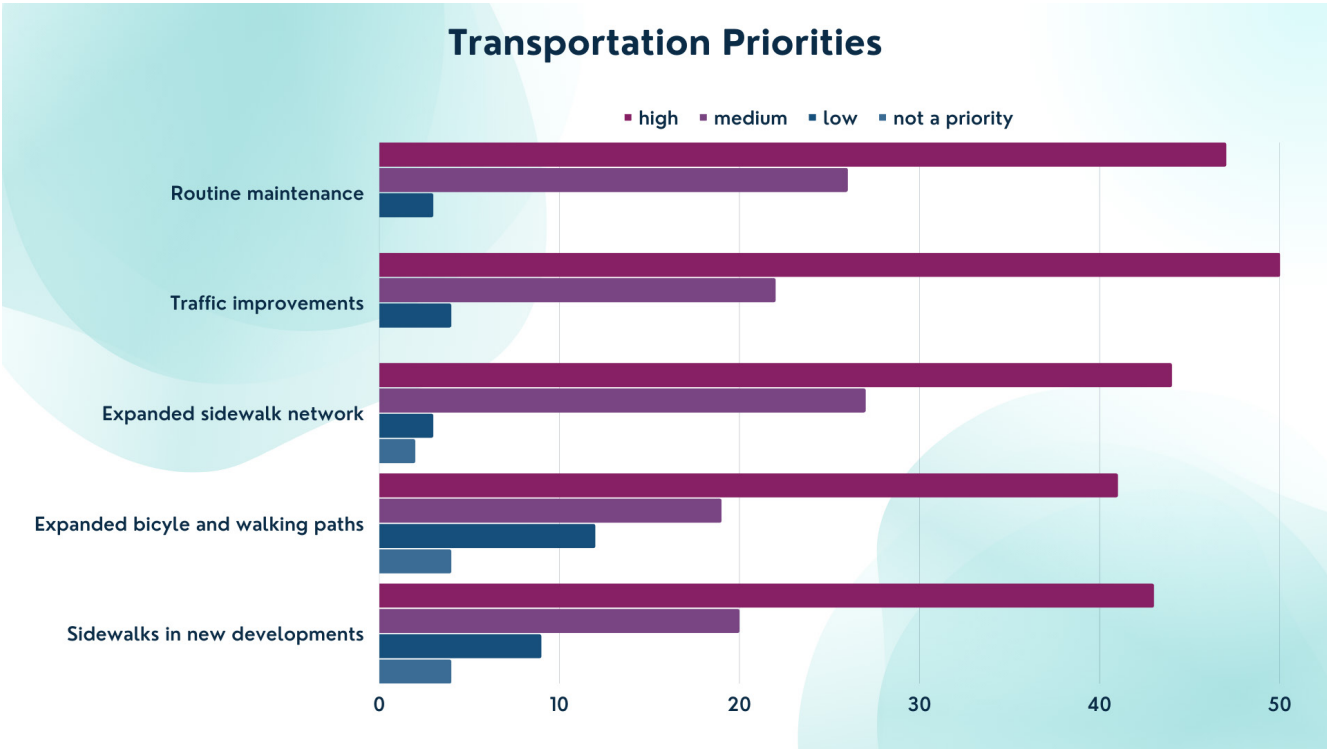
Housing Priorities



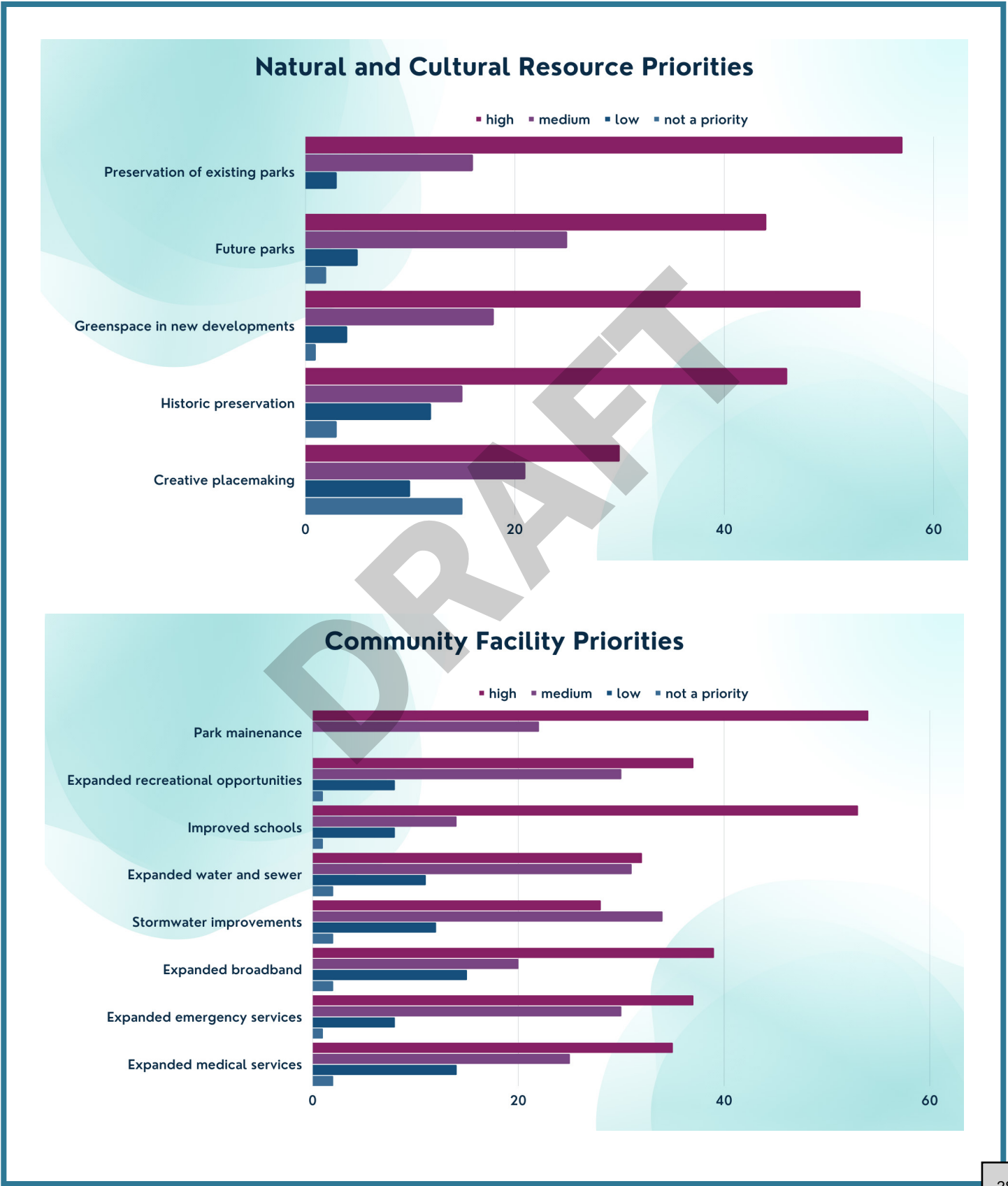
Online Survey (continued)



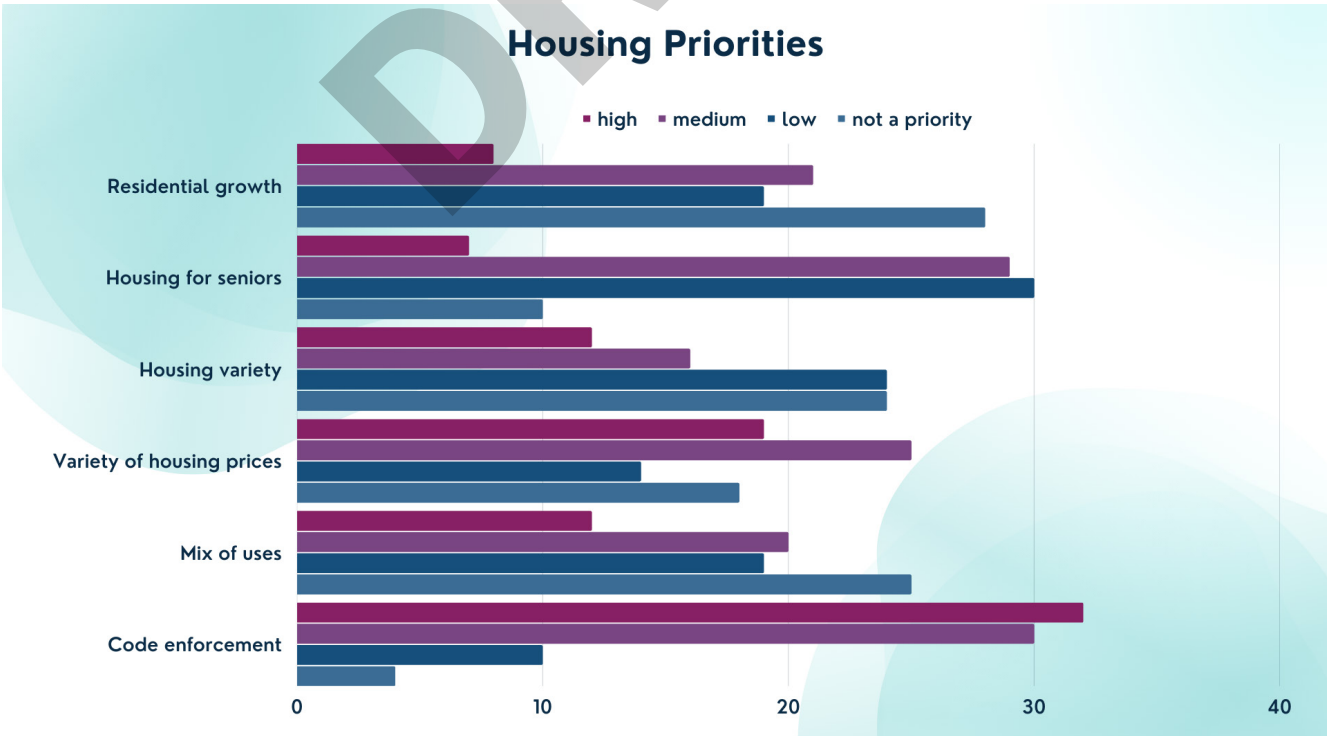
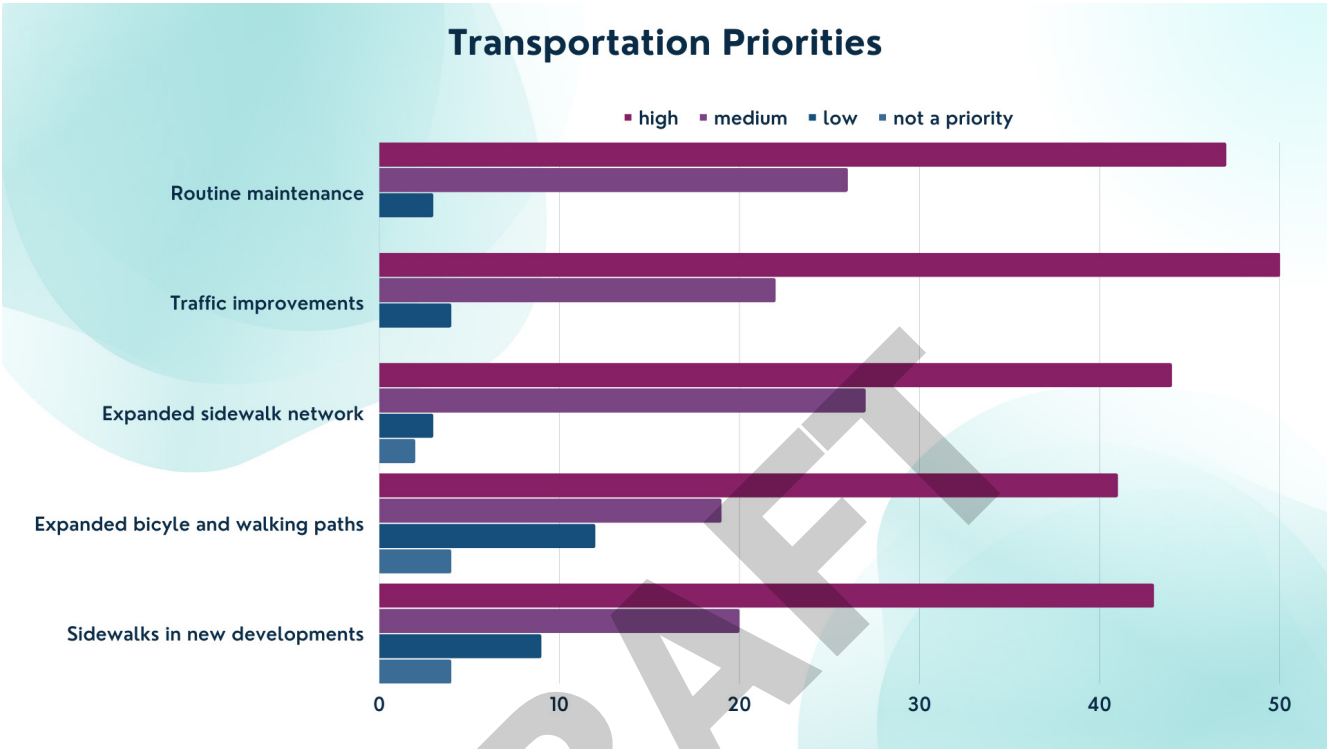
Online Survey (continued)



Online Survey (continued)



Online Survey (continued)



Flyers and Social Media

Information about the public input sessions and the survey was distributed through the City of Dacula's social media page. The Steering Committee distributed fliers to the community through printed copies and email attachments.

Community Visioning Workshop

Join us in planning the future for the City of Dacula!

July 25, 2023 - 6:00 pm
Dacula City Hall
442 Harbins Road
Dacula, GA 30019

www.daculacompplan.com



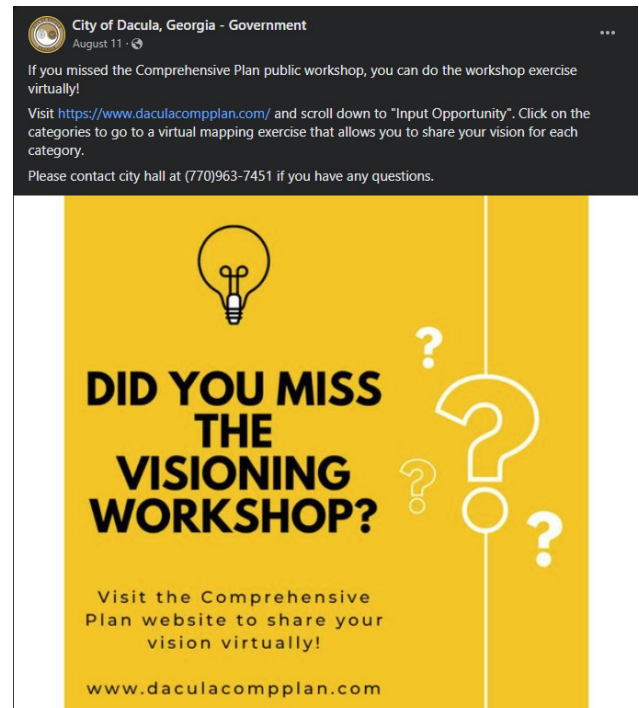
OPEN HOUSE

HELP REFINE THE STRATEGIES AND IMPLEMENTATION STEPS FOR THE COMPREHENSIVE PLAN

October 19, 2023
4:00 pm to 8:00 pm

Dacula City Hall
442 Harbins Road
Dacula, GA 30019

www.daculacompplan.com



Public Hearing #1 - Kickoff

A public hearing must be held at the inception of the local planning process. Per the DCA procedures, the purpose of the hearing is to brief the community on the process to be used, share the opportunities for public participation and to gain input on the overall proposed planning process. The City of Dacula's public hearing was held at City Hall on June 1, 2023.

Visioning Workshop

The community visioning workshop was held on July 25, 2023. Community members learned about the survey results and information about the current and future trends for the city of Dacula. The workshop wrapped up with an interactive mapping exercise. Using the City of Dacula Community Facilities map as a base, they marked up areas where they wanted to expand or see changes for the next 30 years. Each group shared their visions at the end of the workshop.



Strategic Framing Workshop

The strategic framing workshop was held on September 14, 2023. Two activities guided community members through a drop in style workshop targeted toward narrowing down the broad ideas and concepts that came out of the earlier visioning workshop. Attendees voted on their priorities for the major elements of the comprehensive plan, helping guide the development and prioritization of strategies. A mapping exercise challenged them to look over the future land use map and make suggestions for updates to the map.

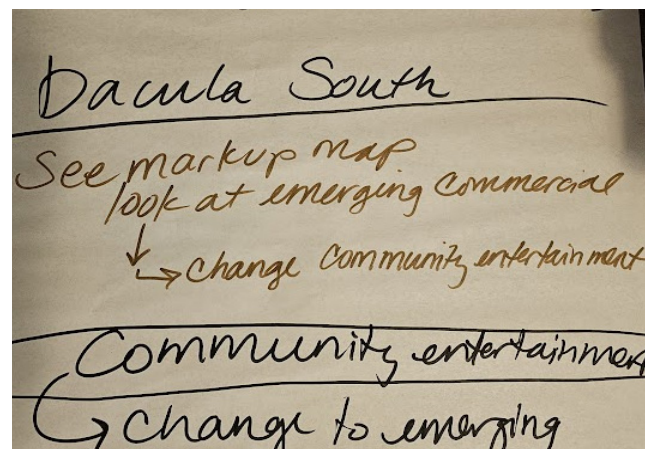


Drop in Open House

The final public workshop was held on October 19, 2023, at Dacula City Hall and was conducted in a drop-in, open house format. Approximately 22 citizens attended the open house that was held from 4-8pm. There were four stations for participants to review content including a prioritization of issues and opportunities table, the draft Gwinnett County Character Area map from a separate effort, the Character Areas Maps for the City of Dacula,

Vision Committee

The Comprehensive Plan Vision Committee met at critical points during the planning process to review data and discuss findings from community input. Their guidance further refined and developed the community vision into feasible strategies for the plan.



Interviews

A total of nine people were interviewed. Each interview included conversations outlined around the following questions.

1. What do you see as the biggest opportunities or challenges for Dacula in the next 5 years? 20 years?
 - Land Use? Zoning and development regulations?
 - Housing?
 - Transportation?
 - Economic Development?
 - Other, quality of life?
2. What issues and concerns do you typically hear from your community?
3. What makes Dacula unique and stand-out in the Atlanta region?
4. What projects or city initiatives should be high priorities?
5. What would you most like to see come out of the Comprehensive Plan update process? What would make the plan most helpful?
6. A summary of the results of the interviews can be found in the appendix.

Community Members Interviewed	
David Barber	GCPS Planner
Dr. James Taylor	Hebron Christian Academy
Farooq Mughal	State Representative
Jasper Watkins	Gwinnett County District Commissioner
Jerry Oberholtzer	Gwinnett County Department of Transportation
Kimberly Bussey	Dacula Middle School/Principal
Michelle Arnold	Gwinnett County Department of Transportation
Nicole Hendrickson	Gwinnett County Chairwoman
Tom Sever	Gwinnett County Department of Transportation

Community Vision

Vision Statement

The City of Dacula makes effective investments in families and children, neighborhood pride, diversity, thriving economy, quality government services, and leadership.

Needs and Opportunities

Through analyses and conversations with City staff, elected officials, the Steering Committee, and the community, a summarized list of needs and opportunities was developed to guide policy and project recommendations. Some of these needs and opportunities have been carried over from the previous comprehensive plan due to their relevance today.

Population and Demographics

- Need to accommodate growth of population in areas that have access to major roadways (i.e., GA-SR316, Winder Hwy, and Sugarloaf Parkway).
- Need to maintain balanced tax base and areas for future residential, commercial & employment growth in potential annexation areas adjacent to City.
- Need infrastructure projects to provide City resources to support a diverse mix of households, age groups, & economic resources.
- Need for a diverse mix of housing options, social activities & services.
- Opportunity to accommodate an increased population of elderly residents (aging is a pressing need).

Community Facilities and Services

- Need to use appropriate community facilities as a focal point or anchor for future town center plans.
- Need new development that contributes to local infrastructure needs related to growth.
- Need funding for new infrastructure and expansion of existing facilities
- Need land for future public facilities to keep costs down and preserve needed land before it becomes scarce and more expensive.

Broadband Services

- Need to address disposition/removal of retired towers.
- Need to identify specific locations with inadequate services.
- Opportunity to support public/private coordination to expand service into unserved areas and capacity into underserved areas.

Needs and Opportunities (continued)

Natural and Cultural Resources

- Need to maintain and protect greenspace and sensitive natural resources.
- Need to protect floodplains, wetlands, steep slopes, and wildlife habitat areas.
- Need to Protect water resources and water quality, including groundwater recharge areas near Fence Road.
- Need smaller lot sizes for new middle class homes (continued large residential lots consume more land, yield fewer housing units, and may consume remaining woodlands, pastures, and steep slopes).
- Need to provide diverse recreation choices for Dacula residents. Gwinnett County is pursuing large parks. City may need smaller parks, green space, and open spaces
- Opportunity to support a “greenway” corridor along the Apalachee River to enhance value to residents and visitors.
- Need to identify a “downtown” and follow up on opportunities to develop public use amenities such as a community or cultural arts facility or a traditional downtown square.
- Need to maintain environmental resources and rural structures that provide sense of place and cultural identity of Dacula which may be lost to redevelopment.
- Need to consider value of existing scenic views to weigh whether new development uses the scenic resource or obstructs it.

Community Building and Civic Engagement

- Need for education on opportunities for civic engagement and events.
- Need for a cultural or arts center that would host events, festivals, workshops, etc.
- Need to promote youth leadership and social connections with diverse populations.
- Need to create a town center for public amenities, events, and social gatherings.
- Opportunity to create additional events and opportunities for community building and engagement.

Economic Development

- Need to provide employment opportunities in the City relative to its residential population.
- Need City branding for a positive identity.
- Opportunity to redevelop and revitalize downtown Dacula.
- Need to improve the aesthetic appearance of older strip shopping centers.
- Need to identify and create City “Gateways” to enhance community identity and provide way finding for visitors.

Needs and Opportunities (continued)

Land Use and Development Patterns

- Opportunity to redevelop and revitalize vacant or underutilized commercial properties in historic downtown near Winder Hwy.
- Opportunity to identify “placemaking” strategies to develop vibrant town center serving as community focal point.
- Need to identify development opportunities and growth pressures caused by extension of Sugarloaf Pkwy. to SR316.
- Opportunity to encourage development of major employment centers and mixed use activity centers at major highway intersections.
- Opportunity to encourage high quality mixed use development to create live-work-play community activity centers.
- Opportunity to develop higher density housing options located in or near mixed use activity centers to support pedestrian-oriented retail and services
- Opportunity to avoid excessive segregation of land uses and “traditional” zoning approaches to minimize traffic and the need to drive between activities.
- Need to encourage incentives to redevelop depressed areas under the City’s zoning and development regulations.
- Opportunity to develop appropriate design and signage standards to support the City’s efforts to rehabilitate unattractive areas.

Transportation

- Need to consider alternative modes of transportation and support mixed use development.
- Opportunity to consider connectivity in the road layout of new residential subdivisions.
- Opportunity to explore commuter rail as an alternative to roads to improve air quality and reduce potential traffic on road corridors.
- Need to develop transportation improvements to be made concurrent with development.
- Opportunity to support multi-modal access to commercial centers.
- Opportunity to explore opportunities for additional pedestrian and bicycle mobility along new connecting corridors or improved existing corridor or access to the Apalachee River corridor and its tributaries.
- Need to address high volumes of through trips compared to the volume of traffic generated by the local Dacula population.
- Need to determine the best possible locations for a commuter station related to the “Brain Train” concept proposal to come through Dacula.
- Opportunity to develop dedicated bicycle and pedestrian infrastructure to promote alternate travel modes.

Needs and Opportunities (continued)

Intergovernmental Coordination and Communications

- Opportunity to support the annexation of the properties identified by the Comprehensive Plan.
- Opportunity to coordinate with Gwinnett County on future land uses and the provision and timing of infrastructure development in the sphere of influence around the City.
- Need to work with Gwinnett County, Barrow County, the City of Auburn, and regional planning entities to address issues regarding water and sewer infrastructure, land use, transportation, and protection of environment resources.
- Opportunity to use service delivery agreements with the County (and other entities) when the value provided by the other entity meets with the interests of the City.
- Need to maintain positive working relationships with the Gwinnett County Board of Education to serve local education needs and maintain the health, safety and welfare of the schools and school attendance districts located in and adjacent to the City.
- Opportunity to engage in intergovernmental relationships such as those between fire, police, EMS, and other services to save resources and provide redundancies to ensure residents' health and well-being.

Intergovernmental Coordination and Communications

- Opportunity to maintain cooperative agreements with water and power utility providers, planning agencies, and regulators such as Georgia Power, Oglethorpe Power, MEAG, the Metropolitan North Georgia Water Planning District, Gwinnett Water services, the Atlanta Regional Commission, and other public elements of State and federal agencies and private entities that encourage coordination between providers and assist in deciding on shared infrastructure and promotion of the best interests of local citizens.

Needs and Opportunities (continued)

Housing and Social Services

- Need to encourage the redevelopment of substandard housing and older manufactured housing in declining neighborhoods.
- Opportunity to increase options for attached housing, such as townhomes, condominiums, and mixed use.
- Opportunity to coordinate housing development with town center planning to provide medium density and traditional neighborhood development near mixed use amenities.
- Opportunity to work with Gwinnett County programs to provide special needs housing and social services, such as the Gwinnett Consolidated Plan and Community development Block Grant (CDBG) program.
- Opportunity to coordinate with non-profit organizations to provide affordable housing and social services.
- Need to identify areas where single family, large lot development can be modified to address alternative housing needs.
- Need to create mixed use districts that include mixed types of housing that promote revitalization in designated areas.
- Need to identify special needs for seniors (smaller households, low income and moderate-income households) that are expected to increase throughout the next two decades.



Goals and Policies

The comprehensive plan is intended to provide a guide to everyday decision-making for use by local government officials and other community leaders. Local planning requirements specify that the local government must include a goals element, with policies to provide ongoing guidance and direction to local government officials for making decisions consistent with addressing the identified needs and opportunities. In this plan Goals and Policies are included within each element as they apply to each element. The goals below are more general, and apply to every decision the city makes, regardless of planning element.

- Ensure a safe community
- Encourage positive development of youth
- Foster neighborhood pride and increase sense of community
- Maintain an attractive City
- Recruit and retain a highly-skilled and diverse workforce
- Ensure long-term financial stability
- Optimize staff effectiveness through training, technology, equipment, and facilities



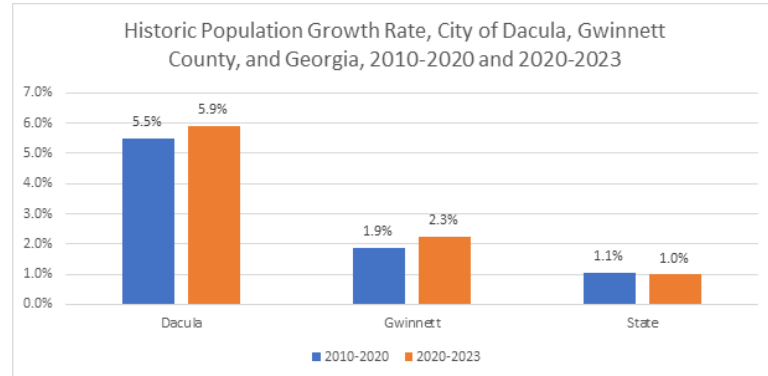
Element One Population and Housing

Population

Growth Rate

In 2023 the estimated population of the City of Dacula was 8,101, representing a 82% increase from 2010. The growth rate in Dacula was significantly higher than for Gwinnett County and the state of Georgia.

Figure 1



Source: 2010 & 2020 US Census

Household Size

The average household size in Dacula is about 3.26. Households tend to be larger in Dacula than in Gwinnett County (3.01) and in the State of Georgia (2.67).

Table 1: Household Size, Dacula, Gwinnett County, Georgia

	Persons Per Household
Dacula	3.26
Gwinnett County	3.01
Georgia	2.67

Source: 2010 & 2020 US Census

Population Forecast

Forecasting the Population for Dacula is difficult. The future growth rate depends on decisions made by the City. The table and figure on the next page show three population growth scenarios. The first is a projection based on the annual growth rate from 2020 to 2023, which was 5.9%. This scenario has the 2045 population forecasted at 25,576. The second scenario is based on the annual population increase from 2020 to 2023. The population increased by an average of 406 persons per year between 2020 and 2023. Using this method, the forecasted population in 2045 is 10,539. The third method uses the amount of vacant land as of 2023 and zoning classifications to calculate the maximum population at buildout. This forecast assumed the household size remains relatively large as shown in Table 1. Table 2 shows the population forecasts for Dacula utilizing the three methods.

Table 2: Dacula Population Forecasts

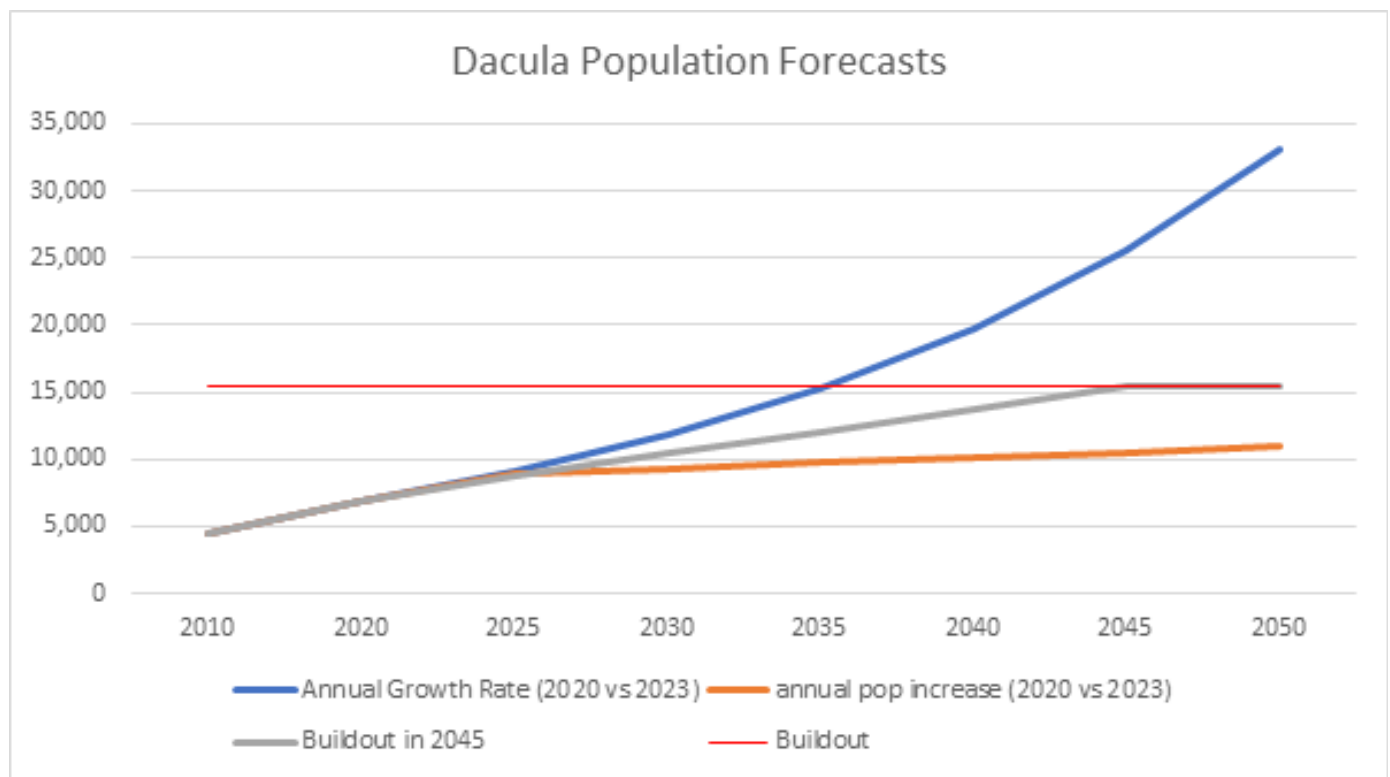
	Annual Growth Rate (2020 vs 2023)	Annual Population Increase (2020 vs 2023)	Buildout in 2045
2010	4,442	4,442	4,442
2020	6,882	6,882	6,882
2025	9,086	8,913	8,763
2030	11,769	9,320	10,419
2035	15,244	9,276	12,074
2040	19,746	10,133	13,730
2045	25,576	10,539	15,385

Source: 2010 & 2020 US Census, Governor's Office of Planning and Budget, Series 2021, Hall Consulting Calculations

Forecasts and Buildout

Figure 2 illustrates three different population forecasts. The red line shows maximum buildout given the amount of vacant land in the city and its zoning. Using the annual growth rate method, buildout is reached in 2035. If the City grows at the same rate as it did from 2020 to 2023 it will need to annex additional land by 2035 to accommodate this growth. If the city grows by 406 people every year moving forward it will not reach buildout before 2050. Finally, if the city grows at a rate to reach buildout in 2045, the average growth rate would be about 3.5% per year.

Figure 2



Under the buildout scenario and using the Atlanta Regional Commission's forecasts for Gwinnett County, Dacula will account for more than 1% of the County's population by 2040. In 2010 it accounted for .55% and in 2020 it accounted for .72% of the County's population. (Table 3)

Table 3: Population Forecast, Dacula, Gwinnett, and Georgia

	2010	2020	2025	2030	2035	2040	2045
Georgia	9,687,653	10,710,017	11,242,166	11,742,622	12,203,589	12,632,994	13,028,837
Gwinnett County	805,321	957,062	1,064,907	1,172,752	1,252,395	1,332,037	1,408,390
City of Dacula	4,442	6,882	8,763	10,419	12,074	13,730	15,385
Dacula's % County Population	.55%	.72%	.82%	.89%	.96%	1.03%	1.09%

Source: 2010 & 2020 US Census, Governor's Office of Planning and Budget, Series 2021, Hall Consulting Calculations

Age

Composition by age group varies throughout the region. Dacula has significantly more children under 18 than Gwinnett County or the State of Georgia. Neither Dacula or Gwinnett County has a high percentage of residents in retirement or nearing retirement.

Figure 3

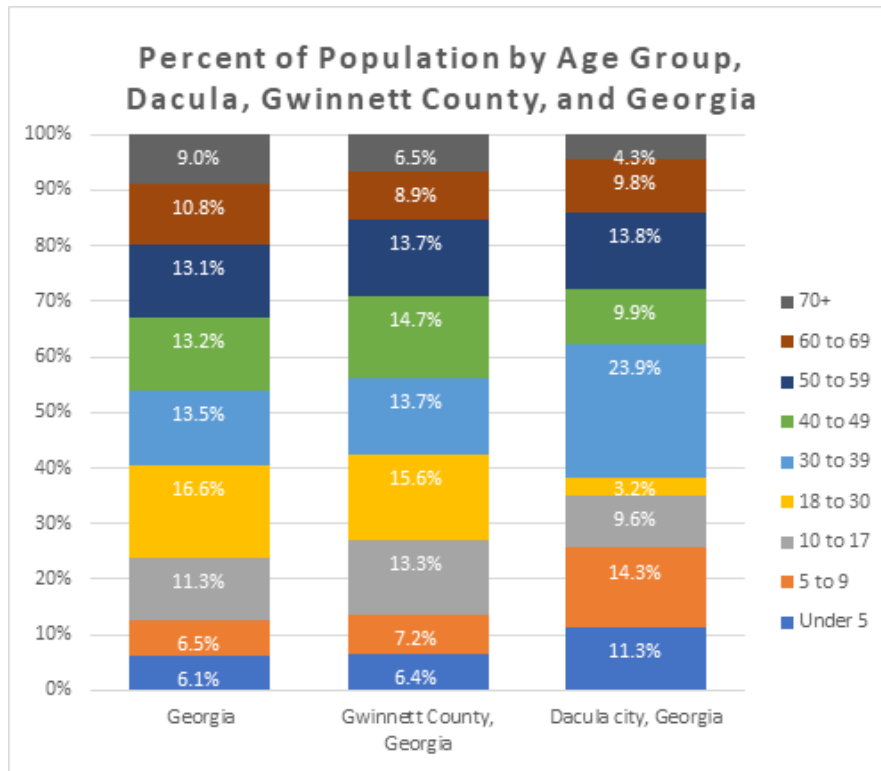


Figure 4

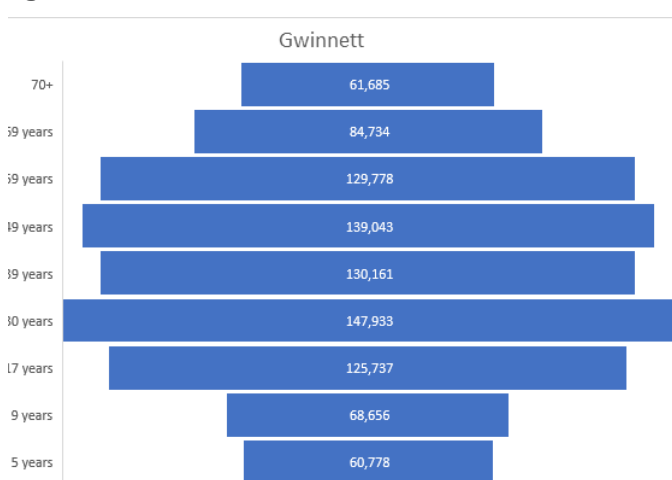
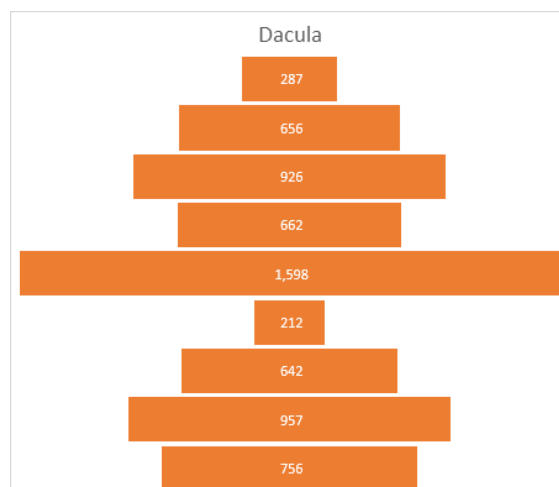


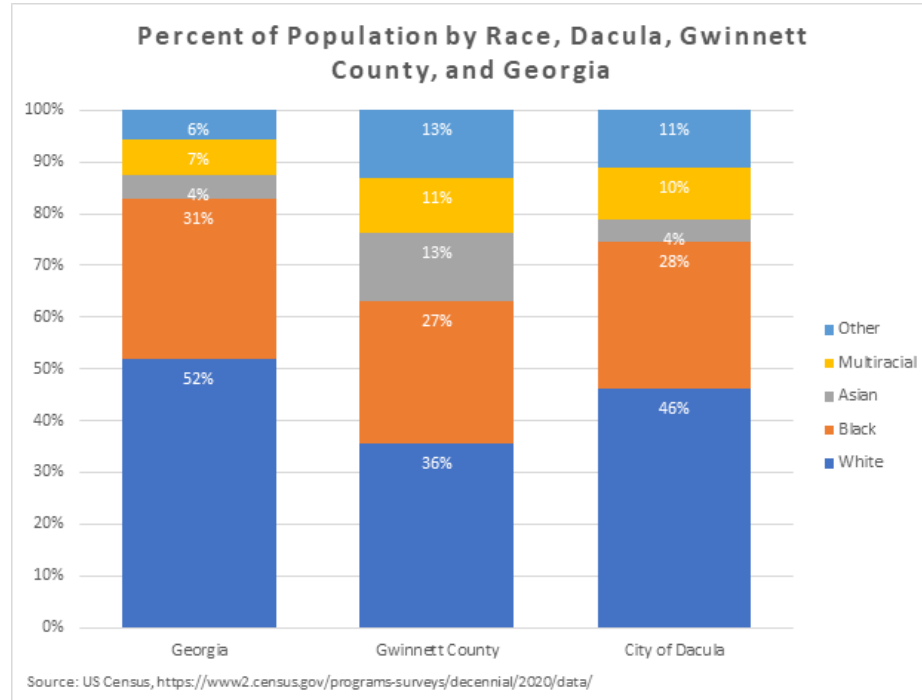
Figure 5



Source: US Census, <https://www2.census.gov/programs-surveys/decennial/2020/data>

Race and Ethnicity

Figure 6



White residents make up about half of the population of Dacula and black residents make up about a third. Although Gwinnett County has a relatively large percentage of persons of Asian descent, much more than the state, Dacula has about the same percentage of Asian residents as Georgia.

Income

Table 4 Income, Georgia, Gwinnett County, Dacula

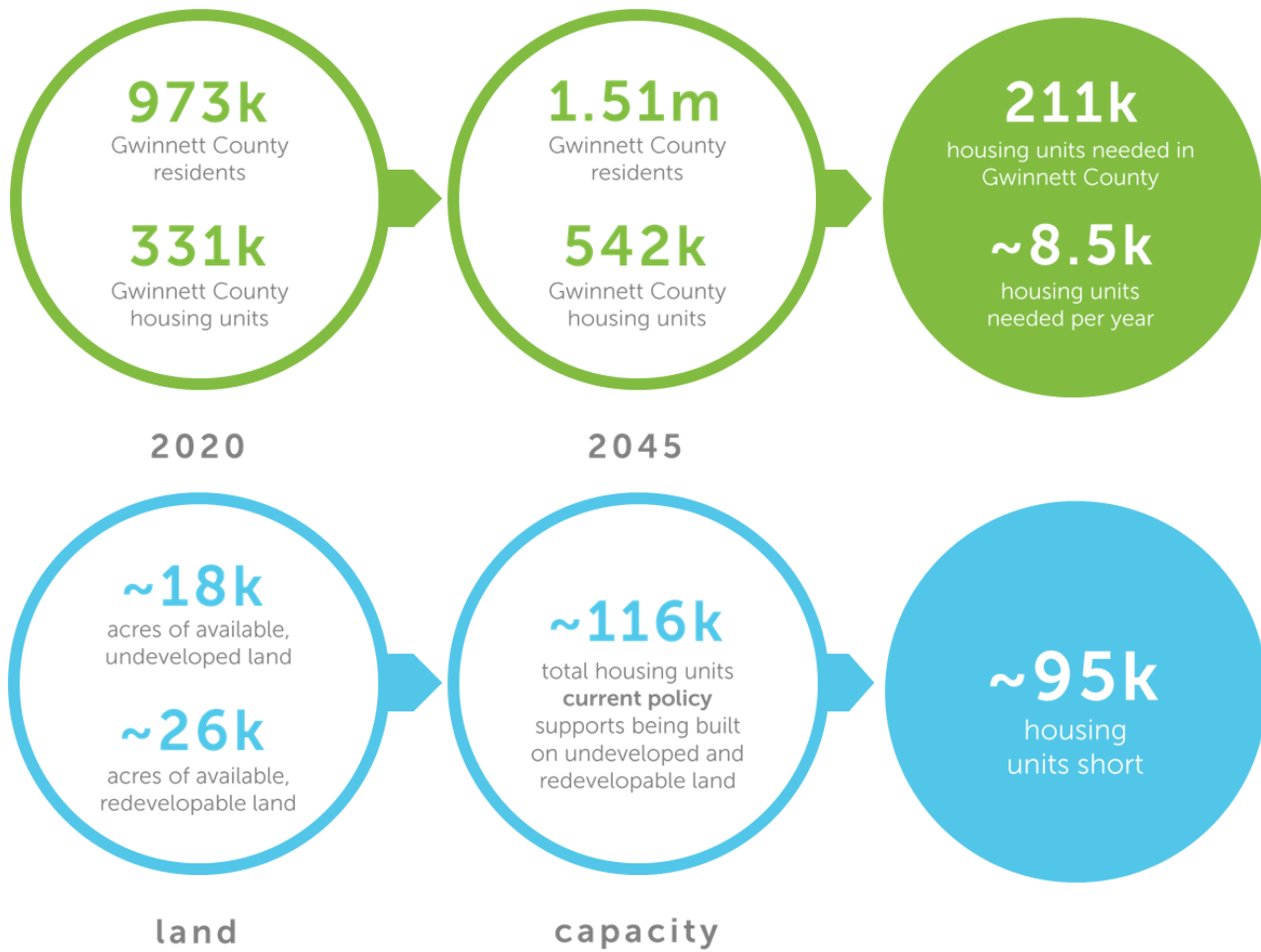
	Georgia	Gwinnett County	Dacula
Median household income (in 2021 dollars)	\$65,030	\$75,853	\$87,666
Per capita income in past 12 months (in 2021 dollars)	\$34,516	\$33,870	\$26,778
Persons in poverty, percent	14.00%	10.80%	2.60%

Source: Census Quick Facts 2017-2021

Households in the City of Dacula tend to be in higher income categories than Gwinnett County and the State. The median household income is significantly higher in Dacula than in Gwinnett County, but per capita income is lower. This can be attributed to the larger household size in Dacula, when compared to the County and State. Additionally, poverty rates are very low in Dacula.

Housing in Gwinnett County

Figure 7



Source: Gwinnett County 2045 Unified Plan, Board of Commissioners – Interim Update, August 15, 2023

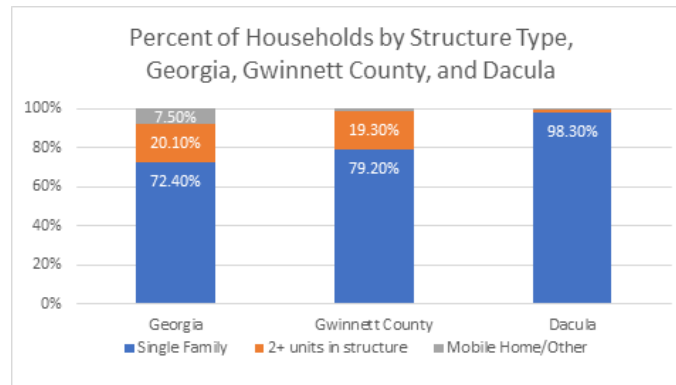
More than 200,000 additional housing units are needed to provide homes for the expected 2045 population of Gwinnett County. Current policies in Gwinnett County lead to a shortfall of about 95,000 housing units. Gwinnett County and its Cities need to change their patterns of development to accommodate future growth.

Housing in Dacula

Household type of structure

Dacula's housing is predominantly single family as shown in the figure below.

Figure 8



Owner Occupied vs. Rental

Most housing in Dacula is owner-occupied. At 80%, this is much higher than in Gwinnett County (67%) and the State. (65%). Also, the average age of a home in Dacula is younger than the county or the state. The median year a home was built is 1998 in Dacula, 1994 for Gwinnett, and 1990 for the State.

Table 5: Share of owners and renters

	Georgia	Gwinnett County	Dacula
Owner-occupied housing units	64.50%	66.90%	80.00%
Renter-occupied housing units	35.50%	33.10%	20.00%

Home prices have increased all over the country in the last decade. The same is true for Dacula and Gwinnett County. However, home prices in Dacula have risen slower than in the county as a whole.

Table 6: Home Prices in Dacula, Georgia

	Gwinnett County	Dacula
Median cost of a home (April 2023)	\$400,000	\$428,000
Median cost of a home (April 2020)	\$257,900	\$312,750
% Change in cost of a home April 2020 vs 2023	55%	37%

Source: Realtor.com, <https://www.realtor.com/realestateandhomes-search/>, accessed May 31, 2023

Housing Goals and Policies

Goal: Provide housing opportunities that ensure Dacula is a lifetime, multigenerational community for residents across the socioeconomic spectrum.

Policies

- Encourage more diverse housing types other than single-family detached homes to accommodate new residents and to adapt to the changing needs of the city's population.
- Provide opportunities for affordable home ownership by allowing a diverse stock of housing intended for individual ownership such as condominiums, townhomes, cottages, and bungalows.
- Encourage mixed use developments that combine housing with office, retail, commercial, and/or industrial.
- Encourage infill development.
- Integrate housing, transportation and land use plans to improve mobility to and from jobs and other primary destinations.
- Encourage profit and nonprofit collaboration on mixed income, mixed use housing development to serve a diverse population.
- Assist homeowners and home buyers in finding information regarding federal or other tax credits.
- Create a diverse mix of housing types, densities and amenities in new housing subdivisions and development projects to accommodate a mix of income and family needs.
- Support transit options in mixed use activity centers.

Goal: Stimulate infill housing development in existing neighborhoods

Policies

- Identify and support financial resources for homebuyers and the rehabilitation of existing housing stock.
- Develop affordable housing repair and infill programs to assist homeowners, buyers, and landlords to focus on basic shelter, building envelope and major systems (electric, plumbing, & mechanical). Provide support and technical assistance to neighborhoods and organizations that provide nonprofit housing development assistance such as Community Development Corporations.
- Protect and improve public resources such as local access streets, public stormwater drainage facilities, neighborhood parks, and sidewalks.

Goal: Address dilapidated and substandard housing

Policies

- Ensure no resident of Dacula has to live in unsafe or unsanitary conditions in alignment with city codes.
- Support programs for weatherization, water conservation, and other efficiency programs to lower utility costs.
- Assist aging owners, disabled residents, and other housing occupants through coordination of volunteer clean up and repair efforts.
- Identify and support financial resources for homebuyers and the rehabilitation of existing housing stock.
- Use Federal, State, and regional assistance programs and funding to help carry out neighborhood revitalization and affordable housing initiatives appropriate to Dacula and Gwinnett County.

Goal: Encourage development of housing opportunities that enable residents to live close to where they live their lives

Policies

- Encourage compact development and urban housing initiatives that integrate housing into mixed use development to provide compact communities with opportunities to live, work and play within the same community.
- Increase and expand mobility with more bicycle and pedestrian options.
- Continue to construct more sidewalks that connect homes to work and shopping facilities.
- Integrate housing, transportation and land use plans to improve mobility to and from jobs and other primary destinations.
- Support transit options in mixed use activity centers.
- Provide more housing choices in addition to large lot single family detached residential at appropriate locations.

Housing Strategies

1a

Create a “Livable Centers Initiative” (LCI) Plan to provide an opportunity for the City to specify redevelopment of central area to include a variety of housing types.

The Livable Centers Initiative (LCI) is a program administered by the Atlanta Regional Commission (ARC) that provides grants and planning support to communities in the Atlanta metropolitan area to create more livable, walkable, and vibrant centers. An LCI plan can provide a conceptual master planning document to direct development, redevelopment, public investment, and other important activities.

1b

Encourage Infill Development

Infill development converts once empty and dilapidated lots into residential developments. Focusing on creating infill affordable housing allows more accessibility to jobs and other resources. Infill development occurs in existing urban areas, meaning that it is easy to integrate these new developments into transportation and other infrastructure systems. Many people that would be living in affordable housing have limited access to cars, so being far from the urban center where a high concentration of jobs are located is an equity issue with greenfield development. Infill development allows residents to have easy access to existing transportation systems and promotes walkability, which is beneficial to those who may not have the financial means to cover the costs associated with owning a vehicle such as fuel costs, registration, and reserved parking, which can come at a premium in urban areas. In broader terms, infill development allows more people of various socioeconomic backgrounds to participate in the local economy.

Element Two Transportation

Transportation Overview

The inventory and assessment for the transportation element of the comprehensive plan includes facilities for vehicles, trains, bicycles, and pedestrians. A starting point for this review is the City of Dacula, Georgia 2019 Comprehensive Plan. Additionally, regional and state plans have been reviewed to identify potential projects that may impact the City of Dacula. The purpose of this inventory and assessment is to identify potential projects that could address existing and future transportation needs.

Inventory and Assessment

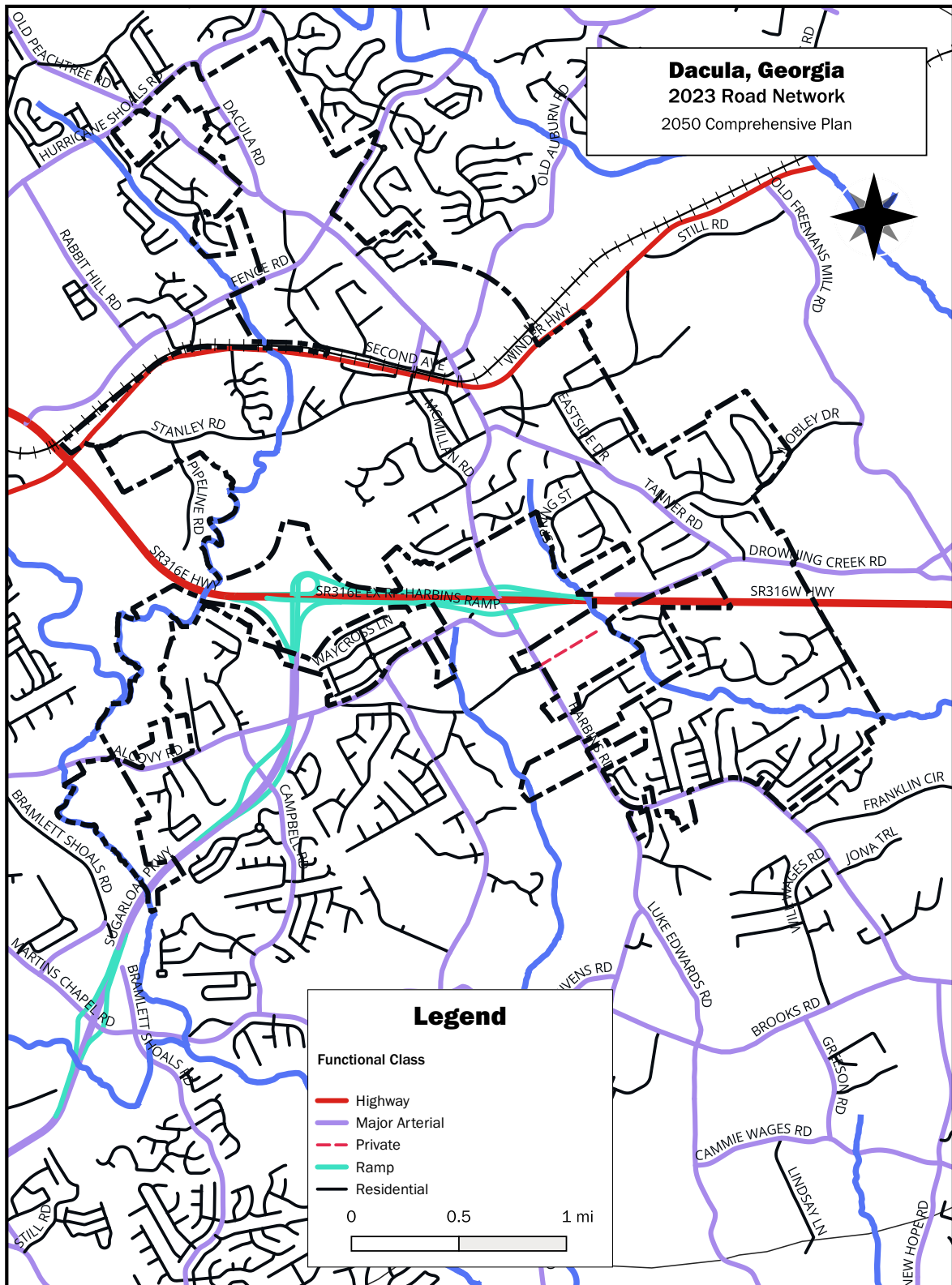
The following is an inventory and discussion of the transportation facilities available to Dacula residents and businesses. Most of this data is from the 2019 Comprehensive Plan and updated with more recent information if available.

Road Network

The functional classification of roads provides for the primary role of the facility. At the highest level, highways are designed to move traffic over large distances and typically have higher speeds. Arterials provide high volume and direct access to properties. Residential roads consist of collectors and local roads. Collectors are typically lower volume and speed, with local roads having the slowest speeds and greatest property access. In Dacula, two main highways transect the city, with arterials and collector roads.

Traffic volumes on the main roads are provided by Georgia DOT. Volumes on Dacula road have increased since 2012. University Parkway (SR 316) has the most traffic and recent/planned improvements will remove the at-grade intersections along the portion of SR 316 near Dacula

Figure 9: City of Dacula Functional Classification Map



Transportation Overview

Figure 10: Traffic Counts

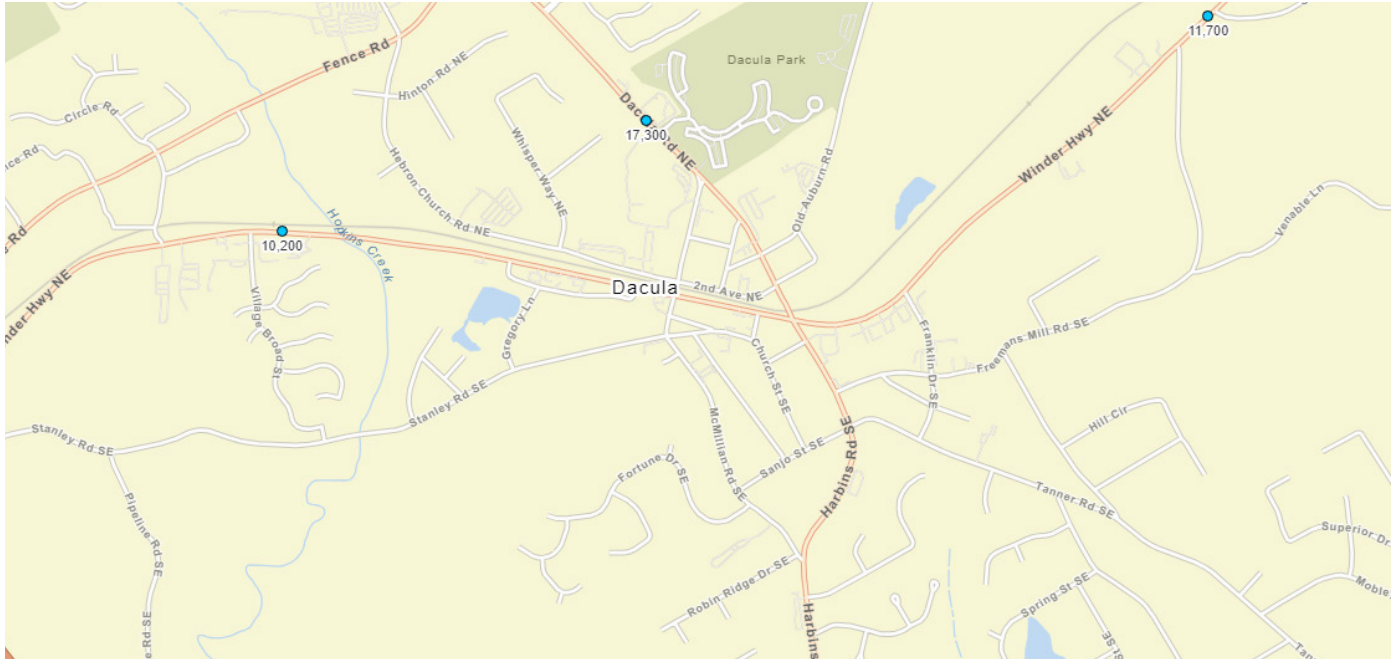


Figure 11: Dacula Road Historical Counts

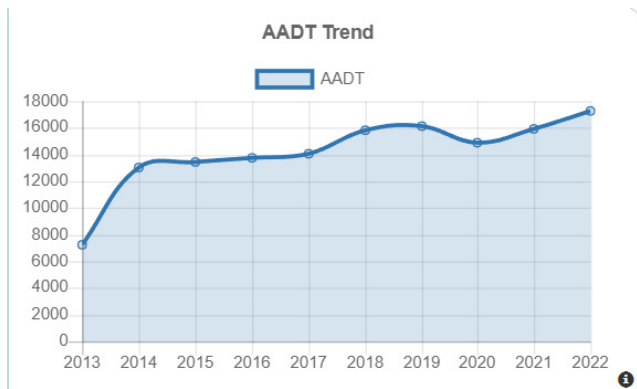


Figure 12: Winder Highway Historical Counts

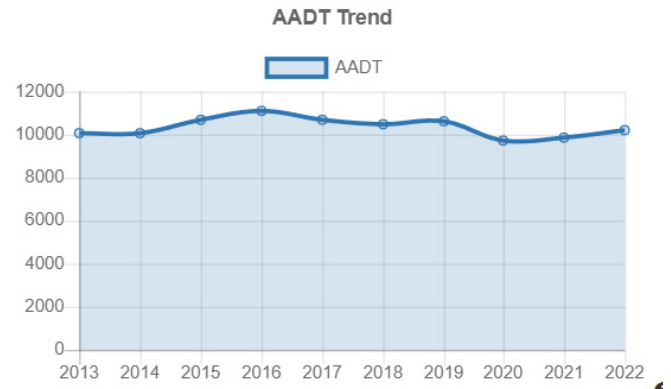
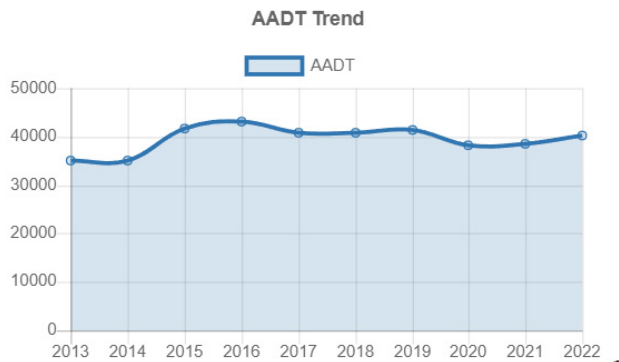


Figure 13: University Parkway Historical Counts

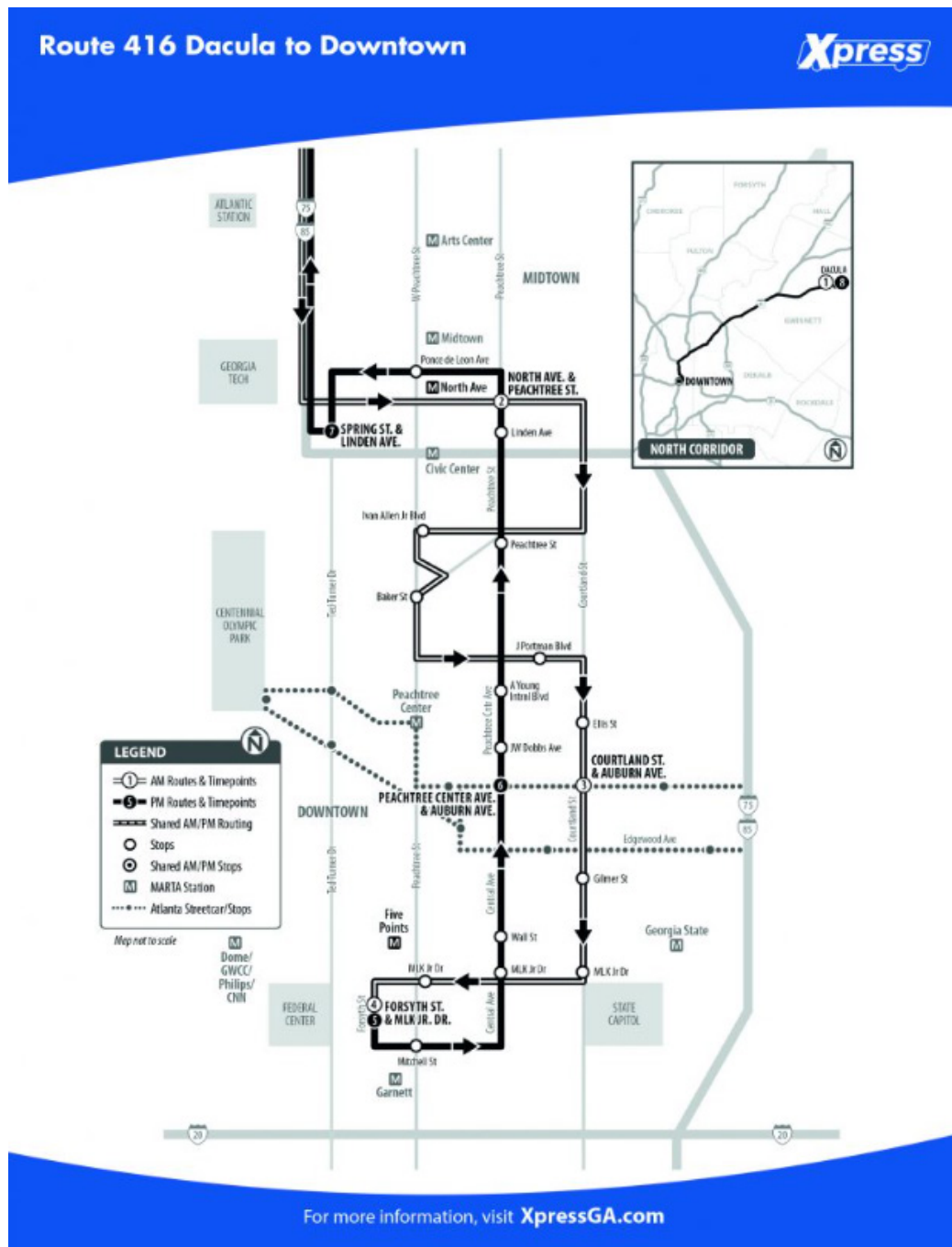


Transportation Overview

Public Transportation

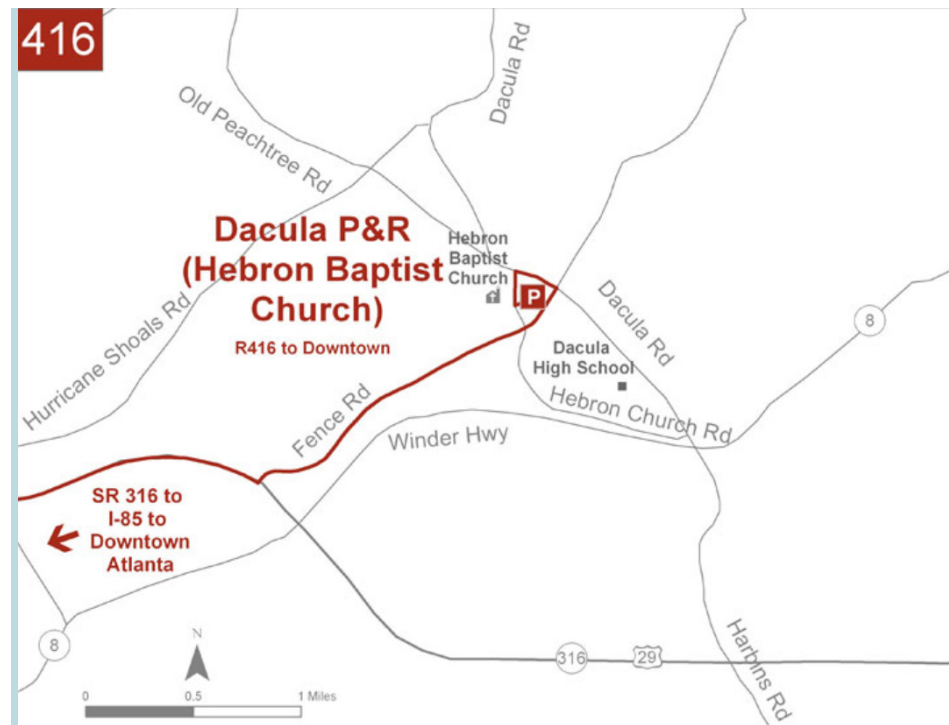
An Xpress route is available to downtown Atlanta serving the City of Dacula. The stop is located at the Hebron Baptist Church. According to commuting data, very few people use public transit for getting to work.

Figure 14: Xpress map



Transportation Overview

Figure 15: 416 Map



Bike Routes

There were no designated bike route facilities listed in the 2019 Comprehensive Plan.

Parking

Parking is generally provided for individual businesses, with shared parking for multiunit commercial facilities. There is on street public parking located on 2nd Avenue in the downtown area for one city block.

Freight

CSX operates a rail line along Winder Hwy through Dacula that runs from Atlanta to Athens. Both SR316 and I85 are designated statewide freight corridors.

Aviation

Dacula is approximately 2.5 miles from Briscoe Field Airport. It is owned by Gwinnett County and provides a 6,000-foot-long runway. There are two fix base operators, a flight training facility and two medical flight operators. The closest passenger airport is Hartsfield Jackson Atlanta International Airport. It is approximately 30 miles away.

Trails

See Community Facilities Element

Transportation Goals and Policies

Goal: Encourage multimodal transportation options, including bike, public transportation, and pedestrian.

Policies

- Reserve right-of-way for new multi-use and walking trails
- Collaborate with County, local, and regional public transportation efforts

Goal: Improve Traffic Flow

Policies

- Encourage interconnected road network
- Identify areas where additional roads would relieve downtown congestion

Transportation Strategies

2a

Develop a master plan for bicycle and pedestrian trails

The master plan should integrate with the County Bike and Trail Plan and Rowen.

2b

Connect Old Peachtree Road to Fence Road behind existing Kroger

The road can alleviate traffic congestion from the elementary school and Hebron Church by allowing connectivity.

2c

Incentivize connectivity for new development and redevelopments by offering bonus density.

Though it may be difficult for additional connectivity, when opportunities arise, these can be encouraged by providing incentives for additional development densities.

Element Three

Economic Development

The economic development element of the comprehensive plan provides for an analysis of the current economic conditions for the City of Dacula and provides recommendations for the next 30 years. In simple terms, economic development refers to the policy and programs implemented by a community to promote sustainable growth and economic health.

Data related to current economic conditions are usually provided at the regional or county level. Residents within the City of Dacula may work outside the city limits. Conversely, residents outside the City of Dacula may work inside the city. The result is work-related commuting patterns on the main access roads into and out of the city. As such, understanding regional impacts is critical in developing policies or programs for economic development within the City of Dacula.

The Atlanta Regional Commission has developed an economic competitiveness study for the 10 counties. The latest available statistics from the US Census are provided for discussion.

Table 7: City of Dacula Industry Trends 2013-2020

Industry	2014	2015	2016	2017	2018	2019	2020
Construction	261	306	253	126	159	165	147
Manufacturing	136	189	101	147	147	168	235
Wholesale Trade	12	14	0	0	0	0	0
Retail Trade	297	396	413	556	556	596	515
Transportation & Warehousing	70	79	115	231	231	324	276
Utilities	34	45	20	63	63	42	41
Information	51	0	0	16	16	28	97
Finance & Insurance	127	150	184	169	169	168	157
Real Estate & Rental Leasing	64	30	34	77	77	64	104
Professional, Scientific & Technical Services	54	13	26	94	94	132	138
Administrative & Support & Waste Management Services	192	24	346	285	285	180	67
Education Services	184	116	79	133	133	57	203
Health Care & Social Assistance	148	138	130	260	260	252	345
Arts, Entertainment, & Recreation	32	0	0	0	0	0	0
Accommodation & Food Services	22	0	19	34	148	125	119
Other Services, Except Public Administration	97	75	69	67	108	32	25

Table 8 City of Dacula Occupation Trends 2013-2020

Occupation	2013	2014	2015	2016	2017	2018	2019	2020
Management, Business, Science, & Arts	462	273	75	110	186	246	555	759
Natural Resources, Construction, and Maintenance	318	228	236			142	142	178
Production, Transportation, & Material Moving	265	172	100	125	133			
Sales & Office	489	609	571	580	705	733	710	493
Service					166	106	100	140
Total	1,534	1,282	982	815	1,190	1,227	1,507	1,570

Figure 16: Gwinnett County Occupation Trends 2013-2020



Figure 3.

Source: Georgia REAPProject.org
Data: Regional Income Division, BEA (11-16-2022)

Economic Development Goals and Policies

Goal: Increase employment opportunities within the City of Dacula

Policies

- Encourage industrial and commercial uses

Goal: Attract more visitors to downtown Dacula

Policies

- Incentivize the revitalization of downtown commercial areas
- Develop a Dacula Identity

Economic Development Strategies

3a

Create a branding plan

A branding plan can help Dacula by creating a unique and compelling identity that distinguishes it from neighboring areas, Attracting businesses and visitors. This distinct brand can foster civic pride, encourage tourism, and generate investor interest, ultimately leading to increased economic growth and prosperity for the city.

3b

Identify and implement gateway signage and landscaping in accord with City “Branding” update.

Two areas have been identified as gateway entrances to the Downtown Dacula Area. Gateway signs welcome tourists and travelers, increasing visibility and foot traffic to local businesses. They also create a sense of identity and place, making the town more memorable and encouraging repeat visits and investments.

3c

Plan for a new cultural center

As the city begins planning for a new city center or revitalizing downtown, a cultural center can be included in the plan as a place for community events. A cultural center can enhance the overall quality of life in a community, making it more attractive to residents and businesses, which can contribute to long-term economic growth and development.

3d

Establish a City Development Authority

The Development Authority could assist Dacula in recruiting new business and supporting existing business. A Development Authority would be able to identify areas for redevelopment and facilitate implementation of redevelopment plans.

Element Four Community Facilities

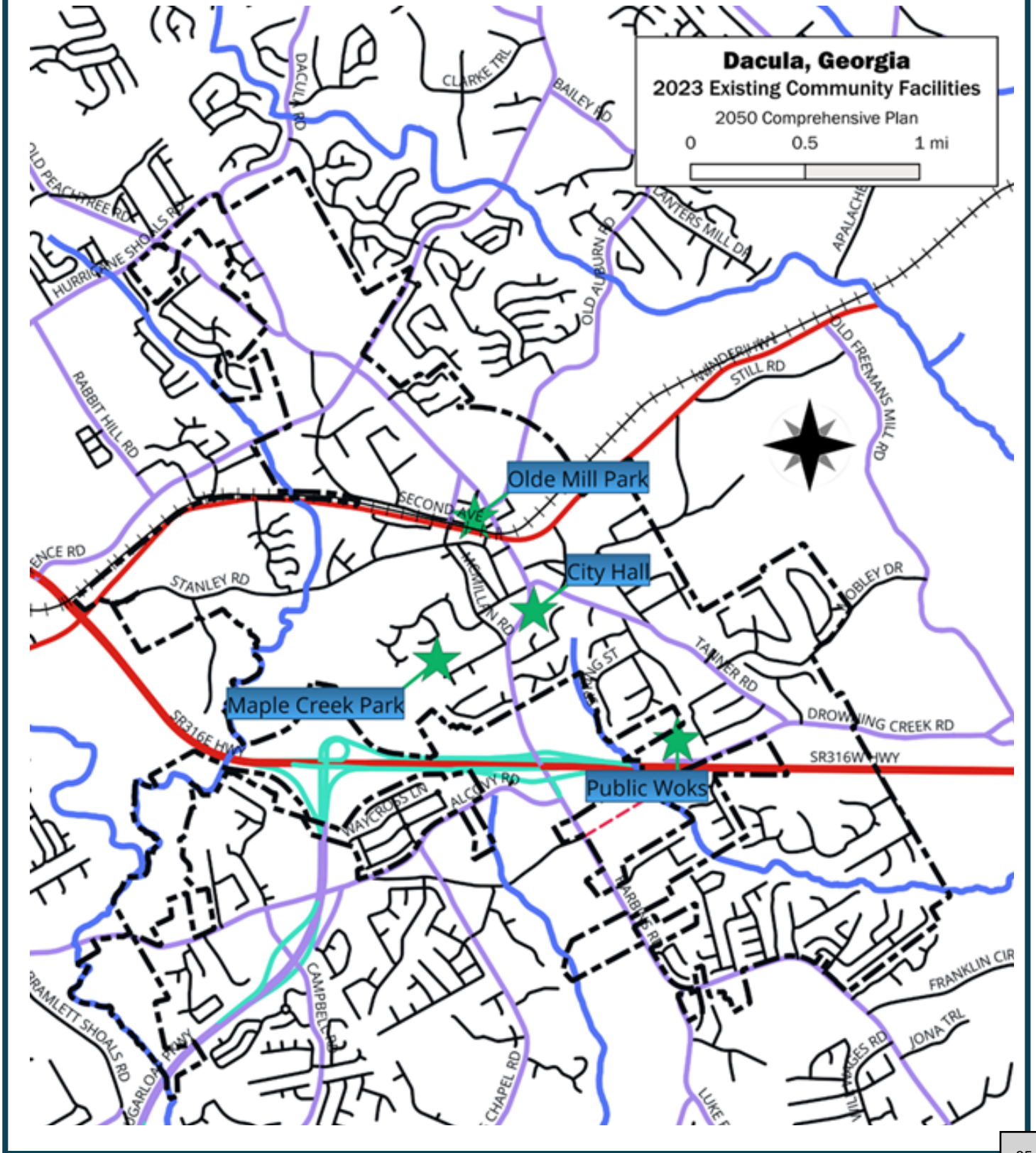
Dacula provides community facilities for the benefit of the residents, business owners and visitors to the city. The City also has access to County provided facilities within the city-limits. The following services are provided by the City:

- Public Safety
- Courts
- Transportation
- Stormwater
- Parks

The City of Dacula employs Marshals for public safety and code enforcement. The City also provides municipal court services. Though Gwinnett County provides parks and recreation, Dacula also provides this service. Dacula maintains the local road system and does participate in other transportation efforts with the County and State. Transportation information is provided in the Transportation Element of the Comprehensive Plan.

The map on the following page provides locations to the four facilities owned by the City. These include two parks, the City Hall and the Public Works building. City Hall houses the marshal's office, the city courts, and city administration and planning. City Hall is at capacity and needs to either be enlarged or relocated to a larger facility.

Figure 17 City of Dacula Community Facilities



Park and Recreation Facilities

There are a total of three parks located in the City of Dacula. Two are managed by the city and one is managed by Gwinnett County. There is also a county park located just outside the city limits that should also be taken into consideration. Across the four parks, there are opportunities for self-directed and programmed recreational opportunities for people of all ages and abilities.

City of Dacula Parks

Olde Mill Park

This park is part of the historic downtown area, with its name referencing the historic mills that used to be located on the park property. Olde Mill Park is a small community space, featuring a Veteran's Memorial Monument, and a Gazebo that is available for rental.

Maple Creek Park

This community park provides opportunities for Dacula's residents to gather and enjoy self-directed recreational activities. There are features available for people of all ages. Maple Creek Park features a 9-hole disc golf course, a playground that is currently being replaced, a ½ mile walking trail, and a small pavilion that is available for rental.



Gwinnett County Parks

Dacula Park

This park is a larger community park and is more likely to serve not only Dacula residents, but also people from the surrounding areas in the county. This park features active recreation opportunities with ball fields and tennis courts. An activity building and aquatics facility provide both programmed and self-directed activities. A paved walking trail and pond provide passive recreation opportunities.

Rabbit Hill Park

This Park is a large regional scale park featuring a wide range of active and passive recreational opportunities. The park hosts 7 football/soccer fields, a soccer complex with 8 youth soccer fields, and a multi-purpose field with a walking track, and an outdoor basketball court. A community center building provides indoor basketball as well as a senior center and classrooms for community programs and activities. Walking trails, playgrounds, and pavilions are available for self-directed recreational use.

Capital Investments

Gwinnett County relies on the Special Local Option Sales Tax (SPLOST) program to fund capital improvements to their parks. Rabbit Hill Park received SPLOST 2017 funds to expand their community center, adding a gymnasium and elevated walking track. A senior center with cafeteria and other support space expanded capacity for senior services. Site work was also completed to provide additional parking and improved connectivity through the park. Athletic field renovations were recently completed in Dacula Park.

Community Facilities Goals and Policies

Goal: Have adequate space for public safety, courts, and administration.

Policies

- Reserve existing City parcel ownership for future needs
- Increase capacity at existing facilities

Goal: Develop revenue sources for the funding of expanded community facilities.

Policies

- Encourage commercial and industrial development and redevelopment to enhance the tax base
- Identify other funding sources for community facilities
- Support EV recharging stations as a potential revenue source

Goal: Have adequate parks and recreation for a growing population.

Policies

- Maintain and enhance existing park facilities
- Connect with surrounding multi-use trail networks
- Create a pocket park system

Community Facilities Strategies

4a

Develop a master plan for property across from existing City Hall.

The result of the master planning effort may preclude other strategies below. This effort should be done first.

4b

Identify additional land for future facilities, including annexation opportunities.

Dacula has ownership of several parcels of land and sufficient land for new facilities but should continue to look for opportunities as needs arise.

4c

Investigate Federal and State grants for community infrastructure.

Grant programs are available from state and federal departments and vary from time to time. These should be checked regularly for opportunities.

4d

Implement an impact fee program for roads, parks & recreation, and public safety.

Impact fees help offset facility expansion cost for certain categories of city services.

4e

Complete playground and exercise upgrade at Maple Creek park.

This is a current project that should be completed prior to finalizing this Comprehensive Plan update.

4f

Explore a pocket park program

Investigate the feasibility of using city owned parcels or vacant lots for pocket parks. Pocket parks provide accessible green spaces for relaxation and recreation, promoting physical and mental well-being among residents. They also contribute to the beautification of urban areas, enhancing the neighborhood's overall quality of life and desirability.

4g

Negotiate with County on sewer

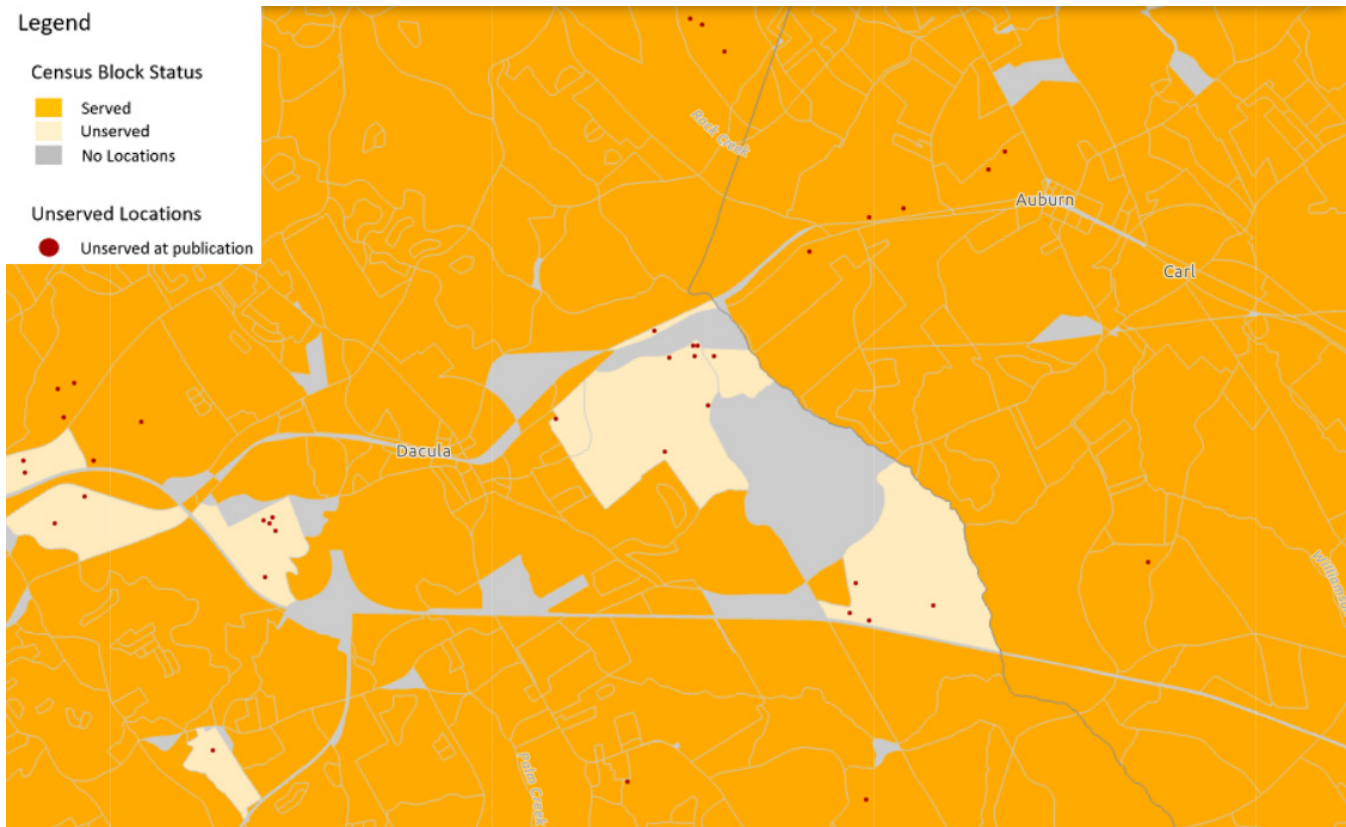
The City of Dacula relies on County sewer for the community service.

Element Five Broadband

According to the Department of Community Affairs, “the purpose of a community amending their comprehensive plan to include a broadband element is to ensure that a community adopts a strategy that demonstrates the promotion of broadband within the community. DCA has developed and approved the rules for the new element required for a community to include in their comprehensive plan. The rules are being communicated to local governments and Regional Commissions. Plans must include the update prior to being eligible to apply for a Broadband Ready Community Designation.”

The City of Dacula recognizes the importance of broadband deployment throughout all parts of the Dacula community and considers broadband services as important and necessary for economic development and quality of life. Fortunately, Gwinnett County and the City of Dacula enjoy widespread access to broadband technology from a variety of public service providers.

Figure 18: Broadband availability in and around Dacula



Source: <https://broadband.georgia.gov/2022-georgia-broadband-availability-map>

Broadband Goals

Goal: Ensure that every resident has access to reliable and affordable broadband services.

Policies

- Work with broadband providers to identify any areas of the community that lack access to broadband
- Work with broadband providers to provide reliable service to every resident and business in the city

Broadband Strategies

5a

Provide broadband availability to unserved areas

Identify specific areas that are not served by broadband service providers and create an action plan to promote the deployment of broadband services to these areas by qualified broadband service providers.

5b

Protect city properties by advocating for retired tower removal

Support legislative direction from the State to define protection of City rights-of-way and decommissioning and removal of retired towers.

Element Six

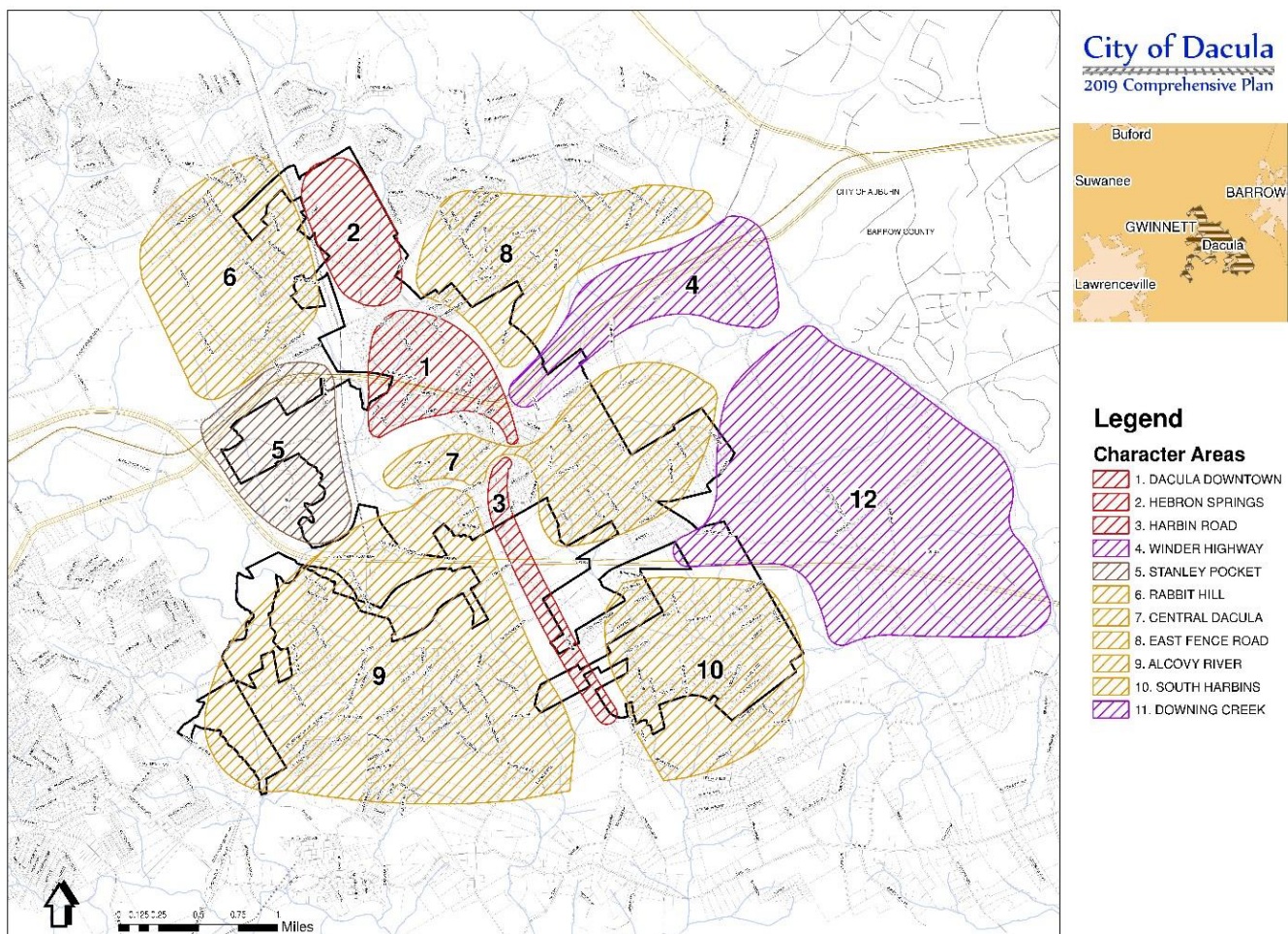
Land Use

Existing Development Patterns

In 2023 the estimated population of the City of Dacula was 8,101, representing a 82% increase from 2010. The growth rate in Dacula was significantly higher than for Gwinnett County and the state of Georgia.

The 2019 Comprehensive Plan identified eleven Character Areas. These were updated as part of the community engagement program for this plan. The revised Character Areas are presented later in this section.

Figure 19: City of Dacula 2019 Character Area Map



In addition to the character areas, the 2019 plan identified five overlay land use modifiers shown below. This includes expressway and commercial corridors, neighborhood connections, gateways, and commuter rail opportunities.

Figure 20: City of Dacula Overlay Modifiers

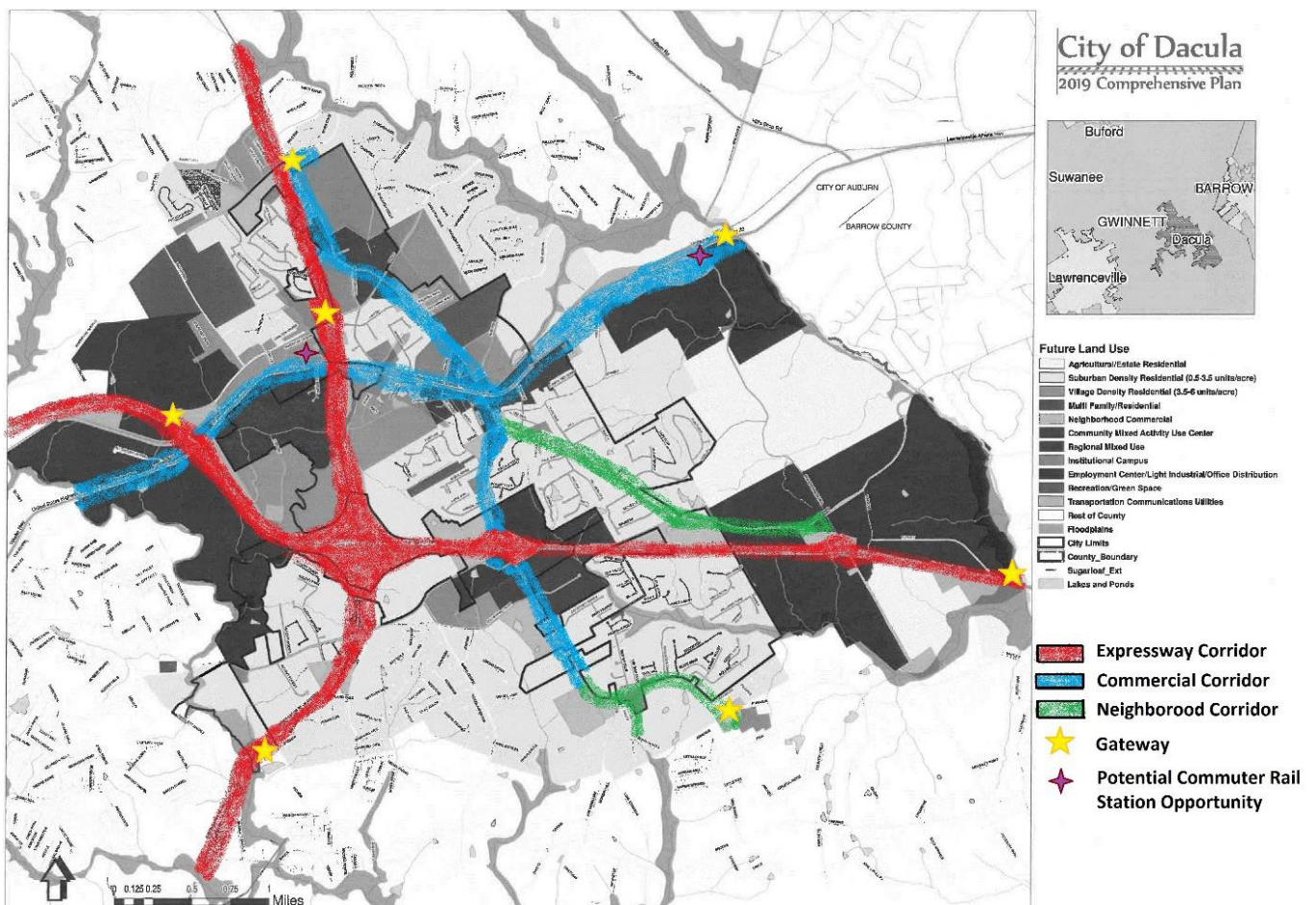
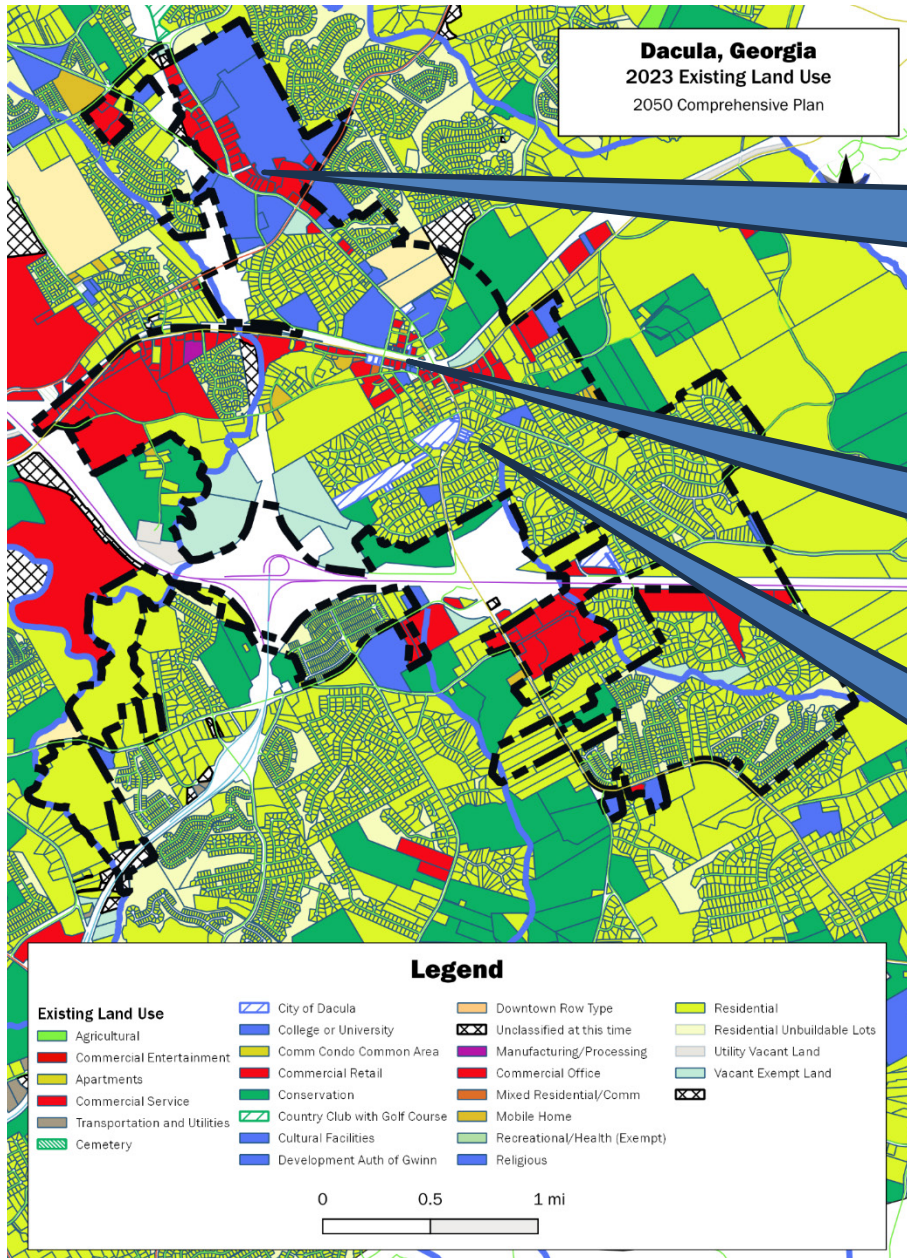


Figure 21 provides a preliminary existing land use map for the City of Dacula and surrounding area. The data source is from Gwinnett County's Geographic Information System (GIS) and has not been field verified.

Figure 21: City of Dacula Existing Land Use



The Hebron Springs area includes a large church and private school and commercial uses.

A mixture of Commercial and Residential uses exist in downtown area.

A good portion of Dacula is single-family residential.

Land Use Goals and Policies

Goal: Maintain existing character in established neighborhoods

Policies

- Redevelopment in existing neighborhoods should be limited to existing zoning but encourage connectivity when opportunities arise
- Enforce codes to maintain the health, welfare and safety of the community

Goal: Increase diversity of land uses in downtown character area

Policies

- Allow for higher density, connectivity, and transportation modal options
- Encourage the redevelopment of underutilized and/or abandoned/dilapidated properties
- Balance land use to provide both housing and employment opportunities

Goal: Increase base economic activity through land use

Policies

- Identify areas for manufacturing
- Encourage research and development activities
- Support tourism

Land Use Strategies

6a

Identify specific areas reserved for industry

The future character area map has identified areas that would be well suited for industrial development. These are near transportation corridors and have access to water and wastewater services.

6b

Identify specific areas reserved for commercial office and retail

The future character area map has identified areas that would be well suited for commercial office and development.

6c

Reserve area for hotels and support industry

The future character area map has identified areas that would be well suited for hotel and associated support industries. These are located along S.R. 316 and would include hotels and sit-down restaurants.

6d

Implement future character area map as a guide for new development and redevelopment

The future character area map has identified areas for all future development and redevelopment activities. Zoning and redevelopment decisions should follow the proposed character to both protect existing character as suggested, or for new development or redevelopment to achieve the future vision of the City.

6e

Review and update building codes

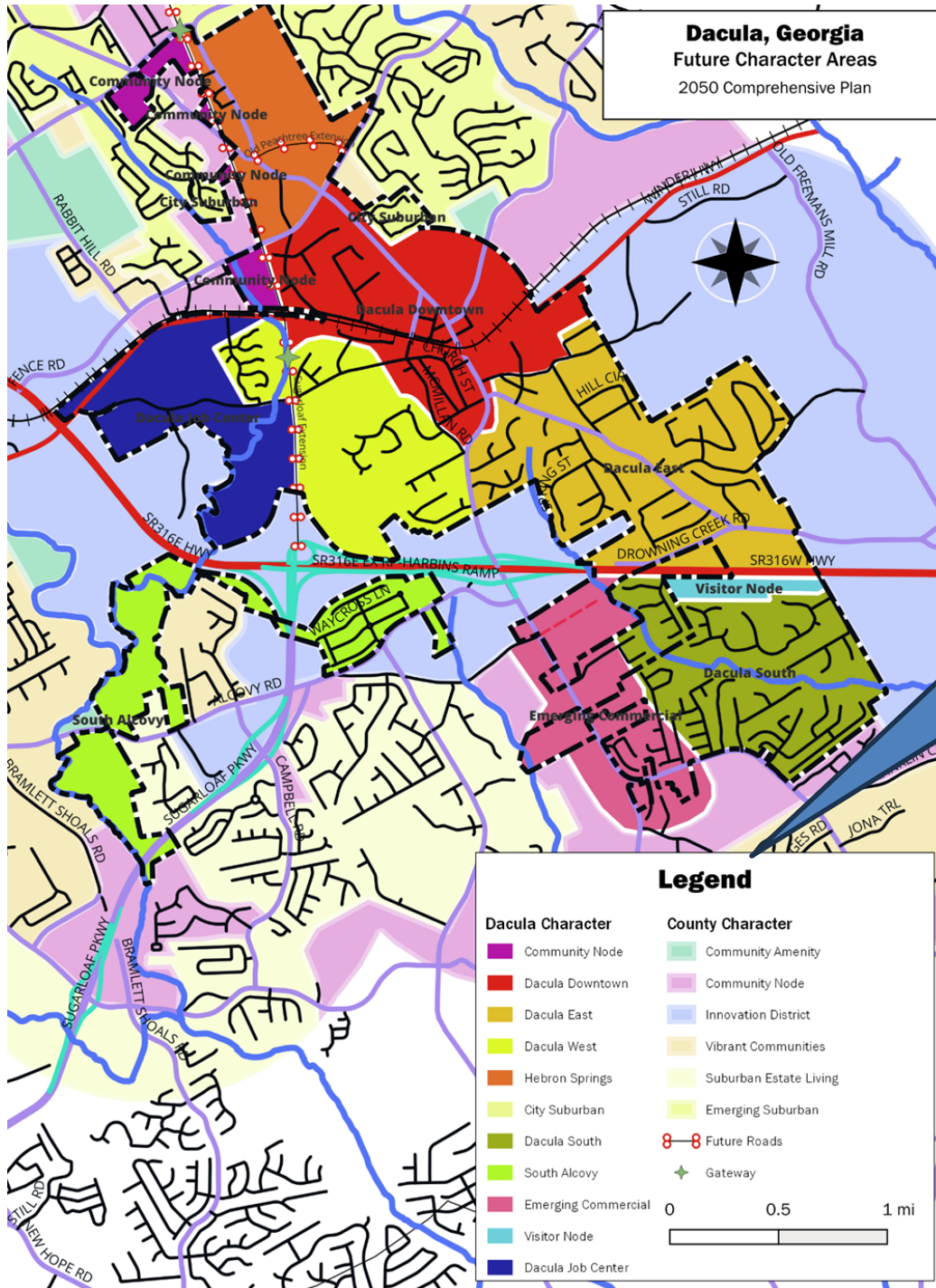
Review and update building codes as needed.

6f

Review and update zoning and development codes

Review and update zoning and development codes to encourage connectivity and alternative modes of transportation, including bike, pedestrian, and public transportation.

Figure 22: City of Dacula Future Character Areas



Defining narrative is provided on following pages

Community Node

Description

The Community Node Character Areas is planned to be a commercial mixed-use area of the city adjacent to unincorporated Gwinnett County in the northwest area of the city. It should support employment of both city and unincorporated residents as well as potentially provide lower cost housing options where appropriate.

Future development and redevelopment should focus on making these nodes more pedestrian-oriented with mixed-use buildings. This area is characterized by mixed-use developments incorporating commercial, office, live-work, and similar ground floor uses with residential uses. Ground floor non-residential uses should be oriented toward the street with direct pedestrian access, outdoor patios, plazas, etc., to encourage pedestrian activity. Where ground floor non-residential space is provided, these areas should include convertible space. These activity centers are intended to serve surrounding residential communities and people throughout the County by providing shopping, dining, and entertainment venues.



Figure 23
Source: 2040 Gwinnett County Comprehensive Plan

Objectives

- Provide an appropriate transition between land uses and intensity.

Policies

- Allow for higher density, and increase in connectivity, and transportation modal options.
- Encourage the redevelopment of underutilized and/or abandoned/dilapidated properties.
- Balance land use to provide both housing and employment opportunities.

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.

Land Use and Zoning Consideration

The Community Node character area is primarily for commercial retail, office, and public/institutional uses. Zoning change and redevelopment requests should be consistent as an activity center.



Figure 24
Source: 2040 Gwinnett County Comprehensive Plan

Dacula Downtown

Description

The Dacula Downtown Character Area is planned to be a primarily commercial retail growth area of the city. The goal would be to have a livable, walkable city center to attract tourism, support employment of residents and to provide a place for entertainment and recreational opportunities.

Objectives

- Increase employment opportunities for the citizens of Dacula to match or exceed planned population increases for the City.
- Decrease vehicular traffic by providing access to trails, sidewalks and public transportation.
- Provide an appropriate transition between land uses and intensity.

Policies

- Allow for higher density, and increase in connectivity, and transportation modal options.
- Encourage the redevelopment of underutilized and/or abandoned/dilapidated properties.
- Balance land use to provide both housing and employment opportunities.

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.

Land Use and Zoning Consideration

The Dacula Downtown character area is primarily for commercial retail, office, and residential land uses. Zoning change and redevelopment requests should be consistent with a downtown character, including provision of entertainment, locally driven cultural and other community gathering uses. Effort should be made to add connectivity in the road network, add sidewalks and multi-use trails. Multi-use trails should logically connect with planned efforts by the County.



Figure 25
Source: Hall Consulting, Inc.



Figure 26
Source: Hall Consulting, Inc.

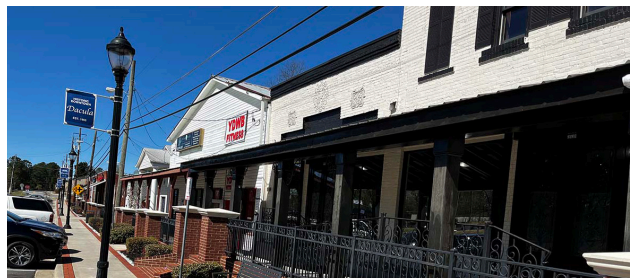


Figure 27
Source: Hall Consulting, Inc.

Dacula East and West

Description

The Dacula East and West Character Areas are primarily single family residential. Most of the East character area is developed, however, the West character area has more undeveloped land. Infill and redevelopment may happen and should continue this existing character and residential density. The goal is to maintain existing character and provide community amenities including neighborhood commercial and pocket parks.

Objectives

- Maintain existing character.

Policies

- Allow for small scale neighborhood commercial activities along Harbins Road.
- Look for opportunities to connect to multi-use trail system (both County and planned city multi-use trails)
- Allow for higher density and better connectivity in Dacula West Character area

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.

Land Use and Zoning Consideration

The Dacula East character area is mostly developed with some opportunities for infill and redevelopment. Zoning considerations should reflect existing character (single-family residential at similar density), and small neighborhood commercial and community amenities where appropriate. The Dacula West character area which has undeveloped land should maintain the single-family character.



Figure 28

Source: © William A. Morgan / Adobe Stock



Figure 29

Source: © Jason / Adobe Stock

Hebron Springs

Description

The Hebron Springs Character Area is home to a larger church and private school and is primarily a commercial retail growth area of the city. The goal would be to have walkable shops, sit-down restaurants and a movie theatre to attract tourism, and to provide a place for entertainment and recreational opportunities for Dacula residents.

Objectives

- Decrease vehicular traffic by providing access to trails, sidewalks, and public transportation.

Policies

- Allow for increase in connectivity, and transportation modal options.
- Carefully review requests for drive through businesses to ensure compatibility with goals and objectives of this area.

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.



Figure 30
Source: Hall Consulting, Inc.

Land Use and Zoning Consideration

The Hebron Springs character area is primarily for commercial retail, office, and institutional uses. Neighborhood Mixed Use and General Commercial land uses include smaller neighborhood mixed use activity centers and general commercial land uses along major roadways that make up and support the economic well-being of the community. Zoning change and redevelopment requests should be consistent with a neighborhood mixed use and general commercial character. Effort should be made to add connectivity in the road network, add sidewalks and multi-use trails. Multi-use trails should logically connect with planned efforts by the County. Appropriate zoning includes standalone and multi-use commercial, mixed use (retail and office) commercial properties. Projects that offer shared off-street parking should be a priority.



Figure 31
Source: Page Light Studios / iStock

City Suburban

Description

There are two areas identified as City Suburban future character. These are currently residential subdivisions and are planned to remain unchanged during the planning horizon. The adjacent County future character areas are identified as emerging suburban. It is anticipated that these land uses are compatible. Request for zoning changes should be consistent with current character.

Objectives

- Maintain existing character.

Policies

- Look for opportunities to connect to multi-use trail system (both County and planned city multiuse trails)

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.



Figure 32
Source: © Konstantin L / Adobe Stock

Land Use and Zoning Consideration

These character areas are primarily single family residential. Zoning change requests should be limited to single family or neighborhood commercial if context allows. These photos represent examples of appropriate development and redevelopment in the City Suburban Character Area.



Figure 33
Source: © zimmytws / Adobe Stock



Figure 34
Source: © Becky Wright / Adobe Stock

Dacula South and South Alcovy

Description

The Dacula South and South Alcovy Character Areas are primarily single family residential. Most of the Dacula South character area is developed. Infill and redevelopment may happen and should continue this existing character and residential density. The goal is to maintain existing character and provide community amenities including neighborhood commercial and pocket parks.

Objectives

- Maintain existing character.

Policies

- Allow for small scale neighborhood commercial activities along main corridors such as Alcovy Road.
- Look for opportunities to connect to multi-use trail system (both County and planned city multi-use trails).

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.



Figure 35
Source: © Evelyn / Adobe Stock

Land Use and Zoning Consideration

The Dacula South and South Alcovy character areas are mostly developed with some opportunities for infill and redevelopment. Zoning considerations should reflect existing character (single-family residential at similar density), and small neighborhood commercial and community amenities where appropriate.



Figure 36
Source: © William A. Morgan / Adobe Stock



Figure 37
Source: © Ursula Page / Adobe Stock

Emerging Commercial

Description

The Emerging Commercial Character Areas is planned to be a primarily mixed-use area of the city along Harbins Rd south of S.R. 316. The goal is to have consistent land use with Gwinnett County's plan which has identified this area as Community Node described earlier in this element. It should support employment of both city and unincorporated residents as well as provide lower cost housing options.

Future development and redevelopment should focus on making these nodes more pedestrian-oriented with mixed-use buildings. This area is characterized by mixed-use developments incorporating commercial, office, live-work, and similar ground floor uses with compatible residential uses. Ground floor non-residential uses should be oriented toward the street with direct pedestrian access, outdoor patios, plazas, etc., to encourage pedestrian activity. Where ground floor non-residential space is provided, these areas should include convertible space. These activity centers are intended to serve surrounding residential communities and people throughout the County by providing shopping, dining, and entertainment venues.

An overlay district over existing residential should be included to protect these current uses.



Figure 38
Source: Hall Consulting, Inc.

Objectives

- Provide a transition area on Harbins Rd. consistent with County Comprehensive Plan

Policies

- Allow for higher density as appropriate, and increase in connectivity, and transportation modal options.
- Encourage the redevelopment of underutilized and/or abandoned/dilapidated properties.
- Balance land use to provide both housing and employment opportunities.

Implementation Strategies

- Create incentives for developers to integrate comprehensive plan goals, objectives, and policies.

Land Use and Zoning Consideration

The Emerging Commercial character area is primarily for any combination of residential, commercial, office, and public/ institutional uses. Zoning change and redevelopment requests should be consistent with a mixed-use character. Effort should be made to add connectivity in the road network, add sidewalks and multi-use trails. Multi-use trails should logically connect with planned efforts by the County, especially along the Sugarloaf parkway corridor. Projects that offer shared off-street parking should be a priority. The resulting character of the area should be similar to the Hebron Springs character area in North Dacula.

Visitor Node

Description

The visitor node character area was identified to support tourism for both Dacula and this area of the County. The County has identified this part of Gwinnett as an innovation district along S.R. 316. The city of Dacula can take advantage of this economic activity by providing hotels, motels and tourist support services.

Objectives

- Provide a hotel district with supporting services.

Policies

- Encourage sit down restaurants.

Implementation Strategies

- Coordinate with County for collector distributor road along S.R. 316

Land Use and Zoning Consideration

The visitor node character area is primarily for temporary housing for visitors to Dacula and the County Innovation District, including the Rowan Development. Zoning change and redevelopment requests should be consistent with hotel or related land use and sit-down restaurants.



Figure 39
Source: © William A. Morgan / Adobe Stock

Land Use and Zoning Consideration

The Visitor Node is currently undeveloped and is located along the S.R. 316 corridor. Land topology and size may make it difficult for large buildings. Zoning should allow for hotels and support industries, including sit-down restaurants.



Figure 40
Source: © MelissaMN / Adobe Stock



Figure 41
Source: © Tada Images / Adobe Stock

Dacula Job Center

Description

The Dacula Job Center Character Area may include light industrial and manufacturing, warehousing, industrial offices, and distribution facilities as well as supporting uses such as hotels. While Industrial areas may be appropriate in several locations within the City, it is important to limit the types of industrial uses to minimize impacts on adjacent areas. For instance, while industrial office space might be appropriate in proximity to some types of residential development, the noise and freight traffic associated with distribution/warehousing necessitates a buffer between it and any type of residential use.

Objectives

- Increase base economy.
- Protect river.

Policies

- Allow for low impact industry.
- Encourage the redevelopment of underutilized and/or abandoned/dilapidated properties.
- Designate land use to provide employment opportunities.

Implementation Strategies

- Create incentives for industrial employers to locate in Dacula.
- Carefully review requests for residential and commercial development to ensure capability with the objectives of this Area and the overall objectives of the Plan.
- Coordinate with County for water and wastewater infrastructure needs.

Land Use and Zoning Consideration

The Job Center character area is primarily for light industrial, industrial office, and distribution/warehouse. Zoning change and redevelopment requests should be consistent with an employment activity specific to enhancing the base economy of Dacula. Appropriate zoning includes industrial zoning categories. New development should provide buffer protection to both the Alcovy River and adjacent character areas.



Figure 42
Source: © onlyyouqj / Adobe Stock



Figure 43
Source: © netsay / Adobe Stock

Guidance for Rezoning by Character Area

Table 10: Guidance for Rezoning by Character Area

Character Area	Summary of Land Uses	Recommended Zoning Codes
Community Node	Commercial mixed use	C2, PMUD, R-TH
Dacula Downtown	Commercial Retail, office, and residential land use	C1, C2, R1200, OI
Dacula East	Single family residential with Commercial along Harbins Rd	R1200, R1400, C1, OI
Dacula West	Single family residential with Commercial along Harbins Rd	TRD, C1, R1200, R1400CZP, OI
Hebron Springs	Commercial Retail, office, and institutional land use	C1, C2, PMUD
City Suburban	Single family residential with Neighborhood commercial if context allows	R1200
Dacula South	Single family residential with Neighborhood commercial if context allows	R1400CSO, R1400, TRD
South Alcovy	Single family residential with Neighborhood commercial if context allows	R1400CSO, TRD, C1
Emerging Commercial	Commercial mixed use	PMUD, C1, C2, OI
Visitor Node	Hotel and Restaurant (sit down) other uses that support tourism	C2
Dacula Job Center	Manufacturing, warehousing, hotels/motels, industrial office	M1, M2, C2

Element Seven Community Building

Community Building and Civic Engagement



Photo by Phil Mistry/PHIL FOTO

Civic engagement can take many forms, such as individual volunteerism, community activism and advocacy, organizational involvement, and electoral participation. Historically, long-term residents of Dacula have been civically engaged, participating actively in their local government and decision-making processes. This civic engagement is a valuable resource that can be tapped. However, as the city and county have attracted new residents overall civic engagement has decreased. As such, during the public engagement process, community building and engagement stood out as necessary components to maintain and improve the quality of life of residents.

A strong sense of community creates a supportive environment where residents feel connected and engaged. This social cohesion contributes to improved mental and emotional well-being, as individuals are more likely to have access to a support system and opportunities for social interaction. In a suburban city experiencing growth, a tight-knit community can help newcomers integrate into the fabric of the city, reducing feelings of isolation and increasing overall satisfaction with life.

Civic engagement is a cornerstone of a vibrant city's success. When residents actively participate in local government, they can voice their opinions and influence policies and decisions that directly affect their lives. This involvement fosters a sense of ownership and empowerment among community members, leading to a more responsive and accountable government. In turn, this can lead to better infrastructure, improved public services, and a safer environment, all of which are essential for attracting new businesses and residents. Economic development thrives in areas where residents take pride in their community and actively work towards its betterment, making it an attractive destination for both businesses and individuals.

An engaged and well-connected community often supports local businesses, boosting their success and sustainability. Moreover, a positive community reputation can attract outside investments and talent, further fueling economic development. Additionally, community-driven initiatives and programs, such as beautification projects, cultural events, and educational initiatives, can make a city more appealing to potential residents and businesses.

The largest community event in Dacula is the Memorial Day Parade. The parade has been a proud tradition in Dacula since 1994 and has grown over the years with about 100 units participating in the parade each year. The parade attracts about 10,000 spectators. Participants in the public engagement process suggested the need for additional community engagement and family activities. Specific suggestions included Art in Park, Fall Festival, additional cleanup events, and restarting the farmers market.

Dacula can encourage civic involvement by implementing a thoughtful system of recognition and incentives that acknowledge and appreciate the contributions of engaged residents. This may include public acknowledgments in local newsletters, websites, or social media platforms, showcasing the individuals or groups making a positive impact. Also, the city can organize annual civic awards ceremonies to honor outstanding volunteers or community leaders. Tangible rewards, such as certificates, plaques, or even small grants for community projects, can also be granted to those who consistently demonstrate a commitment to civic engagement. Additionally, fostering a culture of inclusivity and participation, where residents feel their input genuinely influences decisions and policies, serves as a meaningful and enduring reward, as it empowers citizens to play an active role in shaping the future of their city.

Goals and Policies

Goal: Create opportunities for residents to get together socially and build community

Policies

- Partner with local organizations and schools to create and sustain local events spearheaded by the city.
- Support family and youth activities, attractions, and events.
- Support investment in parks and public spaces to enhance the quality of life for citizens.
- Plan for family-friendly outdoor space for gathering and socializing.
- Create locations for social interactions and community building such as a town center, cultural center, or amphitheater.
- Create and continue traditions that bring residents and visitors together, such as the Memorial Day parade, arts in the park, farmers market, etc.

Goal: Protect and promote a culture of civic engagement

Policies

- Include youth in City planning efforts, events support, and other opportunities, as appropriate.
- Promote community volunteerism through recognition programs for sponsors and contributors to the Memorial Day Parade, historic preservation, volunteer beautification projects, school partnerships, etc.
- Create and support opportunities for volunteerism among residents, especially youth.

Strengthen civic pride for residents of Dacula

Policies

- Support creation and implementation of a consistent brand and messaging strategy to promote the city.
- Encourage the creation of unique destinations and gathering places within the city.
- Encourage placemaking strategies such as wayfinding signs, gateways, public art, and public events.

Community Building and Civic Engagement Strategies

7a

Make it easy to find out how to get engaged with the city

Residents who want to volunteer in their community and get more involved may not know where to start. The city's website should include a page with local volunteer opportunities that enhances and supplements the bulletin board at City Hall.

7b

Reward Civic Involvement

Create and implement a system of recognition and incentives that recognizes the contributions of engaged residents. Recommendations include public acknowledgment on the city's website and social media platforms, hosting an annual civic awards ceremony to honor outstanding volunteers and presenting certificates, plaques, or even small grants for community projects.

7c

Create spaces for public engagement

Need to identify a "downtown" and follow up on opportunities to develop public use amenities such as a community or cultural arts facility and a traditional downtown square. This would be part of an LCI.

7d

Create additional opportunities for engagement and community building

Plan additional events and opportunities for community building and engagement. The city can spearhead new events and partner with local organizations.

7e

Improve civic pride with branding plan

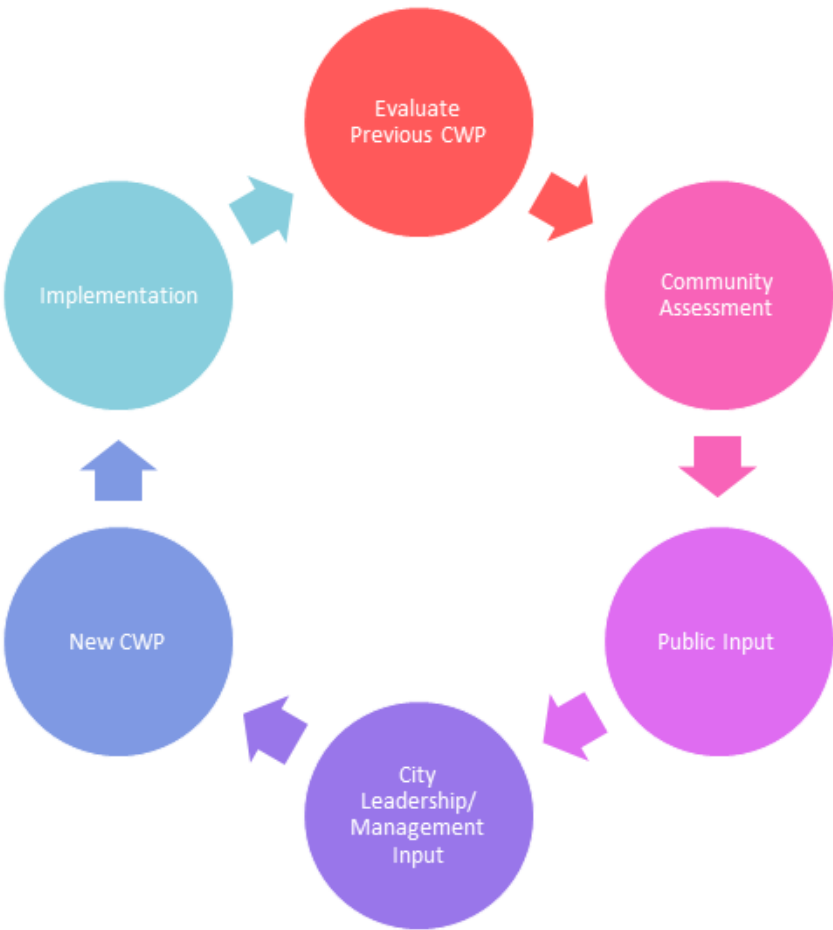
A well-executed branding plan can instill a sense of identity and belonging among residents, fostering civic pride by highlighting the unique characteristics and values of a community. When a city's brand effectively communicates its history, culture, and aspirations, it can evoke a sense of shared purpose and unity among its citizens. Additionally, a strong city brand can attract positive attention, tourism, and investment, which, in turn, can lead to improved infrastructure, amenities, and overall quality of life, further fueling civic pride.

Community Work Program

Community Building and Civic Engagement

The community work program (CWP) is a 5-year detailed plan of activities for the City of Dacula. These could be additional plans, programs, and community facilities as well as rehabilitation of existing community facilities. The activities in the work program are derived from the recommendations in each of the previous sections of this comprehensive plan. Grants are competitive and may not necessarily be awarded. The following illustrates the process of developing the CWP. Please note that public, city leadership, and city management input may be iterative and performed several times prior to completing the CWP.

Community Work Program Update Process



The following table is a list of accomplishments from the previous CWP. Projects that have not been accomplished and/or postponed may be placed on the current community work program. The previous community work program was extensive and included many items that were the responsibility of Gwinnett County. These items have not been rolled over to the new work program to keep the CWP realistic.

List of Accomplishments

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
4	Population and Demographics								
5	1a	1	Prioritize (eastward) annexation, infrastructure, and planned development between CSX RR and SR316 east to support growth of employment, commerce, and homes to support tax base.	Annex area between CSX RR and along south side of Georgia 316 to accommodate future growth and development.				X	Due to the Rowan project this has not been accomplished. South of Winder Highway has been annexed.
6	1b	5	Specify state roads and Dacula, Fence, and Harbins Roads as growth corridors / Update zoning and development regulations to support/manage appropriate densities along corridors.	Update zoning ordinance and development regulations to support urban development where appropriate.	3/5/2020				
7	1c	5	Identify specific locations for employment, higher density, commerce & social interaction.	Prepare infrastructure plans for development of city		X			
8	1d	5	Expand water + sewer infrastructure to accommodate changing population requirements.	Prepare infrastructure plans for development of city		X			
9	1e	5	Identify programs to provide housing choices to keep aging residents in the community.	Prepare infrastructure plans for development of city		X			
10	NATURAL AND CULTURAL RESOURCES								
11	2a	1	Pursue LCI grant for downtown planning and identify priorities and funding.	Identify local \$/match reqts. and pursue LCI grant from ARC to fund Livable Community Initiatives Plan.			X		Will include this to new community work program
12	2b	5	Restrict development densities in environmentally sensitive areas and encourage potential Conservation Subdivision Overlay ordinance	See 1b) above. Update zoning ordinance and development regulations to support urban development where appropriate.	3/5/2020				

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
13	2c	5	Enforce rigid stormwater, erosion, stream bank, and septic tank ordinances in recharge areas.	See 1b) above. Update zoning ordinance and development regulations to support urban development where appropriate.	3/5/2020				
14	2d	5	Support some smaller single-family residential parcels and multi-family in the City (continued large residential lots consume more land, yield fewer housing units, and consume remaining woodlands,	Expand zoning categories to accommodate smaller lots where feasible and appropriate	3/5/2020				
15	2e	5	Work with Gwinnett County for recreation / Identify needs in City for local small scale open space facilities and program some projects for joint City/County	Prepare City recreation plan to supplement County plan and support small parks and cultural resources inside the City and within walking		X			
16	2f	5	Inventory scenic resources for information for decision-makers and negotiations.	Prepare City recreation plan to supplement County plan and support small parks and cultural resources inside the City and within walking		X			
17	2g	5	Identify and preserve pastures, woods, and cultural resources that provide dramatic scenic views of surrounding countryside. along the Alcovy and Apalachee River basins.	Prepare City recreation plan to supplement County plan and support small parks and cultural resources inside the City and within walking		X			
18	2h	10	Work with Gwinnett County to support "greenway" corridor along Apalachee River to complement Chattahoochee River greenway on west side of County.	Prepare City recreation plan to supplement County plan and support small parks and cultural resources inside the City and within walking		X			
19	COMMUNITY FACILITIES & SERVICES								

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
20	3a	5	Explore grants and service fees for expansion.	Explore grants and service fees for expansion.				X	Item to be revisited for more specific application
21	3b	1	Enforce rigid stormwater, erosion, stream bank, and septic tank ordinances in recharge areas.	See 1b) above. Update zoning ordinance and development regulations to support urban development where appropriate and protect environment.	1/1/2023				
22		10+	Enforce rigid stormwater, erosion, stream bank, and septic tank ordinances in recharge areas.	Plan for new reservoir along Apalachee River to supplement existing Chattahoochee River resources.	1/2/2023				
23	3c	1	Improve current water line delivery services to ensure fire flow and increased populations along critical lines	Implement Phase 2 of Water Main Replacement Program - 1. Upsize 6-inch water system pipes that fail fire flow test (2a-2d); 2. Upsize water main on Dacula Road to 10-inch	1/3/2023				
24		5	Update existing water lines as needed based on future fire flow studies and expand water lines into areas of existing City not currently served	Implement future phases of Water Main Replacement Program. Identify requirements for expansion systems and coordinate with County Water System.		X			
25		10+	Update existing water lines as needed based on future fire flow studies and expand water lines into areas of existing and future City not currently served.	Identify requirements for expansion of water system in coordination with County Water System.		X			
26	3d	1	Coordinate with Gwinnett County Water System to extend sewer lines and reduce pump station and force mains in Alcovy basin.	Extend sewer to City Hall on Harbins Road and along Dacula Road and US29 to	2/1/2023				

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
27		5	Coordinate with Gwinnett County Water System to extend sewer lines and reduce pump station and force mains in Alcovy basin and septic tanks in Apalachee basin.	Extend sewer on Harbins Road from City Hall to SR316 and along SR316 to County Line				X	Revisit in next Comprehensive Plan update.
28		10+	Coordinate with Gwinnett County Water System to extend sewer lines and reduce pump station and force mains in Apalachee basin.	Extend distributed water lines in expanded areas of the City that may be annexed.		X			
29	3e	5	Identify additional personnel needs to support fire and police services and facilities as the population grows.	Identify additional personnel needs to support fire and police services and facilities as the population grows.		X			
30	3f	5	Need funding to acquire land in near term for future public facilities needs.	Need funding to acquire land in near term for future public facilities needs.	2021				
31	3g	10	Current City Hall meets needs. Consider cultural facility to anchor downtown.	Plan for New Cultural Center			X		Will include this to new community work program
32	BROADBAND								
33	4a	5	Broadband services provided by private providers. City to address changes to development codes. Also support public access for private users who cannot afford private marketplace	Support Broadband ready programs Citywide via Wi-Fi. Potential initiatives are expected to be clarified by the State. Details pending State legislation.	2022				Park and Public Works WIFI public completed.
34	4b	5	Define where requirements and development codes need to change and implement. Where are the gaps in services?	Support legislative direction from the State to define protection of City rights-of-way and decommissioning and removal of retired towers.		X			This will be a continuous effort

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
35	4c	5	Gap in services along Apalachee River will need service when it is developed.	Support public/private coordination to expand service into unserved areas and capacity into underserved areas		X			This will be a continuous effort
36	CAPITAL IMPROVEMENTS								
37		10+	City may want to consider impact fees in long term plans	Review options to fund specifically allowed infrastructure by establishing impact fees in long			X		Will add this to new community work program
38	ECONOMIC DEVELOPMENT								
39	6a	1	Revise and update the City's marketing materials to create a positive, compelling image for the City.	Create City of Dacula "Brand" for future public information and economic development		X			Will finish in 2024
40	6b	1	Identify and implement gateway signage and landscaping.	Identify and implement gateway signage and landscaping in accord with City "Branding" update			X		Will include this to new community work program
41	6c	5	Explore Tax Allocation Districts (TAD), impact fees, economic development grant programs, Community Improvements Districts (CIDs), ARC grant programs (LCI), and Infrastructure Development Districts.	Establish City Development Authority to support funding, and consider Tax Allocation Districts (TAD), impact fees, economic development grant programs, Community Improvements Districts (CIDs), ARC grant programs (LCI), and Infrastructure Development Districts..			X		Will include this to new community work program
42	6d	5	Balance development requests with revenue generation and create promotion programs to support commercial and industrial development in the City and recruit retail and employment	Establish an economic development function within the city to recruit business and employment centers to balance with housing as				X	Revisit in next Comprehensive Plan update.

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
				infrastructure for water/sewer becomes available!					
43	6e	5	Explore LCI plan to develop and identify consensus on directions for downtown Dacula. .	Create a “Livable Centers Initiative” (LCI) Plan to provide an opportunity for the City to specify redevelopment of downtown and possible				X	Revisit in next Comprehensive Plan update.
44	6f	5	Encourage redevelopment or revitalization with specific architectural standards for design quality and sustainability and include locations of curb cuts, vehicle parking, and outside display elements in the design review process to enhance appearance and desirability.	Update zoning ordinance and development regulations to support urban development where appropriate.	2021				
45	6g	5	Identify methods to require new development to support infrastructure improvements related to growth created by the development.	Develop education program for developers to create mixed uses that support commercial, office and employment in addition to residential.				X	Revisit in next Comprehensive Plan update.
51	LAND USE AND DEVELOPMENT PATTERNS								
52	7a	1	See # 6, Economic Development, (k).	Update zoning ordinance and development regulations to support urban development where appropriate.	2021				
53	7b	1	LCI would provide directions for revitalization of downtown core. See #6, Economic Development (c)	See LCI plan (item 6e) above.				X	Revisit in next Comprehensive Plan update.
54	7c	1	LCI would help identify specific recommendations to add to commercial uses and schools.	See Branding (item 6a) above and LCI plan (item 6e) above.				X	Revisit in next Comprehensive Plan update.

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
55	7d	5	Identify potential grant sources to fund Winder Road Corridor land use study.	See Branding (item 6a) above and LCI plan (item 6e) above.				X	Revisit in next Comprehensive Plan update.
57	7e	5	Identify specific parcels that should include mixed-use and / or major employment.	See Items 1a) above (Annexation) and 6e) LCI project above				X	Revisit in next Comprehensive Plan update.
58	7g	5	Specify appropriate locations for mixed-use.	Actively seek a developer for the Regional Mixed Use centers	2023				
59	7h	5	Determine appropriate locations for mixed-use, and address traffic generation, impacts on schools and services created by increased residential densities.	Update zoning ordinance and development regulations to support urban development where appropriate for mixed use, increased density, and live/work/play.	2021				
60	7i	5	Support Traditional Neighborhood Development (TND) principles for neighborhood design.	Create a City sidewalks program to supplement projects identified under item 8g) below		X			
61		10	Consider mixed-use where appropriate and address inter-use travel regulations.			X			
62	7j	10	Encourage sidewalks, bike lanes, and local traffic enhancements at these locations.	See LCI plan (item 6e) above		X			
63	7l	5	Identify incentives to recover depressed areas.	See item 6c) above to provide powers to a City Development Authority		X			
64	7n	5	Update signage ordinance as needed.	Update zoning ordinance and development regulations to support integrate aesthetic signage standards.				X	Will include this to new community work program

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
65		5	Address land uses at interchanges and along SR 316.	Identify timing and intensity of development along existing E/W and extension of Drowning Creek Road to Harbins Road on north side of SR 316.				X	County responsibility
66	TRANSPORTATION								
67	8a	1	Identify a favored list of SPLOST projects for the City	Identify a favored list of SPLOST projects for the City	2023				
68	8b	1	Provide specific incentives to encourage developers to build quality roadways that exceed minimal requirements especially on future arterial and collector corridors.	Identify roadway design requirements for developers to meet and possible incentives program to allow higher densities for enhanced design.				X	Revisit in next Comprehensive Plan update.
69	8c	1	Narrow bottleneck constrains north/south connectivity). New bridge is pending; short term construction will relieve current congestion, but can increase traffic due to limited capacity of approaching roadways.	Construct SR 8/Winder Highway/Auburn Road New Connection Bridge and relocate roadway alignments for Dacula Road, Harbins Road and US 29.	2021				
70		5	Develop improvements for access across railroad with new grade separated crossings and additional connecting corridors between Northern Gwinnett and GA-316.	Identify improvements to Broad Street access across CSX RR.	2021				
71		5	Identify additional improvements to create new grade separated crossings and additional connecting corridors between Northern Gwinnett and GA-316.	Identify Old Freemans Mill Road right-of-way for access from SR 316 to US 29 and to extend across CSX RR to Apalachee Road				X	County responsibility

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
72		10	Identify additional improvements to create new grade separated crossings and additional connecting corridors between Northern Gwinnett and GA-316.	Improve Old Freemans Road corridor and extension to provide access from Apalachee Road to SR 316				X	County responsibility
73		5	Georgia SR 316 is being reconstructed as a grade- separated, limited access highway from State Route 120 in Lawrenceville to Apalachee River (Barrow Co. line).	Construct grade-separated, limited access bridge and ramps at Winder Highway (US 29/SR8), Sugarloaf Pkwy Extension, and Harbins Road.				X	County responsibility
74	8d	5	"	Construct grade-separated, limited access bridge and ramps at Harbins Road.				X	County responsibility
75		5	SR 316 improvements will close SR 316 access at Fence Road and include Fence Road bridge over CSX RR to connect to Winder Hwy (US 29).	New Project: Fence Road improvements east of new Sugarloaf Parkway Interchange*				X	County responsibility
76		5	Identify desired frontage roads along SR 316 corridor Address land uses at interchanges, and extend grade separated design to/across Apalachee River, including a Drowning Creek Road interchange.	Improve and extend E/W Drowning Creek Road from Old Freeman Mill Road to Harbins Road on north side of SR 316.				X	County responsibility
77	8c	10	Consider Sugarloaf Parkway Extension Phase 2 will be grade-separated, limited access highway from SR316 to I-85. Interchanges are proposed at SR316, Fence Road, and SR124 (Braselton Highway).	Construct Sugarloaf Parkway extension - Phase 2 from I-85 to SR 316 as grade-separated limited access highway with interchanges at SR316, Fence Road, and SR124 (Braselton Highway). Identify east/west access at Old Peachtree Road and Hurricane Shoals Roads.				X	County responsibility

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
78		10	Assume Stanley Road will be closed at Sugarloaf Parkway Extension Phase 2 ROW	Design Sugarloaf Extension to maintain pedestrian & bicycle access across the extension ROW at Stanley Road crossing to promote alternate access to city.				X	County responsibility
79	8d	5	Encourage access management techniques.	New Project: Improve Dacula Road Access Management				X	County responsibility
80	8e	5	Plan roadway and signal improvements to address congestion (ITS Expansion on Harbins Road)	Intersection improvements: Fence Road at Circle Road				X	County responsibility
81		5	Brooks Road at Bramlett Shoals Road	Intersection improvements: Brooks Road at Bramlett Shoals Road				X	County responsibility
82		5	ITS Expansion on Harbins Road	ITS Expansion Project on Harbins Road				X	County responsibility
83		5	ITS Expansion on Sugarloaf Parkway	ITS Expansion Project on Sugarloaf Parkway				X	County responsibility
84		5	Tanner Road from Harbins Road to West Drowning Creek Road	Improve Tanner Road from Harbins Road to West Drowning Creek Road	2019				
85		10	Harbins Road from SR 316 to Ace McMillan Road*	New Project: Improve Harbins Road from SR 316 to Ace McMillan Road*				X	County responsibility
86	8f	5	Identify where appropriate for pedestrian and bicycle routes.	Prepare City bicycle/pedestrian and trail plan to identify and provide pedestrian and bicycle mobility and accessibility.			X		Will include this to new community work program

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
87	8g	5	Integrate context sensitive design approaches to identify preferred roadway design within walkable districts. Also, See # 7, Land Use and Development, (k).	Adopt a "Complete Streets" approach to road design to accommodate multiple transportation modes, including pedestrians, bicycles, automobiles, and transit.			X		Will include this to new community work program
88	8g	5	Improve alternative modes of access to support mixed use development	Promote plans to expand Inter-County bus system with additional routes between Dacula and Lawrenceville, Buford/ Mall of Georgia, Lawrenceville/Gwinnett Justice Center, and Snellville/ US 78 corridor.				X	County responsibility
89		5	Sidewalk Connections on Dacula Road*	New Project: Sidewalk Connections on Dacula Road*				X	County responsibility
90		5	Harbins Road Sidewalks north of SR 316*	New Project: Harbins Road Sidewalks north of SR 316*	2018				
91		10	Need to coordinate with County proposed trails system	Partner with County Recreation and PATH to coordinate trail system to connect Dacula Park, downtown, and areas south of SR 316 to system.		X			
92		5	Explore opportunities for additional pedestrian and bicycle mobility along new connecting corridors or improved existing corridor or along the Apalachee River corridor and its tributaries.	Identify connecting links and preserve as development occurs.			X		Will include this to new community work program
93	8h	5	Ensure policies accommodate the disabled, the elderly, and meet ADA design standards.	Review design of sidewalks and trails with ADA guidelines.		X			

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
94	8i	5	Review road layouts of new subdivisions to support connectivity.	Require review road layouts of new subdivisions to support connectivity, protect buffers, and encourage attractive aesthetics.		X			
95	8j	10	Locate a Commuter Rail Station for the "Brain Train" between Atlanta and Athens on CSX Railroad/Winder Highway corridor between SR 316 and the Apalachee River.	Continue investigation of Atlanta to Athens Commuter Rail.				X	County responsibility
96		10	Determine location for a commuter station related to the "Brain Train" concept proposal to come through Dacula.	Create a "Livable Centers Initiative" (LCI) Plan to provide an opportunity for the City to specify a location for Commuter Rail station.				X	Revisit in next Comprehensive Plan update.
97	8k	10	Develop on-street parking to reduce the need for surface parking, provide a buffer of parked cars along the roadway between automobile traffic and sidewalks, and encourage reduced speeds through congested areas.	Prepare policy to consider increased urban density parking requirements for mixed use developments			X		Will include this to new community work program
98	Not Titled								
99	9a	5	Expand water + sewer infrastructure to accommodate changing population requirements.	See 1c) above. Prepare infrastructure plans for development of city				X	Revisit in next Comprehensive Plan update.
100	9b	5	identify programs to provide housing choices to keep aging residents in the community.	See 1c) above. Prepare infrastructure plans for development of city	2021				
101	9c	5	Review code enforcement to identify needed redevelopment.	Update zoning ordinance and development regulations to support urban development where appropriate.	2021				

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
102	9c	5	Where appropriate especially to mixed-use centers.	Update zoning ordinance and development regulations to support urban development where appropriate.	2021				
103	9d	5	Encourage where appropriate and include economic assessment regarding decisions of where and when .	See LCI plan (item 6e) above				X	Revisit in next Comprehensive Plan update.
104	9e	5	Continue working with Gwinnett County programs and other providers.	Coordinate local input to programs provided by Gwinnett County programs and other agencies and coordinate with non-profit organizations to provide affordable housing and social services..		X			Continuous program
105	9f	5	Accommodate the anticipated mix of diverse housing needs per zoning and development regulations.		2021				
106	9i	5	Adopt a senior housing ordinance or other similar method to ensure that the needs of the elderly population are properly planned for.	Adopt a senior housing ordinance to support the planning needs to accommodate increased elderly populations.	Pre-2015				This was done already
107	9j	5	Continue coordination with providers.	Support Countywide efforts to accommodate homeless persons (specifically including single female parents with children) and help them become self-sufficient.		X			
109	INTERGOVERNMENTAL COORDINATION								
110	10a	5	Follow through on annexation process to create strong identity of City and boundaries.	Follow through on annexation process to create strong identity of City and boundaries..		X			Continuous program

List of Accomplishments continued

#	ID	Priority (Year 1, 5, 10 or 10+)	Need, Opportunity or Purpose	Project	Date Completed	Currently Underway	Postponed	Not Accomplished	Explanation for project or activity postponed or not accomplished
111	10b	5	Coordinate with County providers.	Coordinate with County providers.		X			Continuous program
112	10c	5	Coordinate with regional Water Plan and other jurisdiction.	Coordinate with regional Water Plan and other jurisdiction.		X			Continuous program
113	10d	5	Coordinate with other jurisdictions.	Coordinate with other jurisdictions.		X			Continuous program
114	10e	5	Coordinate with School Board to identify and resolve issues of safety, security, and access.	Coordinate with School Board to identify and resolve issues of safety, security, and access.		X			Continuous program
115	10f	5	Continue coordinating with providers.	Continue coordinating with providers.		X			Continuous program
116	10g	5	Continue coordinating with providers to define and merge responsibilities.	Maintain cooperative agreements with water and power utility providers, planning agencies, and regulators such as Georgia Power, Oglethorpe Power, MEAG, the Metropolitan NGWP District, Gwinnett Water, ARC, and other public elements of State and federal agencies and private entities that encourage coordination between providers and assist in deciding on shared infrastructure and promotion of the best interests of local citizens.		X			Continuous program

Community Work Program

Item 3.

The CWP is developed from public input and staff recommendations. The strategy ID maps back to the plan elements goals, policies and strategies page. A priority of 1 represents the highest priority to be undertaken. Cost are estimates only.

#	Strategy ID	Priority	Need, Opportunity or Purpose	Project	Responsible Party	Cost	Funding Source
1 - POPULATION & HOUSING							
1	1a	1	Prioritize (eastward) annexation, infrastructure, and planned development between CSX RR and SR316 east to support growth of employment, commerce, and homes to support tax base.	Annex area between CSX RR and along south side of Georgia 316 to accommodate future growth and development.	City	100	City
2	1a	1	Create a "Livable Centers Initiative" (LCI) Plan to provide an opportunity for the City to specify redevelopment of central area to include a variety of housing types.	Identify local \$/match reqts. and pursue LCI grant from ARC to fund Livable Community Initiatives Plan.	City, Gwinnett County	50	City, ARC, Gwinnett County
3	1b	1	Encourage Infill Development	Identify empty and dilapidated lots within the city and promote them for redevelopment.	City, Gwinnett County	staff time	City
2 - TRANSPORTATION							
4	2a	5	Identify where appropriate for pedestrian and bicycle routes.	Prepare City bicycle/pedestrian and trail plan to identify and provide pedestrian and bicycle mobility and accessibility.	Gwinnett County, PATH Foundation	40	GDOT, Gwinnett
5	2b	5	Reduce traffic congestion	Build road behind Kroger, extending Old Peachtree Rd. to Fence Rd. (Approx 0.5 miles)	County	1000	SPLOST, County
6	2c	1	Reduce traffic congestion	Modify zoning/development regulations to encourage connectivity of roads.	City	staff time	City
3 - ECONOMIC DEVELOPMENT							
7	3a	1	Identify and implement gateway signage and landscaping.	Identify and implement gateway signage and landscaping in accord with City "Branding" update	City	180	City
8	3a	1	Strengthen civic pride for residents of Dacula	Create a branding plan	City	50	City
9	3b	2	Community identity/placemaking	Gateway Signage	City	100	City
10	3c	10	Encourage tourism	Plan for New Cultural Center	City	100	City
11	3d	5	Explore Tax Allocation Districts (TAD), impact fees, economic development grant programs, Community Improvements Districts (CIDs), ARC grant programs (LCI), and Infrastructure Development Districts.	Establish City Development Authority to support funding, and consider Tax Allocation Districts (TAD), impact fees, economic development grant programs, Community Improvements Districts (CIDs), ARC grant programs (LCI), and Infrastructure Development Districts..	City	TBD	City
4 - COMMUNITY FACILITIES & SERVICES							
12	4a	5	The current Dacula City Hall has reached maximum capacity	Build a new City Hall at 431 Harbins Road	City	5500	SPLOST
13	4b	1	Need land for future facilities	Identify additional land for future facilities, including annexation opportunities.	City	1100	SPLOST
14	4c	5	Explore grants and service fees for expansion.	Investigate Federal and State grants for community infrastructure.	City	TBD	City
15	4d	10+	City may want to consider impact fees in long term plans	Implement an impact fee program for roads, parks & recreation, and public safety.	City	TBD	City
16	4e	1	Update equipment/increase exercise capacity	Complete playground and exercise upgrade at Maple Creek Park.	City	750	Endowment
17	4f	1	Provide additional amenities for residents and visitors	Explore a pocket park program			
18	4g	1	Need sewer for denser development	Negotiate with County on Sewer			

Community Work Program continued

Item 3.

#	Strategy ID	Priority	Need, Opportunity or Purpose	Project	Responsible Party	Cost	Funding Source
1 - POPULATION & HOUSING							
5 - BROADBAND							
19	5a	5	Need to identify specific locations with inadequate services and ensure that every resident has access to reliable and affordable broadband services.	Identify specific areas that are not served by broadband service providers and create an action plan to promote the deployment of broadband services to these areas by qualified broadband service providers.	Utility Providers, County, City	staff time	City, County, Private Providers
20	5b	5	Need to address disposition/removal of retired towers.	Support legislative direction from the State to define protection of City rights-of-way and decommissioning and removal of retired towers.	Utility Providers, City, County	10	City, County
6 - LAND USE AND DEVELOPMENT PATTERNS							
21	6a, 6b, 6c, 6d	1	Increase employment opportunities	Adopt Future Character Area map and defining narrative as a guide for future land use decisions for rezoning and	City	staff time	City
22	6b, 7c	1	Pursue LCI grant for downtown planning and identify priorities and funding.	Identify local \$/match reqts. and pursue LCI grant from ARC to fund Livable Community Initiatives Plan.	City, Gwinnett County	50	ARC, Gwinnett County
23	6e	2	Maintain existing community character	Review and update building codes as needed	City	staff time	City
24	6f	5	Update signage ordinance as needed.	Update zoning ordinance and development regulations to support integrate aesthetic signage standards.	City	TBD	City
25	6f	3	Reduce traffic congestion	Review and update zoning and development regulations to encourage connectivity and alternative modes of	City	staff time	City
7 - COMMUNITY BUILDING AND ENGAGEMENT							
26	7a, 7b	1	Protect and promote a culture of civic engagement	Add a page to the city website highlighting engagement opportunities and activities of volunteers	City	staff time	City
27	7b	5	Protect and promote a culture of civic engagement	Create an annual recognition event to honor outstanding volunteers and organizations	City	10	City
28	7d	1	Create opportunities for residents to get together socially and build community.	Plan and promote additional events and opportunities for community building such as arts in the park, farmers	City	staff time	City

Appendices

Interview Summaries

--

Environmental Planning Criteria

Required Documentation

TO: City of Dacula Mayor and City Council Members

FROM: Brittni Nix, City Administrator
Hayes Taylor, City Planner
Jack Wilson, City Attorney

DATE: November 2, 2023

SUBJECT: Ordinance to amend Chapter 10, Article II – Floodplain
Management / Flood Damage Prevention

Per the Georgia Department of Natural Resources' (DNR) audit of the City of Dacula's floodplain management ordinances, the Code of Ordinances must be amended to remain in compliance with the National Flood Insurance Program (NFIP). The NFIP is a FEMA-managed program that enables property owners to purchase flood insurance in communities that adopt and implement local floodplain management regulations.

The audit report suggests implementing minor amendments prior to FEMA releasing the new flood instance study (FIS) and flood insurance rate maps (FIRM) panels effective on April 11, 2024. Amendments include referencing current FIS data and widening the range of construction and manufactured homes included under the floodplain management program.

Staff recommends approving the proposed Ordinance to amend the Floodplain Management / Flood Damage Protection Ordinance effective immediately.

AN ORDINANCE

AN ORDINANCE TO AMEND CHAPTER 10, ARTICLE II – FLOODPLAIN MANAGEMENT / FLOOD DAMAGE PREVENTION.

WHEREAS, the City has adopted and maintained a comprehensive Code of Ordinances; and

WHEREAS, the City has undertaken and completed a review and evaluation to of Sections 10-33 and 10-37 of its Code of Ordinances related to Floodplain Management and Flood Damage Prevention and determined that certain amendments are warranted to update those Code Sections in accordance with the Georgia Department of Natural Resources standards and recommendations; and

WHEREAS, it is in the best interest of the health, safety, and welfare of the citizens and businesses within the City of Dacula to amend the Code of Ordinances as outlined herein;

NOW THEREFORE, THE MAYOR AND COUNCIL OF THE CITY OF DACULA HEREBY ORDAINS that the Floodplain Management Flood Damage Ordinance and City Code be amended as follows:

The following amendments to the City's Code of Ordinances, Chapter 10, Article II are approved and adopted:

SECTION 1

Chapter 10, Article II, Section 10-33 is amended as follows:

Sec. 10-33 (a) is deleted and is replaced by:

- (a) The flood insurance study (FIS), dated September 29, 2006, with accompanying maps and other supporting data and any revision thereto. For those land areas acquired by a municipality through annexation, the current effective FIS and data for (Gwinnett County), September 29, 2006, with accompanying maps and other supporting data and any revision thereto.

SECTION 2

Chapter 10, Article II, Section 10-37 is amended as follows:

Sec. 10-37 the reciprocal definitions are deleted and are replaced by:

Existing construction means any structure for which the "start of construction" commenced before August 19, 1986, the date of the initial FIRM for the Community.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before October 26, 1976.

New construction means any structure (see definition) for which the "start of construction" commenced on or after October 26, 1976.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after October 26, 1976.

SECTION 3

In the event any Court of competent jurisdiction determines that any portion of the foregoing amendment is invalid, unconstitutional or otherwise illegal, such rulings shall not impair the validity of the rest and remainder of this amendment.

SECTION 4

All laws and parts of laws in conflict with this Ordinance are hereby repealed.

SECTION 5

This Ordinance and the amendments outlined herein shall be effective immediately upon their adoption by the Mayor and City Council.

SO ORDAINED by the governing authority of the City of Dacula, this 2nd day of November, 2023.

AYES: ____

NAYES: ____

ATTEST:

HUGH D. KING, III
MAYOR, CITY OF DACULA

BRITTNI NIX,
CITY ADMINISTRATOR

ARTICLE II. FLOODPLAIN MANAGEMENT/FLOOD DAMAGE PREVENTION¹

Sec. 10-29. Purpose and intent.

The purpose of this article is to protect, maintain and enhance the public health, safety, environment and general welfare and to minimize public and private losses due to flood conditions in flood hazard areas, as well as to protect the beneficial uses of floodplain areas for water quality protection, streambank and stream corridor protection, wetlands preservation, and ecological and environmental protection by provisions designed to:

- (a) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (b) Restrict or prohibit uses which are dangerous to health, safety and property due to flooding or erosion hazards, or which increase flood heights, velocities, or erosion;
- (c) Control filling, grading, dredging, and other development which may increase flood damage or erosion;
- (d) Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands;
- (e) Limit the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters; and
- (f) Protect the stormwater management, water quality, streambank protection, stream corridor protection, wetland preservation, and ecological functions of natural floodplain areas.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-30. Applicability.

This article shall be applicable to all areas of special flood hazard within the jurisdiction of Dacula.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-31. Reserved.

¹Editor's note(s)—An ordinance adopted Mar. 5, 2020(2) , amended art. II in its entirety to read as herein set out. Former art. II, §§ 10-29—10-46, pertained to flood damage prevention, and derived from the Code of 1993, §§ 15.08.010—15.08.180; and an ordinance adopted May 7, 1985, art. 1, §§ A—D, art. 2, art. 3, §§ A—G, art. 4, §§ A—F, art. 5, §§ A(part), A(1)—A(3), A(5), B.

State law reference(s)—Municipal home rule power to exercise authority regarding stormwater systems, Ga. Const. art. IX, § II, ¶ III(a)(6).

Sec. 10-32. Designation of article administrator.

The City administrator or his/her designee is hereby appointed to administer and implement the provisions of this article.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-33. Basis for establishing areas of special flood hazard, areas of future-conditions flood hazard and associated floodplain characteristics—Flood area maps and studies.

For the purposes of defining and determining "areas of special flood hazard," "areas of future-conditions flood hazard," "areas of shallow flooding," "base flood elevations," "floodplains," "floodways," "future-conditions flood elevations," "future-conditions floodplains," potential flood hazard or risk categories as shown on FIRM maps, and other terms used in this article, the following documents and sources may be used for such purposes and are adopted by reference thereto:

- (a) ~~The flood insurance study (FIS), dated September 9, 2006, with accompanying maps and other supporting data and any revision thereto. For those land areas acquired by a municipality through annexation, the current effective FIS and data for (Gwinnett County), September 9, 2006, with accompanying maps and other supporting data and any revision thereto.~~

The flood insurance study (FIS), dated September 29, 2006, with accompanying maps and other supporting data and any revision thereto. For those land areas acquired by a municipality through annexation, the current effective FIS and data for (Gwinnett County), September 29, 2006, with accompanying maps and other supporting data and any revision thereto.
- (b) Other studies, which may be relied upon for the establishment of the base flood elevation or delineation of the base or one-percent (100-year) floodplain and flood-prone areas, including:
 - (1) Any flood or flood-related study conducted by the United States Army Corps of Engineers, the United States Geological Survey or any other local, state or federal agency applicable to Dacula; and
 - (2) Any base flood study conducted by a licensed professional engineer which has been prepared utilizing FEMA approved methodology and approved by Dacula.
- (c) Other studies, which may be relied upon for the establishment of the future-conditions flood elevation or delineation of the future-conditions floodplain and flood-prone areas, including:
 - (1) Any flood or flood-related study conducted by the United States Army Corps of Engineers, the United States Geological Survey, or any other local, state or federal agency applicable to Dacula; and
 - (2) Any future-conditions flood study conducted by a licensed professional engineer which has been prepared utilizing FEMA approved methodology approved by Dacula.
- (d) The repository for public inspection of the FIS, accompanying maps and other supporting data is located at One Justice Square, 446 West Crogan Street, Suite 150, Lawrenceville, Georgia.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-34. Compatibility with other regulations.

This article is not intended to modify or repeal any other ordinance, rule, regulation, statute, easement, covenant, deed restriction or other provision of law. The requirements of this article are in addition to the requirements of any other ordinance, rule, regulation or other provision of law, and where any provision of this article imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards for human health or the environment shall control.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-35. Severability.

If the provisions of any section, subsection, paragraph, subdivision or clause of this article shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this article.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-36. Warning and disclaimer of liability.

The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur; flood heights may be increased by manmade or natural causes. This article does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This article shall not create liability on the part of Dacula or any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-37. Definitions.

Accessory structure or facility means a structure which is on the same parcel of property as the principal structure and the use of which is incidental to the use of the primary structure.

Addition means any walled and roofed expansion to the perimeter or height of a building.

Appeal means a request for a review of the City administrator's interpretation of any provision of this article.

Area of future-conditions flood hazard means the land area that would be inundated by the one-percent-annual-chance flood based on future-conditions hydrology (100-year future-conditions flood).

Area of shallow flooding means a designated AO or AH zone on a community's flood insurance rate map (FIRM) with a one percent or greater chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard means the land area subject to a one percent or greater chance of flooding in any given year. This includes all floodplain and flood prone areas at or below the base flood elevation designated as zones A, A1-30, A-99, AE, AO, AH, and AR on a community's flood insurance rate map (FIRM).

Base flood means the flood having a one percent chance of being equaled or exceeded in any given year, also known as the 100-year flood.

Base flood elevation means the highest water surface elevation anticipated at any given location during the base flood.

Basement means any area of a building having its floor subgrade below ground level on all sides.

Building has the same meaning as "structure."

Development means any man-made change to improved or unimproved real estate including but not limited to buildings or other structures, mining, dredging, filling, clearing, grubbing, grading, paving, any other installation of impervious cover, excavation or drilling operations or storage of equipment or materials.

Elevated building means a non-basement building which has its lowest elevated floor raised above the ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

~~*Existing construction* means any structure for which the "start of construction" commenced before September 26, 2006.~~

***Existing construction* means any structure for which the "start of construction" commenced before August 19, 1986, the date of the initial FIRM for the Community.**

~~*Existing manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before September 26, 2006~~

***Existing manufactured home park or subdivision* means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before October 26, 1976.**

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA means the Federal Emergency Management Agency.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) The overflow of inland or tidal waters; or
- (b) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map or FIRM means an official map of a community, issued by FEMA, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.

Flood insurance study or FIS means the official report by FEMA providing an examination, evaluation and determination of flood hazards and corresponding flood profiles and water surface elevations of the base flood.

Floodplain or flood-prone area means any land area susceptible to flooding.

Floodproofing means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway or regulatory floodway means the channel of a stream, river, or other watercourse and the adjacent areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Future-conditions flood means the flood having a one percent chance of being equaled or exceeded in any given year based on future-conditions hydrology. Also known as the 100-year future-conditions flood.

Future-conditions flood elevation means the highest water surface elevation anticipated at any given location during the future-conditions flood.

Future-conditions floodplain means any land area susceptible to flooding by the future-conditions flood.

Future-conditions hydrology means the flood discharges associated with projected land-use conditions based on a community's zoning maps, comprehensive land-use plans, and/or watershed study projections, and without consideration of projected future construction of stormwater management (flood detention) structures or projected future hydraulic modifications within a stream or other waterway, such as bridge and culvert construction, fill, and excavation.

Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (c) Individually listed on a state inventory of historic places by states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (d) Individually listed on a local inventory of historic places by communities with historic preservation programs that have been certified either:
 - (1) By an approved state program as determined by the Secretary of the Interior; or
 - (2) Directly by the Secretary of the Interior in states without approved programs.

Lowest floor means the lowest floor of the lowest enclosed area, including basement. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of other provisions of this article.

Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when attached to the required utilities. The term includes any structure commonly referred to as a "mobile home" regardless of the date of manufacture. The term also includes parked trailers, travel trailers and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property. The term does not include a "recreational vehicle."

Mean sea level means the datum to which base flood elevations shown on a community's flood insurance rate map (FIRM) are referenced. For purposes of this article, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988.

~~New construction means any structure (see definition) for which the "start of construction" commenced on or after September 26, 2006~~

New construction means any structure (see definition) for which the "start of construction" commenced on or after October 26, 1976.

~~New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after September 26, 2006~~

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after October 26, 1976.

Owner means the legal or beneficial owner of a site, including but not limited to, a mortgagee or vendee in possession, receiver, executor, trustee, lessee or other person, firm or corporation in control of the site.

Permit means the permit issued by the City of Dacula to the applicant which is required prior to undertaking any development activity.

Recreational vehicle means a vehicle which is:

- (a) Built on a single chassis;
- (b) Four hundred square feet or less when measured at the largest horizontal projection;
- (c) Designed to be self-propelled or permanently towable by light duty truck; and
- (d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Repetitive loss means flood related damage sustained by a structure on two separate occasions during a ten-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.

Site means the parcel of land being developed, or the portion thereof on which the development project is located.

Start of construction includes substantial improvement, and means the date the permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of the structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include initial land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a walled and roofed building (including a gas or liquid storage tank), that is principally above ground, or a manufactured home.

Subdivision means the division of a tract or parcel of land resulting in one or more new lots or building sites for the purpose, whether immediately or in the future, of sale, other transfer of ownership or land development,

and includes divisions of land resulting from or made in connection with the layout or development of a new street or roadway or a change in an existing street or roadway.

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. This term also includes repetitive loss.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement to a structure, taking place during a ten-year period, in which the cumulative cost equals or exceeds 50 percent of the market value of the structure prior to the improvement. The market value of the building means:

- (1) The appraised value of the structure prior to the start of the initial repair or improvement; or
- (2) In the case of damage, the value of the structure prior to the damage occurring.

This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include those improvements of a structure required to comply with existing state or local health, sanitary, or safety code specifications which are the minimum necessary to assure safe living conditions, which have been identified by the code enforcement official. The term does also not include any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Substantially improved existing manufactured home park or subdivision means the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

Variance means a grant of relief from the requirements of this article.

Violation means the failure of a structure or other development to be fully compliant with the requirements of this article. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this article is presumed to be in violation until such time as that documentation is provided.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-38. Permit application requirements.

No owner or developer shall perform any development activities on a site where an area of special flood hazard or area of future-conditions flood hazard is located without first meeting the requirements of this article prior to commencing the proposed activity.

Unless specifically excluded by this article, any landowner or developer desiring a permit for a development activity shall submit to the City of Dacula a permit application on a form provided by the City of Dacula for that purpose.

No permit will be approved for any development activities that do not meet the requirements, restrictions and criteria of this article.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-39. Floodplain management plan requirements.

An application for a development project with any area of special flood hazard or area of future-conditions flood hazard located on the site shall include a floodplain management/flood damage prevention plan. This plan shall include the following items:

- (a) Site plan drawn to scale, which includes but is not limited to:
 - (1) Existing and proposed elevations of the area in question and the nature, location and dimensions of existing and/or proposed structures, earthen fill placement, amount and location of excavation material, and storage of materials or equipment;
 - (2) For all proposed structures, spot ground elevations at building corners and 20-foot or smaller intervals along the foundation footprint, or one-foot contour elevations throughout the building site;
 - (3) Proposed locations of water supply, sanitary sewer, and utilities;
 - (4) Proposed locations of drainage and stormwater management facilities;
 - (5) Proposed grading plan;
 - (6) Base flood elevations and future-conditions flood elevations;
 - (7) Boundaries of the base flood floodplain and future-conditions floodplain;
 - (8) If applicable, the location of the floodway; and
 - (9) Certification of the above by a licensed professional engineer or surveyor.
- (b) Building and foundation design detail, including but not limited to:
 - (1) Elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all proposed structures;
 - (2) Elevation in relation to mean sea level to which any nonresidential structure will be floodproofed;
 - (3) Certification that any proposed nonresidential floodproofed structure meets the criteria in section 10-49(b);
 - (4) For enclosures below the base flood elevation, location and total net area of flood openings as required in section 10-48(e); and
 - (5) Design plans certified by a licensed professional engineer or architect for all proposed structure(s).
- (c) Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development;
- (d) Hard copies and digital files of computer models, if any, copies of work maps, comparison of pre- and post-development conditions base flood elevations, future-conditions flood elevations, flood protection elevations, special flood hazard areas and regulatory floodways, flood profiles and all other computations and other information similar to that presented in the FIS;
- (e) Copies of all applicable state and federal permits necessary for proposed development, including but not limited to permits required by Section 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. § 1334; and
- (f) All appropriate certifications required under this article.

The approved floodplain management/flood damage prevention plan shall contain certification by the applicant that all development activities will be done according to the plan or previously approved revisions. Any and all development permits and/or use and occupancy certificates or permits may be revoked at any time if the construction and development activities are not in strict accordance with approved plans.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-40. Construction stage submittal requirements.

For all new construction and substantial improvements on sites with a floodplain management/flood damage prevention plan, the permit holder shall provide to the City administrator or his/her designee a certified as-built elevation certificate or floodproofing certificate for nonresidential construction including the lowest floor elevation or floodproofing level immediately after the lowest floor or floodproofing is completed. A final elevation certificate shall be provided after completion of construction including final grading of the site. Any lowest floor certification made relative to mean sea level shall be prepared by or under the direct supervision of a licensed land surveyor or professional engineer and certified by same. When floodproofing is utilized for nonresidential structures, said certification shall be prepared by or under the direct supervision of a licensed professional engineer or architect and certified by same using the FEMA floodproofing certificate. This certification shall also include the design and operation/maintenance plan to assure continued viability of the floodproofing measures.

Any work undertaken prior to approval of these certifications shall be at the permit holder's risk. The City administrator or his/her designee shall review the above referenced certification data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further work being allowed to proceed.

Failure to submit certification or failure to make the corrections required hereby shall be cause to issue a stop work order for the project.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-41. Duties and responsibilities of the administrator.

Duties of the City administrator or his/her designee shall include, but shall not be limited to:

- (a) Review all development applications and permits to assure that the requirements of this article have been satisfied and to determine whether proposed building sites will be reasonably safe from flooding;
- (b) Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act, Amendments of 1972, 33 U.S.C. § 1334;
- (c) When base flood elevation data or floodway data have not been provided, then the City administrator or his/her designee shall require the applicant to obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other sources in order to meet the provisions of sections 10-42 through 10-53;
- (d) Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new and substantially improved structures;
- (e) Review and record the actual elevation, in relation to mean sea level to which any substantially improved structures have been floodproofed;
- (f) When floodproofing is utilized for a nonresidential structure, the City administrator or his/her designee shall review the design and operation/maintenance plan and obtain certification from a licensed professional engineer or architect;
- (g) Notify affected adjacent communities and the Georgia Department of Natural Resources (GA DNR) prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA);

- (h) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (e.g. where there appears to be a conflict between a mapped boundary and actual field conditions) the City administrator or his/her designee shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article. Where floodplain elevations have been defined, the floodplain shall be determined based on flood elevations rather than the area graphically delineated on the floodplain maps;
- (i) All records pertaining to the provisions of this article shall be maintained in the office of the City administrator or his/her designee and shall be open for public inspection;
- (j) Coordinate all FIRM revisions with the GA DNR and FEMA; and
- (k) Review variance applications and make recommendations to the City council.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-42. Definition of floodplain boundaries.

- (a) Studied "A" zones, as identified in the FIS, shall be used to establish base flood elevations whenever available.
- (b) For all streams with a drainage area of 100 acres or greater, the future-conditions flood elevations shall be provided by the City of Dacula. If future-conditions elevation data is not available from the City of Dacula, then it shall be determined by a licensed professional engineer using a method approved by FEMA and the City of Dacula.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-43. Definition of floodway boundaries.

The width of a floodway shall be determined from the FIS or FEMA approved flood study. For all streams with a drainage area of 100 acres or greater, the regulatory floodway shall be provided by the City of Dacula. If floodway data is not available from the City of Dacula, it shall be determined by a licensed professional engineer using a method approved by FEMA and the City of Dacula.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-44. General standards for development.

- (a) No development shall be allowed within any area of special flood hazard or area of future-conditions flood hazard that could result in any of the following:
 - (1) Raising the base flood elevation or future-conditions flood elevation equal to or more than 0.01 foot;
 - (2) Reducing the base flood or future-conditions flood storage capacity;
 - (3) Changing the flow characteristics as to the depth and velocity of the waters of the base flood or future-conditions flood as they pass both the upstream and the downstream boundaries of the development area; or
 - (4) Creating hazardous or erosion-producing velocities, or resulting in excessive sedimentation.
- (b) Any development within any area of special flood hazard or area of future-conditions flood hazard allowed under section 10-44(a) shall also meet the following conditions:

- (1) Compensation for storage capacity shall occur between the average ground water table elevation and the base flood elevation for the base flood, and between the average ground water table elevation and the future-condition flood elevation for the future-conditions flood, and lie either within the boundaries of ownership of the property being developed and shall be within the immediate vicinity of the location of the encroachment. Acceptable means of providing required compensation include lowering of natural ground elevations within the floodplain, or lowering of adjoining land areas to create additional floodplain storage. In no case shall any required compensation be provided via bottom storage or by excavating below the elevation of the natural (pre-development) stream channel unless such excavation results from the widening or relocation of the stream channel;
- (2) Cut areas shall be stabilized and graded to a slope of no less than 2.0 percent;
- (3) Effective transitions shall be provided such that flow velocities occurring on both upstream and downstream properties are not increased or decreased;
- (4) Verification of no-rise conditions (less than 0.01 foot), flood storage volumes, and flow characteristics shall be provided via a step-backwater analysis meeting the requirements of section 10-45;
- (5) Public utilities and facilities, such as water, sanitary sewer, gas, and electrical systems, shall be located and constructed to minimize or eliminate infiltration or contamination from flood waters; and
- (6) Any significant physical changes to the base flood floodplain shall be submitted as a conditional letter of map revision (CLOMR) or conditional letter of map amendment (CLOMA), whichever is applicable. The CLOMR submittal shall be subject to approval by the City of Dacula using the FEMA community concurrence forms before forwarding the submittal package to FEMA for final approval. The responsibility for forwarding the CLOMR to FEMA and for obtaining the CLOMR approval shall be the responsibility of the applicant. Within six months of the completion of development, the applicant shall submit as-built surveys and plans for a final letter of map revision (LOMR).

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-45. Engineering study requirements for floodplain encroachments.

An engineering study is required, as appropriate to the proposed development activities on the site, whenever a development proposes to disturb any land within the future-conditions floodplain, except for a residential single-lot development on streams without established base flood elevations and floodways. This study shall be prepared by a licensed professional engineer and made a part of the application for a permit. This information shall be submitted to and approved by the City of Dacula prior to the approval of any permit which would authorize the disturbance of land located within the future-conditions floodplain. Such study shall include:

- (a) Description of the extent to which any watercourse or floodplain will be altered or relocated as a result of the proposed development;
- (b) Step-backwater analysis, using a FEMA-approved methodology approved by the City of Dacula. Cross-sections (which may be supplemented by the applicant) and flow information will be obtained whenever available. Computations will be shown duplicating FIS results and will then be rerun with the proposed modifications to determine the new base flood profiles, and future-conditions flood profiles;
- (c) Floodplain storage calculations based on cross-sections (at least one every 100 feet) showing existing and proposed floodplain conditions to show that base flood floodplain and future-conditions floodplain storage capacity would not be diminished by the development;
- (d) The study shall include a preliminary plat, grading plan, or site plan, as appropriate, which shall clearly define all future-conditions floodplain encroachments.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-46. Floodway encroachments.

Located within areas of special flood hazard are areas designated as floodway. A floodway may be an extremely hazardous area due to velocity flood waters, debris or erosion potential. In addition, floodways must remain free of encroachment in order to allow for the discharge of the base flood without increased flood heights. Therefore, the following provisions shall apply:

- (a) Encroachments are prohibited, including earthen fill, new construction, substantial improvements or other development within the regulatory floodway, except for activities specifically allowed in (b) below.
- (b) Encroachments for bridges, culverts, roadways and utilities within the regulatory floodway may be permitted provided it is demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the encroachment will not result in any increase to the pre-project base flood elevations, floodway elevations, or floodway widths during the base flood discharge. A licensed professional engineer must provide supporting technical data and certification thereof; and
- (c) If the applicant proposes to revise the floodway boundaries, no permit authorizing the encroachment into or an alteration of the floodway shall be issued by the City of Dacula until an affirmative conditional letter of map revision (CLOMR) is issued by FEMA or a no-rise certification is approved by the City of Dacula.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-47. Maintenance requirements.

The property owner shall be responsible for continuing maintenance as may be needed within an altered or relocated portion of a floodplain on the property so that the flood-carrying or flood storage capacity is maintained. The City of Dacula may direct the property owner (at no cost to Dacula) to restore the flood-carrying or flood storage capacity of the floodplain if the owner has not performed maintenance as required by the approved floodplain management plan on file with the City of Dacula.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-48. Provisions for flood damage reduction general standards.

In all areas of special flood hazard and areas of future-conditions flood hazard the following provisions apply:

- (a) New construction and substantial improvements of structures (residential or nonresidential), including manufactured homes, shall not be allowed within the limits of the future-conditions floodplain, unless all requirements of sections 10-44, 10-45 and 10-46;
- (b) New construction and substantial improvements shall be anchored to prevent flotation, collapse and lateral movement of the structure;
- (c) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (d) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;

- (e) Elevated buildings. All new construction and substantial improvements that include any fully enclosed area located below the lowest floor formed by foundation and other exterior walls shall be designed so as to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater.
- (1) Designs for complying with this requirement must either be certified by a licensed professional engineer or architect to meet or exceed the following minimum criteria:
 - a. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - b. The bottom of all openings shall be no higher than one foot above grade; and
 - c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions.
 - (2) So as not to violate the "lowest floor" criteria of this article, the unfinished and flood resistant enclosure shall solely be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area; and
 - (3) The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.
- (f) All heating and air conditioning equipment and components (including ductwork), all electrical, ventilation, plumbing, and other service facilities shall be designed and/or located three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher, so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (g) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
- (h) All proposed development shall include adequate drainage and stormwater management facilities per the requirements of Dacula to reduce exposure to flood hazards;
- (i) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (j) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (k) On-site waste disposal systems shall be located and constructed to avoid impairment to, or contamination from, such systems during flooding;
- (l) Other public utilities such as gas and electric systems shall be located and constructed to avoid impairment to them, or public safety hazards from them, during flooding;
- (m) Any alteration, repair, reconstruction or improvement to a structure which is not compliant with the provisions of this article, shall be undertaken only if the nonconformity is not furthered, extended or replaced;
- (n) If the proposed development is located in multiple flood zones, or multiple base flood elevations cross the proposed site, the higher or more restrictive base flood elevation or future condition elevation and development standards shall take precedence;
- (o) When only a portion of a proposed structure is located within a flood zone or the future conditions floodplain, the entire structure shall meet the requirements of this article; and

- (p) Subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, shall be reasonably safe from flooding:
- (1) All such proposals shall be consistent with the need to minimize flood damage within the flood-prone area;
 - (2) All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage; and
 - (3) Adequate drainage shall be provided to reduce exposure to flood hazards.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-49. Building standards for structures and buildings within the future-conditions floodplain.

(a) *Residential buildings.*

- (1) *New construction.* New construction of principal residential structures shall not be allowed within the limits of the future-conditions floodplain unless all requirements of sections 10-44, 10-45 and 10-46 have been met. If all of the requirements of sections 10-44, 10-45 and 10-46 have been met, all new construction shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1).
- (2) *Substantial improvements.* Substantial improvement of any principal residential structure shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1).

(b) *Nonresidential buildings.*

- (1) *New construction.* New construction of principal nonresidential structures shall not be allowed within the limits of the future-conditions floodplain unless all requirements of sections 10-44, 10-45 and 10-46 have been met. If all of the requirements of sections 10-44, 10-45 and 10-46 have been met, all new construction shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation or at least as high as the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1). New construction that has met all of the requirements of sections 10-44, 10-45 and 10-46 may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is higher, with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the City administrator or his/her designee using the FEMA floodproofing certificate along with the design and operation/maintenance plan.

- (2) *Substantial improvements.* Substantial improvement of any principal nonresidential structure located in A1-30, AE, or AH zones, may be authorized by the City administrator or his/her designee to be elevated or floodproofed. Substantial improvements shall have the lowest floor, including basement, elevated no lower than one foot above the base flood elevation or at least as high as the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1). Substantial improvements may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be watertight to one foot above the base flood elevation, or at least as high as the future-conditions flood elevation, whichever is higher, with walls substantially impermeable to the passage of water and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions above, and shall provide such certification to the City administrator or his/her designee using the FEMA floodproofing certificate along with the design and operation/maintenance plan.
- (c) *Accessory structures and facilities.* Accessory structures and facilities (i.e., barns, sheds, gazebos, detached garages, recreational facilities and other similar non-habitable structures and facilities) which meet the requirements of sections 10-44, 10-45 and 10-46 and are permitted to be located within the limits of the future-conditions floodplain shall be constructed of flood-resistant materials and designed to provide adequate flood openings in accordance with section 10-48(e)(1) and be anchored to prevent flotation, collapse and lateral movement of the structure.
- (d) *Standards for recreational vehicles.* All recreational vehicles placed on sites must either:
- (1) Be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is licensed, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached structures or additions); or
 - (2) Meet all the requirements for residential buildings—substantial improvements (section 10-49(a)), including the anchoring and elevation requirements.
- (e) *Standards for manufactured homes.*
- (1) New manufactured homes shall not be allowed to be placed within the limits of the future-conditions floodplain unless all requirements of sections 10-44, 10-45 and 10-46 have been met. If all of the requirements of sections 10-44, 10-45 and 10-46 have been met, all new construction and substantial improvement shall have the lowest floor, including basement, elevated no lower than three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1).
 - (2) Manufactured homes placed and/or substantially improved in an existing manufactured home park or subdivision shall be elevated so that either:
 - a. The lowest floor of the manufactured home is elevated no lower than three feet above the level of the base flood elevation, or one foot above the future-conditions flood elevation, whichever is higher; or
 - b. The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less than 36 inches in height above grade.

- (3) All manufactured homes must be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement in accordance with standards of section 10-48(g).

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-50. Building standards for structures and buildings authorized adjacent to the future-conditions floodplain.

- (a) *Residential buildings.* For new construction and substantial improvement of any principal residential building or manufactured home, the elevation of the lowest floor, including basement and access to the building, shall be at least three feet above the base flood elevation or one foot above the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1).
- (b) *Nonresidential buildings.* For new construction and substantial improvement of any principal nonresidential building, the elevation of the lowest floor, including basement and access to the building, shall be at least one foot above the level of the base flood elevation or at least as high as the future-conditions flood elevation, whichever is higher. Should solid foundation perimeter walls be used to elevate the structure, openings sufficient to automatically equalize the hydrostatic flood forces on exterior walls shall be provided in accordance with standards of section 10-48(e)(1). Nonresidential buildings may be floodproofed in lieu of elevation.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-51. Building standards for residential single-lot developments on streams without established base flood elevations and floodway (A zones).

For a residential single-lot development not part of a subdivision that has areas of special flood hazard, where streams exist but no base flood data have been provided (A zones), the City administrator or his/her designee shall review and reasonably utilize any available scientific or historic flood elevation data, base flood elevation and floodway data, or future-conditions flood elevation data available from a federal, state, local or other source, in order to administer the provisions and standards of this article.

If data are not available from any of these sources, the following provisions shall apply:

- (a) No encroachments, including structures or fill material, shall be located within an area equal to twice the width of the stream or 50 feet from the top of the bank of the stream, whichever is greater.
- (b) In special flood hazard areas without base flood or future-conditions flood elevation data, new construction and substantial improvements shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than three feet above the highest adjacent grade at the building site. Flood openings sufficient to facilitate automatic equalization of hydrostatic flood forces shall be provided for flood prone enclosures in accordance with section 10-48(e)(1).

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-52. Building standards for areas of shallow flooding (AO zones).

Areas of special flood hazard may include designated "AO" shallow flooding areas. These areas have base flood depths of one to three feet above ground, with no clearly defined channel. In these areas the following provisions apply:

- (a) All new construction and substantial improvements of residential and nonresidential structures shall have the lowest floor, including basement, elevated to no lower than one foot above the flood depth number in feet specified on the flood insurance rate map (FIRM), above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least three feet above the highest adjacent grade. Flood openings sufficient to facilitate automatic equalization of hydrostatic flood forces shall be provided in accordance with standards of section 10-48(e)(1);
- (b) New construction and substantial improvement of a nonresidential structure may be floodproofed in lieu of elevation. The structure, together with attendant utility and sanitary facilities, must be designed to be water tight to the specified FIRM flood level plus one foot above the highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice, and shall provide such certification to the City administrator or his/her designee using the FEMA floodproofing certificate along with the design and operation/maintenance plan; and
- (c) Drainage paths shall be provided to guide floodwater around and away from any proposed structure.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-53. Standards for subdivisions of land.

- (a) All subdivision proposals shall identify the areas of special flood hazard and areas of future-conditions flood hazard therein and provide base flood elevation data and future-conditions flood elevation data;
- (b) All residential lots in a subdivision proposal shall have sufficient buildable area outside of the future-conditions floodplain such that encroachments into the future-conditions floodplain for residential structures will not be required; and
- (c) All subdivision plans will provide the elevations of proposed structures in accordance with section 10-39(b).

(Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-54. Variance procedures.

The following variance and appeals procedures shall apply to an applicant who has been denied a permit for a development activity, or to an owner or developer who has not applied for a permit because it is clear that the proposed development activity would be inconsistent with the provisions of this article.

- (a) Requests for variances from the requirements of this article shall be submitted to the City of Dacula. All such requests shall be heard and decided in accordance with procedures to be published in writing by the City of Dacula. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.
- (b) Any person adversely affected by any decision of the City of Dacula shall have the right to appeal such decision to the City council as established by Dacula in accordance with procedures to be published in writing by the City council. At a minimum, such procedures shall include notice to all affected parties and the opportunity to be heard.
- (c) Any person aggrieved by the decision of the City council may appeal such decision to the Gwinnett County Superior Court, as provided in O.C.G.A. § 5-4-1.

- (d) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure, and the variance issued shall be the minimum necessary to preserve the historic character and design of the structure.
 - (e) Variances may be issued for development necessary for the conduct of a functionally dependent use, provided the criteria of this section are met, no reasonable alternative exists, and the development is protected by methods that minimize flood damage during the base flood and create no additional threats to public safety.
 - (f) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
 - (g) In reviewing such requests, the City of Dacula and City council shall consider all technical evaluations, relevant factors, and all standards specified in this and other sections of this article.
 - (h) Conditions for variances:
 - (1) A variance shall be issued only when there is:
 - a. A finding of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship; and
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, or the creation of a nuisance.
 - (2) The provisions of this article are minimum standards for flood loss reduction; therefore, any deviation from the standards must be weighed carefully. Variances shall only be issued upon determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (3) Any person to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation of the proposed lowest floor and stating that the cost of flood insurance resulting from the lowest floor elevation being placed below the base flood elevation will be commensurate with the increased risk to life and property, and that such costs may be as high as \$25.00 for each \$100.00 of insurance coverage provided.
 - (4) The City administrator or his/her designee shall maintain the records of all variance actions, both granted and denied, and report them to the Georgia Department of Natural Resources and the Federal Emergency Management Agency upon request.
 - (i) Any person requesting a variance shall, from the time of the request until the time the request is acted upon, submit such information and documentation as the City of Dacula and City council shall deem necessary for the consideration of the request.
 - (j) Upon consideration of the factors listed above and the purposes of this article, the City of Dacula and the City council may attach such conditions to the granting of variances as they deem necessary or appropriate, consistent with the purposes of this article.
 - (k) Variances shall not be issued "after the fact."
- (Ord. of 3-5-2020(2) , §§ 1, 2)

Sec. 10-55. Violations, enforcement and penalties.

Any action or inaction which violates the provisions of this article or the requirements of an approved stormwater management plan or permit, may be subject to the enforcement actions outlined in this section. Any such action or inaction which is continuous with respect to time is deemed to be a public nuisance and may be abated by injunctive or other equitable relief. The imposition of any of the penalties described below shall not prevent such equitable relief.

- (a) *Notice of violations.* If the City of Dacula determines that an applicant or other responsible person has failed to comply with the terms and conditions of a permit, an approved stormwater management plan or the provisions of this article, it shall issue a written notice of violation to such applicant or other responsible person. Where a person is engaged in activity covered by this article without having first secured a permit therefor, the notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site.

The notice of violation shall contain:

- (1) The name and address of the owner or the applicant or the responsible person;
 - (2) The address or other description of the site upon which the violation is occurring;
 - (3) A statement specifying the nature of the violation;
 - (4) A description of the remedial measures necessary to bring the action or inaction into compliance with the permit, the stormwater management plan or this article and the date for the completion of such remedial action;
 - (5) A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed; and
 - (6) A statement that the determination of violation may be appealed to the City of Dacula by filing a written notice of appeal within 30 days after the notice of violation.
- (b) *Penalties.* In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed. Before taking any of the following actions or imposing any of the following penalties, the City of Dacula shall first notify the applicant or other responsible person in writing of its intended action, and shall provide a reasonable opportunity, of not less than ten days (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) to cure such violation. In the event the applicant or other responsible person fails to cure such violation after such notice and cure period, the City of Dacula may take any one or more of the following actions or impose any one or more of the following penalties:
- (1) *Stop work order.* The City of Dacula may issue a stop work order which shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.
 - (2) *Withhold certificate of occupancy.* City of Dacula may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

- (3) *Suspension, revocation or modification of permit.* City of Dacula may suspend, revoke or modify the permit authorizing the development project. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the City of Dacula may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- (4) *Civil penalties.* In the event the applicant or other responsible person fails to take the remedial measures set forth in the notice of violation or otherwise fails to cure the violations described therein within ten days, or such greater period as the City of Dacula shall deem appropriate (except, that in the event the violation constitutes an immediate danger to public health or public safety, 24 hours notice shall be sufficient) after the City of Dacula has taken one or more of the actions described above, the City of Dacula may impose a penalty not to exceed \$1,000.00 (depending on the severity of the violation) for each day the violation remains unremedied after receipt of the notice of violation.
- (5) *Criminal penalties.* For intentional and flagrant violations of this article, the City of Dacula may issue a citation to the applicant or other responsible person, requiring such person to appear in Dacula municipal court to answer charges for such violation. Upon conviction, such person shall be punished by a fine not to exceed \$1,000.00 or imprisonment for 60 days or both. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.

(Ord. of 3-5-2020(2) , §§ 1, 2)

Secs. 10-56—10-65. Reserved.

**A RESOLUTION OF THE CITY OF DACULA, GEORGIA
URGING THE UNITED STATES FOOD & DRUG ADMINISTRATION TO
PRIORITIZE AND INCREASE ENFORCEMENT ACTIONS AGAINST
MANUFACTURERS AND RETAILERS OF ILLEGAL DISPOSABLE NICOTINE
VAPOR PRODUCTS IN KID FRIENDLY FLAVORS; AND FOR OTHER
PURPOSES.**

WHEREAS, in January 2020 the Food & Drug Administration “FDA” issued industry guidance that detailed the agency’s enforcement priorities relating to e-cigarettes, vapes and other electronic nicotine delivery systems (“ENDS”) products, that prioritized enforcement against “any flavored, cartridge-based ENDS products; and

WHEREAS, the January 2020 guidance created a loophole, whereby all disposable vaping products were insulated from any enforcement for going on three years; and

WHEREAS, since January 2020, millions of illegal, disposable vaping products, primarily manufactured in China and produced in kid friendly flavors have poured into the United States; and

WHEREAS, since 2019, the CDC’s National Youth Tobacco Survey shows that youth usage of disposable vaping products is up 2188%; and

WHEREAS, the FDA’s Center for Tobacco Products Dr. Brian King recently stated “the science clearly shows that a majority of youth who use e-cigarettes report that the products they are using are disposable and flavored.”; and

WHEREAS, an overwhelming majority of disposable vaping products have been introduced after the FDA regulatory submission threshold date of August 8, 2016 and/or have not complied with FDA’s regulatory pathways for the marketing of new tobacco products that ensures products on store shelves are appropriate for the protection of public health; and

WHEREAS, the health, safety, and welfare of the citizens of the City is the highest priority of the City, its elected officials, and staff;

NOW, THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DACULA, GEORGIA, that we urge the FDA to provide clear enforcement guidance to retailers and distributors in the United States.

BE IT FURTHER RESOLVED, that we urge the FDA to publish a directory of disposable vapor products that can be sold subject to FDA enforcement discretion so retailers can remove all illegal disposable vapor products from shelves.

BE IT FURTHER RESOLVED, that the we urge the federal government to allocate resources for federal authorities to enforce these actions across all jurisdictions, at all ports and border control points of entry.

BE IT FINALLY RESOLVED, that upon adoption of this resolution the City Administrator shall immediately transmit an electronic copy to every member of the Georgia Congressional Delegation, the White House Office of Intergovernmental Affairs and the Commissioner of the Food & Drug Administration.

SO ORDAINED by the governing authority of the City of Dacula, this 2nd day of November, 2023.

AYES: ____

NAYES: ____

ATTEST:

HUGH D. KING, III
MAYOR, CITY OF DACULA

BRITTNI NIX,
CITY ADMINISTRATOR

**INTERGOVERNMENTAL AGREEMENT BETWEEN
GWINNETT COUNTY, GWINNETT COUNTY WATER AND SEWERAGE
AUTHORITY AND THE CITY OF DACULA FOR
IMPLEMENTATION OF THE MAXEY STREET SEWER IMPROVEMENT
PROJECT**

STATE OF GEORGIA

CITY OF DACULA

COUNTY OF GWINNETT

THIS INTERGOVERNMENTAL AGREEMENT (this “Agreement”) is made and entered into on the ____ day of _____, 2023, by and between GWINNETT COUNTY, GEORGIA, a political subdivision of the State of Georgia, acting by and through its duly elected Board of Commissioners (hereinafter referred to as "Gwinnett County"), the GWINNETT COUNTY WATER & SEWERAGE AUTHORITY, a body corporate and politic and a political subdivision of the State of Georgia, acting by and through its duly appointed governing authority (hereinafter referred to as the “WSA”), and the CITY OF DACULA, GEORGIA, a municipal corporation of the State of Georgia, acting by and through its duly elected Mayor and Council (hereinafter referred to as "Dacula"). Gwinnett County and the WSA are collectively and sometimes individually referred to herein as “Gwinnett”. Gwinnett, the WSA and Dacula may be referred to herein collectively as the “Parties” or individually as a “Party”.

RECITALS

WHEREAS, Gwinnett County operates and maintains the sewer facilities and appurtenances owned by the WSA to provide utility services to the residents of Gwinnett County, including those within the municipal limits of the City of Dacula; and

WHEREAS, Dacula desires to partner with Gwinnett for the implementation of a sewer improvement project identified to expand service in the area near the intersection of Winder Highway and Harbins Road (hereinafter the “Maxey Street Sewer Project”) the preliminary alignment of which is depicted in Exhibit “A” attached hereto and incorporated herein by this reference and;

WHEREAS, Dacula has applied for and received funding under the 2021 American Rescue Plan Act (hereinafter the “ARPA”), which may be used to fund water and sewer infrastructure projects; and

WHEREAS, ARPA funds must be obligated by December 31, 2024 and the ARPA projects must be completed by December 31, 2026; and

WHEREAS, construction of the Maxey Street Sewer Project will benefit public health, safety and the environment by allowing existing and proposed commercial and residential development to connect to sewer within the municipal limits of the City of Dacula, allow for septic-to-sewer conversion, expand service within the overall basin, and will allow Gwinnett to expand its water and sewer rate base; and

WHEREAS, the Parties desire to partner and work together in good faith for the implementation of the Maxey Street Sewer Project.

TERMS AND CONDITIONS

NOW, THEREFORE, for and in consideration of the mutual covenants, promises, terms, and agreements contained herein and for other good and valuable mutual consideration, the receipt and sufficiency of which is hereby acknowledged, it is mutually agreed by and among the Parties as follows:

1. Recitals.

The above Recitals are true, correct and form a material part of this Agreement.

2. Term of Agreement and Termination.

The term of this Agreement shall begin on the day and date hereinabove written and shall extend thereafter for a period of fifty (50) years.

3. Obligations of the City of Dacula.

- a) Dacula shall acquire all necessary temporary and permanent easements, right-of-way, and other property rights for the Maxey Street Sewer Project no later than June 30, 2024 pending receipt of plats from Gwinnett pursuant to item 4(b) below. Dacula shall provide to Gwinnett a monthly acquisition status report until all easements and other property rights are obtained, beginning on the first day of the month following the execution of this agreement.
- b) Dacula shall be responsible for all associated acquisition costs for the Maxey Street Sewer Project, including all condemnation costs, if necessary.
- c) Dacula shall coordinate with Gwinnett on any third-party services for the acquisition of easements.
- d) All easements and other necessary property interests obtained by Dacula shall be donated and assigned to the WSA.
- e) Dacula shall obtain approval from Gwinnett for any and all easement stipulations and terms before finalizing any easements with the property owners.
- f) Dacula shall contribute Eighty Percent (80%) of the Maxey Street Sewer Project construction cost with a not to exceed amount of One Million Two Hundred Thousand Dollars (\$1,200,000.00), whichever is less. Dacula shall pay half this

amount within thirty (30) days of Gwinnett awarding construction of the Maxey Street Sewer Project, and the remaining half upon project completion. In no event shall Dacula's contribution exceed One Million Two Hundred Thousand Dollars (\$1,200,000.00).

4. Obligations of Gwinnett.

- a) Gwinnett shall acquire the services of a professional engineer to prepare construction drawings and specifications for both the Maxey Street Sewer Project in accordance with Gwinnett County's current water and sewer standards and specifications.
- b) Gwinnett shall provide to Dacula any temporary and permanent easement plats for the Maxey Street Sewer Project no later than February 29, 2024.
- c) Gwinnett shall award construction contract(s) and administer the contract(s) in the amount identified herein for the Maxey Street Sewer Project in accordance with its rules and regulations. Gwinnett shall notify Dacula of any changes in scope of work or the contract price.
- d) Gwinnett shall work in good faith to complete the Maxey Street Sewer Project by December 31, 2026 pending acquisition of all necessary easements by Dacula pursuant to item 3(a) above.
- e) Gwinnett shall have final approval of any and all stipulations associated with the temporary and permanent easements.
- f) Gwinnett shall contribute the remaining construction cost for the Maxey Street Sewer Project beyond the contribution made by Dacula outlined in 3(f) above for the completion of the project.
- g) Gwinnett shall be responsible for all operation, maintenance, and repair of the sewer facilities and appurtenances once constructed.

5. Reservation of Rights.

Gwinnett reserves the right to utilize all real estate rights acquired for the Sewer Project for any and all purposes not inconsistent with the property rights herein obtained.

6. Remedies.

- a) In the event of a breach or attempted or threatened breach of the provisions of this instrument, the Parties agree that the remedy at law available to enforce this instrument would in all likelihood be inadequate, and therefore, the provisions of this instrument may be enforced by a mandatory or prohibitory injunction or decree of specific performance upon the application of the Party which is enforcing the provision.
- b) The remedies herein are in addition to and not in lieu of any other remedies available under applicable law.

7. Entire Agreement.

This Agreement constitutes the entire agreement between Dacula and Gwinnett County and the WSA with respect to the subject matter hereof and supersedes all prior agreements, understandings, discussions, negotiations, and undertakings, whether written or oral, and there are no inducements, representations, warranties or understandings that do not appear within the terms and provisions of this Agreement.

8. Severability.

It is understood and agreed by and between the Parties that if any condition or provision contained in this Agreement is held to be invalid by any court of competent jurisdiction, such invalidity shall not affect the validity of any other such condition or provision herein contained, provided, however, that invalidity of any such condition or provision does not materially prejudice either Gwinnett County, the WSA or Dacula with respect to its respective rights and obligations contained in the remaining valid conditions or provisions of this Agreement.

9. Successors and Assigns.

The provisions of this Agreement shall bind and inure to the benefit of the Parties and their respective representatives, successors, and permitted assigns.

10. Evidence.

The Parties agree that if Gwinnett County or the WSA is sued in subsequent litigation concerning the Sewer Project, including, but not limited to, the acquisition of easements or other property interests or the construction of any of the subject facilities and appurtenances, this Agreement may be introduced into evidence.

11. Attorneys' Fees.

Each Party shall bear its own costs, expenses and claims to attorneys' fees incurred or arising out of this Agreement or the Sewer Project.

12. Controlling Law, Venue.

This Agreement was made and shall be performed in Gwinnett County, Georgia, and shall be construed and interpreted under the laws of the State of Georgia. Venue to enforce this Agreement shall be solely in the Superior Court of Gwinnett County, Georgia, and all defenses to venue are waived.

13. Further Assurances.

The Parties will sign any additional papers, documents and other assurances, and take all acts that are reasonably necessary to carry out the intent of this Agreement.

14. Construction.

This Agreement has been jointly negotiated and drafted. This Agreement shall be construed as a whole according to its fair meaning. The language of this Agreement shall not be constructed for or against any Party.

15. Legal Advice.

In entering into this Agreement, the Parties acknowledge that their legal rights are affected by this Agreement and that they have sought and obtained the legal advice of their attorneys. Each Party has made such an investigation of the law and the facts pertaining to this Agreement and of all other matter pertaining thereto as it or they deem necessary. They further represent that the terms of this Agreement have been completely read by them and that all terms are fully understood and voluntarily accepted by them.

16. Amendment of Agreement.

Only a writing signed by each of the Parties may modify this Agreement.

17. Authority.

The signature of a representative of any Party to this Agreement is a warranty that the representative has authority to sign this Agreement and to bind any and all principals to the terms and conditions hereof.

18. Headings.

The headings of the paragraphs contained herein are intended for reference purposes only and shall not be used to interpret the terms and conditions contained herein or the rights granted hereby.

19. Time.

Time is of the essence with respect to all duties and obligations set forth in this Agreement.

20. Notice.

- (a) Any notice, request, direction, consent, approval, or other communication required or permitted under this Agreement must be in writing and provided to Dacula at its address set forth below:

City of Dacula
City Administrator
442 Harbins Road
Dacula, Georgia 30019

With a copy to:

Robert Jackson Wilson
City Attorney
295 South Culver Street, Suite C
Lawrenceville, GA 30046

- (b) Any notice, request, direction, consent, approval, or other communication required or permitted under this Agreement must be in writing and provided to Gwinnett County at its address set forth below:

Gwinnett County Administrator
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, Georgia 30046

With a copy to:

Gwinnett County Attorney
Gwinnett Justice and Administration Center
75 Langley Drive
Lawrenceville, Georgia 30046

- (c) Any notice, request, direction, consent, approval, or other communication required or permitted under this Agreement must be in writing and provided to the WSA at its address set forth below:

Chairman
Gwinnett County Water and Sewerage Authority
684 Winder Highway
Lawrenceville, Georgia 30045

With a copy to:

Director
Department of Water Resources
684 Winder Highway
Lawrenceville, Georgia 30045

- (d) Notice via email is acceptable only as an additional method of notice to either regular or certified mail, statutory overnight mail, or hand-delivery.

IN WITNESS WHEREOF, the parties hereto, acting by and through their duly authorized officials, have caused this Agreement to be executed in two counterparts, each to be considered as an original, by their authorized representative the day and date herein above written.

CITY OF DACULA, GEORGIA

By: _____
Hugh D. King, III Mayor

Signed, sealed and delivered in the
presence of:

ATTEST:

Unofficial witness

City Clerk

(City Seal)

Notary Public

Signed, sealed and delivered in the
presence of:

GWINNETT COUNTY, GEORGIA

Unofficial witness

Nicole L. Hendrickson
CHAIRWOMAN
BOARD OF COMMISSIONERS

Notary Public

ATTEST:

[Notarial seal]

County Clerk

(County Seal)

Approved as to Form:

Senior Assistant County Attorney

GWINNETT COUNTY WATER &
SEWERAGE AUTHORITY

By: _____

Printed Name: _____
Chairman

ATTEST:

Printed Name: _____
Secretary

Signed, sealed and delivered in the
presence of:

NOTARY:

Unofficial witness

[Notarial seal]

Approved as to Form:

Attorney



TO: Mayor and City Council of the City of Dacula

FROM: Brittni Nix, City Administrator

DATE: October 24, 2023

SUBJECT: Bid package for Brookton Place subdivision improvements

The Brookton Place Subdivision Asphalt Milling and Repaving Project bid documents have been finalized and provided for your review. The project scope includes:

- Asphalt deep patch mill sections of road experiencing asphalt failures. Deep patch milled areas will be filled with 4" of 25 mm Superpave Asphalt.
- Milling and repaving the entire road length to be flush with the existing gutter line.
- Replacing damaged sections of sidewalk, curb, gutter, and driveway aprons as identified on the construction plans.
- Thermoplastic stop bar striping and crosswalk striping at subdivision egress.
- Sod disturbed areas.

The proposed improvements have an estimated OPCC (Opinion of Probable Construction Cost) of \$1,089,893.18 dated September 22, 2023. Staff has submitted this project to receive Local Maintenance Improvement Grant (LMIG) funding of \$82,433.37. The remainder of the project will be funded with SPLOST.

Staff requests the Mayor and City Council approve the bid package as provided and grant authorization to solicit for public bids.

Project Manual
for
Brookton Place Subdivision Asphalt Milling and Repaving Project
for
City of Dacula
G e o r g i a

October 20, 2023

Prepared By:

Bowman

4174 Silver Peak Parkway
Suwanee, Georgia 30024

"Brookton Place Subdivision Asphalt Milling and Repaving Project"
for
 City of Dacula, Georgia

SECTION TITLE

DIVISION 0 - BIDDING/CONTRACT REQUIREMENTS

00 002	Table of Contents
00 020	Advertisement for Bids
00 100	Instructions to Bidders
00 300	Bid Proposal Form
00 500	"DRAFT" Contract
00 600	Bonds & Certificates
00 700	General Conditions
00 801	Supplementary Conditions
00 802	Notice of Commencement
00 900	Addenda and Clarifications

DIVISION 1 - GENERAL REQUIREMENTS

01 000	Project Scope of Work & Performance Specifications
01 370	Application for Payment
01 400	Quality Control
01 500	Temporary Controls
01 580	Pavement Markings
01 630	Substitutions
01 700	Contract Close-Out
01 740	General Contractor Warranty
01 741	Sub-Contractor Warranty
01 742	Certificate of Contractor / Statutory Affidavit
01 743	Georgia Security and Immigration Contractor/Subcontractor Affidavit

DIVISION 2 – SITE

02 050	Demolition
02 200	Earthwork
02 270	Slope Protection and Erosion Control
02-514	Site Concrete
02 547	Bituminous Surfacing
02 580	Pavement Marking
02 720	Site Drainage
02 930	Lawns and Grasses

APPENDIX

- Asphalt Core Report by Atlas Technical Consultants, LLC.
- Integrated Science Engineering – CCTV Storm System.
- Project Drawings dated 10-20-2023.

ADVERTISEMENT FOR BIDS

Sealed bids for the "Brookton Place Subdivision Asphalt Milling and Repaving Project" will be received by the City of Dacula at Dacula City Hall – 442 Harbins Road, Dacula, Ga. 30019, until **2:30 PM** local time on **Thursday, December 14, 2023**. Any bid received after said time and date will not be accepted by the City of Dacula.

The Contract Documents, consisting of Advertisement for Bids, Information for Bidders, Bid Proposal Form, Form of Agreement, Drawings, Specifications, Bid Forms, Bid Bonds, Performance Bond, Payment Bond, Bidders Qualifications Forms, and other Contract Documents may be examined at the following locations: **(1) Bowman Consulting Group, Ltd. (Bowman)**, 4174 Silver Peak Parkway, Suwanee, Georgia 30024. Contact: Kevin D. Whigham, P.E. (770) 932-6550 email: kwhigham@bowman.com; **(2) National Association of Minority Contractors**, 1142 Main Street, Forest Park, Georgia 30297, info@namc-atl.org. Contact: Mr. Billy Freeman, Jr. (404) 304-5967, bfreeman@techniqueconcrete.com, Mr. Arthur J. Queen (404) 288-9521, ajqueen@egmatlana.com; **(3) Hispanic Contractors Association GA**, 2750 Buford Highway NE, Atlanta, Georgia 30341. Contact: Ms. Andrea Rivers (404) 229-8070, info@georgiahac.org; and **(4) Georgia Procurement Website**.

All Bidders must be registered with Bowman to assure that Bidders receive all addenda and/or clarifications to the Bid Documents in a timely manner, it is highly recommended that all bidders obtain at least one complete set of Bid Documents directly from Bowman. Entities that do not obtain Bid Documents from this source will not receive addenda and/or clarifications directly from Bowman. Bidders relying on plan rooms or other services to obtain Bid Documents, rather than obtaining them directly from the source are doing so at their own risk. Copies of the Documents and specifications will be provided in Electronic Format and can be obtained by contacting Bowman to be placed on the Bidder's List. Electronic Copies will be made available on Bowman FTP website or sent by email at no charge. If hard copies are required, there is a non-refundable cost for each set of plans and specifications of \$150.00 (cash or check).

A. BASE BID –

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision, and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the City of Dacula "Brookton Place Subdivision Asphalt Milling and Repaving Project" as follows:

23-0805

ADVERTISEMENT FOR BIDS

00 020-2

The scope of work includes asphalt deep patch milling, standard edge milling, and repaving of all streets within the Brookton Place Subdivision. All areas for deep patch milling are marked in orange paint by the City and Owner's representative. Contractor shall visit the streets identified and determine his own quantities for bidding the project. The project service area includes improvements for the entire length of Brookton Place Subdivision interior streets. Interior streets to be milled and repaved include Ben Arron Drive (553 LF +/-), Sam Calvin Drive (3,725 LF +/-), Carly Joanna Court (123 LF +/-), Peter Josiah Court (464 LF +/-), James Henry Drive (1,154 LF +/-), Winky Bluff (1,002 LF +/-), Nathan Timothy Court (184 LF +/-), Katie Lynne Lane (1,046 LF +/-), and Kristi Beth Court (435 LF +/-) and all cul-de-sacs. Deceleration lane off of Williams Farm Drive into Brookton Place Subdivision at Ben Arron Drive is also included in the scope of work. All streets are approximately 23' wide +/- from edge of pavement to edge of pavement with 80' diameter cul-de-sacs.

SPLOST and 2024 LMIG funds will be utilized for the scope of work to improve Brookton Place Subdivision. Contractor is responsible for complying with all regulations and providing all documents as per City of Dacula requirements. An Asphalt Core Study for the Subdivision has been completed and provided by Atlas Technical Consultants, LLC. to determine the existing asphalt and base thickness for milling depths. Integrated Science Engineering has completed CCTV of the existing storm sewer system to determine the condition of the existing storm sewer pipes and where the storm system is in need of cleaning.

The paving scope will consist of deep patch milling and edge milling of the existing subdivision streets. Edge Milling will begin at 2-1/2" depth at gutter line and then taper out to zero towards the centerline of the road. Once edge milling is complete, the Contractor will perform an additional 4" of Deep Patch Milling to repair alligatored and deteriorated asphalt areas where marked by the City and its Engineer. Once milling is complete, deep patch milled areas will receive 4" of 25 mm Superpave Asphalt Binder Course to make flush with the remainder of the existing milled areas. An asphalt tack coat will then be applied over entire existing asphalt pavement prior to installing 1" inch of 'D' Mix Asphalt Binder Course. A second tack coat will be applied over entire surface prior to installing 1-1/2" of 'F' Mix (9.5 mm) Type 2 Asphalt Surface Course. All new pavement repair shall have smooth transition with adjacent existing asphalt intersections, curb & gutter, and driveways. Finally, new street signs shall be installed to replace aging and faded signage.

The Centerline of the streets shall be built up to create a positive crown in roadway sloping out to edge of pavement and gutter to provide for adequate drainage of the streets. Limits of work include all asphalt pavement within right-of-way of City of Dacula for streets identified.

Thermoplastic Stop Bar Striping shall be reinstalled at intersection of Ben Arron drive and Williams Farm Drive to match existing condition. Contractor shall install any other striping

23-0805

ADVERTISEMENT FOR BIDS

00 020-3

within the subdivision to match existing conditions. Any disturbance outside of existing streets to residential properties (lawns) shall be permanently stabilized with Sod grassing in kind or Bermuda.

In addition to milling and repaving, the scope of work also includes partial curb & gutter replacement, driveway apron replacement, storm sewer manhole paved invert installation, and cleaning out of the existing storm system within the subdivision. A small amount of damaged curb & gutter and driveway aprons are marked with orange paint and will need to be demolished and replaced as illustrated on the drawings. Integrated Science Engineering has also performed and provided the City with CCTV of the storm pipe sewer system to illustrate the existing condition of the storm pipes and manholes. Bowman has added this information to the drawings. The Contractor shall include in his bid, installation of new concrete paved inverts for storm sewer manholes along and within the right-of-way as identified in the drawings and cleaning out of all sediment and debris within the existing storm pipe system and manholes. Contractor will then need to have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com) to perform an updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid.

Contractor shall include in their Base Bid all costs for adjusting any sewer manholes, water valves, or other utilities, and for all materials needed to raise any valves or other covers flush within the finished surface of the road to complete the scope of work as described by the Contract Documents and Drawings.

One lane of traffic and access to residential driveways must be maintained at all times. Traffic Safety devices such as signage, barricades, etc., and the protection of the public-at-large, and the Contractor's personnel is part of this contract and is the Contractor's sole responsibility.

The Contractor will have Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project.

All materials and appurtenances required to complete this Scope of Work is the responsibility of the Contractor and shall be provided in his overall Bid. Contractor with winning Bid is required to submit a schedule of values at the Pre-construction meeting.

Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2008), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.

Additional items within Scope of Work

- A. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done. Contractor is responsible for hauling off all demolition materials (existing pipe, asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner. Contractor shall tie-in and feather new asphalt into existing asphalt so that there is a smooth transition.
- B. If any unforeseen sub-grade conditions arise, then the Contractor shall immediately notify the Owner and/or Owner's representative before proceeding with any work to determine the course of action. The Contractor, if required, shall have a Geotechnical Engineer (who will be selected by the Contractor and approved and paid for by the Owner) qualify and quantify the areas and determine the method of sub-grade repair in coordination with the Owner and/or Owner's Representative on a case-by-case basis.
- C. The limits of work for this project are limited to that area within right-of-way of City of Dacula and Storm Sewer Easements. Contractor shall not disturb private residential properties, unless required to complete scope of work and then shall minimize disturbance to as little as possible. Any disturbance outside of the existing streets shall be repaired in kind to existing condition at no additional cost to Owner.
- D. Contractor is responsible to locate horizontally and vertically all existing utilities within limits of disturbance and protect throughout duration of project. Utilities present include water, gas, electrical, CATV, AT&T, etc., but may not be limited to these within the limits of disturbance.
- E. All earthwork quantities for deep patch milling shall be included in the Contractor's Lump Sum Bid and are the responsibility of the Contractor to haul-in or haul-off at no additional cost to the owner in order to complete the scope of work.
- F. Contractor shall have a Site Superintendent on-site at all times while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

23-0805

ADVERTISEMENT FOR BIDS

00 020-5

Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. There will be a Pre-Bid Conference at Dacula City Hall, 442 Harbins Road, Dacula, GA 30019 at **2:30 PM** local time on **Tuesday, November 28, 2023**. All bidders are strongly encouraged to attend this conference. Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. All questions concerning this project shall be submitted in writing by email to Bowman (Owner's Representative – Kevin D. Whigham, P.E.) 4174 Silver Peak Parkway, Suwanee, Georgia 30024, phone number 770-932-6550, email kwhigham@bowman.com no later than **Thursday, December 7, 2023 by 4:00 PM.**

All areas of work illustrated on the Drawings are approximate and may not illustrate all items of repair and/or replacement. Contractor shall visit site to observe, document, and measure all scope items marked by the City or City's Engineer for preparing his own Bid for the project.

All quantities and measurements are approximate. Contractor shall visit each street identified and determine his own quantities for bidding this project by observing and measuring the orange painted areas for asphalt deep patch milling, standard edge milling, and repaving. Existing grades and crown of roadway shall be maintained to direct stormwater towards existing storm inlets as illustrated on the Drawings. All streets will be repaved to existing lengths and widths as illustrated on the Drawings. Contractor is responsible for verifying all lengths of roadway and quantities required to complete the asphalt repaving work for this project.

Attention of Bidders is particularly called to the requirements regarding conditions of employment and minimum wage rates to be paid on this project, and that the contractor and subcontractor must comply with all Federal, State, and local requirements. Minority and female owned firms are encouraged to participate in this project. Procurement will be in compliance with the Uniform Administrative Requirements, 2 CFR 200.318-326. Potential respondents are particularly called to the requirements of Title VI; Civil Rights Act of 1964 and 24 CFR 570.602; and Executive Order 11246 - Equal Employment Opportunity and Affirmative Action.

By: Mayor, Hon. Hugh D. King, III
City of Dacula, Georgia

SECTION 00 100

INSTRUCTIONS TO BIDDERS

Each Bidder by making his bid represents that he has read and understands the bidding documents and has visited the site and familiarized himself with the local conditions under which the work is to be performed.

All bids must be prepared on the forms provided by the Owner's Representative and submitted in accordance with the Instructions to Bidders. A bid is invalid if it has not been deposited at the designated location prior to the time and date for receipt of bids set forth in the advertisement or invitation to bid, or prior to any extension thereof issued to the bidders.

Work under the contract consists of furnishing all labor and materials required to complete the project entitled:

"Brookton Place Subdivision Asphalt Milling and Repaving Project".

In accordance with Contract Documents prepared by: Bowman Consulting Group, Ltd. (Bowman), 4174 Silver Peak Parkway, Suwanee, Georgia 30024. Phone: (770) 932-6550 / Fax: (770) 932-6551. Dated: October 20, 2023.

The following provisions shall be applicable to all Bidders:

- A. During grading and excavation phases, if required, should the following conditions be encountered: mass rock, trench rock, trench earth excavation, earth excavation, earth fill and unsuitable soils, Contractor shall immediately notify the Owner's Representative who may observe and will determine the appropriate action necessary for the work to proceed. If, in the opinion of the Owner's Representative, work in addition to the original contract requirements is required, that portion pertaining to any of the foregoing conditions will be performed on a time and material basis and the contract shall be equitably adjusted by change order in accordance with the guidelines set forth in Section 00 801 of these Contract Documents. Contractor shall submit unit prices as required herein that are used to formulate his bid. Unit and/or lump sum prices shall include cost of material, sales tax, delivery, labor, labor burden, supervision, taxes, insurance, and all other costs including profit and overhead. Owner's Representative and Owner reserve the right to accept or reject these prices or request the work to be performed on a time and material basis with complete daily breakdowns and logs submitted by General Contractor.

Contractor may draw his own conclusions and no responsibility is assumed by the Owner's Representative or Owner for subsurface conditions or quality of same. No claims for extra compensation or for additional contract time will be allowed due to subsurface conditions.

23-0805

INSTRUCTIONS TO BIDDERS

00 100-2

- B. Time is of the essence. Construction of the "Brookton Place Subdivision Asphalt Milling and Repaving Project" must be substantially complete within Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project.
- C. A bid bond in the amount of 5% of the base bid shall accompany the bid. The Attorney-in-Fact who signs the bid bond must file with the bid bond a certified copy of his Power of Attorney to sign such bond.
- D. Neither Contractor, nor his material suppliers, nor his Subcontractors shall install or otherwise incorporate any materials containing asbestos, PCB or other hazardous materials within the boundaries of the Project. No soil found on site or transported to the site from remote locations which is contaminated with material containing asbestos, PCB, radon, gasoline, fuel oil, diesel fuel or other similar fossil fuels shall be used for fill, backfill or landscape topsoil.
- E. Each bidder represents that his bid is based upon the work described in the Bid Documents, Drawings, and Specifications.
- F. When references are made in the specifications to trade names, or to the names of manufacturers, such references are made solely to designate and identify the quality of the equipment or material to be furnished and are not intended to restrict competitive bidding. In case the Contractor wishes to use material and equipment other than those specified, PRIOR WRITTEN REVIEW by Owner's Representative must be obtained.
- G. If it is desired to use equipment or materials of different manufacturer or trade names from those specified, application for review of such equipment or materials must reach the hands of the Owner's Representative at least ten (10) days prior to the date set for the opening of bids. Application for review must be accompanied by supporting data clearly proving equality of the proposed substitute to that specified. To be acceptable, a substitute must be equal, or exceed, all requirements of the base specifications, including space limitations. A comparative data schedule shall accompany the submittal. Any changes in the work which might be required to accommodate the proposed substitute shall be clearly shown and described. Should the proposed substitute be accepted, any such changes required in other work due to the use of the substitute shall be coordinated and accomplished by Contractor as part of the Contract at no additional cost to Owner.
- H. No substitutes allowed.
- I. No consideration can be given to requests for review received later than ten (10) days prior to the day set for the opening of bids.
- J. METHOD OF AWARD
 - 1. A lump sum, fixed price bid proposal is requested as outlined in the Bid Proposal Form, Section 00 300. Award will be made to the lowest responsive, responsible, qualified bidder. Awarded bidder/contractor shall provide a schedule of values by which they

23-0805

INSTRUCTIONS TO BIDDERS

00 100-3

based their bid upon as part of the documents required prior to the pre-construction meeting.

2. The lump sum bid for the construction of the work as outlined in the Contract Documents and set forth in detail in the proposal, includes the furnishing of all equipment, materials, labor, insurance, overhead and profit for the completion of the work as per the Contract Documents.

K. RIGHT TO REJECT BIDS

Owner reserves the right to reject any or all bids and to waive informalities. It is distinctly understood, and all bids are made subject to this Agreement, that Owner reserves the right to decide which bid he deems lowest and best. In arriving at this decision, due consideration will be given to the reputation of the bidder, his financial responsibility, work of this type successfully completed, and the character of materials and equipment offered. No bids received after the time set for opening proposals will be considered. Any unauthorized conditions, limitations or provisions attached to the proposal, or the omission of a bid on any item in the proposal for the section bid upon, will render it informal and may cause its rejection. No bids will be allowed to be withdrawn after time set for receiving bids.

CONTRACT DOCUMENTS

1. The Contract Documents are intended to agree and be mutually explanatory, and they shall be accepted and used as a whole and not separately. Should any items be omitted from the Project Scope of Work and/or the Drawings, or vice versa, it shall be executed the same as if shown and combined in both. Should any item be omitted, or should any item be described in the Scope and/or Drawings, but not duplicated on other, it shall be executed the same as if shown and combined in both. Should contradiction be found, notify Owner's Representative prior to receipt of bids so that contradictions can be clarified by addendum (a).
2. Large scale details will be furnished by the Owner's Representative for all work which in the opinion of Owner's Representative requires same.
3. Details shall be accurately followed, deviation therefrom being cause for rejection of work.
4. Explanatory note shall be preferred to conflicting drawn out indications. Large scale details shall be preferred to scale measurements. In all cases the details shall be checked with existing conditions. Should any variation be found, it shall be immediately referred to Owner's Representative for clarification and adjustment.
5. Owner's Representative will be, in the first instance, the interpreter of the requirements of the Contract Documents and judge the performance thereunder by Contractor.

23-0805

INSTRUCTIONS TO BIDDERS

00 100-4

Owner's Representative will within a reasonable time, render such interpretations as he may deem necessary for the proper execution or progress of the work.

6. Contractor shall field verify items as outlined in the Project Scope of Work and/or the Drawings. All items outlined in the Drawings are approximate and have not been surveyed. Drawings may or may not include all scope of work items that have been marked with orange paint by the City and City's Engineer in the field. Contractor and subcontractors shall visit the site to determine their own measurements and quantities for bidding the project and not rely on the project Drawings.
7. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done.
8. Any quantities called out in the Scope of Work, Bid Documents, Drawings, Specifications, and/or Details are approximate. Contractor shall verify and determine his own quantities for all materials, lengths of roadway, and other items required to complete the repaving, curb & gutter, and sidewalk replacement improvement work for the project as described in the Scope of Work, Bid Documents, Drawings, and/or Specifications. City has marked all areas for Deep Patch Milling improvements with orange paint in the field. All other limits of pavement for streets will receive standard edge milling and repaving. Contractor to visit Site to calculate, form, and verify his own quantities used to formulate his bid.
9. Contractor is responsible for hauling off all demolition materials (soil, base, existing asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner.
10. Contractor shall use the Georgia DOT asphalt index when forming his bid and adjust prices during construction. Use the latest version of the Georgia DOT index for calculations. Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2009, or latest version), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.
11. Contractor shall coordinate with Owner to locate a suitable staging area near each street in the project. If necessary, the Contractor is responsible for the coordination and payment of fees or leasing agreements needed for the storage and/or staging of equipment on private property.

23-0805

INSTRUCTIONS TO BIDDERS

00 100-5

12. The Contractor shall mill, provide asphalt tack coats, and repave the existing asphalt streets as outlined in the Scope of Work, Bid Documents, Drawings, and/or Specifications.
13. The Contractor is responsible for any and all utility locates needed before commencing with scope of work. The Contractor shall contact the affected utility, not the City, should utility damage occur. Emergency contact numbers are provided to the successful bidder.
14. Contractor is responsible for and shall have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com) to perform an updated CCTV of the existing storm system once the Contractor has cleaned out the entire pipe system and storm sewer manholes for the City of Dacula. All fees for cleaning and updated CCTV is the responsibility of the Contractor and shall be included in his lump sum bid. Contractor is not responsible for acquiring any permits.
15. No other testing requirements are required by the Contractor unless an unforeseen circumstance arises with subgrade issue on a case-by-case basis. If this occurs the repaired area shall be proof rolled for subgrade and base material in the presence of the Owner or Owners' Representative prior to placing base and binder material over graded aggregate base material. If any areas fail, then the Contractor will be required to provide a Geotechnical Engineer to qualify and quantify bad materials. Geotechnical Engineer shall be selected by the Contractor, approved by the owner, and paid through an approved change order by the Owner.
16. Access through intersections and to residential driveways, as well as maintaining one lane (12' wide minimum for school bus access) open for traffic at all times is the Contractor's responsibility. The Contractor's means, methods, and scheduling for completion of the contract work is his responsibility. No road closure is allowed. Access to residential driveways shall be provided at all times.
17. Limits of repaving work for this project occur in residential areas so work is restricted to between the hours of 8 a.m. to 6 p.m. Monday through Friday. Saturday work is allowed once approved by the City. No work on Sunday.
18. Contractor shall match existing road cross slope as illustrated on the Drawings. If road is crowned in the existing condition, then Contractor shall build up new pavement at centerline of streets to be repaved to provide a positive crown in road that slopes from centerline to shoulder and/or curb and gutter (min. 2% cross slope). Contractor shall maintain existing drainage patterns to all existing and proposed storm inlets as illustrated on the Drawings.
19. Contractor shall taper down or feather asphalt down at existing driveways for flush tie-in. Any damage to existing driveways is the Contractor's responsibility and shall be repaired or replaced by the Contractor at no cost to the Owner. Contractor shall edge

23-0805

INSTRUCTIONS TO BIDDERS

00 100-6

mill existing asphalt at intersections so there is a smooth transition with the new and existing asphalt.

20. Contractor is responsible for all erosion control required to complete the scope of work such as temporary sediment controls (pigs-in-blanket) and permanent grassing (Sod) along with any other measures as outlined in the Scope of Work, Bid Documents, and/or Performance Specification.
21. No partial sets of the Contract Documents will be issued by Owner or Owner's Representative.

End of Section

23-0805

BID PROPOSAL FORM

00 300-1

SECTION 00 300

BID PROPOSAL FORM

TO: CITY OF DACULA

P.O. Box 400
Dacula, Georgia 30019

Date: _____

Gentlemen:

Having carefully examined the Contract Documents entitled "Brookton Place Subdivision Asphalt Milling and Repaving Project", dated October 20, 2023 and Addendum (a) No. (s) _____, and having examined the site and conditions affecting the work, including availability of materials and labor, the undersigned hereby proposes to furnish all materials, labor, tools, equipment, machinery, transportation, supervision, administration and services necessary and incidental to construct and substantially complete the repaving improvements called for in the Contract Documents for said project, and in accordance with said documents, shall be substantially complete by the time set forth therein.

A. BASE BID –

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision, and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the City of Dacula "Brookton Place Subdivision Asphalt Milling and Repaving Project" as follows:

The scope of work includes asphalt deep patch milling, standard edge milling, and repaving of all streets within the Brookton Place Subdivision. All areas for deep patch milling are marked in orange paint by the City and Owner's representative. Contractor shall visit the streets identified and determine his own quantities for bidding the project. The project service area includes improvements for the entire length of Brookton Place Subdivision interior streets. Interior streets to be milled and repaved include Ben Arron Drive (553 LF +/-), Sam Calvin Drive (3,725 LF +/-), Carly Joanna Court (123 LF +/-), Peter Josiah Court (464 LF +/-), James Henry Drive (1,154 LF +/-), Winky Bluff (1,002 LF +/-), Nathan Timothy Court (184 LF +/-), Katie Lynne Lane (1,046 LF +/-), and Kristi Beth Court (435 LF +/-) and all cul-de-sacs. Deceleration lane off of Williams Farm Drive into Brookton Place Subdivision at Ben Arron Drive is also included in the scope of work. All streets are approximately 23' wide +/- from edge of pavement to edge of pavement with 80' diameter cul-de-sacs.

SPLOST and 2024 LMIG funds will be utilized for the scope of work to improve Brookton Place Subdivision. Contractor is responsible for complying with all regulations and providing all documents as per City of Dacula requirements. An Asphalt Core Study for the Subdivision has been completed and provided by Atlas Technical Consultants, LLC. to determine the existing asphalt and base thickness for milling depths. Integrated Science Engineering has completed CCTV of the existing storm sewer system to determine the condition of the existing storm sewer pipes and where the storm system is in need of cleaning.

The paving scope will consist of deep patch milling and edge milling of the existing subdivision streets. Edge Milling will begin at 2-1/2" depth at gutter line and then taper out to zero towards the centerline of the road. Once edge milling is complete, the Contractor will perform an additional 4" of Deep Patch Milling to repair alligatored and deteriorated asphalt areas where marked by the City and it's Engineer. Once milling is complete, deep patch milled areas will receive 4" of 25 mm Superpave Asphalt Binder Course to make flush with the remainder of the existing milled areas. An asphalt tack coat will then be applied over entire existing asphalt pavement prior to installing 1" inch of 'D' Mix Asphalt Binder Course. A second tack coat will be applied over entire surface prior to installing 1-1/2" of 'F' Mix (9.5 mm) Type 2 Asphalt Surface Course. All new pavement repair shall have smooth transition with adjacent existing asphalt intersections, curb & gutter, and driveways. Finally, new street signs shall be installed to replace aging and faded signage.

The Centerline of the streets shall be built up to create a positive crown in roadway sloping out to edge of pavement and gutter to provide for adequate drainage of the streets. Limits of work include all asphalt pavement within right-of-way of City of Dacula for streets identified.

Thermoplastic Stop Bar Striping shall be reinstalled at intersection of Ben Arron drive and Williams Farm Drive to match existing condition. Contractor shall install any other striping within the subdivision to match existing conditions. Any disturbance outside of existing streets to residential properties (lawns) shall be permanently stabilized with Sod grassing in kind or Bermuda.

In addition to milling and repaving, the scope of work also includes partial curb & gutter replacement, driveway apron replacement, storm sewer manhole paved invert installation, and cleaning out of the existing storm system within the subdivision. A small amount of damaged curb & gutter and driveway aprons are marked with orange paint and will need to be demolished and replaced as illustrated on the drawings. Integrated Science Engineering has also performed and provided the City with CCTV of the storm pipe sewer system to illustrate the existing condition of the storm pipes and manholes. Bowman has added this information to the drawings. The Contractor shall include in his bid, installation of new concrete paved inverts for storm sewer manholes along and within the right-of-way as identified in the drawings and cleaning out of all sediment and debris within the existing storm pipe system and manholes. Contractor will then need to have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com)

23-0805

BID PROPOSAL FORM

00 300-3

to perform an updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid. Contractor shall include in their Base Bid all costs for adjusting any sewer manholes, water valves, or other utilities, and for all materials needed to raise any valves or other covers flush within the finished surface of the road to complete the scope of work as described by the Contract Documents and Drawings.

One lane of traffic and access to residential driveways must be maintained at all times. Traffic Safety devices such as signage, barricades, etc., and the protection of the public-at-large, and the Contractor's personnel is part of this contract and is the Contractor's sole responsibility.

All materials and appurtenances required to complete this Scope of Work is the responsibility of the Contractor and shall be provided in his overall Bid. Contractor with winning Bid is required to submit a schedule of values at the Pre-construction meeting.

Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2008), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.

Additional items within Scope of Work

- A. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done. Contractor is responsible for hauling off all demolition materials (existing pipe, asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner. Contractor shall tie-in and feather new asphalt into existing asphalt so that there is a smooth transition.
- B. If any unforeseen sub-grade conditions arise, then the Contractor shall immediately notify the Owner and/or Owner's representative before proceeding with any work to determine the course of action. The Contractor, if required, shall have a Geotechnical Engineer (who will be selected by the Contractor and approved and paid for by the Owner) qualify and quantify the areas and determine the method of sub-grade repair in coordination with the Owner and/or Owner's Representative on a case-by-case basis.
- C. The limits of work for this project are limited to that area within right-of-way of City of Dacula and Storm Sewer Easements. Contractor shall not disturb private residential properties, unless required to complete scope of work and then shall minimize disturbance to as little as possible. Any disturbance outside of the existing streets shall be repaired in kind to existing condition at no additional cost to Owner.

- D. Contractor is responsible to locate horizontally and vertically all existing utilities within limits of disturbance and protect throughout duration of project. Utilities present include water, gas, electrical, CATV, AT&T, etc., but may not be limited to these within the limits of disturbance.
- E. All earthwork quantities for deep patch milling shall be included in the Contractor's Lump Sum Bid and are the responsibility of the Contractor to haul-in or haul-off at no additional cost to the owner in order to complete the scope of work.
- F. Contractor shall have a Site Superintendent on-site at all times while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. There will be a Pre-Bid Conference at Dacula City Hall, 442 Harbins Road, Dacula, GA 30019 at **2:30 PM** local time on **Tuesday, November 28, 2023**. All bidders are strongly encouraged to attend this conference. Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. All questions concerning this project shall be submitted in writing by email to Bowman (Owner's Representative – Kevin D. Whigham, P.E.) 4174 Silver Peak Parkway, Suwanee, Georgia 30024, phone number 770-932-6550, email kwhigham@bowman.com no later than **Thursday, December 7, 2023 by 4:00 PM**.

All areas of work illustrated on the Drawings are approximate and may not illustrate all items of repair and/or replacement. Contractor shall visit site to observe, document, and measure all scope items for preparing his own Bid for the project.

All quantities and measurements are approximate. Contractor shall visit each street identified and determine his own quantities for bidding this project by observing and measuring the orange painted areas for asphalt milling and repaving. Existing grades and crown of roadway shall be maintained to direct stormwater towards existing storm inlets as illustrated on the Drawings. All streets will be repaved to existing lengths and widths as illustrated on the Drawings. Contractor is responsible for verifying all lengths of roadway and quantities required to complete the asphalt repaving work for this project.

Attention of Bidders is particularly called to the requirements regarding conditions of employment and minimum wage rates to be paid on this project, and that the contractor and subcontractor must comply with all Federal, State, and local requirements. Minority and female owned firms are encouraged to participate in this project. Procurement will be in compliance with the Uniform Administrative Requirements, 2 CFR 200.318-326. Potential respondents are particularly called to the requirements of Title VI; Civil Rights Act of 1964 and 24 CFR 570.602; and Executive Order 11246 - Equal Employment Opportunity and Affirmative Action.

23-0805

BID PROPOSAL FORM

00 300-5

**A. BASE BID – “Brookton Place Subdivision Asphalt Milling and Repaving Project” –
LUMP SUM AMOUNT**

**Bidder agrees to perform all of the Improvements described in the specifications and represented by the project drawings for the SUM OF :

_____ (\$_____)

(Amounts shall be shown in both * words and figures).

* In case of discrepancy, the amounts shown in words will govern.

**Please note that successful Bidder will be required to submit a Unit Price Breakdown of items used in determining the Lump Sum Bid Proposal Price for this work.

** The **Base Bid** amount shall consist of Work Items more particularly described in Section 01 000, Project Scope & Performance Specification. The Contractor shall be responsible for all labor, equipment, materials, operations, details, insurance, supervision, coordination, administration, overhead and profit, plus all necessary incidental costs associated with the complete function of the Work Scope in context of the project.

Notice to Proceed will be issued during the Pre-Construction meeting. All required paperwork such as Performance and Payment bonds for 100% of the Contract amount which will be submitted to the City along with a Schedule of Values (Unit Prices), Certificate of Insurance, Contractor's Security and Immigration Affidavit, a list of Subcontractors to be used on the project and Subcontractor's Security and Immigration Affidavits shall be provided to the City at City Hall located on Harbins Road, in Dacula, Georgia before construction begins.

Contractor shall mobilize within ten (10) days of Notice to Proceed issued by the City of Dacula and to commit adequate forces on site to substantially complete all Work including punch list items and clean-up for the Base Bid.

The Contractor will have Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project. The City of Dacula will charge the Contractor Five-Hundred Dollars and no cents (\$500.00) per day for liquidated damages for every day past the completion of the Contract.

The undersigned agrees that this proposal may not be revoked or withdrawn after the time set for the opening of bids but shall remain open for acceptance for a period of 60 days following such time. The undersigned, upon receipt of written notice of the acceptance of this bid, agrees to execute within ten (10) days a Contract for the work for the above stated compensation, and to furnish and deliver to Owner at the same time as the Contract, the required Performance Bonds, and a Labor and Materials Payment Bond, for General Contractor in amount to equal 100% of the Contract Sum. These bonds shall be written on forms provided by a company

23-0805

BID PROPOSAL FORM

00 300-6

acceptable to the Owner and licensed to do business in the State of Georgia at the time the bonds are written, and that is listed on "Department of the Treasury Circular 570."

If this proposal is accepted within 60 days after the date set for the opening of bids and the undersigned fails to execute the Contract within ten (10) days after written notice of such acceptance or if he fails to furnish the Performance Bonds and the Labor and Material Payment Bond, the obligation of the Bid Bond will remain in full force and effect and the money payable thereon shall be paid into the funds of the Owner as liquidated damages for such failure; otherwise, said Bid Bond shall be returned to the undersigned upon completion of such obligations.

The undersigned has checked carefully all the foregoing figures and understands that the Owner will not be responsible for any errors or omissions on the part of the undersigned in making this bid. The undersigned also acknowledges receipt of the following Addenda, listed by number and date as issued appearing on each:

Addendum No.Date

_____	_____
_____	_____

IN COMPLIANCE WITH THE ATTACHED SPECIFICATIONS, THE UNDERSIGNED OFFERS AND AGREES, IF THIS BID IS ACCEPTED BY THE CITY OF DACULA, GA WITHIN SIXTY (60) DAYS OF THE DATE OF BID OPENING, TO FURNISH ANY OR ALL OF THE ITEMS UPON WHICH PRICES ARE QUOTED, AT THE PRICE SET OPPOSITE EACH ITEM, DELIVERED TO THE DESIGNATED POINT(S) WITHIN THE TIME SPECIFIED IN THE BID SCHEDULE. THE SUCCESSFUL CONTRACTOR SHALL PROVIDE A SCHEDULE OF VALUES WITH UNIT PRICES FOR A BREAKDOWN OF THEIR LUMP SUM BID.

COMPANY:_____

COMPLETE PHYSICAL ADDRESS:_____

REPRESENTATIVE'S SIGNATURE:_____

DATE:_____

TELEPHONE NO.:_____ FAX NO.:_____

EMAIL:_____

PRINT AUTHORIZED REPRESENTATIVE'S NAME:_____

23-0805

BID PROPOSAL FORM

00 300-7

IF REMITTANCE ADDRESS IS DIFFERENT, INDICATE HERE:

23-0825

CONTRACT

00 500-1

SECTION 00 500

CONTRACT

THIS AGREEMENT, made this _____, day of _____, 2023, by and between the City of Dacula, Georgia, herein called "Owner", acting herein through its Mayor, Hon. Hugh D. King, III, and _____, County of _____, and State of Georgia, herein called "Contractor".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction of the "Dacula Crossing Subdivision Asphalt Milling and Repaving Project" described as follows:

A. BASE BID –

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision, and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the City of Dacula "Brookton Place Subdivision Asphalt Milling and Repaving Project" as follows:

The scope of work includes asphalt deep patch milling, standard edge milling, and repaving of all streets within the Brookton Place Subdivision. All areas for deep patch milling are marked in orange paint by the City and Owner's representative. Contractor shall visit the streets identified and determine his own quantities for bidding the project. The project service area includes improvements for the entire length of Brookton Place Subdivision interior streets. Interior streets to be milled and repaved include Ben Arron Drive (553 LF +/-), Sam Calvin Drive (3,725 LF +/-), Carly Joanna Court (123 LF +/-), Peter Josiah Court (464 LF +/-), James Henry Drive (1,154 LF +/-), Winky Bluff (1,002 LF +/-), Nathan Timothy Court (184 LF +/-), Katie Lynne Lane (1,046 LF +/-), and Kristi Beth Court (435 LF +/-) and all cul-de-sacs. Deceleration lane off of Williams Farm Drive into Brookton Place Subdivision at Ben Arron Drive is also included in the scope of work. All streets are approximately 23' wide +/- from edge of pavement to edge of pavement with 80' diameter cul-de-sacs.

SPLOST and 2024 LMIG funds will be utilized for the scope of work to improve Brookton Place Subdivision. Contractor is responsible for complying with all regulations and providing all documents as per City of Dacula requirements. An Asphalt Core Study for the Subdivision has been completed and provided by Atlas Technical Consultants, LLC. to determine the existing asphalt and base thickness for milling depths. Integrated Science Engineering has completed CCTV of the existing storm sewer system to determine the condition of the existing storm sewer pipes and where the storm system is in need of cleaning.

23-0825

CONTRACT

00 500-2

The paving scope will consist of deep patch milling and edge milling of the existing subdivision streets. Edge Milling will begin at 2-1/2" depth at gutter line and then taper out to zero towards the centerline of the road. Once edge milling is complete, the Contractor will perform an additional 4" of Deep Patch Milling to repair alligatored and deteriorated asphalt areas where marked by the City and it's Engineer. Once milling is complete, deep patch milled areas will receive 4" of 25 mm Superpave Asphalt Binder Course to make flush with the remainder of the existing milled areas. An asphalt tack coat will then be applied over entire existing asphalt pavement prior to installing 1" inch of 'D' Mix Asphalt Binder Course. A second tack coat will be applied over entire surface prior to installing 1-1/2" of 'F' Mix (9.5 mm) Type 2 Asphalt Surface Course. All new pavement repair shall have smooth transition with adjacent existing asphalt intersections, curb & gutter, and driveways. Finally, new street signs shall be installed to replace aging and faded signage.

The Centerline of the streets shall be built up to create a positive crown in roadway sloping out to edge of pavement and gutter to provide for adequate drainage of the streets. Limits of work include all asphalt pavement within right-of-way of City of Dacula for streets identified.

Thermoplastic Stop Bar Striping shall be reinstalled at intersection of Ben Arron drive and Williams Farm Drive to match existing condition. Contractor shall install any other striping within the subdivision to match existing conditions. Any disturbance outside of existing streets to residential properties (lawns) shall be permanently stabilized with Sod grassing in kind or Bermuda.

In addition to milling and repaving, the scope of work also includes partial curb & gutter replacement, driveway apron replacement, storm sewer manhole paved invert installation, and cleaning out of the existing storm system within the subdivision. A small amount of damaged curb & gutter and driveway aprons are marked with orange paint and will need to be demolished and replaced as illustrated on the drawings. Integrated Science Engineering has also performed and provided the City with CCTV of the storm pipe sewer system to illustrate the existing condition of the storm pipes and manholes. Bowman has added this information to the drawings. The Contractor shall include in his bid, installation of new concrete paved inverts for storm sewer manholes along and within the right-of-way as identified in the drawings and cleaning out of all sediment and debris within the existing storm pipe system and manholes. Contractor will then need to have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com) to perform an updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid.

Contractor shall include in their Base Bid all costs for adjusting any sewer manholes, water valves, or other utilities, and for all materials needed to raise any valves or other covers flush within the finished surface of the road to complete the scope of work as described by the Contract Documents and Drawings.

One lane of traffic and access to residential driveways must be maintained at all times. Traffic Safety devices such as signage, barricades, etc., and the protection of the public-at-large, and the Contractor's personnel is part of this contract and is the Contractor's sole responsibility.

23-0825

CONTRACT

00 500-3

The Contractor will have Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project.

All materials and appurtenances required to complete this Scope of Work is the responsibility of the Contractor and shall be provided in his overall Bid. Contractor with winning Bid is required to submit a schedule of values at the Pre-construction meeting.

Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2008), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.

Additional items within Scope of Work

- A. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done. Contractor is responsible for hauling off all demolition materials (existing pipe, asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner. Contractor shall tie-in and feather new asphalt into existing asphalt so that there is a smooth transition.
- B. If any unforeseen sub-grade conditions arise, then the Contractor shall immediately notify the Owner and/or Owner's representative before proceeding with any work to determine the course of action. The Contractor, if required, shall have a Geotechnical Engineer (who will be selected by the Contractor and approved and paid for by the Owner) qualify and quantify the areas and determine the method of sub-grade repair in coordination with the Owner and/or Owner's Representative on a case-by-case basis.
- C. The limits of work for this project are limited to that area within right-of-way of City of Dacula and Storm Sewer Easements. Contractor shall not disturb private residential properties, unless required to complete scope of work and then shall minimize disturbance to as little as possible. Any disturbance outside of the existing streets shall be repaired in kind to existing condition at no additional cost to Owner.
- D. Contractor is responsible to locate horizontally and vertically all existing utilities within limits of disturbance and protect throughout duration of project. Utilities present include water, gas, electrical, CATV, AT&T, etc., but may not be limited to these within the limits of disturbance.
- E. All earthwork quantities for deep patch milling shall be included in the Contractor's Lump Sum Bid and are the responsibility of the Contractor to haul-in or haul-off at no additional cost to the owner in order to complete the scope of work.

23-0825

CONTRACT

00 500-4

- F. Contractor shall have a Site Superintendent on-site at all times while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

Contractor shall have a Site Superintendent on-site at all times, while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. There will be a Pre-Bid Conference at Dacula City Hall, 442 Harbins Road, Dacula, GA 30019 at **2:30 PM** local time on **Tuesday, November 28, 2023**. All bidders are strongly encouraged to attend this conference. Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. All questions concerning this project shall be submitted in writing by email to Bowman (Owner's Representative – Kevin D. Whigham, P.E.) 4174 Silver Peak Parkway, Suwanee, Georgia 30024, phone number 770-932-6550, email kwhigham@bowman.com no later than **Thursday, December 7, 2023 by 4:00 PM**.

All areas of work illustrated on the Drawings are approximate and may not illustrate all items of repair and/or replacement. Contractor shall visit site to observe, document, and measure all scope items for preparing his own Bid for the project.

All quantities and measurements are approximate. Contractor shall visit each street identified and determine his own quantities for bidding this project by observing and measuring the orange painted areas for asphalt milling and repaving, driveway apron replacement, and sidewalk replacement repair. Existing grades and crown of roadway shall be maintained to direct stormwater towards existing storm inlets as illustrated on the Drawings. All streets will be repaved to existing lengths and widths as illustrated on the Drawings. Contractor is responsible for verifying all lengths of roadway and quantities required to complete the scope of work the project.

Attention of Bidders is particularly called to the requirements regarding conditions of employment and minimum wage rates to be paid on this project, and that the contractor and subcontractor must comply with all Federal, State, and local requirements. Minority and female owned firms are encouraged to participate in this project. Procurement will be in compliance with the Uniform Administrative Requirements, 2 CFR 200.318-326. Potential respondents are particularly called to the requirements of Title VI; Civil Rights Act of 1964 and 24 CFR 570.602; and Executive Order 11246 - Equal Employment Opportunity and Affirmative Action.

CONTRACTOR shall perform the above scope of work, hereinafter called the "Project", for a lump sum, fixed price of _____ Dollars.

(\$ _____); and all extra work in connection therewith, under the terms as stated in the Contract Bid Documents; and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor,

23-0825

CONTRACT

00 500-5

insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Bid Proposal.

CONTRACTOR shall provide OWNER with Certificate of Insurance and Performance and Payment Bonds as required by these Contract Documents.

This is a lump sum, fixed price Contract. Notwithstanding any other provision of this Contract, the amount to be paid to Contractor by the City shall not exceed _____ Dollars (\$_____) without the prior written approval of the Mayor and Council of the City of Dacula. Any change order which increases the Contract price by more than \$15,000.00 must be approved in advance by a formal vote of the Mayor and City Council of the City of Dacula at a duly called meeting.

A. BASE BID – “Brookton Place Subdivision Asphalt Milling and Repaving Project” – LUMP SUM AMOUNT

**Bidder agrees to perform all of the Improvements described in the specifications and represented by the project drawings for the SUM OF :

_____ (\$_____)

(Amounts shall be shown in both * words and figures).

* In case of discrepancy, the amounts shown in words will govern.

**Please note that successful Bidder will be required to submit a Unit Price Breakdown of items used in determining the Lump Sum Bid Proposal Price for this work.

** The **Base Bid** amount shall consist of Work Items more particularly described in Section 01 000, Project Scope & Performance Specification. The Contractor shall be responsible for all labor, equipment, materials, operations, details, insurance, supervision, coordination, administration, overhead and profit, plus all necessary incidental costs associated with the complete function of the Work Scope in context of the project.

Notice to Proceed will be issued during the Pre-Construction meeting. All required paperwork such as Performance and Payment bonds for 100% of the Contract amount which will be submitted to the City along with a Schedule of Values (Unit Prices), Certificate of Insurance, Contractor's Security and Immigration Affidavit, a list of Subcontractors to be used on the project and Subcontractor's Security and Immigration Affidavits shall be provided to the City at City Hall located on Harbins Road, in Dacula, Georgia before construction begins.

The OWNER is subject to the requirements of the Georgia Security and Immigration Compliance Act. Accordingly, the requirements of O.C.G.A. '13-10-91 and Georgia Department of Labor Rule 300-10-1-.02 are conditions of this Contract. Compliance with these requirements shall be attested by the execution of the Contractor Affidavit attached hereto, which shall become a part of the awarded contract. In the event the Contractor employs or contracts with any subcontractor(s) in connection with the awarded contract, the Contractor shall secure from such subcontractor(s) attestation of the subcontractor's execution of the Subcontractor Affidavit

23-0825

CONTRACT

00 500-6

attached hereto, which shall also become a part of the awarded contract and also a part of the contractor/subcontractor agreement. Contractor shall maintain records of such attestation for inspection by The City of Dacula at any time. Contractor shall be required to provide copies to the City of Dacula upon request. Failure to comply with these rules will result in the rejection of the bid proposal and/or termination of any awarded contract where it is subsequently determined that there has been a violation of any provision of the Act or implementing rules and regulations.

Any dispute arising under this Contract shall be heard in the Superior Court of Gwinnett County, Georgia, and the parties' consent to jurisdiction and venue in that Court. The parties waive any defense that may have to lack of jurisdiction or improper venue and agree to have all disputes resolved in the Superior Court of Gwinnett County.

CONTRACTOR hereby agrees to commence work under this Contract on or before a date to be specified in a written "Notice to Proceed" of OWNER and to a fully complete the Project within Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project. Contractor shall mobilize within ten (10) days of Notice to Proceed as issued by the City of Dacula or other date agreed upon and to commit adequate forces on site to substantially complete all Work including punch list items and clean-up for the Base Bid within the time specified. The City of Dacula will charge the Contractor One-Hundred Fifty Dollars and no cents (\$150.00) per day for liquidated damages for every day past the completion of the Contract.

The undersigned agrees that this proposal may not be revoked or withdrawn after the time set for the opening of bids but shall remain open for acceptance for a period of 60 days following such time. The undersigned, upon receipt of written notice of the acceptance of this bid, agrees to execute within ten (10) days a Contract for the work for the above stated compensation, and to furnish and deliver to Owner at the same time as the Contract, the required Performance Bonds, and a Labor and Materials Payment Bond, for General Contractor in amount to equal 100% of the Contract Sum. These bonds shall be written on forms provided by a company acceptable to the Owner and licensed to do business in the State of Georgia at the time the bonds are written, and that is listed on "Department of the Treasury Circular 570."

Any dispute arising under this Contract shall be heard in the Superior Court of Gwinnett County, Georgia, and the parties' consent to jurisdiction and venue in that Court. The parties waive any defense that may have to lack of jurisdiction or improper venue and agree to have all disputes resolved in the Superior Court of Gwinnett County.

The Owner agrees to pay the Contractor in current funds for the performance of the Contract, subject to additions and deductions, on completion of the project and final inspection of the Owner.

Termination for Cause: The City may terminate this Contract for cause upon ten (10) days prior written notice to the Consultant of the Consultant's default in the performance of any term of this Contract. Such termination shall be without prejudice to any of the City's rights or remedies provided by law.

23-0825

CONTRACT

00 500-7

Termination for Convenience: The City may terminate this Contract for its convenience upon 30 days written notice to the Consultant. In the event of the City's termination of this Contract for convenience, the Consultant will be paid for those services actually performed. Partially completed performance of the Contract will be compensated based upon a signed statement of completion to be submitted by the Consultant, which shall itemize each element of performance.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in two (2) counterparts, each of which shall be deemed an original, in the year and day first above mentioned. (Seal)

ATTEST:

CITY OF DACULA

By:_____

(Mayor)

ATTEST:

(Seal)

(Contractor)

By:_____

(Witness)

23-0805

BONDS AND CERTIFICATES

00 600-1

SECTION 00 600

BONDS AND CERTIFICATES

PART 1 - GENERAL

1. BID BOND: A bid bond in the amount of 5% of the base bid shall accompany the bid. The Attorney in-fact who signs the bid bond must file with the bid bond a certified copy of his Power of Attorney to sign such bond.
2. PAYMENT & PERFORMANCE BOND: Contractor shall furnish both a Performance Bond and Payment Bond, each in the amount of 100% of the Contract Sum, unless otherwise directed by the Owner. The surety must be one which is authorized to do business in the State of Georgia and is listed on "Department of the Treasury Circular 570". Bonds must be accompanied by letter stating company's current rating for verification prior to acceptance by the Owner and execution of the formal Owner/Contractor agreement. It shall be specifically understood that the performance Bond fully protects the Owner and guarantees the completion of the project in accordance with all Bid Documents. After award of contract, submit a properly executed "Performance Bond" and "Labor and Material Payment Bond".
3. CERTIFICATE OF INSURANCE: After award of contract, Contractor shall submit a properly executed "Certificate of Insurance" to Owner.
4. LIST OF SUBCONTRACTORS: After award of contract, but prior to Pre-Construction Conference, submit a properly executed "List of Subcontractors".

End of Section

23-0805

GENERAL CONDITIONS

00 700-1

SECTION 00 700

GENERAL CONDITIONS

PART 1 - GENERAL

1. "The General Conditions for the Contract for Construction", 1997 Edition, with modifications as called out in Section 00 801 - Supplementary Conditions, is hereby made a part of these documents to the same extent as if herein written out in full.

End of Section

SECTION 00 801

SUPPLEMENTARY CONDITIONS (1997)

The following supplements modify, delete, or add to the "General Conditions of the Contract for Construction, 1997 Edition". Where any article, paragraph or sub-paragraph in the General Conditions is supplemented by one of the following paragraphs, the provisions of such article, paragraph, or sub-paragraph shall remain in effect and the supplemental provisions shall be considered added thereto. Where any article, paragraph, or sub-paragraph, in the General Conditions is amended, voided, or superseded by any of the following paragraphs, the provisions of such article, paragraph or sub-paragraph not so amended, voided, or superseded shall remain in effect.

I. ARTICLE 1 - GENERAL PROVISIONS

- A. Add to paragraph 1.1.1: The Drawings and Specifications shall include the Instructions to Bidders, Invitation to Bid, Sample Forms, Contractor's Bid, and all Addenda items relating to Bidding.
- B. Add to paragraph 1.1.7: The term "Project Manual" as used in these conditions is the volume which includes the Bidding Drawings and Specifications, the Agreement Between Owner and Contractor, the Conditions of the Contract, the Specifications, and all Addenda issued prior to, and all Modifications issued after execution of Contract.

II. ARTICLE 2 - OWNER

- A. Add paragraph 2.1.4: The Owner is the City of Dacula, Georgia. All contact with the Owner shall be made to and through the Engineer, Kevin D. Whigham, P.E., Bowman, 770-932-6550 or kwhigham@bowman.com. The only other directions the Contractor may respond are those issued by the City of Dacula Council, Mayor, City Planner, or City Administrator.
- B. Add to paragraph 2.2.5:
 - 1. Sets of Construction Documents may be obtained as provided for in Advertisement to Bid, which need not be returned by the successful bidder.
 - 2. For construction purposes, the Owner will furnish free of charge to the successful bidding Contractor a maximum of Five (5) printed sets of complete Construction Documents consisting of the Drawings, the Specifications, and all Addenda.
 - 3. Any additional sets of complete Construction Documents or additional copies of selected sheets of Contract Drawings, or sections or pages of Specifications requested by the Contractor will be supplied and billed to the Contractor.

- C. Add paragraph 2.4.2: "If, in the opinion of the Engineer, it is evident that the Contractor has not completed or will not be able to substantially complete the work in accordance with Drawings and Specifications due to default, negligence, or failure on the part of the Contractor, or their subcontractors, the Owner may, at his option, without prejudice, after the expiration of the two seven-day written notices to the Contractor, complete certain portions of the work as may be necessary, or augment the forces of the Contractor with additional manpower as may be required to complete the work by the contracted completion date. In such case, an appropriate deductive change order shall be written, deducting from the contract price the actual costs incurred by the Owner to complete or augment the work. Amount charged to the Contractor will be subject to the approval of the Engineer. Such action, if taken by the Owner, shall not be interpreted by the Contractor as a termination of the contract as per Paragraph 14.2, and the Contractor is to continue to carry out the work or portions of the work as may be required by the contract during this time frame.

III. ARTICLE 3 - CONTRACTOR

- A. Add paragraph 3.2.4:

3.2.4 In case of discrepancies or conflicts in the Drawings and Specifications, the documents to hold precedence over others shall be in the following order:

3.2.4.1 The Owner-Contractor Agreement (including modifications thereto).

3.2.4.2 Change Orders - Those of a later date shall take precedence over those of an earlier date.

3.2.4.3 Written Amendments to the Contract Signed by Both Parties - Those of a later date shall take precedence over those of an earlier date.

3.2.4.4 Addenda - Those of a later date shall take precedence over those of an earlier date.

3.2.4.5 Clarifications.

3.2.4.6 Supplementary Conditions.

3.2.4.7 General Conditions.

3.2.4.8 Specifications.

3.2.4.9 Schedules.

3.2.4.10 Details - Large scale details shall control over small scale drawings.

3.2.4.11 Other drawings.

3.2.4.12 Drawings dimensioned.

3.2.4.13 Drawings not dimensioned.

- B. Add paragraph 3.2.5:

3.2.5 Items of work not illustrated in the drawings or specifications or the mis-

description of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or mis-described details of the work, but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

- C. Add paragraph 3.2.6 as follows:

3.2.6 MEASUREMENTS AND DIMENSIONS

3.2.6.1 The Contractor shall check and be responsible for correctness of all dimensions by taking measurements at the project site before ordering material or doing work dependent for proper size of installation upon coordination with job conditions.

3.2.6.2 The Contractor shall refer discrepancies between Drawings, Specifications, and Project Conditions to Engineer for adjustment before work affected thereby is begun.

3.2.6.3 No consideration shall be given any claim based on difference between actual dimensions and those illustrated on the drawings without first complying with 3.2.6.2 above.

- D. Add paragraph 3.3.8: All grades, lines, levels, and benchmarks for the work under this Contract shall be established and maintained by the Contractor, who shall verify all grades, lines, levels, and dimensions indicated on the Drawings, and shall report all discrepancies before commencing work. The Contractor shall provide and maintain well-built batter boards at corners. He shall establish and safeguard benchmarks in at least two widely separated places. As work progresses, he shall establish and safeguard benchmarks at each level and shall establish exact locations of partitions on rough floors as a guide to trades. Any costs of corrective measure necessitated by erroneous establishment of grades, lines, levels and benchmarks shall be paid for by the Contractor.

- E. Replace paragraph 3.7.1 with the following:

3.7.1 The Owner shall pay for any Permit and/or other jurisdictional fees. The Contractor shall secure and pay for all other governmental permits, fees, licenses and inspections necessary for the proper execution and completion of the work, which are customarily secured after execution of the contract and which are legally required at the time the construction begins.

- F. Add paragraph 3.7.6 Required permits, licenses, inspections, and certificates shall be

carefully preserved and prominently posted during the construction period at the project for the easy, convenient access by the various inspecting authorities.

G. Add paragraph 3.19 as follows:

3.19 PRE-CONSTRUCTION CONFERENCE

- 3.19.1 A Pre-Construction Conference shall be held prior to commencement of work. The purpose of this conference is to introduce all members of the construction team, which include the Engineer, the Contractor's Project Manager, and the Contractor's Superintendent, to review and ensure all Drawings and Specifications and Submittals are completed and in compliance with all Agreements. In addition, the Contractor shall submit 2 copies of all Post-Bid Information, as described below, for the Owner and Owners' Representative's review.
- 3.19.2 A schedule of values for each major item of work included in the Contract shall be submitted on schedule of values cost index sheets contract and shall define both labor and materials costs for each. Provide breakdown per divisions and sections per table of contents of these specs. See sample form included in Bid for Lump Sum Contracts.
- 3.19.3 A statement designating all work to be performed by the Contractor's own forces shall be submitted.
- 3.19.4 A list of the name of all Sub-Contractors and names of other organizations proposed for each portion of the Work shall be properly executed on "List of Subcontractor's" - and shall be submitted for Owner's and Engineers' review with 24-hour phone numbers.
- 3.19.5 The Performance Bond shall be properly executed on acceptable forms and submitted in duplicate, as described in Section 00 600 - Bonds and Certificates. Bond rating letter shall be included.
- 3.19.6 The Labor and Materials Bond shall be properly executed on acceptable forms and submitted in duplicate.
- 3.19.7 The Certificate for Insurance shall be properly executed on acceptable forms and submitted in duplicate.
- 3.19.8 A list of the names of all suppliers of principal materials and equipment shall be submitted for Owner's and Engineer's review.

- 3.19.9 Construction Schedule submitted to Owner within two weeks of award of contract.
- 3.19.10 A schedule of submittals including certifications, shop drawings, product data, samples, manuals, as built drawings and guarantees with dates of proposed submittals shall be submitted.
- 3.19.11 In addition to submittal of the previous items, the following topics will be discussed. The General Contractor is encouraged to have all subcontractors represented at the conference:
- 3.19.11.1 Introduction of all attending parties.
- 3.19.11.2 Channels and procedures for communication shall be discussed.
- 3.19.11.3 Requests for substitution shall be issued in accordance with the requirements of Section 01 630.
- 3.19.11.4 Issuance of RFP's (Requests for Proposals) by the Engineer shall be addressed by the General Contractor within 7 calendar days of receipt thereof in accordance with Supplementary Conditions, Article 7.
- 3.19.11.5 Change Order compensation shall be based on figures indicated in Supplementary Conditions, Article 7.
- 3.19.11.6 Pre-construction submittals shall be issued as indicated in Supplementary Conditions, sub-paragraph 3.19.
- 3.19.11.7 Any requested shop drawings, samples and other project submittals shall be approved by Owner and Engineer.
- 3.19.11.8 Job Progress Meetings shall be held on an as needed basis to review the Contractor's Application(s) for Payment.
- 3.19.11.9 Applications for Payment shall be issued in accordance with the requirements of Article 9 of the General Conditions of the Contract for Construction and all applicable Supplementary Conditions. All Applications for Payment shall be received by the Engineer no later than the first day of each month and paid by the first Friday following the 15th day of the month. Retainage shall be as described in Supplementary Conditions, paragraphs 9.3.4, 9.6 and 9.6.6. (Retainage shall be 10 percent of the amount earned for the work in place, plus the value of stored materials up to and including 50 percent completion, then 0 percent until final

completion, thereby reducing retainage at final completion to 5 percent of the contract amount (including change orders), subject to the approval of the Owner and the Engineer. In other words, at 50 percent project completion, retainage will be 5 percent of the contract amount, plus approved change orders, until final completion is achieved. Retainage for individual subcontractors shall not be released separately as the subcontractors complete their work. Nor shall the retainage for individual subcontractors be reduced when payments beyond 50% of the individual contracts are released. Retainage shall only be reduced based on payments released in excess of 50% of the overall contract sum.

- 3.19.11.10 Safety precautions and programs shall be as directed by the General Contractor in accordance with the General Conditions in Section 00 700.
- 3.19.11.11 Requests for time extension shall be issued in accordance with the requirements of the General and Supplementary Conditions, Article 8.
- 3.19.11.12 Discrepancies and conflicts in the Drawings and Specifications shall be resolved using the order of precedence indicated in the Supplementary Conditions, paragraph 3.2.4.
- 3.19.11.13 The Date of Substantial Completion shall not be achieved and the Certificate of Substantial Completion shall not be issued prior to receipt of the official Certificate of Occupancy by the General Contractor. This requirement is indicated in Specification Section 01 700, Part 1.1.A. In addition, the Certificate of Substantial Completion shall only be issued in accordance with the requirements of Section 9.8 of the General Conditions of the Contract for Construction.
- 3.19.11.14 Contract closeout/final payment requirements are indicated in Section 01 700. Piecemeal delivery of final closeout documents and materials is unacceptable.
- 3.19.11.15 Materials testing (if required) shall be conducted under a separate contract by the Owner. Contractor shall acquire a Geotechnical Engineer to perform all testing to be approved by and paid for by Owner. The General Contractor shall note that he is responsible for payment of additional testing services, if initial testing services fail.
- 3.19.11.16 Immediately prior to Substantial Completion, the General Contractor shall prepare a comprehensive list of items to be corrected or completed (a punch list) for the Engineer's review, in accordance with paragraph 9.8.2 of the General Conditions. The Engineer shall then add to or delete items

from the list during a Substantial Completion Inspection.

3.19.11.17 Permits, fees, licenses, etc. shall be addressed in accordance with the requirements of General Conditions, paragraph 3.7.1, all applicable Supplementary Conditions, and as follows:

- A. All work and material shall be in accordance with the National Electrical Code, the Plumbing Code, and other applicable Federal, State, County, and municipal laws, ordinances, rules and regulations pertaining to construction, and nothing in these plans or specifications shall be construed to permit work not conforming thereto. The Contractor shall consult the Engineer on all deviations regarding possible noncompliance and provide all labor and materials to complete the work as required by laws, ordinances, rules and regulations as directed by the Owner at no increase in cost to the Owner. He shall first confer with the Engineer before making any determinations as to changes in quality, scope and/or increases in cost.

3.19.11.18 Compensation for stored materials shall be as defined in parts 6.2.1, 9.3.2, and 10.2.1.2 of the General Conditions, and as follows:

- H. Material delivered for the Contractor to locations other than the site may be taken into consideration in the preparation of pay requests at the discretion of Engineer, provided the Contractor furnishes satisfactory evidence that he has acquired title to such material that it will be utilized on the project covered by this contract in the form of an affidavit stating such. Contractor must provide proof of acceptable insurance coverage on material stored off-site prior to payment for same as well as invoices for such stored materials indicating transfer of the property to the Owner.

IV. ARTICLE 4 - ADMINISTRATION OF THE CONTRACT

- A. Add to paragraph 4.1.1: The Architect referred to in the Contract, the General Conditions, Supplementary Conditions, or other documents of the Contract shall mean the "Engineer", Bowman Consulting Group, Ltd., 4174 Silver Peak Parkway, Suwanee, GA 30024.

- B. Delete Paragraph 4.5 (Arbitration) in its entirety.

V. ARTICLE 7 - CHANGES IN THE WORK

- A. Add to paragraph 7.1.1

No extra work is to be done without a written change order. Payment will not be authorized for any extra or changed work for which the Contractor has failed to secure

such written change order. All change orders must be signed by the Engineer and Owner.

- B. Delete paragraph 7.3 "Construction Change Directives" in its entirety.

VI. ARTICLE 8 - TIME

- A. Add sub-paragraph 8.1.5:

8.1.5 A working day is a day for which no premium pay is required of the Contractor for labor.

- B. Add paragraph 8.2.4

8.2.4 Upon the determination that the construction progress is two (2) weeks behind the original construction schedule as required by the General Conditions as submitted at the start of the project the Owner will require that the Contractor increase his work effort to a six (6) day ten (10) hour per day work week.

- C. Add sub-paragraph 8.2.5

8.2.5 When requested by the Engineer, the Contractor shall furnish reports as are reasonably desirable as to the progress, condition of the job and anticipated schedule of completing the various phases of the work.

- D. Add paragraph 8.4 - Rain Days

8.4 Requests for extension shall be issued in writing by the Contractor to the Engineer within 21 calendar days of the event which causes the delay. This requirement shall be strictly enforced. Completion time will not be extended for normal bad weather. The time for completion as stated in the Drawings and Specifications includes due allowance for days on which work cannot be performed out-of-doors. Any days lost due to the weather shall be documented and verified with the National Weather Service. These days shall be reported by the Contractor at the monthly job site progress meeting.

For the purpose of this contract, the Contractor agrees that he may expect to lose working days to weather in accordance with the following table:

January - 14 days	May - 6 days	September - 2 days
February - 14 days	June - 3 days	October - 3 days
March - 10 days	July - 4 days	November - 5 days
April - 7 days	August - 2 days	December - 9 days

If the total accumulated number of working weekdays (Monday thru Friday) lost to the weather from the start of work until the building is enclosed, as defined by the Engineer, exceeds the total accumulated number to be expected for the same period from the table above, the contractual completion date shall be extended by the number of calendar days needed to include the excess number of days lost. No extension shall be made for days of bad weather occurring after the building is enclosed. No extension shall be allowed for days on which total precipitation volume is less than 1/10" as recorded by the National Oceanic and Atmospheric Administration, the National Weather Service, the U.S. Army Corps of Engineers, or any other source chosen to be recognized by the Engineer. No extension will be allowed for precipitation occurring on any Saturday or Sunday or nationally recognized holidays during the project life. Furthermore, should a project fall behind the Contractor's original construction schedule, no extensions will be given for inclement weather days beyond the originally scheduled dry-in date plus any additional days due Contractor during such originally scheduled period. No changes in the contract sum shall be authorized because of adjustment of contract time due to inclement weather.

VII. ARTICLE 9 - PAYMENTS AND COMPLETION

A. Add paragraph 9.2.2:

9.2.2 First Payment Application Actions and Submittals which must precede submittal of Contractor's first payment application are as follows:

B. Add paragraph 9.2.3:

9.2.3 The schedule of values shall be prepared in a line item format on Application and Certification for Payment and on Document G703 Continuation Sheet provided in Section 01 370, providing labor and material costs for each line item. Stored materials shall be summarized on the Continuation Sheet provided in Section 01 370.

C. Delete paragraph 9.3.1 entirely and add paragraph 9.3.1:

9.3.1 The Contractor shall submit to the Engineer, on or before the first day of each month, an itemized Application for Payment, notarized by a duly registered Notary Public, supported by data substantiating the Contractor's right to payment as the Owner or the Engineer may require, and reflecting retainage, as provided elsewhere in the Drawings and Specifications. The Form of Application for Payment shall be the Certificate for Payment in Section 01 370. Supporting data shall include Schedule of Values from each Subcontractor requesting

payment, broken down by labor and materials as the Engineer requires. Copies of requisitions from subcontractors and material suppliers may be required.

- D. Add to the end of subparagraph 9.3.2:

9.3.2. Values related to General Contractor's and Subcontractor's overhead and profit for stored materials shall not be paid until the products are incorporated into the project. Materials stored or installed shall not be paid for if required submittals have not been completely reviewed.

- E. Add new sub-paragraph 9.3.4 as follows:

9.3.4 Each Application for Payment up to and including the Application for Payment issued at or following 50% project completion (including approved change orders) shall include a ten percent (10%) retainage of all completed and stored to date items (including approved change orders).

- F. In paragraph 9.4.1, in the first sentence delete "within seven days" and add "by the eighth day of the same month".

- G. Add paragraph 9.5.1.9:

9.5.1.9 It shall be understood that if the Contractor's actual progress becomes more than 10% behind Contractor's anticipated progress, the Owner may direct the withholding of payments to Contractor in amounts equal to the percent behind Contractor's anticipated progress, in addition to the normal 10% withheld.

- H. At paragraph 9.6.1, delete the phrase, "In the manner and within the time provided in the Drawings and Specifications", and in its place use, "On the first Friday following the fifteenth of the same month."

- I. Add new sub-paragraph 9.6.6 as follows:

9.6.6.1 It shall be understood that the Owner shall make progress payments on account of the contract prices, including Owner approved and signed change orders, of labor and materials incorporated in the work and of materials suitably stored at the site thereof, as estimated by the Engineer, less the aggregate of previous payments, until one-half (50%) of the overall contract sum is due (including all Owner approved and signed change orders) and provided that:

- a. The work is not behind schedule as determined, by the Engineer only, from the Engineer accepted, time scaled CPM schedule with monthly anticipated

- progress payment amounts submitted at, or before, the Pre-construction meeting;
- b. The work is being performed in a satisfactory manner in compliance with the Drawings and Specifications as determined by the Engineer;
- c. There are no outstanding claims or liens on the property;
- 9.6.6.2 Further payments beyond 50 percent of the overall contract sum as referenced in 9.6.6.1, with total compliance of Items a, b, and c. shall be made in the amount of 100% of the value of the labor and/or materials incorporated in the work and of materials suitably stored at the site thereof unless;
- a. The percentage of work complete falls behind the percentage required by the Engineer accepted, time scaled construction progress schedule, as described in Item 9.6.6.1.a. by as much as 10%; or
- b. The work is being performed in an unsatisfactory manner and/or non-compliant with the Drawings and Specifications as determined by the Engineer; or
- c. There are outstanding claims or liens on the property.
- 9.6.6.3 In which event or events, the Owner shall reinstate the 10% retainage on all periodical payments to be paid while one or more of the events continue to exist. The Contractor shall be given written notice, by the Engineer, of the reinstatement of the retainage. If the Contractor's actual progress becomes more than 10% behind the Contractor's anticipated progress, as described in Item 9.6.6.1.a., the Engineer may direct the withholding of payments to the Contractor in amounts equal to the percentage behind the Contractor's anticipated progress, in addition to the 10% described in all Items of Article 9.
- 9.6.6.4 If the Contractor recovers all lost time and puts the work back on schedule (0% behind schedule) per schedule described in 9.6.6.1.a and remedies all breaches of 9.6.6.2.b. and 9.6.6.2.c. further payments shall be as described in 9.6.6.2; unless Items 9.6.6.1.a. or 9.6.6.2.b. and 9.6.6.2.c. recur in which event or events the Owner shall reinstate Item 9.6.6.3.
- J. In paragraph 9.7.1, in the first delete "within seven days" and add "by the eighth day of the month"; in the fourth line delete "within seven days after the date established in the Drawings and Specifications" and add "as described in paragraph 9-6-1".
- K. Add paragraph 9.9.4:
- 9.9.4 Should the Project, or any portion thereof, be incomplete for Substantial Completion or final completion at the scheduled date or dates, the Owner shall have the right to occupy any portion of the Project. In such an event, the Contractor shall not be entitled to any extra compensation on account of

said occupancy or by the Owner's normal full use of the project, nor shall the Contractor interfere in any way with said normal full use of the project. Further, the Contractor shall not be relieved of any responsibilities of the Contractor, including the required times of completion. Such occupancy by the Owner does not, in itself, constitute Substantial Completion nor Final Completion.

L. Add paragraph 9.10.6:

9.10.6 Reduction in retainage shall not be made automatically. Any reduction in retainage shall only be considered based on the condition of the project at the time of issuance of the Certificate of Substantial Completion.

M. Add paragraph 9.10.7:

9.10.7 In the event that Final Completion is not achieved within 60 days of the contracted date of Substantial Completion through no fault of the Owner or Engineer, the Contractor shall pay Owner amounts equal to the actual Owner's costs of continuing to provide administrative services on this Contract, until Final Completion.

N. Add paragraph 9.10.8:

9.10.8 Final Payment Application - Actions and submittals which must precede or coincide with submittal of contractor's final payment application are listed in Section 01 700.

O. Add paragraph 9.11

9.11 Article 1 of Chapter 10 of Title 13 of the Official Code of Georgia Annotated, relating to general provisions affecting contracts for public works, is amended by adding at the end of said article a new Code section to be designated as Code Section 13-10-2, which is hereby made a part of this Contract, to read as follows:

A. As used in this Code section, the term:

1. "Contractor" means a person having a direct contract with the Owner.
2. "Lower tier subcontractor" means a person other than a contractor having a direct contract with a subcontractor.
3. "Owner" means the state, any county, municipal corporation, authority, board of education, or other public board, public body, department, agency, instrumentality, or political subdivision of the state.
4. "Engineer" means the Architect or Engineer in charge of the project as

authorized by the Owner or such other contract representative or officer as designated in the Drawings and Specifications as the party representing the Owner's interest regarding administration and oversight of the project.

5. "Subcontractor" means a person other than an owner having a direct contract with the Contractor.
- B. In any contract for the performance of any construction project entered into on or after July 1, 1985, with an owner, as defined in paragraph (3) of subsection (a) of this Code section, such contract shall provide for the following:

After work has commenced at the construction site, progress payments to be made on some periodic basis, and at least monthly, based on the value of work completed as may be provided in the Drawings and Specifications, plus the value of materials and equipment suitably stored, insured, and protected at the construction site, and at the Owner's discretion such materials and equipment suitably stored, insured and protected off-site at a location approved by the Engineer when allowed by the Drawings and Specifications, less retainage; and

1. Retainage to a maximum of 10 percent of each progress payment; provided, however, that when 50 percent of the contract value, including change orders and other additions to the contract value provided for by the Drawings and Specifications is due and the manner of completion of the contract work and its progress are reasonably satisfactory to the Engineer, the Owner shall withhold no more retainage. At the discretion of the owner and with the approval of the Contractor, the retainage of each subcontractor may be released separately as the subcontractor completes his work.
2. If, after discontinuing the retention, the owner's authorized contract representative determines that the work is unsatisfactory or has fallen behind schedule, retention may be resumed at the previous level. If retention is resumed by an owner, the Contractor and subcontractors shall be entitled to resume withholding retainage accordingly.
3. At substantial completion of the work or such other standard of completion as may be provided in the Drawings and Specifications and as the Owner's Representative determines the work to be reasonably satisfactory, the Owner shall within 30 days after invoice and other appropriate documentation as may be required by the Drawings and Specifications are provided pay the retainage to the Contractor. If at that time there are any remaining incomplete minor items, an amount equal to 200 percent of the value of each item as determined by the Engineer shall be withheld until such item or items are completed. The

reduced retainage shall be shared by the Contractor and subcontractors as their interests may appear.

4. The Contractor shall, within ten days from the contractor's receipt of retainage from the Owner, pass through payments to subcontractors and shall reduce each subcontractor's retainage in the same manner as the Contractor's retainage is reduced by the Owner, provided that the value of each subcontractor's work complete and in place equals 50 percent of his subcontract value, including approved change orders and other additions to the subcontract value and provided, further, that the work of the subcontractor is proceeding satisfactorily and the subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his work including any warranty work as the Contractor in his reasonable discretion may require, including, but not limited to, a payment and performance bond.
 5. The subcontractor shall, within ten days from the subcontractor's receipt of retainage from the contractor, pass through payments to lower tier subcontractors and shall reduce each lower tier subcontractor's retainage in the same manner as the subcontractor's retainage is reduced by the contractor, provided that the value of each lower tier subcontractor's work complete and in place equals 50 percent of his subcontract value, including approved change orders and other additions to the subcontract value and provided, further, that the work of the lower tier subcontractor is proceeding satisfactorily and the lower tier subcontractor has provided or provides such satisfactory reasonable assurances of continued performance and financial responsibility to complete his work including any warranty work as the subcontractor in his reasonable discretion may require, including, but not limited to, a payment and performance bond.
- C. This Code section shall not apply to:
1. Any contracts let by the Department of Transportation of this state for the construction, improvement, or maintenance of roads or highways in this state or purposes incidental thereto; or
 2. Any contracts whose value or duration at the time of the award does not exceed \$150,000.00 or 45 days in duration.
- D. Contract and subcontract provisions inconsistent with the benefits extended to contractors, subcontractors, and lower tier subcontractors by this Code section shall be unenforceable; provided, however, that nothing in this Code section shall render unenforceable any contract or subcontract provisions allowing greater benefits to be extended to such contractors, subcontractors, or lower tier subcontractors, the provisions and benefits of

this Code section being minimal only.

- E. Nothing shall preclude a payor under this Code section, prior to making a payment, from requiring the payee to submit satisfactory evidence including any or all invoices that all payrolls, material bills, and other indebtedness connected with the work have been paid.

In addition to the foregoing, before the Owner can implement the above amendment to the contract, a letter of consent from the Surety Company must be provided to the Owner ten (10) days prior to the Contractor's request to the Owner to withhold no more retainage under the terms of 13-10-2.

- F. Add to paragraph above, paragraph B.,1.,a): Conditions for the reduction of retainage from 10 percent to no retainage are:
1. The work is not behind schedule as determined by the Engineer only, from the Architect approved, time scaled CPM schedule with monthly anticipated progress payment amounts submitted at or before the Pre-construction meeting;
 2. The work is being performed in a satisfactory manner in compliance with the Drawings and Specifications as determined by the Engineer;
 3. There are no outstanding claims or liens on the property. Contractor shall submit, with pay request, a lien release form for each subcontractor requesting payments these lien release forms shall be properly notarized.
 4. Further payments, with total compliance of B.1, B.2 and B.3 shall be made in the amount of 100% of the value of the labor and/or materials incorporated in the work and of materials suitably stored at the site thereof unless:
 - a. The percentage of work complete falls behind the percentage required by the construction progress schedule, as described in B.1 by as much as 10%; or
 - b. The work is being performed in an unsatisfactory manner and/or non-compliant with the Drawings and Specifications as determined by the Engineer; or
 - c. There are outstanding claims or liens on the property.
 - d. In which event or events, the Owner shall reinstate the 10% retainage on all periodical payments to be paid while one or more of the events continue to exist. The Contractor shall be given written notice, by the Engineer, of the reinstatement of the retainage. If the Contractor's actual progress becomes more than 10% behind the Contractor's anticipated progress, as described in Item 9.6.6.1.a. the Engineer may direct the withholding of

payments to the Contractor in amounts equal to the percentage behind the Contractor's anticipated progress, in addition to the 10% described in all Items of Article 9.

5. If the Contractor recovers all lost time and puts the work back on schedule (0% behind schedule) per schedule described in 9.6.6.1.a. and remedies all breaches of 9.6.6.2.b and 9.6.6.2.c further payments shall be as described in 9.6.6.2; unless Items 9.6.6.1.a or 9.6.6.2.b and 9.6.6.2.c recur in which event or events the Owner shall reinstate Item 9.6.6.3.

VIII. ARTICLE 11 - INSURANCE AND BONDS

- A. Delete paragraph 11.1.2 in its entirety and substitute the following:

11.1.2. The insurance required by paragraph 11.1.1 shall be written for not less than any limits of liability listed below or required by law, whichever is greater, and shall include contractual liability insurance as applicable to the Contractor's obligations under paragraph 3.18. The Contractor agrees that, prior to the beginning of any work by the Contractor or any Subcontractor, as the case may be, he (the Contractor) will furnish the following to the Owner for himself, and will obtain, and retain in his files for the duration of the construction period, like certificates for each Subcontractor. Certificate from insurance company showing coverage of Workmen's Compensation Insurance for the State of Georgia or a certificate from Georgia Workmen's Compensation Board showing proof of ability to pay compensation directly. Certificate from insurance company showing coverage for the Contractor for the following:

1. Contractor's Protective and Public Liability Insurance: Taken out in the name of the Contractor.
2. Personal Injury, including death - minimum limits of \$500,000 for each person and \$1,000,000 for each accident.
3. Property Damage, minimum limits of \$300,000 for each accident and \$500,000 for aggregated of operations.
4. Disposition: Certificate of Insurance must be sent to Engineer prior to commencement of work. See following for endorsement required on this certificate.

- B. Delete paragraph 11.1.3 in its entirety and substitute the following:

11.1.3 Certificates of insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the work. These certificates shall contain a statement on every policy or certificate, as the case may be, that "The insurance company agrees that Policy No. _____ shall not

be canceled, changed, or allowed to lapse until ten (10) days after the Owner and Engineer have received written notice as evidenced by return receipt of registered letter".

C. Add paragraph 11.1.1.8:

11.1.1.8 Liability insurance shall include all major divisions of coverage and shall be on a comprehensive form including:

1. Premises - Operations
2. Independent Contractor's Protective, for Owner and Contractor
3. Products and Completed Operations (in force for one year beginning at Date of Substantial Completion)
4. Contractual - including specified provisions for the Contractor's obligations under Paragraph 3.18.
5. Owned, non-owned, and hired motor vehicles
6. Broad form coverage for property damage
7. Explosion and collapse hazard
8. Underground hazard

D. Delete paragraph 11.2 in its entirety.

E. Delete paragraph 11.3 in its entirety and substitute the following:

11.3 The Contractor shall purchase and maintain property insurance upon the entire work at the site, to the full (100%) insurable value thereof. This insurance shall include the interest of the Owner and the Contractor in the work and shall insure against the perils of fire, extended coverage, and shall include "all risk" insurance for physical loss or damage including, without duplication of coverage, theft, vandalism and malicious mischief.

F. Delete Paragraph 11.4.1 in its entirety and substitute the following:

11.4.1 Contractor shall furnish both a Performance Bond and a Payment Bond, each in the amount of 100% of the Contract Sum, unless otherwise directed by the Engineer. Contractor shall also provide both Performance Bond and Payment Bond for his major subcontractors, including HVAC, electrical, plumbing, roofing, and sprinkler. The sureties must be authorized to do business in the State of Georgia and listed on "Department of the Treasury Circular 570". In addition, companies furnishing bonds shall have an A.M. Best Company rating of at least a Class "A" with a financial size of VI or better. Bonds must be accompanied by letter stating company's current rating for verification prior to acceptance by the Owner and execution of the formal Owner/Contractor agreement.

IX ARTICLE 13 - MISCELLANEOUS PROVISIONS

A. Delete paragraph 13.5.3 entirely and replace as follows:

13.5.3

1. When initial tests indicate non-compliance with the Drawings and Specifications, all subsequent retesting caused by the non-compliance shall be performed by the same testing laboratory and the costs thereof will be deducted by the Owner from the contract sum.
2. Inspection or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.
3. All specimens and samples for testing, unless otherwise provided in these Drawings and Specifications, will be taken by the testing laboratory. All sampling equipment and personnel will be provided by the testing laboratory and all deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

End of Section

23-0805

NOTICE OF COMMENCEMENT

00 802-1

SECTION 00 802

NOTICE OF COMMENCEMENT

Public Works**To: Clerk of Superior Court of Gwinnett County, Georgia**

Pursuant to O.C.G.A. 36-82-104(f), not later than 15 days after physically commencing work, the undersigned gives Notice of Commencement of a public work including the following information:

1. _____
2. "Brookton Place Subdivision Asphalt Milling and Repaving Project" in the City Limits of Dacula, Georgia.
3. Name and address of the state, country, municipal corporation, or public board or body thereof which is doing the public work:

City of Dacula
P.O. Box 400
Dacula, Georgia 30019
4. Name and address of the surety for the performance and payment bonds, if any:

5. Name and address of the holder of the security deposit provided pursuant to O.C.G.A. 13-10(b)(2)(B), if any: N/A

Contractor

Date

These documents must be filed with the Clerk of the Superior Court for the county in which the public work is located, and a copy of this document must be posted at the public work site not later than 15 days after the Contractor physically commences work on the public work.

Within ten (10) calendar days of receipt of a written request, give a copy of this Notice of Commencement to any subcontractor, materialman, or person making the request.

End of Section.

23-0805

ADDENDA AND CLARIFICATIONS

00 900-1

SECTION 00 900

ADDENDA AND CLARIFICATIONS

PART 1 - GENERAL

1.1 The following changes have been incorporated in the Construction Documents dated October 20, 2023 (Released for Construction).

- a. Addendum No. 1, dated _____, 2023.
- b. Addendum No. 2, dated _____, 2023.
- c. Addendum No. 3, dated _____, 2023.

Copies of these documents are included herein.

PART 2 - N/APART 3 - N/A

End of Section

**PROJECT SCOPE OF WORK
& PERFORMANCE SPECIFICATIONS
FOR
"BROOKTON PLACE SUBDIVISION ASPHALT MILLING AND REPAVING PROJECT"**

PART 1 - GENERAL

1.1 SCOPE OF WORK

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the "Dacula Crossing Subdivision Asphalt Milling and Repaving Project" as follows:

A. BASE BID –

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision, and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the City of Dacula "Brookton Place Subdivision Asphalt Milling and Repaving Project" as follows:

The scope of work includes asphalt deep patch milling, standard edge milling, and repaving of all streets within the Brookton Place Subdivision. All areas for deep patch milling are marked in orange paint by the City and Owner's representative. Contractor shall visit the streets identified and determine his own quantities for bidding the project. The project service area includes improvements for the entire length of Brookton Place Subdivision interior streets. Interior streets to be milled and repaved include Ben Arron Drive (553 LF +/-), Sam Calvin Drive (3,725 LF +/-), Carly Joanna Court (123 LF +/-), Peter Josiah Court (464 LF +/-), James Henry Drive (1,154 LF +/-), Winky Bluff (1,002 LF +/-), Nathan Timothy Court (184 LF +/-), Katie Lynne Lane (1,046 LF +/-), and Kristi Beth Court (435 LF +/-) and all cul-de-sacs. Deceleration lane off of Williams Farm Drive into Brookton Place Subdivision at Ben Arron Drive is also included in the scope of work. All streets are approximately 23' wide +/- from edge of pavement to edge of pavement with 80' diameter cul-de-sacs.

SPLOST and 2024 LMIG funds will be utilized for the scope of work to improve Brookton Place Subdivision. Contractor is responsible for complying with all regulations and providing all documents as per City of Dacula requirements. An Asphalt Core Study for the Subdivision has been completed and provided by Atlas Technical Consultants, LLC. to determine the existing asphalt and base thickness for milling depths. Integrated Science Engineering has completed CCTV of the existing storm sewer system to determine the condition of the existing storm sewer pipes and where the storm system is in need of cleaning.

The paving scope will consist of deep patch milling and edge milling of the existing subdivision streets. Edge Milling will begin at 2-1/2" depth at gutter line and then taper out to zero towards the centerline of the road. Once edge milling is complete, the Contractor will perform an additional 4" of Deep Patch Milling to repair alligatored and deteriorated asphalt areas where marked by the City and it's Engineer. Once milling is complete, deep patch milled areas will receive 4" of 25 mm Superpave Asphalt Binder Course to make flush with the remainder of the existing milled areas. An asphalt tack coat will then be applied over entire existing asphalt pavement prior to installing 1" inch of 'D' Mix Asphalt Binder Course. A second tack coat will be applied over entire surface prior to installing 1-1/2" of 'F' Mix (9.5 mm) Type 2 Asphalt Surface Course. All new pavement repair shall have smooth transition with adjacent existing asphalt intersections, curb & gutter, and driveways. Finally, new street signs shall be installed to replace aging and faded signage.

The Centerline of the streets shall be built up to create a positive crown in roadway sloping out to edge of pavement and gutter to provide for adequate drainage of the streets. Limits of work include all asphalt pavement within right-of-way of City of Dacula for streets identified.

Thermoplastic Stop Bar Striping shall be reinstalled at intersection of Ben Arron drive and Williams Farm Drive to match existing condition. Contractor shall install any other striping within the subdivision to match existing conditions. Any disturbance outside of existing streets to residential properties (lawns) shall be permanently stabilized with Sod grassing in kind or Bermuda.

In addition to milling and repaving, the scope of work also includes partial curb & gutter replacement, driveway apron replacement, storm sewer manhole paved invert installation, and cleaning out of the existing storm system within the subdivision. A small amount of damaged curb & gutter and driveway aprons are marked with orange paint and will need to be demolished and replaced as illustrated on the drawings. Integrated Science Engineering has also performed and provided the City with CCTV of the storm pipe sewer system to illustrate the existing condition of the storm pipes and manholes. Bowman has added this information to the drawings. The Contractor shall include in his bid, installation of new concrete paved inverts for storm sewer manholes along and within the right-of-way as identified in the drawings and cleaning out of all sediment and debris within the existing storm pipe system and manholes. Contractor will then need to have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com) to perform an updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid.

Contractor shall include in their Base Bid all costs for adjusting any sewer manholes, water valves, or other utilities, and for all materials needed to raise any valves or other covers flush within the finished surface of the road to complete the scope of work as described by the Contract Documents and Drawings.

One lane of traffic and access to residential driveways must be maintained at all times. Traffic Safety devices such as signage, barricades, etc., and the protection of the public-at-large, and the Contractor's personnel is part of this contract and is the Contractor's sole responsibility.

The Contractor will have Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project.

All materials and appurtenances required to complete this Scope of Work is the responsibility of the Contractor and shall be provided in his overall Bid. Contractor with winning Bid is required to submit a schedule of values at the Pre-construction meeting.

Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2008), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.

Additional items within Scope of Work

- A. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done. Contractor is responsible for hauling off all demolition materials (existing pipe, asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner. Contractor shall tie-in and feather new asphalt into existing asphalt so that there is a smooth transition.
- B. If any unforeseen sub-grade conditions arise, then the Contractor shall immediately notify the Owner and/or Owner's representative before proceeding with any work to determine the course of action. The Contractor, if required, shall have a Geotechnical Engineer (who will be selected by the Contractor and approved and paid for by the Owner) qualify and quantify the areas and determine the method of sub-grade repair in coordination with the Owner and/or Owner's Representative on a case-by-case basis.
- C. The limits of work for this project are limited to that area within right-of-way of City of Dacula and Storm Sewer Easements. Contractor shall not disturb private residential properties, unless required to complete scope of work and then shall minimize disturbance to as little as possible. Any disturbance outside of the existing streets shall be repaired in kind to existing condition at no additional cost to Owner.
- D. Contractor is responsible to locate horizontally and vertically all existing utilities within limits of disturbance and protect throughout duration of project. Utilities present include water, gas, electrical, CATV, AT&T, etc., but may not be limited to these within the limits of disturbance.
- E. All earthwork quantities for deep patch milling shall be included in the Contractor's Lump Sum Bid and are the responsibility of the Contractor to haul-in or haul-off at no additional cost to the owner in order to complete the scope of work.

- F. Contractor shall have a Site Superintendent on-site at all times while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

1.3 MEASUREMENT AND PAYMENT

- A. Furnish unit prices with quantity breakdowns of all items of construction per Section 00 100, Instruction for Bidders and Section 00 300, Bid Proposal Form.
- B. Furnish unit prices with quantity breakdowns of all items for the Erosion Control Maintenance of the project site.
- C. Contractor will note that any quantities called out in the Scope of Work, Bid Documents, and/or Performance Specification are approximate. Contractor shall calculate and verify his own quantities used to formulate his bid. Contractor shall verify all lengths of roadways and determine all quantities required to complete the asphalt repaving work.

PART 2 - PRODUCTS – N/A

PART 3 – EXECUTION – N/A

3.1 PAVING

- A. City of Dacula's Engineer or designated representative shall have access at all times to all parts of the material producing plants for checking the mixing operations and materials and the adequacy of the equipment in use.
- B. The Contractor is responsible for maintaining the existing pavement alignments, grades, elevations and cross sections as represented by existing roadway conditions.
- C. Submittals shall be in accordance with the Department of Transportation, State of Georgia, Standard Specifications, Construction of Roads and Bridges and shall include aggregate source, gradation, soundness loss, percentage of wear, and other tests required by the DOT.
- D. Contractor shall submit a Job-Mix Formula per the requirements of the Department of Transportation, State of Georgia, Standard Specifications, Construction of Roads and Bridges. Paving specifications as described below in Part 3.1 item J shall be used.
- E. Paving equipment, weather limitations, Job-Mix Formula, mixing, construction methods, compaction, finishing, tolerances, and protection shall conform to the requirements of the appropriate sections of the Department of Transportation, State of

Georgia, Standard Specifications, Construction of Roads and Bridges for the type of materials specified.

- F. Contractor to ensure that stormwater will not pond in roadway, driveways, or on adjacent shoulders or landscaped areas.
- G. After demolition and removal of the existing pavement and base materials, if required, the earth sub-grade shall be proof-rolled in the presence of the Owner and/or Owner's representative to determine the stability and adequacy of the earth base before proceeding with any repaving operations. The earth sub-grade and the GAB base are to be proof-rolled separately. Sections of earth sub-grade and/or GAB base failing to pass the respective proof-roll test shall be replaced and/or re-compacted and may require testing by a Geotechnical Engineer if requested by the Owner or the Owner's Representative, only if required.

Proof-rolling (if required):

- 1. After demolition operations, the Project area shall be proof-rolled in the presence of the Owner's Representative. A Geotechnical Engineer will be selected by the Contractor and approved by the Owner for this project and paid by the Contractor to perform geotechnical and materials testing services for the project if required.
 - 2. Proof-rolling shall consist of a minimum of four (4) complete overlapping passes in each of two perpendicular directions with a heavily loaded 18-20 ton dual tandem dump truck.
 - 3. Proof-rolling shall be performed in the presence of the Owner's Representative.
 - 4. Any soft or unstable sub-grade soil conditions observed shall be identified for qualification and quantification by the Geotechnical Engineer.
 - 5. Any soft or yielding areas shall be thoroughly undercut and replaced with well-compacted structural fill. Areas shall be compacted 95% Standard Proctor with the top twelve (12") inches compacted to 98% Standard Proctor Density or as specified by the Geotechnical Report.
- H. Contractor shall be responsible for providing all equipment necessary to perform proof rolling operations of earth sub-grade, GAB base, and/or existing asphalt, if required.
 - I. Transition between new and existing sections at intersection shall be flush and smooth. Any elevation difference shall be made up with additional asphalt surface course material. Centerline of each street shall be built up to create a positive crown in roadway sloping towards curb and gutter.
 - J. Placement of Asphaltic Paving Materials shall be as follows:

1. Spread material in a manner which requires the least handling.
 2. Where thickness of finished paving will be 3 inches or less, spread in one layer.
 3. After material has been spread to proper depth, roll until the surface is hard, smooth, unyielding, and true to the thickness and elevations as determined by Owner's Representative.
 4. Roll in at least two (2) directions until no roller marks are visible.
- K. Finished paving smoothness tolerance:
1. No depressions which will retain standing water. Contractor will ensure that stormwater will not pond in roadway, driveways or on adjacent shoulders or landscape areas.
 2. No deviations greater than 1/8 inch in six feet.
- L. All existing utility structures will be adjusted to fit flush with street surface 24 hours after resurfacing is completed in accordance with the City of Dacula Standards.

3.2 MAINTAINING TRAFFIC

- A. Sections of newly finished pavement and patching areas shall be protected from traffic until the traffic will not mar the surfaces or alter the surface textures.
- B. All traffic control and detouring equipment, methods and techniques shall conform to the latest edition of the M.U.T.C.D. and all supplements thereto.
- C. Maintain one (1) lane (12' wide minimum for school bus access) open at all times.
- D. Maintain local traffic access to all streets, all intersections and all private driveways during construction period and at all times. Contractor shall not perform any work that will impact the flow of traffic without approval of Owner's Representative.
- E. Contractor shall take necessary precautions to secure the construction sites to maintain a safe environment for the public.
- F. Contractor, vendors and all sub-contractors shall observe speed limits at all times.

3.3 EROSION CONTROL

- A. Install and maintain a comprehensive system of Soil Erosion Control measures throughout the duration of the projects in conformity with the "Manual for Erosion and Sediment Control in Georgia", 6th Edition, 2014 by the Georgia Soil and Water

Conservation Commission and any supplements thereto.

- B. Contractor shall contain all soil erosion from the existing construction areas. Erosion control measures are required for any disturbed areas outside of edge-of-pavement limits such as regraded ditch work, culvert replacement, and storm sewer system installation.
- C. Erosion control includes, but is not limited to Rip Rap, Erosion Control Matting, Temporary and Permanent Grassing. Other BMP's may include Temporary Sediment Traps "F" (w/ filter fabric) and "P" (pigs-in-blanket), and Haybale & Rock Check dams. Temporary Grassing and Permanent Grassing is required where Contractor disturbs any area outside limits of repaving. Sod shall be replaced in kind where disturbed in property owner's yards.

3.4 CLEAN-UP

- A. Contractor shall remove all debris, rubbish, and excess material from the work sites.
- B. Areas along roadways will be dressed, grassed, and mulched.
- C. All excess material from demolition and/or construction activities will be hauled off and legally disposed of.

3.5 GUARANTEE

- A. Contractor shall guarantee all improvements from material and/or craftsmanship defects for a period of one (1) year from date of final acceptance of Work.

End of Section

SECTION 01 370

APPLICATION FOR PAYMENT

PART 1 - GENERAL

- 1.1 Contractor shall submit Application and Certification for Payment in format **similar** to that of the AIA Document G702 and the AIA Document G703, Continuation Sheet. (Example formats are hereby made a part of these documents. (Exhibits follow)
- 1.2 City of Dacula is utilizing SPLOST and LMIG funds for this project. Contractor will need to submit all requested documentation with each pay application as discussed with City at Pre-Construction Meeting.
- 1.3 Contractor shall submit weekly Wage Hour Payrolls and Section 3 Monthly Reports in accordance with Davis-Bacon requirements and any other paperwork required by the City's funding sources. Once the City receives these documents and approval of same, and submitted Application for Payment, then the City will remit payment to Contractor within thirty (30) days.
- 1.4 The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract. The payrolls submitted shall set out accurately and completely all the information required to be maintained under 29 CFR 5.5 (a)(3)(i).
- 1.5 Each payroll submitted shall be accompanied by a "Statement of Compliance", signed by the Contractor or Subcontractor or his or her agent who pays or supervised the payment of the persons employed under the contract and shall certify the following:
 - (1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR 5.5 (a)(3)(i) and that such information is correct and complete;
 - (2) That each laborer or mechanic (including helper, apprentices, and trainee) employed on the contract during the payroll period has been paid the fully weekly wages earned, without rebate either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3.

The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for the submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

- 1.6 If the Contractor or Subcontractor fails to submit the required records or to make them

23-0805

APPLICATION FOR PAYMENT

01 370-1

available, HUD or its designee may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Failure to submit the required records upon request may be grounds for debarment action pursuant to 29 CFR 5.12.

PART 2 - PRODUCTS – N/A

PART 3 - EXECUTION – N/A

End of Section

APPLICATION AND CERTIFICATE FOR PAYMENT

PAGE ONE OF

Item 7.

TO OWNER:

PROJECT:

APPLICATION NO.:

Distribution to:

PERIOD TO:

☐ OWNER

PROJECT NOS.:

☐ ARCHITECT

FROM CONTRACTOR:

VIA ENGINEER:

CONTRACT DATE:

☐ CONTRACTOR☐ ENGINEER☐

CONTRACT FOR:

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract.

1. ORIGINAL CONTRACT SUM\$ _____
2. Net change by Change Orders\$ _____
3. CONTRACT SUM TO DATE (Line 1 \pm 2)\$ _____
4. TOTAL COMPLETED & STORED TO DATE\$ _____
(Column G on G703)
5. RETAINAGE:
 - a. _____% of Completed Work\$ _____
(Columns D + E on G703)
 - b. _____% of Stored Material\$ _____
(Column F on G703)Total Retainage (Line 5a + 5b or
Total in Column I of G703)\$ _____
6. TOTAL EARNED LESS RETAINAGE\$ _____
(Line 4 less Line 5 Total)
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT
(Line 6 from prior Certificate)\$ _____
8. CURRENT PAYMENT DUE\$
9. BALANCE TO FINISH, INCLUDING RETAINAGE
(Line 3 less Line 6)\$ _____

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner		
Total approved this Month		
TOTALS		
NET CHANGES by Change Order		

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By: _____ Date: _____

State of:

County of:

Subscribed and sworn to before
me this _____ day of _____

Notary Public:

My Commission expires: _____

ENGINEER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Engineer certifies to the Owner that to the best of the Engineer's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED\$ _____

(Attach explanation if amount certified differs from the amount applied for. Initial all figures on this Application and on the Continuation Sheet that are changed to conform to the amount certified.)

ENGINEER:

By: _____ Date: _____

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CONTINUATION SHEET

(Instructions on reverse side)

PAGE OF PAGES

APPLICATION AND CERTIFICATE FOR PAYMENT.

containing Contractor's signed Certification, is attached.

In tabulations below, amounts are stated to the nearest dollar.

Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO.:

APPLICATION DATE:

PERIOD TO:

ENGINEER' PROJECT NO.:

[illegible]

23-0805

QUALITY CONTROL

01 400-1

SECTION 01 400

QUALITY CONTROL

PART 1 - GENERAL

1.1 ON SITE OBSERVATIONS

- A. All work and materials shall be subject to review by Owner's Representative and Owner.
- B. Contractor shall fully cooperate and shall furnish all reasonable facilities for the inspections of all parts of the work during the entire construction period.

1.2 TESTING SERVICES

- A. All materials upon which the strength and durability of the work may depend, shall be subject to inspection and testing to establish conformance with City of Dacula, Gwinnett County D.O.T. and Georgia D.O.T. Standards. Contractor shall submit Asphalt Pavement Job Mix Formulas to Owner's Representative for review prior to installation of paving courses.
- B. A Geotechnical Engineer will be selected by the Contractor and approved by the Owner and paid by the Owner, to perform geotechnical and materials testing services for the project. The Contractor will retain the services of the Geotechnical Engineer, only if required. Subgrade operations are not intended to be part of the scope of this project.
- C. It is the responsibility of the Contractor to implement the services of the testing company by ordering those services at the appropriate time in the work, as described below, if required. The Contractor must provide at least 24 hours notice to the testing company for required testing work. Failure to provide adequate notification may result in the requirement for more complex after-the-fact testing, for which the Contractor will be liable.
- D. Testing required under Paragraphs 1.3 A and 1.3 B are to be coordinated by and paid for by the Owner, to be witnessed by the appropriate local inspection agencies as well as by Owner's Representative. The Contractor will secure and maintain evidence of having completed and obtained successful results for those tests, to be transmitted to the Owner and Owner's Representative no later than twenty-four (24) hours by handwritten draft, faxed or emailed; and fifteen (15) days for each report following testing.

1.3 SUMMARY OF REQUIRED NOTIFICATIONS

- A. Contractor's Geotechnical Engineer shall monitor subgrade demolition/preparation and shall observe all compaction, proof rolling, paving operations, and concrete pouring for curb & gutter, only if required. Contractor shall notify Owner and Owner's Representative at least 24 hours in advance of any proof rolling, paving and/or concrete pouring operations.
- B. Proof rolling, if required by Owner:
 - 1. After milling operations, a portion of the Project area shall be proof rolled as directed by the Owner. This shall be done for portions indicated by the Owner and for all other subgrade issues if they arise. If problems are encountered, it will be the Contractor's responsibility to call in the Contractor's Geotechnical Engineer.
 - 2. Proof rolling shall consist of a minimum of four (4) complete overlapping passes in each of two perpendicular directions with a heavily loaded 18-20 ton dual tandem dump truck.
 - 3. Proofrolling shall be performed in the presence of the Owner and Owner's Representative.
 - 4. Any soft or unstable sub-grade soil conditions observed shall be identified for qualification and quantification by the Geotechnical Engineer.
 - 5. Any soft or yielding areas shall be thoroughly undercut and replaced with well-compacted structural fill. Areas shall be compacted 95% Standard Proctor with the top twelve (12") inches compacted to 98% Standard Proctor Density or as specified by the Geotechnical Report.
- C. Material to be placed in a qualified manner as defined by the Contract Documents shall be tested to confirm that the required conditions are met. The testing shall also indicate the type of material observed, the location of the test, the material moisture content, and the current weather. Delivery and compaction of material shall be made during the presence of the testing company's representative and shall be subject to his approval. The inspection by no means absolves the Contractor from responsibility of compaction as specified.
- D. Unless material is covered with finish surfaces (paving) immediately following procedures described in B2 and B3 above, the material shall be observed by Owner's Representative again prior to the placement of those finished surfaces. The purpose of this final review is to preclude deterioration of the required conditions from continuing construction, water, or similar causes.

1.4 CODE COMPLIANCE TESTING

- A. Inspections and tests required by codes or legal ordinances, or by plan approval authority, shall be the responsibility of the Contractor, unless otherwise provided in

23-0805

QUALITY CONTROL

01 400-3

the Contract Documents.

1.5 CONTRACTOR'S CONVENIENCE TESTING

- A. Inspection or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

End of Section

SECTION 01 500

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1. SCOPE

- A. Construction facilities and temporary controls required for this work to be provided by Contractor, include, but are not necessarily limited to:
 - 1. Traffic control signs, barrels, barricades where needed.
 - 2. Parking of construction equipment and storage of materials.
 - 3. Parking of construction personnel vehicles.

2. PROTECTION

- A. Use all means necessary to maintain construction facilities and temporary controls in proper and safe conditions throughout progress of work.

3. REPLACEMENTS

- A. In event of loss or damage, Contractor shall immediately make all repairs and replacements necessary to construction facilities and temporary controls to Engineer's satisfaction at no additional cost to Owner.

4. UTILITY HOOKUP

- A. All fees for temporary utility tie-ins, if required will be Contractor's responsibility.

PART 2 - PRODUCTS

1. CONTRACTOR'S STAGING AREA

- A. The location of construction equipment and materials storage shall be determined at the pre-construction conference. Contractor shall confine his storage therein and take necessary precautions to protect materials from all forms of damage and theft as a part of this work.

2. TEMPORARY UTILITIES

- A. Contractor shall furnish water, gas, electricity, and telephone service as required during construction and extend temporary service lines to construction areas for use of all subcontractors and Owner's forces, if required.

B. Temporary Water

1. Provide ample supply of potable water for all purposes of construction at access points convenient to personnel, if required.
2. Provide sufficient heavy-duty hose or PVC pipe to carry water to every required part of construction and allow use of water facilities to subcontractors engaged on work.

C. Temporary Electricity (*For Construction Trailer - if required*)

1. All temporary electrical facilities shall be constructed and maintained in accordance with the Division of Industrial Safety "Electrical Safety Orders" (ESO), the Public Utilities Commission "Rules for Overhead Line Construction" (G.O. 95). Materials, devices, and equipment used for these facilities shall be in good and safe condition but need not be new.
2. Installation of lighting and safety lights shall be in accordance with local, State and Federal applicable codes.
3. Run a copper ground wire, sized in accordance with NEC, in conduit run, and bond to all steel parts, using clamps acceptable to the NEC.
4. Any attachment of conduit to wood structure shall be by means of bolts or lag screws in shear. All supports shall be capable of supporting four times actual load.
5. Contractor is required to make application for temporary electric service and pay for costs for electric energy used during the course of construction and until final acceptance of work by Owner.

D. Telephone (*For Construction Trailer - if required*)

1. Contractor shall maintain telephone in field office for use of Engineer and Owner. All expenses shall be paid for by Contractor.
2. Contractor shall provide and pay for the telephone installation and service in the field office. Service shall be maintained for duration of project operations under this contract. Contractor shall provide 110 dB outside gongs or horns so that telephones may be heard throughout construction site, or contractor shall provide and install an electronic telephone answering machine.
3. Contractor shall provide and install an electric fax machine with a dedicated line for 24-Hour service within the temporary field office.

3. SANITARY FACILITIES

- A. Provide proper, adequate, sanitary facilities for use of all workers employed on project, in accordance with State and Local Health Departments.

4. TEMPORARY CONSTRUCTION, EQUIPMENT, AND PROTECTION

- A. Provide, maintain, and remove upon completion of work, all temporary

equipment, barricades, lights, and all other protective structures or devices necessary for safety of workers and public property as required to complete all work of this contract.

- B. Provide all necessary protection and all barricades conforming to the standards of O.S.H.A. and requirements of Gwinnett County and City of Dacula.
- C. Contractor shall provide all measures necessary to protect equipment and materials at his own expense.
- D. Protect all workers and equipment from power lines and maintain safe distances and protective devices as required by Industrial Safety Commission.
- E. All temporary construction and equipment shall conform to all regulations, ordinances, laws and other requirements of City, County, State and other authorities having jurisdiction, including owner's and contractor's insurance companies, with regards to safety precautions, operation, and fire hazard.
- F. Protect work and materials to be used on project including materials which have had their title transferred to the Owner, from damage or loss due to elements, theft, vandalism, malicious mischief, or other causes. Contractor shall be held responsible for such damages or losses which he shall remedy at his expense.

5. PARKING OF VEHICLES

- A. Contractor shall assume all responsibility for parking of his equipment, vehicles, and his subcontractor's vehicles. "Job site parking" means an area or areas within the bounds of the property or other authorized areas to be used for parking for vehicles associated with this project. Such areas shall be designated at the preconstruction meeting.

PART 3 - EXECUTION

1. MAINTENANCE AND REMOVAL OF FACILITIES

- A. Maintain all construction facilities and temporary controls as long as needed for safe and proper completion of work.
- B. Remove all such temporary facilities and controls as rapidly as progress of work will permit or as directed by Owner, but prior to final completion.

End of Section

SECTION 01 630

PRIOR APPROVALS AND SUBSTITUTIONS

PART 1 - GENERAL

1. PRODUCTS

- A. Products are specified by ASTM and/or other reference standard, and/or by manufacturer's name and model number or trade name. When specified only by reference standard, Contractor may select any product meeting this standard by any manufacturer. When several products or manufacturers are specified as being equally acceptable, Contractor shall have the option of choosing among those names. When one manufacturer's specific product is specified and other manufacturers are listed as being acceptable suppliers, the other manufacturer's products must have the same basic properties as the specific product mentioned. When specifications indicate "Similar products shall be subject to Engineer's review", this refers to review during bidding only. Otherwise, the following substitution provisions must be observed to use any manufacturer not listed.

2. REQUESTS FOR PRIOR APPROVAL

- A. During bidding, the Engineer shall consider written requests for prior approval received at least ten (10) calendar days prior to bid date. Requests received after that time shall not be considered. If proposed prior approval is accepted by Engineer and approved by Owner, such acceptance shall be set forth in an addendum. Bidders shall not rely upon accepted prior approvals made in any other manner.

3. SUBSTITUTIONS

- A. After receipt of Bids and prior to award of Contract, substitutions may be negotiated. However, Contractor shall be required to provide a substitution form for any change to the original bid documents before it will be incorporated into the contract documents.
- B. After the date of the Contract, Engineer may consider formal requests from Contractor for substitution of products in lieu of those specified. Requests shall be submitted in accordance with the preceding requirements. One or more of the following conditions must also be documented as reason for substitution.
1. The substitution is required for compliance with code requirements.
 2. The substitution is required because of the unavailability of the specified

23-0805

PRIOR APPROVALS AND SUBSTITUTIONS

01 630-2

- product.
3. The substitution is required since new information discloses the specified products will not perform properly or fit into the designated space.
 4. The substitution is required since the manufacturer or fabricator refuses to certify or guarantee performance of the specified product as required.
 5. The substitution is required since it is clear, in the judgment of the Engineer, that a substitution would be substantially in Owner's best interests in terms of cost, time and/or other considerations.
- C. With each request for substitution Contractor shall include the following:
1. Complete data substantiating compliance of proposed substitution with contract documents including:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer's literature, including product description, performance and test data, and reference standards.
 - c. Name and address of similar projects on which product was used and date of installation.
 2. Itemized comparison of proposed substitution with product or method specified, noting any variance from the specified product which may result in inferior appearance, performance, or installation complication.
 3. Information relating to changes in construction schedule.
 4. For requests submitted after bids are received, accurate cost data on proposed substitution in comparison with product or method specified, including any adjustment to the contract sum that will be provided if the substitution is accepted.
- D. In submitting requests for substitution, Contractor shall make the following personal representations:
1. Contractor has investigated proposed product and has determined that it is equal or superior in all respects to the specified product.
 2. Contractor will provide an equal or better guarantee for proposed substitution as compared to the product specified.
 3. Contractor will coordinate installation of accepted proposed substitution into the project, making any such changes as may be required for the project to be completed in accordance with the Contract Documents.
 4. Contractor waives all claims for additional costs related to proposed substitution which became apparent during or following substitution submittal process.
 5. Cost comparison data is complete and includes all related costs under the contract, but does not include:
 - a. Cost under separate contracts.
 - b. Engineer's/Consultant's redesign fee.
 6. The proposed substitution satisfies Code Official's interpretations of all applicable codes.

- E. Substitutions shall not be considered if:
 - 1. They are indicated or implied on shop drawings or product data submittals without a formal request submitted in accordance with this Article.
 - 2. Acceptance will require substantial revision of contract documents.

23-0805 PRIOR APPROVALS AND SUBSTITUTIONS 01 630-4
REQUEST FOR PRIOR APPROVAL

PROJECT: _____ DATE SUBMITTED: _____

CONTRACTOR: _____ BID DATE: _____

SUB CONTRACTOR: _____ SUPPLIER: _____

SPEC SECTION: _____ PARAGRAPH: _____ TITLE: _____

<u>PRODUCT SPECIFIED</u>	<u>PAGE NO.</u>	<u>PRIOR APPROVAL PRODUCT</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____

1. The following required information is attached:

- A. Product identification manufacturer's name, address, telephone number.
- B. Manufacturer's literature, performance/test data, reference standard.
- C. Name/address of similar projects where product has been used and Date of Application.

2. Comparison of proposed substitute product with specified product:

A. Differences: _____

B. Effect on dimensions or other trades: _____

3. Comments: _____

BY : _____

23-0805 PRIOR APPROVALS AND SUBSTITUTIONS 01 630-5
REQUEST FOR SUBSTITUTION AFTER BID

PROJECT: _____ DATE SUBMITTED: _____

CONTRACTOR: _____ BID DATE: _____

SUB CONTRACTOR: _____ SUPPLIER: _____

SPEC SECTION: _____ PARAGRAPH: _____ TITLE: _____

1. The following required information is attached:
 - A. Product identification, manufacturer's name, address, telephone number
 - B. Manufacturer's literature, performance/test data, reference standard
 - C. Name/address of similar projects where product has been used and Date of Application
2. Comparison of proposed substitute product with specified product:
 - A. Differences: _____
 - B. Effect on dimensions and trades: _____
3. Data related to changes in construction schedule:

4. Accurate cost data on proposed substitution in comparison with product specified:

5. Reason for request for substitution: (Check One)
 - 1) ☐ Specified product will not meet code.
 - 2) ☐ Specified product unavailable for purchase.
 - 3) ☐ Specified product will not perform or fit as required.
 - 4) ☐ Manufacturer will not provide required certification or guarantee for specified product.
 - 5) ☐ Substitution is clearly in Owner's best interest in terms of cost or schedule.
 - 6) ☐ Substitution is proposed as a convenience to the Contractor, and the Contractor agrees to compensate the Architect for time involved in reviewing and processing the proposed substitution.

End of Section

23-0805

CONTRACT CLOSE-OUT

01 700-1

SECTION 01 700

CONTRACT CLOSE-OUT

PART 1 - GENERAL

1. CLOSE-OUT TIMING

- A. Owner's Representative shall issue the Certificate of Substantial Completion when he has determined that the work or a designated portion thereof is substantially complete. Contractor shall then prepare, assemble, and transmit the items as listed in Section 1.2 below to Owner's Representative for review and transmittal to Owner. Unless additional quantities are specified elsewhere, submit all items in duplicate.
- B. As-built documents and other close-out requirements shall be submitted (or performed) and accepted by Owner's Representative prior to date of final completion. All close-out documents shall be submitted to Owner's Representative simultaneously. Piece meal delivery of separate elements of the documents will not be acceptable and will be returned to Contractor.
- C. All close out requirements must be complete before submittal of final Application for Payment, including completion of unfinished work.

2. PUNCH LIST

- A. When the project is substantially complete Contractor shall notify Owner's Representative in writing at least five (5) days before the date of request for punch list inspection. Contractor shall arrange for the presence of all subcontractors whose work is involved, if required by Owner's Representative.
 - 1. Owner and/or Owner's Representative shall prepare a "Punch List" as a convenience to Contractor for items not completed and work not meeting the requirements of the Contract Documents. The "Punch List" is not to be construed to be a final or complete listing of project requirements but is intended only to assist in the completion of the project. Contractor shall make a diligent effort to complete all work in conformance with the requirements of the Contract Documents before requesting a "Punch List".
 - 2. Correction of items noted on the "Punch List" does not relieve Contractor from conforming to all requirements of the Contract Documents.
- B. Contractor shall furnish three copies of the following:
 - 1. Consent of Surety for final payment.
 - 2. Final application for payment.
 - 3. Contractor's Statutory Affidavit ensuring no liens.
 - 4. Subcontractor Statutory Affidavits ensuring no liens, only if required by City.

23-0805

CONTRACT CLOSE-OUT

01 700-2

5. Furnish updated CCTV for the cleaned out Storm Sewer Pipe System, inlets, and manholes. Contact Jason Ray at 678-552-2106; jray@intse.com with Integrated Science Engineering to perform the updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid.

C. Warranties

1. Contractor shall warrant all work executed by his forces and his subcontractors under this contract, and any additional modifications and change orders, to be absolutely free of all defects of workmanship and materials for a period of one year beginning on date of Substantial Completion. Contractor shall repair all such defects, resulting damages and repair any damage to other work caused by subsequent repair work to Owner's and Owner's Representatives' satisfaction no later than 30 days following written notification by Owner that remedial repairs are required.
2. At the end of the one (1) year warranty period, Contractor shall inspect the project with Owner for deficiencies. At that time, a correction list shall be prepared by Owner and Contractor shall make the necessary repairs and corrections immediately and as directed by Owner.
3. Contractor shall provide additional guarantees (in excess of one year) where specifically required by pertinent specification sections.

3. FINAL CLEANING

- A. Prior to the Date of Substantial Completion, remove all debris, excess dirt, etc., for all portions of job site.
- B. Final Inspection
 1. When the work is completed in accordance with the Contract Documents and the requirements of Paragraph A above and General and Supplemental Conditions have been satisfied, Contractor shall notify Owner's Representative, in writing, that the work shall be ready for final inspection on a definite date which shall be stated in such notice. The notice shall be forwarded to Owner through Owner's Representative, who will attach his endorsement as to whether or not he concurs in Contractor's statement that the work will be ready for final inspection on the established date. Such endorsement shall not relieve Contractor of his responsibility in this matter.
 2. Final inspection will be made by Owner and/or Owner's Representative when Contractor deems that the work has been completed in accordance with the Contract Documents and when he has requested a final inspection be made as outlined above.

End of Section

23-0805

CONTRACTOR WARRANTY FORM

01 740-1

PROJECT: "Brookton Place Subdivision Asphalt Milling and Repaving Project"LOCATION: Brookton Place Subdivision in Dacula, GAOWNER: City of Dacula, Georgia

We _____, Contractor
(Company name)

for the above referenced project, do hereby warrant that all labor and materials furnished and work performed by this company are in accordance with the Contract Documents and authorized modifications thereto, and will be free from defects due to defective materials or workmanship for a period of one (1) year from Date of Substantial Completion. This warranty commences at 12:00 noon on _____ and will expire at 12:00 noon on _____. Should any defect develop during the warranty period commencement date due to improper materials, workmanship, or arrangement, the same shall, upon written notice by Owner, be made good by the undersigned at no expense to Owner.

Nothing in the above shall be deemed to apply to work which has been abused or neglected by the Owner.

DATE: _____ FOR: _____
(Company Name)

BY:

TITLE:

23-0805

SUBCONTRACTOR WARRANTY FORM

01 741-1

PROJECT: "Brookton Place Subdivision Asphalt Milling and Repaving Project"LOCATION: Brookton Place Subdivision in Dacula, GAOWNER: City of Dacula, Georgia

We _____, Contractor

(Company name)

for _____, as described in Specification Section (s) _____

(List Trade)

do hereby warrant that all labor and materials furnished, and work performed in conjunction with the above referenced project are in accordance with the Contract Documents and authorized modifications thereto and will be free from defects due to defective materials or workmanship for a period of one year from Date of Substantial Completion.

This warranty commences at 12:00 noon on _____ and will expire at 12:00 noon on _____. Should any defect develop during the warranty period commencement date due to improper materials, workmanship, or arrangement, the same shall, upon written notice by Owner, be made good by the undersigned at no expense to Owner.

Nothing in the above shall be deemed to apply to work which has been abused or neglected by the Owner.

DATE: _____ FOR: _____

(Company Name)

BY: _____

TITLE: _____

23-0805

CERTIFICATE OF THE CONTRACTOR

01 742 -1

STATUTORY AFFIDAVIT

TO: CITY OF DACULA
Dacula, Georgia

Contract entered into the _____ day of _____, 2023 between the above-mentioned parties for the "Brookton Place Subdivision Asphalt Milling and Repaving Project" in the City of Dacula, Georgia as represented by the Contract Documents for this project dated October 20, 2023.

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that all work required under the above contract has been performed in accordance with the terms thereof, that all material men, subcontractor, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character (including disputed claims or any claims which Contractor has or will assert and defend) arising out of the performance of the Contract which have not been paid and satisfied in full except as listed herein below: _____

2. The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any employees, subcontractors, or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of Owner.
3. The undersigned makes this affidavit for the purpose of receiving final payment in full settlement of all claims against Owner arising under or by virtue of the Contract, an acceptance of such payment is acknowledged as a release of Owner from any and all claims arising under or by virtue of the Contract.

Signed this _____ day of _____, 2023.

(Signature)

23-0805

CERTIFICATE OF THE CONTRACTOR

01 742 -2

(Title)

(Firm)

COUNTY OF _____ STATE OF _____ Personally before me, the undersigned authority, appeared _____ who is known to me to be an official of the firm of _____. Who, after being duly sworn, stated on his oath that he had read the above statement and that the same is true and correct.

(Notary Public)

My commission expires:

23-0805

CERTIFICATE OF THE SUBCONTRACTOR /

01 742.1 -1

STATUTORY AFFIDAVIT

TO: CITY OF DACULA
Dacula, Georgia

Contract entered into the _____ day of _____, 2023 between the above mentioned parties for the "Brookton Place Subdivision Asphalt Milling and Repaving Project" in the City of Dacula, Georgia as represented by the Contract Documents for this project dated October 20, 2023.

KNOW ALL MEN BY THESE PRESENTS:

1. The undersigned hereby certifies that all work required under the above contract has been performed in accordance with the terms thereof, that all Subcontractor's material men, mechanics, and laborers have been paid and satisfied in full, and that there are no outstanding claims of any character (including disputed claims or any claims which Subcontractor has or will assert and defend) arising out of the performance of the Contract which have not been paid and satisfied in full except as listed herein below: _____

2. The undersigned further certifies that to the best of his knowledge and belief there are no unsatisfied claims for damages resulting from injury or death to any of the Subcontractor's employees or the public at large arising out of the performance of the contract, or any suits or claims for any other damage of any kind, nature, or description which might constitute a lien upon the property of Owner.
3. The undersigned makes this affidavit for the purpose of receiving final payment in full settlement of all claims against Owner arising under or by virtue of the Contract, an acceptance of such payment is acknowledged as a release of Owner from any and all claims arising under or by virtue of the Contract.

Signed this _____ day of _____, 2023.

(Signature)

(Title)

(Firm)

23-0805 CERTIFICATE OF THE SUBCONTRACTOR / 01 742.1 -2

COUNTY OF _____ STATE OF _____ Personally before me, the undersigned authority, appeared _____ who is known to me to be an official of the firm of _____. Who, after being duly sworn, stated on his oath that he had read the above statement and that the same is true and correct.

My commission expires

(Notary Public)

SECTION 01 743

GEORGIA SECURITY AND IMMIGRATION AFFIDAVIT

PART 1- GENERAL

- 1.1 The Contractor Affidavit and Agreement example is attached. The Contractor is required to state affirmatively that the individual, firm or corporation which is contracting with the City of Dacula has registered with and is participating in a federal work authorization program. Place this form on Company Letterhead before verifying compliance with federal work authorization program. Upon execution the completed forms shall be returned to the Owner's Representative before entering into a Contract.
- 1.2 The Subcontractor Affidavit and Agreement example is attached. The Contractor is required to obtain affirmations from the individuals, firms or corporations which are participating as subcontractors in this Contract with the City of Dacula. These Subcontractors must verify that they are registered with and are participating in a federal work authorization program. Place this form on Company Letterhead before verifying compliance with federal work authorization program. Upon execution the completed forms shall be returned along with the Contractor's Affidavit referenced in 1.1 above to the Owner's Representative before entering into a Contract.

GEORGIA SECURITY AND IMMIGRATION CONTRACTOR AFFIDAVIT

STATE OF GEORGIA
CITY OF DACULA

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with The City of Dacula, Georgia has registered with and is participating in a federal work authorization program* (i.e., any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603), in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with The City of Dacula, Georgia, contractor shall secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to The City of Dacula, Georgia at the time the subcontractor(s) is retained to perform such service.

EEV/Basic Pilot Program* User Identification Number

BY: Authorized Officer or Agent
(Contractor Name)

Date

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE
DAY OF _____, 2023.

Notary Public

My Commission Expires:

*As of July 1, 2007, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

GEORGIA SECURITY AND IMMIGRATION SUB-CONTRACTOR AFFIDAVIT

STATE OF GEORGIA -
CITY OF DACULA

SUBCONTRACTOR AFFIDAVIT

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation which is engaged in the physical performance of services under a contract with _____ (name of contractor) on behalf of The City of Dacula, Georgia has registered with and is participating in a federal work authorization program* (i.e., any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603), in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

EEV/Basic Pilot Program* User Identification Number

BY: Authorized Officer or Agent
(Subcontractor Name)

Date

Title of Authorized Officer or Agent of Subcontractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE
DAY OF _____, 2023.

Notary Public
My Commission Expires:

*As of July 1, 2007 O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "EEV/Basic Pilot Program" operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA)

SECTION 02 050

DEMOLITION

PART 1 - GENERAL

1.1 SCOPE

- A. Work described in this section includes demolition and removal of milled asphalt pavement, concrete curb & gutter, concrete driveway aprons, broken up concrete paved inverts in storm manholes, and sediment/debris in storm pipe system. Asphalt pavement will be removed by milling operations for standard and deep patch milling. Refer to Section 01 000, Contract Documents, Project Scope & Performance Specification, and Drawings.

1.2 PROJECT CONDITIONS

- A. Traffic
 - 1. Conduct demolition operations and removal of debris to ensure minimum interference with roads, driveways, walks, and other adjacent occupied or used facilities.
 - 2. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the governing authorities and Owner.
 - 3. One (1) lane of traffic on all streets indicated for asphalt repaving must stay open at all times as required by Owner.
- B. Use of explosives will not be permitted.
- C. Promptly repair damages caused to items to remain by demolition operations at no additional cost to Owner (i.e., curb & gutter, utilities, etc.).

1.2 POLLUTION CONTROLS

- A. Use water sprinkling, temporary enclosures, and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air, to the lowest level of air pollution practical for the condition of work. Comply with the governing regulations.

PART 2 - PRODUCTS

2.1 MATERIALS TO BE REUSED

- A. Materials to be disassembled and reused shall be handled and stored in a manner and placed so as to prevent damage.
- B. Damaged materials shall be repaired or replaced at no cost to Owner.

2.2 MATERIALS TO BE REMOVED

- A. Materials to be removed and not reused shall be treated as "waste" and legally disposed of by Contractor. In addition:
 - 1. Burning of waste on site shall not be permitted.
 - 2. Waste materials shall become the property of the Contractor and shall be promptly removed from site.
 - 3. Storage or sale of salvageable items on site shall not be permitted.
 - 4. Do not store waste in planted areas or any area that can be damaged by storage operations.

PART 3 - EXECUTION

3.1 EXTERIOR DEMOLITION

- A. Coordinate interruption of utility service with utility companies. Obtain required approvals; comply with utility company regulations and building code requirements.
- B. Owner assumes no responsibility for actual condition of existing structures.
- C. Demolish and/or remove asphalt pavement and any below-grade construction interfering with new construction.
- D. Fill all voids below grade caused by demolition of structures, or below-grade construction.
- E. Do not interrupt utility service to existing adjacent occupied facilities except as required and approved by the Public Utility Company and Owner.

23-0805

DEMOLITION

02 050-3

3.3 PROTECTION

- A. Protect and prevent damage to existing structures not included as part of demolition per the Project Scope and Performance Specification.

End of Section

23-0805

EARTHWORK

02 200-1

SECTION 02 200

EARTHWORK

PART 1 - GENERAL

1.1 SCOPE

- A. Earthwork and fill operations may be required for any asphalt pavement subgrade issues that may arise or as indicated in Section 01 000, Project Scope & Performance Specification and on Construction Drawings are part of the scope of the project. All other earthwork and fill operations underneath pavement are only required if other subgrade issues arise during construction. This Earthwork Specification shall be utilized by the Contractor. Furnish all labor, materials, equipment, and incidentals required to perform all excavation, backfill, fill and grading if required for completion of the work.
- B. Notify free underground utility locator service at 1-800-282-7411 prior to any excavations.
- C. Work may include but is not limited to (only if an unforeseen issue arises):
 - 1. Clearing and Grubbing:
 - a) Clearing and Earthwork equipment operations if required are limited to areas described in the scope of work and/or Performance Specification.
 - b) Do not disturb the existing terrain or existing vegetation outside the designated work area(s).
 - c) All debris from clearing and/or grading operations (cleared vegetative matter, trees, root systems, remnant chipped material, stumps, etc.) shall be removed from the site, unless specifically directed otherwise by the Owner.
 - 2. Cutting, filling, and backfilling.
 - 3. Rough and Finish grading to complete the asphalt replacement and repaving operations.
 - 4. Furnish, place, and compact any additional material necessary to maintain existing grades and drainage patterns of existing roadway.
 - 5. Excavation, removal, and replacement of unsuitable soil materials as described herein.
 - 6. Rock removal as described herein.
- D. By submittal of his bid, Contractor certifies that all means, methods, labor, equipment, and materials to complete the satisfactory construction of the Project is included in the contract sum of his bid.

1.2 PROJECT CONDITIONS

- A. Contractor shall visit the site and thoroughly familiarize himself with all existing condition prior to formulating his Bid.
- B. Contractor may, at his own expense and prior to bidding, make any soils or other geotechnical investigations he may deem necessary. Obtain authorization of Owner, prior to commencement of boring or subsurface investigations.
- C. Survey existing grades and lay out grade stakes for if necessary to replace and repave roadway and maintain existing grades and drainage patterns. Utilize a Registered Land Surveyor currently registered to practice land surveying in the State of Georgia.
- D. Upon becoming aware of suspected unsuitable subsurface conditions, promptly notify the Owner and the Owner's Representative to permit verification of the conditions by a Contractor engaged Testing Agency or Contractor's Geotechnical Engineer and follow immediately in writing outlining the nature and extent of the differing conditions. No claim by the Contractor for any additional cost or time for any Earthwork operations of any nature will be allowed, unless the Contractor has so notified the Owner, verbally and in writing, as required above, of such conditions.
- E. Unsuitable materials, including all forms of rock, debris, organic materials, and poor soils, encountered may be redistributed to other areas of the site not to be used in a structural capacity rather than being hauled off site if and only if approved in writing prior to any on-site distribution at the Owner's sole discretion.
- F. Contractor is solely responsible for all earth quantities to render the finished grade elevations of the repaved roadway similar to existing condition with no change in drainage patterns. Any exportation (*i.e.*, "haul-off") of "excess" earth; or importation (*i.e.*, "haul-in") of suitable soil materials or GAB shall be included in the Contract Sum unless provided for otherwise in this Specification or as otherwise directed by the Owner or Owner's Representative.
- G. Contractor is solely responsible to:
 - 1. Survey, establish and protect benchmarks and monuments. If any are disturbed or destroyed, Contractor shall replace in original position using a Georgia Registered Land Surveyor at no additional cost to Owner.
 - 2. Protect areas outside limits of construction from encroachment by construction personnel or equipment regardless of property ownership. Contractor shall erect wooden post and orange safety fencing warning signs and other protective measures and warn the public of ongoing construction activities at limits of and a reasonable distance from the construction if necessary.
 - 3. No Clearing or any form of construction or other disturbance (*including materials*

- storage*), shall be conducted outside the approximate limits of construction.
4. All utilities are to be located and marked. Horizontal and vertical location of all utilities shall be verified by Contractor and marked on "as-built" drawings if they are to remain. Contact the Utility Protection Center at 1-800-282-7411 not less than three (3) working days prior to grading operations. Protect existing facilities, utilities, and adjacent property. Prevent ponding or washing of water on site and over adjacent property. Erect erosion control measures (e.g., silt fences) as required to prevent runoff of soil erosion.
 5. Provide all necessary shoring, sheeting, and bracing for the protection of work and safety of personnel if necessary. Contractor shall engage a Georgia Registered Engineer highly skilled in the design of such shoring and bracing systems to perform the design engineering for said shoring and bracing. Backfill loads shall not be imposed on walls and structural systems until those systems are completely developed and at design capacity.
 6. Protect adjacent and downstream properties from soil erosion. Comply with all erosion and sediment control measures specified elsewhere and required by applicable codes and ordinances.
 7. Protect finished paved areas from construction debris and dirt.
 8. Provide traffic protection by means of suitable signs, barricades, and lights in accordance with the latest edition of the Manual of Traffic Control Devices (MUTCD).
 9. Burning of debris on the Project site will not be permitted.
- H. Provide dewatering and drainage as needed to accomplish the work required in this section. No excavation may proceed until suitable dewatering has been provided and approved by Owner and/or Owner's Representative. Do not allow areas of ponding water. In the event ponding of water occurs, take the necessary measures to eliminate said ponding. Submit dewatering procedures to Owner and/or Owner's Representative for review.
- I. Comply with rules and regulations governing respective utilities.
- J. Contractor is solely responsible for protection of downstream properties from encroachment or damage from increased or concentrated storm water flows, erosion, sediment, or pollutants.
- K. Claims for "lost revenue" from any unsuitable materials or lack of marketability of any unsuitable soil materials or rock shall not be considered for additional payment or compensation by Owner to Contractor.

1.3 QUALITY CRITERIA

- A. All work shall be performed in accordance with applicable codes and ordinances and with requirements of authorities having jurisdiction. All work under this Section:
 - 1. Shall conform fully to applicable OSHA rules and regulations.
 - 2. Shall conform to the latest edition of the City of Dacula Development Regulations.
 - 3. For excavation, trenching and related sheeting, bracing, etc. shall comply with the requirements of OSHA excavation safety standards (29 CFR Part 1926.650 Subpart P) and to the State of Georgia and City of Dacula requirements. Where conflict between OSHA, the State regulations and the County/City regulations exists, the more stringent requirements shall apply.
- B. Employ a Georgia Registered Engineer or Georgia Registered Land Surveyor experienced in reading Architectural and Engineering drawings, using measuring devices and tape, and skilled in the use of surveying equipment necessary to perform layout, survey, establish benchmarks and monumentation of all work required.
- C. Earthwork monitoring and testing shall be performed by a Georgia Registered Geotechnical Engineer, selected by the Contractor, and paid for and approved by Owner.
- D. Excavation, backfilling, and compaction shall comply with the following Reference Standard Designations by the American Society for Testing Materials (ASTM), or as otherwise noted on Drawings.
 - 1. ASTM C136-76 - Sieve or Screen Analysis of Fine and Coarse Aggregates
 - 2. ASTM D1556-64 (1974) - Density of Soil in Place by the Sand-Cone Method
 - 3. ASTM D698 - Standard Proctor Compaction Test
 - 4. ASTM D2167 (1972) Density of Soil in Place by the Rubber Balloon method
 - 5. ASTM D2487-69 (1975) - Classification of Soils for Engineering Purposes
 - 6. ASTM D2922-78 - Density of Soil and Soil Aggregate in Place by Nuclear Methods
 - 7. ASTM D2937-71 - Density of the Soil in Place by the Drive- Cylinder Method

1.4 NOTIFICATION

- A. Contractor shall notify Engineer and/or Owner's Representative 24 hours prior to commencing any grading, excavation, land clearing and removal operations.
- B. Contractor shall notify all Utilities Companies in ample time for necessary measures to be taken to prevent interruption of service when utility lines which are to be removed, relocated and/or disconnected are encountered.

23-0805

EARTHWORK

02 200-5

- C. Contact the Utility Protection Center at 1-800-282-7411 not less than three (3) working days prior to any grading operations.

1.5 SUBMITTALS

- A. Submit detailed Shop Drawings and schematic diagrams as necessary to graphically describe all Shoring and Bracing procedures, if any. Include calculations and schedules. Illustrate sequencing of all Shoring and Bracing.
- B. Contractor shall submit a detailed time schedule of all Earthwork operations to the Owner's Representative for review prior to commencing work, if any.
- C. In the event that the Contractor contemplates deviation(s) from the earthwork design concept for any reason, the deviation(s) shall be represented by submittal of detailed shop drawings which clearly illustrates the intent and scope of said deviation(s) for review and approval prior to proceeding with same.

PART 2 - PRODUCTS

2.1 TOPSOIL

- A. Topsoil either found on the site or imported to the site, shall consist of local, fertile, friable, natural soil of loamy character, free of clay lumps, stones in excess of one inch (1") in greatest dimension, typical of Project locality, and containing no chemicals harmful to plant growth, if needed.

2.2 UNSUITABLE SOIL

- A. Unsuitable soil materials consist of soil materials not capable of being compacted to density required; rock material, as defined in Paragraph 2.09 of this Section, larger than three inch (3"), debris and organic material including muck, which is a wet organic material which cannot support a light crawler tractor type of equipment and requires removal by power shovels or draglines; or material otherwise identified and designated as unsuitable by Contractor's Geotechnical Engineer.
- B. Non-organic materials are considered as unsuitable and include non-organic debris not capable of being compacted to density required, including but not limited to, metal objects such as appliances, metal fencing, tires, etc. Contractor shall remove and legally dispose of such items offsite.
- C. Soil material which is too wet to permit the specified compaction but is still suitable to be used in a structural capacity (once dried) based on the recommendations of Contractor's Geotechnical Engineer, shall be spread, and permitted to dry in an area to

be designated by Owner. Contractor shall assist drying by discing, harrowing, or pulverizing until the soil moisture content is reduced to the specified value.

- D. Only excavation of soils, which is wet due to concealed condition, including, but not limited to underground springs, high water table and leaking pipes, shall be addressed as a potential additive change order. Suitable materials which are wet due to precipitation as determined by Contractor's Geotechnical Engineer shall be dried and reused at no additional cost to Owner.
- E. In the event that a claim by Contractor has been made as to the existence of "Rock", "Unsuitable Soils" or otherwise "Unsuitable Materials", the Contractor's Geotechnical Engineer shall specify the means by which the "Rock" or otherwise "Unsuitable Soils" or "Unsuitable Materials" shall be quantified.

2.3 FILL

- A. Satisfactory fill material shall consist of local, clean, non-active, organic free subsoil, free from debris, roots, topsoil, and frozen material and capable of being compacted to the density required.
- B. Maximum size of rock fragments shall be equal to or less than three inches (3") in the greatest dimension.
- C. In areas of massive fills or disposal pits, Geotechnical Engineer shall determine the maximum size of rock.
- D. Materials classified as SM, SP, ML, SC, or CL are suitable for structural fill. Generally, residual soils in the local area are suitable for reuse as structural fill provided that they meet the following criteria and shall be well graded within the following limits:
 - 1. Common fill shall consist of mineral soil substantially free from organic materials, loam, wood, trash, and other objectionable materials which may be compressible, or which cannot be properly compacted. Common fill shall not contain stones larger than three inches (3") in the largest diameter and shall have a maximum of 75% passing the No. 40 sieve and a maximum of 20% passing No. 200 sieve. Common fill shall not contain granite blocks, broken concrete, masonry rubble or other similar materials. Fill shall have physical properties such that it can be readily spread and compacted during filling. Soil excavated from the structural areas, and which meets the above requirements may be used in embankments.
 - 2. Screened gravel shall meet the requirements of Section 806.02 of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.
 - 3. Partially weathered rock or rock no larger than three inches (3") in any dimension, may be used as fill as provided for in the Geotechnical Report.

23-0805

EARTHWORK

02 200-7

- 4. Soil should exhibit a plasticity index of less than 30 and a dry unit weight of at least 90 pcf unless more stringent requirements are given in the Geotechnical Report, in which case they will govern.
- E. Residual material to be used as fill material shall be tested and approved by Contractor's Geotechnical Engineer for degree of compaction specified for its intended use prior to importation or placement.
- F. For fill soils to be imported from off-site, provide samples of same for laboratory testing by Contractor's Geotechnical Engineer to determine their Standard Proctor.
- G. Contractor shall identify the location of any "borrow pits" so that Contractor's Geotechnical Engineer may inspect same to determine suitability of the general soils which Contractor intends to import to the Project site.

2.4 GRAVEL

- A. All stone for Gravel Fill shall meet the quality requirements of Section 800 of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.
- B. Gravel fill shall consist of sound, durable rock, free from injurious amounts of coatings of any kind and shall be graded so 100% passes the 1-1/2" sieve, 95-100% passes the 1" sieve, 25-60% passes the 1/2" sieve, 0-10% passes the No.4 sieve and 0-5% passes the No.8 sieve.

2.5 CRUSHED STONE (CRUSHER RUN)

- A. All stone for Crushed Stone shall meet the quality requirements of Section 800 of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.
- B. Crushed stone shall consist of sound durable particles of crusher run rock, 100% passing a two-inch sieve, 97-100% passing a 1-inch sieve, 60-95% passing a 1/2 inch sieve, 25-50% passing a No. 10 sieve, 10-35% passing a No. 60 sieve, and not more than 7-15% passing a No. 200 sieve and free from unsuitable materials.

2.6 GRANULAR BEDDING

- A. All stone for Granular Bedding shall meet the quality requirements of Section 800 of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.

- B. Granular bedding and backfill material shall consist of a granular soil, sand, chert, crushed stone or mixture of these, all of which passes a 3/4-inch sieve, 80% passing a 3/8-inch sieve, 40% passing a No. 4 sieve, 10% passing a No. 8 sieve, and not more than 5% passing a No. 16 sieve. Material shall be free of organic matter and debris.

2.7 RIP RAP

- A. Stone for Rip Rap shall meet the quality requirements of Section 805 Rip Rap of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.
- B. Stone Dumped Rip Rap shall be processed in such a manner as to produce a quarry run material including rock fines which meet the gradation for the following two types:
 - Type 1: For severe drainage conditions the largest piece of material shall have a maximum approximate value of two cubic feet. At least 35% of the mass shall be comprised of pieces which weigh 125 pounds or more.
 - Type 3: For general use normal drainage conditions the largest pieces of material shall have a maximum approximate value of one cubic foot. At least 35% of the mass shall be comprised of pieces which weigh 15 pounds or more.The remainder of Types 1 or 3 shall be well-graded down to the finest sizes. Rock fines shall comprise a maximum of 10% of the total mass. Rock fines are defined as material passing a No. 4 sieve.
- C. Stone for Plain Rip Rap shall be sound, durable pieces and shall be resistant to the action of air and water. Flat, slabby and shaley pieces are not acceptable. It shall be clean and essentially free of rock dust and fines. The material shall be processed such that the largest pieces have a volume of not more than 2 cubic feet and not more than 10% of the total weight of rip rap shall consist of spalls passing a 5-inch sieve.

2.8 GRADED AGGREGATE BASE

- A. All stone for Graded Aggregate Base shall meet the quality requirements of Section 815 of the State of Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, 1993 or latest Edition.
- B. Graded Aggregate Base material shall conform to the following: 100% passing a two-inch sieve, 97-100% passing a 1-inch sieve, 60-95% passing a 1/2-inch sieve, 25-50% passing a No. 10 sieve, 10-35% passing a No. 60 sieve, and not more than 7-15% passing a No. 200 sieve and free from unsuitable materials.

2.9 ROCK

- A. Rock consists of three types: Rippable Weathered Rock, Mass Rock, and Trench Rock. Rippable Weathered Rock is considered part of the work and shall be included in the Contract Sum. Payment for Mass Rock and Trench Rock removal shall be in accordance with change order procedures based on the schedule of values with unit costs provided with the lump sum bid as specified by the Bid Proposal Form or a time and material basis as agreed to prior to commencing work. Rock quantities shall be qualified and quantified by Contractor's Geotechnical Engineer and verified by Owner's Representative.
- B. In the event that a claim by Contractor has been made to the existence of "Rock", "Unsuitable Soils" or otherwise "Unsuitable Materials", the Geotechnical Engineer shall specify the means by which the "Rock" or otherwise "Unsuitable Soils" or "Unsuitable Materials" shall be quantified.
 - 1. Rippable Weathered Rock is defined as residual material having a volume greater than one (1) cubic yard that, in the opinion of Contractor's Geotechnical Engineer, can be effectively plowed, spaded, or removed with power driven excavating equipment having been first loosened with a track-mounted bulldozer equipped with a single-tooth ripper shank, having a minimum draw bar pull rated at not less than 56,000 pounds.
 - 2. Mass Rock and Trench Rock are defined as residual material having a volume greater than one (1) cubic yard or more for mass excavation or one-half (1/2) cubic yard for trench or pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, or blasting.
 - a) Mass Rock - Mass Excavation: Late-model, track-mounted bulldozer equipped with a single-tooth ripper shank; rated at not less than 230-hp flywheel power and developing a minimum of 56,000-lbf pryout force; measured according to SAEJ-732 (Caterpillar D-8K, Caterpillar 977 front-end loader or equivalent).
 - b) Trench Rock - Excavation of Trenches and Pits: Late-model, track-mounted hydraulic excavator; equipped with a 42-inch-wide, short-tip-radius rock bucket; rated at not less than 120-hp flywheel power with a bucket-curling force of not less than 25,700-lbf and stick-crown force of not less than 18,700 lbf; measured according to SAEJ-1179 (Caterpillar Model 225 or equivalent).
- C. Provide ground vibration monitoring and existing condition/crack survey (video and/or digital) of all nearby structures and/or adjacent properties prior to any blasting operations. Contractor must notify Owner's insurance company of rock removal intent and must obtain all necessary insurance certificates and permissions to expedite this work.

PART 3 - EXECUTION

3.1 CLEARING

- A. Clearing is the removal of all obstructions which interfere with the construction. These items include minor structures above and below existing grades and below finished grades identified on the drawings, trees and their complete root systems, brush, other vegetative material in any condition (i.e., chipped, cut, wrenched, etc.) rubbish, fences and other such items except items indicated to be preserved on Drawings.
- B. Set and maintain any Active or Passive Tree, Wetland, Spring, Buffer, Limits of Disturbance or Vegetation Protection Fencing prior to Clearing operations in accordance with Drawings.
- C. Contractor shall clear only those areas in which construction or grading operations are required and includes all excavated, graded and filled areas. Contractor shall protect all other areas from any damage as a result of clearing operations.
- D. Burning on site shall not be permitted under any circumstances.
- E. Contractor shall remove all cleared material from the Project site and legally dispose of.

3.2 GRUBBING

- A. Grubbing is the removal of all roots and stumps from the ground larger than 3/4 in. diameter.
- B. Unless otherwise directed, Contractor shall grub all cleared areas;
 - 1. In fill areas where design grade levels for building, roads or paved areas are to be placed, grub to minimum depth of twelve inches (12") below the finished design grade level as indicated on Drawings.
 - 2. In all areas of excavation for structures, grub to the depth of the proposed excavation or to the depth that allows the area to be free of debris, rock, organic and inorganic materials, and unsuitable soils that would otherwise prevent the soil from being compacted to the density as indicated on Drawings and stated in the Specifications herein.
 - 3. In areas outside of design level grades or building footprint or roads and parking lots where fill is to be placed grub to the existing grade unless the area adjacent requires soils compacted to a density to support the structures, roads, or parking areas.
 - 4. Contractor shall be responsible for excavating to an appropriate depth and removing and replacing with suitable soils that will allow soil to achieve requisite

compacted density.

5. In areas to be grassed and/or landscaped without fill, grub to a minimum of six inches (6") below the final grade.

- C. Remove all grubbed material from the Project site and legally dispose of.

3.3 CLEAN UP

- A. Burning of debris or grubbed material onsite shall not be permitted under any circumstances.
- B. Remove all debris resulting from Clearing and Grubbing operations from the site and dispose of in compliance with all applicable laws and regulations.
- C. Do not place such debris on private property without written consent of Owner and Owner of such property.
- D. Do not place debris or grubbed material around perimeter of site.
- E. Remove all non-organic debris, trash, etc. from the site and dispose of in compliance with all applicable laws and regulations.

3.4 TOPSOIL STOCKPILING

- A. Strip topsoil to full depth encountered in areas indicated to be graded on the drawings. Stockpiling may occur as required to complete all construction operations. Intermittent movement of Topsoil from one location of the Project site to another shall be included in the Contract Sum. No claim shall be considered by Owner for the movement of Topsoil.
- B. Prior to stockpiling topsoil, remove tree limbs, tree roots, rocks larger than one inch (1") and other deleterious materials from the topsoil. Removed materials shall become the property of the Contractor and hauled off the site and legally disposed.
- C. Stockpile topsoil in manner to drain without ponding, and to avoid loss of material through erosion by wind or water.
- D. Do not export any topsoil off-site unless approved in writing by the Owner.
- E. Re-distribute a minimum of four inch (4") deep layer of topsoil fine graded to finish contour elevations illustrated in non-paved or building areas.

3.5 EXCESS, UNSUITABLE, AND INSUFFICIENT MATERIALS

- A. Remove and legally dispose of excess and unsuitable materials from Project site unless directed otherwise in writing by Owner. Unsuitable material may be placed on Owner's property if and only if approved in writing by Owner prior to any on-site distribution as a deductive change order and then shall only be placed in non-structural fill areas of the Project site as designated by Owner and/or Owner's Representative.
- B. Provide satisfactory fill material in areas where existing materials are insufficient or unsuitable for earthwork operations.
- C. If, in the opinion of the Engineer/Geotechnical Engineer, the material in its undisturbed natural condition at or below final design grade as indicated on the Drawings, the excavation is unsuitable for its intended use; it shall be removed to such depth and width as directed and be replaced with suitable material by Contractor as directed by the Engineer/Geotechnical Engineer. Contractor, unless otherwise directed by the Engineer or Owner, shall remove and replace unsuitable materials based on the schedule of values with unit costs provided with the lump sum as specified by the Bid Proposal Form. Owner may elect, in accordance with the provision of the agreement, to direct Contractor to remove and replace the unsuitable materials on a lump sum or time and materials basis should applicable unit rates not exist or not covered for unsuitable material being removed. Contractor shall receive written notice from the Engineer of means and methods to employ i.e. lump sum, unit rates or time and materials, prior to executing any work deemed in excess of the amount indicated in the Contract Sum.

3.6 EXCAVATION

- A. Excavation shall be made to the design lines and levels illustrated on the drawings or to such depths, whichever is greater, as further described elsewhere in this section and to such widths as will give suitable room for construction of the structures, for bracing and supporting, pumping, and draining and inspection. The bottom of the excavations shall be rendered clean, firm, level and dry and in all respects acceptable to Contractor's Geotechnical Engineer and Owner's Representative. Where changes in levels occur, provide vertical steps in horizontal runs.
- B. Excavation and dewatering shall be accomplished by means and methods which preserve the undisturbed state of subsurface soils. Exposed subsurface shall be proof rolled with at least two (2) coverages of the specified equipment. Contractor's Geotechnical Engineer and Owner's Representative shall waive this requirement if, in his/her opinion, the subsurface will be rendered unsuitable by such compaction. Subsurface soils which become soft, loose, "quick", or otherwise unsatisfactory for support of structures as a result of inadequate excavation, dewatering, proof-rolling,

or other construction methods shall be removed and replaced by structural fill as required by Contractor's Geotechnical Engineer and Owner's Representative at Contractor's expense.

- C. Dewatering shall be such as to prevent boiling or detrimental under-seepage at the base of the excavation as specified herein.
- D. Contractor shall prepare subsurface areas for all structures unless otherwise illustrated on Drawings or otherwise specified elsewhere in this Section:
 - 1. Roughly level and proof roll these areas with a 25-ton roller, (or the equivalent) making at least four passes (two passes being perpendicular to the others).
 - 2. Compact the top twelve inches (12") of fill below subsurface to a minimum of 100 percent Standard Proctor (ASTM D698).
 - 3. Where structures are supported by piles, compact the top twelve inches (12") of subsurface to a minimum of 95 percent Standard Proctor (ASTM D698).
- E. Excavation equipment shall be satisfactory for carrying out the work in accordance with requirements specified. In no case shall the earth be ploughed, scraped, or dug with machinery so near to the finished design limits indicated on Drawings as to result in excavation of, or disturbance of material below design limits. The last of material loosened by mass excavation shall be removed with pick and shovel immediately prior to placement of concrete or working mat.
- F. When excavation for foundations has reached prescribed depths, Contractor's Geotechnical Engineer and Owner's Representative shall be notified and will inspect conditions. If materials and conditions are not satisfactory to Contractor's Geotechnical Engineer and Owner's Representative, Contractor's Geotechnical Engineer and Owner's Representative will issue instructions as to the procedures to resolve the issue(s) in question.
- G. During final excavation to design limits as indicated on Drawings, take whatever precautions are required to prevent disturbance and remolding. Material which has become softened and mixed with water shall be removed. Hand excavation of the final three to six inches (3"- 6") will be required as necessary to obtain a satisfactory undisturbed bottom. Contractor's Geotechnical Engineer and Owner's Representative will be the sole judge as to whether the work has been accomplished satisfactorily.
- H. Over-excavation by Contractor beyond the design limits and depths required or indicated on the drawings shall be replaced with lean concrete, compacted structural fill, crushed stone, or other materials as directed by Contractor's Geotechnical Engineer and Owner's Representative at no change in Contract Sum or Time.
- I. If soil conditions permit, cut footing trenches to exact size of footing, and omit forms.

Notify Contractor's Geotechnical Engineer and Owner's Representative if earth of doubtful bearing is encountered. If adequate bearing is not encountered within eight inches (8") of depth illustrated on Drawings, excavations shall be carried deeper upon written authorization and paid for as additional work in accordance with Contract Conditions.

- J. If excavations are carried deeper than required by Drawings or Specifications in error, the additional depth shall be filled with materials specified for road subgrade and compaction at no additional cost to Owner.
- K. Protect excavations against cave-ins, ponding and freezing. When freezing can be anticipated prior to placing of concrete, protect excavations or delay carrying excavations to full depth until concrete can be placed.
- L. Maintain excavations free of surface water. Provide pumps if required to drain excavations. Provide and maintain temporary drainage ditches as required.
- M. Notify Contractor's Geotechnical Engineer and Owner's Representative when footing excavations are complete. Geotechnical Engineer will perform appropriate density testing of the excavations prior to placing formwork, reinforcement steel, anchor bolts and concrete.
- N. Contractor shall be fully responsible for all damage to any part of the site, building structures or other installations, caused by water.
- O. Concrete should be placed the same day earth excavation is made. If it is necessary for excavations to remain open overnight, provisions should be made to prevent collection of surface run-off in the excavation.

3.7 EXCAVATION OF ROCK

- A. If rock is encountered, clear away earth and expose materials. Notify Contractor's Geotechnical Engineer and Owner's Representative and receive written instructions prior to excavations. Measure and estimate extent of rock to be excavated. Contractor's Geotechnical Engineer shall identify, qualify, and verify in writing whether the material shall be classified as rock and shall confirm the extent and quantity of rock to be excavated.
- B. Only rock excavation done in accordance with Contractor's Geotechnical Engineer and Owner's Representative instructions will be paid for by Owner as additional work in accordance with Contract Conditions.
- C. Contractor shall remove rock in accordance with the following:

1. Remove rock to a depth of six inches (6") below proposed slabs and pavement.
2. Twenty-four inches (24)" on each side of and below footings of the proposed building walls.
3. Six inches (6") below and eight inches (8") to each side of conduits, ducts and pipes installed in utility trenches, with minimum width of thirty-six inches (36").
4. Twelve inches (12") below finished grade in areas to receive landscaping, sodding, and seeding.

D. No blasting is allowed. Use of explosives will not be permitted.

3.8 EXCAVATION AND BACKFILL OF UTILITY TRENCHES

- A. Excavation for all trenches required for the installation of pipes and ducts shall be made to the design levels indicated on the drawings and in such a manner and to such widths as will give suitable room for laying the pipe or installing the ducts within the trenches, for bracing and supporting, and for pumping and drainage facilities. Bottoms of excavations shall be rendered firm and dry and, in all respects, acceptable to the Contractor's Geotechnical Engineer and Owner's Representative. Bituminous pavement, when encountered, shall be cut with pneumatic chisels along smooth and straight lines before excavating. Saw-cutting is required on all asphaltic concrete.
- B. Rock shall be removed in accordance with Section 3.7.
- C. Where pipe or ducts are to be laid in gravel or sand bedding or encased in concrete, the trench may be excavated by machinery to, or just below design level indicated on Drawings provided that the material remaining in the bottom of the trench is no more than slightly disturbed.
- D. Where pipe or ducts are to be laid directly on the trench bottom, the lower part of the trenches shall not be excavated to the design level by machinery, the last of the material being excavated manually in such a manner that will give a flat bottom true to grade so that pipe or duct can be evenly supported on undisturbed material. Bell holes shall be made as required.
- E. When excavation methods include the use of a steel trench box, comply with the following requirements:
 1. When installing rigid pipe Reinforced Concrete Pipe (RCP), Ductile Iron Pipe (DIP), etc], any portion of the box extending below mid diameter of the pipe shall be raised above this point prior to moving the box ahead to install the next pipe. This is to prevent the separation of installed pipe joints due to movement of the box.
 2. When installing flexible pipe (PVC, ABS solid wall, ABS truss, etc.), the bottom of the box shall not extend below mid diameter of the pipe. This is to prevent loss of soil between the box and the pipe bedding which could result in excessive deflection of

the installed pipe.

- F. Backfilling over ducts, pipes, conduits, etc. shall begin not less than three days after placing concrete encasement or until the test sample achieves prescribed strength of tested sample.
- G. Where pipe is to be installed in fill of any type, fill shall be placed and compacted to the total depth required and then re-excavated for pipe installation.
- H. As soon as practicable after the pipe has been laid and jointed, backfilling shall begin and thereafter be completed expeditiously. If required, as illustrated on Drawings, screened gravel shall be placed around the pipe to its mid-diameter. As the screened gravel is placed, it shall be compacted by suitable tools. Compaction shall meet a minimum criterion of 98% Standard Proctor at or near its optimum moisture content (minus 2 to plus 3 percent).
- I. Use Reinforced Concrete Pipe for culverts within right-of-way and under pavement refer to City of Dacula Standards.
- J. For Plastic (PVC) pipe for drainage systems or roof leaders grade trench bottom to uniform slope to provide a firm, unyielding bearing surface along the entire length of the barrel of the pipe.
- K. Continue backfilling with suitable soil in six-inch (6") layers by hand, tamping material by hand operated tampers to a level eighteen inches (18") above top of pipe.
- L. Form depressions for hubs and similar joints only in size as required for making joint.
- M. In areas of rock excavation, and where needed in other areas, provide crushed stone bedding for all pipes.
- N. Provide bedding over the full width of excavation to a minimum depth of six inches (6") under pipe.
- O. Whenever the subsurface is unstable or too soft to provide a satisfactory pipe foundation for any pipe, undercut the trench as necessary and backfill with crushed stone. Compact and bring the material to proper grade to create a firm, unyielding foundation.
- P. After the bedding, if required, has been placed to the mid-diameter of the pipe, select common fill shall be placed to a depth of twelve inches (12") over the top of the pipe. Material shall be thoroughly compacted by hand-tamping as placed with at least one man tamping for each man shoveling material into the trench. Compaction shall result in achieving a 95% Standard Proctor test at or near its optimum moisture content (minus

2 to plus 3%).

- Q. Where the pipes are laid in unpaved areas, the remainder of the trench shall be filled with common fill in layers not to exceed twelve inches (12") and thoroughly compacted by rolling, ramming, or puddling sufficiently to prevent subsequent settling to 95% Standard Proctor at or near its optimum moisture content (minus 2 to plus 3%). The backfill shall be mounded 3 inches (minimum) above the finish or existing grade or as directed by the Contractor's Geotechnical Engineer. Wherever a loam or gravel surface exists prior to excavations, it shall be removed, conserved, and replaced to the full original depth as part of the work under the pipe items. In some areas it may be necessary to remove excess material during the clean-up process, so that the ground may be restored to its original level and condition. If Contractor prefers not to store loam, gravel, or topsoil he/she shall replace it with material of equal quality and in equal quantity.
- R. Where the pipes are laid in streets, or other paved areas, the remainder of the trench above the bedding and up to a depth of twelve inches (12") below the bottom of the specified paving shall be backfilled with common fill in 6-inch (max.) layers thoroughly compacted by rolling or ramming to 98% Standard Proctor. The twelve-inch (12 ") layer below the bottom of the specified paving shall be of Class A or B stone, compacted in six-inch (6") layers to 98% modified Proctor.
- S. Along the length of all pipeline and duct trenches, impervious dams, or bulkheads of clay thirty-six (36") in thicknesses or concrete twelve-inch (12") in thickness shall be constructed in the trench bottom at three-hundred-foot (300') intervals or at manholes and structures, whichever is less, to obstruct the free flow of groundwater after construction is completed. Provide impervious dams at all points where a pipe trench enters an excavated area where a permanent underdrain system is installed.
- T. Do not over-excavate. If specified trench widths are exceeded, Contractor shall adhere to Section 3.6 H. Contractor's Geotechnical Engineer and Owner's Representative may require installation of stronger pipe or special installation procedures at no additional cost to Owner.
- U. Water line trenches shall be excavated to avoid high points requiring the installation of vacuum and relief valves below the frost line.
- V. Cutting and removing existing pavements where required shall be done in neat lines and in accordance with 3.6.3 A of this Section.
- W. Do not backfill over utility lines which have not passed required testing or inspections including the Contractor's Geotechnical Engineer's inspection of the subsurface has not been done and or other Inspections, testing and regrading locations of subsurface

utilities is not accomplished.

- X. Contractor is to continue to backfill all trenches with suitable fill material in 6-inch lifts immediately after the pipe is laid or bedded as described in items 3.6 I, J and K above using suitable soils and adhering to the backfilled requirements of paved or unpaved areas. Compact trenches backfill with portable compaction equipment.
- Y. If sufficient suitable excavated material is not available on site, provide sufficient and suitable borrow material for backfill (See Paragraph 2.3 of this Section).
- Z. Backfill from twelve inches (12") above the pipe to finish grade shall be as follows:
 - 1. Trenches in areas not to be paved may be backfilled and compacted by methods of Contractor's choice. Compact backfill to 95% Standard Proctor Density. Refill the trench as often as required to maintain the design elevation at proper grade.
 - 2. Trenches in areas to be paved and in areas beneath proposed structures shall be backfilled with granular material.
 - 3. Compact backfill to 98% Standard Proctor Density with top 12 inches compacted to 100% Standard Proctor Density or as specified by Geotechnical Report.
 - 4. Compact backfill further, if necessary, either by leaving the backfilled trench open to traffic while maintaining the surface or by the use of compaction equipment as required.
 - 5. Refill settlement in trenches with material acceptable to Contractor's Geotechnical Engineer and continue such maintenance until pavement placement is authorized by Contractor's Geotechnical Engineer and Owner's Representative.
- AA. Fill and backfill materials shall not be placed on frozen surfaces, or surfaces covered by snow or ice. Fill and backfill material shall be free of snow, ice and frozen earth.
- BB. Utility Trenches:
 - 1. Excavate trenches to a maximum width equal to pipe diameter plus 2'-0" for pipes 30" diameter and smaller; 2'-6" plus pipe diameter for pipe exceeding 30" diameter. Minimum excavation width shall be 3'-0". Do not over-excavate. If specified trench widths are exceeded, Engineer may require installation of stronger pipe or special installation procedures at no additional cost to Owner.
 - 2. The bottom of trenches, when in rock, shall be excavated a minimum of 6" below required bottom of pipe, refilled with fill material free of rock larger than 3" in any dimension, and compacted to bedding level to provide uniform bearing and support along the length of each pipe section.
 - 3. Pipe shall be carefully bedded in soil foundation. See paragraph 3.10.
 - 4. Water line trenches shall be excavated to avoid high points requiring the installation of vacuum and relief valves below the frost line.
 - 5. Cutting and removing existing pavements where required shall be done in neat lines.

CC. Proof-rolling:

1. After the site has been properly drained, and all organic surface soils have been removed, the site shall be inspected by Owner and Owner's Representative and proof-rolled at that time.
2. Proof-rolling shall consist of several overlapping passes of heavily loaded 18-20 ton dual tandem dump truck.
3. The purposes of the proof-rolling will be to detect any areas where soft or unstable soils are present, as well as to improve the density of the loose near-surface soils.
4. Proof-rolling shall be performed in the presence of the Owner and Owner's Representative who can observe any areas where remedial action may be required. Contractor's Geotechnical Engineer will be used if there is a problem encountered.
5. Any soft or yielding areas shall be thoroughly undercut and replaced with well-compacted structural fill 95% Standard Proctor with the top 12" compacted to 98% Standard Proctor Density or as specified by the Geotechnical Report.
6. Groundwater level should be maintained at a depth of at least two (2') feet below the depth of vibratory rolling operations.
7. A minimum of four (4) complete overlapping passes shall be made in each of two perpendicular directions.

3.9 EXCAVATION EMBANKMENT AND BRACING

- A. Contractor shall accept full responsibility for all excavations and shall protect all excavation embankments against collapse.
- B. Where possible, embankments over 5'-0" high shall be made at a slope not greater than 1 horizontal to 1 vertical; or where the soil is very sandy or wet, the slope should not be greater than 2 horizontal to 1 vertical.
- C. Steeper slopes than those suggested herein may be employed when the work is under the supervision of a Registered Professional Engineer responsible for the design engineering of all shoring and bracing techniques required to accomplish the work and shall be employed by Contractor.
- D. Where it is not possible to provide a safe embankment slope, all banks shall be temporarily supported and maintained secure until permanent support has been provided.
- E. Where ditches or trenches are over 5'-0" deep; cross bracing and shoring shall be provided to prevent collapse.
- F. Contractor shall provide bracing systems designed by a Registered Engineer in the State of Georgia, experienced in such designs and acceptable to Owner.

- G. Drawings shall show the work and sequence in its entirety and be submitted to Owner for approval prior to commencing work.
- H. To prevent caving, or settlement of earth adjacent to excavations, and for the protection of persons as well as property, shoring, bracing and other similar work shall be provided and installed to meet the conditions in each particular case and shall be left in place until construction has reached a point where backfills behind walls or in ditches have been made and the need for shoring and bracing eliminated.

3.10 BEDDING

- A. Bedding shall conform to the following Specifications unless illustrated otherwise elsewhere in these documents:
 - 1. For ductile iron, cast iron or plastic (SDR) pipe for water main or sanitary sewer system refer to City of Dacula Standards.
 - 2. For corrugated metal pipe (CMP), concrete pipe (RCP) or plastic (PVC) pipe for storm water drainage systems or roof leaders grade trench bottom to uniform slope to provide a firm, unyielding bearing surface along the entire length of the barrel of the pipe.
 - 3. Bed pipe in trenches on continuous soil foundation shaped to lowest one-fourth of pipe profile, unless illustrated otherwise in these documents.
 - 4. Continue backfilling with suitable soil in 6" layers by hand, tamping material by hand operated tampers to a level 18" above top of pipe.
 - 5. Form depressions for hubs and similar joints only in size as required for making joint.
 - 6. In areas of rock excavation, and where needed in other areas, provide crushed stone bedding for all pipes.
 - 7. Provide this bedding over the full width of the excavation to a minimum depth of 6" under the pipe.
 - 8. Whenever the sub-grade is unstable or too soft to provide a satisfactory pipe foundation for any pipe, undercut the trench as necessary and backfill with crushed stone.
 - 9. Compact and bring the material to proper grade to create a firm, unyielding foundation.

3.11 TRENCH BACKFILLING

- A. Do not backfill over utility lines which have not passed required testing or inspections including:
 - 1. Contractor's Geotechnical Engineer inspection of subgrade.
 - 2. Inspections, testing and regrading locations of subgrade utilities.
- B. Backfill all trenches and excavations immediately after the pipe is laid using suitable

soils:

1. If sufficient suitable excavated material is not available on site, provide sufficient and suitable borrow material for backfill. See Paragraph 2.3 of this Section.
2. Backfill from 18 inches above the pipe to grade shall be as follows:
 - a) Trenches in areas not to be paved may be backfilled and compacted by methods of Contractor's choice. Compact backfill to 90% Standard Proctor Density. Refill trench as often as required to maintain the design elevation at the proper grade.
 - b) Trenches in areas to be paved and in areas beneath proposed structures shall be backfilled with granular material. Compact backfill to 95% Standard Proctor Density with the top 12" compacted to 98% Standard Proctor Density or as specified by the Geotechnical Report. Compact backfill further, if necessary, either by leaving the backfilled trench open to traffic while maintaining the surface or by the use of compaction equipment as required. Refill settlement in trenches with material acceptable to the Contractor's Geotechnical Engineer and continue such maintenance until pavement placement is authorized by the Owner's Representative.

3.12 FILLING

- A. Preparation of Surface to Receive Fill (Reference and follow the Contractor's Geotechnical Engineer's recommendations in his report)
 1. Remove vegetation, topsoil, debris, unsuitable soil materials, obstructions, and deleterious materials from ground surface prior to placement of fill. Break up (and periodically cut benches into) sloped surfaces steeper than one vertical to four horizontal so that fill material will bond with existing surface.
 2. Surfaces to receive fill material shall be inspected and approved by Contractor's Geotechnical Engineer.
 3. When existing ground surface has density less than that specified for particular area classification, break up the ground surface, pulverize, moisturize soil to optimum moisture content, and compact to required depth and percentage of maximum density.
 4. Subgrade shall be proof-rolled with a heavily loaded 18-20 ton dual tandem dump truck, scraper, or similar rubber-tired equipment in the presence of the Owner and/or Owner's representative. Contractor's Geotechnical Engineer will be called in if a problem is encountered.
 5. Proof-rolling shall be performed in two mutually perpendicular directions, with at least two passes in each direction.
 6. Areas which exhibit signs of instability that cannot be stabilized with further compaction shall be undercut to a suitable grade and backfilled with structural fill.
- B. Benching should be made periodically; create an eight foot to ten foot (8'-10') wide

bench for each two vertical foot (2 VF) of fill placed. Insure stable interface between old fill and newly placed fill.

- C. Place fill materials in layers not more than six inch (6") loose depth. Before compaction, moisten or aerate each layer to provide the optimum moisture content plus or minus 2%, or as specified in soils report. See paragraph 3.11 below for compaction requirements of fill. Do not place backfill or fill material on muddy, frozen surfaces or surfaces containing any frost or ice. Compaction shall be inspected by Contractor's Geotechnical Engineer.
- D. No soil found on the site or transported to the site which is contaminated with material containing asbestos, PCB's, radon, gasoline, fuel oil or other fossil fuels shall be used for fill, backfill, or planting topsoil. Any contaminated soil found on the site shall be removed and disposed of in a manner approved by the appropriate regulatory agencies.

3.13 GRADING AND FILLING AROUND TREES

- A. Obtain a copy of City of Dacula Tree Preservation Standards which are hereby made a part of these Specifications; and follow all pertinent guidelines regarding Grading and Filling operations at or near Tree Save Areas as illustrated on Drawings.
- B. Maintain existing grade within Critical Root Zone (CRZ) of trees unless otherwise indicated.
- C. Where existing grade is above new finish grade illustrated around trees, hand excavate within drip line to new grade. Cut exposed roots approximately 3" below elevation of new finish grade. Employ a tree surgeon to recommend procedures such as pruning of branches and stimulation of root growth. Provide subsequent maintenance during the contract period as recommended and long-range maintenance procedures to be followed after completion of construction operations.
- D. Raising Grades
 - 1. Where existing grade is 4" or less below elevation of finish grade illustrated, provide fill using stockpiled topsoil. Use topsoil as specified. Place topsoil in single layer and do not compact.
 - 2. Where existing grade is more than 4" but less than 8" below elevation of finish grade illustrated, place a layer of drainage fill on existing grade prior to placing topsoil. Place fill against trunks of trees to an elevation of approximately 2" above finish grade and extending not less than 18" from tree trunk on all sides. For balance of area within drip line perimeter, place drainage fill to an elevation 4" below finish grade and complete fill with a 4" layer of topsoil. Do not compact stone or topsoil layers.

3.14 COMPACTION

- A. Perform compaction of soil materials for fills using mechanical soil compaction equipment for type and size materials to be compacted. Hand compact materials in areas inaccessible to machinery.
- B. Provide the percentages of specified compaction at the specified moisture content in the specified lifts as outlined in the Geotechnical Report. If no specification is given in said report, use the following as a minimum at 3% plus or minus of optimum moisture content placed in 8" lifts:
 - 1. Provide 95% maximum dry density with top 12" to 98% maximum dry density for fill under building slabs, extending beyond the building outlines a distance equal to twice the height of the fill beneath any edge of building. Fill should then slope not steeper than one vertical to two horizontal (2H:1V);
 - 2. Provide 95% maximum dry density with the top 12" to 98% maximum dry density for fill under asphaltic pavements;
 - 3. Provide 95% maximum dry density Standard Proctor and top 12" to 98% maximum dry density for fill under concrete footings, concrete sidewalks, concrete steps and concrete ramps and trench backfill.
 - 4. Provide 90% maximum dry density for all other non-paved fill material unless otherwise indicated.
- C. Where subgrade or soil layer must be moisture conditioned before compacting, apply water to surface of subgrade or soil layer. Scarify and air-dry soil material that is too wet to permit compaction to specified density.
- D. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread where directed by Owner's Representative and permitted to dry. Assist drying by discing, harrowing, or pulverizing, until moisture content is reduced to satisfactory value, as determined by moisture density relation tests. When accepted by the Contractor's Geotechnical Engineer, soil material may be used in compacted backfill or fill.
- E. Remove unsuitable material at the site for the proposed structures and paved areas from the existing grade. No water shall be allowed to accumulate in the excavation, or on the subgrade soils during construction. Soils which will be exposed during construction are very sensitive to disturbances and strength degradation in the presence of excess moisture. They are also frost susceptible. The amount of time natural subgrades are exposed to the elements must be minimized in order to prevent possible subgrade degradation. Work must be completed such that excavation, inspection, undercutting, backfill and/or concrete mud matting can be accomplished expeditiously in a given area.

Foundations have been designed for bearing capacity of 3000 psf bearing. Contractor shall verify the bearing capacity prior to placing footings. If tests indicate less than assumed capacity, receive instructions from Owner.

3.15 FINISH GRADING

- A. Finish grade disturbed areas, with a minimum 4" depth of topsoil, in smooth, uniformly leveled, crowned, or contoured slopes between all new elevation surface points to existing, undisturbed grade elevations.
- B. Grade areas adjacent to buildings for positive drainage to storm drainage structures and prevent ponding. Finish grades shall be within one tenth of a foot (0.1') of indicated elevations.
- C. Drawings indicate the levels, slopes, and contours of finished grade elevations for the entire site. Slight modifications as determined by Owner's Representative may be required, Contractor shall make these modifications without extra cost to Owner.
- D. Where compacted areas are disturbed by construction operations, scarify surface, reshape, and compact to required density.
- E. Redistribute stockpiled topsoil to uniform depth over graded areas and other areas to receive landscaping or grassing, in a 4" minimum depth. In the event that stripped topsoil is not sufficient to render a 4" minimum depth, import clean topsoil sufficient to render a minimum 4" depth as part of the Contract Sum at no additional cost to the Owner.
- F. Redistribute excess topsoil, subsoil from footing excavations, other soil matter and debris on approved areas of the Owner's property at no additional cost to the Owner.
- G. At completion of finish grading, entire site shall be ready for planting or grassing.
- H. Where finish grading meets or abuts curbs, walks or similar pavements, upstream grades shall be slightly higher than pavements to permit drainage and prevent ponding behind curbs or walks.
- I. Protect newly graded surfaces from traffic and erosion and keep free of debris. Where graded or compacted surfaces are damaged by subsequent operations, return to proper grade and state of compaction.

23-0805

EARTHWORK

02 200-25

3.16 GRADE MAINTENANCE

- A. Contractor shall provide additional fill material, remove excess material, or redistribute materials as required, should grades be changed by erosion or other causes during course of construction, without additional cost to Owner.

3.17 FIELD QUALITY CONTROL

- A. Contractor's Geotechnical Engineer shall be notified by Contractor of the progress of work under this section on a continuing basis so that necessary field soil engineering and testing services may be provided during site preparation, excavation, fill placement and foundation phases, if required by Owner. Do not proceed with additional portions of work until results of previous phases have been verified.
- B. Contractor's Geotechnical Engineer will verify that all existing fill, topsoil, soils containing organic matter and all other undesirable materials are removed and only engineered fill is placed over suitable subgrade soils.
- C. If, during progress of work, tests indicate that compacted materials do not meet specified requirements, remove defective work, replace, and retest at no additional cost to Owner.
- D. Ensure compacted fills are tested before proceeding with placement of surface materials.
- E. Contractor's Geotechnical Engineer will observe all "benching" operations as fill placement progresses to the existing slopes.
- F. Contractor's Geotechnical Engineer will observe the foundation construction as directed by Owner and determine the adequacy of bearing surfaces prior to construction of foundations.
- G. Contractor's Geotechnical Engineer will make all tests of backfill materials to determine their suitability for compaction and will observe the placing of backfill as directed by Owner.
- H. Contractor's Geotechnical Engineer and the Owner's Representative shall have the power of rejection of materials, equipment, or operating procedures of the backfilling operation. Contractor shall replace, rework or correct work which does not meet the Specifications as directed by Contractor's Geotechnical Engineer and/or Owner's Representative at no cost to Owner.
- I. Contractor shall be responsible for notifying the Contractor's Geotechnical Engineer at

least 24 hours prior to the time when testing will be required.

- J. Additional tests on completed fill may be authorized by Owner. If such tests indicate failure to meet the Specifications, the costs of these tests and subsequent retests will be paid by the Contractor. Otherwise, the costs of these tests will be paid by Owner.
- K. In-place density tests shall be performed by the Contractor's Geotechnical Engineer according to the following requirements:
 - 1. In the general building area, conduct one test for every 2,500 square feet for each two feet of depth.
 - 2. At wall and trench backfill areas, conduct one test for every 50 lineal feet for each two feet depth.
 - 3. In all cases, a test is required within the top foot of fill.
 - 4. Sidewalks - One test for each two-foot lift of each 5,000 sq. ft. of area.
 - 5. General area of fill - One test for each two-foot lift of each 10,000 sq. ft. of area.

End of Section

SECTION 02 270

SLOPE PROTECTION AND EROSION CONTROL

PART 1 - GENERAL

1.1 SCOPE

- A. Slope protection and erosion control shall be performed on all disturbed areas that the Contractor disturbs outside of edge of pavement. Contractor shall stabilize all disturbed areas with permanent grassing.
- B. Work described in this section includes the containment of sediment transport, containment and control of all soil erosion and containment and treatment of all pollutants including dust, prior to, during and throughout all construction operations; establishment of permanent vegetative cover on all disturbed areas and continued maintenance of said measures in accordance with sub-paragraph 4 of Part III, paragraph. 3.4 this Section. Work includes removal of all devices at the completion of the project as further described in Part 3.5 of this Section.
- C. Contractor is solely responsible for protection of all adjacent properties and affected downstream properties from encroachment or damage from soil erosion and/or the discharge of pollutants by water, air, or dust to any areas off the project site.
- D. Best Management Practices which are more fully described in the latest edition of the "Manual for Erosion and Sediment Control in Georgia- Vegetative and Structural Best Management Practices (BMPs) for Land Disturbing Activities" as published by the Georgia Soil and Water Conservation Commission shall be employed to stabilize all disturbed areas. The Engineer may require additional measures at no cost to Owner if Contractor is not preventing erosion from leaving the limits of work.

1.2 SUBMITTALS

- A. None required unless additional measures are required by Owner and/or Engineer.

1.3 PROJECT CONDITIONS

- A. Furnish and install all control measures prior to or concurrent with any land disturbance activity. The Contractor is responsible for the initial provision and installation all control measures and then the continued provision and installation of all measures throughout all construction operations and all sequences of construction operations.

- B. Schedule grading operations to allow permanent erosion control to take place in the same construction season. Avoid or minimize exposure of soils to winter weather. Maintain all controls until vegetative cover has been established.
- C. Construct and maintain temporary control measures until such time as permanent measures are effective in control of erosion, sediment, and pollution from the site. Extent of measures shall be responsibility of Contractor.
- D. Stop all erosion, sediment, dust, or other pollution from leaving the site and encroaching on downstream or surrounding properties.
- E. Temporary grassing shall be applied to all disturbed areas left idle for 72 hours.
- F. Contractor is responsible for all quantities of all BMPs regardless of if shown on the ESPC Drawings or not. The extent of soil erosion control measures shown on the ESPC should be considered minimum.

1.4 QUALITY CRITERIA

- A. Procedures shall comply with the "Manual for Erosion and Sediment Control in Georgia", latest edition published by the Georgia Soil and Water Conservation Committee." Acquire and keep on-site throughout construction a copy of the latest edition of the "Field Manual for Erosion and Sediment Control in Georgia- Vegetative and Structural Best Management Practices (BMP's) for Land Disturbing Activities" as published by the Georgia Soil and Water Conservation Commission sometimes referred to as the "little green book". The Contractor is required to keep a logbook on site documenting his inspection of all BMP's (minimum once/week and within 24 hrs of any storm event) and noting any corrections or modifications. General Contractor must also file a "Notice of Termination" when the site is finally stabilized, and all stormwater management systems have been constructed and have been proven to be functioning in accordance with the Design Concept(s).
- B. Reference the ESPC for any other procedural manuals, publications, permits or other field guidelines required for the Contractor to obtain, understand, and utilize in the performance of his work. By reference of same, said materials are made a part of these Specifications.

PART 2 – PRODUCTS

2.1 FILTER FABRIC

- A. Filter fabric for silt fences shall be a 36" Georgia DOT approved pervious sheet of synthetic polymer filaments non-woven from continuous filaments with wire fence backing. Filter fabric shall be of type recommended by its manufacturer for the intended application. The filter fabric shall meet the following requirements:

1. Minimum average thickness: 30 mil (by ASTM D1777).
2. Air permeability: 250 to 550 C.F.M./Sq. Ft.
3. Minimum grab strength: 110 lbs. (by ASTM D1682).

2.2 FILTER STONE

A. Aggregate filter shall conform to following gradations:

<u>Sieve Size</u>	<u>% by weight passing Square mesh sieve</u>
3"	100
3/4"	20 - 90
No. 4	0 - 20

2.3 STONE FOR EXIT/ENTRANCE PAD

A. Stone shall comply with ASTM D448 size #1 (1 1/2" to 3 1/2").

2.4 EROSION CONTROL MATTING

- A. All areas of disturbance (slopes greater than 2:1 or as specified): Refer to latest edition of "Manual for Erosion and Sediment Control in Georgia" for changes to the BMP's listed below.
1. Biodegradable netting impregnated with excelsior wood fiber such as manufactured by "Curlex";
 2. "Ero-Mat" by Verdyol;
 3. "Bon Terra CS2".

2.5 SYNTHETIC POLYMERS

- A. For all newly disturbed, graded, or exposed soil surfaces, apply 1.5 gals/acre of approved erosion control polymer. Erosion control polymer is a water-soluble synthetic polyacrylamide polymer suitable to be applied to disturbed soil surfaces where the polymer will chemically bind to fine clay particles and prevent clay from going into solution, such as:
1. APS 600 Series Silt Stop, as manufactured by Applied Polymer Systems, Norcross, Georgia, Contact Steve Iwinski (678)461-9352.
 2. Or approved equal.
- B. Polymer shall be applied utilizing a hydro seeder mix of appropriate seed, fertilizer, lime, and mulch for the same acre or without seed/fertilizer/lime/mulch mix.
- C. Follow all manufacturer's instructions and recommendations. Do not mechanically disturb treated areas after application. *(This does not include foot traffic as necessary to install erosion control blanket.)*

- D. Contractor shall furnish and install as necessary a minimum 200 lbs. of erosion control polymer for incidental "touch-up" or point source erosion areas."
- E. Furnish two (2) forms of synthetic polymer:
 - 1. Emulsion polymer for hydro seeder application with an active strength of 30%.
 - 2. Powder polymer for hand spreading with an active strength of 95%.

2.6 RIP RAP

- A. Rip Rap shall be granite stone with a minimum weight of one hundred fifty pounds (150 lbs.) per piece.
- B. Place rip rap at both ends of proposed concrete culvert and safety end sections.

PART 3 - EXECUTION

3.1 TEMPORARY EROSION CONTROL DEVICES

- A. Construct temporary sediment barriers of silt fence at all points where surface water flows from construction area bypassing a temporary sediment trap if the area is subject to soil erosion; or as otherwise indicated on ESPC or as deemed necessary by inspectors.
- B. Install temporary sediment traps and temporary sediment basins in accordance with the location and details shown on the ESPC. Remove accumulated sediment when they are one-third full of silt continually until permanent vegetative cover is established.
- C. Install construction exit as indicated on ESPC with geotextile fabric underlayment. Maintain to prevent tracking and flow of mud onto public roads.
- D. Construct diversion berms, dikes (2'-0" wide x 1'-6" tall) or ditches at the tops of all slopes or as otherwise indicated on the ESPC. Machine compact these elements and plant temporary seed until permanent vegetative cover can be established.
- E. Maintain temporary barriers until permanent erosion control measures are established. Repair and replace barriers damaged or displaced by construction activity.
- F. Contractor shall clean out and/or adjust temporary sediment basin(s)/facility elevations to specified depth throughout duration of project after stabilization of all disturbed areas. Compact dam of sedimentation basin to minimum 95% Standard Proctor to the grade elevations shown on the ESPC.

3.2 SEDIMENTATION FACILITIES

- A. Construct temporary sedimentation facility prior to or concurrent with rough grading of site. Permanent sedimentation control measures shall be constructed concurrently with fine grading or partial fine grading of site and vegetative stabilization. Direct surface water into completed portions of sedimentation facility.
- B. Maintain temporary sediment traps around at all drainage structures (both on-site and/or off-site) until permanent vegetative cover has been established to prevent washing of sediment into public storm drainage system. Utilize "pigs-in-a-blanket" temporary sediment traps at all completed or partially completed single wing or double wing catch basins, drop inlets, and yard inlets.
- C. Flush drainage lines between manholes and drainage structures as required during construction and after establishment of permanent erosion control measures to remove collected debris.
- D. Install rip rap at all locations indicated on the ESPC or other drawings as soon as feasible. It shall be reasonably well-graded granite stone sized from smallest to maximum size specified. Stones smaller than smallest size specified is not permitted. Control gradation of rip rap by visual inspection to assure thickness of rip rap conforms with the contract document requirements. Provide geotextile filter fabric under rip rap.
- E. After land disturbance operations of any kind, survey the sediment facility and determine that sediment volume that is available. If specified volume is not available, disassemble control measures, excavate sediment from facility and install control measures. Dispose of excavated sediment from facility, spread over slopes in accordance with contours shown on the Grading and Drainage Plan and stabilize facility with permanent vegetation. Prepare and submit a certified statement of correct sediment facility volume. Do not dispose of any excavated sediment into any drainage way which might lead said material off-site onto adjacent downstream properties.
- F. The existing creeks and ponds shall not be used in any manner for Erosion, Sediment or Pollution Control measures. Protect same from all erosion, sediment or pollutants of any kind.

3.3 GROUND COVER

- A. Protect all exposed soils with mulching (temporary measure) and vegetative ground cover (permanent measure).
- B. Install "Curlex", "Bon Terra CS2" or "Ero-Mat" by Verdyol blanket on all slopes greater than 3:1 along with vegetative cover unless otherwise indicated on the ESPC.

- C. Temporary Seeding consists of ground cover of temporary plant material on all graded areas which will not receive final grading or permanent planting within three (3) days.
- D. All grassing or planting operations shall include mulching as stabilization until ground cover by planting is effective.
- E. Reseed as required until full vegetative coverage is established.

3.4 MAINTENANCE

- A. Inspect all control elements after each rainfall event and a minimum of every two (2) weeks when no rainfall event(s) occur. Clear all debris and accumulated sediment from behind barriers when half full so their functional capacity is not reduced. Repair and replace any and all damaged measures of any kind.
- B. Maintain all erosion, sedimentation, pollution control measures for delivery of correct pond volume for a period of thirty (30) calendar days.

3.5 REMOVAL OF TEMPORARY EROSION CONTROL DEVICES

- A. As soon as permanent vegetative cover is established, Contractor shall remove temporary devices, including sediment barriers, berms, silt traps and similar devices. Contractor to remove retrofit structure and clean out all accumulated silt and debris in detention ponds to restore finished grades indicated on the ESPC.
- B. Contractor shall remove all excess silt from behind all silt fences and other filter devices and utilize it to repair erosion features if necessary. If silt is not needed for repairs, it shall be removed from the site by the contractor.
- C. Contractor shall remove silt fence in such a manner as to minimize damage to surrounding vegetative cover. All fence fabric, wire and posts shall be removed completely, and removed from the site.
- D. All disturbed areas created by removal of silt fence shall be immediately fine graded, stabilized and seeded with permanent grass to match surrounding areas. All rocks and debris shall be removed from the site. Stabilization of disturbed areas may require the use of a "geo-jute" fabric to prevent erosion and allow for mowing of same area. Erosion control fabrics with netting that will be entangled in mowers may not be acceptable in areas where mowing will occur. In the event seasonal considerations prevent establishment of permanent grass, Contractor shall establish temporary grass and return the following season to establish permanent grass.
- E. Remove all debris resulting from temporary erosion control from project site.

- F. Control dust from disturbed areas by means of mulching, irrigation, calcium chloride or other method subject to the Civil Engineer's review.
- G. Should site conditions dictate that it is not prudent to remove all temporary erosion control devices at the time of Contractor demobilization; the Contractor must remobilize personnel and equipment to complete removal as soon as conditions allow. The Contractor will be responsible for the complete and timely removal of all temporary erosion control devices as soon as adequate permanent vegetative cover is established.

End of Section

23-0805

SITE CONCRETE

02 514-1

SECTION 02 514

SITE CONCRETE

PART 1 - GENERAL

1.1 SCOPE

- A. Site Concrete work required by the Contractor includes curb & gutter replacement, driveway apron replacement, storm catch basin top replacement, and storm inlet concrete paved invert replacement/installation. No other concrete work is required unless other existing concrete areas of curb & gutter and/or concrete driveways are damaged by the Contractor during completion of the scope of work. This section consists of furnishing and installing Portland cement concrete for any site improvements to repair damaged areas illustrated on the drawings which may include curb & gutter, driveway aprons, and any other concrete as indicated in Section 01 000, Project Scope & Performance Specification and on Construction Drawings.

1.2 SUBMITTALS

- A. Submit design mix certified by the testing laboratory to be approved by Owner's Representative and paid for by Owner, for the mix design based on cylinder check tests verifying the design mix.
- B. Submit mill certification certifying that cement, sand, aggregate, reinforcing steel and joint materials comply with the requirements of this Specification.
- C. Submit shop drawings for review prior to placement showing bending and placing details for steel reinforcing including bar sizes, spacings, bending and tagging identification.
- D. Submit complete manufacturer's catalog description of all joint materials and curing/sealing materials.

1.3 PROJECT CONDITIONS

- A. Installation shall comply with all state and local laws, ordinances, rules and regulations.
- B. Contractor shall obtain all required permits prior to start of construction.

23-0805

SITE CONCRETE

02 514-2

- C. Survey and maintain all benchmarks, monuments, and other reference points, and if disturbed or destroyed, replace by registered Georgia land surveyor at no cost to Owner.
- D. Provide proper drainage during construction in a manner to prevent damage to the work, adjoining structures and adjoining and downstream property.
- E. Patching parts of a section of work between joints shall not be permitted. Remove and replace entire damaged sections when matching existing work.

1.4 QUALITY CRITERIA

- A. All work and materials shall conform to the applicable standard specifications for roadway construction of the Georgia State Department of Transportation where the construction occurs.
- B. All work shall be performed in accordance with ACI 301.

1.5 GUARANTEE

- A. Site Concrete Contractor to provide Owner's Representative a written guarantee that all work is of good quality, free from faults and defects and in conformance with these Specifications; and that if, within one year after completion and acceptance of the Work, any Work or materials are found to be defective, Contractor will promptly, without cost to Owner, correct such defective Work or materials.

PART 2 - PRODUCTS

2.1 BASE COURSE MATERIALS

- A. Base course shall be constructed of structural fill.

2.2 CONCRETE

- A. Concrete shall be 3,000 psi concrete shall be in compliance with ASTM C94.
- B. Cement shall comply with ASTM C150 normal Type I specifications.
- C. Aggregates shall comply with ASTM C33.
- D. Water shall be potable.

23-0805

SITE CONCRETE

02 514-3

- E. No additives shall be used without prior review of Owner's Representative.

2.3 REINFORCING STEEL

- A. Reinforcing bars and dowels shall conform to ASTM A615, Grade 60, deformed bars with an uncoated finish.
- B. Welded wire fabric shall consist of deformed bars, furnished in flat sheets or coiled rolls with an uncoated finish, and shall conform to ASTM A-185.
- C. Tie wire shall be 16-gauge annealed steel.

2.4 JOINT MATERIALS

- A. Expansion joint filler shall be non-extruding and resilient types conforming to AASHTO M-213 or M153.
- B. Poured joint sealer shall be a hot poured elastic type sealer intended for sealing joints in concrete pavements and shall conform to AASHTO M-173.

2.5 CURING AND SEALING MATERIALS

- A. Curing/sealing compound shall be "CS-309" as manufactured by W. R. Meadows.

2.6 FORM MATERIALS

- A. Form materials shall comply with the requirements of ACI 301.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Prior to placement of base material, installer shall inspect the site grading and ensure that the sub-grade has been properly placed and compacted and is ready to receive the base material. He shall also determine that all site drainage, piped site utilities, underground electrical and communications conduits have been installed, tested and accepted by Owner's Representative.

3.2 PREPARATION

- A. Contractor shall submit to Owner's Representative for review all materials to be

used in the base and pavements.

- B. Contractor shall repair subgrade as necessary to provide uniform surfaces.
- C. Spread base material and compact to 95% Maximum Theoretical Density and within 1/8 inch of required grade.
- D. Check field density with nuclear density device or other method acceptable to Owner's Representative.
- E. Set forms on firm foundation, true to grade and securely fastened in place. No settlement or springing of forms under the finishing machine will be allowed. Top face shall not vary from a true plane by more than 1/8 inch in 10 feet. Vertical sides shall not vary from a true plane by more than 1/4 inch.
- F. Clean and oil all forms prior to use.
- G. Provide work bridges where necessary for finishing, straight edging, making corrections, etc. to surface after concrete has been screeded. Bridges shall be rigidly constructed and easily moveable so that they will not come into contact with the concrete.
- H. Check alignment and grade elevations of forms and obtain approval of preparation and form work from Owner's Representative prior to placement of concrete.

3.3 INSTALLATION OF CONCRETE CULVERT AND DRIVEWAY APRONS

- A. Place reinforcement in accordance with Performance Specification and secure by means of chairs, clips, etc. as necessary.
- B. Excavate drain pockets for all weep holes, if any and fill with coarse aggregate. Provide pipes, sleeves, or formed openings as indicated in Performance Specification.
- C. Place concrete in a manner to avoid segregation. Spread to the full width and depth of forms and bring to grade by screeding and straight edging.
- D. Give aprons a heavy broom finish with smooth trowel edges as shown on the drawings. Final surface shall not vary from a true plane by more than 1/4 inch in 10 ft. Provide sealer for all sidewalks and apply in accordance with manufacturer's recommendations.
- E. Workmanship and appearance shall be of the highest quality.

23-0805

SITE CONCRETE

02 514-5

- F. Provide joints as shown on the Drawings.
- G. Provide proper curing for the sidewalks using liquid curing/sealing compound.
- H. Thoroughly clean all joints immediately prior to sealing and acid and/or pressure wash concrete prior to sealing as directed by Owner's Representative. Apply sealant as soon as possible after required curing period of concrete. Prohibit traffic on sealed surfaces until sealer has cured.

3.4 CLEANING

- A. Curb & Gutter and Concrete Driveway Aprons shall be acid washed and/or pressure washed at substantial completion by Contractor if required by Owner's Representative to achieve the desired appearance. Only required if damaged by Contractor due to tracking, repaving, and/or tack coat applications.

End of Section

SECTION 02 547

BITUMINOUS SURFACING

PART 1 - GENERAL

- 1.1 DESCRIPTION: Work described in this section includes, but is not limited to providing asphalt tack coat, asphalt binder and surface course for asphalt milling and repaving for all streets within Brookton Place Subdivision and deceleration lane off of Willams Farm Road at Ben Arron Drive. Also includes milling and asphalt pavement for deep patch milling and standard edge milling. Furnishing and installing paving courses normally incidental to paving operations is also included.
- 1.2 QUALITY ASSURANCE
- A. Reference Specifications: "Standard Specifications for Construction of Roads and Bridges", 1983 edition, Department of Transportation, State of Georgia and "Supplemental Specifications for Road and Bridge Construction" which modify the 1983 regulations.
 - B. Requirements of Regulatory Agencies: Comply with applicable codes, ordinances, rules, regulations, and laws of local, municipal, state or federal authorities having jurisdiction, the Georgia DOT and City of Dacula Development Regulations.
 - C. Pavement area shall be inspected by Owner and Owner's Representative. Contractor shall correct any deficiencies in material makeup, strength, or quantities revealed.
 - D. Recycled asphaltic concrete must be approved by City of Dacula before it is allowed to be used on any projects for either binder or top course.
- 1.3 SUBMITTALS
- A. Submit manufacturer's data, reports, and material certifications as required to certify compliance with the specifications.
- 1.4 JOB CONDITIONS
- A. Grade Control: Establish and maintain required lines and elevations. Minimum slopes leading to catch basins on curb inlets shall not be less than 1" in 8' (1.04%).
 - B. Contractor shall build up centerline of road with new asphalt pavement to create new crown in road sloping from centerline to curb & gutter.

- C. Utility Installations: No paving work shall be started until all utility installations which will be covered by pavement have been completed.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Paving Base Course: Crusher run grade aggregate consistent with the Reference Specifications, Paragraph 3.2 A, compacted to 95 % Proctor. Aggregate shall be crushed stone consisting of hard durable rock fragments free from clay and reasonably free from flat, elongated, or soft pieces of organic matter. It shall be graded 2" and down, if required.
- B. Materials for hot mix asphaltic concrete construction to be as given in Reference Specifications, Paragraph 400.02 of the Georgia D.O.T. Standard Specifications.
1. Materials: Bituminous concrete materials shall meet the following gradation specifications:

SEIVE SIZE	PERCENT Intermediate or Leveling Course (Type "B")	PASSING Surface Course (Top) (Type "F")
1"	100	
3/4"	90 - 100	
1/2"		100
3/8"	40 - 70	90 - 100
No. 4		50 - 85
No. 8	25 - 40	40 - 55
No. 16		
No. 50		
No. 200	0 - 10	0 - 10
Percent Bitumen	4.2 - 7	5.2 - 9.0
Penetration Grade	85 - 100	85 - 100

- C. Asphalt Tack Coat shall be installed between milled section and asphalt binder course and between asphalt binder course and asphalt surface course (0.05 – 0.15 GAL per SY).

PART 3 - EXECUTION

3.1 SUB-GRADE PREPARATION

23-0805

BITUMINOUS SURFACING

02 547-3

- A. Contractor shall proof-roll sub-grade in the presence of the Owner prior to installing base course material. The sub-grade if required due to unsuitable materials being present shall be cleared of all rocks, loam, debris, vegetation, roots, and foreign matter, to a depth of 12 inches below its finish grade.
- B. Contractor shall protect the sub-grade from damage and maintain it in a smooth, compact, and rut-free condition until the base course has been placed.

3.2 PAVING BASE COURSE

- A. Paving Base Course shall be constructed of grade aggregate and construction shall be done in accordance with Sections 310.01, 310.03, 310.04 of the Georgia D.O.T. Standard Specifications except that the use of automatically controlled screed equipment will be at Contractor's option.

3.3 BITUMINOUS PAVING

- A. Bituminous paving shall be hot mix asphaltic concrete construction conforming to Sections 400.01, 400.03, 400.04, 400.05, 400.07, 400.08, of the Georgia D.O.T. Standard Specifications except that Section 400.04 shall be modified as follows: The job mix formula shall be submitted by Contractor to Owner's Representative for his approval, and such approval does not relieve Contractor of his responsibilities for adequacy and warranty of the paving.

3.4 BITUMINOUS PRIME

- A. Bituminous prime shall conform to Georgia D.O.T. Standard Sections 412.01, 412.02, 412.03, 412.04 of the Standard Specifications.

3.5 PAVING THICKNESSES SHALL BE AS FOLLOWS

- A. All areas of Standard Edge Milling and Asphalt Repaving shall receive (Standard Edge Milling to be performed first, then Deep Patch Milling completed before repaving):

Minimum Thickness

1. Asphalt Edge Milling.....2-1/2" at gutter tapered out to zero near centerline of road
2. Asphalt Tack Coat..... (0.05 – 0.15 gallons per S.Y.)
3. 'D' Mix (Metro-Flex or equivalent 'D' Mix) Asphalt Course 1"
4. Asphalt Tack Coat..... (0.05 – 0.15 gallons per S.Y.)
5. Type 1 – 'F' Mix (9.5 mm) Asphalt Surface Course 1-1/2"

- B. All areas of Asphalt Milling and Repaving for Deep Patch Milling as marked by orange paint in the Field by the City and/or City's Representative shall receive:

Minimum Thickness

- | | | |
|----|---|--------------------------------|
| 1. | Asphalt & Subgrade Deep Patch Milling | 4" |
| 2. | 25 mm Asphalt Binder Course | 4" |
| 3. | Asphalt Tack Coat..... | (0.05 – 0.15 gallons per S.Y.) |
| 4. | 'D' Mix (Metro-Flex or equivalent 'D' Mix) Asphalt Course | 1" |
| 5. | Asphalt Tack Coat..... | (0.05 – 0.15 gallons per S.Y.) |
| 6. | Type 1 – 'F' Mix (9.5 mm) Asphalt Surface Course | 1-1/2" |

- C. 'D' Mix (Metro-Flex) Asphalt Course or equivalent 'D' Mix is required. Contractor to submit Job Mix Formula to Engineer for review.
- D. All asphalt pavements shall have a minimum slope of 1/8" for each 1'. Contractor to build up new crown in road at centerline for positive drainage if crown exists in existing condition. Maintain existing cross slope of all roads. See asphalt details as illustrated on the Drawings.

3.6 ASPHALT PAVEMENT DEEP PATCH:

- A. Asphalt deep patch milling and repaving areas shall be performed for those sections of roadway as marked with orange paint in the Field by the City and City's Representative and as indicated in the Scope of Work and Performance Specification and Drawings.
- B. Work includes removing, transporting, and disposing of the removed milled asphalt pavement material; and cleaning the remaining pavement surface.
- C. All demolished material shall be taken to a State Approved Facility at no additional cost to Owner.

3.7 BITUMINOUS TACK COAT

- A. Apply asphalt tack coat to existing asphalt deep patch areas and binder course prior to installing new "D' Mix Asphalt Course and to new "D' Mix Asphalt Course or Binder Course immediately prior to spreading Asphalt Surface Course materials.
- B. Quantity:
1. Apply from 0.05 to 0.15 gallons per square yard of surface to be covered as directed by Engineer.
 2. Emulsified asphalt shall be diluted with an equal part of water.

C. Application:

1. Apply tack coat by means of a bituminous distributor so that a uniform distribution is obtained at all points.
2. Apply tack coat on each layer of the binder course and allow tack coat to cure before placing the succeeding course.
3. Apply tack coat only as much pavement as can be covered with asphalt aggregate mixture in the same day.

3.8 MAINTENANCE

- A. Contractor shall maintain the wearing surface until approved by Owner.
- B. Contractor shall warrant the paving free of construction defects for a period of one year after acceptance by Owner.

End of Section

SECTION 02 580

TRAFFIC PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SCOPE

- A. All traffic markings as indicated on the Drawings shall be included in the Construction contract. Traffic markings shall match existing conditions and those added to scope of the project.
- B. The scope of pavement markings includes:
 - 1. Thermoplastic Stop Bar on Ben Arron Drive at intersection of Willams Farm Road and/or as indicated on the Drawings.
 - 2. If existing roads have any other paint markings, then Contractor shall stripe and paint to match existing condition.

The work covered by this section consists of furnishing all materials and labor for providing traffic and pavement markings included in the scope of work as stated above. This shall include all required markings at intersections and all ADA/Handicapped symbols and crosswalks, if existing.

1.2 SUBMITTALS

- A. Submit manufacturer's data including material specifications, surface preparation, application instructions and warranty information to Owner's Representative for review.
- B. Above data shall be accompanied by certification from the manufacturer stating that the materials comply with this specification.

1.3 PROJECT CONDITIONS

- A. Provide adequate barricades, etc. to protect the work.
- B. Perform all work in a neat and workmanlike manner and protect all property From spillage or splash of paint.

23-0805

TRAFFIC PAVEMENT MARKING

02 580-2

PART 2 - PRODUCTS

2.1 GENERAL

- A. Paint shall be delivered in unopened containers, clearly marked to identify the Product and its manufacturer.

2.2 PAINT/THERMOPLASTIC

- A. Paint shall be heavy duty, latex based traffic paint of a manufacturer reviewed and acceptable to City of Dacula.
- B. Paint color shall be white in the parking areas, yellow in areas of two-way traffic and blue for all handicap parking and handicap aisle striping.
- C. Paint shall conform to Georgia D.O.T. Standard Specifications, paragraphs 652.01, 652.03, and 652.04.
- D. Thermoplastic shall be of a manufacturer reviewed and acceptable City of Dacula.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verify that all of the pavement is complete and acceptable to the Owner and the Fire Marshal prior to pavement marking application.

3.2 PREPARATION

- A. Thoroughly clean all areas to receive pavement marking. This will include sweeping and such other measures as are necessary to ensure good adhesion of the paint to the pavement surface.

3.3 APPLICATION

- A. Obtain review of site conditions and materials from the Architect prior to application of pavement markings.

23-0805

TRAFFIC PAVEMENT MARKING

02 580-3

- B. All pavement markings and striping within the project Site shall consist of the following: Thermoplastic coating shall be applied for all Arrows, Crosswalks, and Stop Bars. All other pavement markings and striping including handicap symbols shall be applied with approved traffic paint.
- C. All pavement markings and striping for any road widening, deceleration lanes, acceleration lanes, and/or left turn lanes within City of Dacula right-of-way shall be Thermoplastic unless otherwise approved by City of Dacula.
- D. Thermoplastic coating (1 coat) shall be applied as recommended by manufacturer.
- E. Apply paint only under favorable weather conditions above 50-degree F.
- F. Apply paint strictly in accordance with manufacturer's written instructions.
- G. Apply paint with mechanical equipment to provide uniform straight edges.
- H. Apply a minimum of two coats paint to a dry film thickness of 15 mils. All pavement markings shall present a uniform appearance. Lines shall be 4" wide and installed with a striping machine. No uneven letters will be accepted. All letters and numbers shall be 6" high.
- I. Protect work from traffic or public access until paint is completely dry.
- J. Repaint any existing pavement markings damaged during construction.

3.4 CLEAN-UP

- A. Eradicate all markings that are in error and clean all excess paint and spilled or splashed paint from pavement or adjacent structures. Do not use paint or asphaltic liquids for obliteration of markings. Eradication shall be performed by hydro-blasting or other reviewed method that will not harm the pavement.

End of Section

SECTION 02 720

SITE DRAINAGE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Site Drainage required within the scope of work for this project includes storm catch basin top replacement and concrete paved invert installation in all storm sewer manholes within the right-of-way as illustrated on the drawings. Contractor is required to clean the entire storm system and storm sewer manholes. Once all sediment, debris, and trash are removed from the existing storm sewer system, then the Contractor needs to perform and provide a new CCTV update for the entire system using the City's selected CCTV Engineering Company. All fees for cleaning the storm sewer system pipes and manholes and CCTV update are the responsibility of the Contractor and shall be included in his base lump sum bid.

1.2 SUBMITTAL

- A. Product data: Submit for each type of piping material, prefabricated structure, and casting. Indicate product descriptions and installation procedures.
- B. As-builts: Contractor shall provide Owner with two (2) copies of an "as-built" plan of all underground utilities illustrating the location of each with dimensions illustrated to the building and/or curb line from each underground utility after construction is complete.
- C. In the event that site drainage structures are not maintained during the construction process to the satisfaction of City of Dacula, an interim as built may be required to establish the extent of deficiencies.
- D. See Section 02 720, 3.3 for As-Built Record Drawings submittals.

1.3 QUALITY ASSURANCE

- A. Industry standards: Standards for the following, as referenced hereinafter.
 - 1. American Society for Testing and Materials (ASTM).
 - 2. American Concrete Institute (ACI).

3. Georgia Department of Transportation, "Standard Specifications or the Construction of Roads and Bridges", 1983 edition, hereinafter referred to as Georgia D.O.T. Specifications.
4. City of Dacula Development Regulations, Latest Revision.
5. Gwinnett County Development Regulations, Latest Edition.

1.4 GUARANTEE

- A. Contractor shall guarantee the construction of all storm drainage for a period of one (1) year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PIPING

- A. Storm Sewer Drainpipe is to be of the type, size, class or gauge, and material illustrated in the Project Scope and Performance Specification and as indicated on the Drawings.
- B. Aluminized Type II Steel Pipe (AST-2) and Reinforced Concrete Pipe (RCP) are to be used for this project as indicated on the Drawings.
- C. Reinforced concrete pipe, concrete headwalls, concrete storm structures, and safety flared end sections, if indicated on Drawings, shall conform to Georgia D.O.T. Standard Specifications.

2.2 CONCRETE, MASONRY AND ACCESSORY MATERIALS

- A. Concrete: 4000 psi compressive strength including form work, reinforcement, and finish.
- B. Manhole brick: Meeting ASTM C32-73, Grade MM.
- C. Mortar: Meeting ASTM C270-80, Type M.
- D. Construction castings: Meeting ASTM A48-76, grey cast iron.
- E. Manhole steps: Meeting ASTM A48-76, Class 30B, integrally cast into manhole sidewalls.
- F. Gravel Fill: Meeting Ga. D.O.T. Specifications, Section 800, size #57 stone.
- G. Precast concrete manholes: Meeting ASTM C478-79, concentric cone type.

2.3 REINFORCING STEEL

- A. Reinforcing bars and dowels shall conform to ASTM A615, Grade 60, deformed bars with an uncoated finish.
- B. Welded wire fabric shall consist of deformed bars, furnished in flat sheets or coiled rolls with an uncoated finish, and shall conform to ASTM A-185.
- C. Tie wire shall be 16-gauge annealed steel.

PART 3 - EXECUTION

3.1 CONSTRUCTION OF DRAINAGE SYSTEM

- A. Excavation, filling, and compaction for construction of drainage system shall be in accordance with Earthwork Section 02 200.
- B. Inspect piping prior to placing in trenches. Install no defective or damaged piping.
- C. Lay piping beginning at low point of the drainage system with joints lapped upgrade. Lay in proper alignment and to slopes indicated, fully supported on firm subgrade.
- D. Clean interior of piping of dirt and debris as work progresses. Place plugs in the ends of uncompleted piping at the end of each work period. Continue to flush lines between manholes and drainage structures as required to remove collected debris until permanent vegetative cover has been established.
- E. Lengths of storm sewer drainpipe illustrated in the Project Scope and Performance Specification are approximate distances center to center of structures. Contractor is responsible for all pipe quantities to convey storm drainage to points indicated in accordance with the design concept illustrated.

3.2 DRAINAGE STRUCTURES

- A. Construct catch basins, drop inlets, headwalls and similar structures of reinforced concrete unless otherwise indicated; manholes of masonry, concrete, or precast units at Contractor's option.

1. Provide concrete foundations for manholes and other structures as indicated. All drainage structures shall have paved (mortar) inverts.
 2. Concrete structures shall be reinforced as indicated in the Project Scope and Performance Specification.
 3. All concrete construction shall receive a smooth formed finish in accordance with ACI-301-72 on all surfaces exposed to exterior or interior of structure; rough formed for all unexposed construction.
 4. Moist cure concrete for a minimum of seven days after placing.
- B. Mix mortar with only enough water for workability. Re-tempering of mortar will not be permitted. Keep mortar mixing and conveying equipment clean. Do not deposit mortar upon or permit contact with ground.
- C. Lay masonry in full mortar bed with ends and with full vertical joints, not more than 5/8" wide. Protect fresh masonry from freezing and from too rapid drying.
- D. Apply a 2" thickness mortar parge coating on interior and exterior of masonry walls surfaces.
- E. Set tops of frames and covers of manholes flush with finished surface.
- F. Set drainage gratings to elevations indicated in the Project Scope and Performance Specification.

3.3 AS-BUILT RECORD DRAWINGS

- A. Furnish two (2) sets of reproducible As-built Drawings of all portions of the storm sewer system(s) including the horizontal and vertical locations of all pipe structures, clean out connections and the relationship of storm sewer to all other built items in plan and profile. As-builts shall be prepared and sealed by a Georgia Registered Land Surveyor and shall be considered an accurate representation of the built storm sewer system.
- B. Updated CCTV video of the existing storm sewer system pipe and storm sewer manholes shall be performed and provided to the City to demonstrate that the existing storm system is cleaned out and free from sediment, debris, and trash. Contractor shall contact Integrated Science Engineering – Jason Ray 678-552-2106; jray@intse.com to schedule and perform the updated CCTV for the City.

End of Section

23-0805

LAWNS AND GRASSES

02 930-1

SECTION 02 930

LAWNS AND GRASSES

PART 1 - GENERAL

- 1 DESCRIPTION: Work described in this section consists of the establishment of permanent grassing of 100% of all areas disturbed or damaged by paving operations and storage of equipment, outside of those areas covered by pavement as indicated in Section 01 000, Project Scope & Performance Specification and on Construction Drawings.

PART 2 - PRODUCT

- 2.1 FERTILIZER: Fertilizer shall be 19-19-19 grade, uniform in composition, free flowing for application with spreading equipment, delivered to the site in bags or other containers, each fully labeled, conforming to the State fertilizer laws, and bearing the name, trade name, or trademark, and warranty of the producer. Engineer shall be furnished with duplicate copies of invoices for all fertilizer used on the project.
- 2.2 LIME: Ground limestone containing not less than 85% carbonates; 50% passing 100 mesh sieve and 90% passing 20 mesh sieves.
- 2.3 GRASS SEED: Shall be labeled in accordance with U.S. Department of Agriculture Rules and Regulations under the Federal Seed Act in effect on the date of Invitation of Bids. Seed shall be furnished in sealed standard containers unless exception is granted in writing by Engineer. Seed which has become wet, moldy, or otherwise damaged in transit or in storage will not be acceptable. Seed shall be guaranteed 92% germination.
 - A. Kentucky 31 Fescue (*Festuca Elatior*). Seed: Fresh, clean, new seed testing 98% for purity and 85% for germination. September 15 - May 15.
 - B. Common Bermuda (*Cynodon Dactylon*) Seed: Fresh, hulled, clean, new seed testing 98% for purity and 85% for germination. May 15 - September 15.
- 2.4 SOD: Sod replacement is required in yard and ditch regrading areas in front of property owner's yard where Sod is visibly established. Contractor shall replace Sod in kind and match existing condition.
 - 2.4.1. WATER: Water used in this work shall be suitable for irrigation and free from ingredients harmful to plant life. Furnish hose and other watering equipment required for the work.

23-0805

LAWNS AND GRASSES

02 930-2

- 2.6 HYDROMULCH: Wood cellulose fiber containing no germination inhibiting or growth inhibiting agents. Characteristics shall be as follows:
- A. Percent moisture content: 9.0% ($\pm 3, 0\%$).
 - B. Percent organic mater: 99.2% ($\pm 0.8\%$).
 - C. Percent ash content: 0.8% ($\pm 0.2\%$).
 - D. pH: 4.8 (± 0.5).
 - E. Water holding capacity: 150 grams water/100 grams fiber, minimum.

PART 3 - EXECUTION

- 3.1 FERTILIZER: Fertilizer shall be distributed uniformly at a rate of 800 pounds per acre, plus 1-ton agricultural lime per acre two (2) days prior to seeding, over the areas to be grassed, and shall be incorporated into the soil to a depth of at least 3 inches by disking or harrowing. The incorporation of fertilizer may be part of the tillage operation specified above. Undulations in the surface as a result of tillage or fertilizing shall be smoothed.
- 3.2 Approximately 4 weeks after seeding and when grass coverage has been established, apply 1 to 1 ½ pounds of ammonium nitrate per 1,000 square ft. to all seeded areas and immediately water using a fine spray. At the end of the maintenance period and prior to final inspection, apply 10 lbs. of specified fertilizer per 1,000 sq. ft. and water immediately.
- 3.3 SEED: Seed shall be Fescue or Bermuda. Method of seeding shall be hydro seeding or broadcast at Contractor's option; however, the method selected shall be a part of his erosion control plan.
- 3.4 BROADCAST SEEDING:
- A. If conditions are such, by reason of drought, high winds, excessive moisture, or other factors, that satisfactory results are not likely to be obtained, Contractor shall stop the work, and work shall be resumed only when conditions are favorable again or when approved alternate or corrective measures and procedures have been put into effect. If inspection during seeding operations or after there is a show of green indicates that strips have been left, or skipped, Contractor shall sow additional seed on these areas.
 - B. Seeding shall be at the rate of 10 pounds per 1,000 sq. ft. for Fescue or 5 pounds per 1,000 sq. ft. for Bermuda.

- C. Seed shall be broadcast either by hand or approved sowing equipment. The seed shall be uniformly distributed with the sower moving in one direction, and the remainder shall be sown with the sower moving at right angles to the first sowing. The seed shall be covered to an average depth of 1/4 inch by means of a brush harrow, spike-tooth harrow, chain harrow, cultipacker, or another approved device.
- 3.5 HYDROSEEDING: Apply seed/fertilizer/hydro mulch mixture in water slurry. Dispense using hydraulic mulching equipment in following minimum quantities:
 - A. Fertilizer: 130 lbs./acre.
 - B. Fescue Seed: 300 lbs./acre/Bermuda seed 150 pound/acre.
 - C. Hydromulch: 1500 lbs./acre.
- 3.6 COMPACTION: Immediately after the seeding operations specified above have been completed, the entire area shall be compacted by means of a cultipacker, roller, or other approved equipment weighing 60 to 90 pounds per linear foot of roller. If the soil is of such type that a smooth or corrugated roller cannot be operated satisfactorily, a pneumatic roller shall have tires of sufficient size so that complete coverage of the soil surface is obtained. When a cultipacker or similar equipment is used, the final rolling shall be at right angles to the prevailing winds to prevent dust.
- 3.7 CLEAN-UP: Remove from the site and dispose of all debris and foreign material. During the grassing operations, debris shall not be dumped on any part of the property or on any unauthorized placed.
- 3.8 MAINTENANCE:
 - A. Contractor shall be responsible for establishment and proper care of the grassed areas during the period when the grass is becoming established and until final acceptance by Owner.
 - B. Maintenance shall consist of watering, weeding, repair of any erosion and reseeding as necessary to establish a 100% uniform stand of grass and shall continue until acceptance.
 - C. All seeded areas that do not show satisfactory growth within 18 days after seeding shall be re-seeded and re-fertilized as directed until a satisfactory lawn is established. Full coverage is required in 60 days.
 - D. All lawn areas shall be protected until acceptance. All eroded and damaged

23-0805

LAWNS AND GRASSES

02 930-4

areas, regardless of cause, shall be immediately repaired and reseeded. Protect all lawn areas from pedestrian or vehicular traffic.

3.9 GUARANTEE AND ACCEPTANCE:

- A. All disturbed areas must be 100% covered and final stabilized with 80% grassing established.

End of Section

APPENDIX

for

City of Dacula

Brookton Place Subdivision
Asphalt Milling and Repaving Project

- Asphalt Core Report by Atlas Technical Consultants, LLC.
- CCTV by Integrated Science Engineering, See information on Drawings.
- Project Drawings dated 10-20-2023.



3000 Northfield Place, Suite 1100
Roswell, Georgia 30076
(770) 752-9205 * FAX (770) 752-0890

August 31, 2023

City of Dacula
442 Harbins Road
Dacula, Georgia 30265

Attention: Ms. Brittini Nix

Subject: Dacula Crossing Pavement Evaluation
Brookton Place Subdivision
Dacula, Georgia
Atlas Project No. 10497

Dear Ms. Nix:

Atlas Technical Consultants, LLC is pleased to provide this letter report of our evaluation of asphalt pavements at the above referenced project. The field study and this report were accomplished in general accordance with Atlas Proposal No. 23-09242, dated August 14, 2023.

The purpose of this letter is to summarize the results of the asphalt cores taken at the referenced project. Coring was performed at locations indicated to us on the provided site plan. The table shown below summarizes the measured asphalt cores which ranged in thickness from 1 $\frac{3}{8}$ inch to 3 inches. At all the cored locations, the asphalt was found to be underlain by basestone varying in thickness from 5 to 10 inches. Attached with this report is the Site and Coring Location plan which shows the approximate location of each core.

Summary of Asphalt Core Results

Core #	Asphalt Thickness (inches)	Basestone Thickness (Inches)
C-1	1 $\frac{3}{8}$	5
C-2	1 $\frac{5}{8}$	5
C-3	1 $\frac{3}{4}$	5
C-4	1 $\frac{3}{4}$	5
C-5	1 $\frac{3}{4}$	6
C-6	1 $\frac{5}{8}$	5
C-7	3	6
C-8	1 $\frac{3}{4}$	5
C-9	2 $\frac{1}{4}$	5 $\frac{1}{2}$

Core #	Asphalt Thickness (inches)	Basestone Thickness (Inches)
C-10	2	6
C-11	2 ¼	5 ½
C-12	3 ¼	10
C-13	2 ¼	5 ½
C-14	2 ½	6
C-15	2 ½	8
C-16	2 ⅛	5 ½
C-17	2 ⅛	5 ½
C-18	2	5 ½
C-19	2 ⅛	6
C-20	2	6
C-21	2	5 ¼

If you have any questions or would like to discuss this report, please feel free to call us at your convenience. It is a pleasure to serve as your geotechnical and construction materials consultants for this project.

Sincerely,
Atlas Technical Consultants, LLC



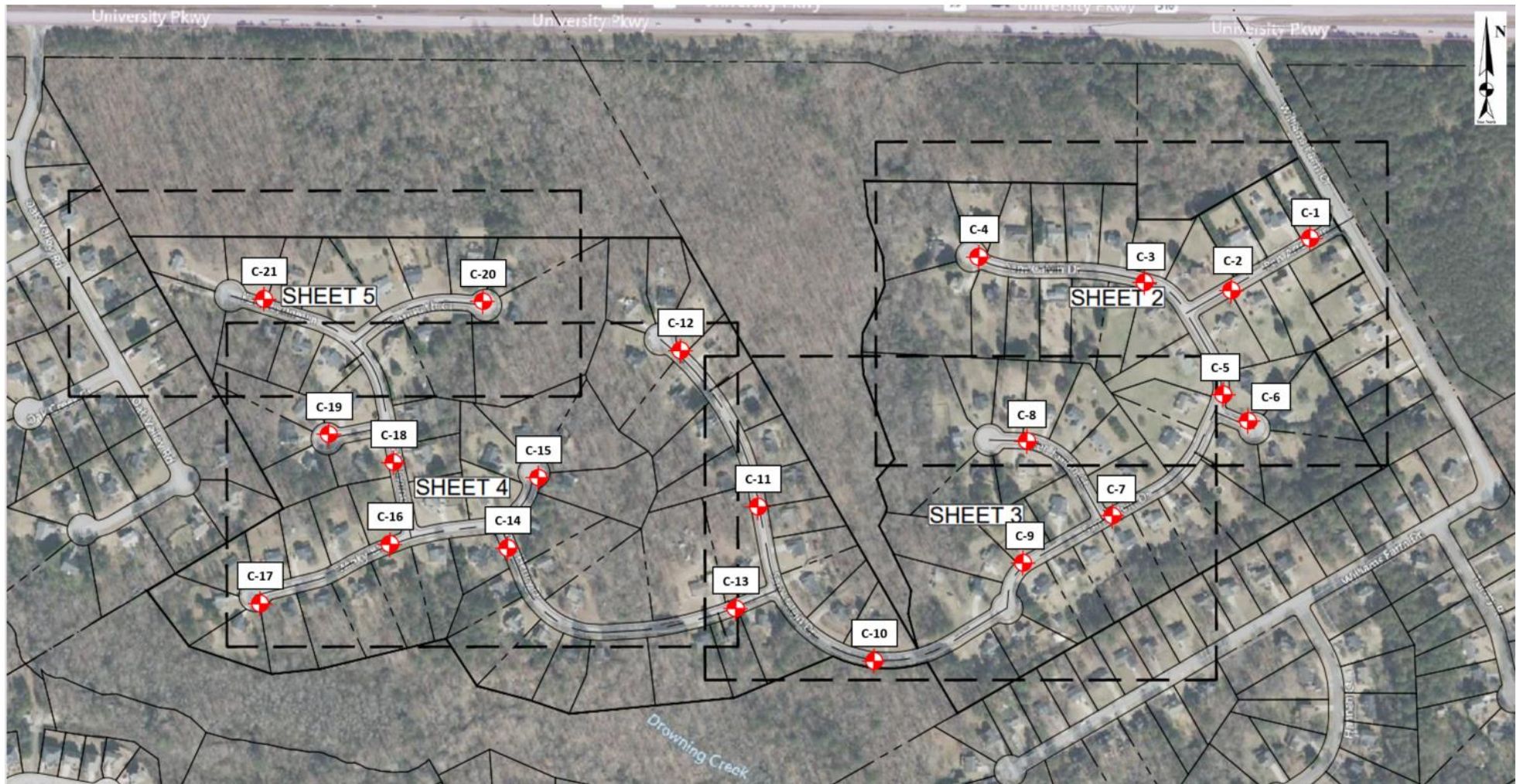
R. Ali Khan, P.E.
Registered Engineer



Garrett M. Owen, P.E.
Registered Engineer

RK/GO/ew

Attachment: Site and Coring Location Plan

**LEGEND****CORING LOCATION****FIGURE 1: SITE AND CORING
LOCATION PLAN**

**BROOKTON PLACE SUBDIVISION
PAVEMENT EVALUATION
DACULA, GEORGIA**

ATLAS

3000 NORTHFIELD PLACE, SUITE 1100
ROSWELL, GA 30076

DRAWN BY: RK

APPROVED BY: GO

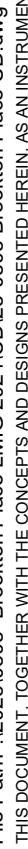
PROJECT NO.: 10497

DATE: August 29, 2023

SCALE: NTS

NOTES:

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.



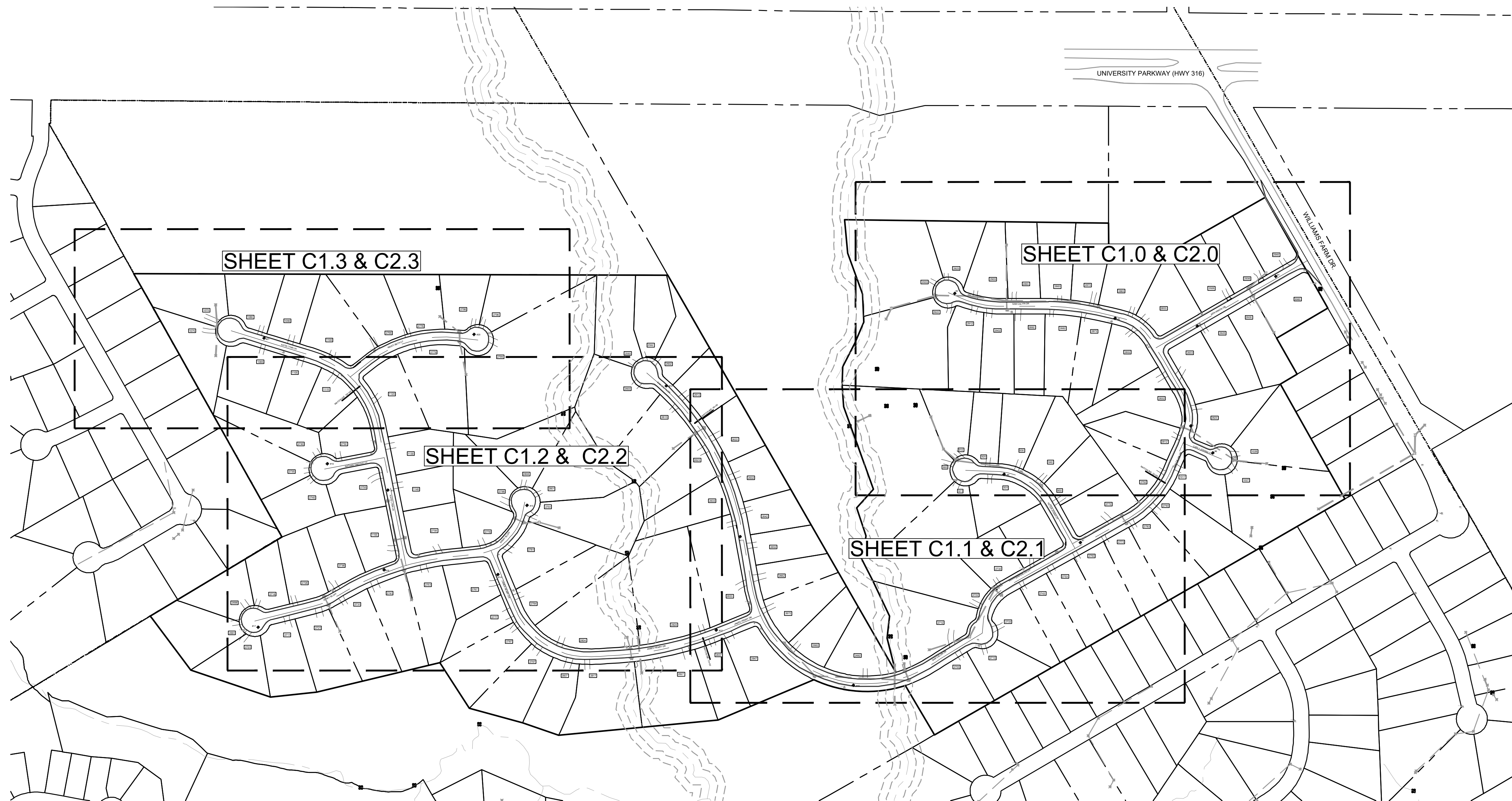
PART OF THIS PROJECT DOES LAY WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) PER FEMA FIRM PANEL 13135C0077F DATED 9/29/2006.



PLAN STATUS			
DATE	DESCRIPTION		
-- DESIGN	RWH DRAWN	KDW CHKD	
SCALE			
JOB No.		23-0805	
DATE :		October 23, 2023	
FILE No.			
SHEET No.		C0.0	

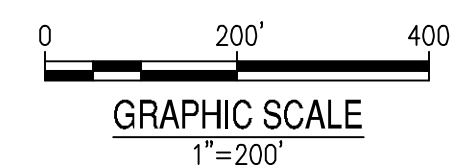
CITY OF DACULA
BROOKTON PLACE SUBDIVISION
ASPHALT MILLING & REPAVING PROJECT

298



CONTROL POINTS		
POINT #	NORTHING	EASTING
1	1444817.20	2387978.62
2	1444657.15	2387725.72
3	1444681.96	2387460.74
4	1444762.46	2386943.64
5	1444334.94	2387704.79
6	1444247.74	2387775.31
7	1443958.90	2387349.00
8	1444179.39	2387102.38
9	1443807.70	2387076.58
10	1443499.52	2386617.22
11	1443978.12	2386255.25
12	1444464.60	2386013.51
13	1443677.08	2386174.99
14	1443856.34	2385470.64
15	1444078.76	2385564.68
16	1443871.61	2385104.05
17	1443686.30	2384698.06
18	1444127.85	2385166.55
19	1444213.61	2384920.77
20	1444630.48	2385394.14
21	1444618.42	2384717.10

SUMMARY OF ASPHALT CORE RESULTS		
CORE #	ASPHALT THICKNESS (INCHES)	BASE STONE THICKNESS (INCHES)
#1	1-3/8"	5"
#2	1-5/8"	5"
#3	1-3/4"	5"
#4	1-3/4"	5"
#5	1-3/4"	6"
#6	1-5/8"	5"
#7	3"	6"
#8	1-3/4"	5"
#9	2-1/4"	5-1/2"
#10	2"	6"
#11	2-1/4"	5-1/2"
#12	3-1/4"	10"
#13	2-1/4"	5-1/2"
#14	2-1/2"	6"
#15	2-1/2"	8"
#16	2-1/8"	5-1/2"
#17	2-1/8"	5-1/2"
#18	2"	5-1/2"
#19	2-1/8"	6"
#20	2"	6"
#21	2"	5-1/4"





STRUCTURE CONDITION TABLE		
STRUCTURE #	TYPE	CONDITION
400	WI	CLEAN OUT
399	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
397	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
394	HW	CLEAN OUT, TAIL GRADE TO DRAIN
425	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
423	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
343	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
421	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
422	HW	CLEAN OUT
404	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
403	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
402	JB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
401	HW	CLEAN OUT, TAIL GRADE TO DRAIN
420	OCS	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
406	HW	CLEAN OUT, TAIL GRADE TO DRAIN
419	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
411	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
410	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
407	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
708	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
396	DI	CLEAN OUT, INSTALL / REPAIR PAVED INVERT, REMOVE VEGETATION GROWING IN FRAME AND GRATE
377	HW	CLEAN OUT, TAIL GRADE TO DRAIN
342	HW	CLEAN OUT
1085	YI	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
398	HW	CLEAN OUT, TAIL GRADE TO DRAIN
375	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
341	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT

STRUCTURE CONDITION TABLE		
STRUCTURE #	TYPE	CONDITION
340	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
339	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
338	HW	HEADWALL SEPARATING FROM PIPE
1301	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
1302	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
1303	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
1304	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
1305	JB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
1306	DWCB	CLEAN OUT, TAIL GRADE TO DRAIN
351	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
349	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
348	HW	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
378	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
379	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
380	JB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
368	HW	CLEAN OUT, TAIL GRADE TO DRAIN
370	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
369	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
353	SWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
367	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
381	HW	CLEAN OUT, TAIL GRADE TO DRAIN
365	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
364	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
363	HW	CLEAN OUT, TAIL GRADE TO DRAIN
373	HW	CLEAN OUT
372	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
371	HW	CLEAN OUT, TAIL GRADE TO DRAIN
374	HW	CLEAN OUT
350	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
376	DWCB	CLEAN OUT, INSTALL / REPAIR PAVED INVERT
366	HW	CLEAN OUT, TAIL GRADE TO DRAIN

PIPE CONDITION TABLE						
LENGTH (FEET)	STREET NAME	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	MATERIAL	DIAMETER	CONDITION
97.51	Katie Lynne Ln	372	371	CMP	Circular 36inch	Sediment build up, flowing and standing water
57.49	Katie Lynne Ln	373	372	CMP	Circular 36inch	Sediment build up, flowing and standing water
104.14	Kristi Beth Ct	376	366	CMP	Circular 30inch	Sediment build up
25.95	Kristi Beth Ct	350	376	CMP	Circular 30inch	Sediment build up, Rock and Debris, Concrete Debris
78.06	Kristi Beth Ct	374	350	CMP	Circular 24inch	Sediment build up
96.66	Katie Lynne Ln	369	367	CMP	Circular 24inch	Sediment build up, Rock and Debris
94.82	Winky Bff	367	381	CMP	Circular 24inch	Sediment build up,
297.52	Sam Calvin Dr	341	340	CMP	Circular 24inch	Sediment build up, Rock and Debris, Concrete Debris, Dirt visible at top of joint (274.4 LF)
26.70	Sam Calvin Dr	351	349	CMP	Circular 24inch	Sediment
77.42	Sam Calvin Dr	349	348	CMP	Circular 24inch	Sediment build up, Gravel, Rocks and Debris
40.36	James Henry Dr	346	347	CMP	Circular 24inch	Sediment, Sediment in pipe joint
26.02	Sam Calvin Dr	340	339	CMP	Circular 24inch	Sediment build up, Gravel
31.51	Sam Calvin Dr	339	338	CMP	Circular 24inch	Sediment, HW separating from pipe
94.47	Sam Calvin Dr	396	377	CMP	Circular 24inch	Obstruction
170.52	Sam Calvin Dr	408	396	CMP	Circular 24inch	Sediment
141.64	Sam Calvin Dr	403	402	CMP	Circular 24inch	
105.25	Sam Calvin Dr	404	403	CMP	Circular 24inch	
117.01	Sam Calvin Dr	343	404	CMP	Circular 24inch	Grass, Leaves and other debris. Small holes
169.88	Sam Calvin Dr	422	343	CMP	Circular 24inch	Sediment build up, Large Holes in pipe, Metal strand hanging from joint
25.79	Ben Arron Dr	399	397	CMP	Circular 24inch	Gravel, Rock and Sediment, Concrete Debris
116.36	Ben Arron Dr	397	394	CMP	Circular 24inch	Gravel and Sediment build up
91.12	Winky Bff	364	363	CMP	Circular 18inch	Gravel and Sediment build up
27.06	Winky Bff	365	364	CMP	Circular 18inch	Gravel, Sediment build up, Rocks and Debris
25.48	Katie Lynne Ln	353	369	CMP	Circular 18inch	
117.82	Katie Lynne Ln	370	369	CMP	Circular 18inch	Rocks and Debris

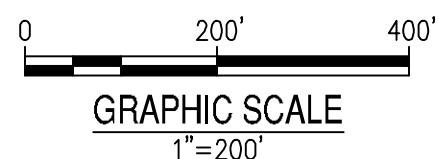
STORM SEWER SYSTEM PAVED INVERT NOTE:

PAVED INVERTS SHALL BE ADDED/REPAIRED/REPLACED FOR ALL STORM SEWER INLETS/MANHOLES LOCATED WITHIN THE RIGHT-OF-WAY FOR ALL STREETS LOCATED IN BROOKTON PLACE SUBDIVISION. STORM SEWER SYSTEM INLETS/MANHOLES AND PIPES SHALL BE CLEANED FIRST TO REMOVE ALL SEDIMENT, TRASH, AND DEBRIS FROM THE SYSTEM.

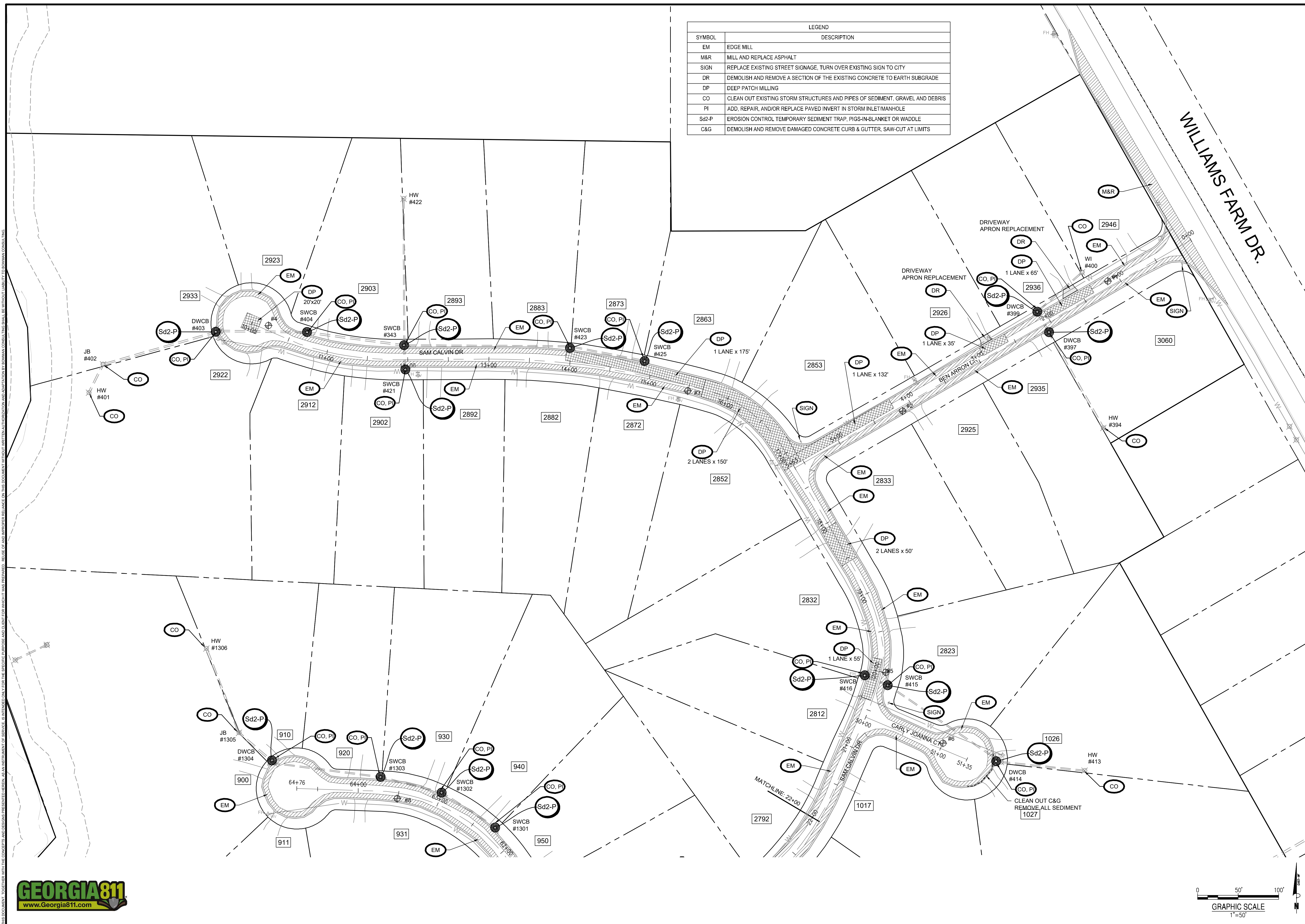
PIPE CONDITION TABLE						
LENGTH (FEET)	STREET NAME	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	MATERIAL	DIAMETER	CONDITION
140.61	Sam Calvin Dr	375	341	CMP	Circular 18inch	Water, Debris, Stick in pipe joint
25.56	Sam Calvin Dr	416	415	CMP	Circular 18inch	Gravel and Sediment build up, Water
161.56	Sam Calvin Dr	415	414	CMP	Circular 18inch	Debris, Water, Corrosion at joints
103.18	Carly Joanna Ct	414	413	CMP	Circular 18inch	Water, Debris and Sediment build up
89.37	Sam Calvin Dr	425	423	CMP	Circular 18inch	Water, Metal dangling down, Hole with dirt visible
94.53	Sam Calvin Dr	423	343	CMP	Circular 18inch	Utility cable pierced through pipe, Metal obstruction.
23.79	Sam Calvin Dr	421	343	CMP	Circular 18inch	Water, Edge of pipe folded up at joint
233.86	Sam Calvin Dr	411	410	CMP	Circular 18inch	Water, Sticks wedged in joint, holes / gash in pipe.
26.00	Sam Calvin Dr	419	411	CMP	Circular 18inch	Debris, Sediment build up
4.84	Sam Calvin Dr	407	408	CMP	Circular 18inch	Debris, Sand Bag and Obstructions, Rocks and Sediment
229.85	Sam Calvin Dr	410	408	CMP	Circular 18inch	Sediment, metal and other damage to pipe
27.29	James Henry Dr	345	346	CMP	Circular 18inch	Small rocks and Sediments
68.22	Ben Arron Dr	400	399	CMP	Circular 18inch	Small rocks and Sediments
12.24	Winky Blf	378	379	CMP	Circular 18inch	Small rocks, Gravel, Sediments and debris
36.02	Winky Blf	379	380	CMP	Circular 18inch	Rocks and Debris
64.09	Winky Blf	380	368	CMP	Circular 18inch	Rocks, Sediment and Debris. Pipe has holes in it
66.38	Peter Josiah Ct	1301	1302	CMP	Circular 18inch	Rocks, Sediment and Debris
72.12	Peter Josiah Ct	1302	1303	CMP	Circular 18inch	Small rocks, Gravel and Sediment
129.19	Peter Josiah Ct	1303	1304	CMP	Circular 18inch	Concrete chunk, Stick across pipe.
40.63	Peter Josiah Ct	1304	1305	CMP	Circular 24inch	Obstruction, Chunk of concrete
107.46	Peter Josiah Ct	1305	1306	CMP	Circular 24inch	Sediment build up
127.60	Sam Calvin Dr	342	398	RCP	Circular 48inch	Water
5.38	James Henry Dr	344	1086	RCP	Circular 42inch	Water
87.18	James Henry Dr	1086	352	RCP	Circular 42inch	Water, rebar exposed in pipe.
38.8550	Sam Calvin Dr	402	401	CMP	Circular 30inch	Rocks, Gravel and Sediment

STORM SEWER SYSTEM INSPECTION (CCTV) NOTE:

STORM SEWER SYSTEM FOR PIPES AND MANHOLES WAS INSPECTED AND CCTV VIDEO PERFORMED AND PROVIDED BY INTEGRATED SCIENCE ENGINEERING. CONTACT JASON RAY - 678-552-2106; JRAY@INTSE.COM TO PERFORM AN UPDATED CCTV FOR THE CITY ONCE ENTIRE STORM SEWER SYSTEM IS CLEANED OUT AND PAVED INVERTS ARE INSTALLED PER THE CONTRACT DOCUMENTS.



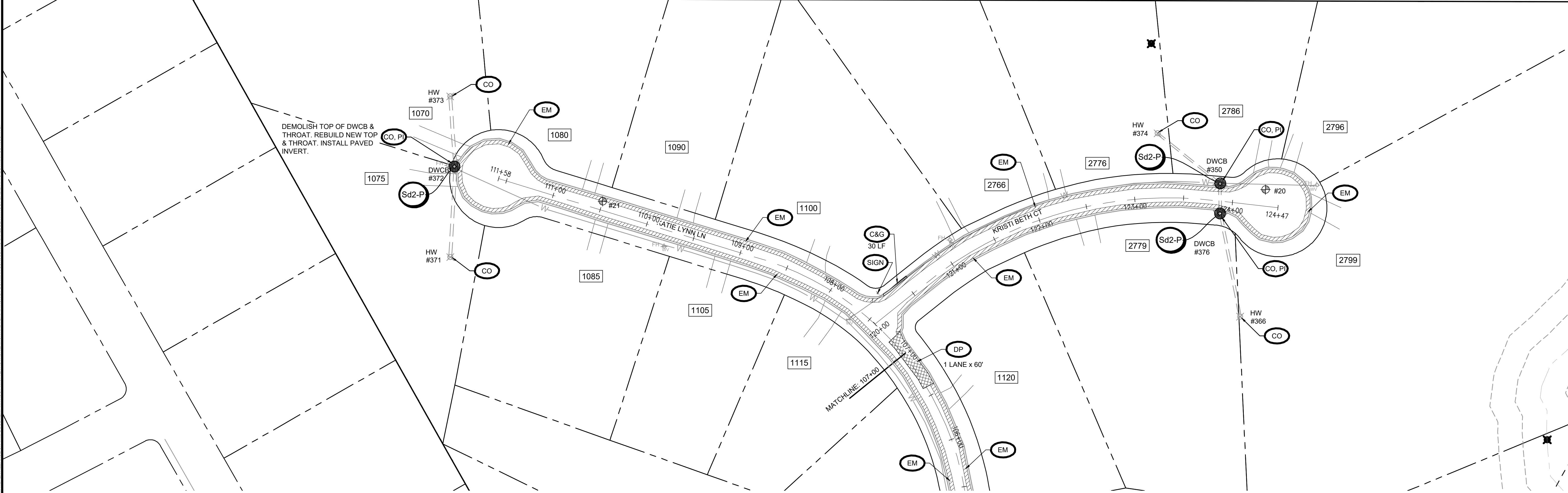
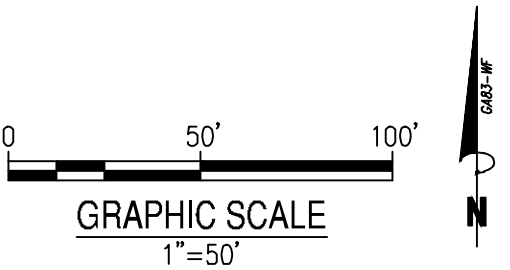
LEGEND	
SYMBOL	DESCRIPTION
EM	EDGE MILL
M&R	MILL AND REPLACE ASPHALT
SIGN	REPLACE EXISTING STREET SIGNAGE, TURN OVER EXISTING SIGN TO CITY
DR	DEMOLISH AND REMOVE A SECTION OF THE EXISTING CONCRETE TO EARTH SUBGRADE
CO	DEEP PATCH MILLING
CP	CLEAN OUT EXISTING STORM STRUCTURES AND PIPES OF SEDIMENT, GRAVEL AND DEBRIS
PI	ADD, REPAIR, AND/OR REPLACE PAVED INVERT IN STORM INLET/MANHOLE
S2-P	EROSION CONTROL TEMPORARY SEDIMENT TRAP, PIGS-IN-BLANKET OR WADDLE
C&G	DEMOLISH AND REMOVE DAMAGED CONCRETE CURB & GUTTER, SAW-CUT AT LIMITS





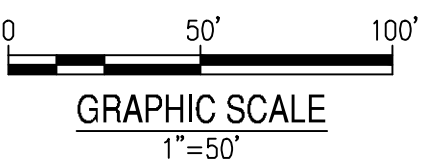
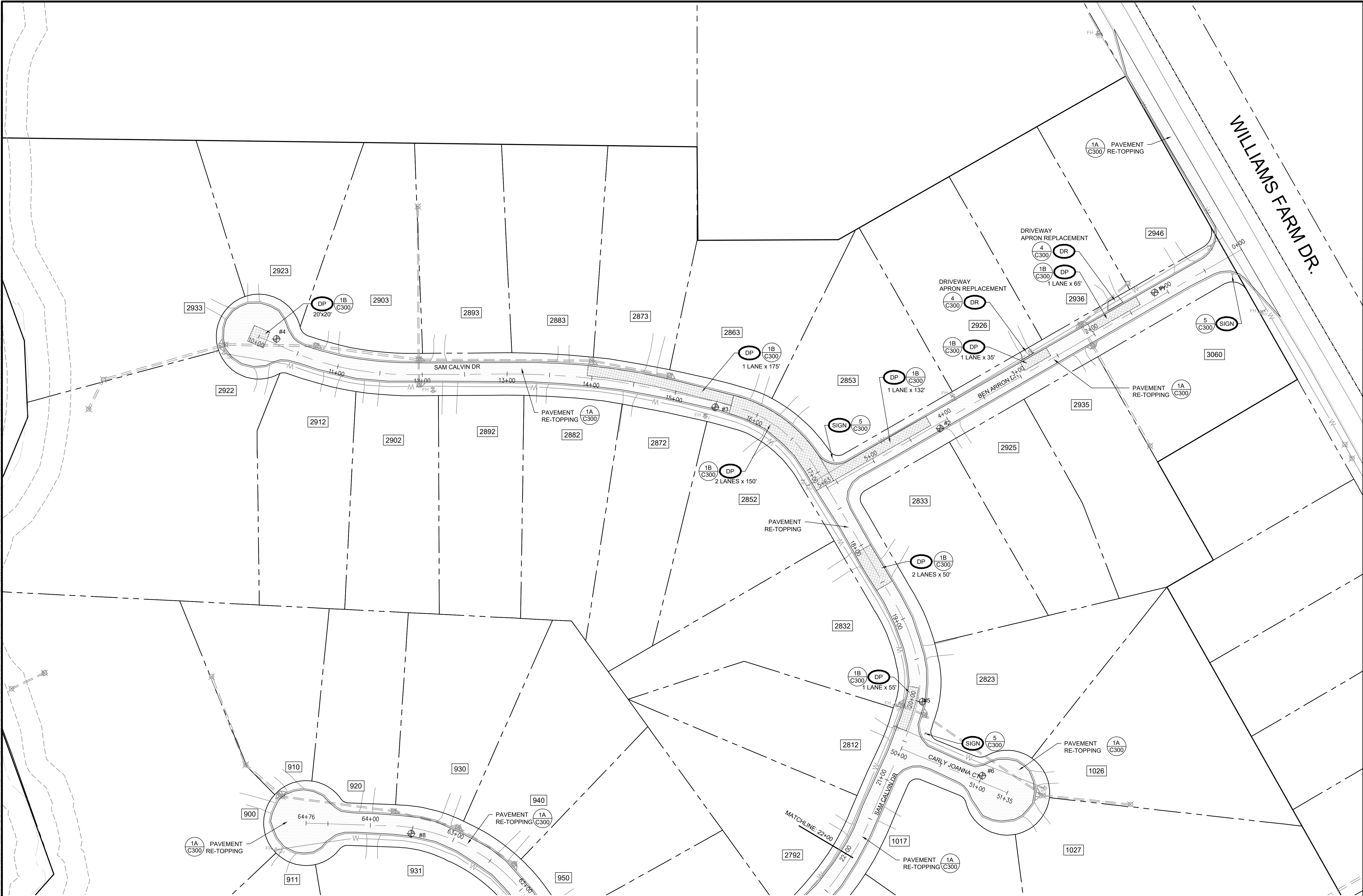
THIS PLAN IS A PRELIMINARY DESIGN AND IS NOT TO BE USED FOR CONSTRUCTION. IT IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INFORMATION ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.

DEMOLISH TOP OF DWCB & THROAT. REBUILD NEW TOP & THROAT. INSTALL PAVED INVERT.





USE OF AND MISUSE OF SERVICE. IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF ANY INFORMATION ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.



Item 7.

Bowman

Certificate of Authorization License No. LSF001241

Bowman Consulting Group Ltd
4174 Silver Peak Parkway
Suwanee, GA 30024
Phone: (770) 932-6550
www.bowman.com
© 2021 Bowman Consulting Group Ltd

SITE PLAN
CITY OF DACULA
BROOKTON PLACE SUBDIVISION
ASPHALT MILLING & REPAVING PROJECT
CITY OF DACULA, GA

CONSULTANT PROJECT #
23-0805

PLAN STATUS

DATE	DESCRIPTION
--	RWH
DESIGN	DRAWN
	KDW
	CHKD

SCALE

JOB No. 23-0805

DATE : October 23, 2023

FILE No.

SHEET No. C2.0

305

www.bowman.com

© 2021 Bowman Consulting Group | 10

CITY OF DACULA, GA
GWINNETT COUNTY

23-0805

PLAN STATUS

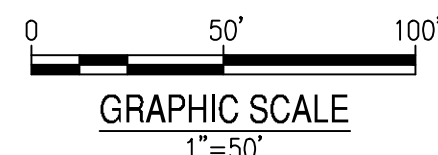
DATE	DESCRIPTION	
--	RWH	KDW
DESIGN	DRAWN	CHKD

JOB No.	23-0805
---------	---------

FILE No.

C2.1

C2.1



www.bowman.com

LECT

OJ

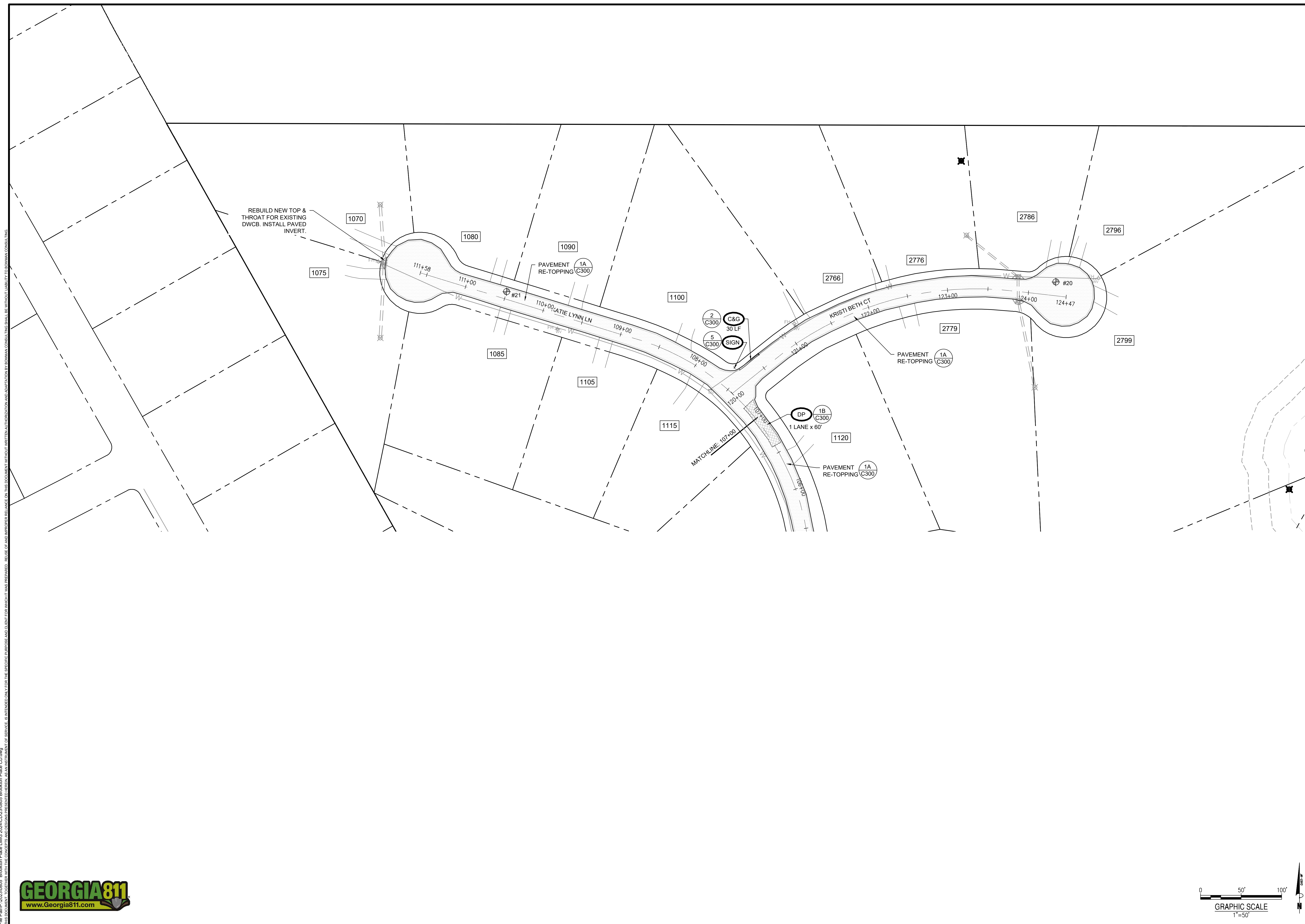
22.2

www.bowman.com

ASPHALT MILLING & REPAVING PROJECT

PROJECT

US
PTION
KDY
CHK
23-00
r 23, 21
2.3



ADVERTISEMENT FOR BIDS

Sealed bids for the "Brookton Place Subdivision Asphalt Milling and Repaving Project" will be received by the City of Dacula at Dacula City Hall – 442 Harbins Road, Dacula, Ga. 30019, until **2:30 PM** local time on **Thursday, December 14, 2023**. Any bid received after said time and date will not be accepted by the City of Dacula.

The Contract Documents, consisting of Advertisement for Bids, Information for Bidders, Bid Proposal Form, Form of Agreement, Drawings, Specifications, Bid Forms, Bid Bonds, Performance Bond, Payment Bond, Bidders Qualifications Forms, and other Contract Documents may be examined at the following locations: **(1) Bowman Consulting Group, Ltd. (Bowman)**, 4174 Silver Peak Parkway, Suwanee, Georgia 30024. Contact: Kevin D. Whigham, P.E. (770) 932-6550 email: kwhigham@bowman.com; **(2) National Association of Minority Contractors**, 1142 Main Street, Forest Park, Georgia 30297, info@namc-atl.org. Contact: Mr. Billy Freeman, Jr. (404) 304-5967, bfreeman@techniqueconcrete.com, Mr. Arthur J. Queen (404) 288-9521, ajqueen@egmatlana.com; **(3) Hispanic Contractors Association GA**, 2750 Buford Highway NE, Atlanta, Georgia 30341. Contact: Ms. Andrea Rivers (404) 229-8070, info@georgiahac.org; and **(4) Georgia Procurement Website**.

All Bidders must be registered with Bowman to assure that Bidders receive all addenda and/or clarifications to the Bid Documents in a timely manner, it is highly recommended that all bidders obtain at least one complete set of Bid Documents directly from Bowman. Entities that do not obtain Bid Documents from this source will not receive addenda and/or clarifications directly from Bowman. Bidders relying on plan rooms or other services to obtain Bid Documents, rather than obtaining them directly from the source are doing so at their own risk. Copies of the Documents and specifications will be provided in Electronic Format and can be obtained by contacting Bowman to be placed on the Bidder's List. Electronic Copies will be made available on Bowman FTP website or sent by email at no charge. If hard copies are required, there is a non-refundable cost for each set of plans and specifications of \$150.00 (cash or check).

A. BASE BID –

The Work to be completed for this Project consists of furnishing all labor, materials, earthwork, construction operations, details, supervision, and coordination of all trades, utility suppliers, governmental inspections, and approvals to complete the construction, installation, and coordination for the City of Dacula "Brookton Place Subdivision Asphalt Milling and Repaving Project" as follows:

The scope of work includes asphalt deep patch milling, standard edge milling, and repaving of all streets within the Brookton Place Subdivision. All areas for deep patch milling are marked in orange paint by the City and Owner's representative. Contractor shall visit the streets identified and determine his own quantities for bidding the project.

The project service area includes improvements for the entire length of Brookton Place Subdivision interior streets. Interior streets to be milled and repaved include Ben Arron Drive (553 LF +/-), Sam Calvin Drive (3,725 LF +/-), Carly Joanna Court (123 LF +/-), Peter Josiah Court (464 LF +/-), James Henry Drive (1,154 LF +/-), Winky Bluff (1,002 LF +/-), Nathan Timothy Court (184 LF +/-), Katie Lynne Lane (1,046 LF +/-), and Kristi Beth Court (435 LF +/-) and all cul-de-sacs. Deceleration lane off of Willams Farm Road into Brookton Place Subdivision at Ben Arron Drive is also included in the scope of work. All streets are approximately 23' wide +/- from edge of pavement to edge of pavement with 80' diameter cul-de-sacs.

SPLOST and 2024 LMIG funds will be utilized for the scope of work to improve Brookton Place Subdivision. Contractor is responsible for complying with all regulations and providing all documents as per City of Dacula requirements. An Asphalt Core Study for the Subdivision has been completed and provided by Atlas Technical Consultants, LLC. to determine the existing asphalt and base thickness for milling depths. Integrated Science Engineering has completed CCTV of the existing storm sewer system to determine the condition of the existing storm sewer pipes and where the storm system is in need of cleaning.

The paving scope will consist of deep patch milling and edge milling of the existing subdivision streets. Edge Milling will begin at 2-1/2" depth at gutter line and then taper out to zero towards the centerline of the road. Once edge milling is complete, the Contractor will perform an additional 4" of Deep Patch Milling to repair alligatored and deteriorated asphalt areas where marked by the City and it's Engineer. Once milling is complete, deep patch milled areas will receive 4" of 25 mm Superpave Asphalt Binder Course to make flush with the remainder of the existing milled areas. An asphalt tack coat will then be applied over entire existing asphalt pavement prior to installing 1" inch of 'D' Mix Asphalt Binder Course. A second tack coat will be applied over entire surface prior to installing 1-1/2" of 'F' Mix (9.5 mm) Type 2 Asphalt Surface Course. All new pavement repair shall have smooth transition with adjacent existing asphalt intersections, curb & gutter, and driveways. Finally, new street signs shall be installed to replace aging and faded signage.

The Centerline of the streets shall be built up to create a positive crown in roadway sloping out to edge of pavement and gutter to provide for adequate drainage of the streets. Limits of work include all asphalt pavement within right-of-way of City of Dacula for streets identified.

Thermoplastic Stop Bar Striping shall be reinstalled at intersection of Ben Arron drive and Willams Farm Drive to match existing condition. Contractor shall install any other striping within the subdivision to match existing conditions. Any disturbance outside of existing streets to residential properties (lawns) shall be permanently stabilized with Sod grassing in kind or Bermuda.

In addition to milling and repaving, the scope of work also includes partial curb & gutter replacement, driveway apron replacement, storm sewer manhole paved invert installation, and cleaning out of the existing storm system within the subdivision. A small amount of damaged curb & gutter and driveway aprons are marked with orange paint and will need to be demolished and replaced as illustrated on the drawings. Integrated Science Engineering has also performed and provided the City with CCTV of the storm pipe sewer system to illustrate the existing condition of the storm pipes and manholes. Bowman has added this information to the drawings. The Contractor shall include in his bid, installation of new concrete paved inverts for storm sewer manholes along and within the right-of-way as identified in the drawings and cleaning out of all sediment and debris within the existing storm pipe system and manholes. Contractor will then need to have Integrated Science Engineering (Contact – Jason Ray 678-552-2106; jray@intse.com) to perform an updated CCTV of the existing cleaned out storm system for the City of Dacula. Contractor shall include all fees for cleaning of storm system and CCTV in their lump sum bid.

Contractor shall include in their Base Bid all costs for adjusting any sewer manholes, water valves, or other utilities, and for all materials needed to raise any valves or other covers flush within the finished surface of the road to complete the scope of work as described by the Contract Documents and Drawings.

One lane of traffic and access to residential driveways must be maintained at all times. Traffic Safety devices such as signage, barricades, etc., and the protection of the public-at-large, and the Contractor's personnel is part of this contract and is the Contractor's sole responsibility.

The Contractor will have Ninety (90) consecutive calendar days from the "Notice to Proceed" to finish and complete the project.

All materials and appurtenances required to complete this Scope of Work is the responsibility of the Contractor and shall be provided in his overall Bid. Contractor with winning Bid is required to submit a schedule of values at the Pre-construction meeting.

Bidder will prepare Asphalt prices for bid based on the current GDOT Asphalt Cement Price Index listed at the time of bid opening. The successful Contractor's pay request will list the current GDOT Asphalt Cement Price Index at the time of purchase. The difference in price between the GDOT Asphalt Cement Price Index at bid and at purchase will either be a change order to the Contractor or a Credit to the Owner. The GDOT Asphalt Cement Price Index is in accordance with Special Provision 109 (dated 2008), Section 400.5.01 Adjustments, the asphalt price index for the month of the Letting posted on the Georgia Department of Transportation Website.

Additional items within Scope of Work

- A. A site visit must be made by Contractor and subcontractors to determine the exact nature and scope of the work to be done. Contractor is responsible for

hauling off all demolition materials (existing pipe, asphalt, etc.) to a State approved disposal facility at no additional cost to the Owner. Contractor shall tie-in and feather new asphalt into existing asphalt so that there is a smooth transition.

- B. If any unforeseen sub-grade conditions arise, then the Contractor shall immediately notify the Owner and/or Owner's representative before proceeding with any work to determine the course of action. The Contractor, if required, shall have a Geotechnical Engineer (who will be selected by the Contractor and approved and paid for by the Owner) qualify and quantify the areas and determine the method of sub-grade repair in coordination with the Owner and/or Owner's Representative on a case-by-case basis.
- C. The limits of work for this project are limited to that area within right-of-way of City of Dacula and Storm Sewer Easements. Contractor shall not disturb private residential properties, unless required to complete scope of work and then shall minimize disturbance to as little as possible. Any disturbance outside of the existing streets shall be repaired in kind to existing condition at no additional cost to Owner.
- D. Contractor is responsible to locate horizontally and vertically all existing utilities within limits of disturbance and protect throughout duration of project. Utilities present include water, gas, electrical, CATV, AT&T, etc., but may not be limited to these within the limits of disturbance.
- E. All earthwork quantities for deep patch milling shall be included in the Contractor's Lump Sum Bid and are the responsibility of the Contractor to haul-in or haul-off at no additional cost to the owner in order to complete the scope of work.
- F. Contractor shall have a Site Superintendent on-site at all times while work is in progress to monitor, direct, and control construction activities. Superintendent in-charge shall be available to City, Engineer, and adjacent property owners to answer or direct questions concerning the project.

Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. There will be a Pre-Bid Conference at Dacula City Hall, 442 Harbins Road, Dacula, GA 30019 at **2:30 PM** local time on **Tuesday, November 28, 2023**. All bidders are strongly encouraged to attend this conference. Owner reserves the right to waive any informalities and any technicalities, and to reject any or all bids. All questions concerning this project shall be submitted in writing by email to Bowman (Owner's Representative – Kevin D. Whigham, P.E.) 4174 Silver Peak Parkway, Suwanee, Georgia 30024, phone number 770-932-6550, email kwhigham@bowman.com no later than **Thursday, December 7, 2023 by 4:00 PM.**

All areas of work illustrated on the Drawings are approximate and may not illustrate all items of repair and/or replacement. Contractor shall visit site to observe, document, and measure all scope items marked by the City or City's Engineer for preparing his own Bid for the project.

All quantities and measurements are approximate. Contractor shall visit each street identified and determine his own quantities for bidding this project by observing and measuring the orange painted areas for asphalt deep patch milling, standard edge milling, and repaving. Existing grades and crown of roadway shall be maintained to direct stormwater towards existing storm inlets as illustrated on the Drawings. All streets will be repaved to existing lengths and widths as illustrated on the Drawings. Contractor is responsible for verifying all lengths of roadway and quantities required to complete the asphalt repaving work for this project.

Attention of Bidders is particularly called to the requirements regarding conditions of employment and minimum wage rates to be paid on this project, and that the contractor and subcontractor must comply with all Federal, State, and local requirements. Minority and female owned firms are encouraged to participate in this project. Procurement will be in compliance with the Uniform Administrative Requirements, 2 CFR 200.318-326. Potential respondents are particularly called to the requirements of Title VI; Civil Rights Act of 1964 and 24 CFR 570.602; and Executive Order 11246 - Equal Employment Opportunity and Affirmative Action.

By: Mayor, Hon. Hugh D. King, III
City of Dacula, Georgia

TO: Mayor and City Council of the City of Dacula

FROM: Brittni Nix, City Administrator

DATE: October 24, 2023

SUBJECT: Design proposal for Whisper Way storm drainage replacement

Concerns about the stability of a stormwater ditch near Whisper Way were reported by a city resident. Upon inspection, it was discovered there was a storm system failure. The corrugated metal pipe (CMP) along the Whisper Way cul-de-sac has deteriorated and has a rusted-out bottom. Erosion and stormwater have undermined the area around the rusted pipe which can create a safety hazard for residents.

The City of Dacula staff requested a proposal from Bowman Consulting Group Ltd. to design and bid a storm drainage replacement project for the subject CMP in the Whisper Woods subdivision. The provided proposal includes surveying, creating construction documents, bid management, and construction administration for \$39,700. The City anticipates utilizing American Rescue Plan Act (ARPA) funding for this project.

Staff requests approving Bowman's proposal in the amount of \$39,700 for the stated services as provided.

October 23, 2023

Brittini Nix
City Administrator
City of Dacula
P.O. Box 400
Dacula, Georgia 30019

Re:	365 Whisper Way (the “Project”) Dacula, Gwinnett County, Georgia 30019 Proposal to provide Storm Drainage Replacement Project Services (the “Proposal”) Proposal No. 23-1014
------------	--

Dear Brittini Nix:

We are pleased to submit this Proposal to provide Storm Drainage Replacement Project services for the above referenced Project. Upon verbal or written direction to proceed with performance of the services described herein, this Proposal, along with all attachments thereto, will constitute a binding agreement (the “Agreement”) between Bowman Consulting Group Ltd. (“Bowman”) and City of Dacula (the “Client”).

Dear Mayor & Council:

Bowman Consulting Group (Bowman) is pleased to offer this Proposal/Agreement for Engineering, Bid, Construction Administration, and Surveying Phase Services for #365 Whisper Way Storm Drainage Replacement Project. Bowman will survey the existing conditions to provide topographic and existing storm drainage information and verify right-of-way in order to provide civil engineering design services and acquire any necessary storm drainage easements for the City of Dacula in order to design and prepare construction drawings, specifications, and Bid Documents for the storm drainage replacement project as described in the project referenced above.

Based on observations made during Site Visit on October 20, 2023, and communications with the City, the following is our understanding of the scope of work required for the Whisper Way Storm Drainage Replacement Project. The City desires to replace the storm sewer drainage pipes and structures that make up the storm pipe system at the end of Whisper Way. This storm sewer system collects stormwater drainage from upstream properties and Harbins Road and conveys it through Whisper Woods Subdivision. The existing storm pipe system consists of two corrugated 24” metal pipes that are deteriorated and have rusted out bottoms which could result in undermined areas around the pipes, structures, and driveways that could create a safety hazard for the residents of Whisper Woods Subdivision. The scope of work will include demolishing the existing storm pipes and storm structures and replace with a new 24” RCP Storm Pipes, Double Wing Catch Basin (DWCB), Headwalls. The cul-de-sac for Whisper Way will be impacted which includes repair/replacement for asphalt pavement, curb & gutter, driveway aprons, and concrete driveways for residential properties impacted.

Bowman will conduct an upstream hydrological analysis to check the size of the drainage basin and the adequacy of existing pipe size. The existing road, culvert, and drainage conveyance will be surveyed to provide base data for the preparation of construction drawings for bidding the project to potential contractors.

SCOPE OF SERVICES AND FEES

The scope of services (the “Scope”) and associated fees shall be as follows:

Task	Description	Fee Type	Total
------	-------------	----------	-------

1	<p>Survey Phase (#365 Whisper Way Survey Scope) Bowman will field survey the proposed area for storm drainage replacement referenced above to provide the necessary topographic data for design.</p> <ol style="list-style-type: none"> Survey and establish topographic elevations and existing storm drainage system data. Field locate visible and flagged utilities per Private Utility Locate Services. Research to provide right-of-way and lot lines as required. <p><u>Deliverables & Schedule:</u></p> <p>The survey will be referenced to state plane coordinates (NAD 83) and mean sea level elevations (NAVD 88).</p> <p>The deliverable will include an Autocad file of the newly collected survey data and a pdf file of the survey. A stamped hard copy may be provided if requested.</p> <p>The Topographic Survey will be delivered within 8 -12. business days.</p>	Lump Sum	\$7,700.00
2	<p>Design Phase Bowman will design and prepare one set of Construction Drawings and Specifications for #365 Whisper Way Storm Drainage Replacement Project which includes:</p> <ol style="list-style-type: none"> Demolition Plan Site Layout Plan. Grading & Drainage Plan. Storm Drainage Profiles and Hydrology Calculations. Soil & Erosion Control Plans & Details. Construction Details. Specifications. 	Lump Sum	\$12,000.00
3	<p>Bid Phase</p> <ol style="list-style-type: none"> Prepare Contract Bid Documents. Respond to Request for Information during the bid phase. Prepare addenda as required. Attend Bid Opening as the Owners Representative. Evaluate Bids. Award the Contract. 	Lump Sum	\$10,000.00
4	<p>Easement Phase</p> <ol style="list-style-type: none"> Research, prepare, and secure easement agreements as required for each property in order to access and install storm drainage improvements. Properties that will be impacted and may require acquisition of easements include #365 Whisper Way, #370 Whisper Way, #360 Whisper Way, and #350 Whisper Way. 	Hourly As Required	\$0.00
5	<p>Construction Administration Phase</p> <ol style="list-style-type: none"> Weekly Site Visits. Prepare Site Reports, as required. Review Storm Drainage and other submittals, Shop Drawings, RFIs, Change Orders etc., as required. Review and approve pay applications. Prepare and review closeout documents. 	Lump Sum	\$10,000.00

Total Estimated Fees \$39,700.00

REIMBURSABLE EXPENSES

Reimbursable expenses shall include actual expenditures made by Bowman in the interest of the Project and will be invoiced at the actual cost to Bowman plus fifteen percent (15%) for handling and indirect costs. Reimbursable expenses shall include but not be limited to costs of the following:

- Mailing, shipping, and out source delivery (i.e. DHL, FedEx) costs.
- Fees and expenses of special consultants as authorized by the Client.
- Parking fees and mileage for employee travel by car to facilitate the project.

REPROGRAPHIC AND COURIER CHARGES

Reprographic, plotting, in-house courier, and archive retrieval services will be invoiced in accordance with Schedule A attached hereto.

OTHER TERMS

This proposal is based on the scope of services indicated herein and the information available at the time of the proposal preparation. If any additional services are required due to unforeseen circumstances and/or conditions, client or regulatory requested revisions, additional meetings, regulatory changes, etc., Bowman will notify the client that additional scope of work and fees are required and will obtain the client's written approval prior to proceeding with any additional work.

Bowman's Standard Terms and Conditions and Hourly Rate Schedule are attached hereto and incorporated into this Proposal by reference.

Please indicate your acceptance of this proposal by executing below and returning a copy to this office. Thank you for the opportunity to provide service to City of Dacula.

Sincerely,

Bowman Consulting Group Ltd.



Kevin Whigham
Team Lead, Civil Engineering

City of Dacula hereby accepts all terms and conditions of this Proposal (including the Standard Terms and Conditions) and authorizes Bowman to proceed with the Project, and the undersigned represents that he or she is authorized by City of Dacula to so execute this Proposal.

City of Dacula

By:

Title:
Date:

BOWMAN CONSULTING GROUP LTD.

SCHEDULE A - FEES FOR REPROGRAPHIC, DELIVERY, TRAVEL AND OTHER SERVICES

January 2023

Reprographic Services

B&W Photo Copies	\$0.35/sf, or \$0.23 for 8-1/2" x 11" sheet
Color Photo Copies	\$0.50/sf, or \$0.32 for 8-1/2" x 11" sheet
Printing (bond)	\$0.35/sf, or \$2.10 for 24" x 36" sheet
Printing (mylar)	\$3.00/sf, or \$18.00 for 24" x 36" sheet

Binding, Mounting and Folding of plan sets, reports, or drawings will be invoiced at our standard hourly rates. Copying of Plans that have been archived in storage is subject to a minimum archive retrieval fee of \$50 plus applicable reprographic fees above.

Delivery Services

In-house delivery services are invoiced at \$2.00 per mile (one way) and subject to a minimum \$20.00 charge for standard delivery during normal business hours. Rush services and times outside normal business hours are subject to a minimum \$20.00 surcharge.

Outsourced courier services (i.e. Federal Express, DHL, etc.) are invoiced at cost plus 15%.

Travel

Mileage for employee travel by car to facilitate the project, including travel to the project site and for meetings with the client, project team, contractors, or governmental agencies, will be invoiced at the current IRS standard mileage rate.

Airfare and/or lodging to facilitate the project will be coordinated with the client in advance and will be invoiced at cost plus 15%.

Miscellaneous

Other costs associated with sub-consultants, specialty equipment, laboratory testing, field testing, tolls, parking or other miscellaneous items will be invoiced at cost plus 15%.

Initials: Bowman *K.W.* / Client

BOWMAN CONSULTING GROUP LTD.

SCHEDULE B - HOURLY RATE

July 2023

CLASSIFICATION	HOURLY RATES
Principal	\$305.00/HR
Department Executive	\$245.00/HR
Senior Project Manager	\$225.00/HR
Project Manager	\$190.00/HR
Project Coordinator	\$110.00/HR
Senior Project Analyst	\$120.00/HR
Senior Surveyor	\$225.00/HR
Engineer I II III	\$120.00/HR \$130.00/HR \$150.00/HR
Planner I II III	\$120.00/HR \$135.00/HR \$175.00/HR
Designer I II III	\$120.00/HR \$130.00/HR \$140.00/HR
CADD Drafter I II III	\$ 85.00/HR \$110.00/HR \$115.00/HR
Construction Inspector	\$110.00/HR
Landscape Architect I II III	\$120.00/HR \$135.00/HR \$175.00/HR
GIS Developer I II III	\$125.00/HR \$165.00/HR \$195.00/HR
Right of Way Specialist I II III	\$ 96.00/HR \$115.00/HR \$137.00/HR
Survey Technician I II III	\$100.00/HR \$120.00/HR \$140.00/HR
Project Surveyor	\$180.00/HR
Survey Field Crew – 1 Man	\$145.00/HR
Survey Field Crew – 2 Man	\$185.00/HR
Survey Field Crew – 3 Man	\$235.00/HR
3D Scanning Crew	\$270.00/HR
Survey Field Technician	\$ 90.00/HR
3D/UAV Modeling Technician	\$170.00/HR
UAV Operation	\$300.00/HR
SUE Field Crew - 1 Man	\$145.00/HR
SUE Field Crew - 2 Man	\$190.00/HR
SUE Field Crew - 3 Man	\$250.00/HR
SUE Field Crew - 4 Man	\$285.00/HR
SUE Utility Coordinator	\$175.00/HR
SUE Technician I II III	\$100.00/HR \$120.00/HR \$145.00/HR
Machine Control Technician	\$155.00/HR
Administrative Professional	\$ 90.00/HR

Initials: Bowman *K.W.* / Client

Table 1812018 - DEFAULT 2023 Florida/Georgia

BOWMAN CONSULTING GROUP LTD.
SCHEDULE C - REQUEST FOR INFORMATION

Accounts Payable Contact:	
Point of Contact:	
Phone:	
Fax:	
E-Mail:	
Billing Information:	
Billing Entity:	
Billing Address:	<input type="checkbox"/> Same as Proposal
	<input type="checkbox"/> If Different, Please Provide:
Billing Requirements:	
Invoice Due Date:	
Requirements/Attachments:	
Invoices Transmitted Via Electronic Mail to:	
Offer ACH Direct Deposit:	<input type="checkbox"/> Yes, Contact:
	<input type="checkbox"/> Not Sure, Contact Our Office
	<input type="checkbox"/> Not At This Time

Initials: Bowman *K.W.* / Client

BOWMAN CONSULTING GROUP LTD. TERMS AND CONDITIONS

These Terms and Conditions are incorporated by reference into the Proposal and its exhibits (the "Proposal") from **Bowman Consulting Group Ltd.** ("Bowman") to **City of Dacula** ("Client") for performance of services described in the Proposal and associated with the project described in the Proposal (the "Project"), and in any subsequent approved Change Order related to the Project. These Terms and Conditions, the accepted Proposal, and any Change Orders or other amendments thereto, shall constitute a final, complete, and binding agreement (the "Agreement") between Bowman and Client, and supersede any previous agreement or understanding.

1. Scope of Services. Bowman will provide the services expressly described in and limited by the Proposal (the "Scope"). If in Bowman's professional judgment the Scope must be expanded or revised, Bowman will forward a change order agreement to Client that describes the revision to the Scope (the "Change Order") and the adjusted fee associated therewith.

2. Standard of Care. The standard of care for all services performed by Bowman for Client shall be the care and skill ordinarily used by members of the applicable profession practicing under similar circumstances at the same time and locality of the Project. Client shall not rely upon the correctness or completeness of any design or document prepared by Bowman unless such design or document has been properly signed and sealed by a licensed professional on behalf of Bowman.

3. Payment Terms. Bowman will invoice Client monthly or more frequently based on a percentage of the work completed for lump sum tasks, number of units completed for unit tasks, and actual hours spent for hourly tasks. Invoices are due and payable in full upon receipt without offset of any kind or for any reason. Bowman shall have the discretion to apply payments made by Client to an invoice or retainer account of Client in accordance with its business practices. Client agrees to pay a finance charge of one and one-half percent (1.5%) per month from the invoice date on any unpaid balance not received by Bowman within thirty (30) days of the invoice date. Payment of invoices is subject to the following further terms and conditions:

(a) If any invoice is not paid in full within forty-five (45) days of the invoice date, and Client has not timely and in good faith disputed the invoice as provided below, Bowman shall have the right at its election by giving notice to Client to either: (i) suspend the performance of further services under this Agreement and, at its sole discretion, suspend the performance of further services on other projects which are being performed by Bowman on behalf of Client or any related Client entities, until all invoices are paid in full and Bowman has received a retainer in such amount as Bowman deems appropriate to be held as described below; or (ii) deem Client to be in material breach of this Agreement and proceed pursuant to Section 17 below. Client agrees to pay any and all charges, costs or fees incurred in collection of unpaid invoices, including reasonable attorneys' fees and costs. Following Bowman's election above, Bowman shall bear no liability to Client or any other person or entity for any loss, liability or damage resulting from any resulting delay, and any schedule for the performance of services hereunder prepared previously shall be deemed void with any future schedule for the performance of services requiring the approval of both Client and Bowman.

(b) If Client disputes any submitted invoice, Client shall give written notice to Bowman within thirty (30) days of the invoice date detailing the dispute. If no written notice of a dispute is provided to Bowman within that time period, the invoice shall then be conclusively deemed good and correct. If part of an invoice is disputed, Client shall remain liable to timely pay the undisputed portion of the invoice in accordance with the terms of this Agreement. Client and Bowman shall promptly negotiate in good faith to resolve any disputed portion of an invoice.

4. Retainer and Other Payments. Bowman reserves the right to require that Client make a payment to be held by Bowman as an advance against future billings (the "Retainer"). The Retainer is not intended as the regular source of payment for invoices issued to Client under this Agreement or otherwise, and the parties intend that the Retainer be applied to the final invoice for the services described in the Agreement, or against any other unpaid amounts owed to Bowman should Client (or any affiliate of Client) fail to timely pay invoices due Bowman. The Retainer account may consist in part of payments applied by Bowman pursuant to the authority granted it under Paragraph 3 above. If the Retainer is applied during the course of the Agreement, Client agrees to promptly replenish the Retainer upon request of Bowman. Upon the conclusion of this Agreement, or its earlier termination, Bowman shall (a) apply the Retainer to any unpaid amount owed Bowman by Client (or its affiliates), and (b) return any unapplied portion to Client. The Retainer shall not be required to be held in a separate account nor shall it bear interest, and the Retainer may include other amounts paid to Bowman by Client with respect to the Project or other projects.

5. Client Duties and Responsibilities. Client shall inform Bowman of any special criteria or requirements related to the Project or Scope, and shall timely and at its cost furnish any and all information in its possession relating to the Project, including reports, plans, drawings, surveys, deeds, topographical information and/or title reports. Bowman shall bear no responsibility for errors, omissions, inaccuracy or incompleteness in third-party information or additional costs arising out of its reliance upon such third-party information supplied by Client. Client warrants and represents that: (a) Client has obtained the full and unconditioned prior written consent from

any third-party for Bowman to use such third-party information; (b) such consent shall be provided to Bowman upon request; and (c) such consent shall be in a form that, in Bowman's reasonable discretion, does not violate any applicable law, regulation, or code of ethics. If the Scope requires a current title report, Client shall timely and at its cost provide such title report to Bowman. If the Scope includes preparation of plats to be recorded in the land records of the Project jurisdiction, Client shall timely prepare, submit, and record necessary deeds and pay all recording fees associated with deeds and plats. All off-site easements are the responsibility of Client. Client shall indemnify and hold harmless Bowman from and against any and all claims, demands, losses, costs, and liabilities, including without limitation reasonable attorney fees and expenses incurred by Bowman and arising out of (a) Client's breach of this Agreement or (b) an action by Client or a third-party with respect to any matter not included in the Scope or that is excluded from the responsibility of Bowman pursuant to this Agreement.

6. Insurance. Bowman and its employees are protected by workman's compensation, commercial general liability, automobile liability, and professional liability insurance policies. Upon request of Client, Bowman shall provide a certificate of insurance to Client evidencing such coverage and shall attempt to include Client as an additional insured on those coverages that permit additional insured status. Client acknowledges it has been offered the opportunity to review the current limits of such coverage and finds them satisfactory, and further agrees that in no event shall Bowman's liability to Client or any party claiming through Client be greater than the limits of such insurance. From time to time Bowman may, without notice to Client, amend the carriers, conditions, exclusions, deductibles or limits of any such insurance; provided that prior to any decrease in any insurance limit becoming effective Bowman shall give notice thereof to Client.

7. Potential Liability of Bowman. The following provisions shall operate with respect to any potential liability of Bowman arising under the Agreement:

(a) Client may not assert that there is a breach, defect, error, omission or negligence in the services performed by Bowman that Client believes creates liability on the part of Bowman unless Client gave written notice to Bowman not later than the first to occur of (i) the beginning of any corrective work, or (ii) thirty (30) days after Client had knowledge of the existence of the breach, defect, error, omission or negligence. Bowman shall have the opportunity to participate in decisions regarding the corrective work, and Client shall ensure that corrective action is taken at the lowest reasonable expense under the circumstances.

(b) Notwithstanding any other provision of this Agreement, the total liability, in the aggregate, of Bowman and Bowman's officers, directors, partners, employees, agents, and consultants to Client and anyone claiming through Client, shall not in any manner whatsoever exceed the direct losses incurred by Client (to the extent of and in proportion to Bowman's comparative degree of fault) that resulted from the error, omission or negligent act of Bowman in the performance of services under this Agreement.

(c) To the fullest extent permitted by law, Bowman and Bowman's officers, directors, partners, employees, agents, and sub-consultants shall not be liable to Client or anyone claiming through Client for any special, incidental, indirect, or consequential damages whatsoever arising out of, resulting from, or in any way related to the Project or this Agreement, regardless of whether such damages are alleged to be caused by the negligence, professional errors or omissions, strict liability, breach of contract, or breach of express or implied warranty.

(d) Client agrees that Bowman's shareholders, principals, partners, members, agents, directors, officers and/or employees shall have no personal liability whatsoever arising out of or in connection with this Agreement or the performance of services hereunder.

8. Certificate of Merit. In addition to the requirement of notice under section 7(a) above, Client shall make no claim (whether directly or in the form of a third-party claim) against Bowman unless Client shall have first provided Bowman with a written certification executed by an independent professional licensed in the state in which the Project is located and licensed in the profession to which the claim relates. Such certificate shall: (a) contain the name and license number of the certifier; (b) specify each and every act or omission which the certifier contends constitutes a violation of the standard of care expected of a professional performing professional services under similar circumstances; (c) state in complete detail the basis for the certifier's opinion that each such act or omission constitutes such a violation; and (d) be provided to Bowman thirty (30) days prior to the presentation of and as a precondition to any such claim, or the institution of any mediation, arbitration, judicial or other dispute resolution proceeding.

9. Conflict Resolution and Applicable Law. Any dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, that cannot be resolved by the parties and for which the amount in controversy is less than One Hundred Thousand Dollars (\$100,000.00) shall be settled by arbitration administered in Fairfax County, Virginia by the American Arbitration Association in accordance with its Commercial Arbitration Rules and Expedited Procedures, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction over the parties. For any other dispute, controversy or claim arising out of or relating to this Agreement, or the breach thereof, the parties agree to first submit such dispute, controversy or claim to non-binding mediation, with each party to bear its own costs of such mediation and to equally share the costs of any mediator. If such mediation does not successfully resolve all issues, then the parties agree that the state and federal courts located in Virginia shall have jurisdiction and

venue over such dispute. This Agreement shall be governed and interpreted in accordance with the laws of the state in which the Project is located, without giving effect to conflicts of laws principles thereof.

10. Ownership of Documents and Other Rights of Bowman.

(a) All reports, plans, specifications, computer files, field data, notes, and other documents and instruments prepared by Bowman as instruments of service ("Work Product") shall remain the property of Bowman up until such time as all monies due to Bowman have been paid in full, at which time (i) Client may take possession of the Work Product, and (ii) Bowman shall be deemed to have granted Client a fully paid, non-exclusive license to use the same solely for the Project. Subject to such license Bowman shall retain all common law, statutory, and other reserved rights, including the copyright to all Work Product. If Client or a party acting on Client's behalf modifies any part of the Work Product or reuses them on a different project, Client agrees to indemnify and hold Bowman harmless from any claim, liability or cost (including reasonable attorneys' fees and defense costs) arising therefrom. Client acknowledges that if Bowman provides Client with Work Product in an electronic or digital format ("Electronic Data"), Client is responsible for cross checking the Electronic Data with the applicable paper document for full conformance and consistency between such paper document and the Electronic Data.

(b) Bowman reserves the right to include photographs and descriptions of the Project in its promotional, marketing, and professional materials. Client grants its consent to Bowman for Bowman to install reasonable signage at the Project equivalent to that which is or could be installed by other vendors to the Project.

11. Modification. From time to time Bowman may either in writing or by electronic mail submit a Change Order to Client and Client shall be deemed to have approved such Change Order if: (a) Client signs the Change Order; (b) Client signifies its consent to the Change Order by electronic mail; or (c) a representative of Client with actual or apparent authority to approve the Change Order orally approves it and Bowman subsequently confirms such approval in writing or by email and begins work associated therewith without receiving written or electronic mail objection thereto. Except for Change Orders authorized by Client as provided immediately above, this Agreement may be amended, modified, or supplemented only in writing signed by all parties hereto. Any signature required or permitted hereunder may be either by hand or by electronic signature.

12. Exclusions from Scope. By way of illustration and not limitation, unless specifically included in the Scope, Bowman has no obligation or responsibility for: (a) favorable or timely comment or action by any governmental entity; (b) taking into account off-site conditions or circumstances that are not clearly visible or reasonably ascertainable by the performance of on-site services; (c) the accurate location or characteristics of any subsurface utility or feature that is not clearly and entirely visible from the surface; or (d) structural design (including, but not limited, to structural design of retaining wall(s) or of special drainage structure(s)).

13. Limits of Scope.

(a) Early Bid Documents. Client agrees that if it requests submission of Work Product documents to contractors for bid purposes either prior to full completion thereof by Bowman or prior to final governmental approval, the potential exists for additional design and construction costs arising from required subsequent revisions and additions to Bowman design documents so as to conform to those of other design disciplines and/or governmental agencies, and any such costs shall be Client's responsibility.

(b) Estimates. Any cost, timing or quantity estimates provided as a part of the Scope are estimates only and reflect Bowman's judgment as a design professional familiar with the construction industry, but expressly do not represent a guarantee of quantities or construction costs. Client agrees that Bowman has no control over contractors as to cost, timing, or quantity matters, and further agrees that if Client desires greater accuracy as to construction costs it should engage an independent cost estimator.

(c) Construction Means and Methods. Client agrees that Bowman does not control and is not responsible for construction means, methods, techniques, sequences, or procedures, or for any safety precautions in connection with the Project or for the acts or omissions of any contractor, subcontractor, or any other person or entity performing work for the Project.

(d) Shop Drawing Review. If specifically included in the Scope, Bowman shall review and check the contractor's shop drawings, product data, and samples, but only for the limited purpose of checking for general conformance with the intent of such contract documents. Client acknowledges that such review is not for the purpose of determining or substantiating the accuracy and completeness of other details, such as dimensions or quantities, or for substantiating instructions for installation or performance of equipment or systems designed by the contractor. Bowman's review shall not constitute approval of safety precautions, construction means, methods, techniques, schedules, sequences or procedures, or of structural features.

(e) Plan and Permit Processing. If the Scope includes preparation of plans and/or plats for review and approval by public agencies, submission and processing of such plans and plats in a manner consistent with a normal course of business is included within the Scope. If Client requests Bowman to either expedite the plan review process by attending meetings, hand carrying plans and

documents from agency to agency, or performing similar services, or to prepare and process permit applications of any type, then, unless specifically included in the Scope, those services will be performed by Bowman as hourly rate services under Section 14 below.

(f) **Building Plan Coordination.** If the Scope includes preparation of site plans, site grading plans, subdivision plans, or similar plans that involve coordination with building plans (including architectural, mechanical, structural, or plumbing plans) to be prepared by others, Client shall provide such building plans to Bowman by such date and in such state as Bowman reasonably deems necessary to timely perform its services. If Client fails to so provide building plans to Bowman, Bowman may make reasonable assumptions regarding building characteristics in order to timely perform its services and any later revisions to Bowman plans required to properly coordinate them with building plans will require a Change Order, subject to an additional fee.

14. Fees by Hourly Rate Schedule. If Client requests Bowman to perform services not included in the Proposal or an approved Change Order (including, without limitation, attending meetings and conferences on an as-needed basis with public agencies), Client shall compensate Bowman for such services in accordance with the Hourly Rate Schedule attached to and made a part of the Agreement. Expert witness testimony or participation at legal discussions, hearings or depositions, including necessary preparation time, will be charged at 150% of the quoted rates. If the Project extends beyond the calendar year in which the Proposal is dated, Bowman may revise its Hourly Rate Schedule in January of each subsequent year.

15. Covenants Benefiting Third-Parties. Bowman and Client acknowledge that from time to time third-parties may request Bowman to execute documents which benefit that third-party. These documents may include certifications, consent of assignment, and/or waiver of certain of Bowman's rights under this Agreement ("Requested Covenant"). Client acknowledges that execution of Requested Covenants is beyond the Scope, is at Bowman's discretion, and, if Bowman decides to so execute a Requested Covenant, the language, terms, and conditions of such Requested Covenant must be acceptable to Bowman, at Bowman's discretion.

16. Assignment. This Agreement may not be assigned by one party without the express written consent of the other party. Notwithstanding the forgoing, Bowman may employ consultants, sub-consultants, or subcontractors as it deems necessary to perform the services described in the scope. Also, Bowman may assign its right to receive payments under this Agreement.

17. Termination. Either party may terminate the provision of further services by Bowman under this Agreement for convenience with thirty (30) days advance notice to the other party. In addition, following a material breach by the other party, the non-breaching party may terminate the provision of further services by Bowman under this Agreement by giving ten (10) days prior notice and an opportunity to cure to the reasonable satisfaction of the non-breaching party. Client acknowledges that its failure to timely pay undisputed invoices is a material breach and that full payment of all undisputed invoices is required to cure such breach. Following any termination of services: (a) Client shall immediately pay Bowman for all services performed through the termination date, including reasonable costs of transitioning the Project to a new design professional designated by Client, if applicable; (b) Bowman shall have the right to withhold from Client the use or possession of Work Product prepared by Bowman for Client under this or any other agreement with Client, until all outstanding invoices are paid in full; (c) if the termination by Bowman resulted from a material breach by Client, Bowman shall have the right to withdraw any Work Product or other documents filed with any governmental agency by Bowman in its name on behalf of Client; and (d) if Client selects a new design professional then, as a condition of transferring any files or documents, Client and Client's new design professional shall execute Bowman's standard Electronic File Transfer Agreement or such other similar agreement as the parties shall in good faith negotiate.

18. Miscellaneous. If any provision of this Agreement shall be held invalid, illegal or unenforceable, the other provisions of this Agreement shall remain in full force and effect. The failure of a party to enforce any provision hereof shall not affect its right at a later time to enforce same. A waiver by a party of any condition or breach hereunder must be in writing to be effective and, unless that writing provides otherwise, shall waive only one instance of that condition or breach. This Agreement is solely for the benefit of the parties hereto and no provision of this Agreement shall be to confer upon third-parties any remedy, claim, liability, reimbursement, cause of action, or other right. The headings in this Agreement are for convenience and identification purposes only, are not an integral part of this Agreement, and are not to be considered in the interpretation of any part hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. References in this Agreement to any gender shall include references to all genders. Unless the context otherwise requires, references in the singular include references in the plural and vice versa. The words "include," "including," or "includes" shall be deemed to be followed by the phrase "without limitation." The individual who signs this Agreement warrants that he has the authority to sign as, or on behalf of, Client, and to bind Client to all of the terms and conditions of this Agreement. To the extent that they are inconsistent or contradictory, the terms of the Proposal or an authorized Change Order shall supersede these Terms and Conditions.

19. Notices. Any notice, request, instruction, or other document to be given hereunder by a party hereto shall be in writing and shall be deemed to have been deemed delivered: (a) on the day sent if delivered personally or by courier service during regular business hours (i.e., prior to 5:00 p.m. on weekdays that are not Federal holidays); (b) on the business day after the day sent if sent by overnight delivery service; or (c) two business days after the day sent if sent by certified mail or delivered by two-day delivery service.

If to Client, notice shall be addressed to the individual signing this Agreement at the address noted on the Proposal.

If to Bowman, notice shall be sent to the address set forth in the proposal, with a copy sent to:

Bowman Consulting Group Ltd.
12355 Sunrise Valley Drive, Suite 520
Reston, Virginia 20191
Attn: Robert A. Hickey

or to such other individual or address as a party hereto may designate for itself by notice given as herein provided.

Initials: Bowman *K.W.* / Client

LOGO VARIATIONS



USAGE

To ensure that the City of Dacula branding is clearly represented across all platforms, clear space must be applied to all uses of the logo.

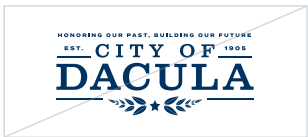


Use the wheat icon as a guide to measure the margin needed around each logo variation

MISUSE



Do not change positioning of elements within the logo

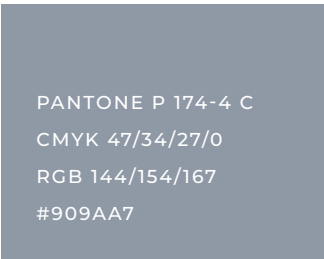
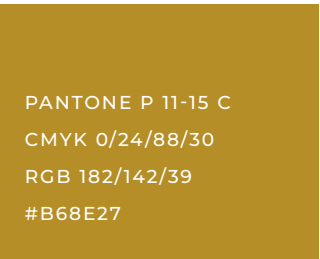
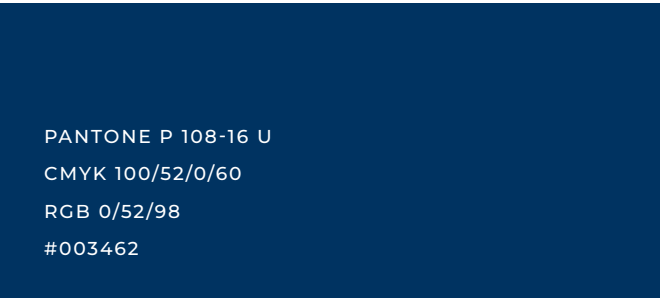


Do not distort the logo



Do not remove any icon elements

COLOR PALETTE



BRAND TYPOGRAPHY

CLARENDON · WIDE MEDIUM
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890!@#%\$%^&*()

Termina : BOLD
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890!@#%\$%^&*()

Montserrat: MEDIUM
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890!@#%\$%^&*()