

* Revised

PINEVILLE TOWN COUNCIL WORK SESSION AGENDA PINEVILLE COMMUNICATIONS for Council & Staff

(Meeting Open to the Public via ZOOM-See Instructions below)
118 COLLEGE ST., PINEVILLE, NC
MONDAY, JUNE 22, 2020
6:00 P.M.

- 1) Call Meeting to Order:
- * Closed Session: Discussion of matters pursuant to NCGS 143-318.11 (5), Real Estate matter.
- 3) Discussion Items:
 - A. Kings Grant Warehouse Project by Beacon Development (Travis Morgan) Final Review of Kings Grant Warehouse Project on Downs Rd.
 - B. Request to Build Patio-Style Townhomes on Dorman Rd. (*Travis Morgan*) Second review of plans for townhomes between the Haven and the Laurels.
 - C. Review of Hyundai Plan (*Travis Morgan*) Second Review of Revised Plans for a Hyundai Dealership represented by John Fryday on behalf of TT of HY Pineville Property LLC and Nick Berndt of AMSI.
 - D. Approval of Minutes from the May 26, 2020 Work Session Meeting
 - E. Budget Amendments for FY19-20 (Richard Dixon)
 - F. Lobby Door at New Town Hall (Ryan Spitzer)
- 4) Adjourn

If you require any type of reasonable accommodation as a result of physical, sensory, or mental disability in order to participate in this meeting, please contact Barbara Monticello, Clerk of Council, at 704-889-2291 or bmonticello@pinevillenc.gov. Three days' notice is required.

*Please note: Council will hold its Closed Session Meeting first at 6:00 p.m. Members of the public that wish to join the Work Session portion of the meeting can connect/dial in to the meeting beginning at 6:45 p.m. Instructions for joining the meeting are following:

INSTRUCTIONS FOR ENTERING MEETING VIA ZOOM:

rspitzer@pinevillenc.gov is inviting you to a scheduled Zoom meeting.

Topic: June 22 Work Session

Time: Jun 22, 2020 06:00 PM Eastern Time (US and Canada)

Join Zoom Meeting

https://us02web.zoom.us/j/88500854770?pwd=VUROWXIsTEIWNEwx MVcvOW83bTdBdz09

Meeting ID: 885 0085 4770

Password: 799668 One tap mobile

+16465588656,,88500854770#,,,,0#,,799668# US (New York) +13017158592,,88500854770#,,,,0#,,799668# US (Germantown)

Dial by your location

- +1 646 558 8656 US (New York)
- +1 301 715 8592 US (Germantown)
- +1 312 626 6799 US (Chicago)
- +1 669 900 9128 US (San Jose)
- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)

Meeting ID: 885 0085 4770

Password: 799668

Find your local number: https://us02web.zoom.us/u/khV80hNSR

Workshop Meeting



To: Town Council

From: Travis Morgan

Date: 6/22/2020

Re: Proposed Senior Townhomes on Dorman Rd (Workshop/Informational Item)

UPDATE:

Proposal has been updated from our last workshop in March with the following

- 1) Updated parking plan showing designated nearby parking spaced coded by letter
- 2) Notes on stormwater control.
- 3) Updated architecture and notes.
- 4) View into rear of units changed with units facing Dorman Rd. Arbors added.

BACKGROUND:

Property was conditionally approved and master planned as part of the Laurels, Haven, and Cottages development. Original plan called for office or community space of approximately 10,000 square feet. Applicant and Cottage residents support residential instead. Prior letter from Cottages HOA supports the request with fencing along the rear hill and county stormwater review and approval.

PROPOSAL:

Request is to reopen the prior conditional approved plan to allow age restricted senior townhomes on the site. Proposal is for 23 single story townhome units on the current vacant open green.

DEVELOPMENT SUMMARY:

Location: 13160 Dorman Road

Acreage: 2.214

Zoning: Existing: O-I (CD) Office/Institutional. Proposed: O-I (CD)

Number of Units: 23

Required Parking: 29 spaces Senior Housing 1.25 each

Parking Provided: 41 in parcel (56 total allocated)

Sidewalks: 5'

STAFF SUMMARY:

Staff supports the updates and clarifications. Basic proposal is in harmony as a similar use within the area. Proposal is consistent with adopted plans. Review and confirm parking diagram, buildings, and design. All other Town and County Standards apply.

PROCEDURE:

The request is for conditional zoning approval as senior housing is conditionally approved only in this zoning designation. This is also to revise the previous plans to remove the office proposal in favor of the current one. This is a workshop for Council to discuss plan updates and detail with the applicant and staff. This follows standard legislative approval process. There are no findings of facts needed. Applicant follow-up or clarification and next meeting dates are to be determined. Applicant seeks a July 14th public hearing.



Submit to Planning Department, 200 Dover St, Pineville, NC 28134 Phone (704) 889-2291 Fax (704) 889-2293

Office Use Only:	Application #:
Payment Method: Cash Check Credit Card A	mount \$ Date Pald
Zoning Application will not be considered until all required sub	cation mittal components listed have been completed
Applicant's Name: WAE LOND, WC.	Phone: 704.995.1808
Applicant's Mailing Address: 11/21 CARMET COMMON	45 BLUD. SUTTE 405, CHARCOTT
Property Information:	18114
Property Location: 13160 DOEMAN ROAD	PINEVILLE, NC
Property Owner's Mailing Address: 3452 SHORON Rob	D, CHOPLOTTE, NC 28211
Property Owner Name: MRSA 2, UL	Phone:
Tax Map and Parcel Number: 221-101-07	Existing Zoning: 12-7 MH (CUP.)
Which are you applying (Check all that apply):	•
Rezoning by Right Conditional Zoning X Conditional Zoning X	onal Rezoning X Text Amendment
Fill out section(s) that apply:	
Rezoning by Right: Proposed Rezoning Designation	
Parking Spaces Required 46 Parking Spaces Provided 41 + 5	Height 20 # of Rooms 2 BR Talan House **Please Attach Site Specific Conditional Plan
Conditional Rezoning:	
Proposed Conditional Rezoning Designation	
Text Amendment: Section N/A Reason N/A Proposed Text Change (Attach if needed) N/A	
Signature of Property Owner (If not Applicant) Signature of Town Official	Date

2 MANUOLOLAA

MECKLENBURG COUNTY, NC POLARIS 3G PROPERTY INFORMATION REPORT

Date Printed: 10/11/2019

Search Criteria: within 5 ft of 22110117. Sorted by: Descending Market Value Order



12/07/2014 from Mecklenburg County 1) Parcel ID #: 22110116

Location: 13180 DORMAN RD PINEVILLE

Land Area: 4.188 AC

Sales Price: \$15,860,000.00 (11/24/2009)

Tax Market Value: \$8,184,100.00 Sq. Ft.: 75,394 Year Built: 1999 Bedrooms: 0 Full Baths: 0



2) Parcel ID #: 22110118

Location: 13150 DORMAN RD PINEVILLE

Land Area: 3.597 AC

Sales Price: \$8,120,000.00 (11/24/2009) Tax Market Value: \$4,636,200.00 Sq. Ft.: 36,784 Year Built: 1999 Bedrooms: 0 Full Baths; 0



3) Parcel ID #: 22110117

Location: 13160 DORMAN RD PINEVILLE

Land Area: 2.214 AC

Sales Price: \$374,000.00 (05/02/2007) Tax Market Value: \$438,800.00



12/07/2014 from Mecklenburg County 4) Parcel ID #: 22110143

Location: 10043 BISHOPS GATE BV

PINEVILLE

Land Area: 0.152 AC

Sales Price: \$280,000.00 (06/01/2007) Tax Market Value: \$265,900.00 Sq. Ft.: 1,910 Year Built: 2006 Bedrooms: 3 Full Baths: 2



12/07/2014 from Mecklenburg County 5) Parcel ID #: 22110150

Location: 10113 BISHOPS GATE BV

PINEVILLE

Land Area: 0.152 AC

Sales Price: \$251,500.00 (08/14/2006) Tax Market Value: \$252,800.00 Sq. Ft.: 1,632 Year Built: 2006 Bedrooms: 2 Full Baths: 2



12/07/2014 from Mecklenburg County 6) Parcel ID #: 22110145

Location: 10051 BISHOPS GATE BV

PINEVILLE

Land Area: 0.152 AC

Sales Price: \$150,000.00 (04/19/2013) Tax Market Value: \$251,400.00 Sq. Ft.: 1,670 Year Bullt: 2005 Bedrooms: 2 Full Baths: 2



12/07/2014 from Mecklenburg County

7) Parcel ID #: 22110146

Location: 10055 BISHOPS GATE BV

PINEVILLE

Land Area: 0,152 AC

Sales Price: \$158,000.00 (03/26/2013)

Tax Market Value: \$249,400.00 Sq. Ft.: 1,698 Year Built: 2005

Bedrooms: 2 Full Baths: 2



12/07/2014 from Mecklenburg County

8) Parcel ID #: 22110149

Location: 10109 BISHOPS GATE BV

PINEVILLE

Land Area: 0.152 AC

Sales Price: \$0.00 (03/30/2017) Tax Market Value: \$247,700.00 Sq. Ft.: 1,698 Year Built: 2006

Bedrooms: 2 Full Baths: 2



12/07/2014 from Mecklenburg Count

9) Parcel ID #: 22110144

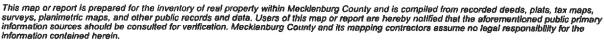
Location: 10047 BISHOPS GATE BV

PINEVILLE

Larid Area: 0.152 AC

Sales Price: \$182,000.00 (03/08/2016) Tax Market Value: \$243,800.00

Sq. Ft.: 1,582 Year Built: 2005 Bedrooms: 2 Full Baths: 2





MECKLENBURG COUNTY, NC POLARIS 3G PROPERTY INFORMATION REPORT

Date Printed: 10/11/2019

Search Criteria: within 5 ft of 22110117. Sorted by: Descending Market Value Order



12/07/2014 from Mecklenburg County

10) Parcel ID #: 22110148 Location: 10105 BISHOPS GATE BV

PINEVILLE

Land Area: 0.152 AC

Sales Price: \$227,500.00 (06/30/2006)

Tax Market Value: \$243,600.00 Sq. Ft.: 1,582 Year Built: 2006

Bedrooms: 2 Full Baths: 2



11) Parcel ID #: 22110147 Location: BISHOPS GATE BV

PINEVILLE

Land Area: 0.03 AC

Sales Price: \$0.00 (12/23/2009)

Tax Market Value: \$0.00

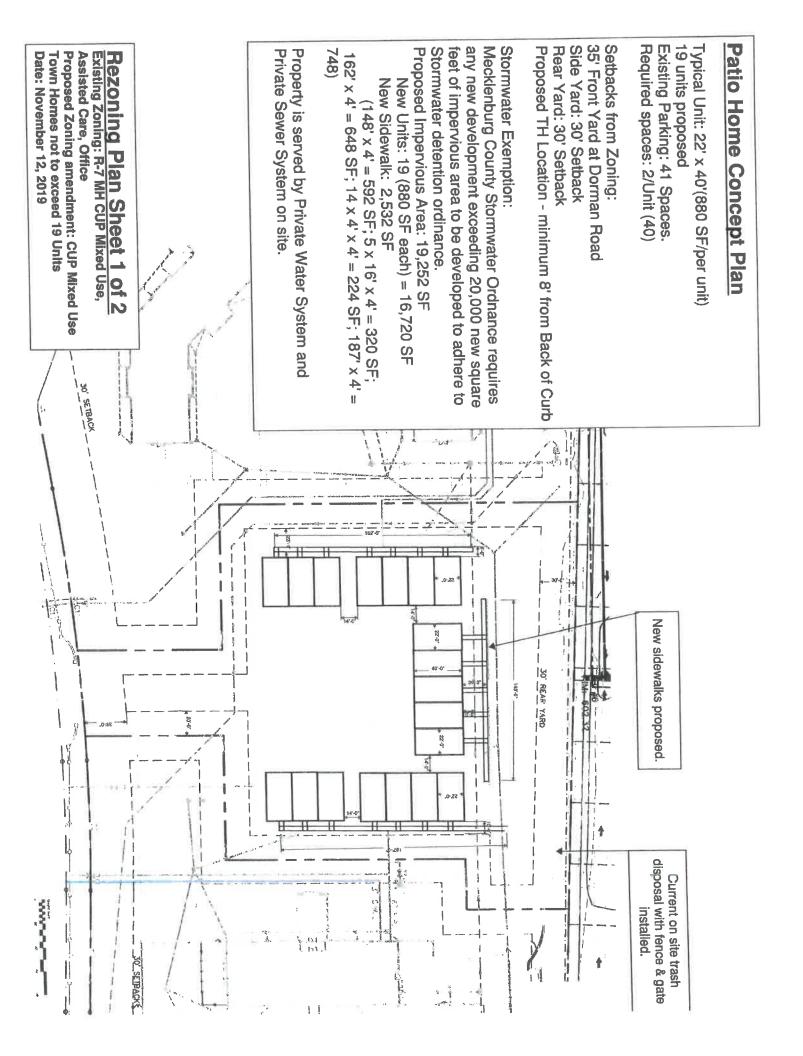


MECKLENBURG COUNTY, North Carolina POLARIS 3G PARCEL OWNERSHIP AND GIS SUMMARY



Date Printed: 10/11/2019

			ted: 10/11/2019			
		ntity		Own	ership	
Parcel ID)	GIS ID	Owner Name		Mailing Address	
22150393		22150393	ASSOCIATION INC		PO BOX 38809	
Property Characteristics		11	CAROLINA VILLAGE CHA		HARLOTTE NC 28278	
Legal desc		COS M49-851	HOMEOWNERS			
Land Area		1.14 AC	C/O AMS		PO BOX 38809	
Fire District		PINEVILLE	- L		CHARLOTTE NC 28278	
Special District		FIRE SERVICE G	De	ed Reference	(s) and S	ale Price
Account Type		HOMEOWNERS	Deed		Date	Sale Price
Municipality		PINEVILLE	23616-270	04/10/200	08	
Property Use		SINGLE FAMILY	15125-866	04/09/200)3	\$0.00
RESIDENTIAL - COMMON		Site Location				
Zoning		ETJ Area		Pineville		
Contact appropriate	Planning De	partment or see Map.	Charlotte Historic District		No	
	Water Qua	ality Buffer	Charlotte 6/30/2011 Annexation Area		Area	No
Parcel Inside Water			Census Tract #		58.25	
FEM/	and Comm	nunity Floodpiain	7	Post Constr	uction Di	strict
FEMA Panel#	3710443B		Jurisdiction		Pineville)
FEMA Panel Date	02/19/201		District	District Pinevi		
FEMA Flood Zone	OUT:VIEV	V FEMA FLOODPLAIN TO	Stream Watershed Districts		tricts	
	VERIFY		Stream Watershe	d Name	McALPI	NE
Community Flood	ommunity Flood OUT:VIEW COMMUNITY FLOODPLAIN				-	
Zone	TO VERIF	Υ				
Situ	s Addresse	s Tied to Parcel	7			
GREEN BIRCH DR	PINEVILLE					





Proposed Elevations for Pineville Town Home Project off Dorman Road.

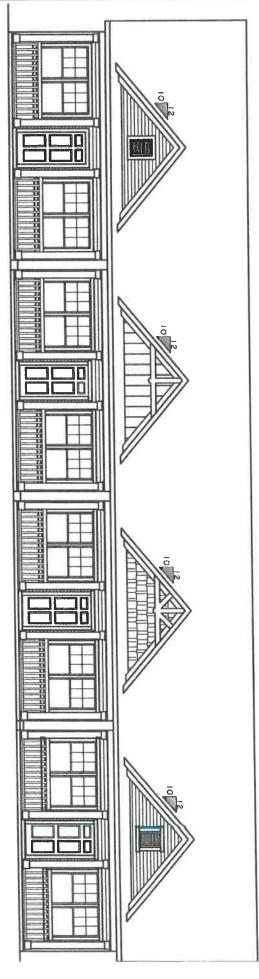
Existing Elevation built in field is the prototype with modifications of additional windows to allow for more light in units.

Existing elevation photo (left) has a side door with steps; proposed elevation below designed with front access and will be on grade for easy access for older adults.

Porches to be framed with white picket railing and square column supports

Variation of dormer elements vary from horizontal siding, vertical ship-lap, and vinyl shake siding. Cementious (fiber cement) siding shall be used on elevations below roof lines on front, side and rear elevations.

Grading of site may require shift in elevations necessary to accommodate topographic conditions.



FRONT ELEVATION - 4 UNIT

Rezoning Plan Sheet 2 of 2
Existing Zoning: R-7 MH CUP Mixed Use,
Assisted Care, Office
Proposed Zoning amendment: CUP Mixed Use
Town Homes not to exceed 19 Units

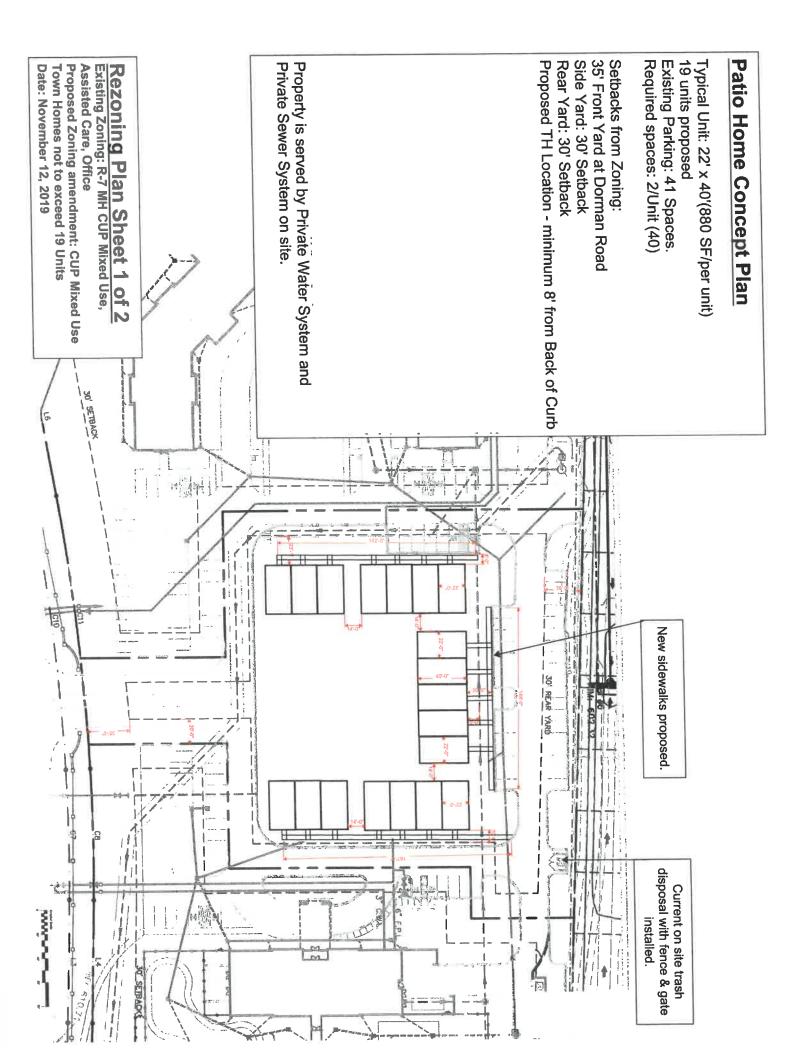
Date: November 12, 2019



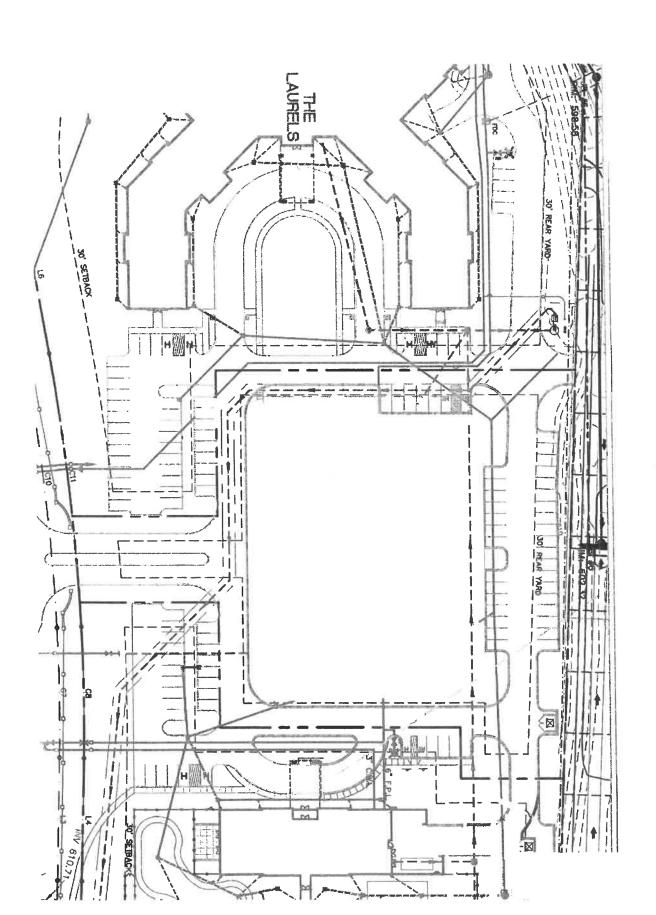
13160 Dorman Road, Pineville, NC 28134

Owner: MIRSA 2, LLC - Tax Parcel No. 221-10-117, +/- 2.12 acres

Petition for zoning change from Conditional Office use to Conditional Town Homes







The Cottages at Carolina Place

13030 Dorman Road

Pineville, NC 28134

December 10, 2018

Mr. Travis Morgan, AICP

Planning Director, Town of Pineville

P.O. Box 249

200 Dover Street, Pineville, NC 28134

Re: Planned 23-unit Patio Home project on vacant land adjoining The Cottages at Carolina Place

Mr. Morgan,

On November 14, 2018 at our regular Board Meeting for the community, we invited Mr. David Tibbals to share the proposal initially he communicated through our community manager, Ms. Bethany Totherow of Henderson Properties, back on October 15, 2018.

At the meeting, Mr. Tibbals shared the concept plan for the project, showing the proposed units, the planned open courtyard, and proximity to The Cottages and seeking community support for the project. As the property has been vacant for 12 years, a positive use of the property for Patio Homes would be more acceptable than a restaurant or more intensive use. There was a good discussion with both the board and several residents attending the meeting who voiced their concerns and questions about the project.

The following items highlight the concerns of the community and its conditional support for the plan:

Fence separating the property: Currently there is only a partial fence and shrub hedge that separates
the Laurels and The Haven's from the existing approximate ten-foot (10') high sloped elevation between
the subject property and the Cottages. Members of our community have asked that a continuous fence
be installed behind the proposed project protecting future residents of the proposed Patio Homes from
accidentally accessing this slope and falling downhill into various individual homeowners' property in
the Cottages.

2. Storm water: With recent rain storms, concerns were voiced about the planned project and whether there are adequate storm drainage systems to accommodate it. Mr. Tibbals shared that the design for storm systems only account for 10-year storm events. The recent rains appeared to produce temporary flooding and exceeded the systems design limits. Mr. Tibbals shared that the original master plan for the project was designed to handle the then current storm water regulations. As the project is in preliminary stages, Mr. Tibbals committed to a review of the full storm water plan for the community (The Haven's/Laurels and The Cottages), and prior to any final construction documents, engage a civil engineer to review and confirm the storm systems are compliant with the original design and are properly functioning and will accommodate this new development. The existing vacant site is 2.18 acres composed of +/- 1 acre of grassed land, the balance is paved with existing parking for this site, as well as circulation for the Haven's and Laurels. The proposed plan would add approximately 23K SF of (under ½ acre) of impervious area, under current the current scheme.

In summary: Based on the preliminary plan submitted for 23 single-story attached Patio Homes surrounding a common courtyard; and based on satisfactory resolution of the two (2) items described above in the final plans, the community and board gives its conditional support to rezoning of this land for the proposed use.

Si	ncere	١٧,

W. Anthony Dunn

President

Home Owners Association

Board of Directors

Workshop Meeting



To: Town Council

From: Travis Morgan

Date: 6/22/2020

Re: Proposed Hyundai Car Dealership (Workshop/Informational Item)

UPDATE:

Proposal has been updated from our last workshop with the following

1) \$5,000 town sign compensation and corner sign rendering

- 2) Clarification on existing building facades not re-skinned to be painted
- 3) Lighting plan with foot-candle measurements.
- 4) 5 front display cars as shown and 4-foot-tall parking lot screening shrubs
- 5) Payment in lieu option for Cadillac road work

BACKGROUND:

You may recall the 10518 Cadillac property adjacent to I-485 and Pineville Road from prior dealership proposals: Hyundai June 2017 and Mercedes October 2018. Previously approved new Mercedes was abandoned in favor of improvements at the existing Mercedes facility due to expense and bad soil. Applicants would like to reapprove a similar Hyundai dealership proposal. Automobile dealerships are conditionally approved only in the B-4 zoning district.

PROPOSAL:

Same applicants as prior Hyundai. John Fryday on behalf of TT of HY Pineville Property LLC and Nick Berndt of AMSI request your consideration of a Hyundai new car dealership. Proposal is similar to 2017 proposal. Highlighted changes are a smaller proposal 40,000 square feet with traffic study allowance of up to 44,000 square feet down from up to 55,000, more detail on clock tower placement and relocated Pineville Welcome sign due to grading, use of dryvit "newbrick" cladding to reskin metal warehouse (see sample material), and larger concrete plaza by the dealership front door.

DEVELOPMENT SUMMARY:

Location: 10518 Cadillac

Acreage: 11.22 acres (minimum 4 acres)

Square footages: 44,000 per TIA (40,000 shown plus 1,200 car wash) (28,000 minimum)

75,000 (existing remaining warehouse)

Employment: 60 people (stated from prior)

Parking Provided: Parking met. 519+/- total provided

45 front 'customer only' parking spaces.

Sidewalks: 10' sidewalk along Pineville Road, 5' sidewalk along Cadillac Street

Height: approx. 26-28'

Traffic: Additional right turn in pavement for turn radius on Pineville Rd repave and

restripe Cadillac for 3 lanes with center 100' minimum car stacking.

STAFF SUMMARY:

Staff would note the updates and clarification to the plans. Staff recommends required staff approval for landscape items especially the 4' evergreen screening shrubs to be hollies or similar durable approved selection.

Lighting plan is the primary area of staff concern. As shown, the proposal is not in lighting compliance. Staff recommends consideration for auto dealership needs but consistent with other approved dealerships and in light of similar municipalities. Staff recommends a maximum of 10-24 foot-candles for site lighting such as parking lots and a maximum of 30 foot-candles for the 5 display cars. As shown lighting hits 103.2 foot-candles and 89,902 lumens. Current ordinance is restrictive at 3,750 lumens. Mazda averages less than 20 foot-candles for the parking lot and 30 foot-candles for the display cars. All other town requirement standards and prior full elevations apply.

PROCEDURE:

This is a workshop for Council to discuss plan updates and detail with the applicant and staff. This follows standard legislative approval process. There are no findings of facts needed. Applicant follow-up or clarification and next meeting dates are to be determined. Applicant seeks a July 14th public hearing.



June 16, 2020

Mr. Travis Morgan, Planning Director Town of Pineville 200 Dover Street Pineville, NC

Re: Hyundai of South Charlotte 10518 Cadillac Street Pineville, NC 28134

Dear Travis,

We are submitting with this letter the sheets revised per our workshop meeting with Town Council May 26th. Per the direction received during the meeting, the following changes or clarifications have been made on the submittal:

- 1) Clock Tower 'sign' no longer has the words 'South Charlotte'. See new rendering of the Tower and Pineville sign location relationship.
- 2) Existing Town of Pineville sign will be removed by the developer due to grading issues, and the Town is offered two options. The existing sign will be relocated to the site agreed to near the Cadillac St intersection at Developers cost, or the Developer will contribute \$5000 to the Town toward a new sign, which is expected to be fabricated and placed in 'this' general location by the Town. The Town must decide on which approach is preferred by the time a building permit is issued. Developer will coordinate with Town on schedule of installation to ensure site is ready.
- 3) Landscape screening around the customer parking has been increased to be 4' high at planting. (Note the request for 4' along the Polk St boundary was included in the original submittal, and remains unchanged)
- 4) A parking pad for not to exceed 5 vehicles has been added in the space between the building and the required street sidewalk (see plan). A note limits vehicles to 5, and each cannot have more than 4 tires.
- 5) Conditional notes state the existing warehouse building that receives the new masonry appearing surface will also be painted on the South end (which faces Cadillac St) and the remainder of the Polk St side of the building.
- 6) Wording has been added to provide the developer with the OPTION to make payment in lieu of improvements shown on the drawings to Cadillac street. Additional coordination will take place between the Town and Developer to define the exact scope of work each will complete.

Mr. Travis Morgan, Planning Director June 16, 2020 Page 2

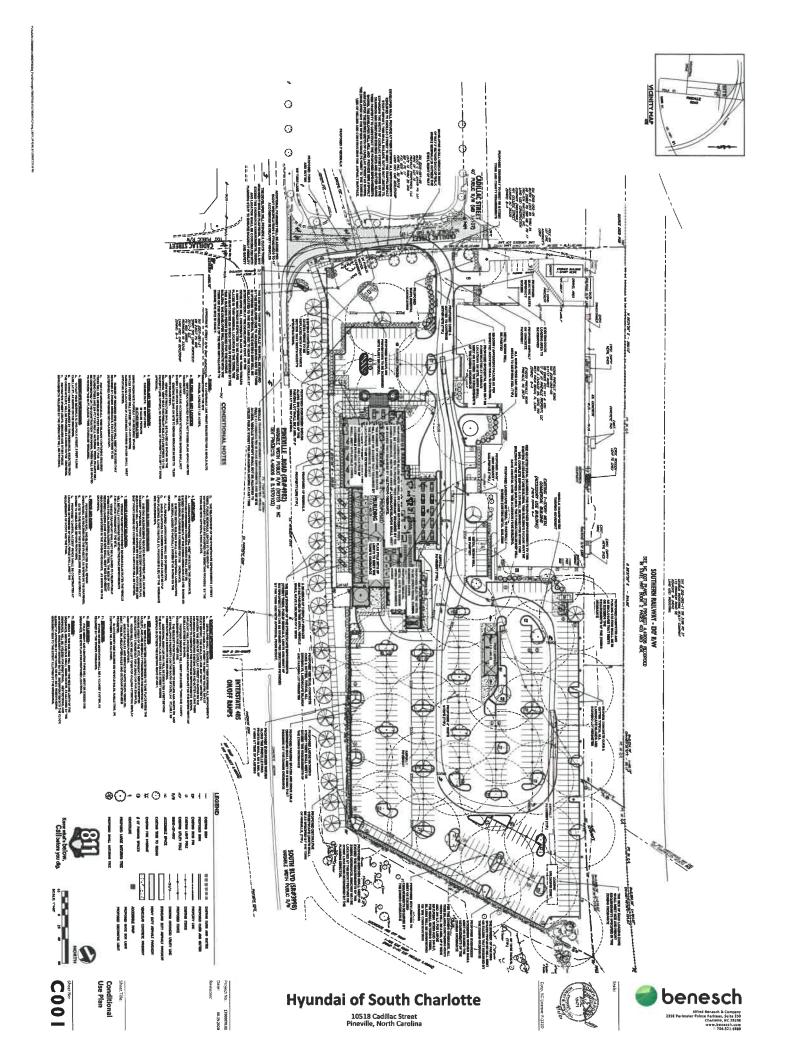
Thank you for the workshop review with the Council, and we hope addressing all these items will lead us to a Public Hearing and vote to approve on July 14th. Let us know if you see any discrepancies or concerns with how the Council requests were addressed.

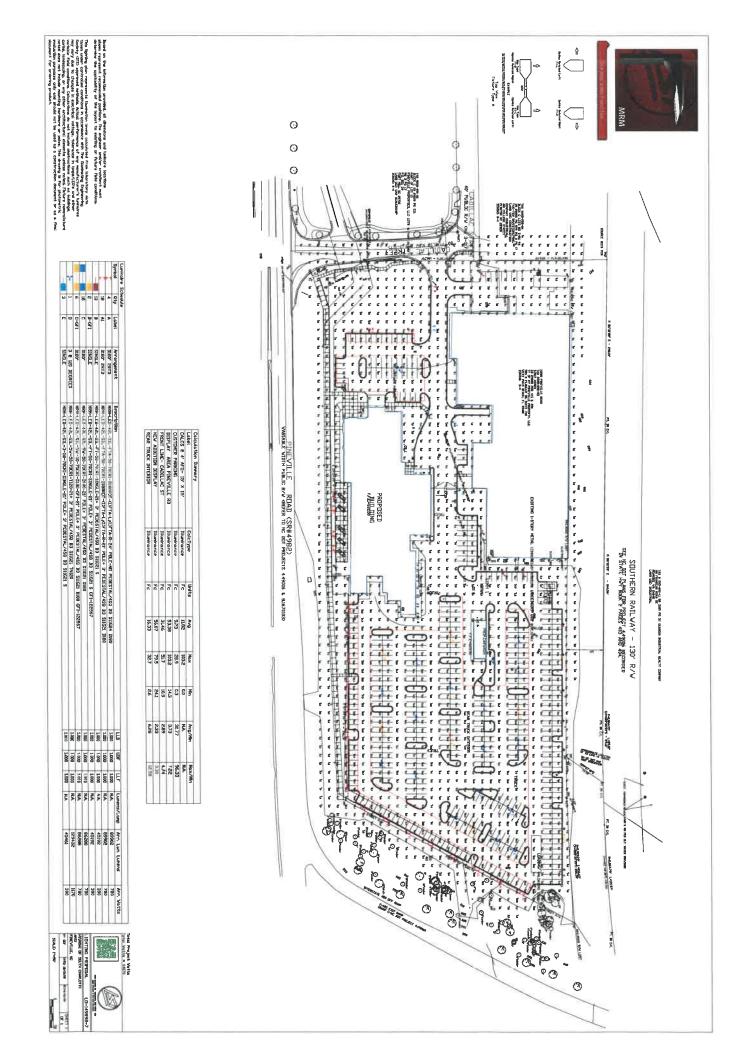
Sincerely,

hn B. Fryday, AIA/ASID/ LEED AP

Attachments:

- Sheet Coo1, Conditional Use Plan, dated o6.15.2020
- Sheet Coo1, Conditional Use Plan, dated 06.15.2020 (with revisions noted)
- Hyundai of South Charlotte Elevations and Finishes Sheet 2, revision o6.15.2020
- Sign and Clock Tower Perspective 1
- Sign and Clock Tower Perspective 2











10615 Industrial Drive Pineville, NC 28134 (704) 835-1123

ESTIMATE EST-2804

Marketing and Branding Solutions www.signarama-pineville.com

Payment Terms: Cash Customer

Created Date: 5/26/2020

DESCRIPTION: Real Brick Base Monument Sign

Bill To: City of Pineville

200 Dover St. PO BOX 249

Pineville, NC 28134

US

Pickup At: Signarama Pineville

10615 Industrial Drive Pineville, NC 28134

US

Requested By: Brian Elgort Salesperson: Darren Vanderhall

Email: belgort@pinevillenc.gov

0.	Product Summary	QTY	UNIT PRICE	UNIT PRICE	AMOUN1
1	Brick Monument Sign w/ Installation	1		\$23,451.95	\$23,451.95
1.1	Custom Item Taxed - Brick/Pre-cast/Foundation				
	Part Qty: 1				
1.2	Custom Item Taxed - Sign Face/Beams/Dimensional Lett	ering			
	Part Qty: 1				
	Text: Real Brick Base 124" x 54" x 14" Double Faced Fabricated Aluminum Cabinet Painted Black with 15" x 3" deep Fabricated Aluminum Letters Halo-Illuminated with LEDs (PINEVILLE), 6" x 3" deep Fabricated Aluminum Letters Halo-Illuminated with LEDs (WELCOME TO) and (2) 23" Sandblasted HDU Pineville Logos to mount to Mason Supplied Base with 6" x 6" Red Wood Accent Posts				
1.3	Installation - Installation				
	Part Qty: 1				
1.4	Design / Layout - Design / Layout				
	- # of Hours: 2				
	Sign Removal (Note: Removal doesn't include breaker box, landscaping, or grading. These items would be handled either by the power company or determined after a detailed survey).	1		\$455.00	\$455.0
2.1	Custom Item Taxed - Existing Sign Removal/Disposal				
	Part Qty: 1				
3	Estimated Permitting	1		\$267.50	\$267.5
3.1	Custom Item Taxed -				
	Part Qty: 1				

4	Estimated Survey (Engineering Survey- TBD)	1	\$5.0	00 \$5.00
4.1	Custom Item Taxed -			
	Part Qty: 1			
Danaud			Subtotal:	\$24,179.45
	ing production of custom signs, this estimate is valid based on ation from client about the project requirements. Changes by		Taxes:	\$1,652.96
	oof and quote approval may result in a change to the price of		Grand Total:	\$25,832.41
	ed signs.			
Please Acct Na BSB: Acct No ABN:				
installa of balla	ding Installation and onsite services, this quote is for estimatio stallation. The Estimate is based on current information from cition. Actual cost may change once project elements are finalizest, LED lights, lamps, sockets, wiring and other components to approve complete replacement of lamps. Client may choos illumination and will provide an itemized list of	lient about the ed. Client ag restore sign se to pay for a	ne project. for time required to dures that sign service & repair will illumination as needed only. Clical site survey wherein we will insp	complete the ill add on the cost ent must request
Signa	ture:	Date:	:	



MINUTES OF THE TOWN COUNCIL WORK SESSION OF Tuesday, May 26, 2020 · 6:00 P.M. (Meeting held remotely via Zoom for the Public) The Hut Meeting Facility for Council & Staff

The Town Council of the Town of Pineville, NC, met in a Work Session on Tuesday, May 26th, 2020 @ 6:00 p.m. The meeting was held remotely using Zoom for the public. Council Members and Staff were present at the Hut.

ATTENDANCE

Mayor: Jack Edwards

Mayor Pro-Tem: Melissa Davis

Council Members: Amelia Stinson Wesley, Les Gladden and Joe Maxim

Town Manager: Ryan Spitzer Town Clerk: Barbara Monticello

Planning & Zoning Director: Travis Morgan

Present via Zoom: Financial Director, Richard Dixon. Representatives from Beacon Development including Jon Morris, John Core, and Jeff Orsborn, Larry Shaheen for parking on Downs Rd. and John Fryday/Nick Berndt representing the Hyundai Dealership.

CALL TO ORDER

Mayor Jack Edwards called the meeting to order at 6:01 p.m. Council Member Amelia Stinson Wesley made a motion to open the meeting and Council Member Les Gladden seconded the motion. There were ayes by all and the meeting was opened. The Mayor then called upon Planning and Zoning Director, Travis Morgan, to begin the discussion on Kings Grant Warehouse Project.

DISCUSSION ITEMS:

A. Kings Grant Warehouse Project by Beacon Development— (*Travis Morgan*) Planning Director, Travis Morgan, stated that Carolina Crossing Logistic Center was the name Beacon Developers gave the warehouse complex instead of Kings Grant. Since the town already had a neighborhood by the name of Carolina Crossing, Beacon would have to come up with another name for the center or go back to calling it Kings Grant Warehouse.

This meeting is for a conditional request for a warehouse center of approximately 3.5 million square feet to be situated between Downs Road and Nations Ford Road. They presented an updated plan with notes, clarifications, etc. Council Member Les Gladden suggested discussing each bullet point as they go through each one.

Travis reviewed Staff Comments noting that for note 2F on the plan, it should read "zoned (G-I-CD)" to match the plan in lieu of "zoned for uses permitted". On note 3B he appreciated them adding comments about outdoor storage but on note 3D, he recommended no outdoor storage from the front of the building to the street particularly on Downs Road and the new connector road. No storage in the front of buildings 2 and 3 facing Downs Road or buildings 4,5,6,7,8 & 11 facing the connector road.

Jon Morris of Beacon Development stated that along Downs Road they will have a berm and landscaping for building 3 southward and buildings 4, 5, 6 will have a 6-foot berm with landscaping. There is a small, triangular piece of land that may be used as a park amenity for picnics at the northwest corner by the nicest of the buildings.

John Core with Beacon Development, asked for clarification on the storage. Director Travis Morgan said the biggest concern was with buildings 2,3,4,5,6,7,8, and 11. He was not keen on outdoor storage.

Referring to note 2G, Mr. Morgan stated that the normal vesting period for the town was 2 years. The note indicated 5 years as a vesting period. Mr. Morgan stated that as long as they kept progressing and continued their efforts, there should not be a problem.

Mr. Morgan stated that on note #6, staff recommended the wording be "No On-street Parking". For notes 6 LMN – Mr. Morgan asked that they "reign in" the wording for "front yard parking" as it was too broad. He'll will work with them on some different language.

Jon Morris noted that with Buildings 7 & 8 there were truck courts that faced sideways and they can be seen from the connector road which Mr. Morgan did not want to see. Council Member Les Gladden suggested changing the wording to "no trucks to be parked at the end of Building 8; no tractor trailers in that area". Jon Morris added that was why they had long neck driveways. Council Member Les Gladden said just don't park trucks in employee lots.

With regards to note #8, they had worked out a plan with alternating decorative and utilitarian forms of lighting but they were still trying to find a less expensive option than the town's lights. He was checking on double head fixtures and was still waiting on pricing for them. Staff's priority is to have more decorative poles on Downs Road and more utilitarian along the connector road.

Mr. Morgan had received two comments from neighboring properties. First was Charles Wilkerson at 1225 Nations Ford Road, who was in agreement with Beacon's plan. Also, Ken and Denise Hammond of 123181 Downs Road, operate a horse farm at that location. They had sent an email with their concerns:

- 1) Stormwater/flooding avoid Downs Road ditch.
- 2) Lighting, noise, buffers and screening.
- 3) Concerns with the connector road lining up with their driveway. Would like screening if it has to be there and preferably a solid masonry wall as a buffer to mitigate lights and noise from tractor trailers turning in and out of the connector road.

John Core stated that it was their intent to have a landscaping buffer there. Council Member Les Gladden said that on Down's Road, across on Kimbrell's side, when trucks come in at night the headlights will shine right into the windows of their home. There will have to be landscaping and fencing to prevent that from happening. Jon Morris suggested that what they needed was a berm there. Putting a well-landscaped berm with different trees, flowering bushes, etc. across both sides of the roads may be better than a wall since the property slopes down. They want to be good neighbors and do a nice buffer.

Jon Morris suggested moving on to talk about Storm Water. He asked John Core to go over their plan for Storm Water. Mr. Core stated that Parcels A, B, and C that touch Downs Road, will all drain to a BMP. Water will go to a drain under Downs Road. Everything will need to be constructed to meet County regulations as well as NCDOT standards. They will be adding curb and gutter all along Downs Road as well.

Jon Morris added that the whole neck of the entrance will be concrete and will go back 100 feet which is more than what Council had suggested at 50 feet.

Council Member Les Gladden wanted assurance that none of the flooding like they discussed at the last meeting will happen again. Mr. Morris stated that while they couldn't control the amount of rain that falls, they can make it better and admitted that it may not be perfect in a huge rainfall event but it would be better. Council Member Les Gladden then asked him where the gutter was going to end. John Core said that they would end in the same pipes that were discharging from here (pointing to the map on the screen).

Mayor Pro Tem Melissa Davis needed clarification asking that with all the hard surface being added, how could the storm run-off possibly be better? Mr. Core stated that calculations that they prepare and submit to the county have to prove that the flow of water is better than what is was before. Mayor Pro Tem Davis was having difficulty believing that there would not be any flooding. Jon Morris reiterated that it wouldn't be eliminated altogether but that they would be controlling it better than before.

Council Member Les Gladden asked about items on the plan labeled "possible" ponds by the end of building 3. He wanted to know what "possible" meant? Mr. Morris responded that it was probably a carry-over from when they were preparing to put those properties under contract. John Core stated that constructing BMP's 1,2,3, and 4 would have to be done first out of the gate and when all was complete there would be a total of 5 BMP's. Depending on which buildings are built first would depend on which BMP's are built first.

Council Member Les Gladden asked where BMP 6 was going to dump into. Mr. Morris stated that 35% would go north over to McCullough and 65% would travel to a storm water pipe and then down the street to BMP 2. Mr. Morgan asked if those BMP's would be permanent wet ponds? Mr. Core replied that they were required to have water in them year-round. Mayor Pro Tem Melissa Davis asked how they would be maintained. John Core said they get inspected yearly and mowed regularly. Mr. Morgan asked if they would have sand filters to which Mr. Morris replied that they would be way too big for sand filters which are generally used more in areas with sandy soil. Mr. Orsborn added that they would maintain the BMP's with landscapers, etc. and that they would have to be inspected every time there was one inch of rain or more.

Mayor Pro Tem Melissa Davis asked to be further educated on wet ponds and the potential for mosquitos. Jeff Osborne said they will be flushing the water out. Mr. Morris added that they've never had an issue with mosquitos; that's never been a problem. Geese have been an issue but not mosquitos. Beacon did not want to do just a good complex; they wanted to do a great one. They want to work with their neighbors.

Mayor Pro Tem Melissa Davis asked about the noise and the impact the development would have on the two residential homes, as well as the horse farm. Mr. Morris reiterated that trucks would exit the complex on to Nations Ford Road – and that the landscaping and berm will act as the buffer to minimize any impact on the residents. They would have plenty of dirt for a berm with all the farm soil from the Harley property.

Council Member Les Gladden asked if Class I manufacturing was an allowed usage in the General Industrial district. Mr. Morgan stated that anything they wanted to add to Class II, from the first list as a prohibited use, they could look at but he hasn't seen anything that would generate a lot of noise. We can look at particular businesses if we need to.

Council Member Les Gladden asked if restrictions could be put on certain buildings, like buildings 4 through 7 cannot have manufacturing at all because they are closest to residences; can the town prohibit certain things like this? Mr. Morgan again stated that he hasn't seen anything that would cause concern. Mr. Morris added that they looked at those things very carefully – if a tenant puts in something like an air compressor, Beacon asks them to construct a building around it to minimize any noise that it might generate.

Council Member Amelia Stinson Wesley wanted to be sure that Beacon touched base with the Hammonds as it was important to represent this conversation to them. Jon Morris will send an email to them and sit down and discuss with them whatever they would like. Travis will be the point person. Jon Morris said he would like to meet with all of the homeowners.

Council Member Les Gladden asked Beacon to be sure they were aware of the fire hydrant requirements for Pineville, not the county, but for Pineville. Our roads and fire hydrants are more restrictive than what the county allows.

The floor was open to anyone from the public that wanted to speak on the subject. Mr. Kimbrell residing on Downs Road asked if there was any consideration to tie the connector road into Eagleton Downs Road. Mr. Morris stated that due to that section crossing over a creek and other design considerations, it just didn't work with the design of the park. Additionally, on the original plan three driveways were shown exiting onto Downs Road which Pineville asked be eliminated altogether. With the way the driveway comes off of Building 9, the NCDOT would likely have issues with it. Mr.

Kimbrell asked if the NCDOT was okay with where it was presented on Beacon's plan – directly across from the Hammond property? Mr. Morris said that's where they wanted it.

Town Manager Ryan Spitzer said the Town was looking to have a Public Hearing in June and a Council vote on this project in July.

B. Request for Parking at 510 Eagleton Downs Road – Planning and Zoning Director, Travis Morgan, stated that all of Eagleton Downs was a conditional use subdivision. The first building on the right as you go into Eagleton Downs is being constructed and the applicant was requesting that we allow parking in front of the building. Our overlay does not allow parking in the front of the building. The proposed parking will be in the front corner. One thing that could offset the parking would be a sidewalk, which is also an asset to the town. The developer is going to put sidewalks in along Eagleton Downs and it will tie in to the Beacon project.

Screening and landscaping along Downs Road would also be an asset to the town. Mr. Morgan was proposing that the developer amend their proposed landscaping to something a little larger to offset the parking in the front of the building. Sidewalks are difficult here because of the drainage coming through there and generally landscaping under the overhead power lines that are there is prohibited so any landscaping should be outside that area.

Larry Sheehan, representing the development of this property, knows the town's concern of the parking in front of the building. He stated that they only needed a little bit of parking out in front of the building and they were going to be sure it looked nice. Council Member Les Gladden asked Travis if he was satisfied with the landscaping.

Mr. Morgan stated they might need to adjust the landscaping a bit, perhaps moving it in front of the utility lines. There is a gap in the buffer due to power line easement. Mr. Shaheen stated he would work with Mr. Morgan on this to do it the right way. Council Member Les Gladden asked if they were OK with doing the landscaping that Pineville required. Larry Shaheen said yes, they were happy to do shrubs.

Mayor Pro Tem Davis asked if the town was going to get sidewalks. She wanted to know about Downs Road and Eagleton. Mr. Morgan replied, yes, the Town will get sidewalks. Council Member Amelia Stinson Wesley asked for clarification on whether the landscaping would extend beyond where parking was proposed. Mr. Morgan replied yes, beyond the proposed parking spaces. There were no additional questions or comments.

C. Review of Hyundai Dealership Plan: John Friday, architect for the project, was at the meeting, along with Nick Berndt, Rob Brooks and Wesley Sherrill of Hyundai. Mr. Morgan stated that the applicant was asking for a conditional Zoning Request for a car dealership at 10418 Cadillac Street in Pineville. The plan originally came in as Hyundai dealership, then came back as a Mercedes dealership, and now they were back as a Hyundai dealership but with a new plan. Auto dealerships are a conditional use and that was why they were before the board.

Mr. Morgan stated that the new plan was smaller than the original plan but it closely matched the original plan however. The plan proposed a 40,000 sq. ft. building. All previous restrictions that applied to the original plan were applicable to the new plan. The plan proposed 45 parking spaces in front for customers only and two service bays in the back. Mr. Morgan explained that there was an option to do a payment in lieu of having to pave Cadillac Street. This would allow our Public Works Department to pave the road sooner so the owners could occupy the building quicker.

The new plan also showed the Welcome to Pineville sign moved to the corner of the lot as well as less display vehicles out in front which Mr. Morgan was pleased about. All other plans still need to be approved by Pineville.

The floor was turned over to the architect, John Fryday, who stated that most things are the same plan as the original plan. The relocation of the Pineville sign was still to be discussed. The clock tower will also be in the new plan as it was originally in 2017. The building size was reduced to 40,000 sq. ft. with a floor plan that was slightly different than the original as was the shape of the current building. They were proposing to use a brick like material on the old metal warehouse because the weight of real brick on that building was too heavy. Therefore, they will be using a synthetic material instead. The front of the building will be resurfaced with brick as well.

Council Member Les Gladden asked what they were doing with the rest of the building? John Fryday replied that they were adding landscaping across the front of the building. Mayor Pro Tem Melissa Davis asked if using the faux brick was a cost-saving measure? Mr. Fryday said no, it was because the weight of real brick on that building was the issue. She then asked if only to doing part of the building was a cost-saving measure to which Mr. Fryday replied that he thought so. Mr. Nick Berndt stated that it was no different than the plan originally.

Council Member Joe Maxim remembered that the metal building was originally a point of contention and asked what the intended use for that building was. Mr. Fryday replied that they had worked out with Council what the wording would be for what the warehouse will be used for. Mr. Morgan said the concerns back then for what the warehouse would be storing and that was why the notes were put on there; they were all the same notes and all the conditions carry forth.

Council Member Les Gladden noted that you could still see a lot of the old metal building and they originally talked about extending the brick beyond where the façade ends. He asked if they were still going to do that? John Fryday said they were going to do more landscaping and paint the rest of the building.

Mayor Edwards asked If Mr. Morgan had seen the security rail fence. Mr. Morgan clarified that the perimeter security fencing was what the Mayor was asking about. We have to have a control fence at 4 ft. high.

Mayor Pro Tem Melissa Davis asked about the frontage on 485, recalling there had been a discussion on that back in 2017. Mr. Fryday stated that the ramp had a lot of screening that belonged to DOT and that the only signage proposed was the clock tower signage which lead to a discussion regarding the relocation of the town's Welcome sign.

Mayor Pro Tem Davis did not think \$2,000 was enough to relocate the sign and asked if the applicant was prepared to spend more money if it was necessary? Nick Berndt stated that they were prepared to relocate the sign or do something different, if the Town wanted it.

Council Member Amelia Stinson Wesley expressed concern that with the sign being relocated near the tower it would look as if the town was being sponsored by Hyundai. She didn't want to see this nor did she want to see another brand in the same proximity to the Town's sign. Additionally, the Hyundai sign would read, "Hyundai of South Charlotte" while the town's sign, "Welcome to Pineville" right near it would not make much sense. Council Member Les Gladden stated all of council would be appreciative if they would leave "South Charlotte" off their sign as the dealership was in Pineville, not Charlotte.

Additional items were discussed including enhanced landscaping out front, along with a 4-foot high aluminum fence, what the size of the screening shrub should be, hood-popping and elevated cars on display not being permitted, as well as how many cars can be on display out front.

The town was favoring a new Welcome Sign, perhaps a brick one instead of a plastic one. The town was willing to allow a total of five cars to be parked out front provided the applicant agreed to paying \$5,000 for a new sign. Mr. Berndt agreed to contributing \$5,000 for a new sign for the town.

It was agreed that 4-foot shrubs would be required in front of the customer parking and all along the front with a maximum of five cars allowed to be displayed out front. Council Member Stinson-Wesley was against any cars being displayed but Council Member Joe Maxim stated that it would be fair to allow some cars to be on display. There would be no box trucks allowed on display out front. Applicant for the Hyundai dealership will also do a payment in lieu of paving with the scope of cost for this improvement to be defined and agreed upon by applicant. Council Member Les Gladden also requested an answer to what the rest of the metal building would look like at their next meeting scheduled for June 22 at the Town's Work Session. After they come back for the Work Session in June, a public hearing will be held on the matter in July.

Discussion of FY 20-21 Budget: Town Manager Ryan Spitzer stated that in order to balance the budget the following items were either deleted or were being deferred to mid-year:

- 1) Rockin' and Reelin' deleted at \$34,335.
- 2) Fire Department drivers to start mid-year @ \$30,000 (originally \$60,000 for full year).
- 3) Defer VAC truck for Public works at \$270,000.
- 4) Defer AC/Heat in bathrooms at Shay Stage until January \$40,000

Manager Spitzer then stated the town would see about one million dollars less in revenues due to COVID-19.

The good news was that our insurance rates dropped for the first time in a long time by \$9,680. Our Health coaching will also be deleted at \$5,500. The exercise equipment for the park will also be deferred at \$35,000.

Council Member Joe Maxim requested we check on revenues every other month or quarterly to keep close track of funds to monitor the impact from COVID-19.

Mayor Pro Tem Melissa Davis asked if electric rates were going to be increased now or later. Mr. Spitzer suggested discussing the issue with Electric Director, Don Mitchell, as well as discuss limiting the amount of money we allocate to Electricities.

Council Member Les Gladden suggested doing away with the grass cutting contract and bringing that function back inhouse. Advise Department Head, Chip Hill, but don't give him the extra person. Mayor Pro Tem Melissa Davis stated she was in favor of bringing the mowing back in-house and recommended contracting out the main thoroughfares like 485 for safety reasons.

Council Member Amelia Stinson Wesley said she is in favor of hiring someone for the handy man position. Council Member Joe Maxim asked to see a job description for this handy man position. Manager Spitzer stated he would get a new job description for the handy man position. Council Member Les Gladden was in favor of filling the handy man spot but not in favor of giving him another person.

Conversation moved to whether to fund for a Police Capitan's position or not. There were differing opinions whether a captain should be appointed before Chief Merchant retired or wait until a new Chief is hired and let him determine who should be the Captain. Mayor Pro Tem Davis was not in favor of funding the position until a new Chief was hired as was Council Member Amelia Stinson-Wesley.

Council Member Joe Maxim stated that it made sense to budget for the position now. He was in favor of budgeting for the position now. Council Member Les Gladden remarked that the Police Department was more stable now than it has ever been and he was in favor of letting Chief Merchant decide who should be hired for the Captain's position. He was of the belief that having a Captain already in place when a new Chief is hired would be more beneficial to a new Chief.

Council Member Joe Maxim asked if someone could be put in as an interim for that position? He would like the process in writing so that everyone was aware of what the process will be. Mr. Spitzer stated that the company assisting the town with finding a replacement for Chief Merchant, Development Associates, determined that the town should start to look for a new Police Chief beginning in August and added that it we were OK for funding the position.

Council Member Amelia Stinson Wesley was not in favor of putting anyone in as Captain until a new chief was hired. Mayor Pro Tem Melissa Davis said she is ok with an interim. Council Member Joe Maxim was in favor of an interim, was in favor of budgeting for the position and was in favor of a new Chief. Council Member Les Gladden was in favor of having someone in the Captain's spot now.

Manager Spitzer moved on to discuss the PARC Plan. Parks and Recreation Director, Kristy Detwiler, was applying for a park grant and Council needed to vote to add this into the capital budget. Council will need to approve the park expansion and approve to have it put in the capital plan in order to get the grant. The town is looking to buy approximately 12.6 acres for approximately \$400,000 for this expansion project. A copy of the minutes stating the approval from Council must be included with grant application.

Next up for discussion was a comparison of companies being considered for handling the employee satisfaction survey. Council had been provided with a sheet in their packets comparing several companies and what they offered. Council Member Joe Maxim like elements of both Culture Amp and Talent Keeper and, for him, it was between these two for the Employee Satisfaction Survey. Council was not comfortable with making a decision and requested more information. Manager Spitzer stated he would try to drill down on the cost of Culture Amp and Talent Keeper and exactly what was included for each.

Mayor Pro Tem Melissa Davis made a motion to adjourn with Council Member Amelia Stinson Wesley seconding the motion. There were ayes by all and the meeting adjourned at 10:40 p.m.

ATTEST:	Jack Edwards, Mayor
Barbara Monticello, Town Clerk	

TOWN OF PINEVILLE BUDGET AMENDMENT

WHEREAS, the Governing Board of the Town of Pineville, North Carolina adopted on the 24th day of June, 2019, the Town of Pineville budget for the fiscal year beginning July 1, 2019 and ending on June 30, 2020; and

WHEREAS, it is appropriate to amend the accounts in the fund listed for the reasons stated;

NOW, THEREFORE, BE IT ORDAINED by the Governing Board of the Town of Pineville, North Carolina, that in accordance with the authority contained in G.S. 159-15, the following accounts are hereby amended as shown and that the total amounts are herewith appropriated for the purposes shown.

Section 1: To amend the General Fund, the appropriations are to be changed as follows:

Department	Number	Decrease	Increase
Governing Board - Legal	4100		175,000
Admin - Capital Outlay	4200		517,000
Police - M&R vehicle	5100		16,000
Police - Salaries	5100		12,000
Cultural & Tourism - Capital Outlay	6300		67,000
Total			787,000

Section 2: To amend the General Fund, the estimated revenues are to be changed as follows:

	Number	Decrease	Increase
Misc Revenue - Insurance Refunds	3350		16,000
Misc Revenue - overtime pay	3450		12,000
Prepared Food Tax	9999		67,000
Local Option Sales Tax	3450		250,000
Utilities Franchise Fees	3370		130,000
General Fund - reserves	9999		312,000
Total			787,000

To amend appropriations for railroad legal fees and purchase of land from Norfolk Southern.

To amend appropriations for auto insurance refunds and overtime reimbursements from (see attached)

To amend appropriations for additional purchases of splash pad spray features.

Section 3: To amend the General Fund, the appropriations and estimated revenues are to be changed as follows:

Revenue - Sale of Fixed Assets	3830	3,500,000	
Admin - Capital Outlay	4200		3,500,000

To amend appropriation and estimated revenues for sale of mill projected in FY21.

Section 4: To report use of contingency funds for FY20 (100,000) budgeted.

	Number	Decrease	Increase
Contingency Fund		43,277	
Administration - Contract Services	4500		27,277
Administration - Covid19 PPE	9000	1	16,000
		43,277	43,277
* See attached for list of Contingency items			

Adopted this 20th day of June, 2020

Town of Pineville, North Carolina

John Edwards, Mayor

ATTEST:	
Barbara Monticello	

(Seal)

Police Department:

Salaries and Benefits - budget increase for overtime reimbursements from DOJ for task force assistance.

Police - M&R vehicle - budget increase for repair of police vehicles involved in accidents from claims paid by insurance company.

Contingency Funds:

Kronos	2,000.00
Verizon	4,402.00
Asbestos removal	8,488.00
GPS hardware	2,387.00
ClearGov	10,000.00
Total	27,277.00

Memorandum



To: Mayor and Town Council

From: Ryan Spitzer

Date: 6/18/2020

Re: Town Hall - Secure Second Floor

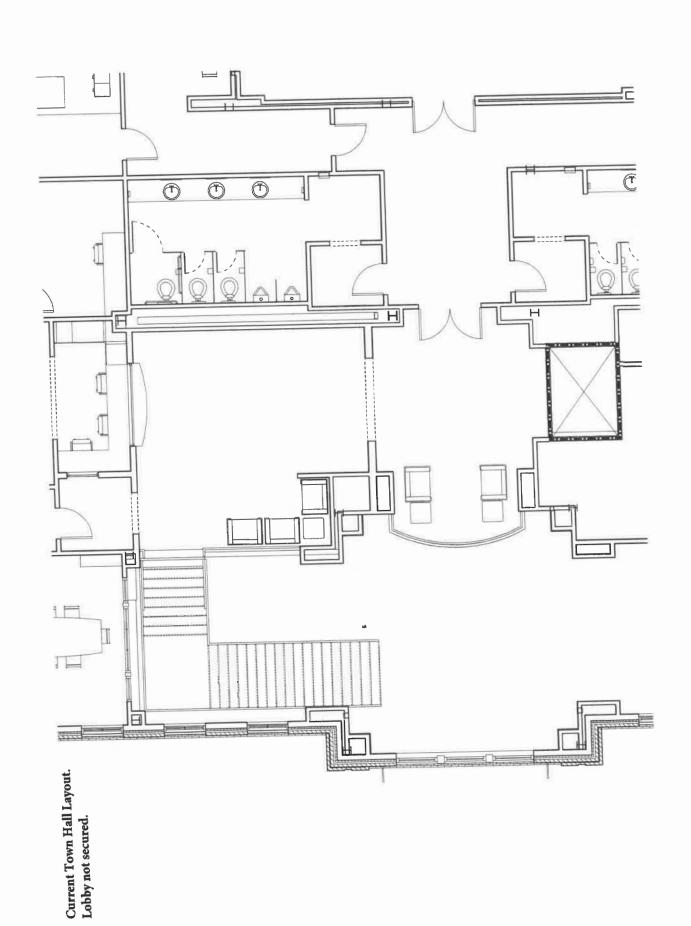
Overview:

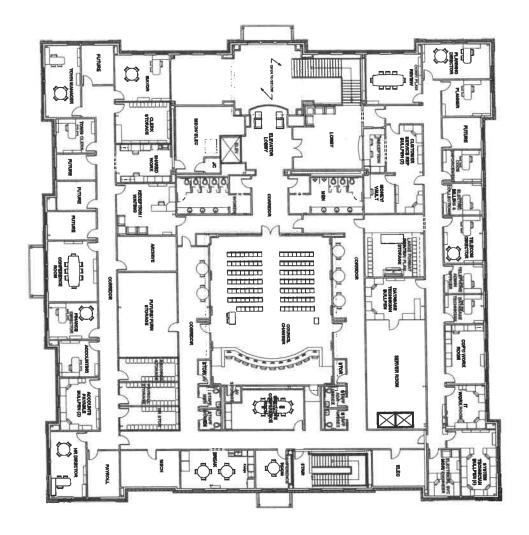
The current design of the new Town Hall leaves the second floor open to visitors after town business hours. This is due to there not being a gate or a door to stop patrons who are going to the library from coming upstairs. This could be a safety risk.

The design team has been discussing this and came up with an option. Does Town Council want to secure the upstairs from after hour visitors as depicted in the attached diagram? If Council does not think this will pose a significant problem, then we can keep the design as it is.

Attachments:

- 1. Current layout of second floor of new Town Hall
- 2. Proposed safety enhancements





No. Description Date

Project Number: 2018-2441
Date: 05-04-2020
SECOND FLOOR
FURNITURE PLAN

A 10.02

PINEVILLE TOWN HALL AND LIBRARY

Not for pricing, permitting or combruction, if used for estimating, it must be understood by all that the drawings and specifications at this point in time are thompside and cannot be essumed to be the basis for correct budgeting or bidding.

Progress Drawings

CREECH (SASSOCIATES

ION W. Merchael St.
Suita 120
Chaden, NC 2008
p PM-176-600
www.creech-design.com

Memorandum



To: Mayor and Town Council

From: Ryan Spitzer

Date: 6/18/2020

Re: New Town Hall

Overview:

The Architect had proposed various heating and cooling systems for the new Town Hall. These were presented to Council several months ago and Council had asked for an economic analysis on if the more expensive systems would pay for themselves in the long haul.

Alternative 1 is what is currently priced for the project. As you can see in the analysis Alternative 2, which is \$215,000 more than Alternative 1 is the only system that would make sense from a payback methodology. The simple payback would be 11.9 years. This would be achieved through lower energy cost and maintenance over alternative 1.

The County would prefer to go with Alternative 2. However, Council needs to determine if the approximately 12 year payback is sufficient enough to make the initial investment in the higher cost system.

Attachments:

Economic Analysis
Description of Alternative 1 and Alternative 2

Pineville Town Hall and Library Pineville, North Carolina

Division 23 – Heating, Ventilating and Air Conditioning

General

It is the intent of this Design Development Narrative to provide the Owner and CM at Risk with a document outlining the proposed design, space requirements and details needed to develop the cost estimate for the mechanical portion of this project. This information is subject to revisions during the course of the following stages of design as new information becomes available.

The following requirements are provided to initially define the various HVAC system requirements and engineering services for the facility.

The heating, ventilating and air conditioning systems shall comply with the following codes:

- ADA Americans with Disabilities Act
- 2018 NC State Building Code
- National Electrical Code Latest Edition
- The Requirements of the North Carolina Department of Insurance
- **OSHA Requirements**
- ASME Requirements for Pressure Vessels
- ANSI Standards
- ASHRAE Indoor Air, Commissioning and Refrigeration Guidelines
- **ASHRAE 90.1 2013**

All air balancing shall be provided by an independent certified balancing subcontractor to the mechanical contractor. All water balancing shall be handled by the same subcontractor.

HVAC System Performance Criteria

ASHRAE: Based on Charlotte, NC Design Conditions

Summer (1.0%) 2013 ASHRAE 91°F db 74°F wb **Outdoor Weather**

21°F db (9.8°F 5 year low) Winter (99.6%) 2010 ASHRAE

Heating-degree-days (65): 3341 Cooling-degree-days (50): 4704

Elevation: Approximately 700 Ft above sea level

Indoor Performance

Seasonal Criteria	DB Degrees F	WB Degrees F
Inside Summer – Telecom Rooms	76 – 78 <u>+</u> 2F	50% RH <u>+</u> 5% RH Max
Inside Summer – Office / Common Areas	74 – 76 <u>+</u> 2F	50% RH ± 5% RH Max

1

Pineville Town Hall and Library Pineville, North Carolina

Inside Winter – Office / Common Areas	70 – 74 <u>+</u> 2F	No added humidity
Inside Summer – Conference and Meeting Rooms	74 – 76 <u>+</u> 2F	50% RH <u>+</u> 5% RH Max
Inside Winter - Conference and Meeting Rooms	70 – 74 <u>+</u> 2F	No added humidity
Inside Summer - Future Library Spaces	74 – 76 <u>+</u> 2F	50% RH ± 5% RH Max
Inside Winter – Future Library spaces	70 – 74 <u>+</u> 2F	No added humidity
Inside Summer – Primary Mech/Elec	+5F above outside ambient	
Inside Winter - Primary Mech/Elec	50F ± 5F	

Internal Conditions

People Based on net 180 SF/Person

Lighting 0.75 W/SF based on the whole building method
Plug Loads Cooling capacity for 0.6 W/SF average in the building

Building Construction Two Floors – 44,000 SF total

Roof Masonry above deck, Insulation R-25/U-0.048 min per

ASHRAE 90.1-2013

Walls Concrete block with insulation and face brick R-9.5 ci.min per

ASHRAE 90.1-2013

Glass SHGC = 0.27, U-0.45 (assembly with frame) + Overhangs

Special Loadings for Cooling Consideration

People High Density Meeting Rooms and Dias Areas

Ventilation Based on ASHRAE standard 62-2013 requirements

Server Room Cooling for 50W/SF of heat rejection in the Server Room.

Energy Objectives

NC 2018 Energy Code compliance. Exceed ASHRAE

Codes and Standards ASHRAE 90.1-2013 (Required by NC 2015 Energy Code)

Meet or exceed ASHRAE 90.1-2013

Pineville Town Hall and Library Pineville, North Carolina

ASHRAE 62-2013 NCBC-2018

HVAC Design Narrative

General

The first floor library space base bid will include vertical ductwork and 8 electric unit heaters only. The fit out of the library space and rooftop equipment as shown on plans, is considered a separate cost.

The primary building mechanical systems will be determined on energy goals as well as life cycle costs to be completed during the next phase of design:

Per discussions, we expect that the building mechanical system will be one of the following in order of Option No 1 and Option No 2 with associated energy use details previously provided.

- 1) Option No. 1 Rooftop Dx/Gas Packaged Air Handling Equipment with Electric Heat and SCR control of heating.
- 2) Option No. 2 Rooftop Dx Packaged Air Handling Equipment with Hot Water Reheat for better comfort control.

The following is a summary of each system in terms of major components:

System Option No 1: Rooftop Packaged Dx/gas VAV Air Handling Units and Variable Air Volume Airside equipment with Electric Reheat in each VAV Terminal unit.

Option No 1 includes two rooftop Dx units, sized at a nominal 50 tons. Each unit will be placed on seismic spring isolation curb. Gas heat will be utilized for morning warm up and discharge air control in low ambient conditions.

System Option No 2: Rooftop Packaged Dx VAV Air Handling Units and Hot Water Boiler System with Variable Air Volume Airside equipment.

The above listed listed system is similar in size and approach to System Option #1, except that the primary heating source will be hot water in each VAV terminal unit. The hot water system is viewed as providing better comfort control and lower long term life cycle costs over electric reheat.

Telecom or IT Closets:

These areas will be provided with dedicated 24/7 refrigerant based cooling systems.

Test and Balance:

Pineville Town Hall and Library Pineville, North Carolina

> The air and water systems will be balanced by a single independent NEBB or AABC test and balance firm as a subcontractor to the mechanical contractor.

Life Safety Systems:

Safety features include:

- Fire dampers will be provided in the supply, return and exhaust ductwork at each floor as well as any other wall openings designated through a 1, 2 hour or higher firewall.
- Interlock with smoke detection devices to shutdown air handling systems in the event of smoke to prevent spreading.

Special Systems Considerations

Outside Air: The outside air requirements for each space will be determined based on the outside air requirements outlined in ASHRAE Standard 62-2013. The Ventilation Rate Procedure described in this standard will be implemented. Critical zone minimum flows will be adjusted as necessary to avoid unreasonably high outside air ratio requirements.

Thermal Comfort

Design Conditions:

Clothing Level (assumed):

0.3 - 0.7 clo Units

Metabolic Rate

1-1.3 Met Units in Office/Meeting areas

≤ 5.4F from floor to 5'-10"AFF

Temperature Stratification

Max Operative Temp Variation:

Max Draft Temperatures

≤ 5.4F from floor to 5'-10

+/- 2F within 15 minutes

< 4F within 1 hour period

Max Draft Temperatures

< 4F within 1 hour period

Areas of the building that are outside the scope of compliance with this above listed criteria are as follows:

- Exit corridors (non-conditioned)
- Vestibules for entry and exit (uncontrolled infiltration)
- Telecom Server Rooms or equipment spaces.

HVAC system has limitations for the above control when:

- Temperature outside exceeds the design conditions
- Temperature outside drops below the design conditions

It is expected that the humidity range of the building will be maintained within the normal operation of the HVAC system during summer hours but is less predictable during winter heating periods.

Pineville Town Hall and Library Pineville, North Carolina

Comfort System Description

The system uses multiple zones of temperature control for current and future flexibility. Set points have limited ranges of adjustment to conform to maximum/minimum limits for Figure 5.2.1.1 of the 55-2010 Standard. Temperature control will be monitored by wall mounted sensors (adjustable) and mounted at 42" AFF per local handicap codes. All temperature control ranges are also adjustable from the BMS. It is expected that for areas shared by large volumes of people, set points will continue to be locked. Private offices and conference rooms will have larger user controlled temperature ranges for personal preference. Individual offices and conference rooms over 150 SF will be provided individual terminal units and control. Because the building internal latent loads are occupancy driven, and all areas served by any individual air handling unit are predominately open with a common RA plenum; the building spaces will not maintain different moisture contents and VAV coil dehumidification and minimum VAV flow will maintain the humidity range for the building.

Sensing Points for Temperature — Individual Zone Sensor, Individual AHU RA Sensor Sensing Point for Humidity Individual Unit RA Humidity Sensor Sensing Point for Carbon Dioxide - Individual Zone Sensor (areas with over 40ppl/1000 SF) Individual Unit CO₂ Sensor for general outside air control of non-critical spaces.

This design will meet the design requirements with the following in mind:

- It will have sufficient zones for occupant adjustment based on common use areas
- . It will allow adjustment for personal taste in private areas to maximize user satisfaction
- . It will have the capability to lock set points in higher occupancy shared environments to minimize conflicts
- . Building computer model calculations will be used to confirm acceptable temperature and humidity levels within the requirements for each zone and floor
- It will be monitored/alarmed for performance by the BMS system by trend values.

Outdoor Air Delivery Monitoring

Design Description

The air handling unit for this building will have an air flow monitoring station on the outside air intake and the relief air duct for each air handling unit to ensure that the required minimum outside air is provided.

The value of this design is:

It will integrate the ventilation requirements into the building exhaust and air pressurization balance by adjusting the building relief volumes as appropriate to the outside air levels.

Pineville Town Hall and Library Pineville, North Carolina

The outside air level will be monitored/alarmed for performance by the BMS system by AO CFM and damper position. The outside air levels will be allowed to rise during economizer mode, but will not be allowed to fall below the minimum requirement.

Special Exhaust - Indoor Pollutant Control

Design Description

The relief air exhaust can be extended to provide the minimum condition of 0.5 cfm/sf flow and .03" negative pressure at rooms designated for enclosed janitor rooms. Each unit will be equipped with MERV 13 filters at the completion of construction.

Measurement and Verification System Base (End-Use Metering)

Design Description

Measurement and verification will be provided. Permanent monitoring of space carbon dioxide and power consumed will be accomplished through the reporting function of the DDC system. Trend information will be archived on the desktop computer for review on a weekly or daily basis as required.

Energy data will be collected via modbus breakers

- . All lights and receptacles
- . All VAV zones
- . All air handling units
- . All lighting (building total)
- . All receptacles (building total)
- . All emergency power (including elevator)
- Parking lot main circuit feed from building panel

Additional monitoring for the following from the DDC

- Variable frequency drives on each pump
- Exhaust fans
- Chillers
- Boilers

The metered information can be used to optimize energy consumption and reduce expenditure.

Optimized Energy - HVAC

Significant decreases in energy use for the HVAC system will be considered as follows:

Pumping Energy: The design provides for variable speed pumping on CHW and HW. Pumping is pressure controlled based on the positions of the coil valves. The chilled water system will be primary variable. The HW system will be primary/secondary.

Pineville Town Hall and Library Pineville, North Carolina

- Variable Air Volume System: The ASRHAE 90.1 Appendix G base building fan system for a building of this size utilizes variable volume air system with hot water reheat. We are proposing a variable volume chilled water / HW based system with multiple air handling units and zones. This will save energy by reducing cooling costs during off-peak seasons. This reduces both fan energy and cooling/reheat energy. Cooling is provided by air-cooled chillers and HW by a boiler.
- Fan Energy: Critical zone pressure reset is used for fan energy minimization. Discharge air reset based on outside air is also used.
- Economizer: An air side economizer exceeding the 90.1 requirement for this climate zone is designed for the proposed building.
- Demand Control Ventilation: Demand control ventilation will be used in areas with occupant driven outside air requirements to reduce outside air flow, heating and cooling during periods of low occupancy
- NEMA defined Premium efficiency motors for pumps and AHUs exceed the requirement by the Energy Policy Act of 1992 (EPACT) an average of 94% compared to 91%.
- . Lighting Controls: The overall lighting energy usage will be reduced through the use of occupancy sensors where appropriate.

The energy savings achieved by the features described above will be calculated using a whole building energy analysis comparing the design building to a base building in the Trane Trace 700 energy modeling program. The overall objective will be an improvement over the minimum requirements of ASHRAE 90.1-2013.

End

Economic Summary

Project Information

Location Project Name Company

Comments

Pineville NC Pineville Town Hall

MSR **CMTA**

25 years 10 % Study Life: Cost of Capital:

Package DX RTU w/Elec Reheat Dx RTU with HW Reheat Alternative 1:

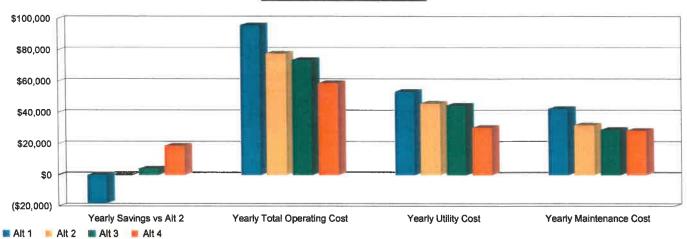
Alternative 2:

Alternative 3: 4-Pipe System Alternative 4: Geothermal

Economic Comparison of Alternatives

	Yearly Savings (\$)	First Cost Difference (\$)	Cumulative Cash Flow Difference (\$)	Simple Payback (yrs.)	Net Present Value (\$)	Life Cycle Payback (yrs.)	Internal Rate of Return (%)	Life Cycle Cost Difference
Alt 2 vs Alt 1	18,064	215,000	561,897	11.9	16,536	21.6	10.8	16,535.75
Alt 3 vs Alt 1	22,203	460,000	916,677	20.7	-74,687	No Payback	8.4	-74,686.50
Alt 4 vs Alt 1	36,902	750,000	1,169,126	20.3	-193,991	No Payback	7.2	-193,990.50
Alt 3 vs Alt 2	4,139	245,000	354,780	59.2	-91,222	No Payback	6.3	-91,222.24
Alt 4 vs Alt 2	18,838	535,000	607,229	28.4	-210,526	No Payback	5.6	-210,526.30
Alt 4 vs Alt 3	14,699	290,000	252,449	19.7	-119,304	No Payback	4.8	-119,304.00

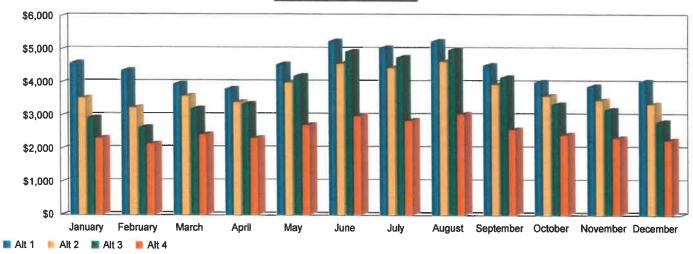
Annual Operating Costs



	Yearly Savings vs Alt 2	Yearly Total Operating Cost (\$)	Yearly Utility Cost (\$)	Yearly Maintenance Cost (\$)	Plant kWh/ton-hr
Alt 1	-18,064	95,920	53,420	42,500	0.858
Alt 2	0	77,856	45,856	32,000	0.517
Alt 3	4,139	73,717	44,637	29,080	0.951
Alt 4	18,838	59,018	30,518	28,500	0.387

Project Name: Pineville Town Hall Dataset Name: 219090 TRC jc.TRC

Monthly Utility Costs



Project Name: Pineville Town Hall
Dataset Name: 219090 TRC jc.TRC

By CMTA/ML

Alternative 2 vs Alternative 1

First Cost Difference	215,000.00
Down Payment Difference	215,000.00
Net Present Value of Incremental Cash Flows	16,535.75
Life Cycle Cost Difference	16,535.75
Revenue Penalty Difference	0.00
Simple Payback on Investment	11.9 years
Life Cycle Payback on Investment	21.6 years
Internal Rate of Return	10.8 %
Cost of capital (%)	10.0

Year	Cash Flow Difference	Cumulative Cash Flow Difference	Present Value of Flow Difference	Net Present Value	
0	-215,000.00	-215,000.00	-215,000.00	-215,000.00	
1	18,063.60	-196,936.40	16,421.45	-198,578.55	
2	18,815.51	-178,120.90	15,550.00	-183.028.54	
3	19,600.47	-158,520.43	14,726.12	-168,302,42	
4	20,420.01	-138,100.42	13,947.14	-154,355.28	
5	21,275.71	-116,824.71	13,210.54	-141,144.74	
6	22,169.24	-94,655.47	12,513.95	-128,630.79	
7	23,102,33	-71,553.14	11,855.15	-116,775.64	
8	24,076.82	-47,476.32	11,232.01	-105,543.63	
9	25,094.61	-22,381.71	10,642.56	-94,901.06	
10	26,157.72	3,776.01	10,084.93	-84,816.13	
11	27,268.23	31,044.24	9,557.34	-75,258.79	
12	28,428.34	59,472.58	9,058.14	-66,200.65	
13	29,640.36	89,112.94	8,585.75	-57,614.89	
14	30,906.70	120,019.64	8,138.70	-49,476.20	
15	32,229.89	152,249.52	7,715.58	-41,760.62	
16	33,612.56	185,862.09	7,315.07	-34,445.55	
17	35,057.52	220,919.60	6,935.94	-27,509.61	
18	36,567.64	257,487.24	6,577.01	-20,932.60	
19	38,145.99	295,633.24	6,237.17	-14,695.43	
20	39,795.76	335,429.00	5,915.38	-8,780.05	
21	41,520.29	376,949.29	5,610.66	-3,169.39	
22	43,323.09	420,272.38	5,322.06	2,152.68	
23	45,207.83	465,480.21	5,048.72	7,201.40	
24	47,178.37	512,658.58	4,789.81	11,991.21	
25	49,238.74	561,897.32	4,544.54	16,535.75	

Project Name: Dataset Name:

By CMTA/ML

Alternative 3 vs Alternative 1

460,000.00 460,000.00 First Cost Difference Down Payment Difference Net Present Value of Incremental Cash Flows -74,686.50 -74,686.50 Life Cycle Cost Difference Revenue Penalty Difference 0.00 Simple Payback on Investment 20.7 years Life Cycle Payback on Investment Does not pay back Internal Rate of Return 8.4 % Cost of capital (%) 10.0

Year	Cash Flow Difference	Cumulative Cash Flow Difference	Present Value of Flow Difference	Net Present Value	
0	-460,000.00	-460,000.00	-460,000.00	-460,000.00	
1	22,202.90	-437,797.10	20,184.46	-439,815.54	
2	23,137.39	-414,659.71	19,121.81	-420,693.73	
3	24,113.33	-390,546.37	18,116.70	-402,577.03	
4	25,132.64	-365,413.73	17,165.93	-385,411.10	
5	26,197.33	-339,216.41	16,266.48	-369,144.62	
6	27,309.49	-311,906.92	15,415.49	-353,729.13	
7	28,471.32	-283,435.60	14,610.29	-339,118.84	
8	29,685.14	-253,750.45	13,848.34	-325,270.51	
9	30,953.36	-222,797.09	13,127.24	-312,143.26	
10	32,278.51	-190,518.58	12,444.76	-299,698.50	
11	33,663.24	-156,855.34	11,798.76	-287,899.74	
12	35,110.33	-121,745.01	11,187.23	-276,712.51	
13	36,622.69	-85,122.31	10,608.29	-266,104.23	
14	38,203.38	-46,918.93	10,060.14	-256,044.09	
15	455,817.70	408,898.77	109,119.10	-146,924.98	
16	41,582.67	450,481.44	9,049.60	-137,875.39	
17	43,388.13	493,869.57	8,584.11	-129,291.28	
18	45,275.66	539,145.23	8,143.22	-121,148.06	
19	47,249.10	586,394.33	7,725.60	-113,422.46	
20	49,312.51	635,706.84	7,329.99	-106,092.47	
21	51,470.11	687,176.95	6,955.18	-99,137.29	
22	53,726.36	740,903.31	6,600.06	-92,537.23	
23	56,085.90	796,989.21	6,263.57	-86,273.66	
24	58,553.61	855,542.82	5,944.69	-80,328.97	
25	61,134.61	916,677.44	5,642.48	-74,686.50	

Project Name: Dataset Name:

By CMTA/ML

Alternative 3 vs Alternative 2

245,000.00 First Cost Difference 245,000.00 Down Payment Difference Net Present Value of Incremental Cash Flows -91,222.24 Life Cycle Cost Difference -91,222.24 Revenue Penalty Difference 0.00 Simple Payback on Investment 59.2 years Life Cycle Payback on Investment Does not pay back Internal Rate of Return 6.3 % Cost of capital (%) 10.0

Year	Cash Flow Difference	Cumulative Cash Flow Difference	Present Value of Flow Difference	Net Present Value	
0	-245,000.00	-245,000.00	-245,000.00	-245,000.00	
1	4,139.31	-240,860.69	3,763.01	-241,236.99	
2	4,321.88	-236,538.81	3,571.81	-237,665.19	
3	4,512.86	-232,025.95	3,390.58	-234,274.61	
4	4,712.63	-227,313.32	3,218.79	-231,055.82	
5	4,921.62	-222,391.70	3,055.94	-227,999.88	
6	5,140.25	-217,251.45	2,901.54	-225,098.34	
7	5,368.99	-211,882.45	2,755.14	-222,343.20	
8	5,608.32	-206,274.13	2,616.32	-219,726.88	
9	5,858.75	-200,415.38	2,484.68	-217,242.20	
10	6,120.79	-194,294.59	2,359.83	-214,882.37	
11	6,395.01	-187,899.57	2,241.41	-212,640.95	
12	6,681.99	-181,217.58	2,129.09	-210,511.87	
13	6,982.34	-174,235.25	2,022.53	-208,489.33	
14	7,296.68	-166,938.56	1,921.44	-206,567.89	
15	423,587.81	256,649.25	101,403.52	-105,164.37	
16	7,970.10	264,619.35	1,734.53	-103,429.84	
17	8,330.62	272,949.97	1,648.17	-101,781.67	
18	8,708.01	281,657:98	1,566.21	-100,215.46	
19	9,103.11	290,761.09	1,488.43	-98,727.03	
20	9,516.75	300,277.84	1,414.60	-97,312.43	
21	9,949.82	310,227.66	1,344.52	-95,967.90	
22	10,403.27	320,630.93	1,278.00	-94,689.90	
23	10,878.07	331,508.99	1,214.84	-93,475.06	
24	11,375.24	342,884.24	1,154.88	-92,320.18	
25	11,895.88	354,780.11	1,097.94	-91,222.24	

By CMTA/ML

Alternative 4 vs Alternative 1

750,000.00 First Cost Difference 750,000.00 Down Payment Difference Net Present Value of Incremental Cash Flows -193,990.53 -193,990.53 Life Cycle Cost Difference Revenue Penalty Difference Simple Payback on Investment 20.3 years Life Cycle Payback on Investment Does not pay back Internal Rate of Return 7.2 % Cost of capital (%) 10.0

Year	Cash Flow Difference	Cumulative Cash Flow Difference	Present Value of Flow Difference	Net Present Value	
0	-750,000.00	-750,000.00	-750,000.00	-750,000.00	
1	36,901.87	-713,098.13	33,547.15	-716,452.85	
2	38,288.92	-674,809.21	31,643.73	-684,809.12	
3	39,731.59	-635,077.63	29,850.93	-654,958.19	
4	41,232.23	-593,845.39	28,162.17	-626,796.02	
5	42,793.33	-551,052.06	26,571.29	-600,224.73	
6	44,417.47	-506,634.58	25,072.50	-575,152.22	
7	46,107.36	-460,527.23	23,660.36	-551,491.86	
8	47,865.80	-412,661.43	22,329.75	-529,162.12	
9	49,695.76	-362,965.66	21,075.85	-508,086.27	
10	51,600.32	-311,365.34	19,894.15	-488,192.12	
11	53,582.70	-257,782.64	18,780.40	-469,411.71	
12	55,646.27	-202,136.37	17,730.61	-451,681.10	
13	57,794.55	-144,341.82	16,741.02	-434,940.08	
14	60,031.23	-84,310.59	15,808.09	-419,131.99	
15	478,322.25	394,011.66	114,506.51	-304,625.48	
16	64,785.32	458,796.99	14,099.17	-290,526.31	
17	67,310.98	526,107.97	13,317.11	-277,209.20	
18	69,941.51	596,049.48	12,579.59	-264,629.61	
19	72,681.52	668,731.01	11,884.00	-252,745.60	
20	75,535.82	744,266.83	11,227.91	-241,517.69	
21	78,509.43	822,776.26	10,609.02	-230,908.67	
22	81,607.64	904,383.90	10,025.16	-220,883.50	
23	84,835.93	989,219.83	9,474.32	-211,409.19	
24	88,200.08	1,077,419.91	8,954.56	-202,454.63	
25	91,706.11	1,169,126.02	8,464.10	-193,990.53	

By CMTA/ML

10.0

Alternative 4 vs Alternative 2

Cost of capital (%)

 First Cost Difference
 535,000.00

 Down Payment Difference
 535,000.00

 Net Present Value of Incremental Cash Flows
 -210,526.27

 Life Cycle Cost Difference
 -210,526.27

 Revenue Penalty Difference
 0.00

 Simple Payback on Investment
 28.4 years

 Life Cycle Payback on Investment
 Does not pay back

 Internal Rate of Return
 5.6 %

0 -535,000.00 -537,843.00 -537,843.00 -537,843.00 -537,844.07 -886,655,77 -886,655,77 -886,655,77 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,655,79 -886,656,656,656,656,656,656,656,656,656,	
1 18,838.27 -516,161.73 17,125.70 -517,874.30 2 19,473.41 -496,688.32 16,093.73 -501,780.57 3 20,131.12 -476,557.20 15,124.81 -486,655.77 4 20,812.22 -455,744.98 14,215.03 -472,440.74 5 21,517.63 -434,227.35 13,360.75 -459,079.99 6 22,248.24 -411,979.11 12,558.55 -446,521.44 7 23,005.03 -388,974.09 11,805.21 -434,716.22 8 23,788.98 -365,185.10 11,097.73 -423,618.49 9 24,601.15 -340,583.96 10,433.29 -413,185.20 10 25,442.60 -315,141.35 9,809.22 -403,375.98 11 26,314.48 -288,86.88 9,223.06 -394,152.92 12 27,217.93 -261,608.95 8,672.47 -385,480.45 13 28,154.19 -233,454.75 8,155.26 -377,325.19 14 29,124.53 -204,330.23 7,669.40 -369,655.79 15 446,092.37 241,762.14 </td <td></td>	
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13 28,154.19 -233,454.75 8,155.26 -377,325.19 14 29,124.53 -204,330.23 7,669.40 -369,655.79 15 446,092.37 241,762.14 106,790.93 -262,864.86 16 31,172.76 272,934.90 6,784.10 -256,080.76 17 32,253.47 305,188.37 6,381.17 -249,699.59 18 33,373.87 338,562.24 6,002.58 -243,697.00 19 34,535.53 373,097.77 5,646.83 -238,050.17	
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15 446,092.37 241,762.14 106,790.93 -262,864.86 16 31,172.76 272,934.90 6,784.10 -255,080.76 17 32,253.47 305,188.37 6,381.17 -249,699.59 18 33,373.87 338,562.24 6,002.58 -243,697.00 19 34,535.53 373,097.77 5,646.83 -238,050.17	
16 31,172.76 272,934.90 6,784.10 -256,080.76 17 32,253.47 305,188.37 6,381.17 -249,699.59 18 33,373.87 338,562.24 6,002.58 -243,697.00 19 34,535.53 373,097.77 5,646.83 -238,050.17	
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18 33,373.87 338,562.24 6,002.58 -243,697.00 19 34,535.53 373,097.77 5,646.83 -238,050.17	
19 34,535.53 373,097.77 5,646.83 -238,050.17	
20 25 740 06 409 927 92 5 240 50 200 707 04	
202,101,04	
21 36,989.14 445,826.97 4,998.36 -227,739.28	
22 38,284.55 484,111.52 4,703.10 -223,036.18	
23 39,628.10 523,739.62 4,425.59 -218,610.59	
24 41,021.71 564,761.33 4,164.75 -214,445.84	
25 42,467.37 607,228.70 3,919.57 -210,526.27	

Project Name: Dataset Name:

By CMTA/ML

Alternative 4 vs Alternative 3

First Cost Difference 290,000.00 290,000.00 Down Payment Difference -119,304.03 Net Present Value of incremental Cash Flows Life Cycle Cost Difference -119,304.03 Revenue Penalty Difference 0.00 Simple Payback on Investment 19.7 years Life Cycle Payback on Investment Does not pay back Internal Rate of Return 4.8 % Cost of capital (%) 10.0

Year	Cash Flow Difference	Cumulative Cash Flow Difference	Present Value of Flow Difference	Net Present Value	
0	-290,000.00	-290,000.00	-290,000.00	-290,000.00	
1	14,698.96	-275,301.04	13,362.69	-276,637.31	
2	15,151.53	-260,149.51	12,521.93	-264,115.38	
3	15,618.26	-244,531.25	11,734.23	-252,381.16	
4	16,099.59	-228,431.66	10,996.24	-241,384.92	
5	16,596.01	-211,835.65	10,304.81	-231,080.11	
6	17,107.99	-194,727.66	9,657.01	-221,423.09	
7	17,636.03	-177,091.63	9,050.07	-212,373.02	
8	18,180.66	-158,910.97	8,481.41	-203,891.61	
9	18,742.40	-140,168.57	7,948.61	-195,943.01	
10	19,321.81	-120,846.76	7,449.39	-188,493.61	
11	19,919.46	-100,927.30	6,981.65	-181,511.97	
12	20,535.94	-80,391.36	6,543.38	-174,968.58	
13	21,171.86	-59,219.51	6,132.73	-168,835.85	
14	21,827.84	-37,391.66	5,747.95	-163,087.90	
15	22,504.55	-14,887.11	5,387.41	-157,700.49	
16	23,202.66	8,315.55	5,049.57	-152,650,92	
17	23,922.85	32,238.40	4,733.01	-147,917.91	
18	24,665.86	56,904.26	4,436.37	-143,481.54	
19	25,432.42	82,336.68	4,158.40	-139,323.14	
20	26,223.31	108,559.99	3,897.93	-135,425.22	
21	27,039.32	135,599.31	3,653.84	-131,771.38	
22	27,881.28	163,480.59	3,425.10	-128,346.28	
23	28,750.04	192,230.63	3,210.75	-125,135.53	
24	29,646.47	221,877.09	3,009.87	-122,125.66	
25	30,571.49	252,448.59	2,821.62	-119,304.03	

Project Name: Dataset Name:

MONTHLY ENERGY CONSUMPTION

By CMTA/ML

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Apr	
<u>S</u>	Мог
.lune	Monthly Energy Consumption
July V	/ Consump
Aug	tion
Sept	
O C C	
Nov V	
Dec	

Building 48,009 Btu/(ft2-year) Source 144,041 Btu/(ft2-year)	Energy Consumption	Electric On-Pk Cons. (kWh) 45,880 41,714 41,911 On-Pk Demand (kW) 200 207 150	Alternative: 1 Package DX RTU w/Elec Reheat	Utility Jan Feb Mar
CO2 SO2 NOX		37,721 167	c Reheat	Apr
	Environmental Impact Analysis	46,466 189		May
672,491 lbm/year 3,297 gm/year 576 gm/year	ntal Impact	54,559 213		June
'year ear ar	Analysis	52,235 207		July
		55,432 205		Aug
		45,713 193		Sept
		42,040 157		Oct
		40,331 155		Nov
		40,538 173		Dec
		544,541 213		Total

Alternative: 2	9: 2	Dx R	Dx RTU with HW Reheat	W Reheat									
Electric	On-Pk Cons. (kWh)	37,165	33,571	41,165	39,441	47,286	54,256	52,455	55,682	46,222	41,754	39,535	36,308
	On-Pk Demand (kW)	150	139	156	175	203	238	235	230	209	162	162	151
Gas													
0	On-Pk Cons. (therms)	659	639	317	88	48	33	39	38	50	231	253	470
On-Pt	On-Pk Demand (therms/hr)	9	9	ប	N	0	0	0	0	0	4	4	7
	Energy Consumption	ption		2	ш	nvironmer	Environmental Impact Analysis	Analysis					
Building	53,673	53,673 Btu/(ft2-year)	ar)		200		648,162 lbm/year	year					
Source	146,620	146,620 Btu/(ft2-year)	ar)		SO2 NOX	X 10	3,178 gm/year 555 gm/year	er er					
Floor Area	38,712 ft2	75											

MONTHLY ENERGY CONSUMPTION

By CMTA/ML

Total	Dec	Nov	Oct	Sept	Aug	July	June	May	Apr	Mar	Feb	Jan	<
				ı	ption	y Consum	Monthly Energy Consumption	Mor					

Floor Area	Building Source		0	Gas		Electric	Alternative: 3	Utility
Area 38,712 ft2		Energy Consumption	On-Pk Demand (therms/hr)	On By Cone (therms)	On-Pk Demand (kW)	On-Pk Cons (kWh)	tive: 3	
Ŕ	49,990 Btu/(ft2-year) 139,793 Btu/(ft2-year)	ption	4	445	146	30 392	4-Pip	Jan
	ar) ar)		с ъ	411	126	27 443	4-Pipe System	Feb
			ω !	214	163	35.887		Mar
	CO2 SO2 NOX		<u> -</u> ;	86	199	37.402		Apr
	ž Ñ Ñ	nvironmer	0	40	226	49,218		May
	626,943 lbm/year 3,074 gm/year 537 gm/year	Environmental Impact Analysis	0	21	249	59,304		June
	/year ear ear	Analysis	0	26	244	56,980		July
			0	27	241	60,588		Aug
			0	41	225	48,657		Sept
			N	186	182	37,259		Oct
			ω	199	176	34,873		Nov
			4	330	148	29,653		Dec
			ហ	2,026	249	507,658		Total