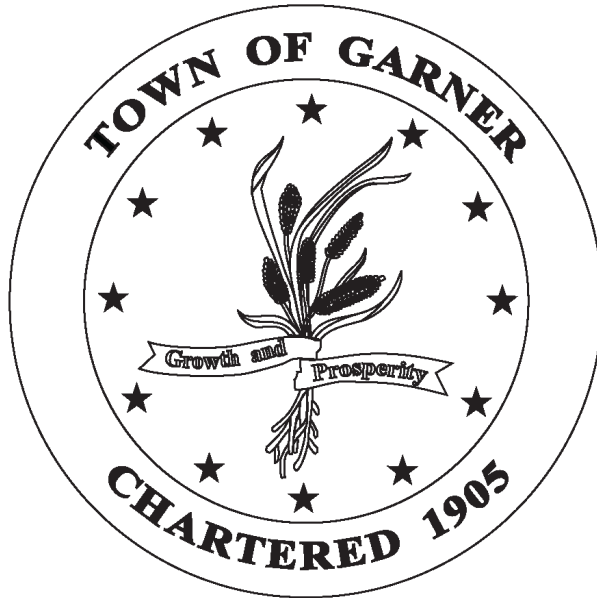


TOWN OF GARNER



Town Council Work Session

October 27, 2020
6:00 p.m.

Garner Town Hall
900 7th Avenue
Garner, NC 27529

**Town of Garner
Work Session Agenda
October 27, 2020**

The Council will meet in a Work Session at 6:00 p.m. in the Council Chambers located at 900 7th Avenue.

A. CALL MEETING TO ORDER/ROLL CALL: Mayor Ken Marshburn

B. ADOPTION OF AGENDA

C. PRESENTATIONS

1. Introduction of new Planning staff.....Page 3

D. DISCUSSION/REPORTS

1. Public Works Space Needs Assessment – Project Update.....Page 4
Presenter: Matt Roylance, Assistant Town Manager and
Forrest Jones, Public Works Director

Staff and the consultant, IBI Group, will present an interim report summarizing their initial findings after completing two of the five project phases.

Action: Provide feedback to staff on interim report and whether to proceed with the rest of the study

2. CIP and Bond Update.....Page 82
Presenter: Mike Franks, Budget & Special Projects Manager

Davenport and staff will provide an update on the Town's CIP in preparation for the November 2021 bond referendum.

Action: No action required

3. UDO-20-03, Residential Solar Panels.....Page 109
Presenter: Reginald Buie, Senior Planner, Zoning and Land Use

Text amendment request (UDO-20-03) submitted by Douglas Kuhns, of 2903 Dunhaven Drive, to amend Article 5. Use Regulations K.3 (3) of the Unified Development Ordinance to allow ground-mounted solar systems on residential properties.

Action: Consider setting public hearing for November 17, 2020

- 4. UDO-20-04, Telecom Towers - Setback Radius.....Page 117
Presenter: Reginald Buie, Senior Planner, Zoning and Land Use

Text amendment request (UDO-20-04) submitted by Cello Partnership, Verizon Wireless through Faulk & Faulk to amend Article 5. Use Regulations B. 8 (c) 7. of the UDO to reduce the fall-zone setback requirements for certain telecommunications towers engineered to have a breakpoint.

Action: Consider setting public hearing for November 17, 2020

- 5. UDO-20-05, Townhomes in the CBD.....Page 130
Jeff Triezenberg, Planning Director

Text amendment request (UDO-20-05) submitted by the Planning Department in conjunction with the Downtown Garner Association to amend Article 6.5 and related sections to permit alternative form standards for townhomes in the Central Business District (CBD).

Action: Consider setting public hearing for November 17, 2020

- 6. November Pending Agenda.....Page 132
Presenter: Rodney Dickerson, Town Manager

The pending agenda items for the November Council Meetings and Work Session are provided for review and discussion.

Action: Receive as information

- E. MANAGER REPORTS
 - 1. BRT LPA Update

- F. COUNCIL REPORTS

- G. ADJOURN

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|--|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: Introduction of New Planning Staff | | |
| Location on Agenda: Discussion | | |
| Department: Administration | | |
| Contact: John Hodges-Asst. Town Manager-Development Services | | |
| Presenter: John Hodges-Asst. Town Manager-Development Services | | |
| Brief Summary: Mr. Hodges will introduce the new Planning Department staff. | | |
| Recommended Motion and/or Requested Action: no action required | | |
| Detailed Notes: | | |
| Funding Source: | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input type="radio"/> No: <input checked="" type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | JH | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|--|---------------------------------|--|
| Meeting Date: October 27, 2020 | | |
| Subject: Public Works Space Needs Assessment – Project Update | | |
| Location on Agenda: Reports | | |
| Department: Administration | | |
| Contact: Matt Roylance, Assistant Town Manager | | |
| Presenter: Matt Roylance, Assistant Town Manager and Forrest Jones, Public Works Director | | |
| Brief Summary: <p>Staff and the consultant, IBI Group, will present an interim report summarizing their initial findings after completing two of the five project phases.</p> | | |
| Recommended Motion and/or Requested Action: <p>Provide feedback to staff on interim report and whether to proceed with the rest of the study</p> | | |
| Detailed Notes: <p>Staff has been working with a consultant to assess the future space needs for the Public Works Department, general file storage to replace Pearl Street, and Police large evidence storage needs. Although a full study was approved and funded, at the beginning of the project financial conditions were uncertain and staff directed the consultant to only complete the first two of five phases of the work. This interim report summarizes the work from the first two phases and provides some very preliminary information that Council can use when discussing upcoming bond projects.</p> | | |
| Funding Source: Previously funded | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | MR | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |



Town of Garner, North Carolina

Space Needs Assessment

Interim Report



Prepared for Town of Garner, North Carolina
by IBI Group
and WithersRavenel
October 20, 2020

Acknowledgements

| | |
|------------------|--|
| MATTHEW ROYLANCE | Assistant Town Manager Town of Garner, North Carolina |
| FORREST JONES | Public Works Director Town of Garner, North Carolina |
| TYSON LAGDON | Assistant Public Works Director |
| MARK HALE | Facilities Manager |
| WOODY DANIEL | Fleet Supervisor |
| DEREK WALSH | Parks & Grounds Superintendent |
| JONATHAN CREECH | Parks & Grounds Supervisor |
| LT. WALTER MYER | Police Department |
| MARIA HERRERA | Police Quartermaster |
| STELLA GIBSON | Town Clerk |
| WITHERS RAVANEL | Keith Pugh, Jason Bertoncino |
| IBI GROUP | Mark Humienny, Johnny Caliendo and Ola Ferm |

Table of Contents

| | |
|----------|---|
| 1 | Executive Summary |
| 2 | Buildings and Facilities |
| 2.1 | Existing Public Works Operation Center |
| 2.2 | Pearl Street Building for Town Records Storage |
| 2.3 | Police Evidence Storage Building |
| 3 | Public Works Site Analysis |
| 3.1 | Site Access and Internal Circulation |
| 3.2 | Pavements |
| 3.3 | Vegetation |
| 3.4 | Impervious Surfaces |
| 3.5 | Surrounding Properties |
| 3.6 | Energy and Sustainability Opportunities |
| 4 | Recommendations & Next Steps |
| | |
| | Appendix A - Program of Space Needs for Year 2040 |
| | Appendix B – Public Works Operations Center Site |
| | Appendix C – Public Works Site Assessment Exhibit |
| | Appendix D – Public Works Site Recorded Map |
| | Appendix E – Facility Assessment Reports by EMG Corp./Dude Solutions |

1 Executive Summary

The Town of Garner has been serving its residents from its current Public Works operations center on Rand Mill Road since 1980, when the complex was initially constructed. Since that time, the Town has experienced phenomenal growth leading to a significant increase in both its service area and population. Ongoing annual population growth of 10% with accompanying service area increases severely limit this site's ability to continue serving this Town in its current form. To address this issue, Garner authorized a Space Needs Assessment to evaluate the Public Works Department's future space needs. The assessment was also to identify the Town's archival storage needs, as well as the needs for the Police Department's large evidence storage. The Design Team of IBI Group and WithersRavenel were retained for this assessment to determine these groups' building and property needs, evaluate the current Rand Mill Road site and make recommendations to accommodate the Town's growth through expansion or relocation.

For each of these three groups, the Design Team was asked to plan for the space needs through the year 2040 – a projection of twenty years. To determine space needs, IBI Group used a method known as Architectural Programming. This method combines staff interviews, facility reviews, and research of similar facilities to identify both quantitative and qualitative space characteristics. IBI also relied on its extensive experience designing similar maintenance and operations facilities to guide staff on their future projections. The resulting space needs document is referred to as the "Program", which is Appendix A of this report.

While each of these three groups fall under a different department, they share a significant space shortage, aging facilities, and resulting operational inefficiencies. Additionally, the Town's storage facility, the former Pearl Street fire station, is under a time constraint due to the potential reuse of the building for historical purposes. Another common link between these groups is that the Public Works complex houses some storage for both the Town Clerk and the Police department. The Police Department's large evidence storage facility is on the property behind Town Hall, within a wooden utility shed. These three facilities are not programmatically linked and may be redeveloped independently of one another.

Prior to the Space Needs Assessment, the Town commissioned a facility condition assessment to document the condition of these groups' buildings. The assessment generally concluded that these buildings have reached the end of their useful life and are now facing increasingly significant maintenance, repair and replacement costs. The majority of these buildings are nearly forty years old and were likely planned to only accommodate a twenty-year horizon.

The below table summarizes a comparison of the current facilities and staff with the Program requirements for the twenty-year projections. The table indicates a year 2040 need for a minimum 50% increase in the current acreage, as well as a significant increase in building square footage and staff count. To accommodate this growth both additional property and new buildings will be required. Though all figures are approximate, the acreage necessary to accommodate the future Public Works space needs is a minimum of 20 acres. To get by with the minimum acreage, the site would have to be of a regular shape with little slope and few encumbrances, such as easements, setbacks or wetlands. The less ideal the property, the more acreage would be required.

| PROGRAM | 2020 | 2040 |
|---|-------------|------------------|
| Public Works Building Area | 33,000 SF | 228,571 SF |
| Public Works Site Area | 12.9 acres | 20 acres minimum |
| Public Works Staff | 50 | 208 |
| Public Works Parking – Visitor & Staff | 50 | 236 |
| Town Records Storage Area | 2,800 | 10,433 |
| Police Building Storage Area | 1,442 | 2,915 |

WithersRavenel performed a detailed review of the existing property and its potential to accommodate future building and site expansion. This site analysis is summarized in Section 3.

The current operations center facilities and property are already straining to accommodate the staff and facilities needed to serve this All-American City. The current facilities are well short on staff meeting space, inventory storage and workshops. The property does not allow for adequate emergency operations, safe maneuvering of large vehicles, efficient adjacencies, or the environmental protection of vehicles and equipment. The vehicular access to the property is adequate, with one primary entrance and one secondary access, however both are off Rand Mill Road. Both access points traverse a water main line, which, in the event of pipe failure, could compromise operations. Direct access to a second thoroughfare, such as Benson Road, would be ideal.

The Town should explore the acquisition of a new 20-25-acre property for the development of entirely new operations center. Locating all divisions on the same site will increase operational efficiency and avoid duplication of facilities across multiple sites, thereby reducing ongoing costs. Key benefits of development a new property include avoiding obstruction of daily operations at the current site, and the potential re-development of its current site for other Town uses, or even a property sale to finance the new development cost.

Given the significant cost involved in the construction of a new operations center, an alternative approach would be the expansion of its current property through acquisition of adjoining land. New buildings could be constructed on the added property, followed by phased renovations of the existing structures. Such plan would require a detailed logistics plan for phasing in order to maintain operations. IBI Group and WithersRavenel have successfully created implemented such phased master plans for other agencies.

Section 4 outlines the Design Team’s recommendations and next steps to achieving sustainable facilities to serve the future needs of these three Town departments.

2 Buildings and Facilities

2.1 Existing Public Works Operation Center

The current Public Works operations center was constructed on the undeveloped property beginning in 1980 with Building A, the Administration building. Building B, the Fleet maintenance facility immediately followed. These were built as relatively sturdy structures with masonry walls and wood-framed roofs. A series of wooden and metal utility sheds were added to the site throughout the 1980's. The most recent addition, a metal shed for Police surveillance equipment, dates from 1991. The site also includes a small fuel station with underground gasoline and diesel storage tanks, a vehicle wash bay, and several outdoor material and equipment storage areas.

This site also houses some storage for the Police Department. They have both a vehicle impoundment lot and a Special Response Team utility shed, housing its Snoopy vehicle. Additionally, the Public Works campus keeps the Town's holiday decorations, parade float, and surplus furniture and equipment at this site. The campus' storage accommodations are over capacity and additionally strain public works daily operations.

The Public Works complex accommodates five divisions: Facilities, Parks and Grounds, Streets/Right of Way, Fleet Maintenance, and Solid Waste/Recycling. Fleet maintains all Town-owned vehicles, except for those of the fire department. All five divisions have both shared and dedicated facilities on this site.

The number of structures, vehicles, equipment and stored materials on this crowded site raises concern for personnel safety and equipment security. Among the most pressing operational needs is for meeting space for daily crew meetings, regular training and emergency operations. An increasing storm frequency requires dedicated emergency response space accompanied by on-site kitchen, showering, laundering and bunking facilities. The five divisions agree on sharing critical support spaces using staggered occupancies to increase space efficiency. Other critical shortages include central warehouse storage and workshops.

As is common with Public Works, this APWA-accredited department has been "making do" with its current accommodations. Fleet is running a surprisingly organized operation considering its space limitations. Among its limitations are vehicle bays that are far too small for a modern fleet. This is a common shortcoming of maintenance shops of this age. Over the last several decades, vehicles and equipment have continued to grow in size. The shop also has a compromised lubricant distribution system. Lacking a dedicated control room for such hazardous fluids, 55-gallon drums are situated alongside service bays. A more appropriate solution would be to store these bulk fluids in a fire-rated room, along with associated pumps and compressors. The current service bays are clean, organized and brightly lit, characteristics that conceal their cramped quarters. With little storage room for parts and tires, such items are stored across the yard in the Administration building's warehouse. Traversing between buildings for everyday items decreases operational efficiency, leading to increased cost.

The current Fleet shop has no expansion capability. A vehicle wash bay was added to the south side of the Fleet shop. This addition has severely compromised large vehicle maneuverability around the shop. On the north side of the shop is the fuel station. Its proximity to the main security gate limits vehicle staging for fueling, potentially creating a log jam at a critical access point. Moving both fueling and washing operations to a perimeter area would free up this central entrance and circulation area.

The Facilities Department indicates that it's currently short on both staff and workshop space. Facilities also is very short on tool and equipment storage spaces. New repair shops for carpentry, electrical and plumbing and HVAC would bring relief to the constricted, unconditioned sheds in which it currently operates. Currently, janitorial services are handled through an outside vendor. Facilities projects this service may be brought into the Town in the future, requiring additional staff and storage space.

Streets/ROW, and Parks & Grounds are using undersized and unconditioned utility sheds for tools and equipment storage. In the near future, Streets will need a sign shop with adequate storage space. Currently the small wooden shed housing the sign shop offers very little in the way of work counters, tools and assembly space. Streets is also in need of a small logistics command room for proper response during storm events. A clothes-changing area with gear lockers for coveralls would be another recommended space to accommodate future growth.

Parks & Grounds needs dedicated meeting space for daily crew instruction and training. They've indicated a flexibility for their many crews to share a single, large space by staggered their meeting times. Among this divisions other needs are a separate pesticides storage and handling room that needs to be well-ventilated and outfitted with emergency eye-wash and shower fixtures. Floor drains from such a space should lead to a containment tank for hazardous materials. Workshop and tool storage space is another critical need for Parks & Grounds.

One of the few amenities that Public Works has requested is a wellness room for maintaining the fitness of its staff. Such spaces are increasingly incorporated into many public and private organization's facilities.

A significant shortcoming of this operations complex is the lack of an adequately sized central warehouse with sufficient loading and staging areas. Operations centers for similarly sized municipalities often have a central warehouse with a purchasing manager to oversee all incoming and outgoing materials and supplies. Such a facility and staff position could be considered for the next twenty years of growth.

Much of its operations center site's yard storage consists of materials atop grassy areas that should otherwise remain as open landscape buffers or tree protection areas. A more orderly arrangement of yard storage on the existing site would yield additional lay-down areas. Combining this with a consolidation of many of the miscellaneous utility sheds onto a few larger, more durable and efficient structures could bring some relief to the overcrowding and space shortages. Should the Town choose to maintain this site for its operations center, it should invest in the development of a new master plan.

2.2 Pearl Street Building for Town Records Storage

The NC Department of Cultural and Natural Resources mandates storage and archiving policies for municipalities, such as Garner. As such, the Town Clerk maintains the long-term storage for multiple departments in what's known as the Pearl Street Building. This very old building, originally a fire station, has historical significance to the Town. Because of this, the building may be re-purposed for another use more suitable to its heritage. The building is approximately 3,300 SF in area. One of the two former vehicle bays is used by the adjacent recreation field, leaving approximately 2,800 SF for Town storage.

Some of the Town Clerks' records are also stored within Town Hall, while other materials, such as holiday decorations, are stored at the Public Works campus. The current building has some key shortcomings, including the minimal fire safety afforded to these stored records and an inefficient retrieval and re-storage operation. Not only will the Town require a larger, more secure space, it will require a refinement of its archival operations. A new facility should include a dedicated work space to eliminate the current practice of staff bringing records back to their respective workplaces for examination. This would allow staff to pull records, examine them on site, and return them to the appropriate space without removal from the building. Such administrative operations can be supported, but not solved, by the design of new space.

The facility assessment report on the Pearl Street Building concluded that the mechanical electrical and plumbing systems are antiquated, and its exterior windows are in poor condition. The resulting lack of humidity control and fire suppression make for a tenuous location for long-term storage.

While not a staffed location, the more remote the building is from the Town Clerk's office, the more dependent the new space will be on its own support spaces, such as parking, layout, copying/scanning and toilet facilities. Although confidential records are not kept at this facility, a future replacement should include a surveillance system. Additionally, the new space needs improved fire protection measures, such as non-combustible construction, smoke and fire detection and a dry fire suppression system. Such improvements may yield financial benefits through the Town's risk management and insurance programs. The increasing use of digital records suggests that the required storage space need may not continue to increase as future records will likely be created and stored electronically. For the foreseeable future, current hard copies are required to be kept in their original form.

2.3 Police Evidence Storage Building

Located on the property behind Town Hall, off Aversboro Road, the Police Department's evidence storage shed also houses police bicycles and gear. This 864 SF wooden shed was erected in 1991 and suffers many shortcomings for its intended purpose. Among these are its lack of vehicle evidence bays, construction with combustible readily penetrated wood materials, no climate control and a layout that doesn't allow for proper chain of custody. In a new facility many improvements should be incorporated.

A new facility would require a dedicated drop off area that is physically separated from the space where evidence is received and stored. Biological evidence is "permanently" stored within a small freezer. However, there is currently no emergency generator back-

up in the event of power failure. Some degree of air-conditioning/humidity control is needed to avoid damaging stored evidence

Although evidence storage is a significant responsibility, the lack of fire suppression in this wooden shed introduces a vulnerability. The structure also lacks emergency power source, leaving vulnerable its freezer, which permanently stores biological evidence.

The Police Department would like its future facility to incorporate storage for its canine unit. The purpose is for temporary boarding while officers are on vacation, or otherwise unavailable. The facility also needs two vehicle bays to prepare, dry and bag vehicles as evidence prior to being moved to the impoundment lot. Lastly, a wash area is needed for processing received materials and maintaining the canine facility.

The Police department maintains other storage at the Public Works complex. A 578 SF metal storage shed houses its "Snoopy" vehicle. At the rear of the complex is the chain-link fenced vehicle impoundment lot. If a new or renovated Public Works campus no longer housed the Snoopy vehicle or the impoundment lot, then these facilities would have to be constructed elsewhere. Efficiency improvements would be gained by locating the future evidence storage facility adjacent to the impoundment lot.

Though the current property is more than adequate to accommodate a new evidence storage facility and impoundment lot, the Town seeks a higher and better use for it. The new facility and lot could be co-located with Public Works or located in any other area with reasonable access to the Police Department headquarters. The further removed from headquarters, the more consideration should be given to incorporating an office work space within the facility.

3 Public Works Site Analysis

The existing site is comprised of approximately 12.9 acres at the intersection of New Rand and Rand Mill Roads. The tract was originally acquired by the Town of Garner in the late 1970's and developed in phases over the last 40 years. A survey prepared for the Town of Garner in June of 2011 by RWK, PA indicates the general location of the existing improvements. The map indicates that approximately 2/3 of the site has been developed. The developed portions of the site have been graded with generally flat with slopes of 5% or less and ranging in elevations from 320 feet in elevation on the southwest edge to high point of 354 feet on the southeast corner. The site is located central to the Town with reasonable routes to most areas of town. It is generally compatible with the character of the area, primarily due to how long it has been at this location and is well buffered from the adjoining uses. If an alternative location for the site were to be considered, a more industrial setting would likely be considered. The majority of the site is protected with a security fence along the perimeter. There is limited free-standing site lighting with limited building area lighting. Any redevelopment of the site should consider this issue in greater detail.

3.1 Site Access and Internal Circulation

The site is accessed via two drives located along Rand Mill Road that are approximately 150 feet apart. The primary drive is median-divided and serves the employee parking area, the administration building, the fuel island, and the maintenance repair shops. The second access point serves the storage and yard areas of the site. While highly utilized the site was laid out and developed in stages over many years leading to complicated circulation patterns in addition to several areas leading to congestion at the beginning and end of shifts. While on-site we observed the delivery of goods via a truck. It was noted there was some difficulty for the truck to navigate through the site. Large vehicle circulation was often conflicting with the movements of other site activities. In general, the site has insufficient parking for the existing equipment needs resulting in vehicle storage partially located randomly in open spaces or extending into circulation corridors. While there are sidewalks along Rand Mill Road most of the site pedestrian traffic is coincidental with vehicle drive aisles creating not only safety concerns, but also having limited accessibility. Site efficiency could be significantly improved with creation of an overall site master plan for redevelopment

3.2 Pavements

The on-site paving is a mix of concrete, asphalt, and gravel areas. While reasonably well maintained, the surfaces do have considerable age, most likely needing some form of rehabilitation. The various surfaces were installed over several years as the site was expanded, creating a variety of grading and drainage challenges. Site maintenance costs could likely be improved by a re-planning of the existing paved areas.

3.3 Vegetation

While approximate 2/3 of the site is developed, much of that area is underutilized, including two large grass areas on the eastern portion of the site. These areas create a nice roadside lawn aesthetic, but could be utilized for site expansion. The perimeter of the site is primarily wooded with a mix of mature pine and hardwood species. The site is well screened from the roadway and surrounding properties with this perimeter

vegetation. The middle of the site does contain a mix of mature tree species, some of which are quite notable. Redevelopment of the existing site to be better utilized would likely result in the loss of virtually all mature vegetation on the interior of the site.

3.4 Impervious Surfaces

As previously stated, approximately two-thirds of the site has been developed with the majority of the improvements consisting of various impervious surfaces, including pavements, building and gravel surfaces. Review of the pertinent town ordinances relative to impervious surface indicates that all existing impervious surfaces are grandfathered regarding maximum allowable limits. Future development of the site would be limited to an impervious surface cap of 70% of the undeveloped site. However, it should be noted that the Town could explore the opportunity to combine the site with the adjoining park site, which is primarily pervious, and “transfer” impervious surface allowances the development of the site. New impervious surfaces will be required to be protected with stormwater control measures. Two stormwater management structures exist on site, and could likely be expanded or relocated to accommodate additional impervious surface.

3.5 Surrounding Properties

The site essentially forms a triangle and is bordered to the east by Rand Mill Road and to the south by an existing multi-family neighborhood. There is a small Town park and a vacant wooded property to the north and west. Expansion into these two properties should be considered, should the Town decide to remain on this site and redevelop. This has the potential to double the developable area, but would likely require a larger land purchase as significant portions of the site to the west appears to have wetland or other riparian features.

The existing property is zoned SB Service Business. The adjoining property to the west is split between R12 and R20 and MF1 to the south. Any expansion off the site would require a rezoning to SB. Any expansion of the site, either on-site or offsite, would require a special use permit.

3.6 Energy and Sustainability Opportunities

There is little question that due to the age of the existing buildings, and the development of the site over an extended period of time that ample operational and cost opportunities exist, either by redevelopment of the existing site or relocation of the facility to a new site. As life cycle and operation costs of these types of facilities often exceed the initial cost, this factor should be given significant consideration when evaluating options.

4 Recommendations & Next Steps

Consistent with the Town's original RFQ for the Space Needs Assessment, the Design Team recommends proceeding to the next steps originally envisioned in scope of work. Specifically, the Design Team's recommended scope included a five-phase work plan as outlined below. This report concludes the first two phase of the work plan.

1. Facility Assessment & Data Collection
2. Architectural Programming
3. Parametric Design Analysis
4. Conceptual Cost Estimating
5. Final Report

Based on its findings in this report, the Design Team recommends the Town of Garner consider three options to accommodate the future needs of the Public Works, Town Clerk and Police departments.

Option 1: Purchase or develop the necessary acreage to relocate the entire Public Works operations center to a single site, while finding new homes for evidence and records storage. Ideally, the Town should attempt to purchase sufficient acreage to accommodate growth beyond the projected 2040 Program. The primary benefits of relocating all operations to a single site are minimized obstruction to ongoing services, operational efficiency and avoidance of duplicate program spaces. The existing Rand Mill Road property might be redeveloped for other Town purposes, including evidence and record storage, or sold to offset the cost of a new operations center.

Option 2: Purchase or develop sufficient property to accommodate only a new Fleet maintenance facility, including the fueling and wash functions. The existing Fleet shop is insufficiently sized to adequately serve the Town's vehicles in the years to come. Removing the fuel station from the operations center's main entrance will open up the main entrance area, while improving maneuverability. The old Fleet shop may be repurposed for warehouse storage and/or workshops, or possibly for a new emergency operations center. Alternatively, the building can be razed to accommodate new construction with a longer life span. Commonly, fleet maintenance, fueling and washing are co-located, and when provided with sufficient building and vehicle staging area, can function remotely from other public works operations. Options for the police evidence storage and town records would be pursued either in conjunction with this plan, or on different parcels.

The remaining divisions – Streets/ROW, Parks & Grounds, Solid Waste/ Recycling and Facilities, along with PW Administration - would remain at the existing site. The existing operations center would then be expanded and renovated to accommodate future program needs. Note that there would be many logistical challenges in expanding the operation center while it continues to provide daily services. However, a phased master plan could be developed to address service disruptions.

Option 3, Similar to Option 2, the Town could purchase property adjacent to the existing operations complex to expand its facilities. Again, we recommend that a new Fleet maintenance shop, along with fueling and washing facilities be constructed on the additional property. Expansion, renovation and re-planning would occur on the existing property following a phased master plan. Options for the police evidence storage and town records would be pursued either in conjunction with this plan, or on different parcels.

APPENDIX A

PROGRAM OF SPACE NEEDS FOR YEAR 2040

SUMMARY SHEET



| Department | Administrative Areas | Shops/Interior Storage Area | Covered Exterior Areas | Uncovered Exterior Areas | Enclosed Vehicle Parking | Covered Vehicle Parking | Uncovered Vehicle Parking | Employee/Visitor Parking | Total Department Square Footage |
|---|----------------------|-----------------------------|------------------------|--------------------------|--------------------------|-------------------------|---------------------------|--------------------------|---------------------------------|
| Public Works Administration | 14,622 | 682 | 1,870 | 4,294 | 0 | 0 | 0 | 10,008 | 31,476 |
| Facilities | 2,333 | 10,534 | 1,320 | 0 | 1,195 | 0 | 14,040 | 11,924 | 41,345 |
| Parks and Grounds | 4,169 | 15,082 | 12,100 | 0 | 5,500 | 5,500 | 1,944 | 21,644 | 65,938 |
| Streets/ROW | 6,361 | 16,090 | 53,898 | 11,204 | 25,221 | 15,840 | 0 | 27,800 | 156,413 |
| Fleet | 3,097 | 24,456 | 330 | 176 | 0 | 0 | 42,800 | 5,976 | 76,835 |
| Vehicle Wash | 0 | 6,306 | 0 | 0 | 0 | 0 | 0 | 0 | 6,306 |
| Vehicle Fueling | 0 | 0 | 2,068 | 7,260 | 0 | 0 | 0 | 0 | 9,328 |
| Town Clerk | 281 | 10,152 | 0 | 0 | 0 | 0 | 0 | 1,516 | 11,949 |
| Police | 621 | 1,344 | 0 | 15,000 | 950 | 0 | 0 | 1,516 | 19,431 |
| Program Component Sub-Total | 31,483 | 84,644 | 71,586 | 37,934 | 32,866 | 21,340 | 58,784 | 80,384 | |
| Sub-Total Department Square Footage | | | | | | | | | 419,021 |
| Site Circulation Factor (Set-Backs, Drive Aisles, Landscaping) | | | | | | | 100% | | 419,021 |
| Site Stormwater Collection (BMP) | | | | | | | | | 22,500 |
| Total Site Master Plan Requirement | | | | | | | | | 860,543 |
| Total Site Master Plan Requirement (Acres) | | | | | | | | | 19.76 |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:
Public Works-Administration



| INTERIOR AREAS | |
|---|---------------|
| Office Areas | |
| Offices | |
| Public Works Director | |
| Assistant Public Works Director | |
| Administrative Support Specialist | |
| Administrative Support Specialist (Supplemental) | |
| Public Works Specialist | |
| Public Works Specialist (Supplemental) | |
| Project Manager | |
| Office Manager | |
| Shared/Support Areas | |
| Lobby/Reception | |
| Airlock Vestibule | |
| Public Restroom | |
| Restroom for Fuel | |
| Conference Rooms | |
| Copy/Mail Room | |
| Secure File Storage | |
| Kitchen/Breakroom | |
| Large Meeting Room | |
| Table and chair storage | |
| Emergency Operations Center (EOC) | |
| EOC Storage | |
| Laundry | |
| Single Occupant Restroom, Shower, Changing Rooms | |
| Large Men's restroom, shower, lockers | |
| Large Women's restroom, showers, lockers | |
| Wellness/Exercise Room | |
| Uniform Storage | |
| Bunk Room | |
| Mail delivery Space | |
| Ice Machine/Cooler Storage Room | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 35% |
| Total Public Works-Administration Office Areas | 14,622 |
| Shop/Storage Areas | |
| Solid Waste Work Bay | |
| Solid Waste Supply Room (Repair consumables) | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 20% |
| Total Public Works-Administration Shop/Storage Areas | 682 |
| Total Public Works-Administration (Building Areas) | 15,303 |

| Master Plan Program (+20 YRS) | | | |
|-------------------------------|-------|-------|-----------|
| Space Standard | Qty. | | Area (SF) |
| | Staff | Space | |

| | | | | | |
|----|---|----|---|-----------|---------------|
| 15 | x | 15 | 1 | 1 | 225 |
| 12 | x | 15 | 1 | 2 | 360 |
| 8 | x | 8 | 3 | 3 | 192 |
| 8 | x | 8 | 1 | 1 | 64 |
| 8 | x | 8 | 3 | 3 | 192 |
| | | | 1 | | |
| 8 | x | 8 | 1 | 1 | 64 |
| 10 | x | 12 | 1 | 1 | 120 |
| | | | | | |
| 14 | x | 20 | | 1 | 280 |
| 8 | x | 8 | | 1 | 64 |
| 7 | x | 11 | | 1 | 77 |
| 7 | x | 11 | | 1 | 77 |
| 16 | x | 24 | | 3 | 1,152 |
| 14 | x | 16 | | 1 | 224 |
| 10 | x | 12 | | 1 | 120 |
| | | | | 1 | 500 |
| | | | | 1 | 3,000 |
| 8 | x | 10 | | 1 | 80 |
| 20 | x | 30 | | 1 | 600 |
| 8 | x | 10 | | 1 | 80 |
| 8 | x | 10 | | 1 | 80 |
| 8 | x | 11 | | 2 | 176 |
| 24 | x | 40 | | 1 | 960 |
| 24 | x | 40 | | 1 | 960 |
| 20 | x | 24 | | 1 | 480 |
| 10 | x | 12 | | 1 | 120 |
| 14 | x | 30 | | 1 | 420 |
| 4 | x | 6 | | 1 | 24 |
| 10 | x | 14 | | 1 | 140 |
| | | | | 12 | 10,831 |
| | | | | 35% | 3,791 |
| | | | | | 14,622 |
| 20 | x | 20 | | 1 | 400 |
| 12 | x | 14 | | 1 | 168 |
| | | | | 0 | 568 |
| | | | | 20% | 114 |
| | | | | | 682 |
| | | | | 12 | 15,303 |

| Remarks |
|---|
| Private Office (Desk, filing cabinet, storage cabinet, 2 guest chairs, table) |
| Private Office (Desk, filing cabinet, storage cabinet, 3 guest chairs, paper shredder) |
| Open workstation (Desk, filing cabinet, printer), near main entrance |
| Open workstation (Desk, filing cabinet), near main entrance |
| Open workstation (Desk, small file cabinet), near Admin. Support Specialist |
| In the field. No specific space requirements. |
| Open workstation (desk, filing) Works close with administrative support specialist, near front |
| Private Office (Desk, filing cabinet, printer, scanner), near Admin. Support Specialist |
| Visitors, vendors, interviews, 4 chairs, |
| Secure from staff spaces, adjacent to lobby. |
| 24-hour access for fueling with badge access. Depending on site plan this could be elsewhere |
| 15 ppl, (Large TV, Computer, camera, smart data ports), Near Services, Operations, & Admin. Possibly two interconnected but a third stand-alone |
| Laydown space in center with storage beneath, large production printer, built-ins, mail box slots (32 mail slots). Mail received at Town Hall and brought here. |
| Shelving, filing cabinets for archived files, MSDS/SDS files, blueprints, historical items |
| Lg. Commercial refr./freezer, & stove, 7 microwaves currently, 2 sinks, cabinets. Smart TV, computer, tables and chairs. Accessible to all divisions. Accommodate 40-50 ppl currently. |
| Built-in with sink. 75-100 ppl, Department training, lg. TV, computer, storage cabinet, camera, smart data ports. Centrally located. Operable partition. Auditorium style seating. Near kitchen area. Adjacent to Kitchen/Breakroom and connected with operable partition. |
| Adjacent to large meeting room |
| 4-5 people from each agency. 4-5 agencies. Fire, Police, PW, Town Admin. Approx. 20 max. Workstations with bank of lg. TV's. |
| Food and water storage, table and chair storage, cot storage |
| Commercial washing machine, dryer, and cabinets. Badge access w/leadership level credentials. Remote from offices and meeting rooms. Periodic use. Wash banners. |
| Gender neutral, bathroom with shower, bench |
| Shared space between all departments |
| Shared space between all departments |
| Close to restrooms and locker area. Shared between departments. Weights, treadmills, ellipticals, refrigerator. |
| Mostly shelving/cubbies. T-shirts, hats storage. Hanging Space with badge access |
| Emergency Events up to 10 people |
| Space with outside access for UPS, Fedex, etc to drop-off items connected to copy/mail room. Door from outside and inside |
| Area to locate large commercial ice machine and cooler storage on racks. Accessible to crews and for special events. Possibly near loading area/warehouse area. Warehouse currently has storage racks dedicated to cooler storage. 2 Stand-up cabinets to store outdoor cooking equipment (Approx. 2x4 ea.) |
| Dedicated work bay for cart repairs with water service available |
| Enclosed area for cart repair supplies--e.g. hinge pins, wheels, axles, etc |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:
Public Works-Administration



| Master Plan Program (+20 YRS) | | | | |
|-------------------------------|-------|-------|-----------|--|
| Space Standard | Qty. | | Area (SF) | |
| | Staff | Space | | |

| Remarks |
|---------|
|---------|

EXTERIOR AREAS

Covered Exterior Areas

| | | | | | | |
|---|-----|---|----|--|---|--------------|
| Solid Waste Cart Storage | 30 | x | 30 | | 1 | 900 |
| Solid Waste Cart wash-out area | 20 | x | 20 | | 1 | 400 |
| Solid Waste Broken cart storage | 20 | x | 20 | | 1 | 400 |
| Subtotal | | | | | | 1,700 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 10% | | | | | 170 |
| Total Public Works-Administration Covered Exterior Areas | | | | | | 1,870 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| <i>Area to store new bulk garbage and recycling roll-out carts. Out weather, semi-enclosed space. 6-7 high stacks. 2 tractor trailer footprint. 54 stacks in each tractor trailers x2. Forklift access. Covered but not conditioned.</i> |
| <i>Covered with drain connected to grease interceptor</i> |
| <i>Area to store broken carts waiting for disposal/recycling pick-up</i> |
| |
| |
| |
| |
| |
| |
| |

Uncovered Exterior Areas

| | | | | | | |
|---|-----|---|----|--|---|--------------|
| Emergency Generator | 16 | x | 20 | | 1 | 320 |
| Dumpster/Recycling | 16 | x | 24 | | 1 | 384 |
| Gov-Deals Storage | 40 | x | 80 | | 1 | 3,200 |
| Subtotal | | | | | | 3,904 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 10% | | | | | 390 |
| Total Public Works-Administration Uncovered Exterior Areas | | | | | | 4,294 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| <i>Emergency diesel generator with belly tank.</i> |
| <i>Screened with double gate access and bollard protection</i> |
| <i>Yard Storage for miscellaneous equipment staged for government surplus. Locate near Fleet Garage.</i> |
| |
| |
| |
| |
| |
| |
| |

Enclosed Vehicle Parking

| | | | | | | |
|---|-----|--|--|--|--|----------|
| None | | | | | | |
| Subtotal | | | | | | 0 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 10% | | | | | 0 |
| Total Public Works-Administration Enclosed Vehicle Parking Areas | | | | | | 0 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

Covered Vehicle Parking

| | | | | | | |
|--|-----|--|--|--|--|----------|
| None | | | | | | |
| Subtotal | | | | | | 0 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 10% | | | | | 0 |
| Total Public Works-Administration Covered Vehicle Parking Areas | | | | | | 0 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

Uncovered Vehicle Parking

| | | | | | | |
|--|------|--|--|--|--|----------|
| None (See below) | | | | | | |
| Subtotal | | | | | | 0 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 100% | | | | | 0 |
| Total Public Works-Administration Uncovered Vehicle Parking Areas | | | | | | 0 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

Employee/Visitor Parking

| | | | | | | |
|---|------|---|----|----|----|---------------|
| Employee Parking | 9 | x | 18 | 12 | | 1,944 |
| Town-Owned SUV Parking | 9 | x | 18 | | 1 | 162 |
| Town-Owned 4-Door Truck Parking | 9 | x | 18 | | 6 | 972 |
| Town-Owned Sedan Parking | 9 | x | 18 | | 1 | 162 |
| Staff Electric Vehicle Parking | 9 | x | 18 | | 2 | 324 |
| Public Electric Vehicle Parking | 9 | x | 18 | | 2 | 324 |
| Visitor/Vendor Parking | 9 | x | 18 | | 4 | 648 |
| ADA Parking | 13 | x | 18 | | 2 | 468 |
| Subtotal | | | | | 18 | 5,004 |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 100% | | | | | 5,004 |
| Total Public Works-Administration Employee/Visitor Parking Areas | | | | | | 10,008 |

| | | | | | | |
|--|--|--|--|--|--|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| |
|--|
| <i>Needs to be secure and separated from Fleet vehicles</i> |
| <i>Needs to be secure</i> |
| <i>Needs to be secure</i> |
| <i>Needs to be secure</i> |
| <i>Needs to be secure. Can also provide rough-ins for future EV charging</i> |
| <i>Can also provide rough-ins for future EV charging</i> |
| <i>Citizens, Town Employees</i> |
| <i>Actual quantity to be verified to conform with Code requirements</i> |
| |
| |
| |
| |

Total WR-WRPP (Exterior Areas)

16,172

Total Public Works-Administration Facility Areas

31,476

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:

Facilities



| INTERIOR AREAS | |
|--|--|
| Office Areas | |
| Offices | |
| Facilities Manager | |
| Facilities Supervisor 1 | |
| Facilities Supervisor 2 | |
| Facilities Technician | |
| Facilities Day Porter | |
| Janitorial Staff | |
| Administrative Staff | |
| Shared/Support Areas | |
| Copy/Mail Room | |
| Blueprint Room | |
| Small Meeting Room | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Facilities Office Areas | |
| Shop/Storage Areas | |
| Shop/Storage Areas | |
| Plumbing Shop | |
| Electrical Shop | |
| HVAC Shop | |
| General Maintenance Shop | |
| Carpentry Shop | |
| Paint Shop/Storage | |
| Key Shop | |
| Key Room Storage | |
| Compressor Room | |
| Dust Collector | |
| Secure Tool Storage | |
| Chemical Storage | |
| Hazmat Storage | |
| Ice Machine Area | |
| Facilities Warehouse Storage | |
| Janitorial Supplies | |
| Receiving Area | |
| Covered Loading Area | |
| Decorations Storage | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Facilities Shop/Storage Areas | |
| Total Facilities (Building Areas) | |

| Master Plan Program (+20 YRS) | | | | |
|-------------------------------|-------|-------|---------------|--|
| Space Standard | Qty. | | Area (SF) | |
| | Staff | Space | | |
| | | | | |
| 12 x 14 | 1 | 1 | 168 | |
| 10 x 12 | 1 | 1 | 120 | |
| 10 x 12 | 1 | 1 | 120 | |
| 4 x 6 | 16 | 16 | 384 | |
| | 8 | | | |
| | 6 | | | |
| 10 x 12 | 1 | 1 | 120 | |
| | | | | |
| 12 x 14 | | 1 | 168 | |
| 10 x 12 | | 1 | 120 | |
| 12 X 22 | | 2 | 528 | |
| | | | | |
| | 34 | | 1,728 | |
| 35% | | | 605 | |
| | | | 2,333 | |
| | | | | |
| 20 x 25 | | 1 | 500 | |
| 20 x 25 | | 1 | 500 | |
| 20 x 25 | | 1 | 500 | |
| 20 x 25 | | 1 | 500 | |
| 20 x 25 | | 1 | 500 | |
| 20 x 25 | | 1 | 500 | |
| 12 x 16 | | 1 | 192 | |
| 8 x 8 | | 1 | 64 | |
| 10 X 12 | | 1 | 120 | |
| 8 x 10 | | 1 | 80 | |
| 8 x 10 | | 1 | 80 | |
| 8 x 10 | | 1 | 80 | |
| 8 x 10 | | 1 | 80 | |
| | | 1 | 1,500 | |
| 20 x 20 | | 1 | 400 | |
| 10 x 24 | | 1 | 240 | |
| 8 x 24 | | 1 | 192 | |
| | | 1 | 2,750 | |
| | | | | |
| | 0 | | 8,778 | |
| 20% | | | 1,756 | |
| | | | 10,534 | |
| | | | | |
| | 34 | | 12,866 | |

| Remarks |
|--|
| |
| Closed Office (desk, filing cabinet, guest chairs) |
| Closed Office (desk, filing cabinet, guest chairs) |
| Closed Office (desk, filing cabinet, guest chairs) |
| Benching Workstation (desk, filing cabinet, overhead shelf) |
| No dedicated space. In crew room |
| No dedicated space. In crew room. Currently contracted out |
| Enclosed office Space. Could be shared position depending on site layout |
| |
| Built-ins, place for large format printer, mail slots. |
| Built-ins for small and large format documents |
| 2-15 person meeting rooms connected by operable partition |
| |
| |
| |
| Pipe cutters, fitting storage, etc |
| Bulk wire racking system, tester storage, etc. Bench, solder hood, static-dissipation, electrical test panel |
| Gauge storage, tester storage, etc. Re-building small compressors. |
| Workbench, hand tool storage, etc. Small, fast projects. |
| Sliding miter saw, workbench, table saw, woodworking tools, etc. |
| Sprayers, prepping station, etc. Downdraft paint booth (shelving, pick-up size) |
| Workbench, organizational cabinets, cutters, etc. |
| Secure space. Hard wall enclosure. Can be caged area. Blanks, medeco cylinders, cut keys for the Town. |
| Sound isolation, floor drain/oil interceptor |
| Sound isolation for dust collection |
| Secure hand tools, power tools, etc. Can be caged area within larger space. |
| |
| Mostly fluorescent bulbs |
| See Administration space requirements. This may be a shared element. |
| Light bulbs, ceiling tiles, etc. Half of current warehouse |
| Palletized storage. Accessible from the exterior and interior |
| Transit van dock height or in-ground platform lift |
| Central for all campus departments |
| Enclosed/tempered space with work bay and work table. Christmas, 4th July, Flags, parade float, etc. |
| Taller space with stacked, higher storage w/forklift access. |
| |
| |
| |
| |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:
Parks and Grounds



| Master Plan Program (+20 YRS) | | | |
|-------------------------------|-------|-------|-----------|
| Space Standard | Qty. | | Area (SF) |
| | Staff | Space | |

| Remarks |
|---------|
|---------|

| INTERIOR AREAS | |
|--|-----|
| Office Areas | |
| Offices | |
| Superintendent | |
| Athletic and Grounds Supervisor | |
| Parks and Grounds Supervisor | |
| Crew Lead Workstation | |
| Maintenance Technician | |
| Lead Parks Maintenance Worker | |
| Maintenance Worker | |
| Lead Landscape Worker | |
| Landscape Maintenance II | |
| Landscape Maintenance I | |
| Parks Maintenance II | |
| Field HR touchdown space | |
| Gear Lockers | |
| Crew Room | |
| | |
| | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 35% |
| Total Parks and Grounds Office Areas | |
| Shop/Storage Areas | |
| Reel Workstation | |
| Grounds Warehouse Storage | |
| Pesticide Area | |
| Special Event Storage | |
| Snow/Ice Storage | |
| Equipment Storage | |
| Fertilizer Barn | |
| Compressor/Lube Room | |
| | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 20% |
| Total Parks and Grounds Shop/Storage Areas | |
| Total Parks and Grounds (Building Areas) | |

| Space Standard | Staff | Space | Area (SF) |
|---|-----------|-------|---------------|
| 16 x 16 | 2 | 2 | 512 |
| 10 x 12 | 2 | 2 | 240 |
| 10 x 12 | 2 | 2 | 240 |
| | | 1 | 400 |
| 10 x 20 | 4 | 1 | 200 |
| | 12 | | |
| | 15 | | |
| | 3 | | |
| | 3 | | |
| | 3 | | |
| | 18 | | |
| 4 x 6 | | 4 | 96 |
| 5 sf per locker | | 40 | 200 |
| | | 1 | 1,200 |
| | | | |
| | | | |
| | 64 | | 3,088 |
| 35% | | | 1,081 |
| Total Parks and Grounds Office Areas | | | 4,169 |
| | | | |
| | | 1 | 400 |
| | | 1 | 2,000 |
| 40 x 50 | | 1 | 2,000 |
| | | 1 | 2,500 |
| | | 1 | 1,000 |
| 50 x 50 | | 1 | 2,500 |
| 40 x 50 | | 1 | 2,000 |
| 12 x 14 | | 1 | 168 |
| | | | |
| | 0 | | 12,568 |
| 20% | | | 2,514 |
| Total Parks and Grounds Shop/Storage Areas | | | 15,082 |
| | | | |
| | 64 | | 19,250 |

| |
|--|
| Closed office (desk, chair, filing cabinet, TV, printer) |
| Closed office (desk, chair, filing cabinet, TV, printer) |
| Closed office (desk, chair, filing cabinet) |
| Open Table (filing cabinets, usb charging ports) 12 individual benching workstations, privacy screening between |
| (4) Open Workstation (desk, filing cabinet, usb charging ports) |
| In field. No space requirements |
| In field. No space requirements |
| In field. No space requirements |
| In field. No space requirements |
| In field. No space requirements |
| In field. No space requirements |
| In or near crew room. 4 benching workstations |
| 40 lockers (24"W x 18"D) |
| 6 Crews now/12 future. 3-5 ppl for each crew. Largest group 50-60 |
| |
| |
| |
| Heated and ventilated. Reel grinding machine for all mowers with area to store bed knives and parts |
| Heated and ventilated. Shelving, playground equipment, grills, paint storage (5 gallons/latex), aerosol, irrigation supplies. |
| Heated and ventilated. Near Wash Pit Area. Within this area is a secured 20x20 Pesticide Room with handwashing sink. |
| Heated and ventilated. Enclosed area with badge access for equipment, fencing, cones, signcades, etc. Combination of shelving storage and open floor space |
| Heated and ventilated. Storage of ice melt, shovels, buckets, etc w/badge access |
| Heated and ventilated. Provide handwashing sink. Mowers, ballfield machines, spray machines, etc. |
| Heated and ventilated |
| Acoustically isolated room for compressor (provide compressed air loop and drops for shop spaces) and 55 gallon drum for bulk grease distribution in shop areas. |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:
Parks and Grounds



| EXTERIOR AREAS | |
|--|--|
| Covered Exterior Areas | |
| Grounds Fill and Wash Down Area | |
| Grounds Bulk Material Storage | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Covered Exterior Areas | |
| Uncovered Exterior Areas | |
| None | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Uncovered Exterior Areas | |
| Enclosed Vehicle Parking | |
| Equipment Barn | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Enclosed Vehicle Parking Areas | |
| Covered Vehicle Parking | |
| Equipment Shed | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Covered Vehicle Parking Areas | |
| Uncovered Vehicle Parking | |
| Supervisor and Superintendent Trucks | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Uncovered Vehicle Parking Areas | |
| Employee/Visitor Parking | |
| Employee Parking | |
| Visitor Parking | |
| ADA Parking | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Parks and Grounds Employee/Visitor Parking Areas | |
| Total Parks and Grounds (Exterior Areas) | |
| Total Parks and Grounds Facility Areas | |

| Master Plan Program (+20 YRS) | | | |
|-------------------------------|-------|-------|-----------|
| Space Standard | Qty. | | Area (SF) |
| | Staff | Space | |

| | | | | |
|--|---|-----|----|---------------|
| 20 | x | 50 | 1 | 1,000 |
| 50 | x | 200 | | 10,000 |
| Subtotal | | | | 11,000 |
| 10% | | | | 1,100 |
| Total Parks and Grounds Covered Exterior Areas | | | | 12,100 |
| Subtotal | | | | 0 |
| 10% | | | | 0 |
| Total Parks and Grounds Uncovered Exterior Areas | | | | 0 |
| Subtotal | | | | 5,000 |
| 10% | | | | 500 |
| Total Parks and Grounds Enclosed Vehicle Parking Areas | | | | 5,500 |
| Subtotal | | | | 5,000 |
| 10% | | | | 500 |
| Total Parks and Grounds Covered Vehicle Parking Areas | | | | 5,500 |
| Subtotal | | | | 972 |
| 100% | | | | 972 |
| Total Parks and Grounds Uncovered Vehicle Parking Areas | | | | 1,944 |
| 9 | x | 18 | 64 | 10,368 |
| 9 | x | 18 | 2 | 324 |
| 10 | x | 13 | 1 | 130 |
| Subtotal | | | | 10,822 |
| 100% | | | | 10,822 |
| Total Parks and Grounds Employee/Visitor Parking Areas | | | | 21,644 |
| Total Parks and Grounds (Exterior Areas) | | | | 46,688 |
| Total Parks and Grounds Facility Areas | | | | 65,938 |

| Remarks | |
|---|--|
| Covered areas one for equipment and one for pesticides | |
| <u>Bunker Type Storage:</u> 25x25 Bays: ABC, Screenings, Topsoil, Sand, Turface, Clay 25x50 Bay: Limbs (doesn't have to be covered) | |
| Enclosed parking shelter with 10 large bay doors. Storage of salt spreaders, snowplows, trailed tractors, tractor accessories, stage, etc. Heated and ventilated. With area for Meadow Brook and Yeagen Crews and future enclosed | |
| Covered equipment area. Heated and ventilated | |
| City-owned vehicles | |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:

Streets



| INTERIOR AREAS | |
|--|--|
| Office Areas | |
| Offices | |
| Superintendent | |
| Stormwater Supervisor | |
| Stormwater Lead | |
| Stormwater Maintenance Worker | |
| ROW Supervisor | |
| ROW Crew Leader | |
| ROW Maintenance Worker | |
| Lead Parks Maintenance Worker (ROW) | |
| Streets Supervisor | |
| Streets Concrete Maintenance Worker | |
| Streets Asphalt Maintenance Worker | |
| Lead Equipment Operator (Streets) | |
| Equipment Operator (Streets) | |
| Streets Specialist | |
| Street Sweeper Operator | |
| Shared/Support Spaces | |
| Streets/ROW Conference Room | |
| Streets Crew Room | |
| ROW Crew Room | |
| EOC/Command Post | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Streets Office Areas | |
| Shop/Storage Areas | |
| Shop Areas | |
| Salt Brine Manufacturing | |
| Sign Shop | |
| Storage Areas | |
| Streets Warehouse | |
| Warehouse Manager's Office | |
| Issue Counter | |
| Cold Patch Storage | |
| Concrete Bag Storage | |
| Pesticide Storage | |
| Hazardous Material Storage | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Streets Shop/Storage Areas | |
| Total Streets (Building Areas) | |

| Master Plan Program (+20 YRS) | | | |
|-------------------------------|-------|-------|-----------|
| Space Standard | Qty. | | Area (SF) |
| | Staff | Space | |

| | | | | | |
|-----|---|----|----|----|---------------|
| | | | | | |
| 14 | x | 14 | 2 | 2 | 392 |
| 10 | x | 12 | 2 | 2 | 240 |
| 8 | x | 8 | 4 | 4 | 256 |
| | | | 8 | | |
| 10 | x | 12 | 2 | 2 | 240 |
| 8 | x | 8 | 4 | 4 | 256 |
| | | | 8 | | |
| 8 | x | 8 | 12 | 12 | 768 |
| 10 | x | 12 | 2 | 2 | 240 |
| | | | 8 | | |
| | | | 8 | | |
| 8 | x | 8 | 8 | 8 | 512 |
| | | | 8 | | |
| 8 | x | 8 | 3 | 3 | 192 |
| | | | 3 | | |
| | | | | | |
| 18 | x | 24 | | 1 | 432 |
| 18 | x | 24 | | 1 | 432 |
| 18 | x | 24 | | 1 | 432 |
| 16 | x | 20 | | 1 | 320 |
| | | | | | |
| | | | 82 | | 4,712 |
| 35% | | | | | 1,649 |
| | | | | | 6,361 |
| | | | | | |
| | | | | | |
| 30 | x | 40 | | 1 | 1,200 |
| 30 | x | 40 | | 1 | 1,200 |
| | | | | | |
| | | | | 1 | 10,000 |
| 10 | x | 12 | 1 | 1 | 120 |
| 8 | x | 10 | | 1 | 80 |
| 14 | x | 20 | | 1 | 280 |
| 14 | x | 20 | | 1 | 280 |
| 12 | x | 14 | | 1 | 168 |
| 8 | x | 10 | | 1 | 80 |
| | | | | | |
| | | | 1 | | 13,408 |
| 20% | | | | | 2,682 |
| | | | | | 16,090 |
| | | | | | |
| | | | 83 | | 22,451 |

| Remarks |
|---|
| |
| Closed Office (desk, file cabinet, printer) |
| Closed Office (desk, file cabinet, printer) |
| Workstation (desk, filing cabinet) |
| In field/No Space requirements |
| Closed Office (desk, file cabinet, printer) |
| Workstation (desk, filing cabinet) |
| In crew room |
| Workstation (desk, filing cabinet) |
| Closed Office (desk, file cabinet, printer) |
| In crew room |
| In crew room |
| Workstation (desk, filing cabinet) |
| In crew room |
| Workstation (desk, filing cabinet) |
| In crew room |
| |
| 25 ppl. Tables and chairs, lg. tv |
| 25 ppl. Crew meeting area. 4-6 HR Touch-down stations |
| 25 ppl. Crew meeting area. 4-6 HR Touch-down stations |
| 10 ppl. Separate space from main EOC and crew rooms. |
| |
| |
| |
| |
| |
| |
| |
| Assemble pre-manufactured signs. May have fully-functional sign shop in future. |
| |
| |
| Climate controlled (heated, ventilated) |
| Conditioned space in warehouse area |
| |
| Secured/Enclosed. Palletized Storage |
| Secured/Enclosed. Palletized Storage |
| Enclosed, dedicated, secure space. Ventilatted. |
| Secured/Enclosed. Storage for gas cannisters, fuel cannisters, petroleum-based sprays, asphalt cleaning products (2 1/2 to 5 gallon containers). Separate 45-gallon flammable cabinets for different products (1 for ROW/1 for Streets). Ventilatted. |
| |
| |
| |
| |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:

Wash Area



| INTERIOR AREAS | |
|--|--|
| Office Areas | |
| None | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Wash Area Office Areas | |
| Shop/Storage Areas | |
| Drive-Thru Automatic Exterior Wash | |
| Chassis Wash | |
| Rough Wash Bay | |
| Wash Equipment Room | |
| Electrical Room | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Wash Area Shop/Storage Areas | |
| Total Wash Area (Building Areas) | |

Master Plan Program (+20 YRS)

| Space Standard | Qty. | | Area (SF) |
|----------------|-------|-------|-----------|
| | Staff | Space | |

| Space Standard | Qty. | | Area (SF) |
|----------------|----------|-------|--------------|
| | Staff | Space | |
| | 0 | | 0 |
| 35% | | | 0 |
| | | | 0 |
| 25 x 60 | | 1 | 1,500 |
| 25 x 60 | | 1 | 1,500 |
| 25 x 60 | | 1 | 1,500 |
| 15 x 45 | | 1 | 675 |
| 8 x 10 | | 1 | 80 |
| | 0 | | 5,255 |
| 20% | | | 1,051 |
| | | | 6,306 |
| | 0 | | 6,306 |

| Remarks |
|---|
| |
| |
| |
| |
| |
| <i>Separate/detached building from Fleet and sequential to fuel</i> |
| <i>Separate/detached building from Fleet and sequential to fuel</i> |
| <i>Separate/detached building from Fleet and sequential to fuel</i> |
| <i>Enclosed area for wash equipment and reclamation tank</i> |
| |
| |
| |
| |
| |
| |
| |
| |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:
Fueling Area

Master Plan Program (+20 YRS)

| Space Standard | Qty. | | Area (SF) |
|----------------|-------|-------|-----------|
| | Staff | Space | |

Remarks

| INTERIOR AREAS | |
|--|----------|
| Office Areas | |
| None | |
| Fueling Restroom | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 35% |
| Total Fueling Area Office Areas | 0 |
| Shop/Storage Areas | |
| None | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | 20% |
| Total Fueling Area Shop/Storage Areas | 0 |
| Total Fueling Area (Building Areas) | 0 |

| Space Standard | Staff | Space | Area (SF) |
|----------------|-------|-------|-----------|
| | | | |
| | 0 | | 0 |
| 35% | | | 0 |
| | | | 0 |
| | | | |
| | 0 | | 0 |
| 20% | | | 0 |
| | | | 0 |
| | 0 | | 0 |

| |
|--------------------------|
| |
| See Administration Areas |
| |
| |
| |
| |
| |
| |
| |
| |

SPACE NEEDS PROGRAM
Town of Garner Space Needs Assessment

Department:

Police



| Master Plan Program (+20 YRS) | | | |
|-------------------------------|-------|-------|-----------|
| Space Standard | Qty. | | Area (SF) |
| | Staff | Space | |

| Remarks |
|---------|
|---------|

| INTERIOR AREAS | |
|--|--|
| Office Areas | |
| Offices | |
| Evidence Technician/Quartermaster | |
| Shared/Support Areas | |
| Evidence Processing | |
| Evidence Submission | |
| Canine Unit | |
| Unisex Restroom | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Police-Office Areas | |
| Shop/Storage Areas | |
| Storage Areas | |
| Secure Evidence Storage | |
| Long Term Evidence Storage | |
| Police Vehicle Equipment Storage (Non-Evidence) | |
| Police Equipment Storage (Non-Evidence) | |
| Motorcycle Parking Room | |
| Bicycle Storage Room | |
| Subtotal | |
| Circulation/Mechanical/Electrical/Structural (Net:Gross) | |
| Total Police Shop/Storage Areas | |
| Total Police-Building Areas | |

| | | | | | |
|-----|---|----|---|---|--------------|
| 8 | x | 8 | 1 | 1 | 64 |
| 8 | x | 16 | | 1 | 128 |
| 8 | x | 10 | | 1 | 80 |
| 10 | x | 10 | | 1 | 100 |
| 8 | x | 11 | | 1 | 88 |
| | | | 1 | | 460 |
| 35% | | | | | 161 |
| | | | | | 621 |
| 24 | x | 24 | | 1 | 576 |
| 8 | x | 10 | | 1 | 80 |
| 10 | x | 10 | | 1 | 100 |
| 10 | x | 10 | | 1 | 100 |
| 8 | x | 12 | | 1 | 96 |
| 12 | x | 14 | | 1 | 168 |
| | | | 0 | | 1,120 |
| 20% | | | | | 224 |
| | | | | | 1,344 |
| | | | 1 | | 1,965 |

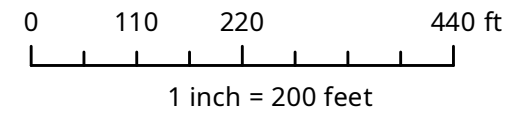
| |
|---|
| <i>All interior areas climate-controlled</i> |
| <i>Open workstation (desk, computer, printer), shared between two technicians</i> |
| <i>Higher worksurface, 2 chairs, Inside secure evidence area, duress buttons throughout facility, sink</i> |
| <i>Enclosed space. Provide two doors (one for technician and one for officer), loading/receiving area</i> |
| <i>Climate-controlled, floor drain, hose bib, single canine</i> |
| <i>Bicycle Racks (15 max.), Shelving. Storage for appliances, yard equipment, , etc. Adaptable, chain link separation</i> |
| <i>Refrigerator, shelving, back-up generator</i> |
| <i>Shelving, light bars, radios, cages, etc</i> |
| <i>Shelving, training supplies, riot gear, etc</i> |
| <i>1-2 motorcycles, power for battery charging, locker space for gear</i> |
| <i>Up 15 bicycles on rack system, work tablework rack, tool storage, parts storage</i> |

APPENDIX B

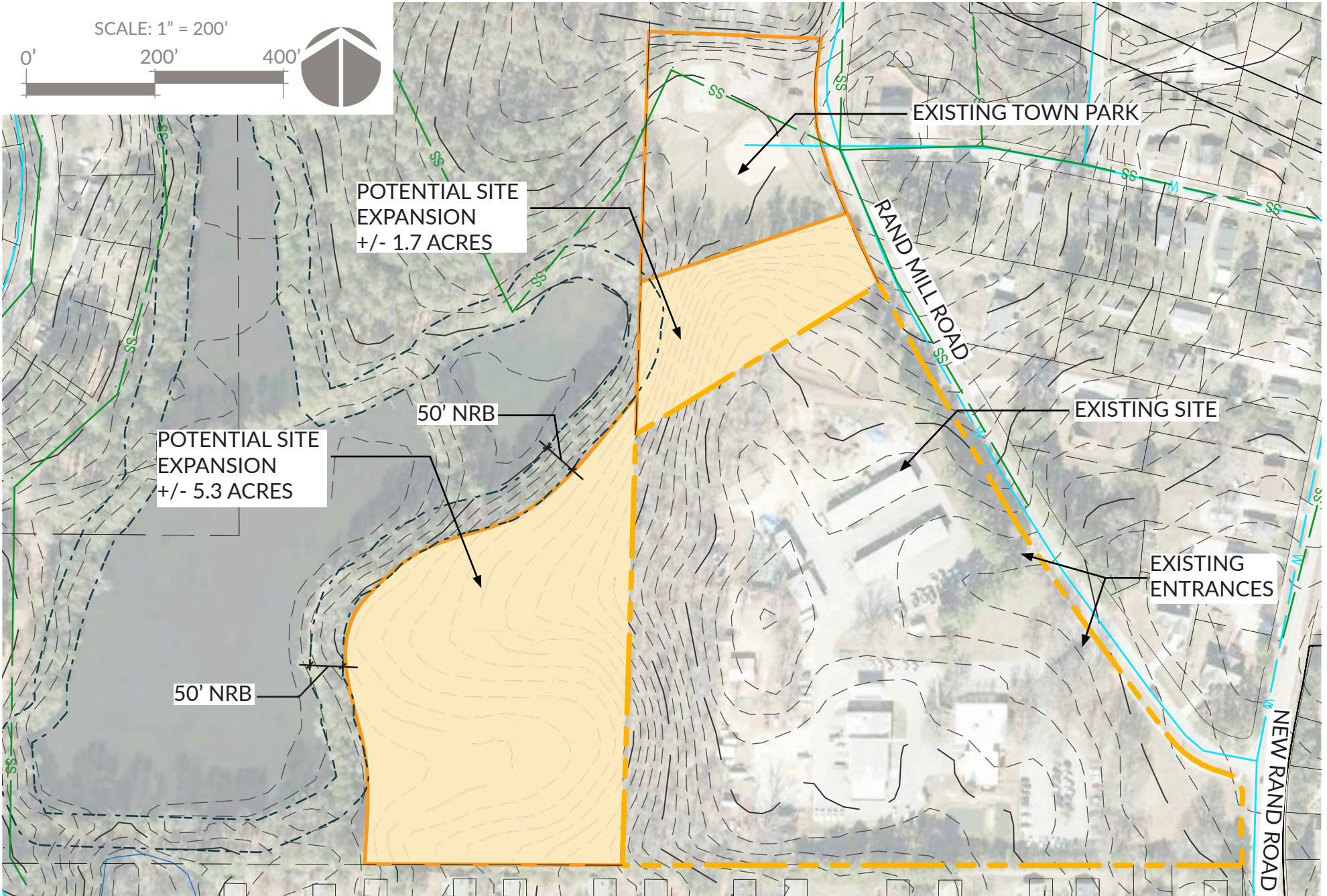
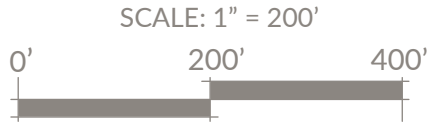
PUBLIC WORKS OPERATIONS CENTER SITE



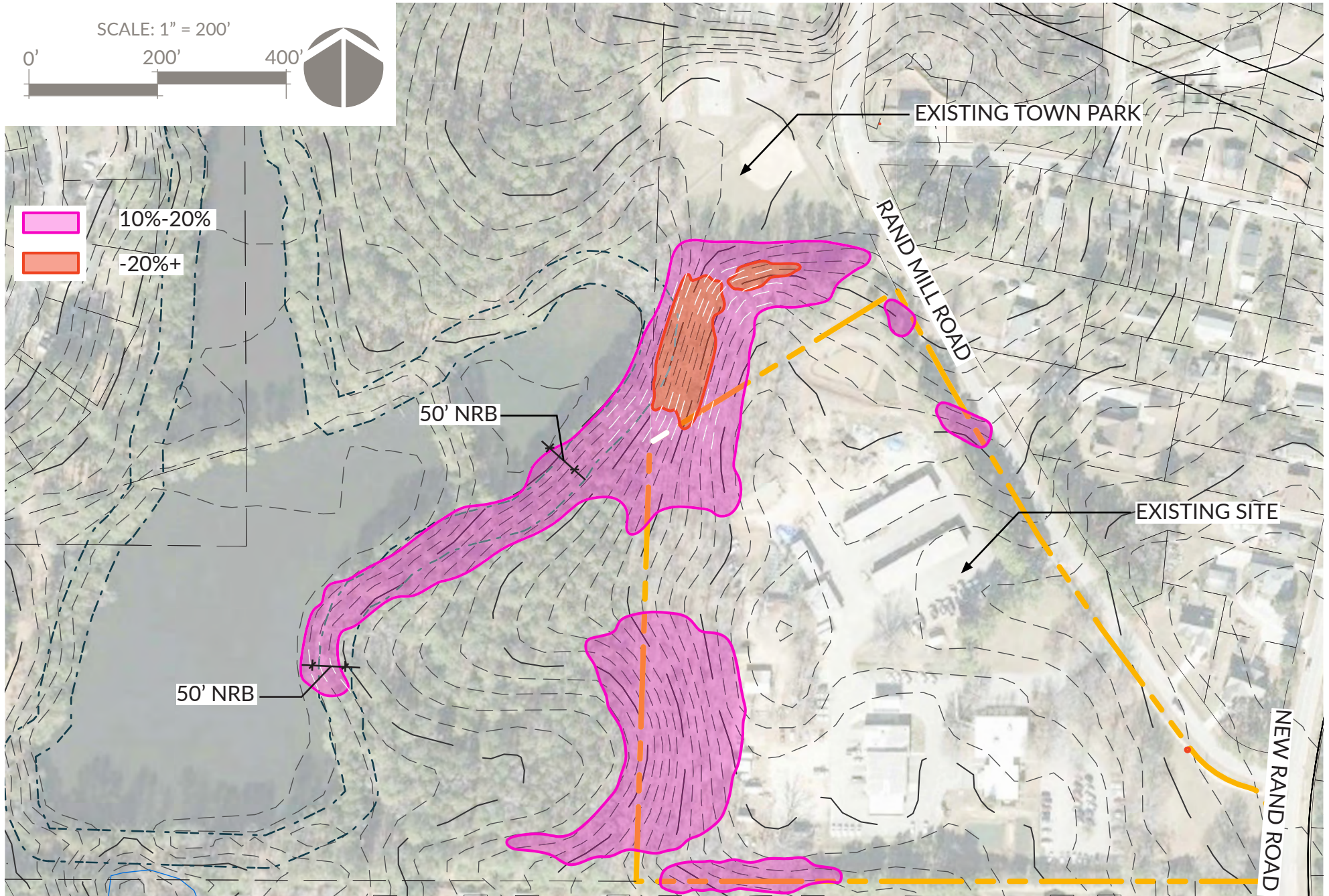
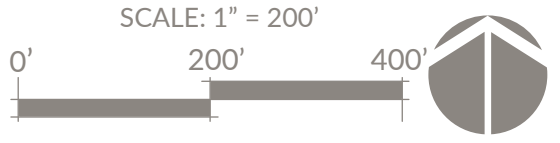
GARNER PUBLIC WORKS OPERATIONS CENTER



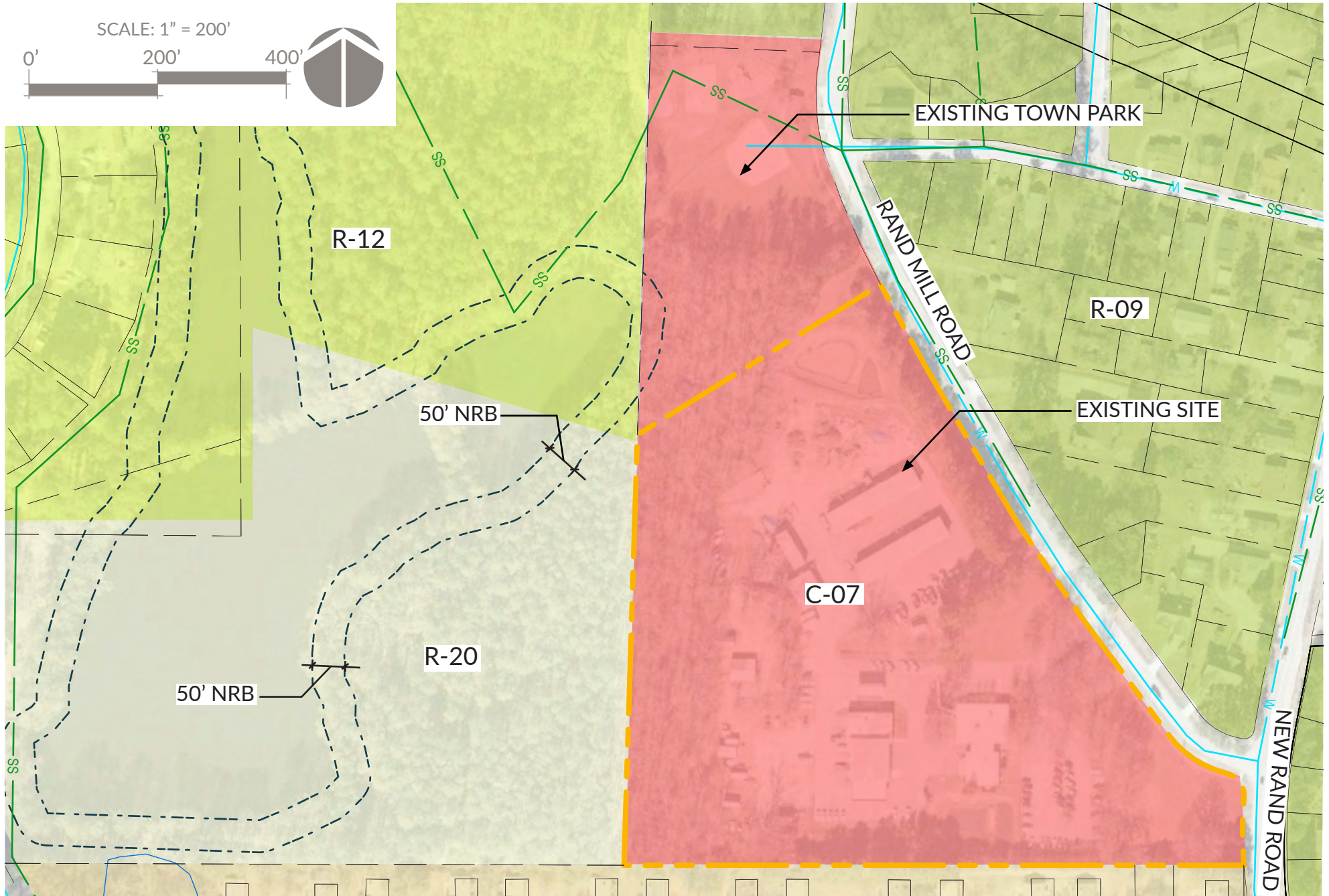
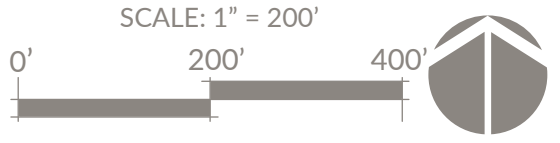
APPENDIX C
PUBLIC WORKS SITE ASSESSMENT EXHIBITS



TOWN OF GARNER: PUBLIC WORKS FACILITY ASSESSMENT



TOWN OF GARNER: PUBLIC WORKS FACILITY ASSESSMENT_TOPOGRAPHIC DATA

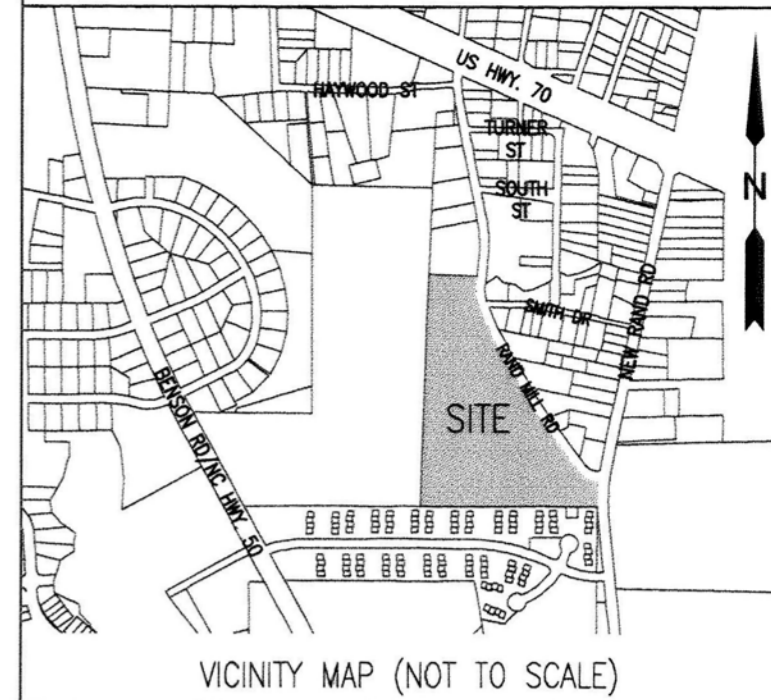


TOWN OF GARNER: PUBLIC WORKS FACILITY ASSESSMENT_ZONING DATA

APPENDIX D
PUBLIC WORKS RECORDED MAP

| CURVE | RADIUS | ARC LENGTH | CHORD LENGTH | CHORD BEARING | DELTA ANGLE |
|-------|----------|------------|--------------|---------------|-------------|
| C1 | 3089.06' | 219.70' | 219.65' | S 25°50'07" E | 04°04'30" |
| C2 | 1050.00' | 98.59' | 98.56' | S 34°29'57" E | 05°22'48" |
| C3 | 150.25' | 71.50' | 70.82' | S 49°37'01" E | 27°15'52" |
| C4 | 1393.99' | 82.22' | 82.21' | S 01°46'29" W | 03°22'46" |
| C5 | 1015.00' | 112.80' | 112.74' | N 32°21'45" W | 06°22'03" |
| C6 | 985.00' | 38.77' | 38.77' | N 30°18'23" W | 02°15'19" |

| LINE | BEARING | DISTANCE |
|------|---------------|----------|
| L1 | S 87°41'02" E | 10.19' |
| L2 | S 76°26'02" E | 271.08' |
| L3 | S 31°26'02" E | 23.46' |
| L4 | S 29°52'51" E | 256.72' |
| L5 | S 30°55'15" E | 167.69' |
| L6 | S 36°28'47" E | 281.08' |
| L7 | S 35°32'46" E | 99.96' |
| L8 | N 89°55'01" W | 4.56' |
| L9 | N 05°32'46" W | 47.09' |
| L10 | N 35°32'46" W | 554.69' |
| L11 | N 29°10'43" W | 249.51' |
| L12 | N 31°26'02" W | 269.31' |
| L13 | N 76°26'02" W | 255.70' |
| L14 | N 87°41'02" W | 6.94' |
| L15 | N 01°45'40" E | 30.00' |



- LEGEND**
- NOTE: THESE STANDARD SYMBOLS WILL BE FOUND IN THE DRAWING.
- COMPUTED POINT (CP)
 - EXISTING IRON PIPE/PIN/REBAR/ROD (EIP, EIR)
 - EXISTING CONCRETE MONUMENT (ECM)
 - ▲ NCGS MONUMENT
 - NCGS NORTH CAROLINA GEODETIC SURVEY
 - CF COMBINED SCALE FACTOR
 - NCDOT NORTH CAROLINA DEPT. OF TRANSPORTATION
 - C1 CURVE DATA
 - L1 LINE DATA
 - D.B. P.G. DEED BOOK & PAGE
 - B.M. P.G. MAP BOOK & PAGE
 - R/W--- RIGHT OF WAY
 - P/L--- PROPERTY LINE NOT SURVEYED
 - ▨ CITY OF RALEIGH WATER EASEMENT
 - ⊙ EXISTING SEWER MANHOLE
- GENERAL NOTES**
- ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES, UNLESS OTHERWISE NOTED.
 - ALL IMPROVEMENTS AND UTILITIES NOT SHOWN.
 - ALL AREAS COMPUTED BY COORDINATE METHOD.
 - THIS SURVEY IS SUBJECT TO THE FINDINGS OF A COMPLETE AND ACCURATE OPINION OF TITLE AND TO THOSE EXCEPTIONS, IF ANY, NOTED THEREON.
 - THIS IS NOT A BOUNDARY SURVEY AND IS INTENDED TO BE USED FOR EASEMENT ACQUISITION ONLY.
 - THIS MAP SUBJECT TO ALL EASEMENTS OF RECORD.
 - RIGHT OF WAY WIDTH FOR RAND MILL ROAD AS SHOWN TAKEN FROM WAKE COUNTY G.I.S., AND COMPUTED FROM FOUND EVIDENCE.

SUBDIVISION EXEMPTION/EASEMENT DEDICATION

BRAD BASS
 PLANNING DIRECTOR (PRINT)
 TOWN OF GARNER

Brad Bass 7-28-08
 PLANNING DIRECTOR (SIGNATURE) DATE
 TOWN OF GARNER

THIS IS TO CERTIFY THAT THIS SURVEY IS OF ANOTHER CATEGORY, SUCH AS RECOMBINATION OF EXISTING PARCELS, A COURT-ORDERED SURVEY, OR OTHER EXCEPTION TO THE DEFINITION OF SUBDIVISION.

Jeffery S. Munn
 PROFESSIONAL LAND SURVEYOR NC L-3946

STATE OF NORTH CAROLINA,
 COUNTY OF WAKE

I, Jeffery S. Munn, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION, THAT THE RATIO OF PRECISION IS 1:10,000+; THAT THE BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.

WITNESS MY HAND AND SEAL THIS 20th DAY OF JULY 2008.

Jeffery S. Munn
 PROFESSIONAL LAND SURVEYOR NC L-3946



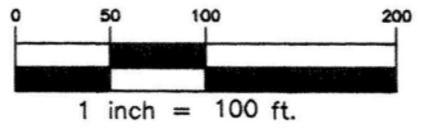
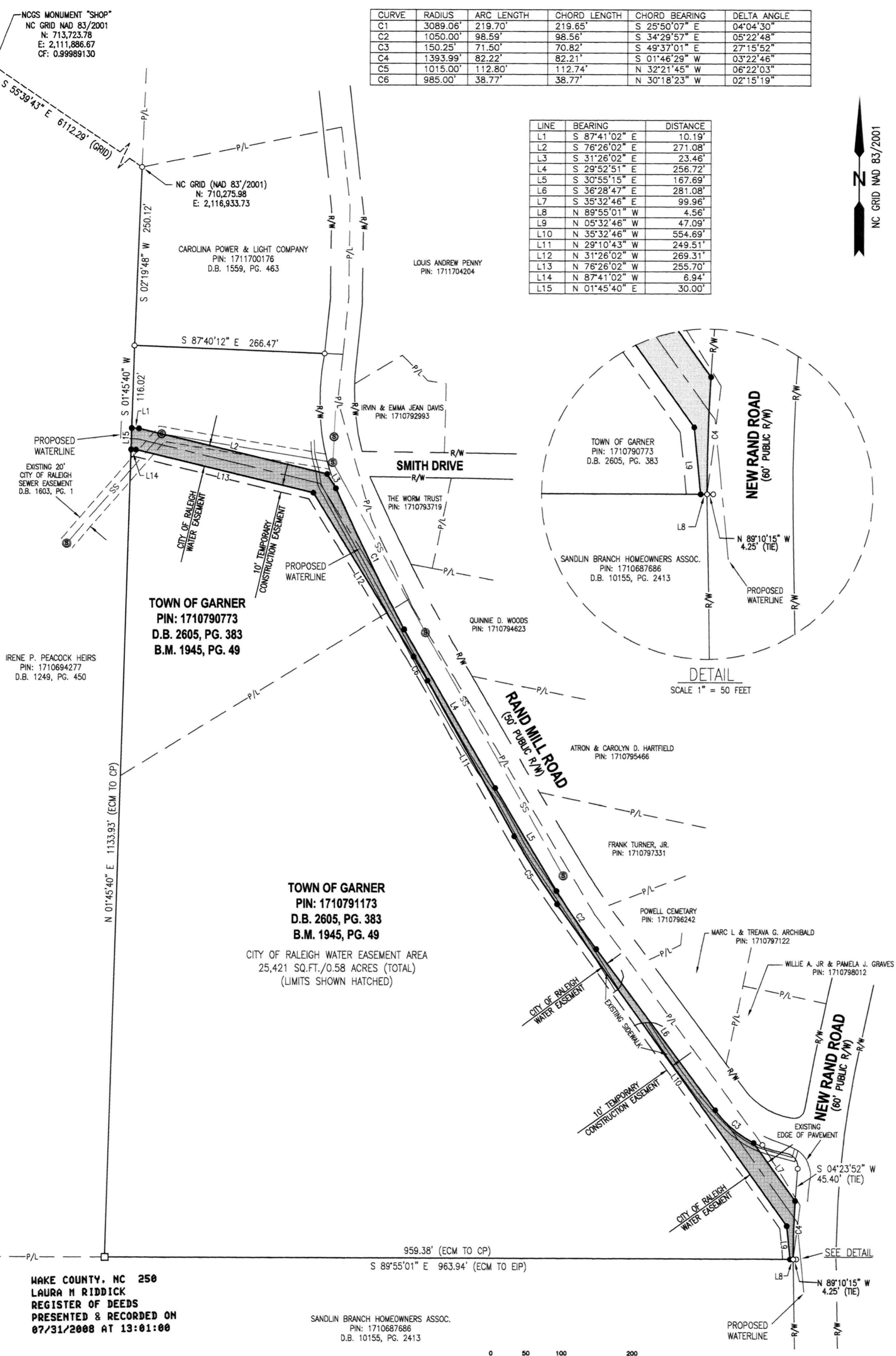
STATE OF NORTH CAROLINA,
 COUNTY OF WAKE

I, Tony Chalk, REVIEW OFFICER OF WAKE COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

Tony Chalk 7-29-08
 REVIEW OFFICER DATE

THIS PARCEL IS LOCATED IN THE Garner PLANNING JURISDICTION.

RECORDED IN BOOK OF MAPS 2008, PAGE 1502



WAKE COUNTY, NC 250
 LAURA M RIDDICK
 REGISTER OF DEEDS
 PRESENTED & RECORDED ON
 07/31/2008 AT 13:01:00

SANDLIN BRANCH HOMEOWNERS ASSOC.
 PIN: 1710687686
 D.B. 10155, PG. 2413

BOOK: BM2008 PAGE: 01502



801 Corporate Center Drive, Suite 300
 Raleigh, NC 27607-5073
 Tel: 919/854-1282 Fax: 919/854-5448



DEMPSEY E. BENTON WATER TRANSMISSION MAIN
CITY OF RALEIGH
 FOR EASEMENT ACQUISITION PURPOSES ONLY
 PROPERTY OF
TOWN OF GARNER
 SAINT MARY'S TOWNSHIP - WAKE COUNTY - NORTH CAROLINA
 SCALE: 1"=100' - APRIL 28, 2008

APPENDIX E

FACILITY CONDITION ASSESSMENT REPORTS BY EMG / DUDE SOLUTIONS

24. Public Works A (Main)



Public Works A (Main): Systems Summary

| | | |
|-----------------------------------|--|------------------|
| Address | 610-A Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1980 | |
| Building Size | 7,520 SF | |
| Number of Stories | 1 | |
| Site Area | 11 acres (estimated) | |
| Parking Spaces | 100 total spaces all in open lots; 6 of which are accessible (entire PW lot) | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Masonry bearing walls and wood-framed roof | Good |
| Façade | Brick with aluminum windows | Fair |
| Roof | Primary: Gable construction with metal finish | Fair |
| Interiors | Walls: Painted CMU Floors: Carpet, VCT, ceramic tile Ceilings: Painted gypsum board, ACT | Good |
| Elevators | None | -- |
| Plumbing | Copper supply and cast iron waste & venting Gas water heaters Toilets, urinals, and sinks in all restrooms | Good |

Public Works A (Main): Systems Summary

| | | |
|-----------------------------------|---|------|
| HVAC | Individual package & heat pump units Supplemental components: suspended gas unit heaters | Good |
| Fire Suppression | Fire extinguishers | Fair |
| Electrical | Source & Distribution: Main switchboard panel with copper wiring Interior Lighting: LED Emergency: Diesel generator | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps, and stairs | Fair |
| Site Development | Property entrance signage, Chain Link fencing, CMU dumpster enclosures | Fair |
| Landscaping and Topography | No significant landscaping features Irrigation not present No retaining walls Low to moderate site slopes throughout | Fair |
| Utilities | Municipal water and sewer Local utility-provided electric and natural gas | -- |
| Site Lighting | Pole-mounted: HPS Building-mounted: HPS | Fair |
| Ancillary Structures | None | -- |
| Accessibility | Potential moderate/major issues have been identified at this property and a detailed accessibility study is recommended. | |
| Key Issues and Findings | <ul style="list-style-type: none"> ▪ Building is not protected by fire suppression system ▪ Building is not protected by fire alarm system and proper exit signs ▪ Caulking between building joints is dried and cracked ▪ Roof exhaust fans are either failed or in poor condition | |

Public Works A (Main): Systems Expenditure Forecast

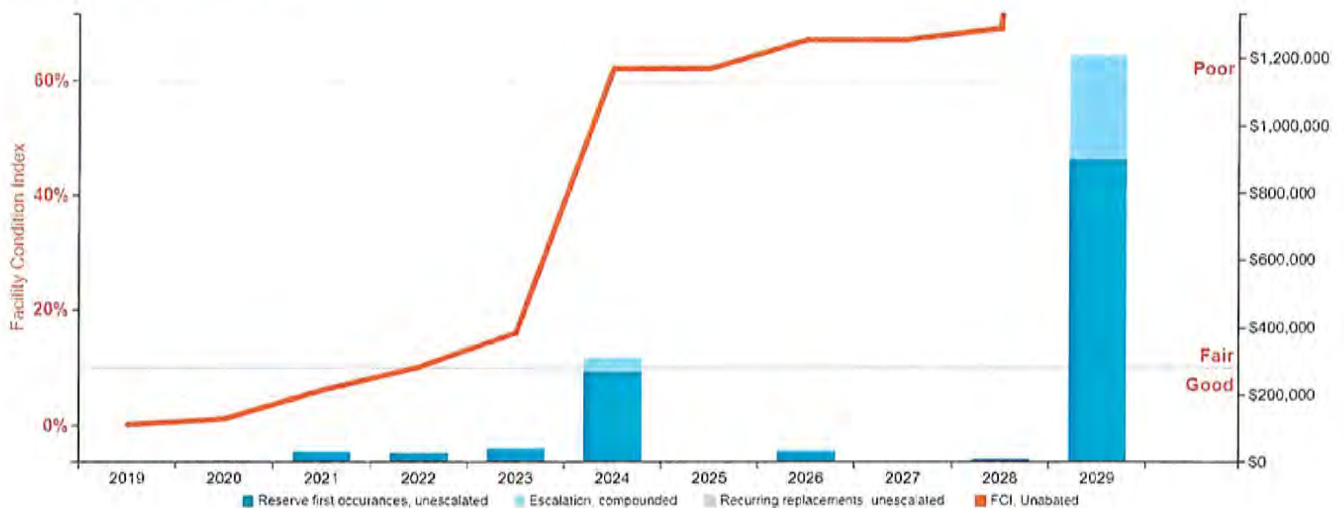
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|-------------------|----------------|-------------------|------------------|--------------------|-------------------|--------------------|
| Facade | - | \$3,100 | - | \$52,000 | \$10,700 | \$65,800 |
| Roofing | - | - | - | - | \$135,000 | \$135,000 |
| Interiors | - | \$28,700 | - | \$78,300 | \$107,000 | \$214,000 |
| Plumbing | - | \$1,000 | \$95,900 | - | \$19,500 | \$116,400 |
| Fire Suppression | - | - | \$42,300 | \$400 | \$500 | \$43,300 |
| HVAC | - | \$1,200 | - | \$43,200 | \$44,600 | \$89,100 |
| Electrical | \$1,100 | - | \$209,700 | \$1,500 | \$106,200 | \$318,400 |
| Fire Alarm & Comm | - | \$31,900 | - | - | - | \$31,900 |
| Site Development | - | - | \$5,800 | - | \$5,100 | \$10,900 |
| Pavement | - | - | - | \$1,081,900 | \$12,500 | \$1,094,300 |
| TOTALS | \$1,100 | \$65,900 | \$353,700 | \$1,257,300 | \$441,100 | \$2,119,100 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Works A (Main)

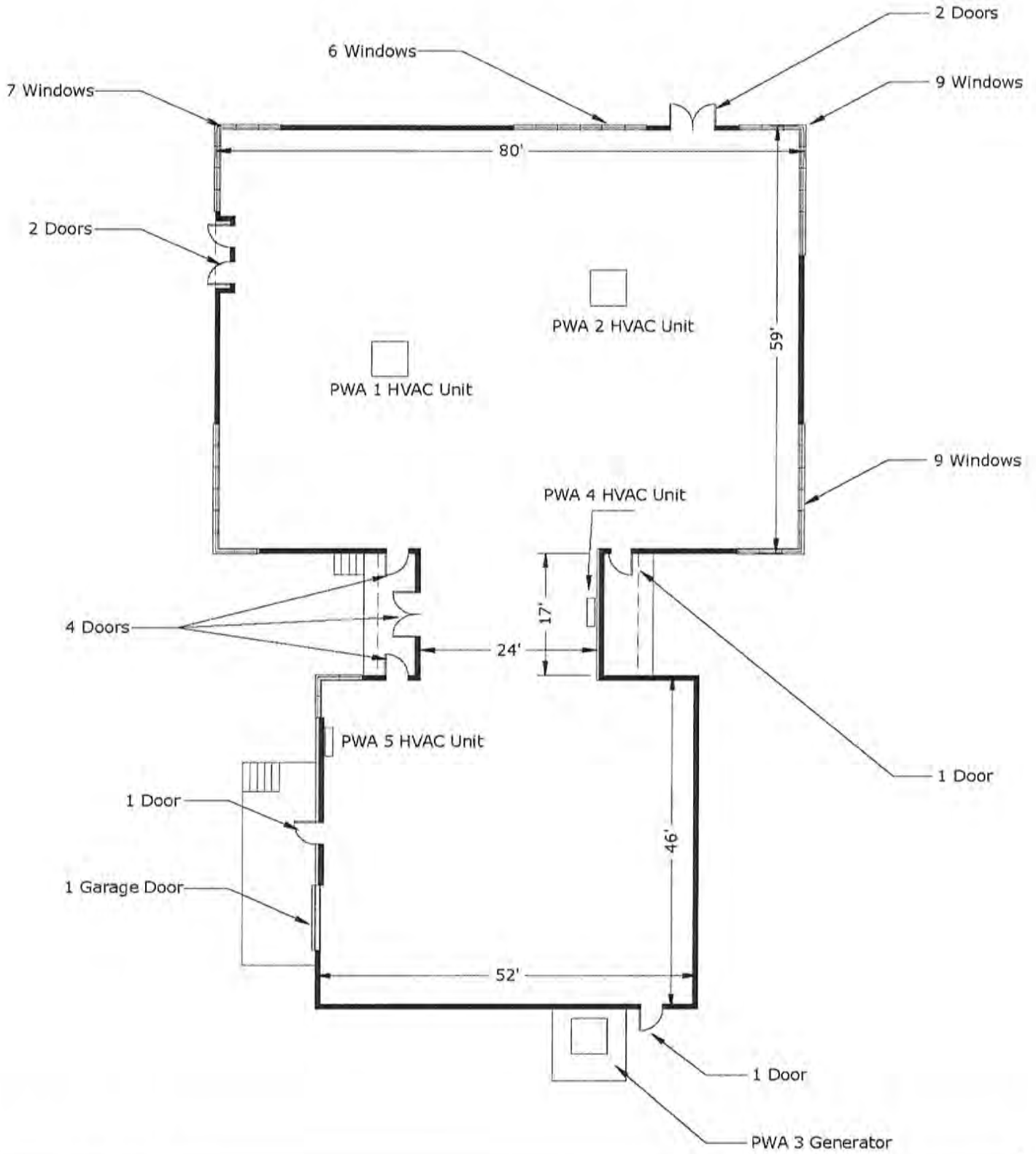
Replacement Value: \$ 681,237; Inflation rate: 3.0%



Public Works B Services: Systems Summary

| | | |
|-----------------------------------|---|---------|
| HVAC | Individual package and split-system units Supplemental components: suspended gas unit heater | Good |
| Fire Suppression | No suppression, hydrant only | Missing |
| Electrical | Source & Distribution: Main panel with copper wiring Interior Lighting: LED | Good |
| Fire Alarm | None Exit signs only | Missing |
| Equipment/Special | None | -- |
| Site Pavement | Discussed under Public Works Building A | -- |
| Site Development | Property entrance signage | Good |
| Landscaping and Topography | No significant landscaping features Irrigation not present No retaining walls Low to moderate site slopes throughout | Good |
| Utilities | Municipal water and sewer Local utility-provided electric and natural gas | Good |
| Site Lighting | Building-mounted: LED | Good |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | Building lacks fire suppression and central fire alarm systems | |

Public Works A



SITE.BLDG #

3.1

25. Public Works B Services



Public Works B Services: Systems Summary

| | | |
|-----------------------------------|---|------------------|
| Address | 610-B Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1981 | |
| Building Size | 7,368 SF | |
| Number of Stories | 1 | |
| Site Area | 1 acre (estimated) | |
| Parking Spaces | See building A | |
| System | <i>Description</i> | <i>Condition</i> |
| Structure | Masonry bearing walls and metal decks | Good |
| Façade | Brick with aluminum windows | Fair |
| Roof | Primary: Flat construction with metal finish | Fair |
| Interiors | Walls: Painted CMU Floors: Carpet, VCT Ceilings: ACT & Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | Copper supply and cast iron waste & venting No hot water Toilets, urinals, and sinks in all restrooms | Fair |

Public Works B Services: Systems Expenditure Forecast

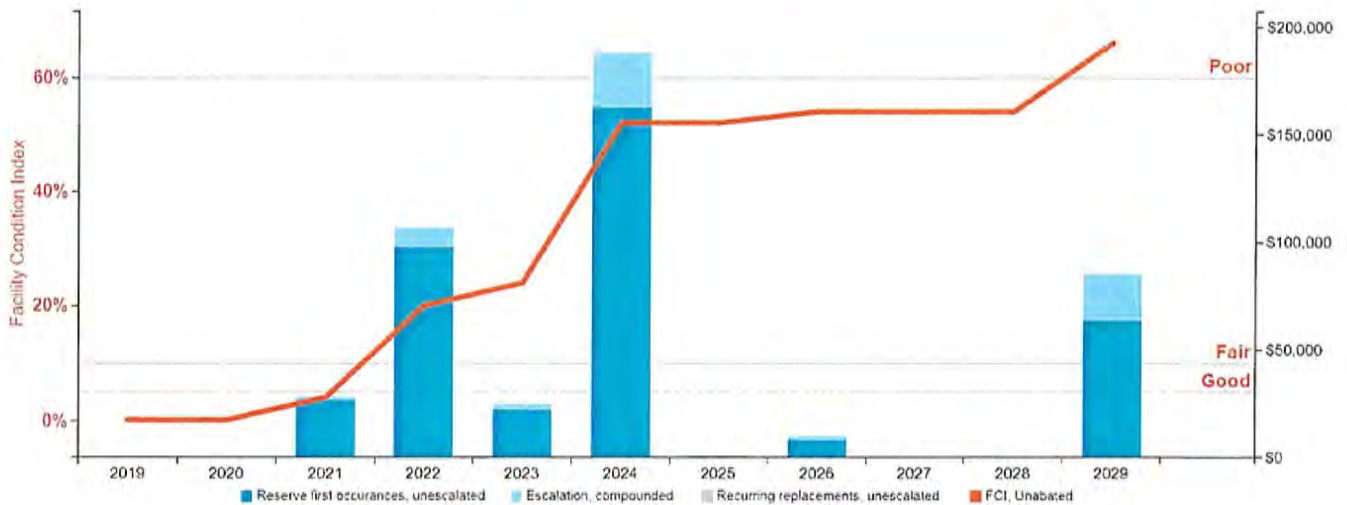
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|-------------------|-----------|-------------------|------------------|------------------|-------------------|------------------|
| Facade | - | - | \$1,100 | \$25,800 | \$6,500 | \$33,400 |
| Roofing | - | \$106,500 | - | - | - | \$106,500 |
| Interiors | - | \$8,000 | \$10,100 | \$19,300 | \$49,900 | \$87,300 |
| Plumbing | - | - | - | \$49,500 | \$11,400 | \$60,900 |
| Fire Suppression | - | - | \$24,900 | \$700 | \$1,000 | \$26,600 |
| HVAC | - | \$2,500 | \$23,200 | - | \$51,700 | \$77,500 |
| Electrical | - | \$2,100 | \$153,700 | \$500 | \$79,600 | \$236,000 |
| Fire Alarm & Comm | - | \$15,600 | - | - | - | \$15,600 |
| TOTALS | - | \$134,700 | \$213,000 | \$95,800 | \$200,100 | \$643,800 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

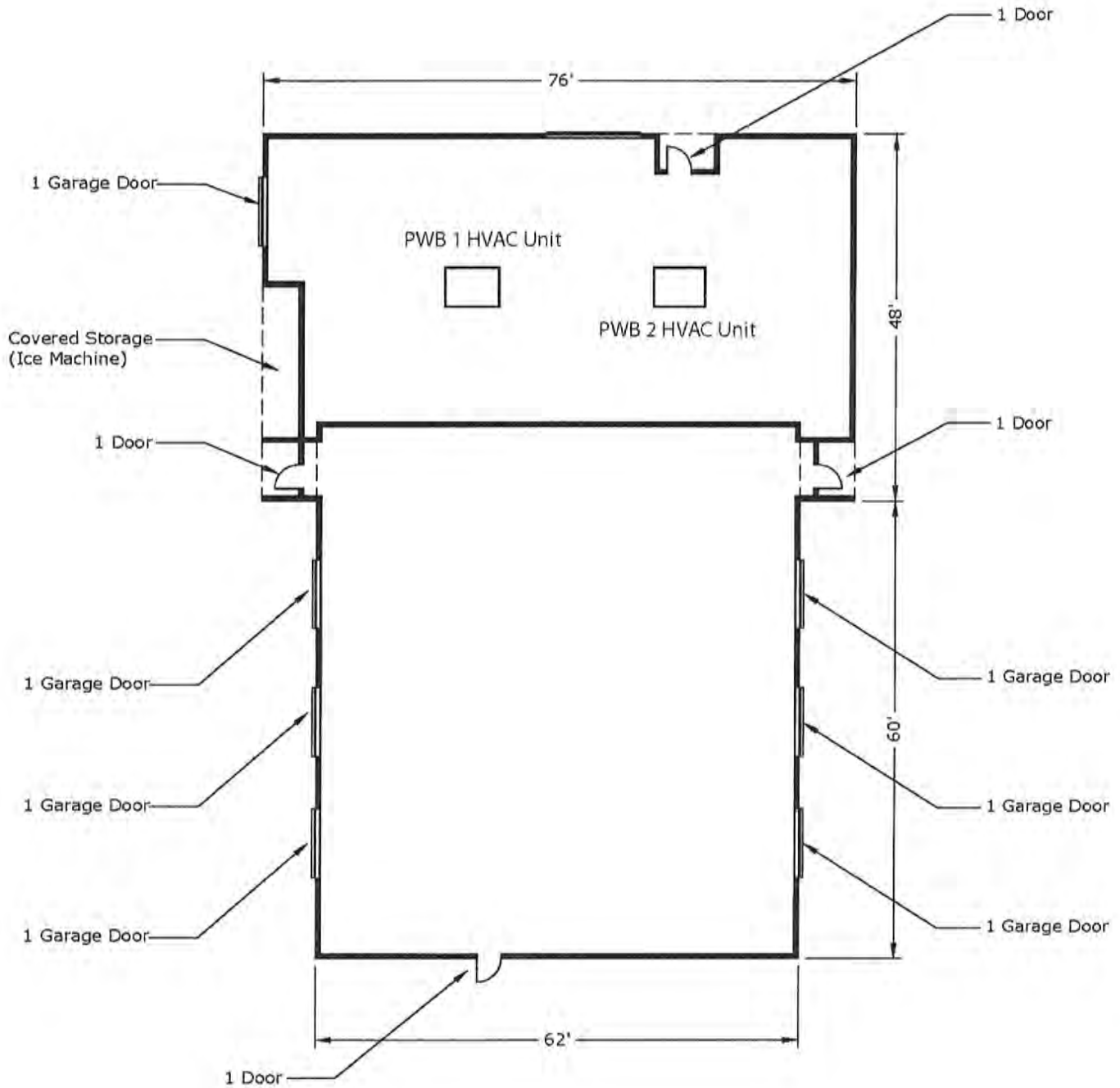
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Works B Services

Replacement Value: \$ 667,467; Inflation rate: 3.0%



Public Works B



SITE.BLDG #

3.2

26. Public Works C Storage



Public Works C Storage: Systems Summary

| | | |
|-----------------------------------|---|------------------|
| Address | 610-C Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1988 | |
| Building Size | 1,254 SF | |
| Number of Stories | 1 | |
| Site Area | 0.25 acres (estimated) | |
| Parking Spaces | See building A | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Conventional wood frame structure on concrete slab/ with raised floor | Fair |
| Façade | Painted wood with vinyl windows | Fair |
| Roof | Primary: Gable construction with metal finish | Poor |
| Interiors | Walls: Unfinished Floors: Unfinished Ceilings: Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | None | -- |

Public Works C Storage: Systems Summary

| | | |
|-----------------------------------|---|------|
| HVAC | None | -- |
| Fire Suppression | Fire extinguishers | Good |
| Electrical | Source & Distribution: Main panel with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | None | -- |
| Site Development | Building-mounted signage | Fair |
| Landscaping and Topography | No significant landscaping features | -- |
| Utilities | Local utility-provided electric | Good |
| Site Lighting | None | -- |
| Ancillary Structures | Wood-framed carports | Fair |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | <ul style="list-style-type: none"> ▪ Metal roof exhibits excessive of rust and signs of leaks. ▪ Building exterior trim and fascia shows signs of decay. ▪ Some of the internal studs are broken or missing. ▪ - Building does not appear to have a fire alarm system | |

Public Works C Storage: Systems Expenditure Forecast

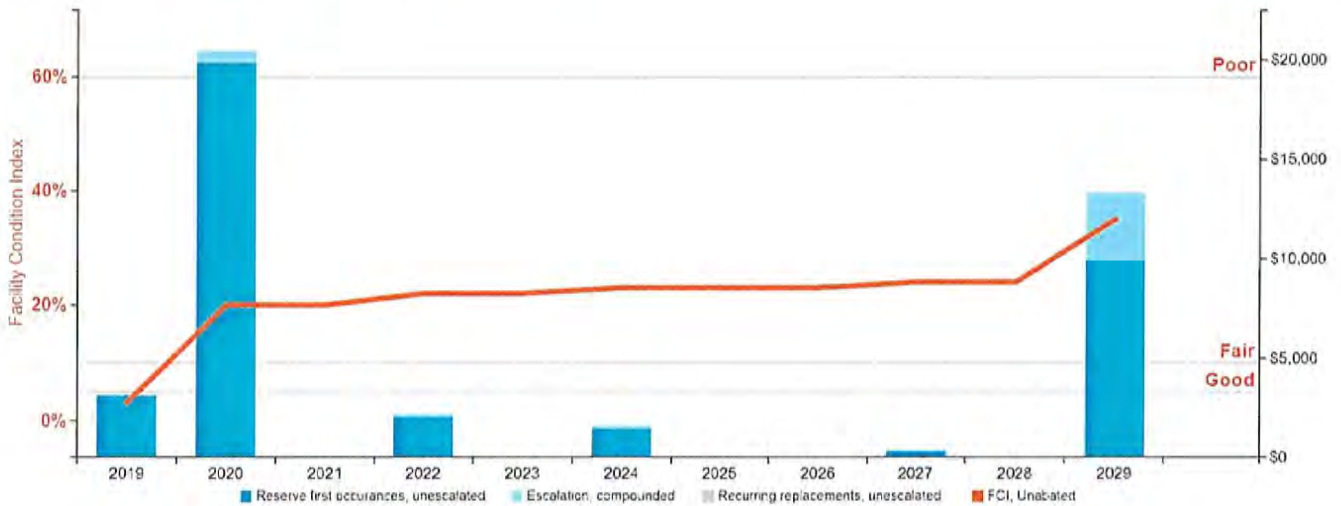
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|-------------------|----------------|-------------------|------------------|------------------|-------------------|-----------------|
| Facade | \$3,100 | - | \$1,600 | \$3,200 | \$5,600 | \$13,600 |
| Roofing | - | \$20,100 | - | - | - | \$20,100 |
| Fire Suppression | - | - | - | \$400 | \$500 | \$900 |
| Electrical | - | \$2,200 | - | \$10,100 | - | \$12,300 |
| Fire Alarm & Comm | - | \$400 | - | - | \$500 | \$900 |
| TOTALS | \$3,100 | \$22,700 | \$1,600 | \$13,700 | \$6,600 | \$47,800 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

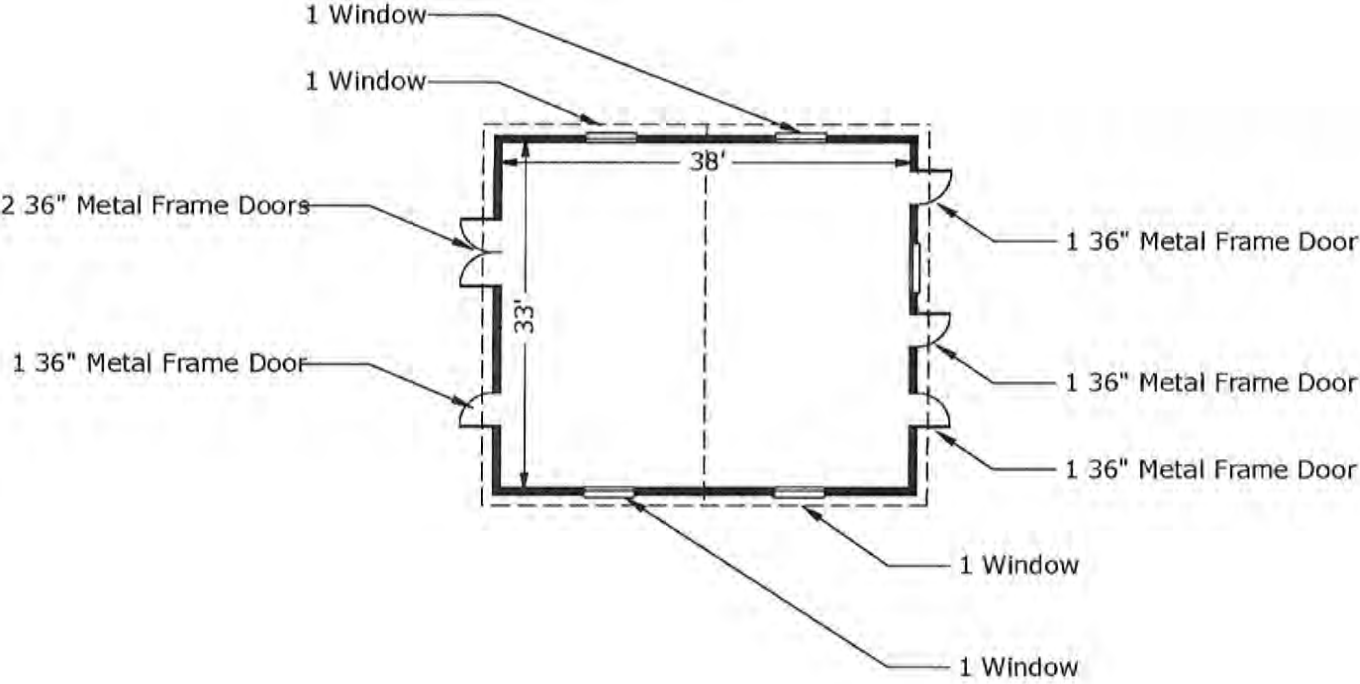
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Works C Storage

Replacement Value: \$ 117,889; Inflation rate: 3.0%



Public Works C



SITE.BLDG #
3.3

22. Public Works E Parks Barn



Public Works E Parks Barn: Systems Summary

| | | |
|-----------------------------------|---|------------------|
| Address | 610-East Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1985 | |
| Building Size | 1,900 SF | |
| Number of Stories | 1 | |
| Site Area | N/A | |
| Parking Spaces | None | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Steel frame with metal siding walls and metal roof | Fair |
| Façade | Metal siding with aluminum windows | Fair |
| Roof | Primary: Gable construction with metal finish | Fair |
| Interiors | Walls: Unfinished Floors: Unfinished Ceilings: Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | None | -- |

Public Works E Parks Barn: Systems Summary

| | | |
|-----------------------------------|--|------|
| HVAC | Exhaust Fan | Fair |
| Fire Suppression | fire extinguishers | Good |
| Electrical | Source & Distribution: Main panel with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | None | -- |
| Site Development | None | -- |
| Landscaping and Topography | None | -- |
| Utilities | Local utility-provided electric | -- |
| Site Lighting | Building-mounted: halogen | Fair |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | None | |

Public Works E Parks Barn: Systems Expenditure Forecast

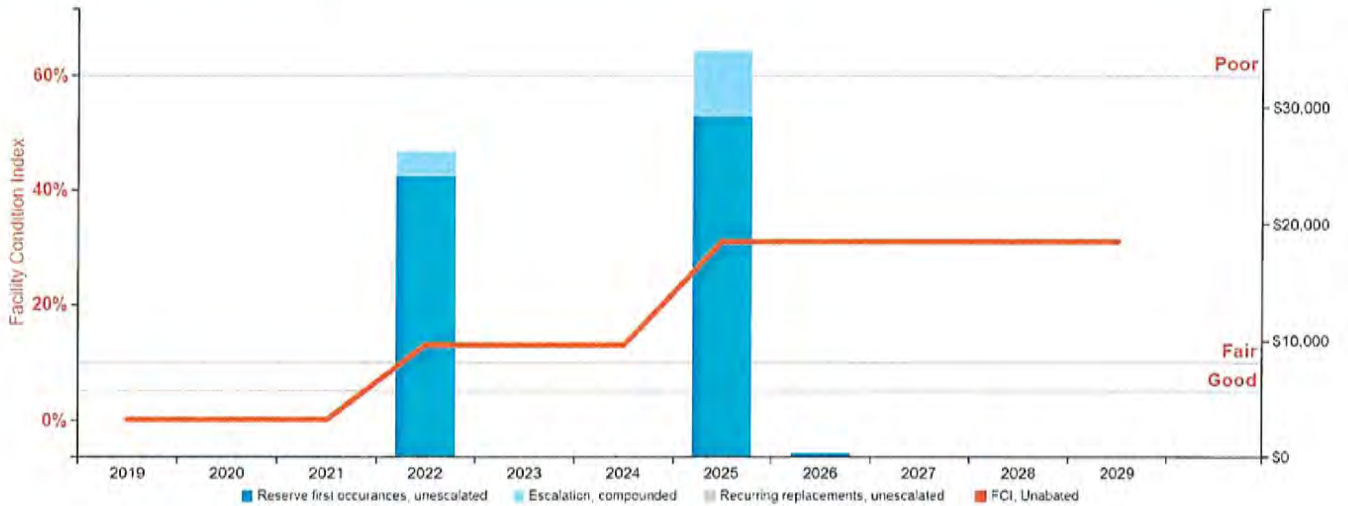
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|------------------|-----------|-------------------|------------------|------------------|-------------------|-----------------|
| Facade | - | \$9,600 | - | \$700 | - | \$10,300 |
| Roofing | - | - | - | \$34,100 | - | \$34,100 |
| Fire Suppression | - | - | - | \$400 | \$500 | \$900 |
| HVAC | - | \$2,000 | - | - | - | \$2,000 |
| Electrical | - | \$14,600 | - | - | - | \$14,600 |
| TOTALS | - | \$26,200 | - | \$35,200 | \$500 | \$61,900 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

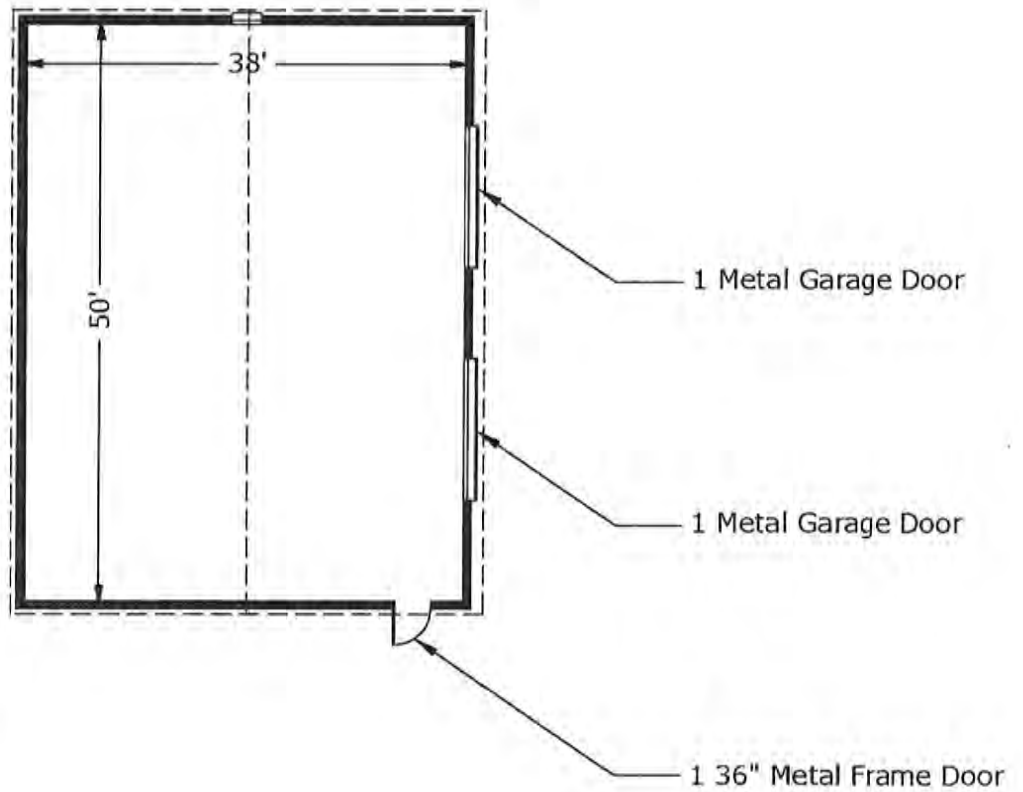
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Wks. E Parks Barn

Replacement Value: \$ 196,232; Inflation rate: 3.0%



Public Works E



SITE.BLDG #
3.4

23. Public Works F Parks Barn



Public Works F Parks Barn: Systems Summary

| | | |
|-----------------------------------|---|--------------------|
| Address | 610-F Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1985 | |
| Building Size | 1,298 SF | |
| Number of Stories | 1 | |
| Site Area | N/A | |
| Parking Spaces | None | |
| <i>System</i> | <i>Description</i> | <i>Description</i> |
| Structure | Steel frame with metal siding walls and metal roofs | Fair |
| Façade | Metal siding with aluminum windows | Fair |
| Roof | Primary: Gable construction with metal finish | Fair |
| Interiors | Walls: Unfinished Floors: Unfinished Ceilings: Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | None | -- |

Public Works F Parks Barn: Systems Summary

| | | |
|-----------------------------------|---|------|
| HVAC | None | -- |
| Fire Suppression | fire extinguishers | Good |
| Electrical | Source & Distribution: Main panel with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | None | -- |
| Site Development | None | -- |
| Landscaping and Topography | None | -- |
| Utilities | Local utility-provided electric | -- |
| Site Lighting | Building-mounted: halogen | Fair |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | Roll up doors and steel doors are corroded due to stored de-icing chemicals in the building and will need replacement in near future. | |

Public Works F Parks Barn: Systems Expenditure Forecast

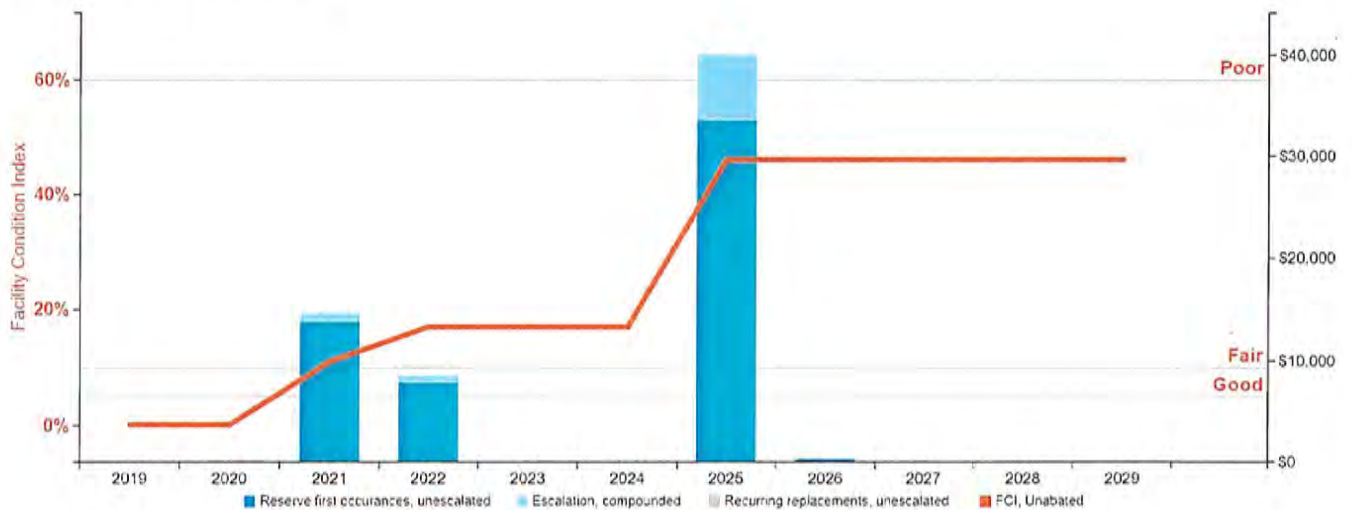
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|------------------|-----------|-------------------|------------------|------------------|-------------------|-----------------|
| Facade | - | \$14,600 | - | \$19,900 | - | \$34,500 |
| Roofing | - | - | - | \$20,200 | - | \$20,200 |
| Fire Suppression | - | - | - | \$400 | \$500 | \$900 |
| Electrical | - | \$8,500 | - | - | - | \$8,500 |
| TOTALS | - | \$23,100 | - | \$40,500 | \$500 | \$64,100 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

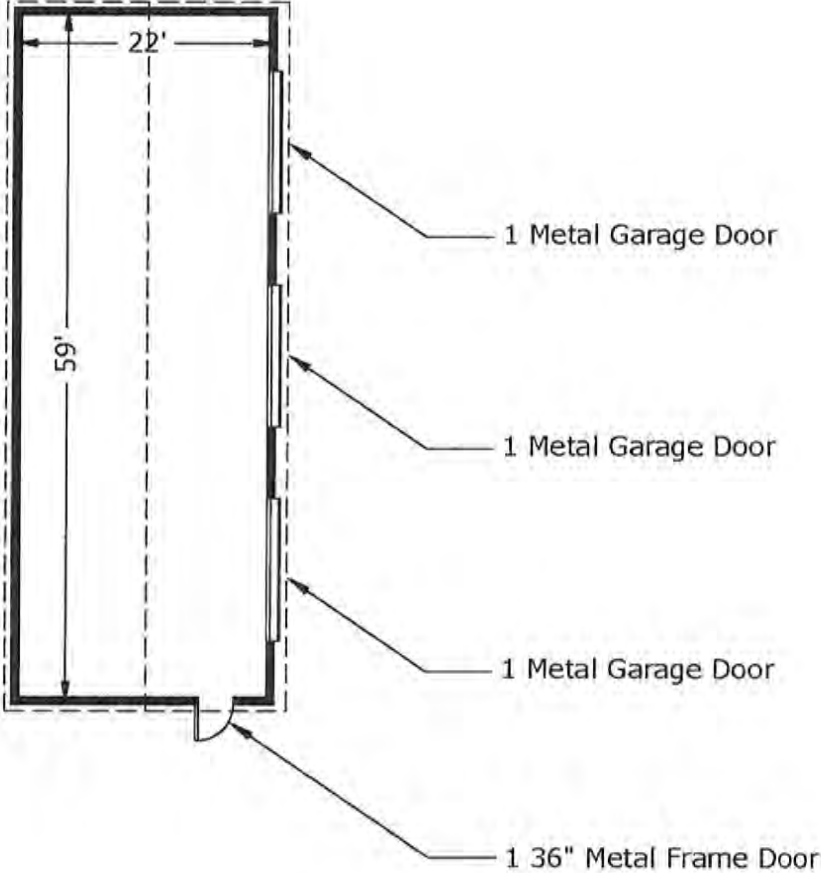
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Wks. F Streets Barn

Replacement Value: \$ 138,055; Inflation rate: 3.0%



Public Works F



SITE.BLDG #
3.5

27. Public Works G Equipment Shelter



Public Works G Equipment Shelter: Systems Summary

| | | |
|-----------------------------------|--|------------------|
| Address | 610-G Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1988 | |
| Building Size | 3,492 SF | |
| Number of Stories | 1 | |
| Site Area | 0.2 acres (estimated) | |
| Parking Spaces | See building A | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Steel frame with metal decks | Fair |
| Façade | Metal siding and brick | Fair |
| Roof | Primary: Shed construction with metal finish | Fair |
| Interiors | Walls: CMU, Unfinished Floors: Unfinished Ceilings: Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | None | -- |

Public Works G Equipment Shelter: Systems Summary

| | | |
|-----------------------------------|--|------|
| HVAC | None | -- |
| Fire Suppression | None | -- |
| Electrical | Source & Distribution: Main with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | Discussed under Public Works Building A | -- |
| Site Development | Building-mounted signage | Fair |
| Landscaping and Topography | No significant landscaping features | -- |
| Utilities | Local utility-provided electric | Good |
| Site Lighting | Discussed under Public Works Building A | -- |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | Structural concrete base of steel column is cracked and requires repair in the short term to insure roof structural integrity. | |

Public Works G Equipment Shelter: Systems Expenditure Forecast

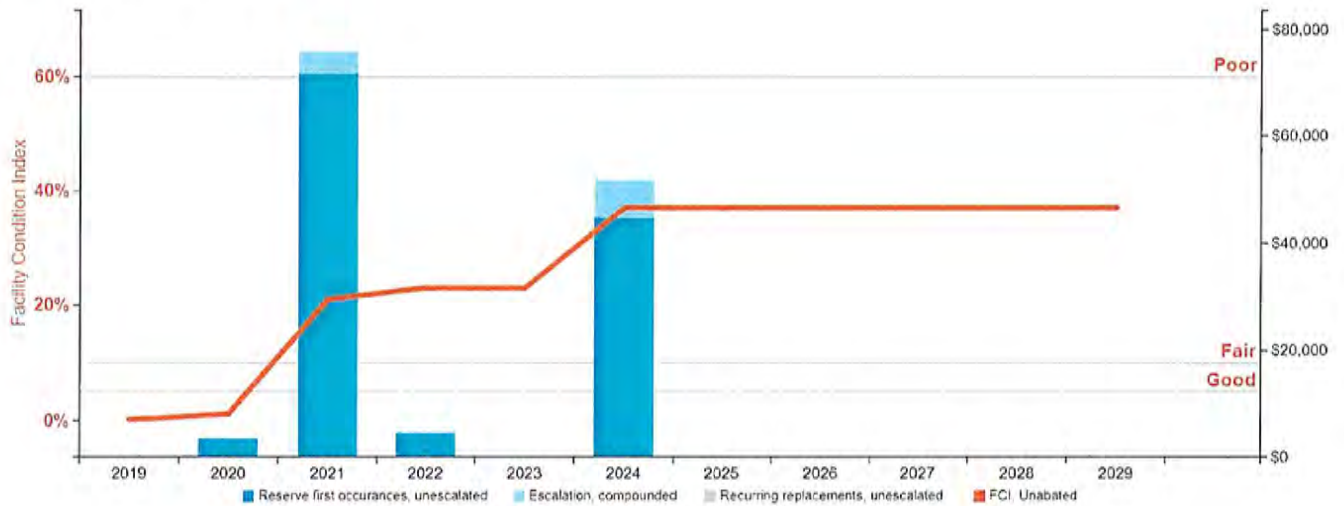
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|---------------|-----------|-------------------|------------------|------------------|-------------------|------------------|
| Structure | - | \$3,500 | - | - | - | \$3,500 |
| Facade | - | \$5,400 | \$27,500 | - | - | \$33,000 |
| Roofing | - | \$73,100 | - | - | - | \$73,100 |
| Electrical | - | \$2,100 | \$24,300 | - | - | \$26,400 |
| TOTALS | - | \$84,100 | \$51,800 | - | - | \$136,000 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Works G Eq. Shltr.

Replacement Value: \$ 370,587; Inflation rate: 3.0%



28. Public Works H Equipment Shelter



Public Works H Equipment Shelter: Systems Summary

| | | |
|-----------------------------------|--|------------------|
| Address | 610-H Rand Mill Road, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1988 | |
| Building Size | 3,492 SF | |
| Number of Stories | 1 | |
| Site Area | 0.2 acres (estimated) | |
| Parking Spaces | See building A | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Steel frame with metal decks | Fair |
| Façade | Metal siding | Fair |
| Roof | Primary: Shed construction with metal finish | Fair |
| Interiors | Walls: CMU, Unfinished Floors: Unfinished Ceilings: Unfinished/exposed | Fair |
| Elevators | None | -- |
| Plumbing | None | -- |

Public Works H Equipment Shelter: Systems Summary

| | | |
|-----------------------------------|--|------|
| HVAC | None | -- |
| Fire Suppression | None | -- |
| Electrical | Source & Distribution: Main with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | Discussed under Public Works Building A | -- |
| Site Development | Building-mounted signage | Fair |
| Landscaping and Topography | No significant landscaping features | -- |
| Utilities | Local utility-provided electric | Good |
| Site Lighting | Discussed under Public Works Building A | -- |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | None | |

Public Works H Equipment Shelter: Systems Expenditure Forecast

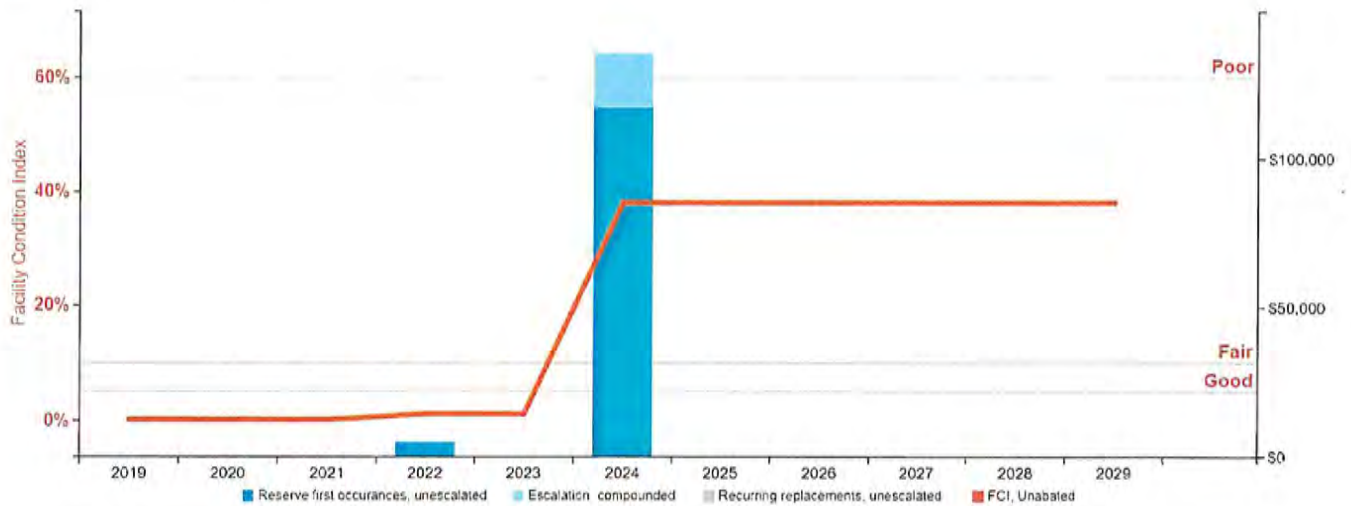
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|---------------|-----------|-------------------|------------------|------------------|-------------------|------------------|
| Facade | - | \$5,500 | \$27,500 | - | - | \$33,000 |
| Roofing | - | - | \$79,900 | - | - | \$79,900 |
| Electrical | - | - | \$28,400 | - | - | \$28,400 |
| TOTALS | - | \$5,500 | \$135,800 | - | - | \$141,300 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

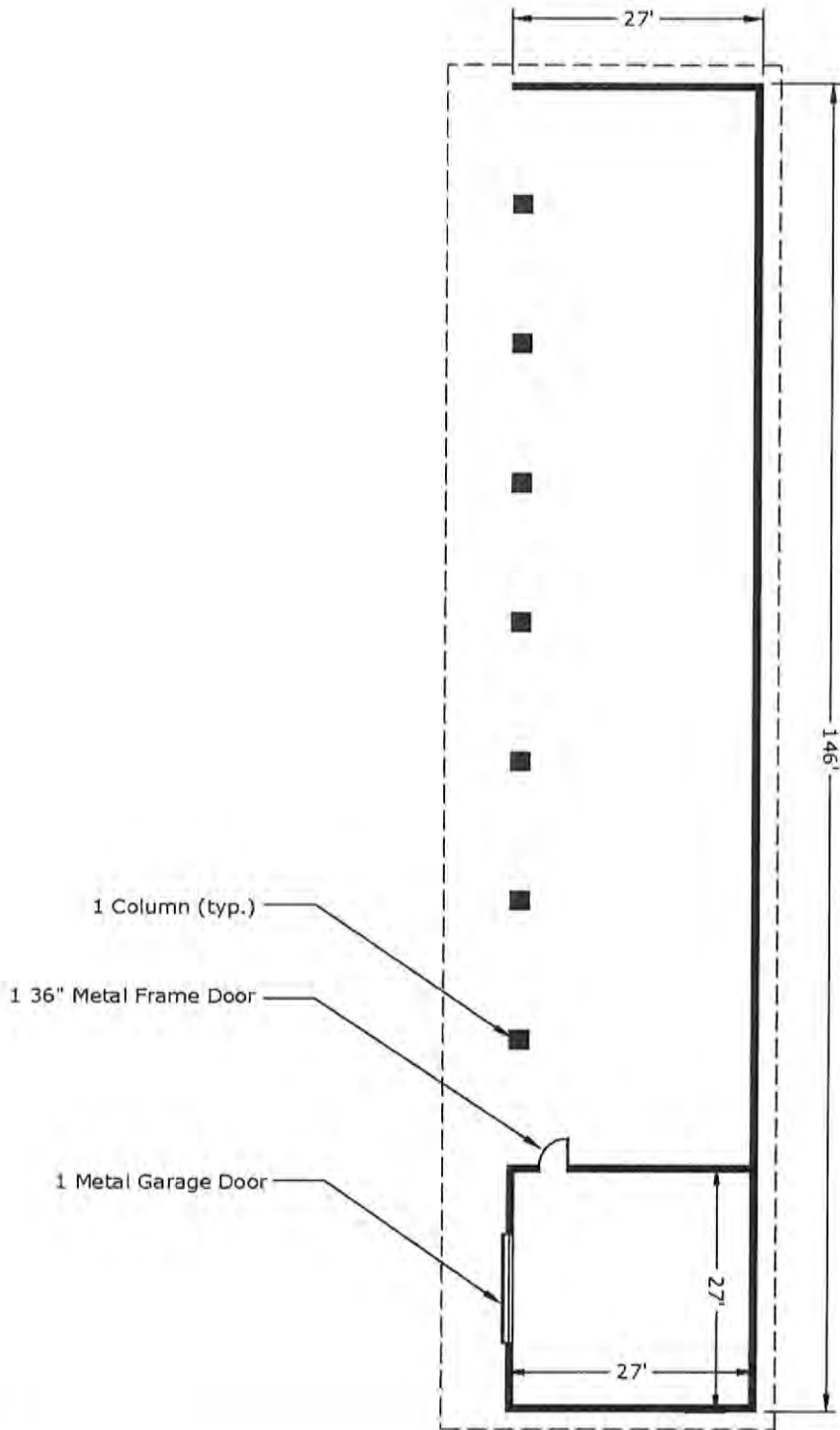
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Public Works H Eq. Shltr.

Replacement Value: \$ 370,587; Inflation rate: 3.0%



Public Works G,H



SITE.BLDG #
3.6

16. Pearl Street Building



Pearl Street Building: Systems Summary

| | | |
|-----------------------------------|---|------------------|
| Address | 106 Pearl Street, Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1922 | |
| Building Size | 3,240 (estimated), 2,856 SF (reported) | |
| Number of Stories | 1 | |
| Site Area | 0.25 acres (estimated) | |
| Parking Spaces | 7 total spaces all in open asphalt lots; 1 of which are accessible Additional gravel lot size for 20 more possible parking space | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Masonry bearing walls and wood-framed roofs | Fair |
| Façade | Painted CMU with steel windows | Fair |
| Roof | Primary: Gable construction with asphalt shingles | Fair |
| Interiors | Walls: Painted gypsum board & CMU Floors: Carpet, VCT Ceilings: Painted gypsum board, ACT | Fair |
| Elevators | None | -- |
| Plumbing | Copper supply and cast iron waste & venting Electric water heaters Toilets, urinals, and sinks in all restrooms | Fair |

Pearl Street Building: Systems Summary

| | | |
|-----------------------------------|--|------|
| HVAC | Individual package and split-system units | Fair |
| Fire Suppression | Fire extinguishers | Fair |
| Electrical | Source & Distribution: Main panel with copper wiring Interior Lighting: T-12 | Fair |
| Fire Alarm | Alarm panel, smoke detectors, alarms, strobes, pull stations, back-up emergency lights, and exit signs | Good |
| Equipment/Special | None | -- |
| Site Pavement | Asphalt lots with areas of concrete and concrete sidewalks, curbs, ramps | Fair |
| Site Development | Playgrounds and sports courts with bleachers, fencing, and site lights | Fair |
| Landscaping and Topography | No significant landscaping features Irrigation not present No retaining walls Low to moderate site slopes throughout | -- |
| Utilities | Municipal water and sewer Local utility-provided electric | -- |
| Site Lighting | Building-mounted: metal halide | Fair |
| Ancillary Structures | None | -- |
| Accessibility | Potential moderate/major issues have been identified at this property and a detailed accessibility study is recommended. | |
| Key Issues and Findings | <ul style="list-style-type: none"> ▪ antiquated HVAC components ▪ building lacks fire suppression ▪ aged electrical and plumbing infrastructure ▪ carpet is worn ▪ - antiquated steel windows | |

Pearl Street Building: Systems Expenditure Forecast

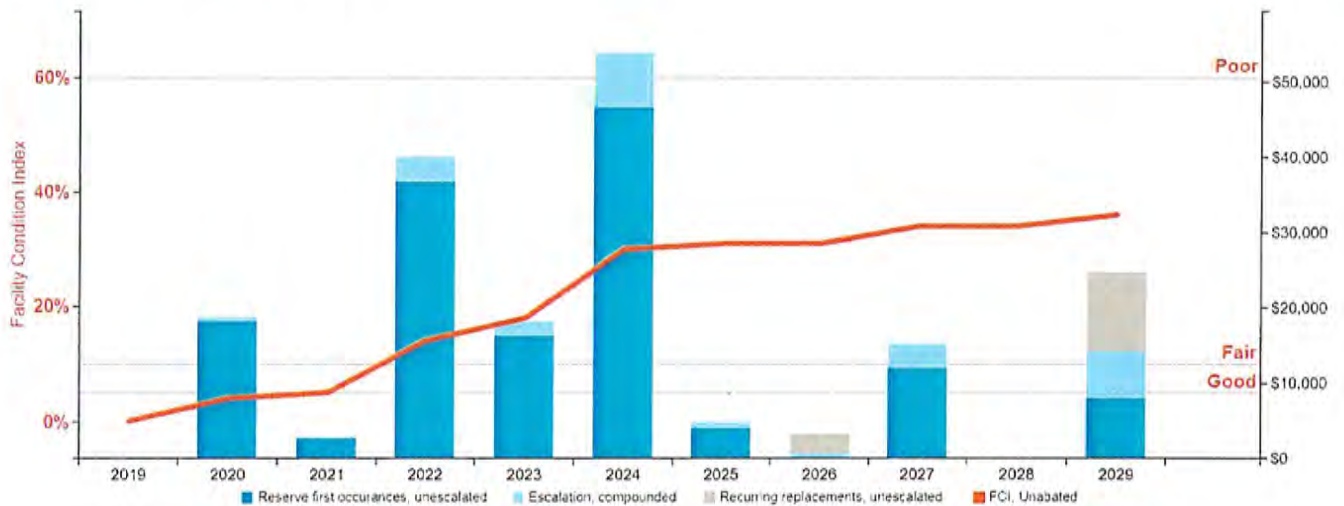
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|-------------------|-----------|-------------------|------------------|------------------|-------------------|------------------|
| Facade | - | \$18,300 | - | \$2,400 | \$34,200 | \$55,000 |
| Roofing | - | - | \$16,700 | - | - | \$16,700 |
| Interiors | - | \$11,800 | \$17,400 | \$5,400 | \$54,200 | \$88,800 |
| Plumbing | - | \$1,300 | \$18,800 | \$2,800 | \$4,100 | \$27,000 |
| Fire Suppression | - | - | \$18,200 | - | - | \$18,200 |
| HVAC | - | \$15,000 | - | - | \$11,300 | \$26,300 |
| Electrical | - | \$900 | \$1,000 | - | \$28,300 | \$30,200 |
| Fire Alarm & Comm | - | - | - | \$4,800 | \$9,000 | \$13,700 |
| Pavement | - | \$14,300 | - | \$32,500 | \$25,600 | \$72,400 |
| TOTALS | - | \$61,600 | \$72,100 | \$47,900 | \$166,700 | \$348,300 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

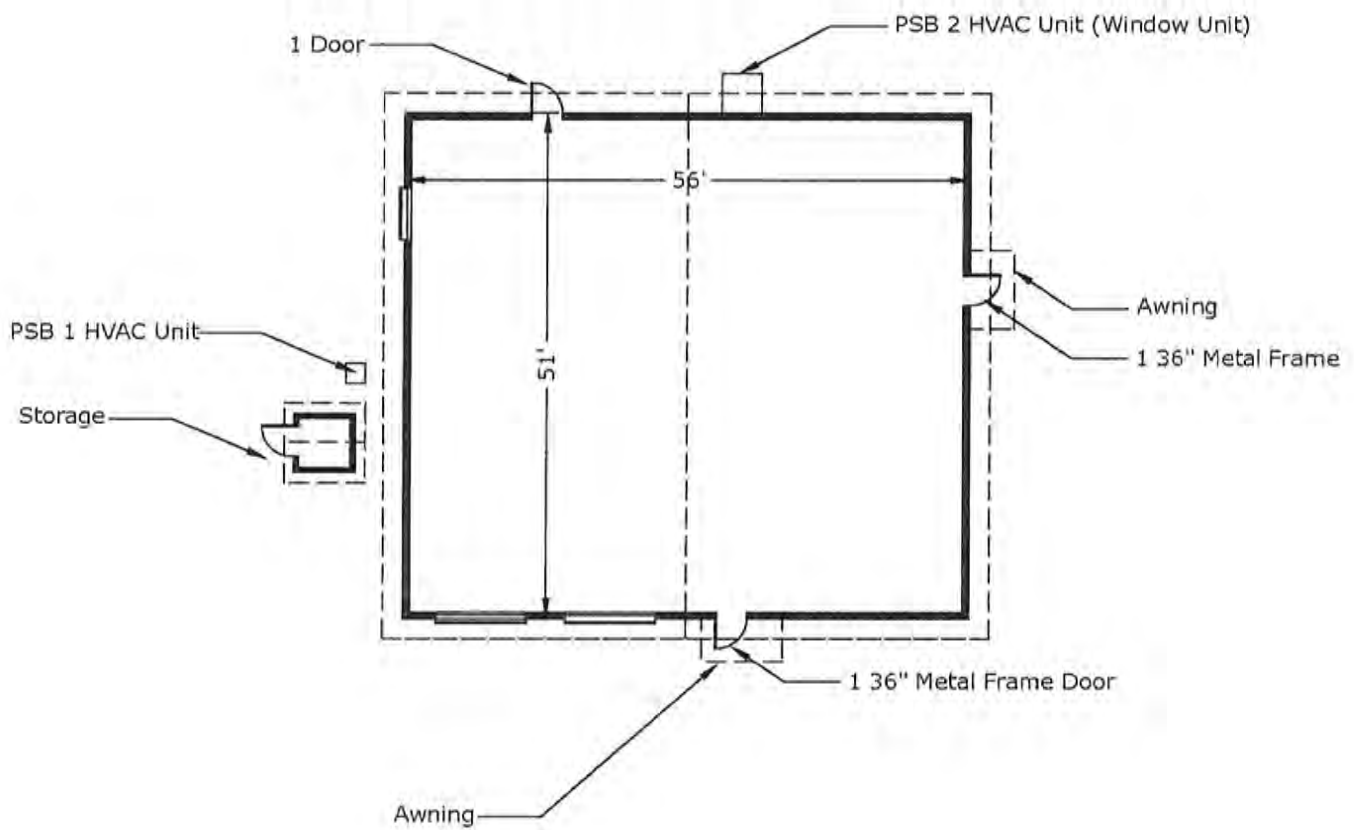
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Pearl Street Building

Replacement Value: \$ 450,791; Inflation rate: 3.0%



Pearl Street Building



SITE.BLDG #

4.1

19. Police Evidence Storage



Police Evidence Storage: Systems Summary

| | | |
|-----------------------------------|--|------------------|
| Address | 400 Aversboro Road Garner, North Carolina 27529 | |
| Constructed/ Renovated | 1991 | |
| Building Size | 864 SF | |
| Number of Stories | 1 | |
| Site Area | 0.1 acres (estimated) | |
| Parking Spaces | None | |
| <i>System</i> | <i>Description</i> | <i>Condition</i> |
| Structure | Conventional wood frame structure and wood-framed roofs | Fair |
| Façade | Wood siding | Fair |
| Roof | Primary: Gable construction with asphalt shingles | Poor |
| Interiors | No interior access was granted due to being police storage | -- |
| Elevators | None | -- |
| Plumbing | None | -- |

Police Evidence Storage: Systems Summary

| | | |
|-----------------------------------|---|------|
| HVAC | None | -- |
| Fire Suppression | None | -- |
| Electrical | Source & Distribution: Fed from 400 Aversboro Annex building with copper wiring | Fair |
| Fire Alarm | None | -- |
| Equipment/Special | None | -- |
| Site Pavement | None | -- |
| Site Development | None | -- |
| Landscaping and Topography | No significant landscaping features Irrigation not present No retaining walls Low to moderate site slopes throughout | -- |
| Utilities | None | -- |
| Site Lighting | Building-mounted: halogen | -- |
| Ancillary Structures | None | -- |
| Accessibility | Presently it does not appear an accessibility study is needed for this property. | |
| Key Issues and Findings | <ul style="list-style-type: none"> ▪ Roof is in poor condition ▪ Rotten fascia ▪ Steel doors need refinish | |

Police Evidence Storage: Systems Expenditure Forecast

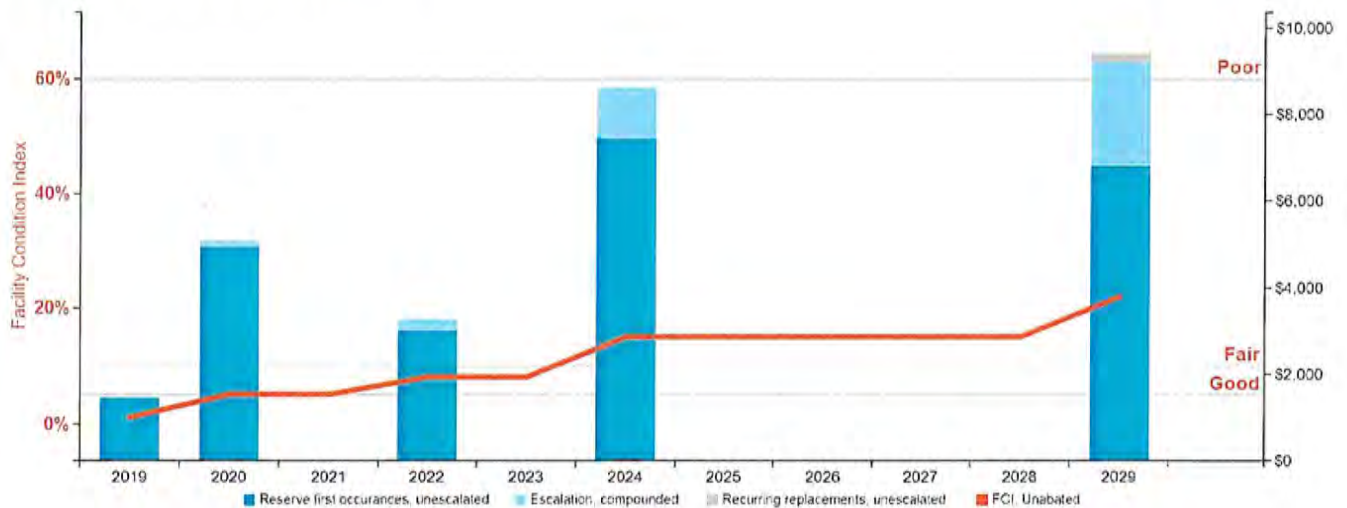
| System | Immediate | Short Term (3 yr) | Near Term (5 yr) | Med Term (10 yr) | Long Term (20 yr) | TOTAL |
|-------------------|-----------|-------------------|------------------|------------------|-------------------|------------------|
| Facade | - | - | - | \$7,500 | - | \$7,500 |
| Roofing | - | \$36,600 | - | - | - | \$36,600 |
| Interiors | - | \$17,700 | \$10,700 | \$7,800 | \$52,200 | \$88,300 |
| Plumbing | - | \$2,000 | - | \$36,000 | \$26,800 | \$64,900 |
| Fire Suppression | - | - | \$9,100 | \$200 | \$200 | \$9,500 |
| HVAC | - | \$25,000 | - | \$900 | \$39,000 | \$64,900 |
| Electrical | - | \$1,000 | \$600 | \$2,500 | \$39,600 | \$43,700 |
| Fire Alarm & Comm | - | \$28,200 | - | - | \$25,500 | \$53,700 |
| TOTALS | - | \$110,500 | \$20,400 | \$54,900 | \$183,300 | \$369,100 |

The orange line in the graph below forecasts what would happen to the FCI (left axis) over time, assuming zero capital expenditures. The capital expenditures for each year (blue bars) are associated with the right axis.

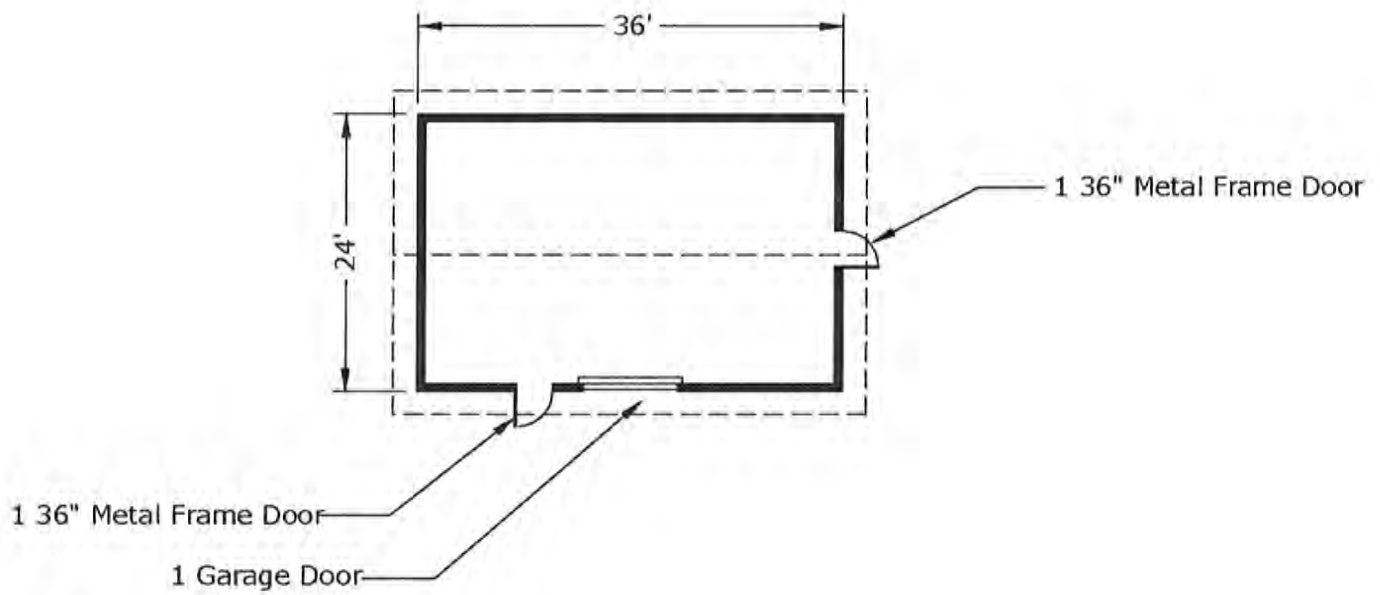
Needs by Year with Unaddressed FCI Over Time

FCI Analysis: Police Evidence Storage

Replacement Value: \$ 124,459; Inflation rate: 3.0%



Police Evidence Storage



SITE.BLDG #

2.2

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|---|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: CIP and Bond Update | | |
| Location on Agenda: Reports | | |
| Department: Administration | | |
| Contact: Mike Franks, Budget Manager | | |
| Presenter: Mike Franks, Budget Manager | | |
| Brief Summary: Davenport and staff will provide an update on the Town's CIP in preparation for the November 2021 bond referendum. | | |
| Recommended Motion and/or Requested Action: | | |
| Detailed Notes: Davenport will provide an update on the Town's debt affordability and the impact of the upcoming referendum on the operating budget. Staff will provide an update on the Town's current Capital Improvement Plan. In both cases, staff is seeking guidance from Council on how to proceed as we approach the upcoming referendum. | | |
| Funding Source: N/A | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | MR | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |

Capital Improvement/Bond Summary

Overview

- Start of the Process to Finalize Projects for Upcoming Referendum
- Regional Bond Comparison
- Review Town of Garner History
- Review Potential Projects and Funding Recommendations
- Questions

Regional Bond Referendums

- The Town's intern reviewed 30 bond referendums from 12 different North Carolina localities over the last 10 years
 - They were all approved by voters
- The 30 bond referendums had an average of 74% yes
 - Of the 30 referendums, 13 were conducted in 6 Wake County commuter communities comparable to Garner: Wake Forest, Fuquay-Varina, Holly Springs, Morrisville, Apex, and Knightdale. These 13 referendums also had an average of 74% yes

| Locality | Date | Yes | No | Percent Yes |
|--|-------------|------------|-----------|--------------------|
| Town of Knightdale Park and Rec Facility Bond Referendum | 11/6/2012 | 4758 | 1292 | 79% |
| Town of Morrisville Parks and Rec Referendum | 11/6/2012 | 5795 | 2036 | 74% |
| Town of Morrisville Street Improvement Referendum | 11/6/2012 | 6269 | 1597 | 80% |
| Town of Holly Springs Parks and Rec Referendum | 11/8/2011 | 1499 | 1035 | 59% |
| Town of Holly Springs Transportation Improvements Referendum | 11/6/2018 | 8494 | 5667 | 60% |
| Town of Apex Parks and Rec Facilities Referendum | 11/7/2017 | 4741 | 1496 | 76% |
| Town of Fuquay-Varina Transportation Improvements Referendum | 11/3/2015 | 1789 | 389 | 82% |
| Town of Fuquay-Varina Sewer System Improvements Referendum | 11/3/2015 | 1798 | 354 | 84% |
| Town of Apex Street and Sidewalk Improvement Referendum | 11/3/2015 | 4844 | 881 | 85% |
| Wake Forest Street and Sidewalk Referendum | 11/4/2014 | 7514 | 3150 | 70% |
| Wake Forest Parks and Recreation Referendum | 11/4/2014 | 6981 | 3668 | 66% |
| Wake Forest Greenway Improvement Referendum | 11/4/2014 | 7006 | 3676 | 66% |

History

- New Capital Improvement Plan and process developed in FY 2019
- Staff and Davenport have provided multiple updates on projects and capacity
- Next referendum is scheduled to take place in November 2021
 - Final decisions should be made by May 2020 to allow for citizen education and administrative tasks to be completed

CIP Summary

| Category | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|----------------------|
| Parks | 0 | 0 | 13,750,000 | 18,750,000 | 18,750,000 | \$51,250,000 |
| Transportation | 6,994,508 | 6,250,976 | 9,062,270 | 16,061,076 | 20,374,574 | \$58,743,405 |
| General Government | 0 | 500,000 | 3,310,000 | 3,228,000 | 260,000 | \$7,298,000 |
| Stormwater | 0 | 250,000 | 895,000 | 250,000 | 754,000 | \$2,149,000 |
| Capital Renewal | 310,000 | 350,000 | 400,000 | 499,999 | 525,000 | \$2,084,999 |
| Total | \$7,304,508 | \$7,350,976 | \$27,417,270 | \$38,789,076 | \$40,663,574 | \$121,525,405 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|----------------------|
| Transfer from General Fund | 310,000 | 350,000 | 400,000 | 500,000 | 525,000 | \$2,085,000 |
| Bond Proceeds | 5,209,154 | 2,184,042 | 0 | 0 | 0 | \$7,393,196 |
| Future Bond Proceeds | 0 | 3,300,000 | 10,350,667 | 17,544,267 | 12,470,666 | \$43,665,600 |
| Impact Fees | 0 | 0 | 1,000,000 | 1,000,000 | 1,000,000 | \$3,000,000 |
| Powell Bill | 616,100 | 622,261 | 628,484 | 634,768 | 641,116 | \$3,142,729 |
| Appropriated Fund Balance | 431,954 | 0 | 0 | 0 | 0 | \$431,954 |
| Partner Agency Funding | 0 | 150,000 | 3,156,000 | 8,090,400 | 3,000,000 | \$14,396,400 |
| Other | 737,300 | 744,673 | 752,120 | 759,641 | 766,792 | \$3,760,527 |
| Unknown Funding Source | 0 | 0 | 11,130,000 | 10,260,000 | 22,260,000 | \$43,650,000 |
| Total | \$7,304,508 | \$7,350,976 | \$27,417,270 | \$38,789,076 | \$40,663,574 | \$121,525,405 |

Park Summary

| Category | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------|------------|------------|---------------------|---------------------|---------------------|---------------------|
| Facility Development | - | - | 12,000,000 | 12,000,000 | 12,000,000 | \$36,000,000 |
| Park Enhancements | - | - | 1,750,000 | 1,750,000 | 1,750,000 | \$5,250,000 |
| Greenways | - | - | - | 5,000,000 | 5,000,000 | \$10,000,000 |
| Total | \$0 | \$0 | \$13,750,000 | \$18,750,000 | \$18,750,000 | \$51,250,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------|---------------------|---------------------|---------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | 5,250,000 | 7,750,000 | 7,750,000 | \$20,750,000 |
| Impact Fees | - | - | 1,000,000 | 1,000,000 | 1,000,000 | \$3,000,000 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 7,500,000 | 10,000,000 | 10,000,000 | \$27,500,000 |
| Total | \$0 | \$0 | \$13,750,000 | \$18,750,000 | \$18,750,000 | \$51,250,000 |

Park Facility

| Category | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|-----------------------------|------------|------------|---------------------|---------------------|---------------------|---------------------|
| Meadowbrook/Yeargan Project | - | - | 12,000,000 | 12,000,000 | 12,000,000 | \$36,000,000 |
| Total | \$0 | \$0 | \$12,000,000 | \$12,000,000 | \$12,000,000 | \$36,000,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------|---------------------|---------------------|---------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | 4,500,000 | 4,500,000 | 4,500,000 | \$13,500,000 |
| Impact Fees | - | - | 1,000,000 | 1,000,000 | 1,000,000 | \$3,000,000 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 6,500,000 | 6,500,000 | 6,500,000 | \$19,500,000 |
| Total | \$0 | \$0 | \$12,000,000 | \$12,000,000 | \$12,000,000 | \$36,000,000 |

Park Enhancements

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|---------------------|------------|------------|--------------------|--------------------|--------------------|--------------------|
| Park Rehabilitation | - | - | 1,750,000 | 1,750,000 | 1,750,000 | \$5,250,000 |
| Total | \$0 | \$0 | \$1,750,000 | \$1,750,000 | \$1,750,000 | \$5,250,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------|--------------------|--------------------|--------------------|--------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | 750,000 | 750,000 | 750,000 | \$2,250,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 1,000,000 | 1,000,000 | 1,000,000 | \$3,000,000 |
| Total | \$0 | \$0 | \$1,750,000 | \$1,750,000 | \$1,750,000 | \$5,250,000 |

Greenways

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|------------------|------------|------------|------------|--------------------|--------------------|---------------------|
| Future Greenways | - | - | - | 5,000,000 | 5,000,000 | \$10,000,000 |
| Total | \$0 | \$0 | \$0 | \$5,000,000 | \$5,000,000 | \$10,000,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------|------------|--------------------|--------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | - | \$2,500,000 | \$2,500,000 | \$5,000,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | - | 2,500,000 | 2,500,000 | \$5,000,000 |
| Total | \$0 | \$0 | \$0 | \$5,000,000 | \$5,000,000 | \$10,000,000 |

Park Bond Summary

- Adequate funding will likely not be available to fully develop both park sites
 - Both sites could be enhanced, or one could become the signature project
- Funding for Greenways and Rehabilitation is not sufficient to meet growing needs
 - It will be critical to remain flexible with greenway project selection to maximize funding opportunities

Transportation Summary

| Category | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|---------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Street Improvements | 6,894,508 | 6,250,976 | 6,675,603 | 14,394,409 | 18,707,908 | \$52,923,405 |
| Sidewalks | 100,000 | - | 1,666,667 | 1,666,667 | 1,666,666 | \$5,100,000 |
| Transit | - | - | 720,000 | - | - | \$720,000 |
| Total | \$6,994,508 | \$6,250,976 | \$9,062,270 | \$16,061,076 | \$20,374,574 | \$58,743,405 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|-------------------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | 5,209,154 | 2,184,042 | - | - | - | \$7,393,196 |
| Future Bond Proceeds | - | 2,700,000 | 2,245,667 | 7,466,667 | 3,966,666 | \$16,379,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | 616,100 | 622,261 | 628,484 | 634,768 | 641,116 | \$3,142,729 |
| Appropriated Fund Balance | 431,954 | - | - | - | - | \$431,954 |
| Partner Agency Funding ¹ | - | - | 2,316,000 | 7,200,000 | 3,000,000 | \$12,516,000 |
| Other ² | 737,300 | 744,673 | 752,120 | 759,641 | 766,792 | \$3,760,526 |
| Unknown Funding Source | - | - | 3,120,000 | - | 12,000,000 | \$15,120,000 |
| Total | \$6,994,508 | \$6,250,976 | \$9,062,270 | \$16,061,076 | \$20,374,574 | \$58,743,405 |

Street Improvements

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|---|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Pavement Condition Improvements | 1,353,400 | 1,366,934 | 1,380,603 | 1,394,409 | 1,407,908 | \$6,903,255 |
| Rand Mill and Main Street Improvements | 600,000 | - | - | - | - | \$600,000 |
| Ackerman Rd / Hebron Church Rd at White Oak Rd | - | 523,123 | - | - | - | \$523,123 |
| New Rand Road & Garner Road Sidewalks | 4,509,154 | - | - | - | - | \$4,509,154 |
| Betterments to NC DOT Projects | 431,954 | 600,000 | - | - | 300,000 | \$1,331,954 |
| Lake Drive (Hwy 50 Bridge Project) ¹ | - | 250,000 | - | - | - | \$250,000 |
| Ackerman Road Extension ¹ | - | 2,400,000 | - | 12,000,000 | - | \$14,400,000 |
| Jones Sausage Road Improvements ¹ | - | 1,110,919 | 2,895,000 | - | - | \$4,005,919 |
| Wilmington Road Extension ¹ | - | - | 2,400,000 | - | 12,000,000 | \$14,400,000 |
| Grovemont Road Extension ¹ | - | - | - | 1,000,000 | 5,000,000 | \$6,000,000 |
| Total | \$6,894,508 | \$6,250,976 | \$6,675,603 | \$14,394,409 | \$18,707,908 | \$52,923,405 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | 5,109,154 | 2,184,042 | - | - | - | \$7,293,196 |
| Future Bond Proceeds | - | 2,700,000 | 579,000 | 5,800,000 | 2,300,000 | \$11,379,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | 616,100 | 622,261 | 628,484 | 634,768 | 641,116 | \$3,142,729 |
| Appropriated Fund Balance | 431,954 | - | - | - | - | \$431,954 |
| Partner Agency Funding | - | - | 2,316,000 | 7,200,000 | 3,000,000 | \$12,516,000 |
| Other | 737,300 | 744,673 | 752,120 | 759,641 | 766,792 | \$3,760,526 |
| Unknown Funding Source | - | - | 2,400,000 | - | 12,000,000 | \$14,400,000 |
| Total | \$6,894,508 | \$6,250,976 | \$6,675,603 | \$14,394,409 | \$18,707,908 | \$52,923,405 |

Sidewalks

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|---------------------|------------------|----------------|--------------------|--------------------|--------------------|---------------------|
| Sidewalk Connectors | 100,000 | - | - | - | - | \$100,000 |
| Future Sidewalks | - | - | 1,666,667 | 1,666,667 | 1,666,666 | \$5,000,000 |
| Total | \$100,000 | \$0 | \$1,666,667 | \$1,666,667 | \$1,666,666 | \$5,100,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------------|----------------|--------------------|--------------------|--------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | 100,000 | - | - | - | - | \$100,000 |
| Future Bond Proceeds | - | - | 1,666,667 | 1,666,667 | 1,666,666 | \$5,000,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | - | - | - | \$0 |
| Total | \$100,000 | \$0 | \$1,666,667 | \$1,666,667 | \$1,666,666 | \$5,100,000 |

Transit

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|-------------------------------|----------------|----------------|------------------|----------------|----------------|---------------------|
| Public Transit Infrastructure | - | - | 720,000 | - | - | \$720,000 |
| Total | \$0 | \$0 | \$720,000 | \$0 | \$0 | \$720,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|----------------|----------------|------------------|----------------|----------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | - | - | - | \$0 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 720,000 | - | - | \$720,000 |
| Total | \$0 | \$0 | \$720,000 | \$0 | \$0 | \$720,000 |

Transportation Bond Summary

- Provides enough funding to likely cover critical projects if program partner funding can be leveraged
 - It will be critical to remain flexible with project selection to maximize funding opportunities
- Provides funding to address several of the priority sidewalk projects
 - Sidewalk projects are being studied and a prioritized list will be brought back to council before action is taken

General Government

| Category | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------|------------|------------------|--------------------|--------------------|------------------|--------------------|
| Facility Development | - | 500,000 | 3,050,000 | 2,968,000 | - | \$6,518,000 |
| IT Projects | - | - | 260,000 | 260,000 | 260,000 | \$780,000 |
| Total | \$0 | \$500,000 | \$3,310,000 | \$3,228,000 | \$260,000 | \$7,298,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------------|--------------------|--------------------|------------------|--------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | 350,000 | 1,960,000 | 2,077,600 | - | \$4,387,600 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | 150,000 | 840,000 | 890,400 | - | \$1,880,400 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 510,000 | 260,000 | 260,000 | \$1,030,000 |
| Total | \$0 | \$500,000 | \$3,310,000 | \$3,228,000 | \$260,000 | \$7,298,000 |

Facility Development

| Category/Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|-----------------------------|------------|------------------|--------------------|--------------------|------------|--------------------|
| Fire Station 5 ¹ | - | 500,000 | 2,800,000 | 2,968,000 | - | \$6,268,000 |
| Shooting Range ¹ | - | - | 250,000 | - | - | \$250,000 |
| Total | \$0 | \$500,000 | \$3,050,000 | \$2,968,000 | \$0 | \$6,518,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------|------------------|--------------------|--------------------|------------|--------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | 350,000 | 1,960,000 | 2,077,600 | - | \$4,387,600 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | 150,000 | 840,000 | 890,400 | - | \$1,880,400 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 250,000 | - | - | \$250,000 |
| Total | \$0 | \$500,000 | \$3,050,000 | \$2,968,000 | \$0 | \$6,518,000 |

IT Projects

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------|----------------|----------------|------------------|------------------|------------------|---------------------|
| Fiber Ring | - | - | 260,000 | 260,000 | 260,000 | \$780,000 |
| Total | \$0 | \$0 | \$260,000 | \$260,000 | \$260,000 | \$780,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|----------------|----------------|------------------|------------------|------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | - | - | - | \$0 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | 260,000 | 260,000 | 260,000 | \$780,000 |
| Total | \$0 | \$0 | \$260,000 | \$260,000 | \$260,000 | \$780,000 |

General Government Bond Summary

- Provides sufficient funding to construct Fire Station 5
- Alternative funding sources will be required for other projects

Stormwater

| Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|--------------------|----------------|------------------|------------------|------------------|------------------|---------------------|
| General Projects | - | 250,000 | 250,000 | 250,000 | 250,000 | \$1,000,000 |
| Forest Ridge Road | - | - | 645,000 | - | - | \$645,000 |
| Junction Boulevard | - | - | - | - | 504,000 | \$504,000 |
| Total | \$0 | \$250,000 | \$895,000 | \$250,000 | \$754,000 | \$2,149,000 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|----------------|------------------|------------------|------------------|------------------|---------------------|
| Transfer from General Fund | - | - | - | - | - | \$0 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | \$250,000 | \$895,000 | \$250,000 | \$754,000 | \$2,149,000 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | - | - | - | \$0 |
| Total | \$0 | \$250,000 | \$895,000 | \$250,000 | \$754,000 | \$2,149,000 |

Stormwater Bond Summary

- Provides sufficient funding to address current projects and to cover operational costs for several years
- A long-term funding strategy must be developed to address future stormwater project requirements

Capital Renewal

| Category/Project | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|--|---------|---------|---------|---------|---------|--------------|
| Additional Projects | | | | | | |
| New Projects Based on Comprehensive Review | - | 64,165 | 50,329 | 238,583 | 184,725 | 537,802 |
| Roofs | | | | | | |
| Avery Street Recreation Center Roof Replacement | 164,409 | - | - | - | - | 164,409 |
| Avery Street Annex Roof Repair | - | - | 161,732 | - | - | 161,732 |
| Garner Senior Center Ceiling Repair - 205 & 209 | - | - | 4,392 | - | - | 4,392 |
| Roof Coating for 912 Police Department | - | - | 99,645 | - | - | 99,645 |
| Roof Coating for 914 Admin. Department | - | - | - | 33,970 | - | 33,970 |
| Interior/Exterior Repairs | | | | | | |
| Resurfacing of tennis courts at SGP and CRP | 34,032 | - | - | - | - | 34,032 |
| Natural Play Ground Play Elements | - | 250,000 | - | - | - | 250,000 |
| Renovation of Restrooms at Garner Senior Center | - | - | 39,845 | - | - | 39,845 |
| Public Work Building B Fleet Garage Exterior Roll Up Doors | - | - | - | 16,000 | - | 16,000 |
| Replacement of Rand Mill Park Basketball Court | - | - | - | 30,000 | - | 30,000 |
| Replacement of Playground Equipment at South Garner Park | - | - | - | 45,000 | - | 45,000 |
| Paint Interior of the Garner Performing Arts Center | - | - | - | 24,291 | - | 24,291 |
| Replacement of Playground Equipment at Greenbriar Park | - | - | - | 28,000 | - | 28,000 |
| Waterproofing Foundation at GPAC | - | - | - | 18,500 | - | 18,500 |
| Painting of Avery Street Recreation Center | - | - | - | 24,273 | - | 24,273 |
| Public Work Building B Workshop Exterior Roll Up Doors | - | - | - | - | 6,000 | 6,000 |
| Replacement of Slate Coping Caps with Concrete | - | - | - | - | 13,805 | 13,805 |
| Window and Wall Leak Repairs at Public Works Buildings A & B | - | - | - | - | 76,315 | 76,315 |
| Refurbishing of Shelter at Jaycee Park | - | - | - | - | 6,000 | 6,000 |
| Exterior Washing or all Town Buildings | - | - | - | - | 32,917 | 32,917 |

Capital Renewal cont.

HVAC and Building Automation

| | | | | | | |
|---|--------|---|---|-------|---------|---------|
| Avery Street Recreation Center HVAC 2 | 24,200 | - | - | - | - | 24,200 |
| Avery Street Recreation Center HVAC 1 | 7,920 | - | - | - | - | 7,920 |
| Avery Street Recreation Center HVAC 4 | 8,580 | - | - | - | - | 8,580 |
| Pearl Street HVAC 1 | - | - | - | 8,250 | - | 8,250 |
| Pearl Street HVAC 2 | - | - | - | 6,930 | - | 6,930 |
| 914 Building HVAC 1 | - | - | - | 8,580 | - | 8,580 |
| 914 Building HVAC 2 | - | - | - | 8,580 | - | 8,580 |
| 914 Building HVAC 3 | - | - | - | 7,590 | - | 7,590 |
| Water Tower Radio Building HVAC | - | - | - | - | 9,460 | 9,460 |
| Automated Gates and Bathroom Locks at Parks | - | - | - | - | 193,019 | 193,019 |

Fire Department Requirements

| | | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|--------------------|
| Facilities Study Recommendations ¹ | 70,859 | 35,835 | 44,057 | 1,453 | 2,759 | 154,962 |
| Total | \$310,000 | \$350,000 | \$400,000 | \$500,000 | \$525,000 | \$1,547,197 |

| Revenue Source | FY 2021 | FY 2022 | FY 2023 | FY 2024 | FY 2025 | 5 Year Total |
|----------------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| Transfer from General Fund | 310,000 | 350,000 | 400,000 | 500,000 | 525,000 | \$2,085,000 |
| Bond Proceeds | - | - | - | - | - | \$0 |
| Future Bond Proceeds | - | - | - | - | - | \$0 |
| Impact Fees | - | - | - | - | - | \$0 |
| Powell Bill | - | - | - | - | - | \$0 |
| Appropriated Fund Balance | - | - | - | - | - | \$0 |
| Partner Agency Funding | - | - | - | - | - | \$0 |
| Other | - | - | - | - | - | \$0 |
| Unknown Funding Source | - | - | - | - | - | \$0 |
| Total | \$310,000 | \$350,000 | \$400,000 | \$500,000 | \$525,000 | \$2,085,000 |

Capital Renewal Bond Summary

- Adequate funding has been included in the multi-year operating budget
- Additional detail will be provided in the future based on staff input and the Town's new asset management system

Next Steps

- Staff will prepare a recommended capital improvement plan document based on Council's input
- This document will be provided in advance of a future work session where final decisions will be made

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|---|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: UDO-20-03, Residential Solar Panels | | |
| Location on Agenda: Discussion | | |
| Department: Planning | | |
| Contact: Reginald Buie, MPA, CZO; Senior Planner, Zoning and Land Use | | |
| Presenter: Reginald Buie, MPA, CZO; Senior Planner, Zoning and Land Use | | |
| Brief Summary: Text amendment request (UDO-20-03) submitted by Douglas Kuhns, of 2903 Dunhaven Drive, to amend Article 5. Use Regulations K.3 (3) of the Unified Development Ordinance to allow ground-mounted solar systems on residential properties. | | |
| Recommended Motion and/or Requested Action: Set public hearing for November 17, 2020 | | |
| Detailed Notes: In it's present form, the UDO only permits roof, flush-mounted panels or shingles. | | |
| Funding Source: | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | JST | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |

TO: Honorable Mayor Marshburn and Members of the Town Council

FROM: Reginald Buie, MPA, CZO; Senior Planner

SUBJECT: *UDO-20-03, Residential Solar Panels*

DATE: October 27, 2020

I. BACKGROUND

Since 2018 Garner Inspections have issued approximately 123 solar system permits for residential properties. Out of this total, 51 permits have been issued in 2020. These have been roof-mounted flush panels or shingles. Over the last several months, the Town has received several applications for ground mounted solar energy systems on residentially zoned property. This is not allowed as the UDO only permits flush-mounted solar roof panels or solar shingles for residentially zoned property.

The Planning Department has received a text amendment request from Douglas Kuhns, of 2903 Dunhaven Drive, to amend the UDO to allow ground-mounted solar systems on residential properties. The applicant has proposed some suggested language below.

II. CURRENT TEXT

Article 5. Use Regulations K.3 (3)

CBD and all residential zoning districts: Only flush-mounted solar roof panels or solar shingles are permitted.

III. PROPOSED TEXT CHANGE BY APPLICANT

5.4. Accessory uses and structures

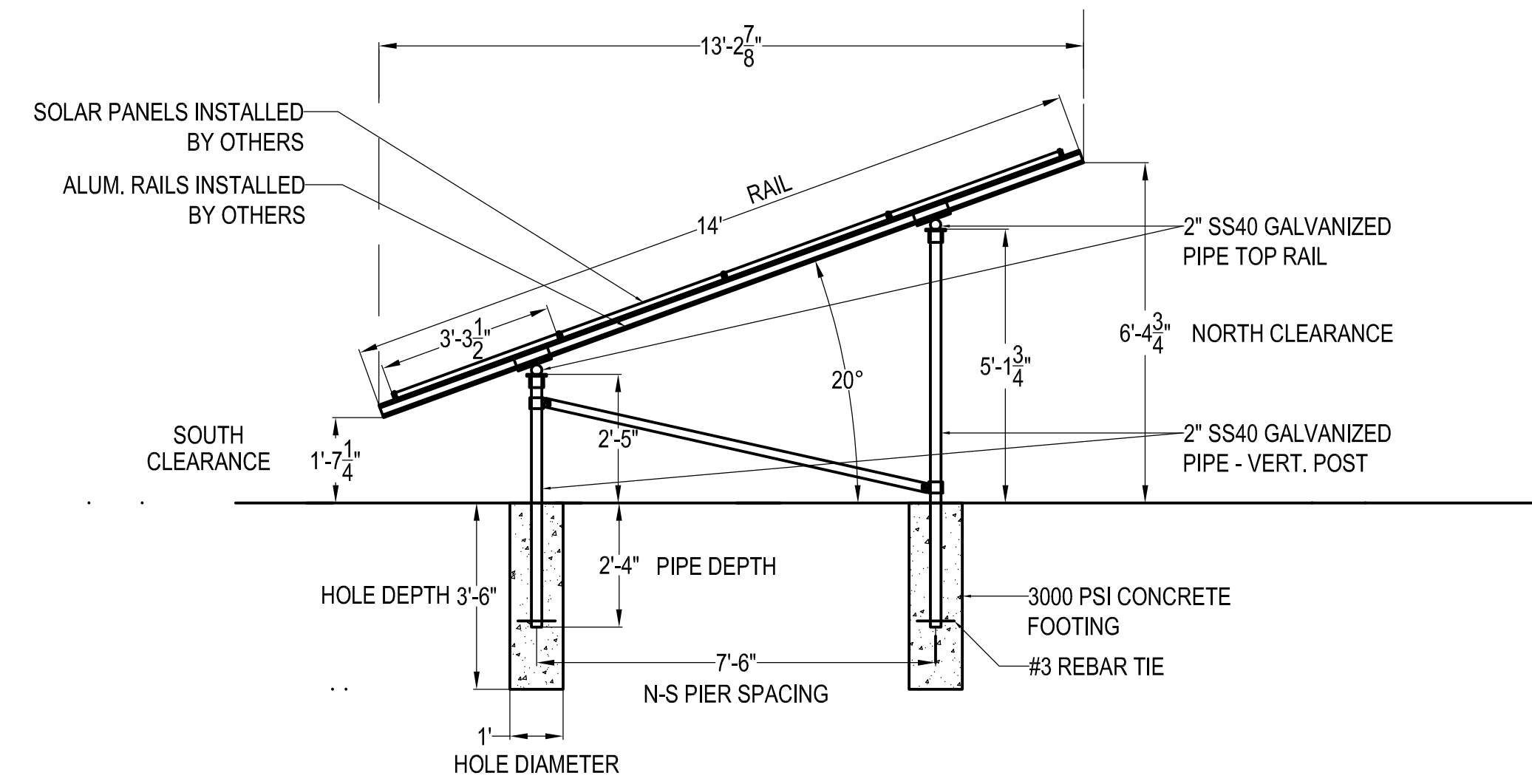
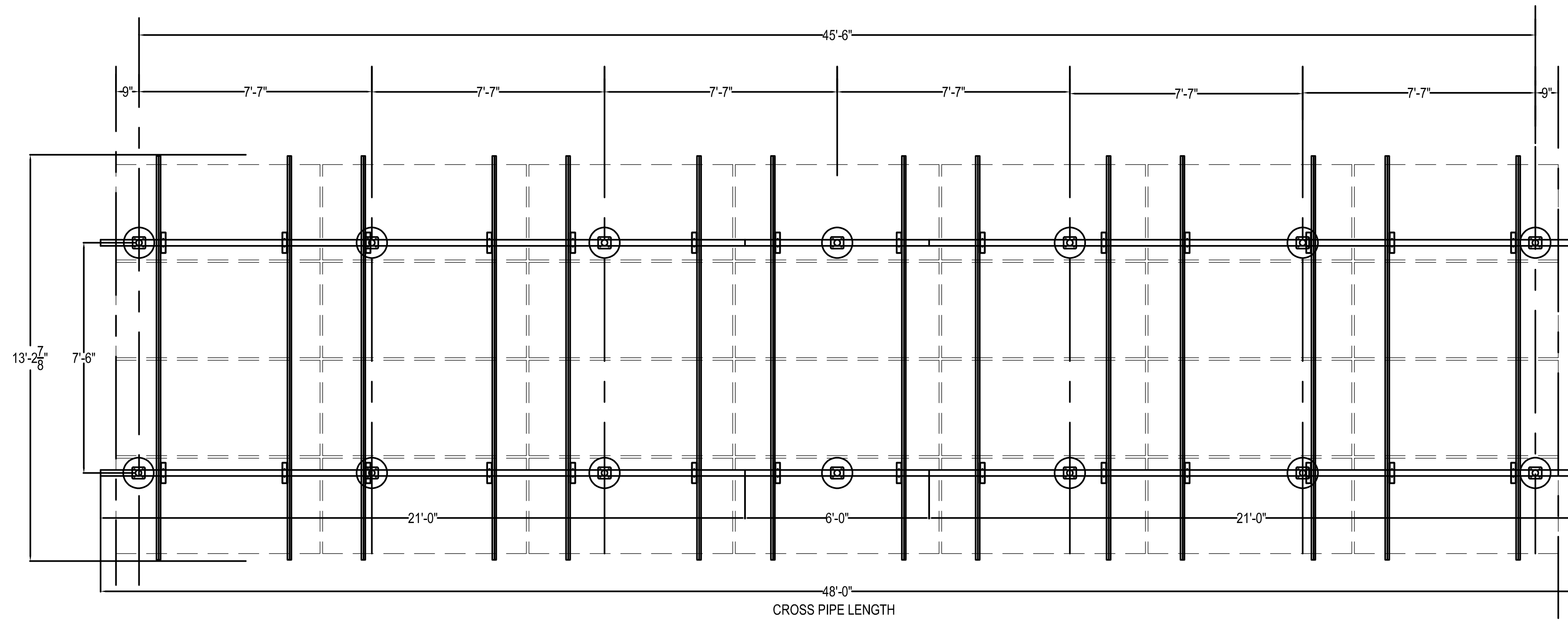
K. Accessory solar energy systems.

3.CBD and all residential zoning districts: Ground-mounted solar panels and flush-mounted solar roof panels or solar shingles are permitted.

- a. The maximum height for all ground-mounted solar panels and related equipment shall not exceed 8 feet. This includes solar panels at maximum tilt.
- b. The area for ground-mounted panels and equipment shall be no more than 25% of the principal building's footprint.
- c. Ground-mounted panels are restricted to the interior side and rear yards only and shall not be located within any perimeter buffer by Section 7.1K(6): Buffer width charts.
- d. Ground mount solar panels visible from the street right-of-way shall be screened from view with an evergreen screen of low-branching shrubs. The plantings may be located remotely from the solar panels to screen the view from the street.

III. RECOMMENDATION

If approved, this text amendment would apply town-wide to all CBD and residentially zone properties. If the Council is interested in moving this forward, Staff recommends setting a public hearing for November 17, 2020 to get public input. Afterwards, Staff would then draft final ordinance language, and this would be sent to the Planning Commission for a recommendation and then back to Council for a decision.



PV-2/01 GROUND MOUNT SOLAR FRAME

SCALE: 3/8" = 1'-0"

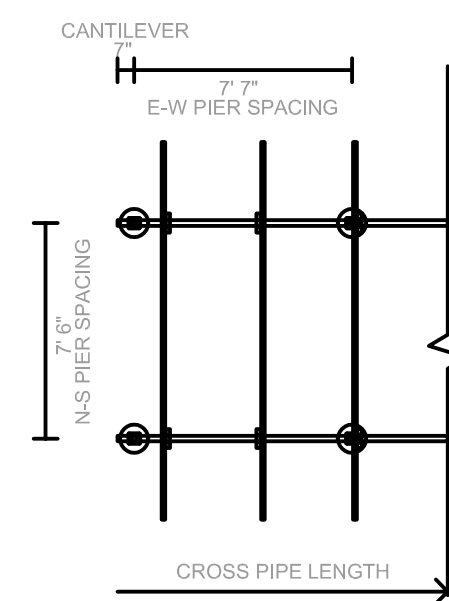
2903 Dunhaven Drive (#627581)
ground based

IRONRIDGE
28357 INDUSTRIAL BLVD., HAYWARD, CA 94545

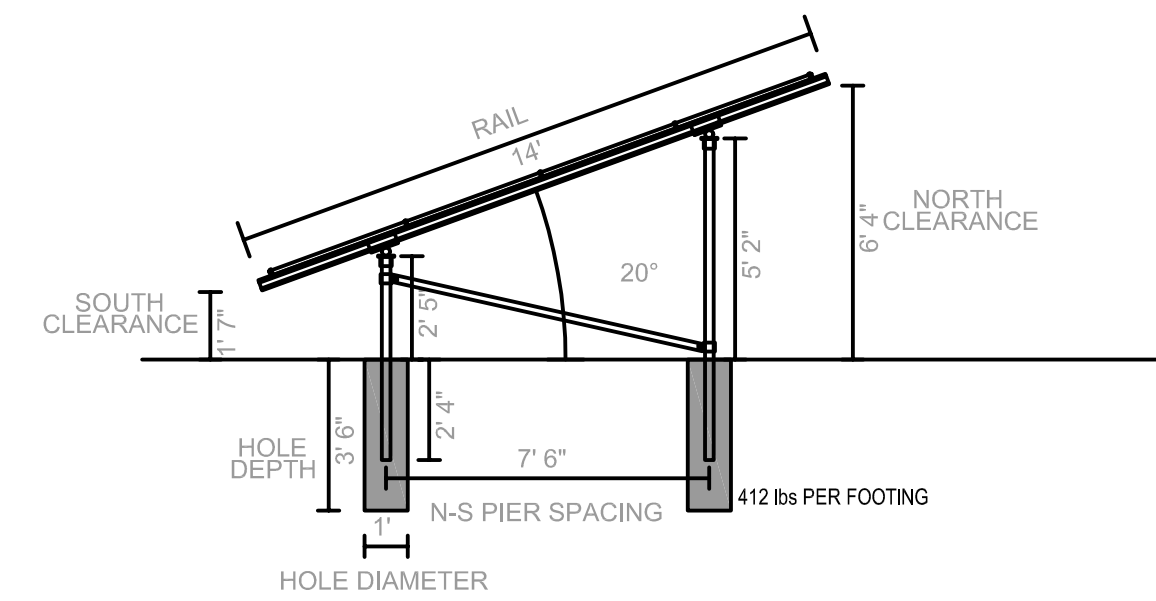
| Project Details | | | |
|-----------------|--|---------------|----------------------|
| Name | 2903 Dunhaven Drive | Date | 05/11/2020 |
| Location | Garner, NC, 27529 | ASCE code | 7.10 |
| Total modules | 28 | Piers | 14 |
| Module | Trina Solar: TSM-DE15H(I) 400 (35mm) | Concrete | 1.43 yd ³ |
| Dimensions | 79.69" x 39.53" x 1.38" (2024.0mm x 1004.0mm x 35.0mm) | Wind exposure | B |
| Total watts | 11,200 kW | Wind speed | 105 mph |
| | | Snow load | 20 psf |

| Substructure & Foundation | | | |
|---------------------------|-----|----------------------|-----|
| Tilt | 20° | Pipe/tubing diameter | 2" |
| Soil class | 4 | Hole diameter | 12" |

| ground based | | | | | |
|-------------------|---------------------------|-------------------|-----------|-------------------|-----------|
| Sub array #1 | | | | | |
| Rows | 4 | Columns | 7 | Repeats | 1 |
| Area | 46' 8" (EW) x 13' 5" (NS) | Rail type | XR1000 | Diagonal bracing | yes |
| E/W spacing | 7' 7" | Rail cantilever | 3' | Pipe cantilever | 7" |
| Piers/repeat | 14 | Total south piers | 7 (4' 9") | Total north piers | 7 (7' 6") |
| Total cross pipes | 2 (46' 8") | Total pipe length | 178' 9" | | |
| Shear | 431 lbs | Moment | 0 ft-lbs | Uplift | -801 lbs |



ALL PIPE FRAMING IS 1.875" GALV.-SS40

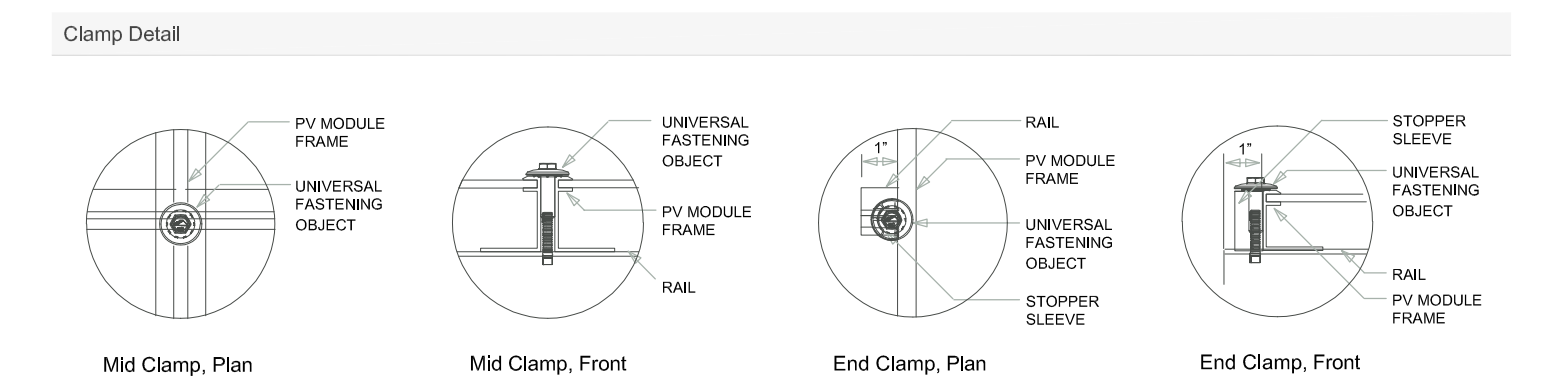
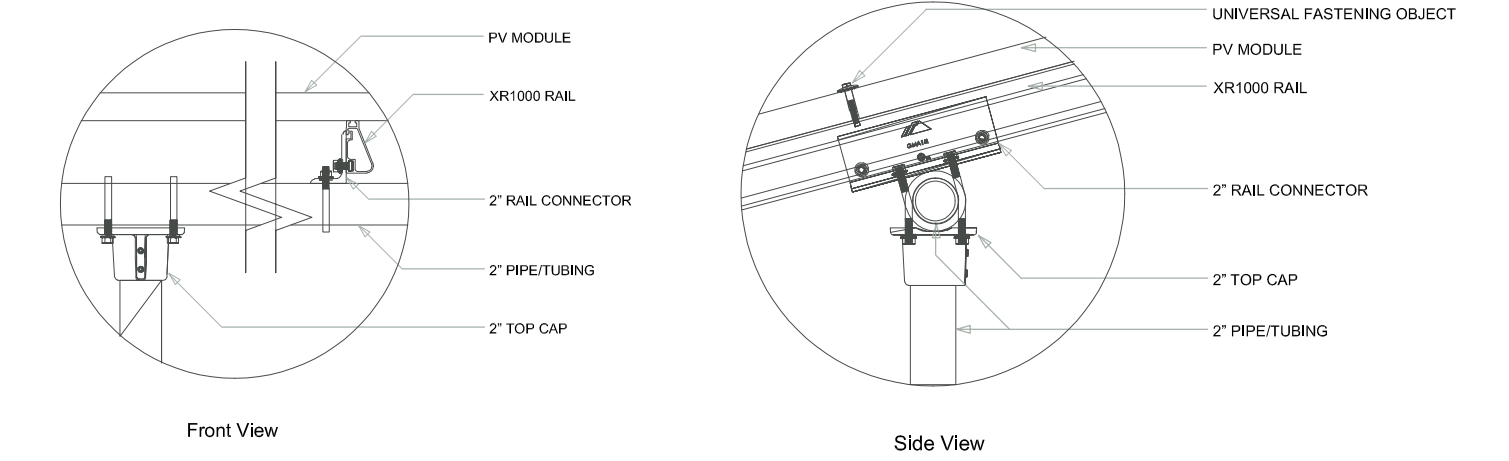


SOLAR RACK ENGINEERING DESIGN & DETAILS PROVIDED BY IRONRIDGE DESIGN ASSISTANT SOFTWARE.

ground based

Pipe Fitting Detail

XR1000 Rail



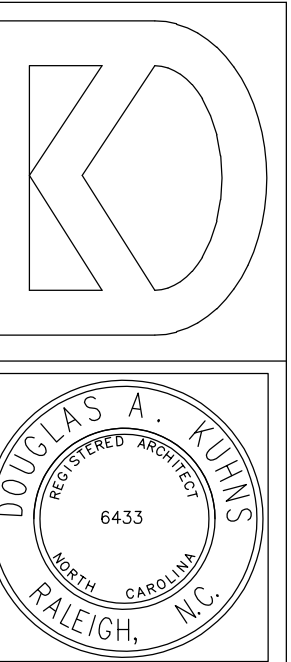
2903 Dunhaven Drive (#627581)

ground based

28357 INDUSTRIAL BLVD., HAYWARD, CA 94545

Bill of Materials

| Part | Spares | Total Qty |
|---|--------|-----------|
| Rails | | |
| XR-1000-168A | | |
| XR1000_Rail 168" (14 Feet) Clear | 0 | 14 |
| Clamps & Grounding | | |
| UFO-CL-01-A1 | | |
| Universal Module Clamp, Clear | 0 | 70 |
| UFO-STP-35MM-M1 | | |
| Stopper Sleeve, 35MM, Mill | 0 | 28 |
| XR-LUG-03-A1 | | |
| Grounding Lug, Low Profile | 0 | 1 |
| Substructure | | |
| 70-0200-SGA | | |
| SGA Top Cap at 2" | 0 | 14 |
| GM-BRC-002 | | |
| Ground Mount Bonded Rail Connector - 2" | 0 | 28 |
| 70-0200-CBR | | |
| SGA 2" Brice Assembly | 0 | 7 |
| Accessories | | |
| XR-1000-CAP | | |
| RR_End_Cap XR1000 (10 sets per bag) | 0 | 2 |



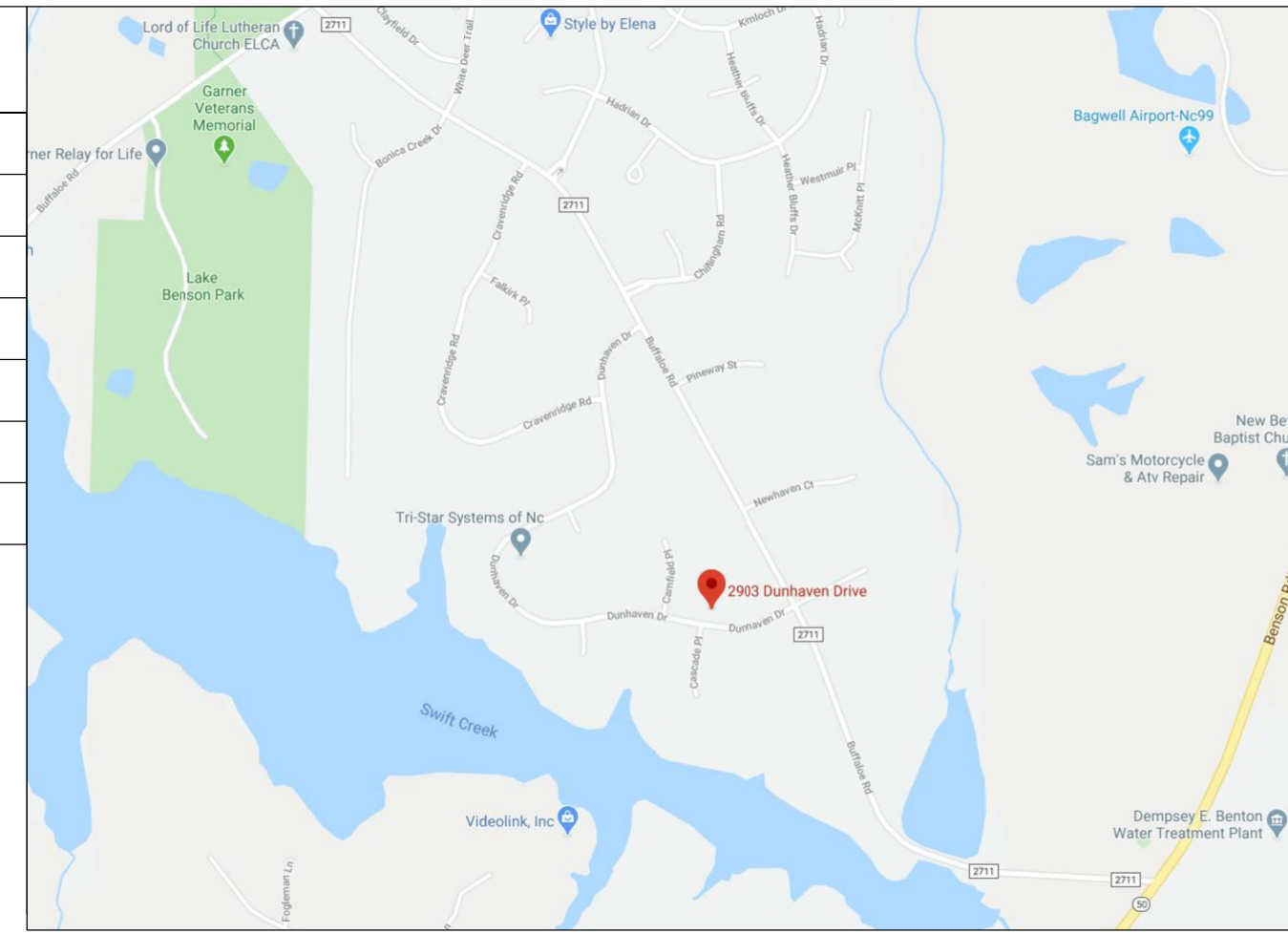
DOUGLAS & ALLISON KUHNS
2903 DUNHAVEN RD.
Garner, NC 27529
DUNHAVEN BY THE LAKE SUBDIVISION

GROUND MOUNT SOLAR RACK PLAN,
DETAILS & CALCS.

SHEET NO.

PV-2

| INDEX TO DRAWINGS | |
|-------------------|--|
| SP1 | SOLAR SITE PLAN |
| PV-2 | GROUND MOUNT SOLAR RACK PLAN, DETAILS & CALCS. |
| | |
| | |
| | |



PROJECT DESCRIPTION

THIS 11.2 kW DC stc, GROUND-MOUNTED PHOTOVOLTAIC (PV) SYSTEM IS TO BE INSTALLED AT 2903 DUNHAVEN DRIVE, GARNER, NC

THE ENERGY PRODUCED BY THE PV SYSTEM SHALL BE INTERCONNECTED WITH THE UTILITY GRID THROUGH THE EXISTING ON SITE ELECTRICAL EQUIPMENT VIA A BACK-FED BREAKER IN THE MAIN SERVICE PANEL. THIS PROJECT DOES NOT INCLUDE STORAGE BATTERIES.

SYSTEM

- 28 TRINA SOLAR TSM-400 Watt PV PANELS
- 28 SOLAR EDGE SEP400W OPTIMIZER
- 1 SOLAR EDGE SE11400H GRID TIE INVERTER
- RACKING: UNIRAC GROUND ARRAY

EXISTING HOME ELECTRICAL

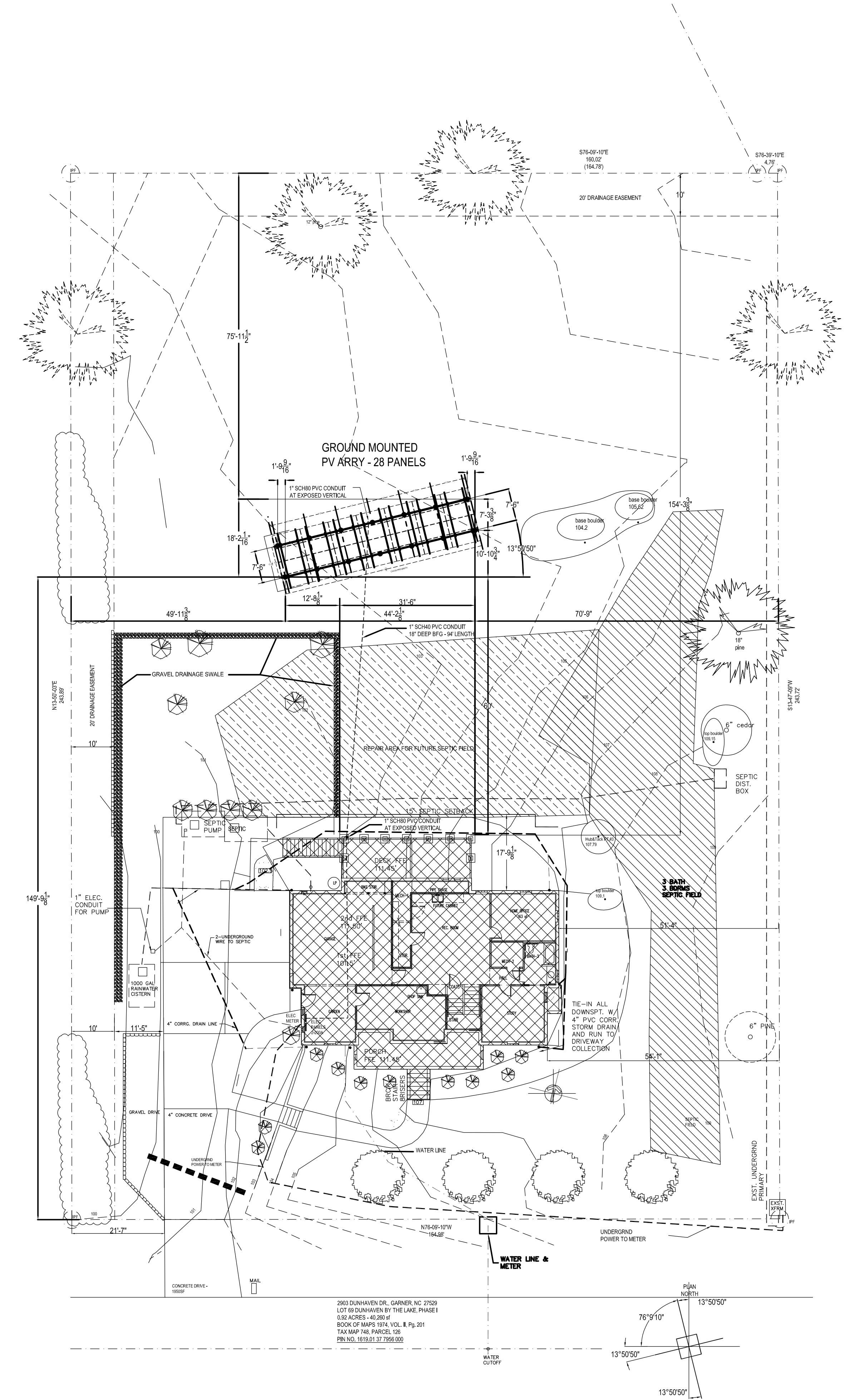
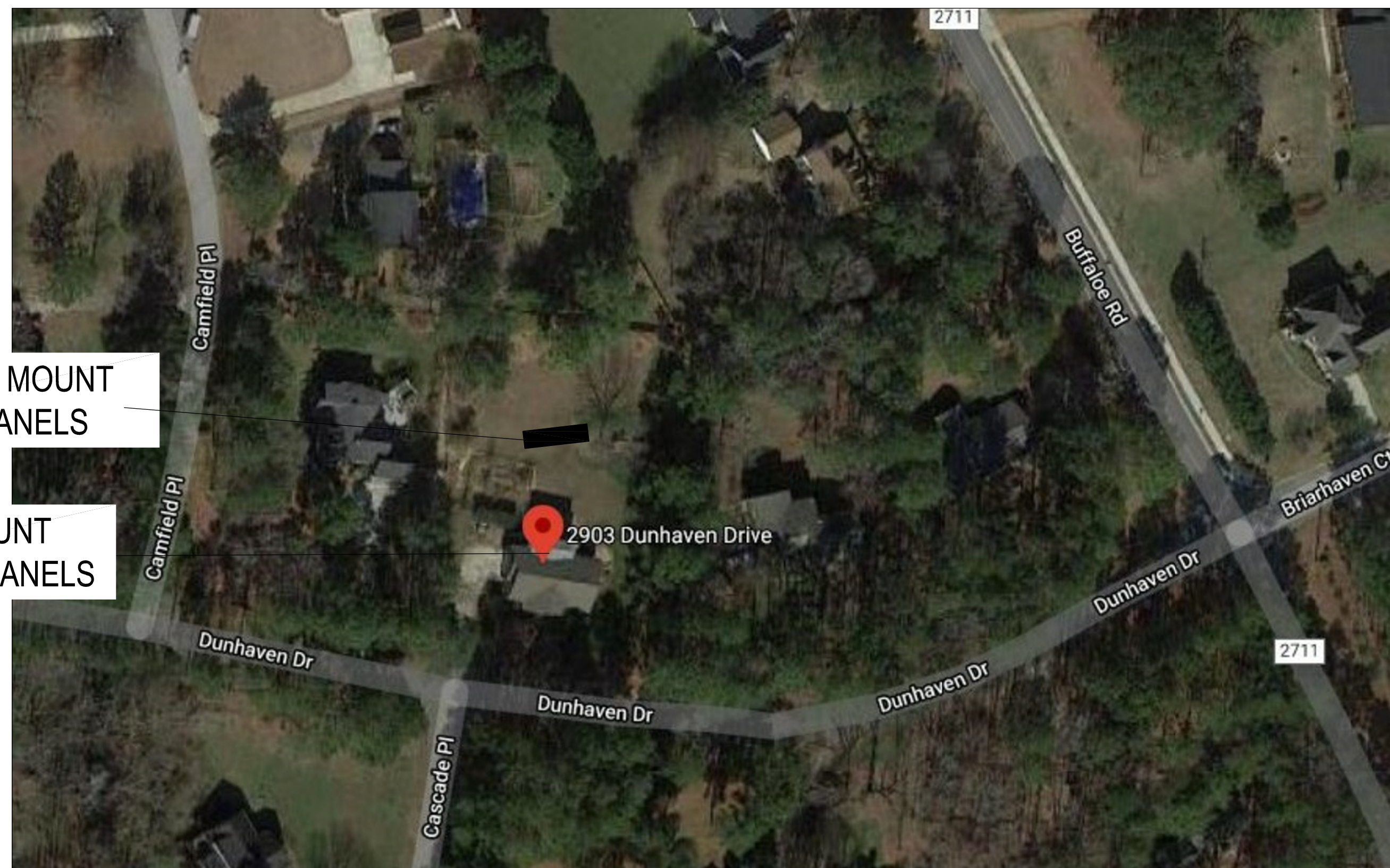
- MAIN SERVICE 2-200A PANELS - 400A METER
- GRID VOLTAGE 120/240V, SINGLE PHASE

SPECIAL INFORMATION:

- TYPE: GROUND MOUNT ARRAY
- ARRAY PITCH: 20d
- ARRAY AZIMUTH: 180d
- AVERAGE HIGH TEMP: 87.8 F (JUN/JUL/AUG -1955 TO 2012)
- RECORD LOW TEMP: -22.8 C = -9.04 F

TOWN OF GARNER ZONING U.D.O.

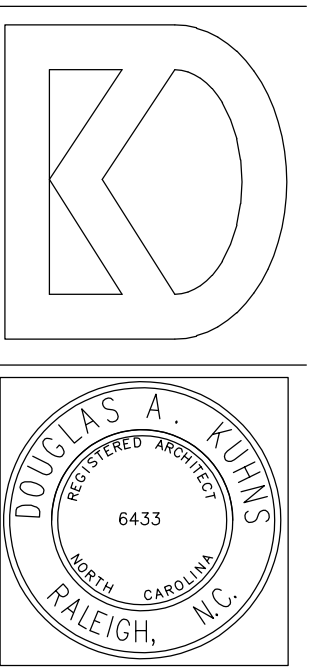
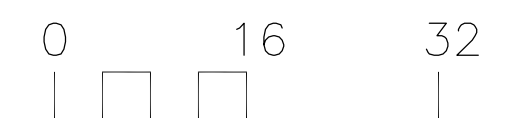
- ACCESSORY SOLAR ENERGY SYSTEMS – 5.4.K.1&2
- 28 PV MODULES – 4 ROWS x 7 COLUMNS = 631 SF AREA
- BUILDING FOOTPRINT = 2,844 SF.
- 631 / 2,844 = 22.2% < 25% MAX. ALLOWED



SP1-01

SOLAR SITE PLAN

SCALE: 1/16" = 1'-0"



DOUGLAS & ALLISON KUHNS
 2903 DUNHAVEN RD.
 Garner, NC 27529
 DUNHAVEN BY THE LAKE SUBDIVISION

SOLAR SITE PLAN

SHEET NO.

SP1

TOWN OF GARNER
www.GarnerNC.gov

TEXT AMENDMENT

COMPLETED APPLICATION MUST BE SUBMITTED WITH FILING FEE

| | | |
|---|------------------------|------------------------|
| OFFICE USE ONLY | | |
| Application Number: <u>UDO-20-03 Solar Panels</u> | Date: <u>9-02-2020</u> | Receipt #: <u>2795</u> |
| Related Projects: _____ | | |

1. Petitioner(s): Douglas Kuhns
 Address: 2903 Dunhaven Drive City, State, Zip: Garner, NC 27529
 Phone: 919-418-1557 Fax: _____ Email: dkuhns001@nc.rr.com

DOUGLAS KUHNS
 Petitioner - Printed
 SIGNATURES (REQUIRED)

Douglas Kuhns 08/20/2020
 Petitioner - Signature Date

2. Cite the applicable section of the UDO Ordinance:
2015 S-4 UDO 5:52A, 3. CBD and all residential zoning districts: Only flush-mounted solar roof panels
or solar shingles are permitted

3. Provide sample of proposed language:
See attached

4. Provide a description of the specific objective of the proposed change:
Allow ground mount solar panels systems to be installed in residential zoned areas that have adequate
amounts of land with suitable solar exposure in addition to roof mounted solar systems. The current zoning
requirements allow for ground mount solar systems in commercial zoning districts with design restrictions.

5. Provide concise statement of the reasons why the proposed amendment would be in the public interest:
Roof mounted solar systems do not provide enough flexibility in design of the solar panel system since they
have fixed roof slopes that do not optimize solar production, limited area of usable roof surface, and cost of
removing and re-installation of solar panels during roof replacement. A ground mount system is more
accessible for easier installation and maintenance, with more design flexibility allowing greater solar production

Article 5 – Use Regulations

5.4 - Accessory Uses and Structures

K. Accessory solar energy systems.

1. All zoning districts: Solar panels shall not create a traffic or safety hazard; solar panels shall be arranged, angled or sited to minimize glare or reflection onto adjoining properties and rights-of-way. Panels shall have a textured or anti-reflective surface or coating. Mirrors or mirrored panels are prohibited.
2. NO, NC, O&I, CR, SB, I-1, I-2 and MXD-1 zoning districts:
 - a. The maximum height for all ground-mounted solar panels and related equipment shall not exceed 15 feet. This includes solar panels at maximum tilt.
 - b. The area for ground-mounted panels and equipment shall be no more than 25% of the principal building's footprint.
 - c. Ground-mounted panels are restricted to the interior side and rear yards only, and shall not be located within any perimeter buffer required by Section 7.1K(6): Buffer width charts.
 - d. Flush-mounted roof panels are exempt from the screening of objectionable views requirements of Section 7.1M(5): Solar farms.
 - e. Any roof panel not installed flush to the roof surface shall be 100% screened from view in accordance with the screening of objectionable views requirements of Section 7.1M(5): Solar farms.

Article 5. Use Regulations Town of Garner Unified Development Ordinance (UDO) 2015 S-4 UDO 5:52A

3. CBD and all residential zoning districts: Only Ground-mounted solar panels and Flush-mounted solar roof panels or solar shingles are permitted.
 - a. The maximum height for all ground-mounted solar panels and related equipment shall not exceed 8 feet. This includes solar panels at maximum tilt.
 - b. The area for ground-mounted panels and equipment shall be no more than 25% of the principal building's footprint.
 - c. Ground-mounted panels are restricted to the interior side and rear yards only, and shall not be located within any perimeter buffer required by Section 7.1K(6): Buffer width charts.

- d. Ground mount solar panels visible from the street right-of-way shall be screened from view with an evergreen screen of low-branching shrubs. The plantings may be located remotely from the solar panels to screen the view from the street.**

(Ord. No. 3396, § 11, 4-3-06; Ord. No. 3418, §§ 1--5, 7-5-06; Ord. No. 3519, 7-7-08; Ord. No. 3523, § 1, 8-4-08; Ord. No. 3780, § 9, 7-7-15)

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|--|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: UDO-20-04, Telecom Towers - Setback Radius | | |
| Location on Agenda: Discussion | | |
| Department: Planning | | |
| Contact: Reginald Buie, MPA, CZO; Senior Planner | | |
| Presenter: Reginald Buie, MPA, CZO; Senior Planner | | |
| Brief Summary: Text amendment request (UDO-20-04) submitted by Cello Partnership, Verizon Wireless through Faulk & Faulk to amend Article 5. Use Regulations B. 8 (c) 7. of the UDO to reduce the fall-zone setback requirements for certain telecommunications towers engineered to have a breakpoint. | | |
| Recommended Motion and/or Requested Action: Set public hearing for November 17, 2020 | | |
| Detailed Notes: Currently, Article 5. Use Regulations B. 8 (c) 7 requires a 500-foot setback from any residential property line and a fall-zone of 100% of the tower height, regardless of engineering and construction methods. | | |
| Funding Source: | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | JST | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |

TO: Honorable Mayor Marshburn and Members of the Town Council

FROM: Reginald Buie, MPA, CZO; Senior Planner

SUBJECT: *UDO-20-04, Telecom Towers – Setback Radius*

DATE: October 27, 2020

I. BACKGROUND

The Planning Department has received a text amendment request from Cello Partnership, Verizon Wireless through Faulk & Faulk to amend the UDO to reduce the fall-zone setback requirements for telecommunications towers. The applicant has proposed some suggested language below.

II. CURRENT TEXT

Article 5. Use Regulations B. 8 (c) 7

A setback radius (a circle whose center is the tower base) shall be required as follows for all cell towers that are permissible in districts except where stricter standards are required in the R-40 district.

- (a) From all sides of a tower there shall be a minimum setback of 500 feet measured straight line to any portion of a property line of a residentially developed lot.
- (b) Where any side of a tower site adjoins undeveloped property zoned residential, the required setback distance from the tower to any property line shall be equal to at least 100 percent of the tower height. The Town Council may allow this setback requirement to be reduced to a minimum of 60 percent of the tower height based on competent evidence provided by the applicant clearly showing that the structural integrity of the tower is designed to collapse within the reduced setback distance and that affected owners of record adjacent to the reduced setback distance provide written documentation that they do not object to such setback reduction.

- (c) Where any side of a tower site adjoins property zoned nonresidential, the required setback distance from the tower to any property line shall be equal to at least 60 percent of the tower height.
- (d) The Town Council may require that a tower setback radius area not contain any buildings, structures or land uses if the Council concludes that such buildings, structures or land uses could be impacted by the structural failure of the tower.

III. PROPOSED TEXT CHANGE BY APPLICANT

Article 5. Use Regulations B. 8 (c) 7

- (a) From all sides of a tower there shall be a minimum setback of 200 feet measured in straight line to any portion of a property line of a residentially developed lot.
- (b) Where any side of a tower site adjoins undeveloped property zoned residential, the required setback distance from the tower to any property line shall be equal to at least 100 percent of the tower height_or the Breakpoint Minimum Distance (as described below).

The Town Council may allow this setback requirement to be reduced to a minimum of 60 percent of the tower height based on competent evidence provided by the applicant clearly showing that the structural integrity of the tower is designed to collapse within the reduced setback distance and that affected owners of record adjacent to the reduced setback distance provide written documentation that they do not object to such setback reduction.

- (c) Where any side of a tower site adjoins property zoned nonresidential, the required setback distance from the tower to any property line shall be equal to at least 60 percent of the tower_height if the tower is not designed with breakpoint design technology, or, if the tower is designed with such technology then the setback must be the Breakpoint Minimum Distance (as described below).
- (d) The Town Council may require that a tower setback radius area not contain any buildings, structures or land uses if the Council concludes that such buildings, structures or land uses could be impacted by the structural failure of the tower.
- (e) Breakpoint Minimum Distance - breakpoint design technology which is defined as: The engineering design of a tower wherein a specified point on the tower is designed such that in the event of a structural failure, the failure will occur at the

breakpoint rather than at the base plate, anchor bolts, or any other point on the tower.

- (f) If the tower has been constructed using breakpoint design technology the minimum setback distance shall be equal to 110% of the distance from the top of the structure to the breakpoint level of the structure, or the minimum side and rear yard requirements, whichever is greater.

Certification by a registered professional engineer licensed by the State of North Carolina of the breakpoint design and the design's fall radius must be provided together with the other information required herein from an applicant.

For example, on a 100-foot tall monopole with a breakpoint at 80 feet, the minimum setback distance would be 22 feet (110% of 20 feet, the distance from the top of the monopole to the breakpoint) or the minimum side or rear yard setback requirements for that zoning district, whichever is greater.

III. RECOMMENDATION

If approved, this text amendment would apply to all telecommunications towers permissible in the R-40, CR, SB, and I-2 zoning districts. If the Council is interested in moving this forward, Staff recommends setting a public hearing for November 17, 2020 to get public input. Afterwards, Staff would then draft ordinance language, and this would be sent to the Planning Commission for a recommendation and then back to Council for a decision.

TOWN OF GARNER
www.GarnerNC.gov

TEXT AMENDMENT

COMPLETED APPLICATION MUST BE SUBMITTED WITH FILING FEE

| | | |
|--------------------------------------|---|------------------------|
| Application Number: <u>UDO-20-04</u> | OFFICE USE ONLY Date: <u>9-03-2020</u> | Receipt #: <u>2797</u> |
| Related Projects: _____ | | |

1. Petitioner(s): Cellco Partnership, d/b/a Verizon Wireless through Faulk & Foster
 Address: 584 Laurel Lane City, State, Zip: Lancaster, PA 17601
 Phone: 518-791-3740 Fax: _____ Email: _____
Faulk & Foster, by Faulk & Foster, by
James L. LaParo James L. LaParo
 Petitioner - Printed Petitioner - Signature Date
 SIGNATURES (REQUIRED)

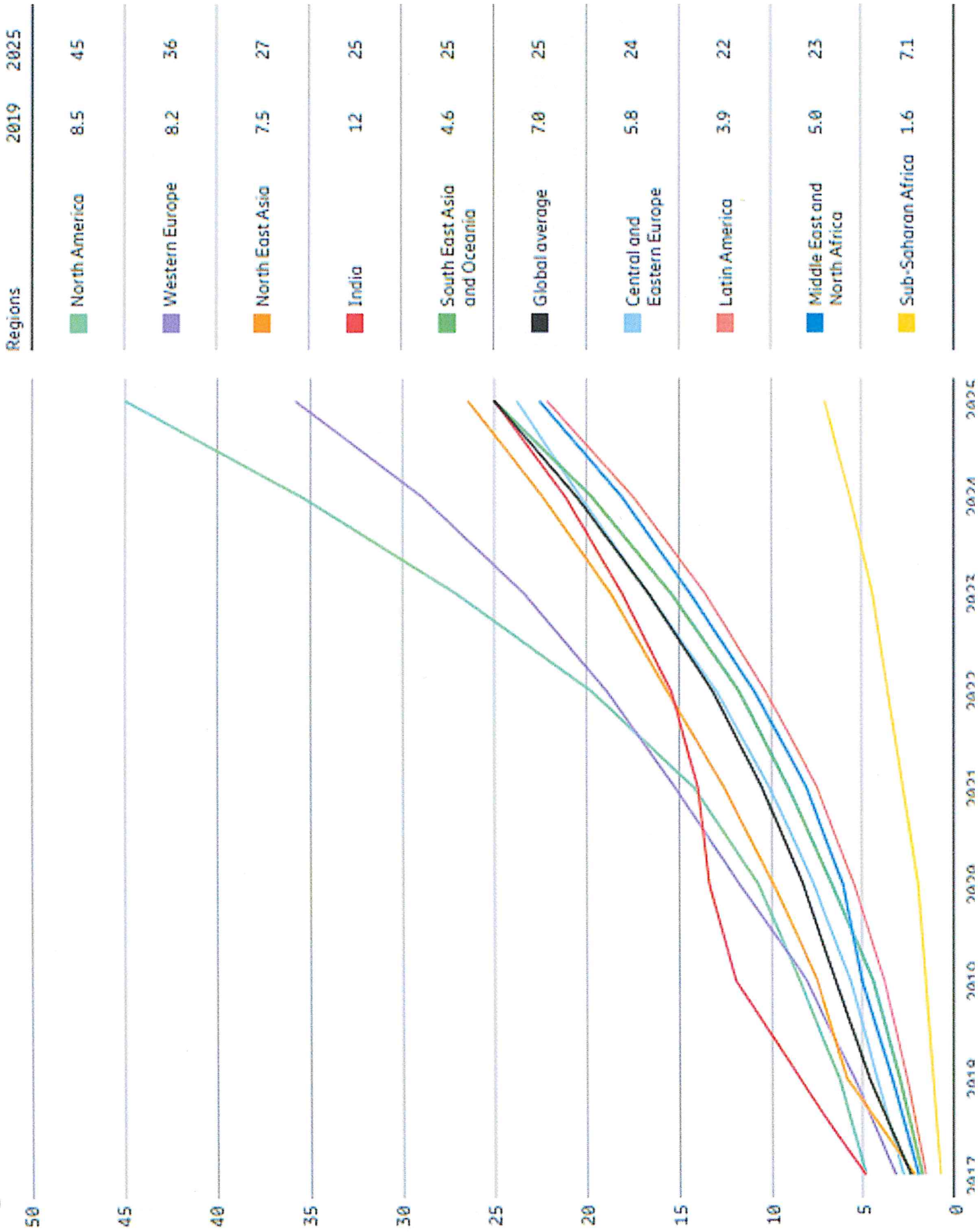
2. Cite the applicable section of the UDO Ordinance:
Article 5 - Use Standards, B Public, civic and institutional uses,
8. Telecommunication facilities (c) (7) Setback radius.

3. Provide sample of proposed language:
(b) Where residential... the required setback distance from the tower to any property line shall be equal to
at least 100 percent of the tower height, if the tower is not built with breakpoint design technology, or the
Breakpoint Minimum Distance (as described below) if it is built with breakpoint technology.

4. Provide a description of the specific objective of the proposed change:
The proposed changes bring the ordinance into line with the ordinances of similar communities, and includes
the currently used technology of "engineered fall zones".

5. Provide concise statement of the reasons why the proposed amendment would be in the public interest:
Smart phones have become a part of society in a way that was never anticipated. It is reported that over
70% of 911 calls are made on cell phones. The use of data by our citizens is rising exponentially. By allowing
cell towers to safely locate near residential district we will safely provide state of the art technology to be used
by individuals working remotely from home, and provide the type of Internet connections uniformly desired.

Figure 19: Mobile data traffic per smartphone (GB per month)





August 19, 2020

Jeff Triezenberg
Planning Director
Town of Garner
900 7th Ave.
Garner, NC 27529

Re: Application for Text Amendment
UDO Article 5 – Use Standards
Setback for cell towers

Dear Mr. Triezenberg:

I have enclosed the following for your review:

- A. Check made payable to the Town of Garner in the sum of \$ 400.00.
- B. Fully Completed Text Amendment form
- C. Supplemental Materials (6 pages of text and one chart)

If a pre-application meeting is required, I would greatly appreciate it if I could attend via zoom. I am an at-risk individual, and I cannot travel to North Carolina at this time due to the pandemic.

Please let me know whether the materials that I submitted are sufficient for the purposes of requesting a text amendment in the Town of Garner, N.C.

Thank you very much,

James L. LaPann
Zoning Specialist – Faulk & Foster
(518) 791-3740 jim.lapann@faulkandfoster.com

TOWN OF GARNER

TEXT AMENDMENT

Supplemental Information

Cellco Partnership, d/b/a/ Verizon Wireless, through Faulk & Foster offers the following in support of their Application for a text amendment to the Uniform Development Ordinance – Article 5 Use Standards.

A. Reason for requested amendment

The current Telecommunication Facilities Ordinance has two sections of the Setback radius ordinance where there are protections for residential housing: Already Established Residential lots, and Undeveloped residentially zoned property. Items 1 and 2 below involve Already Established Residential Lots, and Item 3, below involves undeveloped residentially zoned property.

1. Already Established Residential Lot - Setback from where?

Article 5, (B) (8) (c) (7) (a) involves a situation where there is an existing residentially developed lot. The current ordinance requires a new cell tower to be 500 feet from any portion of the property line of a residentially developed lot.

The property owner who buys or builds a house where there is currently no cell tower must have some protection from someone putting up a cell tower right next to their house. The current ordinance, however, goes well beyond that protection. It measures the setback from “any portion of the property line of a residentially developed lot”.

- (a) Any portion of the property line of a residentially developed lot is a lot different from a “residence”. Many times, residential lots have odd shapes, such as long and thin lots, or oddly shaped lots where the house is quite far from some portions of the property line.
- (b) One method of making this part of the ordinance fair to both the existing land owner and the party wishing to add a cell tower to their land is to measure the tower setback from the residence itself. This

change would make the setback uniform, no matter what shape the residentially developed property is.

2. **Already Established Residential Lot - Length of Setback**

Also in Article 5, (B) (8) (c) (7) (a) there is a requirement that this setback be 500 feet. This is substantially more than similar North Carolina municipalities, like Knightdale, where the setback is 200 feet.

We are asking for a setback of 200 feet, like that in Knightdale. That distance is still significant, being 2/3 of a football field. Together with the ordinance requirements for landscaping, that distance protects the land owner who has already bought or built their house.

3. **Undeveloped residentially zoned property – Engineered Fall Zone**

In Article 5, (B) (8) (c) (7) (b) the ordinance requires a setback that is 100% of the height of the Tower. Most of the “first generation” telecom ordinances used the tower height setback because at that time the engineered fall zone technology had not been fully developed. The safety of the public was protected from the tower falling like a tree, all in one piece.

Today, communities like Clayton NC acknowledge that structural engineers can design the cell tower to have a certain place where they can fail under certain circumstances. In the case of an extreme weather event such that the tower would break at a certain point, and the top of the tower would fold over.

Clayton N.C. uses the term breakpoint design technology, and the “fall zone” as the Breakpoint Minimum Distance.

Through the use of this modern technology, cell towers can be placed in portions of the property where they will have the least impact on the neighboring properties. They don't have to be placed out in the middle of the lot.

B. Requested Amendment

Article 5 Use Regulations,

5.3 Specific Use Standards

B Public, civic and institutional uses

8. Telecommunication facilities

(c) (7)

(7) A setback radius (a circle whose center is the tower base) shall be required as follows for all towers that are permissible in districts except where stricter standards are required in the R-40 district (see subsection (15) below).

(a) From all sides of a tower there shall be a minimum setback of 200 feet measured in straight line to a residence on an adjoining parcel of land.

(b) Where any side of a tower site adjoins undeveloped property zoned residential, the required setback distance from the tower to any property line shall be equal to at least 100 percent of the tower height, if the tower is not built with breakpoint design technology, or the Breakpoint Minimum Distance (as described below) if it is built with breakpoint design technology

(c) Where any side of a tower site adjoins property zoned nonresidential, the required setback distance from the tower to any property line shall be equal to at least 60 percent of the tower height, if the tower is not designed with breakpoint design technology, or the Breakpoint Minimum Distance (as described below) if it is built with breakpoint design technology.

(d) The Town Council may require that a tower setback radius area not contain any buildings, structures or land uses if the Council concludes that such buildings, structures or land uses could be impacted by the structural failure of the tower.

(e) Breakpoint Minimum Distance - breakpoint design technology is defined as:

The engineering design of a tower wherein a specified point on the tower is designed such that in the event of a structural failure, the failure will occur at the breakpoint rather than at the base plate, anchor bolts, or any other point on the tower.

If the tower has been constructed using the breakpoint design technology the minimum setback distance shall be equal to 110% of the distance from the top of the structure to the breakpoint level of the structure, or the minimum side and rear yard requirements, whichever is greater.

Certification by a registered professional engineer licensed by the State of North Carolina of the breakpoint design and the design's fall radius must be provided together with the other information required herein from an applicant.

For example, on a 100-foot tall monopole with a breakpoint at 80 feet, the minimum setback distance would be 22 feet (110% of 20 feet, the distance from the top of the monopole to the breakpoint) or the minimum side or rear yard setback requirements for that zoning district, whichever is greater.

C. Statement of how proposed amendment should be evaluated using the Criteria For Evaluating Text Changes (as set forth in the Application form 3.11 Text Amendment D)

The extent to which the proposed text amendment is consistent with the remainder of the UDO, including specifically any purpose and intent statements.

In general, the Uniform Development Ordinance (UDO) is designed to foster the safe and prosperous development of the community. The ordinance provides a framework in which economic growth and business development is encouraged (Article 1, 1.2, (A) (6)), as well as the adequate provision or availability of transportation, police and fire protection... affordable housing, (Article 1, 1.2, (A) (7)), and securing safety from fire, flood and other dangers (Article 1, 1.2, (A) (8)).

All of these elements depend on a strong technological infrastructure with a cell phone network that is strong and dependable. The proposed text will allow cell towers to co-exist with residences in a manner that will strongly support business development, improved and reliable communication with first responders, including police and fire protection.

The proposed text will preserve the appearance of the residential neighborhoods, while providing strong data signals to allow the increasing number of individuals who work from home.

The extent to which the proposed text amendment represents a new idea not considered in the existing UDO, or represents a revision necessitated by changing circumstances over time.

New Idea Not Considered

The proposed text does involve a new idea that was not considered in the existing UDO. The UDO did not take into account the wide variety of shapes of residential lots. This is not an error, it is a factor that was just not considered. Some residential lots are long and thin, and some have oddly shaped lots due to various factors of topography or shape of the original lot that was developed.

By changing the text to measure from the house itself, rather than any portion of the boundary line, the law can be applied uniformly. This allows protection of the property owner who has invested in an existing house or built a house, and it also protects a property

owner in an adjoining parcel who wants to develop their land. In many parts of the Town residential lots are placed next to commercially zoned parcels.

As is stated above, zoning that takes into account the wide variety of situations, zoning zones, and land configurations can be a tremendous help to the development of the community in a manner that is fair to all.

Changing Circumstances over time

1. Vast increases in demand

One circumstance that has changed over time is the development of technology. The demand for data is increasing exponentially. The widespread use of streaming voice, music, and video was not present ten years ago. It will be greatly increased over the next ten years.

Attached to this text is a chart taken from the Ericson Mobility Report, June 2020, in which this well respected document predicts that in North America, from 2019 to 2025, the mobile data demanded per smart phone will increase from 8.5 to 45 (529 percent). This incredible demand increase requires the source of the cell signals to be closer to the source of the demand.

By allowing the cell towers to be placed closer to the boundary lines of the host property cell towers will be able to be placed on a variety of lots that are currently not feasible. By using smaller, portions of property, we will be able to be closer to the source of the demand, and this will greatly improve the service of the incredible demand that is occurring and that will occur in the future.

2. Improvement in cell tower design

Cell tower design has changed significantly over time. Where the conventional wisdom at one time was that the towers had to fall in one piece (like a tree), the current state of tower design is vastly improved. Now, towers are regularly designed such that in the case of a catastrophic weather event, where the forces on the tower are such that a failure may occur, the towers are designed with a failure point, or break point. This allows the tower to bend over at the “break point” and only a small portion of the tower would fall.

This design improvement allows towers to be placed closer to the boundary lines while totally protecting the safety of individuals travelling on roadways, or walking or working on the adjoining parcel. This improvement allows towers to be placed in areas that do not interfere with the aesthetics of the area, or the productivity of land.

The proposed change is currently in use in a nearby community, Clayton, N.C. as well as many other communities throughout the south-east.

Whether or not the proposed text amendment corrects an error in the UDO.

No

Whether or not the proposed text amendment revises the UDO to comply with state or federal statutes or case law.

No

Based on the Application, the Supplemental Information and the attached chart, Verizon Wireless respectfully requests that the Town of Garner make the requested amendment to the UDO.

Dated: August 18, 2020

James L. LaPann
Zoning Specialist – Faulk & Foster

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|---|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: UDO-20-05, Townhomes in the CBD | | |
| Location on Agenda: Discussion | | |
| Department: Planning | | |
| Contact: Jeff Triezenberg, AICP, GISP; Planning Director | | |
| Presenter: Jeff Triezenberg, AICP, GISP; Planning Director | | |
| Brief Summary: Text amendment request (UDO-20-05) submitted by the Planning Department in conjunction with the Downtown Garner Association to amend Article 6.5 and related sections to permit alternative form standards for townhomes in the Central Business District (CBD). | | |
| Recommended Motion and/or Requested Action: Set public hearing for November 17, 2020 | | |
| Detailed Notes: Currently, townhomes are an allowable use in the Central Business District; however, the associated development standards do not provide for alternatives to typical suburban form that would be more appropriate in a downtown, mixed-use setting - such as alternative setbacks that allow buildings to be brought closer to the street. If supported by the Town Council, staff will generate specific ordinance language for consideration at public hearing. | | |
| Funding Source: | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | JST | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |

Planning Department Memorandum

TO: Honorable Mayor Marshburn and Members of the Town Council

FROM: Jeff Triezenberg, AICP, GISP; Planning Director

SUBJECT: *UDO-20-05, Townhomes in the Central Business District*

DATE: October 27, 2020

I. BACKGROUND

As downtown Garner continues to evolve, the Downtown Garner Association and the Planning Department are witnessing a growing interest to bring new residential opportunities to the areas around the Central Business District as the Garner Forward Comprehensive Plan might envision. However, the current standards for townhomes in the UDO do not contemplate the possibility of a more urban form with reduced street setbacks, the use of alleys and alternative landscaping scenarios. This amendment package would focus on providing these alternatives in a manner that is not otherwise inconsistent with the larger goals of adopted Town plans and applicable policies.

II. RECOMMENDATION

If approved, this text amendment would allow for townhomes to be constructed in the CBD according to urban standards appropriate to a traditional downtown setting. If the Council is interested in moving this forward, staff will prepare specific language in advance of a public hearing on November 17, 2020 to obtain public comments. The case would then be sent to the Planning Commission for a recommendation and then back to Council for a decision.

Town of Garner
Town Council Meeting
Agenda Form

| | | |
|---|---------------------------------|---|
| Meeting Date: October 27, 2020 | | |
| Subject: November Pending Agenda | | |
| Location on Agenda: Reports | | |
| Department: Town Manager's Office | | |
| Contact: Rodney Dickerson, Town Manager | | |
| Presenter: Rodney Dickerson, Town Manager | | |
| Brief Summary: The pending agenda items for the November Council Meetings and Work Session are provided for review and discussion. | | |
| Recommended Motion and/or Requested Action: Receive as information | | |
| Detailed Notes: | | |
| Funding Source: | | |
| Cost: | One Time: <input type="radio"/> | Annual: <input type="radio"/> No Cost: <input checked="" type="radio"/> |
| Manager's Comments and Recommendations: | | |
| Attachments Yes: <input checked="" type="radio"/> No: <input type="radio"/> | | |
| Agenda Form Reviewed by: | Initials: | Comments: |
| Department Head: | JMH | |
| Finance Director: | | |
| Town Attorney: | | |
| Town Manager: | RD | |
| Town Clerk: | | |



Town Manager's Office Memorandum

TO: Mayor and Town Council

FROM: Rodney Dickerson, Town Manager

DATE: November 20, 2020

SUBJECT: November Pending Agenda Items

The following items are currently planned for the November Council Meetings and Work Session. These items are subject to change.

Monday, November 2 – Regular Meeting

Presentations

1. GVFR Presentation – Demographic and Socioeconomic Risk Profiles for Fire District

Consent

1. ANX 20-18 – 713 Wakeland Rd – Set Public Hearing for December 7
2. ANX 20-19 – Jameson Place – Set Public Hearing for December 7
3. Budget Amendments
4. Jones Sausage Road Phase 1 Design Contract
5. Edge of Auburn Agreement Amendment

Public Hearings

1. SUP-SB-20-02 - JS Commerce Park

Old/New Business

1. Fee-in-Lieu of Parkland Dedication Calculation – First Reading
2. GVFR Board Appointments
3. Q1 Budget Review

Reports

Tuesday, November 17 – Regular Meeting

Presentations

1. Economic Development Annual Report

Consent

1. Budget Amendments
2. Nuisance abatements

Public Hearings

1. CUD-Z-20-03 (a) and CUP-SP-20-03 - Timber Drive East Apartments
2. CUD-Z-20-03 (b) and CUP-SB-20-03 - Timber Drive East Townhomes
3. UDO-20-03 - Residential Ground-Mounted Solar Panels
4. UDO-20-04 - Telecommunication Tower Setbacks
5. UDO-20-05 - Townhomes in the CBD

Old/New Business

1. Lake Drive Improvements Design Presentation and Public Comment
4. Fee-in-Lieu of Parkland Dedication Calculation – Second Reading

Reports

Tuesday, November 24 – Work Session

Discussion

1. Joint Planning Commission – Town Council Work Session – UDO Updates
2. BRT Branding and Design Update
3. Utilization of excess Inspection Department funding to cover vehicle related costs

Pending Items

1. Council Meeting Procedures