MCPB

Item No.: 6 Date: 09-26-19

SHA Georgia Avenue Tower – Mandatory Referral MR2020002

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Completed: 09/13/19

Description

Mandatory Referral associated with a request to construct a public safety system radio communications tower; located at the intersection of Georgia Avenue and MD-200 in the Olney Master Plan area.

Submittal Date: July 19, 2019

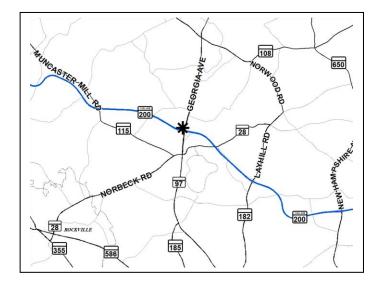
Applicant: Maryland State Highway Administration

(SHA)

Review Basis: Md. LAND USE Code Ann. § 20-301

Staff Recommendation: Approval and Transmittal

of Comments to MDSHA



Summary

A proposal to construct a 250-foot tall communications tower for public safety radio communications. The tower is considered a Public Use under the Zoning Code and not a Telecommunications Facility. The Public Use category in the zoning ordinance does not provide review standards. However, because this use is similar in character to a telecommunications facility, the conditional use review standards for a telecommunications facility were used to provide guidance to inform the review of the project.

RECOMMENDATIONS:

Staff recommends Approval and transmittal of comments on the Mandatory Referral to the Maryland State Highway Administration (SHA):

- 1. There should be no outdoor storage of equipment or other items.
- 2. The support structure should be removed at the cost of the owner of the tower when the tower is no longer in use by the State for more than 12 months.
- 3. The support structure should be identified by a sign two square feet or smaller, affixed to the support structure or any equipment building. The sign must identify the owner and the maintenance service provider of the support structure or any attached antenna and provide the telephone number of a person to contact regarding the structure. A second sign should be affixed to the equipment compound's gate.
- 4. The owner of the tower is responsible for maintaining the tower in a safe condition.

Mandatory Referral Review

This proposal for the construction of a new public safety radio communications facility is subject to the Mandatory Referral review process under the Montgomery County Planning Department's, Uniform Standards for Mandatory Referral Review. State law requires all federal, state, and local governments and public utilities to submit proposed projects for a Mandatory Referral review and make a recommendation on the project by the Commission. The law requires the Planning Board to review and make a recommendation on the proposed location, character, grade and extent of any road, park, public way or ground, public (including federal) building or structure, or public utility (whether publicly or privately owned) prior to the project being located, constructed or authorized.

According to State law (Md. LAND USE Code Ann. § 20-304), unless a longer period is granted by the submitting entity, an official referral to the Commission under this part is deemed approved if the Commission fails to act within 60 days after the date of submission. Staff contacted the State Highway Administration to request an extension that would accommodate the Board's meeting schedule over the August hiatus. MD SHA agreed to extend the review until the Board's September 26th Planning Board date.

Previous Submission

This project was originally submitted on June 7, 2018 as a 349-foot tower in the same location under Mandatory Referral #MR2018030. The item was withdrawn prior to the Planning Board hearing. There was significant community opposition and at that time the State wanted to re-evaluate height and placement options and hold a public meeting.

PROJECT DESCRIPTION

Background

Since November 2010, the State of Maryland has been implementing a statewide public-safety communications system known as Maryland First Responder Radio System Team (Maryland FiRST). To date, more than 85 percent of the state's population is in geographic areas served by the System. More than 14,000 public safety radios use the system for day to day operations, and another 25,000 public safety radios are registered for interoperability. The Maryland FiRST system has been a success, providing seamless, interoperable communications at such major public safety situations as the 2015 Baltimore disturbances, the annual Bay Bridge Walk, and the annual air show in Ocean City. The system is standards-based and provides a common communications platform that is available to all local, state and federal public safety agencies that operate within the state.

The Maryland FiRST system deployment in Montgomery County has begun, and the State of Maryland worked with its County police\fire\first responders to identify existing communications towers that could be used to support the new State system. In a parallel effort, the County had begun the development of its own next generation public safety radio system. In the past, the State and the County have worked together to share facilities to minimize impacts on affected areas. Several local and state communication towers in Montgomery County were identified that were suitable for co-location, and whose location met the needs of both jurisdictions.

However, in the area near the Inter-County Connector (MD-200) at Georgia Avenue (MD-97), no suitable existing structures were suitable for retrofit. The types of radio systems used by public safety agencies need taller towers than those used by cellular providers due to the way frequencies and coverage are used. The State began searching for an available state-owned site in the area that could be used to support all State agency communications in the area, as well as support the County's new communications system.

The Regulatory Agencies involved are:

- Federal Aviation Commission
- Federal Communications Commission
- Maryland Department of the Environment
- Maryland Historical Trust

Copies of approvals and opinions from each of these agencies are submitted with this application.

Site Selection

The Maryland Transportation Authority (MDTA) is a primary user of the Maryland FiRST radio system statewide, for both its police and maintenance operations. MDTA operates and enforces the laws on the ICC. To provide the levels of coverage to support its operations, the MDTA concluded that adequate radio coverage would be needed along the ICC. The Georgia Ave/ICC site is critical to the Maryland FiRST system, as well as the new Montgomery County Public Safety radio system.

The design phase of Maryland FiRST in Montgomery County identified the existing tower at the Shady Grove WSSC site to provide coverage at the western end of the ICC, and that coverage at the east end of the ICC could be provided from existing sites in Howard and Anne Arundel Counties, as well as proposed sites in Prince George's County. The center portion of the ICC required a facility mid-point along the roadway.

Maryland FiRST, and its partner, the State Highway Administration (SHA), began a search in the vicinity of this portion of the ICC for state-owned land, preferably owned by the Maryland Department of Transportation (MDOT) that could be developed for this use. At the same time, the Maryland FiRST project became aware of Montgomery County's ongoing efforts to replace its aging public safety radio systems. This geographic area was also identified by the County as needing a transmitter site.

The State identified two potential areas for the required site. One was in the Burtonsville area on State owned land, the other was the Georgia Ave/ICC Interchange area. Using coverage prediction computer programs, the Burtonsville site was deemed to be too far away from the area that needed coverage for both the State and County systems.

There were no existing wireless communications facilities in the target area that met the requirements of both the State and County systems. Unlike commercial wireless carrier (cellular) systems, the public safety system requires fewer transmitter sites, but taller towers to provide the required coverage. The State and the County are co-locating at most of these sites to reduce the need for new construction in the County.

The Applicant has indicated that this site is the most appropriate for several reasons:

- It is already an area that is "disturbed";
- The site is already owned by MDOT;
- The site provides critical radio coverage for both the State and the County first responders;
- By co-locating with the State, the County will realize significant monetary savings by not having to build its own facility in the area;

- By co-locating with the State, the need for the County to build a separate facility in the area is negated;
- Space on the tower will be available for commercial wireless carriers to lease, potentially reducing the need for further facilities in the immediate area.

Site Description

The subject property is at interchange of MD-200 (ICC) and MD-97 (Georgia Avenue) within the public right-of-way (ROW), in the northwest quadrant, in the center of the interchange's off-ramp ("Subject Property" or "Property").

The Property is currently owned by the State of Maryland. Figures 1 and 2 show the vicinity of the proposed tower and the site location.



Figure 1: 2017 Aerial Photograph Surrounding Vicinity

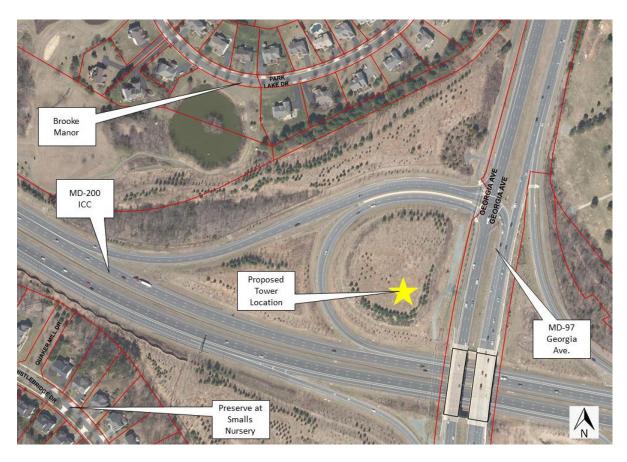


Figure 2: 2017 Aerial Photograph Site Location

Surrounding Neighborhood

The surrounding area is primarily the interchange of MD-200 (ICC) and MD-97 (Georgia Avenue). There are two RE-1 subdivisions in the area. To the north is Manor Brooke which is about 600 feet (closest point) from the tower location and to the South, across MD-200, is Preserve at Smalls Nursery which is about 1,000 feet (closest point) from the tower location. Figure 3 depicts the neighborhood.

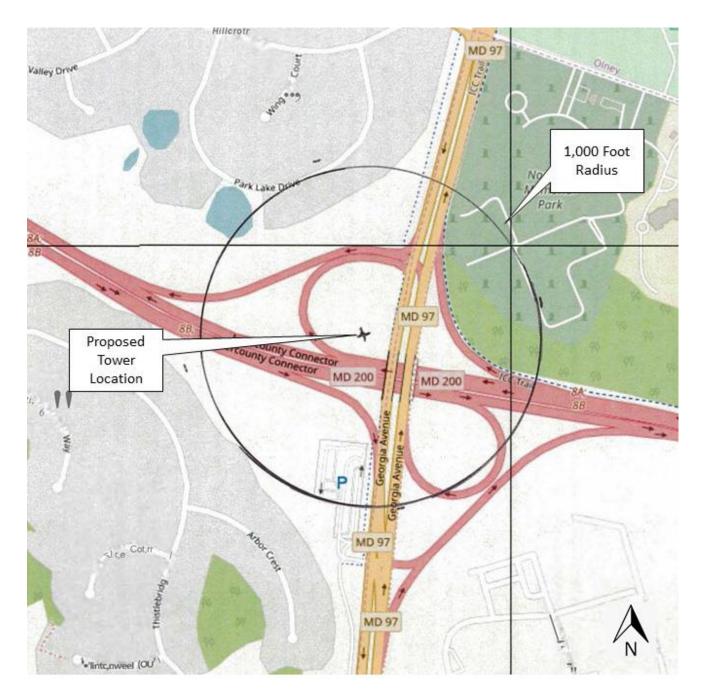


Figure 3: Tower location and 1,000 Foot Radius

Proposed Project

The facility at this site will be built to be consistent with other State communications facilities across the state. The typical facility consists of:

- 250' self-supporting lattice tower with an 18' extension at the top for the top marker light
 - o Marker lights are white strobes during the day, red markers at night

- All lights are compatible with night vision devices used by public safety helicopters;
- 12' x 38' pre-built concrete communications shelter
 - Shelter will house all State and County owned equipment, at no cost to County;
- 12' x 12' pre-built concrete shelter to house a LP gas fueled generator
 - Generator will use appropriate noise suppression muffler;
- LP gas tank typically 1000 gallons;
- Chain link fencing around entire compound
 - o Fence is typically 10' high, with appropriate gates for personnel and vehicles
 - Site area of disturbance is approximately .91 acres, all within the northwest clover leaf of the interchange;
- Entire compound will be graveled over.

Construction of the site will take approximately three to five months from the date the contract is awarded. All work will be done during daylight hours. During that time, typical heavy construction equipment and vehicles will be on site. This may include earth moving equipment, dump trucks, concrete trucks, tractor trailers, and cranes. The State will work to ensure that disruptions to traffic flow are minimized during the construction phase by working closely with State and local officials.

The SHA is working with the Maryland Department of Natural Resources currently to determine any storm water requirements at the site.

This facility will primarily be un-staffed after construction and installation of equipment is complete. State and County staff, or contractors will only be on the site to perform routine preventive maintenance or emergency maintenance. Vehicles are typically small service vans and pick-up trucks. Routine preventive maintenance is usually on an annual basis; emergency maintenance will be on as required basis.

This facility should not add any significant traffic flow to the area after construction is finished.

Figure 4 shows the site's design and Figure 5 shows a typical tower configuration.

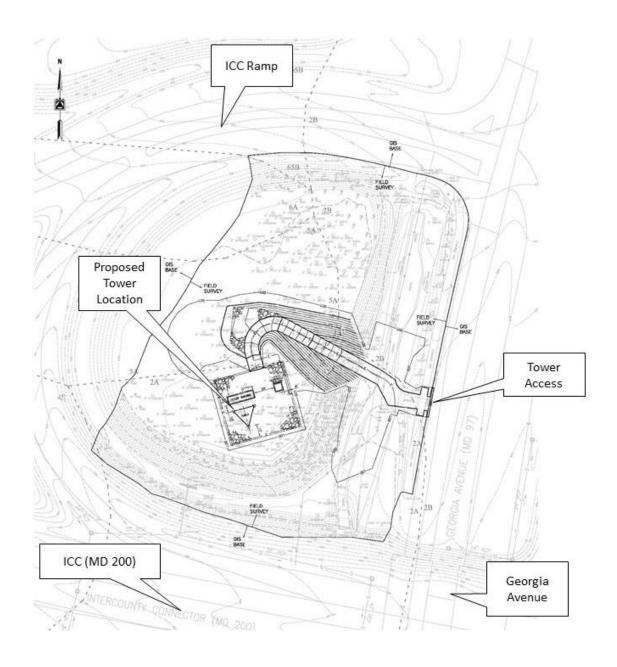


Figure 4: Site Layout and Design

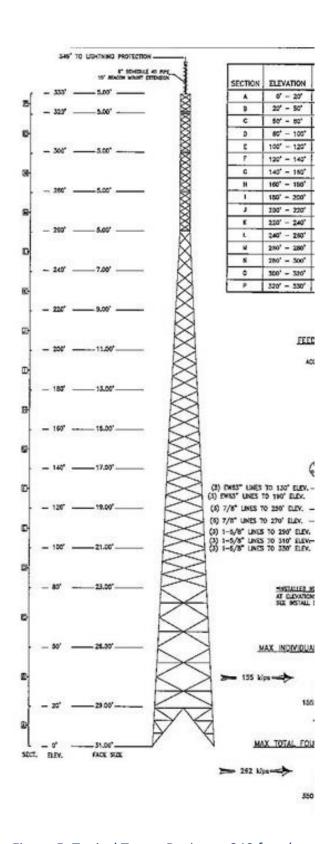


Figure 5: Typical Tower Design at 349 feet (proposed tower is 250 feet)

ANALYSIS

Zoning

The proposed facility is a "Public Use (Except Utilities)" in the Montgomery County Zoning Ordinance (Chapter 59). Because there are no review standards for Public Use (Except Utilities), Staff has used the standards included for a Telecommunications Tower to inform this review.

The Subject Property is not graphically depicted in a specific zone, but the RE-1 zoning line runs to the centerline of the right-of-way,. The RE-1 zone is considered a "Residential Detached" zone.

The proposed use under the Zoning Code is "Public Use (Except Utilities)," covered by Section 3.4.9 of the Code. A Public Use is a permitted use in all zones. According to the Zoning Code:

Public Use (Except Utilities) means a publicly-owned or publicly operated use. Public Use (Except Utilities) includes County office buildings, maintenance facilities, public schools and parks, post office, State and Federal buildings. Public Use (Except Utilities) does not include a Public Utility Structure (see Section 3.6.7.E, Public Utility Structure).

According to Section 3.6.7.E of the Zoning Code:

Public Utility Structure means a utility structure other than transmission lines or pipelines. Public Utility Structure includes structures for the occupancy, use, support, or housing of switching equipment, regulators, stationary transformers, and other such devices for supplying electric service or other public utilities.

Because the tower does not supply electric service or any other public utility, it is not a Public Utility Structure, and therefore falls under Public Use (Except Utilities) in the Zoning Code, as specified above. Because Section 3.4.9 does not provide review standards, Staff looked to Section 3.5.2.C of the Zoning Code, "Telecommunications Tower," to provide the best guidance to inform this report.

In the Conditional Use process, the Hearing Examiner approves most applications. However, this is application is for Mandatory Referral only and the Hearing Examiner is not involved in this review. References below are included only to show complete Code references.

The relevant use standards from Section 3.5.2.C are discussed below:

A Telecommunications Tower is considered a Conditional Use in the RE-1 Zone. The Conditional Use standards for a Telecommunications Tower are numerous, but because the subject application is for a Public Use, these standards are not mandatory; only the most pertinent standards from §59.3.5.2.C are discussed below.

i. Before the Hearing Examiner approves any conditional use for a Telecommunications
Tower, the proposed facility must be reviewed by the County Transmission Facility
Coordinating Group. The applicant for a conditional use must file a recommendation from
the Transmission Facility Coordinating Group with the Hearing Examiner at least 5 days before the
date set for the public hearing. The recommendation must be no more than 90 days old.

The Transmission Facility Coordinating Group has indicated that because the project was state funded and located on state land the group had no jurisdiction.

- ii. A Telecommunications Tower must be set back from the property line, as measured from the base of the support structure, as follows:
 - (b) In the Agricultural, Rural Residential, and Residential Detached zones, a distance of one foot for every foot of height or 300 feet from an existing dwelling, whichever provides the greater setback.

The Proposed tower height is 250 feet and the closest residential dwelling is more than 600 feet away, so the setback requirement has been adequately met.

iii. The maximum height of a support structure and antenna is 135 feet, unless it can be demonstrated that additional height up to 179 feet is needed for service, collocation, or public safety communication purposes. At the completion of construction, before the support structure may be used to transmit any signal, and before the final inspection required by the building permit, the applicant must certify to DPS that the height and location of the support structure conforms with the height and location of the support structure on the building permit.

The proposed height of 250 feet exceeds the Conditional Use height standard. However, it has been determined 250 feet is necessary for adequate coverage for public safety communication purposes.

iv. The support structure must be located to minimize its visual impact. Screening under Division 6.5 is not required, however, the Hearing Examiner may require the support structure to be less visually obtrusive by use of screening, coloring, stealth design, or other visual mitigation options, after considering the height of the structure, topography, existing vegetation and environmental features, and nearby residential properties.

Staff recommends no additional screening; the existing vegetation and placement of the ground level facilities provides adequate screening.

viii. The equipment compound must have sufficient area to accommodate equipment sheds or cabinets associated with all the carriers. Outdoor storage of equipment or other items is prohibited.

The 12' x 38' pre-built concrete communications shelter will house all State and County owned equipment.

ix. The support structure must be removed at the cost of the owner of the Telecommunications Tower when the Telecommunications Tower is no longer in use by any wireless communication carrier for more than 12 months.

Staff has included this provision in its recommendations.

x. The support structure must be identified by a sign 2 square feet or smaller, affixed to the support structure or any equipment building. The sign must identify the owner and the maintenance service provider of the support structure or any attached antenna and provide the telephone number of a person to contact regarding the structure. The sign must be updated and the Hearing Examiner notified within 10 days of any change in ownership.

Staff has included this provision in its recommendations.

xi. Each owner of the Telecommunications Tower is responsible for maintaining the wireless communications tower in a safe condition.

Staff has included this provision in its recommendations.

Master Plan Consistency

The 2005 Olney Master Plan has specific language and a recommendation on the Georgia Avenue Corridor between Norbeck Road and the Town Center.

Protecting the existing communities from potential negative impacts of future growth is a significant objective of the Olney Master Plan, achieved mainly by discouraging proliferation of commercial uses outside the Town Center.

The proposed public safety tower is not a commercial use but a public use intended for providing adequate communication for the protection of the residents of Montgomery County.

Georgia Avenue between Norbeck Road and the Town Center should have an open, semi-rural appearance to mark the transition from more densely populated areas south of Norbeck Road to the low-density suburban character of Olney. A minimum 100-foot setback for any dwelling or other structure along this stretch should be provided from the road right-of-way. Additional landscaping and vegetation should also be used to make sure that main views along the road are trees and vegetation and not the houses and other buildings.

The recommended 100-foot setback for any structure or dwelling from the road right-of-way cannot be achieved because the entire project is located within the State right-of-way. However, the positioning of the base and structure of the tower should provide adequate screening of the ground based elements.

Any future special exceptions along this area should be landscaped such that they are not visible from the road. In particular, their lighting design should be carefully considered to make sure no halo effect or nightglow is produced by excessive lighting.

This application is a Public Use as defined in the Zoning Code and is permitted by right in the underlying zone. Therefore, this application is not a special exception/conditional use. The ground level lighting should be minimal and will not produce halo effect or nightglow. The light at the top of the tower is a required element for safety and will not be excessive for its purpose.

Protect the residential character of Georgia Avenue between Norbeck Road and the Town Center as a green corridor and a gateway to Olney. Design all road improvements north of Norbeck Road to minimize impacts on the open, semi-rural feel of the area.

The tower is not a roadway improvement but a necessary piece of the State's safety infrastructure.

The project, while taking into consideration of the use and purpose of safety, is in substantial conformance with the master plan.

Neighborhood Compatibility

Although the tower will be visible from many locations in the area, the importance of the function of the tower must be weighed against the diminished viewshed. The tower placement is entirely within the ROW and in the middle of a highway offramp. This location is already visually disrupted by the highway interchange. Given the importance of the facility and the need to provide coverage across jurisdictional boundaries, the impact on neighborhood compatibility should be weighed against the safety of the citizens.



Figure 6: Street View MD-97 Facing North

Transportation

The Applicant submitted information to show that a traffic study is not required to satisfy the Local Area Transportation Review under the 2016-2020 Subdivision Staging Policy because the proposed use generates fewer than 50 total person peak-hour trips within the weekday morning and evening peak periods.

Historic Preservation and Rustic Roads

There are no historic preservation issues with the Property. The proposed project is not in the vicinity of any Rustic Roads.

Environment

The County's Forest Conservation Law, Chapter 22A, is applicable for this project since the Property is greater than 40,000 square feet and required to apply for a Mandatory Referral. However, the project is exempt under 22A-5(f) a governmental project reviewed for forest conservation purposes by the State Department of Natural Resources under the Code of Maryland Regulations.

COMMUNITY OUTREACH AND NOTIFICATION

As previously discussed, the original application was for a 349-foot tower at the same location as presented in this application. The only modification between the two applications is the tower was reduced to 250 feet.

Initial Application

When originally submitted in 2018 Staff received correspondence from the Preserve at Smalls Nursery HOA and Brooke Manor HOA expressing concerns about the location of the new tower and the impacts it will have on their communities.

On July 11, 2018 the Greater Olney Civic Association (GOCA) sent a letter of opposition to State Senator Zucker and State Senator Manno (Districts 14 and 19) requesting assistance in ensuring that alternatives locations were given due consideration and to find a better solution than building the tower at a site so prominent right on Georgia Avenue.

On July 13, 2018 Staff received a letter of opposition from the Preserve at Smalls Nursery HOA.

On July 16, 2018 Staff received a letter of opposition from Brooke Manor HOA to the Maryland State Highway Administration.

The general themes in all correspondence were:

- Process issues
- Lack of communication with the community
- Location of the tower
- Visual impacts on community (immediate and Olney at larger scale)
- Impacts of a lighted tower (strobe light)
- Height of Tower

Current Application

In response to the concerns, the Applicant held a community meeting in March of 2019 at Cashell Elementary School in Olney, MD. More than 300 people attended the community meeting, most of whom were in opposition to the project's location. Additionally, the tower height was reduced from 349 feet to 250 feet. The location and visual impacts on the community could not be addressed and fulfill the purpose of the Application.

The Planning Department emailed Jeffrey Weiler, the point of contact for GOCA on this project, on July 26, 2019 to inform the organization of the new application and provide a link to all the application documents.

The Planning Department mailed a notice of application on September 6, 2019 and will mail a notice of Planning Board Hearing on September 13, 2019.

Any new correspondence received after the posting of this report will be forwarded to the Planning Board as it is received.

CONCLUSION

The current first responders radio system fails to provide adequate radio coverage in several areas in the County and across jurisdictional boundaries. The proposed tower will fill in the coverage and will provide greater reliability, allowing police, fire, medical, and other first responders to react more quickly and efficiently in an emergency. The Class III structural standards provide an extremely safe facility.

As a Public Use, the proposed tower is not required to meet the standards of a Telecommunications Tower. However, Staff applied Telecommunications Tower review criteria to this project and finds that it meets most of these standards; Staff has recommended that many of these standards be applied to this project.

Staff recommends that the Planning Board Approve the Mandatory Referral and transmit to the Maryland State Highway Administration the comments and recommendations of this report.

Attachments

Attachment A – Mandatory Referral Package Attachment B – Community Correspondence





Development Applications and Regulatory Coordination Montgomery County Planning Department Maryland-National Capital Park and Planning Commission

Effective: February 6, 2019

8787 Georgia Avenue

Phone 301.495.4550

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Primary Contact (Person who will be the primary contact and point person for future electronic review process.)

State of MD - Dept. of In	formation Technology	Curt Andrich	
Company Name 100 Community PI, 2nd	Flr	Contact Person	
Street Address		602	
Crownsville		MD	21032
City		State	Zip Code
804-869-9004		curt.andrich@maryland.gov	270 0.030
Telephone Number	Fax Number	E-mail	aminol property

State of MD - Dept of Inform	ation Technology	Norman Farley	Plans notifications? * ☐Yes ☑No
Submitting Agency or Department 100 Community Pl, 2nd Flr		Contact Person	
Street Address Crownsville		MD	21032
City 410-697-9681		State norman.farley@maryland.gov	Zip Code
Telephone Number	Fax Number	E-mail *required if checked yes	
Engineer/Plan Preparer		Would you like to receive e	Plans notifications? * ☑ Yes ☐No
Ed Macon		violata yea iike to receive en	initial individual in the initial init
Name 100 Community PI, 2nd FIr		Contact Person	
Street Address Crownsville		MD	21032
City		State	Zip Code
410-767-0819 Telephone Number	Fax Number	ed,macon@maryland.gov E-mail *required if checked yes	
Other Contact Person (if	applicable)	Would you like to receive eF	Plans notifications? * □Yes □No
Name		Contact Person	
Street Address		Select one of the foll	owing.
City		State	Zip Code
Telephone Number	Fax Number	E-mail *required if checked yes	
Signature of Applicant	Jarley		7/10/2019
Signature	7	Date	
Norman Farley			

Name (Type or Print)

.State of Maryland Georgia Avenue Communications Facility Montgomery County Mandatory Referral #MR2020002

I. BACKGROUND

Since November of 2010, the State of Maryland has been implementing a statewide public-safety communications system known as Maryland FiRST. To date, over 85% of the population of the State is in geographic areas served by the System. Over 22,000 public safety radios are using the system for day to day operations, and another 40,000 public safety radios are registered for interoperability. The system has been a tremendous success, being able to provide seamless, interoperable communications at such large-scale events as the Baltimore riots, the annual Bay Bridge Walk, and large events such as the annual air show in Ocean City. The system is standards based and provides a common communications platform that is available to all local, state and federal public safety agencies that operate within the State.

The system deployment in Montgomery County has begun, and the State worked with its County Partners to identify existing communications towers that could be used to support the new State system. In a parallel effort, the County had begun the development of its own next generation public safety radio system. In the past, the State and the County have worked together to share facilities to have minimal impacts on affected areas. Several local and state communications towers in Montgomery County were identified that co-location on the site was appropriate, and that the location met the needs of both jurisdictions.

However, in the area near the Inter-County Connector (MD-200) and Georgia Avenue (MD-97), no suitable existing structures could be located. The types of radio systems used by public safety agencies need taller towers than cellular providers due to the way frequencies and coverage are used. The State began searching for an available state-owned site in the area that could be used to support all State agency communications in the area, as well as support the County's new communications system.

This site was identified by the Maryland Department of Transportation (MDOT) as being available, and after review by the State and County radio project teams, it was deemed as being beneficial to all jurisdictions. Work was begun on environmental and cultural aspects of the site to determine if there were any impediments to its progress.

The State has received approval for this site through the following groups and agencies:

- Federal Aviation Commission
- Federal Communications Commission
- Maryland Department of the Environment
- Maryland Historical Trust

Copies of these approvals and opinions are submitted with this application.

II. SITE DESCRIPTION

The facility at this site will be built to be consistent with other State communications facilities across the state. The typical facility consists of:

- 250' self-supporting lattice tower with an 18' extension at the top for the top marker light
 - Marker lights are white LED markers during the day, red LED markers at night
 - All lights are compatible with night vision devices used by public safety helicopters and avian friendly
- 12' x 38' pre-built concrete communications shelter
 - Shelter will house all State and County owned equipment, at no cost to County
- 12' x 12' pre-built concrete shelter to house a LP gas fueled generator
 - o Generator will use appropriate noise suppression muffler
- LP gas tank typically 1000 gallons
- Chain link fencing around entire compound
 - Fence is typically 10' high, with appropriate gates for personnel and vehicles
 - Site area of disturbance is approximately .91 acres, all within the northwest clover leaf of the interchange.
- Entire compound will be graveled over

The State will not have final construction drawings of this site until a contract is issued sometime after September 1, 2019.

As part of this submission, the State provides:

- Conceptual site drawing showing the location of proposed facilities, road locations, and contours of the site
- Typical drawings of the proposed tower, communications shelter, and generator shelter showing what has been used in the past in other localities. The tower rendering is of a 330' tall tower, as that is what the State typically builds. The tower to be built at this location will only be 250'.
- Photographs of the site in current state

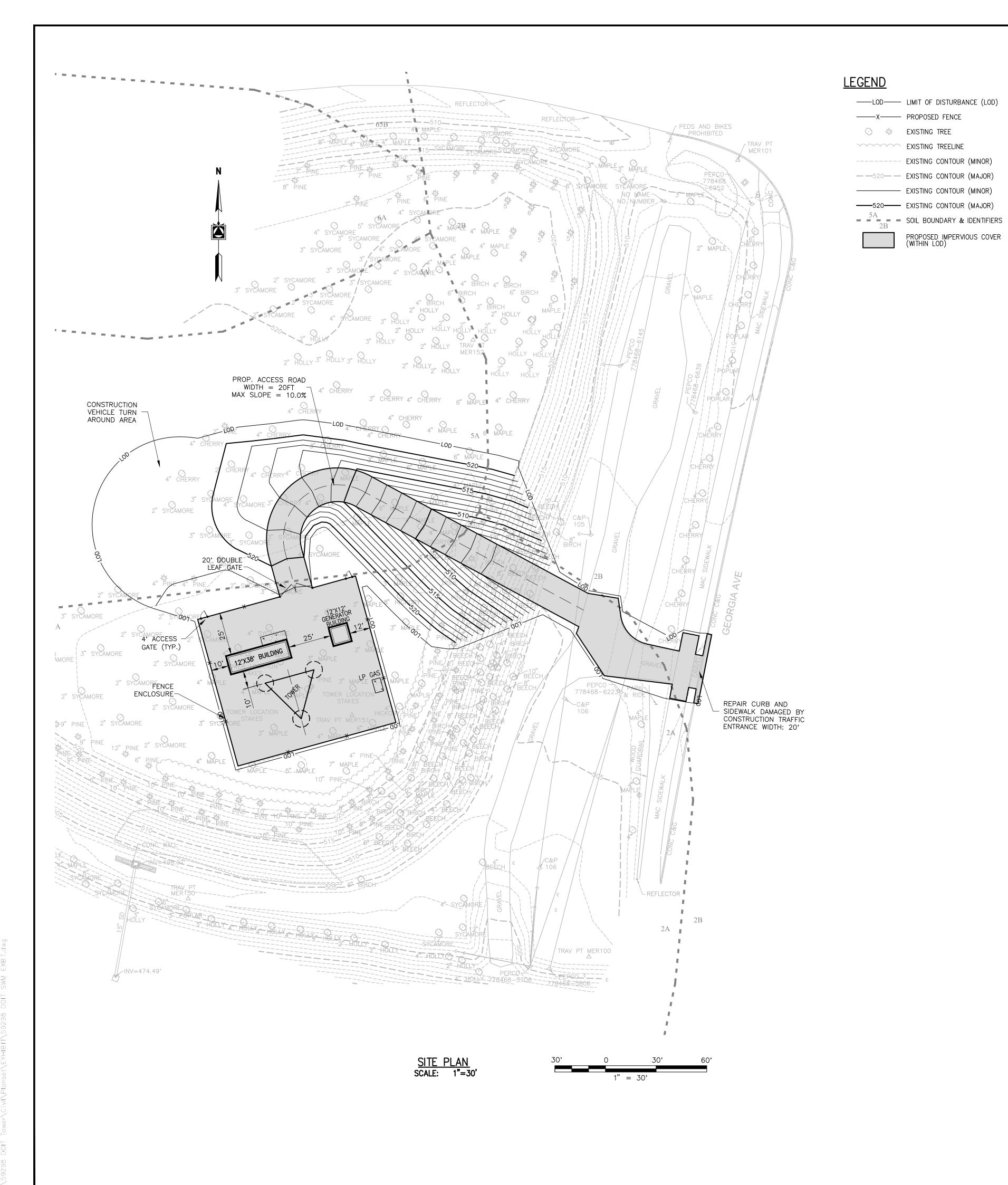
Construction of the site will take approximately 6 months from contract award. All work will be done during daylight hours. During that time, typical heavy construction equipment and vehicles will be on site. This may include earth moving equipment, dump trucks, concrete trucks, tractor trailers, and cranes. The State will work to ensure that disruptions to traffic flow are minimized during the construction phase by working with State and local officials on a close basis.

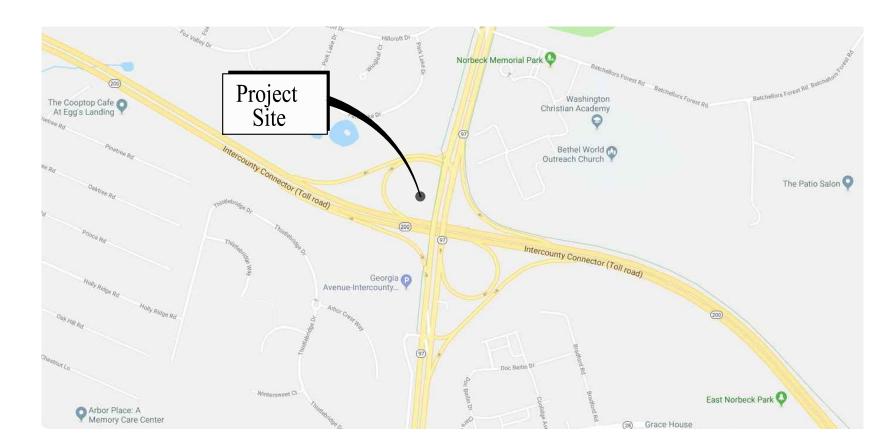
This will primarily be an un-staffed facility after construction and installation of equipment is complete. State and County staff, or contractors will only be on the site to perform routine preventive maintenance or emergency maintenance. Vehicles used are typically small service vans and pick-up trucks. Routine preventive maintenance is usually on an annual basis; emergency maintenance will be on as required basis.

This facility should not add any significant traffic flow to the area after construction is finished.

State of Maryland Georgia Avenue Communications Facility Montgomery County Mandatory Referral #MR2020002 Local Development

Submission 02-LOCAL-MR2020002-001 shows the area around the communications facility. On the drawing, a circle showing approximately 1000' in all directions from the center of the site, has been placed. As the drawing shows, within 1000' of the site, most of the area is within the existing MD200 Interchange, with a small area encroaching on an existing cemetery, and just brushing an existing housing area. The potential effects on the surrounding area are minimal, as all areas appear to have been developed already.



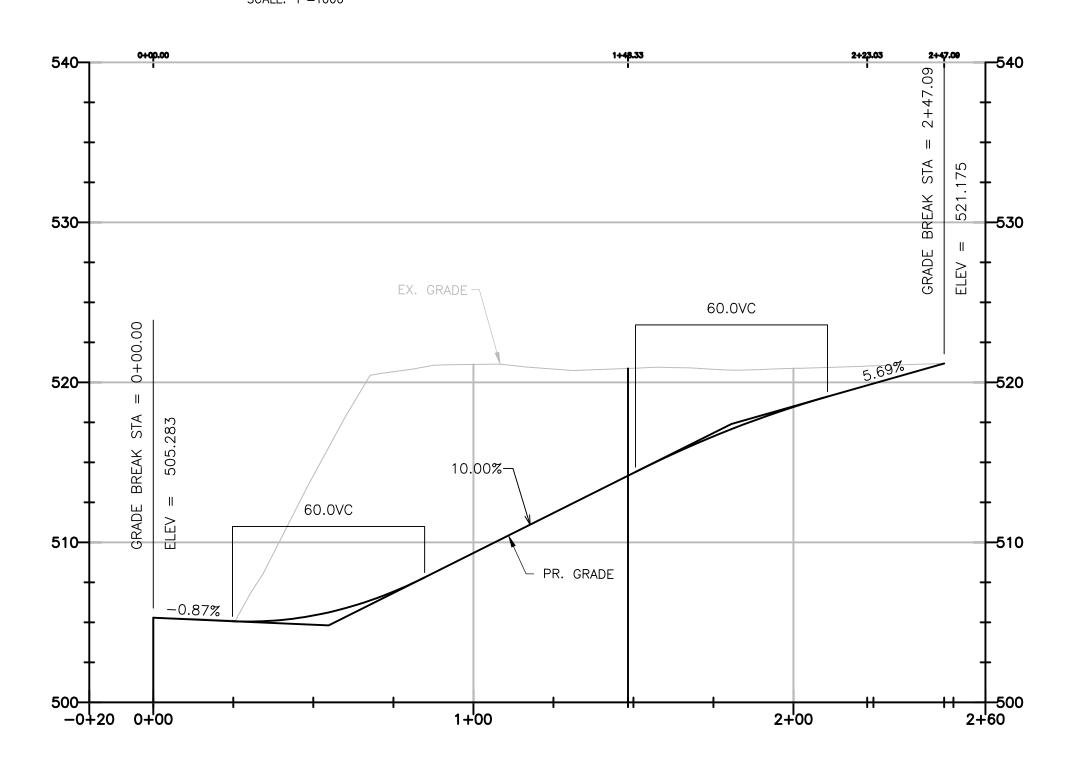


VICINITY MAP

- EXISTING CONTOUR (MINOR)

PROPOSED IMPERVIOUS COVER (WITHIN LOD)

SOURCE: GOOGLE MAPS



ACCESS ROAD PROFILE HORIZONTAL SCALE: 1"=30' VERTICAL SCALE: 1"=6'

ENVIRONMENTAL SITE DESIGN VOLUME (ESDv) CALCULATIONS			
PROPOSED DISTURBED AREA (LOD):	39,710	SF	
EXISTING IMPERVIOUS COVER WITHIN LOD:	2,254	SF	(5.7 %)
PROPOSED IMPERVIOUS COVER WITHIN LOD:	15,980	SF	(40.3 %)
IMPERVIOUS AREA REQUIRING TREATMENT (IART):	15,980	SF	
REQUIRED ESDv:	2,119	CF	



RUTHERFORD PLAZA
7133 RUTHERFORD ROAD, SUITE 300
BALTIMORE, MD 21244

PROFESSIONAL CERTIFICATION

A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 41550, EXPIRATION DATE: 1/12/2020.



MD 200 / GEORGIA AVENUE **COMMUNICATIONS TOWER**

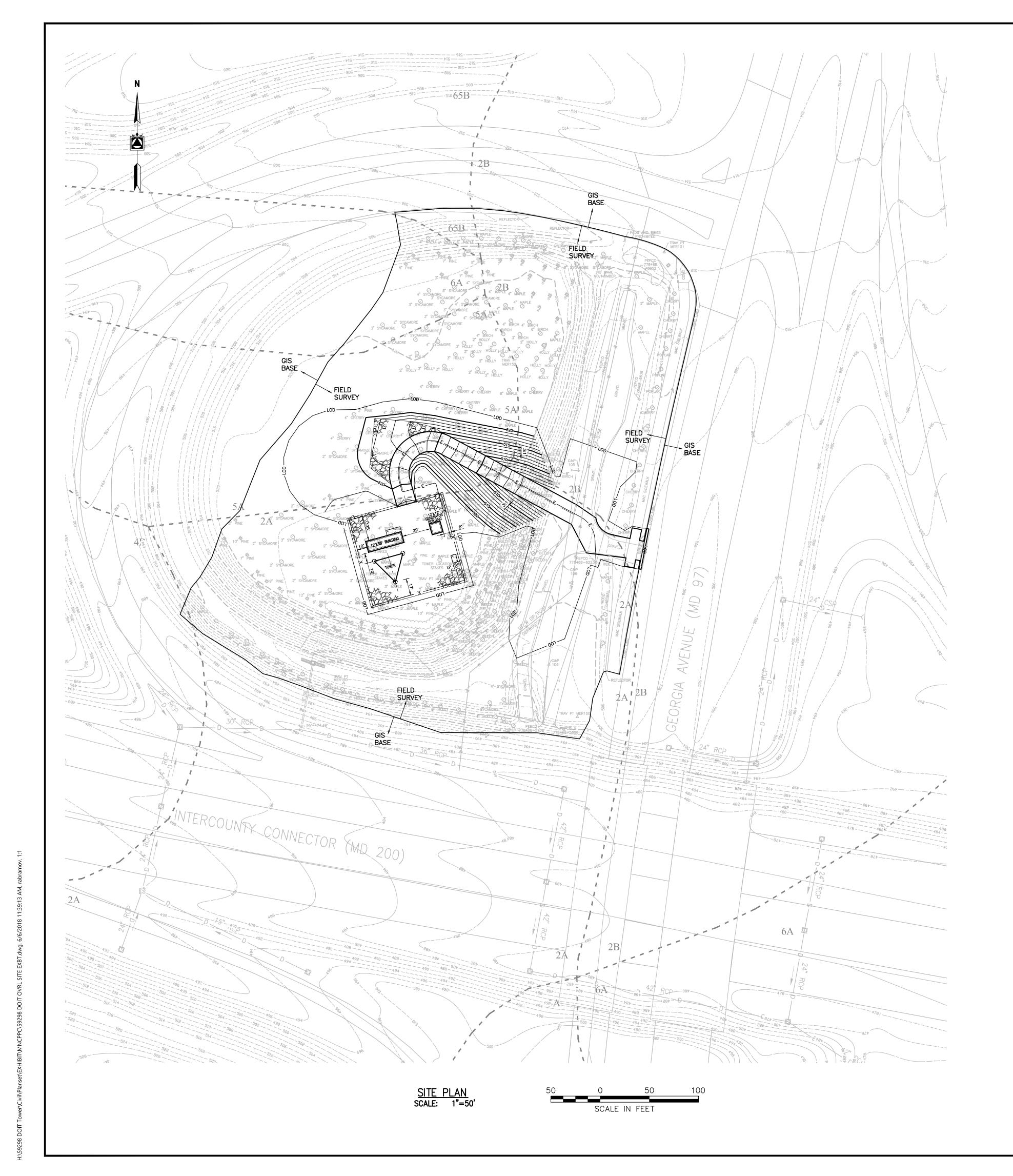
USING AGENCY APPROVAL

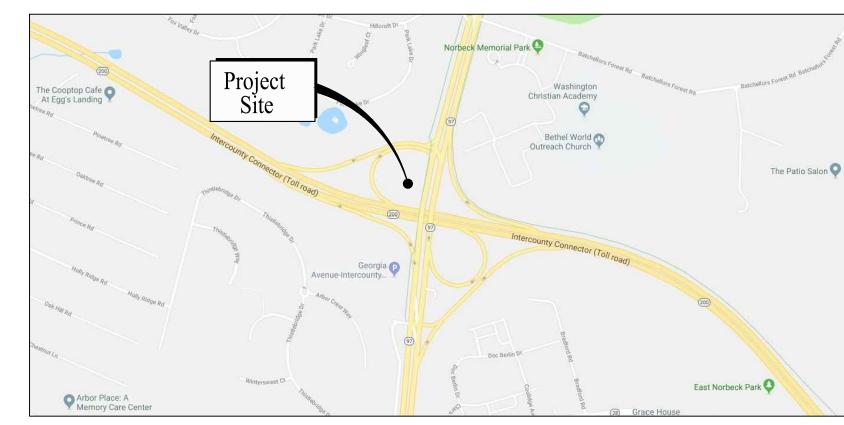
MARK DATE CAD DWG FILE:

DRAWN BY: CHK'D BY:

PROJECT NO.: APRIL 2018

SWM EXHIBIT





VICINITY MAP

SOURCE: GOOGLE MAPS

<u>LEGEND</u>

PROPOSED CONTOURS

X FENCE
PROPOSED ELECTRIC
LIMIT OF DISTURBANCE
EXISTING CONTOUR
EXISTING TREE
EXISTING TREELINE
EXISTING WATER LINE
EXISTING WATER VALVE
EXISTING FIRE HYDRANT
EXISTING UTILITY POLE
SOIL BOUNDARY
SOIL TYPE

GENERAL NOTES

- HORIZONTAL DATUM: NAD 83/91 VERTICAL DATUM: NAVD 88
- 2. THE TOPOGRAPHIC INFORMATION SHOWN ON THIS DRAWING IS BASED ON A FIELD SURVEY PROVIDED BY MERCADO CONSULTANTS, INC. DATED DECEMBER 2017.
- 3. TOPOGRAPHIC FIELD SURVEY IS MERGED WITH GIS INFORMATION FROM MONTGOMERY COUNTY
- 4. THE LOCATIONS OF UNDERGROUND AND AERIAL UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL ADHERE TO THE MARYLAND HIGH VOLTAGE LINE ACT AND COORDINATE WITH UTILITY COMPANIES FOR ANY OR ALL RELOCATIONS THAT MAY BE REQUIRED.
- 5. CALL "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. FOR AREAS AND/OR UTILITIES WHICH "MISS UTILITY" WILL NOT LOCATE, THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A PRIVATE UTILITY LOCATOR TO IDENTIFY THE LOCATION OF SUBSURFACE UTILITIES WITHIN THE LIMITS OF WORK.
- 6. SUBSURFACE CONDITIONS MAY VARY ON SITE. INFORMATION ON SUBSURFACE CONDITIONS, LOCATION OF TEST BORINGS, AND BORING LOGS ARE CONTAINED IN THE GEOTECHNICAL EVALUATION REPORT. THE CONTRACTOR SHALL PLAN WORK ACCORDINGLY.
- 7. MITIGATION FOR TREE REMOVAL WILL BE PROVIDED BY SHA.
- 8. THERE IS NO STREAM OR WETLAND DISTURBANCE ASSOCIATED WITH THIS PROJECT.



RUTHERFORD PLAZA
7133 RUTHERFORD ROAD, SUITE 300
BALTIMORE, MD 21244

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 41550, EXPIRATION DATE: 1/12/2020.



DEPARTMENT OF INFORMATION TECHNOLOGY

MD 200 / GEORGIA AVENUE COMMUNICATIONS TOWER

USING AGENCY APPROVAL

MARK DATE DESCRIPTION

CAD DWG FILE:

DRAWN BY: SJM

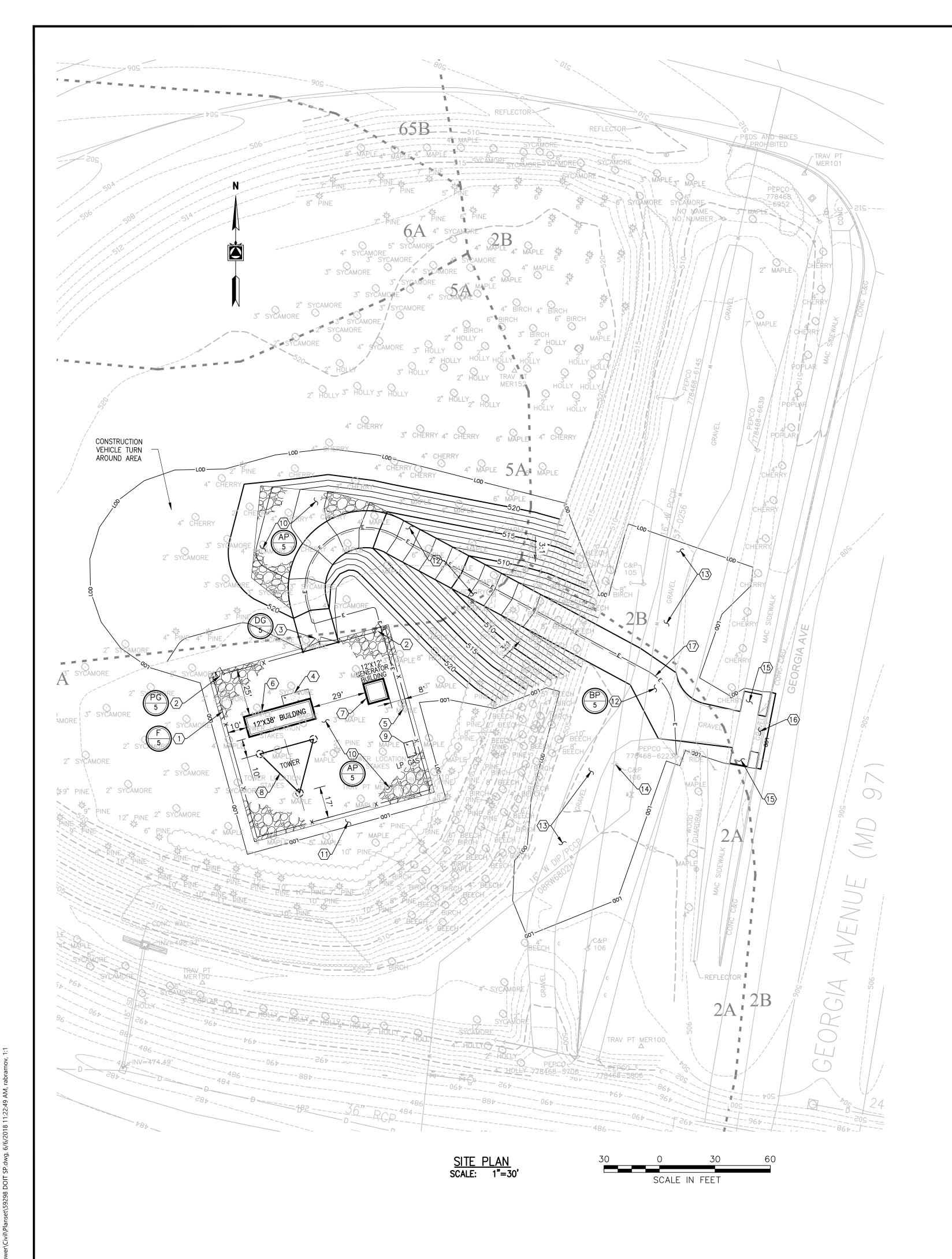
OVERALL SITE EXHIBIT FOR MNCPPC

MAY 2018

OUEET

PROJECT NO.:

Concept Submittal
Not for Construction



<u>LEGEND</u>

PROPOSED CONTOURS

X FENCE

LIMIT OF DISTURBANCE

EXISTING CONTOUR

EXISTING TREE

EXISTING TREELINE

EXISTING WATER LINE

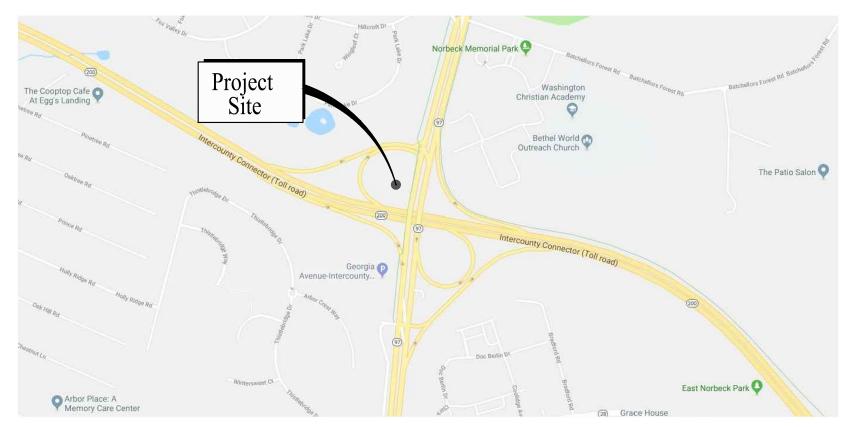
EXISTING WATER VALVE

EXISTING FIRE HYDRANT

EXISTING UTILITY POLE

SOIL BOUNDARY

SOIL TYPE



VICINITY MAP

SOURCE: GOOGLE MAPS

Sannett Fleming

RUTHERFORD PLAZA 7133 RUTHERFORD ROAD, SUITE 300 BALTIMORE, MD 21244

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 41550, EXPIRATION DATE: 1/12/2020.



S T A T E O F M A R Y L A N D
DEPARTMENT OF INFORMATION TECHNOLOGY

MD 200 / GEORGIA AVENUE

COMMUNICATIONS TOWER

USING AGENCY APPROVAL

DESCRIPTION

JMS

MAY 2018

SITE PLAN

- 1 FENCE ENCLOSURE
- 2 PEDESTRIAN GATE
- 3 DOUBLE SWING GATE
- 5'W X 15'L CONCRETE PAD CENTERED ON BUILDING DOORS. PAD TO BE MONOLITHIC AND POURED AS PART OF BUILDING FOUNDATION.
- (5) UTILITY BACKBOARD, DESIGN BY OTHERS

REFERENCE NOTES

- 6 12'X38' UTILITY BUILDING, DESIGN BY OTHERS
- $\overline{\langle 7 \rangle}$ 12'X12' GENERATOR BUILDING, DESIGN BY OTHERS
- (8) COMMUNICATION TOWER STRUCTURE, DESIGN BY OTHERS
- 9 5'W X 8'L CONCRETE PAD AND LIQUID PROPANE (LP) GAS TANK. LP GAS TANK DESIGN BY OTHERS
- (10) AGGREGATE PAVEMENT
- PROVIDE 2FT WIDE 6" DEEP AGGREGATE STRIP ALONG OUTSIDE PERIMETER OF FENCE EXCEPT AT ACCESS ROAD. AGGREGATE SHALL BE CR-6
- (12) 20'-WIDE ACCESS ROAD, ASPHALT PAVEMENT.
- (13) REPAIR EXISTING GRAVEL ACCESS ROAD TO EXISTING CONDITION
- RELOCATE EXISTING UTILITY POLE AND ANY GUY WIRES. COORDINATE POLE RELOCATION WITH UTILITY OWNER
- REPAIR ASPHALT CONCRETE SIDEWALK, MATCH EXISTING SIDEWALK SECTION
- CONSTRUCT ENTRANCE PER SHA STANDARD MD 630.02. REPAIR ANY DAMAGED CURB AND GUTTER PER SHA STANDARD 620.02. REPAIRED CURB SHALL MATCH ADJACENT EXISTING CURB

Concept Submittal
Not for Construction

(17) ELECTRICAL CONDUIT, DESIGN BY OTHERS

GENERAL NOTES

- 1. HORIZONTAL DATUM: NAD 83/91 VERTICAL DATUM: NAVD 88
- 2. THE TOPOGRAPHIC INFORMATION SHOWN ON THIS DRAWING IS BASED ON A FIELD SURVEY PROVIDED BY MERCADO CONSULTANTS, INC. DATED DECEMBER 2017.
- 3. TOPOGRAPHIC FIELD SURVEY IS MERGED WITH GIS INFORMATION FROM MONTGOMERY COUNTY
- 4. ANY DAMAGE TO ADJACENT ROADS, UTILITIES, FENCE LINES, ETC. DURING CONSTRUCTION SHALL BE REPLACED IN KIND OR REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE STATE.
- 5. MATERIALS SALVAGED DURING CONSTRUCTION SHALL BECOME THE CONTRACTOR'S PROPERTY UNLESS OTHERWISE NOTED ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF SALVAGED MATERIALS.
- 6. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AT ALL TIMES.
- 7. THE LOCATIONS OF UNDERGROUND AND AERIAL UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL ADHERE TO THE MARYLAND HIGH VOLTAGE LINE ACT AND COORDINATE WITH UTILITY COMPANIES FOR ANY OR ALL RELOCATIONS THAT MAY BE REQUIRED.
- 8. CALL "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION TO DETERMINE THE LOCATION OF EXISTING UTILITIES. FOR AREAS AND/OR UTILITIES WHICH "MISS UTILITY" WILL NOT LOCATE, THE CONTRACTOR SHALL UTILIZE THE SERVICES OF A PRIVATE UTILITY LOCATOR TO IDENTIFY THE LOCATION OF SUBSURFACE UTILITIES WITHIN THE LIMITS OF WORK.
- 9. THE CONTRACTOR MUST PROTECT IN PLACE ALL ACTIVE UNDERGROUND UTILITIES UNLESS OTHER TREATMENT IS CALLED FOR. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF THE CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION MUST BE MADE AT THE CONTRACTOR'S EXPENSE BEFORE PROCEEDING WITH CONSTRUCTION.
- 10. AFTER NEW FENCE AND GATES ARE INSTALLED, COORDINATE WITH THE PROJECT MANAGER TO MAINTAIN THE COMPOUND LOCKED AT ALL TIMES.
- 11. SUBSURFACE CONDITIONS MAY VARY ON SITE. INFORMATION ON SUBSURFACE CONDITIONS, LOCATION OF TEST BORINGS, AND BORING LOGS ARE CONTAINED IN THE GEOTECHNICAL EVALUATION REPORT. THE CONTRACTOR SHALL PLAN WORK ACCORDINGLY.
- 12. MITIGATION FOR TREE REMOVAL WILL BE PROVIDED BY SHA.
- 13. THERE IS NO STREAM OR WETLAND DISTURBANCE ASSOCIATED WITH THIS

NOTE TO CONTRACTOR:

- 1. EROSION AND SEDIMENT CONTROL SHALL BE STRICTLY ENFORCED.
- 2. EXCESS CUT MATERIAL SHALL BE HAULED OFFSITE IMMEDIATELY.

STANDARD STABILIZATION NOTE:

FOLLOWING INITIAL SOIL DISTURBANCE AND REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1): AND
- B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

MDE NOTE:

MDE NO. 18-SF-XXXX

NOTE:

SHEET ______3 OF 13

MARK DATE

CAD DWG FILE:

DRAWN BY:

CHK'D BY:

DATE:

PROJECT NO.:

State of Maryland Georgia Avenue Communications Facility Montgomery County Mandatory Referral #MR2020002 Lighting Plan

There will be no lighting, such as street lamps or walkway lamps, installed at the proposed site. On the two shelter buildings, there will only be an above door fixture on the exterior of each shelter. This is typically a 60 watt or equivalent type light in a standard commercial fixture. The exact fixture will not be known until the final construction plans are submitted by the winning bidder. This lamp is not left on when no personnel are on the site. It is also set up on a timer so that it will automatically shut off after a set time to ensure it is not left on inadvertently.

The tower hazard lights will be per Federal Aviation Administration (FAA) regulations. The light at the top of the tower will be a dual red/white flashing LED light. During daylight hours, the LED will be white. At dark, it will automatically switch to a red flashing light. There will be shields on this lamp to direct the light upward and away from any surrounding areas on the ground. The tower will also have a set of steady burning red LED lights at its midway height. These will only be lit at night. The midway lights will not be on during the day. These lights are also night vision goggle friendly, to ensure any helicopters operating in the dark with night vision goggles will not be affected by the lighting, as well as avian friendly to reduce bird strikes. The specification for the lights, from the State's typical tower procurement documents, are as follows:

- i. The tower lighting system shall be an all LED system by Flash Technology Systems (http://www.flashtechnology.com/) (Part # FTS370d LED SMART IR with NVG compatibility using infrared "IR" LEDs) or approved equivalent and manufactured to specifications for FAA type L-864/L-865 and FAA-AC 150/5345-43E.
- ii. The TO Contractor shall install a dual, medium intensity, Type E-1 LED system that provides a white flashing LED for day operation and a red flashing LED (with IR LED) for night operation as per FAA requirements. The L-810 side markers will also utilize NVG-compatible LED technology. A 15 foot beacon extension assembly, with safety climb, shall be installed with flash head and lightning rod mounts and step bolts spaced alternately at approximately 15 inch intervals from the tower flange to the beacon. The beacon extension will be centrally mounted and not anchored to just one tower leg. It will be anchored to all three tower legs to distribute weight evenly. The beacon extension can be solid like the other legs on the tower or hollow, but no less than 4.5 IN outside diameter and ¼ IN wall thickness. The design shall be approved by the State Project Manager prior to shipment.

State of Maryland Georgia Avenue Communications Facility Montgomery County Mandatory Referral #MR2020002 Landscaping Plan

Changes to the existing landscaping at the site will be minimal. Only the plants that are within the boundaries of the fenced compound and the driveway will be displaced. A cut will be made in the existing tree line along Georgia Avenue for the access driveway to reach the site. This is all shown on the submitted site plan. The existing tree line will remain intact, except for the driveway access.

No amenities such as sidewalks or trails will be removed or added to the site. The submitted site plan shows where the driveway will breach the existing curb line onto Georgia Avenue.



MONTGOMERY COUNTY, MARYLAND APPLICATION FOR WIRELESS COMMUNICATIONS SITE COORDINATION

DATE: ____ NUMBER: ____ (To be filled in by County)

Applicant Name: Maryland Department of Information Technology
Address: 100 Community Pl, 2 nd Flr, Crownsville, MD
Contact Person and Phone Number: Norman Farley 410-697-9681
Provide a description of the proposed installation, including the type and height of the structure (i.e. monopole, rooftop, water tank, guyed tower, self-support tower, etc.) and whether it is existing, modified, or new. Describe any modifications that will be made to existing structure. New
Address/City: Clover leaf at MD 200 and MD 97 Olney MD
Site Name: ICC and Georgia Ave Zoning:
Site Owner/Landlord: Maryland Dept of Transportation
Structure Owner: Maryland Dept of Transportation
Latitude/Longitude (NAD27 Degrees/Minutes/Seconds): 39-07-09.12N NAD83 77-04-32.80W
Ground Elevation AMSL in Feet: <u>528</u>
Antenna Height AGL in Feet: 250
Frequency Bands to Be Used: 700 & 800 MHz,
Maximum Effective Radiation Power (EFP): <u>To be Determined</u>
Federal Communications Commission (FCC) Emission Designator: <u>To be Determined</u>
FCC Antenna Structure Registration Number: <u>1305618</u>
Description of antenna(s), including physical size, patterns, gain and orientation (include copy of spec sheet or drawings): <u>To be Determined</u>
Describe area to be served by the proposed installation. Attach a map of the general area showing the location of the site. Upon request, attach RF propagation studies showing service area coverage surrounding the proposed site with and without the proposed site. MarThis will be a State Public Safety Co-Location antenna Tower structure to serve the radio communications of
State, Local, County and Federal Public Safety Agencies.
Will antennas be installed on an existing structure? Yes ☐ No ☒

Attachment 1 Revised 02/23/17

an explanation as to why each possible alternative was not selected. If a site was ruled out because of radio frequency (RF) issues, provide RF propagation maps documenting inadequate coverage: This site was selected due to the radio coverage it would provide to Public Safety Agencies and lack of existing
radio coverage in that immediate vacinity.
Justification of why this site was selected: <u>See above</u>
Will site be used to support government telecommunications facilities or other equipment for government use? Yes ☑ No ☐
If yes, describe: <u>See above</u>
Attach a site plan of the proposed facility showing location of monopole, tower, or structure on the property, location of existing and proposed equipment buildings or cabinets, and distance of any new structures or buildings from property lines and other buildings or residences within 300 feet. Clearly identify existing versus proposed facilities by carrier. Also provide an elevation sketch of the structure showing major dimensions, existing attachments, and mounting height of proposed antennas. If a balloon test has been performed, please provide copies of the photographs.
Will the antenna installation be in compliance with the maximum permissible RF exposure limits set forth in $\$1.1310$ of the FCC Rules and Regulations? Yes \square No \square If the answer is no, please attach an explanation.
Type of compliance study required under §1.1307 of the FCC Rules and Regulations: Categorically Excluded Routine Environmental Evaluation Environmental Assessment
If antennas will be located on a rooftop, please attach a description of any steps that have been or will be taken to prevent the aggregate RF from exceeding exposure limits.
Montgomery County Code, Chapter 2-58E requires applicants to submit a facility location plan indicating the location of every existing telecommunications transmission facility and the general location of facilities that are anticipated to be built in the near future. Has a new or updated plan been filed with the County within the last year? Yes No If the answer is no, please submit a plan with this application.
If an application for an FAA review has been submitted or an FAA determination has been issued, please attach a copy.
Application fees have been paid to Montgomery County Government on N/A .
Make check payable to Montgomery County, MD and submit payment to:
Office of Cable and Communication Services Department of Technology Services Attn: Marjorie Williams 100 Maryland Avenue, Room 250 Rockville, Maryland 20857

If not, describe results of investigation about possible co-location. Include a listing of alternative sites considered and

Submit this application to:
Columbia Telecommunications Corporation
c/o Montgomery County Tower Coordinator
10613 Concord Street
Kensington, MD 20895
301-933-1488



Miller, Judy < Judy.Miller@montgomerycountymd.gov> to Gerry, Donald, Justin, paul.ketner, DManley, me, Jennifer

12/19/17

Darien, Curt,

I spoke to Margie Williamson who is the Chair of the County's Tower Committee. She said that she definitely appreciates your application and will enter your information in the County's database that tracks antenna and tower locations. However, the Tower Committee does not have jurisdiction over State land, so it will not take any action regarding your application.

I am checking with our Permitting department to see if you need any County building permits (you may already know the answer to that).

As far as M-NCPPC Planning goes, they may have the same response as the Tower Committee. Do you want me to ask them whether you need to file with them? Either way, I know they also appreciate advance notice of what you plan to build.

Judy

Judy Miller

Site Project Manager PSSM Radio System Infrastructure Project Department of Technology Services Montgomery County Government 240-773-7214 (office) 301-452-7131 (cell)



February 4, 2009

Mr. Denis McElligott 301 W Preston St, Suite 1304 Baltimore, MD 21201 MD Department of Information Technology

RE: Tower Design Criteria, Failure Mode, and Fall Zone Radius

Tower Innovations designs and manufactures towers in accordance with the TIA/EIA-222-F Structural Standards for Steel Antenna Towers and Supporting Structures.

The TIA-222 Standard incorporates nationally recognized loading standards (ASCE 7-Minimum Design Loads for Buildings and Other Structures) and design standards ([Specification for Structural Steel Buildings - Allowable Stress Design, June 1, 1989 and ACI 318 Building Code Requirements for Structural Concrete) into a consensus standard widely recognized and accepted by design professionals in the tower industry. The TIA-222 Standard has also been accepted and approved by the American National Standards Institute.

We have analyzed towers with regard to the potential fall zone radius. Should a failure occur, the most likely mode of failure will be the buckling failure of one of the tower legs due to excessive compression loading. The tower leg with the highest compressive stress ratio can located at whatever elevation the designer chooses and is usually positioned near the mid portion of the tower. Given that the tower leg with the highest stress ratio will probably fail first, a tower will fail near the mid portion of the tower and the top half of the tower will collapse. Therefore, towers manufactured by Tower Innovations typically have a fall zone radius of 50% of the total tower height. However, a site specific fall radius study should be performed for each individual tower site.

Two things should be noted regarding this matter:

- In our opinion, in the event of a severe wind event, the tower would most likely be stripped of most of its antennas, transmission lines and other appurtenances. Therefore, the loading on the tower will be greatly reduced, increasing the survival potential of the tower.
- By the time environmental conditions reach the point where the tower will fail, many surrounding man-made structures, buildings, trees, cars, etc. will already be damaged or destroyed.

Tower Innovations is solely in the business of designing and manufacturing communications towers. In our twenty years in business, we have designed towers for all types of weather conditions. Every tower we manufacture is engineered and designed using sophisticated and detailed practices. Based on our design practices, our use of the TIA-222 Standard and our years of experience, we feel that a tower failure is highly unlikely except in the event of a catastrophic environmental event (hurricane, tornado, major earthquake) or human intervention (careless construction practices, MARY MARY MARKET OF MARY MARKET MARKE vandalism or terrorism).

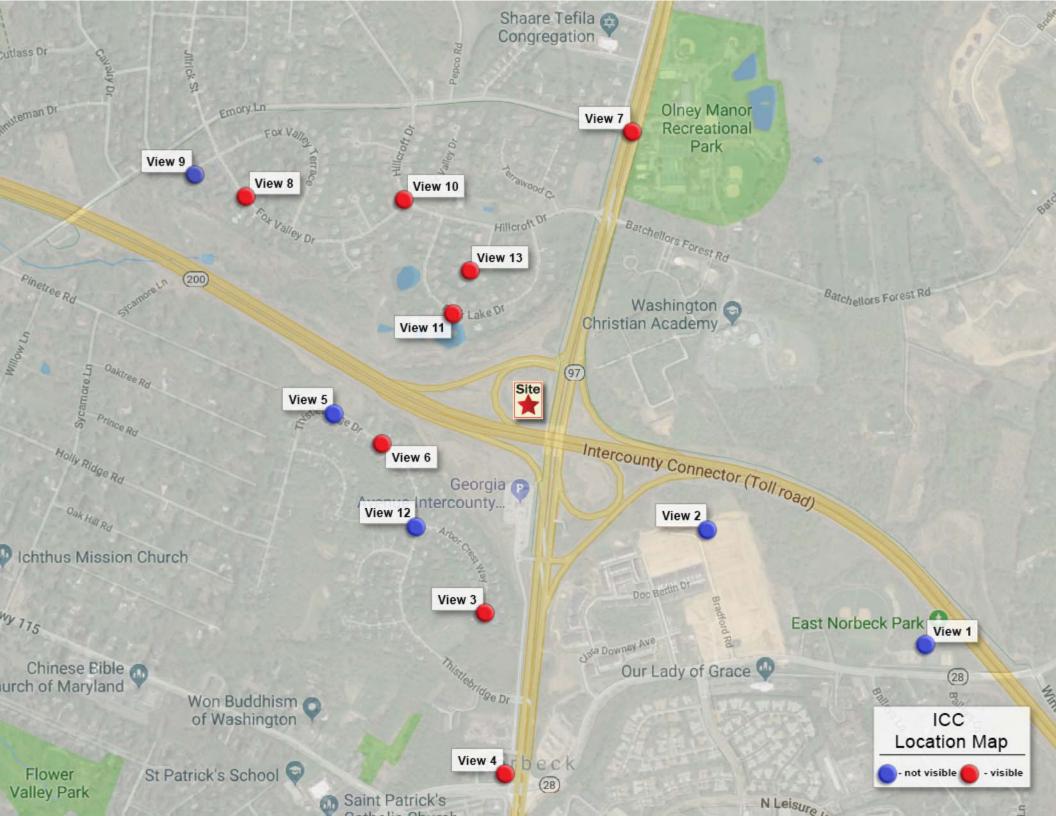
Sincerely,

Engineering Department

State of Maryland Georgia Avenue Communications Facility Montgomery County Mandatory Referral #MR2020002 Traffic Impact Statement

This will primarily be an un-staffed facility after construction and installation of equipment is complete. State and County staff, or contractors will only be on the site to perform routine preventive maintenance or emergency maintenance. Vehicles used are typically small service vans and pick-up trucks. Routine preventive maintenance is usually on an annual basis; emergency maintenance will be on as required basis.

This facility should not add any significant traffic flow to the area after construction is finished. Construction of the facility typically takes 4-6 months.



















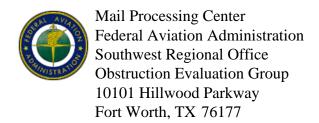












Aeronautical Study No. 2017-AEA-7162-OE Prior Study No. 2016-AEA-8639-OE

Issued Date: 08/15/2017

Edward R. Macon STATE OF MD. D.O.I.T. 301 W. PRESTON ST. BALTIMORE, MD 21201

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure: Antenna Tower GEORGIA AVE. SHA

Location: OLNEY, MD

Latitude: 39-07-09.12N NAD 83

Longitude: 77-04-32.80W

Heights: 528 feet site elevation (SE)

348 feet above ground level (AGL) 876 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure should continue to be marked/lighted utilizing a med-dual system.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part 1)
X_	Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

This determination expires on 02/15/2019 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within

6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5922, or debbie.cardenas@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2017-AEA-7162-OE.

Signature Control No: 338224998-340845369 (DNE)

Debbie Cardenas Technician

Attachment(s) Frequency Data

cc: FCC

Frequency Data for ASN 2017-AEA-7162-OE

LOW	HIGH	FREQUENCY		ERP
FREQUENCY	FREQUENCY	UNIT	ERP	UNIT
5.8	6.9	GHz	30	dBm
151	160	MHz	500	W
450	470	MHz	500	W
698	806	MHz	1000	W
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W



UNITED STATES OF AMERICA FEDERAL COMMUNICATIONS COMMISSION ANTENNA STRUCTURE REGISTRATION



OWNER: Maryland State Highway Administration

FCC Registration Number (FRN): 0004668190			
ATTN: Phil Lazarus	Antenna Structure Registration Number		
Maryland State Highway Administration	1305618		
5901 Baltimore National Pike			
Baltimore, MD 21228	Issue Date 03/15/2018		
Location of Antenna Structure MD 200 and MD 97	Ground Elevation (AMSL)		
Olney, MD 20832	161.0 meters		
County: MONTGOMERY	Overall Height Above Ground (AGL)		
	106.0 meters		
Latitude Longitude 39- 07- 09.1 N 077- 04- 32.8 W NAD83	Overall Height Above Mean Sea Level (AMSL)		
39- 07- 09.1 N 077- 04- 32.8 W NAD83	267.0 meters		
Center of Array Coordinates	Type of Structure		
N/A	LTOWER Lattice Tower		
1477			
Painting and Lighting Requirements:			
FAA Chapters 4, 8, 12			
Paint and Light in Accordance with FAA Circular Number 70/7460-1L			
Conditions:			

This registration is effective upon completion of the described antenna structure and notification to the Commission. YOU MUST NOTIFY THE COMMISSION WITHIN 24 HOURS OF COMPLETION OF CONSTRUCTION OR CANCELLATION OF YOUR PROJECT, please file FCC Form 854. To file electronically, connect to the antenna structure registration system by pointing your web browser to http://wireless.fcc.gov/antenna. Electronic filing is recommended. You may also file manually by submitting a paper copy of FCC Form 854. Use purpose code "NT" for notification of completion of construction; use purpose code "CA" to cancel your registration.

The Antenna Structure Registration is not an authorization to construct radio facilities or transmit radio signals. It is necessary that all radio equipment on this structure be covered by a valid FCC license or construction permit.

You must immediately provide a copy of this Registration to all tenant licensees and permittees sited on the structure described on this Registration (although not required, you may want to use Certified Mail to obtain proof of receipt), and display your Registration Number at the site. See reverse for important information about the Commission's Antenna Structure Registration rules.

You must comply with all applicable FCC obstruction marking and lighting requirements, as set forth in Part 17 of the Commission's Rules (47 C.F.R. Part 17). These rules include, but are not limited to:

Posting the Registration Number: The Antenna Structure Registration Number must be displayed in a conspicuous place so that it is readily visible near the base of the antenna structure. Materials used to display the Registration Number must be weather-resistant and of sufficient size to be easily seen at the base of the antenna structure. Exceptions exist for certain historic structures. See 47 C.F.R. 17.4(g)-(h).

Inspecting lights and equipment: The obstruction lighting must be observed at least every 24 hours in order to detect any outages or malfunctions. Lighting equipment, indicators, and associated devices must be inspected at least once every three months.

Reporting outages and malfunctions: When any top steady-burning light or a flashing light (in any position) burns out or malfunctions, the outage must be reported to the nearest FAA Flight Service Station, unless corrected within 30 minutes. The FAA must again be notified when the light is restored. The owner must also maintain a log of these outages and malfunctions.

Maintaining assigned painting: The antenna structure must be repainted as often as necessary to maintain good visibility.

Complying with environmental rules: If you certified that grant of this registration would not have a significant environmental impact, you must nevertheless maintain all pertinent records and be ready to provide documentation supporting this certification and compliance with the rules, in the event that such information is requested by the Commission pursuant to 47 C.F.R. 1.1307(d).

Updating information: The owner must notify the FCC of proposed modifications to this structure; of any change in ownership; or, within 30 days of dismantlement of the structure.

You can find additional information at [insert link] or by calling (877) 480-3201 (TTY 717-338-2824).



Larry Hogan, Governor Boyd Rutherford, Lt. Governor Wendi W. Peters, Secretary
Ewing McDowell, Deputy Secretary

October 31, 2016

Mr. Ed Macon Project Manager, Wireless Services Group Department of Information Technology (DOIT) 301 W. Preston Street Room 1304 Baltimore, MD 21201

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier: MD20160916-0816

Applicant: Department of Information Technology (DOIT)

Project Description: Proposed Construction of One (1) 348-foot Self Supporting Microwave/Radio Tower and Two

(2) 12x38x10 foot Equipment Shelter (Georgia Avenue SHA Tower Site)

Project Address: Inter-County Connector (MD 200) and Georgia Avenue (MD 97), Olney, MD

Project Location: County(ies) of Montgomery

Approving Authority: Maryland Department of Transportation MDOT/SHA

Funds: State: \$700,000.00

Recommendation: Consistent with Qualifying Comment(s)

Dear Mr. Macon:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.01.04-.06, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter, with attachments, constitutes the State process review and recommendation. This recommendation is valid for a period of three years from the date of this letter.

Review comments were requested from the <u>Maryland Department(s) of Natural Resources</u>, the <u>Environment</u>; and the <u>Maryland Department of Planning including the Maryland Historical Trust</u>.

The Maryland Department(s) of Natural Resources; and the Maryland Department of Planning including the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

The Maryland Historical Trust has determined that the project will have "no effect" on historic properties and that the federal and/or State historic preservation requirements have been met.

Mr. Ed Macon October 31, 2016 Page 2

State Application Identifier: MD20160916-0816

The Maryland Department of Environment found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments summarized below.

- 1. Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land Management Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.
- 2. If the proposed project involves demolition Any above ground or underground petroleum storage tanks that may be on site must have contents and tanks along with any contamination removed. Please contact the Oil Control Program at (410) 537-3442 for additional information.
- 3. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Waste Diversion and Utilization Program at (410) 537-3314 for additional information regarding recycling activities.
- 4. The Waste Diversion and Utilization Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.
- 5. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please contact the Land Restoration Program at (410) 537-3437.
- 6. Additional comments from the Science Services Administration are enclosed.

Any statement of consideration given to the comments(s) should be submitted to the approving authority, with a copy to the State Clearinghouse.

The State Application Identifier Number <u>must</u> be placed on any correspondence pertaining to this project. The State Clearinghouse must be kept informed if the approving authority cannot accommodate the recommendation.

Mr. Ed Macon October 31, 2016

Page 3

State Application Identifier: MD20160916-0816

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at rita.pritchett@maryland.gov. Also please complete the attached form and return it to the State Clearinghouse as soon as the status of the project is known. Any substitutions of this form <u>must</u> include the State Application Identifier Number. This will ensure that our files are complete.

Thank you for your cooperation with the MIRC process.

Sincerely,

Myra Barnes, Lead Clearinghouse Coordinator

MB:RP Enclosure(s)

e: MTGM Amanda Degen - MDE Phil Lazarus - SHA

anda Degen - MDE Greg Golden - DNR

Peter Conrad - MDPL

Beth Cole - MHT

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The Preserve at Small's Nursery Homeowners Association, Inc. C/O Community Association Services, Inc. 18401 Woodfield Road, Suite H Gaithersburg, MD 20879

July 12, 2018

Joshua Penn
MNCPPC Lead Reviewer
Maryland National Capital Park and Planning Commission
Joshua.Penn@montgomeryplanning.org

Subject: Opposition to Proposed 349-Foot Tall Communication Tower on Georgia Ave in Olney

Dear Mr. Penn,

We are Board members of the Preserve at Small's Nursery Homeowners Association and want to express our full opposition to the State Highway Administration proposal to install a 349-foot tall communication tower right on the side of Georgia Avenue at its intersection with the ICC.

We are strongly objecting both to the process followed by the State for this project and to the proposed location of the tower. First, we are outraged that the State did not give us proper early notice and provide us with the opportunity to make timely comments on a project with potentially massive visual and property value impacts on our community. While the State has been working on this project since at least October 2016, we have been informed of its existence only a few days ago through the mailing of a public hearing announcement postcard with virtually no details included.

Second, we oppose the proposed location of this tower on several grounds. The proposed structure is massive, unsightly, and industrial in appearance and has no place in this residential area of Montgomery County. It would also be a nuisance effecting the enjoyment of homeowners' own property since it would tower over our heads and have lights flashing both during day time and night time. All of its characteristics would negatively and disproportionally impact the value of the homes adjacent to it

We can hope that the public trust can be restored and real input from the effected community can become part of the decision-making process for this proposal. Right now, the process associated with this tower stands in stark and negative contrast to the cooperative approach adopted by the State Highway Administration when designing the ICC features and interchanges to reduce visual impacts to the community. This including the very knoll you propose to place this unsightly structure on, where community leaders worked with SHA engineers to build a knoll/berm to block the view of the ICC traffic and planted beautiful trees to make it a landscaping asset along Georgia Avenue. The proposal to locate the tower here is shameful.

Respectfully,

The Preserve at Smalls Nursery HOA Board of Directors

Cc: <u>bonnie.cullison@house.state.md.us</u>

benjamin.kramer@house.state.md.us

Marice.Morales@house.state.md.us

craig.zucker@senate.state.md.us

anne.kaiser@house.state.md.us

eric.luedtke@house.state.md.us

pam.queen@house.state.md.us

councilmember.navarro@montgomerycountymd.gov

Roger.Manno@senate.state.md.us

Brooke Manor Estates Homeowners Association

July 13, 2018

Darien Manley MDSHA 5901 Baltimore National Pike Catonsville, MD 21228

Curt Andrich
MD Dept of IT
100 Community Place
Crownsville, Md 21032

RE: SHA Georgia Ave Tower, Montgomery County Mandatory Referral #MR2018030

Darien and Curt,

On behalf of the 177 homeowners that reside in Brooke Manor Estates, the Brooke Manor Estates Homeowners Association Board of Directors writes to express our community's total opposition to the State Highway Administration's proposal to install a 348-foot tall communication tower on the NW side of Georgia Avenue at the intersection with the ICC. We are strongly objecting both to the process followed by the State for this project and to the proposed location of the tower.

The State has been working on this project since 2016. Yet the State never gave any Brooke Manor Estates residents or the Brooke Manor Estates HOA any notice of its plans, held no public meeting, and denied our community the opportunity to provide input and ask questions on a project with considerable impact on our community. We only learned about the proposed Tower last week, from the HOA President at the Preserves of Small Nursery. We understand that Preserves homeowners received a post card earlier this month, announcing the Public Hearing, but with little or no information included. Brooke Manor Estates was denied even this small courtesy, which we understand is inconsistent with the Montgomery County Department of Park and Planning's Uniform Standards for Mandatory Referral Review.

Considering Brooke Manor Estates is the very community which you identify in your Mandatory Referral as the "existing housing area" that is "just brushing" the 1000' area around this enormous Tower, the fact that Brooke Manor Estates was not included is a particularly egregious oversight. Accordingly, we respectfully request that you, as the submitting entity for Montgomery County Mandatory Referral #MR2018030, approve an extension of the 60-day referral period, consistent with § 20-304 of the Land Use Article of the Maryland Code, so that the Montgomery County Planning Commission can postpone its July 26, 2018 to allow affected communities additional time to review this proposal.

The proposed structure, taller than the Statute of Liberty, is massive, unsightly, and does not belong in a highly developed, residential area of Montgomery County. The proposed strobe light

on top would be flashing both day and night negatively affecting the community's quality of life. Unfortunately, it will also negatively impact the value of homes not just on the west side of Georgia Avenue, but also those in the new communities being developed to the East of Georgia Avenue, off of Route 28, Norbeck Road.

The SHA's current approach in designing and approving this proposed communication tower is unfortunately totally different than the cooperative approach used when designing the ICC to reduce visual impacts to our community. We hope that the SHA now recognizes the value of real input from the affected communities, so that we can again become part of the decision-making process. It is not too late to increase transparency and do things the right way.

Sincerely,

Robert Zimmerman President, Brooke Manor Estates Board of Directors

Dan Marks

Debi Palmer

Reese Alutto-Schmidt

Anthony Watkins

CC: Joshua Penn, MNCCP

Ike Leggett, Montgomery County Executive

Roger Manno, State Senator

Bonnie Cullison, State Delegate

Benjamin Kramer, State Delegate

Marice Morales, State Delegate

Nancy Navarro, County Councilwomen



P.O. Box 212 • Olney, Maryland • 20830

Wednesday, July 11, 2018

www.goca.org

Senator Craig Zucker

William (Billy) Becker President

122 James Senate Office Building

11 Bladen Street

Annapolis, Maryland 21401

Matt Quinn

Ashley Hollow

Executive Vice President

Cherrywood

Senator Roger Manno Office of the Majority Whip

David Miller

11 Bladen Street

First Vice President Norbeck Meadows

Annapolis, Maryland 21401

Stacy Levine Second Vice President

Re: Emergency Communication Tower Proposed for Installation at: Georgia Avenue and the ICC

Reserve at Fairhill

Dear Senator Zucker and Senator Manno:

Carol Frenkel **Recording Secretary** Olney Mill

Katherine Harris Corresponding Secretary Norbeck Meadows

Robert Hambrecht Treasurer Williamsburg Village The Greater Olney Civic Association requests your assistance/intervention with regard to a State government proposal to install a 349-foot tall emergency communication tower right on the side of Georgia Avenue at the southern gateway into Olney. 1 Not only would this be a huge industrial looking structure but the tower also would have strobe lights that would flash 24 hours a day to warn off aircraft. This would be a very significant and negative visual impact to everyone living in the Olney area.

On June 22, 2018, the Maryland-National Capital Park and Planning Commission (MNCPPC) mailed out an announcement of a public hearing on this proposal filed by the State Highway Administration (SHA) for the tower on State-owned land at the northwest corner of the intersection of Georgia Avenue and the Inter County Connector in Olney. The public hearing is tentatively scheduled for July 26, with a decision on awarding tower construction contracts to follow shortly thereafter.

There is no need here to discuss the need for such communication equipment. For purposes of discussion, let us begin with the premise that its installation is warranted for purposes of public safety communications. The problem/concern is the fact that the height of the proposed tower (almost 2/3rds the size of the Washington Monument) and flashing lighting would be in the midst of the main thoroughfare of our community (Georgia Avenue) and immediately adjoining residential neighborhoods along a lovely

¹ I understand that reference material for the project may be accessed at: http:// <u>www.mcatlas.org/daic8/Default</u>.aspx. I understand the reference number thereafter is: MR2018030.

stretch of attractively landscaped highway. Once constructed, other commercial users would be encouraged to add equipment to the tower, thus increasing the visual impact.

Because we find the currently proposed site unacceptable, we ask that the SHA find a nearby location or alternative tower option that can be equally functional without being aesthetically unsightly. Information leads us to strongly believe that reasonable and easily accessible alternative sites have not been given adequate consideration.

Just from a quick look at our area of Central Montgomery County, we can suggest other potential alternative sites on State-owned land that would be equally functional. For example, an alternative site could be the area just south of the ICC along the southeast side of Needwood Road adjacent to where the large new 'solar farm' is located. A second site to consider might be to locate the tower within the ICC construction fill dirt area adjacent to the dry storm water retention pond approximately 3/8ths of a mile east of the Georgia Avenue and ICC interchange across the ICC from East Norbeck Park. I believe other alternative sites or other equipment installation options could also be identified.

Your assistance is needed to ensure that these alternatives and less unsightly locations are given due consideration and to find a better solution than building this huge tower at a site so prominent right on Georgia Avenue.

In addition, parties on the proponent's side clearly appear to be in a rush to get this proposal approved and started, so at a minimum, we are requesting your assistance in getting a delay in the Park and Planning "Staff Report" and also a 60-day delay in the schedule for the public hearing.

Joshua Penn is the tower project's public outreach point-of-contact at MNCPPC. He can be reached at 301-495-4546 or e-mailed at: Joshua.Penn@montgomeryplanning.org.

Jeffrey Weiler will act as the GOCA lead on this issue. Please feel free to contact him directly at 301-924-4636 or by e-mail at: weilerj@ix.netcom.com. His mailing address is 15710 Thistlebridge Drive, Rockville, MD 20853.

On behalf of the Greater Olney Civic Association, Inc., and its member communities, your attention to this important matter is appreciated.

Sincerely,

William Francis Xavier Becker William Francis Xavier Becker President

Tower letter