



HOWARD COUNTY PUBLIC WORKS BOARD

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Thomas J. Meunier, Executive Secretary
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Cory J. Summerson, Chairperson
Abby Glassberg, Vice Chairperson
Michael P. McLellan, Member
Pedro Ramirez, Member
Alan Whitworth, Member

Minutes of the Howard County Public Works Board – March 9, 2021

Members present: Mr. Cory Summerson, Chairperson, Ms. Abby Glassberg, Vice Chairperson, Mr. Pedro Ramirez, Mr. Michael P. McLellan, and Mr. Alan Whitworth.

Staff present: Thomas J. Meunier, Executive Secretary; John Alcorn, Engineering Specialist II, John Seefried, Engineering Manager I; Phyllis Watson, Administrative Analyst, Real Estate Services Division; Carl Katenkamp, Acting Chief, Real Estate Services Division; Rachel Roehrich, Recording Secretary, Real Estate Services Division.

Mr. Summerson called the meeting to order at approximately 7:31 p.m.

1. **Approval of minutes:** Mr. Summerson indicated that the first item on the agenda is the approval of the minutes of February 9, 2021. Mr. Summerson asked if everyone had a chance to review the minutes.

Motion: On a motion made by Mr. Ramirez and seconded by Ms. Glassberg, the Board unanimously approved the minutes of January 12, 2021.

2. Public Works Board Road Acceptance

- a) **Subdivision:** Honeysuckle Ridge, Lots 1 thru 29 and Open Space Lots 30 thru 34 (Being a Resubdivision of Lots 1 and 2, As Shown on a Plat Entitled "Lots 1-2, Ashby Property" Recorded Among the Land Records of Howard County, Maryland as Plat No. 10769, and a Subdivision of Tax Map No. 50, Tax Map Par. 369, 361, 362 and 474, Grid No. 1)
R/SW Agreement No. F-16-041 W/S Agreement No. 24-4885-D
Road Names: Sydney Way and River Hill Road
Petitioner: Land Design & Development, Inc.

Staff Presentation: Ms. Watson, Administrative Analyst, Real Estate Services Division, indicated that Land Design & Development, Inc., a Maryland corporation, has presented a petition to the Director of Public Works for the acceptance of Sydney Way and River Hill Road located within Honeysuckle Ridge, Lots 1 thru 29 and Open Space Lots 30 thru 34 (Being a Resubdivision of Lots 1 and 2, As Shown on a Plat Entitled "Lots 1-2, Ashby Property" Recorded Among the Land Records of Howard County, Maryland as Plat No. 10769, and a Subdivision of Tax Map No. 50, Tax Map Par. 369, 361, 362 and 474, Grid No. 1). The Bureau of Engineering has inspected the subdivision and certifies that all public improvements have been constructed in accordance with the approved plans and specifications and meets the criteria for acceptance under the Section 18.202 of the Howard

County Code. The Bureau of Engineering recommends that the public improvements be accepted into the County's system of publicly owned and maintained facilities.

Board Comments: None.

Public Testimony: None.

Motion: On a motion made by Mr. Whitworth, and seconded by Ms. Glassberg, the Board unanimously recommended that the Director of Public Works accept the public improvements located in Sydney Way and River Hill Road located within Honeysuckle Ridge, Lots 1 thru 29 and Open Space Lots 30 thru 34 (Being a Resubdivision of Lots 1 and 2, As Shown on a Plat Entitled "Lots 1-2, Ashby Property" Recorded Among the Land Records of Howard County, Maryland as Plat No. 10769, and a Subdivision of Tax Map No. 50, Tax Map Par. 369, 361, 362 and 474, Grid No. 1) into the County's system of publicly owned and maintained facilities.

- b) **Subdivision:** Dorsey Glen, Lots 1-15, Open Space Lots 16-20, & Non-Buildable Bulk Parcel A, (A Resubdivision of Non-Buildable Lot 2, Kane Property, Plat No. 14104) R/SW Agreement No. F-16-027 W/S Agreement No. 14-4867-D
Road Names: Mount Holly Way
Petitioner: Trinity Homes Mary Land, LLC

Staff Presentation: Ms. Watson, Administrative Analyst, Real Estate Services Division, indicated that Trinity Homes Mary Land, LLC, a Maryland limited liability company, has presented a petition to the Director of Public Works for the acceptance of Mount Holly Way located within Dorsey Glen, Lots 1-15, Open Space Lots 16-20, & Non-Buildable Bulk Parcel A, (A Resubdivision of Non-Buildable Lot 2, Kane Property, Plat No. 14104). The Bureau of Engineering has inspected the subdivision and certifies that all public improvements have been constructed in accordance with the approved plans and specifications and meets the criteria for acceptance under the Section 18.202 of the Howard County Code. The Bureau of Engineering recommends that the public improvements be accepted into the County's system of publicly owned and maintained facilities.

Board Comments: None.

Public Testimony: None.

Motion: On a motion made by Mr. Ramirez, and seconded by Ms. Glassberg, the Board unanimously recommended that the Director of Public Works accept the public improvements located in Mount Holly Way located within Dorsey Glen, Lots 1-15, Open Space Lots 16-20, & Non-Buildable Bulk Parcel A, (A Resubdivision of Non-Buildable Lot 2, Kane Property, Plat No. 14104) into the County's system of publicly owned and maintained facilities.

3. **Howard County Resurfacing Program Presentation**

Staff Presentation: Mr. Krishnakanth Jagarapu, Chief, Bureau of Highways, began the presentation by noting that his presentation would focus on the roadway infrastructure needs in general for the County, along with the resurfacing program. Mr. Jagarapu continued by listing the key responsibilities of the Bureau of Highways which included, but not limited to, roadway maintenance, storm water infrastructure maintenance, street tree maintenance, sidewalk/ADA ramp maintenance, traffic control device installation and maintenance, as well as streetlight maintenance. Mr. Jagarapu continued to give an overview of the various areas of maintenance the Bureau of Highways is responsible for.

The County is responsible for the maintenance of approximately over 10,080 center lane miles of roadway, which is one of many areas the Bureau of Highways maintains. The Bureau of Highways also maintains the stormwater management infrastructure below the roadways including storm drain culverts, inlets, any outfall, and approximately 1,200 stormwater management ponds. In terms of the storm drain infrastructure, there is over 700 miles that is known at this point. The Bureau of Highways maintains all 300,000 street trees within the County, and currently there are over 1,200 requests pertaining to street tree maintenance with over 4,000 requests open and currently being worked on. Another area that the Bureau of Highways receives community requests and concerns pertain to the sidewalks within the County. Mr. Jagarapu explained the Howard County Code states the maintenance of sidewalks within the County fall upon the adjacent property owner, unless the damage is caused by a street tree or any County public utility that caused the damage. Therefore, concerns from property owners regarding sidewalk damage must be reviewed, and if the damage was in fact caused by a street tree or a County public utility, Highways will repair the damage. Mr. Jagarapu further explained Highways is also responsible for the maintenance of the traffic control devices throughout the County. Currently, there are 98 traffic signals within the County, 135 school flashers and over 30,000 street signs within the County, which again, are all maintained by the Bureau of Highways. The County also has over 10,000 streetlights within the County, and of the 10,000, about 1,300 are leased streetlights from BGE (Baltimore Gas & Electric). Therefore, of the 10,000 streetlights within the County, the County owns roughly 9,000 streetlights, and BGE is used as a contractor to maintain the streetlights. Mr. Jagarapu also stated there was a new program introduced this year which was implemented to replace existing streetlights from incandescent bulbs to LED bulbs. Highways is also working with BGE to convert the roughly 1,300 leased streetlights with the LED bulbs as well. This program began January 2021 and is projected to last for about a year and a half to convert all 9,000 County owned streetlights within the County.

Furthermore, Mr. Jagarapu finished the opening of his presentation by stating that on top of the many other projects Highways is involved in on an everyday basis, the snow events involve a massive amount of manpower. Mr. Jagarapu explained that as of the date of the March meeting there was a total of eight (8) snow events thus far.

Mr. Jagarapu went on to explain how the Bureau of Highways deals with the maintenance and operations on an everyday basis as well as how the projects were dived throughout the County. He explained the County is divided into three zones. The East Zone (including areas such as Laurel, Savage, and Elkridge) includes the location of the Mayfield Maintenance Shop, the Central Zone (areas such as Columbia and Ellicott City) includes the Dayton Maintenance Shop, the West Zone (everything to the west of the Central Zone) includes the location of Cookeville Maintenance Shop. Furthermore, each maintenance shop includes two road crews as well as one specialty crew. The road crews work within the zone they are assigned, and the specialty crews tend to work County-wide. Some specialty crew examples for each zone include the following: the Cookeville Shop (West Zone) has a sign and marking crew responsible for all signs across the County, the Dayton Shop (Central Zone) has a tree crew responsible for all maintenance of the street trees within the County, and lastly, the Mayfield Shop (East Zone) has a pond crew responsible for all the storm water management ponds within the County. In Addition to the three maintenance shops, there is also a Traffic Engineering Division primarily responsible to maintain all traffic-controlled devices within the County, and the sign crew from the Cookeville Shop assists the traffic Engineering Division with any maintenance of projects as needed. Anything the maintenance shops are not able to handle is

directed to the Capital Projects Division within the Bureau of Highways, and the use of contractors will be determined through the Capital Project Division.

Mr. Jagarapu listed the following capital projects within the Bureau of Highways with regard to roadway infrastructure needs:

Road Resurfacing Program-H2014
ADA Ramps Upgrade Program-K5069
Sidewalk Repair Program-K5043
Storm Drain Repair Program-D1169
Traffic Signalization Program-T7105

-Road Resurfacing Program-H2014- The Bureau of Highways resurface all roadways within the County. This is the largest program that Highways oversees. There are over 3650 County owned and maintained roadways. This includes 1080 center lane miles of roadway in which 80% of the roads within the County are local roads and 20% of the roads are primary roads. All the roadways are inspected once every two years. During the inspection, which is contracted out to a vendor, a van with a 3D laser crack measurement system drives over the roadway to identify different types of distresses including any cracks, potholes, breakdown etc. The 3D produces images of the roadway in 20-foot intervals, in which all the roadways are broken down into 20-foot sections to determine what type of distresses there is on the road. The roadway survey assigns a value called a Pavement Condition Index (PCI) rated 0-100, with 0 being the worst condition possible and 100 being rated a brand-new road. All information is uploaded into a software program called PAVER to manage the pavement management throughout the County. On average, the life of a paved roadway is between 15-20 years, and about 35% of the life expectancy deteriorates in the first 10 years. Therefore, the quality drops 40% within the first 10 years, followed by another 40% within the following 5 years, therefore yielding a drastic drop once it begins to fail. The key for the pavement condition evaluation done every two years is to identify which roads need certain road repairs, which can extend the life of the roadway instead of having to make extreme reconstruction maintenance repairs to the roadways. The cost for a resurfacing program is roughly \$10.00 per square yard. With the average life expectancy being about 15 years, based on the mileage and life expectancy of the roadways within the County, Highways needs to repair approximately 71.6 miles of roadway each year. The typical cost to repair the roadway is about \$200,000/mile, therefore to maintain about 71-72 miles \$14.3M/year is needed. Currently, the ten-year average funding is \$5.6M/year. Therefore, Mr. Jagarapu is requesting \$12.5M in FY2022. Different scenarios have been examined as to funding and maintenance PCI scores which detail that if \$5M is continued to be allocated by the year 2024 the PCI rating of around 72 will be achieved. If the requested \$12M is allocated to resurfacing roadways a PCI rating of 80 will be predicted. Mr. Jagarapu then presented a map showing the roadways within the County color coded according to PCI ratings. Any roads that were shown as red or yellow showed roadways with very low PCI and need repair. Roads shown in light green and dark green had a high PCI rating. Mr. Jagarapu further explained that lower funding for this program presents challenges for the Bureau of Highways to decide if some roads with lower PCI ratings should solely be focused on within an area or neighborhood, rather than resurfacing more roadways within the whole neighborhood or area. More funding would help to alleviate some of challenges deciding what roads should be resurfaced in partially as opposed to what roads could be resurfaced in entirety.

-ADA Ramps Upgrade Program-K5069- Any time roadway is resurfaced Highways makes improvements to any pedestrian ramps, associated sidewalk repairs as well as curb and gutter repairs.

-Sidewalk Repair Program-K5043- Howard County has over 900 miles of sidewalk, and this program used to make improvements to the sidewalk the County is responsible for that have damages caused by street trees or utilities. Currently, there is over \$1M of backlog needed for repairs for the County Sidewalks. The Bureau of Highways is requesting \$1M to be allocated for FY2022 in order to accommodate the Sidewalk Repair Program. As the roadways within the County are aging, the sidewalks are as well. In order to reduce tripping hazards on the uneven sidewalks within the County, Highways has been cutting the concrete of the sidewalk rather than replacing the entire section of sidewalk. The Highways department has also been sending letters to the residents reminding them that the sidewalk adjacent to their property is their responsibility.

-Street Tree Program- H2016- Program heavily used to replace dead trees

-Storm Drain Repair Program-D1169-The County maintains of 700 miles of storm drains, and this Program is used to make upgrades and repairs to existing culverts, inlets and storm drain pipes that are adjacent or underneath the roadways. Currently, there is over 45 active projects. There are a lot of locations that there are sink holes due to storm drain pipes that are failing. Mr. Jagarapu explained that when a complaint regarding a storm drain pipe is received Highways will inspect the location of the complaint as well as the rest of the community where the storm drain pipe is located. Mr. Jagarapu then proceeded to present examples of Tamar Dr., Alexander Bell Dr., Toomey Lane and Joseph Scott Drive in which they received complaints of sink holes or dips in the roadway near the storm drains. Once the locations were inspected it was found that the storm drains below were damaged and required repairs. Mr. Jagarapu also stated that the culverts on Woodbine Morgan Rd. were failing, and Highways replaced the pipe with a box culvert.

-Traffic Signalization Program-T7105- This program is used to install any new traffic signals or maintain current traffic signals. There are about 98 traffic signals within the County with a typical life cycle of 20 years. Currently there are about 60% of signals in the County that are older than 20 years and there is about 38% of signals that are over 30 years. Most current projects are for signal modification or retrofit for an existing traffic signal.

Lastly, Mr. Jagarapu explained he wanted to talk on a wider scale of the roadway infrastructure needs, along with the road resurfacing program because there is a lot of need for maintenance needs within the County which continue to grow year by year. Typically, \$20M is requested for all of the programs every fiscal year. He further explained that in FY19 only \$10M was allocated, FY20 \$7M was allocated and FY21 \$3M, which is much lower than what is needed as both infrastructure and maintenance needs continue to grow. Mr. Jagarapu further stated he wanted to present this presentation to the Public Works Board to gain support for the requested FY22 funding for the various programs for the Bureau of Highways.

Board Comments: Mr. Summerson asked Mr. Jagarapu what the odds would be for how close it could be possible to get close to reaching the requested \$24M for FY22. Mr. Jagarapu referred the question to Mr. Meunier, in which Mr. Meunier stated that they were hopeful that there would be an increase from FY21, which looks promising, although it would most likely not be the \$24M requested. Mr. Summerson asked if the \$3M that was allocated in FY21 was due to COVID related problems and Mr. Meunier stated it was not COVID related, but redirection of funds to other higher priorities. Mr.

Jagarapu further stated that the Highways department is always looking at different ways to reduce the cost of different programs in order to use the funding that is allocated. Mr. McLellan asked what the connection and impact with the Ellicott City Mitigation was. Mr. Meunier explained the flood control work continues to move forward which does use up some available funding as it has been given a higher priority. Mr. Summerson asked if the Ellicott City Mitigation was work done out of County funds or different funds. Mr. Meunier explained that additional funding for the Ellicott City Mitigation was through federal grants and funding to offset the County funds. Mr. Whitworth asked if the life expectancy (typically 25 years for corrugated pipe) for the storm drain pipe was anticipated in the budget as it seemed to be failing all at once in certain areas. Mr. Jagarapu stated that they have been trying to review certain areas and locations, but most of the infrastructure was installed in the County around the same time. Some locations that have storm drain pipe that is older than 25 years that is still holding up, but other areas need more attention as it is failing. Mr. Jagarapu further stated that one of the goals is to review all the assets within the County. For example, once a sink hole issue is received, Highways will look at the entire community in which the storm drain issue is received and not just the location of the sinkhole. Mr. Whitworth further asked when the Highways department began the inspections or if has been ongoing. Mr. Jagarapu estimated that the inspections within the entire neighborhoods about four (4) years ago. Before that time frame the inspections were being done on a smaller scale within certain locations within the County. Mr. Ramirez asked how Highways handles the storm drains that are Columbia Association (CA) owned. Mr. Jagarapu stated that CA pipes are maintained by CA. Mr. Ramirez further asked how the CA pipes are handled where they connect to the County pipes, and Mr. Jagarapu stated that the County will work with CA if there is a problem where the pipes connect, but Highways will make the repairs at the location that is the responsibility of the County. As there were no more questions from the Board, Mr. Summerson thanked Mr. Jagarapu for his presentation, and stated he hoped he received more funding for FY2022 as it seemed to be needed.

Public Testimony: None.

There being no further business, the Public Works Board meeting adjourned at approximately 8:17 p.m.


Thomas J. Meunier
Executive Secretary


Rachel Roehrich
Recording Secretary