County staff has compiled brief summaries of the active County projects for the months of April, May, and June of 2021. The attached Executive Summary and Presentation summarizes and highlights the active projects within the County. This report meets the requirements of Code of Virginia Section 15.2-516 and Prince William County Code of Ordinance 2-1(5) and 2-1(5)(a) which requires the County government to provide “periodic reporting” on the “status of major projects and issues.”

Detailed project reports will be available through the County’s intranet site at [http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/](http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/). Staff will publish full project reports on the internet starting on September 15, 2021. Citizens will then be able to view the detailed project reports online at: [https://eservice2.pwcgov.org/eservices/qpr/](https://eservice2.pwcgov.org/eservices/qpr/).

Attachments: Executive Summary and Presentation
EXECUTIVE SUMMARY

Department of Facilities & Fleet Management (DFFM)

Facilities Construction Management (FCM) Division

- **Adult Detention Center Main Building Repairs** – Phase 1 resurfacing of showers is complete. Painting of cells is in progress. Water valve replacement in cell chases is ongoing. Roof replacement contract has been issued and pre-construction meeting held in August 2021; however, “Notice to Proceed” has not yet been issued because the roofing contractor is encountering industry-wide delays procuring materials.
  

- **Animal Shelter Expansion** – David Smith, Project Manager, with Michael Baker International is scheduled to present a construction update on this project to the Board at its afternoon meeting (2:00 p.m.) on September 14, 2021, as part of the Capital Projects Quarterly Project presentation.
  

- **Courthouse Security System & Lobby Expansion Project** – The security system portion of project is approximately 90% complete. Camera installation and programming are in progress and the security call boxes continue to be integrated. The lobby expansion portion of project is substantially complete with punch list items ongoing.
  

- **Public Safety Training Center Expansion** – DFFM is assembling the project team and the scope of work for the Architectural/Engineering (A/E) Request for Proposal (RFP) process.
  

- **Judicial Center Complex Master Plan Update** – Currently coordinating a 25% progress presentation to all interview parties. Overall schedule remains on track for completion by the end of Calendar Year 2021.
  

- **Juvenile Services Center** – DFFM will be assembling the project team and the scope of work for the A/E contractual task order in November. The Department of Social Services (DSS) is currently revisiting State requirements for the facility.
  

- **New Potomac Community Library Master Plan** – The Board approved creating a capital project for a new Potomac Community Library at its meeting on July 20, 2021. The Board also approved $310,000 for Master Planning Activities for the new project. DFFM is assembling the project team and the scope of work for the A/E contractual task order. It is estimated that the Master Plan will be completed within 12 months of the NTP under the A/E task order’s terms.
• **New Woodbridge Library Master Plan** – The Board approved creating a capital project for a new Woodbridge Library at its meeting on July 20, 2021. The Board also approved $310,000 for Master Planning Activities for the new project. DFFM is assembling the project team and the scope of work for the A/E contractual task order. It is estimated that the Master Plan will be completed within 12 months of the A/E’s NTP under the task order’s terms.

• **New Woodbridge Senior Center Master Plan** – The Board approved creating a capital project for a new Woodbridge Senior Center at its meeting on July 20, 2021. The Board also approved $310,000 for Master Planning Activities for the new project. DFFM is assembling the project team and the scope of work for the A/E contractual task order. It is estimated that the Master Plan will be completed within 12 months of the NTP under the A/E task order’s terms.

• **New Homeless Navigation Center – East** – DFFM is assembling the project team and the scope of work for the Architectural/Engineering (A/E) RFP process.

*Property Management (PM) Division*

• **Valley View Fleet Building Repair** – Development Services (DS) is requiring a change to the use group of the facility due to scale and type of renovations that have been completed at this facility as part of this project. A tenant layout plan is being prepared to facilitate this and drawings will be resubmitted to DS as required. The project is expected to be fully completed by November 30, 2021.  
http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=904

*Department of Parks, Recreation and Tourism (DPRT)*

• **Catharpin Park Phase II** – The construction of an additional trail was completing in June 2021. The concessions building will be re-bid in September 2021.  
http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=892

• **Rollins Ford Park Phase 2** – First attempt to bid project was canceled due to pricing issues. Staff is working with Procurement Services to re-bid the project.  
http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=862

• **Harbor Drive Wellness Park** – Asphalt milling of parking lot completed on June 30, 2021. Cement seat wall was completed on July 1, 2021. Water fountain vaults installed on July 15, 2021. Completion of project is now scheduled for November 2021. A ribbon cutting ceremony will be held in the spring 2022.  
http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=907

• **Doves Landing** – The Master Plan for this project will be updated this winter with the feasibility study for the additional boardwalks and trails completed by spring 2022.  
http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=892
- **Broad Run Greenway** – Field survey work was recently completed.  
  http://mydesktop/apps/CXOProgMgr/Intranet/InetDetail.asp?ProjId=767

- **Occoquan Greenway** – The Lake Ridge Parks and Recreation Association (LRPRA) Board approved the Trail Lease Area plat changes for Segment 3 on May 11, 2021. Site Plan for Segment 3 was resubmitted to Development Services (DS) on July 6, 2021. Plan review comments from DS have been received and are being addressed.  
  http://mydesktop/apps/CXOProgMgr/Intranet/InetDetail.asp?ProjId=769

- **Potomac Heritage National Scenic Trail** – The contractor started field work on Featherstone Segment on July 15, 2021. Also on the Feather Segment, the consultant, WSP, is coordinating a meeting with the United States Corps of Engineers and the Virginia Department of Environmental Quality to review results of wetland delineation and determine permitting approach.  
  http://mydesktop/apps/CXOProgMgr/Intranet/InetDetail.asp?ProjId=766

- **Locust Shade Challenge Course** - Play equipment installation completed in August 2021. Electrical and paving work will be completed in September 2021.  
  http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=919

- **Locust Shade Park** – Maintenance Building – Procurement Services has canceled the contract with the contractor due to pricing issues. The project will be re-bid later this year.  
  http://mydesktop/apps/CXOProgMgr/Intranet/InetDetail.asp?ProjId=861

- **Long Park Auxiliary Building** – Building construction completed August 20, 2021. Final inspection scheduled for September 7th.  
  http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=911

**Department of Public Works (DPW)**

**Solid Waste (SW) Division**

- **Balls Ford Road Organic Waste Processing Facility** – A food waste recycling grant from the United States Department of Agriculture (USDA) was obtained with collaboration with the Prince William County Public Schools to accept PWCS’ food waste. This food waste along with the mandatory yard waste recycling program starting in October 2021 will further provide waste diversion to extend landfill life.  
  http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=905

- **Landfill Liner Design and Construction of Phase III, Cell A** - The contractor has finished liner installation work and all other related work. The Contractor is installing litter fence and is working on punch list items. Final Completion is anticipated by mid-September 2021. The certification report is being prepared for submission to the Virginia Department of Environmental Quality (DEQ). The Certificate-to-Operate is expected to be received from DEQ during the month of October 2021.  
  http://connectapps.pwc.ad/apps/cxoprojmgr/intranet/InetDetail.asp?ProjId=898
• **Landfill Eco Park Complex** – Staff will highlight the status of this project as part of the Capital Projects Quarterly Report presentation to the Board at its afternoon meeting (2:00 p.m.) on September 14, 2021.  

*Environmental Services Division (ESD) - Drainage Improvements:*

• **Neabsco Creek Bandalong** – Manufacturer experiencing material delays due to COVID. Project completion now anticipated in November 2021 (from July 2021).  

• **Stormwater Facility 386 – Water Quality Retrofit** - This project will convert the existing dry detention pond to a wet pond to add water quality treatment volume. Additionally, it will move the access gate to facilitate maintenance. The project will result in significant pollutant reductions to meet County's MS4 requirements. Project construction started on August 16, 2021. Estimated completion date is November 30, 2021.  

• **Powells Creek 725 Phase 1 Stream Restoration** – Construction is underway with completed scheduled for October 21, 2023.  
Quarterly Project Report
Fiscal Year 2021, Fourth Quarter

Matthew F. Villareale
Director of Facilities & Fleet Management

Jason M. Pauley
Deputy Director of Public Works

Seth A. Hendler-Voss
Director of Parks, Recreation & Tourism

Mark G. Kitta
Deputy Director of Facilities & Fleet Management
Projects Highlighted Today

Department of Facilities & Fleet Management
- Animal Shelter Expansion
- Courthouse Security System & Lobby Expansion Project
- Adult Detention Center (ADC) Main Building Repairs

Department of Public Works
- Neabsco Creek Bandalong Litter Collection Device
- Powells Creek Stream Restoration Phase 1
- Quantico Marine Corps Drainage Project
- Landfill Liner (Phase III, Cell A)
- Landfill Eco-Park
Projects Highlighted Today – Continued

Department of Parks, Recreation & Tourism

- Catharpin Park Auxiliary Building
- Long Park Auxiliary Building
- Rollins Ford Park
- Harbor Drive Wellness Park
- Potomac Heritage National Scenic Trail (PHNST), Occoquan Wildlife Refuge Segment
- Hellwig Park Artificial Turf Field
- Occoquan Greenway
- Locust Shade Challenge Course
- Hammill Mill Pool White Coat
- Building & Facilities Program (BFP) Projects
  - Hammill Mill Paving
  - Cloverdale Park Accessibility Improvements, Phase I
  - Cloverdale Park Bridge Abutments
  - Veteran’s Park Accessibility Improvements, Phase I
PWC Animal Shelter – August 2021

Michael Baker:
CM Services

Project Manager: David Smith
Construction Manager: Yasser Gamil
## Project Status

### Schedule

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Substantial Completion</td>
<td>October 28, 2021</td>
</tr>
<tr>
<td>Revised Substantial Completion</td>
<td>November 27, 2021</td>
</tr>
<tr>
<td>Original Final Completion</td>
<td>January 26, 2022</td>
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<tr>
<td>Revised Final Completion</td>
<td>February 25, 2022</td>
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<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Time Extension(^1)</td>
<td>30 Days</td>
</tr>
<tr>
<td>Total Calendar Days</td>
<td>570</td>
</tr>
<tr>
<td>Calendar Days Used(^2)</td>
<td>453</td>
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<tr>
<td>Calendar Days Remaining(^2)</td>
<td>117</td>
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<tr>
<td>% Time Lapsed(^2)</td>
<td>79.5%</td>
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### Cost

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Base Contract</td>
<td>$11,136,925</td>
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<tr>
<td>Executed Change Orders</td>
<td>$1,153,399</td>
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<tr>
<td>Current Contract</td>
<td>$12,290,324</td>
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<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Change Orders</td>
<td>9.4% (includes restored space)</td>
</tr>
<tr>
<td>% Contract Paid to Date</td>
<td>71.9%</td>
</tr>
</tbody>
</table>

### Footnotes:
1. Time extension of 30 days approved for all 2020 delays, including weather, multiple unforeseen conditions, and change in materials.
2. As of April 1, 2021.
Last Quarter

- **Exterior:** Placed building siding. Installed exterior and overhead doors, roof coping, window glazing, and ERUs.

Installed ERUs on Building Roof (West Wing)

Installed curtain wall glass, clips, and caps
Last Quarter

- **Interior**: Installed VRFs, ductwork, and air handlers. Placed ceiling grid and angles, as well as hangers for lights. Installed gypsum drywall and placed joint compound.

- Installed electrical panels

Ceiling grid and ductwork installed
Last Quarter

Site: Set the generator and the transformer. Poured the concrete sign wall. Constructed concrete curb and gutters on backside of building.

Set mechanical pad and generator

Exercise yard walls, curb, and site concrete
Last Quarter

- **Restored Space:** Placed interior door frames. Worked on the constructing CMU walls. Placed sanitary and vent pipes.

Constructing CMU walls for restored space

Installed interior door frames within restored space
Next Quarter (through Oct.)

- **Exterior:** Paint building exterior.
- **Interior:** Install lights, ceiling tile, and animal cages. HVAC startup and balancing. Paint interior. Partial commissioning.
- **Site:** Site concrete. Install fencing. Hydrosodering. Construct bioretention.
- **Restored Space:** Masonry, steel beams, deck, metal framing, and roofing. Above ceiling mechanical rough-ins. Install ceiling grid.
Project Timeline

• **Transition & Partial Occupancy (West Wing Only):** November 2021

• **Demolish Existing Facility:** January 2022

• **Full Occupancy:** March 2022

• **Project Final Punchlist Work:** Spring 2022
Questions?
Courthouse Security System & Lobby Expansion

- Lobby Expansion Portion – Substantially Complete/Punch List Work
- Security System Upgrades Portion – 90% Complete
ADC Main Building Repairs

- Phase I of shower resurfacing completed
- Painting of cells and water valve replacement in cell chases ongoing
- Roof Replacement on hold due to contractor’s supply issues
Neabsco Creek Bandalong Litter Collection Device

- **Bandalong device is being manufactured**
  - Manufacturing delays pushed installation to October 2021
  - Site preparation currently in progress

![Neabsco Creek Bandalong site](image1)

![Example of the Bandalong Model 920 to be installed on Neabsco Creek](image2)
Construction 50% complete. Estimated substantial completion is September 2022.

Monitoring, inspection, and maintenance by county staff for 7 years as required by permit

All soils and trees removed were utilized in the project

Project area will be planted with native trees
Quantico Marine Corps Drainage Project

- 48-inch failed storm drainage pipe and slope failure
  - 40-foot deep
  - Installation under a retaining wall
- Jack and bore install of 48-inch pipe has been completed
- Contractor to stabilize failed slope on opposite side of road
Landfill Liner (Phase III, Cell A)

- **Construction Complete**
  - Completed ahead of schedule and within budget
  - Certificate to Operate from DEQ required to place trash in the cell
Landfill Eco-Park

- **Renewable Natural Gas (RNG) Project**
  - Change in use of landfill gas from production of electricity to pipeline quality renewable natural gas (RNG)
  - Prince William RNG LLC will construct new RNG facility at the landfill
  - RNG facility will significantly improve energy recovery from landfill gas – electrical engines are about 35% efficient – RNG plant will be about 95% efficient at energy recovery
  - Will lower landfill air emissions
  - New revenue share agreement is based on a percentage of RNG sales to third parties – revenues expected to increase significantly

- **Nature Trail**
  - Collaboration with Parks & Rec
  - Construction is substantially complete
Catharpin Park Auxiliary Building

- Re-bidding Scheduled for Fall, 2021
Long Park Auxiliary Building

- Under Construction
- Completion Expected Fall, 2021
Rollins Ford Park

- Re-bidding Scheduled for Fall, 2021
Harbor Drive Wellness Park

- Construction in Progress
- Opening Fall, 2021
PHNST – Occoquan Refuge Segment

- Complete
- Ribbon Cutting 9/26/2021
Hellwig Park
Artificial Turf Replacement (Field #7)

- Completed June 2021
Hellwig Park Artificial
New Artificial Turf Field

- Completed June 2021
Occoquan Greenway

- Segment 3 Bridge Design Complete; Procurement in Late 2021
- Segment 4 Bridge Replacement Under Design
Occoquan Greenway

- New Wayfinding Signs Installed
Locust Shade Challenge Course
Hammill Mill Pool White Coat

- Under Construction
- Estimated Completion in Fall, 2021
Building & Facilities Program Projects

Hammill Mill Paving

Hellwig Site Improvements
Building & Facilities Program Projects Slated for FY22 Construction

- Cloverdale Park Accessibility Improvements, Phase I
- Cloverdale Park Bridge Abutments
- Veteran’s Park Accessibility Improvements, Phase I
Impact of Inflation on CIP and Operating Expenses:
Department of Facilities & Fleet Management
Department of Parks, Recreation & Tourism

Mark Kitta
Deputy Director, Department of Facilities & Fleet Management
September 14, 2021
Overview

• Service and Construction Impacts
• Fleet Services Impacts
• Escalating Cost overview
Facilities Construction

Material Price Increases: Q4 2020 to Q1 2021 Increase

- Brick: 15%
- Framing Lumber: 32%
- Plywood: 8%
- Roof Membrane: 5%
- Insulated Glass: 12%
- Metal Studs: 23%
- Sheet Metal: 23%
ADC Roof Replacement Project

- Single ply roof replacement
- Delayed due to required insulation not available
- Anticipated date materials will be available - March 2022
FFM & DPRT Maintenance

Delays Mount

• Factories production material wait times grew to 79 days

• The average delivery time of supplies for maintenance, repair and operations was also the longest in Institute for Supply Management data.

• In November 2020, purchasing managers listed just 8 materials companies were struggling to get their hands on. Five months later and it’s expanded to 24.
AVERAGE (LOW/HIGH) MAINTENANCE MATERIAL INCREASES

- **Electrical**: 400% increase
- **HVAC**: 200% increase
- **Plumbing**: 200% increase
- **Carpentry**: 400% increase
- **Pool Equipment**: 300% increase
Vendor Restrictions

- Vendors have minimum stock
- 2-to-4-week lead times on special orders with most vendors
- Due to prices constantly increasing, vendor price quotes only good for 5 days, rather than previous standard of 30 days.
- Equipment and materials in short supply are subject to extreme price increases due to market demand.
- Although prices of Lumber have increased average 250% quality of lumber is substandard.
## Fleet Service Material Costs

<table>
<thead>
<tr>
<th>Description - Short</th>
<th>Current Issue Price</th>
<th>Last Order Price</th>
<th>Price Diff.</th>
<th>% Change</th>
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<tbody>
<tr>
<td>TORO LOCK NUT</td>
<td>$3.12</td>
<td>$0.52</td>
<td>2.60</td>
<td>500.63%</td>
</tr>
<tr>
<td>HOSE MAKE UP</td>
<td>$257.00</td>
<td>$49.97</td>
<td>207.03</td>
<td>414.31%</td>
</tr>
<tr>
<td>TORO FLANGE NUT</td>
<td>$3.19</td>
<td>$0.85</td>
<td>2.34</td>
<td>275.07%</td>
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<tr>
<td>ACTUATOR BLEND DOOR MOTOR</td>
<td>$39.63</td>
<td>$12.37</td>
<td>27.26</td>
<td>220.37%</td>
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<tr>
<td>DECAL PARKING ENFORCEMENT</td>
<td>$26.00</td>
<td>$8.75</td>
<td>17.25</td>
<td>197.14%</td>
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<tr>
<td>CYLINDER FOR HOOD</td>
<td>$1,148.86</td>
<td>$574.43</td>
<td>574.43</td>
<td>100.00%</td>
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<tr>
<td>FILTER FUEL - FRAM</td>
<td>$11.75</td>
<td>$8.19</td>
<td>3.56</td>
<td>43.47%</td>
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<tr>
<td>TIRE FIRESTONE ALL</td>
<td>$60.04</td>
<td>$45.38</td>
<td>14.66</td>
<td>32.30%</td>
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<tr>
<td>PUMP COOLANT</td>
<td>$437.38</td>
<td>$364.38</td>
<td>73.00</td>
<td>20.03%</td>
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<tr>
<td>TIRE FIRESTONE</td>
<td>$147.13</td>
<td>$129.49</td>
<td>17.64</td>
<td>13.63%</td>
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<tr>
<td>OIL 50WT 5 GALLON</td>
<td>$79.48</td>
<td>$70.08</td>
<td>9.40</td>
<td>13.41%</td>
</tr>
</tbody>
</table>
Review CIP Estimate Process

• Process Action Team (Budget, Finance, FFM & DPRT) to Review the CIP Development Process
  ▪ Evaluate Project Estimate Process
  ▪ Review Contingency Budget Formulation
  ▪ Process to Update Annual CIP Numbers
  ▪ Fund a Standing Contingency Budget
DPRT Project Cost Escalations

- Average escalation: 28%
- Total estimated shortfall: $2,600,000
- Additional capital required or projects must be postponed or canceled

<table>
<thead>
<tr>
<th>Project</th>
<th>Initial Estimate</th>
<th>Updated Estimate</th>
<th>Estimated Shortfall</th>
<th>% Increase</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Catharpin Concession Building</td>
<td>$644,166</td>
<td>$1,013,280</td>
<td>$369,114</td>
<td>36.43%</td>
<td>Bid opening on 3/23/21; Only one bid received for $1,164,092</td>
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<tr>
<td>Lake Ridge Marina Dock</td>
<td>$508,000</td>
<td>$782,440</td>
<td>$274,440</td>
<td>35.07%</td>
<td>Bid opening on 4/27/20; No bids received</td>
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<tr>
<td>Locust Shade Maintenance Building</td>
<td>$1,140,000</td>
<td>$1,596,000</td>
<td>$456,000</td>
<td>28.57%</td>
<td>Bid opening on 11/16/20; Low bid was non-responsive; Second lowest bid was $1,313,000</td>
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<tr>
<td>Material Storage Building Hellwig</td>
<td>$474,299</td>
<td>$592,873</td>
<td>$118,574</td>
<td>25.00%</td>
<td></td>
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<tr>
<td>Rollins Ford Park</td>
<td>$8,361,915</td>
<td>$9,744,241</td>
<td>$1,382,326</td>
<td>16.53%</td>
<td>Bid opening on 2/26/21; Low bid disqualified ($9,240,179); Second lowest bid was $10,024,000; Estimate does not include the artificial turf fields ($1,000,000)</td>
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<tr>
<td>Pat White Elevator</td>
<td>$380,660</td>
<td>$494,858</td>
<td>$114,198</td>
<td>30.00%</td>
<td>Additional $160,000 needed in addition to escalation adjustment; project currently funded with insurance reimbursement revenue</td>
</tr>
</tbody>
</table>

$2,600,454
Questions?