FLOYD L. POTTER

Career Summary:

Director of Operations for Wi-Skies, LLC, Floyd brings over thirty-seven years of diverse engineering experience, with a focus on Georgia DOT roadway design and engineering. His strengths are hydrology and storm water engineering, horizontal and vertical profile design, erosion and sedimentation, signage and striping, utility plan and coordination, cost estimating and bid document preparation. Mr. Potter is extremely proficient with Microstation V8i and other various design software and has worked directly with Georgia DOT and Local Governments in designing Streetscape projects consisting of sidewalk design, decorative pavers/crosswalks, drainage design, curb & gutter design, landscaping, irrigation, decorative street lighting, and utility design. Floyd is very familiar with all aspects of Georgia DOT specification and standards as well as AASHTO's Green Book (Policy on Geometric Design of Highways and Streets) for design and construction. Floyd's roll includes assist in design and CADD, utility coordination, maintaining project budgets, manage staff workload and manage project schedules.

Areas of Expertise:

- Stormwater Management & Engineering
- Hydrology Problem Solving and Solutions
- Hydrology Calculations & Design
- All Aspects of Road Design
- Caice and Inroads Design Software
- HY8 Stormwater Software
- Utility Coordination & Planning
- Microstation J, V7, V8i MS 2023
- Erosion and Sedimentation Pollution Control (E&SPC)

Project Summary:

CADD Manager for Interstate Lighting Retrofit using Carbon Reduction Program Funding for Georgia DOT. GDOT Management wanted to retrofit and repair approximately fifty miles of existing lighting along the interstate system within the I-285 Atlanta metro perimeter ahead of the World Cup arrival in the summer of 2026. The Department identified and utilized available funding from the federal carbon reduction program (CRP) initiative to deliver this seemingly impossible task in less than a year and a half. This timeframe included development of full plans, specifications and estimates for fourteen total projects which were competitively bid and awarded to comply with federal funding requirements. Starting in October of 2024, each of the fourteen projects had to be developed in extremely short order to ensure they were competitively bid, awarded, procured, installed and operational before May 2026 to meet the World Cup deadline. This required an incredible amount of effort and coordination with over a dozen GDOT Offices to ensure the delivery schedule was met. All plan development was done in accordance with all GDOT and FHWA requirements, including coordination and approval from all parties, including environmental, right-of-way, structural, railroad, utility, and state construction offices. Despite the consolidated schedule, all construction delivery requirements had to be fulfilled, including final field plan review (FFPR), approval from all offices, including FHWA, and Construction Bidding Administration (CBA) and Let date timelines.

All fourteen projects required full electrical survey to determine the condition and power source of each individual luminaire and circuit along each corridor to establish accurate quantities to ensure adequate funding was provided within each of the individual projects' budget while not exceeding the overall available CRP funding. As much of the system was in disrepair, this required a lot of cable replacement as well as replacement of each of the service points to ensure all lights are metered. Each project was designed to meet current IES/ANSI lighting requirements whenever possible without creating environmental, ROW or constructability issues with variances granted when necessary. In order to adhere to these IES recommendations, several trees, branches and other foliage were removed within a certain distance of each pole or tower to ensure the luminaire distribution pattern was not disrupted in the near future.

Wi-Skies is also responsible for construction oversight of all projects to address the myriad of RFI's and construction issues with all fourteen projects. These projects are concurrent to many other large-scale projects, such as repaving all fifty miles of the same stretches of the same interstate system and a fiber installation project, all with competing lane closures. We are also responsible for providing as-built drawings for all work completed, including final wiring schematics for each service point throughout the interstate system, as this information did not previously exist, but is necessary for any future maintenance or proposed project.

Floyd was in charge of all CADD management, production management and ensuring schedules were met as per GDOT. Floyd was also in charge of ensuring all plan sheets and plan sheet organization were done in accordance with GDOT Plan and Presentation Guide and Electronic Data Guidelines.

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(PI0020767) I-75 from Musket Ridge to I-85. This six-mile-long segment included all lighting infrastructure along the mainlines, ramps, and under bridge locations along I-75 south of the I-75/85 Connector split. This project included one interchange that was lit by high mast light towers, which needed extensive repair in addition to being retrofitted. Additionally, some light poles were relocated from behind sound barriers to in front to alleviate accessibility and maintenance concerns.

(PI0021308) I-85 from I-75 Split to Lenox Rd. This 3.5-mile-long segment included all lighting infrastructure along the mainlines, ramps, and under bridge locations along I-85 north of the I-75/85 Connector split. This segment included the illumination of the Buford Highway ramps and side streets spanning underneath the I-85 mainline, adjacent to the Buford Spring Connector Tunnel, which was Let separately, but includes both daytime and nighttime lighting. Field analysis was conducted to ensure all existing, damaged, or removed lighting infrastructure was accounted for. During design, several service points were eliminated and combined with others to minimize the number of locations that could be vandalized while also helping to reduce the cost of the project.

(PI0020955) I-75/85 from I-20 North to I-85 Split. This segment was 4.5 miles long and included all lighting infrastructure along the mainlines, ramps, and under bridge locations along the I-75/85 Connector through downtown Atlanta. This segment was designed in conjunction with three other tunnel lighting projects: Capitol and Memorial Tunnel, Piedmont and Baker Tunnel, and Courtland and Ralph McGill Tunnel projects. While this will pose a challenge with conflicting lane closures, it presents the opportunity for multiple Contractors to work together in an area with a lot of lighting work to be completed in a short amount of time. Field analysis was conducted to ensure all existing, damaged, or removed lighting infrastructure was accounted for, which is critical to ensure final quantities correlated with actual service point loads across the several design and construction plans. There was a stretch in this project where existing high mast towers which were up to 200’ in height, lighting the mainline from each side. There were also several frontage roads adjacent to the interstate mainline that have ramps that tie into the interstate that were continuously lit.

(PI0020954) I-75/85 from Merge to I-20. This four-mile-long segment includes all lighting infrastructure along the mainlines, ramps, and under bridge locations along the I-75/85 Connector through downtown Atlanta from the I-75/85 merge north to I-20. This segment includes a large interchange between I-75/I-85 and I-20 which utilizes a combination of high mast towers, underpass luminaires mounted on short poles, and conventional poles, all which need to be retrofitted to LED luminaires. There were also several frontage roads adjacent to the interstate mainline that have ramps that tie into the interstate that were continuously lit. Field analysis was conducted to ensure all existing service points, high mast tower light poles, underpass luminaires, roadway luminaire light poles, and any damaged or removed lighting infrastructure was accounted for. Field analysis was especially critical for this segment to ensure the overall design was improved to meet current ANSI/IES standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with existing infrastructure.

(PI0020766) I-75 from Frontage Rd to I-85. This four-mile-long segment includes all lighting infrastructure along the mainline, ramps, and under bridge locations along I-75 south of the I-75/85 Connector near the Atlanta airport. This segment includes a center-splitting freeway exit and entrance ramps illuminated by cobra heads mounted on existing light poles with titled arms, which were retrofitted to horizontal mount fixtures and arms as part of this retrofit project. In addition to the mainline lanes, there was also a separate HOV lane that was part of this project which exited directly onto an overpass bridge. As this project was adjacent to the Atlanta airport, shorter high mas\t towers (60’ MH) were used at the I-285/I-75 Interchange, which were retrofitted as part of this project. Due to the proximity to the runway, additional analysis was done to minimize any uplight which may be detrimental to incoming and outgoing pilots. Two existing towers which were located in an area known to be predominately underwater were removed as part of this project and replaced with conventional light poles.

(P#0020951) I-85 from Riverdale Rd to I-75. This 5.5-mile-long segment includes all lighting infrastructure along the mainlines, ramps, and under bridge locations along I-85 near the Atlanta airport. This segment had a very large amount poles which were knocked down or subject to copper thievery, which presented the opportunity to shift the new poles back from the mainline and ramps to minimize the risk of future knockdowns. Several other locations which were subject to frequent knockdowns, guardrail was added to help prevent future knockdowns. Many trees which were found to be located within clear zone were removed as part of this project and all trees were trimmed at all light pole locations. Special attention was given to the photometric distribution of new LED luminaires, and short mast arms were recommended for use on existing poles located close to the roadway to optimize the uniformity of the new lighting design. Field analysis was especially critical for this segment to ensure all existing, damaged, or removed lighting infrastructure was accounted for. The overall design was improved to meet current ANSI/IES standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with existing infrastructure. Careful consideration was also provided to ensure there was minimal uplight to the incoming and outgoing pilots near the Atlanta airport.

(PI0021309) I-20 from Linkwood Rd to I-85. This six-mile segment includes the mainlines, ramps, and under bridge locations along I-20 west of downtown. A large section of I-20 within this segment did not have center median light poles, instead placed conventional poles on the outside of the freeway. Therefore, additional attention was given to which poles required new fixtures with a higher-lumen output or lower-lumen output to ensure all lanes were properly illuminated while optimizing the performance of the existing lighting infrastructure. This project also had high mast tower lighting at the I-75/85 interchange which needed to be repaired and retrofitted. Field analysis was especially critical on this segment to ensure all existing, damaged, or removed lighting infrastructure was accounted for. The overall design was improved to meet current ANSI/IES

standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with existing infrastructure.

(PI0021310) I-20 from Capitol Ave to Flat Shoals Road. This five-mile segment includes the mainlines, ramps, and under bridge locations along I-20 immediately east of the I-75/85 Connector. This section of I-20 includes both center median light poles and single conventional light poles on the outer lanes as well as high mast towers at the interchange of I-75/I-85. Special attention was given to which poles required new fixtures with a higher-lumen output or lower-lumen output to ensure the existing infrastructure is optimized to ensure all lanes are properly lit. Field analysis was especially critical to ensure all existing, damaged, or removed lighting infrastructure was accounted for. Several of the service points were moved from their existing location to a more accessible location for maintenance and operational considerations. The overall design was improved to meet current ANSI/IES standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with existing infrastructure.

(PI0021311) I-20 from Flat Shoals Rd to Columbia Dr. This four-mile-long segment included lighting along the median of the mainlines, lighting along ramps, and under bridge lighting along I-20, all of which was retrofitted to LED. Field analysis was conducted to ensure all existing, damaged, or removed lighting infrastructure was accounted for. The overall design was improved to meet current ANSI/IES standards, and new design layouts were implemented where the team discovered the opportunity to without interfering with existing infrastructure.

(PI0020952) I-75/85 at Capitol Ave and Memorial Dr Tunnel Lighting Retrofit. Located immediately north of the I-20 interchange, this 0.35 mile long segment of I-75/85 is the most heavily traveled roadway in Atlanta. The tunnel has six northbound lanes, six southbound lanes, and five ramp lanes running under it. Due to the tunnel's overall width, length and relatively short height and only outside wall-mounted luminaires, rear-end accidents and traffic backups are common in this area. A 3D model of the entire tunnel was generated using actual tunnel entrance and exit portal height measurements and aerial imagery. A daytime analysis was done within AGi32 to determine how much natural daylight penetrated within the tunnel. From this information, Wi-Skies developed an experimental solution to provide minimal lighting only where necessary rather than current IES/ANSI recommendations. The lighting design took into consideration a variety of budgetary and constructability concerns and developed custom overhead installation assemblies braced between existing concrete beams directly over traffic without drilling the existing concrete beams anywhere. Because a maximum of three lanes of traffic could only be shut down at any time for either construction or maintenance, Wi-Skies had to limit the design to place lights only over the three inside and outside lanes only. Despite the many design challenges, the proposed design delivered a much more effective lighting solution within the tunnel despite reducing the overall luminaire count by almost half.

(PI0020953) I-75/85 at Baker St and Piedmont Ave and I-75/85 at McGill Blvd and Courtland St Tunnel Lighting Retrofit. These two independently unique partially divided tunnels cover 0.209 miles of some of the busiest section of roadway in Atlanta. The Baker and Piedmont tunnel includes six northbound lanes, six southbound lanes, two merging northbound on-ramp lanes, and two southbound off-ramp lanes. The Courtland and McGill tunnel covers seven northbound lanes and seven southbound lanes. Due to the tunnel's overall width, length and relatively short height and only outside wall-mounted luminaires, rear-end accidents and traffic backups are common in this area. A 3D model of the entire tunnel was generated using actual tunnel entrance and exit portal height measurements and aerial imagery. A daytime analysis was done within AGi32 to determine how much natural daylight penetrated within the tunnel. From this information, Wi-Skies developed an experimental solution to provide minimal lighting only where necessary rather than current IES/ANSI recommendations. The lighting design took into consideration a variety of budgetary and constructability concerns and developed custom overhead installation assemblies braced between existing concrete beams directly over traffic without drilling the existing concrete beams anywhere. Because a maximum of three lanes of traffic could only be shut down at any time for either construction or maintenance, Wi-Skies had to limit the design to place lights only over the three inside and outside lanes only. Despite the many design challenges, the proposed design delivered a much more effective lighting solution within the tunnel while greatly reducing the overall luminaire count.

(PI0021192) The Buford Spring Connector Tunnel. This 435' long tunnel is a braided ramp from the SR13 Buford Connector SB ramp passing under the I-85 mainline to I-85 SB. A 3D model of the entire tunnel was generated using actual tunnel entrance and exit portal height measurements and aerial imagery. AGi32 was used to perform daylighting analysis to determine the amount of natural daylight penetration within the tunnel. It was not surprising that this box culvert tunnel required supplemental daytime lighting and nighttime lighting within it due to the overall poor natural daylight that penetrates within it. A minimalistic approach was taken to provide new lighting within the tunnel by placing new lights along each of the wall sides to light the single lane. Given the nature of the tunnel and limitations of the scope, the existing embedded conduit and junction boxes were re-used in the retrofit, but everything surface mounted was removed. As the existing system was operational and the tunnel is so dark, Wi-Skies worked diligently with the contractor to ensure a hybrid of the existing and proposed lighting system remained operational throughout the construction process.

(PI0020000) I- 75 at Windy Hill Tunnel. The I-75 northbound exit ramp to Windy Hill Rd creates a 615' culvert style tunnel as it passes under a number of ramps, including four entrance ramps from I-285. A 3D model of the entire tunnel was generated using real tunnel entrance and exit portal height measurements and aerial imager to create an AGi32 daytime model. Being a long culvert tunnel, it requires both daytime lighting and nighttime lighting. However, due to the existing infrastructure, placement of the new luminaires had to remain on both walls of the culvert tunnel so as to not reduce the overhead clearance

within the tunnel. Despite these challenges, there was an increase of overall photometric performance while reducing the overall luminaire count within the tunnel.

(P#0020764) I-75 at NB and SB Cumberland Braided Ramp Tunnels. These dual tunnels cover the I-285 movements to I-75 just north of Cumberland Ave. The Northbound tunnel ramp connects I-75 NB to I-285 east by spanning under the Cumberland entrance ramp to I-75 northbound and 490' long. The southbound tunnel connects the I-285 westbound movement to I-75 southbound by spanning under the four lane exit ramp to Cumberland Ave. A 3D model of both tunnels was generated using real tunnel entrance and exit portal height measurements and aerial imagery. AGi32 was used to perform daylighting analysis with real location data. Unsurprisingly, both tunnels modeled very dark within them and required supplemental daytime lighting and nighttime lighting. The LED retrofit design provided a much more efficient design while delivering better overall lighting within the tunnels.

Assistant Designer/CADD for Jonesboro Rd Widening – Henry County, GA. This 7.7-mile-long project is a large-scale road improvement initiative largely along Jonesboro Rd (SR 920) from just west of US 19/ US 41 in Clayton County to the I-75 interchange in Henry County. The existing two-lane roadway is being expanded to four travel lanes with raised medians, bike lanes, sidewalks, proposed and re-aligned turning lanes at intersections, and a bridge replacement over Walnut Creek. This project will improve traffic operations and safety, accommodate for future growth and traffic demands, and improve access for pedestrian and multi-modal transportation. The new roadway lighting design enhances the safety by improving the visibility during nighttime or low-light conditions across the entire project for the entire roadway and pedestrian areas including at all intersections, pedestrian crossings, changes in roadway geometry, and unexpected hazards. Due to limited ROW and time constraints, the Wi-Skies team had to work closely with Georgia Power (GPC) to develop a dual-purpose solution, consisting of standalone light poles wherever possible, but joint use poles installed where we directed by GPC in areas where ROW or easement could not be procured. Floyd is responsible for the design, utility coordination, and plan preparation.

Assistant Designer/CADD for SR 9 Lighting from Dunwoody to Chattahoochee River for Roswell, GA. This transportation improvement initiative aims to enhance safety and mobility across 0.58 miles of SR 9. The project entails roadway widening, intersection improvements, new sidewalks and crosswalks, bicycle infrastructure, stormwater management, signage, and lighting. Additionally, the project includes a multi-use trail and pedestrian bridge to extend connectivity and access to the Chattahoochee River. Because SR 9 is a main arterial roadway, Wi-Skies is providing lighting for high volumes of vehicle, bicycle, and pedestrian traffic which meets the current industry standards and recommendations.

Assistant Designer/CADD for SR 316 at Bethlehem and Barber Creek Interchange Lighting (GDOT). Two adjacent at-grade intersections along SR 316, which is a major thoroughfare connecting Atlanta to Athens, are being reconstructed to controlled access interchanges. These new interchanges, one mile apart, both terminate in roundabouts in both directions. These four roundabouts are being lit utilizing a hybrid high mast tower and conventional lighting light pole system. Due to the proximity to a local airport, each of the four high mast towers coordinates and elevations had to be submitted to the FAA for approval. Floyd was responsible for utility coordination and plan preparations.

Assistant Designer/CADD for SR 92/Campbellton Fairburn Rd Continuous Flow Intersection at SR 14 (GDOT). The existing intersection in a growing commercial area is being completely overhauled due to heavy traffic. The proposed solution involves a continuous flow intersection (CFI), which offsets left hand movements further up- and down-stream from the main intersection. This significantly widens the roadway at the intersection and approaches, creating significant challenges to provide sufficient lighting throughout the defined intersection and approach limits. These challenges were met by using Type IV luminaires with a 40' mounting height at a reduced spacing. Overall SR 92 is being widened to include additional turning lanes, a raised median, shoulders for many business entrances and exits, resulting in an overall project length of over two miles. Additionally, a new roundabout is designed for the intersection at SR92 and Hall Rd, which also required full lighting. Floyd was responsible for utility coordination, plan preparations and details.

Assistant Designer/CADD for SR 211 Widening from SR 347 to SR 53 for GDOT. This project entails 3.4 miles of roadway widening, which increases SR 211/ Old Widner Highway from two lanes to four travel lanes to alleviate congestion and enhance traffic flow along this mixed commercial and residential corridor. Additionally, a new roundabout is designed for the intersection of SR 211 and Reveille/Union Church Rd, along with auxiliary and through-lanes. Three different functional decorative light poles are implemented in this project to elevate community aesthetics with also meeting current ANSI/IES standards and improve traffic operations and safety, accommodate for future growth and traffic demands. Floyd was responsible for utility coordination, plan preparation and review.

Assistant Designer/CADD for City of Union City, GA Gateway Park Lighting and Cameras. Union City is developing a new Gateway Park adjacent to the intersection of SR 92 at SR 14, which requires new parking lot, decorative sign and pavilion lighting, in addition to security cameras to provide visibility to the Union City police department throughout project site. Wi-Skies was brought in after the plans were awarded to the Contractor to re-design all of the lighting and electrical systems. Careful coordination with ongoing construction activities and concurrent design with an adjacent GDOT project was imperative to the success of delivering of this project. Floyd was responsible for all plan preparations and revisions.

Assistant Designer/CADD for Sprayberry Rd and Jefferson St to Greison Trail Roundabout (GDOT). This project includes a realignment at the intersection of Sprayberry Road and Jefferson Street and incorporate a roundabout at the intersection of Greison Trail and Jefferson Street. A shared use path with pedestrian lighting is designed to follow both sides of the roadway within project

limits. The roundabout is intended to improve safety by reducing conflict points and calming traffic while also improving pedestrian accessibility. The new roundabout will include perimeter and approach lighting to improve nighttime visibility for drivers with properly illuminated splitter islands, crosswalks, and circulating lanes. As the gateway into downtown Newnan, the lighting will also strengthen the visual appeal with the opportunity to use decorative light poles and post tops.

Assistant Designer/CADD for Etris Rd Multi-Use Trail for Roswell, GA. This multi-use trail stretches from Hardscrabble Rd to Crabapple Rd in Fulton County, Georgia. The project is approximately 0.9 miles long, providing safe, non-motorized connectivity between neighborhoods, schools, and the Crabapple activity center. Community safety and aesthetics are elevated with decorative LED pedestrian post-top and pendant light poles along the path and crosswalks. Floyd was responsible to ensure plans were designed and prepared as per City and GDOT specifications.

Assistant Designer/CADD for SR 8 Bridge at Jackson Creek for GDOT. The SR 8/US 29 (Lawrenceville Hwy) bridge replacement over Jackson Creek is designed to enhance safety and aesthetics. To ensure proper alignment and transition, the sidewalks and civil infrastructure surrounding the approaches to the bridge bring the total project length to 0.4 miles. The design required careful coordination with the City's construction team to utilize decorative pedestrian light poles to match the community aesthetics. Wi-Skies paid special attention to ensure the lighting meets minimum pedestrian path recommendations and does not create an adverse glare affect to the drivers along the roadway. Floyd was responsible for Photometric and lighting plan preparations.

Assistant Designer/CADD for Southwest Connector and Corinth Rd Roundabout for Coweta County, GA. The Southwest Connector is a new roadway segment connecting the County Fairgrounds to Millard Farmer Rd with a four-legged roundabout. Wi-Skies is responsible for providing lighting at this new roundabout and the approaches to meet IES and AASHTO standards. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for SR 98 and SR 172 Roundabout for Georgia DOT. Wi-Skies is tasked with providing a border and approach lighting design including photometric calculations, plans, specifications, and quantities for a four-legged roundabout at the rural intersection of SR 98 and SR 172 in Madison County, Georgia. The existing intersection is being revised to improve traffic flow and safety. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for 14th Street and Washington Street Roundabout in Darlington County, SC (SCDOT). Wi-Skies was tasked with providing full roundabout and approach lighting design including photometric calculations, plans, specifications, and quantities for a three-legged roundabout in Darlington County, South Carolina. The existing intersection is being revised to improve traffic flow and safety. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for South Fork Peachtree Creek Greenway for City of Tucker, GA. The Peachtree Creek Greenway is a proposed multi-use trail corridor (pedestrian and bicycle) that will follow the creek (north fork and/or south fork) through portions of Atlanta, Brookhaven, Chamblee, Doraville and unincorporated DeKalb County. The Greenway will be a hard-surfaced multi-use path linking major regional trails/transportation networks. Lighting is a major supporting element of the South Fork Peachtree segment not just for safety, but also for accessibility, aesthetics, and environmental harmony. Wi-Skies provided a continuous lighting design including photometric calculations, plans, specifications, and quantities using decorative pedestrian post top light poles.

Assistant Designer/CADD for SR 30 at Kolic Helmey Rd Roundabout for Effingham County, GA. The existing stop-controlled T-intersection is to be replaced with a roundabout at the SR 30/ Kolic Helmey Rd crossing while introducing a new roadway serving a new residential development. Crosswalks and multi-use paths are being placed around and through the roundabout while the current undivided two-lane highway and undivided two-lane road are yet to be developed for future growth and multimodal traffic. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for SR 316 at Dials Mill Extension / Dials Mill Rd Interchange in Oconee County, GA (GDOT). This approximately 1.6-mile-long project is a corridor improvement of SR 316 and re-aligning the Dials Mill Extension. A grade-separated interchange is designed to improve safety, traffic flow, and mobility along SR 316 as part of a larger transformation initiative along the heavily traveled SR 316 corridor between Atlanta and Athens. The new interchange includes roundabouts at each of the ramp terminals, which need to be fully lit in accordance with GDOT Chapter 14 requirements. The lighting at the compact interchange roundabouts will enhance the safety and visibility where speeds transition quickly from highway to local traffic levels. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for I-285 at I-20 East Interchange Lighting (GDOT) Wi-Skies is designing the lighting at the I-285 interchange with I-20 on the east side of the loop as part of GDOT's Major Mobility Investment Program (MMIP). As part of a massive design-build effort, the interchange is being reconstructed to improve traffic flow throughout the interchange as well as adjacent interchanges. These improvements include increased entrance and exit ramps for all interchanges as well as the main interchange itself, which includes the addition of several flyover ramps as well as increased roadway width. Most of the interchange area will be lit using high mast towers, however, because of the elevation differences between the mainline and some the flyover ramps, supplemental conventional lighting is necessary on the taller flyover ramps. Full photometric analysis including all roadway elevations along with the tower heights based on actual proposed cross-section elevations were done throughout the project to verify lighting criteria was met. The cross-sections were also analyzed to determine where any existing towers may be re-used based on the local grade. Due to the increased roadway widths, ROW constraints coupled with both structural and noise wall obstructions, placement of high mast towers was difficult or impossible to, leading to extensive coordination with the roadway and bridge designers to accommodate. Spill lighting analysis was done at the ROW in certain quadrants where residential properties were prevalent. These residential properties in some quadrants, along with dense forestation in other quadrants, also limited the service point locations to power the very large electrical

load, which resulted in extensive coordination with the local power company. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for Shoal Creek at SR 136 Roundabout (GDOT). Shoal Creek Rd is being straightened, which means the existing three-legged intersection is being removed and replaced by a new roundabout further down the road at the new intersection location. At this location, there are existing overhead distribution lines and an existing service point that need to be coordinated with. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for Henry Parkway at McDonough Parkway Roundabout Lighting (Henry County, GA). An existing three-legged intersection is being converted a roundabout. As both intersecting roadways are dual lane, this results in a very wide roundabout, presenting challenges to meet uniformity requirements within the roundabout. As the roundabout is immediately adjacent to Mercer University with heavy pedestrian traffic at times, proper lighting within the crosswalks is essential to the operational safety of the roundabout, in addition to proper transition lighting along each leg. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for Howell Bridge at Ball Ground Roundabout Lighting (Cherokee County, GA). An existing four-legged intersection near a commercial development was converted to a four-legged roundabout. The existing lighting along one of the legs needed to tie into some existing privately owned commercial lighting. All pedestrian crosswalks were carefully analyzed to ensure maximum lighting within the vertical plane of the crosswalk to maximize lighting within the crosswalk. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for I-26 Widening Between MM 85-101 for SCDOT Sixteen miles of I-26 are being expanded to accommodate an additional lane in each direction from mile post 85 to 101 north of Columbia, South Carolina. As part of the project, two interchanges are being revised which include full lighting design which Wi-Skies is responsible for designing. Additionally, Wi-Skies will design and implement a new state of the art Weigh-In-Motion (WIM) system in the northbound direction. Joe is responsible for all lighting design, including photometric and voltage drop calculations, plan development, cost estimates and specifications. He is also responsible for the WIM design, implementation and verification.

Assistant Designer/CADD for Sea Island at Frederica Roundabout (Glynn County, GA) The County is replacing the existing major intersection at Sea Island and Frederica with a roundabout to improve traffic flow. Wi-Skies is tasked with providing new lighting at this intersection and working with Glynn County to establish lighting standards for the island; both conventional and decorative. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for I-285 at I-20 East Interchange Lighting (GDOT) Wi-Skies is designing the lighting at the I-285 interchange with I-20 on the east side of the loop as part of GDOT's Major Mobility Investment Program (MMIP). As part of a massive design-build effort, the interchange is being reconstructed to improve traffic flow throughout the interchange as well as adjacent interchanges. These improvements include increased entrance and exit ramps for all interchanges as well as the main interchange itself, which includes the addition of several flyover ramps as well as increased roadway width. Most of the interchange area will be lit using high mast towers, however, because of the elevation differences between the mainline and some the flyover ramps, supplemental conventional lighting is necessary on the taller flyover ramps. Full photometric analysis including all roadway elevations along with the tower heights based on actual proposed cross-section elevations were done throughout the project to verify lighting criteria was met. The cross-sections were also analyzed to determine where any existing towers may be re-used based on the local grade. Due to the increased roadway widths, ROW constraints coupled with both structural and noise wall obstructions, placement of high mast towers was difficult or impossible to, leading to extensive coordination with the roadway and bridge designers to accommodate. Spill lighting analysis was done at the ROW in certain quadrants where residential properties were prevalent. These residential properties in some quadrants, along with dense forestation in other quadrants, also limited the service point locations to power the very large electrical load, which resulted in extensive coordination with the local power company. Floyd was responsible for Photometric and lighting plan preparation.

Assistant Designer/CADD for I-75 at Chula-Brookfield Road (GDOT) At the Chula-Brookfield exit along I-75, GDOT is upgrading the existing on/off ramp intersections with new roundabouts as well as realigning the ramps to accommodate the new intersection locations. Partial interchange lighting is being provided as part of this project utilizing high mast towers at both roundabouts and ramp terminals. Floyd was responsible for Photometric plan preparation, lighting plan preparation and utility coordination.

Assistant Designer/CADD for Effingham County Roundabouts Lighting Design Effingham County, GA is developing plans for eight total roundabouts throughout a business development area. These roundabouts will increase travel speeds through the area, as well as decrease the seriousness of traffic accidents at some of the intersections. Each of the eight roundabout sites require lighting, both within the roundabout circle, but also at each crosswalk, along each approach leg, in accordance with IES standards. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for Hooks St at Emil Jahna Rd Roundabout Lighting – Florida DOT Hooks Rd is undergoing a 1.5 – mile long extension in the City of Clermont, FL, which intersects with Emil Jahna Rd, which will be a roundabout and subsequently will be lit. There is existing decorative post top lighting along the median of Emil Jahna Rd, much of which will remain in place, save for locations where the post top lighting will create a glare impact to incoming drivers. The new lighting will be designed in accordance with the FDOT Greenbook, utilizing 3000K luminaires and a 35' mounting height at the roundabout. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

FLOYD L. POTTER

Assistant Designer/CADD for Sandy Springs, GA Roswell Rd RTA Lighting. Wi-Skies is responsible for developing lighting plans for 2.35 miles of Roswell Rd as part of their Road Transit Access program. The highly commercial corridor begins at Meadowbrook Dr and ends at Northwood Dr and includes intersections with Windsor Parkway, Glenridge Dr and Lake Placid Dr. The lighting requires the use of their decorative fixtures (Type A and Type C), placed dependent on their location to driveways, entryways and intersections as visible identifiers both during daytime and nighttime. Photometric calculations were conducted to verify all lighting design criteria is being met along all sidewalks along the corridor. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for Lighting for SR 146 from SR 1 to Lakeview Rd (GDOT) This project encompasses the reconstruction and widening of over two miles of SR 146, which includes a total of three roundabouts. Each of these roundabouts requires full lighting, including both horizontal illuminance calculations for the roundabout area, but also vertical illuminance calculations along each of the crosswalks. There is also a segment of SR 146 which will be lit between two of the roundabouts due to their proximity to each other. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for North Point Parkway Lighting – City of Alpharetta, GA. As part of a roadway diet and enhancement project, Wi-Skies is developing lighting plans for 1.4 miles of North Point Parkway. The highly visible commercial corridor begins at Mansell Rd and ends at Haynes Bridge Rd and includes eight intersections, along with many more commercial driveway entrances and exits. The lighting plan includes of over one hundred sixty decorative roadway and post top fixtures, alternated throughout the corridor to achieve both roadway and sidewalk lighting design criteria, along with intersection lighting at all eight intersections. Each pole location was carefully coordinated with many utilities, but also with the landscape designers, with decorative trees placed to stagger the light pole conflicts. Photometric calculations were conducted to verify all lighting design criteria is being met for all criteria along the corridor. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for Lighting for SR 84 at Lakeview Rd Roundabout (GDOT) The existing three-legged intersection is being replaced with a new roundabout, which requires lighting, in accordance with GDOT policy. However, the locals were initially not in support of installing lighting at the roundabout. Extensive discussion and coordination were necessary to convince the City the lighting to be provided would not negatively impact the existing residences within the roundabout area nor the church that ties into the fourth roundabout leg. The lighting at the roundabout has been carefully designed using both decorative roadway and pedestrian lights along the roundabout legs to appease the local influence, without sacrificing operational safety of the roundabout, crosswalks or pedestrian traffic along the sidewalks. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

CADD Designer for Johns Creek Parkway at Lakefield Dr Roundabout Lighting (City of Johns Creek, GA) This quick response project involves the replacement of an existing intersection with a new roundabout to reduce the severity and frequency of crashes at the busy intersection. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for City of Albany Lighting at Traffic Signal Upgrades. The City of Albany, GA is upgrading sixteen intersections throughout their downtown corridor as part of a traffic enhancement and beautification project. As part of this work, they are installing decorative lighting onto these traffic signal poles, for which Wi-Skies is responsible for. Given the luminaire locations are dictated by the traffic signal locations (by MUTCD), the challenge is meeting intersection lighting requirements with these limitations. It is our responsibility to provide luminaires to maximize the lighting delivered where it needs to be within the intersection while also meeting the aesthetic objectives of the project. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer/CADD for Lighting for Trickum Rd at Nocatee Trail Roundabout (Cherokee County, GA) A new four-legged roundabout is being constructed at an existing three-legged intersection and Wi-Skies was brought in to provide lighting. The lighting at the roundabout has been carefully designed to avoid excessive light spill to the nearby adjacent residential homes, as well as to minimize any impacts to the decorative features at the residential neighborhood entrance. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

County is replacing the existing major intersection at Sea Island and Frederica with a roundabout to improve traffic flow. Wi-Skies is tasked with providing new lighting at this intersection and working with Glynn County to establish lighting standards for the island; both conventional and decorative. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

CADD Designer for Lighting for US 701 over Cape Fear River – North Carolina DOT The existing 1250' long bridge over Cape Fear River was being reconstructed when lighting was added to the project. As one side of the bridge was already constructed, all four lanes of traffic had to be lit from only one side of the bridge, posing a challenge. We developed a solution using horizontal mounted Type IV fixtures, which were able to meet photometric requirements. As the project was under construction, the lighting design had to be completed in a matter of only a few weeks, complete with light pole mounting details as part of the revised bridge plans. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer for SR 101 at Holly Springs, Goldmine Roundabout Lighting (Paulding County, GA). An existing three-way high speed intersection in a rural area is being converted to a four legged roundabout to considerably increase safety. As the area is also expected to grow with the addition of a new church, pedestrian facilities were included within the roundabout, of which vertical

illuminance calculations were provided within each crosswalk. Approach lighting on some of the legs was evaluated to be removed along some of the roundabouts, but ultimately recommended to leave in due to the curvature of each of the approach legs. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer for Lighting, ITS and Signage for SR 400 Pedestrian Path Wi-Skies provided lighting, ITS and signage plans for a new pedestrian path which is being installed immediately adjacent to SR 400, one of the most heavily traveled roadways in the Atlanta area. The four-mile-long pedestrian path runs through several areas, including residential, commercial and even interstate sections of SR 400. At locations where the path crosses an existing roadway, which is at Loridans Dr, Windsor Pkwy and Northland Dr, double indicated lighted pedestrian crossing signage is being provided along with traffic warning beacons in advance to the drivers. This flashing warning system elevates the awareness of the busy pedestrian crossing. Existing lighting is impacted at several locations, both because the pedestrian path is immediately adjacent to SR 400 in several locations, but it also crosses over interchange ramps, which resulted in existing lighting to be relocated. Finally, much of the path was installed directly on top of the main DOT ITS trunk line, resulting in the need to address impacts as appropriate. Nearly a mile of new fiber backbone was provided as part of the project relocation, along with another mile of new drops to the many devices within the project area, all of which was challenging given the elevation differences between the devices at grade and the path, which varied in elevation. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

Assistant Designer for Lighting for SR 365 at Howard Rd Roundabouts (GDOT) A new bridge is being constructed over SR 365 to eliminate a high-speed intersection, which is expected to have a significant traffic increase due to the construction of Lanier Technical College adjacent to the intersection. This new bridge are bookended by roundabouts which Wi-Skies is responsible for lighting. Each of these roundabouts requires full lighting, including both horizontal illuminance calculations for the roundabout area, but also vertical illuminance calculations along each of the crosswalks. Floyd is responsible for photometric plan preparation, lighting plan preparation, details, utility coordination and project scheduling.

CADD for I-285 at I-20 West Phase 1 Lighting Study for GDOT As part of GDOT's Major Mobility Investment Program (MMIP), the existing I-285 interchange with I-20 on the west side of the loop is being reconstructed to improve traffic flow throughout the interchange as well as adjacent interchanges. These improvements include increased entrance and exit ramps for all interchanges as well as the main interchange itself, some of which include eliminating weaving areas and replacing them with dedicated throughway tunnels. This work will be accomplished through a design-build effort, which will be awarded at a later date. Wi-Skies role in this project is to provide the Phase 1 engineering study and oversee and approve the lighting aspects of the final design and construction of the project. The Phase 1 study includes developing a conceptual lighting layout for the entire project, which consists mostly of high mast lighting throughout the interchange, as well as other areas that have conventional lighting and delving into whether expanding the lighting limits is warranted, based on sub-standard conditions, crash data or other conditions. There are also twenty-four underpass structures which need to be evaluated for potential daytime lighting. Floyd is responsible for all CADD file preparations.

Assistant Designer for Woodruff Road Bypass – Greenville, South Carolina (SCDOT) Wi-Skies is providing a complete lighting design for the Woodruff Road Bypass project, which spans a total of six miles of roadway. Woodruff Road is a highly traveled roadway and experiences extreme congestion during peak travel times. SCDOT is proposing a parallel route to bypass the overly crowded Woodruff Road. The roadway contains ten total roundabouts with four travel lanes with a decorative median for most of the route, along with both a sidewalk and multiuse path. As an additional challenge, this roadway intersects a railroad and crosses under transmission lines. Wi-Skies will be responsible for lighting the entire parkway limits including photometric calculations, service point coordination, voltage drop calculations, conduit routing, and lighting plan development. Floyd is responsible for photometric and plan preparation in accordance with SCDOT requirements.

Assistant Designer for I-74 Danville Lighting Replacement, IDOT District 5, Contract 70A29 The District is making several traffic improvements along the corridor through three interchanges along I-74 – MLK Drive, N G St and US 150 in Danville, IL. This presented them the opportunity to retrofit the existing lighting to LED. All existing roadway lighting poles not affected by the roadway work, so a simple retrofit was done for a majority of the poles. An auxiliary lane was also added to a portion of I-74 near N G St. where several luminaires were required to be removed and reinstalled to accommodate the new lane. In the end three manufacturers were determined to meet the standards called out in the IDOT BDE manual. The District also combined two lighting controllers at the MLK interchange into one controller as the load LED luminaires requires is much lower than that of the existing HPS fixtures and one of the existing controllers was difficult to access. Floyd is responsible for plan preparation, details and all associated CADD design.

Assistant Designer for Ozora Church Rd Roundabout (GDOT). An existing three-legged intersection in a rural area is being converted to a roundabout. As the area is also littered with many large trees and distribution lines which have minimum clearance requirements, light pole placement was limited. To save cost, approach lighting on some of the legs was recommended for removal where there was adequate visibility from an AASHTO safe stopping distance. . Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

Assistant Designer for SR 42 at United and Skyhaven for GDOT. An existing four-way intersection is being expanded due to increased capacity demands. Full intersection lighting is being provided as well to combat an ongoing trend of increased pedestrian and vehicular strikes near the intersection. Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

CADD Designer for Lighting at I-77 and SC Hwy 9 Interchange. This existing interchange is adding lighting at the I-77 and Hwy 9 interchange along with tying into another project that is adding lighting along Hwy 9. This project is a combination of high mass towers

and conventional roadway lighting. The use of high mast towers will cover the bridge over I-77 and conventional roadway poles will be used along the ramps. We are working with Duke Energy to make sure that this project ties directly to another lighting project along Hwy 9 to ensure full coverage throughout the corridor. Joe is responsible for the entire standalone lighting plan set, including development of plans and oversight of a Geotech sub-consultant, necessary to ensure proper high mast tower foundations are installed at each of the tower locations, based on actual soil conditions. Floyd is responsible for Photometric and Lighting plan development, photometric plans and all CADD work.

Assistant Designer for SR211 at CR1 County Line-Auburn Rd/Mulberry Rd Roundabout (GDOT). An existing interchange is being transformed into a roundabout. Wi-Skies is providing lighting for the roundabout as it is located on a state route. Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

Assistant Designer for SR 98 at SR164 Roundabout for GDOT. A new roundabout is being designed at this intersection. Joe is the lead lighting designer for the lighting at this new roundabout, performing photometric calculations, voltage drop, and quantity calculations for the lighting design for the intersection. Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

Assistant Designer I-85 at SR 42 Interchange for Georgia DOT Wi-Skies was engaged in designing the lighting at the interchange of I-85 and SR 42 in Druid Hills, GA, which featured a new L-cut crossover bridge in the middle of the existing interchange. This project also included many utility conflicts as multiple sets of power lines lined both sides of SR 42 in addition to limited access in a quadrant due to an existing children's hospital. Additionally, many of the light poles had to be mounted on the new bridge to light both the new and existing bridge, which was unaffected by the new construction. Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

Assistant Designer for Carolina Crossroads Phase 1 Design-Build for South Carolina DOT SCDOT is designing improvements along the interstate corridor of I-20/26/126 which includes system interchanges at I-20/I-26 and I-26-I/126 in Lexington and Richland Counties in five phases, of which this is the first. These improvements are proposed to increase mobility and enhance traffic operations by reducing existing traffic congestion within the I-20/26/126 corridor, while accommodating future traffic needs. The corridor's approximately 14 miles of mainline interstate include I-26 from Exit 101 - Broad River Road (US 176) to east of the Saluda River, I-20 from the west of the Saluda River to west of the Broad River, and I-126 from I-26 to east of the interchange with Colonial Life Blvd. Floyd is responsible for Photometric and Lighting plan development, photometric plans and all CADD work. The design includes both high mast towers along the interstate and interchanges as well as conventional roadway lighting along the ramps and side streets. Every effort has been made to minimize spill lighting to the residential areas on the side streets.

Assistant Designer for Carolina Crossroads Phase 2 Design-Build for South Carolina DOT SCDOT is designing improvements along the interstate corridor of I-20/26/126 which includes system interchanges at I-20/I-26 and I-26-I/126 in Lexington and Richland Counties in five phases. These improvements are proposed to increase mobility and enhance traffic operations by reducing existing traffic congestion within the I-20/26/126 corridor, while accommodating future traffic needs. The corridor's approximately 14 miles of mainline interstate include I-26 from Exit 101 - Broad River Road (US 176) to east of the Saluda River, I-20 from the west of the Saluda River to west of the Broad River, and I-126 from I-26 to east of the interchange with Colonial Life Boulevard. Phase 2 of the design includes the design of I-20 as well as a new Diverging Diamond Interchange at Broad River Road (US 176). The lighting design includes both high mast towers along the interstate and interchange as well as conventional roadway lighting along the side streets, with an effort to minimize spill lighting to the residential areas on the side streets.

Assistant Designer for Allison Rd Pedestrian Sidewalk Lighting for City of Beaufort, SC. As part of the beautification of the city of Beaufort, SC, SCDOT added a sidewalk on one side of Allison Road between Cottage Farm Drive and Ribaut Road and wanted to add pedestrian lighting to this sidewalk. The City of Beaufort of a City Standard pedestrian luminaire on a decorative pole. It was Wi-Skies responsibility to provide the lighting design for the pedestrian sidewalk while also illuminating the street. With extremely close ROWs and numerous existing trees and electrical lines, this presented many interesting underground and overhead challenges throughout the project.

Assistant Designer for I-75 at Highway 151 Interchange Lighting – City of Ringgold, GA. Floyd was responsible for plan preparation, photometric plans, and all CADD design for the installation of four high mast towers at the Highway 151 interchange at I-75 for the City of Ringgold, GA. There were originally four towers installed at the interchange before a tornado destroyed them a number of years ago. The interchange had been overhauled and expanded since that time and the lighting was missed. Joe oversaw the lighting design, which was submitted through GDOT's permit process (GUPS) and ultimately approved for installation.

Project Manager for SR 400 Pedestrian Path in Sandy Springs, GA. The City of Sandy Springs is constructing multi-use path which runs parallel to SR 400 for 3.5 miles. This path meanders through both residential areas but is mostly in close approximation to the major corridor, leading to many impacts to the existing main GDOT ITS duct bank, as well as power feeds to ITS devices and lighting along the corridor. Floyd is responsible for plan preparation, details and all associated CADD design.

Assistant Designer for Fred Nash Roundabout Lighting in Myrtle Beach, SC. SCDOT designed a roundabout just south of SC Hwy 17 at Harrelson Blvd and the entrance to the Coastal Grand Mall in Myrtle Beach, SC. One leg of the roundabout is the entrance to Coastal Grand Mall and one leg of the roundabout is the relocation of Fred Nash Blvd. This is a unique roundabout in that Harrelson Blvd enters and exits the roundabout both north and south but continues through the center of the roundabout. This roundabout design is sometimes commonly referred to as a "hamburger" roundabout. Wi-Skies worked closely with the City of Myrtle Beach, SCDOT, the

contractor and the local utility company while designing the lighting for this roundabout, approach and departure legs. The local utility company will ultimately provide and install the lights. Therefore, Wi-Skies provided photometric calculations to meet IES requirements for this roundabout. Since this roundabout is in a heavy traffic area with high roadway speeds, Wi-Skies approached the design as a partial interchange, making sure the area was well lit, both within the roundabout area along the approaches to the roundabout as well as departures.

Assistant Designer for SR 9 at AC Smith Roundabout for GDOT. A three-legged roundabout is being constructed at an existing intersection to reduce crash rates and severity at a rural roundabout. Proper lighting was designed for the roundabout to include the roundabout, crosswalk facilities, and the approaches within the roundabout area. However, recommendations were provided and ultimately accepted to remove transition lighting along the two approach legs on SR 9, as visibility of the roundabout was adequate at an AASTHO safe stopping distance. This transition lighting was not removed along the AC Smith approach leg due to roadway curvatures. Spill lighting was analyzed along all residential property lines to minimize undesirable impacts.

Assistant Designer for SR 16 at Beulah Church Roundabout for GDOT. A four-legged roundabout is being constructed at an existing intersection to reduce crash rates and severity at a rural roundabout. Proper, but minimal, lighting was designed for the roundabout to include the roundabout and all crosswalk facilities within the roundabout area. However, recommendations were provided, and ultimately accepted to remove transition lighting along the two SR 16 legs, as visibility of the roundabout was adequate at an AASTHO safe stopping distance. This transition lighting was not removed along the Beulah Church legs due to roadway curvatures and heavy forest areas. Spill lighting was analyzed along all residential property lines to minimize undesirable impacts.

Assistant Designer for SR 8 at Conners Rd Roundabout for Georgia DOT. GDOT is revising an existing intersection, which comprises of two high speed approach legs along SR 8 with a lower speed, albeit heavy truck traffic, roadway which intersects at a high angle to a roundabout. Additionally, there is a feeder road for trucks immediately adjacent, along with a set of railroad tracks about 300' away. The roundabout location will be slightly offset from the original intersection location to lessen the angles along the approach legs, providing a better approach to drivers in all locations, while also slowing traffic along the approaches. Lighting was provided not only within the roundabout circle, but also along each of the approach legs to ensure adequate visibility for all drivers approaching and leaving the roundabout to ensure the new configuration is recognized, the railroad track crossing is seen, the heavy truck traffic is visible and to overcome the ambient lighting of the commercial establishments in the area.

Assistant Designer for SR 53BU at Dragon Dr Roundabout for GDOT. A three-legged roundabout is being constructed at an existing intersection to reduce crash rates and severity at a rural roundabout. This roundabout is at the entrance to a local high school. Proper lighting was designed for the roundabout to include the roundabout, crosswalk facilities, and the approaches within the roundabout area. However, recommendations were provided, and ultimately accepted to remove transition lighting along all three approach legs, as visibility of the roundabout was adequate at an AASTHO safe stopping distance.

Assistant Designer for City of Jesup Streetscape GA (GDOT) The City of Jesup is rehabilitating three street sections off of State Route 38 to match the existing areas that have already been updated previously. The scope is to provide lighting along the sidewalk areas only without negatively impacting the drivers along these roads, as is a Georgia DOT requirement. This is typically a challenge, as pedestrian scale light fixtures are designed to throw light in all directions with little or no cut-off features, especially with acorn style fixtures. To combat this, nominally lower lumen output fixtures are utilized and if possible, mounting height increased to get out of the driver's field of view when measuring the glare metric, the maximum veiling luminance ratio (MaxLv). Calculation of this ratio is necessary to ensure drivers are not blinded by the pedestrian scale light as they drive through this area. All of the lighting work is being done in accordance with Georgia DOT and IES design standards. Floyd is responsible for plan preparation in accordance with GDOT Plan and Presentation Guide, AASHTO requirements and all CADD design.

Assistant Designer for Bridges Rd at Willow Lane Roundabout for Henry County, GA. The County is converting an existing four-legged intersection into a rural roundabout. Wi-Skies is responsible the lighting design at the roundabout, consisting of lighting the roundabout circle, but recommends removing the lighting along the approaches for three of the four legs due to good visibility and a net reduction of associated costs along with the reduction of energy use and spill lighting to the surrounding areas. This SPLOST project was extremely fast-paced and was turned around in less than two weeks.

Assistant Designer for North Ola Rd at Snapping Shoals Roundabout for Henry County, GA. The County is converting an existing four-legged intersection into a roundabout. The roundabout is in a rural area, but with several overhead power lines around and through it, which created several conflicts with the light pole locations. There is a also a church on the north approach leg with multiple entrances and exits, creating several conflicts within the lighting transition zone, so the transition lighting along that leg was recommended to remain in the design. However, the transition lighting along the other three legs were recommended for removal due because of good visibility to and from the roundabout along those legs.

Assistant Designer for Langford Parkway (SR 166) Lighting Replacement. Langford Parkway is a major thoroughfare which connects I-285 to I-85 north of the Atlanta airport in the southwest side of the city. The corridor was originally built as an urban collector, but over time has become an access control freeway with entrance and exit ramps. However, urban curb still exists in portions of the roadway and the lighting was installed based on the original urban collector setting and subsequent setbacks. Because of this, most of the lighting installed on the outside of the roadway is within unprotected clear zone and subject to frequent knockdowns. As the entire 6.5-mile corridor is continuously lit, this results in a lot of maintenance. To properly address this situation, coupled with

inadequate lighting, the recommendation was made to provide a new lighting system through the corridor which will increase pole setbacks coupled with barrier protection as warranted. This new lighting system will also replace and upgrade the existing lighting along the median wall, where applicable. As the corridor was untouched for decades, full survey, LIDAR and SUE is necessary. Floyd is responsible for lighting plan development, photometric plans, standard specifications and to ensure plans are done in accordance with GDOT Plan and Presentation Guide.

Assistant Designer for Lighting for SR 120 from SR 141 to Peachtree-Industrial (GDOT) The reconstruction and widening of over 2.5 miles of this major thoroughfare is substantial and comprises of several large intersections and a roundabout. As part of the project, a multi-use path is being installed along one side of the roadway and a sidewalk will be installed on another, both of which will be properly lit, along with the roadway. Due to narrow ROW and presence of many utilities, this presents many interesting underground and overhead challenges throughout the project. The project spans two cities and ranges from commercial to residential, making the lighting objectives quite different. In-depth analysis is necessary to make sure lighting does not end up where it is not desired, such as in the sensitive residential areas, while also meeting the recommended values for the wide roadway. Floyd is responsible for all CADD design, including photometric plans, construction plans and details.

CADD Designer for Solar Lighting – SR 99 at SR 25 - GDOT. Deemed a high priority project by Management, a roundabout will be created in the place of an existing three-legged intersection. Without local support for paying the lighting bill, the Department will instead go to a completely solar lighting design. Due to the presence of overhead transmission lines, historical boundaries, and heavy forestry at the roundabout, finding a location for the solar array is challenging. Even after identifying a nominal location, a difficult decision was made to eliminate many very tall trees which would cast a shadow over the array during much of the day, hindering the design, which is to nominally create the system to be self-sufficient for up to ten days. Floyd is responsible for photometric plan preparation, construction plan preparation and details.

Assistance Designer for SR 247 at SR 247 Spur for Georgia DOT. An existing high-speed three-legged intersection is being reconstructed to a roundabout, of which lighting is to be provided. Because of the high-speed approach legs, there must be careful consideration for approach lighting along each leg to ensure drivers are aware of the upcoming round-about, so they slowdown in time. Floyd is responsible for preparation of lighting plans, photometric plans, and details.

Assistant Designer for SC 161 at US 321 Roundabout for South Carolina DOT. An existing high-speed three-legged intersection is being reconstructed to a roundabout, where lighting is being provided. Because of the high-speed approach legs and presence of an existing grocery store in one of the quadrants, approach lighting along each leg is being carefully considered to ensure drivers are aware of the upcoming roundabout. Floyd is responsible for preparation of lighting plans, photometric plans, details and to ensure plans are done in accordance with SCDOT Plan and Presentation Guide.

Assistant Designer for I-26 Widening Between MM 85-101 for SCDOT Sixteen miles of I-26 is being expanded to accommodate an additional lane in each direction from mile post 85 to 101 north of Columbia, South Carolina. As part of the project, two interchanges are being revised which include full lighting design which Wi-Skies is responsible for designing. Additionally, Wi-Skies will design and implement a new state of the art Weigh-In-Motion (WIM) system in the northbound direction. Floyd is responsible for all CADD design, including photometric plans, construction plans and details.

Assistant Designer for Experimental Daytime Lighting at both I-85 at SR 237 and I-285 at SR 13 for GDOT. As part of ongoing high-level research work with IES, GDOT and other agencies, Floyd is leading the effort for all the CADD design with the daytime lighting within short tunnels, which are considered to be under 400'. Measuring of over a dozen tunnels has led to the belief that the amount of daytime lighting recommended within short tunnels is excessive. As part of this effort, GDOT has chosen two tunnels which certainly need some sort of daytime lighting and tasked him to provide what he believes will be the minimum amount of lighting necessary within them. The team is putting together full lighting plans to accomplish this and will verify the results in the field before it is ultimately accepted. From these tunnels and others, the hope is that GDOT can revise policy based on these findings, even before international policy is revised.

Assistant Designer for Buford Springs Connector at Peachtree St Roundabout Lighting. As part of a private development, the existing exit and entrance ramps from I-20 at the Buford Springs Connector to Peachtree St will be reconstructed to terminate into a roundabout before reaching Peachtree St. The roundabout also incorporates Inwood Drive and an adjacent parking lot into the design, culminating in four total legs. Floyd's responsible for all CADD design, consisting of photometric plans, lighting plans and details. The lighting design will optimize lighting within the roundabout, along with lighting on all approaches, including tie-ins to existing lighting on both the exit ramp and the entrance ramp to Buford Springs Connector. Lighting at the intersection of Peachtree St is also being evaluated due to the revised tie-in. Additionally, existing Service Points will be updated for the new lighting load.

CADD Designer for Lake Charles Regional Airport Electrical Rack Relocation in Lake Charles, LA. Lake Charles Regional Airport experienced a hurricane in 2013 which destroyed a portion of the electrical system powering their parking lot lighting and FA helicopter building. At the time, it was decided to create a temporary electrical rack to power these loads until a more suitable solution could be put in place. Now, Lake Charles Regional Airport is completing several parking lot improvements and turning one of its parking lots into a rental car parking lot. As part of these improvements, the temporary electrical rack will be relocated and new loads for electric gate operators will be added. Floyd is responsible for plan preparation and details.

CADD Designer for Lancaster Lane and Londonderry Way Pedestrian Lighting in Union City, GA. Union City, in-an-effort to improve pedestrian lighting, is deciding to install decorative pedestrian lighting fixtures along Lancaster Lane and Londonderry Way. An initial layout was provided by another firm and it was up to Katie to determine if this layout would satisfy lighting requirements put forward by AASHTO.

It was determined that the layout and lumen output of the fixture proposed would not provide adequate illumination for the safety of pedestrians in this area. A brighter fixture is being proposed within the same style of fixture the Union City is specifying and the spacing along these roads has been updated to meet recommended lighting levels. Floyd is responsible for construction plans, photometric plans, and details.

Assistant Designer for Bell Rd at Old Homestead Trail Roundabout Lighting in Johns Creek, GA. The City of Johns Creek is building a 192-acre community park between Bell Road and the Chattahoochee River. A roundabout, which Wi-Skies is responsible for lighting, is being constructed on at this location on Bell Road with the south leg of the roundabout being the entrance to the park. The north leg of the roundabout is the entrance to the gated subdivision, Old Homestead Trail. Since this is an existing residential area, but also will become a busy pedestrian area as bikers and walkers will be entering the park, consideration had to be made to limit spill lighting for the residents while generating enough light within the roundabout and crosswalks for pedestrian safety. In addition to existing overhead distribution lines which have clearance requirements, limitations on right of way, and limitations with the entryway to the Old Homestead Trail subdivision, light pole placement presented a challenge. After discussion with the City of Johns Creek, the lighting design was developed for two scenarios: the initial design for before the park is built (with Low Pedestrian classification) using dimming for all of the luminaires and an increased light level after the park is constructed in the future, where the pedestrian classification will become Medium, where the luminaires will be adjusted to full lumen output. Floyd oversaw all CADD activities including preparation of lighting plans, photometric plans and details.

Assistant Designer for Hames Rd at Willowcreek Overlook Roundabout Lighting (Cherokee County, GA). An existing three-legged intersection in the middle of a residential area is being converted to a roundabout. As the area is also littered with many large trees and distribution lines, which have minimum clearance requirements, light pole placement was limited. Additionally, the area in the proximity of residences near the roundabout, created concern over spill lighting. These areas of concern were carefully analyzed to ensure there was minimal or no impact to the residences in the area. To save cost, approach lighting on some of the legs was recommended for removal, where adequate visibility would be present to drivers approaching in that leg from an AASHTO safe stopping distance. Floyd led the CADD design including preparation of lighting plans, photometric plans and details.

Assistant Designer for Seven Hills Blvd at Naturewalk Parkway Roundabout Lighting - Paulding County, GA. A large roundabout is being designed on Seven Hills Boulevard at the entrance to two large housing complexes. Seven Hills Boulevard is a heavily trafficked collector road with a multi-use trail on the south side. There are also sidewalks and multi-use trails going into each subdivision with crosswalks at each leg of the roundabout. Seven Hills Boulevard is currently continuously lit; therefore, Wi-Skies lighting design must be implemented into the middle of the current roadway lighting design, while not interrupting the uniformity along the roadway. Careful consideration was made with regards to the approach legs of the roundabout on Seven Hills Boulevard to remove some of the existing lighting that would be redundant or excessive to the proposed roundabout lighting. Floyd led the CADD design including preparation of lighting plans, photometric plans and details.

Assistant Designer for Rosebud Road at Brushy Fork Roundabout Lighting in Gwinnett County, GA. An existing intersection in the middle of a residential area is being converted to a roundabout, in which spill lighting becomes a concern to the residences due to the proximity of residences to the roundabout. These areas of concern were carefully analyzed to ensure there is minimal or no impact to the residences in the area. As the area is also littered with many large trees and distribution lines, which have minimum clearance requirements, placing poles is complicated. Therefore, coordination is necessary with local utility company throughout the design process. As a cost savings venture, approach lighting on some of the legs was recommended for removal, where adequate visibility would be present to drivers approaching in that leg from an AASHTO safe stopping distance. Floyd oversaw all CADD activities including preparation of lighting plans, photometric plans and details.

Assistant Designer for I-20 EB at Maynard Terrace Roundabout Lighting (GDOT). The existing exit ramp from I-20 onto Maynard Terrace is being reconstructed to terminate into a roundabout, which is a residential wooded and historical area. Because of this, lighting the roundabout is of critical importance as is limiting the spill lighting outside of the roundabout area. Further complicating this is the presence of a multi-use path which crosses the roundabout on one of the approach legs. The lighting design optimized lighting within the roundabout, along with the approaches along all four legs, while tying into existing continuous lighting along the bridge as well as incorporated lighting along multi-purpose walkway and crosswalks in the roundabout. Floyd oversaw all CADD activities including preparation of lighting plans, photometric plans and details.

Assistant Designer for I-285 at SR 400 Interchange Lighting and ITS Power (GDOT) As part of the largest design-build effort the state has ever taken on, Floyd assisted the designer in designing the lighting and electrical ITS work for the interchange, comprising of several hundred devices. This interchange is the busiest and fastest-growing interchange in the Atlanta area, subject to traffic volumes of over 250,000 vehicles daily. The overall design intent is to provide collector-distributor (CD) lanes throughout the project limits for a total of 8.3 miles along both SR 400 and I-285, which will eliminate much of the congestion in the area due to a poor existing interchange layout. Throughout the design process, several lighting and ITS design alternatives were designed and considered. The lighting design also included daytime lighting installations under three tunnels.

CADD Designer for Lighting for SR 120 from SR 141 to Peachtree-Industrial (GDOT) The reconstruction and widening of over 2.5 miles of this major thoroughfare is substantial and comprises of several large intersections and a roundabout. As part of the project, a multi-use path is being installed along one side of the roadway and a sidewalk will be installed on another, both of which will be properly lit, along with the roadway. Due to narrow ROW and presence of many utilities, this presents many interesting underground and overhead challenges throughout the project. The project spans two cities and ranges from commercial to residential, making the lighting objectives quite different. In-depth analysis is necessary to make sure lighting does not end up where it is not desired, such as

in the sensitive residential areas, while also meeting the recommended values for the wide roadway. Floyd is leading the entire CADD design effort by overseeing the photometric plans, utility coordination, construction plans and details.

CADD Designer for Solar Lighting – SR 99 at SR 25 - GDOT. Deemed a high priority project by Management, a roundabout will be created in the place of an existing three-legged intersection. Without local support for paying the lighting bill, the Department will instead go to a completely solar lighting design. Due to the presence of overhead transmission lines, historical boundaries, and heavy forestry at the roundabout, finding a location for the solar array is challenging. Even after identifying a nominal location, a difficult decision was made to eliminate many very tall trees which would cast a shadow over the array during much of the day, hindering the design, which is to nominally create the system to be self-sufficient for up to ten days. Floyd is responsible for construction plans, details, utility coordination and service point locations.

Assistant Designer for I-85 at SR 18 Interchange Lighting (GDOT) The existing slip-diamond interchange intersection is being reconstructed to terminate into a roundabout at each ramp terminal and an additional roundabout is being constructed a half mile away for Wi-Skies is responsible for the complete lighting plans, specifications, voltage drop and photometric calculations. The existing high mast lighting at the interchange will be salvaged as much as possible, however, several of the towers will be retrofitted to LED fixtures to optimize the lighting both to the I-85 mainline, but also to the crosswalks within the roundabouts. While these tower locations will not change, the cable and conduit feeding the towers will be destroyed during the roadway reconstruction, meaning circuits must be traced and re-routed where necessary to ensure all existing lighting remains in operation after construction. Floyd is responsible for plan preparation, photometric plans and details.

Assistant Designer for Roundabout Lighting at SR 9 at Dawson Forest Rd for Georgia DOT. Two new roundabouts will replace two high speed three-way intersections in a rural part of Dawson County, GA. The roundabouts and the roadway between them are designed to be properly, but minimally lit to meet rural lighting standards for the roundabouts. Additionally, due to the presence of bats in the area, vertical illuminance had to be analyzed along the ROW line along the entire project limits. These vertical calculations were done every 10' to ensure there were no concerns whatsoever along the ROW line, as this was an FHWA requirement. Floyd was responsible for all the CADD design, details and quantity review.

Assistant Designer for Pedestrian Bridge over Castleberry Rd in Cumming, GA. The City of Cumming is constructing an elevated pedestrian bridge to the City Fairgrounds from the parking lot across Castleberry Rd. Ramps will tie into the existing sidewalk and lead up to a covered portion of the bridge over Castleberry and tie into an existing elevation difference on the other side. All the ramps, adjacent sidewalks and covered portion of the bridge all require pedestrian lighting, accomplished by several light fixture types. Additionally, there are variable message signs on both sides of the pedestrian bridge to alert drivers along Castleberry of pertinent information. Floyd is responsible for photometric plans, construction plans and details.

CADD Designer for Solar Lighting at CR 238 at Industrial Drive/Cool Springs Rd Roundabout for Georgia DOT. The existing intersection is being converted to a four-legged roundabout, which requires lighting. Due to the limited power options in the rural area, power for this lighting must be accomplished by other means, namely solar as well as potentially wind energy. Finding the square footage of land necessary for the solar panels which will not become shadowed is a challenge within itself due to wetlands, trees and potential businesses in the future. The objective to create the first completely off-grid lighting project within the state which would be self-autonomous for ten days or more. Floyd is assisting the lead Engineer in designing the alternative energy solution along with assisting the lighting design, consisting of photometric calculations, lighting plans and specifications.

Assistant Designer for Daytime Lighting along both SR 11 and SR 53 under SR 316 (GDOT). These two separate projects will replace existing at-grade intersections are being converted to two interchanges, under which both require daytime lighting. Because of the County's limited funds for maintaining such an expense, experimental daytime lighting is being considered under the tunnel, which is based on our research with Georgia DOT. Alternative energy will also be considered to assist with power costs. Floyd will be responsible for the CADD design, details and conformance.

Assistant Designer for SR 53 at SR 183 Roundabout Lighting for Georgia DOT. GDOT is revising a three-legged intersection to a roundabout due several high-speed accidents. SR 183 terminates into SR 53 at the intersection while SR 53 continues east to west, all of which are rural roads with speed limits of 55 MPH, with only yield signs at each leg, creating a dangerous situation. Add in that drivers along westbound SR 53 experience a blind curve entering the intersection without the need to yield makes it treacherous. The new roundabout will force traffic in all directions to slow down to at least a crawl before proceeding. The addition of lighting in the rural and very dark area will also assist visibility and therefore safety to the roundabout's performance. Floyd is responsible for the CADD design to develop final plan sheets, verify quantities and verify GDOT CADD conformance.

Assistant Designer for Lighting at I-75 and I-16 Interchange – Georgia DOT This existing interchange is being overhauled as part of a multi-phase construction project totaling six miles of interstate, all of which will be continuously lit. There are three smaller interchanges, all of which require complete lighting or modifications to complete lighting. Additionally, five total tunnels will require supplemental daytime lighting. There is a lot of pedestrian lighting going in this area as well as the city continues its beautification approach, especially near the River. However, there are also several locations which are sensitive to light pollution, such as residences or other environmental concerns, all of which are being analyzed to verify there is minimal concern. Floyd is overseeing the CADD design, including photometric plans, construction plans, details and quantities.

Assistant Designer for Stand-alone Lighting SR 166 at SR 5 Roundabout (GDOT). This stand-alone lighting project will provide lighting at an existing roundabout with a history of problems. The roundabout is in a rural area; however, is the intersection between two major high-speed routes in the area. When the original roundabout was constructed, it had a single high mast tower placed in the

middle of the roundabout. This high mast tower was subsequently struck down by a vehicle, thus proving providing lighting in the middle of a roundabout is not an effective solution as it does not afford the driver enough advanced warning of the upcoming roundabout. Therefore, a more effective design using several 40' poles placed around the outside and in advance of the roundabout is the solution we are deploying. As there is no other roadway work as part of this lighting improvement, Joe is responsible for overseeing a survey and utility investigation and a myriad of other construction issues, especially dealing with the many distribution lines present at the roundabout. Floyd is responsible for CADD design and details.

CADD Designer for Pedestrian Bridge over Northside Dr at Mercedes-Benz Stadium. As part of a design-build project, Wi-Skies is designing the lighting for a pedestrian bridge being constructed safely allow pedestrians to cross the busy six-lane roadway immediately adjacent to the new Atlanta Falcons stadium. The bridge spans a total of almost 1000' of walkable path, including a 140' long covered portion as it crosses Northside Drive. All of the pathway is being lit to high pedestrian traffic lighting design criteria, including vertical illuminance design criteria, which is being accomplished with a combination of pedestrian scale LED fixtures for outside of the covered portion and architectural ceiling mounted fixtures inside the covered portion. The sidewalk areas along the perimeter of the west loop are also being lit to ensure good visibility of fellow pedestrians while not providing a glare concern to the drivers along Northside Dr. In addition to the pedestrian lighting, Wi-Skies is also responsible for designing the impressive architectural lighting features on, in and around the bridge. Both sides of the bridge will have continuous multi-color rope lights which span a total of over 2000'. Additionally, accent lights are being provided at crucial areas, such as the bridge decorative columns and outer aluminum skin of the bridge as it crosses Northside Drive All of the decorative features will be centrally controlled for the client to have the ability to change the colors freely, depending on the venue. The architectural features of this bridge will mesh well with the new stadium's architectural features, as it is immediately adjacent to the new stadium, which will be aerially viewed often to show off its architectural features, yet the lighting on the bridge will set it apart. Floyd is responsible for all the CADD design and details.

Assistant Designer on I-285 WB at SR 6 DDI (GDOT). The Department is reconstructing an existing slip diamond interchange to a diverging diamond interchange (DDI) in an effort to greatly reduce traffic concerns at the interchange. Due to the proximity to the Atlanta airport, the use of high mast towers is not possible. Further, the City's desire to use decorative fixtures not intended for roadway use put on us to work with multiple lighting manufacturers to develop fixtures and poles which will meet photometric requirements for the busy roadway as well as meet the City's decorative desires. The existing bridge over I-285 will not be reconstructed as part of the project, which makes lighting the 260' bridge area span challenging. This is especially critical in the area where drivers are on the opposite side of the roadway between crossovers. Additionally, there is a concurrent project consisting of many decorative lighting features that the design team is responsible for providing power to.

Assistant Designer SR 9 at SR 60 Roundabout Lighting for Georgia DOT. An existing four-legged high-speed divergent intersection is being revised to a roundabout, the center of which will be an ancient burial site, known as Stone Pile. Because of this, the significance of adequate advanced lighting is critical to the safety of the roundabout's operation. At the same time, the area is sensitive to light pollution due to the adjacent residences and historical boundaries. To overcome the spill light concern while also providing adequate lighting, the design will utilize low lumen output fixtures at a low mounting height and the limits of lighting will be extended as much as possible to ensure as much advanced visibility to the driver approaching in any direction. Floyd is responsible for plan development, CADD design for final plans and photometric design.

Assistant Designer for City of East Point Main St Streetscape. The City of East Point is rehabilitating a mile segment of sidewalk along the west side of Main St (State Route 14 & 139, US 29) and Wi-Skies is designing the lighting to be included. The scope is to provide lighting along the sidewalk areas only without negatively impacting the drivers along the State Route, as is a Georgia DOT requirement. This is typically a challenge, as pedestrian scale light fixtures are designed to throw light in all directions with little or no cut-off features, especially with acorn style fixtures. To combat this, we use lower lumen output fixtures nominally. We also try to increase mounting height to get out of the driver's field of view when measuring the glare metric, the maximum veiling luminance ratio (MaxLv). Calculation of this ratio is necessary to ensure drivers are not blinded by the pedestrian scale light as they drive through the corridor. All the lighting work is being done in accordance with Georgia DOT standards. Floyd is leading all the CADD design and plan preparations.

Assistant Designer for SR 347 at New Bethany Rd Roundabout Lighting for Georgia DOT. SR 347 is located directly south of Lake Lanier and serves many of the lakefront businesses along the lake and is being re-aligned and expanded. As part of the project, the intersection of SR 347 with New Bethany Rd is being converted to a roundabout and moving several hundred feet north. As the area near the lake, it is sensitive to light pollution and hence a low lumen LED fixture is being utilized at 30' to minimize light pollution concerns while also meeting horizontal illuminance requirements for the roundabout and vertical illuminance requirements at each crosswalk.

Assistant Designer for Roundabout Lighting at SR 52 at SR 183 Roundabout (GDOT) Wi-Skies is providing a lighting design, including photometric calculations, plans, specifications and quantities, to a three-legged roundabout at the rural intersection of SR 52 at SR 183 in Dawson County, GA. The existing intersection is being revised to a roundabout due several high-speed accidents, for which the roundabout will force traffic in all directions to slow down to at least a crawl before proceeding. The addition of lighting in the rural and very dark area will also assist visibility and therefore safety to the roundabout's performance. Floyd will be responsible for all the CADD design and plan preparations.

FLOYD L. POTTER

Assistant Designer for Lighting along SR 30/90/US 280/16th St from I-75 to Midway Rd in Cordele, GA for Georgia DOT. Due to the heavy volume of truck and other traffic at the interchange due to the large commercial presence, the Department is widening the roadway from the northbound interchange ramp intersection to the Midway Rd intersection, where a Pilot exists. Due to the high pedestrian traffic in the area, lighting is being extended from the interchange to Midway. As the existing lighting system is HPS, the new portion will be HPS to match. In addition to the roadway being analyzed for proper luminance through this half mile segment, new sidewalk facilities will be analyzed, including both horizontal and vertical illuminance requirements. The intersection at Midway has transmission lines running along the west side of the road, creating a large area where light poles cannot be installed and therefore, creating uniformity issues within the intersection. Floyd is the lead CADD designer for this project, providing final photometric plans, details, and quantities for the new lighting system.

Assistant Designer for I-85 at SR 18 Interchange Lighting (GDOT) The existing slip-diamond interchange intersection is being reconstructed to terminate into a roundabout at each ramp terminal and an additional roundabout is being constructed a half mile away for which Floyd was responsible for the CADD design, plan preparation for both photometric plans and construction plans, details and quantities. The existing high mast lighting at the interchange will be salvaged as much as possible, however, may be modified to optimize the lighting both to the I-85 mainline, but also to the crosswalks within the roundabouts.

Assistant Designer for SR 12 at Cove Lake Road Intersection Lighting for Georgia Department of Transportation An existing four-way intersection is being expanded due to increased capacity demands. Full intersection lighting is being provided as well to combat an ongoing trend of increased pedestrian and vehicular strikes near the intersection due to a bus stop at the intersection. Floyd is overseeing the CADD design, details, and plan preparations for this project.

CADD Designer for SR400 @ SR53 Continuous Flow Intersection for Georgia DOT. Floyd prepared photometric plans, full lighting plans, details and quantities for existing intersection which is being changed to a Continuous Flow Intersection (CFI). The basis of a CFI is to eliminate the need for a dedicated left turn arrow at a normal signalized intersection. In order to accomplish this, the left turn movement must be done several hundred feet prior to the main intersection by creating a small crossover intersection. For lighting purposes, these smaller adjacent intersections must be well lit, as well as the main intersection. This creates a-very-large area which must be continuously well lit with good uniformity. Since these intersections are generally busy, the main challenge is providing enough light across the entire intersection when the width of the intersection is so large. Additionally, this intersection had several crosswalks which had to be analyzed to alleviate any pedestrian conflicts.

Assistant Designer for Roundabout Lighting at US 278 at SR 142 (GDOT). Wi-Skies is the responsible electrical engineer for lighting plans for a roundabout in Covington, GA. This roundabout is intended to slow down the traffic in a high-speed rural area while also providing continuous flow to the US 278 traffic by including dual lanes for three of the four legs. These additional lanes create additional setback, coupled with the City of Covington's preference of a maximum mounting height of 30', posed challenges to meet vertical illuminance recommendations in the middle roundabout lane. However, in using a Type IV LED, these challenges were met.

Assistant Designer for Jeffersonville Road and Millerfield Road Lighting (City of Macon/Bibb County). As part of a large-scale area of urban improvement, Joe is leading the lighting design for two segments which encompass a total of 1.8 miles of urban collector roadway. The five-lane roadway cross-section consists of dual lanes in each direction with a middle turn lane throughout. To complicate the design, there are several smaller roadways and driveways littered throughout the project, a continuous multi-use path along one side with a sidewalk on the other of the roadway throughout. This creates a challenge of providing good uniformity throughout a wide area using a large setback. Especially challenging is meeting vertical illuminance requirements along the multi-use path, sidewalk and at the many crosswalks throughout the project while also providing recommended average luminance and uniformity in the center dual turn lane. This is all being accomplished by using LED fixtures mounted at a maximum mounting height of 45', due to Macon-Bibb's maintenance limitations. Floyd completed the CADD design, details, and plan preparation as per GDOT Plan Presentation Guide.

Assistant Designer for Roundabout Lighting - SR 195 at Smithville Rd and 2nd St for Georgia Department of Transportation. Two legs of an existing six leg intersection are being cul-de-sac'd, leaving the remaining four legs in an extended roundabout design. This configuration brings about unique challenges in providing lighting uniformly to all the internal segment and crosswalks. Floyd led the effort to complete lighting plans and performed quantity calculations.

Project Manager/Designer for Jeffersonville Road and Millerfield Road Lighting (City of Macon/Bibb County) As part of a large-scale area of urban improvement, Floyd was lead designer for two segments which encompass a total of 1.8 miles of urban collector roadway. The five-lane roadway cross-section consists of dual lanes in each direction with a middle turn lane throughout. Design included drainage studies, drainage calculations and design, curb & gutter design, sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, landscaping coordination, horizontal and vertical design, Right-of Way Plans, typical section design, staging plans, driveway design, and culvert design. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Hazlehurst Street Improvements (City of Hazlehurst, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two-lane street with failing base and pavement, inadequate drainage and flooding problems. Floyd performed a drainage study and pinpointed the drainage problems and solved the drainage issue. After the

drainage issue was resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, driveway design, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Lyons Street Improvements for the City of Lyons, Georgia. Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two-lane street with failing base and pavement, inadequate drainage, and flooding problems. Floyd performed a drainage study and pinpointed the drainage problems and solved the drainage issue. After the drainage issue was resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, driveway design, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Dodge County Street Improvements (Dodge County, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two- lane street with failing base and pavement, inadequate drainage, and flooding problems. Floyd performed a drainage study and pinpointed the drainage problems and solved the drainage issue. After the drainage issue was resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, driveway design, Railroad permitting, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Vidalia Street Improvements (City of Vidalia, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two-lane street with failing base and pavement, inadequate drainage and flooding problems. Floyd performed a drainage study and pinpointed the drainage problems and solved the drainage issue. After the drainage issue was resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, driveway design, water & sewer relocation design, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Vidalia Streetscape (Transportation Enhancement) (City of Vidalia, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two to four lane street with cracked sidewalk with failing base, failing pavement base, inadequate drainage and flooding problems. Floyd performed a study and pinpointed all the problems and issues. After the issues were resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, decorative sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, decorative crosswalk design, landscaping coordination and design, decorative street lighting coordination, water & sewer relocation design, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Eastman Streetscape (Transportation Enhancement) (City of Eastman, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of a two-lane street with cracked sidewalk with failing base, failing pavement base, inadequate drainage and flooding problems. Floyd performed a study and pinpointed all the problems and issues. After the issues were resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, decorative sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, decorative crosswalk design, landscaping coordination and design, decorative street lighting coordination, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for McRae Streetscape (Transportation Enhancement) (City of McRae, Georgia). Floyd was lead designer for this urban collector roadway. The existing roadway consisted of four lane street with cracked sidewalk with failing base, failing pavement base, inadequate drainage and flooding problems. Floyd performed a study and pinpointed all the problems and issues. After the issues were resolved Floyd designed and upgraded the streets that included an upgraded drainage system, curb & gutter design, decorative sidewalk design, erosion and sedimentation control, signage and marking, utility coordination, horizontal and vertical design, typical section design, decorative crosswalk design, decorative retaining wall design, ADA ramp design, decorative street lighting coordination, water & sewer relocation design, prepared bid documents and project management. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

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Project Manager/Designer for Lee County East-West Connector (Lee County, Georgia). Floyd was lead designer for this rural roadway that was approximately five miles of new location. The proposed design consisted of a new two-lane roadway with several drainage basins. Floyd designed the connector road that included several drainage systems, bridge culvert analysis and design, bridge coordination, erosion and sedimentation control, signage and striping, horizontal and vertical design, typical section design water line design, and utility coordination. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.

Project Manager/Designer for Monroe Bypass (City of Monroe, Georgia). Floyd was lead designer for this rural roadway that was approximately four miles of new location. The proposed design consisted of a new two-lane roadway with several drainage basins. Floyd designed the bypass that included several drainage systems, bridge culvert analysis and design, bridge coordination, erosion and sedimentation control, signage and striping, horizontal and vertical design, typical section design water line design, and utility coordination. The design was done in Caice and Microstation software, all design was done in accordance with Georgia DOT standards and specifications, AASHTO and ADA requirements. Plans were done in accordance with Georgia DOT Plan Presentation Guide and Electronic Data Guidelines.