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То:

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Subject:

Central Polk Parkway East – Protecting <u>The Natives</u> Environmental Restoration Center Honoring a Conservation Easement with Environmental and Cultural Importance to Florida

Dear Ms. Heywood,

I am a former NASA physicist, graduate of the University of Florida, and CEO of a new environmental AI company called Ecodash.ai founded here in the State of Florida. I write to you with respect for the Florida Department of Transportation (FDOT), and the honorable work of its engineers and planners, seeking to guide decision making for important environmental and

cultural preservation. To balance transportation needs with environmental stewardship, I am reaching out re: Central Polk Parkway East toll road alignment. I respectfully urge you to adjust the route to eliminate or minimize impact on "The Natives" nursery and its adjoining conservation easement (see Figure 1 below for exact location). The lands in question are near Snell Creek at the western edge of the Lake Marion Creek Wildlife Management Area (Central Polk Parkway Update). This letter outlines the scientific, economic, and cultural merits of preserving this invaluable site, and proposes a collaborative path forward to achieve project goals while safeguarding an irreplaceable environmental resource.



Figure 1 - Above, highlighting The Natives lands in question, versus a map of FDOT identified Environmental Features (Environmental Features). Lands protected by conservation easement with economic, historic, and cultural importance for Florida are under direct severe threat by roads **B** and **C**.

Ecological and Scientific Significance of The Natives lands

Unique Habitat & Biodiversity: The area surrounding *The Natives* nursery is part of the Lake Wales Ridge, an ancient 100-mile sand ridge harboring distinctive upland habitats. This ridge is a living museum of Florida's natural history – a remnant of the original peninsula that existed when most of the state was under water. It fosters **rare and imperiled species** found virtually nowhere else, such as the Florida scrub-jay and the Eastern indigo snake. The Bissett property itself straddles diverse ecosystems, from dry scrub uplands to wetlands. Notably, Snell Creek runs near the nursery – a *seepage stream* fed by shallow groundwater. Such streams are

exceedingly rare in Florida. They support unique plants and aquatic life. Any alteration to their flow or water quality could mean the loss of species that depend on these delicate conditions. Mrs. Nancy Bissett has expressed concern that the toll road, as currently mapped, could **degrade Snell Creek** – an outcome that could disrupt the entire connected wetland system.

Environmental Value of Rare Species & Ongoing Scientific Research: The Natives nursery and its environs have proven to be scientifically significant. In fact, new species have been discovered on this land. Nancy Bissett and a colleague discovered Dicerandra modesta – the blushing scrub balm – on the Lake Wales Ridge (Central Polk Parkway - Update). This rare mint species with pink blooms was unknown to science before, underscoring how biologically unique and understudied this area remains. Mrs. Bissett's keen botanical work has also led to finding a new scrub mint species and a new Carphephorus (commonly called "Pineland purple") in Central Florida (Nancy Bissett « Florida Association of Native Nurseries Seminars). These discoveries are not merely academic; they indicate that the Ridge and surrounding habitats are still yielding new insights and require careful management. A major roadway could foreclose opportunities for future research and the chance to protect species before they become endangered.



Figure 2 - Above, 54 wild species have been officially observed on and adjacent to the Natives site, according to a geospatial query of iNaturalist research grade observations between 2016-2024 (Global Biodiversity Information Facility). Here I report that **Asclepias curtissii** is a State-endangered wildflower that is endemic to the region around The Natives (Florida Wildflower Foundation). **Sacoila lanceolata** is a Florida-native orchid that is "critically imperiled in Florida" (North American Orchid Conservation Center).

Few places in Florida offer such a living laboratory for scientists, students, and conservationists to observe and learn. Preserving this site aligns with FDOT's own commitment to avoid environmentally sensitive areas to the maximum extent feasible. My arguments also go beyond just protecting the rare natural ecosystems on these lands, as valuable alone as they are.

Restoration and Conservation Leadership: Beyond its wild habitats, *The Natives* is an active social center for ecological restoration across the State of Florida. Nancy Bissett is a highly respected horticulturist, restoration ecologist, and botanist who, along with her husband Bill, established *The Natives*, *Inc.* in 1982 on this property (Green Horizon Land Trust Awards). For over 40 years, this nursery has grown *Florida native plants* and developed techniques to restore the very upland ecosystems that the Parkway may traverse. Mrs. Bissett has pioneered methods for re-establishing scrub, sandhill, and flatwoods habitats – from site preparation and planting to direct-seeding native groundcovers and controlling invasive weeds. Her expertise has assisted state agencies, water management districts, mitigation banks, and landowners in restoring Florida's native landscapes. In many ways, Nancy Bissett and her team have dedicated their lives to a mission of restoring previously destroyed environments – with a unique attention to artistic and aesthetic detail that curates engaging and uplifting nature experiences for all people.

In short, *The Natives* nursery is not just a business at the lands targeted for FDOT roadways; it is a hub for nature restoration across Florida. It grows an impressive array of over 150 native Florida plant species (*The Natives Profile on FANN*). I have personally visited this nursery and consider it to be a key partner for large-scale environmental restoration projects projected across Florida through 2030 and beyond. The nursery grows all kinds of rare species that are cultivated for conservation projects statewide (*Florida Wildflower Foundation*). Damaging this site would disrupt ongoing scientific work and nullify decades of accumulated knowledge about how to heal Florida's degraded lands.

Economic and Educational Value

Ecosystem Services & Cost Savings: Conservation of *The Natives* nursery and its landscape is not at odds with economic interests – on the contrary, it serves them. FDOT's own 2014 study recognized that roadside vegetation is a vital asset worth nearly half a billion dollars in ecosystem services (such as stormwater runoff prevention, erosion control, and pollination) (Economic Impact of using more native plants on our roadways). The study found this value could increase to \$1.5 billion if sustainable vegetation management and native wildflower plantings were adopted broadly. *The Natives* has been a key partner in exactly this approach. By supplying native plants and expertise, the nursery helps create roadside and restoration plantings that reduce maintenance costs (less mowing, no fertilizers needed) and improve

environmental outcomes – a fact demonstrated in collaborative projects. For example, when the renowned Archbold Biological Station constructed new facilities, they enlisted Nancy Bissett to design and install 100% native landscaping around them (The Scrub Blog – Nature and Science from Florida's Heartland). She grew and planted nearly 12,000 native plants of 75+ species on 2 acres, creating a flourishing landscape that requires no irrigation (saving an estimated ¾ million gallons of water annually) and no chemical fertilizers. This project now stands as a living exhibit, educating visitors on sustainable Florida-friendly landscaping. I have visited multiple environments designed by Nancy Bissett, to instruct my work in developing AI for large-scale native planting design and environmental restoration. The economic lesson is that protecting sources of native plant material and know-how, like *The Natives*, pays off in the long run through ecosystem services, reduced infrastructure maintenance costs, and greater industrial innovation.

Local Economy and Green Industry: The Natives nursery is a contributor to the local and regional economy. It provides jobs in the green industry and supports Florida's growing native plant market – a market that FDOT and municipalities increasingly rely on for environmentally conscious landscaping. By growing difficult-to-propagate native species, the nursery ensures availability of plant stock for public projects, parks, mitigation sites, and private developments that need to adhere to Florida-friendly landscaping principles. The nursery's consulting and design services have been employed by developers and corporations to balance development with ecological restoration. In many cases, this has allowed economic development to proceed in a more sustainable manner by offsetting impacts elsewhere. In essence, The Natives functions as a mitigation partner for Florida's development – its very presence has enabled countless permits and projects to satisfy environmental requirements by providing the needed restoration expertise and plant materials. Losing even part of this facility to a toll road could hamper ongoing restoration contracts and future opportunities to economically mitigate infrastructure impacts with native landscaping. It is a classic case of being "penny wise and pound foolish" to sacrifice a resource that ultimately helps save tremendous tax money and preserve Florida's natural heritage in infrastructure projects statewide.

Educational and Scientific Outreach: The Natives has accumulated immense ecological intelligence, which translates into economic value including through science and education. Nancy Bissett has published in scientific journals and presented at numerous conferences, sharing findings on restoration techniques and native plant propagation. She has also been an educator and mentor for decades – giving programs for the Florida Native Plant Society (FNPS), Florida Association of Native Nurseries (FANN), the Florida Wildflower Foundation, and the Florida chapter of the American Society of Landscape Architects. In 2019, she co-authored "Native Plants for Florida Gardens," a comprehensive guide on 100 native Florida wildflower plants, teaching gardeners and landscape professionals to incorporate natives and transform any

Florida property into a resilient ecosystem (<u>Florida Native Plant Society</u>). Much of the knowledge in that book and in her workshops is drawn directly from experiments and observations at *The Natives* lands. Additionally, the nursery welcomes students, researchers, and enthusiasts for hands-on learning (being one of the oldest native nurseries in Florida, established 1982).



Figure 3 - Above, from a Florida Native Plant Society presentation called <u>"Wild Design that Works"</u> by Nancy Bissett, **cultural leadership** rooted in research **performed on The Natives lands**. Many of the environments above were **designed and planted by The Natives**, including a wildflower planting for a children's hospital (bottom left) featuring the state wildflower, <u>Coreopsis leavenworthii</u>.

The Natives **living classroom** has also inspired professionals now working in environmental fields, including myself and collaborators across the State of Florida. We practically revere the spirit of work by The Natives for its bold artistic curation of natural ecosystems expressing both exceptional scientific intelligence and sensational wild beauty. Florida's Turnpike Enterprise and

FDOT stand to gain, not lose, by ensuring this hub of innovation and education remains intact – as it can continue to inform better practices for roadside management, mitigation planting, and conservation design on future projects.

Cultural and Community Importance

Beyond the scientific and economic factors, *The Natives* nursery and Mrs. Bissett's work represent a cultural asset to Florida. Nancy Bissett has been honored with awards from *The Nature Conservancy* and other environmental organizations for her lifelong contribution to Florida's flora. The Green Horizon Land Trust presented her with its **Blazing Star Award** in 2006 for "exceptional work with rare and endangered plants and plant communities," aptly recognizing her as someone who works for Florida "from the ground up" (Green Horizon Land Trust Awards).

Nancy Bissett of The Natives is a founding member of FANN and has served on the boards of FNPS, the Florida Wildflower Foundation, and Green Horizon Land Trust – institutions that are key partners in the state's conservation and land management efforts. In short, Mrs. Bissett is deeply woven into the fabric of Florida's conservation community.

The land also carries a conservation status. A portion of the Bissetts' property is protected under a conservation easement: a legal commitment to preserve natural conditions in perpetuity. This easement complements the adjacent public lands of Lake Marion Creek Wildlife Management Area. Routing a highway through or immediately adjacent to this easement would undermine that commitment and set a worrying precedent. Florida has invested heavily in conserving lands through easements and preserves; respecting those investments by aptly **avoiding** development on them during infrastructure planning is essential to maintain public trust in conservation law. Just as publicly owned preserves like Split Oak Forest have sparked widespread public concern when slated for road impacts (Florida Native Plant Society), the potential impact to *The Natives* has rallied community attention. Numerous citizens and organizations stand ready to support an alignment that safeguards this cultural and ecological treasure. Protecting it could uphold a commitment and legal requirement of pairing progress with environmental preservation – the idea that we do not have to forfeit our natural heritage to achieve transportation improvements.

Request for Action and Collaboration

In light of the above, I respectfully request that Florida's Turnpike Enterprise and FDOT reconsider the current proposed corridor and adjust the alignment to avoid direct impacts to *The Natives* nursery and its conservation easement. I fully understand that route selection is a complex process influenced by engineering, environmental, and community factors. However, I

am convinced that with creative planning, it is possible to meet the Parkway's transportation objectives without irreparable harm to this site. In previous planning studies, alternatives were identified that skirted the most sensitive areas; indeed, the officially approved plan from 2012 kept the alignment further from this vicinity. You also affirm that the corridor evaluation will seek to "avoid and minimize impacts to the greatest extent possible" regarding social, cultural, and natural resources. I urge you to hold true to that mandate, particularly for this site which holds outsized importance particularly for Florida's natural environment. Mitigations may include:

- Avoiding any development under B and C roadway proposals near *The Natives lands*: For the north-south range around this area, pursuing development closer to the A proposal would likely be least disruptive to environmental conservation and research.
- Buffering/Bypassing the Easement: In the worst case scenario, ensure roadway design curves around the nursery property and conservation easement boundary at a safe distance. A buffer or green underpass could be established to protect Snell Creek's hydrology and allow wildlife movement between the easement and WMA.
- Engineering Solutions to Minimize Footprint: In scenarios where avoidance is only partially achievable, consider design modifications such as elevated sections (bridges) over the ecologically sensitive swath, natural green noise abatement measures, and strategic placement of green stormwater facilities away from the creek. These can greatly reduce the impact on the nursery's microclimate and the creek's water quality.

The long-term value for environmental conservation in this case outweighs the short-term convenience of the initially straightest line on a map. Adjusting the route now can save FDOT from costly mitigation later and avoid the loss of a site that cannot be replaced once destroyed. As Mr. Ryan Kordek of the Polk TPO noted, the planning process should indeed try to stay out of existing conservation lands to the "maximum extent feasible". I respectfully ask that The Natives be given that same consideration as a de facto conservation land due to its easement and extraordinary ecological and economic value to the state. Personally, I believe the ecological knowledge that has been cultivated over many decades at that site to be worth several billions of dollars in economic growth for the State of Florida, when coupled with technology innovations that my company Ecodash.ai has developed. It is essential as a society that we master the ability to sustainably cultivate biodiverse ecosystems of plants, including for agriculture and landscape architecture, and also for long-term climate resilience and wildlife habitat restoration.

Commitment to Collaboration

Florida's Turnpike Enterprise has an opportunity to demonstrate how infrastructure projects can incorporate community input and environmental ethics early on, yielding a better outcome for all.

I stand ready to assist as needed. This could include facilitating meetings with environmental experts who know the site, providing data on species and water resources in the area, or helping to rally volunteers for any on-site mitigative work that might be required as plans proceed. You will find a willing ally in me for any effort to refine plans in a way that <u>protects</u> The Natives.



nursery in the National Historic Landmark of **Bok Tower Gardens** with over 100 species. Right, before environmental restoration highlighting the dramatic environmental change from The Natives.

University of Florida scientists, educators across the State of Florida, landscape architects, and local officials all recognize the significance of work done through The Natives. We are optimistic that FDOT and Turnpike Enterprise can find a creative solution that solves Polk County's transportation needs while honoring Florida's deeply rooted conservation values. This outcome – where a roadway is designed <u>around</u> irreplaceable resources – can further enhance FDOT's reputation as a custodian of Florida's environment, even as it builds needed infrastructure.

Conclusion: Protect The Natives for a More Natural Florida

Please re-evaluate the toll road's path with an eye toward conservation in this specific locale. The Natives lands are jewels of Florida's environmental landscape, offering benefits that far

exceed what can be measured on a simple cost-benefit ledger. The irony is too great that FDOT could actually choose to destroy a conservation easement established by a publicly-awarded environmental restoration leader across the State, whose nursery serves FDOT mitigation needs. The Natives is also a leading designer and grower of plants for *Bok Tower Gardens*. The Florida Turnpike Enterprise has heard extensively on the value of preserving Bok Tower Gardens. We must <u>not</u> lose the spirit of a cultural icon that has inspired environmental restoration across all of Florida. The Natives' discoveries, education, conservation, and leadership of ecosystem services through innovative land management are emblematic of next-generation ecological regeneration. Preserving The Natives site with careful attention secures this legacy for all. By adjusting the Central Polk Parkway East alignment to avoid direct disruption, we can avoid a regrettable loss and instead celebrate a win—win achievement down the road.

Thank you very much for your time and consideration of this request. I deeply appreciate the outreach that Florida's Turnpike Enterprise has conducted and your willingness to hear public input. I am confident that, working together, we can arrive at a solution that **honors both**Florida's transportation needs and its natural treasures. I would welcome the opportunity to discuss this matter further at your convenience. Please feel free to contact me at 954-740-0845 or lance@ecodash.ai to continue this important conversation.

Sincerely,

Lance Legel

CFO. Fcodash.ai