Introduction
The United States National Arboretum (USNA) will reposition and redevelop its Core landscape to give greater expression to its mission — connecting people to plants in one of the Capitol’s greatest open spaces — according to a vision that capitalizes on the cultural and ecological heritage of its 446-acre property, and sets forth practical and attainable recommendations for a sustainable future.

The primary study area is the Arboretum Core, a 109-acre site that includes the memorable Ellipse Meadow and its surrounds, and stretches from the former M Street Gate to Hickey Lane. The study addresses the larger landscape of the Arboretum to the extent that it provides the physical and cultural context for the Core Framework Plan, namely by identifying those landscape systems and character-defining features that identify this unique resource. This effort builds upon the findings of the 2007 Master Plan Update (Rhodeside & Harwell) and the 2000 Master Plan (Marshall Tyler Rausch), and it reexamines their conclusions based on societal needs, research aims, and budgetary realities of the present day. Developed by Reed Hilderbrand in conjunction with staff and the not-for-profit Friends of the National Arboretum, the purpose of the Core Framework Plan is to update the current Arboretum Master Plan. The work has sought to align the Master Plan recommendations with USNA’s recent Strategic Plan and to realize the goals and objectives in beautiful physical form.

Reed Hilderbrand’s Core Framework Plan recognizes the Arboretum’s distinguished landscape legacy and its preeminent reputation as the fundamental basis of its institutional identity and its educational offerings. The proposed visitor experience is redirected as a sequence from new entry at the Bladensburg Road urban thoroughfare through site features that descend from its history as a farm in the 19th century and earlier, to its decades of development as a renowned scientific research facility focused on agriculture. A honed vehicular and pedestrian circulation system establishes clarity, hierarchy, and wayfinding to the experience while reducing the amount of impervious pavement on the site. The new system brings visitors to expanded collections and visitor services at the Core, and to a myriad of new outlying destinations across the property’s uplands, midlands, and dendritic ravines. Strategic investment in the Core’s modernist compound provide opportunities to develop a visitor’s center as an efficient, practical center of energy on the property where staff, volunteers, and visitors co-mingle to learn about plants, historic and new research findings, and stewardship and sustainability practices in today’s world.
Identity
The US National Arboretum is one of the largest pastoral open spaces of Washington DC. The vastness of the sweeping Ellipse meadow or the height of Mount Hamilton allows people the chance to escape from the city. The character of this landscape is informed by its topography and soils, which shape its physical and ecological characteristics. These characters comprise three primary zones: the wooded hilltops of Mount Hamilton and Hickey Hill; the dendritic ravines, including Hickey Run Creek, that cross and drain the landscape; and the great expanse of pastoral, rolling midlands. These midlands reflect the agricultural meadows and fields that composed the site’s life before the founding of the Arboretum and proved ideal “for the purposes of research and education concerning tree and plant life.” Other features of experimental plots and gardens that one sees today indicate the scientific advancements of the Arboretum over the decades as the primary laboratory within the USDA Agricultural Research Services.

As the Arboretum has grown, the connection to its agricultural heritage has diminished. Collections of woody and flowering plants have developed without the benefit of a governing plan. Interpretation doesn’t offer the public a full understanding of the Arboretum as a premier international scientific institution. These aspects of the mission lie latent in the built fabric of the arboretum landscape, awaiting renewed expression.

Experiencing USNA

The Larger Arboretum:
The existing vehicular circulation system on site has been adjusted to provide hierarchy and clarity of experience to the extensive network of Arboretum drives. Wayfinding and orientation have long been issues for the visitor. The system takes cues from the site’s topography and three zones of character — wooded highlands, pastoral midlands and dendritic ravines — in order to define distinctive identifiable loops. The vehicular drives are redefined as one-way loops, allowing for the drives to narrow, and for parallel parking along drive shoulders to get visitors closer to desired destinations. Several of the existing drives such as Meadow Drive and Beechwood Road, will be reduced in width and open to walking paths and service vehicles only. These repurposed drives extend pedestrian circulation across the Arboretum connecting the eastern collections to the Arboretum Core. Additional pedestrian paths create new opportunities for visitors to explore the natural systems such as the riparian zone of Hickey Run Creek.
The Core:
Visitor experience at the USNA starts with a distinct primary entrance, relocated from the R Street neighborhood to an existing curb cut along the Bladensberg Road thoroughfare. The new two-way entry drive fits harmoniously to the side slopes of Mt Hamilton to meet the existing Azalea Road, and continues along its current route to meet the Meadow Ellipse of the Core, where views of the National Capitol Columns are revealed. Sweeping north along Eagle Nest Road, the entry drive culminates in a broad circular drop-off at the visitor services and administration campus, directing visitor to orientation exhibitions, auditorium and information, offices of Friends of the National Arboretum, display gardens, greenhouses, and event spaces.

Parking
In addition to the existing paved lot at the Core visitor center and Administration building, several staff and volunteer lots are fitted within the campus quadrangular system of buildings and courts. Satellite lots throughout the larger grounds relate to specific collections and trailheads. Stabilized meadows replace paved lots at the New York Ave entrance and the M Street Gate, providing overflow parking for events. In addition, the one-way loop drives provide the opportunity for parallel parking spaces distributed throughout the larger Arboretum. These modifications allow reduce the Arboretum’s impervious footprint while providing flexible parking options close to the varied demands.

Campus Core
Building from the modernist heritage of Albert G. Mumma, Jr.’s 1963 Administration Building, the interface between the visitor and the Arboretum’s research takes place in the form of a new campus. The orthogonal order of the Administration building extends to new buildings created for visitor services and Arboretum research, providing exterior courtyards for new garden displays. The proposed Core draws the visitor deeper into the existing research areas of the site while aligning visitor experience with institutional identity. The existing greenhouses are renovated and reconceived as an interactive teaching greenhouse complex.

The rational order of the modernist campus provides a clear juxtaposition to the romantic and pastoral areas of the larger arboretum. A new promenade and display garden extends along the south edge of campus, linking the herb garden directly into the campus. This area provides limited service access to the adjacent collections and culminates in an event pavilion at its east edge.
Core Framework Plan Recommendations
...as a Scientific Institution

1. Recognize the research areas/fields as part of the larger collections of scientific display and extend the display of the USNA research material into the collections such as the Flowering Tree Walk

...for Serving the Community

1. Construct a distinct new main entrance at Bladensburg Road, and close to the public vehicular access at the other entrances. The new entrance drive shall provide an overview of the varied natural systems of the site, show clear views of destinations within the arboretum, and terminate with a sense of arrival at the Administration Building and USNA Campus.

2. Simplify the site-wide vehicular circulation to create a series of hierarchical one-way loops for visitors to tour the grounds. Repurpose excess drives into pedestrian paths with limited service access.

3. Extend the pedestrian circulation across the site to connect the Core and the eastern collections and to provide access to the riparian areas.

4. Reduce the Arboretum’s impervious footprint by renovating the New York Ave and M Street Gate lots into stabilized meadow parking.

5. Construct small satellite parking areas and parallel parking along the loop drives to handle the varying demands of Arboretum attendance and at the appropriate locations within the site.

6. Preserve the sense of expansiveness within the Arboretum; New plantings should reflect this vastness and keep in scale with the larger natural systems of the site.

7. Renovate the greenhouse complex to extend public education opportunities.

8. Establish a campus at the Core using the modernist language of the existing administration building and extending it to the adjacent greenhouses. The campus shall serve as the gateway to the larger site and the interface between the visitor and the Arboretum’s scientific research.

9. Centralize and relocate the office of Friends of the National Arboretum within the Core Campus, and utilize their fundraising capacity for visitor services such as docents and programming

10. Extend the campus order to the south to create a promenade, flanked by perennial displays, that provides a flexible space for events and service access to the adjacent collections

11. Construct an event pavilion on the east side of the new promenade to serve as an on-site source of revenue.