

World's End Traffic and Circulation Project

Look-Back, Summary Materials



Overview

The completion of the parking and circulation improvements at World's End has had significant positive results as compared to the stated goals of the project. The approved "World's End Traffic and Parking Management Plan" identified three primary goals:

1. Ensure public safety.
2. Improve traffic flow.
3. Formalize parking arrangements and procedures for events.

The site improvements included widening the entrance, adding a turnaround on site, and adding parking capacity resulted in a dramatic change to vehicular circulation. The change in traffic flow allowed us to eliminate traffic backups, and address safety issues on Martins Lane. We also adjusted our staffing to accommodate this new traffic flow and are following the specific "tiered event" schedule designated in the World's End Traffic and Parking Management Plan dated 2/6/2017. There has been no traffic back up associated with scheduled events to date.

Project Summary

The project was started in April 2018. We were delayed by an appeal of the Planning Board's and Zoning Board's decisions which, disrupted the planned project schedule. Once the appeal was dismissed, late winter was the time selected to initiate site construction to minimize the disruption of our operations. The repeated snow storms of March 2018 further delayed the project launch.

The physical improvements to the entrance were the first areas to be addressed. The gatehouse was moved away from the entrance to its new location, adjacent to the bridge and the western stone entrance column was adjusted eight feet wider to help accommodate two-way traffic. These improvements had an immediate impact on the overall flow of traffic in and out of the site, by removing key bottlenecks that had restricted flow of two-way traffic for decades.

Next, the circular looped driveway was installed. This enabled us to manage traffic on site during the construction phase and has provided handicapped parking and an on-site turn around option. It also allowed for the installation of the initial landscape plantings along the knoll to be among the first plantings to help aid in their establishment and ability to screen and buffer the drive from the abutters.

In May and June, the far lots were expanded. The driveway and parking lots were graded to achieve dimensional requirements and proper drainage, and new gravel was installed and compacted. We encountered some ledge on site and made minor field adjustments to help minimize site disturbance. All major construction work was completed by early July. The parking spaces were delineated with cedar posts. The approved plan had the tracking pad at the entrance as a permanent installation, but after several months in place there were complaints about the noise of the tracking pad when vehicles crossed it. After consulting with the Planning Director, it was agreed that the pad would be removed and replaced with the same crushed stone as the rest of the drive and parking areas.

In September the second phase of landscape plantings were installed in the parking lots. This included extending the vegetated island in the middle of the far lot and help to define the one-way loop traffic

World's End Traffic and Circulation Project

Look-Back, Summary Materials



pattern. Gates were installed between the near and far parking lots to help manage the use of those lots, and the last of the traffic signs were installed. In October, the pedestrian pathway to safely connect the parking areas with the gatehouse was created to segregate pedestrian from vehicular traffic. After meeting with the Conservation Agent, the pathway was adjusted to avoid a steep section of the existing path that was prone erosion adjacent to the bridge. This pedestrian pathway was completed in spring of 2019.

In October, Cavanaro Consulting was brought back in to provide some As-Built Plans. These plans were delivered to the Hingham Planning Office. On behalf of the Planning Board, John Chessia, of Chessia Consulting Services, reviewed the As-Built plans during a site visit on October 22, 2018. He concluded that the plans generally conform to the approved design. He also noted seven specific issues:

1. The As-Built should change the screening such that the contour labels are legible. **Done.**
2. The access to the loop/handicap parking area is narrower than proposed on the approach side. ***The contractor has widened the outer radius of the entrance road to 18' to match the approved plan. Done.***
3. The pathway off the loop is straight back to the existing path not curved to the future building location as proposed. ***The path layout was altered to avoid the need to do any more cedar tree removals.***
4. The far lot has the same number of spaces as proposed but the access islands have not been installed as indicated on the approved plans. **Done.**
5. There appears to be two "Do Not Enter" signs missing from the far lot. **Done.**
6. The secondary gate between the closer lot and the Far lot was not installed. **Done.**
7. The plantings are in general conformance with the plans and there are many plants that should create the required buffer after a few years' growth. It was not possible to perform a full count of every planting as not all types were marked and there were adjustments to the locations. I did note the following:

There are fewer shrubs in the entrance on the east side than proposed. Some of the trees and shrubs are in different locations but near the proposed location. There is an area of ledge near #26 Surrey Road that does not appear suitable for planting. There were shrubs proposed in this area. Some of the perimeter shrubs do not appear to be planted on the east side of the far lot. I noted one dead shrub in the loop area. ***We followed the approved planting plan as much as we could. Some field adjustments were necessary based on site conditions and limitations, including the presence of ledge. The site condition at the entrance is dominated by several large Norway maples, that presented dense shade and severe root competition. Shrubs planted within these conditions would not be able to compete for light, water, and nutrients and would likely die. Some of these proposed plants were relocated along entrance drive to further thicken the vegetated buffer with the abutters. At the east end of the far lot there were a lot of desirable native plants within the understory of the island trees that were retained, including good sized red maples and sassafras trees. Any plants that die will be replaced.***

World's End Traffic and Circulation Project

Look-Back, Summary Materials



Traffic Queuing on Martins Lane

Queuing on Martins Lane has been significantly reduced. During the same period the previous year, queuing was reduced from 12-18 days to 2 days. Detail associated with these two days is below.

1. Sunday, November 4th, 2018

This was the first beautiful fall day after a few weekends in a row of bad weather. We had extremely light visitation the day before. Prior to this date we had reached capacity on multiple occasions though never more than a few cars at a time were waiting. On the 4th, the parking lot reached capacity at 11am and remained full until 2pm. Cars started parking along the edges of the road between the two parking lots which caused traffic to flow in just one direction at a time. This backed up cars both trying to enter and exit and eventually visitors started parking along the fence side of the entrance road causing even longer one-way traffic entering and exiting. Ranger staff was moved from the gatehouse and back entrance to manage the traffic and prohibit visitors from parking illegally. Approximately 3 hours later the situation was fixed once illegally parked visitors returned to their cars and ranger staff enforced proper parking.

We used temporary signage over the winter and we will be adding ranger staff on busy days to deter illegal parking which is the primary cause of the back ups in this case.

2. Tuesday, January 1st, 2019

This was both a holiday and an unusually beautiful weather day for January 1st, with temperatures reaching the mid 50's and full sunshine. Parking reached capacity at 11:30am and stayed at capacity until 3pm. Knowing that we had the potential to reach a situation like November 4th, ranger staff anticipated improper parking and we employed a roving parking lot ranger responsible for prohibiting improper parking and ensuring the exit flowed properly. Unfortunately, visitors started parking illegally along the fence side of the entrance road when the ranger was deterring cars in the back-parking lot. As such, the site became congested with one-way traffic in and out. Ranger staff was reduced to directing traffic in and out only.

We are developing an 'on call' protocol to increase our staffing on unpredictable weather days so that we can better manage illegal parking. We believe the signage updates and some physical barriers preventing parking in these areas will also mitigate illegal parking.

Hingham Police Details

The last detail worked the weekend of May 5-6th. Standard operating procedure prior to the weekend of May 5-6th 2018 was for Trustees management to be in touch with the Hingham Chief of Police by Thursday of **every week** about the upcoming weekend scheduling of detail officers. Nice weather and holiday weekends could have as many as six 2-hour police detail shifts scheduled. **Police details have not been scheduled since the completion of major site work in May 2018. Although we have been in communication with the Chief of Police periodically this year**, there has been no communication between the Trustees and Chief of Police concerning traffic, safety, or Martins Lane queuing since May 2018.

World's End Traffic and Circulation Project

Look-Back, Summary Materials



Programming

The last programmed event at this property was the trail race on September 30th. Programming through the fall and winter was cancelled due do a staffing transition. We plan to conduct programming in 2019 following the specific “tiered event” schedule designated in the World’s End Traffic and Parking Management Plan dated 2/6/2017

Solstice June 21st, 2018; We reached capacity, selling preregistered 350 tickets by 9am the day of the event. The evening was extremely uneventful in terms of the entrance sequence, parking, and safety. No police detail was needed.

Project outcomes

- With the implementation of the redesign and physical improvements to the front entrance, we were able to see immediate improvements to traffic flow and the lack of vehicle back-ups onto Martin’s Lane, fulfilling one of our key objectives.
- The widening of the travel lanes and the circular flow through the far lot has improved internal flow and provides an efficient process for the visitor to find parking spaces. As we monitored the lot on busy days, we found that cars would exit on their own when spaces were not available.
- The increased parking capacity has been adequate on all but two days.
- If needed the circular loop drive provides an option to safely and efficiently turn traffic on site.
- The plantings are robust for the space and already provide a significant buffer that will be enhance within the a few years.
- Although just recently completed, we feel the new pedestrian pathways provide a safe and attractive alternative to walking in the parking areas. This will improve vehicular flow along the drive.
- We have followed the approved Traffic and Parking Management Plan for programing and event planning. All events went smoothly without incident.

Next Steps

Property Signage: Temporary site signage was in place through this past winter. In April 2019, permanent wayfinding signage for vehicular traffic and walking visitors was installed.

Town Parking Spots at entrance to World’s End: There are two town parking spots at the end of Martin’s Land though they are not designated as such and on occasion as many as four cars park in this location. Cars parked in front of the stone pillar at this location partially block access in and out of World’s End somewhat regularly. Our staff is currently communicating with the Town about these parking spaces as part of the DPW improvement project on Martins Lane.

We anticipate spending approximately 600 hours in 2019 watering the newly established trees and shrubs and watering the entrance road on a regular basis.