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DATE: 31 August 2022

TO: Lanette M. Phillips

> Development Manager, STREAM Tennessee Tower, 24th Floor 312 Rosa L Parks Avenue Nashville, Tennessee 37243

RE: **Program Document**

Natchez Trace State Park Lodge

24845 Natchez Trace Rd.

Wildersville, Henderson County, TN 38388

SBC #: 529/000-02-2019-03, Task Authorization #: 03-012

Dear Lanette,

Per your request, EOA Architects along with our consultants have prepared this Program Document for the Natchez Trace State Park Lodge. As we have discussed, this document evaluated three options for property which are detailed in the Phase 2 deliverable, as well as in the Executive Summary that follows.

(Pages 2-66)

(Pages 67-86)

(Pages 87-107)

This Phase 3 deliverable includes the following contents:

Phase 1 Deliverable - Observation Narrative

Phase 2 Deliverable - Recommended Solution Narrative

Phase 3 Deliverable - Program Document

Executive Summary - EOA

Detailed Program Information - Exhibit A

Anticipated Project Duration

Opinion of Probable Cost - Exhibit B

Civil-Site Programming Document (Kimley Horn) Food Service Space Allocation Program (Inman)



DATE: 7 July 2022

TO: Lanette M. Phillips

Development Manager, STREAM Tennessee Tower, 24th Floor 312 Rosa L Parks Avenue Nashville, Tennessee 37243

RE: Observation Summary Narrative

Natchez Trace State Park Lodge

24845 Natchez Trace Rd.

Wildersville, Henderson County, TN 38388

SBC #: 529/000-02-2019-03, Task Authorization #: 03-012

Dear Lanette,

Per your request, EOA Architects held an on-site meeting with representatives from STREAM, TN State Parks, Natchez Trace State Park, and the proposed Design team on Friday, June 17th, 2022 to review the current conditions of the Natchez Trace State Park Lodge.

In addition to discussion regarding the history of, and desired modifications for the current facility, this meeting included a walk-through tour of several guest rooms, public common spaces, support spaces, kitchen and dining areas, and adjacent exterior space.

The following Observation Summary Narrative includes meeting minutes and observations made during this site visit and serves to fulfill the requirements of Phase 1 for this project.

Contents:

Meeting Minutes Architectural narrative Civil/Landscape Narrative Food Service Narrative MEP Narrative

Meeting Minutes

Attendees:

Lanette Phillips (STREAM); Benn Dunn, Shannon Bowles, Tim Stewart, Chad Kimes, Christina Treglia, Mike Lodwick, Nick Lewis (TN State Parks); Cindy Morisch (Natchez Trace)

Jud Adams, Gray Adams (Power Management); Madison Moitoso, Rachel Robinson (Kimley Horn); Frank Flowers (Inman Food Service); Josh Gruner (EOA Architects)

General Background

As part of Franklin D. Roosevelt's New Deal Program, approximately 48,000 acres of land in Wildersville, TN were purchased and assigned to the work of the WPA and CCC. Much of the work of these organizations remains in the park today. The Park includes a visitor center, equestrian center and wrangler camp, 4 lakes, multiple campgrounds, picnic shelters, and hiking trails as well as the Pin Oak Lodge.

The original Lodge was constructed in the 1970s on the bank of Pin Oak Lake and included 20 guest rooms, a restaurant with full-service kitchen, main lobby with offices and support spaces, a Fireplace Lounge, and a rec room. A swimming pool and tennis courts were added a few years later, and the restaurant was expanded in 1992. A major addition came in 1998 when the conference center was added to the West end of the current facility, and another bank of 27 guest rooms was added to the East end, nearest the lake.

Various system updates and replacements have happened since, but the Inn is in need of a wholistic renovation to bring it up to the State Parks desired standards.

Vision

Shannon explained that this park attracts a large number of guests with an interest in hunting, fishing, horseback riding, boating, and other outdoor recreation activities. She felt the inn should be renovated with this concept in mind, making reference to a "Woodsy, Hunting Lodge" vibe.

The group commented that this is not a destination many customers know about. They would like to tell the story of the Park and offer a space that outdoor enthusiasts will want to go.

The Inn is very seasonal currently, with almost no presence from October to February.

The group referenced the recent renovations to the Lodge at Montgomery Bell as a good precedent for the desired quality of finishes, but acknowledged the concept and scale would be different.

Sitework Discussion

Tim Stewart began the meeting by giving an overview of the site around the Lodge.

A new boat ramp with adequate queuing and trailor parking is planned for the current overflow parking lot as a separate, stand alone project. It is anticipated that additional parking will be needed to supplement these lost spaces. Cindy said that the restaurant and conference space hold up to 150 people, but no final desired parking count was provided.

It was requested that 12-15 spaces be dedicated as staff parking. The space around the loading dock, as well as the previous tennis courts (currently a playground) were discussed as options.

The group felt that the 2 EV spaces currently being installed would be sufficient. Madison pointed out that they typically recommend between 2-5% of the total parking capacity.

The current location of the ADA parking spaces requires access through the main lobby, which is on the opposite side of the building from the guest rooms and is locked at night. There is currently no other accessible path into the building. The State would like to maintain the current spaces, but also explore options for providing handicapped access directly to the guest rooms.

The accessible path around the swimming pool and playground area is also convoluted and inefficient. A chair lift is needed to serve the swimming pool.

Drainage from the pool area to the adjacent lower level guest rooms has been an issue.

Shannon requested that a covered drop-off area be considered for the main entrance. Push button operators for major entrance doors would be helpful.

Tim thought there was minimal underground storm piping, perhaps just two drains near the pool area.

Chad has provided existing drawings that provide information related to utility work around the Inn.

There was discussion of a possible fish cleaning area, and possibly even a meat locker to serve guests who have fished and/or hunted in the area.

Architectural / Finish Discussion

Regarding additional space, the only items the State would would like to add to the Inn are in-house laundry facilities and Table/Chair storage for the conference area.

The team would have to study the impact of new laundry facilities on the existing septic system. Tim said that 2 washer/dryers with 50-65 lb capacity should be sufficient. The State does want to be cognizant of it's water usage.

Guest areas of the Inn are mostly in poor condition. A few rooms have recently been renovated, but there are moisture issues in all rooms. Some of the glazing has been replaced, but the State was interested in a wholistic approach to room renovations to bring them all up to a consistent level.

There are no rooms that are compliant with current accessibility codes.

The State would like to add electronic locks at all guest rooms.

Shannon felt that tubs should be provided in all double bed rooms, with showers (lined with mincy marble, not tile) in all single King-bed rooms. A refrigerator should be provided in every room.

The Main Lobby and reception area have been reconfigured and the flow is currently not great. The staff would like the reception area to front the main entry, with a more open lobby area and reconfigured gift shop.

Finishes throughout the common areas should be updated, including the Lobby, Lounge, Restaurant, and Conference area.

The operable partition in the conference area is not working and should be replaced. A/V upgrades should be included in this space as well.

There are issues with the current loading dock, truck circulation in the drive is awkward and the height of the dock has caused issues (too low).

A majority of the wood siding is in poor condition and should be replaced. Small portions have been replaced with board and batten siding (see photos). The masonry facades appear in good condition.

The existing elevator is original to the building and should be updated/replaced.

Kitchen / Restaurant Discussion

The group agreed the current kitchen was an infrastructure mess. The flow is inefficient and much of the equipment is past it's reasonable life expectancy. They would like a full inventory of current equipment to better understand what could be re-used.

The dishwasher area does not have adequate ventilation and creates moisture issues throughout the kitchen.

The State would like to keep the buffet service (both hot and cold) currently offered. The location of the buffet should be reconsidered.

There was discussion about providing outdoor dining space off of the main dining area that could overlook the pool.

The State would like to create a lounge with bar service in the Natchez Room. Draft beer (1/4 kegs) with 3 taps and blenders. Adequate, lockable liquor storage needs to be accounted for.

A mobile bar should be provided to serve the conference area and/or outdoor spaces. A beverage station should be provided for the conference area.

Off-site catering will not be included in the scope.

A market-style Grab n Go should be provided in the lobby area.

MEP Discussion

The Inn was on a 2-pipe chiller system, but this was replaced with rooftop units around 2003. Tim believes that none of the ductwork was modified as part of this switch.

Tim believes that most of the rooftop mechanical equipment has been replaced in the last few years and were in okay condition. The roof along with all coping and gutters/downspouts was also recently patched, but may need additional review.

Guest rooms are having extreme humidity issues. Controls for the electrical heat pump PTACs don't appear to be functioning properly, currently the State has a dehumidifier in every room.

Overall conditioning of the public spaces is not great, but much better than guest rooms.

Cindy believes there is one boiler for the guest rooms, and another for the kitchen and public areas. There is no propane currently serving the building. There is an underground grease trap outside the kitchen.

Tim thought that the sprinkler system and fire alarm system were not even functional and should be a full replacement.

There are currently sanitary issues, the State currently has a plan for replacing 3 septic pumps outside the scope of the Inn renovation.

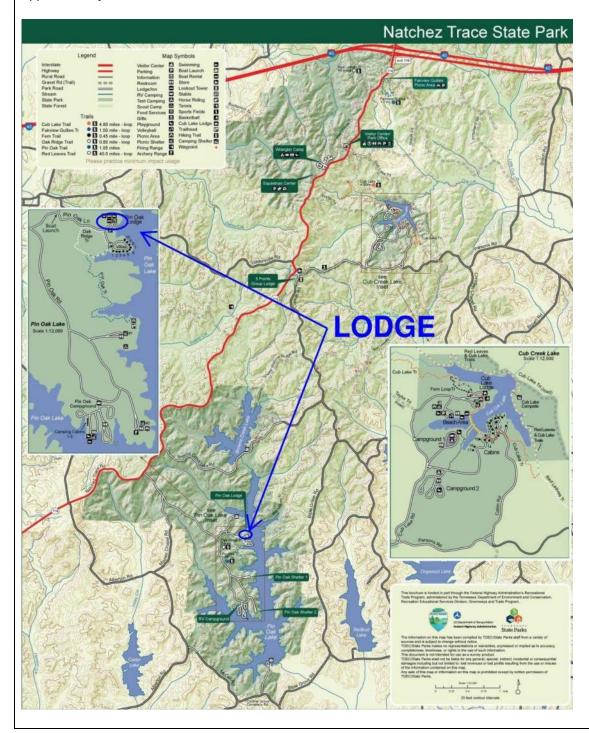
Building-wide electrical systems are in need of an upgrade. The facility is connected to a single transformer.

Architectural Narrative & Observations

Context Images

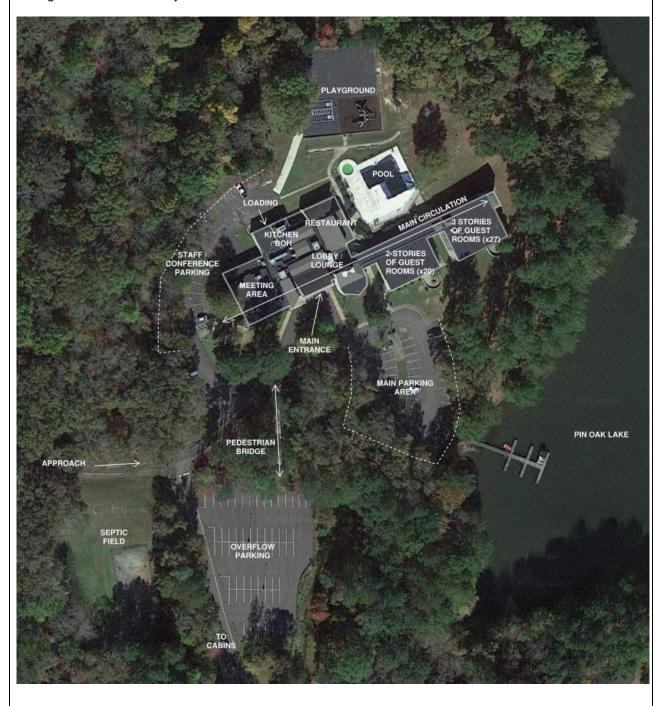
1) Park Map

Natchez Trace State Park is located in Henderson County, TN East of the city of Jackson and approximately a 2-hour drive from Nashville, due South of Interstate 40.



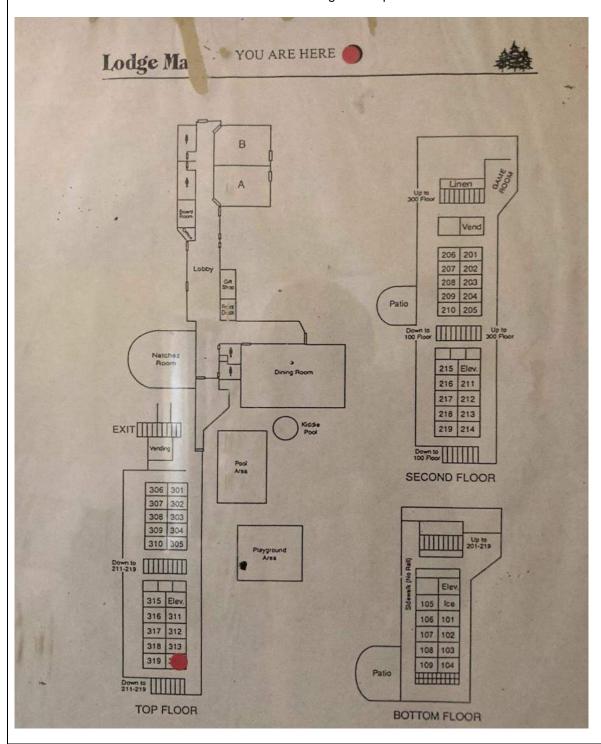
2) Detailed Aerial View of Lodge Area

The Lodge is location on a penisula of Pin Oak Lake. The Main Entrance is in the center of the building with meeting area to the West and guest rooms to the East. The restaurant and kitchen are located to the North, adjacent to the outdoor swimming pool and playground. The main circulation spine runs East-West throughout the entire facility.



3) Lodge Floor Plans

Floor plans show the Lobby and main entrance in the middle of the building with conference area to the West (top of page), restaurant and pool to the North (right), and guest rooms to the East (bottom). Guest rooms continue down an additional 1 and 2 levels as grade slopes down to the lake.



4) Equestrian Center – The park offers stables and a wrangler camp.



5) Group Lodge – Much of the park's structure utilitizes the same stone and wood siding.



6) Park Store



7) Lodge Plaque – Commemorating the additions made in 1994



Exterior Photos

8) Lodge Exterior – View of approach to entry from parking area. It was noted this path is not accessible.



9) Lodge Exterior –Guest room wing with views to the South overlooking Pin Oak lake in the background.



10) Lodge Exterior – Side entrance to the Conference Area is currently the only accessible entrance to the facility.



11) Lodge Exterior – Loading area for the conference rooms.



12) Lodge Exterior – Main loading area serving the kitchen. It was noted that the dock is too low for many of the service vehicles.



13) Lodge Exterior – View of previous cooling tooler, since removed. Much of the exterior façade is need of repair/replacement.



14) Lodge Exterior - Guest room wing with views to the North overlooking the pool area.



15) Lodge Exterior – Circulation path from guest rooms to the pool area is not well arranged and should be reviewed to offer better connectivity.



16) Lodge Exterior – View of guest room wing overlooking the pool area. Additional levels of rooms occur as the grade slopes to the lake.



17) Lodge Exterior – Sitting areas on the South side of guest room. The State mentioned a desire to provide firepits in these areas.



18) Lodge Exterior – View of the dining addition. Siding has been replaced in this area with board and batten siding.



19) Lodge Exterior – Overview of the pool area from inside the dining addition.



20) Lodge Exterior – View of exterior siding in need of replacement.



21) Lodge Exterior – View of exterior stone veneer, which appears in good condition. Asphalt shingle roofing and all roof coping appeared in good condition.



Public Area Photos

22) Lobby – View of State Park mural directly in front of the main entrance.



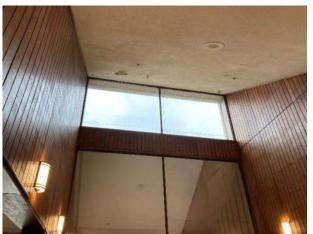
23) Lobby – View of main reception desk. It was suggested this space relocate to front the main entrance.



24) Lobby – Overall view of the main Lobby with gift shop added into this space. The group suggested rearranging this area.



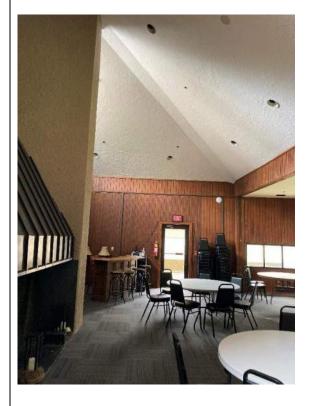
25) Lobby – View of large clerestory windows over the main lobby space.



26) Lounge - View of entrance into the Natchez Room, which serves as the Lounge.



27) Lounge – view inside the Natchez Room.



28) Lounge – View of the Natchez Room looking out over the main entrance to the Lodge.



29) Lounge – Fireplace inside the Natchez Room. The State wants to improve the quality of this space, but likes it's design and location.



30) Rec Room – The original rec room has been repurposed primarily for storage.



31) Rec Room – Interior of the Rec Room, which includes a fireplace.



32) Dining – Overall view of the main dining area, facing East.



33) Dining – View of the addition to the dining area, facing North.



34) Dining – A bar area has been added to the dining space, but is under utilized.



35) Dining – The State has requested to keep buffet service, but would like to reconsider it's location and arrangement.



36) Conference – View of the large meeting room. It was noted that the operable partition no longer functions.



37) Conference – Additional view of the large meeting room.



38) Public Restrooms – Located adjacent to the main conference room.



39) Public Restrooms – It was noted that additional restrooms should be considered to serve the restaurant and pool area.



Kitchen Photos

40) Kitchen – Overall view of the kitchen area. Refer to the Food Service Narrative for additional information.



41) Kitchen – Existing hood serving the main cooking equipment.



42) Kitchen – Main dishwashing area. It was noted that there is not sufficient ventilation for the dishwashing steam.



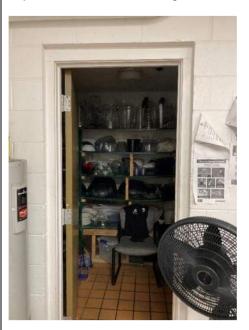
43) Kitchen – A dedicated Dry Storage room off of the main kitchen.



44) Kitchen – A manager's office that connects back to the main reception area.



45) Kitchen - A small storage closet.



46) Kitchen – The existing break room has been repurposed into additional storage.



47) Kitchen – A small corridor leading to two restrooms and the original break room.



48) Kitchen – View of the walk-in freezer and down a corridor back to the main Lobby area.



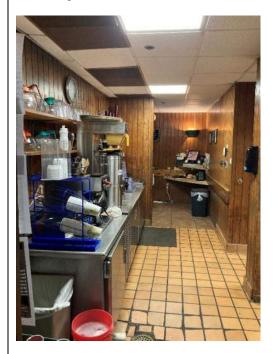
49) Kitchen - Walk-in cooler



50) Kitchen – Additional storage space and a Janitor's closet.

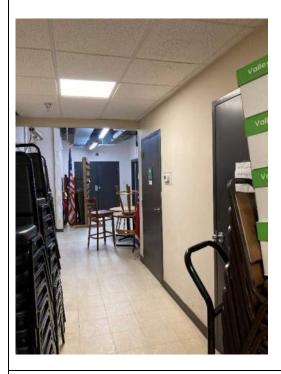


51) Kitchen – Service area connecting the main dining room to the kitchen.



Back of House / Support Space Photos

52) Back of House – Loading area for the meeting room with small storage areas.



53) Back of House – Conference loading leading back to the main lobby. Emergency egress widths appear to be compromised.



54) Back of House – Sprinkler Valve room located off the main loading area.



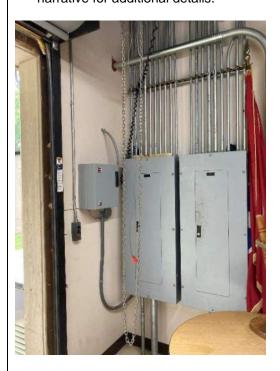
55) Back of House – Mechanical room with boiler equipment off of the main loading area.



56) Back of House – Main Fire Alarm panel located behind the reception desk. Refer to MEP narrative for additional details.



57) Back of House – Electrical panels located in the conference loading area. Refer to MEP narrative for additional details.



58) Back of House – Administrative area adjacent to the main reception desk.



59) Back of House – Administrative offices located behind the main reception area.



Guest Area Photos

60) King Accessible Room – Some upgrades have been made to the original 1970s stack of rooms, including new storefront.



61) King Accessible Room - Additional view.



62) King Accessible Room – It was noted that this room is not up to current accessibility codes.



63) King Accessible Room – Small vanity and closet area inside the restroom.



64) Typical Double Room – The 1990s stack of rooms have the original storefront and PTACs.



65) Typical Double Room – View of room interior, in need of a finish upgrade.



66) Typical Double Room – Vanity and closet area.



67) Typical Double Room – Restroom. It was requested that double bed rooms keep tubs, and single bed rooms have showers.



68) Guest Area – View of a typical exterior corridor, including the elevator which was added with the 1990s addition.



69) Guest Area – View of exterior corridor of 3-story 1990s addition.



70) Guest Area – Additional view of exterior corridors.



71) Guest Area – Exterior stair in the 1990s addition, which appears to be in good condition.



72) Guest Area – Vending areas located on each floor.



73) Guest Area – Several finishes on the lowest level show signs of water damage.



74) Guest Area – Rooms on the lower level of the original 1970s stack have been recently updated with new finishes.



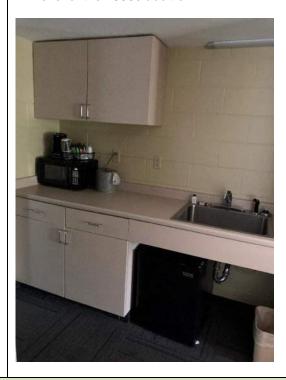
75) Guest Area – View of recently updated guest room. It was noted that all rooms are experiencing extreme condensation issues.



76) Guest Area – Recently updated guest bath.



77) Guest Area – A parlor suite is located at each level of the 1990s addition.



Roof Photos

78) Roof – View of the conference area. Refer to MEP narrative for additional information.



79) Roof – View of the area between conference and the kitchen.



80) Roof – Space over the kitchen.



81) Roof – View of mechanical doghouse (left side) and typical shingle roof dormer providing clerestory lighting to main lobby.



82) Roof – View inside a typical mechanical penthouse.



83) Roof – View of guest area.



STREAM Site Observations: Pin Oak Lodge Civil/ Site

Site Background

Pin Oak Lodge sits on scenic Pin Oak Lake in Natchez Trace State Park in Lexington, Tennessee. The Lodge was originally constructed in 1972 with 20 guest rooms but was expanded in the late 1990s to include an additional 27 guest rooms and a conference room.

The Lodge's managerial staff are most concerned that guests do not take full advantage of the park's diverse opportunities. They envision a Lodge that comfortably hosts guests with a variety of interests, including fishing, hunting, watersports, and recreation, and that is a top destination spot for all outdoors enthusiasts.

Pin Oak Lodge is the most seasonal of the multiple guest accommodation options in the park and sees little guest traffic between November and February each year.

The Lodge's managerial staff believe that the Lodge contains sufficient indoor and outdoor space to accommodate their guests' needs, but that the existing space needs to be utilized more efficiently to maximize the Lodge's many amenities.

Parking Observations

An overall map of the site is provided in Exhibit 1: Overall Map, on page 3. The front parking lot is intended for guest parking and contains 47 standard stalls, which is equivalent to the number of guest rooms in the lodge (see images 1-4).

The side parking lot is intended for employee and overflow guest parking and contains 22 standard stalls (see images 5-6), 2 of which will be EV designated in the future (see image 7), and 5 accessible parking stalls designed to meet compliancy code (see images 8-11). The accessible parking stalls are larger than required by code, with widths up to 16.5 feet.

The extra parking lot located south of the lodge off of Pin Oak Lodge Road is currently intended for guest overflow parking and contains 59 standard stalls (see images 12-17). This lot was added to the property in 2001 and connects to the main Lodge site via access drives and a pedestrian bridge (see images 18-20). A septic field is located to the west of the lot. The entire extra parking lot will be converted to boat and trailer parking in the future. A boat ramp connecting the extra parking lot's southeast corner and Pin Oak Lake is also proposed. Pin Oak Lodge's staff wish to add a new lot for additional boat and trailer parking to the east of the extra parking lot, as shown in Exhibit 1 on page 3. The proposed lot will be 15-20 feet lower in elevation than the current extra parking lot (see images 21-23).

The rear parking lot contains an additional 2 accessible parking stalls designed to meet compliancy code, which currently serve the playground (see images 24-26). These stalls are also larger than required by code, at 26 feet in length. The rear parking lot is accessible via a one-way concrete drive (see images 27-28).

ADA Compliancy Observations

The most prominent ADA compliancy issue at the Lodge is the lack of an outdoor accessible path from the guest rooms to the current accessible parking stalls in the side parking lot. There is an interior accessible path between these locations, however, this path travels through the Lodge lobby, which is locked at night. The current outdoor path from the guest rooms to the accessible parking stalls includes

extreme longitudinal and cross slopes (see images 29-39), and mass regrading of much of the parking and access drive areas would be required to make this path accessible.

The ramp from the guest drop-off area to the lobby front door is not ADA compliant. The ramp has a longitudinal slope of 14% and a cross slope of less than 1%. There is no level landing at the top or bottom of the ramp (see images 40-41).

None of the Lodge guest rooms are fully ADA compliant. The guest rooms that are currently used as accessible rooms are located on the second floor and have direct access to the sidewalk connecting the front parking lot to the split-level staircase (see images 42-43). The connection ramp from these guest rooms to the sidewalk has a longitudinal slope of 5% and a cross slope of less than 2%. The sidewalk connecting the front parking lot to the split-level staircase has a longitudinal slope of 6-9% and a cross slope of 2% (see images 44-46).

The pool is located at an elevation between that of the first and second guest room floors and is accessible via a ramp from the first-floor guest rooms, located southeast of the pool deck (see images 47-52). The pool is not fully accessible from the rear parking lot, as this designated path includes a set of stairs and a steep ramp (see images 53-59).

EV Parking Observations

There are currently no EV designated parking stalls on site. The side parking lot contains 22 standard stalls, 2 of which will be EV designated in the future (see image 7). No other stalls are planned to be EV designated in the future.

Landscape Observations

The Lodge lobby drop-off island contains the only remaining Pin Oaks on the property (see image 60).

Utility Observations

The site is served by a 6" water line.

The interior fire suppression system has experienced inadequacies.

The sanitary lift station serving the site is located directly north of the Lodge (see images 61-62). 8" service lines run from the guest room wings to the lift station, and a 4" force main runs from the lift station to the septic field located southwest of the Lodge. Plans are in place to replace three septic pumps, located southwest of the property, in the future.

Each guest wing, the first from the original 1972 build and the second from the late 1990s expansion, is served via separate utilities.

Electric vehicle (EV) charger placement will require coordination with the site electrical engineer to ensure that adequate loads are available to serve the chargers.

Stormwater Infrastructure and Drainage Observations

The majority of the site surface drains to Pin Oak Lake.

The front parking lot drains either to a concrete flume at the southeast corner of the lot, which flows to the lake (see images 63-64), or surface drains directly down to the lake (see images 65-66).

The sanitary lift station hill at the rear of the building surfaces drains north and east to the lake (see images 67-68).

Lodge staff expressed concern that the existing stormwater infrastructure does not adequately capture pool drainage. Three catch basins are located southwest of the pool, along the section of the Lodge containing the restaurant (see images 69-70). All of these catch basins are raised above the final site grade and do not adequately capture pool drainage (see images 71-73). Two yard-inlets are located in the landscape island between the pool ramp and the guest rooms (see image 74). An additional catch basin captures stormwater to the northwest of the pool (see images 75-76), and a trench drain is located at the base of the pool ramp to capture stormwater to the southeast of the pool (see image 77). A majority of the stormwater from the pool area drains toward the guest rooms (see images 78-83), leading to flooding outside the guest rooms, inside the first-floor guest rooms, and inside the elevator shaft.

The side parking lot stormwater runoff is captured using one catch basin and a culvert (see images 84-87). The system's tie-in and outfall locations are unknown.

The rear parking lot surface is designed to surface drain north and east to the lake, but experiences significant ponding (see images 88-90).



Exhibit 1: Overall Map









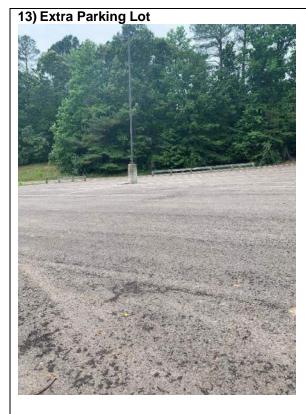










































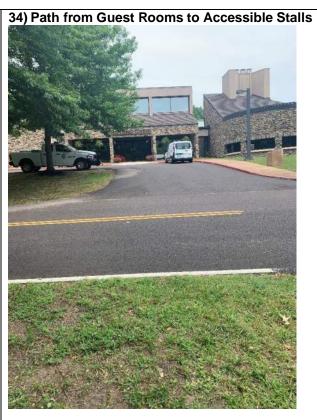


































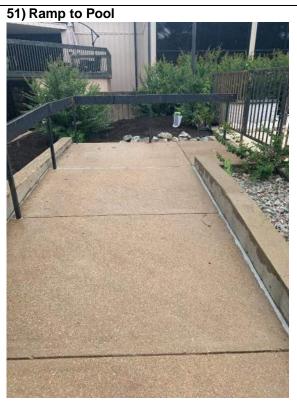
















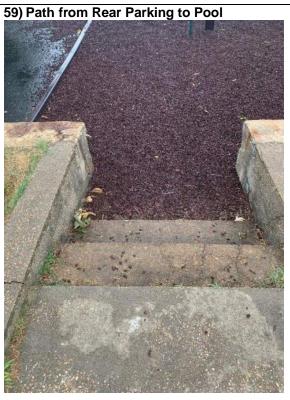






























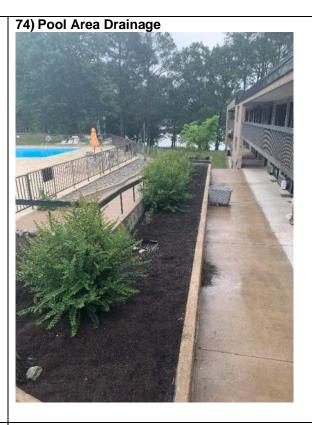
























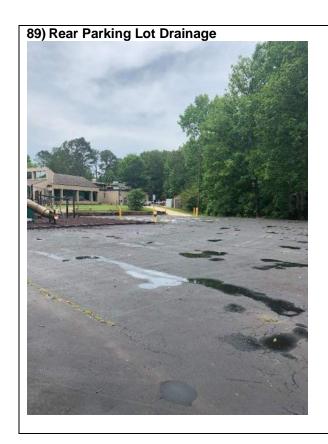










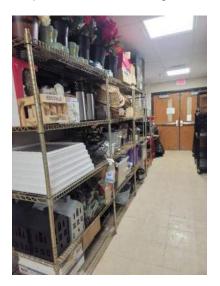






Foodservice Narrative & Observations

1) Items being stored in corridor. Recommend corridor path remain free for egress.



2) Drain in walk-in path poses a tripping hazard.



3) Freezer has mosture issues. Ice has built up on floor & facility is using mats to reduce slippage.



4) Facility is using wood shelving units to store product. NSF requires shelving to meet it's requirements for healthcode requirements.



5) Food is required to be stored 10" aff. Wood used in cooler not recommended.



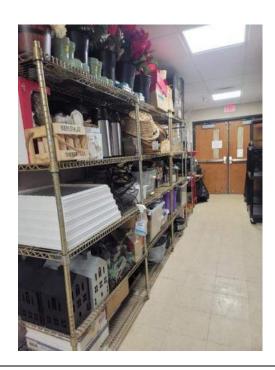
6) Blower coil has ice build-up. Service agent onsite correcting issue. Unit is probably at the end of it's life cycle.



7) Walk-in has mold growth along electrical conduit & ceiling. Building is sprinkled, walk-ins are also required to be sprinkled & are not.



8) Items being store to ceiling. Code requires that all items be store 18" below the sprinklers.



9) Electrical boxes behind cooking equipment are not sealed & pose a fire hazard. Electrical outlet not covered. Area is in need of thourough cleaning.



10) Ceiling tiles with non-food storage area have some water damage and items are being stored with 18" of sprinklers.



11) Electrical outlet poses a tripping hazard and is not protected from potential damage.



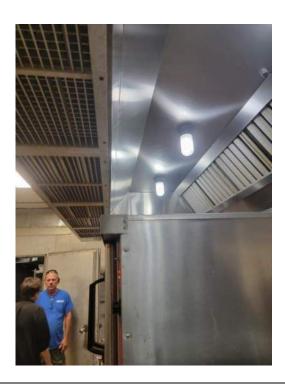
12) Ceiling has been repaired at some point but repair has not been completed. Codes require ceilings to be smooth, non-abosobent, washable & durable. Open utilies in ceiling. Items also being stored in front of electrical panels.



13) Cooking equipment is required to sit 12" from face of exhaust hood.



14) Cooking equipment is required to sit 12" from face of exhaust hood.



15) Majoraity of cooking equipment is in good working order.



16) Product being stored on floor. Required to be 10" aff.



17) Recommend thougrough cleaning through entire kitchen.



18) Walk-in ceiling has mildew growth. Requires to be sprinkled.



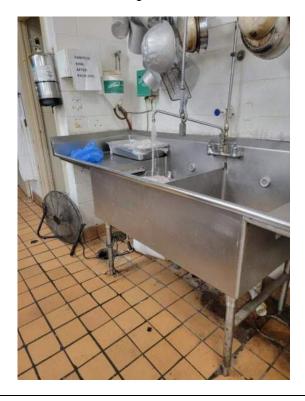
19) Gasket on walk-in door to be replaced.



20) Disposer unit for soiled dish table not functioning. Recommend replacement.



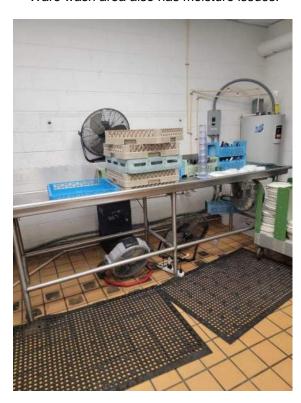
21) Open drain should be covered. Mildew issues on block wall behing sink.



22) Construction material recommended to be removed and throurough cleaning.



23) Power strip on floor poses an electrical hazard. Ware wash area also has moisture issues.



24) Clear ware being stored on wood shelving units. Recommend replacement w/NSF approved units. Required to be 10" aff.



25) Rusting electrical control panel due to moisture issues within the ware wash space.



26) Drain poses a tripping hazard & does not seem to be properly trapped.



27) Buffet area is remote from kitchen, making it difficult to replinish station. Recommed relocating closer to kitchen.



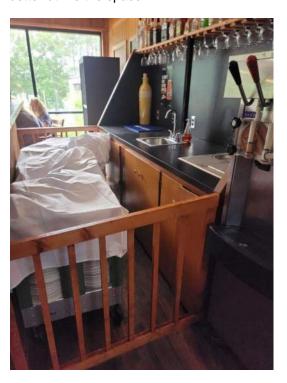
28) Recommend a trayslide or additional dept for guest to have a place to sit down plates as they're going through the line.



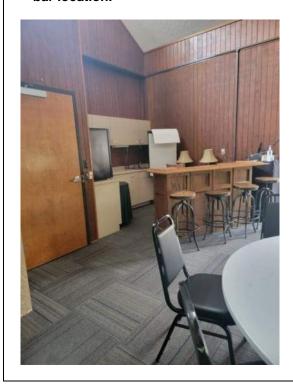
29) Waffle station does not meet the ADA height requirement.



30) Bar located in dining room is under utilized. State recommends that relocating bar to help better utilize the space



31) Location State has recommended for new bar location.



32) Gues ice machine & dispenser not currently functioning. Recommend replace to match other location.





OBSERVATION SUMMARRY NARRATIVE

PROJECT: Pin Oak Lodge Renovation

SBC#: 529/000-02-2019

PMC PROJECT#: 22068

REPORTED BY: Judson Adams, P.E.; Grayson Adams, P.E.

DATE: July 5, 2022

Power Management Corporation visited the Pin Oak Lodge in the Natchez Trace State Park on Friday, June 17, 2022, to observe the building MEP systems for the State of TN Real Estate Asset Management group. The following is a report of our observations.

Plumbing

Domestic Water Service Entrance and Metering

Water entry appears to be 3"

Domestic Hot Water Production

- The domestic hot water is provided by intellihot instantaneous water heaters. Three are located adjacent to the kitchen and three are located in a Mech Room serving the Guestrooms.
- Small point of use water heaters are located in the public restrooms

Supply, Waste, and Vent Piping

 Observed piping was copper domestic water lines, PVC rainwater leaders, cast iron sanitary piping, and black steel gas piping.

Fixture Types

- Water closets are flush tank type in public area and guestrooms
- Urinals are flush valve in public restrooms
- Lavatories are manual lever faucets.

Summary of Deficiencies

- Water heaters are displaying an error code
- Fixtures in the public area are aged and some are damaged
- Drinking fountains are not in hi-low arrangement

HVAC

Cooling and Heating Equipment

- 2 pipe chilled water system has been replaced with air cooled rooftop units in the meeting rooms/lounge/kitchen/restaurant
- PTAC heat pumps installed in each Guestroom (0.75-tons).
- Space dehumidifier installed in Guestrooms.
- Packaged gas RTUs are installed for the public and common areas. The units range in age from 2018 to 2021. All are in Good condition.

Air Distribution System

- Sheetmetal ductwork for the public/common areas.
- Return air through plenum doghouse on roof
- Ceiling air devices are in poor condition.

Exhaust and Ventilation Equipment

- Ventilation air is through packaged RTUs
- It is unknow if the PTACs have ventilation air
- Exhaust fans are roof mounted.
- Kitchen has exhaust and heated makeup air

Controls and Automation

Standalone, programmable thermostats

Summary of Deficiencies

- Air circulation/temperature in kitchen is a complaint
- Dishwasher steam in kitchen lingers
- Ductwork issues, according to Tim
- Lobby gets humid in summer evenings
- Only 3 of 5 exhaust fans running for Guestrooms
- Too much exhaust being pulled from Guestrooms (where fans are running)
- The plenum doghouses on roof need to be sealed more tightly.

Electrical Power

Utility Service Entrance and Metering

- Single electrical service is underground to the original building (1972)
- 1999 addition is fed from the original service

5,000-amp service entrance at 120/208 3phase

Standby Power

- No generator backup plant
- Emergency lighting utilizing batteries
- Most past useful life and in need of replacement

Facility Power Distribution System

- Switchboards and panelboards are past useful life
- Some newer panels were installed when AC was updated that could be reused

Surge and Lightning Protection

No Surge or Lightning Protection observed

EV chargers

Rough-in for one pedestal – No active chargers in place

Summary of Deficiencies

- 1. Electrical power distribution is aged, and parts are obsolete. Any renovation of the 1972 section will require all new electrical gear.
- 2. Wiring methods are conduit/wire and are past useful life. Any renovation in the 1972 building will require all new wiring.

Lighting

Lighting Fixtures and Lamps

- Lighting fixtures are a mix of fluorescent and incandescent, most past useful life
- Exit and egress lighting is past useful life and needs replacement
- Lighting power density does not meet current energy code

Controls and Automation

Local control only; No automatic controls noted

Summary of Deficiencies

- 1. All lighting fixtures need to be replaced throughout
- 2. New controls are needed to meet current energy codes

Fire Alarm

System Control Panel

- Aged and in need of replacement
- Existing troubles present

• Operator reports system is difficult to maintain

Initiating and Visual/Audible Devices

- Older pull stations and horn/strobes
- Placement/spacing does not meet current codes
- Smoke alarms in guest rooms

Summary of Deficiencies

1. System is past useful life and should be replaced

Fire Sprinkler

Fire Water Service Entrance

• A 6" fire riser is located adjacent to the kitchen

System Type and Coverage

A single wet system appears to protect the entire building

Summary of Deficiencies

- Sprinkler heads are outdated and should be replaced
- Sprinklers are not installed in the Guestrooms

Option A is to renovate the existing facility in its entirety.

Public Areas

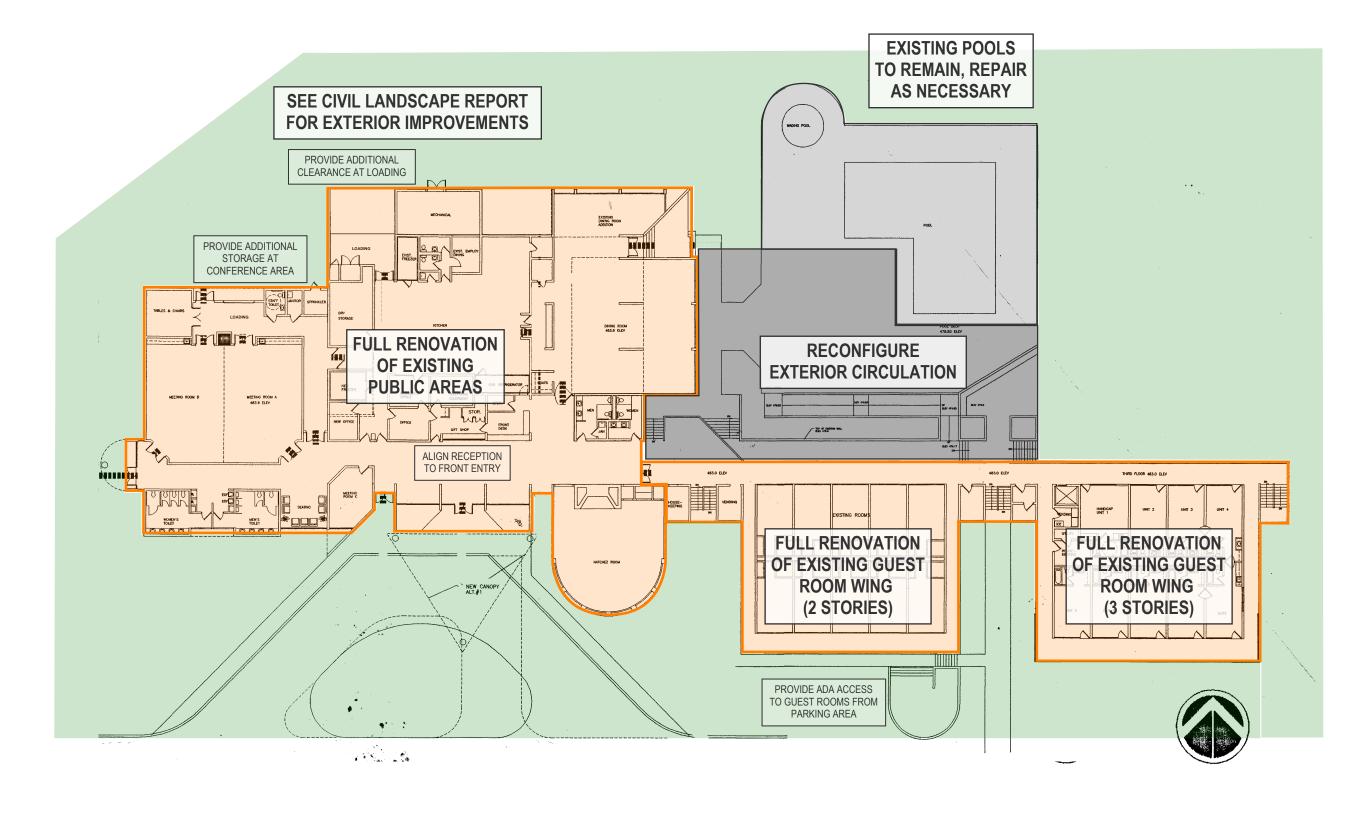
Undergo a complete finish upgrade with minor reconfigurations as noted.

Guest Areas

Upgrade to a consistent level of finish. Rooms could be phased if there was the desire to keep portions of the Lodge open.

Outdoor Areas

The existing pools will remain (repaired as necessary), but space around the pool reconfigured to incorporate outdoor dining and a more direct connection to the guest areas. Accessibility should also be provided from the parking area directly to the guest rooms.







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Option B is to renovate the public areas of the building, but construct a new guest room wing.

Public Areas

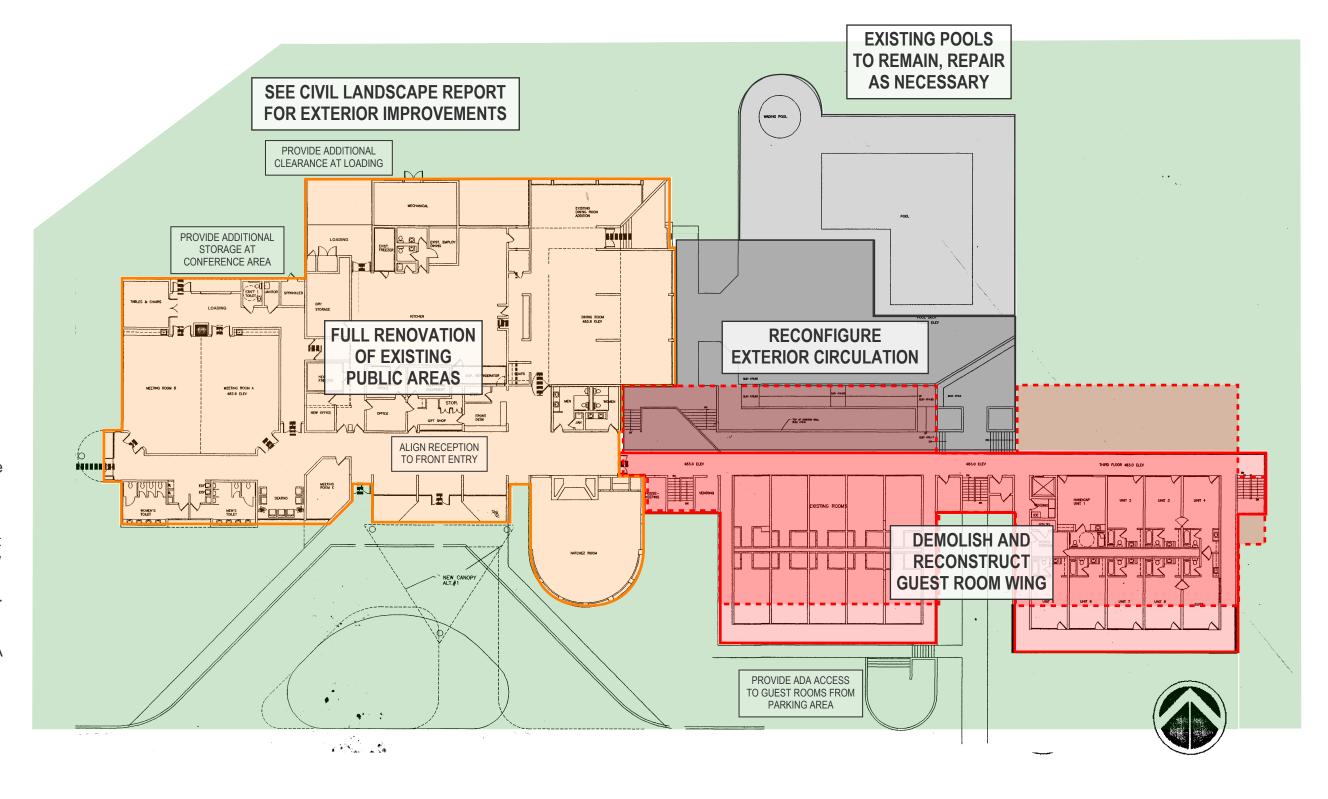
Undergo a complete finish upgrade with the same minor reconfigurations as noted in Option A.

Guest Areas

Provide a new guest wing that would allow for several upgrades, including a conditioned interior corridor, private balconies on all rooms, larger guest rooms and bathrooms, new MEP systems, etc. The arrangement would be similar to the existing to not disrupt the overall massing, but allow for a new design to establish consistency with other State projects.

Outdoor Areas

Similar upgrades as seen in Option A







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Option C is to provide an entirely new facility.

A design that located the new Lodge outside the existing building footprint was explored, but due to the lack of additional site area, no good options appear to be available.

The design provides two wings of guest rooms that frame an outdoor pool courtyard. Single-loaded corridors are proposed so all guest rooms have private balconies and a view of Pin Oak Lake.

The front entrance is rotated to face the approach to the site and provides a covered drop-off area. Parking is re-allocated to the West and North sides of the site, with the existing overflow parking area remaining. The existing, mature Pin Oaks should be preserved.













STREAM: Pin Oak Lodge Civil/Site Recommended Solutions

Project: Pin Oak Lodge

August 5, 2022

Subject: Pin Oak Lodge Recommended Solutions

Mr. Gruner:

Date:

Following one visit to Pin Oak Lodge at Natchez Trace State Park, Kimley-Horn submits the following recommended solutions and improvements for the existing site.

Consistent with EOA's recommendations, Kimley-Horn's solutions and improvements are specific to one of three site plan options. Option A is to renovate the existing facility in its entirety. Option B is to renovate the public areas of the building but construct a new guest room wing. Option C is to provide an entirely new facility.

Options A and B

Kimley-Horn assumes that implementation of Option A would not alter the building footprint or elevations. Kimley-Horn also assumes that the implementation of Option B, despite construction of a new guest room wing, would not alter the building footprint or elevations. Additional site investigation would be required to develop more detailed civil/site recommendations if it was determined that the implementation of Option B would impact the building footprint or elevations. The following recommended solutions and improvements for Options A and B were developed under these assumptions.

Expanded parking for lodge

- Kimley-Horn does not recommend expanding the existing side and rear parking lots due to steep slopes, excessive clearing and grubbing, and potential environmental impacts.
- The existing ADA parking stalls in the side parking lot exceed minimum width requirements.
 These parking stalls can be restriped, which would result in additional standard parking spaces.
- Kimley-Horn recommends relocating the playground in the rear parking lot to open up the
 entire pavement area for additional parking stalls with a two-way drive aisle. It is not
 recommended to expand this asphalt area in any direction due to steep slopes to all sides.
 Kimley-Horn also recommends widening the concrete connection from the side parking lot to
 the rear parking lot to facilitate two-way traffic.
- While on site, the design team observed the presence of streams or wet weather conveyances in the area between the front parking lot and proposed new lot location. Kimley-



- Horn recommends further investigation into the environmental features of this area prior to attempting to connect the proposed new lot to the existing front lot.
- The proposed new lot location will likely be 15-20 feet lower than the extra parking lot and front parking lot. Due to these grade differences, an ADA compliant connection between the extra parking lot and the existing lots is unlikely.

Accessible parking in front of lodge

- An ADA accessible path from the guest rooms to ADA accessible stalls is required. It is not feasible to connect the existing ADA parking stalls in the side parking lot on the west side of the lobby to the guest rooms. Therefore, Kimley-Horn recommends paving additional area adjacent to the existing front parking lot to create new ADA accessible spots. Additionally, Kimley-Horn recommends re-grading the existing sidewalk between the front parking lot and the guest rooms to ensure ADA compliancy.

Electric vehicle parking

Per Pin Oak staff, 2 existing standard parking stalls are planned for Electric Vehicle (EV)
designation in the future. These stalls are located in the existing side lot. Kimley-Horn
recommends that a minimum of 2-5% of total vehicular stalls are designated as EV parking.

Landscaping improvements

 Landscaping upgrades should consist of native Tennessee species per Lodge staff and STREAM preference. The existing Pin Oak trees at the front of the lobby should be preserved.

Additional recommendations - site drainage

- Flooding occurs to the north of the 1990s guest room addition. Grading updates, such as swales or ditches, and additional stormwater infrastructure, such as flumes, pipes, and inlets should be considered to facilitate positive drainage away from the guest rooms.
- The drainage structures in the pool area should be reset at appropriate elevations to adequately capture stormwater drainage.





Exhibit 1: Overall Map of Civil/Site Recommendations for Options A and B



Option C

Kimley-Horn assumes that implementation of Option C would provide the flexibility to alter building elevations, and therefore alter site grading and stormwater drainage as appropriate. This would eliminate the need for many of the solutions and improvements listed above. However, additional site investigation would be required to better understand existing site topography and drainage patterns, and develop more detailed civil/site recommendations, after finalization of the new building footprint and elevations. Kimley-Horn recommends further investigation of the following potential site impacts as a result of implementation of Option C.

Lodge parking

Kimley-Horn recommends additional investigation into the potential loss of parking stalls due to the proposed new building footprint. Pin Oak staff are concerned that there is not adequate parking on site as-is, and implementation of the proposed Option C would result in the loss of 47 standard stalls from the front parking lot. Potential solutions are as follows:

- Remove the proposed southern guest room wing and relocate these guest rooms to additional floors above the proposed eastern guest room wing. This would conserve some of the parking stalls from the front parking lot.
- Reconfigure the proposed loading area to increase capacity for parking stalls at the rear of the building.
- Do not designate the overflow/extra parking lot as boat and trailer parking, and instead leave this lot designated as guest parking.

Site and lodge accessibility

Kimley-Horn assumes that implementation of Option C would provide the flexibility to regrade portions or the entirety of the site. All new construction would require ADA accessible paths from the accessible stalls to the public areas of the building as well as the guest room wing(s). However, given the drastic topography of the existing site, especially at the front parking lot, it may not be possible to achieve accessibility to the proposed southern guest room wing. If mass regrading is completed to achieve site accessibility, a number of challenges may result, including high fill volumes and the need for retaining walls. Potential solutions are as follows:

- Remove the proposed southern guest room wing and relocate these guest rooms to additional floors above the proposed eastern guest room wing. This would allow the existing topography of the front parking lot area to remain, instead of regrading this entire southern wing to the same elevation.
- Match new building footprint and elevations to existing building footprint and elevations as appropriate to achieve the greatest accessibility but the least need for mass regrading.

Please let me know if you have any questions. Thank you,

Rachel Robinson, E.I. Kimley-Horn

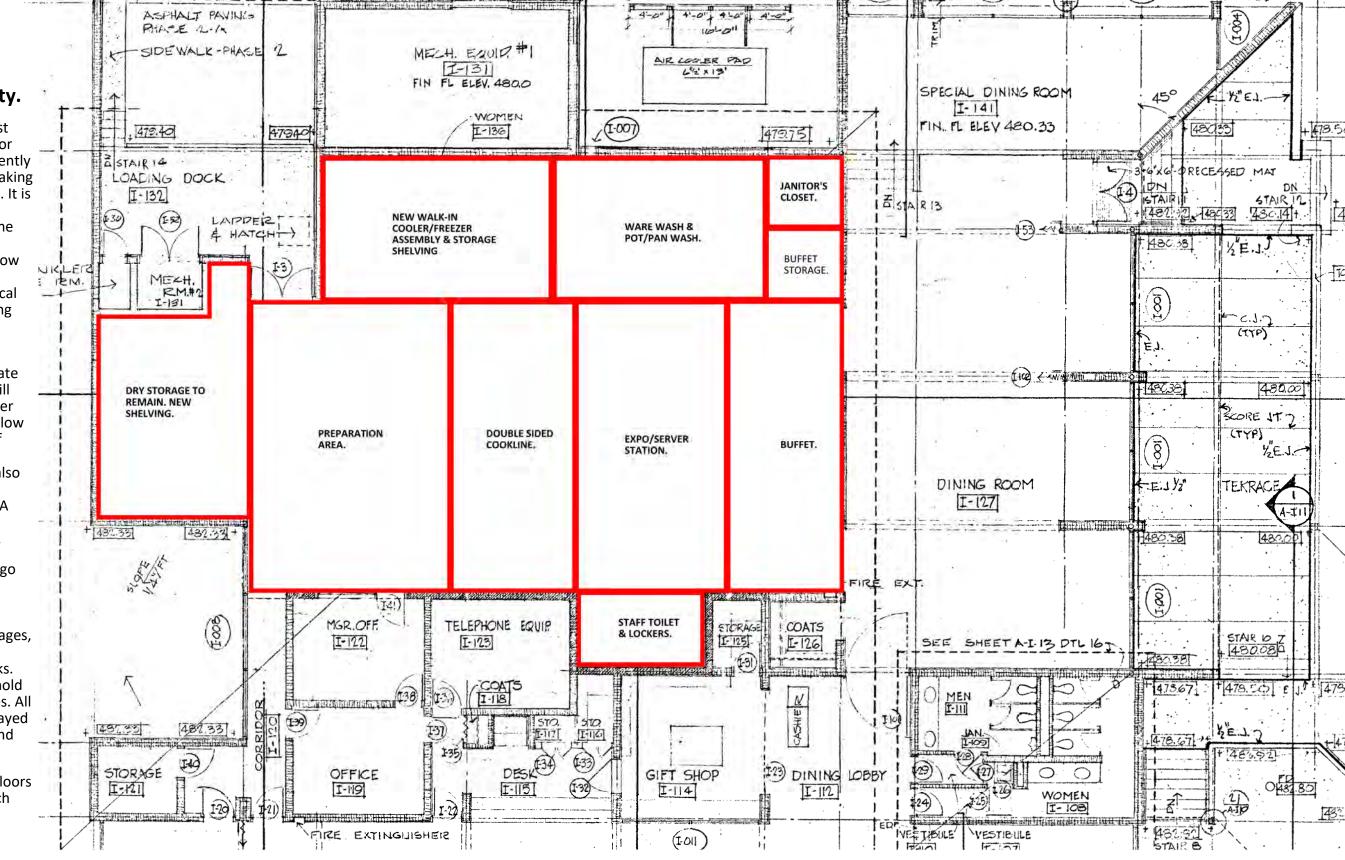
Option A is to renovate the existing facility in it's entirety.

The Lodge currently provides the guest with buffet style dining and catering for the meeting rooms. The buffet is currently located remotely from the kitchen, making access to replenish the buffet difficult. It is recommended that the buffet be relocated to better serve the guest. The renovation will also include a kitchen remodel to provide a more efficient flow to improve production, replace faulty equipment, address the HVAC, electrical and plumbing issues. Additional seating outdoors has been requested.

In addition to the kitchen and buffet renovation, there will be a new separate bar located in the lounge area. This will ensure the space and the bar are better utilized. The Bar will be designed to allow the Lodge to provide a wide variety of liquor, bottled beer, 3-4 draft beer selections and cocktails. The bar will also provide a limited menu that will be serviced from the renovated kitchen. A mobile bar is to be provided for the meeting room and outdoor pool area.

The Lodge would like to add a grab-n-go option within the gift shop space to provide quest with additional dining options. The grab-n-go area will have space to accommodate bottled beverages, pre-made salads, sandwiches, frozen desserts, candies, and packaged snacks. There will be proper refrigeration to hold products at the required temperatures. All sundries and other items will be displayed in typical retail fashion on slat walls and merchandising counters.

The ice machine on one of the guest floors will need to be replaced and will match the existing ice machines and bins.

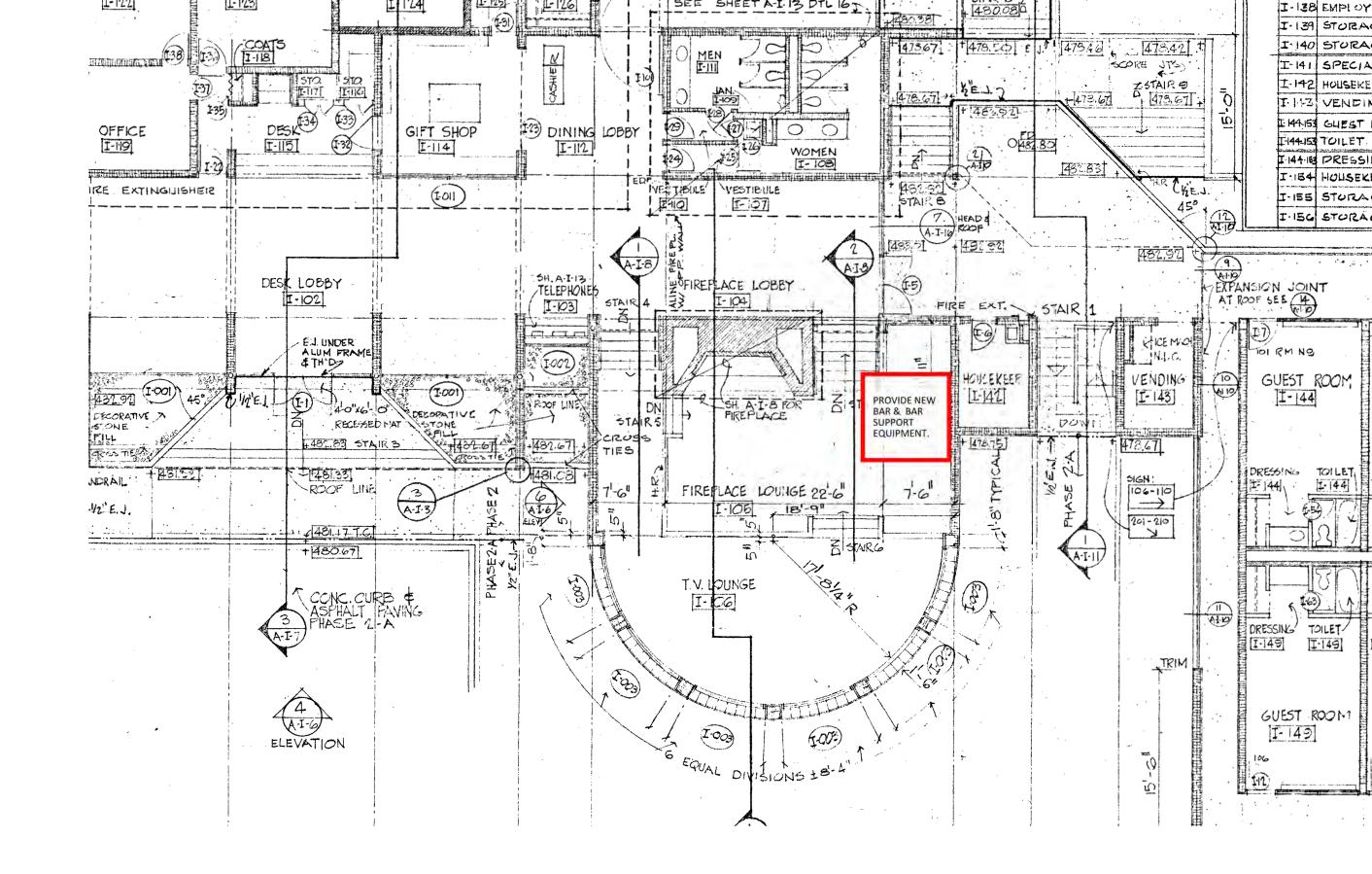


















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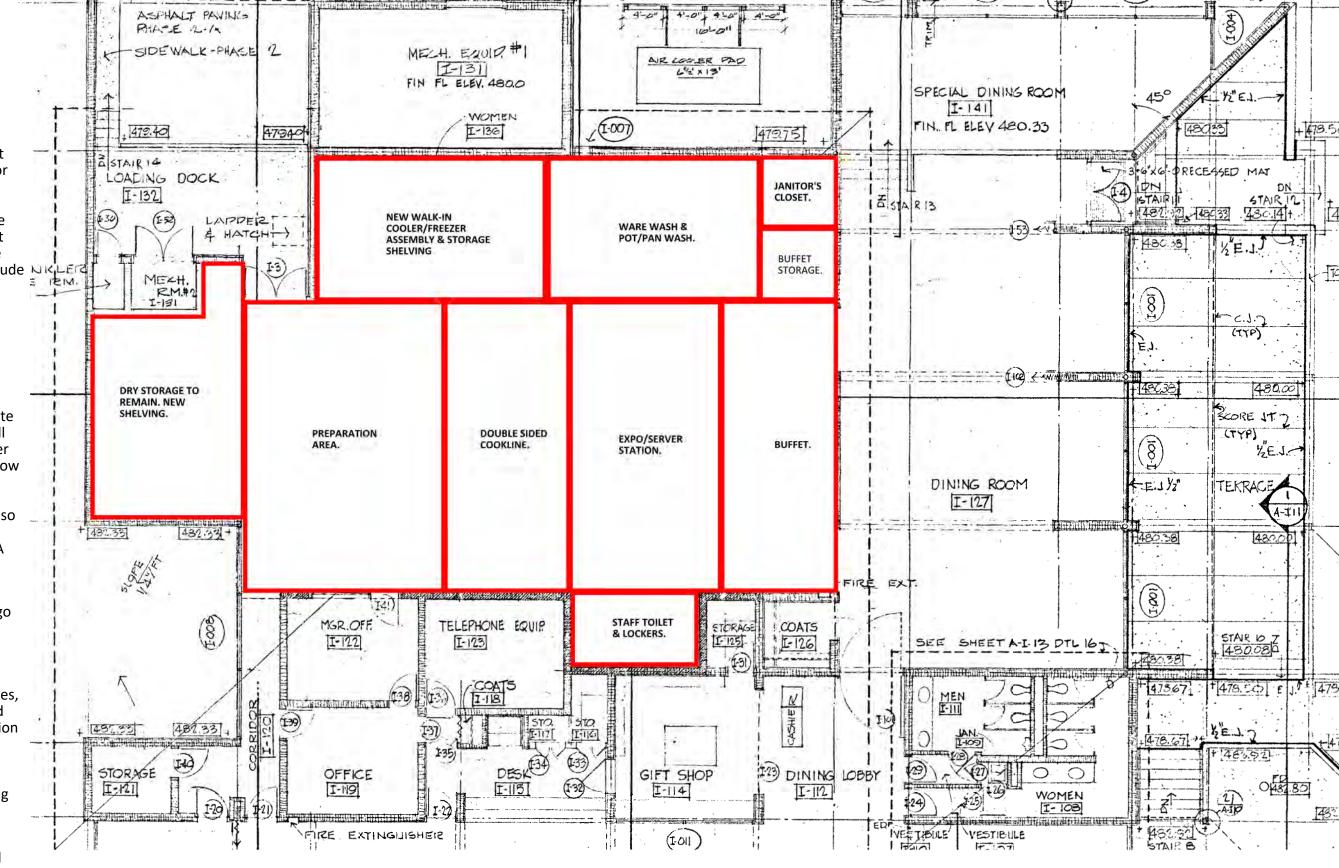
Option B is to renovate the public areas of the building, but construct a new guest room wing.

The Lodge currently provides the guest with buffet style dining and catering for the meeting rooms. The buffet is currently located remotely from the kitchen, making access to replenish the buffet difficult. It is recommended that the buffet be relocated to better serve the guest. The renovation will also include a kitchen remodel to provide a more efficient flow to improve production, replace faulty equipment, address the HVAC, electrical and plumbing issues. Additional seating outdoors has been requested.

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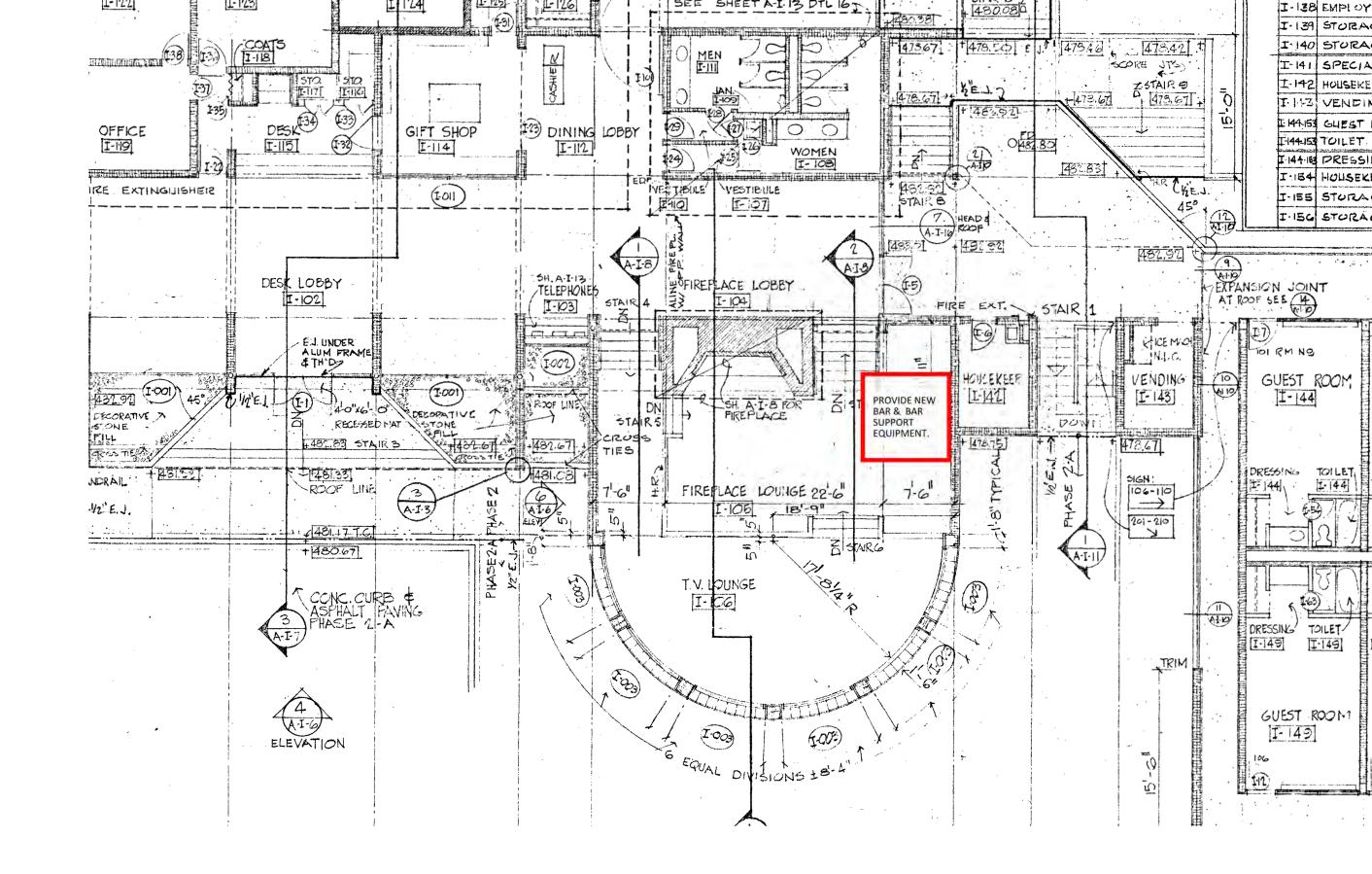


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24845 NATCHEZ TRACE RD, WILDERSVILLE, TN | 05 AUGUST 2022



Option C is to provide an entirely new facility.

The existing Lodge, scheduled for demolition, provided the guest with buffet style dining, as well as catering for the meeting rooms. Limited bar service was also provided.

The new building will include a new commercial kitchen to provide cooking capabilities to accommodate guest dining, buffet dining and catering for the meeting rooms. Storage for dry goods and chilled goods will be designed to keep delivery to a minimum. In addition to the new kitchen and dining, there will be a separate bar with additional seating. The area will include a mixture of high-top tables and bar seats. The exact location and size of the bar will be coordinated with the architect (EOA). The bar design will allow for the Lodge to provide a wide variety of liquors, bottled beers, 3-4 draft beer selections and cocktails. A mobile bar is to be provided for the meeting room and outdoor pool area.

The Lodge would like to add a grab-n-go option within the gift shop space to provide quest with additional dining options. The grab-n-go area will have space to accommodate bottled beverages, pre-made salads, sandwiches, frozen desserts, candies, and packaged snacks. There will be proper refrigeration to hold products at the required temperatures. All sundries and other items will be displayed in typical retail fashion on slat walls and merchandising counters.















RECOMMENDED SOLUTION NARRATIVE - MEP

PROJECT: Pin Oak Lodge Renovation

SBC#: 529/000-02-2019

PMC PROJECT#: 22068

PREPARED BY: Judson Adams, P.E. & Grayson Adams, P.E.

DATE: August 5, 2022

The State of TN is contemplating a renovation/replacement of the Pin Oak Lodge in the Natchez Trace State Park. Three options are being considered:

- Option A Renovate the existing facility in its entirety
- Option B Renovate the public areas of the building; construct a new guest room wing
- Option C Construct an entirely new facility in the same location as the existing

The following narrative outlines the recommended MEP solution for each option.

Option A – Complete Renovation:

Plumbing

Demolish and replace all plumbing fixtures in the public areas and guest areas. Retain all supply, waste, and vent piping, and water heating systems.

<u>Domestic Water Service Entrance and Metering</u>

Reuse the 3" water entry and meter

Domestic Hot Water Production

- Reuse the instantaneous water heaters for the and public areas and guest areas.
- Relace the point of use water heaters located in the public restrooms

Supply, Waste, and Vent Piping

 Reuse existing copper domestic water lines, PVC rainwater leaders, cast iron sanitary piping, and black steel gas piping.

Fixture Types

Install new flush tank water closets throughout

- Install new hi-low drinking fountains in public area
- Install new urinals with battery powered electronic flush valves in public restrooms
- Install new lavatories with battery powered electronic faucets in public restrooms.
- Install new lavatories with single lever faucets in guestrooms.
- Install new shower/tubs in guestrooms

HVAC

Clean and reuse most of the HVAC systems in the public areas including supply ductwork and air devices. Retain packaged roof-top units that are in good condition and suitable for reuse.

Cooling and Heating Equipment

- Reuse air cooled rooftop units (RTU) in the public areas
- Install new RTUs for the kitchen and restaurant
- Install new make-up air unit in the kitchen
- Install dehumidifiers for the Lobby
- Replace PTAC heat pumps in each guestroom with new PTACS that have increased dehumidification control, quite operation, and ventilation air control.
- Install a wall mounted dehumidifier with condensate drain in each Guestroom

Air Distribution System

- Repair and reuse ductwork for the public areas
- Install return ductwork for all RTUs to prevent moisture infiltration
- Replace all ceiling air devices throughout public areas
- Rebalance all airflows in public areas

Exhaust and Ventilation

- Incorporate demand control ventilation (CO2 sensors) to control ventilation air in the Meeting Rooms and Restaurant
- Replace kitchen grease exhaust and makeup air
- Install a new hood for dishwasher
- Replace roof mounted exhaust fans serving the guestrooms
- Provide ventilation control in the PTAC units serving guestrooms
- Rebalance exhaust and ventilation air throughout, including guestrooms

Controls and Automation

Install new programmable thermostats for each system serving the public areas

Fire Sprinkler

Reuse and recertify existing fire sprinkler system. Modify system to accept any new floorplan changes.

Fire Water Service Entrance

Reuse 6" fire riser and meter

System Type and Coverage

- Reuse and re-work wet system to protect the entire building
- Install fire sprinkler system to protect guestroom building
- · Replace sprinkler heads throughout

Electrical Power

Upgrade the electrical power systems in the public areas. Clean and reuse the existing electrical systems in the guest areas.

Utility Service Entrance and Metering

 Replace the electrical service entrance with new, modernized equipment sized for the renovated facility electrical demand

Facility Power Distribution System

- Replace all 1972 vintage power and branch circuit panelboards in the public areas
- Reuse existing branch circuits in public areas where existing walls are not affected
- Install new branch circuitry for all remodeled spaces
- Install a new kitchen panel and all new kitchen branch circuitry
- Clean and reuse all panelboards in the guest areas
- Add receptacles as required by code to modernize the guestrooms

EV chargers

Install four new electric vehicle chargers in the designated parking spaces

Lighting

Replace all lighting in the public areas and guest areas.

Lighting Fixtures and Lamps

- Install LED fixtures throughout
- Install exit and egress lighting throughout; Use battery backup

Controls and Automation

 Provide code required lighting controls in all spaces, including occupancy sensors and time-of-day controls in public areas.

Fire Alarm and Smoke Detection System

Replace the manual fire alarm system serving the public areas and guest areas with a new code compliant addressable system. Install new stand-alone smoke alarms and CO sensors in each guestroom.

Option B – Renovation with New Guestroom Wing:

Plumbing

Incorporate the same scope of work described in Option A for the public area plumbing systems. Completely demolish and reconstruct all new plumbing systems for the new guestroom wing as outlined below.

Domestic Water Service Entrance and Metering

• Extend new 2" water line to feed new guestroom wing

<u>Domestic Hot Water Production</u>

Install new instantaneous water heaters with recirculation system

Supply, Waste, and Vent Piping

- Install new supply, waste, vent, and stormwater piping. Use copper supply mains, PEX branch lines, cast iron waste lines, and PVC vent and stormwater lines.
- Install black steel gas piping for the water heaters and connect to the public area main gas service.

Fixture Types

- Install new flush tank type water closets
- Install new shower/tubs
- Install new lavatories with single lever faucets

HVAC

Incorporate the same scope of work described in Option A for the public area HVAC systems. Completely demolish and reconstruct all new HVAC systems for the new guestroom wing as outlined below.

Cooling and Heating Equipment

• Install PTAC heat pumps with increased dehumidification control, quite operation, wall thermostat, and ventilation air control.

Exhaust and Ventilation

Install central exhaust fans on the roof to serve the guestrooms

Controls and Automation

Install a wall mounted thermostat for the new PTACs.

Fire Sprinkler

Incorporate the same scope of work described in Option A for the public area fire sprinkler systems. Install a new fire sprinkler system for the new guestroom wing as outlined below.

Fire Water Service Entrance

Install a new 6" riser

System Type and Coverage

- Wet system NFPA 13
- Residential sprinkler heads

Electrical Power

Incorporate the same scope of work described in Option A for the public area electrical power systems. Install a new electrical power system for the new guestroom wing as outlined below.

<u>Utility Service Entrance and Metering</u>

• Serve the guestroom wing electrical power form the existing public area building service

Facility Power Distribution System

- Install new branch circuit panelboards on each level to serve the guestrooms
- Install a branch circuit in each guestroom for 1) general lighting and 2) bathroom circuit
- Install branch circuit for the PTAC unit
- Install power for the central exhaust system

Lighting

Incorporate the same scope of work described in Option A for the public area lighting systems. Install new lighting systems for the new guestroom wing as outlined below.

<u>Lighting Fixtures and Lamps</u>

- Provide new LED wall sconces in the guestroom sleeping area and bathroom
- Install exit and egress lighting throughout; Use battery backup

Controls and Automation

- Install occupancy sensors in the guestrooms
- Install manually switched receptacles for floor lamp in the sleeping area

Fire Alarm and Smoke Detection System

Incorporate the same scope of work described in Option A for the fire alarm system.

Option C – New Facility:

Install plumbing systems for the new facility as described below.

Plumbing

Domestic Water Service Entrance and Metering

Install a 3" water entry for the facility

Domestic Hot Water Production

- Install an instantaneous water heater plant for the kitchen and public areas
- Install a separate instantaneous water heater plant for the guestroom wing
- Install a hot water recirculation system for each water heater plant

Supply, Waste, and Vent Piping

- Install new supply, waste, vent, and stormwater piping
- Use copper supply mains, PEX branch lines, cast iron waste lines, and PVC vent and stormwater lines
- Install black steel gas piping for the water heaters and other gas-fired equipment

Fixture Types

- Install new flush tank water closets throughout
- Install new hi-low drinking fountains in public area
- Install new urinals with battery powered electronic flush valves in public restrooms
- Install new lavatories with battery powered electronic faucets in public restrooms
- Install new lavatories with single lever faucets in guestrooms.
- Install new shower/tubs in guestrooms

HVAC

Install HVAC systems for the new facility as described below.

Cooling and Heating Equipment

- For the for the public areas install packaged rooftop units (RTU) with the following features:
 - Air-Cooled DX, 16 SEER rating
 - Gas heat
 - Active dehumidification control
 - Roof curb
 - o Full economizer
 - Self-contained controls
 - Motorized intake and exhaust dampers
 - Supply air temperature sensors

- Install a dedicated RTU for the laundry area, sized for spaced conditioning, humidity control and dryer make up air
- Install PTAC heat pumps with increased dehumidification control, quite operation, wall thermostat, and ventilation air control.

Air Distribution System

- Install sheet metal supply and return ductwork for all areas except the guestrooms
- Install ceiling air devices throughout public area

Exhaust and Ventilation

- Install demand control ventilation (CO2 sensors) to control ventilation air in the meeting rooms and restaurant
- Install central exhaust fans on the roof to serve guestrooms
- Install kitchen exhaust and tempered makeup air
- Install a hood for cookline equipment and for the dishwasher
- Install a fully ducted exhaust system with lint trap for the laundry dryers

Controls and Automation

- Install a centralized building automation system capable of monitoring status and adjusting setpoints and occupancy schedules for all HVAC equipment, excluding PTACs.
- Install a wall mounted thermostat for the new PTACs

Fire Sprinkler

Install a fire sprinkler system for the new facility as described below.

Fire Water Service Entrance

Install a 6" fire riser in Riser Room.

System Type and Coverage

- Install NFPA 13 wet system to protect the entire building
- Install residential sprinkler heads for guestroom and quick response heads for all other areas

Electrical Power

Install electrical power systems for the new facility as described below.

Utility Service Entrance and Metering

 Install a new electrical service entrance and main switchboard with meter on the utility transformer - 120/208-volt, 3-phase wye connected

Facility Power Distribution System

- Install new branch circuit panelboards to serve HVAC, kitchen, public areas lighting and power, and guestrooms
- Install new branch circuitry using EMT conduit/wire and MC cable where applicable
- Install a new kitchen panel and all new kitchen branch circuitry
- Install receptacles as required by code in guestrooms and kitchens
- Install general-use receptacles throughout

EV chargers

Install four new electric vehicle chargers in the designated parking spaces

Lighting

Install LED lighting in the public areas and guest areas

Lighting Fixtures and Lamps

- Install LED fixtures throughout
- Install exit and egress lighting throughout; Use battery backup

Controls and Automation

 Provide code required lighting controls in all spaces, including occupancy sensors and time-of-day controls in public areas.

Fire Alarm and Smoke Detection System

Install a manual fire alarm system serving the public areas and guest areas with a code compliant addressable system. Install new stand-alone smoke alarms and CO sensors in each guestroom.



Program Document
Natchez Trace State Park Lodge
24845 Natchez Trace Rd.
Wildersville, Henderson County, TN 38388
SBC #: 529/000-02-2019-03, Task Authorization #: 03-012

Executive Summary

Based on discussions with the State after the Phase 1 deliverable, the design team has prepared recommendations for 3 options for the future of the Natchez Trace State Park Inn. This document will provide additional information for all 3 options include a detailed program, anticipated design and construction schedules, and an opinion of probable cost.

Option A: Renovate the existing facility in its entirety.

This option is consistent with the conversations held on site and prepared in our team's Phase 1 deliverable. Our team is recommending this option include a full renovation of all architectural finishes, and MEP systems as detailed in the Phase 2 recommendation. Note there is sitework associated with this option to provide ADA access to all portions of the Lodge, and to connect the outdoor amenities more directly.

Our team's recommendation is for the State to close the Lodge for the duration of the renovation, but an option could be considered that allows the construction to be phased so that portions could be left open as necessary.

Option B: Renovate the existing public areas of the existing facility and reconstruct a new Guest Area.

This option allows the State to address one of the most dire needs of the facility by constructing brand new guest rooms that would be consistent with their other products across the State. Interior corridors would be provided that would allow every guest room to have a private balcony. Renovating the Public areas to the same degree proposed in Option A would maintain some of the existing character from the previous design.

Similar to Option A, a phased approach could be considered, but given the amount of new construction associated with the guest wings, our team recommends Inn be closed for the duration of the renovation.

Option C: Construct a brand-new facility.

The design team evaluated options that would locate the new facility in a manner that would allow the existing facility to remain open, but due to the site limitations on the peninsula, and the significant undertaking to relocate all utilities to another location in the Park, we recommend locating the new Lodge in the same general area as the existing.

The program for the new Lodge would closely mimic the existing, but guest rooms would be in two separate wings with all rooms having a view to the lake. Rooms would step down the site in a similar fashion

to the existing, with an additional level of rooms below the Lobby level. A subterranean corridor would be needed to connect levels below grade. This arrangement also allows for the creation of a private outdoor space for the pool and other amenities, with all rooms facing the lake. The State has also requested the addition of a Private Dining Area as well as in-house laundry facilities.

The Civil-Site Programming Document raises a concern with the removal of the existing parking lot facing the lake. Further study would be needed to ensure the revised plan meets the parking needs of the facility. As Kimley Horn points out, guest rooms could be stacked in a single wing, or perhaps relocated if the revised plan did not provide adequate parking.

Detailed Program Information

Refer to attached Exhibit A

Anticipated Project Duration

Programming 06 weeks
Schematic Design 10 weeks
Design Development 12 weeks
Construction Documents 14 weeks

Total Design Duration* 42 weeks (+/- 10 months)

*Note this timeframe does not include review time by STREAM and Stakeholders between design phases.

Bidding / Negotiation 08 weeks

Construction 78 weeks (+/- 18 months)

Project Close Out 04 weeks

TOTAL PROJECT DURATION 132 weeks (+/- 38 months)

Opinion of Probable Cost

Refer to attached Exhibit B



STREAM: Pin Oak Lodge Civil/Site Programming Document

DATE: August 31, 2022

TO: Josh Gruner

EOA Architects PLLC 515 Main Street Nashville, TN 37206

RE: Civil/Site Programming Document

Pin Oak Lodge at Natchez Trace State Park Lodge

567 Pin Oak Lodge Road Wildersville, TN 38388

Mr. Gruner:

Following one visit to Pin Oak Lodge at Natchez Trace State Park, Kimley-Horn submits the following civil/site programming document.

Consistent with EOA's recommendations, Kimley-Horn's recommended conceptual scopes of work to be performed are specific to one of three site plan options. Option A is to renovate the existing facility in its entirety. Option B is to renovate the public areas of the building but construct a new guest room wing. Option C is to provide an entirely new facility.

Options A and B

Kimley-Horn assumes that implementation of Option A would not alter the building footprint or elevations. Kimley-Horn also assumes that the implementation of Option B, despite construction of a new guest room wing, would not alter the building footprint or elevations. Additional site investigation would be required to develop a more detailed civil/site scope of work if it was determined that the implementation of Option B would impact the building footprint or elevations. The following recommended scope of work for Options A and B was developed under these assumptions. See Exhibit 1 below for an overall layout of proposed improvements.

Recommended Scope of Work

- Restripe ADA parking stalls in the side parking lot to create additional standard parking spaces.
- Relocate playground to stripe additional parking stalls and a two-way drive aisle in the rear parking lot.
- Widen concrete connection from the side parking lot to the rear parking lot to facilitate twoway traffic.



- Pave additional area adjacent to the existing front parking lot to create new ADA accessible spots.
- Regrade existing sidewalk between the front parking lot and the guest rooms to ensure ADA compliancy.
- Designate 2-5% of total vehicular stalls as EV parking.
- Preserve existing Pin Oak trees at the front of the lobby.
- Install swale north of the 1990s guest room addition to facilitate positive drainage away from the guest rooms.
- Reset drainage structures in the pool area to adequately capture stormwater drainage.



Exhibit 1: Overall Map of Civil/Site Scope of Work for Options A and B

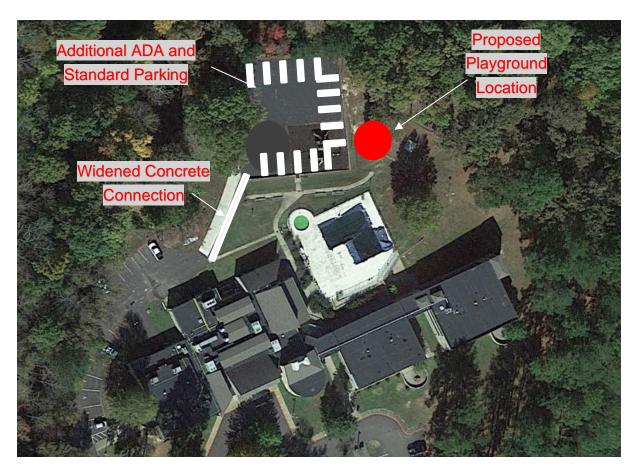


Exhibit 2: Rear Parking Lot Upgrades for Options A and B



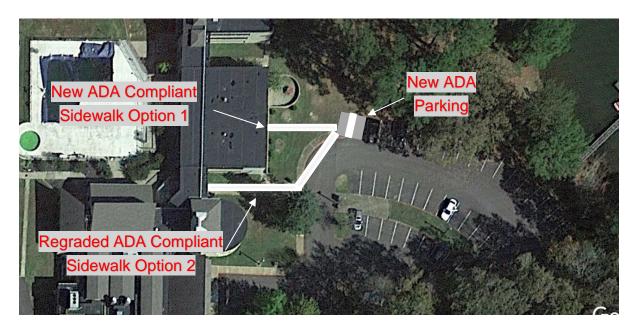


Exhibit 3: Front Parking Lot ADA Upgrades for Options A and B



Option C

Kimley-Horn assumes that implementation of Option C would provide the flexibility to alter building elevations, and therefore alter site grading and stormwater drainage as appropriate. This would eliminate the need for many of the improvements listed in Options A and B. However, additional site investigation would be required to better understand existing site topography and drainage patterns and develop a more detailed civil/site scope of work, after finalization of the new building footprint and elevations. The following recommended scope of work for Option C was developed under these assumptions. See Exhibit 4 below for an overall layout of proposed improvements.

Recommended Scope of Work

- Remove southern guest room wing and relocate these guest rooms to additional floors above the proposed eastern guest room wing, to conserve space for parking stalls and eliminate the need for mass regrading of the existing front parking lot. Complete elimination of the front parking lot would significantly decrease parking capacity on site, require high fill volumes to regrade, and potentially require retaining walls.
- Relocate playground to stripe additional parking stalls and a two-way drive aisle in the rear parking lot.
- Widen concrete connection from the side parking lot to the rear parking lot to facilitate twoway traffic.
- Designate 2-5% of total vehicular stalls as EV parking.
- Preserve existing Pin Oak trees at the front of the lobby.
- Grade ADA accessible paths from the accessible stalls to the public areas of the building as well as the guest room wing(s).
- Match new building footprint and elevations to existing building footprint and elevations as appropriate to achieve the greatest accessibility but the least need for mass regrading.





Exhibit 4: Overall Map of Civil/Site Scope of Work for Option C

Let me know if you have any questions.

Thank you,

Rachel Robinson, E.I. Kimley-Horn

Space Designation Elements				NSF/ Space S	# of Spaces	Total NSF	EX NSF	Equipment Budget	S.F. Cost
OFFICE, EXECUTIVE CHEF				128	1	128	152		
Workstation w/ Computer Terminal		1.0 @	60 NSF	60		- 1			
File Cabinet		1.0 @	6 NSF	6		_			
Book Shelf		1.0 @	6 NSF	6		_			
Vendor Waiting		2.0 @	15 NSF	30		_			
	Circulation	@	25%	26					
OFFICE, MANAGER				90	1	90	159		
Workstation w/ Computer Terminal		1.0 @	60 NSF	60		_			
File Cabinet		1.0 @	6 NSF	6		_			
Book Shelf		1.0 @	6 NSF	6		_			
	Circulation	@	25%	18					
STAFF LKR/BREAKROOM				117	1	117	120		
Seating		4 @	15 NSF	60		_			
Lockers		10 @	3 NSF	30		_			
	Circulation	@	30%	27					
STAFF TOILET FEMALE				73	1	73	61		
Water Closet		1 @	48 NSF	48		_			
Handsink		1 @	8 NSF	8		_			
	Circulation	@	30%	17					
STAFF TOILET MALE				73	1	42	42		
Water Closet		1 @	48 NSF	48		_			
Handsink		1 @	8 NSF	8		_			
	Circulation	@	30%	17					
J.C./CHEM STOR.				34	1	34	24	\$ 4,394	\$ 130
Chemical Rack		1 @	8 NSF	8		_			
Trash Trucks		1.0 @	12 NSF	12					
Mop Sink		1 @	6 NSF	6					
	Circulation	@	30%	8					
WALKIN, COOLER, COOKS				120	1	120	104	\$ 38,400	\$ 320
WALKIN,COOLER				120	1	120	114	\$ 38,400	\$ 32
WALKIN, FREEZER, GENERAL				140	1	140	140	\$ 44,800	\$ 32

Inman Foodservices Group, Inc.

Nashville, Tennessee

Space Designation Elements				NSF/ Space	# of Spaces	Total NSF	EX NSF	E	quipment Budget		s. <i>F.</i> Cost
STORAGE, DRY FOOD				312	1	312	313	\$	28,080	\$	90
Storage Shelving		24 @	8 NSF	192				•	,	•	
Can Racks		2 @	8 NSF	16		_					
	Circulation	@	50%	104		_					
NONFOOD STORAGE				60	1	60	58	\$	5,400	\$	90
PREP, COLD				179	1	179	1553	\$	51,129	\$	285
Vegetable Prep Sink		2.0 @	30 NSF	60		_					
Worktable		1.0 @	30 NSF	30		_					
Pan Rack		3.0 @	6 NSF	18		_					
Slicer w/ Stand		1 @	6 NSF	6		_					
Mixer		1 @	6 NSF	6		_					
Food processor		1				_					
Refrigerator, Reach-in		1.0 @	12 NSF	12		_					
Hand sink		2 @	3 NSF	6		_					
	Circulation	@	30%	41		_					
PREP, BAKERY				82	1	82	inc	\$	23,342	\$	285
Bakery prep table w/ Sink		1.0 @	30 NSF	30		_					
Proofer		1 @	12 NSF	12		_					
Refrigerator, Reach-in		1.0 @	12 NSF	12		_					
Pan racks		1 @	6 NSF	6		_					
Ing. Bins		4				_					
Hand sink		1 @	3 NSF	3		_					
	Circulation	@	30%	19		_					
COOKING/GENERAL PROD	UCTION			190	1	190	inc	\$	111,150	\$	585
Dbl. Convection Oven		1.0 @	20 NSF	20		_					
Dbl. Convection Steamer		2.0 @	12 NSF	24							
Kettle, 12 gal. Trunnion		1.0 @	9 NSF	9							
Range		2 @	20 NSF	40							
Dbl. Cook n Hold		2.0 @	8 NSF	16	`						
Hand sink		1 @	3 NSF	3							
Utility distribution		1 @	40 NSF	40							
-	Circulation	@	25%	38							

Space Designation Elements			NSF/ Space	# of Spaces	Total NSF	EX NSF	-	uipment Budget	S.F. Cost
Elements			Зрасе	Spaces	NSF	NOF		uugei	COSI
COOKING/CHEFS PRODUCTION			161	1	161	inc	\$	94,331	\$ 585
Charbroiler	1.0 @	20 NSF	20		_				
Griddle w/ Ref. Eq. Stand	1 @	18 NSF	18		_				
Range w/ Ref. Eq. Stand	2 @	20 NSF	40		_				
Fryer w/ Dump Station	2.0 @	16 NSF	32		_				
Refrigerator/Freezer, Reach-in	2.0 @	8 NSF	16	`	_				
Hand sink	1 @	3 NSF	3		_				
Circulation	n @	25%	32		_				
CHEFS COUNTER			250	1	250	inc	\$	94,848	\$ 380
Refrigerated Prep Table	2.0 @	25 NSF	50		_				
Carving Station	1.0 @	6 NSF	6		_				
PrInter Stations	4.0				_				
Hot Wells	5 @	4 NSF	20		_				
Reachin refrigerator	1.0 @	12 NSF	12		_				
Wait Tray Assemb. Area w/ Dble. Overshelf	1.0 @	60 NSF	60		_				
Soup Well	2.0 @	4 NSF	8		_				
Mobile Rack	2.0 @	9 NSF	18		_				
Mobile Tray Plating Table	1.0 @	12 NSF	12		_				
Hand Sink	2.0 @	3 NSF	6		_				
Circulation	n @	30%	58		_				
COLD PANTRY COUNTER			226	1	226	inc	\$	81,432	\$ 360
Refrigerated Prep Table	1.0 @	25 NSF	25		_				
Hand Sink	1.0 @	3 NSF	3		_				
PrInter Stations	2.0				_				
Worktable w/ Sinks	2 @	24 NSF	48		_				
Slicer w/ Stand	1 @	6 NSF	6		_				
Mixer	1 @	6 NSF	6		_				
Microwave	1 @	6 NSF	6		_				
Wait Tray Assemb. Area w/ Dble. Overshelf	1.0 @	40 NSF	40						
Ice cream freezer	1.0 @	6 NSF	6						
Mobile Rack	1.0 @	6 NSF	6						
Mobile Storage Unit	1.0 @	8 NSF	8						
Dbl. Pass Thru Refrigerator	1.0 @	20 NSF	20						
Circulation	n @	30%	52						

Space Designation				NSF/	# of	Total	EX	quipment	S.F.
Elements				Space	Spaces	NSF	NSF	Budget	Cost
WAIT PICK-UP BEVERAGE AREA				192	1	192	226	\$ 36,480	\$ 190
Reachin Refrigerator		1.0 @	24 NSF	24				,	
Hand Sink		1.0 @	6 NSF	6					
Beverage Table		1.0 @	50 NSF	50					
Ice Maker w/Bin		1 @	24 NSF	24					
P.O.S. System		2 @	6 NSF	12					
Mobile Rack		2 @	6 NSF	12					
	Circulation	@	50%	64		_			
POT/PAN WASHING				118	1	118	inc	\$ 29,575	\$ 250
Power soak Wash Sink, Four comp.		1 @	80 NSF	80				·	
Pot and Pan Rack		1 @	8 NSF	8					
Hand sink		1 @	3 NSF	3					
	Circulation	@	30%	27		_			
WAREWASHING				283	1	283	286	\$ 90,400	\$ 320
Soil /Scrapping Table		1 @	100 NSF	100					
Cart Holding		4 @	6 NSF	24					
Automated dishmachine		1 @	36 NSF	36					
Sorting		1 @	60 NSF	60					
Hand sink		1 @	6 NSF	6					
	Circulation	@	25%	57		_			
BUFFET (located in dining room)				164	1	164	80	\$ 81,900	\$ 500
Recessed 5 Well Hot Food Unit		1.0 @	50 NSF	50					
Recessed Cold Food Unit		1.0 @	40 NSF	40					
Pastry Display		1 @	24 NSF	24					
Misc. Display		1 @	12 NSF	12					
	Circulation	@	30%	38					

Space Designation Elements				NSF/ Space	# of Spaces		Total NSF	EX NSF	Equipment Budget	S.F. Cost
DINING ROOM Seating	Circulation	80 @ @	20 NSF 30%	2080 1600 480			2080	2215		
PRIVATE DINING ROOM Seating	Circulation	24 @ @	18 NSF 30%	562 432 130			562	547		
LIQ. STORAGE (Mobile Bar)				120	1		120	65	\$ 27,600	\$ 230
MISC.STORAGE				56	1		56	56		
						-	_		_	
TOTAL DEPAR	Circulat			10% 3%			5898 590 195	6315 183 114		
TOTAL DEPARTME	ENT GROSS	AREA				-	6682	6612		
Total Equipment Area							2746		\$ 854,061	\$ 311
Total Equipment Budget						\$	854,061	 		

148 24 6 16 8 18 18 6 34	1	148	\$	48,165	\$	325
6 16 8 18 18 18						
16 8 18 18 18 6						
8 18 18 18						
18 18 18 6						
18 18 6						
18 6						
6						
34						
			l			
10%		148 15				
3%						
		168				
		148	\$	48,165	\$	32
	\$	48,165	ï			
	10% 3%	3%	10% 15 3% 5 168	10% 15 3% 5 168 148 \$	10% 15 3% 5 168 148 \$ 48,165	10% 15 3% 5 168 148 \$ 48,165 \$

Space Designation			NSF/	# of		Total	EX	=	auinmont	° E
Space Designation Elements			NSF/ Space	# or Spaces		NSF	NSF		quipment Budget	S.F. Cost
BUFFET (located in Prefunction Area)			164	_		164	80	\$	81,900	\$ 500
Recessed 5 Well Hot Food Unit	1.0 @	50 NSF	50			104	00	Ψ	01,000	Ψ 000
Recessed Cold Food Unit	1.0 @	40 NSF	40			_				
Dessert Area	1 @	24 NSF	24			_				
Beverage Area	1 @	12 NSF	12			_				
Circulation	@	30%	38			_				
					_			_		
TOTAL DEPARTMENT NET A Circulati Structu	on @		10% 3%			164 16 5	80 183 114			
TOTAL DEPARTMENT GROSS	AREA				_	186	6612			
Total Equipment Area						164		\$	81,900	\$ 500
Total Equipment Budget					\$	81,900				

Natchez Trace State Park - Exhibit A SBC # 529-000-02-2019-03 Detailed Program Document August 31, 2021

			PUBLIC AREAS	
	Room	Square Feet	Square Feet	
Room Name	Number	(Existing)	(Added)	Notes
Lobby		1890		
Front Desk		450		Includes closets behind front desk
Admin Offices		725		Includes 4 offices between Lobby and Kitchen
Kitchen		2790		Includes walk-in cooler/freezer
Break Room		125		Staff break area
Kitchen Restrooms		165		
Dry Storage		320		
Mechanical		430		
Loading Dock		670		
Dining Room		2915		
Public Restrooms		340		
Natchez Room		1470		Lounge space in Option C
Private Dining			900	Added in Option C
Seating Area		485		
Meeting Room A		1085		
Meeting Room B		1085		
Conf Restrooms		700		
Conf Circulation - FOH		850		
Conf Circulation - BOH		410		
Conf Loading		285		
Tables & Chairs		250		
Janitor		50		
Sprinkler Riser		75		
Staff restroom		65		
Laundry			1200	
Additional Conf Storage			400	
Public Area Total		17,630	2,500	

			GUEST AREAS	
	Room	Square Feet	Square Feet	
Room Name	Number	(Existing)	(Added)	Notes
Level 1 Rooms				
Guest Room	101	305		
Guest Room	102	305		
Guest Room	103	305		Connected to GR 104
Guest Room	104	325		Connected to GR 103 & 109
Guest Room	105	305		
Guest Room	106	305		
Guest Room	107	305		
Guest Room	108	305		Connected to GR 109
Guest Room	109	325		Connected to GR 104 & 108; includes kitchenette
Ice		30		·
Utility		85		
Housekeeping		85		
Elev Equip		85		
=:0: =40.1			400	Additional circulation to connect two guest wings in Option C
Elevator		75	75	A service elevator will be added in Option C
LEVEL 1 TOTAL		3145	475	
LEVELTIONAL		3143	473	
				Includes exterior stairs, but not patios
Exterior walkways		1960		Included as conditioned interior space in Options B and C
				metaded as conditioned interior space in options 5 and c
Level 2 Rooms				
Guest Room	201	305		
Guest Room	201	305		
Guest Room	202	305		
Guest Room	203	305		
	204	305		
Guest Room				
Guest Room	206	305 305		
Guest Room	207			
Guest Room	208	305		
Guest Room	209	305		
Guest Room	210	305		
Guest Room	211	305		
Guest Room	212	305		0 1 00 044
Guest Room	213	305		Connected to GR 214
Guest Room	214	315		Connected to GR 213 & 219
Guest Room	215	305		
Guest Room	216	305		
Guest Room	217	305		
Guest Room	218	305		Connected to GR 219
Guest Room	219	315		Connected to GR 214 & 218; includes kitchenette
Rec Room		455		Has been converted into storage
Ice		30		
Housekeeping		265		
Vending		180		
Elevator		75	75	A service elevator will be added in Option C
			400	Additional circulation to connect two guest wings in Option C
Storage		210		
LEVEL 2 TOTAL		7030	475	
Exterior walkways		4230		Includes exterior stairs, but not patios Included as conditioned interior space in Options B and C
Level 3 Rooms				
Guest Room	301	305		
Guest Room	302	305		
Guest Room	302	303	<u> </u>	

LODGE TOTAL		24 415	2 025	
Public Area Total		17,630	2,500	
Guest Area Total		16,785	1,425	Does not include an additional 10,555 of exterior walkways
Exterior walkways		4,365		
		1.005		
LEVEL 3 TOTAL		6610	475	
Storage		210		
			400	Additional circulation to connect two guest wings in Option C
Elevator		75	75	A service elevator will be added in Option C
Vending		180		
Housekeeping	_	265		
Guest Room	319	315		Connected to GR 314 & 318; includes kitchenette
Guest Room	318	305		Connected to GR 319
Guest Room	317	305		
Guest Room	316	305		
Guest Room	315	305		
Guest Room	314	315		Connected to GR 313 & 319
Guest Room	313	305		Connected to GR 314
Guest Room	312	305		
Guest Room	311	370		ADA Guest Room
Guest Room	310	305		
Guest Room	309	305		
Guest Room	308	305		
Guest Room	307	305		
Guest Room	306	305		
Guest Room	305	305		
Guest Room	304	305		
Guest Room	303	305		

	,	,	
LODGE TOTAL	34,415	3,925	
Swimming Pools	2020		
Pool Deck	5400		
Playground	13000		Former tennis courts
Exterior Walkways	8700		Estimated, Includes patios and sidewalks
Parking Lot	39600		Includes Front lot, conference lot, and loading area
Access Drives	10400		Includes approach road and drop off area
Overflow Parking	26900		To be converted to truck/trailor parking under separate contract

Exhibit B

Opinion of Probable Cost-Natchez Trace State Park Lodge Reconstruction Option A- Renovation

Date: 9/1/22 **Divisional Breakdown** Cost per GSF **Estimate Amount** 712,300 \$ Division 1 General Requirements 20.00 \$ 525,000 \$ 14.74 Division 2 **Existing Conditions** \$ \$ Division 3 Concrete 10.00 \$ 356,150 \$ Division 4 Masonry 30.00 1,068,450 \$ Division 5 Metals 10.00 356,150 Division 6 Wood, Plastic, Composites \$ 14.00 498,610 Division 7 Thermal & Moisture Protection \$ 11.00 391,765 \$ \$ Division 8 Openings 26.00 925,990 Division 9 Finishes \$ 48.00 \$ 1,709,520 Division 10 **Building Specialties** \$ 4.00 142,460 Division 11 Equipment \$ 27.80 990,000 Division 12 **Furnishings** \$ 2,000,000 56.16 \$ Division 13 **Special Conditions** 4.21 \$ 150,000 Division 14 \$ Conveying Systems 2.81 \$ 100,000 \$ 249,305 Division 21 Fire Suppression 7.00 \$ Division 22 Plumbing 14.00 \$ 498,610 Division 23 Mechanical \$ 25.00 890,375 Electrical & Communication \$ Division 26 45.00 \$ 1,602,675 Division 31 \$ Earthwork 14.04 500,000 Division 32 \$ 14.04 \$ **Exterior Improvements** 500,000 Subtotal Direct Cost of Work \$ 14,167,360 **General Conditions** \$ 708,368 Construction Contingency \$ 1,416,736 Design Contingency \$ 1,416,736 Builder's Risk \$ 212,510 Bond \$ 212,510 Contractor's Fee \$ 1,416,736 Subtotal Soft Costs 5,383,597 Escalation to 2023 13% | \$ 2,541,624 Escalation to 2024 12% 2,651,110 Escalation to 2025 10% \$ 2,474,369 Escalation to 2026 10% 2,721,806 **Total Construction Cost \$** 29,939,866

Exhibit B

Opinion of Probable Cost-Natchez Trace State Park Lodge Reconstruction Option B- Renovation & New Guest Wing

Date: 9/1/22 **Divisional Breakdown** Cost per GSF **Estimate Amount** 712,300 \$ Division 1 General Requirements 20.00 \$ \$ 14.74 525,000 Division 2 **Existing Conditions** \$ \$ Division 3 Concrete 25.69 \$ 914,840 \$ Division 4 Masonry 1,191,850 33.46 \$ Division 5 Metals 16.73 595,925 Division 6 Wood, Plastic, Composites \$ 14.00 498,610 Division 7 Thermal & Moisture Protection \$ 11.00 391,765 \$ \$ Division 8 Openings 26.00 925,990 Division 9 Finishes \$ 48.00 \$ 1,709,520 Division 10 **Building Specialties** \$ 4.00 142,460 Division 11 Equipment \$ 27.80 990,000 Division 12 Furnishings \$ 2,000,000 56.16 \$ Division 13 **Special Conditions** 4.21 \$ 150,000 Division 14 \$ 250,000 Conveying Systems 7.02 \$ \$ 249,305 Division 21 Fire Suppression 7.00 Plumbing \$ Division 22 20.13 \$ 716,800 Division 23 Mechanical \$ 890,375 25.00 Division 26 Electrical & Communication \$ 1,602,675 45.00 \$ Division 31 \$ 21.06 Earthwork 750,000 Division 32 Exterior Improvements \$ \$ 21.06 750,000 Subtotal Direct Cost of Work \$ 15,957,415 **General Conditions** \$ 797,871 Construction Contingency \$ 1,595,742 1,595,742 Design Contingency \$ Builder's Risk \$ 239,361 Bond \$ 239,361 Contractor's Fee \$ 1,595,742 Subtotal Soft Costs \$ 6,063,818 Escalation to 2023 13%|\$ 2,862,760 Escalation to 2024 12% 2,986,079 Escalation to 2025 10% \$ 2,787,007 Escalation to 2026 10% 3,065,708 Total Construction Cost \$ 33,722,787

Exhibit B

Opinion of Probable Cost-Natchez Trace State Park Lodge Reconstruction Option C - New Construction

9/1/22 Date: **Divisional Breakdown** Cost per GSF **Estimate Amount** \$ Division 1 General Requirements 20.00 \$ 766,800 525,000 \$ Division 2 **Existing Conditions** 13.69 \$ \$ Division 3 Concrete 44.00 \$ 1,686,960 \$ Division 4 Masonry 50.00 1,917,000 \$ Division 5 Metals 25.00 958,500 Division 6 Wood, Plastic, Composites \$ 536,760 14.00 Division 7 Thermal & Moisture Protection \$ 11.00 421,740 \$ \$ Division 8 Openings 26.00 996,840 Division 9 Finishes \$ 48.00 \$ 1,840,320 Division 10 **Building Specialties** \$ 4.00 153,360 Division 11 Equipment \$ 25.82 990,000 Division 12 **Furnishings** \$ 2,000,000 52.16 \$ Division 13 **Special Conditions** 13.04 \$ 500,000 Division 14 \$ Conveying Systems 9.78 \$ 375,000 \$ Division 21 Fire Suppression 7.00 268,380 \$ Division 22 Plumbing 28.00 \$ 1,073,520 Division 23 Mechanical \$ 1,150,200 30.00 Electrical & Communication \$ Division 26 45.00 1,725,300 Division 31 \$ 39.12 Earthwork 1,500,000 Division 32 **Exterior Improvements** \$ \$ 26.08 1,000,000 **Subtotal Direct Cost of Work** 20,385,680 **General Conditions** \$ 1,019,284 Construction Contingency \$ 2,038,568 Design Contingency \$ 2,038,568 Builder's Risk \$ 305,785 Bond \$ 305,785 Contractor's Fee \$ 2,038,568 Subtotal Soft Costs 7,746,558 Escalation to 2023 13%|\$ 3,657,191 Escalation to 2024 12% 3,814,732 Escalation to 2025 10% \$ 3,560,416 Escalation to 2026 10% 3,916,458 **Total Construction Cost \$** 43,081,035