

For Executive Privilege

NEW HAMPSHIRE CORRECTIONAL FACILITY FOR MEN REPLACEMENT PROJECT

Task III: Findings & Recommendations Executive Summary



May 2026

Acknowledgements

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Glossary of Terms

Various terms and abbreviations are used within this report. This glossary terms and acronym list is offered to make reading this document easier.

<u>Term</u>	<u>Acronym</u>
American Correctional Association	ACA
American with Disabilities Act Accessibility Guidelines	ADA
Corrections Counselor/Case Manager	CC/CM
Close Custody Unit (Housing Unit for C4 inmates)	CCU
Career and Technical Education	CTE
General Educational Development	GED
Health Information Portability and Accountability Act	HIPAA
Intermediate Distribution Frame	IDF
Leadership in Energy and Environmental Design	LEED
Main Distribution Frame	MDF
Mental Health	MH
New Hampshire Adult Parole Board	Board
New Hampshire Department of Corrections	NHDOC
NH State Prison for Men	NHSP-M
Officer in Charge	OIC
Offender Management System	OMS
Pending Administrative Review	PAR
Prison Rape Elimination Act	PREA
Probation/Parole Officer	PPO
Request for Project Review	RPR
Reception and Diagnostic Unit	R&D
Residential Treatment Unit	RTU
Acute Psychiatric Intensive Care	APIC
Special Emergency Response Team	SERT
Special Housing Unit (Housing for C5 inmates)	SHU
Victim Services Unit	VSU
Victim Witness Advocate	VWA

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INTRODUCTION/ EXECUTIVE SUMMARY

INTRODUCTION/EXECUTIVE SUMMARY

In 2024, the State of New Hampshire Department of Administrative Services (NHIDAS) on behalf of the New Hampshire Department of Corrections (NHDOC) began work with DLR Group, in partnership with Lavallee Brensinger Architects and a team of specialized consultants (the Planning Team), for the provision of preliminary design services for a new 1,500-bed Correctional Facility. Capacity for planning was based on a one-to-one replacement capacity for the existing facility, as the population of the New Hampshire correctional system has been relatively stable for the past several years.

The new facility will replace outmoded and inefficient existing New Hampshire State Prison for Men (abbreviated to NHSP-M) located at 281 North State Street in the city of Concord, New Hampshire. NHSP-M is the oldest correctional facility in the State of New Hampshire. Replacement is warranted for several reasons:

- The NHSP-M opened in 1878 to replace the original state prison built in 1812. In 1934 the industries building was established containing the original plate shop, sign shop, and print shop industries. In the early 1980s, new Special Housing and Close Custody housing units were constructed, and extensive renovations were undertaken to the administrative offices, chapel, staff and inmate dining areas. In 1986, the Secure Psychiatric Unit and Medium security units were completed & began operations.
- The infrastructure of the prison is best termed as “aged but functional”, indicating that it is working but the timing of failure of the majority of system components is unpredictable at best. As a supplemental effort (authorized in March of this year), the planning team is currently undertaking a Facilities Condition Assessment to quantify the cost of returning the existing facility to a full state of good-repair. Of critical concern is the condition of locking devices and electronic security systems essential to day-to-day operation, which are to the greatest extent inoperable in the North & South Housing towers. Additionally, state of good-repair will require replacement of two major components -Food Service Dining due to extreme leakage of the original construction from the exposed ramps and walkways over functioning spaces and Reception & Diagnostics due to extreme functional deficiencies. Note that costs will be significantly impacted by phased renovation of an existing occupied facility. Information on “do nothing costs” will be available in at the end of-June 2026 when the study and implementation plan are completed.
- This latest housing expansion work summarized above resulted in a total design capacity of 844 beds at NHSP-M. Due to continued growth in the incarcerated population since the last expansion in 1986, the day-to-day operating capacity of the facility is over 1,400 beds, accommodated primarily by double-celling housing initially designed for a single occupant and when necessary adding beds to day room areas. The population has regularly exceeded not only the rated capacity, but also the assumed maximum operational capacity.
- The outmoded design and layout of some of the existing buildings results in day-to-day operations, and staffing inefficiencies, and the quality of the work environment for staff is a detriment to staff recruitment and retention, resulting in significant expenditures for overtime of security staff.

As outlined below, the initial planning phase is primary focused on determining the feasibility of constructing a new facility, including siting, space requirements, overall approach to development and estimated range of construction and project costs as a basis for project implementation. An underlying imperative of the process is to focus the program on achieving better outcomes for inmates, their families, staff, communities and the State of New Hampshire through enhanced programs while at the same time focusing on increased operational efficiencies and mitigating long-term staffing and operating cost increases.

Phase I Pre-Design Planning Focus and Deliverables

Phase I, Pre-Design as defined by the New Hampshire Department of Administrative Services and Department of Corrections was focused on defining all of the parameters necessary to facilitate decision-making related to project implementation. These key parameters defined by the Phase I Pre-Design Study as outlined in this report are outlined and summarized below.

The effort for Phase I, Pre-Design was completed under three primary tasks:

- **Task I. Preliminary Programming & Site Identification**, the subject of a previous report dated April 2025, involved analyzing the projected population distribution by classification, performing an initial site evaluation and developing a complete preliminary architectural program identifying the main program elements to be included or co-located in the new facility complex, and the overall square footage of the proposed new facility
- **Task II. Site Evaluation**, the focus of this report, was on the analysis of the current prison property to determine potential sites for development of the replacement facility, environmental, geological and other development constraints impacting site development, site test fits based on the preliminary program, and finally comparative evaluation of available sites based on off-site development costs and potential grading and rock excavation as a basis for a recommendation to New Hampshire Department of Corrections, the Department of Administrative Services for presentation to the Governor, Legislature and the Executive Council.
- **Task Group III. Master Planning/Pre-Schematic Implementation** the subject of this report focuses on the development of a conceptual framework for design representative of the organization and location of buildings for the new replacement facility on the approved site, definition of the masterplan framework and layout of the project as the basis for design phase services, reflecting the approved space program, and operational review with NHDOC and NHDAS. Additionally, this phase will included an overall summary of the proposed basis for design of the buildings and systems, statement of probable construction cost and an implementation plan and schedule which will support the development of a comprehensive statement of probable project costs including escalation based on an anticipated project start date, subject to action by the Legislature, Governor and Executive Council

The Task III report summarizes the recommendations of the Pre-Design Study in accordance with the defined scope as follows:

Site Determination & Development Analysis – Determination of the best available site within the existing state property occupied by DOC on North State Street in Concord for development of the new replacement facility. Effort included a full and complete analysis of environmental, geotechnical, utilities, access and other factors impacting development to both assure that there were no impediments to development and to

Phase I Scope as Published by Department of Administrative Services

This project is for a complete exhaustive site evaluation and pre-design effort for a new men's correctional facility. The new facility will be located adjacent to the Women's Correctional Facility on the 380-acre site currently owned by the State on North State Street in Concord. Evaluation will include: complete boundary and topographic survey including documentation of all deeds and easements and other encumbrances on the properties currently known and unknown; geologic analysis including soils and rock testing, borings and/or test pits; detailed analysis of existing utilities and recommendations for supplemental utility infrastructure to meet the requirements of this type and size facility on site, including water for domestic and fire use, storm water, sewer electrical, communications, etc.; full documentation and analysis of the impact of City of Concord requirements for site development on this site; full analysis and documentation of state and federal environmental requirements for this site including archaeology (if any), wetlands, etc.; and siting of building footprints, parking, access roads, perimeters, clear areas, etc. required for a state of the art correctional facility

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provide a basis for establishing an order of magnitude estimate for site development costs to facilitate an early package for site preparation, similar to the implementation planning for the New Women's Prison.

Note that the site determination and analysis effort was focused on the existing site as it already has public acceptance as the site for the prison, is central to the current labor pool supporting operations and its proximity to the urban core of Concord allows the facility to draw on a wide range of professional resources to support medical and behavioral health needs as well as rehabilitative programming.

Following the comparative evaluation as part of Task Group 2, it was determined that further advancing and refining the development for Site A/B was preferred. Utilizing the knowledge obtained during the site investigation and data gathering and understanding the site connection points for access, the proposed site development location was updated to provide a development scenario to limit impacts to the surrounding natural resources.

Preliminary grading plans were advanced to better understand the primary elevations that could be achieved at major program elements, including parking areas, roadway intersections, service yard and primary entrance elevations. Due to the length and slope of the access roads to achieve higher elevations, significant side slopes are required to meet existing grade, resulting in additional wetland impacts and/or grading towards existing constraints. Therefore, to minimize these impacts, another option was reviewed that included additional walls to further reduce the overall development footprint.

These two conceptual 'Options' were evaluated concurrently. Both utilize the same building layout and roadway alignments, however, grading and retaining walls were compared.

Option 1 included a grading model that emphasized fewer retaining walls and a lower construction cost. Option 1 is approximately 61-acres of disturbance. However this option also has sizable wetland impacts and thus would require an extensive permitting effort and larger monetary contributions to the ARM fund for wetland and stream mitigation measures.

Option 2 sets a higher priority on minimizing wetland and stream impacts, through the use of additional retaining walls to minimize the extents of site grading and earthwork. Option 2 is approximately 58-acres. By introducing additional (and taller) retaining walls, proposed grading extents could be brought in and environmental impacts decrease dramatically. It is also worth noting that impact permit applications submitted to the NHDES will be required to demonstrate minimization of environmental impacts. So, while Option 2 represents a higher construction cost due to additional retaining walls, it also represents a reduced cost of impact mitigation fees and likely a more streamlined permitting process with the NHDES. For this reason, Option 2 was selected for the focus of this investigation.

Please refer to Section 2 for additional detail on the overall development analysis completed as part of Pre-Design Services as well as a list of anticipated permitting requirements. Additionally, refer to the Task I & II reports and Appendices for the detailed report supporting the site analysis and development plan.

Programming & Projected Space Requirements – A key parameter for determining the range of order of magnitude costs for implementation is the determination of the probable area requirements for the planned replacement facility. The Planning Team undertook a detailed collaborative effort with DAS, DOC and facility staff to understand current area shortfalls and potential space requirements to support the mission of DOC to “reduce recidivism by providing safe, humane supervision and evidence-based rehabilitation to enhance public safety in New Hampshire”. Additionally, this effort focused on increasing staff efficiency and efficacy by considering staffing requirements in parallel with space needs.

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A key focus of Task III was reviewing and revising the projected space requirements to optimize space available to meet the operational requirements of the program while reducing the total area planned for the facility.

Synopsis of Findings -As illustrated in Table 3.2 following the background narrative, **total Building Gross Area is currently projected to be 642,425 BGSF¹** for the primary replacement facility of 1,506 Beds (C3, C4, C5 & Medical & Special Housing). **This is a reduction of 61,961 BGSF from the initial Task I Preliminary Program.** This now equates to 262 NSF per/bed or 371 DGSF/426 BGSF per bed, which is typical for facilities with a robust prison industry, vocational and rehabilitative programming.

Moreover, two other areas have been identified for consideration as part of supplemental services:

- C-2 Minimum Security Housing as summarized in Table 3.3 has been separated from the base program to allow consideration for potentially adapting existing buildings after construction of the replacement facility for C-2 housing as part of the supplementary analysis requested by DAS/DOC. If this is feasible and less costly, it **represents a further reduction in initial project funding of 35,383 BGSF.**
- DOC Central Services including Field Services/Probation, Transportation, Facility Maintenance, Centralized Pharmacy and Mailroom as summarized in Table 3.4 have also been separated from the base program as part of the ongoing analysis of the potential adaptive use of existing buildings after construction for DOC Central Services. This results in a **further reduction to the base program as presented in Task I of 42,020 BGSF.** An additional 30,308 has also been identified for consideration for adaptive use to consolidate DOC Headquarters, the Correctional Officers Training Academy and facilities to support staff retention as part of ongoing supplementary services.

From the initial Task I Program total projected needs for initial construction have been reduced by over 100,000 BGSF (exclusive of C-2 Housing) through focused program reductions and planning DOC Central Service functions as backfill of buildings vacated by construction of the new replacement facility.

(See Section 3 of this report and Task II Report & Appendices).

Conceptual Site Test Fit – In order to both facilitate the identification of an appropriate site and inform site development costs such as access and grading, Phase I included the development of multiple site test fit schemes. These schemes are not intended to represent final design but rather provide a benchmark for moving forward. A key finding during the development of site test fits was that a more urban or compacted site organization is preferable over an open campus plan due to accommodating the grade differential across and of the sites. This was a conscious effort to reduce site development costs by minimizing the overall site footprint. These studies will inform the continuing design process and allow early development of design drawings for site preparation to allow permitting and procurement to proceed for an early site preparation package while building design and construction documents and permitting to proceed.

Three options were developed as part of analyzing Site A/B during Task II.

¹ **Net Area (NSF)** clear floor area required for an individual space; **Department Gross Area (DGSF)** accounts for the circulation area within the component and internal wall thicknesses; **Building Gross Area (BGSF)** total area to be constructed including “unassignable” areas such as circulation spaces, hallways, mechanical, electrical and data rooms, plumbing chases, wall thicknesses, horizontal and vertical circulation between component areas.

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- Option 1 was termed a Compact Urban Campus, with housing developed around an urban “mall” housing programs & services. This option focused on reducing the site footprint to mitigate extensive site preparation and related costs due to the sloping terrain and underlying rock strata.
- Option 2 was termed a Compact Suburban Campus with housing developed as independent structures and external movement to central programs and services, typical of correctional facility typology.
- Option 3 reflected an Open Campus concept that spread the housing buildings out on the site again with external circulation to central programs and support. Additionally, this option explored massing the central program and services element to follow the topography of the site, resulting in a curvilinear form to the building which created added construction complexity and costs.

Option 1 was determined to be the most advantageous approach to developing the replacement facility as it minimized the footprint and by compacting buildings, reduced circulation. Additionally, the compacted plan with internal movement allowed for campus type movement in inclement weather and each housing building still has a direct connection to the outside for recreation and to create a more humanistic environment. The primary “big” move between Task II and Task III was to shift the outdoor recreation fields from the North side of the facility to the South side so that they have a stronger relationship to the C-3 housing who are the primary users of the large fields. For additional information on the recommended site development option refer to Section 4 of this report. For additional information on the three options considered as well as the analysis of Site C please refer to the Task II report.

Figure 1.1

Artist Conception – New Hampshire Correctional Facility for Men Replacement Project



Implementation Plan and Schedule –Current planning mirrors the New Women’s Prison delivery strategy and issuing an early package for site preparation – access, grading, utility extensions – while design and construction documents for the buildings proceed, and then a separate procurement for vertical construction and final site development. This may also allow the State Legislature to fund the project in two increments rather than a single large amount.

Figure 1.2 overleaf illustrates the currently anticipated project delivery schedule for the New Hampshire Correctional Facility for Men Replacement Project. The anticipated approach to project delivery is similar to

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the approach used for the construction of the new Women's Facility. It anticipates that an early site preparation package will be procured to allow site preparation to begin while design is completed.

The projected schedule does suggest that project development will continue immediately as funding has been authorized by the legislature for design phase services. The intent would be to initiate work on the early site package concurrently with the completion of schematic design based on the planning framework established by this Phase I Pre-Design study. It does, however, recognize that there will be additional deliberations regarding project implementation given the magnitude of the anticipated expenditure. It assumes that a decision to move forward concurrently with execution of the contract for design services.

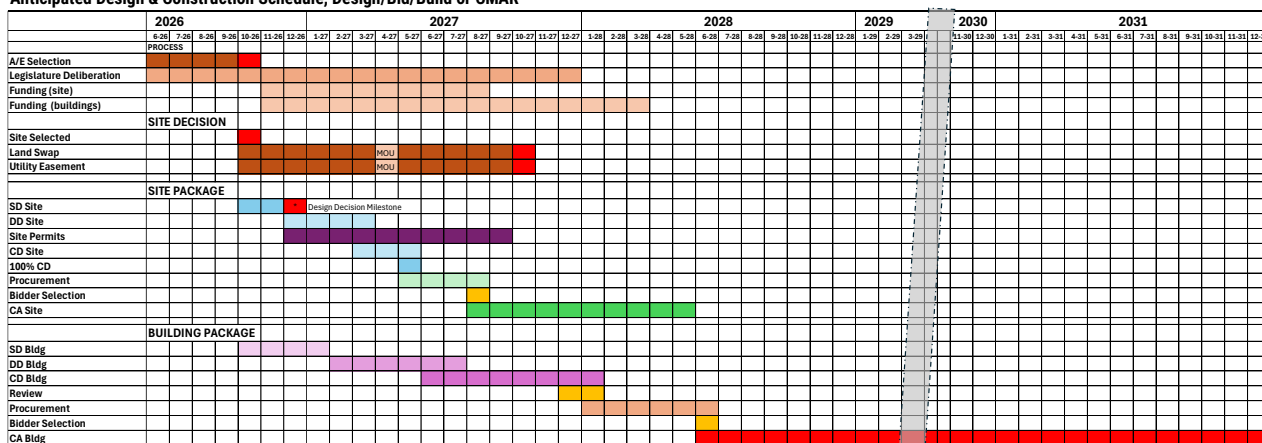
With an anticipated start related to procuring design services continuing as planned, it is anticipated that four (4) to four and one-half (4 1/2) years will be required to reach occupancy of the proposed replacement facility. In general, this allows for:

- Four months for the selection and negotiation of a contract for professional design services
- Sixteen months for full design services
- Development of, procurement and construction of the site preparation package concurrent with design of the buildings and final site work
- Four to six months for construction bidding, negotiation and contract execution, and
- Thirty-six to Forty-Two months for construction of the primary correctional facility.

The anticipated approach to project delivery is similar to the approach used for the construction of the new Women's Facility. It anticipates that an early site preparation package will be procured to allow site preparation to begin while design is completed. (See Section 5 of this report.)

Figure 2.1
Preliminary Project Design & Construction Schedule

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire
Anticipated Design & Construction Schedule, Design/Bid/Build or CMAR



Order of Magnitude Probable Costs – A key deliverable of Phase I, Predesign Planning is the preparation of an order of magnitude costs for construction.

Construction costs are based on the analysis of two major cost elements:

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- Site Development Costs based on the determination of the ideal site, required access roads and utility extension and anticipated rough grading including where necessary rock removal. These costs are based on a preliminary quantity take-off and general unit prices for this type of work in the New Hampshire market.
- Building Costs are based on unit prices/square foot by component base on the program of requirements. This accounts for the difference in unit costs for different building types. It reflects the variances in unit costs for differing uses. Typically for example, housing, medical, food service and control functions are more costly on a unit basis than education or programs and also have variable costs among themselves. Unit costs are based on current experience nationally in the construction of similar facilities, adjusted to the New Hampshire market. (See Section 6 of this report)

In developing a preliminary ROM estimate of probable construction cost the planning team focused on developing a range of costs as a set of “guardrails” for project development. Table 6.1 provides a summary of anticipated probable construction costs in today’s dollars based on the exhaustive site investigation effort completed, the refined architectural program and the conceptual site planning completed to date. As illustrated in Table 6.1, the Planning Team is projecting a range of construction costs of \$749.4M to \$786.8M for development of the New Hampshire Correctional Facility for Men Replacement Project. Note that the construction number excludes soft costs and funds already allocated as well as escalation.

Note that these costs exclude C-2 Housing and DOC Central Support facilities that are being analyzed separately as potential backfill for adaptive use of buildings that will be vacated upon completion of the new facility, including the historically significant original prison buildings.

Relative to the initial program estimate developed in conjunction with program development in Task I (for buildings only as site development costs were unknown at that time), this represents a \$54.6M to \$57.4M reduction in the estimated range of construction costs. If the C-2 beds are also excluded based on the potential to renovate/reuse or adapt use of vacated structures at the existing prison, the total cost reduction the total reduction in construction cost ranges from \$94.4M to \$99.0M.

Table 6.1
Anticipated Probable Construction Costs -All Construction

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire **Projected Range of Construction Costs Site & Building - (06.2026 Dollars)**

	Low Range	High Range
Site Preparation	\$ 23,178,600	\$ 24,337,530
Buildings/Vertical Construction	\$ 691,689,903	\$ 726,274,398
Final Sitework/Parking	\$ 34,487,500	\$ 36,211,875
Total Probable Construction Cost	\$ 749,356,003	\$ 786,823,803

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Note that these costs (excluding the site development costs) are comparable to similar projects currently in development or construction across the United States. For example:

- New Arkansas State Prison - \$825M
- Baltimore Therapeutic Treatment Center (MD Dept. of Public Safety and Correctional Services - \$846M const. cost in FY 25 now estimated at over \$1B;
- New South Dakota Men's Correctional Facility - \$650M for 1200 beds

Next Steps – There are several items that require further deliberation and action to advance the implementation of the development of the proposed New Hampshire Correctional Facility for Men Replacement Project.

-
- Acceptance of the recommendations of the Phase I Predesign Study.
- First and foremost is a determination by the Governor and the legislature of the need for the project, implementation strategy and funding source(s)
- Finalize the land swap with the City of Concord to provide the recommended site.
- Finalize negotiations with Util for relocation of the utility easement (concurrently with finalizing land swap.)
- Proceed with selection of design professional for development of early site package and final design & construction documents.
- Determine Delivery strategy specific to the project.

Finally, recognizing that there will be questions regarding the comparison of upgrading the existing facility, potential for expanding in place and the potential reuse of existing buildings, DAS & DOC have authorized the following supplemental studies within the original appropriation for Phase I, Predesign Study.

- Development of a complete Facility Condition Assessment of the exiting prison facility related to current condition and deferred maintenance along with an implementation plan and projected construction costs budget.
- Development of conceptual plan for additions, alterations and renovations for phased reconstruction/reuse of the existing facility to meet projected program requirements.
- Analysis of the potential for adaptive use or “backfilling” of the existing buildings to meet other systemic DOC space needs while preserving the historic character of the existing facilities which while not certified as of historical resources are considered socially significant and could be eligible for historical designation.

These follow-up reports along with a comparative analysis will be available by June 30, 2026.

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SITE DETERMINATION & DEVELOPMENT ANALYSIS

SITE DETERMINATION & DEVELOPMENT ANALYSIS

Site Assessment & Evaluation

The Phase I Pre-Design Study included an exhaustive and detailed review of the identified study area to determine the optimum site for the proposed New Hampshire Men's Correctional Facility Replacement project (NHMCFR). This effort is detailed in the Task I & II reports, and the final recommendations are presented herein.

Detailed investigations were completed during the study process and continually updated through comprehensive onsite surveys, subsurface exploration, sampling and analysis, and extended desk study reviews covering:

Site topography

- Soil characteristics
- Critical environmental resources
- Cultural and archeological resources
- Hazards
- Utility infrastructure

The objectives of these investigations were to document ground conditions, understand the geotechnical/subsurface conditions, investigate the likelihood of unexpected hazards, and to identify potential site constraints and constructability issues to support site selection and conceptual development plans and the development of a realistic order of magnitude budget reflecting actual site conditions.

Primary data collection efforts as outlined in the scope requested by DAs included:

- Geomatics – VHB conducted a comprehensive Existing Conditions Site Survey of the project site, including the New Hampshire Men's and Women's Correctional Facilities and surrounding undeveloped, wooded areas. The survey entailed preparing a Property Line Survey Plan and an Existing Conditions Plan, focusing on property lines, site features, topography, and underground utilities.
 - Property Delineation Survey - VHB acquired record plans and deeds from city offices and the Registry of Deeds, field-measured perimeter property lines, and compiled this data into a Property Line Survey Plan. This survey clearly identified the boundaries of the ten parcels within the project site.
 - Existing Conditions/Topographic Survey - VHB utilized a combination of LiDAR data for undeveloped areas and UAS/Drone flights plus traditional survey methods for developed areas to establish contours and site features. This survey encapsulated ten parcels with an additional 25-foot perimeter and identified key site features such as buildings, paved areas, utilities, and landscaping.
 - Underground Utility Survey - VHB assessed record drawings from local utility agencies to represent existing utilities at Quality Level D. Field measurements included the location of drain and sewer structures, invert elevations, pipe dimensions, type, and flow direction. The project integrated research, field work, and office calculations to deliver a detailed Existing Conditions/Topographic Survey of the site, facilitating further development planning.

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*Note: Due to limitations with security requirements within close proximity to the existing prison facilities and challenges with securing Department of Corrections (DOC) Staff for being security guides, VHB was unable to obtain all the subsurface utility information during this phase of the project. VHB will continue to work with DOC staff for availability to support in this documentation.

- Rare, Threatened, and Endangered Species Screening and Natural Resource Delineation - VHB Environmental Scientists (including a NH Certified Wetland Scientist) delineated wetland and stream boundaries within the approximately 488-acre project area. Wetland and stream boundaries were demarcated in the field by affixing sequentially numbered flagging tape to vegetation. Resource flags were located in the field utilizing handheld GPS units capable of sub-meter accuracy.
- Preliminary Geotechnical Investigations – Performed by S. W. Cole Engineering, Inc. for VHB, Inc. The project work included subsurface explorations involving test pit explorations, test boring explorations, and a geotechnical analysis of the subsurface findings.
- Historic/Cultural Resources - VHB prepared a Request for Project Review (RPR) for submittal to the NH Division of Historical Resources (NHDHR).
- Environmental Site Assessment - VHB environmental scientists conducted and prepared an environmental site assessment to identify Recognized Environmental Conditions (RECs) based on a review of environmental information and visual observations for overt evidence of a release or threat of a release of petroleum and/or hazardous substances on or in the vicinity of the Site.
- Transportation Assessment (Existing) - VHB performed a full Traffic Study in conformance with applicable City of Concord and New Hampshire Department of Transportation (NHDOT) guidelines, standards, and requirements.

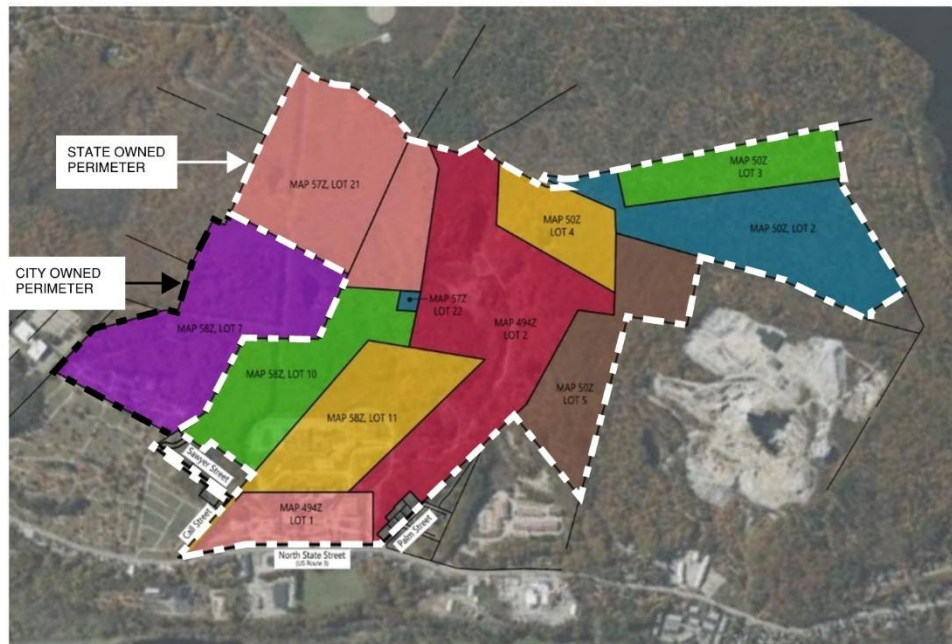
As noted, the site assessment and evaluation process that led to the recommended site is outlined in the detailed reports documented in Task I & II and related Appendices. A capsulized summary is provided in this Task III report for the convenience of the reader regarding the basis for the site determination as recommended.

Site Study Area

Figure 2.1 illustrates the area identified for analysis in determining potential siting locations. The study area is located within multiple zoning districts, including the Institutional District (IS) district and Open Space Residential (RO) district. Apart from the existing prison complex, shooting range, and utility ROW, most of the land is forested and undeveloped. The total study area identified for consideration including approximately 45 acres of state owned and controlled property. Note that while initially, the study area was limited to current state property, that limitations uncovered during the analysis led to the extension of the study area to adjacent property under the ownership of the City of Concord.

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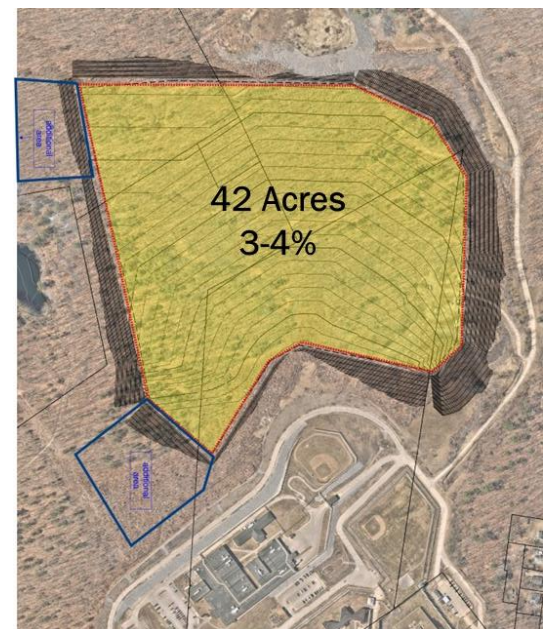
Figure 2.1 Overall Study Area



Within this area, as illustrated in Figure 2.2, initially it was believed that the most viable site was generally directly to the north of the Women's prison and directly north of the existing Women's Prison and South of the DOC Firing Range, with access via the service road to the Firing Range and primary access via an extension of the access road to the Women's Prison.

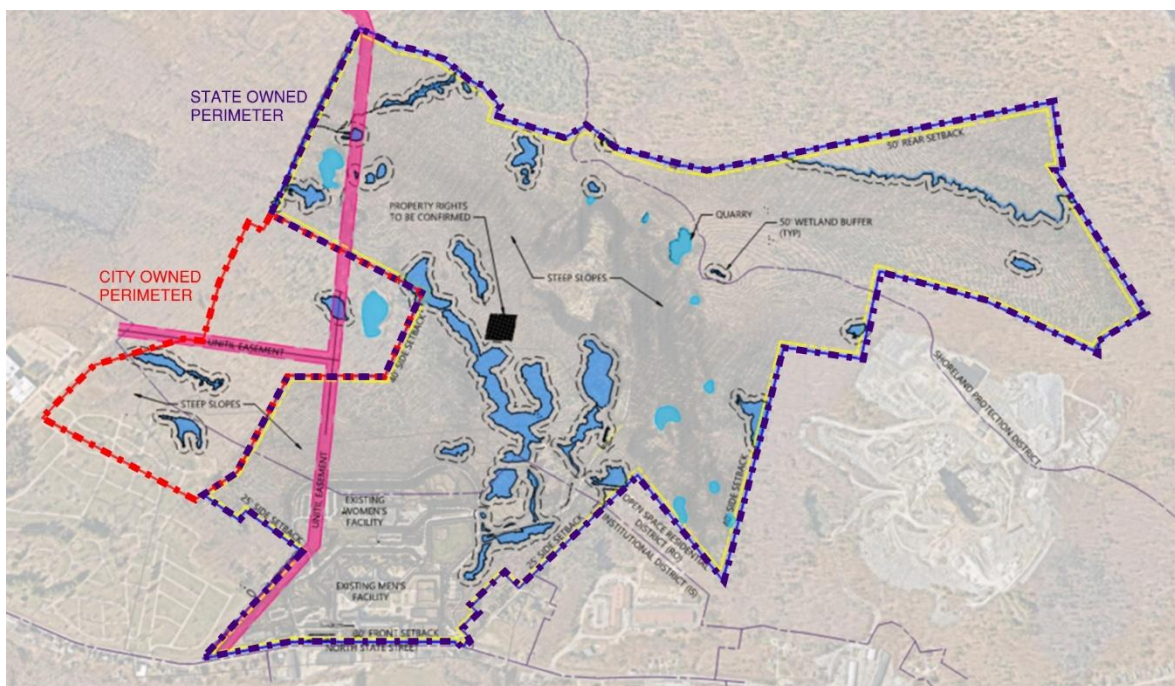
However, as illustrated in Figure 2.3 significant wetlands were found as part of the site environmental studies (Appendix A.2) which without mitigation effectively bifurcated this area into two smaller parcels. Additionally, a 110' wide transmission easement across State and City property limits site development to the East. The total area of wetlands in this site area was identified as in excess of 48.2 acres. Generally, approval of any area for wetlands mitigation of over an acre is difficult if not impossible to obtain, potentially impacting at a minimum time required for approvals and at a maximum, the viability of the site for development.

Figure 2.2 Initial Siting Concept



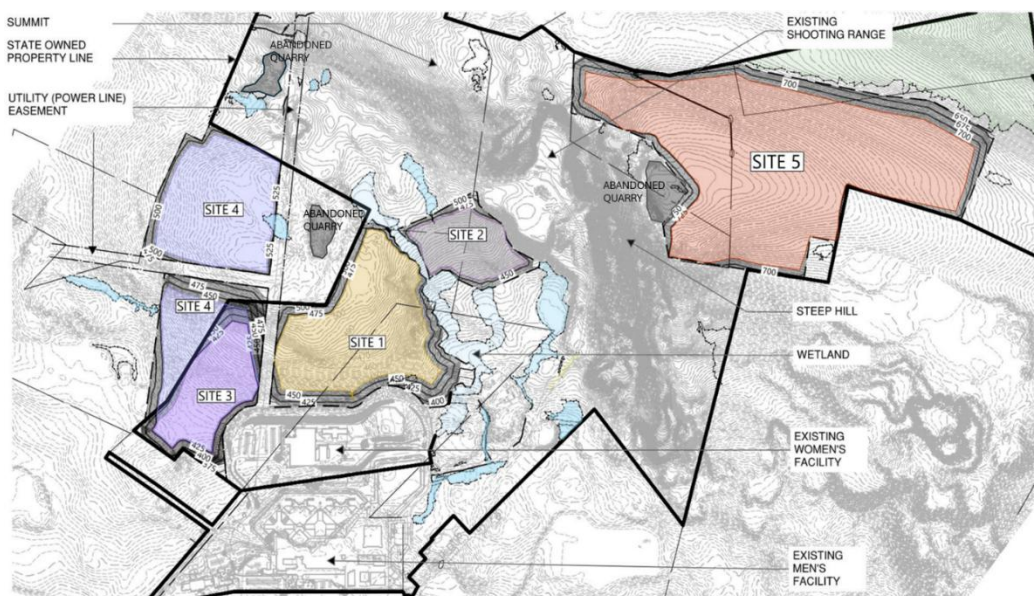
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Figure 2.3 Wetlands & Existing Transmission Easement



Five potential development sites were identified for initial screening as illustrated in Figure 2.4

Figure 2.4 Alternative Sites



To determine the initial viability of the five sites available for consideration it was necessary to evaluate each site against an established siting criteria. Five principal site evaluation criteria were established and utilized as the basis for comparing sites against each other objectively and consistently:

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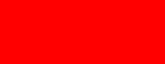
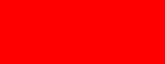
1. **Site Area** – Ability to accommodate the entire program.
2. **Site Access** – Ensuring efficient ingress and egress for staff, visitors, and service operations with two points of access to the site.
3. **Site Conditions & Constructability** – Assessing topographic conditions, the presence of granite bedrock on site, infrastructure, and overall build feasibility.
4. **Development Constraints** – Evaluating environmental and regulatory limitations, including likelihood of encountering cultural and historic resources and/or threatened/endangered species and habitats, wetlands and easement challenges.
5. **Campus Configuration Appropriateness** – Determining how the proposed architectural program fits on the available land area to allow low- to mid-rise construction, separate stand-alone buildings, ample recreational and landscape opportunities and parking.
6. **Expansion Flexibility** – Evaluating potential for site development and ensuring long-term adaptability for future growth and expansion onto contiguous sites if needed.

Each alternative site was evaluated against the above criterion and collectively rated with a color which reflects level of responsiveness to the individual criteria:

Best  Better  Fair  Poor 

A Green rating implies the adequacy of the site to meet the evaluation criteria, and the more the red ratings reflect a greater difficulty or higher cost of adapting the site to meet the projected requirements. Sites rated and ranked as shown in summary Table 2.1. Refer to Section 4 for a discussion of the rating criteria for each site.

Table 2.1 - Comparison of Alternative Sites against Siting Criteria

EVALUATION CRITERIA	Site 1 20 acres	Site 2 6 acres	Site 3 9 acres	Site 4 16.5 acres	Site 5 55 acres
Developable Area					
Site Access					
Site Condition & Constructability					
Development Constraints					
Campus Configuration Appropriateness					
Expansion Flexibility					

After careful review of the site requirements and applying the evaluation criteria yielded to the following preferences regarding each of the five alternative sites for development of the new replacement facility:

- **Site 5** is the most optimal parcel based on its extensive positive aspects. Regarding available buildable area, this was the most generous of the sites under consideration, potentially allowing for future expansion of the complex should that become necessary. It is relatively level across the entire buildable area and has a relative lack of issues requiring mitigation (there are no wetlands on the site,

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and it is located outside of any flood hazard zone). However, the most notable concerns about this site are access to existing utility infrastructure and the distance between this site and the primary access road and the availability of a second means of access to the site within the property.

- From a location standpoint, **Site 1** is the closest to the existing Women's Correctional Facility and offers the most convenient access from existing available roadways and utility infrastructure, which would limit the effort and resources associated with correctional operations and transportation.
- **Site 3** is preferable for its connectivity to all needed utility infrastructure and road access. The existing sewer, water, electrical and telecommunications infrastructure that is in place at the existing prison complex would support the future replacement facility with little upgrades required, avoiding costly improvements.

A critical consideration was the ability of the site to accommodate not only the program, but other site requirements related to the security of the facility that exponentially increase the required site acreage. Key distances are outlined below and illustrated in Section 4.

- Distance from buildings to the inner security fence – typically 75' to 100'+ including a 20' no-mans land subject to electronic intrusion monitoring and an internal fire road;
- Double fence with minimum 25' between fences;
- Perimeter patrol road 20'+ from outer fence, minimum 16' wide with pull offs for patrol vehicle stationing;
- Public Access buffer with nuisance fence – typically 200' minimum, 300' preferred;
- Fire response access roads inside the fence perimeter

Minimum criteria results in a need for 336' of site. This increased the required site area exponentially.

Traditionally, correctional facilities like NHSP-M are based on an open campus model that resembles a community or village within a secure perimeter. This allows for windows in cells, exterior movement to programs and services and connection with nature. In most cases, for a 1,500-bed facility this requires a relatively large site to accommodate the program and appropriate setback distances for security.

Development of an open campus would stretch the limits of the sites identified (even if combined) and given the terrain and geotechnical formation add significant costs to the development of the facility as witnessed by the construction of the new Women's Facility adjacent to the existing NHSP-M. The planning team, therefore adopted an approach for planning that would be based on a more compact plan that could even include "stacked" housing units in lieu of constructing all housing units on grade as one and two-tier structures.

The preliminary evaluation led to the following conclusions regarding identification of primary sites for consideration.

- Selected site must be larger than 65 acres (for 25 acres of buildable area perimeter or more)
- Wetland Mitigation (Ideally less than 1 acre) , Easement Mitigation & possible acquisition of City Land will be considerations to providing an appropriate site for development
- A compact more urbanistic solution is recommended to reduce "sunk" costs in site development
- As part of continued development of the Master Plan additional options should be considered to reduce site area requirements and therefore development costs such as:

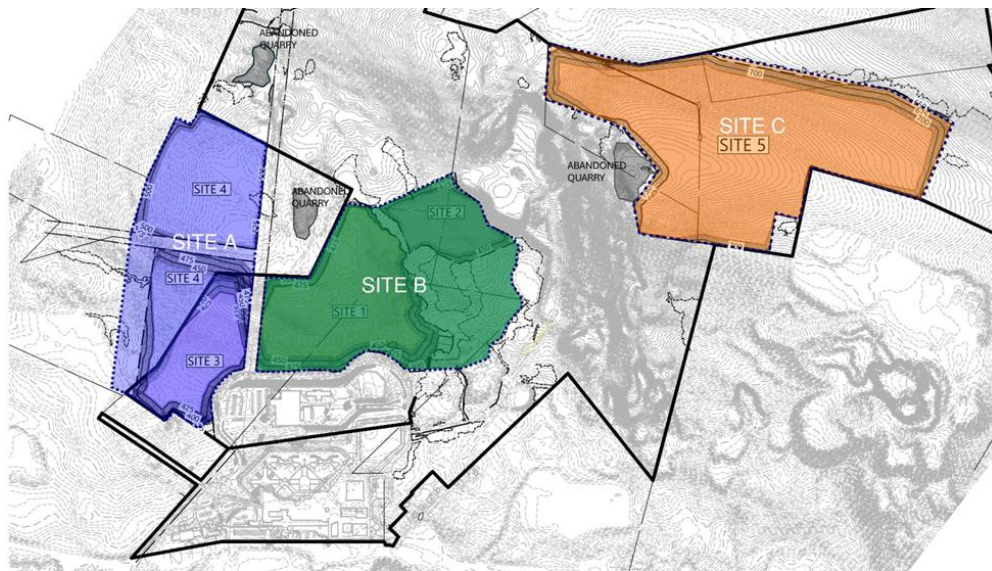
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- Reuse of existing buildings for systemic support functions not essential to day-to-day operation of the 1,500 bed prison replacement facility was recommended to reduce new construction required – and therefore site development costs.
- Potential for off-site parking or overflow parking

Site A/B Conceptual Site Test Fit Studies

Initially, A combination of sites 3 and 4 (relabeled as “Site A”) and sites 1 and 2 (reabeled as “Site B”) emerged as more suitable alternative options to move forward with in the evaluation process, along with Site 5 (reabeled as “Site C”) as illustrated in Figure 2.5.

Figure 2.5 Combined Alternative Sites



Site B, however, presented several challenges including impact of configuration on ability to effectively use developable area, and the potential need to mitigate 6+ acres of wetlands.

As illustrated in Figure 2.6, these studies suggested that Sites A & B should be further combined to provide a viable site for development, with the potential for reducing required Wetland mitigation area as noted in the site test fit descriptions.

The preferred location for development of the proposed Men’s Correctional Facility requires sufficient land to accommodate programmatic needs, security requirements, infrastructure, site access, and long-term operational considerations. To assemble the most advantageous contiguous land area, a potential land swap with the City of Concord has been identified as one possible mechanism to obtain land area necessary for the project. NHDAS, NHDOC & the Planning Team met with representatives of the City of Concord to discuss the potential of a land swap. The City has an interest in State owned land along the Merrimack River and are amenable to moving forward with a land swap and believe that it can occur concurrently with the continued development of design. The City also authorized the Planning Team’s civil engineer VHB to access City land to include the City property as part of the due diligence effort undertaken as part of Task II including the impact of the existing open abandoned quarry. Work to date has not identified any further site or environmental issues of concern.

The potential land swap concept contemplates an exchange of property interests between the State of New Hampshire and the City of Concord, the specifics of which have not been finalized. The New Hampshire

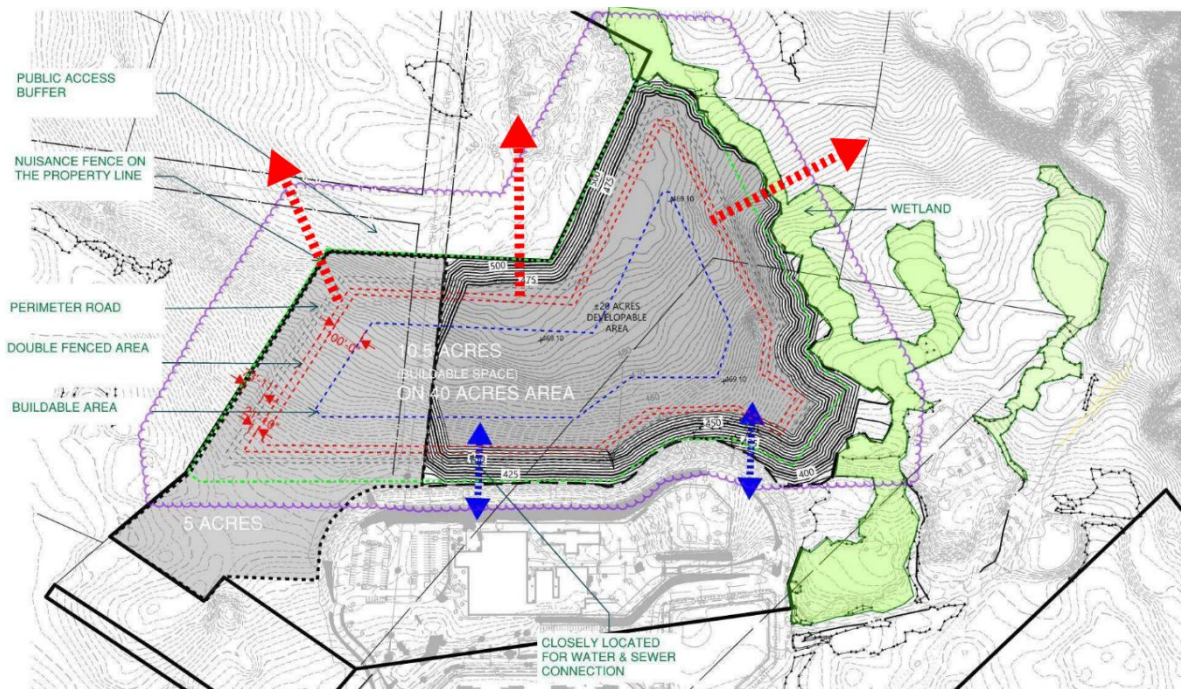
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Department of Administrative Services (NHDAS) has identified interest in acquiring and subdividing approximately 44 acres of Parcel Map 58 / Zone 7 (PID 6902), a 72-acre parcel, to support development of the new facility. This area of land is located on the southerly end of the study parcel areas and to the south and west of the existing women's facility and directly abuts the State-owned parcels. The City of Concord has identified interest in Parcel Map 494 / Zone 42 (PID 5989), which comprises approximately 117 acres and is located on the easterly side of North Main Street, adjacent to the Merrimack River. The parcels involved, their boundaries, relative values, and permitted uses remain conceptual and would likely require further definition through boundary surveys, appraisals, title review, and technical analysis.

VHB separately reached out to Unitil Corporation who holds the easement for the transmission lines and confirmed that they are amenable to relocation if required.

As a result, the Planning Team recommended and NHDAS & DOC agreed that Sites A & B should be combined for the final evaluation and potentially enlarged through continuing discussions with the City of Concord. (Refer to Task II Report and related Appendices for additional detailed information.)

Figure 2.6 Alternative Site A/B



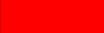
The outcome of the initial site assessment was that two sites, A/B combined & C remained under consideration, (see prior Figure 2.6) as they both could adequately accommodate the projected program based on site test fits (See Task II Report).

A more detailed comparison of these sites was therefore completed in accordance with the requirements of the Pre-Design scope to determine the most advantageous site for development for the proposed NHMCFR. In addition to general planning factors, this analysis also considered off-site development and grading costs as well as potential impediments to development. Table 2.2 provides comparative data for the 2 site alternative finalists using the same criteria evaluation system as the analysis of potential sites.

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Table 2.2 Comparative Evaluation of Sites A/B & C

Best  Better  Fair  Poor 

	Site A/B	Site C
Access/ Utilities Construction Cost	 \$5.81M	 \$28.7M
Access/ Utilities Project Cost @ 35% (assumes 2027 \$\$)	 \$7.85M	 \$38.7M
Cut/Fill	 580,000/530,000 cu yd	 1,130,000,1,180,000 cu yd
Rock Excavation	 300,000 cu yd	 210,000 cuyd
Cut/Fill & Rock Excavation Construction Cost	 \$11.9M	 \$16.2M
Cut/Fill & Rock Excavation Project Cost	 \$16.1M	 \$21.9M
Planning/Design Flexibility	 Preliminary Site Test Fits indicate flexibility	 Preliminary Site Test Fits indicate flexibility
Impediments to Development	 City/Unitil in positive negotiations	 City watershed major impediment; City expressed A/B as preferred alternative

Conclusion/Recommendation

Based on the foregoing and multiple meetings with NHDAS & NHDOC it was determined that:

- Site A/B was the preferred site alternative
- Task III conceptual planning should be based on Site A/B
- The Planning Team should continue to support NHDAS, NHDOC and other related agencies in resolving the “land swap” with the City of Concord and the easement relocation with Unitil
- Final Site development and project cost recommendations to the Legislature, Governor and the Executive Committee will be based on the development of Site A/B including definition of an early site preparation package for permitting and construction of access, utilities and rough grading

Development Analysis

General Site Evaluation

Following the comparative evaluation as part of Task Group 2, it was determined that further advancing and refining the development for Site A/B was preferred. Utilizing the knowledge obtained during the site investigation and data gathering and understanding the site connection points for access, the proposed site development location was updated to provide a development scenario to limit impacts to the surrounding natural resources.

Preliminary grading plans were advanced to better understand the primary elevations that could be achieved at major program elements, including parking field, roadway intersections, service yard and primary entrance elevations. Due to the length and slope of the access roads to achieve higher elevations, significant side slopes are required to meet existing grade, resulting in additional wetland impacts and/or grading towards existing constraints. Therefore, to minimize these impacts, another option was reviewed that included additional walls to further reduce the overall development footprint.

These two conceptual ‘Options’ were evaluated concurrently. Both utilize the same building layout and roadway alignments, however, grading and retaining walls were compared.

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Option 1 included a grading model that emphasized fewer retaining walls and a lower construction cost. Option 1 is approximately 61-acres of disturbance. However, this option also has sizable wetland impacts, and thus would require an extensive permitting effort and larger monetary contributions to the ARM fund for wetland and stream mitigation measures.

Option 2, sets a higher priority on minimizing wetland and stream impacts, through the use of additional retaining walls to minimize the extents of site grading and earthwork. Option 2 is approximately 58-acres. By introducing additional (and taller) retaining walls, proposed grading extents could be brought in and environmental impacts decrease dramatically. It is also worth noting that impact permit applications submitted to the NHDES will be required to demonstrate minimization of environmental impacts. So while Option 2 represents a higher construction cost due to additional retaining walls, it also represents a reduced cost of impact mitigation fees and likely a more streamlined permitting process with the NHDES. For this reason, Option 2 was selected for the focus of this investigation.

Site Grading & Topographic Analysis

Site A/B has been evaluated from a grading and topographic perspective, and preliminary building floor elevations have been established. Across the project site, existing ground elevations range from roughly 350' at the beginning of the north access road (near the existing baseball field), to 540' at the western extents of the project site. The existing ground elevations at the site access connection locations were the primarily starting points for setting the proposed site elevations, so that rough cut and fill figures could be estimated for bulk earthwork and blasting quantities. The proposed main building has been determined to at a ground floor elevation of 510', which was chosen with the intention of achieving site grades from the access road connection points and parking lot connections, while minimizing net cut and fill volumes, and potential rock blasting efforts. Adjacent to the upper-level housing complex, recreational fields are at an elevation of approximately 480'.

Utility & Stormwater Needs

- **Water:** Task Group One's discussions with the City indicated no capacity concerns within the water supply network in the vicinity of the project area. A formal water design and capacity analysis was not completed as part of this study, however, the project will provide a looped water system with connection points on the southerly and northerly access road locations to maintain a redundant supply of water should one location need to be temporary shutdown. Depending on whether existing infrastructure is deemed adequate to handle new demand, upgraded connections to the water mains in N. State Street can be provided. As pressure and flow concerns were identified during the planning and development of the Women's Correctional Facility, specifically related to the projects elevation, it is anticipated that a water storage tank or a booster systems will be incorporated into further design plans to provide adequate water service to the new, as there will be approximately a 150' delta in elevation to the women's facility below.
- **Sewer:** Sewer service is provided by the City of Concord municipal system. There is a 12" vitrified clay (VC) sewer main within North State Street. Within the existing Men's Correctional Facility development, sanitary sewer infrastructure is collected in the southwesterly parking lot. Additionally, there are two sewer connections from the existing facility that collect sanitary waste, and via gravity system are conveyed to a grinder station. This grinder station collects sewerage from multiple lots before being discharged to the sewer main in N. State Street. Discussions with the City indicated no capacity concerns within the sewer network in the vicinity of the project area. New sewer service to the proposed development site is anticipated connect into the infrastructure

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on the existing site. Depending on final configuration on onsite infrastructure and routing requirements, the sewer infrastructure is anticipated be routed within the southerly access road.

- **Electric** Electricity service is provided by Unitil. Discussions with them have indicated no capacity concerns within the infrastructure, however, proposed load demands during the design phase of the project are required to determine final design of electrical routing, new transformers and other equipment that may be necessary to support the new facility. Unitil has rights to the existing 100-foot-wide transmission easement that starts at the southeasterly edge of the subject parcels from N. State Street, continuing in a northwesterly direction following Call Street and then traversing the undeveloped land westerly towards Little Pond Road. The preferred development site will impact this easement and overhead wires, requiring the infrastructure to be relocated around the development footprint. Preliminary feedback from Unitil indicated that relocating the easement and power lines is achievable, however, early coordination is required to initiate the process and design. It is recommended that relocation efforts commence as early as possible during the design phase of the project.
- **Gas** Natural Gas service is provided by Liberty Utilities. Infrastructure in the vicinity of the site provides a high pressure 8" gas main within North State Street and a high pressure 6" service to the Women's Correctional Facility. Liberty Utilities indicated no capacity or infrastructure concerns in the vicinity of the WDH campus. For redundancy, a looped connection is likely, which would utilized both the southern and northern access roads. There would be two gas feeds into the complex, one from each access road.
- **Communications** Consolidated Communications provides fiber service the property with fiber infrastructure along N. State Street. According to Consolidated Communications, they have been expanding broadband to fiber over the past 15-years within the city. There were no capacity concerns to provide adequate service and network speed to the facility. It is anticipated that the communication
- **Stormwater** The proposed development is anticipated to utilize a standard drainage network layout with deep sump catch basins, connected with drainage pipes to, drainage manholes and routed to stormwater control measures (SCMs), providing both pre-treatment and treatment measures, as well as peak-rate attenuation to match or reduce existing peak runoff flows. These treatment devices and SCMs will be determined when the design of the facility is advanced. Examples of SCMs may include bioretention basins, infiltration practices, sand filters, detention basins, gravel wetlands, and/or a combination of practices.

Roadway Design and Parking

With Site A/B, just as with all other potential sites studied, there is a need to establish vehicular access to the new correctional facility. While some existing gravel and dirt paths do exist in and around the study area, the future facility will require permanent, paved and maintained access roads for both public and visitor use, as well as for operations & security purposes. The current conceptual layout calls for both a north and south access road, as well as a perimeter security road which will run in-between proposed security and nuisance fences.

The northern road will be for service access only and will begin near the existing facility's baseball field. This service road will proceed northward from the baseball field at a maximum gradient of 8%, before then curving in a westward direction and continuing uphill to a proposed service yard. This two-way road will be

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24 feet in width, and will largely mimic roadway design standards laid out by the City of Concord's Construction Standards and Details. This service road will be approximately 1800 linear feet in length.

The southern road will be used for public and visitor access, as well as for staff access. This road will begin near the existing Women's Correctional Facility's parking lot and proceed in a southern direction before then curving uphill in a westward direction. Maximum road gradients will again be held to 8% and shall also be 24 wide measured curb-to-curb, in a two-way bidirectional configuration. A variety of buildings and parking facilities will be accessible from this road, including a proposed C2 Housing building, a central operations & facility maintenance building, and a 2-level parking structure with an entry into the main correctional facility complex. This access road will be approximately 840 linear feet in length.

Earthwork and Rock Excavation

Due to the existing topography and geology of the project site, proposed grading and excavation efforts will be a major component for the project. Shallow granite outcroppings can be found throughout a majority of the project site, and steep slopes of greater than 3:1 exist on large portions of the site as well. As previously mentioned, Option 2 was selected for the focus of this analysis due to its emphasis of minimizing environmental impacts onsite. Another benefit to Option 2's grading design is that it also required less fill material, and less rock excavation. Approximately 536,000 cubic yards of general cut and 543,000 cubic yards of fill will be required, per a preliminary analysis. Separately, it is anticipated that roughly 80,000 cubic yards of rock excavation will be required, which is 20,000 cubic yards less when compared to Option

Permitting & Regulatory Efforts

There are a variety of State and Municipal-level approvals and permits that would need to be attained for the project. Below is a list of what can be expected in terms of required approvals that pertain to the site and engineering aspects of the project:

- **City of Concord – Governmental Land Use / Major Site Plan Review**
The project is considered a governmental land use under RSA 674:54 and is expected to proceed through Concord's Major Site Plan review process for non-binding local comments. Submittals are expected to include plans, a project narrative, abutter information, stormwater materials, traffic information, and related impact documentation.
- **NHDES Alteration of Terrain Permit**
An Alteration of Terrain permit will be required because the development will disturb more than 100,000 square feet. This permit addresses erosion control and stormwater runoff associated with site development.
- **NHDES Wetlands Permit**
Any dredge, fill, or other impacts to wetlands, streams, or related aquatic resources will require a major wetlands permit. The level of review will depend on the extent of impacts, and the project will need to demonstrate avoidance and minimization; mitigation will also be required.
- **NHDES Sewer Connection Permit**
A sewer connection permit will be required due to the extension of the sewer infrastructure and new flow.

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- **USACE Section 404 / Federal Wetlands Review**

Federal authorization will be required for jurisdictional wetland or stream impacts. Depending on the extent of impacts, the project may proceed under a general/nationwide permit process or may require a more detailed Individual Permit review. Further review and discussion with USACE is recommended.

- **Section 401 Water Quality Certification**

Because federal review under Section 404 is required, associated Section 401 Water Quality Certification coordination through NHDES will also be required.

- **USEPA NPDES Construction General Permit**

Since the project will disturb more than one acre, construction stormwater permit coverage will be required. This will include preparation of a Stormwater Pollution Prevention Plan (SWPPP) before filing for permit coverage.

- **Protected Species Review**

The project will require state and federal protected-species review, including ESA-related coordination tied to federal permitting and NPDES coverage. Depending on final design and clearing limits, additional agency coordination may be needed.

- **NOAA/NMFS ESA Screening**

Federal review may also require NOAA/NMFS screening for listed species or habitat through Section 7 review tools. If the screening identifies a potential effect, further coordination would be required.

- **Section 106 Cultural Resources Review**

Because federal permitting is anticipated, the project is subject to Section 106 review. NHDHR has already indicated that further reviews will not be required based on the initial coordination.

- **Unitil Licensing Agreement**

An agreement with Unitil will be required for the permanent relocation of the existing electrical easement through the property.

- **City of Concord – Subdivision (Land Swap)**

The initial framework for the land swap indicates that a subdivision of a City parcel will be required to provide the State with the additional land to build the proposed project.

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Figure 2.7 Site Development Option 1
Aerial Site Test-Fit - Access

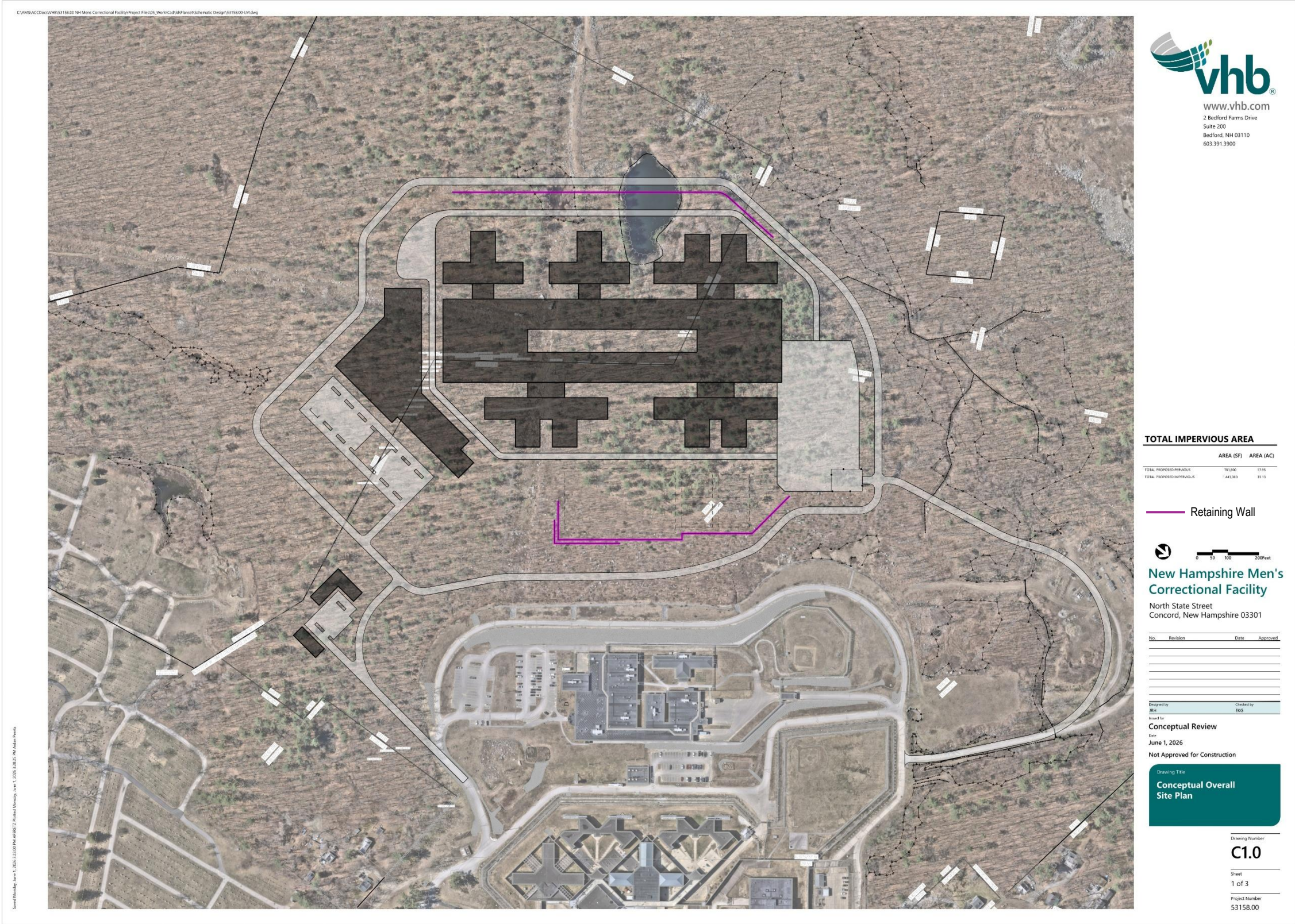
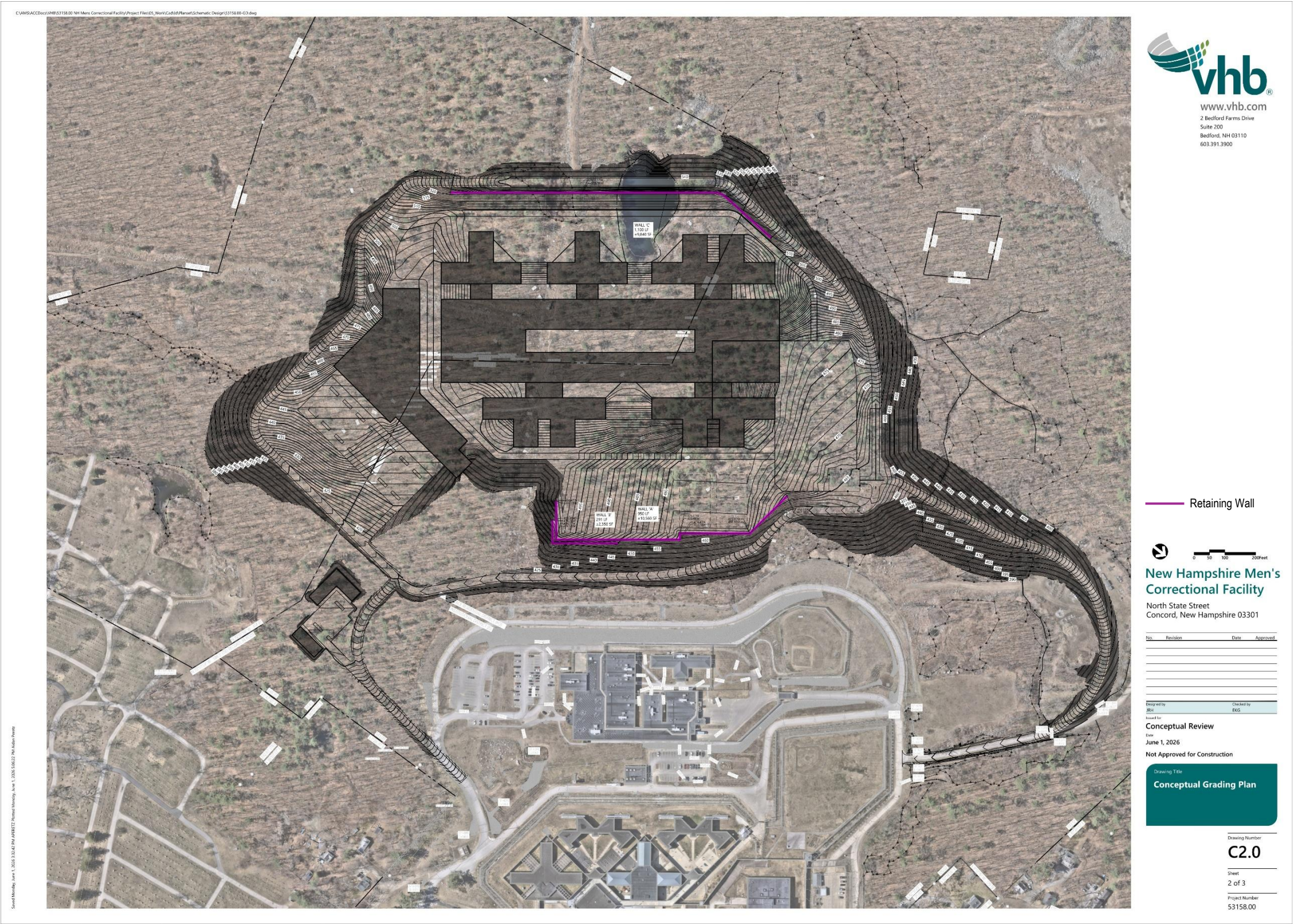


Figure 2.8 Site Development Option 1
Aerial Site Test-Fit - Grading



**Figure 2.9 Site Development Option 1
Aerial Site Test-Fit – Utility Routing**

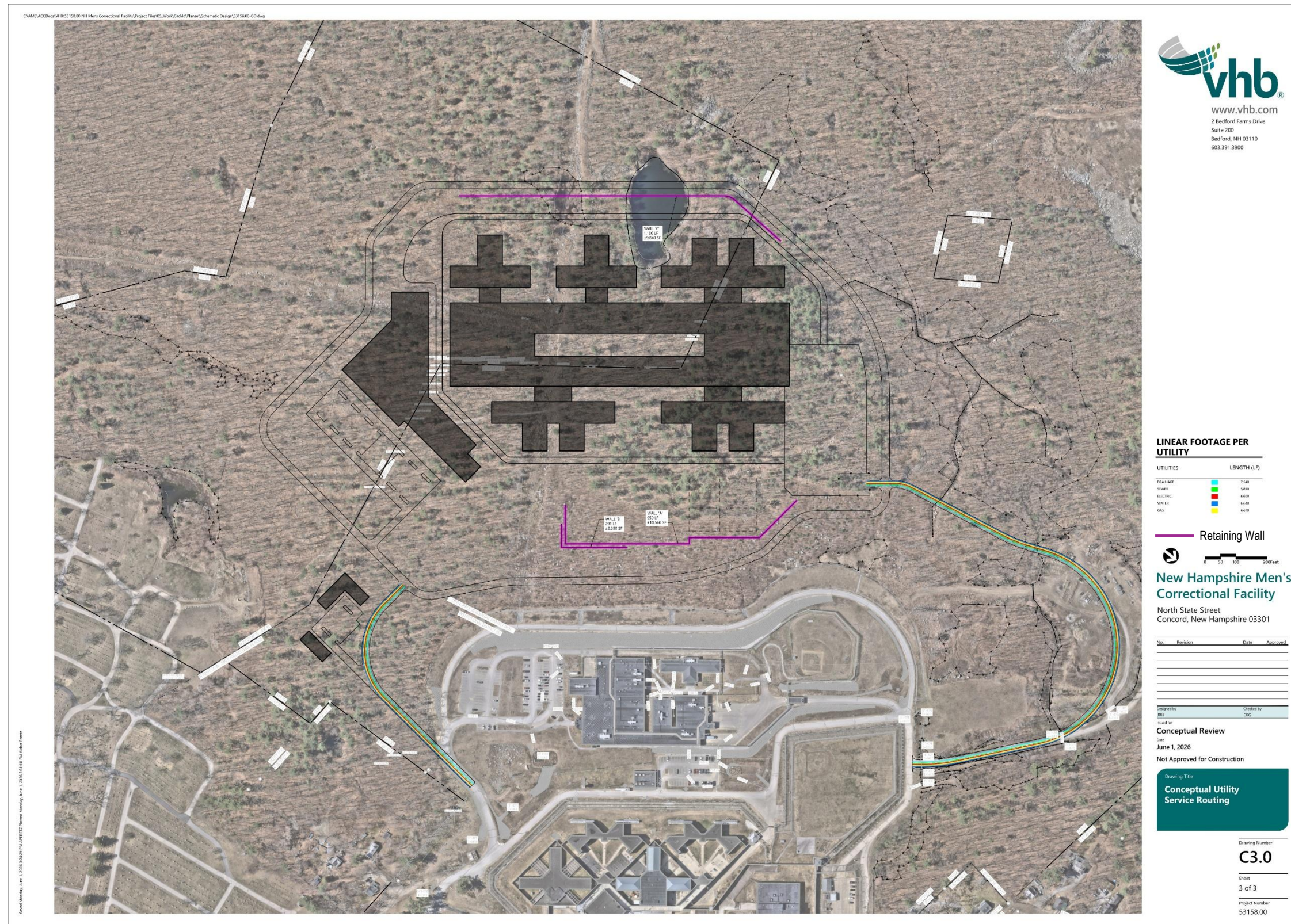


Figure 2.10 Site Development Option 1
Site Test-Fit – Grading Plan

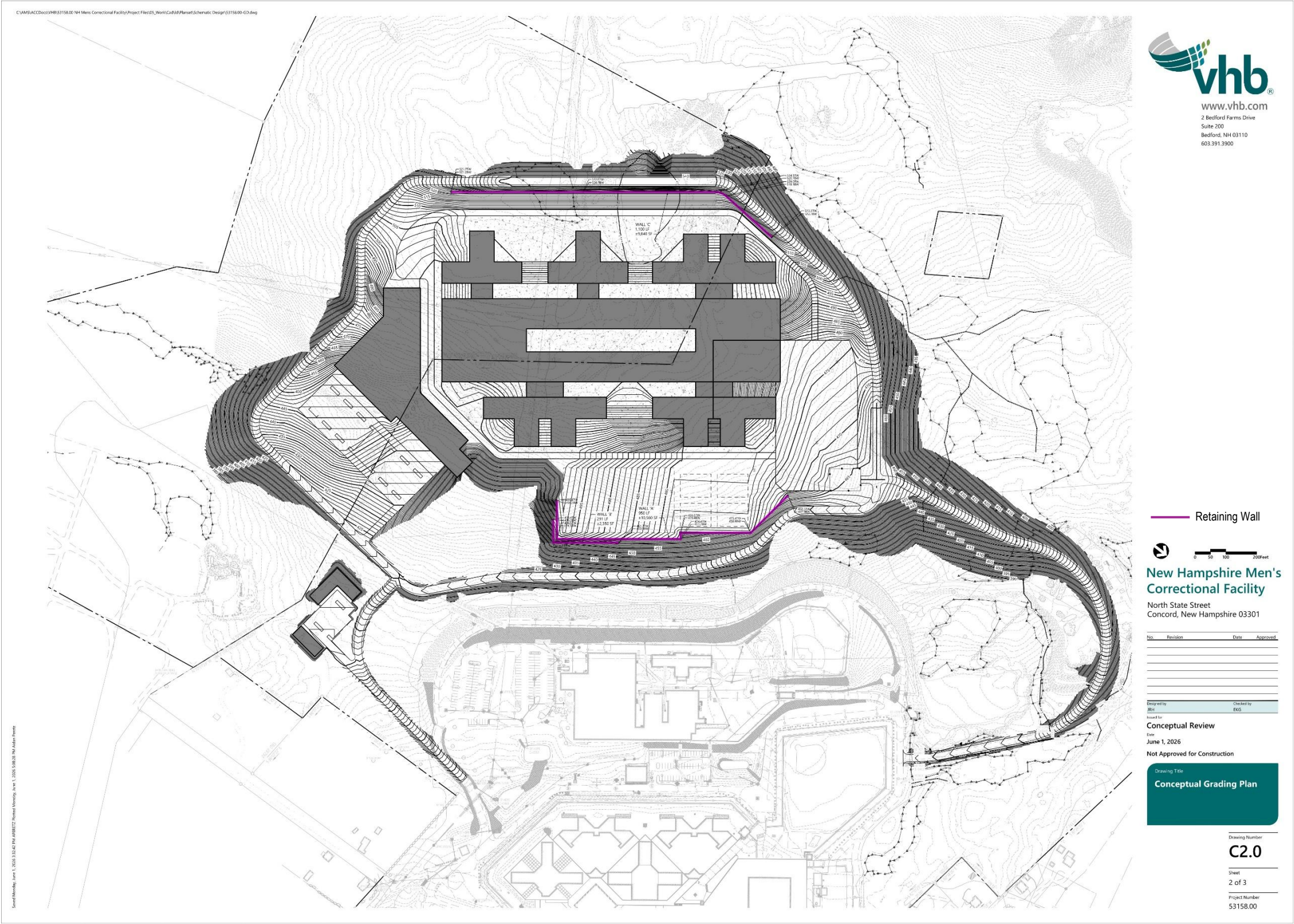


Figure 2.11 Site Development Option 1
Grading – Cut/Fill

Volume Summary							
Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
CUT-FILL	full	1.000	1.000	2632378.66	535658.71	637503.55	101844.84<Fill>

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-1000.000	-30.000	
2	-30.000	-20.000	
3	-20.000	-10.000	
4	-10.000	-5.000	
5	-5.000	-3.000	
6	-3.000	-1.000	
7	-1.000	0.000	
8	0.000	1.000	
9	1.000	5.000	
10	5.000	10.000	
11	10.000	15.000	
12	15.000	20.000	
13	20.000	30.000	
14	30.000	40.000	
15	40.000	50.000	
16	50.000	1000.000	

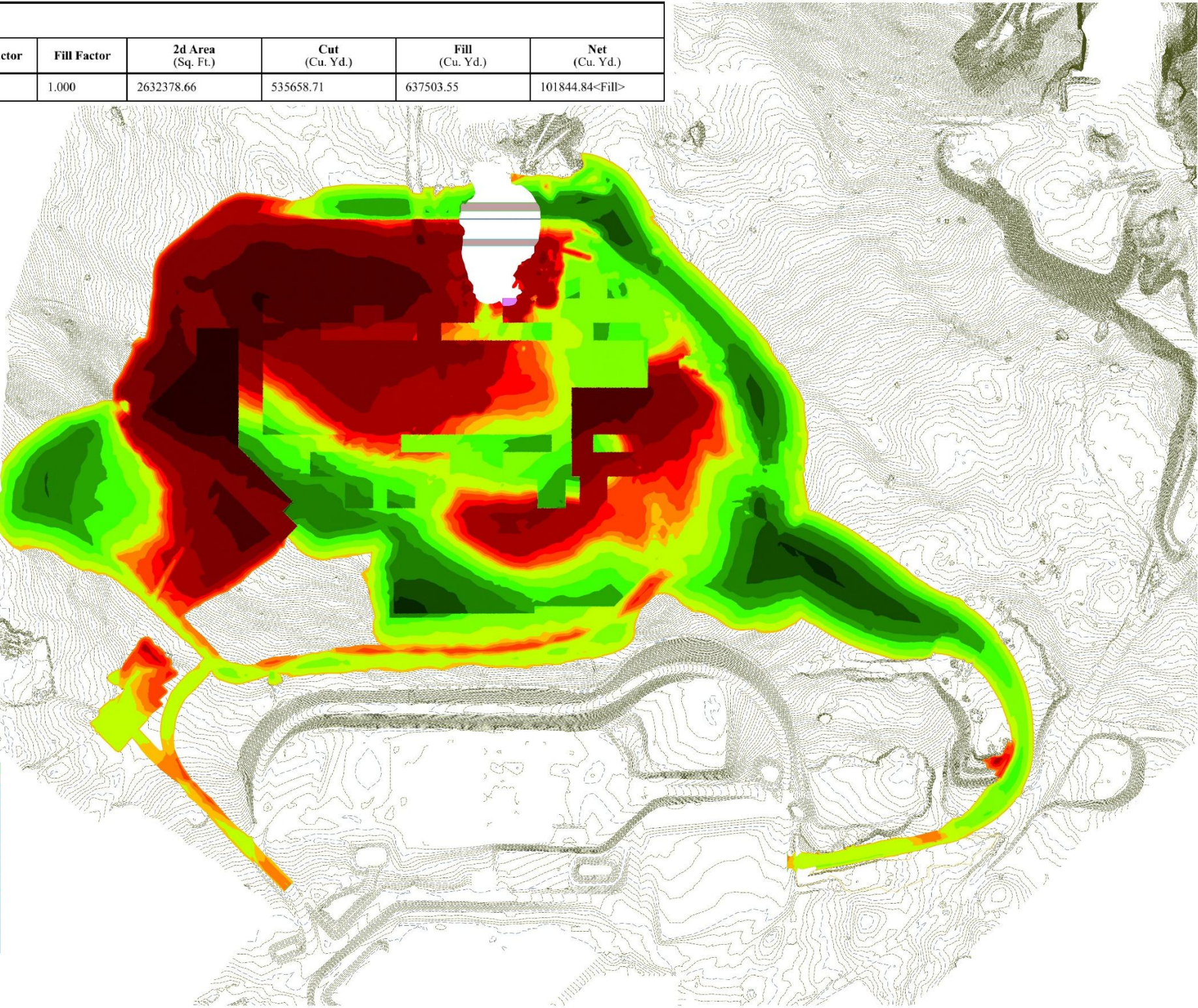


Figure 2.12 Site Development Option 2
Aerial Site Test-Fit - Access

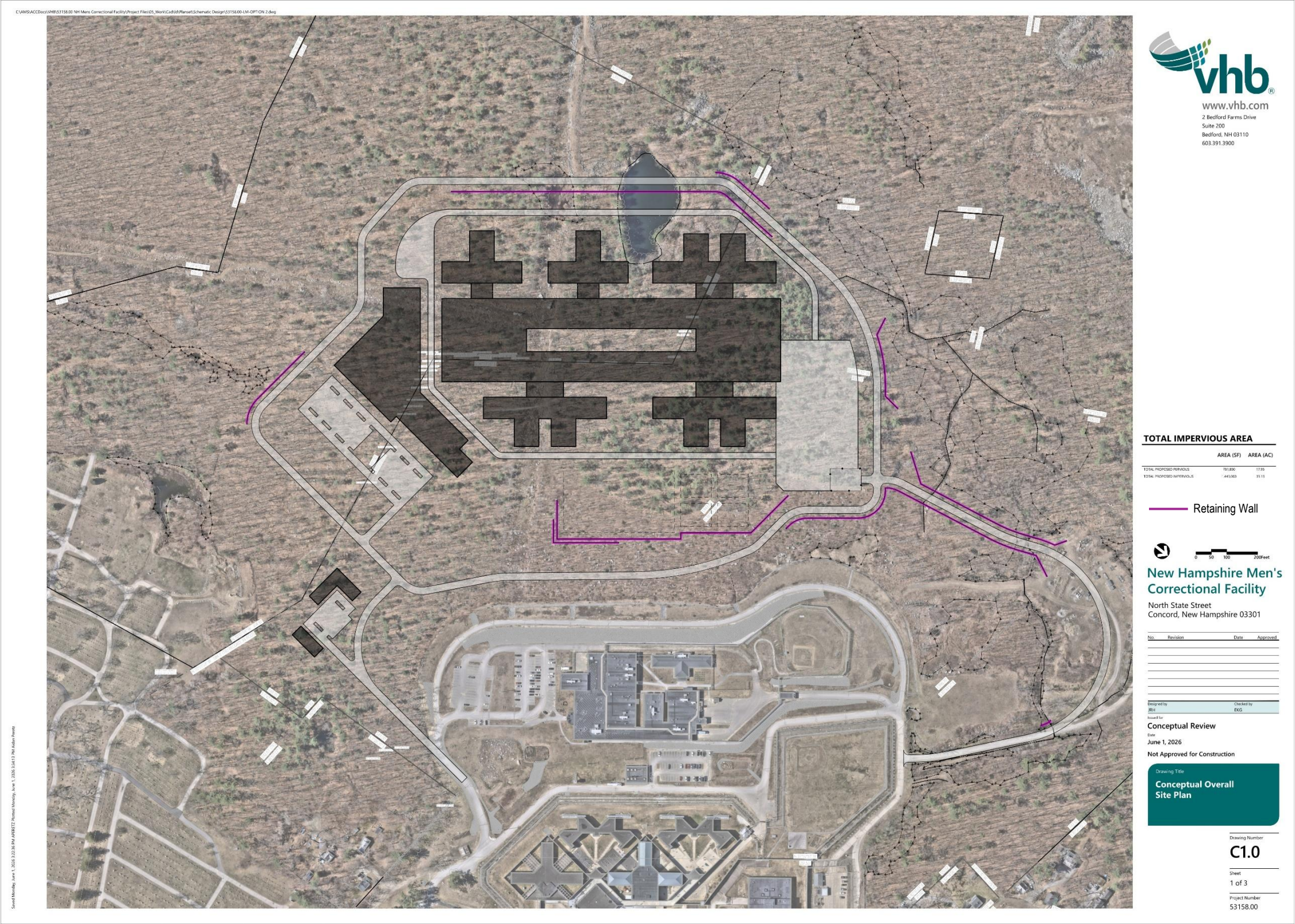


Figure 2.13 Site Development Option 2
Aerial Site Test-Fit - Grading

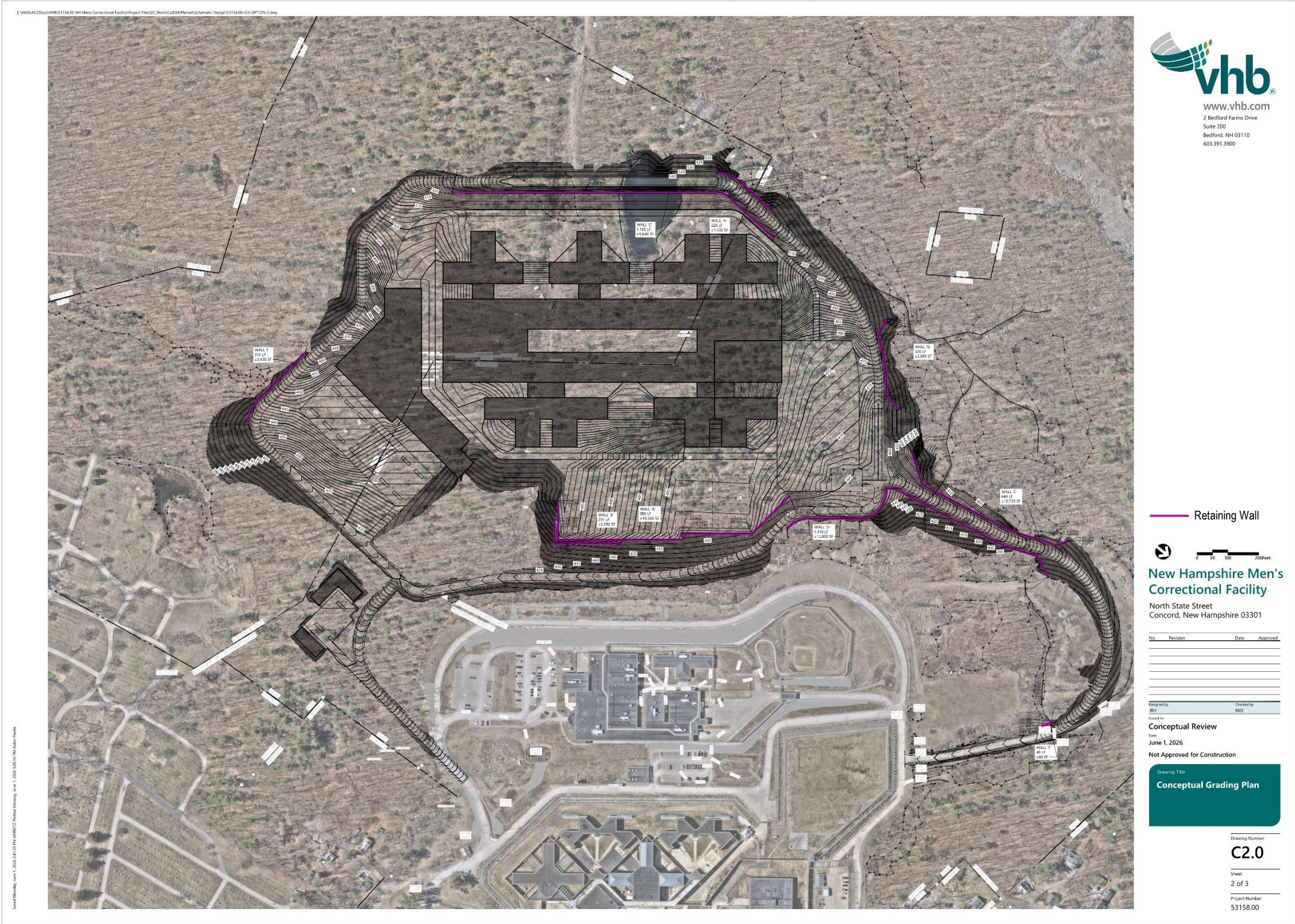


Figure 2.14 Site Development Option 2
Aerial Site Test-Fit – Utility Routing

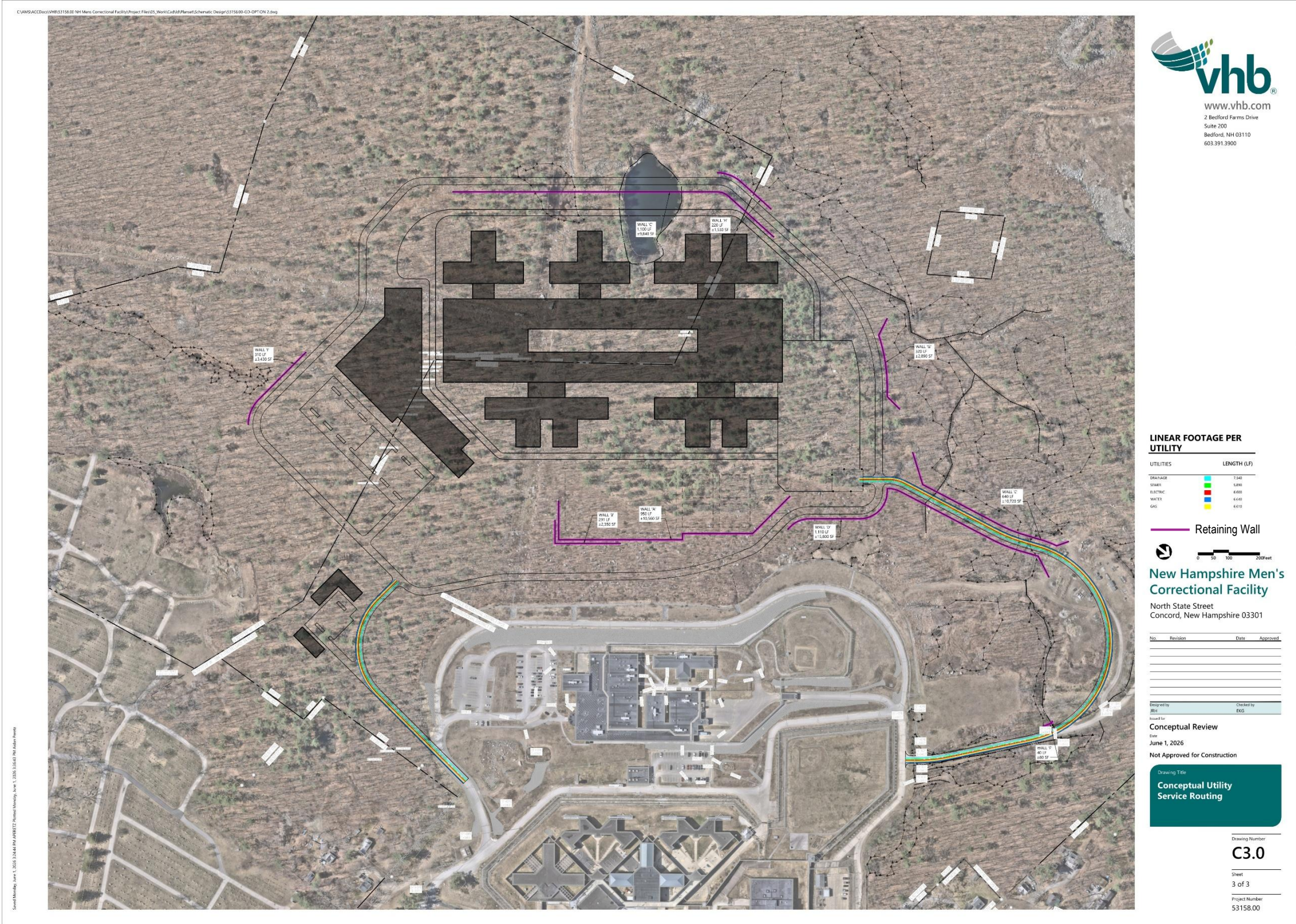


Figure 2.15 Site Development Option 2
Site Test-Fit – Grading Plan

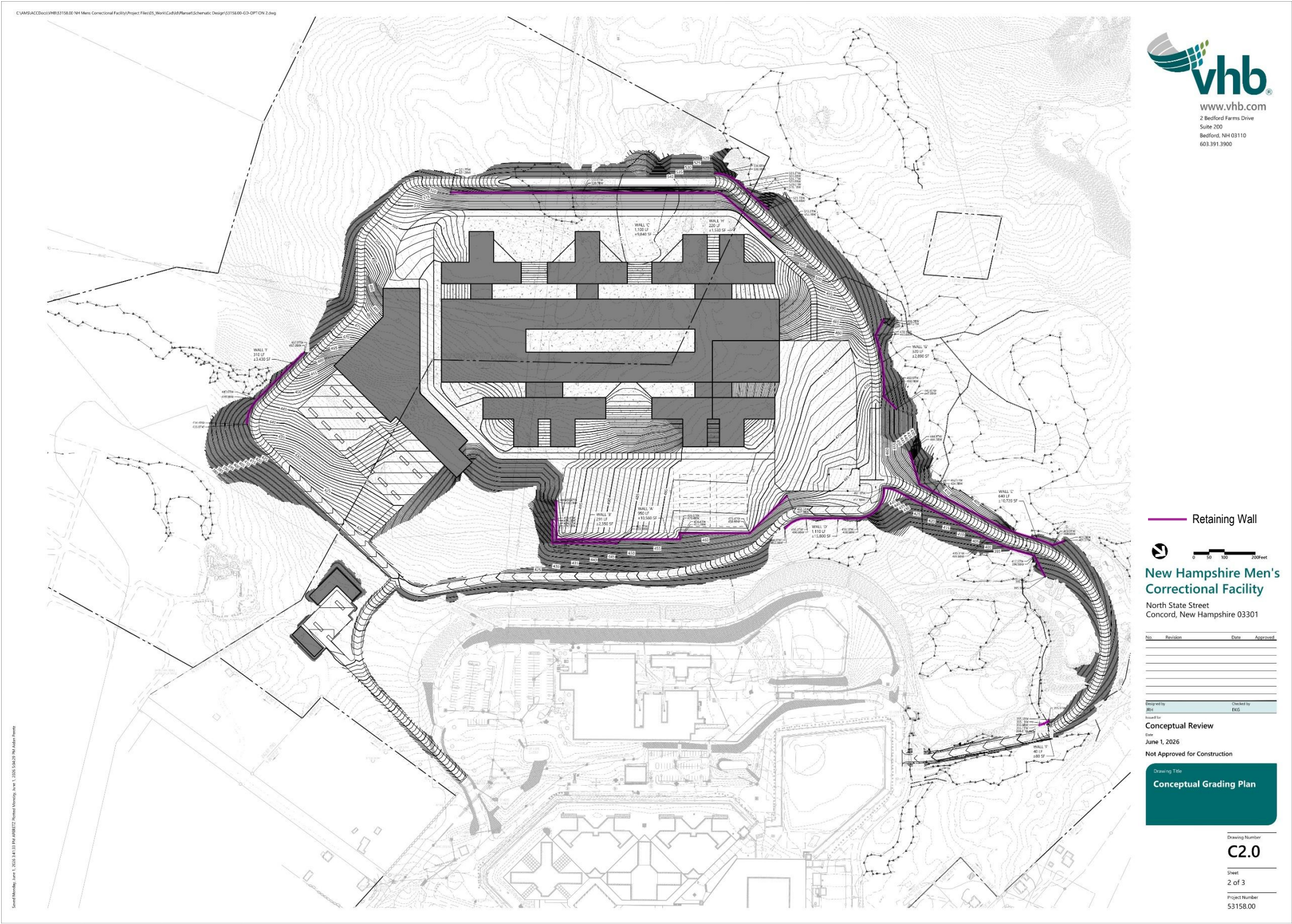
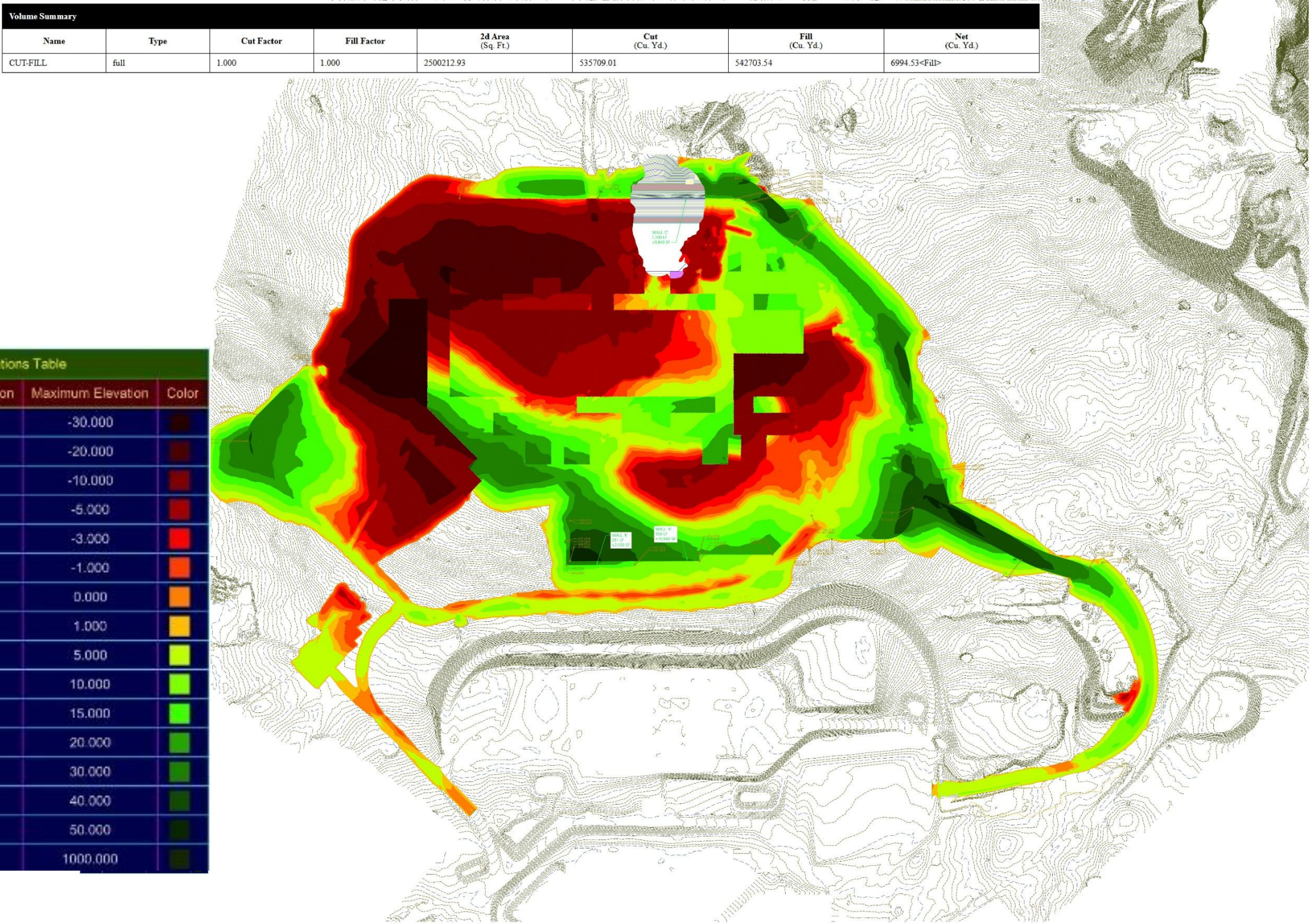


Figure 2.16 Site Development Option 2
Grading – Cut/Fill



3

PROGRAMMING & PROJECTED SPACE REQUIREMENTS

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Synopsis of Final Recommended Space Requirements

A key focus of Task III was reviewing and revising the projected space requirements to optimize space available to meet the operational requirements of the program while reducing the total area planned for the facility.

As illustrated in Table 3.2 following the background narrative, **total Building Gross Area is currently projected to be 642,425 BGSF²** for the primary replacement facility of 1,506 Beds (C3, C4, C5 & Medical & Special Housing). **This is a reduction of 61,961 BGSF from the initial Task I Preliminary Program.** This now equates to 262 NSF per/bed or 371 DGSF/426 BGSF per bed, which is typical for facilities with a robust prison industry, vocational and rehabilitative programming. Major areas where current space deficiencies existing based on a review of current drawings include:

Moreover, two other areas have been identified for consideration as part of supplemental services:

- C-2 Minimum Security Housing as summarized in Table 3.3 has been separated from the base program to allow consideration for potentially adapting existing buildings after construction of the replacement facility for C-2 housing as part of the supplementary analysis requested by DAS/DOC. If this is feasible and less costly, it **represents a further reduction in initial project funding of 35,383 BGSF.**
- DOC Central Services including Field Services/Probation, Transportation, Facility Maintenance, Centralized Pharmacy and Mailroom as summarized in Table 3.4 have also been separated from the base program as part of the ongoing analysis of the potential adaptive use of existing buildings after construction for DOC Central Services. This results in a **further reduction to the base program as presented in Task I of 42,020 BGSF.** An additional 30,308 has also been identified for consideration for adaptive use to consolidate DOC Headquarters, the Correctional Officers Training Academy and facilities to support staff retention as part of ongoing supplementary services.

From the initial Task I Program total projected needs for initial construction have been reduced by over 100,000 BGSF (exclusive of C-2 Housing) through focused program reductions and planning DOC Central Service functions as backfill of buildings vacated by construction of the new replacement facility.

Background

The primary goal of this project is to provide humane standards compliant housing to accommodate the current and future inmate population by providing a sufficient number of beds in a setting that is conducive to treatment and rehabilitation while addressing the need for modern, efficient, and cost-effective prison operations and infrastructure.

The new replacement Men's Correctional Facility is not intended to increase the bedspace capacity of NHDOC beyond its current number. Rather than advocating for an increased system capacity, this project proposes creating more supportive and safer housing environments to better serve the in-custody population and NHDOC's ability to deliver evidence-based programs and treatment services in an effective and efficient manner.

² **Net Area (NSF)** clear floor area required for an individual space; **Department Gross Area (DGSF)** accounts for the circulation area within the component and internal wall thicknesses; **Building Gross Area (BGSF)** total area to be constructed including "unassignable" areas such as circulation spaces, hallways, mechanical, electrical and data rooms, plumbing chases, wall thicknesses, horizontal and vertical circulation between component areas.

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In addition, this project aims to provide for:

- The protection of the community
- The safe accommodation and supervision of people in custody
- A professional and safe environment for facility employees and visitors
- Effective operations and staffing efficiencies
- Intensive support and collaborative case management
- Academic and vocational education, workforce development and reintegration services for the successful transition of individuals back into the community
- The inclusion of family and prosocial support via regular communications, visits, and multi-therapy related programs and family events.
- The easy maintenance of systems, equipment, and infrastructure, with emphasis on sustainable design initiatives and energy efficiency (i.e. solar shading, renewable energy, water recycling for irrigation, greywater treatment, etc.) furthering the goal of reducing long-range operational costs.

The new facility conceptual design will endeavor to define, masterplan and design the project, including a recommendation regarding the best location for the new facility to be built and a detailed cost and scope understanding in order to provide all-in budgeting for approval by the legislature.

The programming/pre-design process began in October 2024 and was completed in April 2025 with the ongoing collaboration and active participation of key stakeholders, NHDOC and NHDAS leadership, medical and forensic service personnel and other partner agencies and service providers.

Projected Capacity Needs

Located in the city of Concord, New Hampshire, this state-of-the art replacement Men's Correctional Facility is dedicated to offering adult males access to a wide range of evidence-based programs, treatment activities, and reintegration services supporting a safe, humane, rehabilitation and wellness model for a successful transition and re-entry back into the community.

The proposed multi-custody level replacement facility will provide a total of 1,500 rated beds and 110 unrated beds. Rated beds provide a comprehensive continuum of security levels, from minimum (C2) to maximum (C5) custody, including a 96-bed Receiving and Diagnostics Unit (R&D) to process, assess and classify newly admitted individuals as follows:

- **C2 Custody Level** – Low-security housing, no perimeter fencing, with relatively low staff-to-inmate ratio and minimum level of supervision outside the walls.
- **C3 Custody Level** - Medium level of supervision and control inside the walls. Medium custody inmates generally move around unescorted during scheduled movements.
- **C4 Custody Level** - Close supervision and greater internal controls. On a limited basis, select close custody inmates move unescorted during scheduled movements.
- **C5 Custody Level** - Highest security housing with higher staff-on-inmate ratio, supervision and control with extensive cell-time due to public and institutional risks or violent behavior. Within the C5 category, protective custody inmates and inmates pending administrative review (PAR) for protective custody reasons are housed in a separate unit referred to as **Secure Housing Unit (SHU)**.

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Additionally, based on special criminogenic risks and needs, rated beds are provided for other levels of care in the following specialized residential units focused on providing intensive behavioral health services and co-occurring disorder treatment services:

- **Acute Psychiatric Intensive Care Unit (APIC)** for individuals exhibiting severe impairment and manifested behaviors dangerous to self and others due to psychiatric illness requiring management in a secure psychiatric setting.
- **Residential Treatment Unit (RTU)** – Individuals in this category have severe to moderate impairment due to psychiatric illness or psychological issues whose unpredictable behavior requires special management, monitoring and treatment.
- **Wellness Units** - These units provide a therapeutic milieu experience designed to support individuals toward the achievement of personal goals. With an emphasis on rehabilitation and wellness, participants benefit from a positive community culture where they re-learn behaviors and develop coping skills/wellness strategies in preparation for release.

Based on an analysis of historic and current average daily population by classification as defined above by the planning team, future bed distribution for planning is projected as indicated in Table 3.1 In addition to the custody levels summarized above, the facility will also include the following unrated beds intended for short-term occupancy:

- A full-service Infirmary Housing unit with 38 transient medical beds and 8 end-of-life care beds;
- A Secure Housing Unit (SHU) of 64 temporary assignment beds for short-term behavioral management, protective custody and pending administrative review purposes.

Table 3.1: Anticipated Capacity Distribution for Planning

Classification Categories	Total Beds
Reception and Diagnostics (RND)	96
C2 Minimum Custody	104
C3 Medium Custody	1,088
C4 Close Custody	96
C5 Maximum Custody	52
Acute Psychiatric Intensive Care (AICP)	32
Residential Treatment Unit (RTU)	32
TOTAL RATED BEDS	1,500
*Medical/Observation Beds	38
*End-of-life/Nursing Beds	8
*Special Housing Units (SHU) Beds	64

**Temporary Occupancy Beds – not included in base rated capacity*

Projected Space Needs

As outlined above, the proposed multi-custody level replacement facility - New Hampshire Men's Correctional Facility Replacement (NHMCFR) - is planned to accommodate a rated capacity of 1,500 beds, providing a comprehensive continuum of security levels, from minimum (C2) to maximum (C5) custody, including a 96-bed Receiving and Diagnostics Unit (R&D) to process, assess and classify newly admitted individuals as a replacement capacity for the existing facility.

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It is important to understand that a major facility such as NHMCFR is in effect a microcosm of society and a city that includes a wide range of services and programs to fulfill its mission and desired operations – especially related to providing a trauma responsive environment focused on rehabilitative services, better outcomes and a reduction in recidivism. The new replacement facility includes the following program components organized in sixteen major functional categories as listed below, some with sub-categories.

1. Public Entry and Visiting Center
2. Victim Services and Parole Board Hearings
3. Central Administration Building
4. Staff Support Facilities
5. Security Operations
6. Receiving and Diagnostics / Transportation / Discharge
7. Inmates Housing
8. Academic Education and Library/Resource Center
9. Inmate Intervention and Religious Services
10. Recreation Programs
11. CET and Correctional Industries
12. Healthcare Services
13. Food Services
14. Laundry Services
15. Building Support
16. Central Plant

Additionally, the several systemwide functions currently located on site or in the case of Field Services/Probation were identified during Task I for possible consolidation as part of developing the NHMCFR:

- Field Services/Probation
- Transportation Operations
- Facility Maintenance
- Centralized Pharmacy Operations
- Mailroom Operations

The functions above were included in the base program developed during Task I. Several additional functions were identified for potential consolidation during the development of Task II which will be analyzed in greater detail as part of Task III supplemental services. These functions include:

- Central Department of Corrections Administration (Headquarters)
- Correctional Officers Training Academy
- CO Support Services including Daycare.

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Projected Space Requirements

Table 3.2 provides a summary of projected space requirements for the main replacement facility housing the C-3, C-4, and C-5 population as well as unrated beds for medical and special housing for a total capacity of 1,506 Beds. Please refer to the Appendix for detailed space requirements and room data sheets.

As indicated, the overall program averages 262 NSF per bed. Useable area is projected at 371 DGSF per bed or a useable grossing factor overall of 41%. This grossing factor is primarily driven by planning for visibility from any location of cell housing which significantly increases the gross area needed – especially for larger capacity housing units planned for staffing efficiency. Grossing factors for these housing units typically are 60% of net area requirements. Total area per Bed is 426 BGSF which is comparable to other facilities with robust prison industry, vocational and rehabilitative programming.

**Table 3.2: Projected Space Requirements by Component
Core Replacement Facility**

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire Projected Space Requirements				
Component Designation	Component	Departmental Net Square Feet (NSF)	Circulation Factor	Departmental Gross Square Feet (DGSF)
1.000	Main Public Entry and Visiting Center	10,352		12,580
1.100	Public Lobby/Visitor Processing	3,991	30%	4,310
1.200	Visitors Center	6,361	30%	8,269
2.000	Victim Services & Parole Board	4,256		5,483
2.100	Victim Services Unit (VSU)	997	25%	1,246
2.200	Adult Parole Board	3,259	30%	4,237
3.000	Central Administration	11,652	30%	15,148
4.000	Staff Support Facilities	10,815		13,519
4.100	Staff Entrance	624	25%	780
4.200	Staff Support - Wellness	8,228	25%	10,285
4.300	Staff Overnight Stay (14 beds)	1,963		2,454
5.000	Security Operations	5,428		6,884
5.300	Shift Change, Briefing and Training	3,701	30%	4,811
5.400	Special Emergency Response Team	1,062	20%	1,274
5.500	Armory	665	20%	798
Men's Facility Functions and Spaces Inside of the Secure Perimeter				
5.000	Security Operations	2,816		3,279
5.100	Central Control	1,004	20%	1,104
5.200	Platoon Commander Suite	1,812	20%	2,174
6.000	R&D, Transports and Release	21,818		30,855
6.100	Vehicular Sallyport and Zone Control Room	2,492	10%	2,741
6.200	Reception and Diagnostics Area	3,373	35%	4,554
6.300	Reception and Diagnostics Housing (96 BEDS)	13,776	60%	20,930
6.400	Transports/Transfers Processing Area	890	30%	1,157
6.500	Discharge Processing Area	287	30%	373
6.600	Central Property Storage Room	1,000	10%	1,100
7.000	Inmates Housing			270,370
7.1000	C5 AND SPECIAL HOUSING UNIT (SHU) HOUSING - 112 BEDS	19,401		31,485
7.1100	C5 Housing Unit (52 beds)	7,765	60%	12,924
7.1200	SHU - Special Housing Unit (64 beds)	8,047	60%	14,075
7.1300	C5&SHU Shared Management and Support Space	3,589	25%	4,486
7.2000	C4 CLOSE CUSTODY HOUSING - 96 BEDS	11,811		18,459
7.2100	C4 Housing Unit (96 beds)	8,500	60%	14,320
7.2200	Close Custody Housing (CCU) Management and Support Space	3,311	25%	4,139
7.3000	C3 MEDIUM CUSTODY HOUSING - 1,088 BEDS	138,795		194,033
7.3100	C3 GP Community Custody and Management Offices	1,324	20%	1,589
7.3200	C3 GENERAL POPULATION CLUSTER (768 BEDS)	93,057	60%	130,488
7.3300	C3 GP Community Custody and Management Offices	839	20%	1,007
7.3400	C3 SPECIAL PROGRAMS (320 BEDS)	43,575	60%	60,949
7.4000	APIC and RTU - 64 BEDS	17,600		26,393
7.4100	APIC Housing Unit (32 beds)	7,248	65%	11,645
7.4200	RTU Housing Unit (32 beds)	5,063	65%	8,149
7.4300	APIC & RTU Management, Nursing, and Support Space	5,209	25%	6,511
7.4400	APIC Transportation	80		88

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Table 3.2 cont'd.: Projected Space Requirements by Component
Core Replacement Facility

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire Projected Space Requirements				
Component Designation	Component	Departmental Net Square Feet (NSF)	Circulation Factor	Departmental Gross Square Feet (DGSF)
8.000	Academic Education and Resource Center	17,995		23,267
8.100	Education Department Staff Office Spaces	2,524	25%	3,155
8.200	Academic Education	12,771	30%	16,602
8.300	Library / Resource Center	2,700	30%	3,510
9.000	Inmate Intervention and Religious Services	9,190		11,592
9.100	Case Management	2,502	25%	3,128
9.200	Family Connections Center	2,090	30%	2,717
9.300	Religious and Fellowship Services	4,598	25%	5,748
10.000	Recreation Programs	12,641		16,390
10.100	Recreation Building	431	20%	517
10.202	Music Program	710	30%	923
10.300	Indoor Gymnasium	11,500	30%	14,950
11.000	CTE and Correctional Industries	36,124		47,481
11.100	Gate House/Industries Access Point	652	10%	717
11.200	Building Support Spaces	488	10%	537
11.300	Career and Technical Education Center	13,153	30%	15,784
11.400	Correctional Industries Center	21,071	25%	29,607
11.500	Receiving and Staging Area	760	10%	836
12.000	Medical and Behavioral Health Care Services	24,472		38,760
12.100	Health Services Administrative Offices	5,993	30%	7,791
12.200	Main Medical Clinic	9,541	35%	12,880
12.300	HCS Infirmary (38 beds)	8,938	45%	13,460
12.400	End of Life Care/Nursing Home (8 beds)	3,325	45%	4,629
13.000	Food Services	29,587		37,506
13.100	Receiving, Loading and Staging Area	1,228	20%	1,474
13.200	Central Kitchen	11,663	30%	15,162
13.300	Bakery Area	800	25%	1,000
13.400	Staff Dining	2,399	25%	2,999
13.500	Inmates Central Dining Hall	13,497	30%	16,871
14.000	Laundry Services	4,991		5,989
14.100	Receiving, Loading and Staging Area	0	20%	0
14.200	Central Laundry Room	4,191	25%	5,029
14.300	Laundry Support Spaces	800	20%	960
15.000	Building Support	5,193		6,122
15.100	Vehicular Gate	550		550
15.200	Institutional Mail and Satellite Storeroom	1,417	20%	1,700
15.300	Canteen Services	888	20%	1,066
15.400	Satellite Maintenance Shop	2,338	20%	2,806
15.500	Outdoor Storage	0		0
16.000	Central Energy Plant	13,408	10%	13,408
TOTAL		394,937		558,631
Building Gross Area Factor				15%
Grand Total Main Correctional Center - BGsf:				642,425
1,396 Rated Beds; 110 Non-Rated Beds (Infirmary & SHU) 1,506 Total Beds				
Area per Bed:		262NSF/Bed;	371 DGSF/Bed;	426/BGSF/Bed
Outdoor Spaces Supporting the Main Correctional Center				
10.400	Outdoor Recreation			117,706
17.000	SITE WORK - PARKING			167,650
17.001	Executive Staff Parking - 25 spaces	25 @ 350 sf		8,750
17.002	Employees Parking - 450 spaces	350 @ 350 sf		122,500
17.003	Transportation Unit - Civilian Carpool Vehicles	4 @ 350 sf		1,400
17.004	Public Parking - 100 spaces	100 @ 350 sf		35,000

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Table 3.3 provides a summary of projected space requirements for the Minimum-Security Facility outside the fence housing the C-2 with a total capacity of 104 Beds. Please refer to the Appendix for detailed space requirements and room data sheets.

**Table 3.3: Projected Space Requirements by Component
Minimum Security C-2 Facility**

C2 Minimum Security Facility Replacement New Construction or Adaptive Use of Vacated Medium Security Housing				
18.100	C2 MINIMUM CUSTODY BUILDING (104 BEDS)			
	Public Entry and Waiting	680	20%	816
	Inmates Living Quarters (52-beds/wing)	12,800	50%	19,779
	Shared Program, Services and Support Spaces	6,700	25%	8,375
	C2 Building Support	1,498	20%	1,798
TOTAL		21,678		30,768
		Building Gross Area Factor		15%
Grand Total C2 Minimum Security- BGSF				35,383

Table 3.4 provides a summary of projected space requirements for DOC Central Services which are in the process of being analyzed for backfill and adaptive use of structures vacated upon completion of the replacement facility. Please refer to the Appendix for detailed space requirements and room data sheets.

**Table 3.4: Projected Space Requirements by Component
DOC Central Services**

DOC Central Services - Systemwide Support Functions Adaptive Use of Vacated Medium Security Housing				
18.200	Field Services / PPO Office	11,607		5,108
	Office Space	4,257	20%	5,108
	Vehicles (Covered not enclosed)	7,350		7,350
18.300	Transportation Unit	4,978		5,076
	Transportation Personnel Offices	978	10%	1,076
	Transportation Vehicles	4,000		4,000
18.400	Facility Maintenance	15,873	25%	19,841
18.500	Centralized Pharmacy Operations	2,832	25%	3,876
18.600	Mailroom Operations	2,142	20%	2,637
Subtotal		37,432		36,539
		Building Gross Area Factor		15%
Task I DOC Central Services Subtotal				42,020
Additional Components for Consideration				
18.700	DOC Headquarter Offices	15,873	25%	19,841
18.800	Correctional Officer Training Academy	2,832	25%	3,876
18.900	Retention/Staff Services	2,142	20%	2,637
Subtotal		20,847		26,355
		Building Gross Area Factor		15%
Additional DOC Central Services Components Subtotal				30,308
TOTAL ADDITIONAL CENTRAL SERVICES COMPONENTS		58,279		62,894
				72,328

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Overarching Design Priorities

Envisioned as a versatile facility, the overarching layout and design criteria are characterized by:

- Adhering to high safety standards so that people in custody can be successfully and safely supervised.
- Creating a healthy living, learning, and working environment for incarcerated individuals, facility employees and service providers.
- Creating a healing path to wellness, recovery and personal growth through the provision of evidence-based programs, interventions and treatment services associated with each person's specific criminogenic and behavioral needs.
- Employing innovative design and alternative approaches in construction, and uplifting architectural styles that are more humane, dignifying and responsive to the goals of healing, autonomy, normalization, and social integration.
- Providing vibrant and multi-functional spaces in which people can be exposed to innovative programming and enriching learning and skill development activities.
- Providing a visually pleasing design on the secure perimeter which mimics the natural environment.
- Creating a normalized environment with an intended community look and residential feel within a secure setting.
- Incorporating biophilic features such as views of nature, abundant natural light, fresh air, thermal and airflow variability, and high ceilings to create the illusion of openness and space.
- Incorporating landscaped outdoor areas and a variety of outdoor recreational spaces.
- Supporting the flexibility to separate inmates as required for safety, risk and need purposes.
- Facilitating facility supervision and management by leveraging the latest trends and innovations in technology, systems and equipment to support staff efficiency and sound operational practices, as well as to limit the interruption in service delivery.

Through attention to design details, all physical elements will be integrated in a manner that creates a supportive and trauma-informed environment that supports opportunities for growth, connection, and positive behavior. In turn, ***the enhanced environmental qualities of space not only improve the well-being of the inmates but also provide a better work environment for staff. This should contribute to boosting staff recruitment and retention rates and result in reduced overtime costs for the State.***

Please refer to the Task I & II Reports and Appendices for additional details.

4

CONCEPTUAL SITE TEST FIT

5.2. Conceptual Site Test-Fit - Approach & Blocking Plans

Site A/B Compact Urban Campus

Three options were developed as part of analyzing Site A/B during Task II.

- Option 1 was termed a Compact Urban Campus, with housing developed around an urban “mall” housing programs & services. This option focused on reducing the site footprint to mitigate extensive site preparation and related costs due to the sloping terrain and underlying rock strata.
- Option 2 was termed a Compact Suburban Campus with housing developed as independent structures and external movement to central programs and services, typical of correctional facility typology.
- Option 3 reflected an Open Campus concept that spread the housing buildings out on the site again with external circulation to central programs and support. Additionally, this option explored massing the central program and services element to follow the topography of the site, resulting in a curvilinear form to the building which created added construction complexity and costs.

Option 1 was determined to be the most advantageous approach to developing the replacement facility as it minimized the footprint and by compacting buildings reduced circulation. Additionally, the compacted plan with internal movement allowed for campus type movement in inclement weather and each housing building still has a direct connection to the outside for recreation and to create a more humanistic environment. The primary “big” move between Tasks II and three was to shift the outdoor recreation fields from the North side of the facility to the South side so that they have a stronger relationship to the C-3 housing who are the primary users of the large fields. For additional information on the three options consider as well as the analysis of Site C please refer to the Task II report.

Figure 4.1

Artist Conception – New Hampshire Correctional Facility for Men Replacement Project



New Hampshire Correctional Facility for Men – Concord (NHCFM – Concord) Replacement Project

Overall Organization

The proposed compact urban campus concept is organized to minimize the development footprint while maximizing functional open space, operational efficiency, and compatibility with surrounding public and natural resources. The planning strategy consolidates buildings and infrastructure into a dense, clearly organized campus that reduces land disturbance and supports long-term adaptability. The campus is planned on approximately **65 acres**, including roughly **11 acres of City-owned property** adjacent to the abandoned quarry, allowing the project boundary to be thoughtfully adjusted to accommodate site constraints while maintaining a coherent and efficient campus framework. Actual site area will be greater as a boundary fence will be provided approximately 100' from the developed area on the North, West and East sides to limit intrusion of individuals into the more secure site area.

Vehicular access and circulation are planned to support clear operational separation and safe movement for all user groups. Staff and public access are provided via an extension of the existing driveway, reinforcing an established access point and minimizing the need for new curb cuts onto surrounding roadways. Service vehicle access is routed from the currently unpaved road leading to the gun range, creating the most direct connection to the site and reducing internal circulation conflicts. Inmate transport vehicles are coordinated along the same access corridor as staff vehicles but are managed at a separate elevation, resulting in a two-level circulation and parking configuration. This approach leverages the site's steep topography to reduce surface parking, limit grading, and concentrate infrastructure in a compact footprint.

The campus is structured around a central Facility Support Mall, with housing units arranged in close proximity to ensure efficient access to shared programs and operational services. This compact organization supports consistent response times, simplifies wayfinding, and reinforces a walkable campus environment. Housing is based on a 96-bed unit model, with capacity for an additional cluster to accommodate future needs. Parking is consolidated into a structured solution designed to serve R&D transport, staff, and public parking requirements, integrated into the natural grade to minimize visual impact and reduce environmental disturbance.

Environmental sensitivity and infrastructure coordination are key considerations in the site planning approach. The compact campus layout is specifically intended to minimize wetland impacts by limiting development spread and concentrating impervious surfaces. Existing utility alignments crossing the site are evaluated in conjunction with the adjusted project boundary ensuring uninterrupted service while reducing conflicts with proposed buildings and circulation. This coordinated utility strategy supports long-term system reliability and allows the campus to function efficiently within its revised limits.

As part of the Task II site analysis test fit, C2 housing and central operational support programs were located at the lowest elevation of the site, near the main street, to facilitate efficient access for daily operations and emergency response. Subsequent to the completion of the Task II effort, these functions were separated from the main facility program and are being separately analyzed for the potential adaptive use of buildings vacated upon the completion of the new replacement facility, including the historically significant buildings of the original prison facility.

Refer to Figures 4.2 thru 4.7 for illustrations of siting concept and organizational parti.

Upper Level -Housing Level

New Hampshire Correctional Facility for Men – Concord (NHCFM – Concord) Replacement Project

The building is planned to respond directly to site characteristics while ensuring equitable travel distances between housing units and associated support programs. The upper level of the facility support mall accommodates the majority of the housing units along with key inmate support functions, including health services, general education and inmate programs, and the dining and kitchen facilities. Locating these primary functions on a single level minimizes inmate movement between floors, reducing vertical circulation to enhance safety, security, and operational efficiency.

The center of the building is selectively opened to introduce natural light into the lower level, creating a bright and open interior environment throughout the facility. Due to site conditions, the primary outdoor recreation area serving all inmates is also located on this level, allowing direct access from housing units. Double-stacked general population housing facing the street is organized to vertically consolidate housing, optimizing land use while preserving larger contiguous areas for outdoor activities.

Lower Level - Building Support/Programs Level & “Stacked” C-3 Housing

The lower level remains fully within the secure perimeter and serves as a key operational layer where services and inmate transport are integrated into the campus. This level houses a centralized collection of building and inmate support programs, including the gymnasium, recreation spaces, career and technical education (CTE), industry programs, laundry, and receiving and distribution (R&D). These functions are centrally located to ensure efficient and equal access from all housing units.

Additional general population housing units are also located on this level, arranged around the support spaces to further centralize programming and reduce internal travel distances. This organization reinforces operational efficiency while maintaining a compact and secure interior layout.

Public Level -Outside of Security

Public-facing functions, including the main lobby, visitation areas, and administrative offices, are located one level below the secure environment and are integrated into the natural grade of the site. This placement allows for convenient access from the entry driveway while clearly separating public functions from secure operational areas.

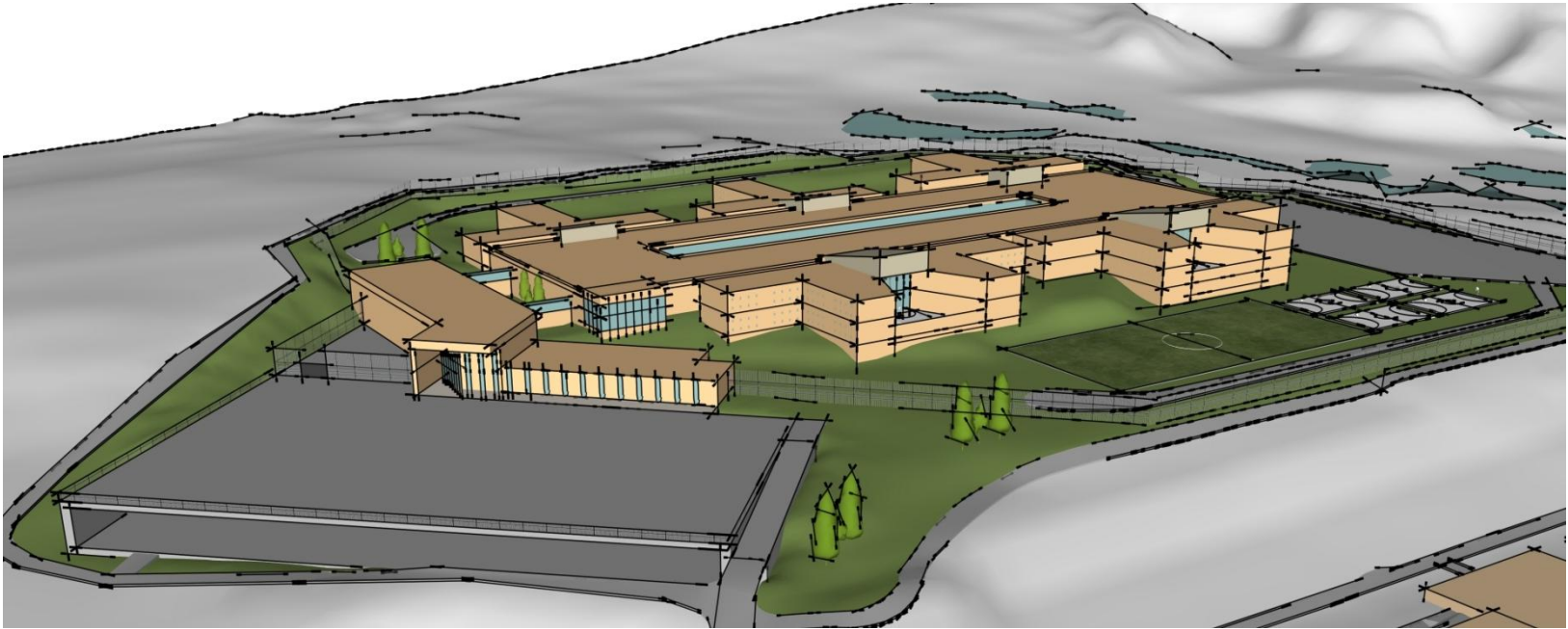
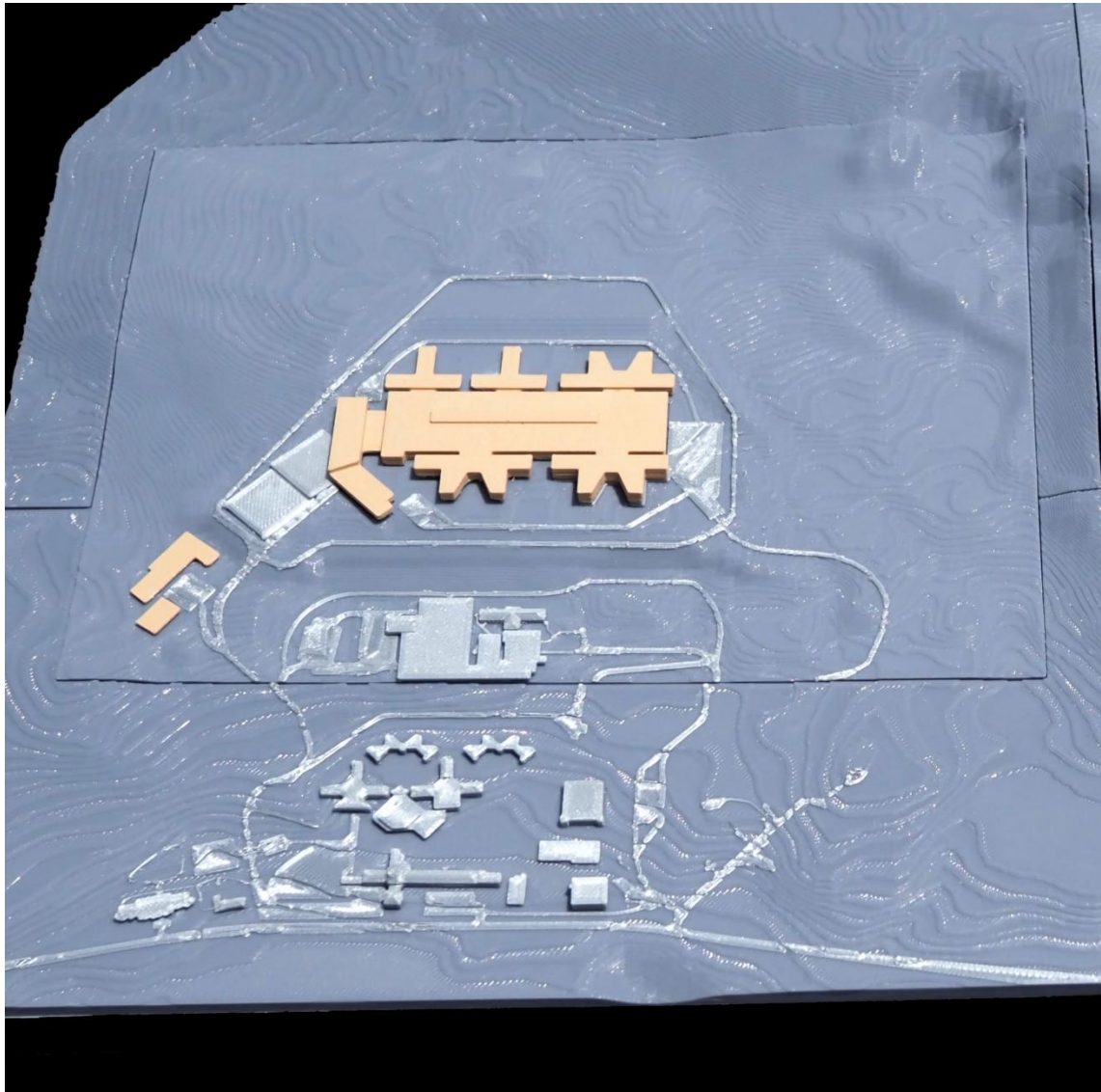
C-2 Housing & DOC Central Support Services

C2 housing and shared central support programs serving multiple facilities are located at the lowest elevation near the entry driveway. This positioning provides the most direct access to the main roadway network, supporting efficient daily operations, service access, and emergency response while reinforcing a clear hierarchy of access across the campus

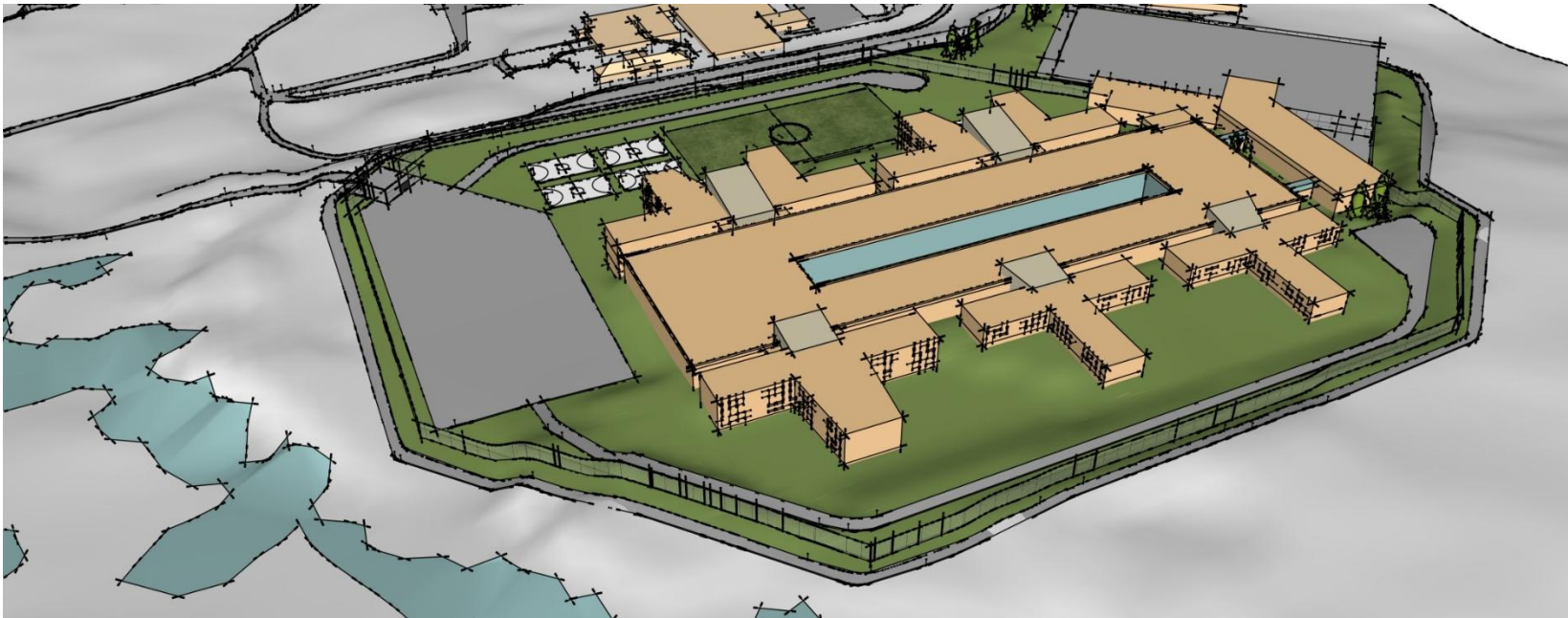
Figure 4.2
Artist Conception – New Hampshire Correctional Facility for Men Replacement Project



Figure 4.3 Site Development Concept
Study Model & Sketches

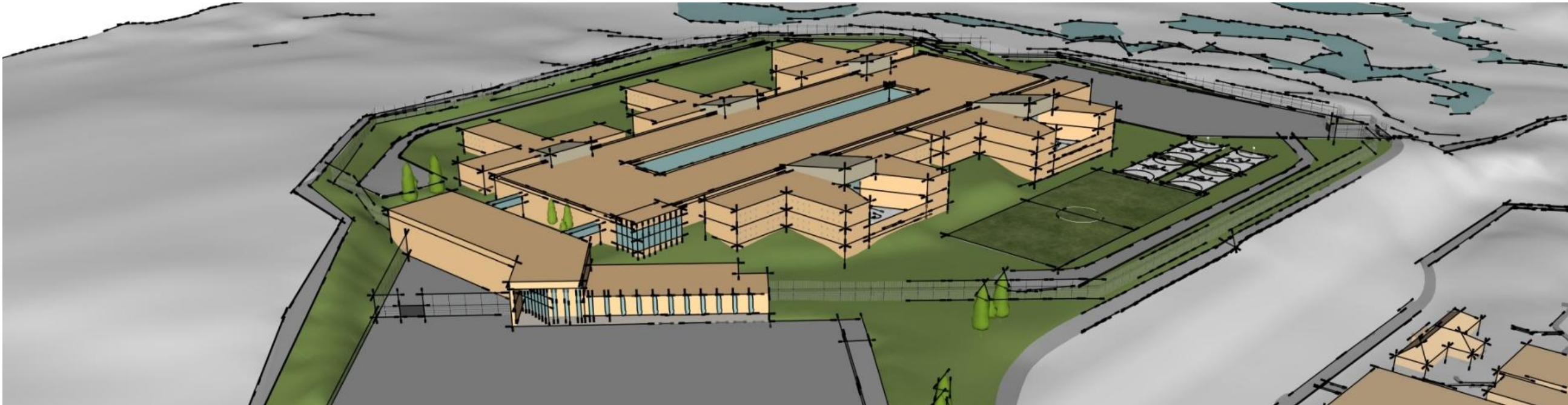


View from Southeast

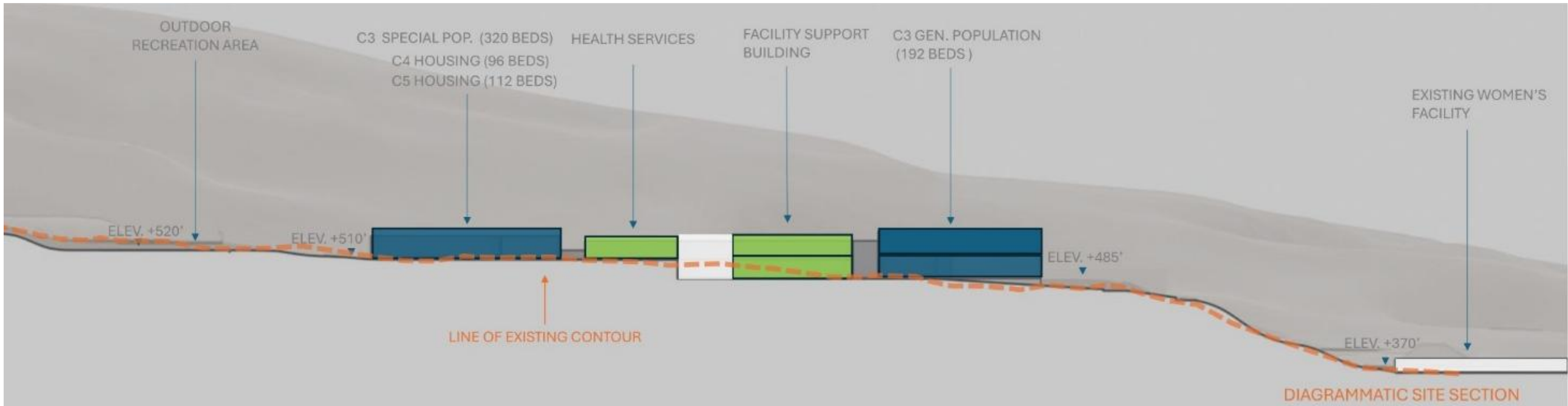


View from Northwest

Figure 4.4 Site Development Concept
Building Organization & Massing Responds to Topography

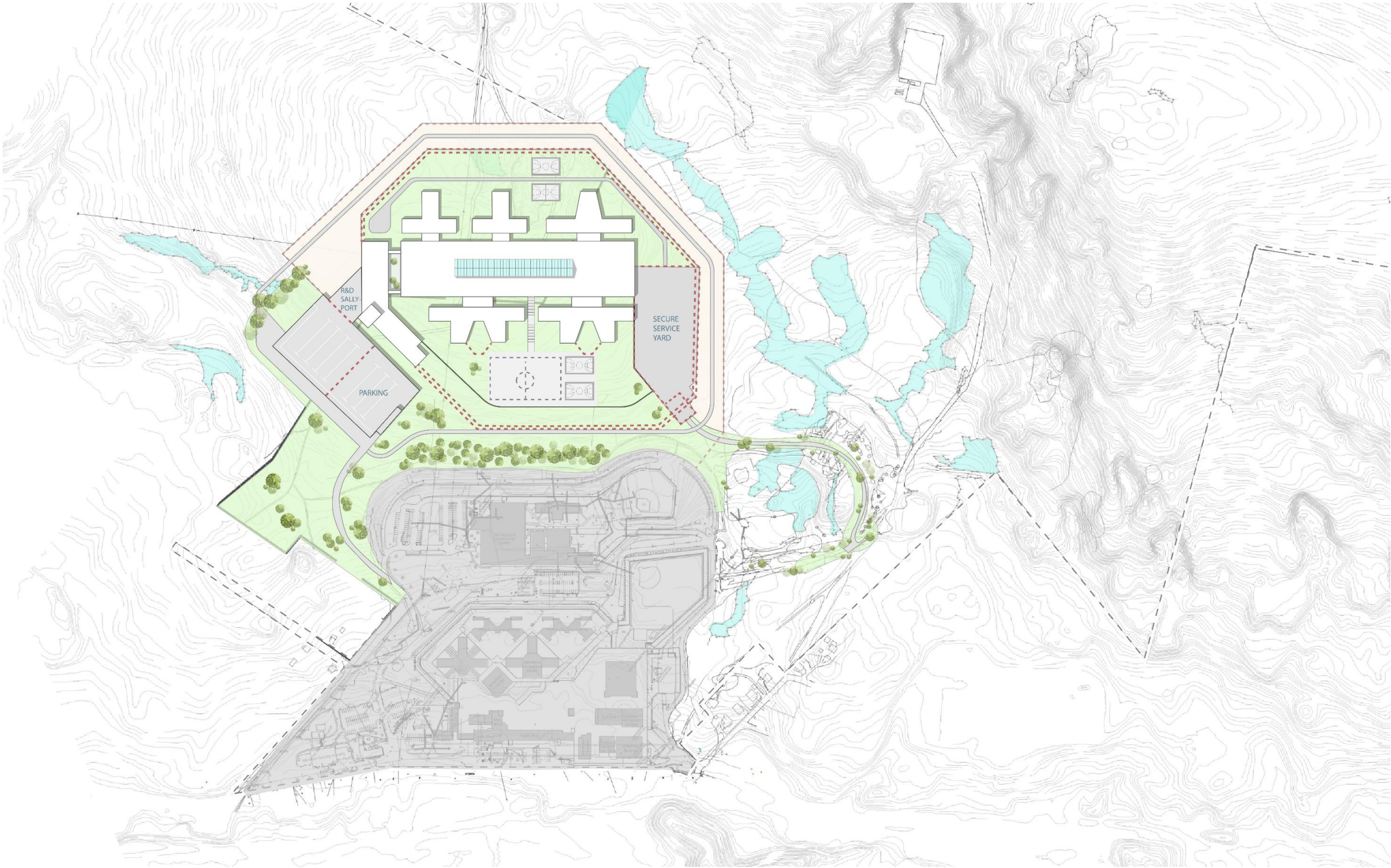


View from Southeast – Building Massing Responds to Topography



Section Illustrating Building Positioning to Accommodate Changing Topography

Figure 4.5 Site Development Concept
Site Plan



**Figure 4.6 Organizational Block & Stack
Lower Level**

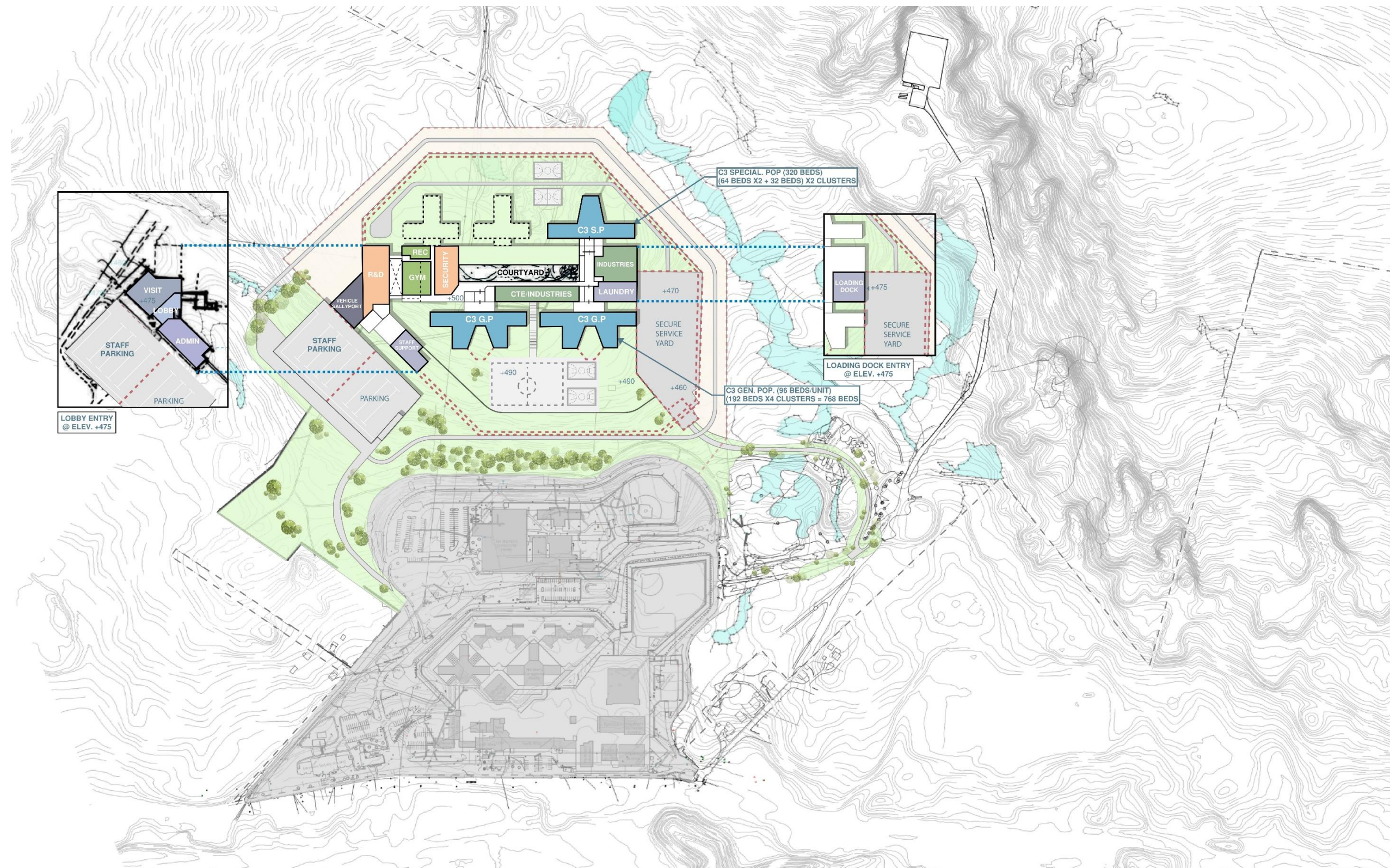
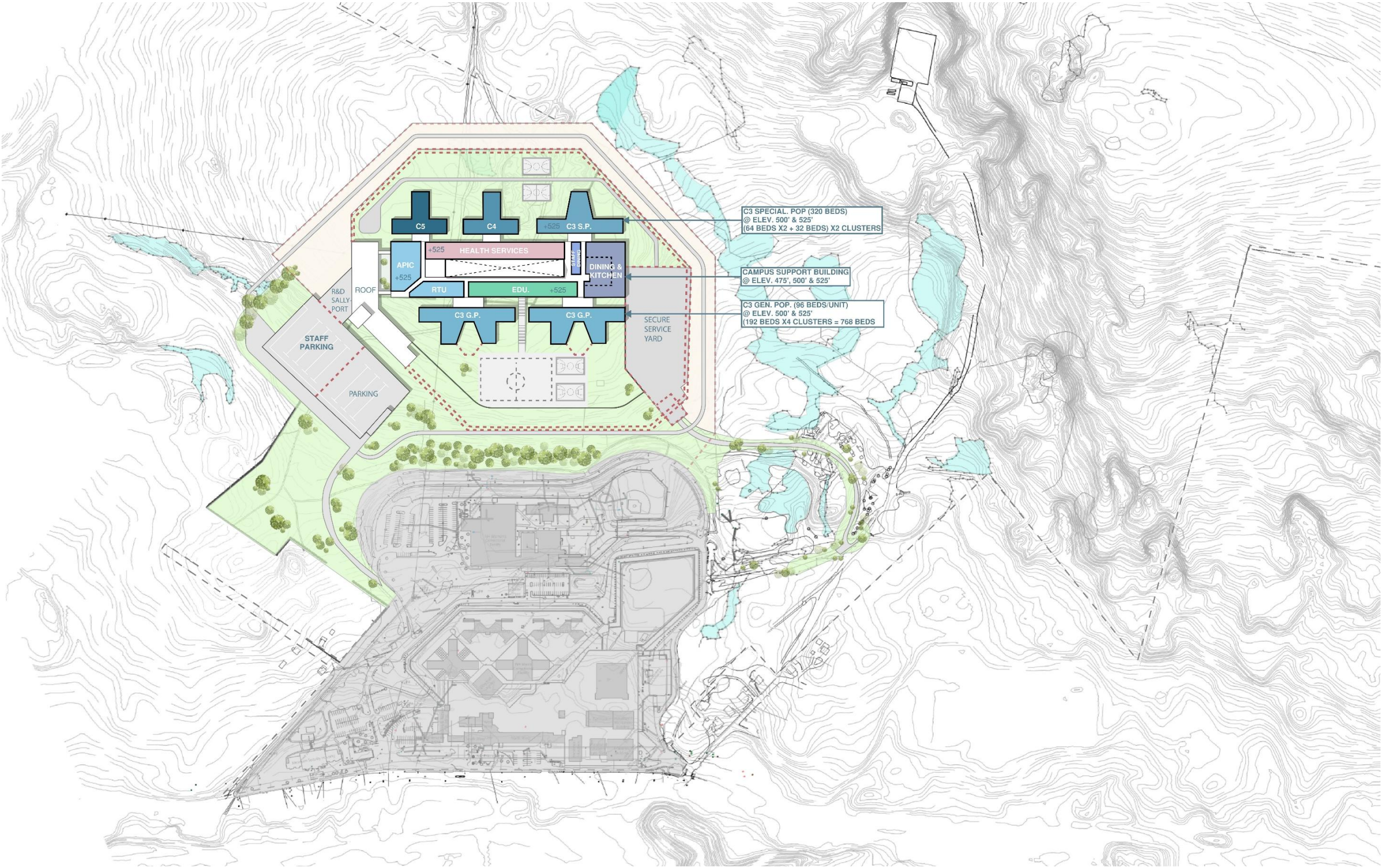


Figure 4.7 Organizational Block & Stack
Upper Level



5

IMPLEMENTATION PLAN & SCHEDULE

SECTION 5. IMPLEMENTATION PLAN & SCHEDULE

Figure 5.1 overleaf illustrates the currently anticipated project delivery schedule for the New Hampshire Correctional Facility for Men Replacement Project. With an anticipated start related to procuring design services continues as planned, it is anticipated that four (4) to four and one-half (4 1/2) years will be required to reach occupancy of the proposed replacement facility. In general, this allows for:

- Four months for the selection and negotiation of a contract for professional design services;
- Sixteen months for full design services;
- Development of, procurement and construction of the site preparation package concurrent with design of the buildings and final site work;
- Four to six months for construction bidding, negotiation and contract execution, and;
- Thirty-six to Forty-Two months for construction of the primary correctional facility, with Occupancy in May or December of 2031.

The anticipated approach to project delivery is similar to the approach used for the construction of the new Women's Facility. It anticipates that an early site preparation package will be procured to allow site preparation to begin while design is completed.

The projected schedule does suggest that project development will continue immediately as funding has been authorized by the legislature for design phase services. The intent would be to initiate work on the early site package concurrently with the completion of schematic design based on the planning framework established by this Phase I Pre-Design study. It does, however, recognize that there will be additional deliberations regarding project implementation given the magnitude of the anticipated expenditure. It assumes that a decision to move forward concurrently with execution of the contract for design services.

The anticipated schedule also recognizes that the funding of the project may require some time both to reach agreement on the funding approach and if financed via government bonding that time will be required to initiate funding and that time should be allowed to assure that such funding can be obtained at favorable time in the market.

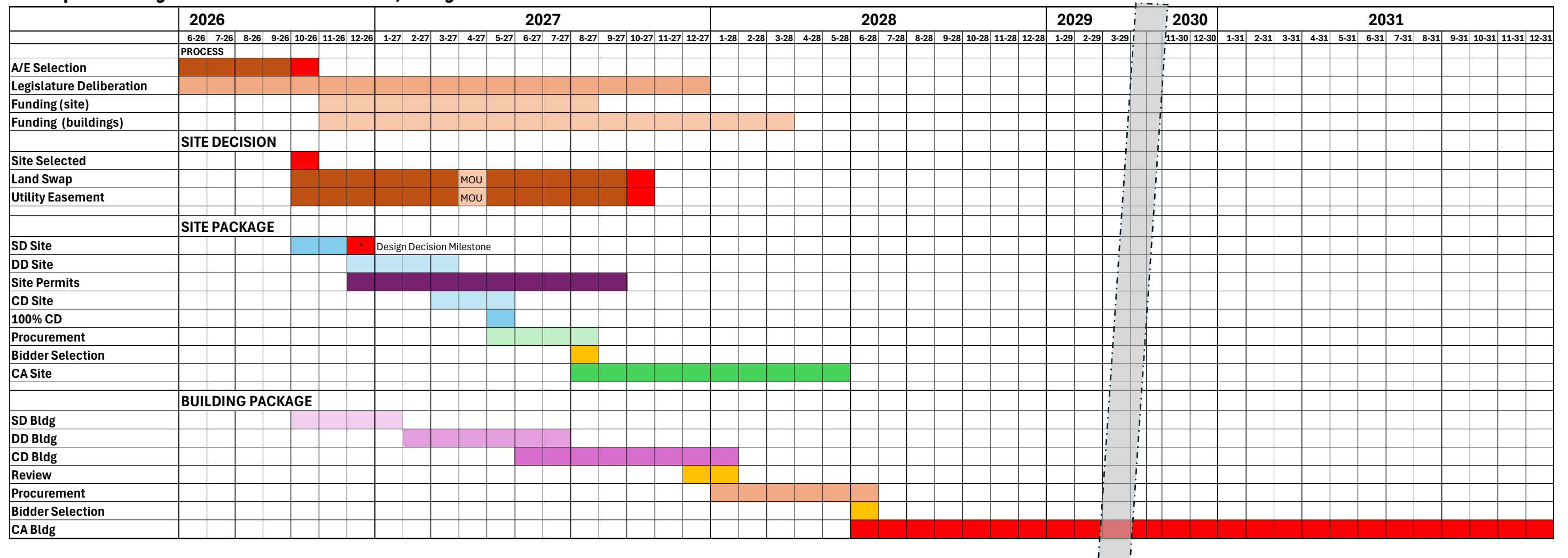
Funding has also been identified in two increments. First, funding for site preparation which may be direct general fund expenditures rather than part of a larger bond issue or financing package. Assuming that discussions with the City go forward as anticipated and that the Pre-Design effort related to site environmental conditions provides a head-start on approvals, it is anticipated that funding for the early site package would need to be in place prior to the anticipated award date of August 2027, with funding for the major portion of construction in place at the anticipated award date of June, 2028

The critical path for the schedule is through the determination of project financing. Beyond this milestone, the critical path will be impacted by finalization of the land swap with the City of Concord required to confirm the site and site related approvals. Anytime that can be saved in this process will result in shortening the total time to occupancy.

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Figure 5.1 Preliminary Project Design & Construction Schedule

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire
Anticipated Design & Construction Schedule, Design/Bid/Build or CMAR



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ORDER OF MAGNITUDE
PROBABLE COSTS

SECTION 6.1 ORDER OF MAGNITUDE PROBABLE COSTS

A key deliverable of Phase I, Predesign Study is the preparation of an order of magnitude costs for construction.

Construction costs are based on the analysis of two major cost elements:

- Site Development Costs based on the determination of the ideal site, required access roads and utility extension and anticipated rough grading including where necessary rock removal. These costs are based on a preliminary quantity take-off and general unit prices for this type of work in the New Hampshire market.
- Building Costs are based on unit prices/square foot by component base on the program of requirements. This accounts for the difference in unit costs for different building types. It reflects the variances in unit costs for differing uses. Typically for example, housing, medical, food service and control functions are more costly on a unit basis than education or programs and also have variable costs among themselves. Unit costs are based on current experience nationally in the construction of similar facilities, adjusted to the New Hampshire market.

In developing a preliminary ROM estimate of probable construction cost the planning team focused on developing a range of costs as a set of “guardrails” for project development. Table 6.1 provides a summary of anticipated probable construction costs in today’s dollars based on the exhaustive site investigation effort completed, the refined architectural program and the conceptual site planning completed to date. As illustrated in Table 6.1, the Planning Team is projecting a range of construction costs of \$749.4M to \$786.8M for development of the New Hampshire Correctional Facility for Men Replacement Project. Note that the construction number excludes soft costs and funds already allocated as well as escalation.

Note that these costs exclude C-2 Housing and DOC Central Support facilities that are being analyzed separately as potential backfill for adaptive use of buildings that will be vacated upon completion of the new facility, including the historically significant original prison buildings.

Relative to the initial program estimate developed in conjunction with program development in Task I (for buildings only as site development costs were unknown at that time), this represents a \$54.6M to \$57.4M reduction in the estimated range of construction costs. If the C-2 beds are also excluded based on the potential to renovate/reuse or adapt use of vacated structures at the existing prison, the total cost reduction the total reduction in construction cost ranges from \$94.4M to \$99.0M.

Table 6.1
Anticipated Probable Construction Costs -All Construction

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire **Projected Range of Construction Costs Site & Building - (06.2026 Dollars)**

	Low Range	High Range
Site Preparation	\$ 23,178,600	\$ 24,337,530
Buildings/Vertical Construction	\$ 691,689,903	\$ 726,274,398
Final Sitework/Parking	\$ 34,487,500	\$ 36,211,875
Total Probable Construction Cost	\$ 749,356,003	\$ 786,823,803

New Hampshire Correctional Facility for Men – Concord (NHCFM – Concord) Replacement Project

Note that these costs (excluding the site development costs) are comparable to similar projects currently in development or construction across the United States. For example:

- New Arkansas State Prison - \$825M
- Baltimore Therapeutic Treatment Center (MD Dept. of Public Safety and Correctional Services - \$846M const. cost in FY 25 now estimated at over \$1B;
- New South Dakota Men's Correctional Facility - \$650M for 1200 beds

The following pages provide supporting information for the estimated range of probable construction costs.

Site Development Costs

Table 6.2 provides detail on the site preparation ROM statement of probable cost. Note that in addition to anticipated construction costs it also captures the potential cost of relocating the existing power line easement.

Building Costs

Table 6.3 outlines the basis for the anticipated ROM statement of probable cost range for all vertical construction. Note that unit prices vary by component, reflecting the differential costs of construction and fit out. The calculated overall cost/BGSF range of \$1,077/BGSF to \$1,131/BGSF is comparable to our current experience in procuring construction services for correctional facilities similar to the proposed NHCFMR.

Final Site Work/Parking

To reduce the overall footprint and site grading, the Conceptual Development Plan assumes that parking will be split 50% on grade and 50% on a one level deck. This also easily separates the staff entry on the lower level from the public entry on the upper level. The Final Site Work/Parking budgetary ROM includes \$25M for site development over and above the allowances carried in the unit prices and \$9.5M for a simple parking deck based on \$4,000 per car on grade and \$25,000/car on the simple one-level elevated deck.

New Hampshire Correctional Facility for Men – Concord (NHC FM – Concord) Replacement Project

Table 6.2
Anticipated Probable Construction Costs -Site Preparation

Site Earthwork Costs

	Volume (CY)	Cost per CY	Total Cost
General Cut	535,800	\$8	\$ 4,286,400.00
Rock Cut	80,000	\$21	\$ 1,680,000.00
General Fill	542,800	\$4	\$ 2,171,200.00
			\$ 8,137,600.00

Total Cost Estimate: \$ 23,178,600.00

Roadway Costs

	Length (LF)	Cost/LF	Total Cost
Access Road South	840	\$ 1,900	\$ 1,596,000
Access Road North	1800	\$ 1,900	\$ 3,420,000
			\$ 5,016,000

Retaining Walls

	Area of Face (SF)	Cost/SF	Total Cost
Wall A	10,560	\$50	\$528,000
Wall B	2,350	\$50	\$117,500
Wall C	9,840	\$50	\$492,000
Wall D	15,800	\$50	\$790,000
Wall E	10,720	\$50	\$536,000
Wall F	80	\$50	\$4,000
Wall G	2,890	\$50	\$144,500
Wall H	1,530	\$50	\$76,500
Wall I	3,430	\$50	\$171,500
			\$2,860,000

Stormwater Management Basins

	Impervious Area (SF)	Volume (CF)	Cost/CF	Total Cost
Estimated WQV	1,443,000	120,250	\$10	\$1,202,500
Estimated Peak Rate Control	1,443,000	360,750	\$10	\$3,607,500
				\$4,810,000

Assumed 1" WQV

Assumed 3x WQV

Wetlands, Quarry and Stream Impacts

		Cost
Wetland Impacts	0.67 Acres	\$250,000
Quarry Impacts	1.17 Acres	\$440,000
Stream Impacts	415 LF	\$165,000
		\$855,000

Overhead Electric Easement Relocation	# of Poles	Cost per Pole	Total Cost
	15	\$100,000	\$1,500,000

New Hampshire Correctional Facility for Men – Concord (NHC FM – Concord) Replacement Project

Table 6.2
Anticipated Probable Construction Costs -Site Preparation

New Replacement 1,500 Bed Men's Facility - Concord, New Hampshire Projected Range of Construction Costs Building - (06.2026 Dollars)								
Component Designation	Component	(NSF)	(DGSF)	BGSF	Low Range		High Range	
					\$/BGSF	Estimated Cost	\$/BGSF	Estimated Cost
1.000	Main Public Entry and Visiting Center	10,352	12,580	14,467	\$ 1,117	\$ 16,159,099	\$ 1,173	\$ 16,967,054
2.000	Victim Services & Parole Board	4,256	5,483	6,305	\$ 1,043	\$ 6,579,540	\$ 1,096	\$ 6,908,517
3.000	Central Administration	11,652	15,148	17,420	\$ 1,000	\$ 17,419,740	\$ 1,050	\$ 18,290,727
4.000	Staff Support Facilities	10,815	13,519	15,547	\$ 1,000	\$ 15,546,563	\$ 1,050	\$ 16,323,891
5.000	Security Operations	8,244	10,163	11,687	\$ 1,300	\$ 15,192,938	\$ 1,365	\$ 15,952,584
6.000	R&D, Transports and Release	21,818	30,855	35,483	\$ 1,117	\$ 39,634,148	\$ 1,173	\$ 41,615,855
7.000	Inmates Housing		270,370	310,925	\$ 1,087	\$ 337,962,375	\$ 1,141	\$ 354,860,494
8.000	Academic Education and Resource Center	17,995	23,267	26,757	\$ 1,043	\$ 27,920,760	\$ 1,096	\$ 29,316,798
9.000	Inmate Intervention and Religious Services	9,190	11,592	13,331	\$ 1,000	\$ 13,330,800	\$ 1,050	\$ 13,997,340
10.000	Recreation Programs	12,641	16,390	18,849	\$ 1,000	\$ 18,848,730	\$ 1,050	\$ 19,791,167
11.000	CTE and Correctional Industries	36,124	47,481	54,603	\$ 1,000	\$ 54,602,978	\$ 1,050	\$ 57,333,126
12.000	Medical & Behavioral Health Care Services	24,472	38,760	44,574	\$ 1,117	\$ 49,789,543	\$ 1,173	\$ 52,279,021
13.000	Food Services	29,587	37,506	43,131	\$ 1,130	\$ 48,757,150	\$ 1,187	\$ 51,195,008
14.000	Laundry Services	4,991	5,989	6,888	\$ 1,087	\$ 7,486,500	\$ 1,141	\$ 7,860,825
15.000	Building Support	5,193	6,122	7,040	\$ 1,000	\$ 7,039,840	\$ 1,050	\$ 7,391,832
16.000	Central Energy Plant	13,408	13,408	15,419	\$ 1,000	\$ 15,419,200	\$ 1,050	\$ 16,190,160
	TOTAL	408,345	558,631	642,425	\$ 1,077	\$ 691,689,903	\$ 1,131	\$ 726,274,398
	Per Bed	271	371	427		\$ 459,289		\$ 482,254