PROPOSED CONCEPTUAL DESIGN **STRAFFORD COUNTY NURSING HOME, DOVER, NEW HAMPSHIRE**JULY 19, 2023





In the fall of 2022, Warrenstreet completed a Conceptual Design for a New Nursing Home on the Site known as the "Hyder Field Site". As part of the early due-diligence, we completed an archaeology study, historic review, and geotechnical test pits and found the site suitable for construction. In the fall of 2022, we completed a field survey of the property inclusive of wetland mapping. Although, to the laypersons eye, the land appears to be agricultural fields, they were determined to have scattered wetlandsthroughout the proposed building site. The wetland impact was determined to be greater than (3) acres which would require a major permit with US Army Corps review, which would take a minimum of two years only after all the civil engineering had been completed. Onsite mitigation was deemed unreasonable and the financial penalty calculated at greater than \$600,000 to be be paid to the State Wetland Mitigation Fund. A conscious decision was made to explore other opportunity sites within the County Farm Property.

In the spring of 2023, the Commissioners approved surveying the enitre county farm, which was completed mid june. The Eric Drive Site was determined the best suitable site, with wetlands around the perimeter of the buildable location rather than scattered throughout. This site allows for a buildable site, although smaller in size, it was discussed exploring a building schmeme more vertical in height, scaling the project from two stories to five stories. the overall wetland impact per the conceptual package within is in fact under 800 sf. Both parcels are comparable is size, with the Eric Drive site being of greater elevation and with an expected better soils composition for building.

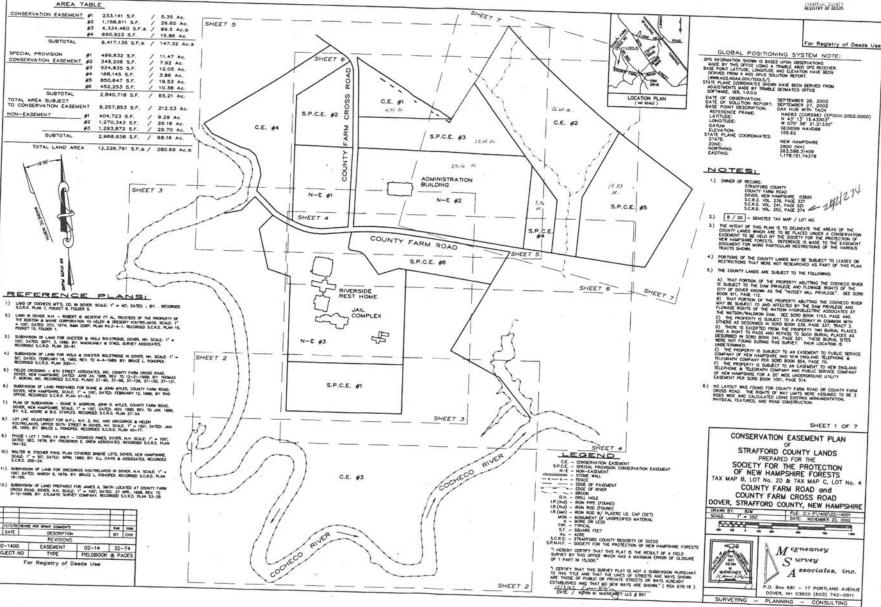
All of the County Farm property is burdened with both "Conservation Easements" and "Special Easements" place over the entire farm property in the early 1980's. The Eric Drive Site is the better of the two situations, having a Special Easement which the County is allowed to remove for the expansion of county business. The proposed structure is set far back from property lines, and all of the abutting tree cover is proposed to remain providing a great buffer for adjouning properties. The flat roof of the building provides the opportunity to construct a local solar array to differ operating costs for the new building.

The cost of site development, utilties, and roadways is comparable. The cost of vertical construction however can be less expensive than the same square footage having a larger footprint. The proposed building has an approximate 57,000 sf footprint, is proposed to befive stories, with a bsement level that houses the Kitchen, Housekeeping, Facilities and Mechanicals systems.

As a County Facility, the proposed project is exempt from local Dover zoning and planning requirements. The construction would be overseen by the State Fire Marshals Office.







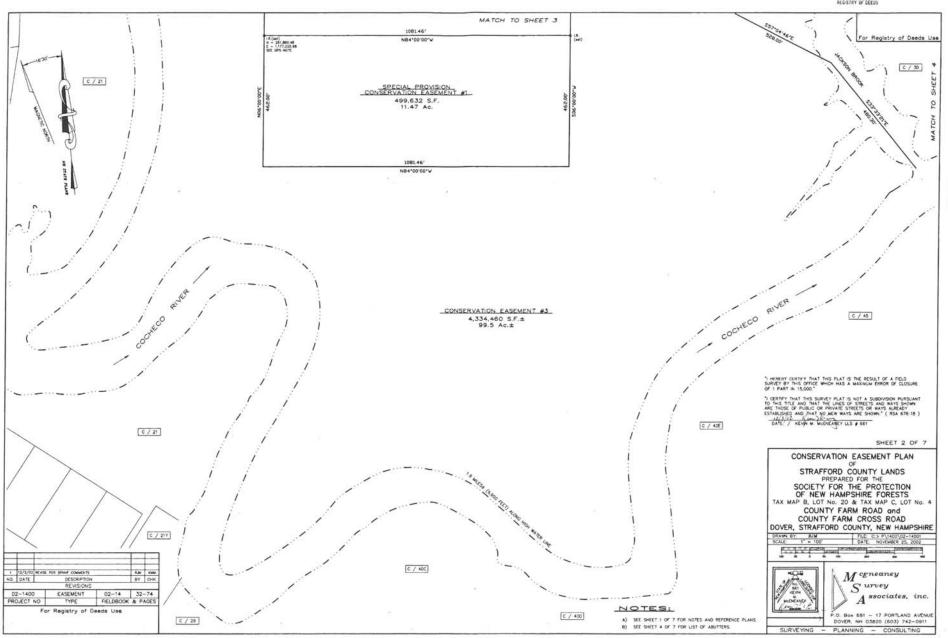
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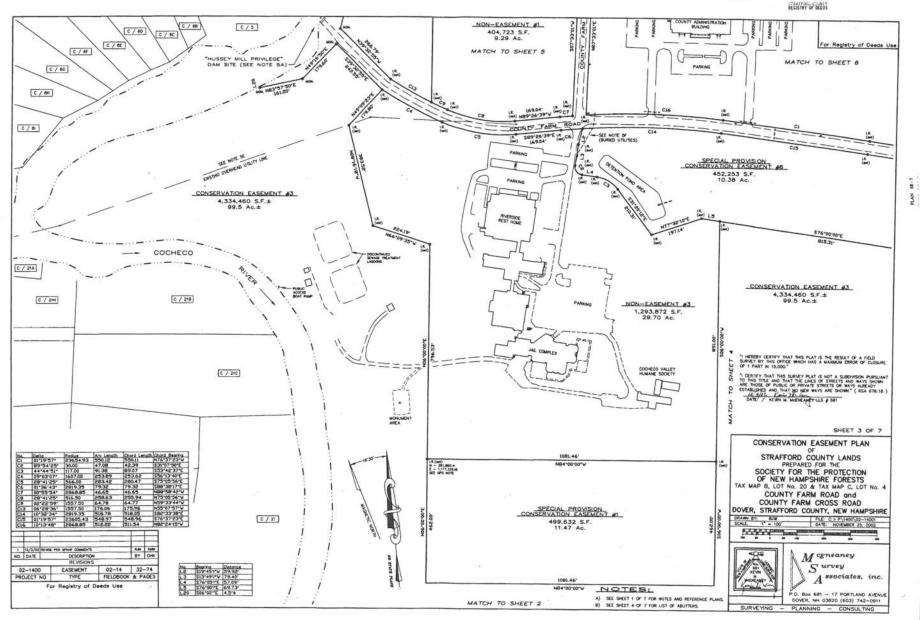
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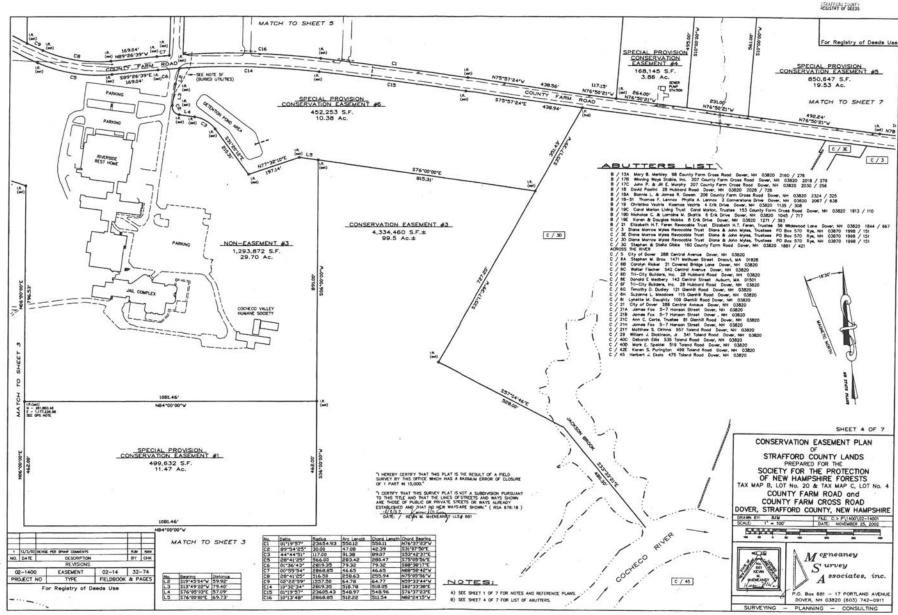
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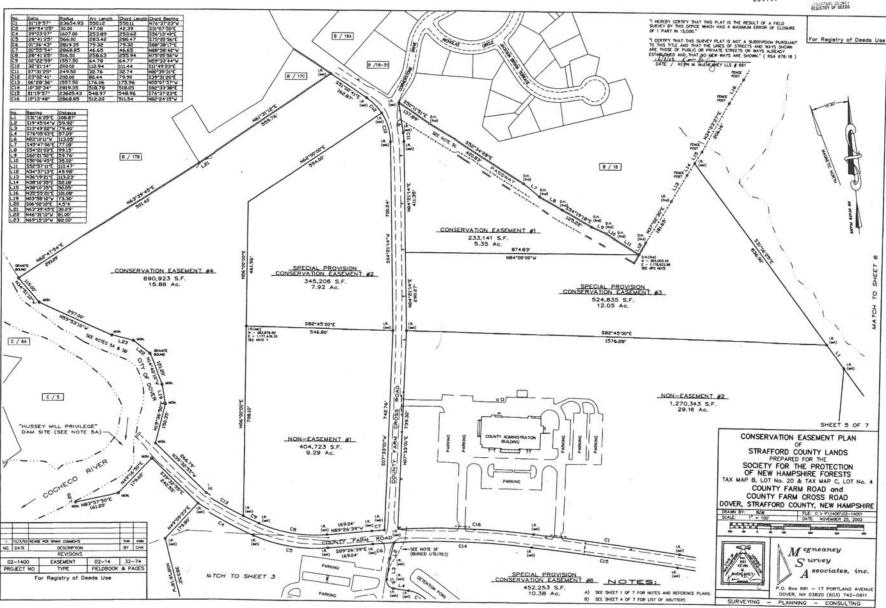
HEGSTRY OF DEEDS





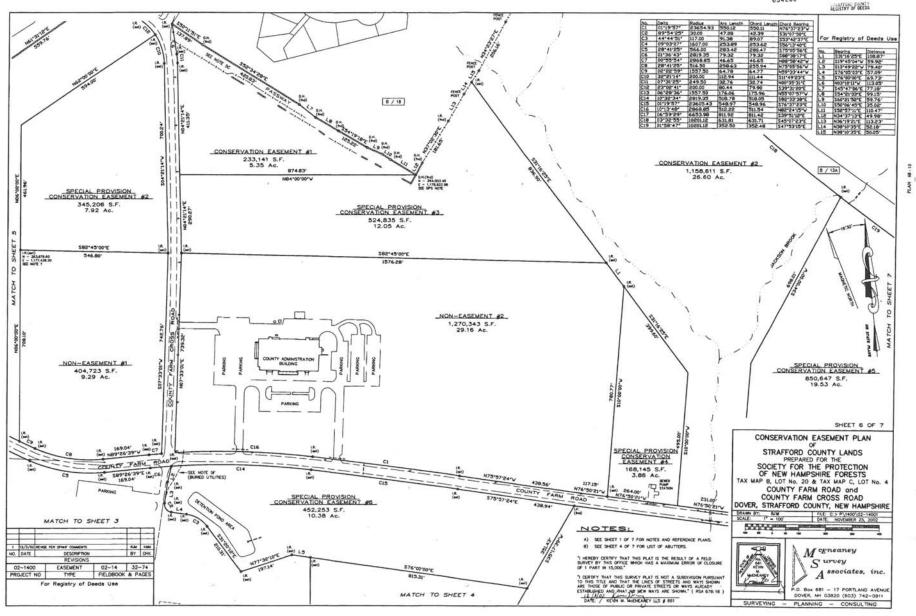


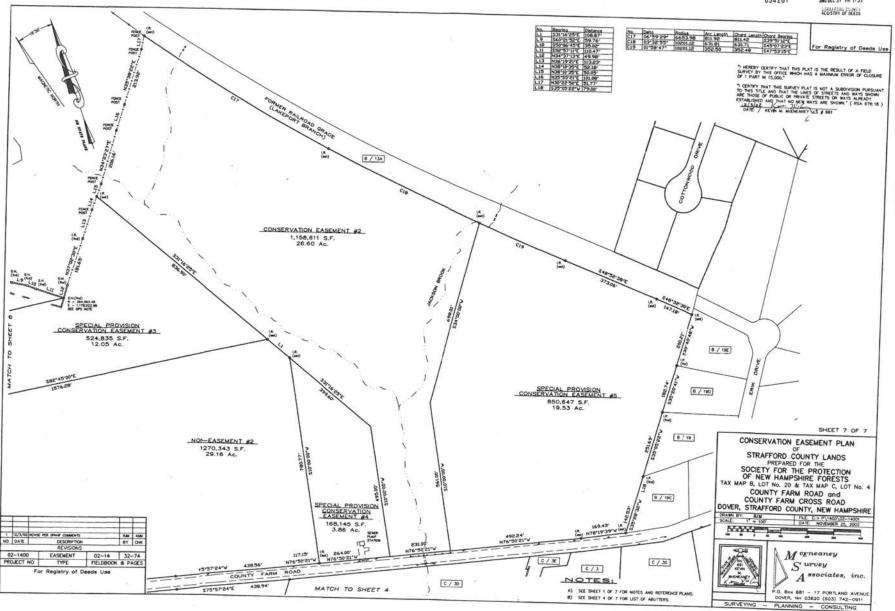
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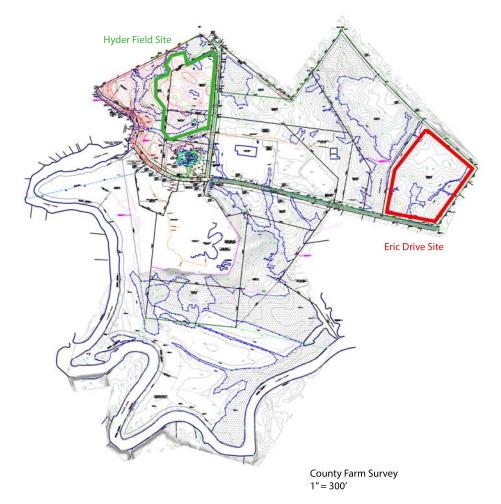
MANDEC 31 PM 1: 36





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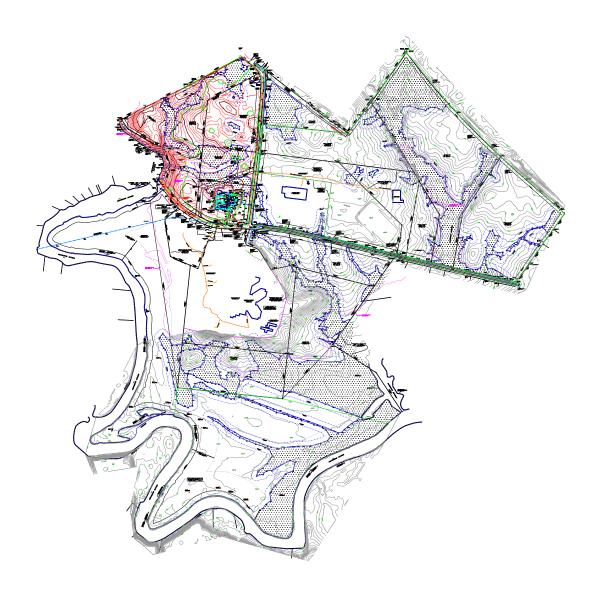
COUNTY FARM ROAD EXISTING CONDITIONS





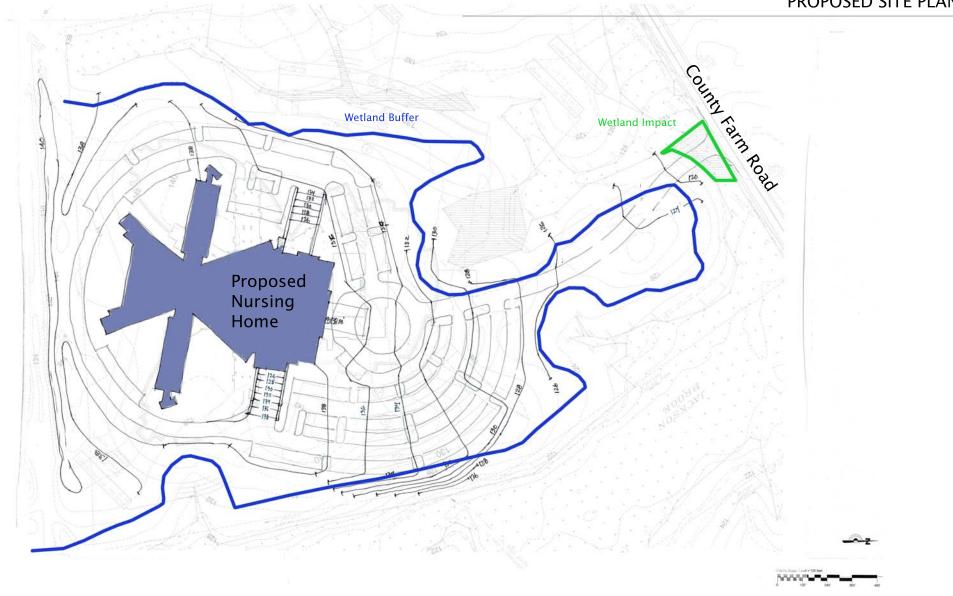




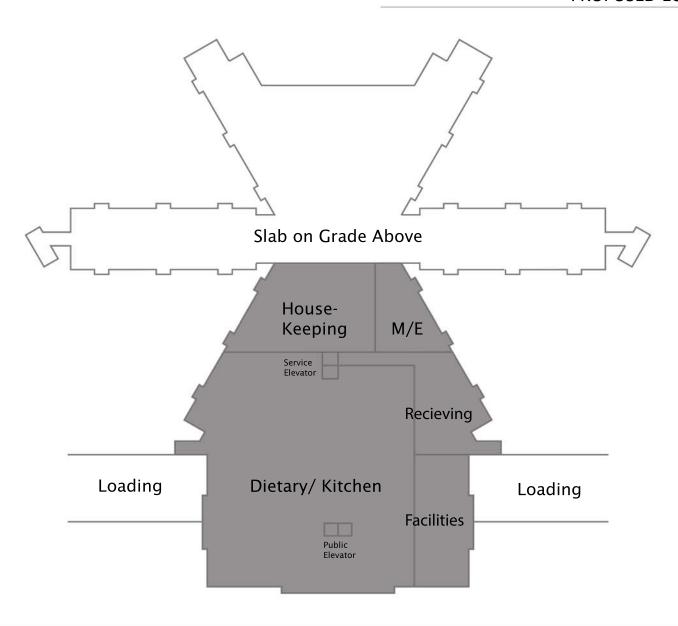




PROPOSED SITE PLAN

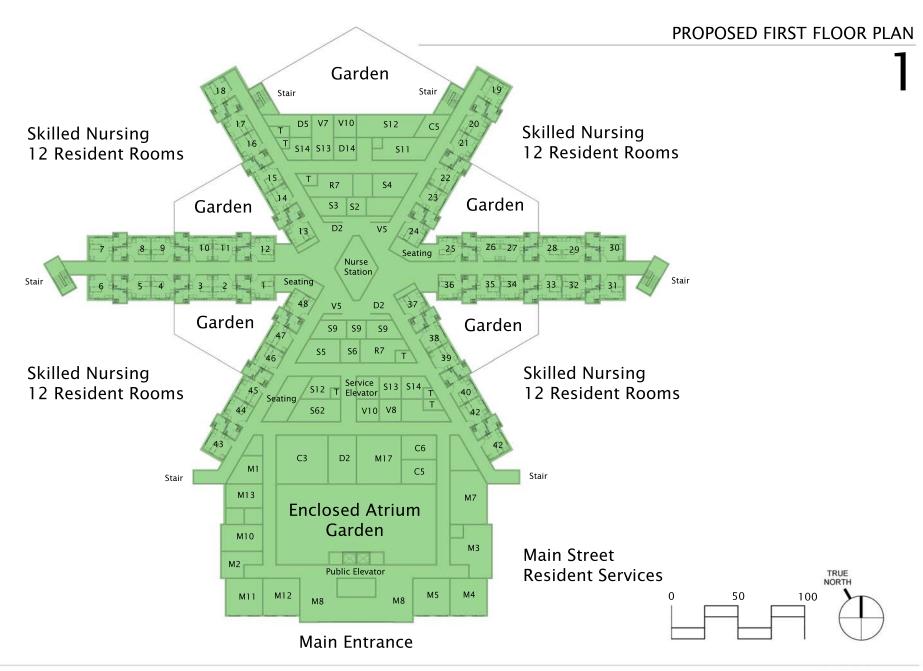






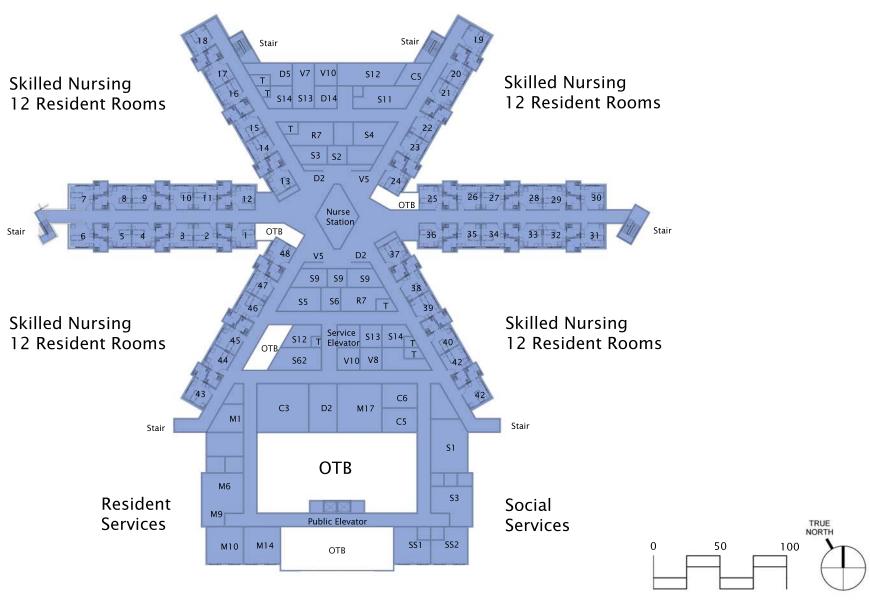




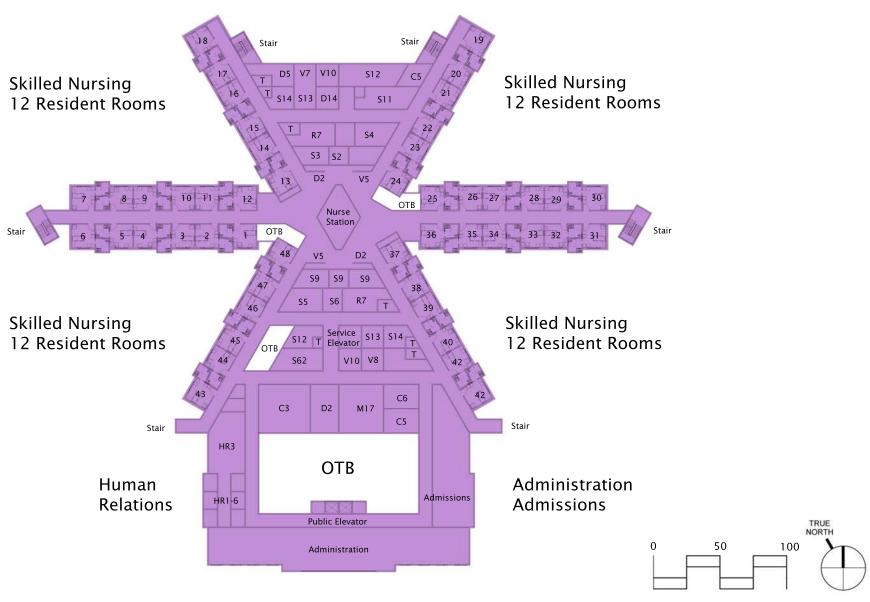




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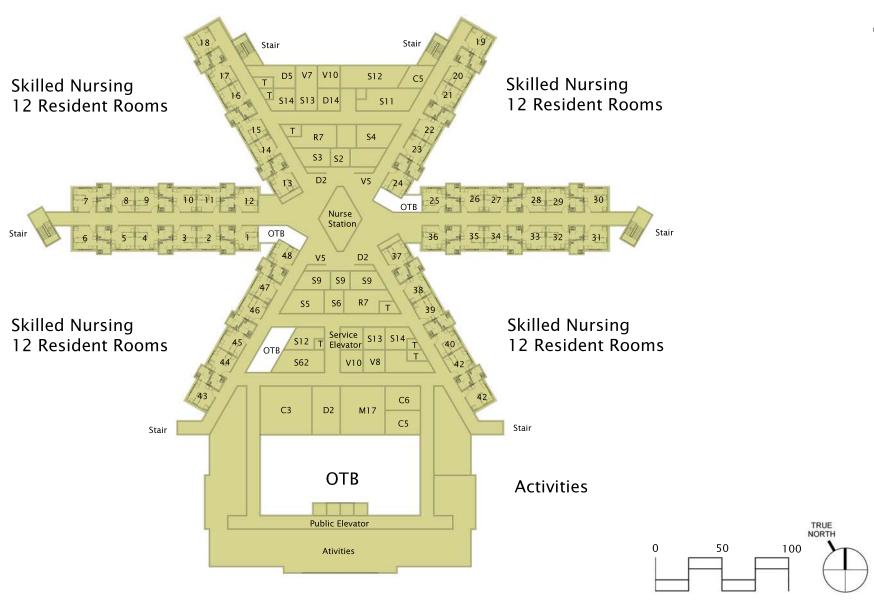




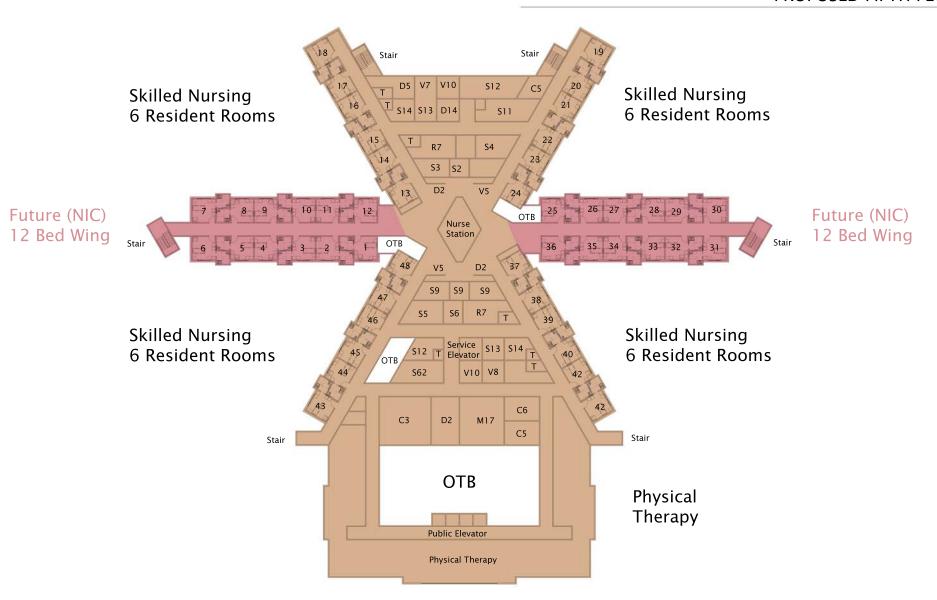




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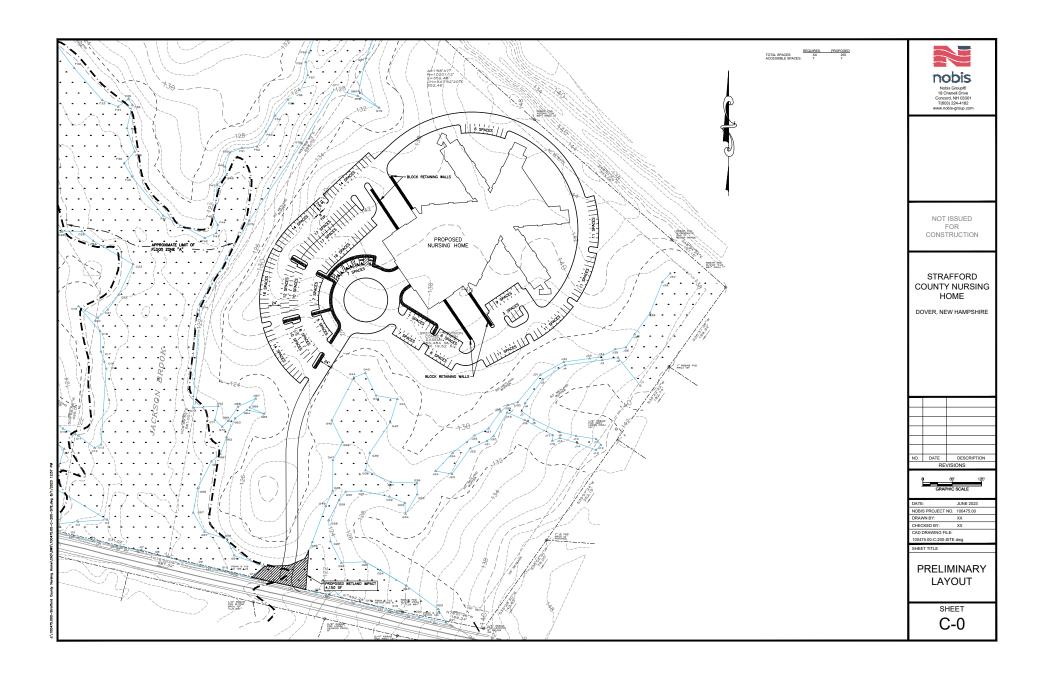
Group	Phase	Description	Takeoff Quantity	Total Cost/Unit	Total Amount
1000		GC'S & GR'S	30.00 mnth	380,000.00 /mnth	11,400,000
3000		CONCRETE	289,566.00 sf	15.78 /sf	4,570,333
4000		MASONRY	289,566.00 sf	22.02 /sf	6,877,490
5000		METALS	289,566.00 sf	36.04 /sf	10,436,456
6000		WOOD & PLASTIC	289,566.00 sf	15.6 /sf	4,517,230
7000		THERMAL/MOISTURE	289,566.00 sf	15.5 /sf	4,486,962
8000		OPENINGS	289,566.00 sf	14.91 /sf	4,318,341
9000		FINISHES	289,566.00 sf	42.07 /sf	12,183,172
10000		SPECIALTIES	289,566.00 sf	5.29 /sf	1,531,025
11000		EQUIPMENT	289,566.00 sf	10.28 /sf	2,977,451
12000		FURNISHINGS	289,566.00 sf	0.59 /sf	171,913
13000		SPECIAL CONST - SKYLIGHT	289,566.00 sf	3.8 /sf	1,100,000
14000		CONVEYING SYS	289,566.00 sf	4.14 /sf	1,200,000
210000		FIRE SUPPRESSION	289,566.00 sf	6.00 /sf	1,737,396
220000		PLUMBING	289,566.00 sf	25.66 /sf	7,430,264
230000		HVAC	289,566.00 sf	40.65 /sf	11,771,498
260000		ELECTRICAL	289,566.00 sf	39.35 /sf	11,395,661
310000		EARTHWORK	11.00 acre	400,000.00 /acre	4,400,000

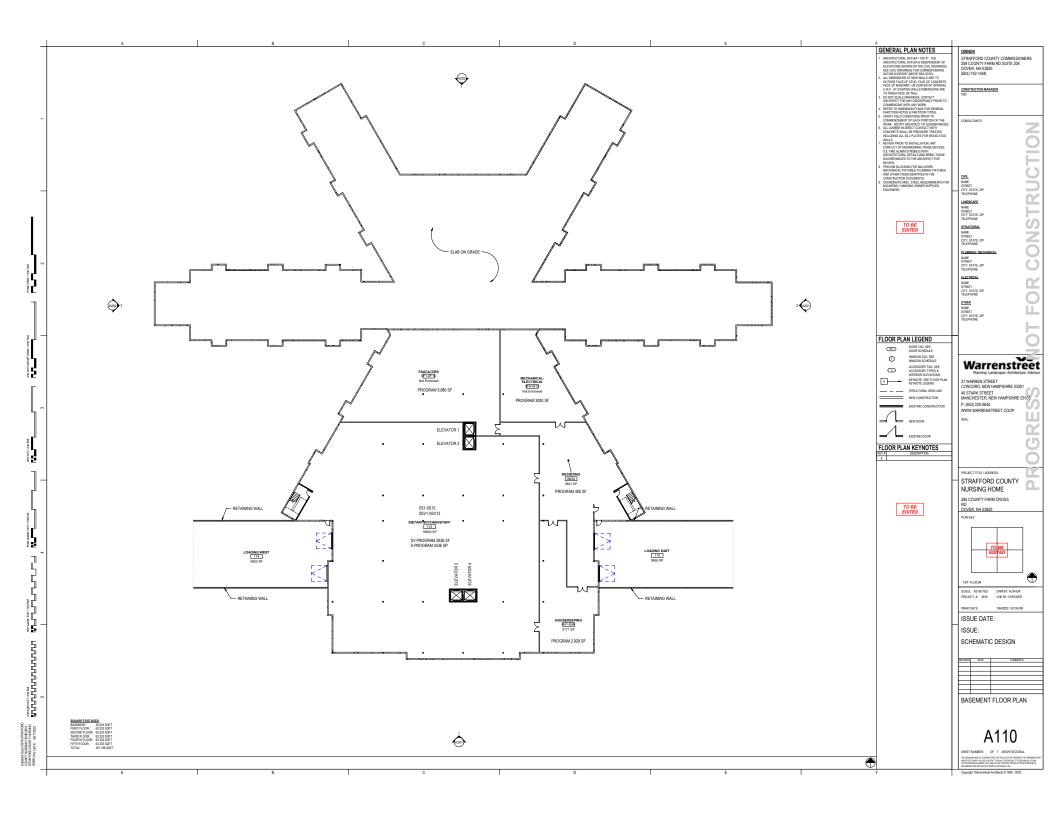
Estimate Totals

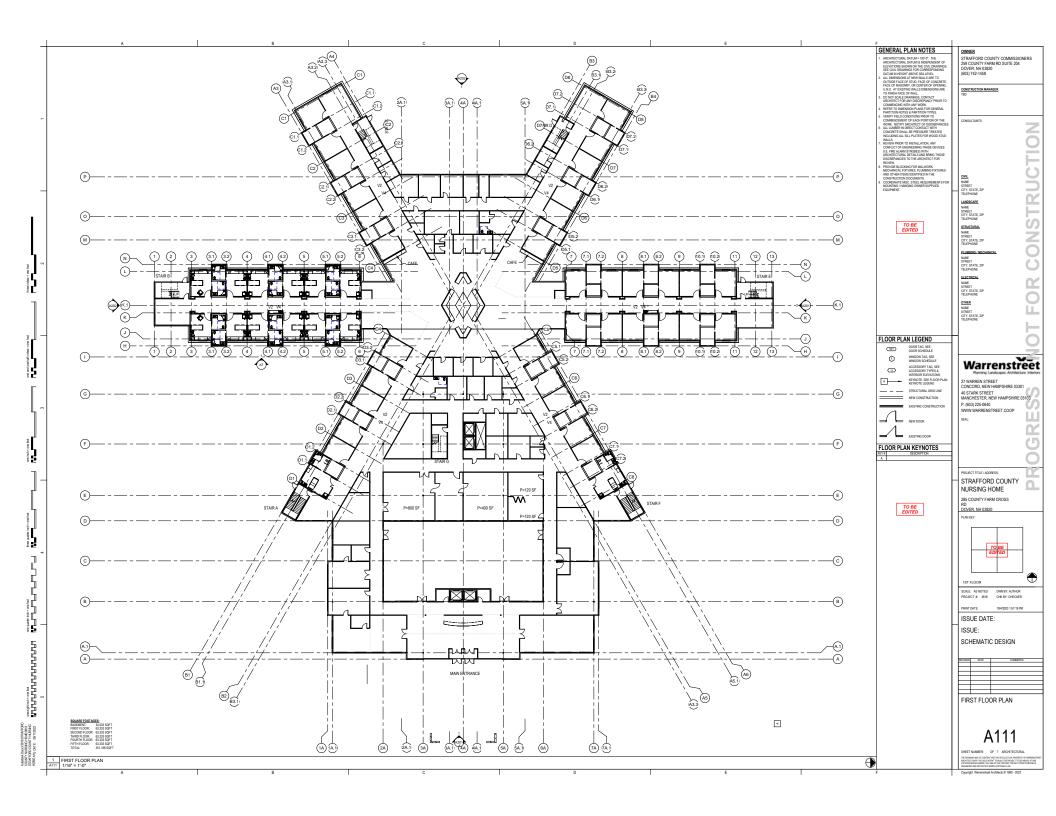
Description	Amount	Totals	Rate	Cost Basis	Cost per Unit	Percent of Total
Labor Material						
Subcontract	102,005,191				352.269 /sf	85.86%
Equipment Other_				_		
	102,005,191	102,005,191			352.269 /sf	85.86
Performance & Payment Bond	696,325			В	2.405 /sf	0.59%
P & P Bond Ext over 24 mths	20,401		0.020 %	Т	0.070 /sf	0.02%
Builders Risk Insurance	148,507		1.250 \$/	1,000 T	0.513 /sf	0.13%
General Liability & Umbrella P	1,063,314		1.895 %	T	3.672 /sf	0.90%
Software Licenses	166,328		0.140 %	T	0.574 /sf	0.14%
Pre Construction Services %	260,250		0.250 %	T	0.899 /sf	0.22%
CM Contingency %	5,218,016		5.000 %	T	18.020 /sf	4.39%
CM Fee %	3,287,350		3.000 %	T	11.353 /sf	2.77%
Escalation %	5,940,299		5.000 %	T	20.514 /sf	5.00%
Total		118,805,981			410.290 /sf	

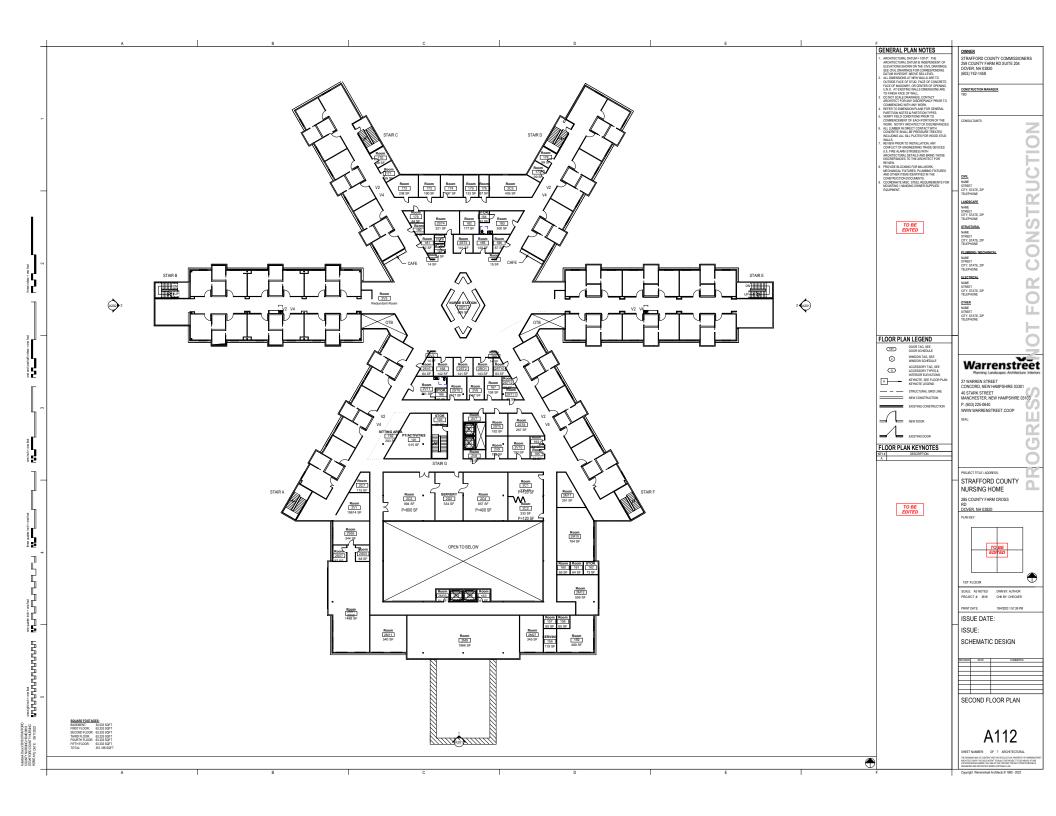
October 2022 Const Costs FF&E Soft Costs Owners Contingency Inflation Totals	- 335,000 sf	\$ \$ \$ \$ \$	144,000,000 3,500,000 14,000,000 2,900,000 8,000,000 172,400,000 \$514/sf
December 2022 Const Costs FF&E Soft Costs Owners Contingency Inflation Totals Revised	235,000 sf	\$ \$ \$ \$ \$	112,000,000 3,500,000 14,000,000 2,900,000 7,000,000 139,400,000 \$593/sf
July 2023 Const Costs FF&E Soft Costs Owners Contingency Inflation Sub-Totals Schematic Con Totals	tingency 15% 289,500 sf	\$ \$ \$ \$ \$ \$	119,000,000 3,500,000 14,000,000 2,900,000 7,000,000 146,400,000 17,850,000 164,250,000 \$567/sf

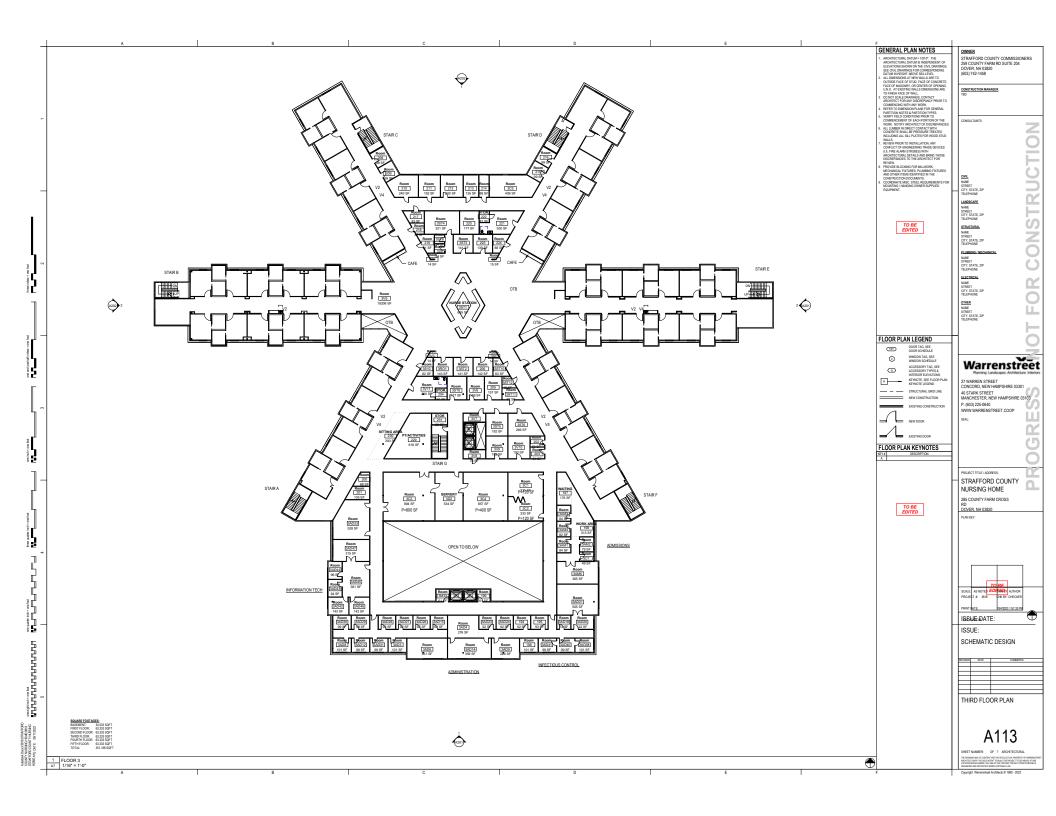
8/23 Current Project Costs \$146M - \$164M

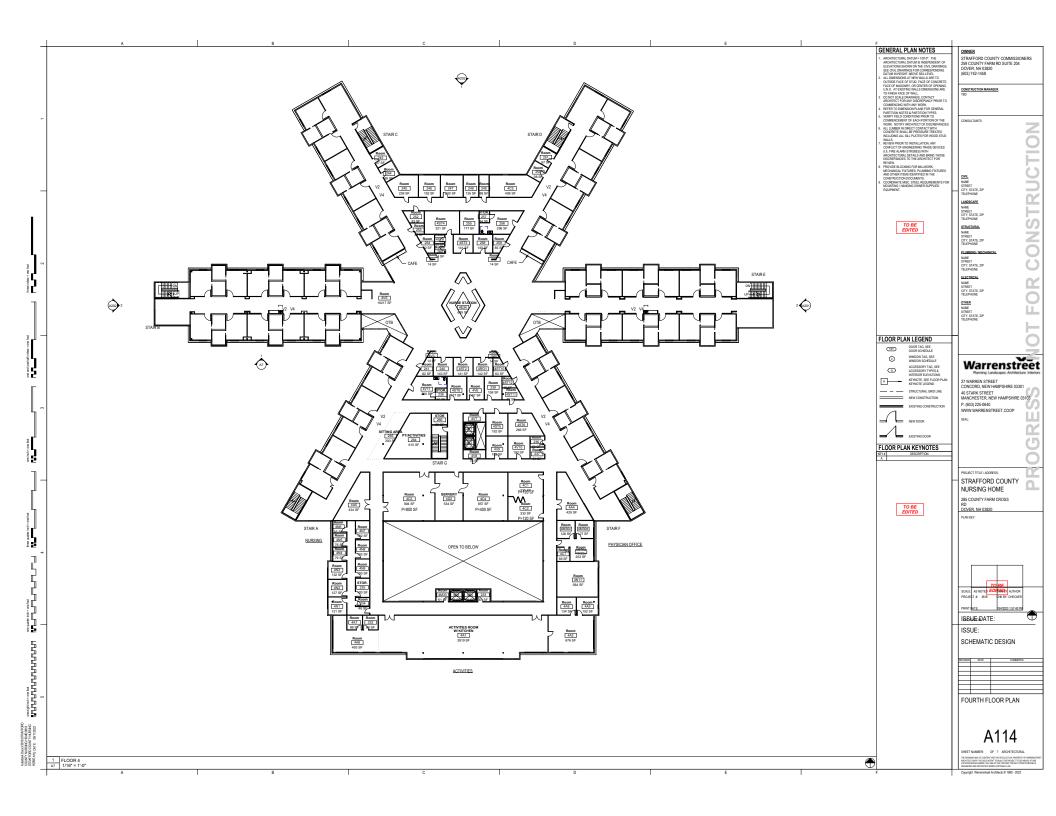


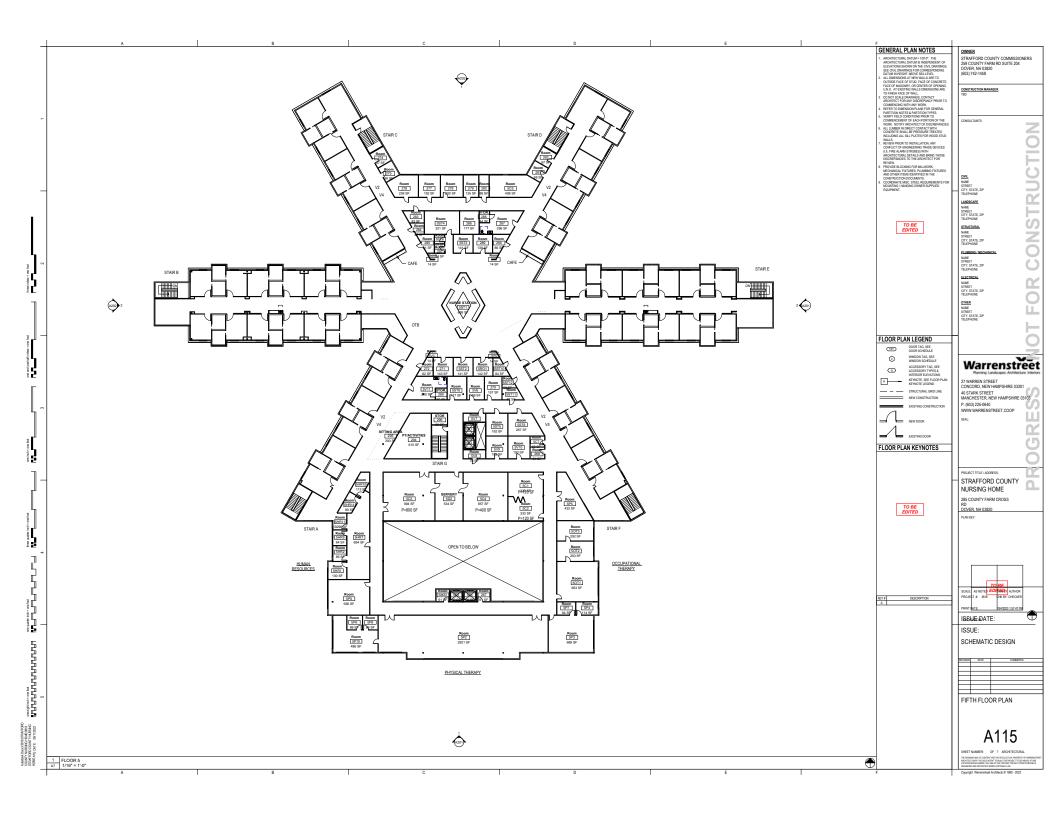


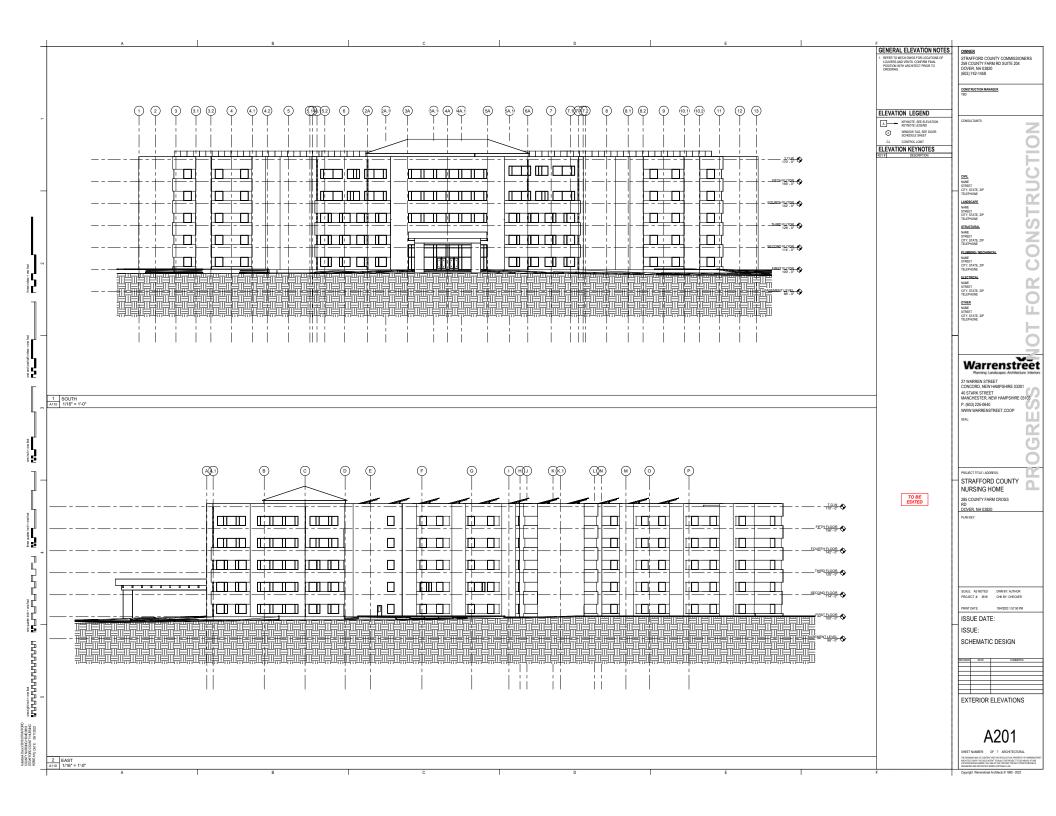


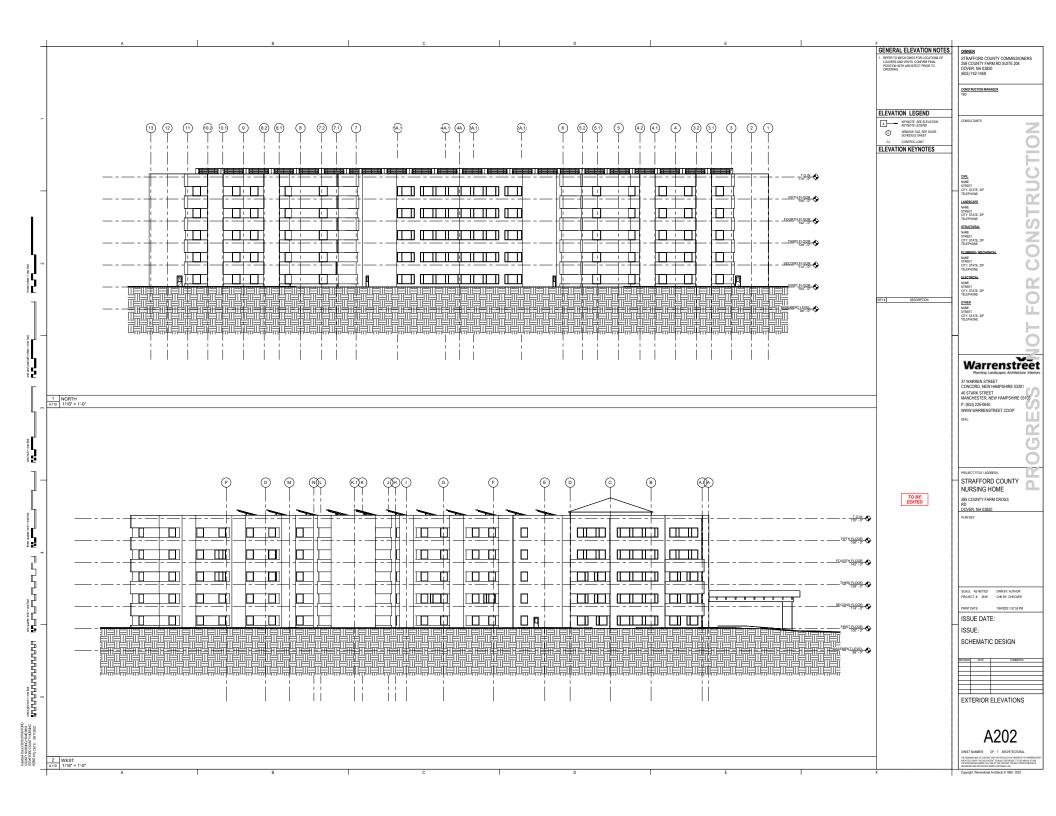














MILLER ENGINEERING & TESTING INC.

GEOTECHNICAL / SOIL BORINGS / ENVIRONMENTAL / SOILS / CONCRETE / MASONRY / STEEL / ROOFING / ASPHALT INSPECTION

Mail all correspondence to: 100 SHEFFIELD ROAD · PO BOX 4776 · MANCHESTER, NH 03108-4776 · TELEPHONE (603)668-6016 · Fax (603)668-661

October 4, 2023

Mr. Jonathan Halle, AIA Warrenstreet Architects 4 Crescent Street, Unit 2 Concord, New Hampshire 03303

RE: Geotechnical Engineering Letter

Proposed Strafford County Nursing Home

County Farm Road

Dover, New Hampshire

Project 23.108.NH

Dear Mr. Halle:

We have completed our geotechnical engineering investigation for the Strafford County Nursing Home project planned for the "Erik Drive Site" off County Farm Road in Dover, NH. The details of our subsurface observations, geotechnical evaluations, and building foundation and pavement design recommendations are provided in our report titled "Geotechnical Engineering Report Strafford County Nursing Home County Farm Road, Dover, New Hampshire", dated October 3, 2023.

In summary, our test borings indicate naturally occurring subsurface soil conditions are present from the ground surface at all locations explored in the project area. The subgrade bearing layers for the building foundation and pavements consist of hard clay, dense glacial till soils, and bedrock. In our opinion, these subsurface layers are suitable for supporting conventional reinforced concrete spread footing foundations and concrete floor slabs for the building; and should provide a suitable subgrade for driveways and surface parking areas. The geotechnical report should be reviewed for our complete geotechnical analysis, evaluation, and recommendations.

We hope this letter and our geotechnical report are helpful to you and the project team. Please contact me if you have any questions.

Sincerely,

MILLER ENGINEERING & TESTING, INC.

Frank K. Miller, P.E. Vice President

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources State Historic Preservation Office Attention: Review & Compliance 19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED SEP 1 1 2023

DHR Use Only

R&C# 14572 M

Log In Date 9,11,23

Response Date ___/_/_

Sent Date ___/_/_

Request for Project Review by the New Hampshire Division of Historical Resources

☐ This is a new submittal ☑ This is additional information relating to DHR Review & Compliance (R&C) #: 14572
GENERAL PROJECT INFORMATION
Project Title Strafford County Nursing Home
Project Location County Farm Road
City/Town Dover Tax Map B1 Lot # B0020-000000
NH State Plane - Feet Geographic Coordinates: Easting 1180471 Northing 263053 (See RPR Instructions and R&C FAQs for guidance.)
Lead Federal Agency and Contact (if applicable) NA (Agency providing funds, licenses, or permits) Permit Type and Permit or Job Reference #
State Agency and Contact (if applicable)
Permit Type and Permit or Job Reference #
APPLICANT INFORMATION
Applicant Name Raymond Bower, Strafford County Administrator
Mailing Address 259 County Farm Rd., Suite 204 Phone Number 603-516-4100
City Dover State NH Zip 03820 Email rbower@co.strafford.nh.us
CONTACT PERSON TO RECEIVE RESPONSE
Name/Company Jonathan Halle/Warrenstreet Architects
Mailing Address 4 Crescent St., Unit 2 Phone Number 225-0640
City Concord State NH Zip 03303 Email jh@warrenstreet.coop

This form is updated periodically. Please download the current form at www.nh.gov/nhdhr/review. Please refer to the Request for Project Review Instructions for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Please include a self-addressed stamped envelope. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, additional information will be needed to complete the Section 106 review. All items and supporting documentation submitted with a review request, including photographs and publications, will be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process and the DHR's role in it, please visit our website at: www.nh.gov/nhdhr/review or contact the R&C Specialist at marika slabash@dncr.nh.gov or 603.271.3558.

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION
Project Boundaries and Description
Attach the Project Mapping using EMMIT or relevant portion of a 7.5' USGS Map. (See RPR Instructions and R&C FAQs for guidance.) Attach a detailed narrative description of the proposed project. Attach a site plan. The site plan should include the project boundaries and areas of proposed excavation. Attach photos of the project area (overview of project location and area adjacent to project location, and specific areas of proposed impacts and disturbances.) (Informative photo captions are requested.) A DHR records search must be conducted to identify properties within or adjacent to the project area. Provide records search results via EMMIT or in Table 1. (Blank table forms are available on the DHR website.) Please note, using EMMIT Guest View for an RPR records search does not provide the necessary information needed for DHR review. EMMIT or in-house records search conducted on 01/06/2023.
<u>Architecture</u>
Are there any buildings, structures (bridges, walls, culverts, etc.) objects, districts or landscapes within the project area? ☑ Yes ☐ No If no, skip to Archaeology section. If yes, submit all of the following information:
Approximate age(s): see text
 Photographs of each resource or streetscape located within the project area, with captions, along with a mapped photo key. (Digital photographs are accepted. All photographs must be clear, crisp and focused.) If the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures, provide additional photographs showing detailed project work locations. (i.e. Detail photo of
windows if window replacement is proposed.)
Archaeology
Does the proposed undertaking involve ground-disturbing activity? Yes No If yes, submit all of the following information:
 Description of current and previous land use and disturbances. Available information concerning known or suspected archaeological resources within the project area (such as cellar holes, wells, foundations, dams, etc.)
Please note that for many projects an architectural and/or archaeological survey or other additional information may be needed to complete the Section 106 process.
DHR Comment/Finding Recommendation This Space for Division of Historical Resources Use Only
Insufficient information to initiate review. Additional information is needed in order to complete review.
☐ No Potential to cause Effects ☐ No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect
Comments: Project area is considered curchaeologically Sensitive. Survey necessary before informed comment can be made.
If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.
Authorized Signature: Date: 125 125 125



September 15, 2023 File No. 100475.000

STRAFFORD COUNTY NURSING HOME - CIVIL SCHEMATIC DESIGN NARRATIVE

The proposed project is a new 5-story (60,250+/- SF footprint) County nursing home, located approximately ½ mile east of the existing Riverside Rest Home on County Farm Road in Dover.

The area proposed for development (site) is 19-1/2 acres of open field on the eastern portion of a 35-acre parcel owned by Strafford County. The site is approximately rectangular-shaped, flanked by Jackson Brook to the west and residential development to the north and east. County Farm Road is the southern boundary of the parcel. Currently the vegetative cover on the site is mainly grass with trees along the north and east property lines, and brush along Jackson Brook. The fields are leased and are mowed on an annual basis currently.

Access/Circulation and Parking

The project involves construction of a single access/egress drive from County Farm Road, located east of the Pope Memorial Humane Society of Cocheco Valley, approximately 1,060 feet west of Erik Drive. This access drive will terminate at a circular drop-off at the main entrance to the building. Parking areas are proposed around the perimeter of the building, located off a two-way drive. The primary parking area is located southwest of the building (front) and there are parking spaces around the building with direct access from the drive.

All parking and access driveways will be paved. Vertical granite curbing is proposed throughout the development at parking and drives. Vertical concrete curbing is proposed where concrete sidewalks abut parking and driveways.

Grading

The topography of the site rises from the entrance at County Farm Road, climbing approximately 24 feet from south to north. Preliminary grading of the access drive indicates the first 450 feet (to the beginning of the parking areas) will need to rise at approximately 6%, after crossing the



wetland. The remainder of the driveway will have fairly level consistent slopes (1%-3%) to facilitate access to multiple points around the building.

Utilities

<u>Power</u>: There are existing utility poles along County Farm Road south of the building. It is anticipated that power to the facility will be via underground conduit from a new pole to be set along County Farm Road. Emergency generators are planned as a backup power source. Natural gas is available.

<u>Storm Water:</u> As noted earlier, the current site is undeveloped with a grass surface that is regularly mowed. We are not aware of any closed drainage systems along County Farm Road; storm water runoff tends to flow overland to low-lying areas on the south, west and east sides of the site, ultimately entering Jackson Brook.

The new development will require collection and treatment of storm water runoff designed in accordance with City and state requirements. Based on an initial review of on-site soils according to the Natural Resources Conservation Service Web Soil Survey, on-site soils consist of Scantic and Suffield silt loam, which are considered hydrologic soil group C (low potential for infiltration). Results of borings and test pits performed on the site indicate fairly shallow depths to groundwater. Closed drainage systems will be designed for collection of stormwater runoff from the building roof and impervious surfaces. It is anticipated that subsurface soils and depth to ground water will preclude infiltration as a means of control and treatment of stormwater. Therefore, designed systems may include subsurface detention chambers, surface detention systems, and surficial and/or proprietary engineered methods of stormwater treatment.

<u>Telecommunications</u>: Telecommunication conduit may be co-located in the ductbank that carries the new power lines.

<u>Water:</u> A municipal water line is located in County Farm Road. There is a hydrant located approximately 350 feet east of the proposed access drive. Details of the existing system have been requested from the City but not yet received.



<u>Wastewater</u>: A municipal sewer system is located on the north side of County Farm Road. There is a City pump station located on the west side of Jackson Brook. Details of the existing system have been requested from the City but not yet received.

Permitting

Under NH RSA Section 674:54, governmental land use is not subject to formal approval by the City of Dover Planning or Zoning Board. The County shall give written notification to the City of Dover Planning Department. Written notification shall contain plans, specifications, explanations of proposed changes, a statement of the governmental nature of the use, and a proposed construction schedule. Such notification shall be provided at least 60 days prior to the beginning of construction. The City of Dover may conduct a public hearing relative to the proposed governmental use. Any such hearing shall be held within 30 days after receipt of notice. A representative of the County shall be available to present the plans, specifications, and construction schedule, and to provide explanations. The planning board may issue nonbinding written comments relative to conformity or nonconformity of the proposal with normally applicable land use regulations to the County within 30 days after the hearing.

Application will be made to the NHDES Alteration of Terrain Bureau for the project, which exceeds 100,000 square feet of overall land disturbance. This application includes review of the NH Heritage Bureau (NHB) database for the presence of rare and/or endangered species within the project area. During the September 8, 2022 review, NHB identified two threatened species within the vicinity of the project: the Eastern Meadowlark and the Spotted Turtle. Further coordination with NH Fish and Game has been initiated and will continue throughout the design process. Specific measures will be incorporated as recommended by NH Fish and Game to minimize impacts to threatened species and their habitats. The Alteration of Terrain permit includes submission of a wildlife impact assessment and a site-specific soil map for all areas proposed to be disturbed as part of the project. The City of Dover is part of the Coastal and Great Bay Region and the project is located within ¼ mile of the Cocheco River, which is considered a Designated River by the NHDES. Coordination with the Cocheco River Local Advisory Committee will be required. According to FEMA Flood Map Panel 33017C0310E effective 9/30/2015, the western portion of the site (along Jackson Brook) is in an area of Special Flood



Hazard Zone "A", with Base Flood Elevations not determined. The approximate extents of this area are shown on the Existing Conditions survey plan.

This project will be covered under the Federal EPA Construction General Permit (CGP) since construction activities will disturb more than one acre of land. In order to be covered under the CGP, a Stormwater Pollution Prevention Plan (SWPPP) will need to be prepared and a Notice of Intent will need to be filed with EPA. As part of this permit application, the project will be reviewed by the NH Department of Historical Resources (NHDHR) to determine if there will be any potential impacts to historic properties or features.

County Farm Road is a municipally-maintained two-lane road with a posted speed of 35 mph. Permitting for the new access drive will occur at the local level – an NHDOT driveway permit will not be required.

There are wetland areas on eastern, southern and western portions of the site. The City requires a 50-foot building setback from wetlands. Jackson Brook is not subject to NHDES Shoreland Rules as it is not considered a fourth order stream. According to NHDES OneStop, Jackson Brook has impairments for Ecoli. The new access drive will cross the wetland in the front (south) of the property. The crossing will require an oversized embedded RCP culvert for compliance with threatened species protection recommendations made by NH Fish and Game. The anticipated impact to the wetlands at the driveway entrance is 4,150 square feet, which will require a Dredge & Fill Permit from the NHDES Wetlands Bureau.

A Sewer Connection Permit will be required from NHDES for the extension of sewer service to the new facility.

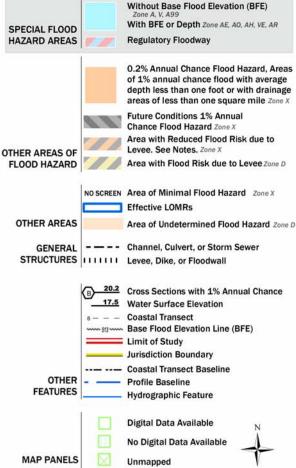
National Flood Hazard Layer FIRMette





Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

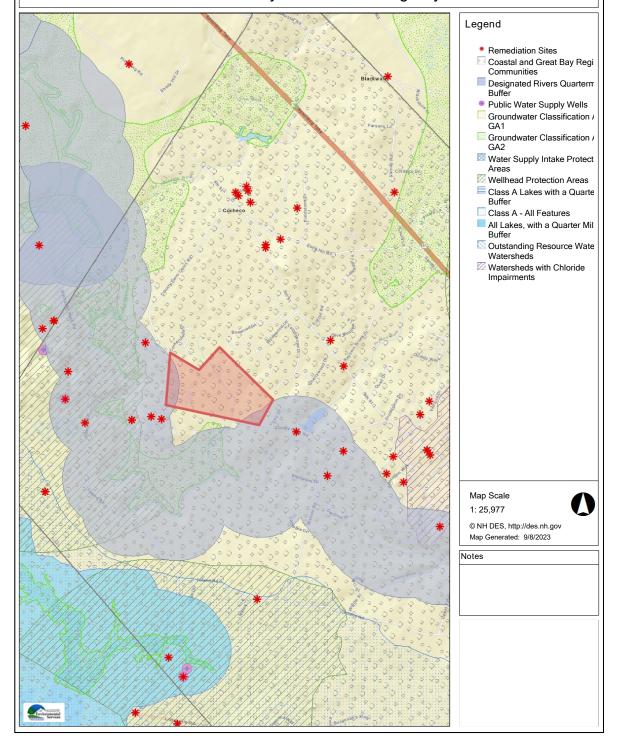
The pin displayed on the map is an approximate point selected by the user and does not represent

an authoritative property location.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/12/2023 at 1:51 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers. FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Strafford County - AoT Screening Layers



Strafford County - Surface Water Impairments Legend Surface Waters with Impairn with Quarter Mile Buffer Cordeiro Dr

Map Scale 1: 25,977

Notes

© NH DES, http://des.nh.gov Map Generated: 9/8/2023

