Maine Medical Center Portland, Maine Campus Application for Zoning Amendment





December 12, 2003 01046

Alex Jaegerman, Director Planning Division Planning and Development Department City of Portland 389 Congress Street Portland, ME 04101

Application for Zoning Amendment Maine Medical Center, 22 Bramhall Street, Portland, Maine

Dear Alex:

Maine Medical Center (MMC) is pleased to submit the enclosed materials for your review. MMC is planning a comprehensive facilities construction project at its Bramhall Campus. Working closely with The Ritchie Organization, project architects, the hospital is planning the following improvements:

- A four-story, 192,000 square foot building addition for obstetrics and newborn services, referred to as the Charles Street addition. The Charles Street project also includes improvements to the Richards Wing/admitting lobby.
- A new parking garage to accommodate 512 additional parking spaces for patients and visitors. The new garage will be located immediately east of and connected to the existing parking garage on Congress Street. A pedestrian bridge will lead from both garages to the main hospital building.
- A new central utility plant, located on Gilman Street, which will provide a central heating/cooling facility for the campus.
- A new helicopter landing pad to be constructed on the top level of the existing parking garage on Congress Street.
- Reconfiguration of the main entrances to the hospital and lobbies.
- Replacement housing for 35 and 37 Crescent Street which must be removed in order to construct the new parking garage.

In response to preliminary discussions with City officials, MMC is applying for a zoning amendment in the form of a contract or conditional zone. The reasons for requesting a rezoning are to accommodate taller buildings (the Charles Street addition, the new parking garage and the

helipad) than the current zoning district regulations allow and to allow a reduced setback for the parking garage and a portion of the helipad along Congress Street. In addition to the zoning amendment, the project will require:

- Site Plan/Conditional Use approval of proposed development.
- Site Location of Development approval under delegated review authority.
- Traffic Movement Permit approval under delegated review authority.
- Zoning Map Amendment for helipad overlay zone.
- Approval of Housing Replacement proposal.

MMC will also ask the City to discontinue portions of Charles Street and Crescent Street, and to relocate a small portion of Ellsworth Street, all as shown on the plans. A short section of Crescent Street will become a two-way street west of Wescott Street, and Wescott Street will be converted to a two-way street. We understand that the Planning Board and City Council will review the zoning amendment and street discontinuance/relocations concurrently.

Overview of Material

As discussed at our meeting on November 7, 2003, we are submitting this package of application materials for initial staff review. We understand that our first workshop with the Planning Board is scheduled for January 13, 2004, and the second workshop is scheduled tentatively for January 27, 2004. Additional material will be supplied in a timely manner in advance of the second workshop. The schedule for public hearings and City Council review will be determined at a later date.

Section 1 Campus Site Plans. This section includes an overall campus plan depicting the campus master plan and detailed site plans depicting proposed building and site improvements.

The campus master plan has been developed as a result of extensive consultation with neighborhood residents and City staff. MMC has held several meetings with area residents and representatives from the City Planning Department, Department of Public Works, and Fire/Rescue Department.

New Parking Garage. This new 512 capacity garage will serve as "the new gateway" to the Bramhall campus. Visitors to the campus will be directed to the new garage entrance on Congress Street via off-site directional signage and by instructions to patients with scheduled medical appointments. After parking in the new garage, visitors will travel to the hospital lobbies via a new parking garage elevator tower and within the newly constructed corridors connecting to the campus.

As part of the zoning amendment request, MMC is proposing to construct the new garage at the Congress Street right-of-way line within the required 20 foot rear yard setback in this area. This proposal is consistent with existing buildings in the area which are constructed in close proximity to the right-of-way line. MMC proposes to construct the garage to a height of 66 feet which exceeds the 45 foot allowable height limit in the R6 Zone. While not part of this construction project, MMC has designed the structure of the garage to accommodate a future vertical expansion of two levels, with a maximum future height of 86 feet.

Due to the steep topography and limited width of the site, it is necessary for MMC to construct the garage as proposed to achieve the needed parking capacity. The proposed width provides two full parking trays; a lesser width would result in an inefficient structure deemed not feasible based on construction costs.

The implementation of this new garage/gateway will dramatically decrease the amount of traffic on Bramhall Street and within adjacent residential areas.

Section 3 Charles Street Addition. MMC is the largest provider of obstetrical services in Maine, with over 2,200 deliveries annually. MMC has the only State-wide full-time maternal fetal medicine service serving women and newborns at high risk during the antepartum and delivery period. MMC has the only Level III Neonatal Intensive Care Unit (NICU) in Maine.

As MMC plans for the future, it must respond to the changing professional and clinical standards for space, noise and environmental controls for sick infants within the NICU facility. For example, the area required for each baby within the NICU unit is three times that of standard birthing facilities.

Accordingly, MMC must build an addition comprised of 192,000 square feet in order to meet the spatial requirements of today's routine and high risk obstetrical and newborn care. The proposed site for the Charles Street Addition is generally bounded by Charles Street, Wescott Street, Ellsworth Street and Crescent Street. There is an existing medical building on this site, which will be removed.

The addition will abut the existing Richards Wing of the hospital which is a ten story building. At four stories, the Charles Street addition will afford an aesthetic transition between the taller Richards Wing and adjacent residential homes. MMC has taken an unusual approach by incorporating mechanical equipment within the building rather than leaving these elements exposed to public view. The design of the addition utilizes clay brick and accent materials which are in harmony with the existing hospital. The site will feature extensive public sidewalks and new landscaping which will enhance the character and pedestrian safety in the area.

The proposed relocated streets have been designed in consultation with the City Department of Public Works. The right-of-way will be 40 feet in width, with a travel way of 28 feet and 6 foot brick sidewalks on each side of the street. A new arrival plaza will be developed at the Charles Street lobby entrance, where a circular canopy will provide shelter for families arriving in inclement weather.

The emergency department parking area will be reconfigured as part of the Charles Street addition. This area will continue to provide access to the emergency department for patients and for ambulances. In response to input received from the City Fire/Rescue Department, MMC is proposing to increase its ambulance parking capacity. A dedicated "ambulance parking only" area will be provided under the rear portion of the Charles Street addition. This area, together with surface parking areas, will increase the total parking spaces in this area from 11 spaces to 16 spaces.

MMC is proposing to construct the Charles Street addition to a height of 94 feet, which exceeds the 45 foot allowable height limit in the R6 Zone. MMC also has designed this building to accommodate a future vertical expansion of two floors, with a maximum future height of 122 feet.

- Section 4 Helicopter Landing Pad. This facility, designed in collaboration with Life Flight of Maine, is proposed to be constructed on the top level of the existing parking garage. Life Flight of Maine is Maine's critical response medical helicopter service. Critical patients will be transported to the emergency department utilizing the new garage elevators and connector corridors.
- Section 5 Central Utility Plant. The central plant, located on Gilman Street, will replace currently fragmented heating and cooling systems with a new central distribution system. This building will be constructed within the dimensional requirements of the R6 Zone, and will be built into the hillside between the hospital and Gilman Street, with a proposed height of 40 feet. MMC has designed this building to accommodate a future vertical expansion of two floors, with a maximum future height of 64 feet.
- Section 6 Parking Needs Assessment. Prepared by Gorrill-Palmer Consulting Engineers, this is a comprehensive evaluation of the existing campus and sets forth the future parking needs for the Bramhall Campus.

In summary, this initial submittal sets forth the planning completed to date and defines the aesthetic elements of the proposed projects. We look forward to the submittal of our formal application and remaining technical documents. In the interim, please contact me at your convenience.

Sincerely,

MAINE MEDICAL CENTER

Paul D. Gray, Vice President of Planning

PDG/WTC:jc

Enc.

cc:

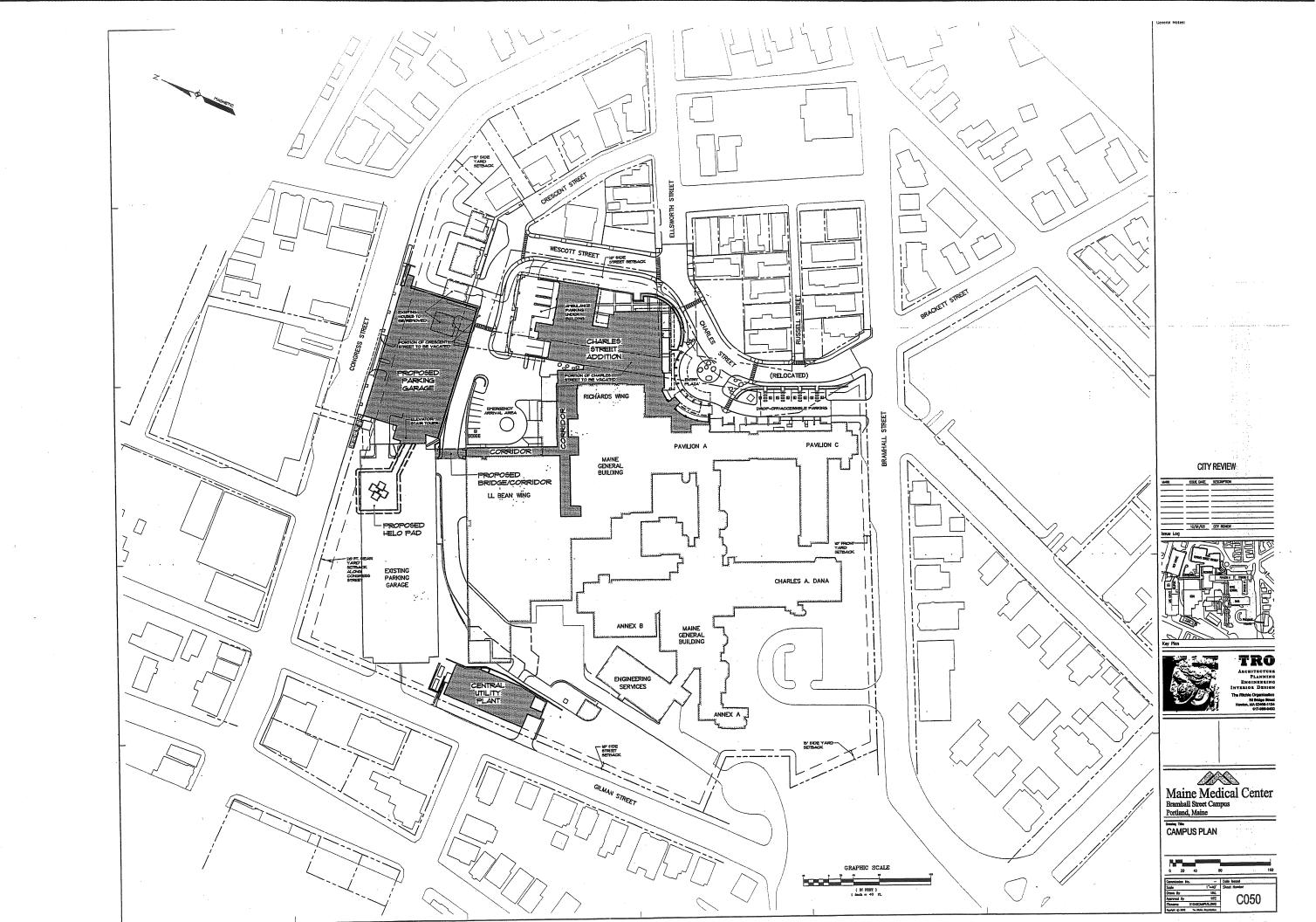
Rich Linehan, Maine Medical Center Dan Doughty, Maine Medical Center

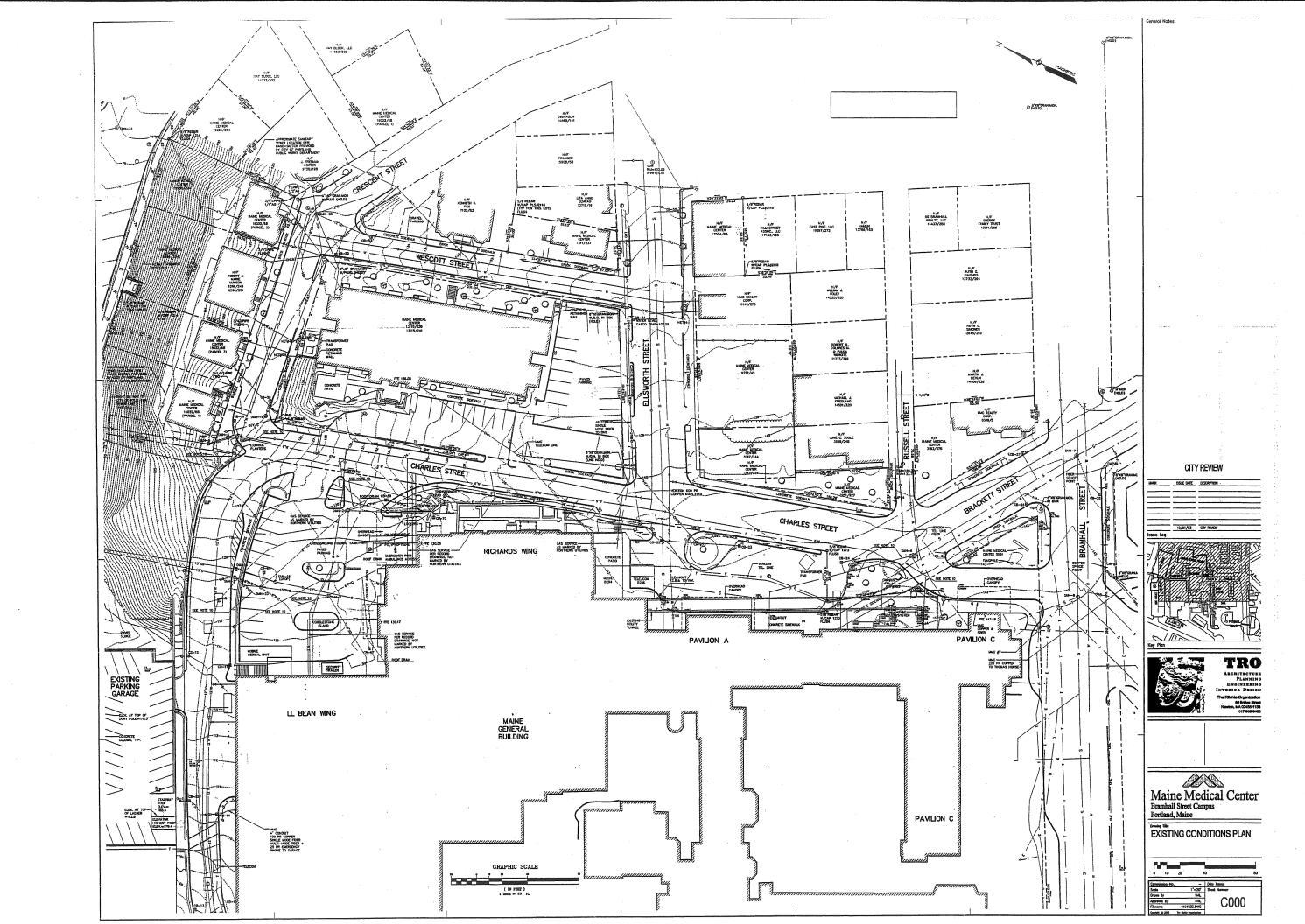
Hank Dunn, Maine Medical Center

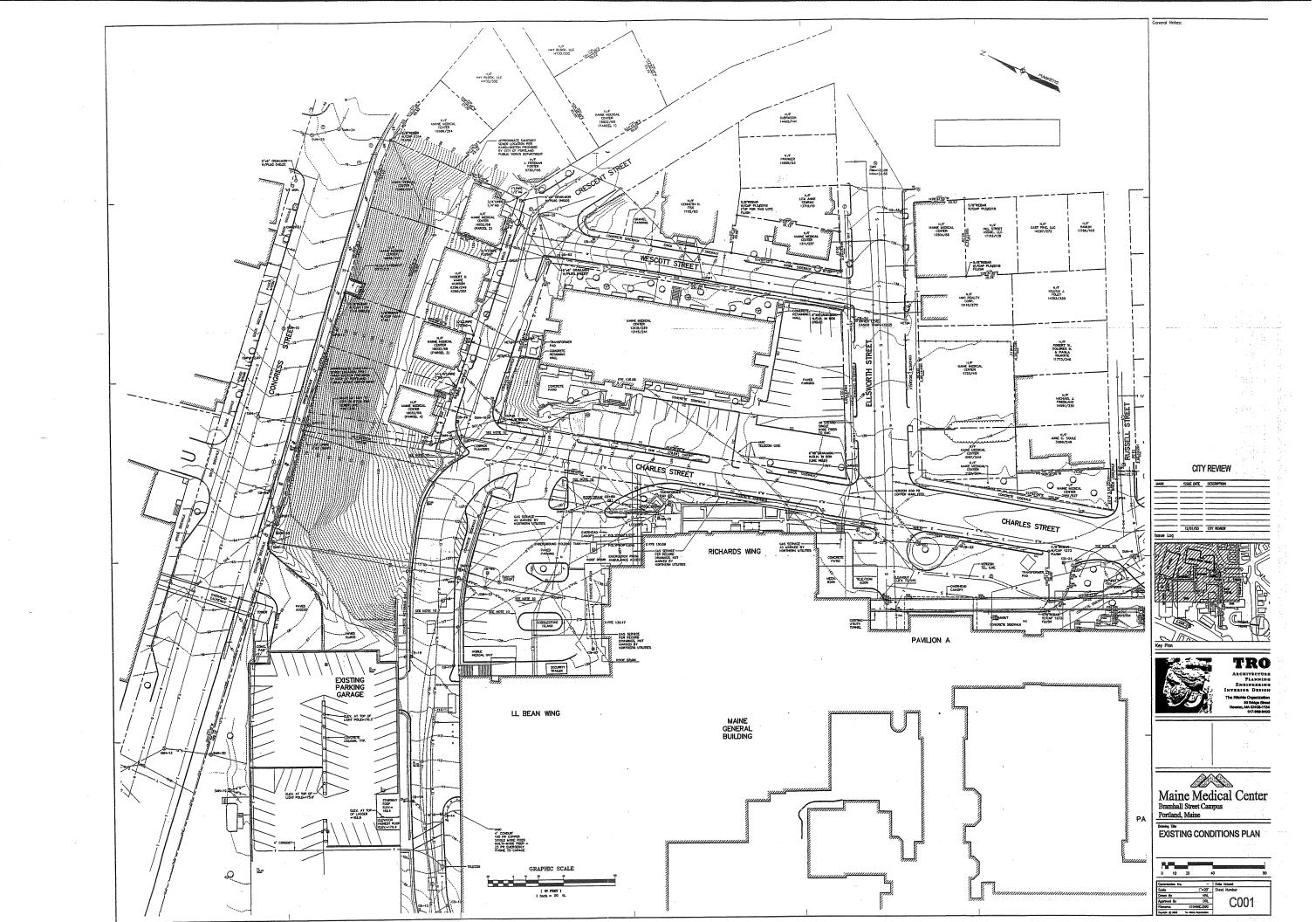
Dennis Kaiser, The Ritchie Organization

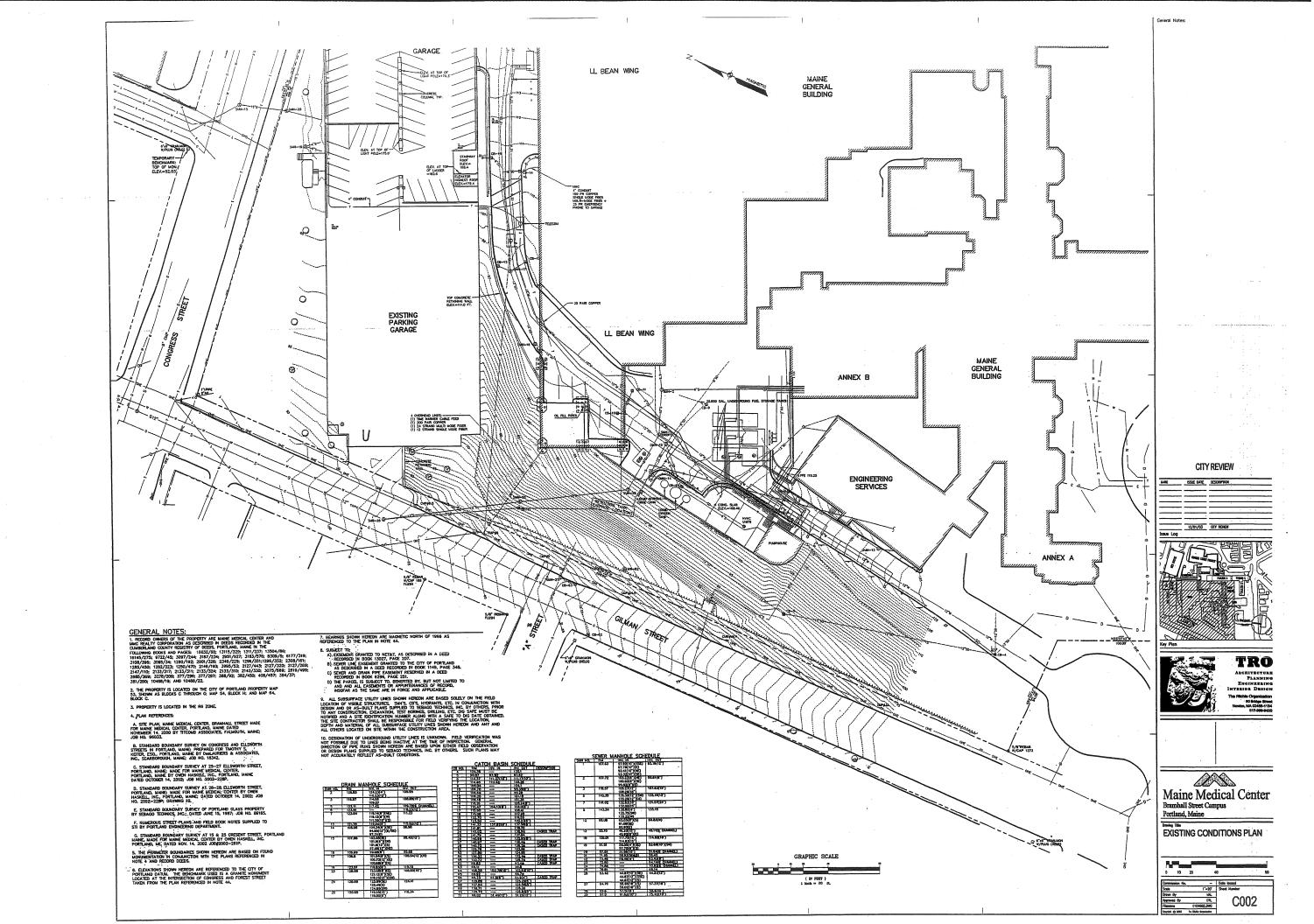
Will Conway, Sebago Technics, Inc.

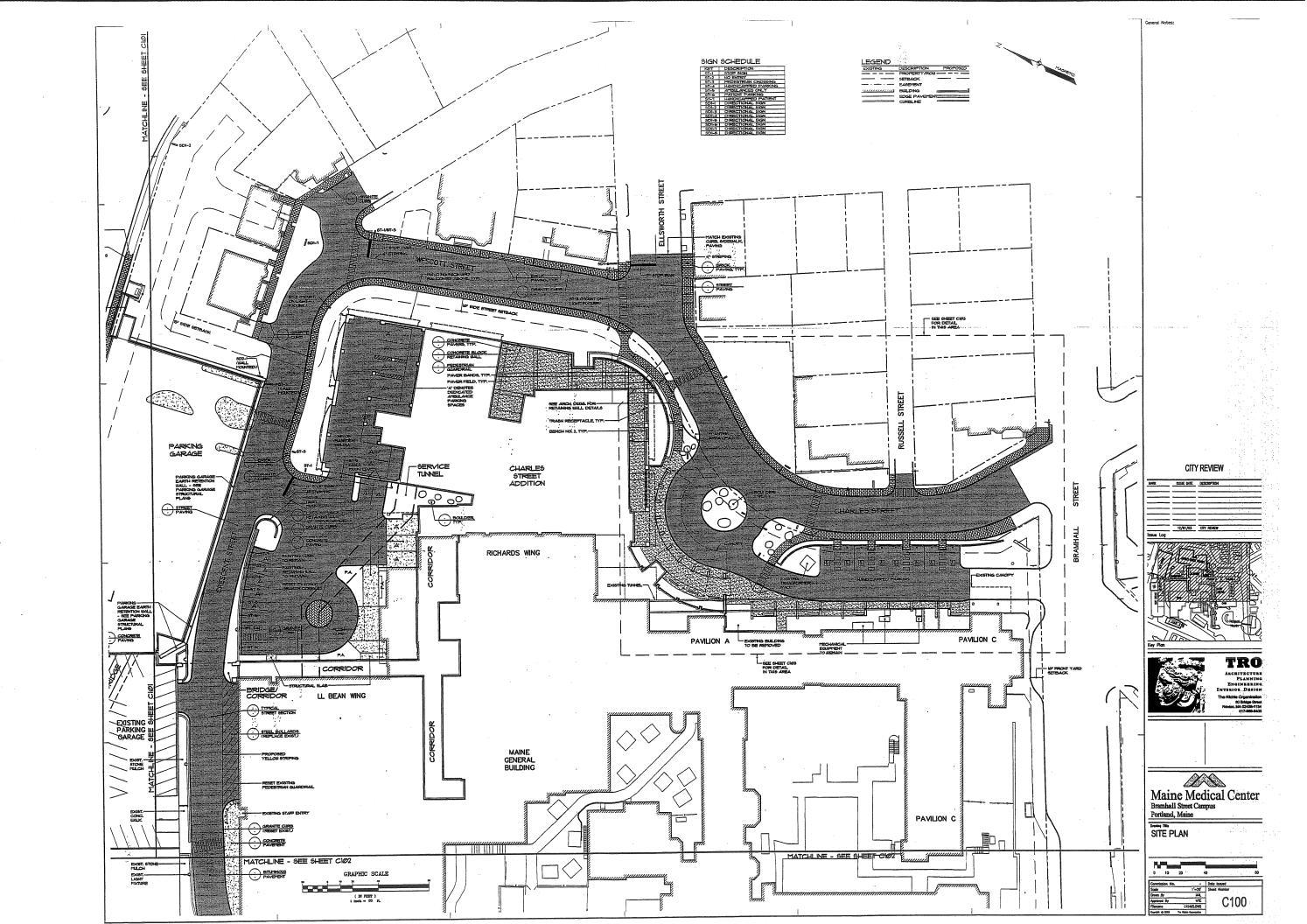
Chris Vaniotis, Bernstein Shur Sawyer& Nelson

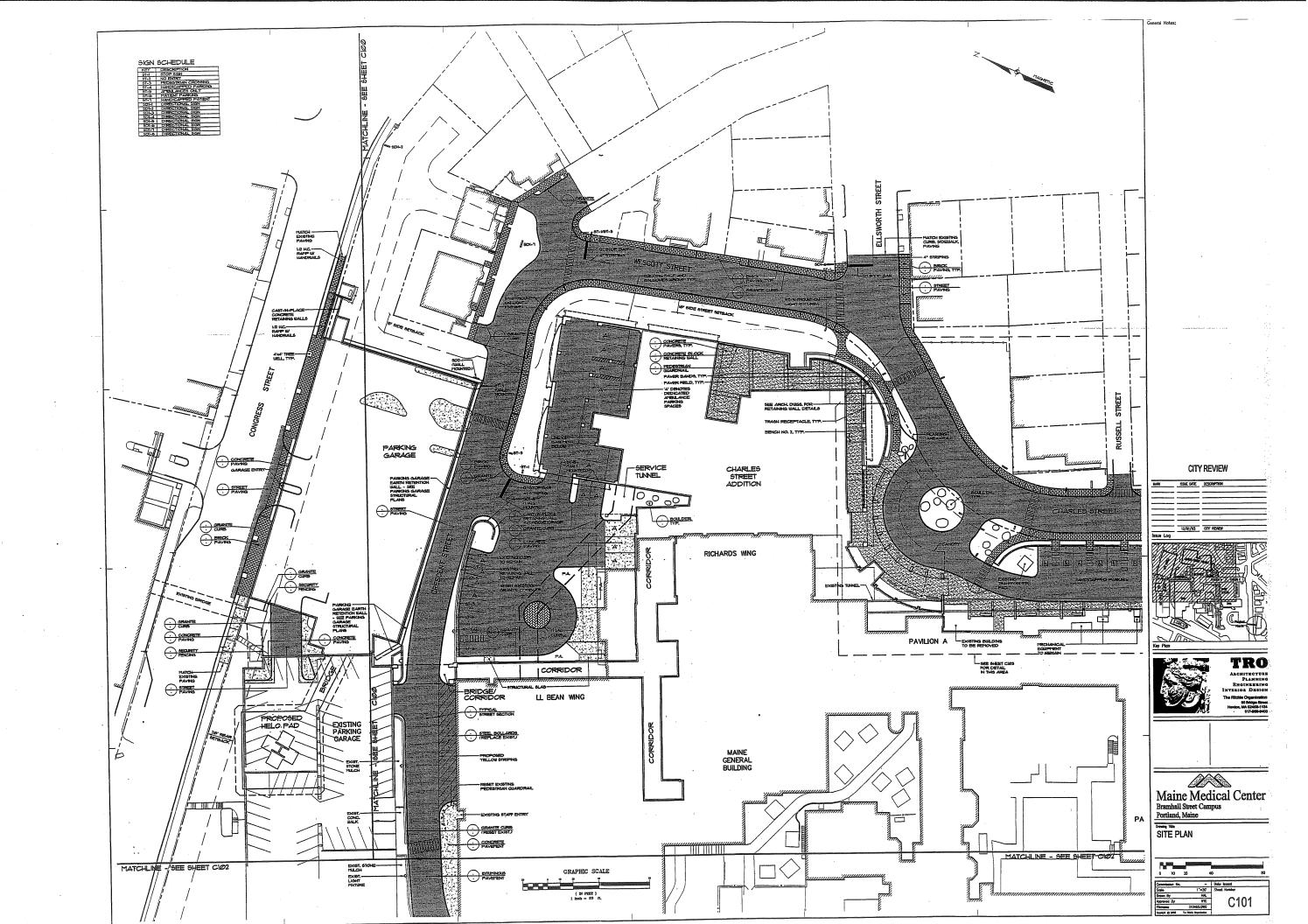


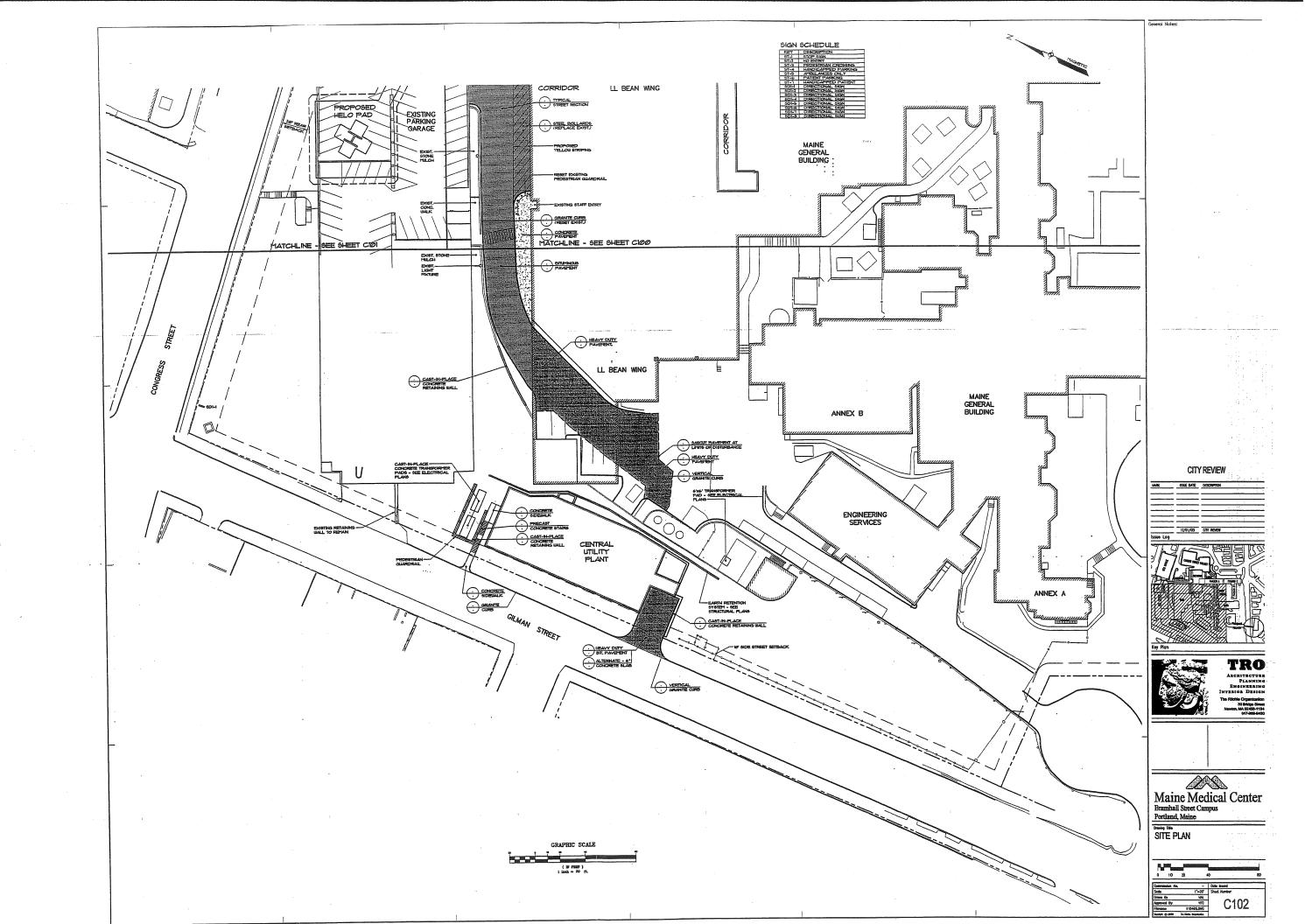


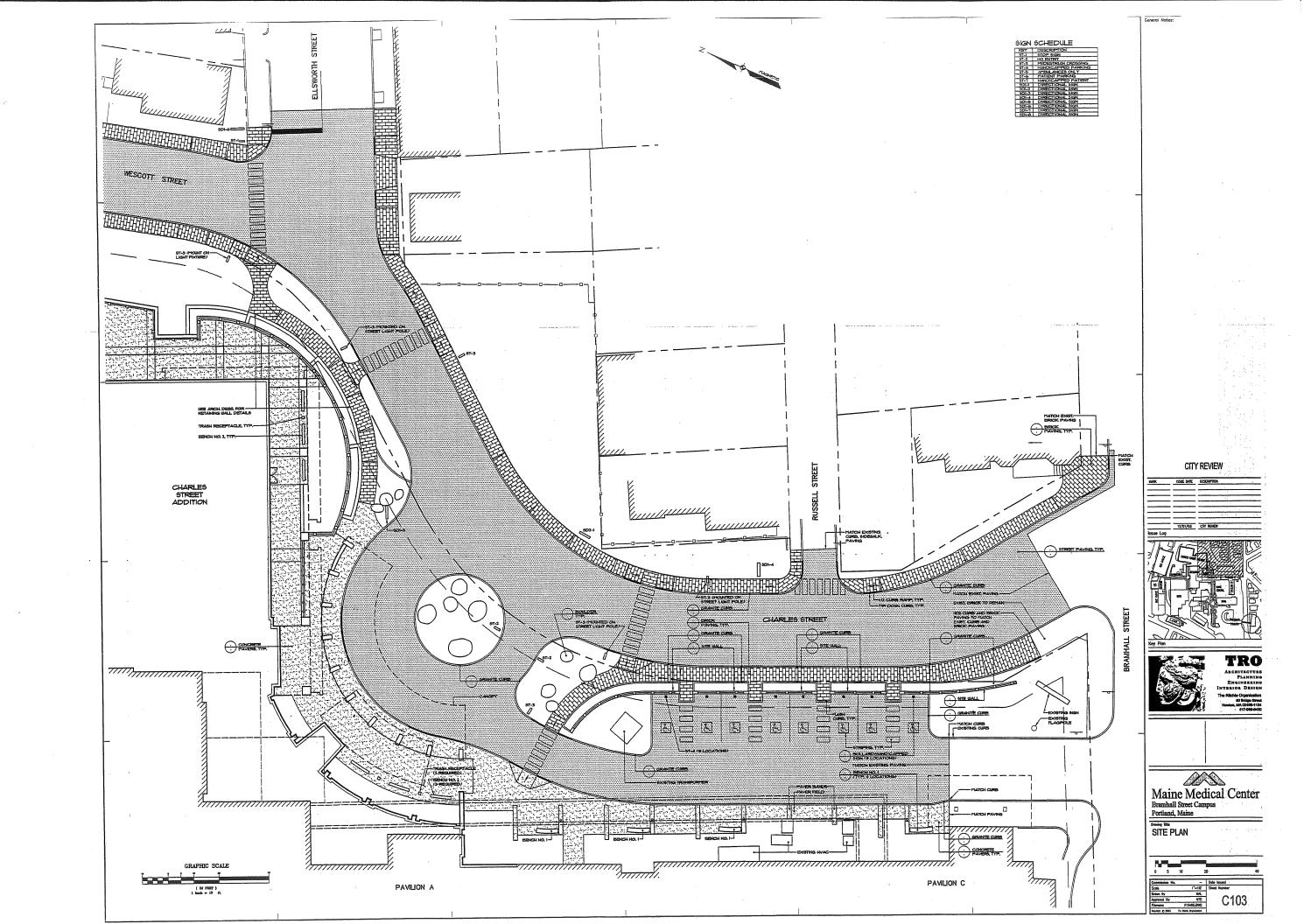


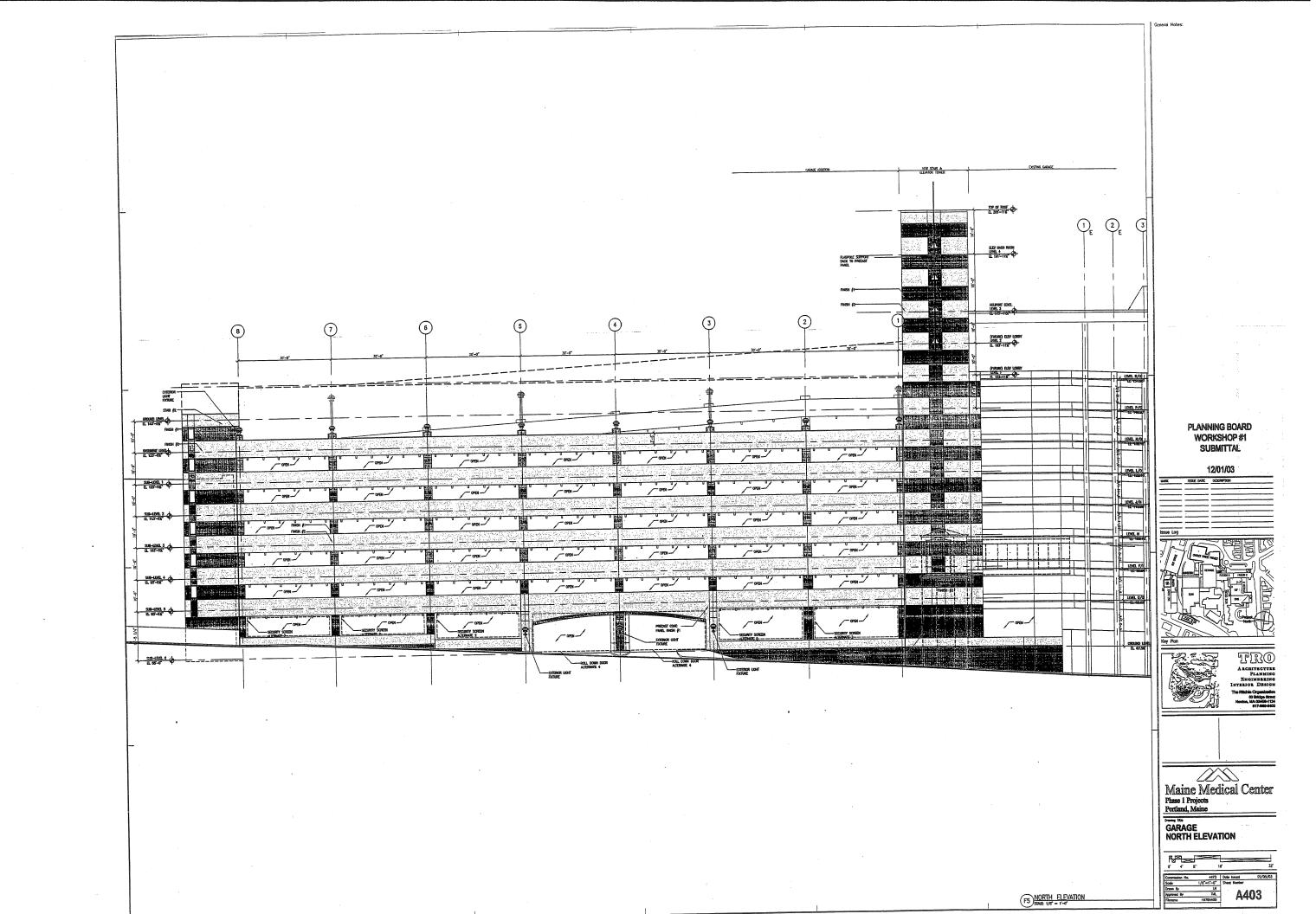


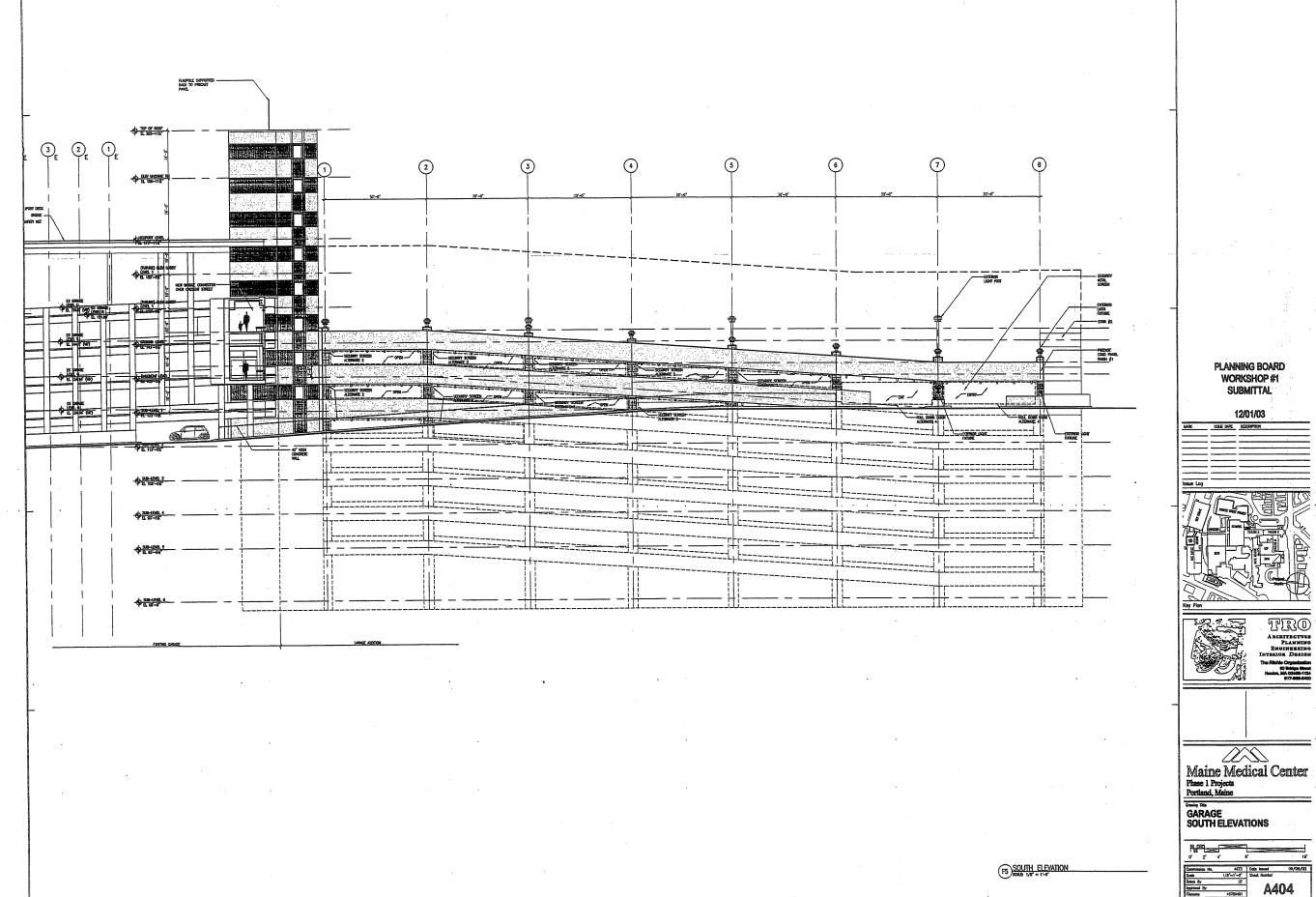








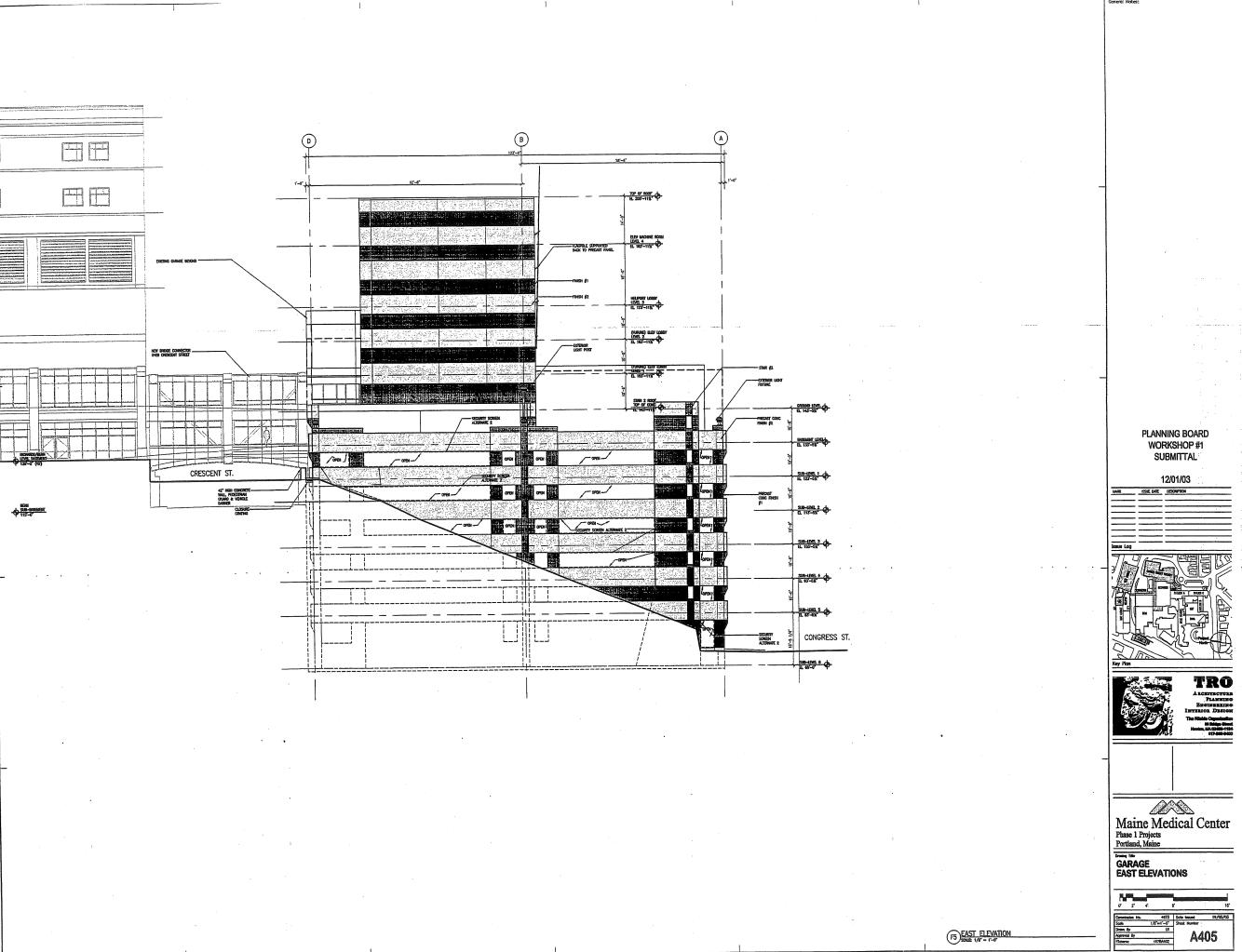




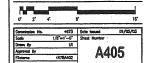
PLANNING BOARD WORKSHOP #1 SUBMITTAL

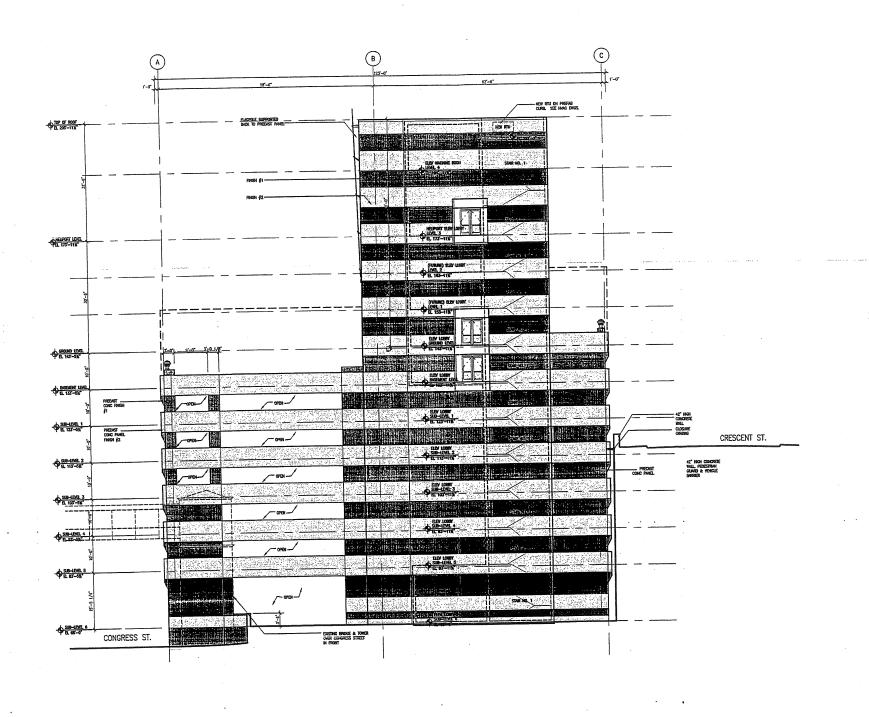
12/01/03





	·
Issue Log	
21 13	
1/2 4/6	
7 1 1	幽)\'司!リ <i>//</i>
1	
為熱烈	
The boson in the	724DEA POUDS
	FEAGUR A PROLUTE C
(8) I	
a de la lace	수다나 된 때만 나다스
╎╎╎╏┰┌╏╚┖	4 15 ZH 114
	S C CPRINT
	5 (m)
7/2	Vin He
2//72	1
Key Plan	





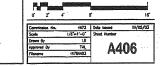
PLANNING BOARD WORKSHOP #1 SUBMITTAL

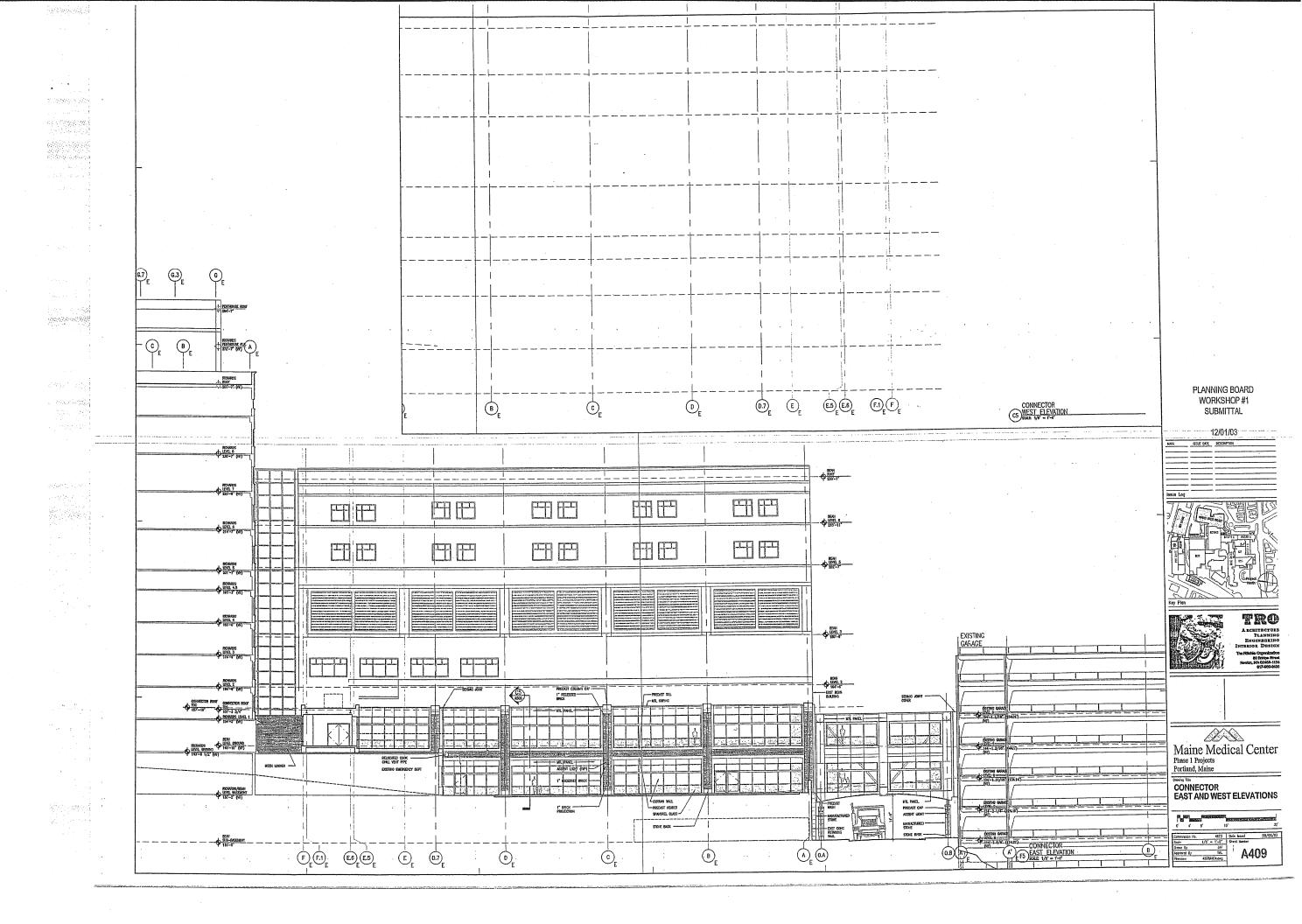
12/01/03

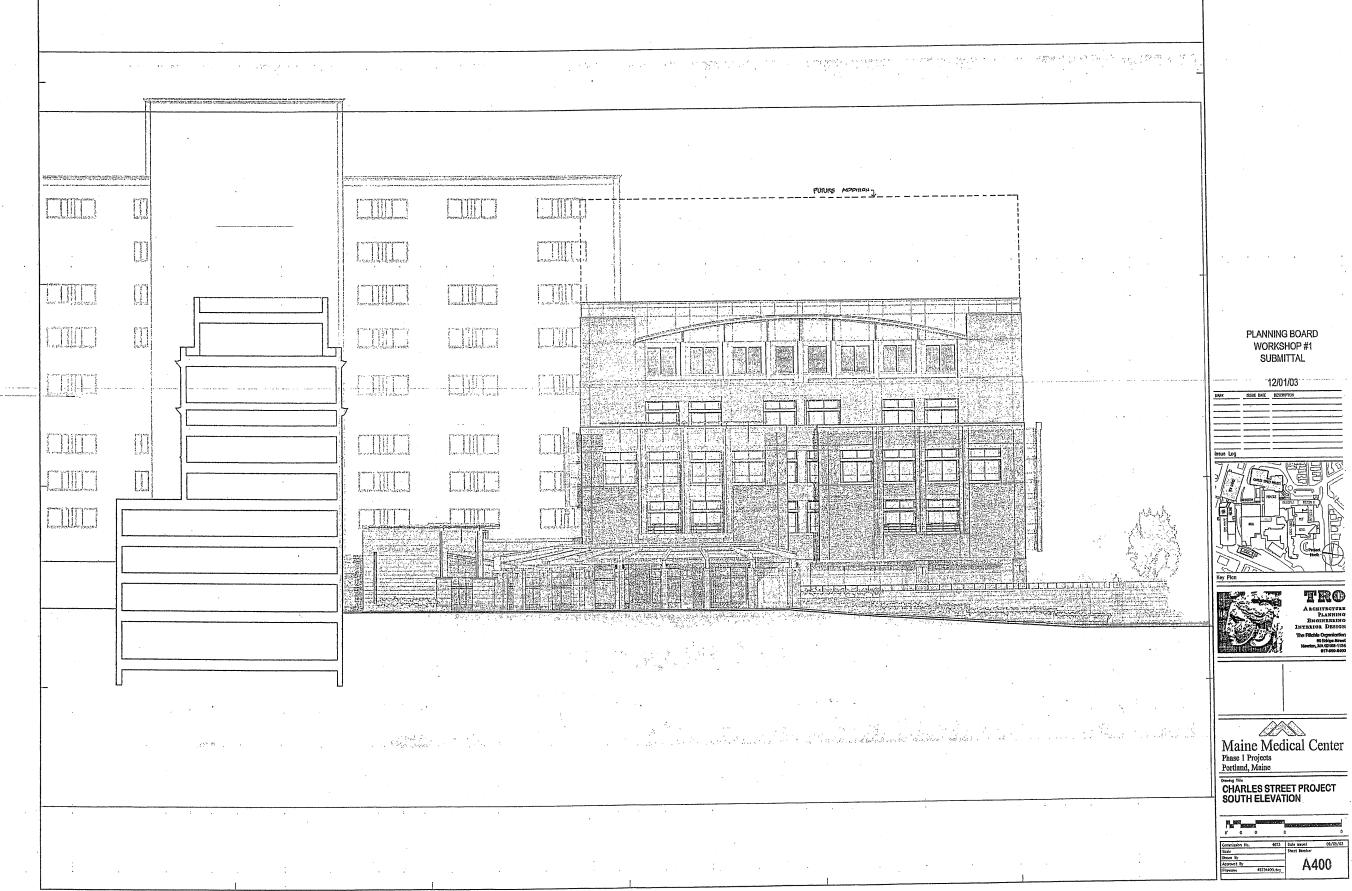


Maine Medical Center
Phase 1 Projects
Portland, Maine

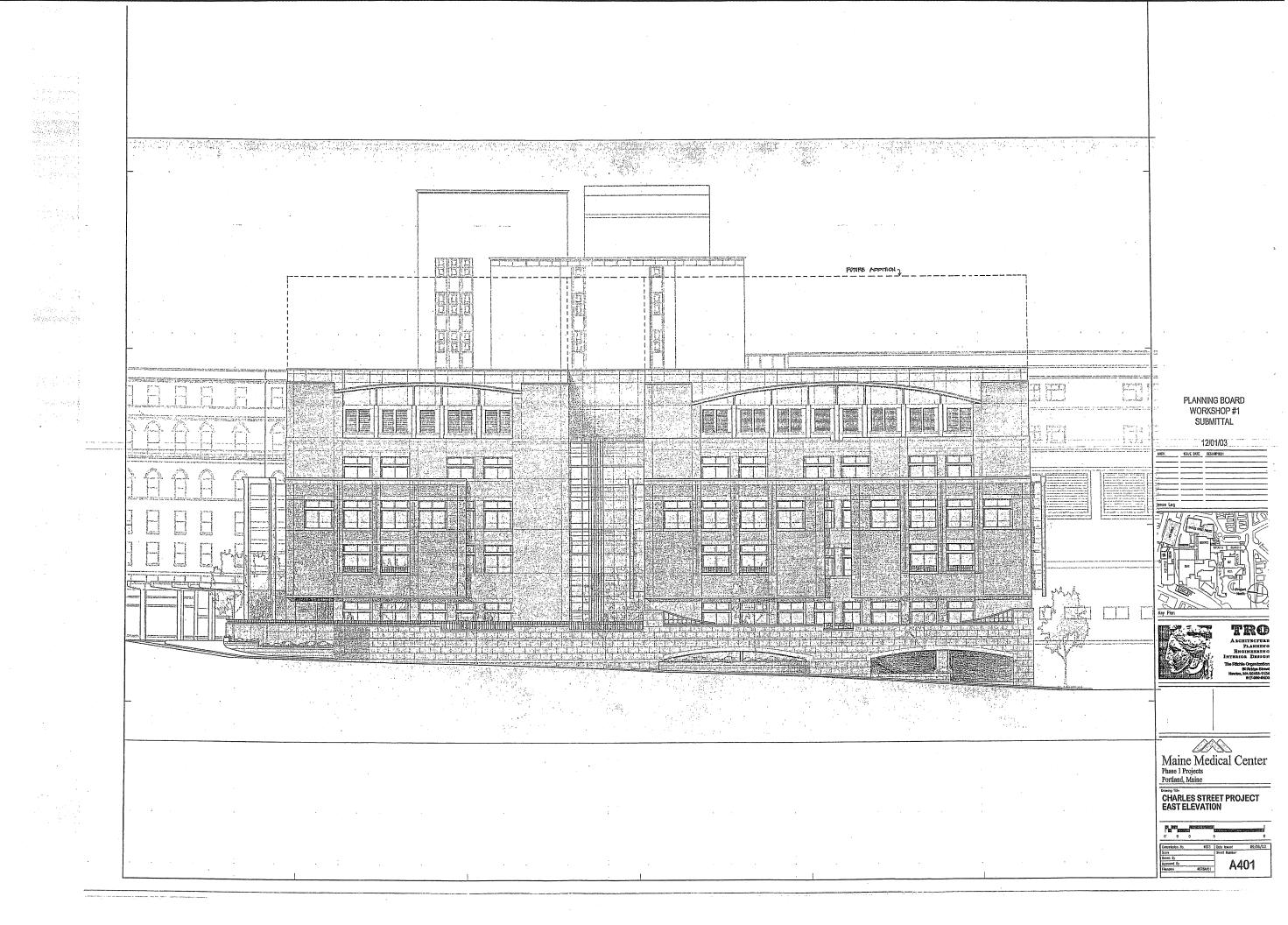
GARAGE
WEST ELEVATIONS

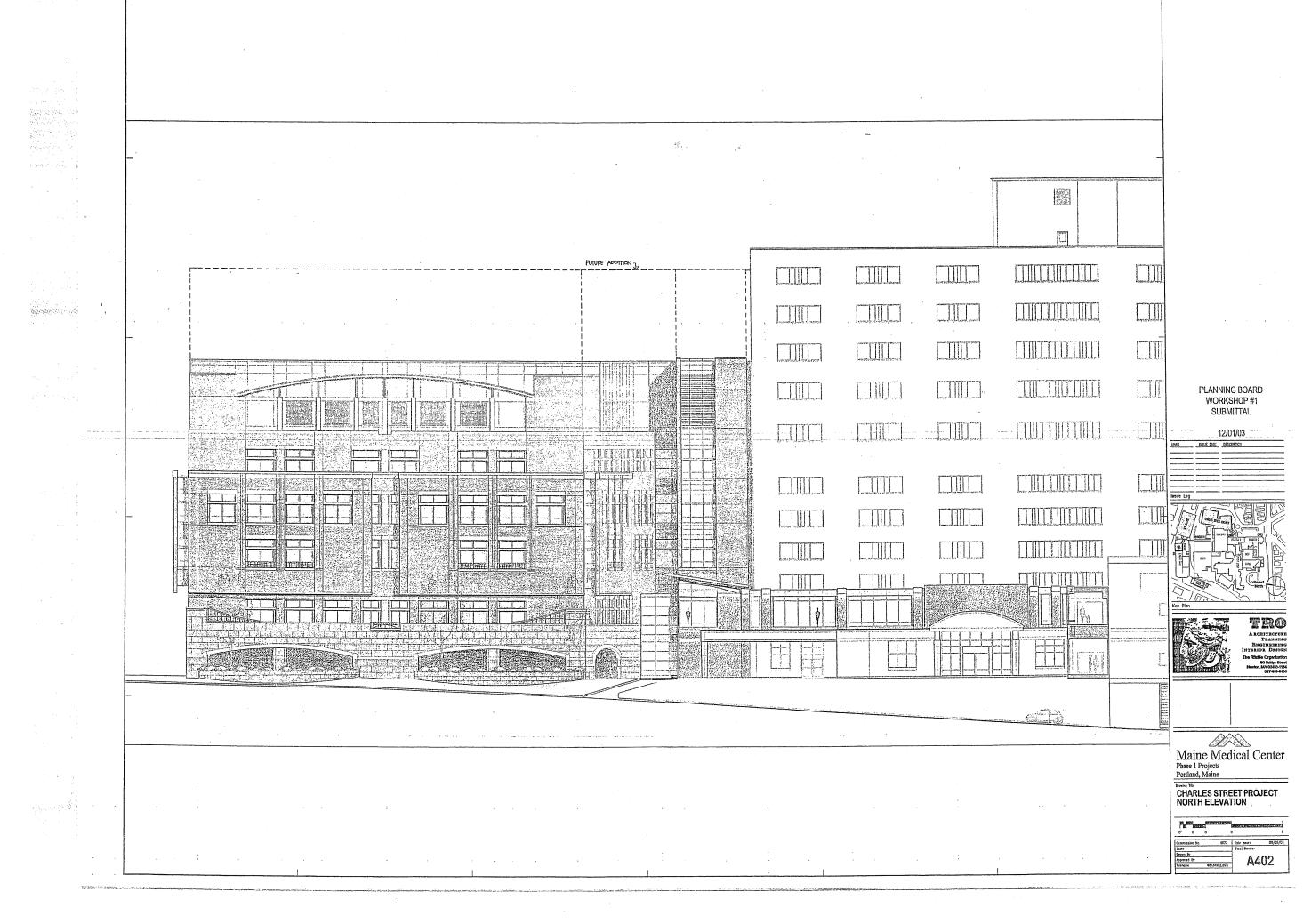


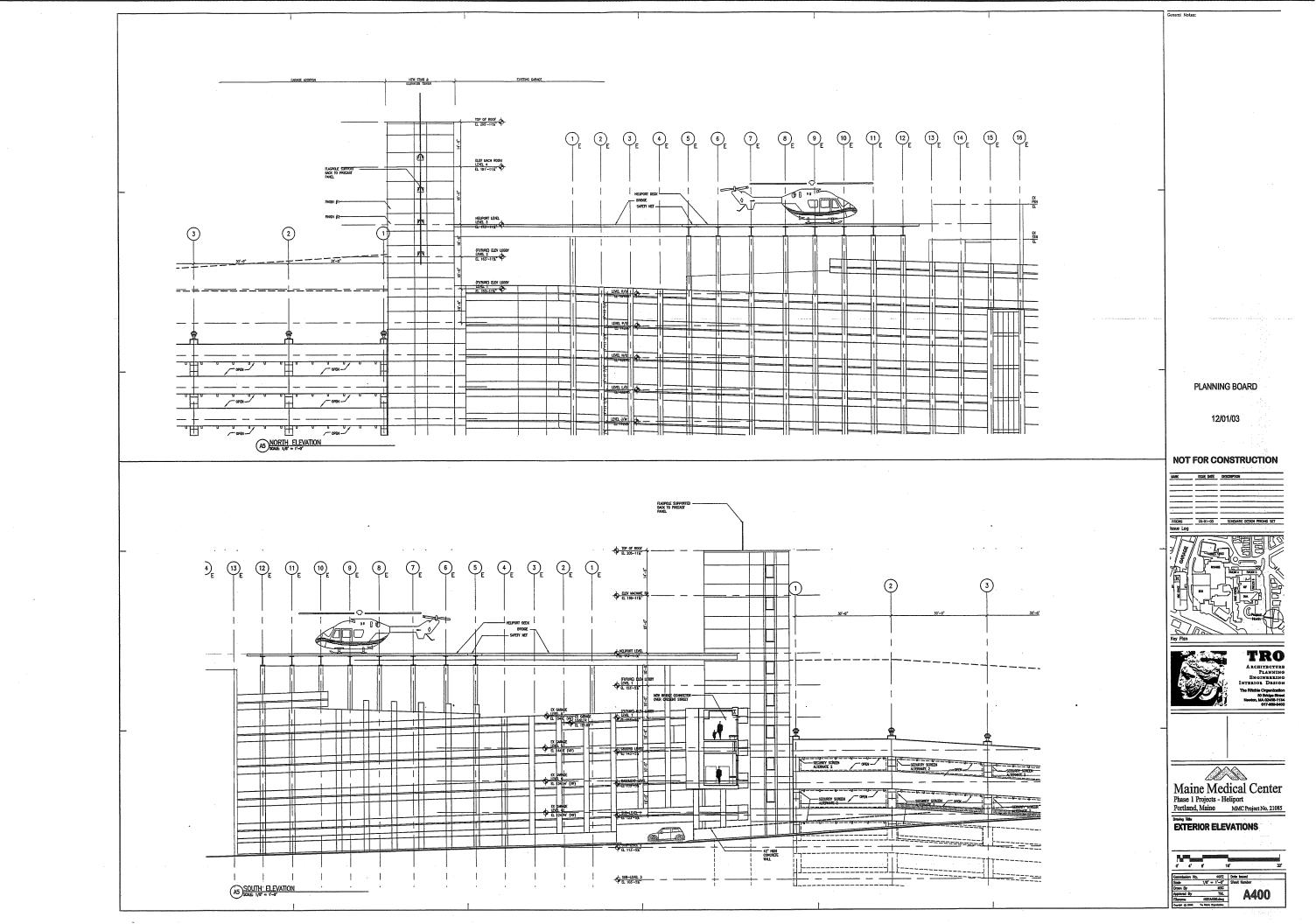


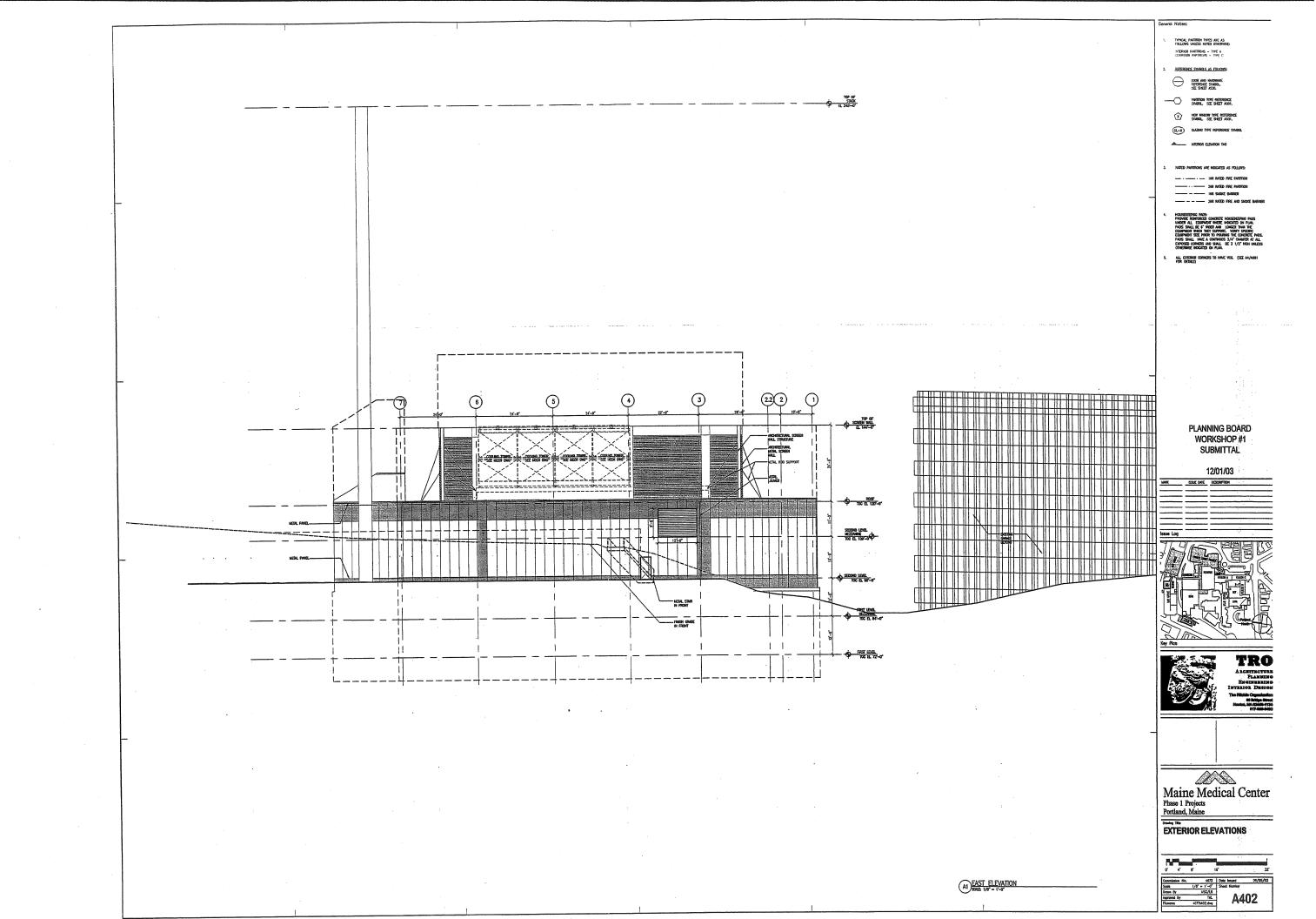


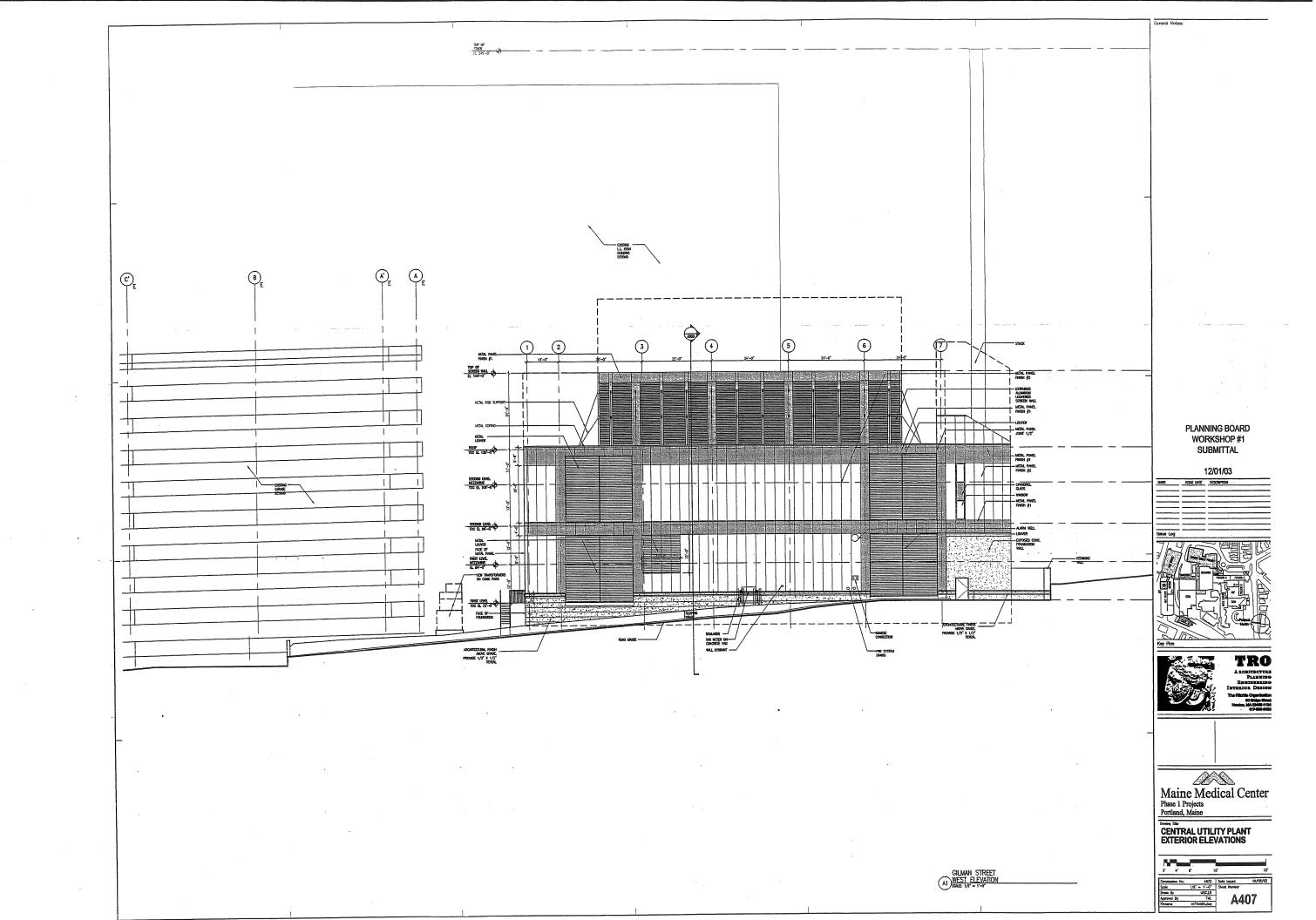
military Markets (1)

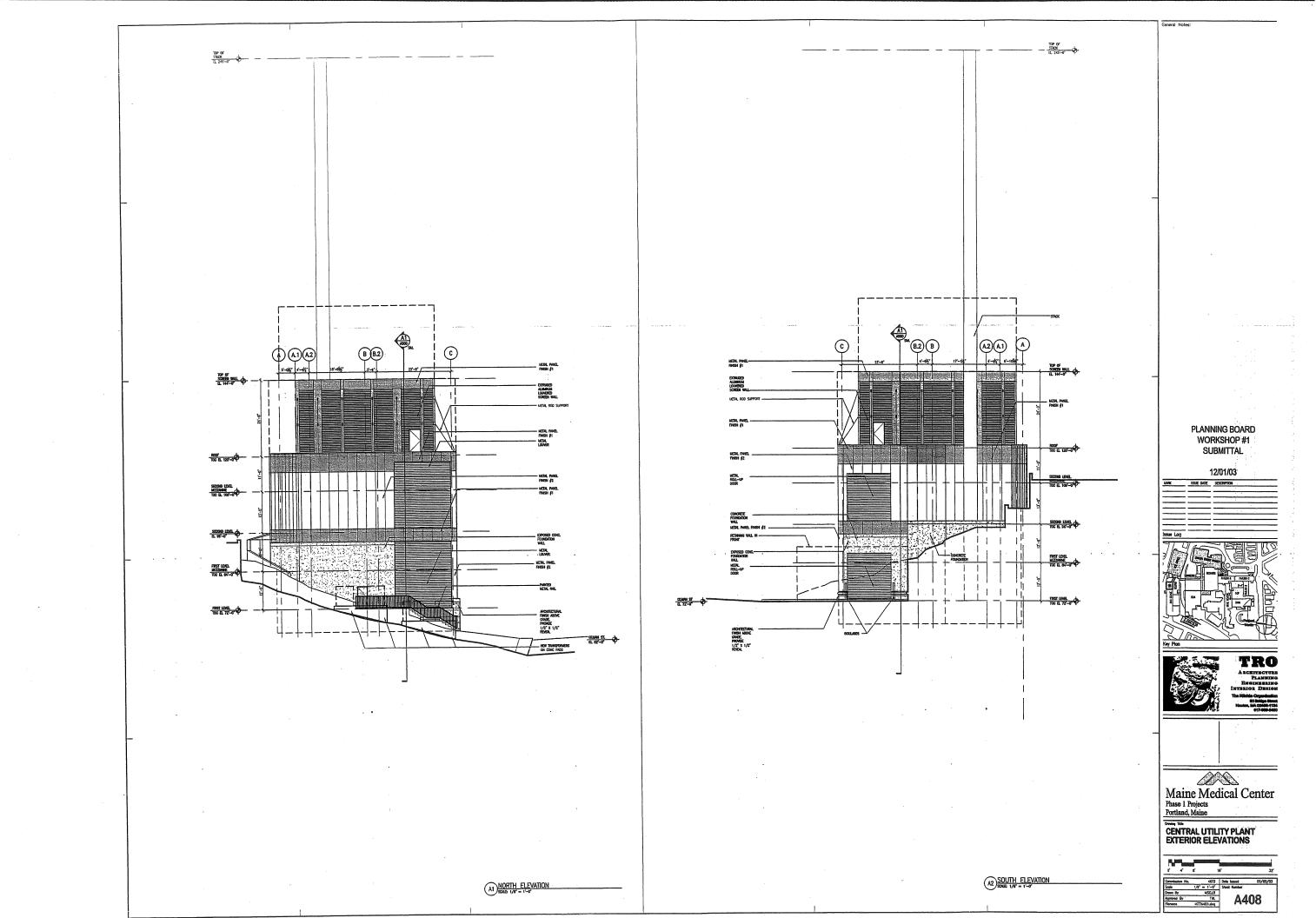












Brighton Avenue Campus
Parking Study
Maine Medical Center
Portland, Maine

Prepared for Maine Medical Center 22 Bramhall Street Portland, Maine, 04102

December 2003



Prepared by



Brighton Avenue Campus Parking Study Maine Medical Center Portland, Maine

Index

Section	Description	Page
I.	Executive Summary	1
II.	Introduction	3-4
III.	Data Collection	4
IV.	Parking Supply	4-9
V.	Parking Demand	9-18
VI.	Conclusions	19-20

$Appendix\,A$

U.S.G.S. Location Map

Appendix B

Study Area Map

I. Executive Summary

The following Executive Summary is prepared for the reader's convenience, but is not intended to be a substitute for reading the full report.

Gorrill-Palmer Consulting Engineers, Inc. has been retained by Maine Medical Center to complete a parking inventory for the Bramhall campus of the Maine Medical Center to evaluate the adequacy of the parking supply upon completion of the proposed Charles Street Project planned at the Maine Medical Center in Portland. The proposed Obstetrics and Newborn Center will be bordered by Charles, Ellsworth, and Wescott Streets. The proposed building will consist of a total floor area of approximately 192,000 s.f. However, all of the functions proposed for the new center already exist within the campus but are crowded and do not meet current industry layout standards. Maine Medical Center is also planning to expand the existing parking garage at the corner of Gilman and Congress Streets by constructing a 512 space addition to the north. The location of the site is shown in Figure 1 of Appendix A.

A parking inventory was completed on Wednesday, June 17, 2000 from 6:00 AM to 4:00 PM in anticipation of this project. Although the study was completed in 2000, no material level of change has taken place at Maine Medical Center that would affect the findings of that study. Our findings are summarized below:

- 1. The current total off-street parking supply for Maine Medical Center was determined to be 2,146 parking spaces. The maximum off-street parking demand was 1,770 parking spaces, or 82 percent of the supply. The proposed expansion to the Gilman Street garage will be 512 spaces increasing the off street supply to 2,658 spaces. The overall parking demand is anticipated to increase by 38 spaces due to the project.
- 2. The total on-street parking supply for the Maine Medical Center was determined to be 495 parking spaces. The maximum demand for on-street parking was 318 parking spaces, or 64 percent of the supply. Approximately 57 of these parking spaces were filled by vehicles with MMC parking stickers. In addition, Gorrill-Palmer Consulting Engineers, Inc. estimates another 25 percent of the on-street parking is affiliated with MMC. Therefore, the current on-street parking demand associated with MMC is estimated to be 137 parking spaces or 28 percent of the current supply. However, the proposed parking garage expansion will provide sufficient additional spaces to accommodate this on street demand as well as the additional demand forecast due to the expansion.
- 3. The total off-street supply for MMC is currently 2,146 spaces. The total parking demand for MMC affiliated vehicles (both on and off street) was determined to currently be 1,886 parking spaces or 88 percent of the off-street supply. It is recommended that the demand not exceed 85 percent of the supply to allow for circulation and finding the remaining parking spaces.

With the expansion of the proposed parking garage, the total off street parking supply will increase to 2,658 spaces. With the total current parking demand of 1,886 and the additional 38 space demand forecast for the project, the post development demand is projected to be 1,924 or 72% of the available off street supply. Although overall Maine Medical Center's parking supply falls within the recommended range, Gorrill-Palmer Consulting Engineers, Inc. recognized some areas where improvements could be made. Based on these observations, we recommend the following improvements:

- The Visitor's Lot is overcrowded, causing visitors to park in walkways and driveways, and making it difficult to maneuver a vehicle through the lot. Gorrill-Palmer Consulting Engineers, Inc. recommends that visitors be allowed to park in the proposed parking lot expansion and signs should be posted at the entrance to the Visitor's Lot, directing traffic to this location when the Visitor's Lot is full. In addition, Gorrill-Palmer Consulting Engineers, Inc. recommends that patients be directed to park in the proposed garage in their pre-visit materials.
- > The majority of on-street parking is currently one-hour parking. In addition, many visitors are disregarding parking regulations and are parking in one-hour parking spaces for extended periods of time. Recently installed meters on Bramhall Street have helped alleviate this issue significantly. Gorrill-Palmer Consulting Engineers, Inc. feels that strict enforcement of parking regulations should be upheld for all on-street locations and consideration be given to additional meters.

II. Introduction

Gorrill-Palmer Consulting Engineers, Inc. has been retained by Maine Medical Center to complete a parking inventory for the Bramhall campus of the Maine Medical Center to evaluate the adequacy of the parking supply upon completion of the proposed Charles Street Project planned at the Maine Medical Center in Portland. The proposed Obstetrics and Newborn Center will be bordered by Charles, Ellsworth, and Wescott Streets. The proposed building will consist of a total floor area of approximately 192,000 s.f. However, all of the functions proposed for the new center already exist within the campus but are crowded and do not meet current industry layout standards. Maine Medical Center is also planning to expand the existing parking garage at the corner of Gilman and Congress Streets by constructing a 512 space addition to the north. The location of the site is shown in Figure 1 of Appendix A.

The area studied by Gorrill-Palmer Consulting Engineers, Inc. includes the following off-street locations:

- Ramp Parking Garage off Gilman Street
- Medical Office Building (MOB) Lot
- St. John Street Lot (Union Station)
- Visitor's Lot
- Admitting Lot
- Emergency Lot
- Medical Students Lot
- Gilman Street Lot
- MMC Development Office Lot
- MRI Center Lot (Dana Center)

The study area also includes the following on-street locations:

- Chadwick Street (Bramhall to West)
- West Street (Vaughan to Western Promenade)
- Western Promenade (Bramhall to Carroll)
- Vaughan Street (West to Bramhall)
- Brackett Street (Vaughan to Bramhall)
- Bramhall Street (Vaughan to Western Promenade)
- Gilman Street (s/o Congress Street)
- Congress Street (Bramhall to Gilman)
- Crescent Street
- Ellsworth Street
- Hill Street
- Ramp (Gilman to Charles)

A map of the study area is included in Appendix B.

III. <u>Data Collection</u>

Gorrill-Palmer Consulting Engineers, Inc. surveyed the study area discussed above to determine the parking supply for each of the locations. Inventory sheets were then drawn up with each space marked separately on the inventory sheet. On Wednesday, June 17, 2000, Gorrill-Palmer Consulting Engineers, Inc. completed a parking inventory of the locations mentioned above. Altough the study took place in 2000, no material level of change has taken place at Maine Medical Center that would affect the findings of the study. The inventory took place from 6:00 AM to 4:00 PM. Each lot and street was checked every hour to determine whether or not the parking spaces were occupied. When a space was occupied, the license plate was recorded in the corresponding space on the inventory sheet.

After completing the inventory, the data was compiled and analyzed. The supply and demand were calculated and compared for each location for each hour of the study. A discussion of the supply versus demand for each lot is included in the following sections.

IV. Parking Supply

Gorrill-Palmer Consulting Engineers, Inc. surveyed the lots and streets mentioned in the introduction of this report to determine the supply for each location. In areas where parking spaces were striped, the number of spaces was counted and recorded. In areas where metered parking was set-up, the number of meters and vehicles per meter were counted and recorded. In areas where there were no stripes or meters, the length of the space available for parking was measured. Assuming that an average vehicle requires 25 feet to parallel park, the number of feet of curb side parking was divided by 25 to determine the number of vehicles which could park in a given location. A discussion of the supply determined by Gorrill-Palmer Consulting Engineers, Inc. for each of the locations mentioned in the introduction is included below.

Off-street

Currently, based on data furnished by Maine Medical Center and data collected by Gorrill-Palmer Consulting Engineers, Inc., there are approximately 2,146 off-street parking spaces for the hospital. The locations of these spaces are shown in the table below and are discussed in more detail in the following paragraphs. After completion of the development, a total of 2,658 off-street parking spaces will be available for Maine Medical Center with the addition of a 512 car garage adjacent to the existing garage.

Off-street Parking Supply		
Location	Number of Available Spaces	
Ramp Parking Garage	1225	
MOB Lot	207	
St. John Street Lot (Union Station)	283	
Visitor's Parking Lot	329	
Admitting	8	
Emergency	16	
Medical Students Lot	24	
Gilman Street Lot	30	
MMC Development Office Lot	10	
MRI Lot (Dana Center)	14	
Proposed Garage	512	
Total Available Spaces	2,658	

Ramp Parking Garage

The Ramp Parking Garage is located on the west side of Maine Medical Center and contains 1,225 parking spaces for Maine Medical Center medical staff and volunteers. Sixteen parking spaces on level G are used for valet parking only by the emergency room. Parking in this garage requires a permit. A permit for this garage also allows for parking in the Medical Office Building (MOB) Lot and St. John Street Lot when the Ramp Parking Garage is full.

Proposed Expansion to the Ramp Parking Garage

A 512 car expansion to the Ramp parking garage is proposed with access from Congress Street.

MOB Lot

The MOB Lot is located at the corner of Congress Street and Forest Street, across from the Ramp Parking Garage. This garage contains a total of 434 parking spaces. It is divided by chains and posts into two parking areas, each with its own entrance. The lower levels contain 207 parking spaces for Maine Medical Center employees. A permit is required to park in this section of the lot. The two top levels contain 227 parking spaces and are used by private physicians at the Medical Office Building and their patients. These parking spaces are not currently available for use by Maine Medical Center employees.

St. John Street Lot (Union Station)

St. John Street Lot, listed as a source of parking in the table above, is located behind GoodWill, off Saint John Street. It is used by GoodWill, Margaritas Restaurant, and Hair It Is Salon. The rear section of this lot, containing 283

parking spaces, is used by Maine Medical Center to accommodate overflow in the Ramp Parking Garage. Employees are instructed to park in this lot when the Ramp Garage is filled. The Maine Medical Center runs a shuttle from the St. John Street Lot to the hospital.

Visitor's Lot

The Visitor's Lot is located on the east side of the hospital off of Chadwick Street. This lot contains 329 parking spaces with an hourly rate of \$0.35 and a maximum payment of \$3.50 per day. This lot is used by visitors to Maine Medical Center, who are parking for a short time to visit, drop-off, or pick-up patients. It is currently the most congested off-street parking location at Maine Medical Center.

Admitting Lot

The Admitting Lot contains 8 striped parking spaces with a 15-minute time limit. The employee shuttle pick-up is also located on the curb in this lot.

Emergency Lot

The Emergency Lot is used mainly for ambulance and EMT parking, and contains 16 parking spaces. There are 10 ambulance only parking spaces in this lot. In addition, there are 6 valet parking spaces located in this lot used by emergency room patients. When these six parking spaces have been filled, valets park vehicles on level G of the Ramp Parking Garage.

Medical Students Lot

The Medical Students lot is located on the west side of Chadwick Street between West Street and Pine Street. This lot contains 24 parking spaces used by medical students at Maine Medical Center.

Gilman Street Lot

The Gilman Street Lot is located in the rear of the hospital and can be accessed from Gilman Street or from a ramp off of Charles Street. This parking lot contains 30 parking spaces used by Maine Medical Center employees. In addition, this lot contains a large area used for truck access, delivery, and pick-up.

MMC Development Office Lot

The MMC Development Office Lot is located in back of the Development Office, off of Vaughan Street. This lot contains 10 parking spaces for employees of the MMC Development Office.

MRI Center Lot

The MRI Center Lot is located at the rear of the hospital and can be accessed from Bramhall Street and requires an access card to enter. This lot contains 14 striped parking spaces used by patients of the MRI Center. In addition, there is ample space for an additional 8 vehicles to park temporarily along the curb for drop-off and pick-up of patients.

On-street

Based on data furnished by Maine Medical Center and data collected by Gorrill-Palmer Consulting Engineers, Inc., there are approximately 495 on-street parking spaces located on the following streets surrounding the hospital:

On-street Parking Supply		
Location	Number of Available Spaces	
Chadwick Street (Bramhall to West)	49	
West Street (Vaughan to Western Promenade)	44	
Western Promenade (Bramhall to Carroll)	69	
Vaughan (West to Bramhall)	61	
Brackett (Vaughan to Bramhall)	11	
Bramhall (Congress to Western Promenade)	99	
Gilman Street (s/o Congress)	51	
Congress (Bramhall to Gilman)	64	
Crescent Street	13	
Ellsworth Street	8	
Hill Street	18	
Ramp (Gilman to Charles)	8	
Total Available Spaces	495	

Chadwick Street

There are a total of 49 parking spaces on Chadwick Street between Bramhall Street and West Street. 8 of the 49 spaces are metered spaces. These spaces are located on the east side of the street between Bramhall Street and the entrance to the Visitor's Lot. The remaining spaces are all one-hour parking spaces.

West Street

West Street has a total of 44 one-hour parking spaces between Vaughan Street and the Western Promenade.

Western Promenade

The Western Promenade has a total of 69 parking spaces between Bramhall Street and Carroll Street. All of these spaces are one-hour parking. Also, a small loop

exists off the west side of the Western Promenade, which also contains one-hour parking spaces.

Vaughan Street

Vaughan Street has a total of 55 one-hour parking spaces from West Street to Bramhall Street. In addition, there are two 5-minute, handicapped parking spaces located in front of the Portland Urological Associates Building. There are also four 15-minute parking spaces located near the corner of Vaughan Street and Brackett Street.

Brackett Street

Brackett Street has a total of 11 metered parking spaces from Vaughan Street to Bramhall Street.

Bramhall Street

On the date the parking survey took place, Bramhall Street had a total of 80 one-hour parking spaces between Congress Street and Western Promenade. In addition, there were 4 handicapped spaces located near the entrance to the hospital. These spaces do not have a posted time limit. Since the date of the data collection, the City has added 15 one-hour, metered parking spaces on Bramhall Street across from the MRI Center (Dana Center) lot. Theses meters have significantly improved access to these spaces.

Gilman Street

Gilman Street has 25 one-hour parking spaces located on the west side of the street. There are an additional 26 parking spaces on the east side of the street, which do not have a posted time limit. Many of these parking spaces are used by Maine Medical Center employees who enter through the rear of the hospital through the Gilman Street Lot.

Congress Street

Congress Street has a total of 64 parking spaces with varying time limits. There are seven 2-hour parking spaces located between Gilman Street and Forest Street. There are four 15-minute parking spaces located at the corner of Weymouth Street and Congress Street. There are 28 one-hour parking spaces located on the north side of the street, and four one-hour parking spaces on the south side of the street. The remaining 21 parking spaces on the south side of the street do not have a posted time limit.

Crescent Street

Crescent Street has 13 one-hour parking spaces located mainly on the west side of the street.

Ellsworth Street

At the time of the study, Ellsworth Street contained 16 one-hour parking spaces. The proposed development will involve the removal of 8 of these parking spaces, leaving 8 one-hour parking spaces on this street. The vehicles currently using this street to park and visit Maine Medical Center will be reassigned to the proposed garage.

Hill Street

Hill Street contains 18 one-hour parking spaces. These spaces are used by residents on this street and MMC visitors.

Ramp

The ramp, located between Gilman Street and Charles Street on the west side of the hospital, has 8 parking spaces on the east side of the ramp. These parking spaces are used by Maine Medical Center employees. No-parking signs are posted for two of these spaces. However, several vehicles parked in these spaces throughout the day and no tickets were noticed on the vehicles.

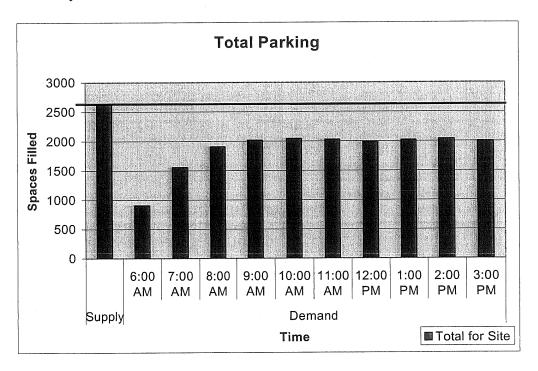
V. Parking Demand

On Wednesday, June 17, 2000, Gorrill-Palmer Consulting Engineers, Inc. revisecompleted the parking inventory of the lots mentioned in the table above, as well as the streets surrounding the hospital. Although this study was conducted in 2000, no material level of change has taken place at Maine Medical Center that would affect the findings of this study. The inventory took place from 6:00 AM to 4:00 PM. Each lot and street was checked every hour to determine whether or not each parking space was occupied. If a space was occupied, the license plate was recorded in the corresponding space on the inventory sheet.

After completing the inventory, the data was compiled and analyzed. The demand was then determined for each location for each hour. The demand for the off-street and on-street parking was also calculated for each hour. A summary of the parking supply versus demand is shown in the table below:

		Demand										
Location	Supply	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	
MOB Lot	207	21	86	147	160	166	168	170	170	167	152	
Ramp Garage	1225	528	944	1028	1033	1013	1019	983	982	983	1013	
All Garages	1432	549	1030	1175	1193	1179	1187	1153	1152	1150	1165	
St. John Street Lot	283	12	88	153	171	183	187	188	191	187	172	
Visitor's Lot	329	73	112	184	266	307	312	325	331	331	301	
Small Lots	102	33	52	82	81	73	84	70	79	74	78	
Off-street	2146	667	1282	1594	1711	1742	1770	1736	1753	1742	1716	
On-street	495	243	277	318	309	305	261	263	268	302	288	
Total for Site	2641	910	1559	1912	2020	2047	2031	1999	2021	2044	2004	

The following table summarizes the total supply and demand for each hour of the inventory for the entire site.

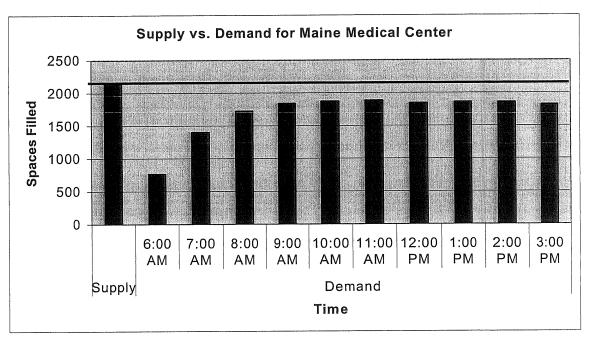


The highest demand for the hospital was determined to occur at 10:00 AM, when there is a demand of 2,047 spaces or 78 percent of the supply. However, this observed parking demand includes vehicles that are not associated with the Maine Medical Center. While conducting our survey, Gorrill-Palmer Consulting Engineers, Inc. also noted whenever a MMC sticker was placed on a vehicle parked on the street. The following table summarizes the number of parking spaces filled by vehicles with a MMC sticker.

Street	Supply	Number of Stickers									
	•• •	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM
Chadwick	49	5	6	5	6	7	5	5	3	3	3
West	44	3	3	3	4	3	5	4	4	4	3
Vaughan	61	6	6	6	6	6	4	4	3	3	2
Brackett	11	0	0	0	0	0	0	0	0	0	0
Bramhall	99	10	14	15	12	13	10	10	10	10	10
Gilman	51	8	11	12	14	15	15	17	16	16	11
Congress	64	4	4	4	3	3	3	3	2	2	3
Crescent	13	2	2	2	3	2	1	0	1	1	1
Ellsworth	16	1	3	3	4	4	3	2	2	2	0
Hill	18	1	1	1	1	1	2	1	1	1	0
Western Promenade	69	1	2	3	3	3	3	2	2	2	1
Total	495	41	52	54	-56	57	51	48	44	44	34

As shown in the table above, the current on-street parking demand for vehicles with MMC stickers is approximately 57 parking spaces or 18 percent of the onstreet demand. MMC stickers are placed only on vehicles belonging to employees of the Maine Medical Center. Therefore, in order to determine the offstreet demand for MMC, these vehicles should be added to the off-street demand calculated above. In addition, Gorrill-Palmer Consulting Engineers, Inc. estimates that an additional 80 parking spaces or 25 percent of the total on-street parking demand is due to MMC patients, visitors and staff. This number must also be added to the off-street parking to determine the actual off-street parking demand. The following table and chart summarize the current off-street parking demand with these numbers added.

Location	Supply	Demand									
	***	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM
Off-street	2146	667	1282	1594	1711	1742	1770	1736	1753	1742	1716
MMC Stickers On-street	N/A	41	52	54	56	57	51	48	44	44	34
Visitors On-street	N/A	61	70	80	77	76	65	66	67	76	72
Total	2146	769	1404	1728	1844	1875	1886	1850	1864	1862	1822



As shown in the table above, the actual Maine Medical Center parking demand is currently 1,886 parking spaces or approximately 88 percent of the parking supply.

Future Demand

The current off-street parking demand was estimated to be 1,886parking spaces, or 88 percent of the supply as discussed above. Maine Medical Center continues its efforts to decompress the Bramhall campus by redirecting outpatients from the Bramhall campus to its Brighton, Scarborough and Falmouth campuses. The relocation of patient activity from the Bramhall campus to the other campuses helps alleviate parking demand and congestion at Maine Medical Center's main campus, which are ongoing concerns. Routine outpatient activity is redirected toward satellite campuses to free up Maine Medical Center's clinical resources for inpatient demand due MMC's role as Maine tertiary care center. Currently, Maine Medical Center plans to move its endoscopy and outpatient surgery facilities to the Scarborough and Brighton Campuses. This will result in a reduction of 7500 to 8000 patient visits per year. Although we can not take credit for this relocation, it is an illustration of the Maine Medical Center's continuing commitment to decompress the Bramhall campus.

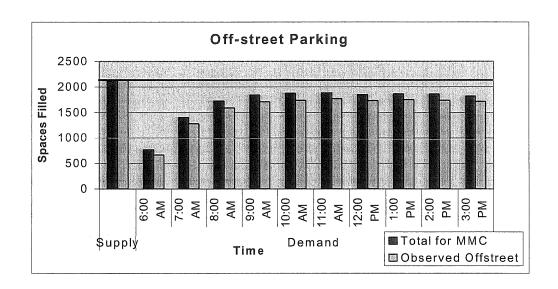
The proposed Obstetrics and Newborn Center will consist of a total floor area of approximately 192,000 s.f. However, all of the functions proposed for the new center already exist within the campus but is crowded and does not meet current industry layout standards. Based on information furnished by MMC, the inpatient population is expected to grow from 480 to 490 patients or 2% between 2003 and 2005 (1% per year). The outpatient activity has been proportional to the inpatient activity in the last decade. This does not necessarily reflect the national trend, which generally shows outpatient increasing more than inpatient, because a significant portion of the increase in outpatient activity has been shifted away from the Bramhall campus to the Brighton and Scarborough campuses as discussed above.

The staffing load is driven by the number of patients and is therefore not expected to increase, however we have assumed a 2% increase to be conservative.

The overall parking demand on campus will be forecast to increase by 2%, or 38 spaces. Thus, the total demand is forecast to be 1,924 spaces upon completion of the expansion.

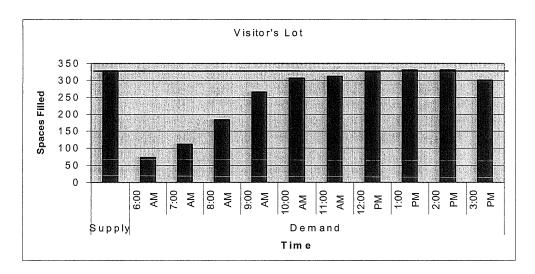
Off-Street

The following table summarizes the current supply and hourly parking demand for all off-street parking:



Visitor's Lot

The following graph summarizes the supply and hourly demand for the Visitor's Lot:

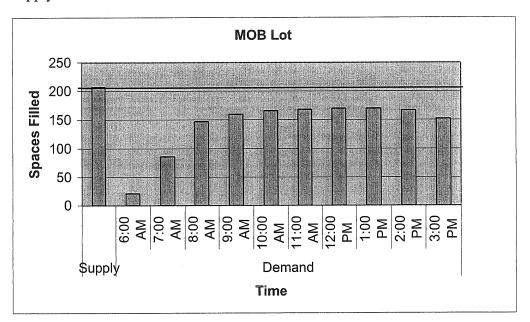


The supply for the Visitor's Lot was determined to be 329 parking spaces. However, the highest demand for the Visitor's Lot was found to be 331 parking spaces. This level of demand occurred between 1:00 PM and 3:00 PM. During this time, cars were parked illegally in the driveways and walkways. This made maneuvering a vehicle through the lot difficult and forced pedestrians to walk around vehicles parked in crosswalks. Often times, cars would queue at the

entrance to the Visitor's Lot, waiting for a car to leave so that they might enter. This queue of cars often backed up traffic attempting to drive down Chadwick Street. It is therefore, the opinion of Gorrill-Palmer Consulting Engineers, Inc. that Maine Medical Center is not meeting its parking demand for visitors. Gorrill-Palmer Consulting Engineers, Inc. recommends posting signs at the entrance to the visitors lot directing traffic to the proposed addition to the parking garage. This may reduce the queuing of cars on Chadwick Street and prevent vehicles from parking in walkways and driveways. In addition, Gorrill-Palmer Consulting Engineers, Inc. recommends that patients be directed to park in the proposed garage on Congress Street in their pre-visit materials.

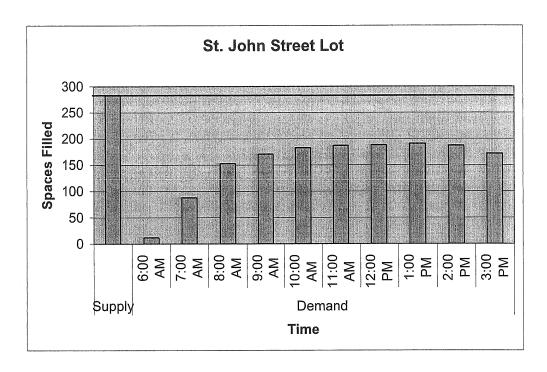
MOB Lot

Gorrill-Palmer Consulting Engineers, Inc. also noticed that the MOB lot is currently less than 82 percent full at its peak. Gorrill-Palmer Consulting Engineers, Inc. recommends Maine Medical Center take steps to encourage more employees to park in this lot. The following table summarizes the hourly parking supply and demand of the MOB Lot.



St. John Street Lot

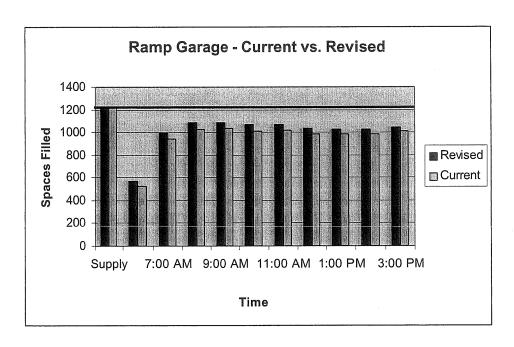
The maximum demand for the St. John Street Lot was 191 parking spaces, or 67 percent of the supply. Currently, Maine Medical Center runs a shuttle from the St. John Street Lot to the hospital for its employees. It is the recommendation of Gorrill-Palmer Consulting Engineers, Inc. that Maine Medical Center encourage its employees to park in this lot and take advantage of this service. The following table summarizes the hourly parking supply and demand for the Saint John Street Lot.



Ramp Parking Garage

The maximum demand for the Ramp Parking Garage was 1033 parking spaces, or 84 percent of the supply. Although this demand seems high to add additional vehicles to this parking garage, the peak for this lot occurs early in the day, between 8:00 and 9:00 AM while there is a turnover of staff at Maine Medical Center. Between the hours of 1:00 and 3:00 PM, this garage is only approximately 80 percent full, leaving 242 empty spaces. Adding the employee vehicles, which currently park on the street, would increase the parking demand for this lot to only 1089 parking spaces or 88 percent of the supply. Gorrill-Palmer Consulting Engineers, Inc. therefore, feels that Maine Medical Center should encourage its employees to park in this garage rather than on the street.

The following table summarizes the hourly parking supply and demand for the Ramp Garage as it is currently and with the improvements recommended by Gorrill-Palmer Consulting Engineers, Inc.



MRI Center Lot

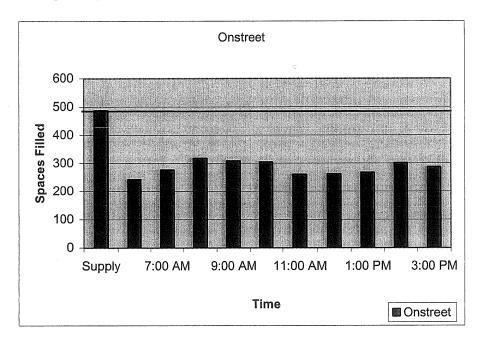
Currently, the rear lot off of Bramhall Street is striped for 14 spaces for patients. However, there is enough space along the curb for an additional 8 vehicles to park temporarily for drop-off.

Proposed Parking Garage

As mentioned above, the Maine Medical Center is not currently meeting its parking demand for its visitors with its off-street lots. The surrounding neighborhood is concerned that a large number of visitors and patients are using on-street parking. The proposed garage on Congress Street, with 512 parking spaces, is anticipate to relieve overcrowding in the visitor's lot and provide an additional parking area for Maine Medical Center visitors. The addition of this garage will raise the total Maine Medical Center parking supply to 2,658 parking spaces. Currently, the total demand for Maine Medical Center is 1,886spaces or 71 percent of the future supply after completion of the garage. Typically, no more than 85 percent occupancy is desired in order to allow for circulation and finding remaining parking spaces. With its proposed improvements, Maine Medical Center will meet this requirement.

On-Street

The following graph summarizes the supply and hourly parking demand for onstreet parking:



Western Promenade

Currently, the Western Promenade contains enough space for 69 parking spaces. Throughout the day, no more than 30 percent of these spaces were filled.

Ellsworth Street

With its close proximity to the entrance to the hospital, Ellsworth Street is one of the most frequently used parking areas for visitors to Maine Medical Center. Ellsworth Street contains enough space for 16 vehicles to park legally in one-hour parking spaces. However, eight of these parking spaces will be lost due to construction. In addition, many vehicles remained parked in these spaces for well over the time limit without being ticketed. In addition, there are several curb-side locations which are marked as no-parking zones for bus stops, fire hydrants, etc. Throughout the day, particularly during peak parking times for the Visitor's Lot, visitors parked in these no-parking zones. It is the opinion of Gorrill-Palmer Consulting Engineers, Inc. that strict enforcement of parking regulations combined with the increased supply proposed as part of this project should reduce this problem.

Chadwick Street

Chadwick Street contains enough curb-side space for 20 vehicles to park legally. However, between the hours of 12:00 and 3:00 PM, when the Visitor's Lot is full, several vehicles were seen parked illegally across driveways and fire hydrants along this street. It is therefore, the opinion of Gorrill-Palmer Consulting Engineers, Inc. that strict enforcement of parking regulations should be upheld for Chadwick Street. In addition, signs should be posted near the entrance of the Visitor's Lot, directing traffic toward the new parking garage. Patients should also be instructed to park in the new garage in their pre-visit materials.

Bramhall Street

Bramhall Street contains enough curb-side space for 84 vehicles to park legally in one hour parking spaces. However, many vehicles were observed parking for several hours at a time. In addition, this street seemed to be a favorite for vehicles with MMC parking stickers and visitors to the Maine Medical Center. It is the opinion of Gorrill-Palmer Consulting Engineers, Inc. that strict enforcement of parking regulations combined with the increased supply proposed as part of this project, should reduce this problem.

Gilman Street

Currently, the majority of the west side of Gilman Street is used by Maine Medical Center employees with MMC parking stickers. These spaces do not have a time limit and are therefore often preferred over parking in the Saint John Street Lot and riding the shuttle. This greatly reduces the number of on-street parking spaces available for residents and patrons to facilities on Gilman Street. Gorrill-Palmer Consulting Engineers, Inc. feels that MMC should strongly encourage its employees to avoid parking on this street and to park in the proposed expansion to the Ramp Garage or the St. John Street Lot.

VI. Conclusions

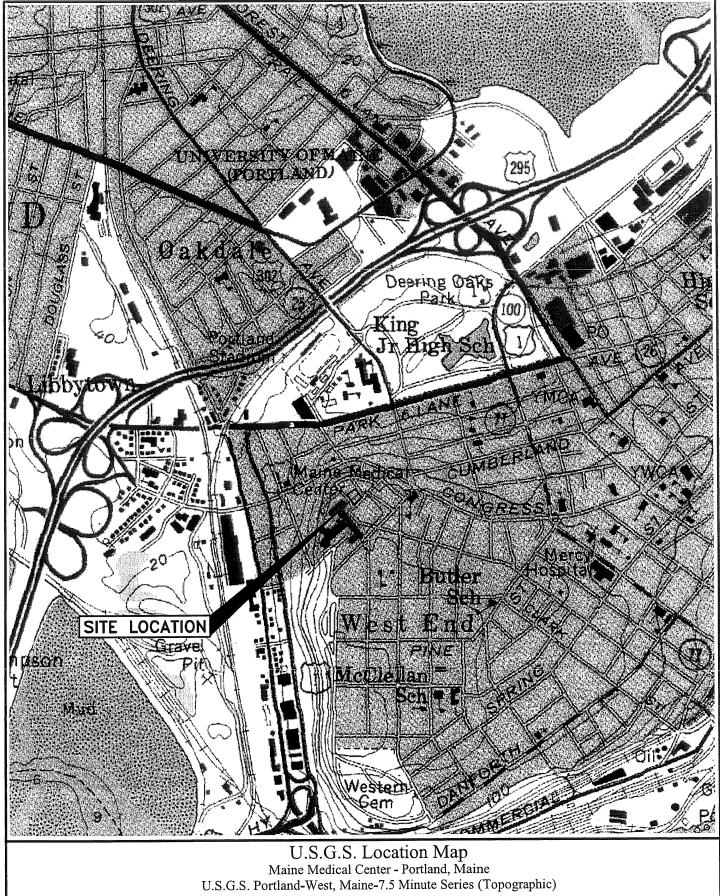
The following is a summary of the findings of Gorrill-Palmer Consulting Engineers, Inc.

- 1. The current total off-street parking supply for Maine Medical Center was determined to be 2,146 parking spaces. The maximum off-street parking demand was 1,770 parking spaces, or 82 percent of the supply. The proposed expansion to the Gilman Street garage will be 512 spaces increasing the off street supply to 2,658 spaces. The overall parking demand is anticipated to increase by 38 spaces due to the project.
- 2. The total on-street parking supply for the Maine Medical Center was determined to be 495 parking spaces. The maximum demand for on-street parking was 318 parking spaces, or 64 percent of the supply. Approximately 57 of these parking spaces were filled by vehicles with MMC parking stickers. In addition, Gorrill-Palmer Consulting Engineers, Inc. estimates another 25 percent of the on-street parking is affiliated with MMC. Therefore, the current on-street parking demand associated with MMC is estimated to be 137 parking spaces or 28 percent of the current supply. However, the proposed parking garage expansion will provide sufficient additional spaces to accommodate this on street demand as well as the additional demand forecast due to the expansion.
- 3. The total off-street supply for MMC is currently 2,136 spaces, which includes the lot on 993 Congress Street. The total parking demand for MMC affiliated vehicles (both on and off street) was determined to currently be 1,886 parking spaces or 88 percent of the off-street supply. It is recommended that the demand not exceed 85 percent of the supply to allow for circulation and finding the remaining parking spaces. With the expansion of the proposed parking garage, the total off street parking supply will increase to 2,658 spaces. With the total current parking demand of 1,886 and the additional 38 space demand forecast for the project, the post development demand is projected to be 1,924 or 72% of the available off street supply. Although overall Maine Medical Center's parking supply falls within the recommended range, Gorrill-Palmer Consulting Engineers, Inc. recognized some areas where improvements could be made. Based on these observations, we recommend the following improvements:
 - The Visitor's Lot is overcrowded, causing visitors to park in walkways and driveways, and making it difficult to maneuver a vehicle through the lot. Gorrill-Palmer Consulting Engineers, Inc. recommends that visitors be allowed to park in the proposed parking lot expansion and signs should be posted at the entrance to the Visitor's Lot, directing traffic to this location when the Visitor's Lot is full. In addition, Gorrill-Palmer

Consulting Engineers, Inc. recommends that patients be directed to park in the proposed garage in their pre-visit materials.

➤ The majority of on-street parking is currently one-hour parking. In addition, many visitors are disregarding parking regulations and are parking in one-hour parking spaces for extended periods of time. Recently installed meters on Bramhall Street have helped alleviate this issue significantly. Gorrill-Palmer Consulting Engineers, Inc. feels that strict enforcement of parking regulations should be upheld for all on-street locations and consideration be given to additional meters.

Appendix A Location Map



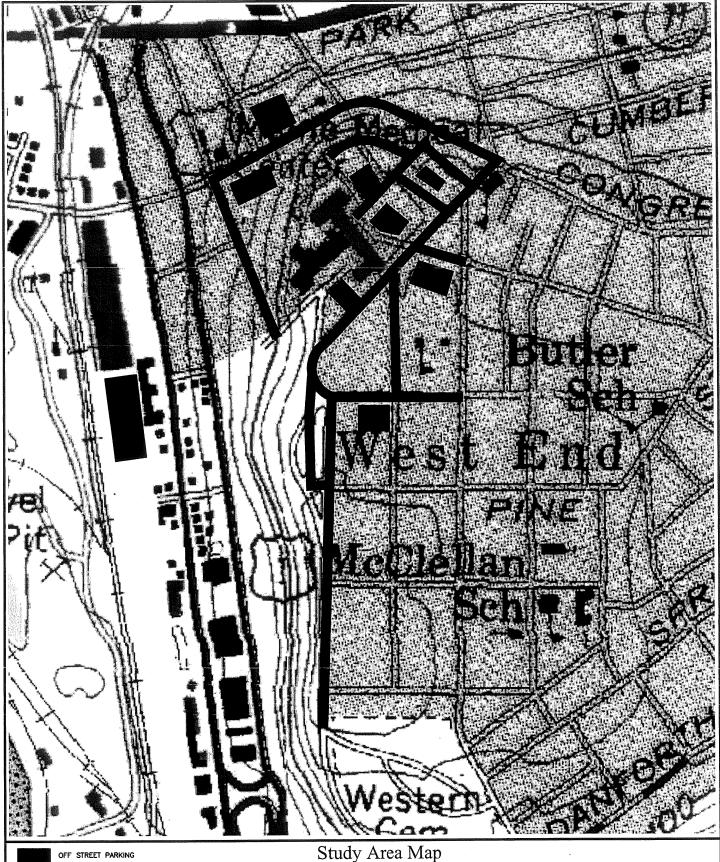
Design: Jo	-		AUG 2003
Draft: D		Job No.:	
Checked: J.		Scale:	None

GP	Gorrill-	-Palm	er C	onsulting	Engineers,	Inc.	
	Tra ffic	and I	Tinil	Engineer	rina Servic	205	_

PO Box 1237 15 Shaker Road Gray, ME 04039 207-657-6910 FAX: 207-657-6912 E-Mail: mailbox@gorrillpalmer.com

Figure 1

Appendix B Study Area Map



OFF STREET PARKING ON STREET PARKING

Maine Medical Center - Portland, Maine U.S.G.S. Portland-West, Maine-7.5 Minute Series (Topographic)

AUG 2003 Design: JJB Date: Draft: DB Job No.: 317 Checked: JJB Scale: File Name: 317-LOCMAP2.DWG

Gorrill-Palmer Consulting Engineers, Inc. Traffic and Civil Engineering Services

PO Box 1237 15 Shaker Road Gray, ME 04039

207-657-6910 FAX: 207-657-6912 E-Mail: mailbox@gorrillpalmer.com

Figure