BROOKLINE
DEVELOPMENT
CORPORATION

APPROVED
Peter M. Ditto
11/18/11

CONSTRUCTION MANAGEMENT PLAN

Project Address:
20 Englewood Avenue
Brookline, MA

The purpose of this document is to illustrate the course of construction including site renovations at 20 Englewood, to satisfy a condition forth by the Zoning Board of Appeals and to adequately illustrate the proposed course of construction for the above referenced project.

Owner: Green Eyes Environmental LLC
3 Craftsland Road
Chestnut Hill, MA 02467

Owner Contact: Jeff Feuerman, Principal
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Onsite Representative:
Matt Calkins
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Project Manager: The Gowdy Group, LLC
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Project Architect: RODE Architect, Inc.
Eric Robinson, Principal
535 Albany Street Suite 405
Boston, MA 02118
Phone: (617) 422-0090
Email: eric@rodearchitects.com

Superintendent

Onsite Representative (superintendent) will be onsite daily Matt Calkins 617-694-4479 during regular work hours. A 24 hour emergency phone number will be posted on a sign at the project site and monitored 617-694-4479 and 617-733-5455.

CONSTRUCTION MANAGEMENT PLAN
20 Englewood, Brookline, MA

Construction Meetings

Owner and General Contractor, Onsite Representative (Matt Calkins, Phone: (617) 694-4479, Email: matt@brooklinedevelopmentcorp.com) and Project Manager will meet weekly during active construction phase. Items discussed at meetings will include:

- Updates of overall project/construction progress
- Review of subcontractor selections and progress
- Review of selection and procurement of building fixtures and finishes
- Review of concerns requiring site access and access to adjacent properties
- Review of budget and schedule compliance

Scope of Work

Please refer to proposed construction drawings for entire proposed scope of project and construction details. The project involves building a 3 story 20-unit apartment home building on top of a two level 81 space concrete parking garage on the land in back of 1842 Beacon Street, which is currently a surface parking lot. The project includes demolishing the existing parking lot and excavating approximately 10' below existing grade, installing an 18" thick structural mat slab, and then constructing an at-grade parking deck. One additional concrete deck will be installed above ground to act as the first level of the three story wood frame structure. The structure will have a brick façade with aluminum clad wood windows. The interior will be sprinklered throughout. The project will be LEED certified.

In order to complete the excavation, the existing transformer in the southeast corner of the parking will be relocated to the bottom of the existing ramp to 1842 Beacon's basement. Soldier pile and wood lagging will be used to shore the perimeter of the project, especially on the south and west sides of the project (the two sides other than the street side), in order to complete the excavation.

Note: All work is to proceed in accordance with the requirements of the Town of Brookline Building Department inspection procedure.
Note: All construction methods and materials will comply with all local, state, and federal building code requirements, as applicable to this project.
Note: All specialty contractors on site will be licensed and insured as required by state and federal laws where applicable.

<u>Project Schedule</u>

Permit Phase

Submit final plans, indicating façade design, colors, materials, windows, rooftop details, walls, screening devices and placement of utilities for HVAC and transformers for the new residential building, for the review and approval of the Planning Board. A mock up of the finished details shall be provided [on site] for review and approval of the Planning Board.

Submit final site and landscaping plans, indicating site design, landscaping, fencing, lighting, drainage details, garage parking layout, and limited landscaping on the abutting property at 38 Englewood Avenue agreed to by the property owner, for the review and approval of the Assistant Director for Regulatory Planning.

Submit plans for handicap ramp to serve Lot 2 (the professional office building at 1842 Beacon Street), subject to the review and approval of the Assistant Director for Regulatory Planning.

Submit final drainage and sewer improvement plans, subject to the review and approval of the Director of Engineering and Transportation.

Submit a construction management plan, including parking locations for construction vehicles, information about additional parking opportunities for displaced parkers during construction, location of portable toilets, and a rodent control plan, for review and approval by the Transportation Director, with a copy of the approved plan submitted to the Planning Department.

Submit a certified as built foundation plan for the new residential building on Lot 1, to ensure conformance to the Board of Appeals decision, to the Building Commissioner for review and approval before the balance of the building permit shall issue.

Record a final parking plan for the new garage at the Registry of Deeds clearly delineating 44 parking spaces for the exclusive use of Lot 2, 17 dual parking spaces, 20 parking spaces for the exclusive use of Lot 1 and 3 visitor parking spaces, and show evidence of such to the Building Commissioner.

Submit to the Building Commissioner for review and approval for conformance to the Board of Appeals decision: 1) a final site plan, stamped and signed by a registered engineer or land surveyor, including landscaping, fencing, grading, and location of utilities; 2) building elevations and floor plans for the new residential building, stamped and signed by a registered architect; and 3) evidence that the Board of Appeals decision has been recorded at the Registry of Deeds.

Construction Phase

Phases of Construction shown below will have inherent overlaps. Time allotment illustrated is not a necessary indication of overall construction schedule.

Phase 1 – Parking Garage Construction

Ramp to 1842 Beacon and Transformer Relocation **4 weeks**

The ramp to the basement of 1842 Beacon will be closed. Basement Parking patrons of 1842 Beacon will park in the surface lot prior to its excavation. The ramp will be removed and replaced. A pad for the future transformer that services 1842 Beacon will be installed. Conduit from the electrical manhole in Englewood Avenue to the new transformer location and into the existing building will be installed. NStar, the electric utility, will make the final connections. Upon transferring power to the new transformer, the old transformer will be removed and the excavation work completed.

Shoring, Dewatering and Excavation **8 weeks**

A temporary chain link fence will be installed along the perimeter of property. Appropriate temporary silt and runoff control measures will be installed in accordance with the approved site plans. Soldier piles will be installed on interior property lines using either a vibratory hammer, impact hammer or they will be installed in a drilled sleeve. Installation method will be determined by the predicted depth to rock at each pile location. Excavation will then proceed starting in the southwest corner. The bottom of the excavation will be roughly 10 feet below existing grade. Trucking routes are addressed in a separate section of this document. A dewatering system will be

permitted with the appropriate authorities (MWRA) and installed to lower the water table below the bottom of the excavation.

Concrete Work **10 weeks**

An 18" concrete mat foundation will be installed followed by 12" thick perimeter walls and at grade concrete parking deck. A first deck will be installed that is the base for the wood framed structure. Walls will be waterproofed prior to pouring of concrete. Upon completion of the concrete work, an as-built will be prepared and submitted to the Building Commissioner for review and Approval.

Structural Framing **9 weeks**

Upon completion of concrete work, framing of the 3 story wood structure will begin.

Masonry, Roof, Windows, Interior Mechanical/Electrical/Plumbing/Sprinkler **7 weeks**

After completion of structural framing, the roof and exterior skin will be installed, thereby making the building water tight. While that work is being completed, rough installation of the mechanical, electrical, plumbing and sprinkler systems will be completed.

Site Utilities. Hardscape, Landscape **12 weeks**

After the exterior is completed, then sitework will proceed to complete the underground drainage system and storm drain tie-in, the sewer line extension to Beacon Street, the water line tie-in, and the electrical connections.

Interior Building Finishes **25 weeks**

After the building is 'dried in' and the rough installation work of the MEPS is completed, then inspections, insulation installation, more inspection, and drywall will be installed. After drywall, then all of the finish work will be completed, including cabinetry, finish carpentry, marble and granite work, hardwood floors, paint, and finish mechanical/electrical/plumbing/sprinkler systems.

Finish Site Work **2 weeks**

Upon completion of most on site and street related construction activities, the granite curbing along Englewood will be reset, a new concrete sidewalk will be poured, and appropriate sections of Englewood Avenue will be replaced with a new top layer of asphalt.

Final Certificate of Occupancy **1 week**

Upon completion of all construction activity, final inspections will occur and a final certificate of occupancy will be issued.

General Conditions

Hours of Operation

On site construction will be limited to the hours of 7:00am to 7:00pm Monday through Friday and 8:00am to 5:00pm Saturday and Sunday.

CONSTRUCTION MANAGEMENT PLAN
20 Englewood, Brookline, MA

Noise Mitigation

As feasible, abutters will be given written notice regarding impending disruptive site activity. Any concerns will be addressed immediately.

Dust Control

Dust control during excavation phase will be a priority. It is the responsibility of the Onsite Representative to ensure that air quality is maintained both inside and outside of building as feasible. Landscaping dust shall be controlled when natural soil moisture is not adequate to keep dust under control.

Tree Protection

Reasonable efforts will be made to protect the existing trees in the northwest corner of the property, and the existing street trees.

Recycling of Debris and Waste

Any materials that can collected on site to be recycled will be, including solid fill materials (brick, concrete, gravel), asphalt, paper and cardboard, steel, and wood as feasible.
Only bonded and licensed haulers of construction debris will be hired for construction debris removal.

Material and Equipment Storage

Any excess material inventory will be stored inside building or in covered concise piles outside of building.
All construction equipment will be stored and secured inside building or secured if needing to be left outside of building.
No equipment will be left unattended and unsecured outside of building confines during or after hours of operation.
The basement level of the parking garage will be actively used for material and equipment storage and construction activity, as allowed.

Relocation of Existing Parking Patrons

Boston Development Group, owners of 1842 Beacon Street, is securing Temporary Monthly Parking Permits from the Town of Brookline for use at select meters along Beacon Street by the existing tenants that park in the surface parking lot at 20 Englewood.

The tenants that currently park underneath 1842 Beacon Street will be relocated to the surface lot during reconstruction of the garage ramp. After the garage ramp work is complete, those tenants will return to parking underneath 1842 Beacon.

Construction Parking/Traffic/Obstructions

Temporary exclusive rights to use the six metered street parking spaces along the frontage of the project will be secured from the Town of Brookline Transportation Department for construction vehicular use (see attached plan for location). Additional parking will be along Englewood in metered and unmetered spots on an as available basis.

If any blockage of normal street or sidewalk traffic is required due to needs of construction, permits and details will be procured as required.
All neighboring driveways and hydrants will be kept free and clear of any short and long term obstructions related to parking or construction activity. If obstructing a driveway is required, project will seek permission from owner(s) of neighboring properties prior to obstructing the driveway.

Sidewalk Obstruction

In order to maintain a reasonable separation between construction activities and the general public to maximize pedestrian safety, the sidewalk at Englewood Avenue along the property frontage will be closed to pedestrian traffic for the duration of construction. In addition, this sidewalk area will be actively used by construction for unloading of construction materials which will reduce the amount of disruption to vehicular traffic in Englewood Avenue. The sidewalk area will be fenced off with temporary chain link fence, and if required for safety, a jersey barrier will be installed along the existing curb line.

As shown on the attached plan, a new pedestrian crosswalk across Englewood Avenue will be installed at the northwest corner of the property. Pedestrian will then continue south along the east side of Englewood, across Lanark Road and the next private road, until they reach the crosswalk at the intersection of Englewood and Beacon Street. A detour sign will be posted at both sides of the property where the closure occurs, and a warning sign, "Sidewalk closed ahead. Detour to east side of Englewood Avenue." will be installed on the west side of Englewood at the Beacon Street intersection.

Truck Route

Trucks will approach the site from Route 128. They will take exit 20 off Route 128 (I-95) then head eastbound on Route 9 (Boylston Street). They will turn left at Chestnut Hill Avenue, turn right onto Beacon Street, then left onto Englewood Avenue to arrive at the site.

Trucks will depart the site one of two ways. Alternate #1 is for trucks to continue westbound on Englewood, then turn left onto Chestnut Hill Road. Alternate #2 is for trucks to head southbound on Englewood, turn right onto Beacon Street, then left onto Chestnut Hill Road. In either case, they will head south on Chestnut Hill Road, then turn right onto Route 9, and continue on Route 9 to Route 128.

The attached plan shows the above directions.

Neighborhood Notification

Neighbors within 200 feet will be given notification flyers at the beginning of the project with information regarding the proposed construction parking, sidewalk closing, and truck route.

Fire Hydrant Water Meter

The existing fire hydrant along the Englewood frontage shall be protected. Permission to install a fire hydrant water meter will be requested from the City of Brookline Water Department to provide water for use in dust control, vehicular washdown, and construction use (i.e. mortar for laying brick).

Security and Lighting

During interruptions to interior and exterior lighting and existing or final door and window installation, measures will be taken to assure safe and secure site conditions, including temporary lighting, boarding of any openings in building envelope, and signage indicating property use and restrictions.

Safety

Site will be maintained as a safe and secure worksite at all times and will comply with all osha requirements where applicable to residential construction operations.

No 'Attractive Nuisance' conditions will be created on site.

A copy of contractor's jobsite safety folder containing emergency information, insurance information and standard practices and procedures will be kept on site at all times.

Contractor shall keep the roadway free and clear of any debris and at the direction of the commissioner of public works, or his designee, shall sweep roadway.

Sanitary Facilities

Temporary toilet facilities will be kept on site as needed during course of construction. They will be maintained regularly to control odor. The Temporary Toilet facilities location will vary depending on type of construction activity currently ongoing to both maintain safety as well efficient access for the worker.

Rodent Control Plan

All trash will be placed in appropriate receptacles and disposed of on a regular basis. A pest control expert will be consulted to provide additional proactive strategies to control the rodent population and to be on call in case further control efforts are required.

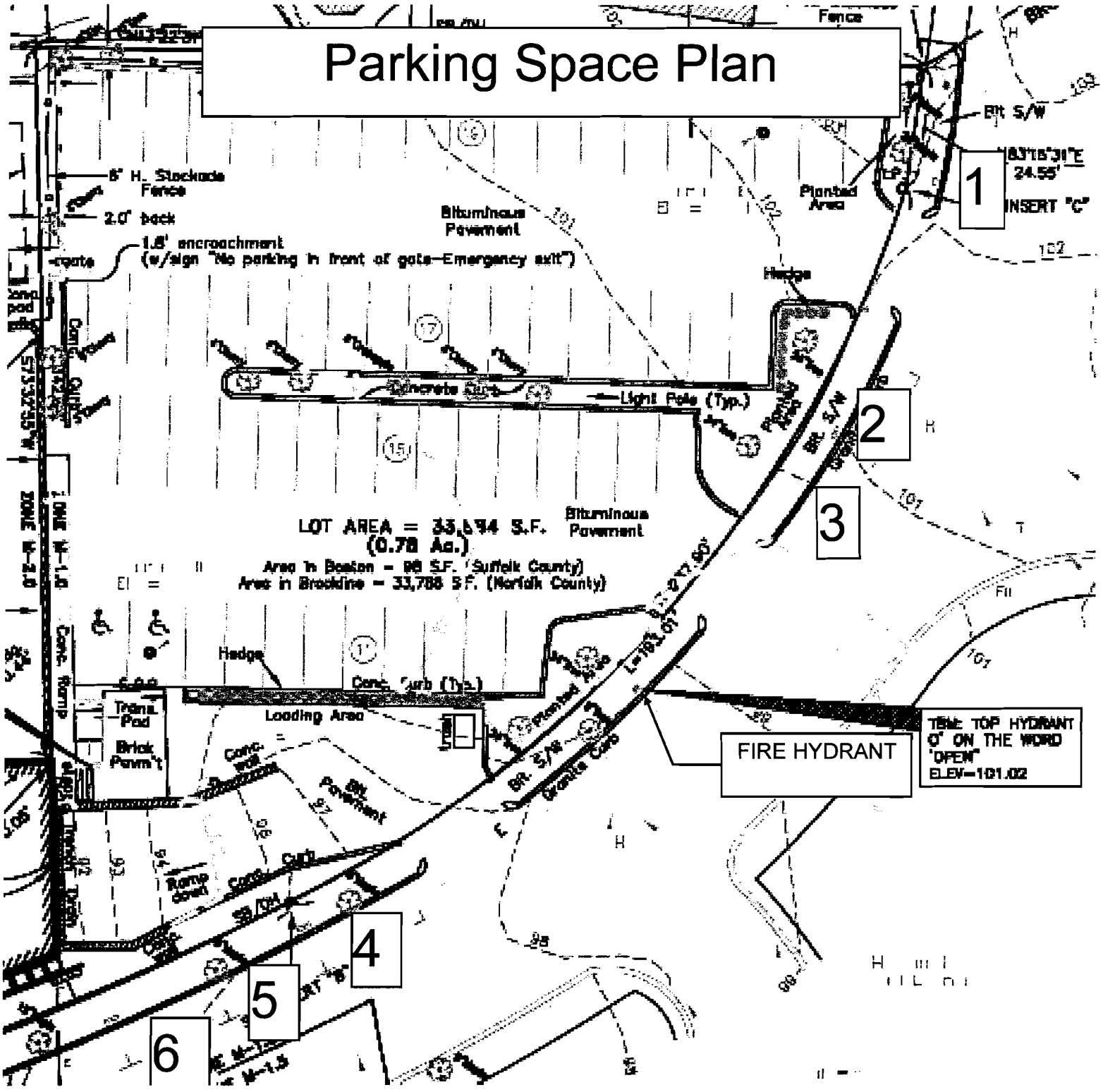
Changes to Construction Management Plan

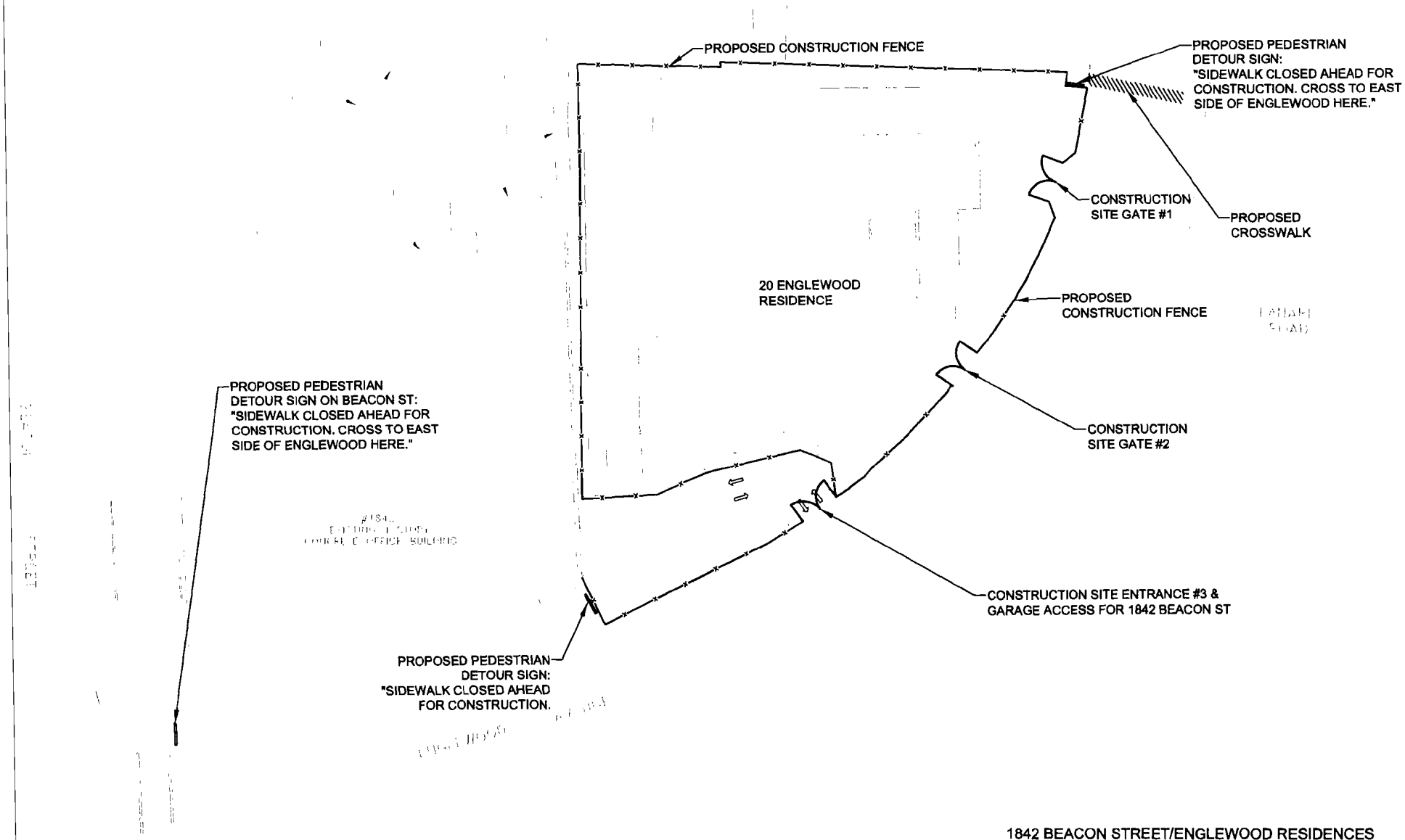
As the project progresses, we may find we need to alter our approach to some aspects of construction in order to achieve our goals and to maintain a safe and secure site with minimal impact to our neighbors.

Any changes in the construction management plan shall be brought to the attention of the director of engineering/transportation.

END

Parking Space Plan



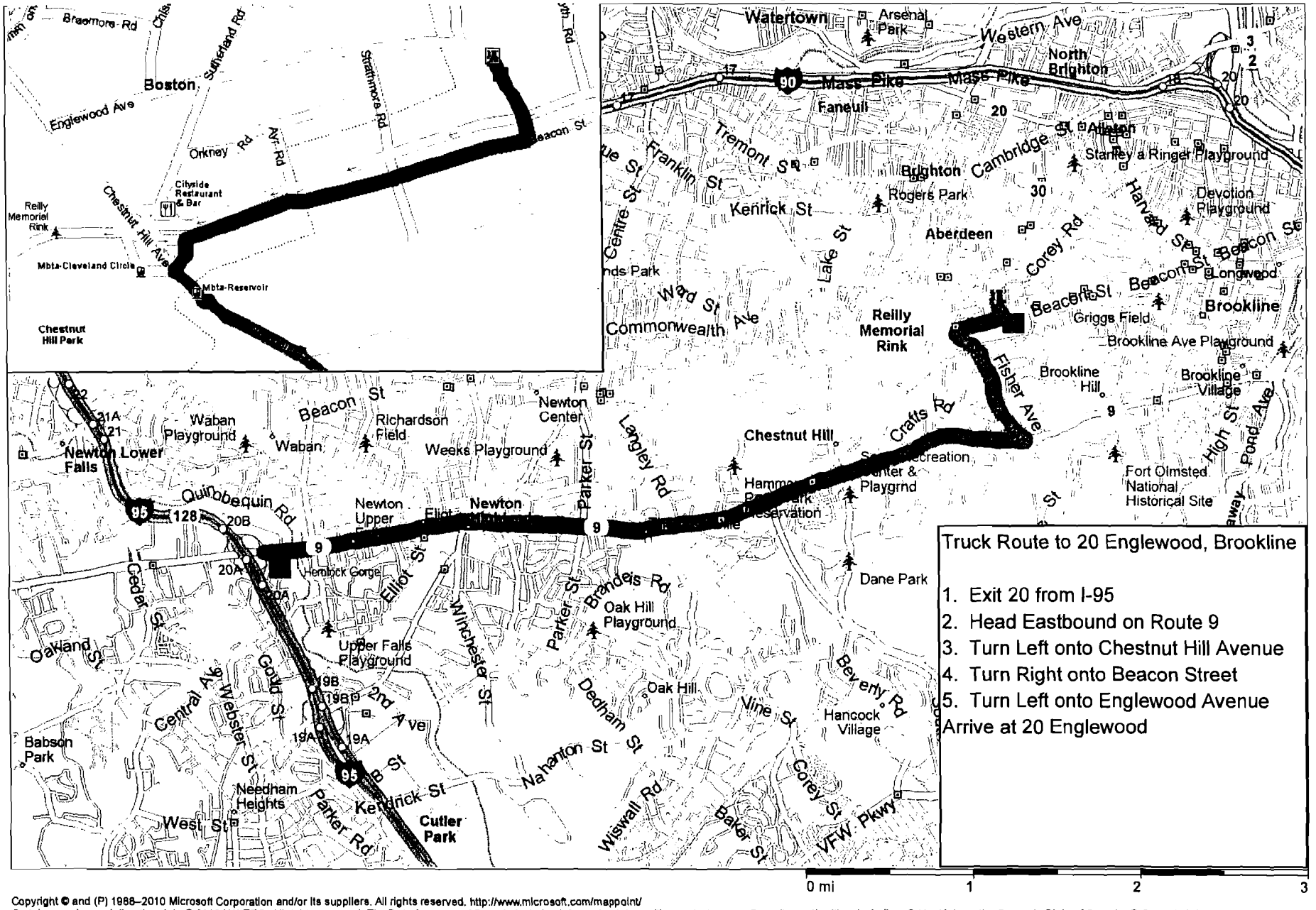


PROPOSED PEDESTRIAN DETOUR

1842 BEACON STREET/ENGLEWOOD RESIDENCES
10/20/2011

RODE Architects, Inc.

Truck Route Inbound to 20 Englewood



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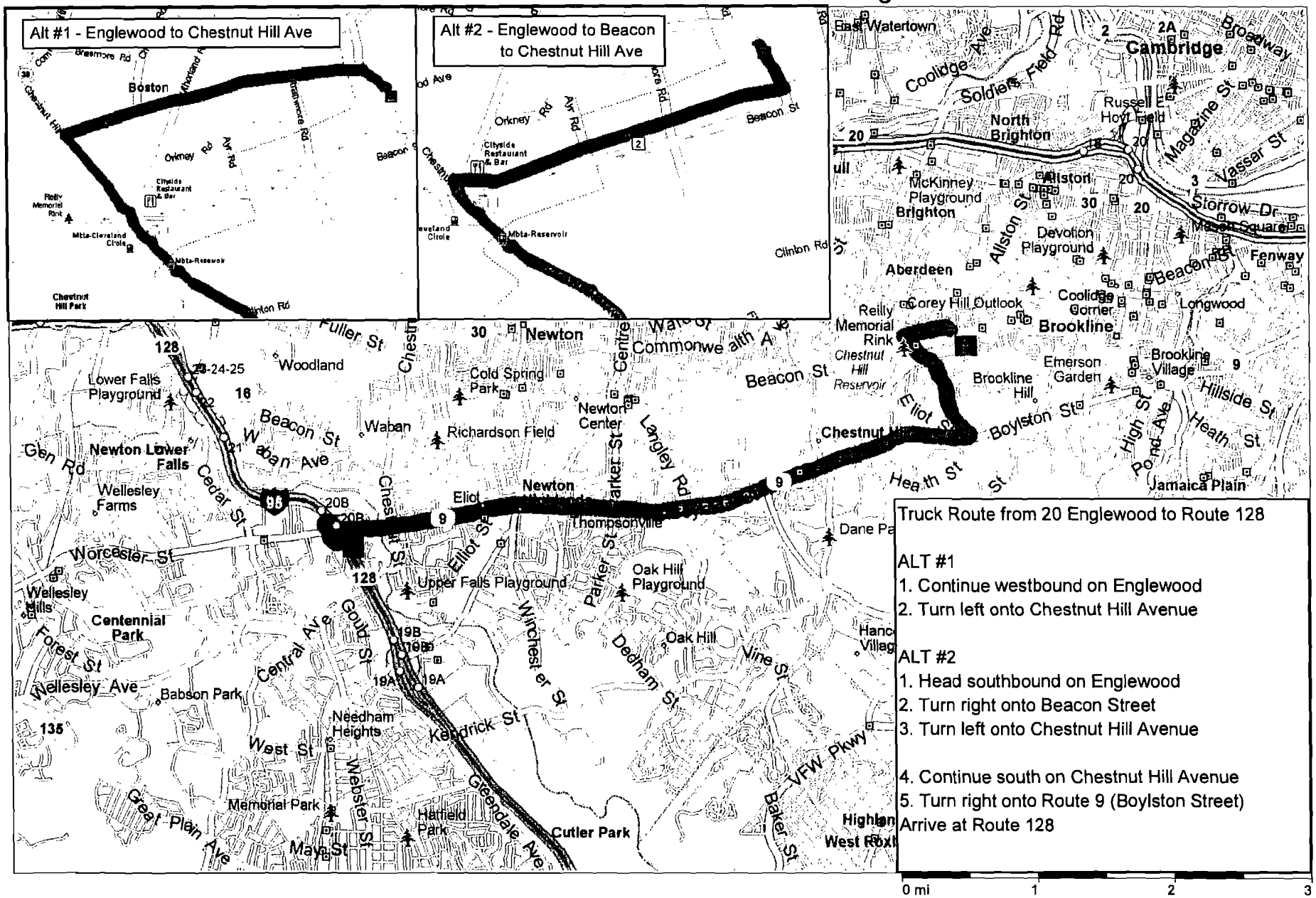
Truck Route outbound to Route 128 from 20 Englewood



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