
Atlantic Yards Arena and Redevelopment Project

*Response to Draft Scope of Work for a
Supplemental Environmental Impact Statement*

BrooklynSpeaks

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1. Background

1.1 BrooklynSpeaks

BrooklynSpeaks is an initiative of civic associations, community-based organizations, and advocacy groups concerned about the future of development at the Atlantic Yards site. Since the approval of the Atlantic Yards plan by the State of New York in December of 2006, the BrooklynSpeaks sponsors have advocated for transparency by State and City government with respect to project governance, as well as for the involvement of the public in the decision-making process. We have also drawn attention to adverse environmental impacts of the plan that remain to be fully and properly addressed.

The sponsors continue to work to create a dialog among residents, Community Boards, elected officials and State and City agencies around responsible development at the Atlantic Yards site that meets Brooklyn's needs and addresses the concerns of surrounding neighborhoods, while maintaining accountability to the taxpayers of the City and the State.

BrooklynSpeaks is a collaborative initiative of the following sponsors:

- The Atlantic Avenue Local Development Corporation
- The Boerum Hill Association
- The Brooklyn Heights Association
- The Congress for New Urbanism (New York Chapter)
- The Fifth Avenue Committee
- The Park Slope Civic Council
- The Pratt Area Community Council
- The Prospect Heights Neighborhood Development Council
- Tri State Transportation Campaign

1.2 The 2009 MGPP and the SEIS

The Empire State Development Corporation's approval of Atlantic Yards' 2009 Modified General Project Plan (MGPP) had the effect of extending the project's build-out from ten years to twenty-five years, while adding no mechanism for effective project oversight. Faced with more than double the duration of construction impacts being borne by our communities, as well as deferral of the vast majority of public benefits for a generation, a group of BrooklynSpeaks sponsors filed suit against the ESDC and Forest City Ratner Companies (FCRC) in November of 2009.

BrooklynSpeaks' petition was filed on November 19, 2009, prior to FCRC's master closing with the ESDC and purchasers of the arena bonds, which took place on December 29, 2009. The Master Development Agreement (MDA) was not immediately released to the public, nor had it been released by the date of oral arguments in the matter, January 19, 2010. At the hearing on that date, counsel for the ESDC implied that remedies in the MDA were sufficient to ensure Atlantic Yards would be completed on schedule—assumedly the ten-year project schedule initially studied in the environmental impact statement. On January 25, 2010, the ESDC made the MDA available to the public. It showed that remedies for completion of the full Atlantic Yards project were minimal, and only applied after 25 years. The BrooklynSpeaks petitioners were not allowed to submit the MDA to the court. Consequently, on March 10, 2010, the court found for the ESDC and FCRC.

The BrooklynSpeaks petitioners filed a motion to renew their claim based on the evidence in the MDA. Had the court ruled against ESDC, FCRC's access to escrowed \$500 million in bond financing would have been in jeopardy. The escrow period expired in May 2010. The court heard the reargument in June 2010. On November 9, 2010, the court ruled that the master development agreement called in to question ESDC's "rational basis" in approving the 2009 MGPP, and ordered ESDC to submit findings justifying its use of

10-year build-out for its environmental analysis. On December 16, 2010, ESDC submitted findings to the court that, among other things, claimed the timelines negotiated in the master development agreement had no bearing on its expectation for the actual project schedule, but that, in any event, the surrounding communities would not suffer additional adverse impacts by more than doubling the construction duration to 25 years.

On January 18, 2011, almost one year after the first hearing in the suit, the petitioners filed a supplemental petition challenging the findings in the ESDC's response. Together with their supplemental petition and with its reply to ESDC's answer, the BrooklynSpeaks sponsors also submitted affidavits from experts in urban planning and sustainable development that countered ESDC's contention that the community would suffer no additional impacts from extended construction, and supported BrooklynSpeaks' call for a supplemental environmental impact statement (SEIS). On July 13, 2011, the court found that the ESDC's approval of the 2009 MGPP based upon the 2006 environmental impact statement lacked a rational basis, was arbitrary and capricious, and therefore illegal under New York State environmental law. Justice Marcy Friedman ordered the ESDC to prepare a SEIS, and to reconsider the MGPP in light of the findings in the SEIS.

On September 9, 2011, FCRC filed a notice of its intent to appeal the July 13 decision ordering a supplemental environmental impact statement. ESDC followed suit on September 12. The two notices stayed the order to conduct an SEIS pending appeal. The Appellate Division heard oral arguments in the appeal on February 14, 2012. On April 12, the Appellate Division issued a unanimous decision upholding the lower court's ruling that ordered ESDC to prepare a SEIS and revisit the 2009 MGPP.

On May 14, 2012, ESDC and FCRC filed notices with the New York State Court of Appeals requesting leave to appeal the Appellate Division decision. The motion by ESDC and FCRC was denied by the Court of Appeals on June 26, 2012. With no further appeals possible, the decision of the lower court ordering a SEIS and revisiting of the 2009 MGPP became final.

On December 19, 2012—nearly six months following the exhaustion of its appeals, seventeen months after the lower court ruling ordering an SEIS, and more than three years after it had illegally approved the 2009 MGPP without proper environmental review—the ESDC issued a “Draft Scope of Work for a Supplemental Environmental Impact Statement for the Atlantic Yards Arena and Redevelopment Project.”

This document contains the response of the BrooklynSpeaks sponsors to the Draft Scope.

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2. Summary

The BrooklynSpeaks sponsors appreciate the opportunity to respond to the draft scope of work for the Atlantic Yards Supplemental Environmental Impact Statement (SEIS). We note that the need for a SEIS was cited prior to the approval of the 2009 MGPP, not only by our organizations but by nearly every local elected official representing the neighborhoods surrounding the Atlantic Yards project. We sincerely regret that litigation was required to compel the study anticipated by the draft scope, but look forward to working constructively with the ESDC to ensure that the SEIS it prepares will be a new starting point from which the stated objectives of the Atlantic Yards project can be achieved on a timely basis, through a transparent process with public accountability.

As its core deliverable, the SEIS must reconcile the stated purpose of the Atlantic Yards project to eliminate purported blight, with the 2009 MGPP's potential of extending the exact same blight some 15 years past the timeframe given for completion of the Atlantic Yards project at the time of its approval in 2006. In the absence of such reconciliation, we find these two positions antithetical, particularly given that a pattern of investment and organic development had already been established in the area within the project footprint prior to Atlantic Yards' 2006 approval. It will not be enough for the SEIS to conclude that construction impacts are not greater over 25 years than they otherwise would be over 10 years. The Atlantic Yards project itself was approved to address a blight condition so onerous that hundreds of millions of dollars of direct and indirect government aid, zoning overrides and the use of eminent domain all were apparently justified. There would appear to be some public interest in such blighted conditions being remediated in a timely fashion, and the SEIS should determine whether delaying the completion of the project supports that interest.

But to the extent the SEIS nevertheless should conclude that extending project construction by nearly a generation would not create additional adverse impact to local communities, it must be prepared to explain how commitments to protect air quality, limit construction noise, manage contention for on-street parking between construction workers and residents, and control the use of residential streets by construction vehicles will be enforced. Violations of these commitments during the construction of the Barclays Center arena were well documented not only by residents but also by the ESDC's own environmental monitor, leading an independent environmental engineer to conclude that ESDC and the City of New York in effect allowed Forest City Ratner to break project commitments and City law with impunity. Why should the public believe later phases of the Atlantic Yards project will be different? This question must be answered thoroughly and with candor.

Nor is it sufficient for the SEIS to limit its scope of analysis to Atlantic Yards' second phase footprint. Current project agreements allow the development of features of Phase I, including building B1 and the entire Site 5, to extend beyond the originally-approved 10-year time frame. Analyses involving the impacts of construction on transportation and pedestrian circulation must be revisited for the entire project site based upon current conditions and existing plans.

The SEIS must also assess the time value of economic development and affordable housing benefits ascribed to the Atlantic Yards project. Would thousands of affordable apartments delivered fifteen years late really be as effective in terms of preserving socioeconomic diversity in the study area as if they were delivered on the originally approved schedule? And what would the delay in adding tens of thousands of residents mean to the development of businesses in Fort Greene, Prospect Heights, Park Slope and Boerum Hill?

What about the "temporary" open space impact cited in the draft scope of work? The build year guidelines in the *CEQR Technical Manual* would suggest that an interim build year based on the contractual obligation to complete Phase I in 12 years be considered as a point at which the open space impact must be mitigated—with or without the Phase II buildings.

The BrooklynSpeaks sponsors believe that when all of the above impacts are considered together, they indicate that an alternative plan for the development of Phase II of the Atlantic Yards project must be evaluated. This alternative plan should focus on the opportunity to restore the original 10-year construction plan by dividing the Phase II site among multiple development teams through a competitive bidding process. Had ESDC not withheld disclosure of the change in project schedule in 2009 in order to avoid a SEIS, exploring this alternative would have made good sense at the time. With intense development

activity in downtown Brooklyn today, it is no longer a matter of simple good sense, it is imperative that it be explored in order to realize the stated goals of the Atlantic Yards project.

The recommendations summarized above are detailed in the sections below.

3. The impact of prolonged (and augmented) blight

3.1 Consistency between project goals and delay from 2009 MGPP

In its Executive Summary, the Atlantic Yards 2006 Final Environmental Impact Statement states, “The overarching goal of the proposed project is to transform a blighted area into a vibrant mixed-use community, incorporating principles of environmental sustainability.”¹ In this case, “blight” is defined according to Section 10(c) of the New York State Urban Development Corporation Act, which describes “a substandard or insanitary area” which “tends to impair or arrest the sound growth and development of the municipality.” ESDC’s justification for the project itself hinges on the goal of removing this condition, and the SEIS must study the impacts of delaying its achievement by 15 years or more.

At the time of its approval by the ESDC, the 2009 MGPP did not concern itself with the impact of delaying Atlantic Yards’ completion and realization of its objectives because the 2009 MGPP attempted to conceal the delay which was later memorialized in the Master Development Agreement (MDA). However, given that the court in July 2011 found an effect of the 2009 MGPP was to delay the completion of the Atlantic Yards project and has ordered ESDC to complete the SEIS, an assessment of the impacts of delaying the goals of the project cannot be avoided in order for the agency to truly consider, as ordered by the court, whether the 2009 MGPP should in fact be approved.

3.1.1 The rail yards

A main source of the claimed blight was stated as being the Vanderbilt rail yards, “which has long been a blighting influence in the immediate area,” one that creates a “physical and visual barrier that separates the neighborhoods of Boerum Hill, Fort Greene, Prospect Heights, and Park Slope.”² The 2006 Blight Study states, “One of the principal reasons why the project site has remained in a state of physical disrepair and relative economic inactivity while surrounding blocks have experienced significant revitalization is the presence of the open below-grade Vanderbilt Yard,” and found, “The gap in the urban landscape that is created by the below-grade rail yard creates an environment that discourages street-level activity, and the inadequate street lighting surrounding the rail yard, in combination with vacant lots and deteriorating structures on the blocks south of the yard, creates a sense of isolation that spans across the project site.”³ The Blight Study also found that the blighting effect of the rail yards could be an inducement to crime: “The lack of adequate lighting, presence of deteriorating built structures and vacant lots, and lack of street-level activity creates a sense of isolation that may encourage illegal activity,” and “The lack of pedestrian activity and relative isolation and desolate feeling on the project site, particularly on Pacific Street south of the rail yard, creates an environment that is conducive to activities such as automobile theft and drug sales.”

The SEIS must therefore study the effect of prolonging for an additional 15 years the blight associated with the Vanderbilt rail yards found by the ESDC in 2006.

What would be the specific impact to the “immediate area” surrounding the rail yards should they remain “a blighting influence” for an additional 15 years? The SEIS should identify impacts with respect to land use, socioeconomic conditions, open space, cultural resources, urban design, and neighborhood character, and propose necessary mitigations in lieu of the expected project benefits. The SEIS must also study the effect of prolonging the blight conditions around the rail yards on crime rates in the area.

What of the neighborhoods of Boerum Hill, Fort Greene, Prospect Heights and Park Slope cited in the FEIS as being impacted by a “physical and visual barrier” of the rail yards? The SEIS must study the impact of prolonging this condition for an additional 15 years with respect to land use, socioeconomic conditions, open space, cultural resources, urban design, and neighborhood character, and again propose necessary mitigations in lieu of the expected project benefits.

¹ Atlantic Yards Final Environmental Impact Statement (“FEIS”), “Executive Summary”; New York State Empire State Development Corporation, November 2006.

² Ibid.

³ “Atlantic Yards Arena and Redevelopment Project—Blight Study,” AKRF Inc., July 2006.

3.1.2 Block 1129

The 2006 Blight Study did not find that all buildings on block 1129 exhibited blight, and that only three were vacant. The buildings demolished on block 1129 following approval of the Atlantic Yards project included residential buildings housing working families, light manufacturing buildings housing artists and related creative sector businesses, and the historic Ward Bakery building. Given the definition of “blight” used in the 2006 Blight Study, the SEIS must determine whether the demolition of buildings on block 1129 and their replacement with a surface parking lot extended the blight that ESDC identified prior to the project’s approval in 2006. If so, the SEIS should assess the impacts over 15 additional years of construction in terms of land use, socioeconomic conditions, open space, cultural resources, urban design, and neighborhood character, and propose necessary mitigations in lieu of the expected project benefits.

3.1.3 Open space

The Blight Study specifically references Atlantic Yards proposed “at least 7 acres of publicly accessible open space⁴” as mitigation for blight in the project area. The SEIS must study the impact to blight removal of delaying the open space for up to 15 years or more.

3.1.4 Preexisting project permits and agreements

Demolition and site preparation at Atlantic Yards began shortly after the project’s approval in December 2006. In some cases, City agencies issued permits to the project sponsors for related work. For example, in 2008, the New York City Department of Parks issued a permit for the removal of 86 street trees around the project perimeter. The permit was conditioned on monetary restitution, as well as a commitment by Forest City Ratner to replace the trees, presumably with an outer limit of project completion. With the delay in construction, this permit would allow some or all the site perimeter to be empty of trees for an additional 15 years.

The SEIS should identify this and all other permits granted to the project sponsors prior to the 2009 MGPP and determine whether the 15-year delay in construction would have the effect of increasing blight in the project area and document the impact of that extended blight. The SEIS should assess the impacts in terms of land use, socioeconomic conditions, open space, cultural resources, urban design, and neighborhood character, and propose necessary mitigations in lieu of the expected project benefits.

3.2 Comparable extended development in urban areas

The SEIS should study comparable projects involving extended development located within vibrant urban environments to identify impacts likely to be suffered by communities surrounding the Atlantic Yards site.

3.3 Best case future without the project

In making the above assessments, the SEIS should also consider for comparison a reasonable best case scenario of development that likely would have occurred had the ESDC and the Atlantic Yards project not transferred control of the site to Forest City Ratner and instead allowed organic development already established at the site to continue.

⁴ Ibid.

4. Insufficient environmental controls and ineffective enforcement of project commitments

The FEIS assumed that planned measures to mitigate air quality and noise impacts from construction would be fully implemented. However, during construction of the Barclays Center arena, numerous violations of provisions of the Memorandum of Environmental Commitments (MEC) were documented not only by local residents, but also by ESDC's own environmental monitor, Henningson, Durham & Richardson Architecture and Engineering, P.C. (HDR). Further, many of the mitigations proposed for noise and air impacts proved to be insufficient during arena construction. Finally, several key elements of the plan to mitigate construction impacts were never implemented at all.

Although it was possible for the FEIS to make theoretical assumptions about the efficacy of environmental mitigations, the SEIS must now review the actual experience during arena construction and assess the extended impacts of an additional 15 years of construction on that basis. The observations below were included in a report "Evaluation of Construction Air Quality and Noise Commitments and Mitigations, Atlantic Yards, Brooklyn, NY," prepared by Sandstone Environmental Associates for the Prospect Heights Neighborhood Development Council in June 2012. In addition to the material presented below, ESDC and its consultants should study the Sandstone report (which has been attached to this response) for additional examples of environmental impacts experienced during arena construction, as well as additional recommendations for action, to be considered during the formulation of the SEIS scope of analysis.

4.1 Non-compliance with and deficiencies in agreed upon environmental commitments

4.1.1 Construction vehicles

In the MEC, FCRC committed to scheduling truck deliveries to minimize queuing, and "untimely deliveries shall, in general, be turned away or reassigned with different delivery times." FCRC agreed to require its contractors to limit all unnecessary idling of vehicles and non-road engines, ensure that engines are shut off when not in use, and enforce idling limits in queuing trucks.

During arena construction, these commitments were often violated. HDR's quarterly reports noted idling and queuing problems in 2010 and 2011, and the OEM subsequently notified Hunt Construction of the violations. Violations were documented numerous times on the Atlantic Yards Watch web site (AYW).

Reports from HDR and the onsite environmental monitor (OEM) also documented many instances of trucks traveling to the arena via unauthorized routes. AYW reported that trucks regularly parked in travel lanes and no-standing lanes, used illegal routes rather than designated truck routes, travelled the wrong way on one-way streets, and were observed making left turns at red lights. The non-public Pacific Street between Carlton and Vanderbilt is supposed to be a holding area for trucks, but they regularly idle on public Pacific between 6th and Carlton or on Atlantic Avenue.

The SEIS should reevaluate volume and hourly distribution of trucks to determine their environmental impacts over a 25-year period. The SEIS should further identify the root causes of the violations of truck protocols documented during arena construction and propose additional measures to improve enforcement.

The SEIS should propose a more reliable means of informing individual truck drivers and dispatchers of the appropriate rules and regulations, and authorized truck routes.

Finally, the SEIS must assess the ability of City agencies responsible for enforcement to monitor the site perimeter, issue summonses as required, and propose any additional resource plan required to ensure compliance with City and State laws.

4.1.2 Construction worker parking

The MEC states, "FCRC shall provide on-site parking for construction workers at levels appropriate in light of the number of workers employed at the site during different stages of construction, to a maximum of 800 spaces. FCRC shall monitor the work force levels throughout the construction period and shall report to ESDC on a quarterly basis as to the number of on-site spaces and the utilization of such spaces."

However, during arena construction, FCRC provided no paid worker parking, and provided 90 free spots to senior employees. The result was that not only was much of the available on-street parking near the site taken by arena construction workers, but a significant amount of illegal worker parking was documented.

The SEIS must revisit the policies proposed in the MEC to recommend appropriate changes in light of the impacts experienced during arena construction. The SEIS must address the need for ongoing monitoring of the number of construction workers arriving at the site in private vehicles to ensure an adequate number of off-street parking spaces are being provided.

The SEIS should also study and propose genuine incentives to reduce auto trips by construction workers, including hiring local workers, establishing a changing room with lockers, providing free transit passes and having construction workers park in one lot off-site so FCRC can transport them to and from work sites via vans.

Finally, the SEIS should identify the method of calculating construction worker parking demand mentioned on page 18. For the 2006 FEIS, it was apparently based on a survey of 129 workers who were working on the 24-story expansion tower at the New York Marriott at the Brooklyn Bridge in 2006. This approach may have underestimated the demand for parking. Work at the Marriott in 2006 covered a single site within a block and likely involved less nighttime work. Construction jobs at Atlantic Yards, in contrast, have been scattered over a 22-acre site and involve varied daytime and nighttime shifts. This would make carpooling less feasible than for the Marriott and increase the percentage of workers desiring to drive their own cars.

4.1.3 Extended hours construction

The 10-year construction schedule discussed in Chapter 17 of the FEIS implies that construction may last into the early evening up to three days per week approximately every other week. The frequency of evening and night work was not specified, leading the reader to believe that it would not occur frequently or for extended periods of time. Chapter 17 did not identify periods when consecutive days of late night work would occur for weeks or months at a time.

However, extended hours construction was the rule rather than the norm during arena construction, expanding to 24/7 in the months leading up to the arena opening, a clear violation of the original commitment. As mentioned previously, ESDC's environmental monitors did not generally visit the site outside of normal construction hours. Had they done so regularly, they would have seen on several instances violations of noise policies as documented in AYW and the Sandstone report.

In reevaluating noise impacts for a 25-year construction schedule, the SEIS should study the following strategies for reducing impacts:

- Schedule noisy truck deliveries and construction-related garbage pick-up for daytime hours.
- Provide required noise shielding to reduce noise levels for nearby residents.
- Monitor nighttime noise levels in the vicinity of residences to document noise levels during extended hours.
- Reevaluate the construction schedule so that nighttime work can be avoided.
- Provide better oversight and foresight regarding the types of equipment and work permitted late at night.
- Maintain a log of work during extended hours, including the time, type of work, etc., in the quarterly reports.
- ESDC's on-site environmental monitor (HDR) and FCRC's OEM should visit the site during extended and late-night hours one or more times per week using an unpredictable schedule.
- Replace loud back-up beepers with lights or more environmentally friendly devices that emit noise several decibels above background levels.
- Incorporate modifications to the dumpsters that will mitigate noise levels during trash collection such as rubber wheels.

Of greatest importance, the SEIS should seek and obtain more stringent commitments regarding extended hours work, including:

- Reducing the incidence of extended hours, particularly the scheduling of construction for 24 hours per day
- Limiting the number of consecutive days when extended construction hours, particularly 24-hour construction work, is permissible.
- Requiring that construction periods with extended hours, particularly activities carried out 24/7, be followed by at least 7 days of normal construction hours.

4.1.4 Equipment

As a function of the MEC, FCRC committed to the following:

- Follow Subchapter 5 of the NYC Noise Control Code and use a wide range of equipment, including construction trucks, that produces lower noise levels than typical construction equipment.
- Use construction equipment that meets the noise emission levels specified in Table 17c of the FEIS, “Construction Equipment Noise Emission levels,” where such levels are more stringent than those imposed by the Noise Code.
- Require all contractors and subcontractors to properly maintain their equipment and have quality mufflers installed.
- As early as practicable in the construction period and wherever feasible, use electrical powered equipment such as electric scissor lifts and electric articulating boom lifts, rather than diesel-powered equipment for construction activities.

In July 2011, Sandstone reported, “The use of the Noise Control Code and the use of quieter equipment, where available, has not been followed consistently. This is partly due to inadequate oversight.”⁵

Given the significant number of noise complaints registered during arena construction, the SEIS should consider whether measures taken by other major construction projects such as the Boston Central Artery and Tunnel Project Construction Noise Control Specification 721.56 should be applied to future construction at Atlantic Yards. These measures include, among other things, the following:

- Banning the use of impact devices (jack hammers, hoe rams, pavement breakers) at night;
- Allowing the site engineer to stop a contractor’s work, without compensation for lost time, if noise conditions are unacceptable;
- Requiring an updated noise control plan to be submitted every 6 months; and
- Requiring noise measurements to be submitted on a weekly basis.

4.1.5 Shielding and windows

The MEC specifies construction areas shall be shielded with a minimum 8-foot high barrier (constructed of ¾” thick plywood), with a 16-foot high barrier (of ¾” thick plywood) adjacent to sensitive locations, including locations along Pacific Street, Dean Street, and Flatbush Avenue opposite residences and the Brooklyn Bear’s Pacific Street Community Garden, and, where practicable, truck deliveries shall take place behind these barriers. Noisy delivery trucks, such as concrete trucks, are to be operated behind the barriers. Further, noise curtains and equipment enclosures are to be used to shield sensitive receptor locations.

The Sandstone report states, “The noise barriers, where deployed, are not sufficient to protect bedrooms on the second floor and higher. In addition, the attenuation provided by barriers composed of ¾” plywood over a chain-link fence may not be sufficient to ensure an interior L₁₀ noise level of 45 dBA or less at affected residences. New York City’s Vendor Guidance Document for Smaller Construction Jobs states that 1” plywood has an STC rating of 30. The STC rating of ¾” plywood, based on various internet sources, ranges

⁵ For specific examples, see Sandstone, p. 19.

from 22 to 28. In areas subject to construction noise levels with an L_{10} of 75 or more, the plywood walls, by themselves, would be inadequate and would need to be coupled with additional noise reduction measures.”

The SEIS must review the sufficiency of the noise mitigations in the MEC based upon community experience during arena construction, and determine whether additional mitigations and more effective monitoring should be introduced. Specifically, the SEIS should study the use of FHWA’s RCNM model, CADNA, on-site noise monitoring, or other means of determining noise levels at affected residences in order to implement an appropriate set of mitigation measures that may include noise curtains and equipment enclosures.

The FEIS projected an area around the Atlantic Yards footprint where residents were expected to experience high noise levels during construction. FCRC offered double-glazed replacement windows and air conditioners to residents in this area; windows were installed in 2009 and 2010, but no information on the noise attenuation ratings of the model of windows installed was provided. Further, during arena construction, residents outside the noise impact zone defined in the FEIS reported severe noise impacts. Other residents within the zone claimed to have not been informed about the noise mitigations offered by FCRC. Finally, the sensitive receptor locations in the 2006 analysis (locations like residences or open space where human activity may be affected by project generated noise) do not account for more recent conversions from commercial to residential in the vicinity of the project site.

Given an additional 15 years of construction, the SEIS must review the sufficiency of the residential window replacements offered as mitigation under the MEC, including a means to determine the necessary OITC rating to attenuate projected construction noise levels or monitored noise levels during noisy construction periods. The zone for expected noise impacts must be reviewed and enlarged as may be necessary based on the experience during arena construction (we note that building a platform over the rail yards is expected to produce significant noise), and a mechanism for continued outreach to residents should be proposed.

4.1.6 Vibration

The MEC requires FCRC to implement a monitoring program to ensure that vibration levels at the Swedish Baptist Church and the town houses along Dean Street immediately adjacent to the project’s Building 15 site are kept below 0.50 inches/second.

However, vibration complaints have been registered from properties outside of this area. These properties have included the Newwalk building on the block between Dean Street, Pacific Street, 6th Avenue and Carlton Avenue; buildings on Vanderbilt Avenue between Dean and Pacific Streets; and Carlton Avenue between Dean and Pacific Streets. Both of the latter two areas are within the Prospect Heights Historic District, but FCRC’s Historic District Construction Protection Plan does not address them because the district was designated in 2009, three years following the drafting of the plan. FCRC installed vibration monitors in several town houses on Carlton Avenue between Dean and Pacific Streets; however, results from the logs of those monitors were not included in the quarterly HDR reports. In one incident, a resident of Carlton Avenue reported the collapse of a ceiling in his home following construction activity causing excessive vibrations.

The SEIS must review the area originally projected to require vibration monitoring, and also assess the sufficiency of the monitoring program given local experience during arena construction. In particular, the SEIS should determine whether results from vibration monitors should be included in quarterly reports of ESDC’s environmental monitor (HDR), and whether these results should also be provided to property owners hosting the monitors. The SEIS should propose how to provide prompt responses to residents’ complaints of damage and document the damage, correlating the time of the damage with the construction activities at that time, and making all documentation available to HDR. To reduce the potential for disruption to local residents and damage to properties, the SEIS should identify construction activities that may cause severe vibrations in nearby residences and implement mitigation measures proactively to prevent damage; ban nighttime activities that may cause vibration as vibration is more disruptive when residents and their families are trying to sleep; and propose more effective mitigation methods to substantially reduce vibration from hoe rams, jackhammering, and other activities that may cause vibration to off-site structures.

4.1.7 Fugitive dust and air quality

The MEC and the Construction Air Quality Measures Compliance Plan (CAQM, April 2010) spell out requirements for controlling dust emissions at the Atlantic Yards project. Among the measures described are:

- Limiting on site speed to five miles per hour;
- Using sleeves and wetting during demolition activities;
- Watering unpaved surfaces, including haul roads and excavation surfaces;
- Covering or water misting of stockpiled materials;
- Water spraying of any dry material which may release dust during loading and unloading;
- Covering of all trucks carrying loose material, and checking to see the covers are properly sealed; and
- Wheel washing of all trucks leaving the site.

The CAQM also includes a provision for FCRC and Turner Construction Company to conduct training sessions for construction personnel and contractors summarizing the requirements. Personnel attending the training sessions must be in a managerial position, and they shall be responsible for compliance by the contractor/subcontractor. Furthermore, FCRC will hold annual refreshers and will hold new training sessions if the compliance measures change.

During arena construction, AYW reported many violations of the dust control commitments. Many examples are documented in the Sandstone report. Sandstone also writes about reports by HDR to ESDC of violations over the course of nearly a year: “During the fourth quarter of 2010, HDR observed inadequate dust suppression measures and notified FCRC, who instructed Hunt to increase the wetting frequency. HDR’s first quarter report for 2011 notes that four buildings on Block 1129 were demolished, and HDR did not observe the use of drop transfer operations with closed sleeves and bins. HDR also reported a lack of adequate tire washing on-site...HDR’s second quarter report for 2011 reported problems with fugitive dust on Block 1129 and the adjacent Pacific Street queuing area due to inadequate watering, gravel cover, and wheel washing. Several off-site events were observed by HDR and reported to the OEM in April and March of 2011.”

The failure of FCRC to abide by, and ESDC to enforce, dust suppression commitments was one of the most glaring lapses in environmental impact mitigation during arena construction. The SEIS must determine the cause of this failure, and define the measures to be taken that will ensure such failures are not continued into later phases of construction.

Effective air quality monitoring is obviously a key component of ensuring compliance. However, Sandstone found numerous issues with air monitoring during arena construction:

- “The monitors are generally discontinued during conditions of precipitation or frozen ground. They also are not as effective during periods of high humidity or temperatures below 32F. Although windborne fugitive dust from storage piles would not be as great under these conditions, PM₁₀ could still be emitted from diesel combustion and from excavation work such as drilling.
- “Placement of the monitors may not be effective if wind direction changes frequently or if the observer cannot ascertain which monitor was the “downwind” monitor. Some monitored data actually shows lower PM₁₀ readings for the “downwind” monitor than for the “upwind” monitor.
- “Use of two or three monitors may not be sufficient to capture high readings at a work site if the work area is large or if dust problems develop at multiple site locations. During the first quarter of 2011, HDR noted an incident on February 3rd where an additional PM monitor should have been deployed downwind in the vicinity of the Carlton Avenue Bridge.
- “15-minute averaging periods for the data are not reliable or useful unless observers know for certain that a particular monitor was upwind or downwind. Under some weather conditions, the

wind can be highly variable. The 15-minute PM₁₀ averages may reflect a wind direction that occurred only 50% of the time.

- “Meteorological data that is averaged three times per day, as recommended in the CAMP, is not sufficient to correlate with air quality data averaged at 15-minute intervals.
- “Only PM₁₀ is monitored. PM_{2.5}, which has a lower permissible concentration under the NAAQS, is not included. PM_{2.5} from diesel exhaust has been associated with increased incidence of asthma in children.”

Further, AYW has documented that air monitors were deployed during arena construction between 7AM and 4PM, not during extended hours or weekend construction work.

The SEIS must evaluate the efficacy of the air monitoring effort conducted during arena construction and propose improved measures consistent with industry best practices for future phases of construction, including deploying monitors during extended hours and weekend work; increasing the number of monitors deployed based upon the size of the area where construction activities are occurring; using a state-of-the art monitoring system with built-in data loggers that send information wirelessly to a computer program that can evaluate the locations and wind data and identify which monitors are “upwind” or “downwind”; install at least one permanent PM_{2.5} monitor to ascertain 24-hour and annual concentrations of PM_{2.5} in the vicinity of the work sites; and setting the monitors’ audible alarms to also ring the cell phone of an employee who will respond.

4.1.8 Emissions

Under the MEC, FCRC agreed to implement a comprehensive diesel emissions reduction program. The program included maximizing the use of electric engines and minimizing the use of diesel; installing an electric grid throughout the site powered by Con Ed for use with electric construction equipment; requiring the use of ultra-low sulfur diesel fuel; and ensuring that diesel engines were fitted with Diesel Particle Filters (DPFs) or Diesel Oxidation Catalysts (DOCs).

During arena construction, Hunt Construction did not contact Con Ed regarding the power grid until the second quarter of 2010; its installation was delayed until after the summer high electric season, and the grid did not become fully available until after construction activities had peaked in the spring of 2011. During the intervening time, contractors used generators to power equipment. Sandstone reported that contractors Banker Steel and McKissack each complained that it was not practical for their workers to use the power grid at the site, and each employed diesel generators instead.

HDR’s first quarter 2010 report states that it periodically requests ultra-low sulfur diesel receipts to verify compliance. It is not known how frequently it received them, or if there are any instances of non-compliance. The air quality monitoring plan does not include the one-hour SO₂ standard that was adopted in June 2010.

HDR also found that some construction equipment did not have the required DPFs installed. In some cases, the FCRC on-site environmental monitor allowed non-compliant equipment to remain on site for up to three months while awaiting replacement by compliant equipment.

Diesel particulates are a particular concern in NYC where studies have found a direct association between diesel exhaust and asthma in children. The SEIS should study and project air quality impacts from diesel emissions for the 25-year construction period, and compare a scenario in which electric equipment, DPFs and ULSD fuel are used, to a scenario in which those mitigations are not employed. The analysis should include the one-hour SO₂ standard. To avoid problems in policing equipment with DPFs, the SEIS should study whether to require contractors to use newer equipment that complies with EPA Tier IV emissions, and also study the difference in 25-year impacts between older diesel equipment that has been retrofitted with DPFs or DOCs and new diesel equipment with Tier IV emissions.

4.2 Gaps in oversight and community relations

The SEIS must include an impartial, transparent analysis of the root cause of so many documented violations of agreed-upon environmental commitments, and present a credible plan to ensure full compliance during future phases of construction. This analysis should include study of the oversight

mechanisms defined in various project agreements to determine why they were not followed or not sufficient.

4.2.1 Worker training

During arena construction, FCRC's general contractor Turner Construction was required to conduct training sessions for managers working for subcontractors on environmental protocols and mitigations. Nevertheless, the sessions did not appear to be sufficient to influence behavior among workers. The SEIS must study the reasons training in MEC requirements was not effective, and propose techniques to improve it.

4.2.2 FCRC on-site environmental monitor

According to the CAQM, FCRC will provide an on-site environmental monitor (OEM), who will be a full-time employee who is a qualified field engineer who will be on site or in the site construction office at all times during the work day. FCRC was to hire an OEM at the commencement of intensive construction activities, which was apparently considered to be 2010. During the second quarter of 2010, HDR expressed concerns with lack of oversight by FCRC on the job site. Chuck Baldwin of Turner Construction was hired to handle the position until mid-July and HDR noted an improvement in on-site compliance. Mr. Baldwin was replaced by Adam Schwartz, a Vice President at FCRC.

However, numerous violations of the MEC and CAQM documented during arena construction suggest that the OEM may have too many responsibilities to handle. The SEIS must assess whether the size of the team available to Mr. Schwartz was sufficient to cover the entire construction area on a daily basis or during extended hours work, and if it was not, propose how the OEM function will be staffed for future construction.

4.2.3 ESDC environmental monitor

Following the collapse of the Ward Bakery parapet in 2007, ESDC announced a set of measures intended to provide greater oversight of the Atlantic Yards project. These measures included ESDC's hiring of HDR as owner's representative/mitigation monitor.

During arena construction, HDR submitted reports on MEC compliance to ESDC on a quarterly basis. The OEM provided much of the information included in the reports. HDR monitors visited the site once weekly at a prearranged time, and only during daytime hours. Sandstone writes, "Given the size of the Atlantic Yards project, the weekly meetings were not sufficient to identify all of the issues that developed, especially with regards to fugitive dust. This may have prevented knowledge of MEC violations as well as action to mitigate them, particularly in cases where the OEM was also unaware of incidents."

HDR typically presented its reports to ESDC three months after quarter end. The delay raises questions as to how effective the reporting could have been in alerting ESDC to violations of the MEC so the agency and FCRC could take corrective action.

The SEIS should assess the sufficiency of ESDC's environmental monitoring function during arena construction with respect to a 25-year build-out, and propose how the function will be improved to better ensure compliance with environmental commitments.

4.2.4 MTA construction oversight

Because the Metropolitan Transit Authority (MTA) is a New York State public benefit authority, it can and does supersede local regulations and agencies. The Long Island Rail Road (LIRR), a subsidiary of the Metropolitan Transportation Authority (MTA), owns several blocks inside the Atlantic Yards footprint on which construction is to take place. New York City regulations do not apply on LIRR property and City agencies are not authorized to oversee construction work. This apparently includes the Department of Buildings, Department of Environmental Protection, and the Mayor's Office (311 complaints). As a result, 311 calls made about construction located there often remain unresolved. MTA oversees the construction work on the LIRR property without any apparent procedure for community members to reach it. Unlike the Second Avenue Subway, for example, Atlantic Yards is an ESDC project, not an MTA project. Therefore, the MTA has not (to our knowledge) prepared a Construction Environmental Protection Program or a website for it. Thus, an important component of project oversight is missing.

Much of Atlantic Yards' second phase construction will take place over MTA property. But even before the platforming of the rail yards, FCRC will construct the "permanent" rail yard it is required to provide under its agreements with the MTA. (In fact, site preparation has recently started.) The SEIS must therefore assess the extent to which a gap in environmental monitoring and enforcement with respect to construction on MTA property exists, project the impacts of such a gap over 25 years of construction, and propose strategies to close it.

4.2.5 FCRC construction coordinator

Per the MEC, FCRC is required to have an on-site construction coordinator to function as a liaison between FCRC and the community with respect to construction related issues. The coordinator shall be available to consider specific concerns raised by the community with respect to the construction issues and seek to resolve such issues. However, FCRC has been inconsistent in providing a construction coordinator. When construction significantly lessened from the fall of 2008 through 2009 no community liaison was present although a modest amount of construction continued along with construction related impacts. For much of 2010 and 2011, the community liaison was on site one or two days a week.

FCRC has erred in not supporting and developing the role of construction coordinator/community liaison more vigorously because it is an important component of the oversight process. Residents who observe violations of the MEC can bring them to the attention of the liaison, who can then contact the OEM.

The SEIS must assess the extent to which FCRC's failure to resource the role of construction coordinator as provided in the MEC contributed to the number of violations of provisions of the MEC observed during arena construction, and propose how any deficiency on the part of FCRC in this respect will be addressed in future phases of construction.

4.2.6 CBA independent compliance monitor

On June 27, 2005, FCRC signed a Community Benefits Agreement (CBA) with eight community groups: All-Faith Council of Brooklyn (ACPB), Association of Community Organizations for Reform Now (ACORN), Brooklyn United for Innovative Local Development (BUILD), Downtown Brooklyn Neighborhood Alliance (DBNA), Downtown Brooklyn Educational Consortium (DBEC), First Atlantic Terminal Housing Committee (FATHC), New York State Association of Minority Contractors (NYSAMC), and Public Housing Communities (PHC). For the purposes of the CBA, these groups are referred to as the Coalition.

Under Section VIII, Environmental Assurances, FATHC was to work with the developers to establish a Committee on Environmental Assurance to address short- and long-term environmental issues that may affect the surrounding community as a result of development of the arena and project. The committee would establish a working group, and a representative of the project developer would be available to attend the working group's meetings. Under Section VIII.C, the developers shall also consult with FATHC to determine appropriate mitigation measures to address, among other issues, a staging plan for construction that minimizes the effects of idling trucks, a pedestrian and vehicular traffic plan, and encouragement of all contractors to use low sulfur diesel in trucks operating at the project. The CBA requires the board to establish an executive committee, and the executive committee is supposed to hire an independent compliance monitor (ICM) whose job is to ensure the contractual obligations in the CBA are met. The monitor's job covers a range of issues from the delivery of benefits and jobs to meeting environmental commitments. The ICM is responsible for oversight of the project developer's, arena developer's and coalition members' obligations under the agreement, investigation of complaints brought against the developers, and review of the developer's reports. FCRC is obligated to pay the ICM's salary. At the commencement of the agreement, FCRC was supposed to place the equivalent of a year's salary into an escrow account and to replenish the account as necessary.

The monitor was supposed to be hired "as soon as reasonably practicable" following the signing of the agreement in 2005. Later, FCRC stated the monitor would be hired six months after the groundbreaking of the arena, which occurred in the spring of 2010. In November 2011, the developer stated the monitor will be hired for the residential phase of the project. However, at an Atlantic Yards Quality of Life Committee meeting in February 2013, a representative for the developer stated that the ICM had not been hired and there was no date planned to do so.

The SEIS must assess the impact of failing to hire the ICM on the incidents of violations of the MEC during arena construction. The SEIS must also propose how an environmental compliance function accountable to the local community will be provided for future phases of construction that will not suffer the same fate as the ICM.

4.3 Status quo scenario

The SEIS must also assess and analyze the environmental impacts that would be expected if no improvement is made to the ESDC's ability to enforce compliance with the project's environmental commitments. Resulting impacts from the status quo scenario should be assessed in terms of land use, socioeconomic conditions, open space, cultural resources, urban design, and neighborhood character.

4.4 Additional comments on air quality and noise analysis in the draft scope

4.4.1 Air quality

The statement on page 8 of the draft scope that the stationary air quality does not require a detailed assessment does not address changes in the NAAQS since the 2006 EISF was completed. The standard for PM_{2.5} has been lowered. In addition, new one-hour standards for NO₂ and SO₂ have been implemented. Therefore, modeled pollutant concentrations, when added to background concentrations, should be compared to the most recent standards. Even if background concentrations are lower in the future, that may not be sufficient to avoid potential impacts. Stationary source air quality for Phase II should be carried out for the SEIS.

Air quality from parking facilities is not mentioned in the SEIS despite the fact that the size, location, and configuration of the facilities may have changed. Stationary source air quality from parking facilities should be included in the SEIS.

The mobile source analysis described on page 18 should specify that PM includes PM₁₀ and PM_{2.5}. It should also include dispersion modeling of NO₂ due to the truck traffic that would be generated.

The on-site dispersion analysis should state that PM includes PM₁₀ and PM_{2.5}. Analysis of SO₂ should also be included as a pollutant of concern. Given the size of the project, the 1-hour NO₂ concentration should be analyzed quantitatively and modeled as well.

4.4.2 Hazardous materials

The statement on page 9 of the draft scope that the construction delay would not affect the conclusions in the 2006 FEIS does not address potential impacts from leaks and spills of materials that may have occurred or have been discovered since 2006. At the very least, the SEIS should review regulatory records to update the determination of whether the construction sites have been or may have been impacted by hazardous materials. The SEIS should also analyze vapor intrusion. Lastly, the SEIS should update the hazardous materials analysis .

4.4.3 Noise

The 12 noise receptors listed on page 14 do not seem sufficient to represent the Phase II area. The SEIS also should include receptors on 1) Atlantic Avenue between 6th and Carlton Avenues, and 2) Dean Street between 6th and Carlton Avenues.

Noise monitoring should include 1/3 octave band measurements as recommended in the CEQR Technical Manual (2012).

The statement that "recommendations of measures to attain acceptable interior noise levels and to reduce noise impacts to within acceptable levels will be made, if practicable" needs to be clarified. If this statement pertains to operational noise (i.e., following project completion), the SEIS should identify the potential conditions for which mitigation of impacts would not be practicable.

The 25 noise receptors listed on page 19 (construction noise) do not seem sufficient to represent the Phase II area. The SEIS also should include receptors on 1) Atlantic Avenue between 6th and Carlton Avenues, 2) 6th Avenue between Bergen and Dean Streets, 3) Carlton Avenue between Bergen and Dean Streets, and 4) Bergen Street between 6th and Carlton Avenues.

4.4.4 Greenhouse gases

Greenhouse gas (GHG) analysis, which is now required by the CEQR Technical Manual, should be applied to the 25-year construction period and the operational period.

5. The impact of delayed economic development

The SEIS should assess and study the effect of delay on economic development expected to result from the completed project in terms of neighborhood character, socioeconomic conditions, land use, and community facilities.

The following addresses our concerns regarding the impact of the delay on the character of the community and on its small businesses in particular.

5.1 Study area

The SEIS Draft Scope states that the study will analyze projects in New York City that have experienced extended construction activities and/or construction delays. That is not adequate. This project is unique in several ways: (a) it is located within an already vibrant and growing commercial and residential area, and (b) it is the largest project attempted in Brooklyn and the largest single-source project in New York City. Large projects such as Battery Park City, Queens West, and Hudson Yards were at most near,—but not in the midst of—long established, dense, urban residential and commercial areas. Therefore, we are concerned that there may not be a comparable project.

We believe the SEIS should compare socioeconomic indicators within the ¼-mile zone of the study with indicators in Brooklyn outside of that zone. Flatbush, Fulton, Vanderbilt and Atlantic Avenues all have distinct commercial activity that should be compared to areas within one mile outside the immediate study area.

5.2 Study period

If the SEIS considers the above proposed study area during the relevant time period from the announcement of the project to the present (2003-2013), the public could gain an understanding of what the impact might be of another 22 years of construction and delay. Just as with monitoring environmental impacts, this impact should be directly analyzed every five years to determine whether there should be additional mitigation of its impact.

5.3 Socioeconomic indicators

This is a vibrant area of Brooklyn, New York City, and New York State. The standard should not be just economic disinvestment. There was already a positive private investment trend in this area. Therefore, the question to be addressed must go beyond the issue of whether there will be disinvestment. The first question to be analyzed is whether businesses and real estate investment in the vicinity will be able to keep up with the rest of brownstone Brooklyn.

With the potential for future customers on the long-term horizon, there may very well be investors who will hold for the long term. However, it has been our experience that those long-term investors might be more interested in letting their sites remain fallow in hopes of greater return on their investment than in short-term investments in successful enterprises. That would not be beneficial to the local character that has made this area so attractive to new residents and upon which value the Atlantic Yards project has sought to capitalize. Therefore, the SEIS should analyze decreases in employment by local businesses – both full- and part-time workers, including salary and benefits, as well as increases or decreases in sales tax revenues to determine whether actual business in the study zone is affected. Rents and vacancies are not the only indicators of socioeconomic impact.

Finally, the commercial avenues east of the project site, including Vanderbilt Avenue, Washington Avenue and Franklin Avenue, have historically experienced high vacancy rates among their storefronts. In recent years, and as their surrounding neighborhoods have gentrified, a pattern has emerged of these spaces being filled with new hospitality businesses. But there remain a great number of empty storefronts, and local residents and Community Board members have expressed concern that a continued increase in the number of restaurants and bars may not be economically sustainable. The Phase II residential components, with their thousands of residential units, could reasonably be expected to create demand for a more diverse and balanced set of businesses on these avenues. The SEIS should study the effect of the delay of construction

and occupation of the Phase II buildings on the economic development of surrounding neighborhoods in this regard.

5.4 Categories of business risk

In addition to the basic indicators of average income and rents, the types of businesses and residents that exist also need to be studied and analyzed. With a delayed development of the Phase II site, surrounding local small business owners may struggle to hang on and keep up. These types of businesses are vital to maintaining, reinforcing and strengthening the long-term vitality, stability and social fabric of any neighborhood. The SEIS needs to look at these types of businesses in light of the economic indicators and time frame mentioned above. Whole sections of the site lying fallow only to be turned into chain and big-box stores in 25 years not only will add significant vulnerability to the local business economy, but will have a depressing effect on residential vitality and value as well.

If economic development is meant to improve the local economy, that is what must be studied. The SEIS will not conform to its legal obligations if the benefits studied are only those accruing to the development team. Therefore, FCRCs tenants in the Atlantic Center, Atlantic Terminal and the Barclays Center must be excluded from the analysis in order to avoid skewing the analysis inherent in the inevitable circularity of their inclusion.

5.5 Mitigations

The SEIS should recommend the typical mitigations for this sort of socioeconomic impact: investment in commercial revitalization, efforts to attract appropriate size and mix of businesses, and inclusion of local businesses in the development. However, as this project exists in a already vibrant area, further mitigations that build upon what works, and deliver on what was promised, must be analyzed and provided. Public open space must be delivered in a manner that provides a broader ameliorative impact to the surrounding area. Affordable housing should be delivered sooner in order to help maintain the successful and vital social fabric of the area.

6. The impact of delay in delivering affordable housing to local neighborhoods

6.1 The critical need for affordable housing in neighborhoods surrounding the project

Affordable housing in the project area is in short supply and high demand. The SEIS should study the effect of the 25-year Extended Build-out Scenario that FCRC has proposed on residents of the project area who presently are in need of and qualify for affordable housing. The following examples were provided by the Fifth Avenue Committee:

- At 78 St. Mark's Place, four short blocks from the Barclays Center, the owner seeks to demolish his rent stabilized building and replace it with commercial space and luxury apartments. The building is home to seven families; most have lived in the building for 20 years; all for at least 10. The tenants at 78 St. Mark's Place have many connections to the neighborhood, and their children go to the good Park Slope schools. If the owner is successful, these families would most likely have no choice but to leave their neighborhood. While they would qualify for affordable housing in the Atlantic Yards buildings today, as time goes on, most would likely not be earning enough to qualify. In any event, all of these families would likely be long gone in much less than 25 years.
- Another group of tenants on Sackett Street have been living without heat and hot water. It is their contention that the landlord is harassing them by withholding these essential services, and hoping that they will move out. If the landlord is successful, he would be able to remove these units from the rent stabilization program, allowing him to double or even triple his rent roll. The tenants are fighting hard to force the landlord to make the repairs necessary to provide heat and hot water, but they would much prefer to live without harassment in permanently affordable housing in the neighborhood.
- A woman who would qualify for affordable housing built now, has had to move twice in the last 15 years each time when the two family building she was living in was sold. She is tired and wants a permanent affordable unit.

The Atlantic Yards Project has put increased pressure on an already intensely gentrifying area—and with the delay in the delivery of affordable housing, has sold out on the “promise of a lifetime” to some of the project's earliest supporters. This represents a significant adverse impact and is a matter that requires further study in the SEIS—the results of which are likely to suggest that effect of the 25 year Extended Build-out should be mitigated – not tolerated.

6.2 The impact of delay in affordable housing on socioeconomic diversity

The SEIS should measure the rates of change in the breakdown of income and racial demographics in the study area between project approval in 2006 and the present, project those rates forward through the build year scenarios in the SEIS, and study how delay in the project's affordable housing components would affect socioeconomic diversity in the study area relative to delivery of the affordable housing components on the schedule originally approved.

The likely impacts on socioeconomic conditions that need to be further studied in the SEIS as a result of the 25 year Extended Build-out Scenario that FCRC proposed are extensive. Specifically, the majority of low, moderate and even middle income families earning 30 to 135% of AMI that would be eligible for the affordable housing if it were built within the first 10 years will not be eligible for those same units if they were built in 25 years.

As an example, HUD Area Median Income (AMI) for a family of four for the New York Metropolitan Area in 1990 was \$36,900. Today, 23 years later, that number has nearly doubled and AMI for New York City is \$71,400 for a family of four. HUD Area Median Income and what percentage of AMI that is being targeted for a particular affordable project is what determines rents, sales prices and income eligibility for

that project. This rate of growth in AMI—which is a reflection of overall gentrification in New York City and its surrounding areas—effectively means that families that would be eligible for a significant portion of the affordable housing at Atlantic Yards if it were built in the first 10 years will not be eligible if that same level of affordability were provided in 25 years. Families of four earning 30% of AMI in 2010 or \$21,420 annually, will earn too little to qualify for that same 30% of AMI housing if it is built in 2035. Effectively, the 25 year delay means that any family (of four) earning less than \$21,420 is priced out of the Atlantic Yards project unless the project receives some kind of rental operating subsidy, only making it that much more reliant on tax payer subsidy to be affordable.

Additionally, because of on-going gentrification and displacement pressures, which have only worsened with recent developments in the area, there will likely continue to be significant changes in the racial and ethnic make-up of Community Board 8 that will disadvantage African Americans, in particular, in an affordable housing lottery process that takes place in 2035 vs. 2010. It is current New York City policy that local residents within community boards in which a project is being built are given priority during affordable housing lotteries. That local priority often means the difference between getting into an affordable home or not—or even becoming homeless.

For illustrative purposes, in 1990 just over 5% of the population in Community Board 8 was White and over 83% were African-American, approximately 10% were Latino (of any race) and less than 1% were Asian. In 2010, according to the US Census, nearly 17% of Community Board 8 residents were White, just over 65% were African American, nearly 3% were Asian and nearly 12% were Latino. If these same trends continue, the White population in 2035 is likely to be over 35% while the African American population in Community Board 8 will likely to be less than 40%. The Extended Build-out Scenario that pushes construction of Phase II out up to 25 years will disproportionately benefit Whites and disproportionately negatively impact African Americans. Finally, low, moderate and middle income families that live in Community Board 8 today that would get priority in an affordable housing lottery if it were held now will not receive that same priority if they are displaced and live outside of Community Board 8 in 2035. The impact of the Extended Build-out Scenario, regardless of intention, discriminates against African Americans living in Community Board 8, in particular, and must be further studied in the SEIS.

Unfortunately, the limited affordable housing that is included in Phase I of the project that recently broke ground, in B2, will benefit smaller families since the majority of the units are studio and one-bedroom apartments. The number of total units, levels of affordability and number of bedrooms must be studied in the SEIS in conjunction with the timing of when those particular units are expected to be built in Phase II of the project. Providing a majority of 2- and 3-bedroom units later in the project's development, for instance, will impact on the socio-economic make-up of the community in meaningful ways.

These represent significant adverse impacts to the socio-economic conditions in the community that must be thoroughly studied in the SEIS. These significant adverse impacts are a direct result of Forest City Ratner Companies' inability to deliver Phase II of the project in a timely manner and are unacceptable, and must be mitigated.

Reducing the risk or exposure for a single developer appears to be the most plausible argument for the Extended Build-out Period, yet neither that argument nor any other, can justify the discriminatory effect, from a socio-economic perspective, of delaying the project beyond the original 10-year build-out period.

7. Open space impact following completion of Phase I

When first approved in 2006, the project promised eight acres of publicly accessible open space to be constructed incrementally in the Phase II site over the course of ten years. In addition to providing necessary active and passive recreation for residents and workers of the project, the open space was identified as a significant public benefit as well as a measure to address neighborhood blight.

The 2009 MGPP and Master Development Agreement (MDA) allowed changes to the project that would significantly delay the delivery of open space and, therefore, the ability of the project to meet its stated goals. The most damaging consequence of these changes is the extension of a “temporary” significant adverse impact on open space, which could extend for another 15 years. Allowing this condition to remain unmitigated is at odds with CEQR’s intent to “ensure that impacts are identified at the earliest points in which they would occur in the course of development and that mitigations are implemented at that time, rather than at the complete build-out of the project, which may occur years later.” (Chapter 2-4, January 2012 Edition) The SEIS should study the open space impact following completion of Phase I of the Atlantic Yards project, and propose mitigations not dependent upon Phase II tasks.

Another change that requires study is the extension of the timetable for Phase II from a 10-year to a 25-year build-out. As the decision by the Appellate Division noted, the project agreement does not provide for significant financial penalties for delays in Phase II construction project agreements and does not provide specific commencement dates for Phase II construction beyond the construction of one building on block 1129 and building a platform over the rail yard. This allows the developer wide latitude in the sequencing and timetable of project elements and may result in adverse impacts that could last for 15 years or more. The draft scope’s proposed method to study Phase II in discrete snapshots is arbitrary because there are no agreements to deliver project elements in the block increments the Draft Scope indicates for the SEIS.

Additional impacts created by changes to the project and its sequencing that have not been identified in the Draft Scope are discussed in greater detail below. They include a potential adverse impact on residential open space, impacts to sidewalks and pedestrian circulation, impacts to Dean Playground, the delay of public benefits and the delay in the project’s primary goal of eliminating blight.

7.1 Methodology

The SEIS must identify a new reasonable worst-case scenario that takes into account the project’s extended timeline and the terms outlined in the MDA. The agreement gives Forest City Ratner until 2035 to “substantially complete” Phase II construction. Within that timeframe, the only other construction dates set forth are the construction of the platform over the rail yard in 2025 and the “initiation” of construction of one building on block 1129 in 2020. The RWCS must account for the possibility that construction of the remaining Phase II buildings—and the open space that surrounds them—will not be developed until the latest possible date. The RWCS for the construction timeline should also take into account the project’s adoption of modular construction methods, which would permit full build-out to take place in a more condensed time frame closer to the 2035 deadline.

The Draft Scope of Work for the SEIS states that the quantitative analysis of open space will be performed for “discrete snapshots taken upon completion of construction on each of the four blocks that comprise the Phase II site and will estimate changes in open space ratios for these snapshots.” This approach has no basis in the project plan or project agreements. The risk is that it could obscure open space shortfalls during the period of a block’s construction. There are several reasons for this. The residential density of buildings varies and the open space is not equally distributed throughout the project site. Some open space features may not be possible to implement on an incremental basis, such the water features—which have complex infrastructure requirements—or the planned bike path, which may not be functional until construction is completed on multiple blocks. Construction of adjacent buildings or infrastructure may result in noise, air pollution, and other impacts that would affect the usefulness of incremental or interim open space. Finally, the snapshot analysis gives no indication of the duration of construction on each block. Interim residential open space shortfalls that are created during construction on a block could last for a decade or more.

Instead, the SEIS should study open space conditions at the time of each building’s completion. This analysis should include open space ratios for residential and non-residential use and a description of the

open space to be provided at that moment in time. The SEIS should then propose mitigations for open space shortfalls in the absence of any contractual commitments to ensure CEQR's goal that open space is delivered at the time the impacts are created and not years later at the project completion.

7.2 Incremental space may be inadequate

Project documents describe a program where incremental open space is provided adjacent to each Phase II building once it has been completed. The SEIS should study whether open space provided in this scenario would address residential and non-residential needs for Phases I and II at the point at which each building has been completed. The SEIS should also study whether the impacts of adjacent construction would affect the usefulness of the open space. Specifically, the SEIS should provide:

- Data on the acreage and the percent of the area dedicated to active and passive use;
- Open space ratios for active and passive use for residential and non-residential populations;
- Detailed descriptions of the features including the type of equipment and facilities, points of public access, and hours of operation; and
- An assessment of construction activity or rail yard operations in proximity of the open space which may result in emissions, noise, vibrations or limits on public access that would affect the open space usefulness, even on a temporary basis.

7.3 East-west corridor

Project documents identify the east-west and north-south corridors as significant features in the project's open space plan. In addition to providing pedestrian infrastructure, these corridors serve as connections between neighborhoods and, for that reason, were specifically identified by the FEIS as blight mitigations. The SEIS should examine the delay in the completion of these corridors, including:

- Whether delay in providing neighborhood connections continues existing blight;
- Whether delay would reroute pedestrians on to other streets;
- The utility of partial construction of the corridor, which might be a dead-end walkway; and
- The impact of the loss of pedestrian traffic to neighborhood businesses.

7.4 Tree planting

The change in the project timeline will delay the planting of trees in the project's open space and along its perimeter. In addition, in 2008, Forest City Ratner was given permission by the New York City Department of Parks to remove 86 street trees around the project's perimeter. The permit required the replacement of trees, in addition to monetary restitution. With the delay in construction, the replacement of trees that existed in the No-Build condition will be further delayed, presumably until the project's completion since there is no deadline stipulated for their replacement. In addition to identifying all street trees removed or expected to be removed from the project site, the SEIS should assess:

- Whether the delay in planting trees would increase blight in the project area;
- Areas where planting of new or replacement street trees has been delayed;
- The cost value to the public of the delay in replacement of trees (based on DPR guidelines with the conversation assumption that tree replacement will occur upon project completion);
- Impact of the delay of tree planting on open space, urban design and neighborhood character;
- Impact of the delay in terms of air quality with respect to pollution removal, carbon storage and sequestration as measured in both tons and dollar savings; and
- Impact of the delay of replacement trees where trees were removed to allow for curb cuts to the interim satellite uplink lot and block 1129.

7.5 Impact to Dean Playground

The SEIS should assess how a delay in the delivery of open space would impact the Dean Playground, the closest children's playground and active open space to the project. The SEIS should assess:

- Impacts to the playground upon the completion of Phase I, which will create significant adverse impacts with respect to non-residential open space;
- Impacts to the playground from the residential population at the completion of Phase I, broken down by CEQR age brackets;
- Current use of Dean Playground by athletic and school groups and agreements for future use; and
- Impacts on Dean Playground in the intervals before the completion of the project's playground, half-basketball court and other active space areas. The assessment should be broken down by CEQR age brackets and should also take into account the residential population from the building that is required to be built on block 1129 no later than 2020.

7.6 Community facilities

As part of project agreements, Forest City Ratner Companies has committed to offer space for the construction of an elementary and intermediate public school on the project site. FCRC is also required to provide access to suitable outdoor space for use as a playground for the school's students.

The SEIS should explain where the public school playground will be located at the time the school is constructed within the project site. According to project documents, the school is likely to be located in the first building constructed in Phase II. The study should describe the minimum suitable square footage for the school population, its proximity to the school and other features such as planting, materials and equipment. The study should assess ongoing project construction impacts such as noise, air quality and vibrations that would affect conditions at the playground. The SEIS should also study the impacts of the parking lot and staging area in the event that the school is located on block 1129.

While the Draft Scope will update public school enrollment and capacity data, it should be noted that construction of the school facility is not predicated on a threshold being met for enrollment or capacity within the study area. Further, there is no date for the commencement of the first Phase II building to assess against the need for additional public school capacity within the study area. Therefore, the SEIS should make the conservative assumption that the school will be needed at the time the first Phase II building is constructed.

7.7 Impacts on open space from construction, blight and arena operations

The SEIS should study whether the project's extended timeline could extend or increase construction and rail yard operations that would degrade the quality of open space. The new project timeline could leave open spaces exposed to impacts from construction or operation of the railyard, which was identified as a blight impact, for a longer period of time. Delayed construction of buildings on adjacent sites could leave open space unbuffered from noise from Atlantic Avenue and arena operations such as arena surface parking.

7.8 Block 1129

The 2009 MGPP added the requirement that the developer must "initiate" construction of one residential building on block 1129 by 2020, fifteen years before the project's completion date. It is conceivable that this residential building could remain next to the arena surface parking lot and a construction staging area for an extended period of time.

The SEIS must assess the impact of locating open space adjacent to the arena surface parking lot and should consider, among other factors, noise, emissions, visual resources, neighborhood character and pedestrian safety en route to the open space at high traffic intersections leading to the parking lot. The SEIS

should also include in its assessment the impact of 100 parking spaces that were relocated from the arena block.

7.9 Bike path

The SEIS should examine how the project's bike path—a public amenity and a blight reduction strategy—would be implemented in light of the project's extended construction schedule. Construction of the bike path on an incremental basis would create a path with a dead end, offering no utility to users.

7.10 Delay of Pacific Street Corridor

As part of the project agreements, the street bed of Pacific Street between Carlton and Vanderbilt was transferred by the City of New York to the project developer and was removed as a public right of way. Currently used for construction vehicle queuing and the arena patron parking lot, it will be the site of a significant amount of open space. For each scenario of construction sequencing, the SEIS should assess:

- The point at which this open space will be developed in each build-out scenario;
- Opportunities for developing this open space out of sequence and as early as possible;
- The amount and the features of the open space;
- Any impediments to developing significant features - such as water features - before full build-out;
- The impact of the loss of the public thoroughfare on neighborhood character and pedestrian and bike movement; and
- How the delay in delivering the open space passage affects economic development on Vanderbilt Avenue by delaying a public amenity that would attract pedestrians to the avenue.

7.11 Impact on Storm water and Sewage Minimization Measures

The MEC outlines a number of measures for storm water management to reduce the impact on the municipal sewage system. Open space landscaping and street tree pits also contribute to storm water runoff mitigation. The SEIS should assess:

- How changes to the project timeline and sequencing could impact the adoption of these mitigations; and
- The impact of the delay on the local sewage system in terms of increased storm water runoff.

7.12 Interim Open Space

According to the MEC: “In the event FCRC does not expect to commence construction of a particular portion of the Project site or to use such portion of the Project site for interim parking facilities or construction-related activities, including staging, in each case for a period of time to be set forth in the Project Documentation, then such portion of the project site shall be used as publicly accessible temporary open space, subject to safety and security requirements.”

The SEIS should detail scenarios in which the project will deliver interim open space in areas in Phase I and Phase II that will not be used for interim parking or construction-related activities.

8. Project-wide impacts to be addressed in the SEIS

The Draft Scope has a focus that is explicitly and deliberately narrow. “Because the Court’s Order is limited to the consideration of a delay in the Phase II construction activity, Phase I of the project—including the Arena and the other project buildings west of 6th Avenue and the new roadway configurations for the area and the parking plans for Phase I of the project—will be assumed to be constructed and to be part of the background condition.” The division of the project into two phases, while understandable from the point of view of devising and completing the project, is of little importance to the public. The project is a work in progress and will remain so for as long as construction takes. For the purpose of understanding project impacts it is not as neatly divisible into discrete phases as the Draft Scope supposes.

Further, the 2012 CEQR Technical Manual states:

“For some generic actions or small area rezonings, where the build-out depends on market conditions and other variables, the build year cannot be determined with precision. A build year ten (10) years in the future is generally considered reasonable for these projects as it captures a typical cycle of market conditions and generally represents the outer timeframe within which predictions of future development may usually be made without speculation; however, generic actions that would facilitate large-scale development over a significant geographic area may sometimes warrant build years beyond a ten-year horizon.

“For phased projects, interim build years are assessed in addition to the final build year when the entire project is scheduled to be completed. Interim build years are the first full year after each phase is completed. Large-scale projects that would be constructed over a long period, with the different elements becoming operational or occupied as they are completed, often assess interim build years as well. These interim build years are often assessed to ensure that impacts are identified at the earliest points in which they would occur in the course of development and that mitigations are implemented at that time, rather than at the complete build-out of the project, which may occur years later. Typically, one interim year is chosen, usually based on an estimate of the year when enough development to produce impacts requiring mitigation would have occurred.”

Because the Draft Scope envisions an analysis of environmental impacts projected 25 years into the future, the SEIS must provide an explanation as to why the build year has been increased beyond what CEQR considers reasonable, together with a description of how speculative risk in the analysis will be managed. Alternatively, the Draft Scope could be revised to study an interim build year not more than ten years into the future in accordance with CEQR guidance. In either case, the SEIS must also include detailed construction plans describing what portions of the project will be completed and when. Together with these plans, the SEIS should also describe in detail the contractual terms that govern schedule performance on the construction plans. In addition to the MDA, other agreements that might contain obligations that bear upon the schedule include:

- The MTA Transfer Agreement;
- The MTA Sale Agreement;
- The MTA Air Space Parcel Purchase and Sale Agreement;
- The MTA Air Rights Development Agreement; and
- The Yard Relocation and Construction Agreement.

Finally, the SEIS must include an updated and comprehensive analysis of the impacts to local transportation networks and pedestrians based upon current plans and conditions, as these impacts are broadly dispersed radiating from the entire project site into surrounding neighborhoods without respect to the Phase I and Phase II boundaries.

8.1 Transportation impacts

The location of the project is a narrow site in a congested, densely populated part of Brooklyn. Except for Atlantic Avenue, Flatbush Avenue, and Vanderbilt Avenue, the streets abutting and traversing the site are narrow. These have little or no capacity to absorb additional vehicular traffic or, with their narrow sidewalks, a large volume of pedestrian traffic. Impacts of the project ranging from air quality to transportation cannot help but be felt over the whole project site and indeed over a wider area. They do not respect arbitrary boundaries set by those defining the parameters of a study.

The Draft Scope explicitly relies on forecasts and assumptions made in the Final Environmental Impact Study (FEIS) in 2006. One example is the following, from the Transportation portion of the Operational Analysis: “Travel demand that would be generated by the Arena in the Future Without Phase II will be based on the travel demand forecast in the 2006 FEIS and validated/refined using survey data to be collected during the first Nets season played at the Arena.” This seems to suppose that seven years on, the data and assumptions in the FEIS are still valid and need only be refined to “validated/refined” based on one type of use of the Barclays Center arena. We contend that with other construction in the vicinity of the project site that is either underway or projected, the data from the FEIS are not necessarily valid for an operational analysis.

Our review of the transportation component of the Draft Scope’s Operational Analysis and Construction Impacts begins with the following propositions:

- First: The SEIS must consider impacts and operations based on the entire project site, not just the portion east of Sixth Avenue.
- Second: The geometry of the project site and the streets abutting and traversing the site means that the impacts of the project construction and the built project cannot be easily absorbed and will spill over into the surrounding areas.
- Third: The data and modeling used in the transportation component of the FEIS must be revisited in light of non-project development in the project vicinity as well as current volumes and travel patterns by motorists, surface transit users, subway users, and pedestrians. The conditions in 2006 are not necessarily a valid basis for the SEIS.

A discussion of the practical effects of these propositions on the SEIS follows.

8.1.1 Operational Analysis

The Operational Analysis section of the Draft Scoping Document relies heavily 2012 CEQR Technical Manual, in particular Chapter 16 – Transportation, Section 200 – Determining Whether a Transportation Assessment is Appropriate, and Section 300 – Assessment Methods. It is not our purpose to analyze the CEQR Technical Manual; indeed, for the purpose of this document, we assume it is correct and valid. The Draft Scoping Document applies the CEQR Technical Manual guidance with a broad brush and does not offer specifics of how certain assumptions were arrived at. For example:

“Along with demand from the Phase I development and any other significant Future Without Phase II development projects, the 2035 Future Without Phase II transit (subway and bus) analyses will also include background growth based on a rate of 0.25 percent per year for years one through five, and 0.125 percent per year for subsequent years, as recommended in the 2012 CEQR Technical Manual for areas in the vicinity of Downtown Brooklyn.”

Since this approach is used for, among other things, deleting three of six subway stations in the project area from further consideration, it is essential that the SEIS show in detail how this determination was arrived at. The following appears on page 16-3 of the CEQR Technical Manual:

“Should the proposed project involve a mix of land uses, it is appropriate to conduct a preliminary trip generation assessment (see Levels 1 and 2 Screening Assessment in Section 300) for each land use or use a weighted average to determine whether the total site generated trips exceed the threshold for analysis. If the proposed project would result in development densities less than the levels shown in Table 16-1, further numerical analysis would not be needed for any technical area, except in unusual circumstances. Conversely, if a proposed

project surpasses these levels, a preliminary trip generation analysis, described below in Section 300, is needed.”

In short, the SEIS must show in detail how the project would or would not result in development densities below the threshold that would trigger additional analysis. This has implications well beyond the narrow issue of whether or not to include certain subway stations in further analysis. Following from the third proposition above, the SEIS must also document why the conditions that formed the basis of the FEIS in 2006 remain a valid basis of measurement. This is not an academic exercise: this element of the study will determine the adequacy of transportation facilities in the project vicinity for a long time to come. It is essential that the SEIS “get this right” in how the study is conducted. We do not presuppose a particular outcome.

8.1.2 Construction Impacts

The transportation-related impacts of the project construction relate to deliveries of project materials and the partial or complete closure of streets and sidewalks to accommodate construction. We believe the delayed build-out of the project will extend these impacts without significant mitigation over a much longer period of time. The project, when completed, will be divided into several “superblocks.” It is difficult to imagine that as construction progresses in different sections of the project site, each construction area will be so contained as to leave other areas unaffected. In the interest of a coherent study and to educate the public, we request the SEIS show, at least at a top level, the sequence of construction in both project phases, including street and sidewalk closures. To date the general public has not seen a construction plan for the project. Without at least the top-level construction plan we request it would be difficult, if not impossible, for the project sponsors to substantiate its assertions regarding construction impacts.

Following from the first proposition above, the construction impacts assessment for transportation must also consider the spillover effects of construction such as vehicular traffic diverted to neighboring streets, pedestrian traffic forced into the travel lanes of a street, and delays to bus service resulting directly from construction activities or diverted traffic. Given the densely built character of the project vicinity, the study of vehicular spillover (including effects on bus service) should be examined within a minimum one-half mile radius from the Barclays Center arena.

Lastly, as part of the requested construction plan, the SEIS must specify whether temporary parking for construction workers, and staging areas for construction deliveries, will occupy planned permanent open space, and at what times.

8.1.3 Parking

The Draft Scope includes study of a reduction of parking capacity for the Phase II residential use. The study should be extended to include parking capacity for Phase I as well, which would be more consistent with current land use policy to reduce parking requirements near transit. The SEIS should study the reduction of residential accessory parking for Phase I and Phase II with respect to traffic impacts, on-street parking conditions, off-street parking capacity, pedestrian conditions and neighborhood character.

Likewise, the SEIS should spell out the implications of a change in the second phase construction sequence without reducing residential accessory parking requirements. The SEIS should identify points during the construction schedule in which the project produces shortfalls or excess in parking capacity. The SEIS should spell out the accessory parking locations for each residential building if there is no reduction in parking minimums.

Using data that is now available for arena parking usage on block 1129, the SEIS should study a reduction in the capacity of the temporary surface parking lot and the permanent underground arena patron parking that would accommodate current average arena patron demand in the arena parking lot. The SEIS should consider implementing interim open space in place of surface parking.

8.2 Pedestrian impacts

8.2.1 Methodology

Changes to the project plan and construction schedule, combined with flawed assumptions in the 2006 FEIS, require the pedestrian analysis in the FEIS to be updated for both construction and project

completion. Since the FEIS was issued, the methods for assessing pedestrian impacts from construction and project operation have improved. The SEIS pedestrian analysis should follow the most up-to-date CEQR, Highway Capacity Manual, DOT Street Design Manual and ADA guidelines.

Since Barclays Center's opening, it has been demonstrated that the point of greatest demand for capacity by pedestrians is post-event when patrons surge from the arena and head home. The FEIS assumption that peak sidewalk LOS would occur during rush hour commuting has proven incorrect. Some areas near the arena are crowded beyond capacity post-event, forcing spillover into streets and creating a difficult situation for pedestrian flow. DOT has recently announced the construction of a fence from Flatbush to 6th Avenues on Atlantic to discourage pedestrian crossings. Moving against the pedestrian flow post-event may be a challenge for future residents of the arena block.

CEQR states, "A proposed sports arena or concert hall may also require a pre-and post-event analysis for a weeknight event, a Friday night or Saturday night event, and a weekend afternoon event. (2012 CEQR, pp. 16-18). An updated pedestrian analysis in the SEIS should therefore study post-event conditions in the project site. The analysis should take into account pedestrian movements in the opposite direction at the same time patrons exit the arena. It should use a sold out arena event patronized by a young audience as the worst-case scenario. It should analyze mitigations such as widening sidewalks and securing a commitment from the project sponsor to fund pedestrian safety managers during arena events.

8.2.2 Baseline

The baseline should start now, not at the time of the completion of Phase I. There is no logic to moving the baseline to a point the project agreements don't guarantee will happen, especially given that changes to the project affect the first phase of construction in ways not anticipated or analyzed in the FEIS. And even if the Phase I project is completed in full, the project agreements enable the construction of Phase I to overlap with Phase II in multiple scenarios.

Because of changes to the project plan, omissions in the original FEIS, and changes to the construction plan, the SEIS should revisit the pedestrian analysis using the same geographic scope as the FEIS, but expand the analysis to include the north side of Bergen Street between 6th Avenue to Carlton due to the expansion of City employee parking onto those sidewalks as a product of the project, the east side of Flatbush Avenue from Atlantic Avenue to Hanson Place because of the LIRR and transit entrances there, the south side of the Times Plaza triangle, and the south side of Pacific Street from Flatbush to 4th Avenues. All are either heavily used by pedestrians associated with the project now, or are impacted by the project in other ways.

8.2.3 Changes to the Phase I plan

Although the plans of the new arena and the layout of the arena block were presumably known to the State and the project developer during the 2009 MGPP review process, only the layout of the arena block from the 2006 FEIS was provided for public comment. In fact, the arena was rotated so that it is positioned north/south on the block (apparently putting pressure on some sidewalks), and that the Dean Street lay-by lane was "marked" as not to be used by arena patrons prior to the arena opening. Most importantly, patrons now surge from the arena, causing a number of sidewalks to be crowded and spillover onto streets post-event. The SEIS should detail the changes to the arena and arena block layout and assess them for the new conditions they create, *particularly post-event*.

Some details of the project's Phase I are new and have never been analyzed. For example the arena exit at the Dean Street/Flatbush Avenue intersection was not disclosed to the public or analyzed before it was constructed. Even though the 2009 Technical Analysis anticipates the sidewalk LOS in the area it is located will be improved over the conditions assessed in the 2006 FEIS analysis because of the removal of a lay-by lane, the arena operators were recently forced to remove new street trees in the area because of pedestrian safety concerns. This exit certainly contributes more than 200 pedestrians per hour post-event and analysis is required.

B2 will be located in between two arena exits (one of them the new exit), has retail on the ground floor, is adjacent to a lay-by lane and is at a street corner. Arena patrons post-event have frequently crowded the area around the B2 site on the way to Flatbush Avenue, leaving little room for a resident of B2 to walk in the opposite direction, or move across pedestrian flow to enter or exit the building. If built to the property

line, and with retail on the ground floor as planned, B2 and B3 will narrow the Dean Street sidewalk relative to the 2006 FEIS. The sidewalk is already interrupted by entrances to the loading dock and the “pad,” which apparently may be permanent. CEQR notes, “detailed analysis is necessary if the project results in pedestrian volume increases of 200 or more pedestrians per hour at any sidewalk, crosswalk, or intersection, or proposes to remove or reduce capacity of a pedestrian element (for example reducing the width of a sidewalk).” (CEQR, pp. 16-21). The SEIS should assess the pedestrian LOS of the narrowed sidewalk on the north side of Dean Street from Flatbush to 6th Avenues.

Widening Sixth Avenue between Flatbush Avenue and Atlantic Avenue and turning it into a two-way four-lane street is an element of the project plan, not just a mitigation. Widening the street has been deferred, if not cancelled, because transportation consultants failed to identify obstructions in the sidewalks that decrease the sidewalk widths, and because the Sixth Avenue Bridge was not replaced. Likewise, the widening of Pacific Street between Carlton Avenue and Sixth Avenue is an element of the project plan. The implementation of that widening (originally scheduled for the project’s first phase) has been delayed because an unanticipated LIRR ramp is situated in the north sidewalk that would result in an actual sidewalk width of two feet if the roadway were widened. The SEIS should analyze the condition that would be created with the permanently narrower sidewalks on Sixth and the long-term narrowing of Pacific Street’s sidewalks.

Conditions on Sixth Avenue also differ significantly from those assessed in the FEIS because planners believed they had removed City employee parking on Sixth Avenue sidewalks by providing 24 parking spaces on site on block 1129. That assumption has proved incorrect. On some days some sections are not passable for wheelchair users or for baby strollers. The draft SEIS scope arbitrarily assumes pedestrians associated with the Phase II (or for that matter Phase I) will not use Sixth Avenue sidewalks, an assumption based on the idea that project residents and arena patrons will only walk east/west and will make different choices than existing residents. The scope should reassess Sixth Avenue pedestrian capacity taking into account these conditions that have failed to be addressed.

The 2009 AY Technical Memorandum disclosed eliminating the southern lay-by lane on Flatbush Avenue; however it did not anticipate the Dean Street lay-by lane would not be usable by arena patrons. Only the remaining lay-by lanes on Flatbush Avenue are used as anticipated at this time and the only lay-by lane yet to be built is along Sixth Avenue in an area that is not a frequent pull-over area now. Instead, arena patrons pull over in travel lanes along the north side of Atlantic Avenue and both sides of Flatbush Avenue, often creating an unsafe environment for vehicles and pedestrians. The SEIS should redo pedestrian and travel lane analysis to take the changes in location and capacity of lay-by lanes in the arena block into account.

The FEIS analysis does not take into account the bollards now implemented in a circle around the arena. The bollards affect the LOS of all arena block sidewalks. Bollards should be included in new LOS assessments in the SEIS.

8.2.4 Changes to the construction schedule

If it is in fact built, B1 may be constructed at any point in the project schedule. It is perched above the key transit entrance and the main entrance of the arena. Site 5 can also be built at any time in the project schedule. The 2009 AY Technical Memo’s sketch of arena patron pedestrian management during construction does not adequately address issues that arise from the indeterminate construction plans for B1 and Site 5. There is no analysis of Site 5’s delayed construction and its impact on pedestrians. The MPT for the west side of Site 5, although it is the location of a key transit entrance, was not detailed in the FEIS and should be now. Where is the construction staging for B1 and Site 5 to be located during the many construction timetable scenarios possible for those buildings? The SEIS must detail construction plans including construction staging locations and MPT for B1 and Site 5 for the construction scenarios the project agreements enable.

The capacity of lay-by lanes for Phase I has been reduced by construction delay, including a section of the (apparently unusable) Dean Street lay-by lane, the Sixth Avenue lay-by lane, and a pullover area on Pacific Street east of Sixth Avenue. This leads to different pedestrian behavior than was anticipated and elevated risk of pedestrian/vehicle conflict. Changes to lay-by lane capacity and their impact on pedestrian behavior should be assessed in the SEIS.

8.2.5 Omissions in assessments of project sidewalks

Using the methodology found in ESDC's environmental monitor HDR's September 27, 2011 Technical Memorandum, the community monitoring site Atlantic Yards Watch assessed the effective width of the sidewalks at the time of the arena opening and discovered that the capacity of 86% of them were overstated in the FEIS, many by significant margins. In the course of the analysis it was noted that as project buildings were completed, the permanent effective width of many adjoining sidewalks would likewise be narrower than anticipated.

The AYW assessment demonstrated that assessing existing sidewalk effective widths using maps (as was done in the FEIS) instead of using site visits, minimized existing obstructions like stoops, streetlights, fire hydrants and tree pits with tree bed guards. The FEIS projections to the future appear not to take into account retail on the ground floor, or the entrances of large residential buildings that will create conditions in which pedestrians cut across the pedestrian flow post arena events. Some omissions have already been discovered during implementation, and the plans have been changed as a result. For example the FEIS missed obstructions on Sixth Avenue sidewalks that prevented the widening of Sixth Avenue. They also failed to account for impediments to sidewalk width caused by the delay of the project. For example, they did not account for the security wall required along the below grade B4 footprint. The street corner on Site 5 at the intersection of 4th Avenue and Flatbush is now being expanded near an area anticipated to have a 20-foot sidewalk when construction is complete. They also obviously could not anticipate changes to the project like moving the LIRR access ramp and electric conduit bridges on the north side of Pacific Street east of Sixth Avenue.

In addition to the 2009 and 2010 Technical Memorandums associated with the 2009 MGPP, the State has issued three later Technical Memorandums to address insufficiencies with the FEIS's effective width (and LOS) assessments. The methodology of each is based on the 2000 HCM Manual when the improved methodology of the 2010 HCM manual is available. The pedestrian LOS for sidewalks, street corners and crosswalks for the project as a whole should be reassessed in the SEIS using the current CEQR/HCM methodology.

8.2.6 The need for detailed current construction plans

The 2009 MGPP relied upon construction schedules from 2006, even though in retrospect it is clear significant changes were envisioned to schedule and phasing. It is not possible to perform a meaningful analysis of pedestrian impacts without knowing what is to be built, and when. Therefore, the SEIS must include detailed construction plans that represent rational, good faith representations of how the public can expect construction of Atlantic Yards to proceed in order that it may judge the sufficiency of the analyses contained in the SEIS. Our concerns based on what we know of current plans are detailed below.

8.2.6.1 Potential for additional sidewalk closures

The 2009 MGPP shifted much of the project construction until after the arena had opened, decreased the below-grade storage capacity of the arena, moved the place and timing of the below-grade arena parking garage, phased property control both by delaying control of the rail yard and the implementation of eminent domain, as well as extended the timing and changed construction of the rail yard. All these changes have increased competition for the available area where construction staging on site can be situated.

Among the unanticipated new "uses" placed in the footprint (largely at grade) by project planners are the broadcast parking lot, the pad, the construction trailers in the B4 footprint, the LIRR operations on block 1129, and the construction offices in 572 Pacific Street. This unanticipated competition, combined with the largely untested complication of delivering large scale modular units in a way coordinated not to cause construction delays, appears to increase the probability that sidewalk and travel lanes will be closed for construction staging.

Originally all of Phase I construction overlapped in time. All Phase I construction was to be complete one and a half years after the arena. The construction of B2 and the transit opening were coordinated, presumably simplifying the coordination of construction with overlapping arena operation. Now sidewalk closures for construction (with or without temporary sidewalks with restricted widths) will be implemented during arena operation with patrons still seeking to get to transit or to the main Avenues. Site 5 will now apparently be constructed with its staging located far away and an operating arena and new residential

towers in between. Little information about how arena patrons are to be managed during this period, including changes to arena entrances/exits, has been disclosed to the public.

Originally Phase II construction staging was to be located in block 1129 throughout the project construction period, with platform staging located in block 1120. Construction delay would not change the locations of staging, however it would extend the duration of exposure to construction impacts by the community nearby. If the sequence of construction changes from that described in the FEIS and block 1129 construction is moved forward in the construction schedule, then in some scenarios no construction staging is detailed in any environmental analysis released to date.

Even though for much of the arena's construction period the eastern sidewalk along Flatbush Avenue was open with a temporary sidewalk, nearby local retail on Flatbush still complained about the low number of pedestrians as a result. Residents have long complained about the loss of passage in certain areas of the project, and project construction has not conformed to the "limited" sidewalk closures the FEIS anticipated. Indeed, the FEIS only anticipated longer-term interruptions of pedestrian flow due to sidewalk closures for the reconstruction of the bridges and for the construction of the transit entrance in Phase I. The FEIS otherwise underplays sidewalk closures that interrupt pedestrian flow by stating they all "could" be associated with temporary sidewalks. Instead, during arena construction 3 of 4 sidewalks on the arena block were closed for long periods without temporary sidewalks being implemented. Likewise, the FEIS did not anticipate the closing without a temporary sidewalk of the north side of Pacific Street between 6th and Carlton Avenues, however pedestrian flow on that sidewalk is now to be closed for 8 months or more, (and the work is taking place with the arena and its parking lot in operation). As development proceeds, the project will generate more pedestrians on sidewalks at the same time temporary sidewalks will be more difficult to implement due to additional demand for travel lanes, diminishing options for construction staging locations, and increased demand for on-street parking.

The SEIS should detail and assess how arena patrons are going to be managed through the construction of each building in Phases I and II. The SEIS should detail the location and timing of sidewalk closures and construction staging across all the potential construction scenarios, and detail the MPT for each project building that remains to be built. If project planners cannot commit to temporary sidewalks in those locations that involve potential sidewalk closures, the SEIS should consider the elimination of pedestrian flow on that sidewalk as the worst-case scenario. It should assess how the extended implementation of construction MPT affects economic development, land use, neighborhood character, the defining characteristics of the neighborhood, visual resources, pedestrian safety and pedestrian LOS.

8.2.6.2 Potential for extended sidewalk closures

The FEIS never anticipated full sidewalk closures, temporary sidewalks, sidewalks restricted by construction, or construction fencing intermittently installed throughout the project site for a 25 -year construction period. At the same time that the project is being built out slowly, organic development surrounding the site will continue to draw community members and arena patrons through and alongside the development, generating unanticipated walking routes. Growth already has proved more dynamic than development inside the project site. Community members already express frustration about restrictions on pedestrian movement the project has caused. Pedestrians experience a neighborhood a different way when they are inside a temporary walkway. They dislike having to walk an extra distance because of the intervention of construction, especially when construction is extended longer than anticipated.

Under the 2009 MGPP, the arena and non-arena buildings on the arena block were to be constructed as separate projects. As a result, the amount of available sidewalk and street corner space on the arena block may be significantly reduced for an extended period of 12 years or longer, depending on the construction date of B1. Originally, MPT for construction was to be in place for Phase I for approximately three and a half years, with only one and a half years remaining after the arena opening. Now the arena and the three non-arena residential buildings might take more than ten additional years from the point the arena opened, and B1 and Site 5 may be constructed long into the future. Retail patrons tend to choose to shop in areas where they are comfortable as pedestrians. The arena block is considered a key economic generator by the State, but now sidewalk closures may occur on the block for up to twelve years instead of the original three and a half.

Already, Atlantic Yards has suffered through multiple existing sidewalk closures that have extended significantly longer than anticipated. The Carlton Avenue Bridge was closed for nearly five years instead of the two years originally anticipated. The permanent closure of Pacific Street between Carlton and Vanderbilt Avenues may now extend for twenty-five years from the project effective date under the original construction scenario while it is being used for construction staging (and possibly construction truck routing).

The SEIS should analyze the adverse impacts on the community of sidewalk closures and restrictions on pedestrian passage over a longer construction period. It should assess how the extended implementation of construction MPT affects economic development, land use, neighborhood character, visual resources, pedestrian safety and pedestrian LOS.

8.2.6.3 *Visual resources*

The SEIS should provide illustrative representations of each building site in the project from each relevant pedestrian vantage point until the building is constructed. The illustrations should be provided for each of the construction scenarios analyzed.

8.2.7 Changes to the Phase II construction sequence

The construction of Phase II has been changed from what was studied in the FEIS, and the SEIS proposes analysis of further changes that risk causing additional impacts.

8.2.7.1 *East-west routes*

The FEIS over-assessed the capacity of the sidewalk on the north side of Dean Street between 6th Avenue and Carlton Avenue and the south side of Pacific Street between 6th Avenue and Carlton Avenue. Because of changes to LIRR rail yard construction from what was anticipated in the FEIS, it failed to identify changes to the north sidewalk of Pacific Street between 6th Avenue and Carlton Avenue which may affect the capacity of the sidewalk until final build-out, if not affect its permanent condition. The SEIS should redo existing conditions analysis using the most up to date 2012 CEQR and 2010 HCM guidelines.

It is not clear at this time what the timing of delivery of the changes to the Pacific Street sidewalk and the Major East/West Walkway will be. The features will not succeed as pedestrian corridors if they are delivered incrementally as the project is built out. With block 1129 constructed earlier in the construction sequence a great deal of density may be added east of this area with reductions in sidewalk capacity from what is assessed in the FEIS for each of the east-west walking routes. Plus, changes in routing may result in adverse impacts on neighborhood character on Dean Street between 6th Avenue and Carlton Avenue, which is a quiet residential block with far narrower sidewalks than the FEIS assumed. The SEIS should assess how the delay in completing (or failure to deliver) the Major East/West Walkway extends blight and reduces east/west capacity. It should assess how delay reroutes pedestrians on to other streets affecting pedestrian LOS and neighborhood character. It should assess the utility of partial construction of the corridor, which may be a dead-end walkway.

Pacific Street between Carlton Avenue and Vanderbilt Avenue has been closed to pedestrian passage since 2010 and may remain closed until the project is completed. It is the area where construction staging is located for the duration project construction and it may be among the last areas completed in the project in some construction scenarios. The closing of Pacific Street has decreased the desirability of local retail nearby on Vanderbilt Avenue relative to other areas of Vanderbilt and forced residents to go the long way around to reach certain areas of their neighborhood. The SEIS should assess how delay in delivering the open space passage on Pacific Street affects economic development on Vanderbilt Avenue and forces rerouting of pedestrians in each build-out scenario.

8.2.7.2 *North-south routes*

The draft scope of analysis anticipates only assessing the part of Sixth Avenue that lines the Project's Phase II. Residents of buildings in the project's second phase (and many Phase I residents) will behave as existing residents do and walk on Sixth Avenue between Dean Street and Flatbush Avenue. They will do this to go to Flatbush retail and the Bergen Street 2/3 subway entrance, which is a shorter walk and has more direct access to the platform. The SEIS should reassess Sixth Avenue pedestrian capacity using up-to-date CEQR and 2010 HCM methodology. It should take into account City employee parking on sidewalks in this area.

The north-south walkways are major features in the open space plans of the project and they help deliver one of the major goals of the project, to improve connections between neighborhoods. They will not succeed if delivered incrementally. Delay will delay their benefits. The SEIS should assess how delay in delivering (or potential failure to deliver) new connections between neighborhoods affects economic development, visual resources, neighborhood character, and continues an existing condition of blight.

8.2.8 Street trees

The Design Guidelines for the project detail “Street trees shall be located on the surrounding streets at a rate of one tree every 25 linear feet of sidewalk where feasible pursuant to New York City Department of Transportation and Department to Parks and Recreation standards.”

In 2008 FCRC received a Parks Department Permit to cut 86 street trees and plant 116 street trees as a partial repayment. Originally, the permit anticipated 42 trees on the arena block, 33 of them street trees. All but 2 were to be located along Flatbush Avenue and Atlantic Avenue. Construction of those areas is largely complete and only 11 street trees and an empty tree bed are in place. 5 newly planted trees were recently removed due to pedestrian safety concerns.

The Parks Department permit allows FCRC to plant the trees promised future AY residents elsewhere in the neighborhoods nearby. Narrower sidewalks, a failure so far to assess pedestrian conditions post-event, and an instinct developers of to absorb sidewalks as much as possible for construction staging and to build to the property line increase the risk planned street trees will be removed for the sake of pedestrian safety. This is in contrast to Brooklyn generally, and Prospect Heights specifically, which are known for their tree lined streets. Atlantic Yards should be planned so that pedestrian safety and street trees and other amenities are not in conflict.

At full build-out some areas of the project where street trees are planned may not be feasible like Atlantic Avenue from Carlton Avenue to Vanderbilt or in front of B2. The SEIS should review the project plans to anticipate areas where there is a risk planned trees may not be feasible. It should also assess the project generally to see if plans can be modified to decrease the risk street trees will be sacrificed during development.

9. Changes to Phase I to be addressed in the SEIS

9.1 Use of modular construction

The use of modular construction was not detailed or assessed in the 2006 FEIS or the 2009 and 2010 Technical Memorandums. FCRC has already disclosed numerous changes to the construction plan including situating a factory off-site, and delivering large modular units through the course of the early morning and work day for installation on site. Both the height and number of buildings proposed to be constructed at Atlantic Yards using modular techniques is unprecedented in the United States. Although the court order for the SEIS specifies an analysis of Phase II construction, in July of 2011, the court would have had no way of knowing a decision to use modular construction techniques for the Atlantic Yards project would later be made. Therefore, a thorough study of the impact of the developer's decision to use modular techniques must be included in the SEIS.

9.1.1 Open space

The SEIS must study how the use of modular construction techniques will impact the project's ability to deliver open space incrementally as buildings are completed, and also assess the quality of any open space delivered next to active modular construction in terms of noise and other impacts.

9.1.2 Traffic and parking

Arena construction showed that even with the best-laid plans, coordinating construction deliveries so that they occur as planned and without unanticipated impacts is difficult. The oversized loads transporting modules from the factory in the Brooklyn Navy Yard to the Atlantic Yards site clearly have the potential to be disruptive to traffic along the entire route. The SEIS' transportation analysis must detail the route and timing of these deliveries, plans for staging and dispatching them, and control procedures for overseeing that the plans are followed, together with the expected impacts of module deliveries on the local transportation network.

The SEIS must also study the potential for the use of modular construction to increase the demand for sidewalk and travel lane closures, and/or the implementation of temporary sidewalks.

9.1.3 Noise

The SEIS must study the potential of modular construction to create additional noise impacts from, among other sources, heavy machinery manipulating large modules.

The SEIS must also study the potential for buildings constructed using modular techniques to be less effective in containing sound now being heard by neighboring residents coming from arena events.

9.1.4 Construction

The SEIS must study whether any new construction impacts have been created by locating a module factory in the Brooklyn Navy Yard.

9.1.5 Socioeconomic

Job creation was a major public incentive leading to the approval of the Atlantic Yards project. It has been reported that a large percentage of construction tasks will be transferred to the module factories, and that workers in the module factories will earn less than counterparts working on site. The SEIS must study how the decision to use modular construction techniques will affect the number of jobs created by the project and the pay scale of those jobs, and the impact of any change on the local economy.

9.2 Noise originating from the Barclays Center arena

The 2006 FEIS did not study the arena itself as a source of noise. In 2009, Frank Gehry's arena design was replaced with an arena designed jointly by Ellerbe Becket and SHoP Architects. Since the time of the arena opening, numerous residents circling the arena have complained about bass noise entering their homes during bass-heavy concerts. The NYC Department of Environmental Protection has issued a violation to the arena operators for concert noise escaping the arena.

The SEIS should assess noise and land use impacts on existing and future residents as a product of concert noise emanating from the arena building.

9.3 Other changes affecting land use, zoning and public policy

The SEIS should assess whether there are any new land use, zoning, public policy, neighborhood character impacts not previously disclosed in the FEIS, and whether any additional or different mitigation measures would be required. This assessment should include the land use and neighborhood character impacts created by arena operations to the south of the arena on Dean Street like the pad, whose operations may be permanent but were not disclosed in the FEIS. The SEIS should examine how use of this site for at-grade arena operations like security screening as well as truck and bus storage is consistent with the FEIS' land use analysis which states B2 and B3 would serve as a "buffer" between the residences to the south of the arena and the arena itself, and that "security screening and loading functions would be entirely within the building." (FEIS p. 3-2). Other functions not studied in relation to their locations in the FEIS include the satellite uplink parking lot, LIRR operations, a trailer area in the B4 footprint and construction offices in 752 Pacific Street. The SEIS should detail and assess the interim locations of unanticipated project elements until the time they are placed below grade.

The SEIS should assess whether these unanticipated functions reduce opportunities for the project to implement the commitment in the MEC to provide publicly accessible interim open space in the event FCRC does not expect to commence construction of a particular portion of the Project site or to use such portion of the Project site for interim parking facilities or construction-related activities, including staging.

10. Alternative involving multiple additional development teams

Given the current high level of development activity in Brooklyn, the SEIS should study an alternative to the 2009 MGPP in which the original 10-year build-out is achieved by dividing the Phase II site among multiple development teams through a competitive bidding process, and in so doing adding resources, expanding access to financing and reducing supplier risk.

A prime local example of the effectiveness of this type of process is the Downtown Brooklyn Plan passed in 2004 which has prompted the development of thousands of units of residential housing both affordable and market rate over the past nine years. Projects developed following the City's rezoning under the Downtown Brooklyn Plan include luxury condominiums and rentals along Flatbush Avenue extension, including the Toren, Avalon and Oro projects, through downtown with the conversion of the Verizon building, the 80-20 rental by FCRC on Dekalb and onto the Livingston-Schermerhorn corridor. This corridor of development is particularly ideal as it combines more affordability and diversity of developers with both supportive housing and bond financed 50-30-20 projects in a more contextual setting. The planning process also included a design charrette with involvement from local residents and community organizations. This area includes nonprofit developer Common Ground and local for profit developers such as IBEC. Another example is the development at Court and Atlantic by Two Trees that houses the YMCA. All of the above have been built by multiple developers within 10 years over an area just as large as Atlantic Yards, by using a variety of financing tools, including, but not limited to the use of inclusionary zoning. It is important to note further that these projects were produced even in the midst of the recession.

FCRC has asserted that historically poor, and unanticipated, market conditions gave rise to the lengthy delay agreed to in the 2009 MGPP. To the extent that this rationale had even a theoretical foundation at the time, it is demonstrably not the case today: Brooklyn, particularly the downtown area, is the hottest real estate market in New York City. With new development projects moving up Flatbush Avenue and into the BAM cultural district slated to break ground over the next two years, there is yet more to come. These projects include the Gotham with 600 units of which 300 are affordable, Two Trees' BAM triangle with 300 units of which 60 are deeply affordable, The HUB by Steiner, 770 units of which 149 are deeply affordable and permanent. Clearly, the Brooklyn real estate market is not in a recession and the area in question likely never was. One must ask, was the delay embodied in the MGPP instead caused by the financial condition of the sole source developer and not the market? The SEIS must thoroughly study and analyze this question with hard data and candor.

All of the projects about to break ground also provide thousands of square feet of cultural facilities, public plazas, public library and retail space. The land in the cultural district is controlled by the City of New York which has negotiated to bring major public benefits to these projects. For example, the Gotham has the same ratio of affordability in terms of unit count and distribution as B2 in the Atlantic Yards project— except in the latter, only 20% of affordable units would be two bedrooms, while in the Gotham, 40% are 2 bedroom units. The difference is striking: 36 vs. 120 two-bedroom units. The City's model of multiple sites and a variety of developers is thus far yielding greater public benefit. It presents an alternative that begs for evaluation.

There was significant displacement from the site of residents in great need of deeply affordable housing, including 400 residents of a homeless shelter. The State of New York through ESDC must analyze whether together with the MTA the agencies would bring more public benefit to the Atlantic Yards site by utilizing a competitive process and multiple development teams. Can a more appropriate and needed variety of housing alternatives be produced? Can the alternative to a sole source developer provide both deeper affordability, units more responsive to the needs of families seeking affordable homes, community facilities and cultural amenities such as daycare and health centers (the demand for which would be increased by residential development at Atlantic Yards), retail opportunities to emerging small entrepreneurs, and quality public open space? The SEIS must consider this scenario as an alternative to the 25-year build-out of 16 residential towers with few prescribed public amenities.

The alternatives studied in the SEIS should also include options for constructing a platform over the MTA Vanderbilt Yard that are not dependent upon the development rights over the rail yard.