

New York City College of Technology Arch 2430 Building Technology IV Professor Friedman Fall 2013

Computer Programs used: Revit, AutoCAD

Student Learning Objectives:

Upon successful completion of this assignment, the student will:

- 1. Understand building site research
- 2. Develop zoning analysis skills
- 3. Understand writing out property lines and building footprints

Assessment:

To evaluate the student's achievement of the learning objectives, the professor will do the following:

- 1. Evaluate student team zoning calculations
- 2. Evaluate individual student's site plans

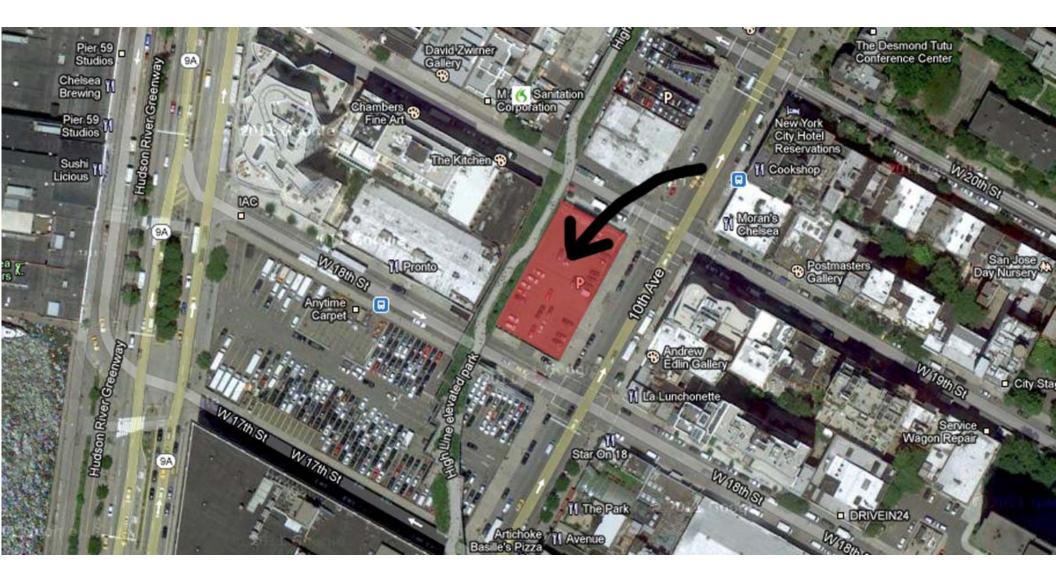
Site:

The students have now chosen one of their projects (as part of Assignment 1) to be used as their semester project (must have been approved by the Professor).

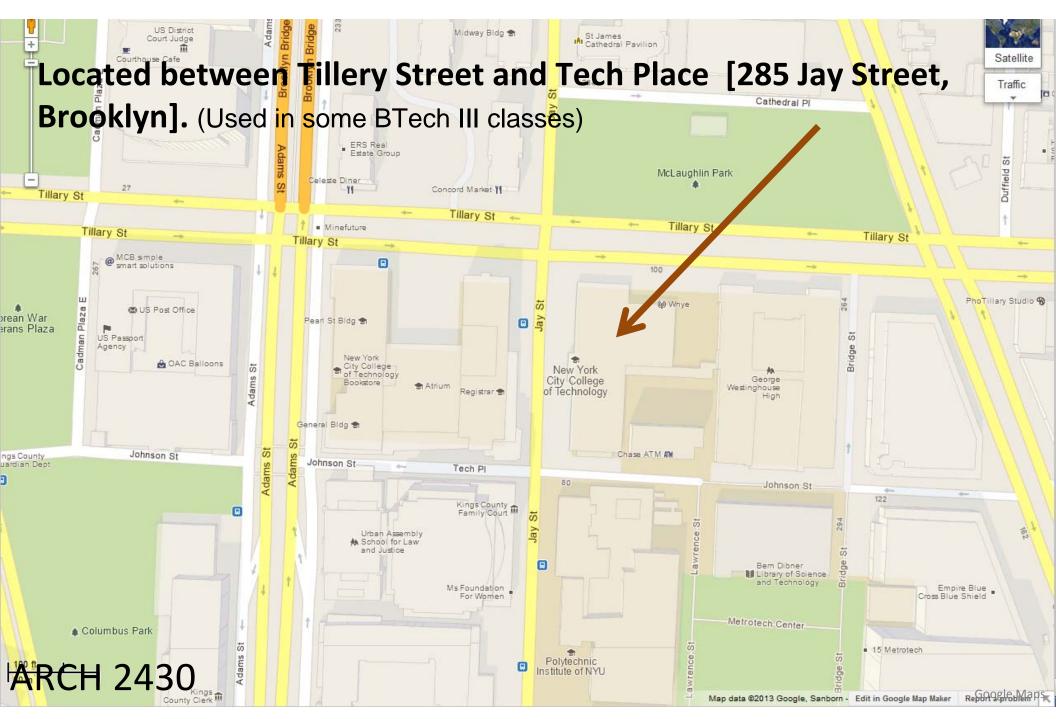
The sites to be used for this project are:

Location:

10th Ave. between 18th and 19th St. (Used in some BTech III classes)



Location:



Project Description:

Students will divide into their teams to study the site.

The teams will research the means and bounds and the zoning requirements of their site. Upon completing the research, the team will conduct a zoning analysis of the site.

Using your calculations and the research developed, each student will create a Revit massing model indicating the allowable zoning volume.

Groups: Each team is responsible for submitting all three parts of the assignment. Each part must have a "lead group member" assigned to it. Each group member will receive two grades for the project: a grade for their individual portion and a grade for their combined group. Afterward, the two grades will be averaged together resulting in one final grade.

Note: The Assignment may be re-submitted up to one week later for a possible improved grade.

Remember: Each group must turn in their assignment on time. Due assignments will be submitted via blackboard and/or GTeam by 10pm the night before the assignment is due. Late assignments will be downgraded 1/3 grade for each class date they are late.

Due: Monday September 16, 2013

The parts of the assignment are outlined in detail below (with suggestions and tips for completion:

Part A: Plot (site) Plan:

This drawing sheet should contain:

Lot lines of the site,

Property lines,

Building footprints,

Sidewalks.

(if your site includes the High Line, show dashed lines representing it's placement above the site)

[Note: Should be constructed using Revit]

- -Show a "Google Earth" **photo of the site** showing its position within the surrounding area.
- -Indicate the **Block and Lot** information of the site.

Due: Monday September 16, 2013

Part B: Zoning Analysis:

- -Create a zoning analysis list that indicates the zoning district and any special zoning laws that apply.
- -List the use groups that can be accommodated on the site.
- -Your Zoning Analysis/ Calculations should contain the following list (in text):
 - 1. Zoning District
 - 2. Use Group
 - 3. FAR (Floor Area Ratio)
 - 4. Zoning Envelope
 - 5. Street Wall Height
 - 6. Setbacks
 - 7. Sky Exposure Planes
 - 8. Maximum Build-able Height
 - 9. Open Space Requirements
- Place a copy of the **Zoning Map** (zoomed in on our site with a little context)

Due: Monday September 16, 2013

Part C: Zoning Diagrams:

- -The zoning envelope will actually be drawn as a Revit massing model (3D). So in this analysis, you need to indicate:
 - 1. the maximum and minimum Street Wall Heights,
 - 2. Project Setbacks
 - 3. Sky Exposure Plane requirements
 - 4. Maximum Build-able Height
 - 5. Zoning Envelope
 - 6. Open Space Requirements
- -Try to put as much detail into this diagram as possible without making it confusing. If needed, you can separate this into two diagrams.
- -Use your plot plan as a base for your massing model.
- -Create your massing model as a massing family. In some cases, you may find that you need to develop more than one massing model to illustrate the zoning envelope.

Note: the Total Assignment should be 2-3 pages long.]

Process:

- 1. Division of tasks amongst team members (be sure to indicate on the drawings, what piece you authored).
- 2. Acquire the site dimensions by using "ZoLa zoning and land-use" and NYC digital tax maps.
- 3. Research site zoning using http://www.nyc.gov/html/dcp/html/subcats/zoning.shtml
- 4. Conduct and document your zoning analysis to indicate the values indicated on previous pages.
- 5. Create your own model from the template "Architectural-Default.rte" save and rename using the course naming conventions. (improper file names will not be accepted.
- 6. Draft a plot (site) plan using AutoCAD. Include Building footprints, property lines, and sidewalks.
 - 7. Use the plot planned as an underlay to create your Revit Massing Model.
- 8. Construct the massing model to the maximum build-able area (you may find there are several configurations and you may have to create more than one massing model)

Process:

- 9. Assemble your data onto a site sheet.
- 10. Post your sheets as pdfs onto blackboard.
- 11. Post the 3d Model and the pdf sheets onto GTeam

Resources:

http://maps.nyc.gov/doitt/nycitymap/template?applicationName=ZOLA

http://gis.nyc.gov/taxmap/

http://www.oasisnyc.net

http://www.nyc.gov/html/dcp/html/subcats/zoning.shtml

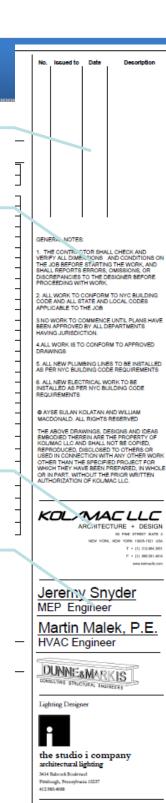
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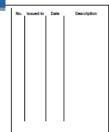
Revision List

General notes and legal disclaimer

Architect Logo

Consultants logos





GENERAL NOTES

 THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONDITIONS ON THE JOB BEFORE STARTING THE WORK, AND SHALL REPORTS ERRORS, CANSSIONS, OR DISCREPANCIES TO THE DESIGNER BEFORE PROCEEDING WITH WORK.

2. ALL WORK TO CONFORM TO NYC BUILDING CODE AND ALL STATE AND LOCAL CODES APPLICABLE TO THE JOB

250 WORK TO COMMENCE UNTIL PLANS NOV BEEN APPROVIDE BY ALL DEPARTMENTS HAVING JURISDICTION. 4.ALL WORK IS TO COMPORM TO APPROVED TO MARION.

5. ALL NEW PLUMBING LINES TO BE INSTALLED

S. ALL NEW ELECTRICAL WORK TO BE INSTALLED AS PER NYC BUILDING CODE

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KOL/MAC LLC

ARCHITECTURE + DEBIG 10 PML (FWICT BUTS) MEV YORK, MEV YORK SOCIATOR II 7 • 70 J STARKS

Jeremy Snyder MEP Engineer

Martin Malek, P.E. HVAC Engineer



Lighting Designer



the studio i company architectural lighting 361 Mahruk Boslenat Habingh, Prosophusis 19217 62/86-698

42.00.400

50 PINE STREET- SECOND FLOOR

LIENT: WILLIAM MAC DONA

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04/1/08 m by Author ked by Checker

COVER SHEET

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Title Block

The Drawing Title must identify the floor, or floors, if applicable.

The Revision Decimal is a two digit numeric decimal indicating a change, or changes, to an approved document

The Drawing Reference Number is a 3 digit number (000-999).

Each submitted drawing must contain a discipline designator.

All drawing plans must contain a page number (1 of X, 2 of X).

PROJECT

BPC - SITE 3 New York, New York

11TH TO 22ND FLOOR EAST REFLECTED CLG. PLAN

SEAL & SIGNATURE DATE: 3-6-06 PROJECT No.: 2006-48 DRAWING BY: CHK BY: DWG No: CADO FILE No: 1 of 20 J: BPC SITE 3 (2006 - 48)

KOL/MAC LLC

Jeremy Snyder MEP Engineer

Martin Malek, P.E. HVAC Engineer

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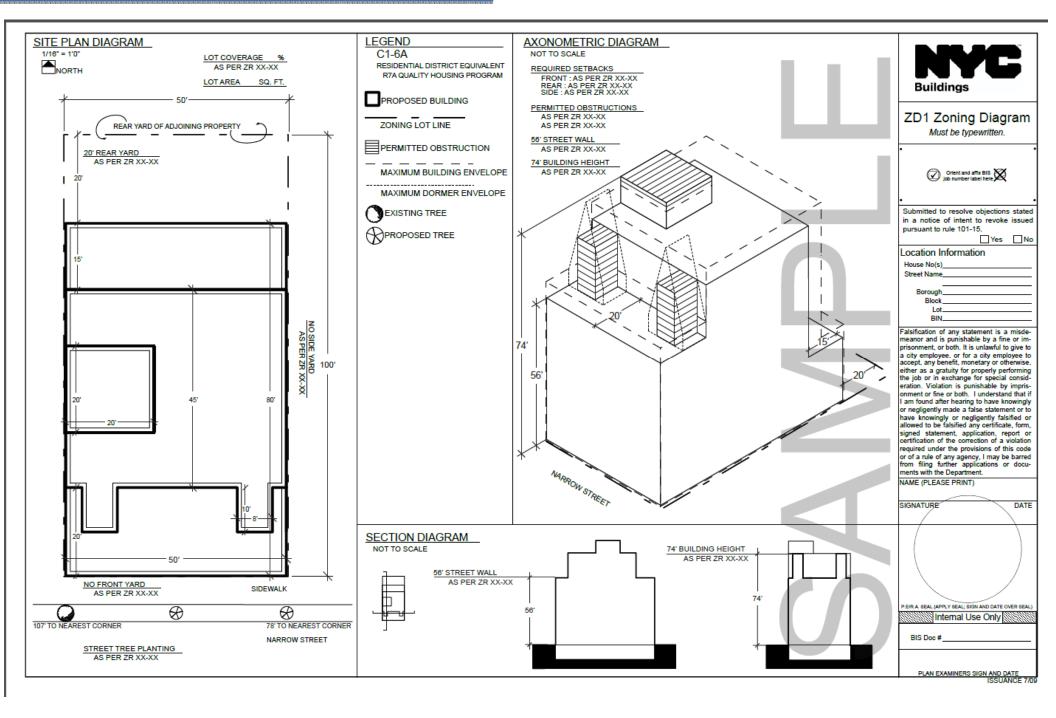


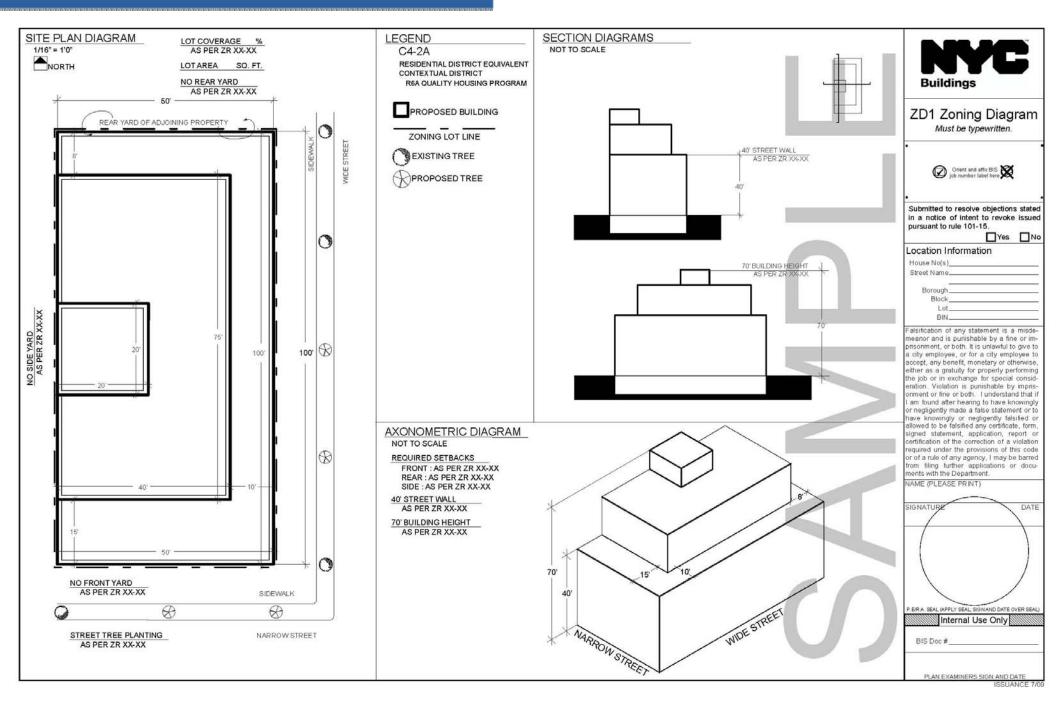
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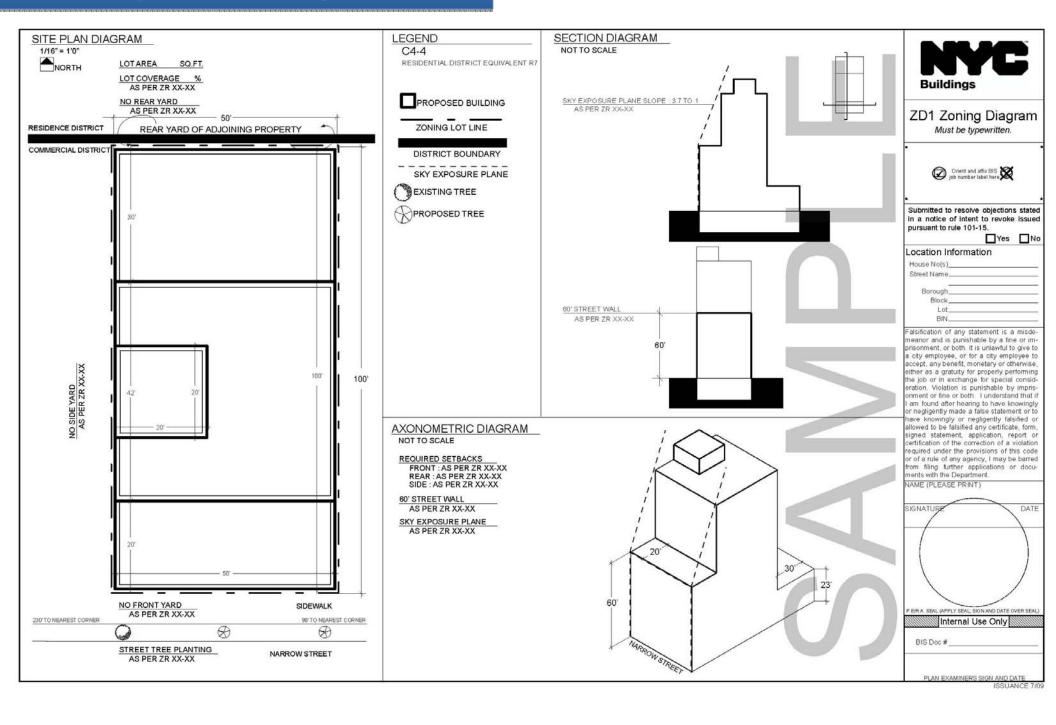
BPC - SITE 3

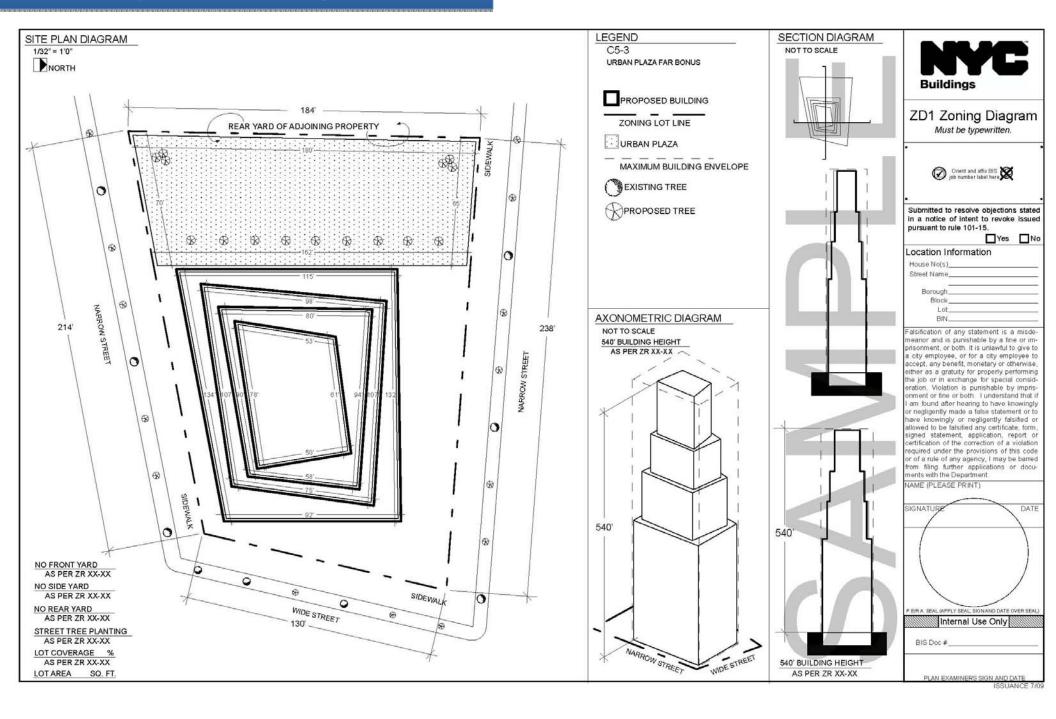
11TH TO 22ND FLOOR EAST REFLECTED CLG. PLAN

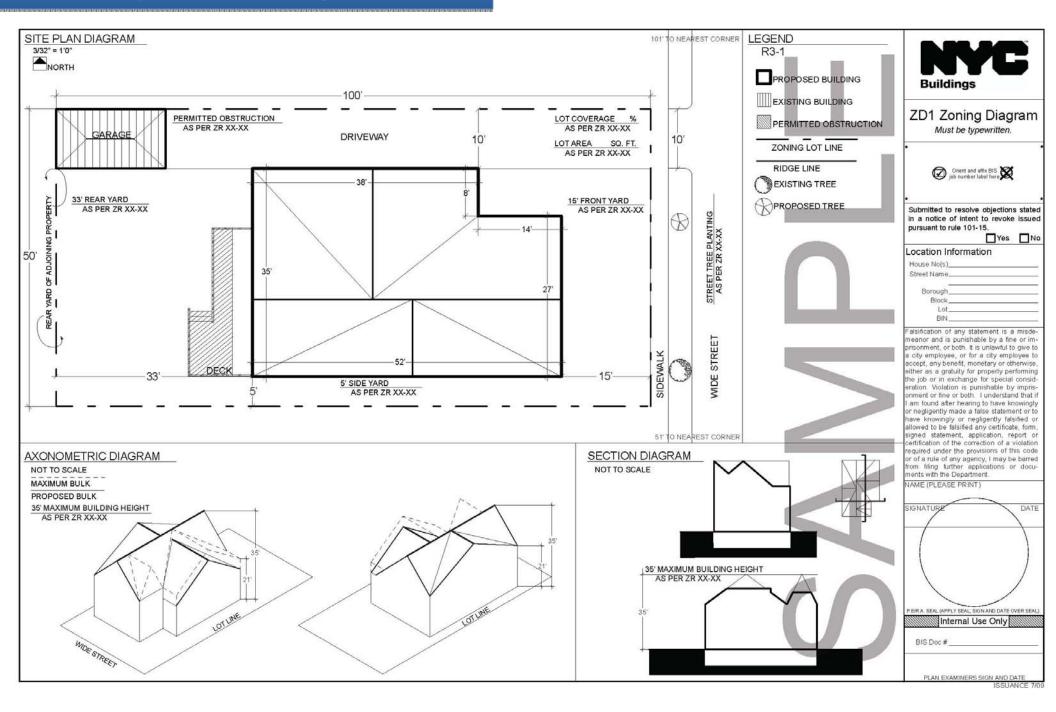






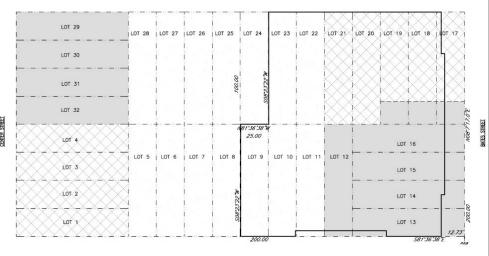








BROOK STREET



COLDEN STREET

AS PER THE BATES STREET REDEVELOPMENT PLAN (MAY 24, 2006, XII.B BONUS PROVISIONS— HEIGHT BONUS AND MAP 3: BONUS HEIGHT MAP

1 BONUS HEIGHT MAP SCALE: 1/32"=1'-0" LEGEND

BONUS HEIGHT AREA "A"

BONUS HEIGHT AREA "B"

BONUS HEIGHT AREA "C"

A. 5 + 1 P = 6TH FLOOR

