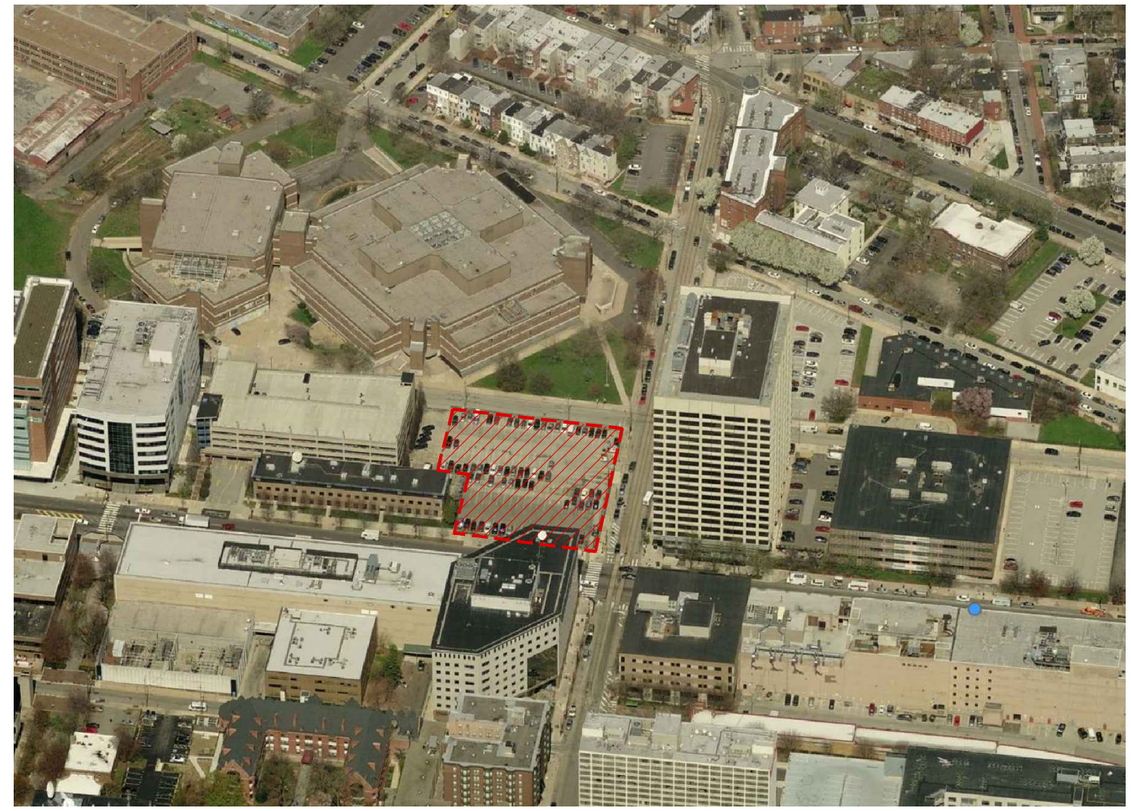
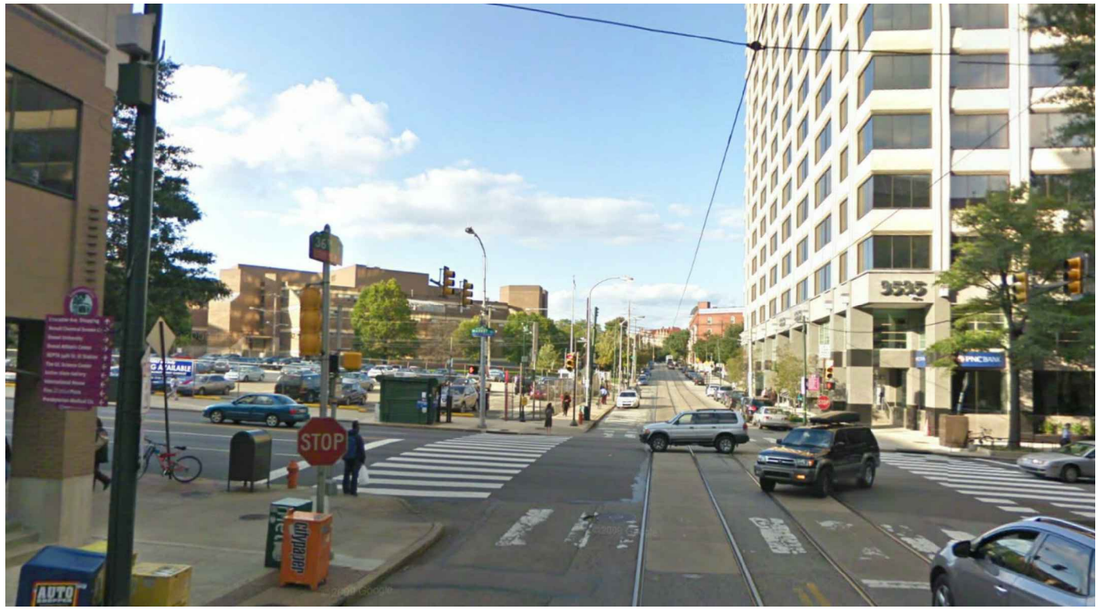
AERIAL VIEW

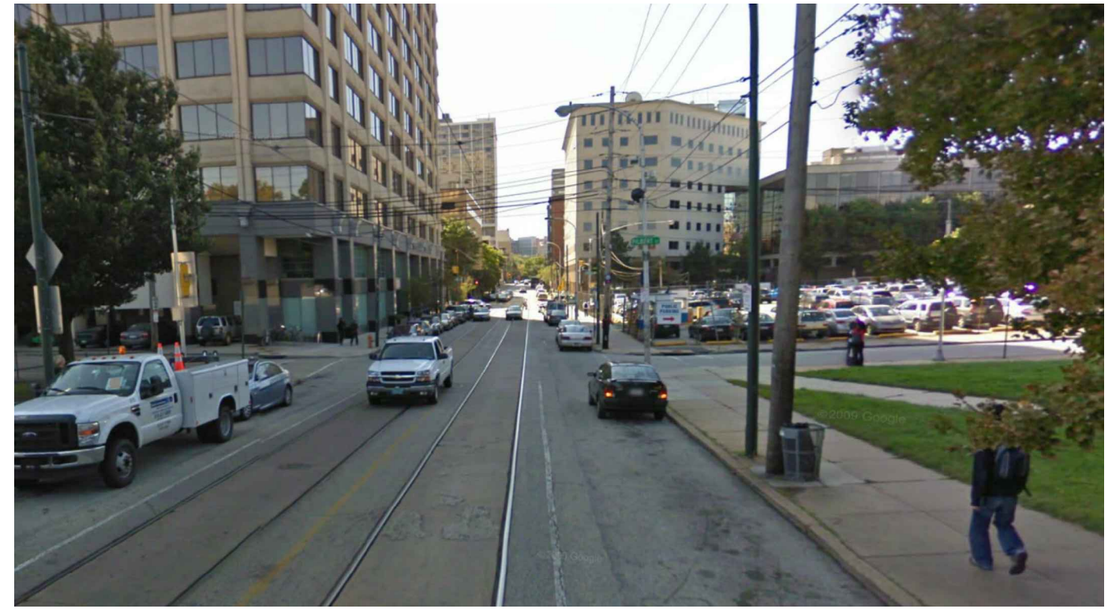


BIRD'S EYE VIEW

SITE



VIEW LOOKING NORTH ON 36TH STREET

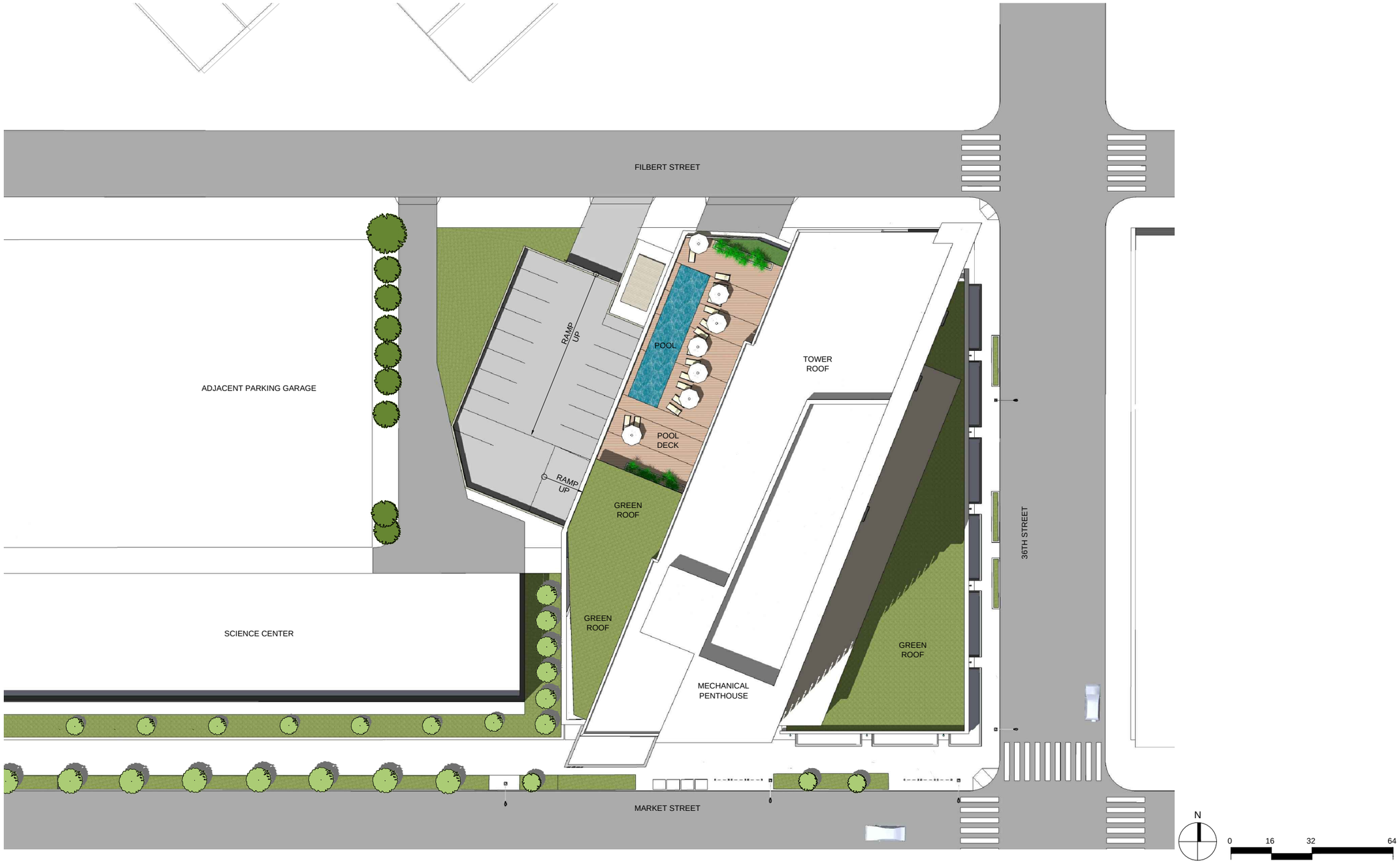


VIEW LOOKING SOUTH ON 36TH STREET

VIEW LOOKING WEST ON MARKET STREET

VIEW LOOKING EAST ON MARKET STREET

CONTEXT PHOTOS



SITE PLAN

BLTa

UC Science Center Residential Tower
3601 Market Street, Philadelphia PA

1219000
March 19, 2013

Southern Land Company
WEXFORD
SCIENCE+TECHNOLOGY

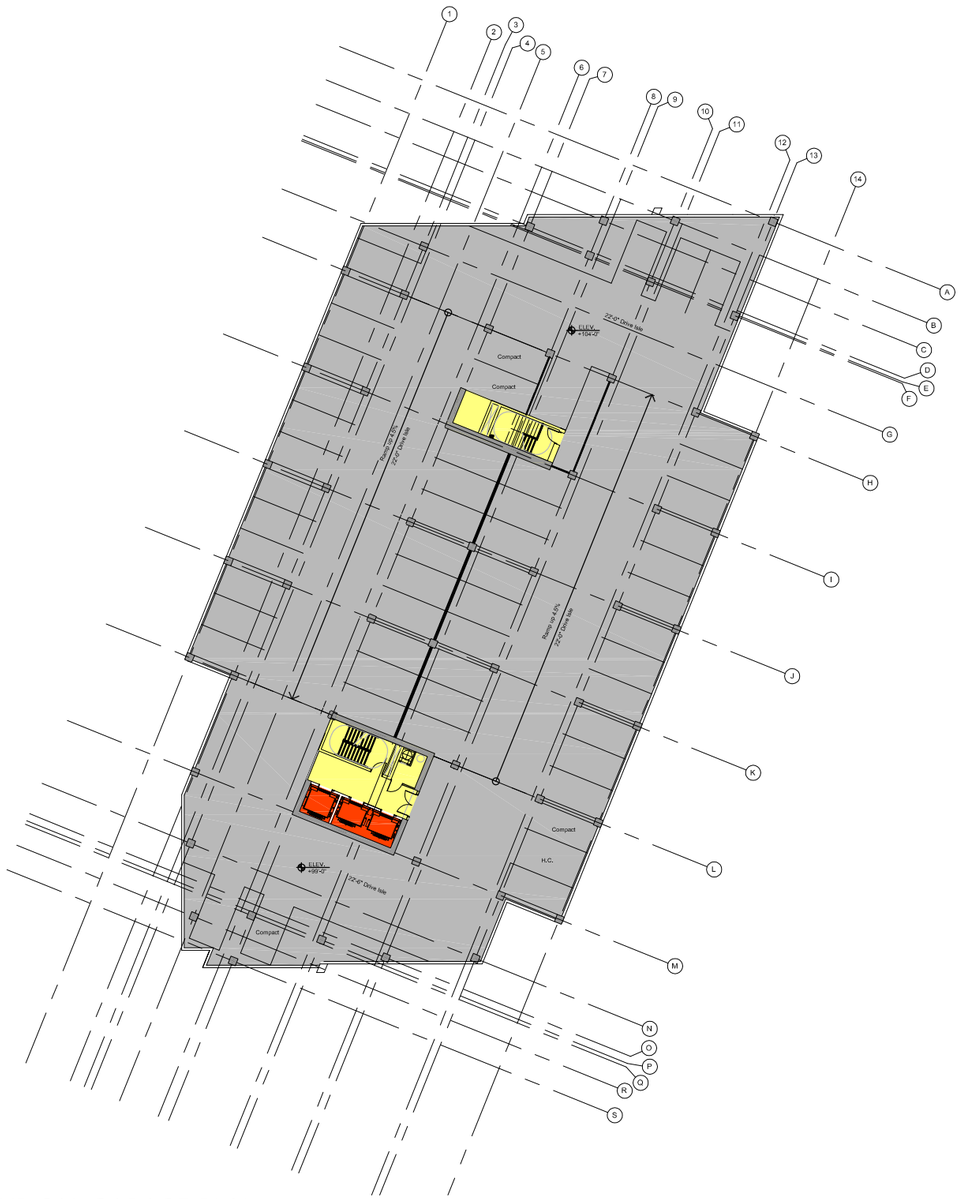
GROUND FLOOR PLAN

BLTa

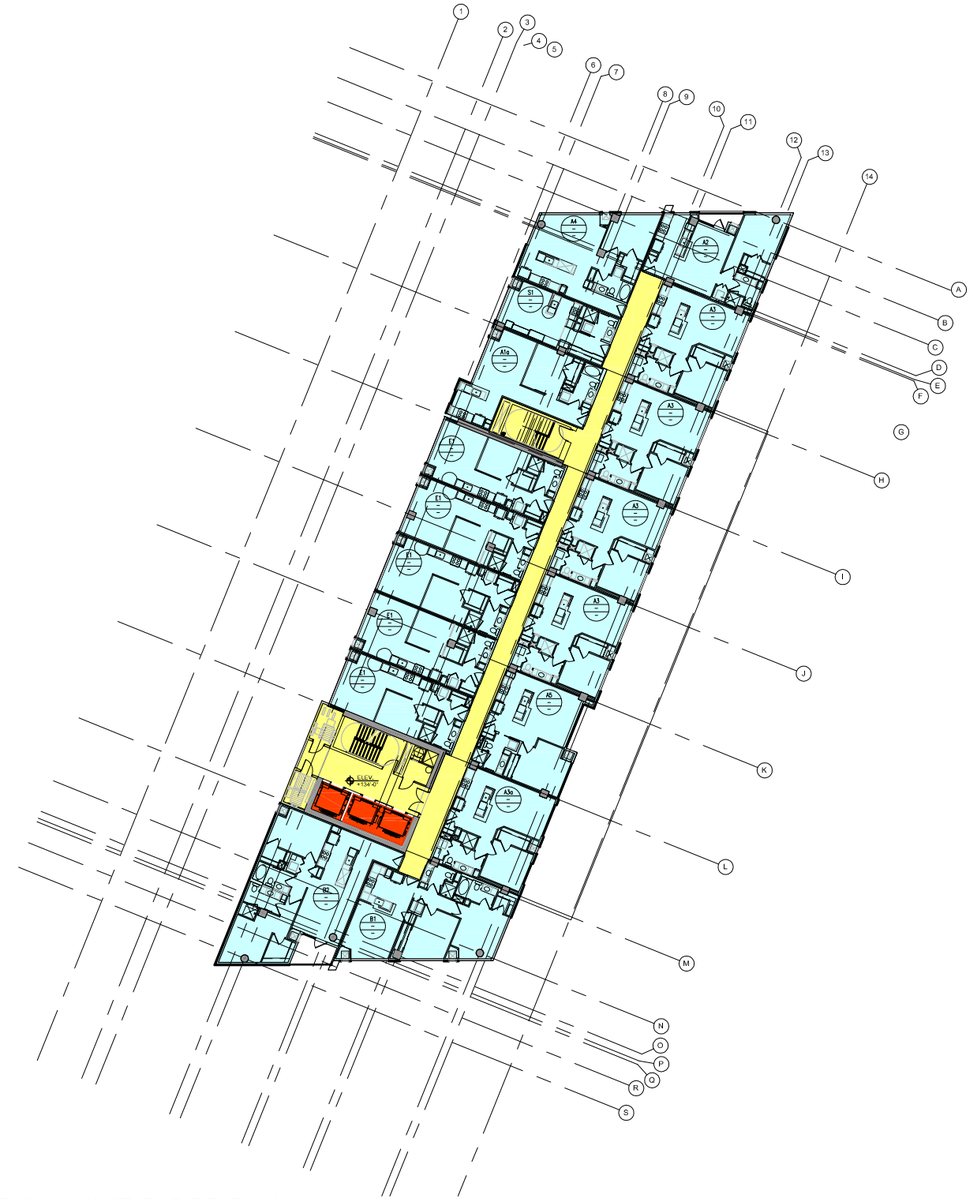
UC Science Center Residential Tower
3601 Market Street, Philadelphia PA

1219000
March 19, 2013

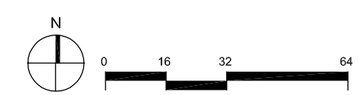
Southern Land Company
WEXFORD SCIENCE+TECHNOLOGY



TYPICAL GARAGE PLAN



TYPICAL UNIT FLOOR PLAN



TYPICAL GARAGE AND TOWER FLOOR PLAN

BLTa

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March 19, 2013

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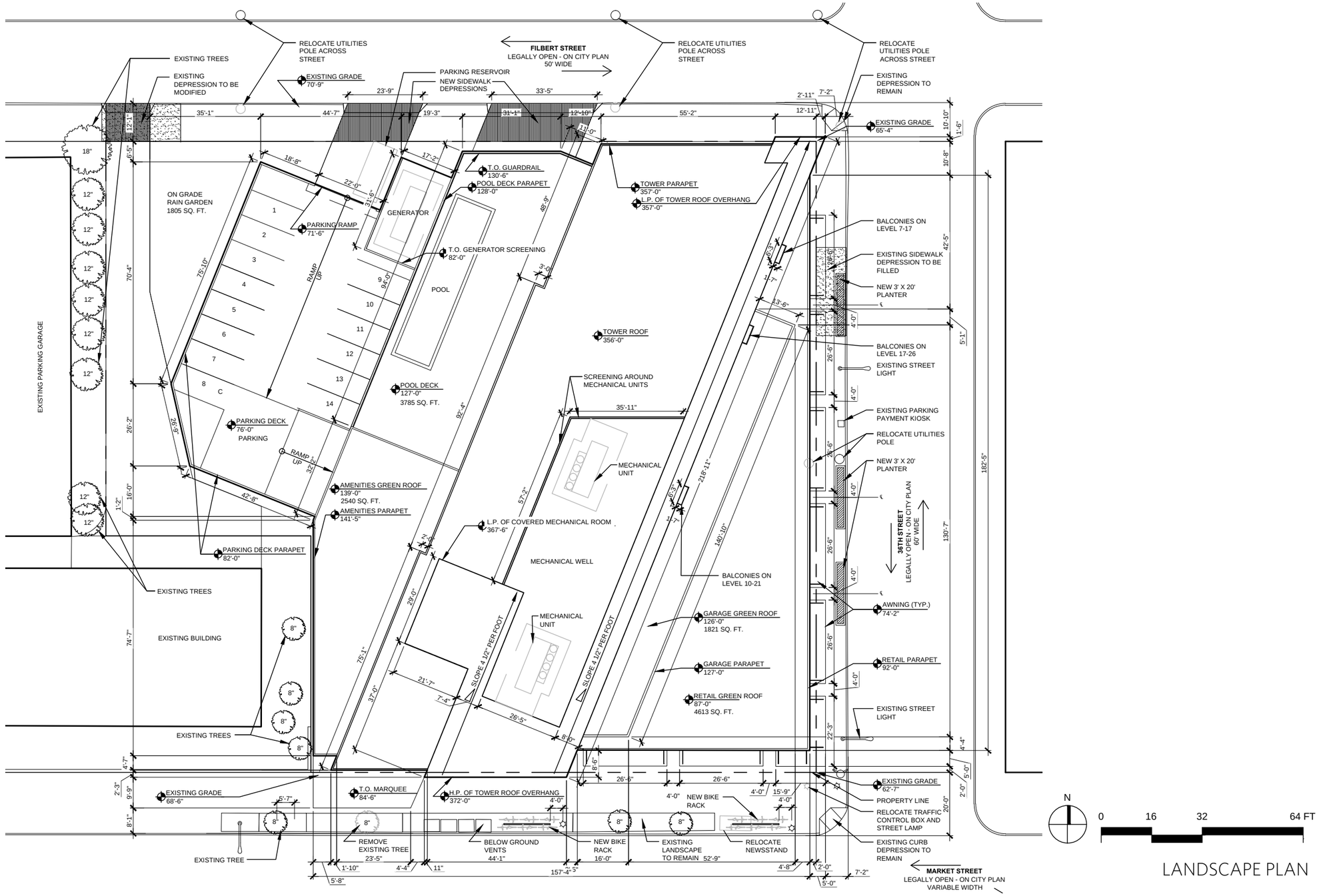

LANDSCAPE PLAN

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March 19, 2013

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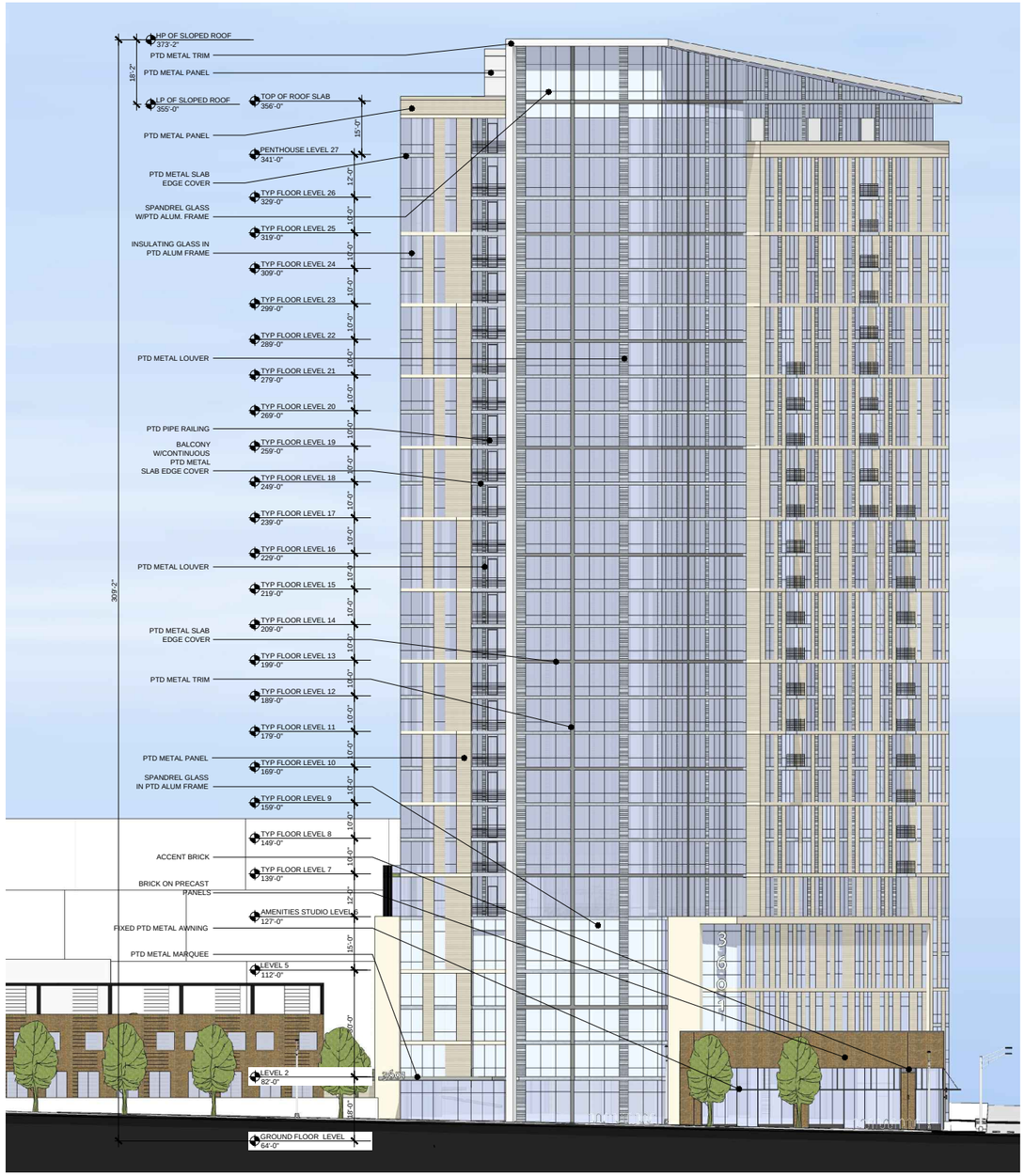
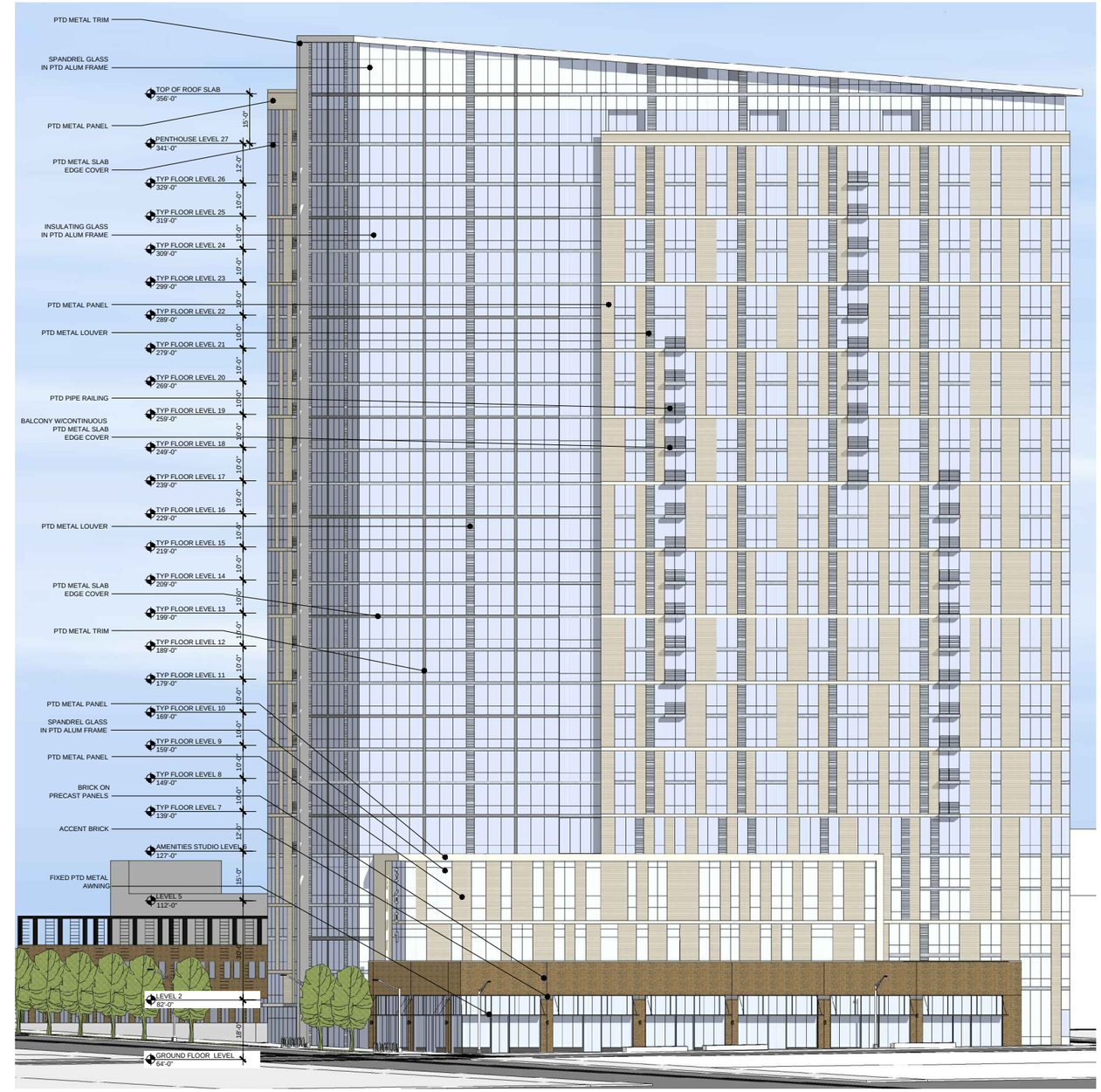


SOUTH ELEVATION



EAST ELEVATION

0 16 32 64

ELEVATIONS

BLTa

UC Science Center Residential Tower

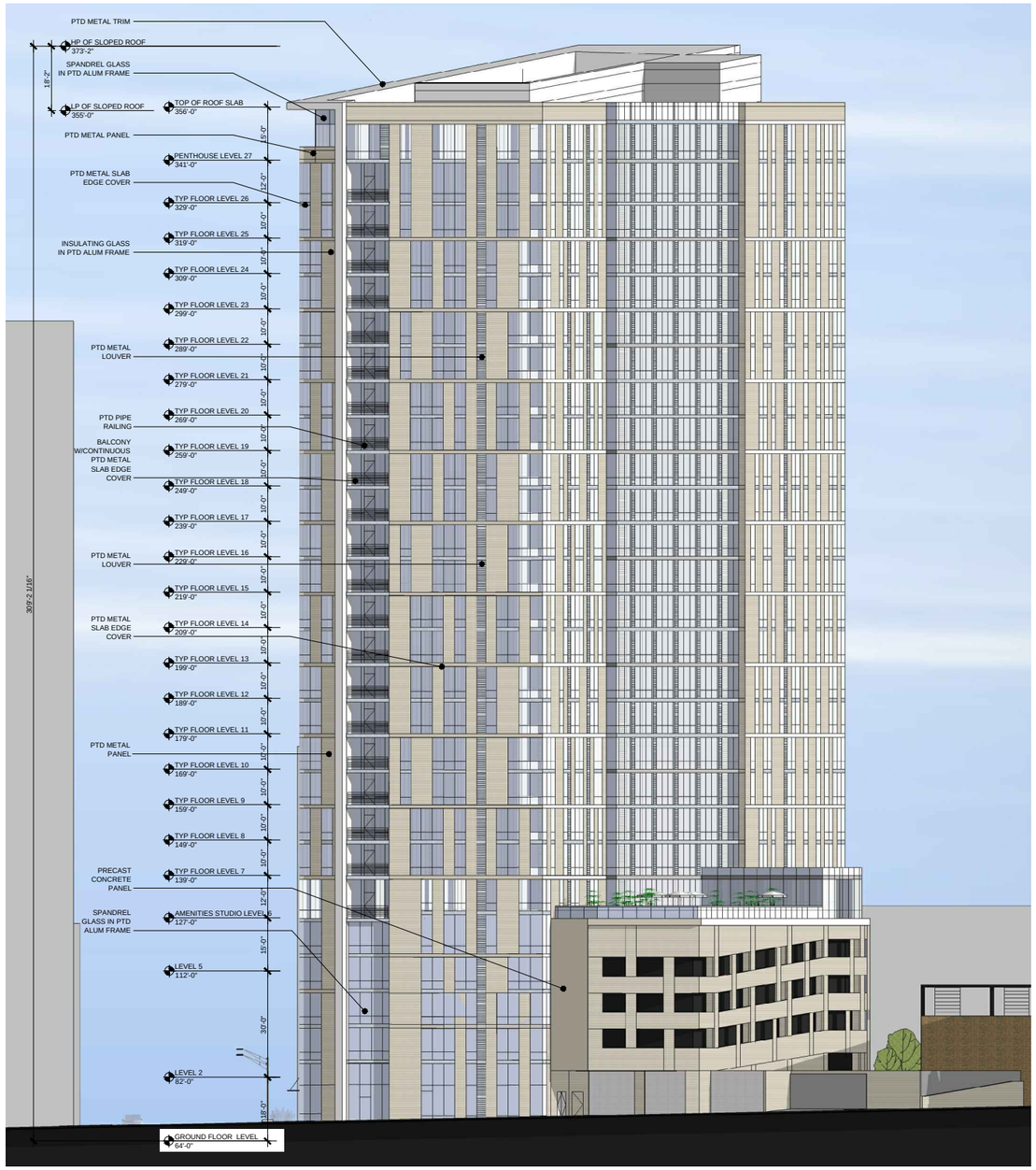
3601 Market Street, Philadelphia PA

1219000

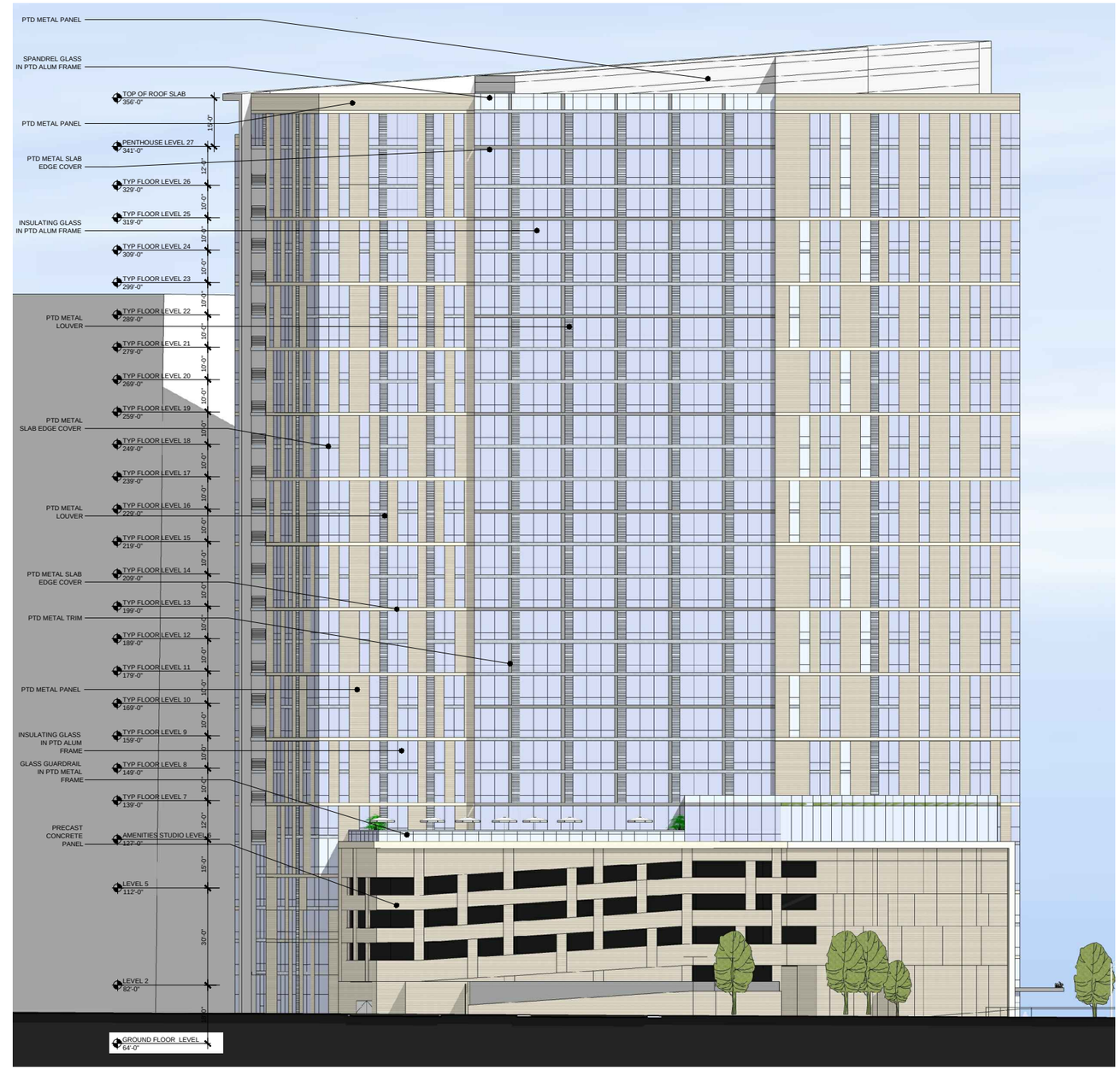
March 19, 2013

Southern Land Company

WEXFORD SCIENCE+TECHNOLOGY



NORTH ELEVATION



WEST ELEVATION

0 16 32 64

ELEVATIONS

BLTa

UC Science Center Residential Tower
3601 Market Street, Philadelphia PA

1219000
March 19, 2013

Southern Land Company
WEXFORD SCIENCE+TECHNOLOGY

NORTH/SOUTH LOOKING WEST AT 36TH STREET

0 16 32 64

SITE SECTION

BLTa

UC SCIENCE CENTER RESIDENTIAL TOWER
3601 MARKET STREET, PHILADELPHIA PA

1219000
MARCH 19, 2013

SOUTHERN LAND COMPANY
WEXFORD SCIENCE+TECHNOLOGY

EAST/WEST LOOKING NORTH AT MARKET STREET

0 16 32 64

SITE SECTION

BLTa

UC Science Center Residential Tower
3601 Market Street, Philadelphia PA

1219000
March 19, 2013

Southern Land Company
WEXFORD
SCIENCE+TECHNOLOGY

EYE LEVEL VIEW FROM SOUTHEAST

RENDERING

STREET LEVEL VIEW FROM SOUTHEAST CORNER OF MARKET & 36TH STREET

RENDERING

BLTa

UC Science Center Residential Tower
3601 Market Street, Philadelphia PA

1219000
March 19, 2013

Southern Land Company
WEXFORD
SCIENCE+TECHNOLOGY

BUILDING AXON

MASSING MODEL

LEED

LEED v.3 (2009) - NC Registered Project Checklist

BLT Design Study

Potential High	Potential Med	Potential Low	Total Possible						
17	5			**Sustainable Sites - 14 Possible Points**	Requirements	**Design Strategies**	**Respons.**	**Costs**
				Prereq 1	Erosion & Sedimentation Control	Erosion and Sediment Control plan to more stringent 2003 EPA, local code	Local regulations require compliance?	Civil	Low
1				SS 1	Site Selection	Avoid undeveloped farmland, flood plain, wetlands, water edge, habitat, etc.	Is site previously developed? Is it 5' above flood plain?		
5				SS 2	Development Density & Community Connectivity	Use previously developed site, with min. density, or 1/2 mile from community	Need to map out local urban services to show compliance		
	1			SS 3	Brownfield Redevelopment	Develop on a local, state or EPA classified contaminated site	Is site on state remediation list? Is there other documentation of brownfield certification?		
6				SS 4.1	Alternative Transportation: Public Transit Access	Locate building w/in 1/2 mile rail station or 1/4 mile of 2 bus lines	Convenient access to subway station and bus stops?		
	1			SS 4.2	Alternative Transportation: Bike Storage / Change Rms	Bike storage and shower facilities for min. 5% of building occupants	Need to calculate appropriate population. Need to determine number and location of showers.	Arch	Low
3				SS 4.3	Alternative Transportation: LEV / Fuel Efficient Vehicles	Preferred parking for ZEV vehicles, or alt. fuel stations for 3% of parking	Locate dedicated parking spaces on site with signs, near entrance.	Arch	Low
				SS 4.4	Alternative Transportation: Parking Capacity	Do not exceed zoning required parking; car pool parking for 5%	Less than code? Prefered parking for carpools/vanpools - 5% of occupants?	Arch	Low
				SS 5.1	Site Development: Protect or Restore Habitat	Limit disturbance area on greenfield sites; restore 50% of developed sites	Restore 50% of non-building open space to native vegetation?	Arch	Low
	1			SS 5.2	Site Development: Maximize Open Space	Exceed open space requirement in zoning code by 25%	Leave some space open to the sky? What percent?	Arch	Low
	1			SS 6.1	Stormwater Design: Quantity Control	No net increase in runoff, or protect streams, or reduce impervious by 25%	Need to conform to new City regulations? Capture rain water, reduce run-off, bioswales? Pervious paving?		
	1			SS 6.2	Stormwater Design: Quality Control	Treat runoff to remove 80% TSS, follow best management practices	Need to conform to new City regulations, treat and filter run-off solids.	Civil	High
1				SS 7.1	Heat Island Effect: Non-Roof	For 50% of hardscape provide shade, reflectance or open grid; cover parking	New trees for shade on open areas, surface parking, light colored walks?	Arch	Med
1				SS 7.2	Heat Island Effect: Roof	High solar reflectance index for roof (75%) or green roof (50%) or comb.	Specify high-albedo, high SRI roofing materials, white color; consider green roofing?	Arch	Low
				SS 8	Light Pollution Reduction	Do not exceed IESNA exterior stds per zone; eliminate interior light escape	Innovative exterior lighting - avoid night sky pollution? Controls on interior lights near windows?	Arch	Low
4	2			**Water Efficiency - 5 Possible Points**					
1				WE 1.1	Water Efficient Landscaping, Reduce by 50%	Reduce potable water consummation for landscaping by 50%	Planters on sidewalk and roof decks currently on the job - collect and use rainwater?	Civil	Low
	1			WE 1 .2	Water Efficient Landscaping, 100%	Reduce potable water consummation for landscaping by 100%	Do not provide any irrigation systems? 2nd tank for incremental use of grey water for landscaping?	Civil	Med
				WE2	Innovative Wastewater Technologies	Reduce potable water use for sewage by 50% or treat wastewater on-site	Not likely given site.	Civil	Med
3				WE 3.1	Water Use Reduction, 20% Reduction	Use 20% less than baseline from Energy Policy Act of 1992	Specify low flow plumbing fixtures: toilets, showers, lavs?	Mech	Low
	1			WE 3.2	Water Use Reduction, 30% Reduction	Use 30% less than baseline from Energy Policy Act of 1992	Not realistic for condominium	Mech	Low
3	8	2		**Energy & Atmosphere - 17 Possible Points**					
				Prereq 1	Fundamental Commissioning of Building Systems	Designate CxA, develop commissioning plan, incl. HVAC, lighting, DHW, etc.	Hire separate consultant or separate expert within MEP firm	Mech	Med
				Prereq 2	Minimum Energy Performance	Design to energy performance requirements of ASHRAE 90.1-2004	Need to develop computer energy model to test thermal efficiency	Arch	Med
				Prereq 3	Fundamental Refrigerant Management	Zero use of CFC-based refrigerants in new buildings	Mechanical specs	Mech	Low
	4	2		EA 1 .1	Optimize Energy Performance (10 pts)	Reduce energy cost by 10.5% - 42% compared to ASHRAE 90.1-2004	High perf glass; heat recovery; increased insulation; solar shading; reduced artificial lighting, etc.	Mech	High
				EA 2.1	On-Site Renewable Energy, 2.5% / 7.5% / 12.5% (3 pts)	Use on-site energy systems to offset building energy cost by 2.5% - 12.5%	Consider large array of photovoltaic panels on roof? Energy model required?	Owner	High
2				EA 3	Enhanced Commissioning	Focused design reviews; submittal reviews; recomiss. manual; etc.	Added cost for consultant and GC; save operating costs, better performance.	Owner	High
	2			EA 4	Enhanced Refrigerant Management	Calc. ozone depletion; no HCFC's, halon in HVAC&R or fire suppression	Mechanical specs can address	Mech	Low
1				EA 5	Measurement & Verification	Comply with performance requirements of US DOE IPMVP, Option D or B	Needs detailed study by engineer; not realistic with all the condo units	Mech	Med
	2			EA 6	Green Power	For 35% of energy, min. 2 yr. contract to purchase Green-e certified power	Make green power deal for building with PECO Wind?	Mech	Low
6				**Materials & Resources - 13 Possible Points**					
				Prereq 1	Storage & Collection of Recyclables	Provide areas for separation, collection & storage of recyclables	City regulations; option for off-site separation and recycling with adequate on-site loading area	Arch	Low
				MR 1.1	Building Reuse: Maintain 75% of Existing Shell	Maintain at least 75% of structure and shell (excl. windows)	Not applicable for new construction; encourages renovation		
				MR 1.2	Building Reuse: Maintain 95% of Shell	Maintain at 95% of structure and shell (excl. windows)	Not applicable for new construction; encourages renovation		
				MR 1.3	Building Reuse: Maintain 50% Interior Non-Structural	Maintain 50% non-shell interior partitions, flooring, ceilings, incl. additions	Not applicable for new construction; encourages renovation		
1				MR 2.1	Construction Waste Management: Divert 50%	Recycle/salvage min. 50% of construction, demo and clearing debris	CM and GC to manage on site with separate containers; need a plan to address each type of material	CM	Low
1				MR 2.2	Construction Waste Management: Divert 75%	Recycle/salvage min. 75% of construction, demo and clearing debris	CM and GC to manage on site with separate containers; need a plan to address each type of material	CM	Low
				MR 3.1	Materials Reuse, 5% salvaged or refurbished	Specify min. 5% salvaged, reused or refurbished materials	Not likely to reuse products from other buildings or sites		
				MR 3.2	Materials Reuse, 10% salvaged or refurbished	Specify min. 10% salvaged, reused or refurbished materials	Not likely to reuse products from other buildings or sites		
1				MR 4.1	Recycled Content: 10% (post-consumer + ½ p.i.)	Specify 10% materials w/ recycled content (post-cons. + 1/2 pre-cons.)	Can achieve through careful product selections and specs; concrete, steel, gyp, tile, carpet, metals	Spec	Med
1				MR 4.2	Recycled Content: 20% (post-consumer + ½ p.i.)	Specify 20% materials w/ recycled content (post-cons. + 1/2 pre-cons.)	Can achieve through careful product selections and specs; concrete, steel, gyp, tile, carpet, metals	Spec	Med
1				MR 5.1	Regional Materials: 10% extracted & manuf. regionally	Min. 10% of materials extracted & manufactured within 500 miles of site	Can achieve with concrete, steel, gypsum board, etc.	Spec	Low
1				MR 5.2	Regional Materials: 20% extracted & manuf. regionally	Min. 20% of materials extracted & manufactured within 500 miles of site	Can achieve with concrete, steel, gypsum board, etc.	Spec	Med
				MR 6	Rapidly Renewable Materials	Use 2.5% of total material to be from rapidly renewable resources	Consider bamboo wood flooring? Use linoleum or cork flooring, ceramic tiles?	Spec	Low
				MR 7	Certified Wood	Use 50% of wood based materials to be FSC certified	Certified wood for millwork in lobby, cabinets, counters, wood blocking and framing?	Spec	High
7	2	2		**Indoor Environmental Quality - 15 Possible Points**					
				Prereq 1	Minimum IAQ Performance	Meet min. ventilation requirements of ASHRAE 61-2004	Comply with codes and/or ASHRAE, need engineer input and analysis	Mech	Low
				Prereq 2	Environmental Tobacco Smoke (ETS) Control	Prohibit or restrict smoking, inside and outside building	Need special treatment at unit doors, pressurized hallways, unit exhausts	Mech	Low
				EQ 1	Outdoor Air Delivery Monitoring	Monitor CO2 levels and ventilation systems, provide alarms	Can include CO2 sensors within private rooms, conference rooms, apt. units	Mech	Low
				EQ 2	Increased Ventilation	Vent. system exceed ASHRAE 62.1-2004 by 30%, or CIBSE nat. vent. reqts.	Providing operable windows; or increase outside air ventilation and heat recovery to avoid energy losses	Arch	High
1				EQ 3.1	Construction IAQ Management Plan, During Construction	Meet SMACNA IAQ guidelines; replace filters, protect from moisture	CM or GC to manage, specification to identify measures needed	GC	Med
		1		EQ 3.2	Construction IAQ Management Plan, Before Occupancy	Use outside air flush out building interior, or use air testing procedures	CM or GC to manage, specification to identify measures needed	GC	Med
1				EQ 4.1	Low-Emitting Materials: Adhesives & Sealants	Adhesives and sealants to meet VOC limits defined by USGBC	Can achieve through specifications.	Spec	Low
1				EQ 4.2	Low-Emitting Materials: Paints & Coatings	Paints, coatings and wood finishes to meet VOC limits of Green Seal	Can achieve through specifications.	Spec	Low
1				EQ 4.3	Low-Emitting Materials: Carpet Systems	Carpet to meet CRI Green Label Indoor Air Quality Test Program	Can achieve through specifications.	Spec	Low
		1		EQ 4.4	Low-Emitting Materials: Composite Wood & Agrifiber	Composite wood and agrifiber to contain no added urea-formaldehyde	Can achieve through specifications. Not that easy to track all products.		
				EQ 5	Indoor Chemical & Pollutant Source Control	Entry dirt control floor mats; separate exhausts; negative pressures; filters	Difficult to achieve all three items; need full height walls at printer/copier spaces; better filters	Arch	Low
1				EQ 6.1	Controllability of Systems: Lighting	Individual lighting controls for 90% of occupants, and for shared spaces	Provide lighting controls in all occupied rooms, window treatments	Arch	Med
1				EQ 6.2	Controllability of Systems: Thermal Comfort	Individual comfort controls for 50% of occupants, and for shared spaces	Thermal controls require more VAV boxes for office spaces and conference rooms; easy for apt. units	Mech	Med
1				EQ 7.1	Thermal Comfort: Design	Temperature, air speed, humidity levels per ASHRAE 55-2004	Coordinate with engineer, may require humidity control in HVAC units	Mech	High
				EQ 7.2	Thermal Comfort: Verification	Perform survey of occupant comfort; make corrections if needed	Owner can provide occupant surveys and assemble data, choose to respond	Owner	Low
	1			EQ 8.1	Daylight & Views, Daylight 75% of Spaces	Achieve min 2% Daylight Factor for 75% of occupied spaces	All occupied rooms satisfy requirement? Needs floor plan evaluation, or use light meters	Arch	Low
	1			EQ 8.2	Daylight & Views, Views for 90% of Spaces	Direct line-of-sight window from 90% of regularly occupied spaces	All occupied rooms satisfy requirement? Needs floor plan evaluation. If borrowed lights, need clear glass	Arch	Low
5				**Innovation & Design Process - 5 Possible Points**					
1				IOUM 1.1	Innovation in Design: Education & Demonstration		Consider Philly CarShare use of garage?	Arch	Low
1				IOUM 1.2	Innovation in Design: Provide Specific Title	Substantially exceed LEED performance credits (e.g. water or energy efficiency); Address relevant issues not covered by rating system (e.g. sound control, life cycle analysis of materials, occupant education, etc); community development; etc.	Educational programs; artificial wetlands for purification of combined storm/rain water system	Civil	Med
1				IOUM 1.3	Innovation in Design: Provide Specific Title		Use green furniture in lobby for seating, tables,etc.? Upgrades sound control for demising walls?	Arch	Low
1				IOUM 1.4	Innovation in Design: Provide Specific Title		Use of automated garage to reduce super structure, higher building density (ie. 120,000 sq. ft per acre)	Arch	Med
1				IOUM 2	LEED™ Accredited Professional	Min. one LEED accredited professional on Project Team	BLT Architects	Arch	Low
42	17	4		**Project Totals (pre-certification estimates)**					
90%	60%	10%		**Certified 40-49 points**	**Silver** 50-59 points	**Gold** 60-79 points	**Platinum** 80 points		
38	10	0		48	Adjusted Potential LEED credits				

MAJOR EXTERIOR MATERIALS

TOWER

PAINTED METAL PANELS, BUFF COLOR, MATTE FINISH
PAINTED METAIL SLAB EDGE COVERS & TRIM - 3 COLORS
PAINTED METAIL ARCHITECTURAL LOUVERS
PAINTED PIPE RAILINGS
VISION GLASS, HIGH PERFORMANCE, NON-TINTED LOW REFLECTANCE INSULATING GLASS
SPANDREL INSULATING GLASS WITH FRIT ON FOURTH SURFACE

BASE ADDITIONAL MATERIALS

PRECAST CONCRETE PANELS WITH MASONRY FINISH
FIXED PAINTED METAL CANOPIES/MARQUEE

SUSTAINABLE DESIGN ELEMENTS & BUILDING MATERIALS