

From **BROWN** to **GREEN**: The Watershed @ Hillsdale Senior Housing



The Watershed at Hillsdale

August '06 - View from Bertha Court

williamwilsonarchitectspc



Sheila Fink, Community Partners for Affordable Housing (CPAH)
Craig Kelley, Housing Development Center (HDC)

Why A Brownfield?

- Because it was there (with 450,000 other PDLs)
- Severe shortage of affordable senior housing in Southwest Portland; buildable land unavailable
- Located in vibrant town center, near transit and services
- Knew we could enhance town center by reclaiming vacant, underutilized parcel
- Resources existed to make it possible (financial and technical assistance)



**Oleson Woods:
Woodlands/Wetlands
Low-Impact Development**



Brownfield Resources

- **EPA:** Tim Brincefield and Veronica Henzi
- **DEQ:** Bob Williams
- **BES:** Clark Henry
- **OSU:** Jerry Orlando (TOSC/TAB Programs)
- All were proactive, helpful, accommodating, responsive, reviewed draft reports and documents, and were clear with schedule and requirements
- **Green/Smart Growth Resources** (Tend to support brownfield redevelopment):
 - Metro/TOD, Office of Sustainable Development, Enterprise

Why was this a **Brownfield**?

- From turn of century until 1950's: Fulton Park Dairy (hay barn on southern portion)
- 1920's: Bertha Station, stop on Red Electric line
- 1930's-40's: norther portion utilized as auto wrecking and gas fueling facility
- 1957: purchased by ODOT (in recent years used for newspaper recycling & overnight vehicle storage)
- Late 1990's: Multnomah County considered it for library, didn't proceed; ODOT noted intention to auction property

Project Description

- 51,500 SF Mixed Use Development on .68 acre
- ~3,300 SF of Commercial Condominium; 37 parking spaces residential/commercial
- 3 & 4 story wood frame construction/PT slab
- 51 units senior housing (48, 1-bedrooms)
- 40 units with rental assistance (very low-income, including 8 for homeless Vets)
- On site offices for service providers; community room for residents & neighborhood
- Targeting LEED Silver certification; completion fall '07

Development Team

- **Sponsor:** Community Partners for Affordable Housing
- **Project Manager:** Housing Development Center
- **Architect:** william wilson architects, p.c.
- **General Contractor:** Walsh Construction Co/OR
- **LEED Consultant:** Green Building Services
- **Environmental:** Hahn and Associates

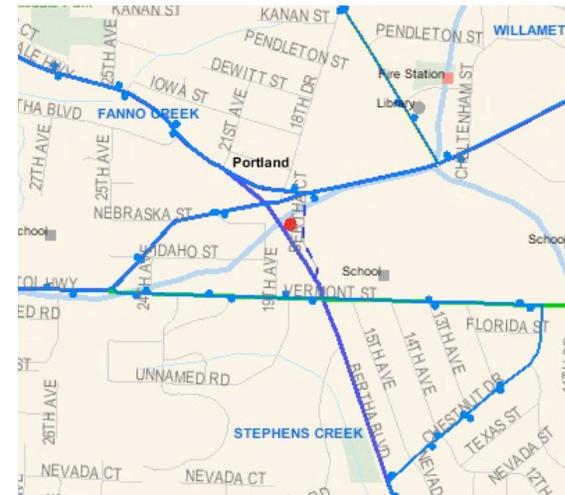


How did a brownfield get named “The Watershed @ Hillsdale”

- Neighborhood told us our project name (Bertha Station) was trite, they would help us find just the right one...they chose Watershed because:
- It's between the Tualatin & Willamette River watersheds
- It's at the headwaters of Stephens & Fanno Creeks
- It's sensitively handling all the stormwater it can on-site
- It's a “watershed moment” in their development history, one of the last pieces of buildable land, and project that will book-end their neighborhood (with the LEED Hillsdale Library on the other end)

John Wesley Powell's definition of Watersheds:

"that area of land, a bounded hydrologic system, **within which all living things are inextricably linked** by their common water course and where, as **humans settled, simple logic demanded that they become part of a community.**"

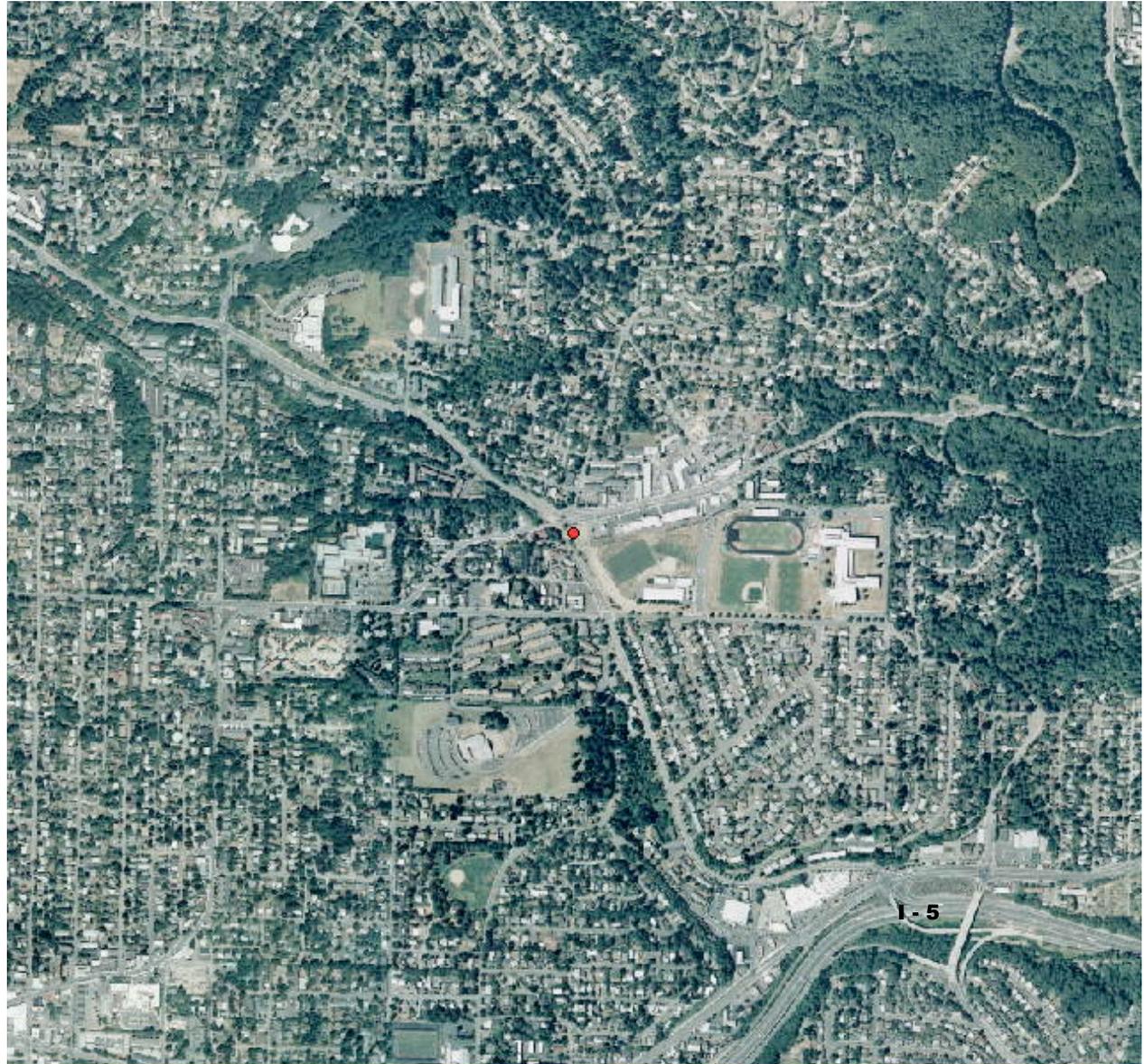


Project/Community Goals

- Redevelop/reclaim vacant brownfield site
- Utilize access to transit and services
- Build gateway to Hillsdale Town Center
- Take CPAH's greening of projects to next level
 - 20-30% reduction in energy & water consumption
 - Long term building durability (60 year affordability term)
 - Lower maintenance and operating expenses
 - Improved indoor environmental quality
 - Meet specific needs of senior population (lighting, social)

Site
Location

Hillsdale
Town
Center



Site Opportunities

- Location: Proximity to services
- Location: Proximity to commercial
- Location: Proximity to transit
- Mixed Use
- Community

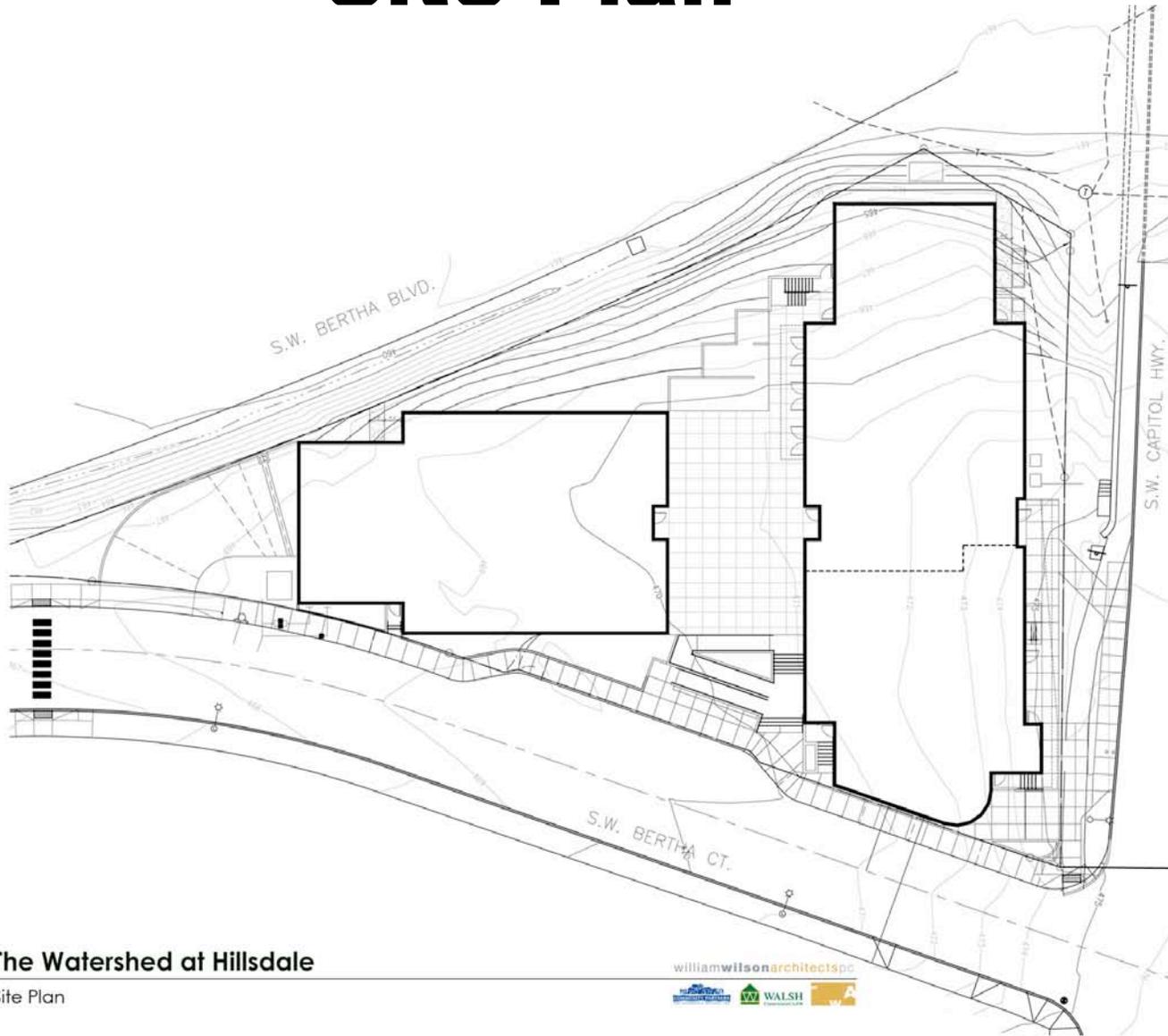


Site Challenges



- Small triangular site
- Surrounded by 3 roads
- Brownfield
- Non structural fill
- 15' grade change
- Tight site (no staging)
- Mixed Use
- Design Review Overlay

Site Plan



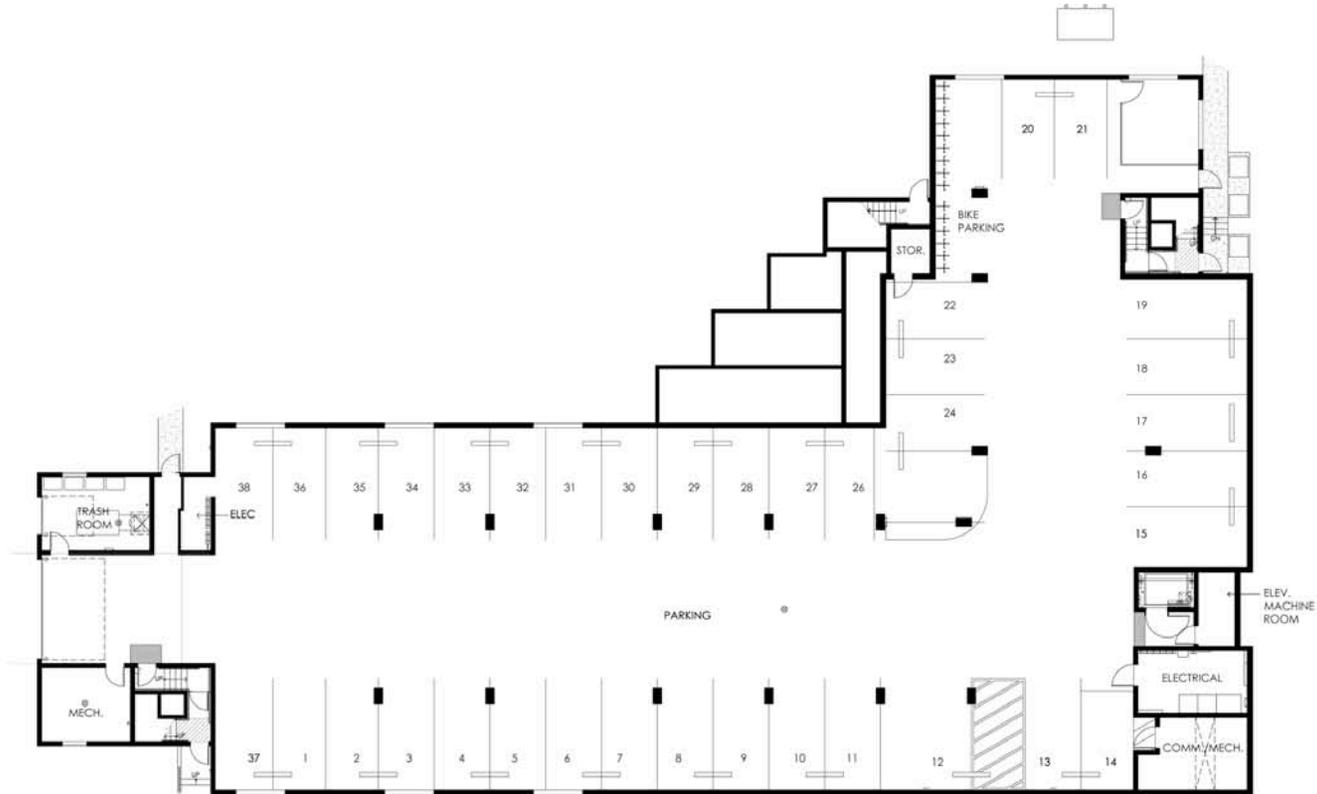
The Watershed at Hillsdale

Site Plan

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Parking Level Plan



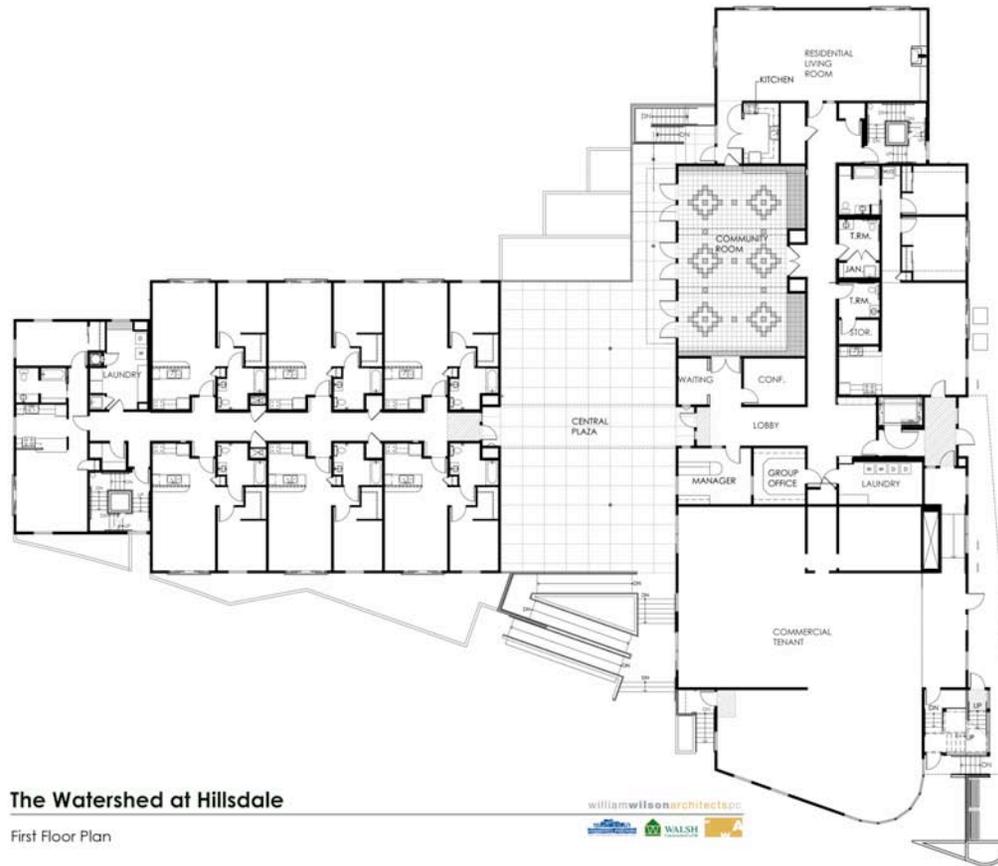
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Parking Level Plan

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1st Floor Plan

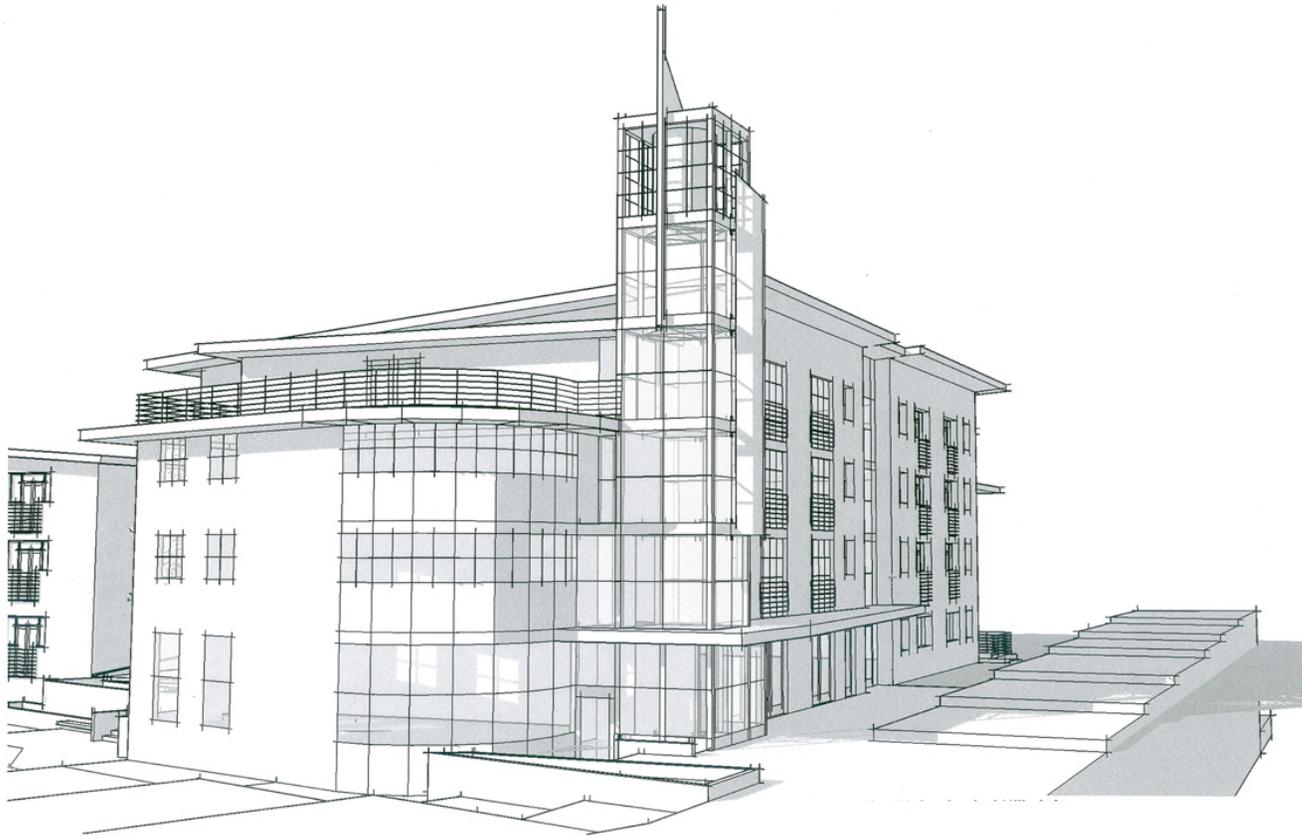


The Watershed at Hillsdale

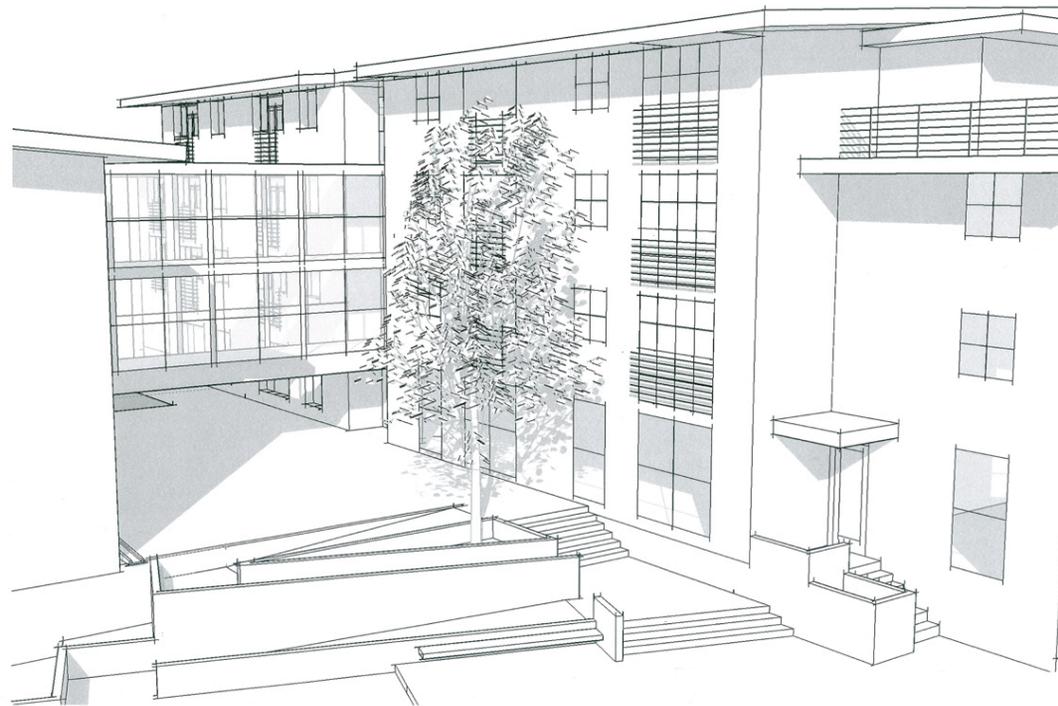
First Floor Plan



View from NE



View of plaza and entry water garden



Process

- **Early assembly of team**
 - RFQ selection for architect & contractor
- **Community Charrettes**
 - Community design charrette
 - LEED oriented charrette
- **Look at challenges as opportunities** for funding
 - Brownfield – EPA
 - Mixed use/structured parking – Metro
 - Green Building – OSD, Enterprise, BETC

Project Financing

| SOURCES OF FINANCING | | | | |
|------------------------------------|-------------------|------------------|-------------------|---------------|
| | Housing | Commercial | Total | % |
| LOANS | | | | |
| Permanent Loan - NOAH | 1,455,525 | | 1,455,525 | 12.6% |
| PDC Equity Gap Loan | 866,732 | | 866,732 | 7.5% |
| Developer Loan (Deferred Fee) | 379,439 | 37,847 | 417,286 | 3.6% |
| | | Subtotal | 2,739,543 | 23.7% |
| HOUSING GRANTS | | | | |
| OHCS Trust Fund | 65,000 | | 65,000 | 0.6% |
| SDC Exemption | 250,000 | | 250,000 | 2.2% |
| | | Subtotal | 315,000 | 2.7% |
| TAX CREDIT EQUITY | | | | |
| Enterprise Community | 6,825,000 | | 6,825,000 | 58.9% |
| | | Subtotal | 6,825,000 | 58.9% |
| OTHER | | | | |
| Commercial Condominium Sale | | 950,000 | 950,000 | 8.2% |
| Cash During Lease UP | 30,000 | | 30,000 | 0.3% |
| | | Subtotal | 980,000 | 8.5% |
| GREEN/BROWN SOURCES | | | | |
| Office of Sustainable Development | 80,000 | | 80,000 | 0.7% |
| METRO Centers Implementation | 69,486 | 160,514 | 230,000 | 2.0% |
| EPA Brownfield Redevelopment Fund | 200,000 | | 200,000 | 1.7% |
| OHCS Weatherization | 100,000 | | 100,000 | 0.9% |
| Better Bricks | 3,000 | | 3,000 | 0.0% |
| BETC | - | 57,000 | 57,000 | 0.5% |
| Enterprise Green Communities Grant | 50,000 | | 50,000 | 0.4% |
| | | Subtotal | 720,000 | 6.2% |
| Total Sources | 10,374,182 | 1,205,361 | 11,579,543 | 100.0% |

Project Uses

| USES OF FINANCING | | | | |
|--------------------------------------|-------------------|------------------|-------------------|---------------|
| | Housing | Commercial | Total | % |
| Acquisition | 342,541 | 23,892 | 366,433 | 3.2% |
| Brownfield Cleanup | 228,000 | 12,000 | 240,000 | 2.1% |
| Green Construction costs (estimated) | 265,000 | - | 265,000 | 2.3% |
| Parking | 852,027 | 408,973 | 1,261,000 | 10.9% |
| Construction | 5,951,693 | 309,226 | 6,260,919 | 54.1% |
| Green Soft Costs (estimated) | 115,000 | - | 115,000 | 1.0% |
| Soft Costs | <u>2,619,921</u> | <u>451,270</u> | <u>3,071,191</u> | <u>26.5%</u> |
| Total Uses | 10,374,183 | 1,205,360 | 11,579,543 | 100.0% |

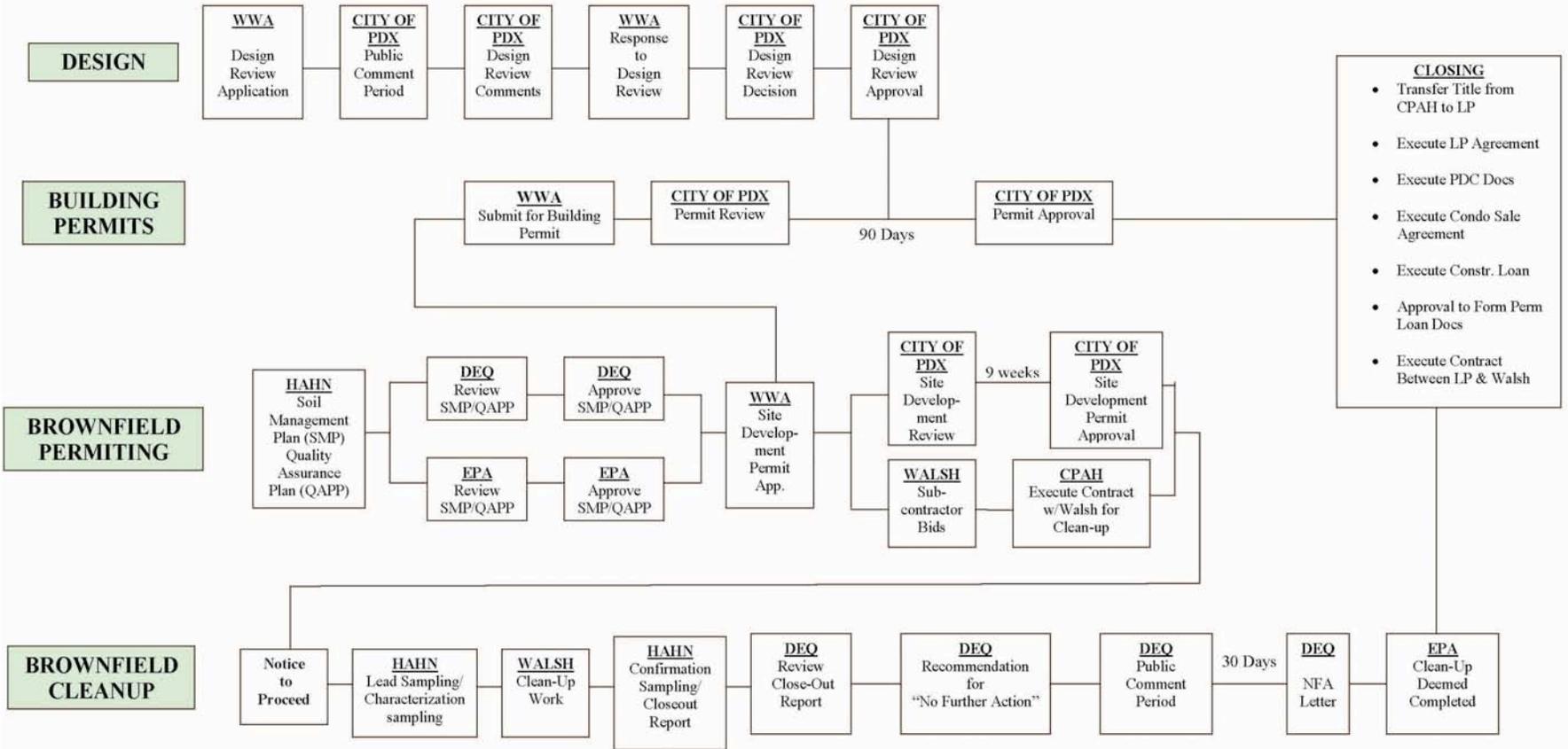
Brownfield Cleanup

- Lengthy process of assessment and cleanup
- Property owned by ODOT during most of assessment period so no interest accruing to project

| Document Name | Date | Performed By | Performed For |
|---------------------------------------|--------------|--------------------|------------------|
| Phase I Environmental Report | August-98 | PBS Environmental | Multnomah County |
| Phase II Environmental Report | September-99 | PBS Environmental | Multnomah County |
| Environmental Site Characterization | February-00 | PBS Environmental | Multnomah County |
| Targeted Brownfield Assessment | January-02 | DEQ | EPA |
| Geophysical survey | September-02 | Geopotential | ODOT |
| Groundwater Monitoring Report | September-03 | ODOT | ODOT |
| No Further Action Letter | January-04 | DEQ | ODOT |
| Quality Assurance Plan | April-06 | Hahn Environmental | CPAH |
| Soil Management Plan | April-06 | Hahn Environmental | CPAH |
| Phase I Environmental Report | November-06 | Hahn Environmental | CPAH |
| Closure Report for Brownfield Cleanup | November-06 | Hahn Environmental | CPAH |
| No Further Action Letter | December-06 | DEQ | CPAH |
| Final Performance Report | December-06 | CPAH/HDC | EPA |

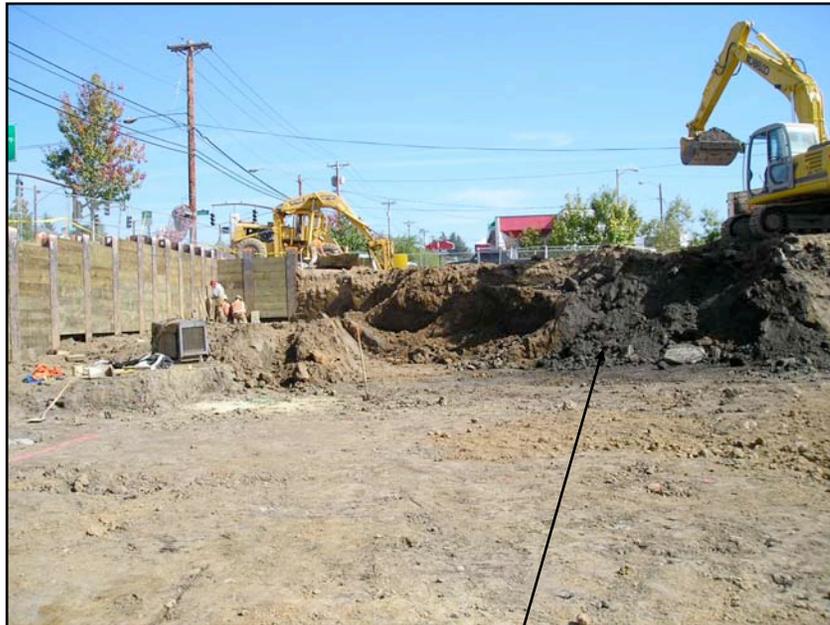
The Watershed Project Regulatory Agency Flow Chart

Post LIHTC Award in 11/05
Updated 8/29/06



Key:
WWA: William Wilson Architects
Hahn: Hahn Environmental Consulting
DEQ: Oregon Department of Environmental Quality
CPAH: Community Partners for Affordable Housing
PDC: Portland Development Commission
City Of PDX: City of Portland, Bureau of Development Services
Walsh: Walsh Construction Co/Oregon
EPA: US Environmental Protection Agency
LP: Bertha Senior Housing Limited Partnership

Brownfield Cleanup



Petroleum contaminated soil



Site after brownfield cleanup completed

Meeting Energy and Water Conservation Goals

- **Initial Strategies:**
 - Insulated Concrete Form walls
 - Rainwater Harvesting
- **Revised Strategies:**
 - Upgrade insulation
 - High efficient boiler, furnace, hot water
 - Low flow plumbing fixtures
 - Rainwater “Gardens” (detention, but not re-use)
- **3 green standards/reporting formats:**
 - Enterprise Green Communities, LEED, OSD

Brownfield or not, it's all about the soil!

- Geotechnical investigation
 - Preliminary geotech investigation: contaminated soil and non structural fill
 - Brownfield/environmental liability limited us from full investigation until we owned the site
 - Full geotechnical report revealed native soils prone to liquefaction during earthquake, requiring deep piling
 - Weight and lateral loads from ICF's and stored rainwater significantly added to piling and grade beam costs
 - Moved from geopiers to deep piles

Lessons Learned

- **Set goals but have flexibility in strategies/measures**; rely on wisdom of the team (integrated design)
- **Select team willing to make strong commitment** to goals (it ain't easy going from brown to green!)
- Everyone on **team must be creative**
 - Brownfield cleanup was required to be completed prior to construction loan closing or else EPA would not award grant.
 - Lenders/funders had to allow work to be completed prior to construction closing (risk!).
 - CPAH had to raise more predev funding.
 - Separate site development permit required from City (extra costs).
 - Good news: ODOT held site thru-out investigation (no carrying costs); clean up done during dry season, mitigating construction risk

Lessons Learned - Continued

- **Create road map** for team and funders (it's just a process)
- **Estimate true costs** of time & complexity (brownfields do require additional resources)
- **Let experts (EPA, DEQ) help** in reducing perceived risks
- **Take advantage of trainings** and listen to other case studies to build your confidence
- **Get local jurisdictions involved early** (not just EPA and DEQ) to ensure that one clear path is charted to reduce costs and confirm timeline

Lessons Learned - Continued



- **Involve the local community** from start to finish (wisdom of the team!)
 - Solicit questions, ideas, reassurance along the way
 - Neighborhood and Business association were important champions with our funders, and enthusiastic recipients of brownfield info along the way

From **Brown** to **Green!**



QUESTIONS?



