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SUBJECT: MP2H – Assumptions Memo

ECONorthwest utilized MapCraft labs to run financial pro formas to test development feasibility and summarize potential development outcomes under different land use scenarios. To understand the impact to development, given the factors of the alternative scenarios, our pro forma models evaluated changes to the *residual land value* (RLV) of the development typologies, or *prototypes*, under both the existing zoning allowances (base scenario) and potential future zoning scenarios defined by the Perkins+Will urban design concepts and in discussion with City of Portland staff. This memorandum documents the assumptions used in the pro forma analysis for the preferred land use scenario.

Pro Forma Methodology

RLV is an estimate of what a developer would be able to pay for land given the property's income from leases or sales, the cost to build as well as operate the building, and the investment returns needed to attract capital for the project (we assume an industry standard for ROC for what is necessary to attract institutional capital). In other words, it is the budget that developers have remaining for land after all the other development constraints have been analyzed. While there are other quantitative methods for calculating value created from land use changes and calibrating public benefit requirements, such as an internal rate of return (IRR) threshold approach, all of the potential methods share drawbacks regarding the quality of inputs and sensitivity to those inputs. An advantage of the RLV approach is that it does not rely on land prices as an input. Rather, observed land prices can be compared with the model outputs to help calibrate the model and ensure it reflects reality. This pro forma analysis identifies market feasible development for projects that have a positive RLV after subtracting the Multnomah County Assessor's estimates of real market value on each parcel and assuming current estimates of leases or sales, the cost to build as well as operate the building, and the investment returns needed to attract capital for the project.

We used RLV to identify the prototypical development with the highest value for each site in the study area. This reflects the likely market conditions where land will sell to whichever developer is able to pay the highest price. The RLV analysis is an estimate of the feasibility for the market to produce housing and commercial space – it is used to compare policy and investment choices but does not produce a precise answer for every site due to variations in property conditions and property owner decisions. It is best to use these results to understand the direction and scale of policy and investment choices

relative to desired outcomes (e.g., more housing units or jobs under different potential alignment scenarios). The outputs of this analysis are not intended to be a final recommendation, but to help ground future recommendations and policy decisions in the context of market realities and how private investment decisions are made.

Additionally, this analysis relies heavily on recent development trends and observed development within and around the study area. The near and mid-term impacts of COVID-19 on investment in residential and commercial development are unclear but will affect how and when the scenarios evaluated in this analysis might be realized. This is especially true for some of the larger sites above four acres in the study area that would require a phased development approach or more sensitivity to post-COVID market dynamics and broader Portland market residential and commercial absorption trends.

Assumptions

There are assumptions that were standard across the study area and assumptions that varied either by parcel (e.g., zoning, rent) or by prototype (e.g., single-family, multifamily). We detail these assumptions in the tables below.

Figure 1. Assumptions that Vary by Parcel

Variable	Value
Residential Market Variables	
Blended Avg Multifamily market rent (per sf per month)	$2.00 to $2.85
Condo sales price (per sf)	$200 to $260
Single-family / Townhome sales price (per sf)	$500 to $600
Commercial Market Variables	
Office rent (per sf)	$22 to $27
Industrial rent (per sf)	$8
Industrial office rent (per sf)	$27
Ground floor retail sales rent (per sf)	$35

Figure 2. Assumptions that Vary by Prototype

Variable	Value
Assumed Unit Sizes in Unit Mix (bedroom size)	
Multifamily	0 to 2 bedrooms
Single-Family / Townhome	1 to 4 bedrooms
Blended Unit Size (square feet)	
Multifamily	550 to 710
Single-Family / Townhome	860 to 3,000
Blended Parking Ratio	
Multifamily (per unit)	0 to 1
Single-Family / Townhome (per unit)	0 to 1
Office (per 1,000 sf)	0 to 2
Industrial (per 1,000 sf)	0 to 0.75
Retail (per 1,000 sf)	0 to 0.5

Figure 3. Assumptions that are Standard Across Study Area

Variable	Value
Affordability Policy	
Portland Median Family Income	$92,100
Number of residential units to be exempt from IH	19
Commercial fee-in-lieu (per sf of use)	$20
Utility allowance - as a percent of rent	5%
Affordable rent - MFI depth	60%
Affordable rent - set-aside	8 to 15%
Affordable sales - MFI depth	80%
Affordable sales - set-aside	8 to 15%
Alignment and Transit Premium	
Maximum Rent Premium for Streetcar (new and existing) - Multifamily	20%
Maximum Rent Premium for Streetcar (new and existing) - Condo	9%
Maximum Rent Premium for Streetcar (new and existing) - SF	9%
Maximum Rent Premium for Streetcar (new and existing) - Office	14%
Maximum Rent Premium for Streetcar (new and existing) - Retail	20%
Maximum Rent Premium for LightRail - Multifamily	6%
Maximum Rent Premium for LightRail - Condo	15%
Maximum Rent Premium for LightRail - SF	15%
Maximum Rent Premium for LightRail - Office	10%
Maximum Rent Premium for LightRail - Retail	7%
Maximum Rent Premium for Bus - Multifamily	2%
Maximum Rent Premium for Bus - Condo	1%
Maximum Rent Premium for Bus - SF	1%
Maximum Rent Premium for Bus - Office	6%
Maximum Rent Premium for Bus - Retail	6%
Operating costs	
Multifamily market rate vacancy	5%
Multifamily affordable vacancy	2%
Multifamily operating cost	20%
Multifamily property taxes	15%
Retail vacancy	10%
Retail operating cost	5%
Office vacancy	15%
Office operating cost	10%
Industrial vacancy	10%
Industrial operating cost	10%
Hard Costs - Residential	
Residential cost per sf - tower	$250
Residential cost per sf - podium	$200
Residential cost per sf - 4-5 story woodframe	$160
Residential cost per sf - 2-3 story woodframe	$140
Residential cost per sf - townhomes	$155
Residential cost per sf - single family	$135
Hard Costs - Commercial	
Office cost per sf (high density, excl. TI)	$200
Office cost per sf (mass timber, excl. TI)	$185
Office cost per sf (mid density, excl TI)	$175
Office cost per sf (low density, excl TI)	$150
Warehouse cost per sf	$85
Manufacturing cost per sf	$100

Flex Industrial cost per sf	$125
Flex Office cost per sf (excl. TI)	$150
Retail cost per sf (excl. TI) - sales	$150
Retail cost per sf (excl. TI) - restaurant	$200
Industrial ground floor cost per sf (excl. TI)	$150
Lobby Cost per sf (lux, incl. FF&E)	$200
Lobby Cost per sf (basic, incl. FF&E)	$150
Bike storage cost per sf	$125
Truck loading and parking ramping cost per sf	$75
Office TI cost per sf - high-rise	$100
Office TI cost per sf - mid-rise	$75
Office TI cost per sf - low-rise	$50
Flex Office TI cost per sf	$50
Retail TI cost per sf - sales	$50
Retail TI cost per sf - restaurant	$75
Industrial ground floor TI cost per sf	$30
Hard Costs - Site and Parking	
Site prep cost per sf of land	$5
Parking cost per stall - surface	$6,000
Parking cost per stall - private garage	$8,400
Parking cost per stall - podium	$40,000
Parking cost per stall - underground (less than or equal to typ. max floors)	$60,000
Parking cost per stall - underground (greater than typ. max floors)	$80,000
Harscape cost - driveway / truck court per sf	$10
Development Costs	
Soft Costs - a&e, insurance, no city fees	25%
City SDCs and permit fees for residential (per unit)	$15,000
City SDCs and permit fees for commercial (per sf)	$9
Constuction Excise Tax	1.0%
Developer Fee	4.0%
Contingency	4.0%
Sales commission	3.0%
Investment Metrics	
Residential ROC	5.0%
Office ROC	6.5%
Retail ROC	7.5%
Traditional Industrial ROC	8.5%
Flex and Urban Industrial ROC	7.5%
Structured Parking ROC	8.5%
Spread on cost for-sale residential	20%
Debt Service Coverage Ratio	1.25
Loan to Cost ratio	0.7
Interest rate	6.0%
Amortization Period	30
Parking Market Variables	
Residential podium parking rent (per stall per month)	$75
Residential tower parking rent (per stall per month)	$100
Office midrise parking rent (per stall per month)	$100
Office tower parking rent (per stall per month)	$100
Urban industrial parking rent (per stall per month)	$75