Memorandum

To: Cheryl Zuelig, SmithGroup-JJR

From: Todd J. Poole, 4ward Planning LLC

CC: Amber Miller, Ann Arbor DDA

Date: July 17, 2012

Re: Financial Feasibility Analysis Findings for Connecting William Street Project

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Background

4ward Planning earlier completed a market analysis focused on Ann Arbor's downtown area, in support of evaluating development opportunities within four undeveloped land parcels connected by East William Street. As part of its charge, 4ward Planning was tasked with perforing an in-depth financial feasibility analysis associated with three hypothetical mixed-use redevelopment scenarios (*the three specific scenarios examined are identified under the scenarios and methodology section of this memorandum*).

The principle objectives for performing the financial feasibility analyses were **(a)** to determine the minimum development density (e.g., units of housing and commercial square footage) and land-use mix (e.g., residential, retail and/or office) which could be financially viable – permitting a sufficient market rate of return given the associated risk for undertaking a development project within each of the project sites – and **(b)** to identify likely land values (per acre and per square foot) for each of the developable land parcels under study.

Methodology

4ward Planning relied upon build-out assumptions provided by SmithGroup-JJR, Ann Arbor's planning department and the Ann Arbor DDA, regarding permitted and proposed land-uses within the project study area. Conventional and locally germane metrics were used for site work and construction costs (4ward Planning's local developer interview findings were particularly instructive for developing locally relevant construction metrics).

Further, to ensure that our analysis was realistic, known and/or assumed pre-development costs were identified and modeled within the financial development pro forma (e.g., property acquisition, demolition, and general site improvements).

Development costs associated with parking are excluded from this analysis, as the current surface and structured parking supply managed by the Ann Arbor DDA is sufficient to service the land-uses and densities proposed.

The financial analysis performed (e.g., development and operating pro forma for each scenario examined) were performed on an unleveraged basis – that is, each development scenario was modeled without the assistance of debt, which is customary when performing a financial feasibility analysis for real estate development. Market area financial benchmarks such as the cash-on-cash rate of return (ROE) and the internal rate of return (IRR) were incorporated into the operating pro forma to allow analysis of financial viability (4ward Planning used identified financial benchmarks based on interview findings with local developers experienced with similar scale and types of development). We made an assumption that a project sale (the entire mixed-use project within a given scenario) would be sold in year 15, which is a reasonable hold period for projects of this size analyzed.

4ward Planning modeled each land parcel area as a stand-alone development opportunity/scenario, given the likelihood that each parcel would be subject to a separate development agreement between the city of An Arbor and a developer. Further, and based on three land-use variants (A, B and C) within each prospective development scenario provided by SmithGroup-JJR, 4ward Planning created 12 separate development and operating pro-forma (four prospective development scenarios times three iterations of each scenario). Separating out the financial analysis in this way permitted a meaningful financial return comparison, based on land-use mix and intensity.

The minimum financial return rate metrics needing to be satisfied by each of the 12 prospective development opportunities were a 10 percent cash-on-cash rate of return and a 10 percent internal rate of return. In 4ward Planning's experience, these financial return metrics are reasonable, given Ann Arbor's current market conditions for housing and commercial space, as well as the perceived development risk (e.g., the likelihood of completing a development project in a reasonable period of time). However, we recognize that the above financial return rate metrics will vary according to a developer's tolerance for risk, personal interests in the development, and changing market conditions.

Two of the 12 scenarios modeled involved a hotel conference center facility. The conventional method for determining land acquisition costs for lodging facilities is as percentage of total room development costs. Accordingly, 4ward Planning applied this methodology within the modeling involving lodging facilities.

TOD Scenarios Modeled and Key Assumptions

4ward Planning developed an Excel based financial model which allowed for creation of development and operating pro forma associated with four development project scenarios, and their associated development iterations.

Much detail was built into both the development and operating pro forma, including estimated annual inflation rates, estimated construction and lease costs per square foot, estimated acquisition

costs, estimated demolition costs, etc. (see development and operating assumptions at the end of the financial analysis section write-up for both development scenarios).

The pro forma variables having most influence on the prospective financial return rates (e.g., cash-on-cash and internal rate of return) are as follows:

- Residential construction costs per square foot
- Property acquisition costs
- Market residential rental rates
- Office construction costs
- Office lease rates
- Residential and commercial space densitity

While adjustments to any of the above variables had a noticeable impact on return rates within the cash-flow model, it should be understood that all of these variables, with little exception, are subject to market forces and, therefore, cannot be arbitrarily adjusted for purposes of achieving a desired financial result. While 4ward Planning performed a limited amount of sensitivity testing by slightly adjusting the values of the above variables, no marked change in return rate was observed.

We were also careful to input variables which are considered market supportable, based on a prospective mixed-use development project. So, for example, the average per square foot residential rental rate used is $1.65, which is based on inquiries with area developers and a review of current market renal rates for new apartment units near to shopping and transit amenities. The estimated per square foot construction cost used for the residential units ranged from $150 per square foot for low-rise multi-family housing units to $250 per square foot for multi-family rental/condominium units, which is inclusive of all hard and soft costs, and includes finishes and fixtures (these figures were validated by architects and developers consulted, as well as based on 4ward Planning's professional experience).

Financial Analysis Findings

The projected land values (e.g., financially supportable land acquisition costs from the perspective of a developer, based on minimum return metrics) identified for each prospective land-use scenario examined spanned a considerable range, as exhibited in the below table:

Development Scenario	Total Land Value	Land Value per Acre	Land Value per S.F.
Kline Lot - Scenario A	$7,800,000	$1,950,000	$45
Kline Lot - Scenario B	$15,500,000	$3,875,000	$89
Kline Lot - Scenario C	$10,000,000	$2,500,000	$57
4th & Main Lot - Scenario A	$0	$0	0
4th & Main Lot - Scenario B	$3,700,000	$37,000,000	$849
4th & Main Lot - Scenario C	$0	$0	0
Y Lot - Scenario A	$17,500,000	$12,411,348	$285
Y Lot - Scenario B	$24,000,000	$17,021,277	$391
Y Lot - Scenario C	$5,050,000	$3,581,560	$82
Library Lot - Scenario A	$9,300,000	$11,425,061	$262
Library Lot - Scenario B	$3,800,000	$4,668,305	$107
Library Lot - Scenario C	$4,700,000	$5,773,956	$133

The above land value ranges are a function of several key factors, including land-use class (for example, office lease values per square foot in downtown Ann Arbor are far greater than retail lease values per square foot in the downtown), densities permitted (the higher the density permitted per acre of developable land, the greater the price per acre paid, all other things being equal). For example, while the Kline Lot is the biggest undeveloped parcel among the four land parcels, the relatively low intensity of development proposed for the parcel (residential and commercial) has rendered the residual land value (on a per acre and square foot basis) low, relative to the other developable land parcels.

4ward Planning believes it instructive to exhibit recent land sales in the downtown area, as a means of providing a point of comparison for the land values estimated for each of the 12 scenarios. Accordingly, the table below arrays downtown property sales data captured within the past 48 months:

Year	Street Adress	Acreage	Square Footage	Sale or List Price	Price per Acre	Price per S.F.
2008	600-606 East Washington	0.33	14,347	$4,875,000	$14,801,352	$340
2010	209-211 S. State Street	0.15	6,600	$2,600,000	$17,160,000	$394
2008	202-212 S. Division Street	0.20	8,712	$1,000,000	$5,000,000	$115
2008	500 E William Street	0.32	13,942	$4,250,000	$13,278,583	$305

Below is a summary of estimated land values identified for each of the 12 Connecting William Street scenarios:

- **Kline Lot Scenario A** – This modest density, residential only development scenario on a relatively large lot yields $45/s.f. residual land value. This per square foot land value ranks lowest among all development scenarios examined and, therefore, represents a poor land-use choice.
- **Kline Lot Scenario B** – This scenario features a mix of land-uses, although the housing component is particularly low-density at less than five units per acre. The per square foot land value comes in at approximately twice that of Scenario A, though the $89/s.f. value is still quite low. The land-use density of this scenario needs increasing, in order to make it a good choice. A substantial increase in housing units is a logical choice, given the property location.
- **Kline Lot Scenario C** – While, relative to the other Kline Lot scenarios, this scenario greatly increases residential density (approximately 24 units per acre) and office space (192,000 s.f.) on the Kline Lot, the inclusion of a prospective 13,000 square foot performance venue (with its estimated low lease rate per square foot) creates a significant drag on the development pro forma to the extent of lowering the residual per square foot land value ($57/s.f.). By increasing either the office and/or residential uses on this block, the projected residual land value would rise, accordingly.

- **4th and Main Lot Scenario A** – This scenario proposes no development but rather keeps the relatively small lot are area available for multi-uses and parking overflow. Accordingly, no residual land value is assigned to this parcel scenario.

- **4th and Main Lot Scenario B** – This scenario, which includes the ground floor space of the Williams Street Garage, fully maximizes the land area with retail (7,100 s.f.), office (25,800 s.f.) and incubator space (5,000 s.f.). Because the lot is particularly small, the retail and commercial office square footage is relatively intensive, given the small lot size, the per square foot residual land value is quite high at $849/s.f. 4ward Planning deems this scenario acceptable.

- **4th and Main Lot Scenario C** – While the retail square footage in this scenario is similar to that of Scenario B, the office square footage is approximately 47 percent smaller and the low rental value incubator space is four times as large. This space configuration, notwithstanding the land parcel's small size, is associated with a zero residual land value – that is, in order for the development to achieve the target cash-on-cash and IRR return rates of ten percent, respectively, the project cannot carry a land cost. Accordingly, 4ward Planning recommends cutting back on the amount of incubator space and increasing the amount of office space.

- **Y Lot Scenario A** – This 1.41 acre land parcel features a mix of retail (8,500 s.f.) and office (144,800 s.f.), which is of sufficient scale to generate a healthy $285 per square foot

residual land value (in keeping with land value exhibited four years earlier in the downtown area). Accordingly, 4ward Planning deems this land-use scenario acceptable.

- **Y Lot Scenario B** – This land-use scenario increases the retail (9,900 s.f.) and office (199,700 s.f.) found in Scenario A and, as a result, realizes a substantially increase residual land-value ($391/s.f.). Accordingly, 4ward Planning deems this land-use scenario acceptable.

- **Y Lot Scenario C** – This scenario, despite the 9,900 square feet of retail, departs from scenarios A and B by eschewing office space for a relatively large conference center hotel facility (226,000 s.f.) and including 85 residential dwelling units. The scenario achieves a very high dwelling units per acre (slightly more than 60) and includes similar amount of retail space (9,000 s.f.) as scenarios A and B. However, the relatively low per square foot residual land value ($82) is, principally, due to the manner in which land is valued for lodging facility development projects. Specifically, lodging facility development projects allocate as little as 12 percent and, typically, no more than 15 percent of total room development costs to land acquisition. For example, this scenario assumes a $100,000 per room development cost. Accordingly, the price paid for land would fall between $12,000 and $15,000. The estimated land acquisition cost associated with this scenario's lodging and conference facility amounts to $4.5 million dollars. A reduction in this scenario's lodging space with a corresponding addition of office space, would likely raise the residual land value considerably. However, and not withstanding this scenario's relatively low residual land value, there are other important benefits associated with a conference center hotel in downtown Ann Arbor – increased tourism, retail purchases, and employment.

- **Library Lot Scenario A** – This scenario proposes no residential units and a modest amount of retail (12,000 s.f.) and office (71,300 s.f.) space. The resultant per square foot land value is a respectable $262. Nonetheless, this scenario appears not to develop the land parcel as intensively as could be – missing an opportunity for supply more office space and increasing the land value.

- **Library Lot Scenario B** – This scenario provides a modest amount of retail square footage (12,000), no residential dwelling units or office space, and 127,000 square feet of hotel conference center space. As with Y Lot Scenario C, the manner in which land is valued for hotel development and the scale of the hotel project relative to this scenario's parcel acreage, results in a relatively low $107 per square foot residual land value. This scenario could be improved, markedly, by adding residential dwelling units and office space.

- **Library Lot Scenario C** – This scenario features strong mix of residential units (72), retail (39,000 s.f.) and office space (96,480 s.f.). Consequently, this scenario achieves a relatively strong per square foot residual land value ($240). Accordingly, 4ward Planning deems this scenario acceptable.

Development Scenario	Area in Acres	Area in ng Units (DU) S.F.	For Sale	For Rent
Kline Lot - Scenario A	4.00	174,240	68	-
Kline Lot - Scenario B	4.00	174,240	18	-
Kline Lot - Scenario C	4.00	174,240	-	95
4th & Main Lot - Scenario A	0.10	4,356	-	-
4th & Main Lot - Scenario B	0.10	4,356	-	-
4th & Main Lot - Scenario C	0.10	4,356	-	24
Y Lot - Scenario A	1.41	61,420	-	-
Y Lot - Scenario B	1.41	61,420	-	-
Y Lot - Scenario C	1.41	61,420	-	85
Library Lot - Scenario A	0.81	35,458	-	-
Library Lot - Scenario B	0.81	35,458	-	-
Library Lot - Scenario C	0.81	35,458	-	72

Total DU	DU per Acre	Retail S.F.	Office S.F.	Incubator S.F.	Arts Venue S.F.	Hotel Conference
68	17.0	-	-	-	-	-
18	4.5	29,000	148,000	-	-	-
95	23.8	22,100	192,000	-	13,000	-
-	-	7,100	25,800	5,000	-	-
24	240.0	6,900	13,800	20,000	-	-
-	-	8,500	144,800	-	-	-
-	-	9,900	199,700	-	-	-
85	60.3	9,900	-	-	-	226,000
-	-	12,000	71,300	-	-	-
-	-	12,000	-	-	-	127,000
72	88.5	39,000	96,480	-	-	-

Scenario A Land Values:
Scenario B Land Values:
Scenario C Land Values:

Total Land Value	Land Value per Acre	S.F.
$7,800,000	$1,950,000	$45
$15,500,000	$3,875,000	$89
$10,000,000	$2,500,000	$57
$0	$0	0
$3,700,000	$37,000,000	$849
$0	$0	0
$17,500,000	$12,411,348	$285
$24,000,000	$17,021,277	$391
$5,050,000	$3,581,560	$82
$9,300,000	$11,425,061	$262
$3,800,000	$4,668,305	$107
$8,500,000	$10,442,260	$240
Aggregate	**Average**	**Average**
$34,600,000	$8,650,000	$199
$47,000,000	$11,750,000	$270
$23,550,000	$5,887,500	$135