

MEMORANDUM

TO: Mayor and City Council

FROM: Susan Pollay, Ann Arbor Downtown Development Authority

DATE: October 10, 2007

RE: City Council Resolution R-394-8-07 Requesting that the DDA Develop a Comprehensive Report for Constructing Additional Parking on the Properties Immediately East of the Larcom Municipal Building.

On August 20, 2007 City Council voted to direct the DDA to conduct an analysis to determine the feasibility of building a new parking structure on the privately owned properties east of the Larcom Municipal building with a minimum of 500 parking spaces. This analysis was to include information to respond to the following questions:

- a. Recommended parking capacity options with a minimum requirement for 500 parking spaces, including ideas to accommodate both dedicated and general public parking users.
- b. Recommended design and engineering options to include above and/or below ground parking, as well as ground floor retail.
- c. Specific cost estimates for all phases of facility development including but not limited to property and legal disposition, cost per parking space, project planning, engineering, construction, and related costs.
- d. Legal and property issues with preferred approaches for their mitigation.
- e. Anticipated timelines of the planning, design and construction with key milestone steps.
- f. Analysis of revenue and expense impact to the public parking system with the construction of a new public parking structure on the Larcom block.
- g. Any noteworthy strategic issues requiring City Council consideration, action and timing.

In the past weeks, DDA members met with several members of City Council and the City Administrator to gain a better understanding of what information was being sought and the footprint that was being explored. DDA members also conducted a shared meeting between Ken Klein of Quinn Evans and Associates and Mike Ortlieb, Carl Walker Inc. to understand how a parking structure could fit on the properties east of Larcom that would fit with the design of the new municipal center that is taking shape. These meetings and subsequent DDA Committee meeting discussions have led to the following feasibility analysis:

cc: City Council, R. Eason, Mayor

Answers to questions (a), (b), and (c) regarding how to provide a minimum of 500 parking spaces on the properties east of Larcom, including design issues and estimated cost:

The DDA was provided with the following assumptions regarding the placement and design of a structure, and this established the framework of our analysis.

1. The parking structure must provide a minimum of 500 parking spaces
2. The structure would sit on properties east of Larcom but must not include any of the properties located along Division Street, including the property located at Huron/Division.
3. The parking structure footprint must not include the property immediately east of the Larcom building containing the police garage as it will be used as egress by police patrol cars existing the new court/police building.
4. The parking structure must minimize its presence along Ann Street in respect to the historic residential properties located across the street.
5. The parking structure must include a retail component along Huron Street.
6. Costs should be estimated in 2007 dollars. If the structure is built after spring 2008, costs must be adjusted. For the past few years construction costs have increased approximately 4-5%/year.

In our meetings with consultants, it was learned that approximately 5 ½ to 6 floors of parking would be needed to provide the minimum 500 parking spaces required on the footprint provided. Working with its engineers at Carl Walker Inc. (CWI), the DDA has developed three basic concepts with three variations each which meet the requirements as set forward above, in slightly different ways.

Please note, that to ensure that we had a fuller understanding of this site, this exploration also examined variations without retail (see assumption #5) and that expanded the footprint west of the proscribed area (see assumption #3).

Each concept that follows was developed with the goal of achieving as close to 500 parking spaces as possible and minimizing the overall structure height by utilizing below grade parking. If the City opted to separate city vehicles from other parking, this could be accomplished by reserving the below grade parking for City use only. Parking spaces are calculated at 8'6". A structure could be designed in coordination with the City's design team to allow vehicle or pedestrian connections to City Hall. Also, it is assumed that two elevator/stair towers are included in each scenario.

CWI provided the base construction costs shown hereafter. Soft costs include testing, engineering, architectural, etc. Additional costs include the following rough estimates:

Storm water detention	\$ 400,000
Bond costs	\$ 250,000
Utility relocation	\$ 125,000
Site and building demolition	\$ 25,000
Land acquisition	<u>\$3,900,000 to \$5,200,000</u>
	\$4,700,000 to \$6,000,000

Option 1: 6 level structure with 2 ½ levels below grade. Retail along Huron.

The structure would be designed as a two-bay single thread helix configuration with two-way traffic and 90-degree parking. Due to the narrow site constraints, one of the parking bays is single loaded with parking. This design would be similar to Fourth & William which also has a single thread helix configuration with two-way traffic and 90-degree parking, but with a two-bay design. The advantage to this design is that straight-in parking is easier for many patrons; the disadvantage is the restriction to a single bay of parking.

- The structure would hold approximately 511 parking spaces.
- Two levels (11'4" each) of retail (7,800sf) would be provided.
- At its highest level the structure would be 45' at the top of the spandrel.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$36,140/car space
Project cost (including soft costs 20%)	\$43,360/car space
Additional costs	\$9,198 to \$11,742/car space
Total estimated project costs (2007 dollars)	\$52,558 to \$55,102/car space
Total project costs (2007 dollars)	\$26.8 - \$28.1 million

Option 1A: 5 ½ level structure with 2 levels below grade. No retail.

Similar to Option 1 but without retail. Eliminating the retail component allows a reduction in the amount of underground parking which reduces costs. The structure would hold approximately 503 parking spaces.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$30,930/car space
Project cost (including soft costs 20%)	\$37,120/car space
Additional costs	\$9,344 to \$11,928/car space
Total estimated project costs (2007 dollars)	\$46,464 to \$49,048/car space
Total project costs (2007 dollars)	\$23.3 to \$24.7 million

Option 1B: 5 ½ level structure with 2 levels below grade. One level of retail.

Similar to Option 1, but with only one level of retail (3,900sf). Approximately 545 spaces. See page 27 & 28 for a suggestive schematic layout.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$34,860/car space
Project cost (including soft costs 20%)	\$41,830/car space
Additional costs	\$8,624 to \$11,009/car space
Total estimated project costs (2007 dollars)	\$50,454 to \$52,839/car space
Total project costs (2007 dollars)	\$27.5 to \$28.8 million

Option 2: 6 level parking structure with 2 levels below grade. Retail along Huron.

The structure would be designed as a two-bay, double thread helix configuration with one-way traffic and 70-degree parking through most of the structure and 60-degree parking through the narrow portion of the east bay. This design would be similar to Ann Ashley, which also has a double-thread configuration and angled one-way parking. The advantage to this design is patrons traverse two floors at a time, thereby saving time. The disadvantage is that first-time or occasional users have trouble orienting themselves and can misplace their parking space.

- The structure would hold 543 parking spaces
- Two levels (11'4" each) of retail (7,000sf) would be provided
- At its highest level, the structure would be 43' at the top of the spandrel.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$33,920/car space
Project cost (including soft costs 20%)	\$40,700/car space
Additional costs	\$8,656 to \$11,050/car space
Total estimated project costs (2007 dollars)	\$49,356 to \$51,750/car space
Total project costs (2007 dollars)	\$26.8 to \$28.1 million

Option 2A: 6 level structure with 2 levels below grade. No retail.

Similar to Option 2, but with no retail. The structure would hold approximately 593 parking spaces.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$30,420/car space
Project cost (including soft costs 20%)	\$36,500/car space
Additional costs	\$7,926 to \$10,118/car space
Total estimated project costs (2007 dollars)	\$44,426 to \$46,618/car space
Total project costs (2007 dollars)	\$26.3 to \$27.6 million

Option 2B: 6 level structure with 2 levels below grade. One level of retail.

Similar to Option 2 but with only 1 level of retail. The structure would hold approximately 545 parking spaces. See page 29 & 30 for a suggestive schematic layout.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$33,410/car space
Project cost (including soft costs 20%)	\$40,100/car space
Additional costs	\$8,624 to \$11,009/car space
Total estimated project costs (2007 dollars)	\$48,724 to \$51,109/car space
Total project costs (2007 dollars)	\$26.5 to \$27.8 million

Option 3: 5 level structure with 2 ½ levels below grade. Retail along Huron.

The structure would extend west over the City Hall property line by 13 feet, which would by necessity modify the design currently under consideration, which shows a new Council chambers and the existing police garage. The advantage to this design is that the structure would be wide enough for two-way traffic and two full bays of parking, thus reducing the overall height and increasing the parking efficiency. Also, the parking structure and Larcom building could be knit together more effectively. The structure would be designed with a single helix configuration with two-way traffic, again similar to 4th & William.

- The structure would hold 524 parking spaces
- Two levels (11'4" each) of retail (8,600sf) would be provided.
- At its highest level, the structure would be 32' at the top of the spandrel.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$34,260/car space
Project cost (including soft costs 20%)	\$41,100/car space
Additional costs	\$8,969 to \$11,450/car space
Total estimated project costs (2007 dollars)	\$50,069 to \$52,550/car space
Total project costs (2007 dollars)	\$26.2 to \$27.5 million

Option 3A: 4 ½ level structure with 2 levels below grade. No retail.

This option is similar to option 3 except that it does not contain retail space, and its larger footprint combined with its single use makes it the shortest of the options presented in this report at only 32' at the top of the top spandrel. The structure would hold approximately 522 parking spaces.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$28,750/car space
Project cost (including soft costs 20%)	\$34,500/car space
Additional costs	\$9,004 to \$11,494/car space
Total estimated project costs (2007 dollars)	\$43,504 to \$45,994/car space
Total project costs (2007 dollars)	\$22.7 to \$24 million

Option 3B: 4 level structure with 2 levels below grade. One level of retail.

One level of retail is provided (4,300sf). Approximately 506 spaces. See page 31 & 32 for a suggestive schematic layout.

It is estimated that the cost to construct this structure would be:

Base construction cost:	\$30,830/car space
Project cost (including soft costs 20%)	\$37,000/car space
Additional costs	\$9,288 or \$11,858/car space
Total estimated project costs (2007 dollars)	\$46,288 to \$48,848/car space
Total project costs (2007 dollars)	\$23.4 to \$24.7 million

Answer to question (d) regarding legal and property issues, with recommended approaches for their mitigation.

To accommodate any of these three options, properties must be acquired from the owners of the following properties:

- Dean Zahn, 331 E. Huron Street (Tio's building)
- Schott/Lighthammer, 335 E. Huron Street (Campus Management building)
- Ann Arbor News, 336 E. Ann Street (parking lot)

It is our understanding that the City will take responsibility for land acquisition, and that City staff have made contact with the property owners listed above.

If needed it may be useful if the City were to develop and distribute a Request for Qualifications with which to select a commercial broker to assist with this project. There may be business relocation or property valuation questions and an experienced commercial broker would be able to provide valuable assistance. There are no DDA members currently with commercial real estate experience to assist the City.

An appraisal was received for the Ann Arbor News lot in 2003, and at that time the value of the property was determined to be \$665,000. There has been a great many downtown real estate transactions in the past four years and this appraisal should be updated and appraisals conducted for the other two properties to provide a realistic view to the value of the properties to be acquired. For the purposes of this exercise, it is assumed that the value of the three properties is \$3.9 to \$5.2 million, but this figure is speculative.

One other bit of research that will need to be conducted is to determine whether a parking structure on this location can be built to the property line or if a setback is required to maintain the proper distance from the residential properties along Division and Ann Street.

Answer to question (e) regarding the planning, design and construction of this project with key milestones.

Based on experience with recent parking structure constructions, we assume that the following schedule could be met for this project.

City Council direction to proceed.	
RFQ written/distributed, interviews, project architect selected	3 months
Schematic design, including public input	4-6 months
Design development	2 months
Construction documents	3 months
Bidding	1 month
Bid approval by the DDA	1 month

Mobilization, etc.	1 month
Construction.	<u>18 to 24 months</u>
Total estimated timeline following City Council notice to proceed:	34 to 42 months

The time suggested for public input is an estimate based on our experience with the design process for the Forest parking structure in 2000 and the Fourth & Washington structure in 1998. This can be reduced or expanded as necessary.

This schedule assumes that the properties would be acquired during the first year and the process of land acquisition would not add to the project timeline.

Please note that it is highly recommended that any parking structure construction wait until the City's new municipal center construction has already been completed. The parking structure construction will need to use much of the same staging and lay down area on Ann and Huron Streets as the municipal facility construction. Plus a major construction project on either side of Larcom would make working conditions very difficult if not intolerable for City employees and citizens coming to the building for services, given the noise, vibration, dust, large vehicles and expanded hard hat area that is required whenever cranes are used.

Answer to question (f), analysis of revenue and expense impact to the public parking system with the construction of a new public parking structure on the Larcom block.

A comprehensive downtown parking study completed in January 2007 determined that 50-100 new parking permits a year for each of the next ten years must be found in order to meet anticipated City downtown development goals. Currently the long permit wait list has made it extremely difficult for the City and DDA to support important downtown projects including the encouragement of new downtown jobs.

It is worth noting that constructing a 500+ space structure at this location would not meet parking demand in the areas of greatest need as indicated by this 2007 Parking Study. However, if this structure were built patrons in other structures would be relocated to this structure, thereby freeing up spaces for others. Some possible patron parking shifts could include the following, as their parking would be more convenient in this new structure:

Users moved to a new Larcom Structure	No. of spaces	Spaces freed up from	Description
Ann Arbor News	110	Liberty Square	New structure would be across the street from A2 News. Number doesn't include current users of the A2 News lot (approx. 50)
TOTAL	110	LIBERTY SQUARE	
Police union members	110	Ann Ashley	Contract provides free parking for

			police personal vehicles. Police staff hold approximately 200 permits, but a maximum of 110 permits are in use at any one time.
TOTAL	110	ANN ASHLEY	
City Center building tenants	50-100	4 TH & William	
TOTAL	50-100	4TH & WILLIAM	
TOTAL SPACES FREED UP ELSEWHERE	270-320		

If City Council elects to pursue this structure, the DDA would direct its Operations Committee to investigate the list of current monthly permit holders in the Liberty Square, Ann Ashley, and 4th/William structures, and determine which month-to-month permits would be moved to this structure to free up spaces elsewhere.

It is important to note that there is very little hourly public parking demand near the Larcom Building at this time. The 2007 Parking Study showed that only 27% of the parking meters in the City Hall lot were in use at the midday peak, 30% were in use during the midweek evening peak, and 6% were in use during the weekend evening peak. Thus a new structure on this block would likely be used nearly exclusively by monthly permit holders.

The DDA Operations Committee examined the cost/revenue impact of a proposed structure on this location with approximately 525 parking spaces constructed at a cost of \$23 million. Attached is an estimated profit/loss statement (see pages 33 & 34) which outlines the financial impact to the parking system if such a parking structure were undertaken.

Answer to question (g), any noteworthy strategic issues requiring City Council consideration, action and timing.

The downtown areas with the greatest parking demand were identified in the 2007 Parking Study as being in the area west of Main Street and in the Campus area. The parking demand in the area surrounding the Larcom building is quite low. There may be a small number of citizens who will come to the new 15th District Court location, but Ann Ashley is an easy two block walk and there are several dozen parking meters along Ann Street that can be adjusted as needed.

Given the estimated schedule shown above, the construction of a parking structure at this site would not be an immediate solution to providing downtown parking.

It is not recommended that that City employees beyond police union employees be moved to this new building. In discussions with City Council members it was clear that

there is a strong Council commitment to a goal of City employees utilizing alternate transportation options including AATA buses, bicycle riding, and walking, and providing convenient parking adjacent to the Larcom Building may work against this goal.

If a structure is constructed on this site it is recommended that ALL users must pay for their parking spaces, other than those exempted by contract. Currently the City provides free parking for several dozen of its employees in the City Hall lot and along Ann Street, and it also readily provides free parking placards to consultants and citizens who park in the City Hall lot. Given the cost to construct the proposed structure every possible parking space must be revenue-generating.

As noted above, construction of a parking structure on this site should be timed to follow the construction of the new court/police building so that employees can continue to work productively and citizens can continue to feel welcome to come to the building.

Additional downtown public parking is needed, and many on the DDA believe it should be located where it can meet several purposes, not just one. Given what we know at this time, a new parking structure on the Larcom site is not likely to support downtown development beyond the City's new court/police building, nor would it be utilized other than Monday through Fridays 8am-5pm. If the same amount of resources were expended on an alternative such as a new 500+ space underground parking structure on the S. Fifth Avenue lot, for instance, these 500 spaces would support the redevelopment of the Public Library and its future expanded meeting spaces, it would support McKinley and other development projects in the State Street area, and it would support the redevelopment of the former YMCA site with its proposed conference center and hotel.

It is important to note that a DDA approval of a parking arrangement with HDC in February 2006 committed the DDA to an investment of \$20 million in new parking within 1-2 blocks of the William Street Station site (Fifth/William) within five years. This commitment was made to provide the significant local match needed to support the project's Brownfield application to the state. It is our understanding this Brownfield application was approved. To date \$5 million was spent by the DDA on an addition to the Fourth & William structure, thus there is an outstanding commitment in this center city area by the DDA for new parking that must be addressed.

Finally, please note that the DDA pursued the development of construction drawings for the expansion of the Ann Ashley structure and would be ready to move forward to bidding a construction project immediately. An addition to the Ann Ashley parking structure would be the least expensive structured parking option available in the downtown, and would also be the quickest to accomplish.

It is our understanding that upon receipt of this report from the DDA on or before October 10, 2007 the Mayor and City Council will be prepared to provide formal direction to the DDA regarding this project no later than November 5, 2007.

Memo

Date: October 1, 2007 revised

To: Susan Pollay
Company: Ann Arbor Downtown Development Authority
Fax: 734.997.1491
Email: spollay@a2dda.org

From: Russ Randall

Project No: N1-2007-456
Project Name: Ann Arbor City Hall Parking Structure
Regarding: Concept Plans, Probable Construction Cost, and Schedule
cc: Adrian Iraola, Washtenaw Engineering
Mike Ortlieb, **Carl Walker, Inc.**

Message

The City of Ann Arbor is working with Quinn Evans Architects to expand City Hall. The Ann Arbor Downtown Development Authority (DDA) is considering building a 500-space, stand-alone parking structure adjacent to and east of City Hall. This parking structure would provide parking for City Hall, as well as other area businesses.

The DDA has requested that **Carl Walker** consult with the DDA, and assist in developing parking structure concepts that will be functionally compatible with City Hall and the adjacent neighborhood. Variations in design concepts will consider below grade parking, parking structure mass/height, parking structure function, site width and projected construction cost.

We have attached concept functional plans for three base options with variations of each for one level of retail (1B, 2B, & 3B), two levels of retail (1, 2, & 3), and no retail (1A, 2A, & 3A) along E. Huron Street. We have also attached a Conceptual Construction Cost Estimate for each option. The construction costs do not include costs for land acquisition, administrative costs, environmental remediation, storm water detention, demolition, or utility relocation.

* Includes 15% Estimating Contingency

** Includes 20% soft Costs: design, testing, project contingency

To help visualize the massing of each concept we have included views of basic 3-D Models for the parking structure adjacent to City Hall.

An Option Comparison of the concepts is provided in the attached Table 1. For each concept, we used the following assumptions:

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1. Concepts 1 & 2

- a. Concepts 1 & 2 are shown on the property to the east of City Hall including the City property currently used for surface parking, parcels 330, 336, 333 and 335.
- b. Concept 1 is based on a 6 level parking structure with 2-1/2 levels below grade.
- c. Concept 2 is based on a 6 level parking structure with 2 levels below grade.
- d. Concepts 1 & 2 parking is considered independent of the existing police parking at the east end of City Hall. It may be possible, if desired, to link the police parking area with the parking structure.

2. Concept 3

- a. Concept 3 is shown on the property to the east of City Hall including the City property currently used for surface parking, parcels 330, 336, 333 and 335. Concept 3 increases the overall width of the parking structure by extending 13 feet west into the City Hall property.
- b. Concept 3 is based on a 5 level parking structure with 2-1/2 levels below grade.
- c. Concept 3 parking is considered independent of the existing police parking at the east end of City Hall. It may be possible, if desired, to link the police parking area with the parking structure.

3. We have developed the Concepts with the goal of achieving as close to 500 parking spaces as possible and minimizing the overall height of the parking structure by utilizing below grade parking.

4. Parking Space width is 8'-6".

5. Stair and Elevators have been located on the northwest and southwest corners of the parking structure to facilitate pedestrian access to City Hall. The stair and elevators can be relocated as necessary to best accommodate pedestrian destinations.

6. Options currently do not show vehicle and/or pedestrian connection to the City Hall facilities. However, both vehicle and pedestrian connections are possible with each option and will need to be coordinated with the City Hall expansion for elevations and locations of these connections. A vehicle connection to the City Hall police parking will reduce the car count. For each option a portion of parking can be secured for police parking at the bottom or top of the parking structure. However, Option 2, 2A, & 2B will be less flexible with regards to the location and number of secured parking spaces as a result of the one-way traffic pattern for these options.



7. Construction costs include costs for sprinklers and mechanical ventilation throughout the entire parking structure. Actual costs may be less if the above ground portion of the structure can be considered an open parking structure. The openings on the west side of the parking structure may be impacted by the design of the City Hall expansion and separation distance between the parking structure and expansion.

Concept No. 1

The following is a brief summary of this parking structure option:

The parking structure is a two-bay single thread helix configuration with two-way traffic and 90 degree parking. Due to the narrow site constraints, one of the parking bays is single loaded with parking. Two Levels of Retail Space (11'-4" floor-to-floor height) has been provided along Huron Street on the south side of the parking structure.

- | | |
|-------------------------------|-------------------------|
| a. # of Levels: | 6 levels |
| b. # of below grade levels | 2-1/2 levels |
| c. # of parking spaces | 511 spaces |
| d. Efficiency | 354 sf/space |
| e. Parking Structure Area | 181,000 sf |
| f. Retail | 7,800 sf |
| g. Elevation of Highest Level | 45 ft (top of spandrel) |
| h. Elevation of Lower Level | 31 ft below grade |

Construction Cost (refer to attached cost summary)

Base construction Cost*	\$18,470,000	\$36,140 per space
Project Cost**	\$22,160,000	\$43,360 per space

Concept No. 1A

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 1 except that it does not have retail space along Huron Street. This option extends the length of the ramps reducing the slopes. The additional area available to parking reduces the depth of the structure below grade by 1/2 of a level.

- | | |
|-------------------------------|-------------------------|
| a. # of Levels: | 5-1/2 levels |
| b. # of below grade levels | 2 levels |
| c. # of parking spaces | 503 spaces |
| d. Efficiency | 350 sf/space |
| e. Parking Structure Area | 176,000 sf |
| f. Retail | none |
| g. Elevation of Highest Level | 45 ft (top of spandrel) |
| h. Elevation of Lower Level | 25 ft below grade |



Construction Cost (refer to attached cost summary)

Base construction Cost*	\$15,560,000	\$30,930 per space
Project Cost**	\$18,670,000	\$37,120 per space

Concept No. 1B

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 1 except that it has one level of retail space along E. Huron Street. The slope of the ramp down to the basement has been increased to 6% to allow parking directly below the retail space. The location of the ramp allows for parking above the retail with a floor-to-floor height between 13 ft and 16 ft for the retail space.

- a. # of Levels: 6 levels
- b. # of below grade levels 2-1/2 levels
- c. # of parking spaces 545 spaces
- d. Efficiency 347 sf/space
- e. Parking Structure Area 189,000 sf
- f. Retail 3,900 sf
- g. Elevation of Highest Level 45 ft (top of spandrel)
- h. Elevation of Lower Level 35 ft below grade

Construction Cost (refer to attached cost summary)

Base construction Cost*	\$19,000,000	\$34,860 per space
Project Cost**	\$22,800,000	\$41,830 per space

Concept No. 2

The following is a brief summary of this parking structure option:

The parking structure is a two-bay double thread helix configuration with one-way traffic at 70 degrees, typical, and 60 degree parking through the narrow portion of the east bay. Two Levels of Retail Space (11'-4" floor-to-floor height) has been provided along Huron Street on the south side of the parking structure.

- a. # of Levels: 6 levels
- b. # of below grade levels 2 levels
- c. # of parking spaces 543 spaces
- d. Efficiency 343 sf/space
- e. Parking Structure Area 186,000 sf
- f. Retail 7,100 sf
- g. Elevation of Highest Level 43 ft (top of spandrel)
- h. Elevation of Lower Level 29 ft below grade



Construction Cost (refer to attached cost summary)

Base construction Cost*	\$18,420,000	\$33,920 per space
Project Cost**	\$22,100,000	\$40,700 per space

Concept No. 2A

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 2 except that it does not have retail space along Huron Street. This option extends the length of the ramps reducing the slopes. Because this option is a double thread with one-way traffic, the additional area provides additional parking but does not reduce the depth or height of the structure without removing an entire level of parking.

- a. # of Levels: 6 levels
- b. # of below grade levels 2 levels
- c. # of parking spaces 593 spaces
- d. Efficiency 327 sf/space
- e. Parking Structure Area 194,000 sf
- f. Retail none
- g. Elevation of Highest Level 43 ft (top of spandrel)
- h. Elevation of Lower Level 29 ft below grade

Construction Cost (refer to attached cost summary)

Base construction Cost*	\$18,040,000	\$30,420 per space
Project Cost**	\$21,650,000	\$36,500 per space

Concept No. 2B

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 2 except that it has one level of retail space along E. Huron Street. Additional speed ramps are required on Level 1 with this option to account for the elevation difference between E. Ann Street and E. Huron Street and to allow for the retail elevation to match the sidewalk elevation on E. Huron Street. The retail space has a floor-to-floor height between 11'-4" and 14'-4".

- a. # of Levels: 6 levels
- b. # of below grade levels 2 levels
- c. # of parking spaces 545 spaces
- d. Efficiency 349 sf/space
- e. Parking Structure Area 190,000 sf
- f. Retail 3,200 sf
- g. Elevation of Highest Level 43 ft (top of spandrel)
- h. Elevation of Lower Level 29 ft below grade



Construction Cost (refer to attached cost summary)

Base construction Cost*	\$18,210,000	\$33,410 per space
Project Cost**	\$21,850,000	\$40,100 per space

Concept No. 3

The following is a brief summary of this parking structure option:

The parking structure is a two-bay single thread helix configuration with two-way traffic and 90 degree parking. This option extends to the west over the City Hall property line by 13 feet. This allows the parking structure to be wide enough for two full bays of parking reducing the overall height and increasing efficiency of the parking. Two Levels of Retail Space (11'-4" floor-to-floor height) has been provided along Huron Street on the south side of the parking structure.

- a. # of Levels: 5 levels
- b. # of below grade levels 2-1/2 levels
- c. # of parking spaces 524 spaces
- d. Efficiency 319 sf/space
- e. Parking Structure Area 167,000 sf
- f. Retail 8,600 sf
- g. Elevation of Highest Level 32 ft (top of spandrel)
- h. Elevation of Lower Level 29 ft below grade

Construction Cost (refer to attached cost summary)

Base construction Cost*	\$17,950,000	\$34,260 per space
Project Cost**	\$21,540,000	\$41,100 per space

Concept No. 3A

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 3 except that it does not have retail space along Huron Street. This option extends the length of the ramps reducing the slopes. The additional area available to parking reduces the depth of the structure below grade by 1/2 of a level.

- a. # of Levels: 4-1/2 levels
- b. # of below grade levels 2 levels
- c. # of parking spaces 522 spaces
- d. Efficiency 310 sf/space
- e. Parking Structure Area 162,000 sf
- f. Retail none
- g. Elevation of Highest Level 32 ft (top of spandrel)
- h. Elevation of Lower Level 23 ft below grade



Construction Cost (refer to attached cost summary)

Base construction Cost*	\$15,010,000	\$28,750 per space
Project Cost**	\$18,010,000	\$34,500 per space

Concept No. 3B

The following is a brief summary of this parking structure option:

This parking structure is similar to Concept No. 3 except that it has one level of retail space along E. Huron Street. The slope of the ramp down to the basement has been increased to 6% to allow parking directly below the retail space. The location of the ramp allows for parking above the retail with a floor-to-floor height between 13 ft and 16 ft for the retail space.

- | | |
|-------------------------------|-------------------------|
| a. # of Levels: | 4-1/2 levels |
| b. # of below grade levels | 2 levels |
| c. # of parking spaces | 506 spaces |
| d. Efficiency | 314 sf/space |
| e. Parking Structure Area | 159,000 sf |
| f. Retail | 4,300 sf |
| g. Elevation of Highest Level | 32 ft (top of spandrel) |
| h. Elevation of Lower Level | 25 ft below grade |

Construction Cost (refer to attached cost summary)

Base construction Cost*	\$15,600,000	\$30,830 per space
Project Cost**	\$18,720,000	\$37,000 per space

ANTICIPATED PROJECT SCHEDULE

Schematic Design	1 Month (may be longer depending on public process and/or decisions)
Design Development	2 Months
Construction Documents	3 Months
Bidding	1 Month
Project Approval	3 Weeks
<input type="checkbox"/> DDA Board Meeting <input type="checkbox"/> City Council Meeting <input type="checkbox"/> Award Contract	
Anticipated Construction Schedule	18 Months to 24 Months

Table 1
Ann Arbor Downtown Development Authority
Municipal Center Parking Structure
 Ann Arbor, Michigan

OPTION COMPARISON
 October 1, 2007

Criteria	Option No. 1	Option No. 1A	Option No. 1B	Option No. 2	Option No. 2A	Option No. 2B	Option No. 3 ¹	Option No. 3A ¹	Option No. 3B ¹
	Number of Parking Spaces	511	503	545	543	593	545	524	522
Area (sq. ft.)	181,000	176,000	189,000	186,000	194,000	190,000	167,000	162,000	159,000
Efficiency (sq. ft. / space)	354	350	347	343	327	348	319	310	314
Number of floors	6	5.5	6	6	6	6	5	4.5	4.5
Number of floors below ground (full level)	2.5	2	2.5	2	2	2	2.5	2	2
Anticipated User Group	Employee	Employee	Employee	Employee	Employee	Employee	Employee	Employee	Employee
Floor-to-floor height	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"	11'-4"
All floors meet ADA ¹ clearance requirements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Retail Area (sq. ft.)	7,800	0	3,900	7,100	0	3,200	8,600	0	4,300
Number of Retail Floors	2	0	1	2	0	1	2	0	1
Retail Floor-to-floor height	11'-4"	--	13'-0" to 16'-0"	11'-4"	--	11'-4" to 14'-4"	11'-4"	--	13'-0" to 16'-0"
Total length of parking ramp	265'-0"	265'-0"	265'-0"	265'-0"	265'-0"	265'-0"	265'-0"	265'-0"	265'-0"
Total width of parking ramp: North End	109'-0"	109'-0"	109'-0"	113'-0"	113'-0"	113'-0"	125'-0"	125'-0"	125'-0"
Total width of parking ramp: South End	117'-6"	117'-6"	117'-6"	117'-0"	117'-0"	117'-0"	125'-0"	125'-0"	125'-0"
Area of Footprint (sq. ft.)	29,900	29,900	29,900	30,465	30,465	30,465	33,125	33,125	33,125
Number of parking bays	1.5	1.5	1.5	2	2	2	2	2	2
Traffic flow (One-way/Two-way/Combination)	2-way	2-way	2-way	1-way	1-way	1-way	2-way	2-way	2-way
Parking angle	90-degrees	90-degrees	90-degrees	60 & 70-degrees	60 & 70-degrees	60 & 70-degrees	90-degrees	90-degrees	90-degrees
Speed ramp	No	No	No	Yes	No	No	No	No	No
Maximum Slope of Parking Ramp	4.4%	3.3%	6.0%	6.2% (14.3%)	6.2%	6.2%	4.4%	3.3%	6.0%
Vehicular entrance & exit locations	Ann St.	Ann St.	Ann St.	Huron St.	Ann St. Huron St.	Ann St. Huron St.	Ann St.	Ann St.	Ann St.
Location of stair towers / Elevators	NW & SW	NW & SW	NW & SW	NW & SW	NW & SW	NW & SW	NW & SW	NW & SW	NW & SW
Construction Cost Projection^{2,3,4,4}									
Conceptual Base Construction Cost Projection ⁵	\$10,860,000	\$10,560,000	\$11,340,000	\$11,160,000	\$11,640,000	\$11,400,000	\$10,020,000	\$9,720,000	\$9,540,000
Premium for Below Grade Parking	\$4,320,000	\$2,970,000	\$4,710,000	\$4,050,000	\$4,050,000	\$4,050,000	\$4,620,000	\$3,330,000	\$3,510,000
Premium for Retail	\$879,000	\$0	\$468,000	\$804,000	\$0	\$384,000	\$967,500	\$0	\$516,000
Construction TOTAL	\$18,470,000	\$15,560,000	\$19,000,000	\$18,420,000	\$18,040,000	\$18,210,000	\$17,950,000	\$15,010,000	\$15,800,000
Const Cost / Car	\$36,140	\$30,930	\$34,860	\$33,920	\$30,420	\$33,410	\$34,260	\$28,750	\$30,830
Soft Costs (20%)	\$3,690,000	\$3,110,000	\$3,800,000	\$3,680,000	\$3,610,000	\$3,640,000	\$3,590,000	\$3,000,000	\$3,120,000
Project Cost	\$22,160,000	\$18,670,000	\$22,800,000	\$22,100,000	\$21,650,000	\$21,850,000	\$21,540,000	\$18,010,000	\$18,720,000

Notes:
¹ Americans with Disabilities
² Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.
³ Construction cost does not include utility relocation or site and building demolition.
⁴ Options require demolition of City Hall Roof/Plaza/Walkway on East Side. Costs are not included.
⁵ Parking space count does account for required accessible parking spaces which will reduce the total number of spaces
⁶ Cost is for base parking structure only (Does not include Retail, Estimating Contingency, or Premiums for Retail or below grade parking)

Ann Arbor Municipal Center Parking Structure
OPTION 1
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	181,000	\$60.00	\$10,860,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	30,000	\$30.00	\$900,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	30,000	\$60.00	\$1,800,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	18,000	\$90.00	\$1,620,000	
					\$15,180,000
					\$83.87
2 Retail					
2.1 Base Cost: Retail	SF	7,800	\$60.00	\$468,000	
2.2 Premium: Retail	SF	7,800	\$45.00	\$351,000	
2.3 Premium: Waterproofing over Retail	SF	4,000	\$15.00	\$60,000	
					\$879,000
Construction Cost Subtotal				\$16,059,000	
Estimating Contingency	15%			<u>\$2,409,000</u>	
Construction Total				\$18,470,000	
Soft Costs	20%			\$3,690,000	
Project Cost				\$22,160,000	
<hr/>					
Parking Area		181,000			
No. Cars		511			
			w/o soft cost	w/soft cost	
Cost / SF			\$102.04	\$122.43	
Cost / Car			\$36,145	\$43,366	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 1A (No Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	176,000	\$60.00	\$10,560,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	30,000	\$30.00	\$900,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	30,000	\$60.00	\$1,800,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	3,000	\$90.00	\$270,000	
					\$13,530,000
					\$76.88
2 Retail					
2.1 Base Cost: Retail	SF	0	\$60.00	\$0	
2.2 Premium: Retail	SF	0	\$45.00	\$0	
2.3 Premium: Waterproofing over Retail	SF	0	\$15.00	\$0	
					\$0
Construction Cost Subtotal				\$13,530,000	
Estimating Contingency		15%		<u>\$2,030,000</u>	
Construction Total				\$15,560,000	
Soft Costs		20%		\$3,110,000	
Project Cost				\$18,670,000	
<hr/>					
Parking Area		176,000			
No. Cars		503			
			w/o soft cost	w/soft cost	
Cost / SF			\$88.41	\$106.08	
Cost / Car			\$30,934	\$37,117	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 1B (One Level Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	189,000	\$60.00	\$11,340,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	25,000	\$30.00	\$750,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	30,000	\$60.00	\$1,800,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	24,000	\$90.00	\$2,160,000	
					\$16,050,000
					\$84.92
2 Retail					
2.1 Base Cost: Retail	SF	3,900	\$60.00	\$234,000	
2.2 Premium: Retail	SF	3,900	\$45.00	\$175,500	
2.3 Premium: Waterproofing over Retail	SF	3,900	\$15.00	\$58,500	
					\$468,000
Construction Cost Subtotal				\$16,518,000	
Estimating Contingency	15%			<u>\$2,478,000</u>	
Construction Total				\$19,000,000	
Soft Costs	20%			\$3,800,000	
Project Cost				\$22,800,000	
<hr/>					
Parking Area		189,000			
No. Cars		545			
			w/o soft cost	w/soft cost	
Cost / SF			\$100.53	\$120.63	
Cost / Car			\$34,862	\$41,835	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 2
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	186,000	\$60.00	\$11,160,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	31,000	\$30.00	\$930,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	31,000	\$60.00	\$1,860,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	14,000	\$90.00	\$1,260,000	
					\$15,210,000
					\$81.77
2 Retail					
2.1 Base Cost: Retail	SF	7,100	\$60.00	\$426,000	
2.2 Premium: Retail	SF	7,100	\$45.00	\$319,500	
2.3 Premium: Waterproofing over Retail	SF	3,900	\$15.00	\$58,500	
					\$804,000
Construction Cost Subtotal				\$16,014,000	
Estimating Contingency	15%			\$2,402,000	
Construction Total				\$18,420,000	
Soft Costs	20%			\$3,680,000	
Project Cost				\$22,100,000	
<hr/>					
Parking Area		186,000			
No. Cars		543			
			w/o soft cost	w/soft cost	
Cost / SF			\$99.03	\$118.82	
Cost / Car			\$33,923	\$40,700	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 2A (No Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	194,000	\$60.00	\$11,640,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	31,000	\$30.00	\$930,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	31,000	\$60.00	\$1,860,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	14,000	\$90.00	\$1,260,000	
					\$15,690,000
					\$80.88
2 Retail					
2.1 Base Cost: Retail	SF	0	\$60.00	\$0	
2.2 Premium: Retail	SF	0	\$45.00	\$0	
2.3 Premium: Waterproofing over Retail	SF	0	\$15.00	\$0	
					\$0
Construction Cost Subtotal				\$15,690,000	
Estimating Contingency	15%			<u>\$2,354,000</u>	
Construction Total				\$18,040,000	
Soft Costs	20%			\$3,610,000	
Project Cost				\$21,650,000	
<hr/>					
Parking Area		194,000			
No. Cars		593			
			w/o soft cost	w/soft cost	
Cost / SF			\$92.99	\$111.60	
Cost / Car			\$30,422	\$36,509	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 2B (One Level Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	190,000	\$60.00	\$11,400,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	31,000	\$30.00	\$930,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	31,000	\$60.00	\$1,860,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	14,000	\$90.00	\$1,260,000	
					\$15,450,000
					\$81.32
2 Retail					
2.1 Base Cost: Retail	SF	3,200	\$60.00	\$192,000	
2.2 Premium: Retail	SF	3,200	\$45.00	\$144,000	
2.3 Premium: Waterproofing over Retail	SF	3,200	\$15.00	\$48,000	
					\$384,000
Construction Cost Subtotal				\$15,834,000	
Estimating Contingency	15%			<u>\$2,375,000</u>	
Construction Total				\$18,210,000	
Soft Costs	20%			\$3,640,000	
Project Cost				\$21,850,000	
<hr/>					
Parking Area		190,000			
No. Cars		545			
			w/o soft cost	w/soft cost	
Cost / SF			\$95.84	\$115.00	
Cost / Car			\$33,413	\$40,092	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 3
 Conceptual Construction Cost Estimate
 October 1, 2007

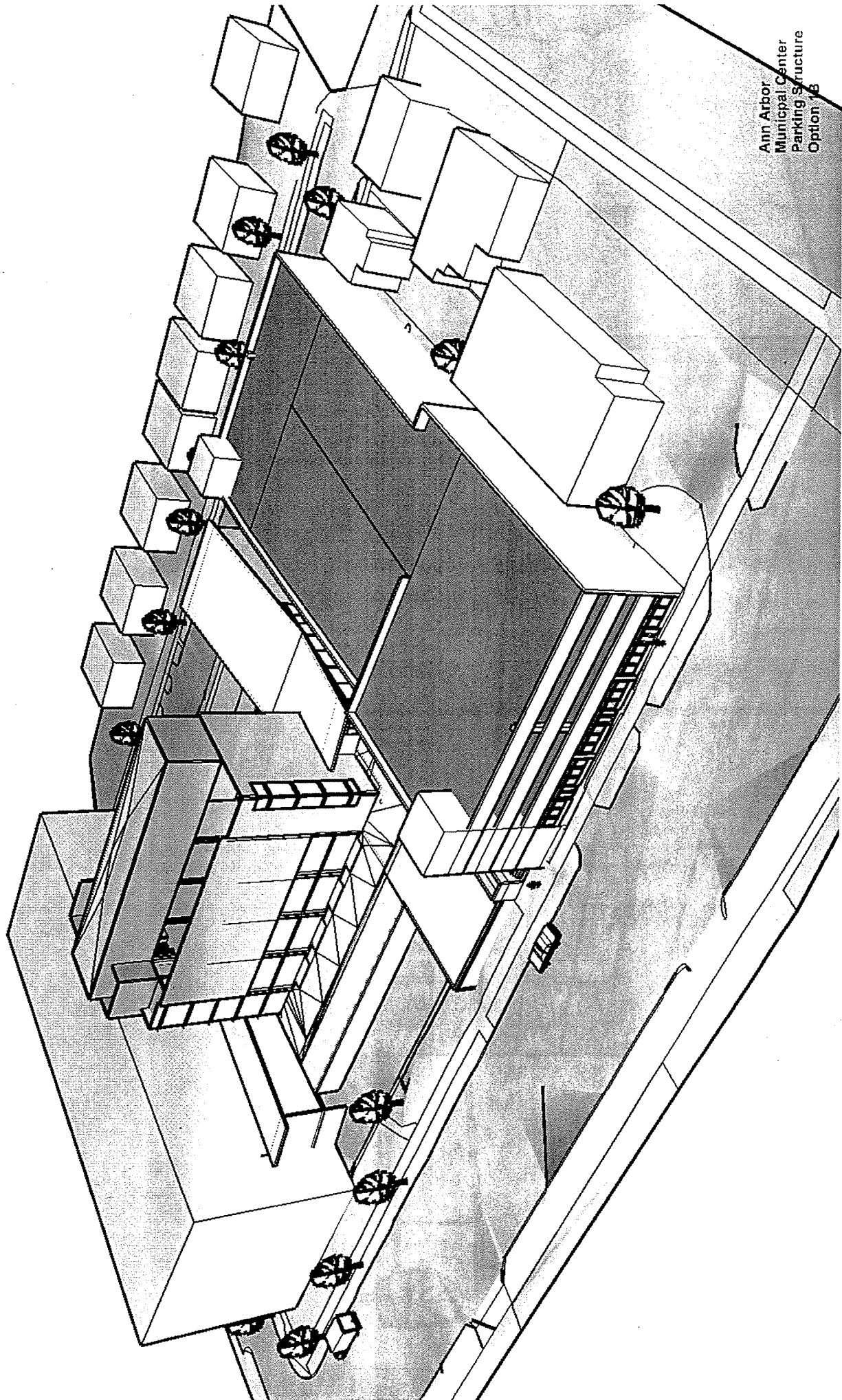
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	167,000	\$60.00	\$10,020,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	29,000	\$30.00	\$870,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	34,000	\$60.00	\$2,040,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	19,000	\$90.00	\$1,710,000	
					\$14,640,000
					\$87.66
2 Retail					
2.1 Base Cost: Retail	SF	8,600	\$60.00	\$516,000	
2.2 Premium: Retail	SF	8,600	\$45.00	\$387,000	
2.3 Premium: Waterproofing over Retail	SF	4,300	\$15.00	\$64,500	
					\$967,500
Construction Cost Subtotal				\$15,608,000	
Estimating Contingency	15%			<u>\$2,341,000</u>	
Construction Total				\$17,950,000	
Soft Costs	20%			\$3,590,000	
Project Cost				\$21,540,000	
<hr/>					
Parking Area		167,000			
No. Cars		524			
			w/o soft cost	w/soft cost	
Cost / SF			\$107.49	\$128.98	
Cost / Car			\$34,256	\$41,107	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

Ann Arbor Municipal Center Parking Structure
OPTION 3A (No Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

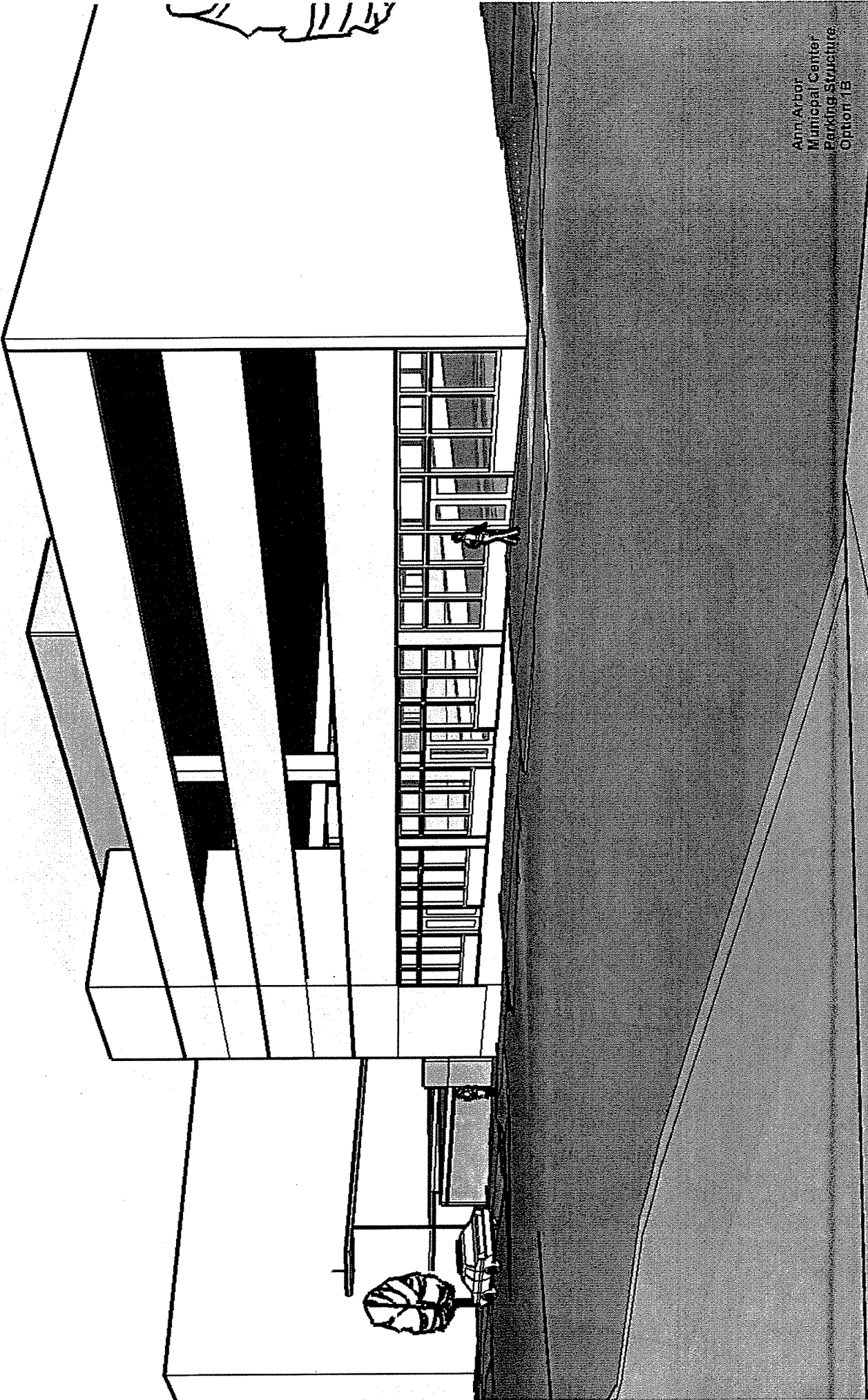
<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	162,000	\$60.00	\$9,720,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	34,000	\$30.00	\$1,020,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	34,000	\$60.00	\$2,040,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	3,000	\$90.00	\$270,000	
					\$13,050,000
					\$80.56
2 Retail					
2.1 Base Cost: Retail	SF	0	\$60.00	\$0	
2.2 Premium: Retail	SF	0	\$45.00	\$0	
2.3 Premium: Waterproofing over Retail	SF	0	\$15.00	\$0	
					\$0
Construction Cost Subtotal				\$13,050,000	
Estimating Contingency	15%			<u>\$1,958,000</u>	
Construction Total				\$15,010,000	
Soft Costs	20%			\$3,000,000	
Project Cost				\$18,010,000	
<hr/>					
Parking Area		162,000			
No. Cars		522			
			w/o soft cost	w/soft cost	
Cost / SF			\$92.65	\$111.17	
Cost / Car			\$28,755	\$34,502	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					

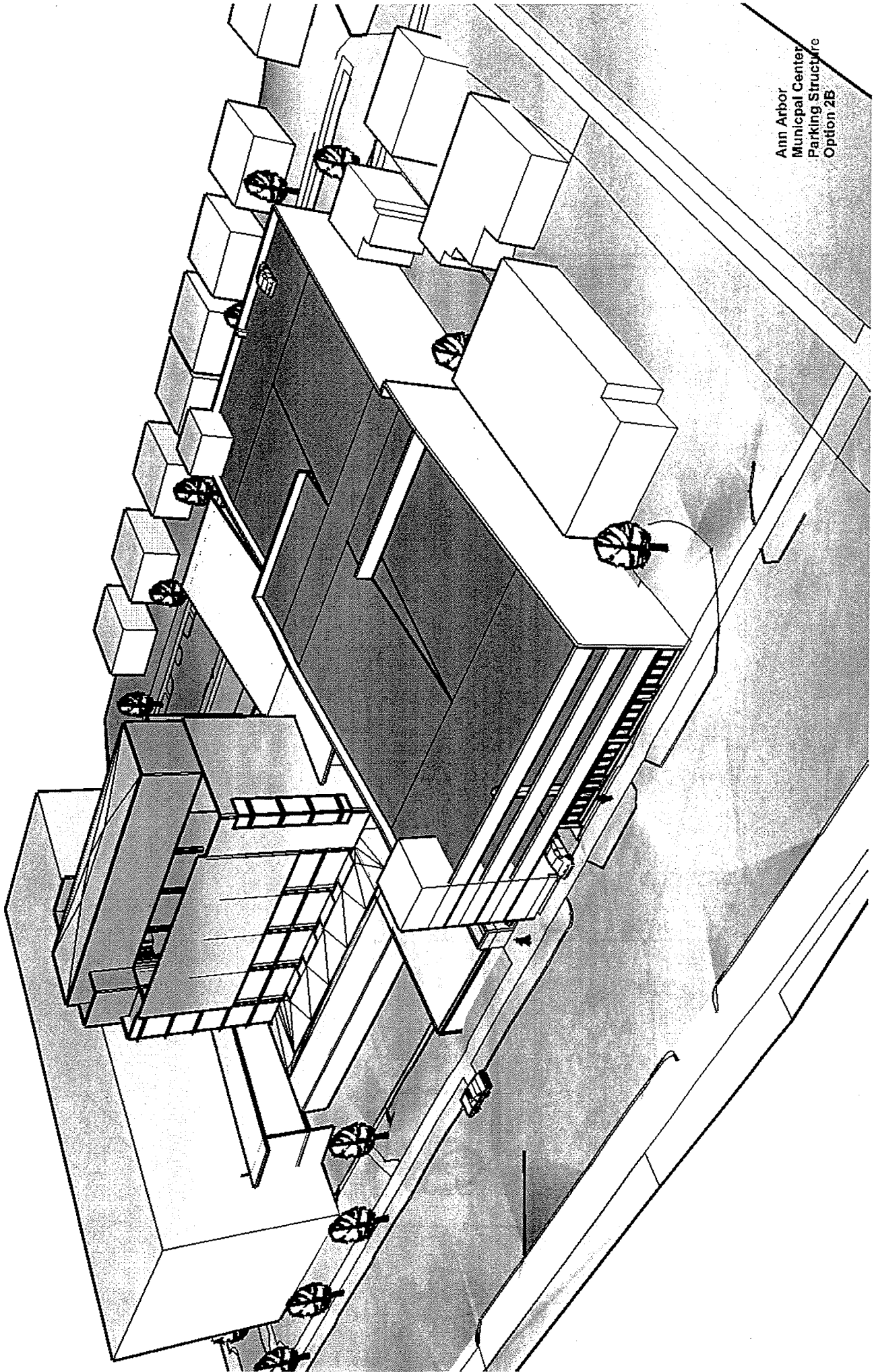
Ann Arbor Municipal Center Parking Structure
OPTION 3B (One Level Retail)
 Conceptual Construction Cost Estimate
 October 1, 2007

<u>Description</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Cost</u>	<u>Subtotals</u>
1 Base Parking Structure					
1.1 Base Cost	SF	159,000	\$60.00	\$9,540,000	
1.2 Premium: Basement B1 (Down to -11.5 ft)	SF	34,000	\$30.00	\$1,020,000	
1.4 Premium: Basement B2 (Down to -23 ft)	SF	28,000	\$60.00	\$1,680,000	
1.5 Premium: Basement B3 (Down to -34 ft)	SF	9,000	\$90.00	\$810,000	
					\$13,050,000
					\$82.08
2 Retail					
2.1 Base Cost: Retail	SF	4,300	\$60.00	\$258,000	
2.2 Premium: Retail	SF	4,300	\$45.00	\$193,500	
2.3 Premium: Waterproofing over Retail	SF	4,300	\$15.00	\$64,500	
					\$516,000
Construction Cost Subtotal				\$13,566,000	
Estimating Contingency	15%			<u>\$2,035,000</u>	
Construction Total				\$15,600,000	
Soft Costs	20%			\$3,120,000	
Project Cost				\$18,720,000	
<hr/>					
Parking Area		159,000			
No. Cars		506			
			w/o soft cost	w/soft cost	
Cost / SF			\$98.11	\$117.74	
Cost / Car			\$30,830	\$36,996	
<p>1. Construction cost does not include land acquisition, administration costs, environmental remediation, storm water retention, demolition, or utility relocation.</p> <p>2. Parking space count does account for required accessible parking spaces which will reduce the total number of spaces</p>					



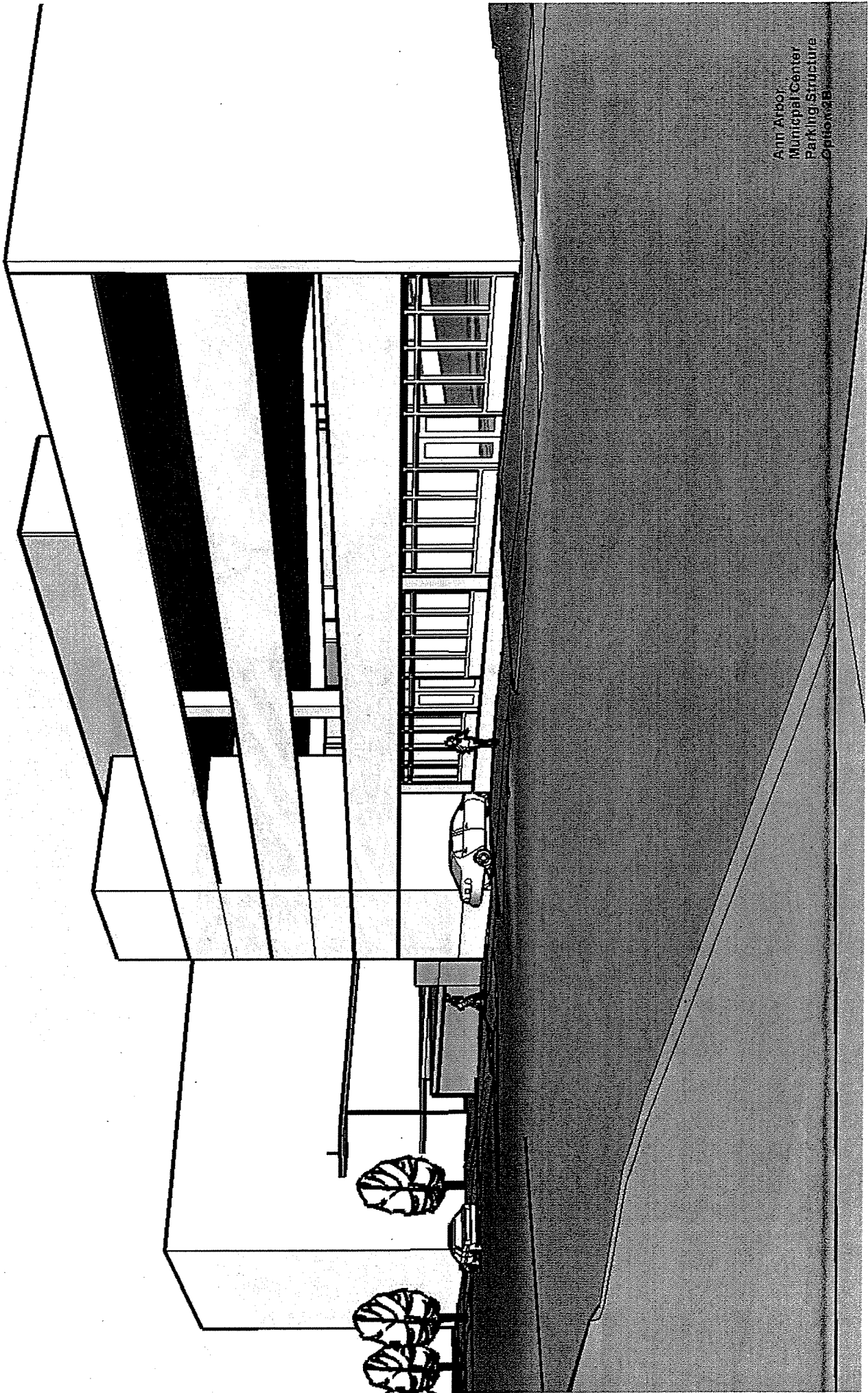
Ann Arbor
Municipal Center
Parking Structure
Option B

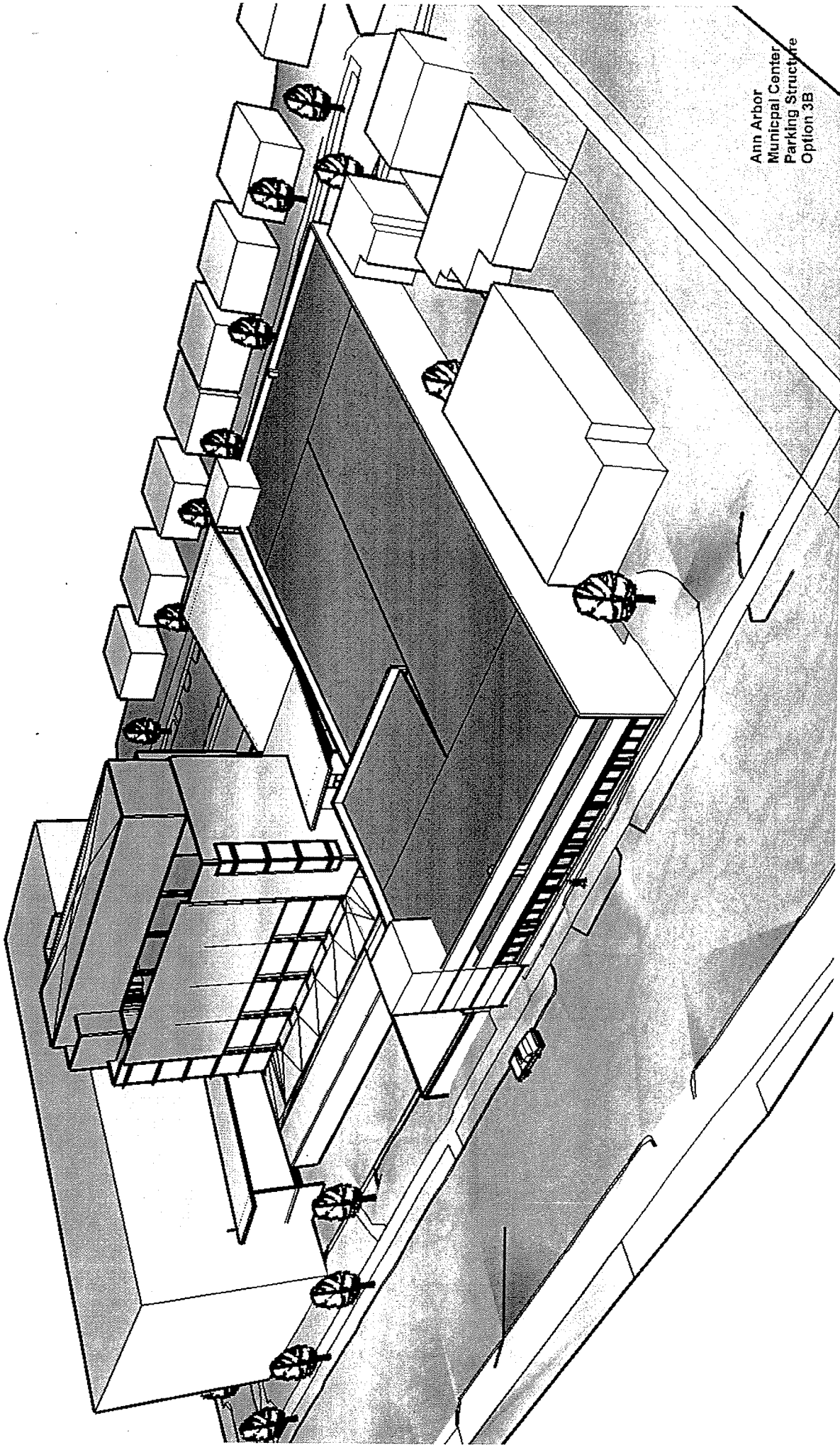




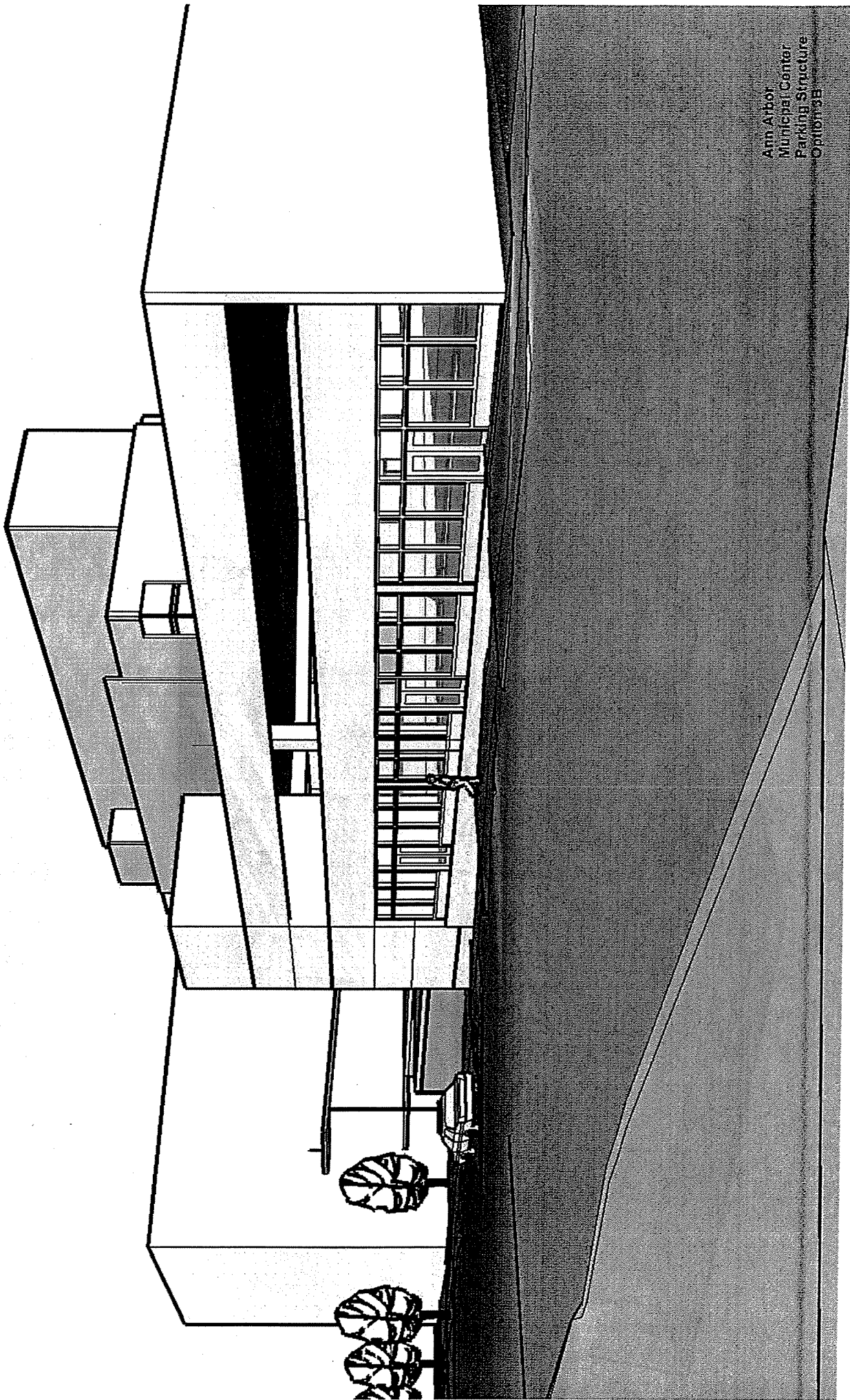
Ann Arbor
Municipal Center
Parking Structure
Option 2B

Arlin Arbor
Municipal Center
Parking Structure
Option B





Ann Arbor
Municipal Center
Parking Structure
Option 3B



Ann Arbor
Municipal Center
Parking Structure
Option B

Larcom Site Parking Structure
Estimated Profit/Loss Statement

Optimistic Estimation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	
Income																		
Permit Income (340)	\$510,000	\$525,300	\$541,059	\$557,291	\$574,009	\$591,230	\$608,967	\$627,236	\$646,053	\$665,434	\$685,397	\$705,959	\$727,138	\$748,952	\$771,421	\$794,563	\$818,400	
Police (110)	\$185,000	\$169,650	\$175,049	\$185,709	\$191,280	\$191,280	\$197,019	\$202,929	\$209,017	\$215,288	\$221,746	\$228,399	\$235,251	\$242,308	\$249,577	\$257,065	\$264,777	
Transient (27)	\$93,600	\$96,408	\$99,300	\$102,273	\$105,348	\$108,508	\$111,763	\$115,116	\$118,570	\$122,129	\$125,791	\$129,561	\$133,451	\$137,455	\$141,578	\$145,826	\$150,201	
Total Income	\$780,600	\$791,658	\$815,408	\$839,273	\$865,066	\$891,018	\$917,749	\$945,281	\$973,639	\$1,002,849	\$1,032,934	\$1,063,922	\$1,095,840	\$1,128,715	\$1,162,576	\$1,197,454	\$1,233,377	
Expenses																		
Labor	\$270,000	\$278,100	\$286,443	\$295,036	\$303,887	\$313,004	\$322,384	\$332,066	\$342,028	\$352,289	\$362,857	\$373,743	\$384,955	\$396,504	\$408,389	\$420,651	\$433,271	
Insurance	\$3,900	\$4,100	\$4,300	\$4,500	\$4,700	\$4,900	\$5,100	\$5,300	\$5,500	\$5,700	\$5,900	\$6,100	\$6,300	\$6,500	\$6,700	\$6,900	\$7,100	
Tickets	\$6,000	\$6,100	\$6,200	\$6,300	\$6,400	\$6,500	\$6,600	\$6,700	\$6,800	\$6,900	\$7,000	\$7,100	\$7,200	\$7,300	\$7,400	\$7,500	\$7,600	
Phone	\$2,500	\$2,550	\$2,600	\$2,650	\$2,700	\$2,750	\$2,800	\$2,850	\$2,900	\$2,950	\$3,000	\$3,050	\$3,100	\$3,150	\$3,200	\$3,250	\$3,300	
Utilities	\$30,000	\$30,000	\$31,827	\$32,782	\$33,768	\$34,778	\$35,822	\$36,906	\$38,033	\$39,214	\$40,452	\$41,750	\$43,118	\$44,556	\$46,066	\$47,649	\$49,307	
Maintenance	\$25,000	\$25,000	\$26,523	\$27,318	\$28,175	\$29,098	\$30,082	\$31,133	\$32,257	\$33,462	\$34,747	\$36,113	\$37,569	\$39,116	\$40,755	\$42,487	\$44,314	
Contract Work	\$20,000	\$20,000	\$21,218	\$22,185	\$23,210	\$24,302	\$25,461	\$26,689	\$27,997	\$29,387	\$30,861	\$32,421	\$34,068	\$35,804	\$37,631	\$39,550	\$41,563	
Miscellaneous	\$3,500	\$3,605	\$3,713	\$3,825	\$3,939	\$4,057	\$4,180	\$4,307	\$4,438	\$4,574	\$4,715	\$4,861	\$5,012	\$5,168	\$5,329	\$5,496	\$5,669	
Total Operating Expenses	\$380,900	\$371,727	\$382,879	\$394,265	\$406,166	\$418,382	\$430,933	\$443,861	\$457,177	\$470,893	\$485,019	\$499,570	\$514,557	\$529,994	\$545,884	\$562,270	\$579,139	
Bond Cost Per Year	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	
Total Expenses	\$1,995,831	\$2,007,658	\$2,019,810	\$2,030,296	\$2,042,127	\$2,054,313	\$2,066,864	\$2,079,732	\$2,093,108	\$2,106,824	\$2,120,950	\$2,135,501	\$2,150,488	\$2,165,925	\$2,181,825	\$2,198,201	\$2,215,069	
Net Profit or (Loss)	(\$1,228,231)	(\$1,216,000)	(\$1,204,402)	(\$1,193,019)	(\$1,182,059)	(\$1,171,601)	(\$1,161,116)	(\$1,150,651)	(\$1,140,211)	(\$1,129,793)	(\$1,119,469)	(\$1,109,250)	(\$1,099,148)	(\$1,089,163)	(\$1,079,248)	(\$1,069,484)	(\$1,059,748)	

Assumptions:

1. The cost of the 525 space structure is estimated to be \$23 M.
2. A 20-year 6% bond is taken out for 85% of the cost.
3. Both Income and Expenses are projected to rise at 3% annually.
4. The cost of any major repairs or renovations has not been included.
5. The income from the Police permits will be earned on the spaces freed up at Ann & Ashley.

Pessimistic Estimation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	
Income																		
Permit Income (340)	\$574,009	\$591,230	\$608,967	\$627,236	\$646,053	\$665,434	\$685,397	\$705,959	\$727,138	\$748,952	\$771,421	\$794,563	\$818,400	\$842,952	\$868,241	\$894,288	\$921,117	
Police (110)	\$185,000	\$169,650	\$175,049	\$185,709	\$191,280	\$191,280	\$197,019	\$202,929	\$209,017	\$215,288	\$221,746	\$228,399	\$235,251	\$242,308	\$249,577	\$257,065	\$264,777	
Transient (27)	\$37,985	\$39,178	\$39,303	\$40,503	\$41,718	\$42,959	\$44,258	\$45,608	\$46,964	\$48,362	\$49,813	\$51,317	\$52,874	\$54,432	\$56,055	\$57,747	\$59,479	
Total Income	\$796,784	\$820,068	\$845,303	\$870,667	\$896,787	\$923,691	\$951,402	\$979,944	\$1,009,342	\$1,039,622	\$1,070,811	\$1,102,939	\$1,136,024	\$1,170,104	\$1,205,207	\$1,241,364	\$1,278,604	
Expenses																		
Labor	\$303,887	\$313,004	\$322,384	\$332,066	\$342,028	\$352,289	\$362,857	\$373,743	\$384,955	\$396,504	\$408,389	\$420,651	\$433,271	\$446,269	\$459,657	\$473,447	\$487,650	
Insurance	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	\$4,980	
Tickets	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	\$6,763	
Phone	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	\$2,814	
Utilities	\$33,765	\$34,778	\$35,822	\$36,906	\$38,033	\$39,214	\$40,452	\$41,750	\$43,118	\$44,556	\$46,066	\$47,649	\$49,307	\$51,073	\$52,950	\$54,945	\$57,063	
Maintenance	\$28,138	\$28,982	\$29,851	\$30,747	\$31,669	\$32,619	\$33,607	\$34,633	\$35,698	\$36,804	\$37,951	\$39,140	\$40,372	\$41,648	\$42,968	\$44,333	\$45,745	
Contract Work	\$22,510	\$23,185	\$23,881	\$24,607	\$25,365	\$26,157	\$26,984	\$27,847	\$28,747	\$29,685	\$30,661	\$31,675	\$32,728	\$33,820	\$34,961	\$36,152	\$37,394	
Miscellaneous	\$3,539	\$3,605	\$3,681	\$3,767	\$3,863	\$3,969	\$4,086	\$4,214	\$4,352	\$4,501	\$4,661	\$4,832	\$5,015	\$5,210	\$5,417	\$5,637	\$5,870	
Total Operating Expenses	\$406,196	\$418,382	\$430,933	\$443,861	\$457,177	\$470,893	\$485,019	\$499,570	\$514,557	\$529,994	\$545,884	\$562,270	\$579,139	\$596,513	\$614,408	\$632,840	\$651,826	
Bond Cost Per Year	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	\$1,995,831	
Total Expenses	\$2,402,027	\$2,414,213	\$2,426,764	\$2,439,695	\$2,453,012	\$2,466,725	\$2,480,834	\$2,495,348	\$2,510,267	\$2,525,590	\$2,541,327	\$2,557,478	\$2,574,043	\$2,591,122	\$2,608,725	\$2,626,862	\$2,645,534	
Net Profit or (Loss)	(\$1,605,243)	(\$1,593,153)	(\$1,581,461)	(\$1,570,029)	(\$1,558,859)	(\$1,547,940)	(\$1,537,438)	(\$1,527,354)	(\$1,517,682)	(\$1,508,422)	(\$1,499,571)	(\$1,491,130)	(\$1,483,109)	(\$1,475,508)	(\$1,468,327)	(\$1,461,566)	(\$1,455,224)	

Assumptions:

1. Construction will begin until 20012 raising the cost by 20%.
2. The cost of the 525 space structure is estimated to be \$27.6M.
3. A 20-year 5.5% bond is taken out for 85% of the cost.
4. Both Income and Expenses are projected to rise at 3% annually.
5. The cost of any major repairs or renovations has not been included.
6. The income from the Police permits will be earned on the spaces freed up at Ann & Ashley.
7. Free Parking will be continue for City Hall Staff currently receiving it reducing the transient income by 48 spaces.

Larcom Site Parking Structure
Estimated Profit/Loss Statement

	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Optimistic Estimation													
Income													
Permit Income (340)	\$842,952	\$888,241	\$884,288	\$921,117	\$948,750	\$977,213	\$1,006,529	\$1,036,725	\$1,067,827	\$1,099,862	\$1,132,857	\$1,166,843	\$1,201,848
Police (110)	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901
Transferr (75)	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720
Total Income	\$1,278,573	\$1,323,862	\$1,319,909	\$1,356,738	\$1,384,371	\$1,402,834	\$1,432,150	\$1,462,346	\$1,493,448	\$1,525,483	\$1,558,478	\$1,592,464	\$1,627,469
Expenses													
Labor	\$446,269	\$459,657	\$473,447	\$487,650	\$502,280	\$517,348	\$532,868	\$548,854	\$565,320	\$582,280	\$599,748	\$617,740	\$636,273
Insurance	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446
Tickets	\$9,917	\$10,215	\$10,521	\$10,837	\$11,162	\$11,497	\$11,842	\$12,197	\$12,562	\$12,937	\$13,322	\$13,717	\$14,122
Phone	\$4,132	\$4,256	\$4,384	\$4,515	\$4,651	\$4,790	\$4,934	\$5,082	\$5,234	\$5,391	\$5,552	\$5,717	\$5,887
Utilities	\$48,585	\$51,073	\$52,805	\$54,683	\$56,609	\$58,583	\$60,604	\$62,672	\$64,787	\$66,950	\$69,161	\$71,419	\$73,734
Maintenance	\$41,321	\$42,551	\$43,838	\$45,183	\$46,587	\$48,049	\$49,569	\$51,139	\$52,759	\$54,429	\$56,149	\$57,919	\$59,739
Contract Work	\$33,057	\$34,049	\$35,070	\$36,122	\$37,206	\$38,322	\$39,470	\$40,650	\$41,872	\$43,136	\$44,444	\$45,796	\$47,192
Miscellaneous	\$5,785	\$5,859	\$5,937	\$6,019	\$6,104	\$6,192	\$6,284	\$6,379	\$6,477	\$6,578	\$6,682	\$6,789	\$6,898
Total Operating Expenses	\$995,513	\$1,014,408	\$1,032,840	\$1,051,321	\$1,069,851	\$1,088,430	\$1,107,058	\$1,125,736	\$1,144,464	\$1,163,242	\$1,182,070	\$1,200,948	\$1,219,876
Bond Cost Per Year	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931	\$1,635,931
Total Expenses	\$2,631,444	\$2,650,339	\$2,668,771	\$2,686,752	\$2,704,282	\$2,721,361	\$2,738,989	\$2,756,225	\$2,773,060	\$2,789,492	\$2,805,520	\$2,821,152	\$2,836,387
Net Profit or (Loss)	(\$352,871)	(\$326,476)	(\$342,861)	(\$324,583)	(\$319,911)	(\$315,527)	(\$311,438)	(\$307,540)	(\$303,812)	(\$300,241)	(\$296,823)	(\$293,459)	(\$290,141)
Net revenue (loss) over 30 years (\$13,322,121)													

	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	Year 26	Year 27	Year 28	Year 29	Year 30
Pessimistic Estimation													
Income													
Permit Income (340)	\$846,750	\$877,213	\$877,213	\$914,725	\$942,237	\$969,750	\$1,007,263	\$1,034,775	\$1,062,288	\$1,089,801	\$1,117,314	\$1,144,827	\$1,172,340
Police (110)	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901	\$280,901
Transferr (75)	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720	\$154,720
Total Income	\$1,282,371	\$1,312,834	\$1,316,634	\$1,350,346	\$1,377,858	\$1,405,371	\$1,432,884	\$1,460,396	\$1,487,909	\$1,515,422	\$1,542,935	\$1,570,448	\$1,597,961
Expenses													
Labor	\$502,280	\$517,348	\$532,868	\$548,854	\$565,320	\$582,280	\$599,748	\$617,740	\$636,273	\$655,320	\$674,367	\$693,414	\$712,461
Insurance	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446	\$8,446
Tickets	\$11,162	\$11,497	\$11,842	\$12,197	\$12,562	\$12,937	\$13,322	\$13,717	\$14,122	\$14,537	\$14,952	\$15,367	\$15,782
Phone	\$4,651	\$4,780	\$4,914	\$5,053	\$5,197	\$5,346	\$5,499	\$5,657	\$5,819	\$5,985	\$6,155	\$6,329	\$6,507
Utilities	\$55,809	\$57,483	\$59,208	\$60,984	\$62,813	\$64,698	\$66,638	\$68,633	\$70,684	\$72,795	\$74,967	\$77,200	\$79,494
Maintenance	\$48,507	\$49,903	\$51,340	\$52,828	\$54,367	\$55,956	\$57,595	\$59,284	\$61,023	\$62,812	\$64,651	\$66,540	\$68,479
Contract Work	\$37,208	\$38,322	\$39,470	\$40,659	\$41,898	\$43,187	\$44,526	\$45,815	\$47,154	\$48,493	\$49,832	\$51,171	\$52,510
Miscellaneous	\$5,511	\$5,585	\$5,659	\$5,733	\$5,807	\$5,881	\$5,955	\$6,029	\$6,103	\$6,177	\$6,251	\$6,325	\$6,399
Total Operating Expenses	\$991,380	\$1,010,275	\$1,029,170	\$1,048,065	\$1,066,960	\$1,085,855	\$1,104,750	\$1,123,645	\$1,142,540	\$1,161,435	\$1,180,330	\$1,199,225	\$1,218,120
Bond Cost Per Year	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117	\$1,983,117
Total Expenses	\$2,974,497	\$2,993,392	\$3,012,287	\$3,031,182	\$3,050,077	\$3,068,972	\$3,087,867	\$3,106,762	\$3,125,657	\$3,144,552	\$3,163,447	\$3,182,342	\$3,201,237
Net Profit or (Loss)	(\$692,126)	(\$680,558)	(\$695,653)	(\$677,836)	(\$672,218)	(\$666,599)	(\$660,980)	(\$655,361)	(\$649,742)	(\$644,123)	(\$638,504)	(\$632,885)	(\$627,266)
Net revenue (loss) over 30 years (\$20,579,959)													