

990513

Anoka County Contract No. *990512*

**JOINT POWERS AGREEMENT
FOR THE RECONSTRUCTION
OF COUNTY STATE AID HIGHWAY 116 (BUNKER LAKE BOULEVARD)
FROM COUNTY STATE AID HIGHWAY 9 (ROUND LAKE BOULEVARD)
TO COUNTY STATE AID HIGHWAY 78 (HANSON BOULEVARD)
(SAP 02-716-04)**

This Agreement is made and entered into this 9th day of March, 1999, by and between the County of Anoka, State of Minnesota, a political subdivision of the State of Minnesota, 2100 Third Avenue North, Anoka, Minnesota 55303, hereinafter referred to as "County," and the City of Andover, 1685 Crosstown Boulevard Northwest, Andover, Minnesota 55304, hereinafter referred to as the "City."

WITNESSETH:

WHEREAS, the parties of this agreement wish to improve the condition of County State Aid Highway 116 (Bunker Lake Boulevard) as well as the drainage along County State Aid Highway 116 (Bunker Lake Boulevard); and

WHEREAS, said parties are mutually agreed that the reconstruction of County State Aid Highway 116 (Bunker Lake Boulevard) and construction of a storm sewer system should be done as soon as possible; and

WHEREAS, the parties to this Agreement consider it mutually desirable to provide permanent traffic control signals at the intersections of Rose Street, Heather Street, County State Aid Highway 18 (Crosstown Boulevard), and Jay Street and modify existing traffic control signals at the intersection of County State Aid Highway 9 (Round Lake Boulevard) for the safety of the traveling public; and

WHEREAS, the parties agree that the County shall cause the reconstruction of County State Aid Highway 116 (Bunker Lake Boulevard); and

WHEREAS, the Anoka County Highway Department has prepared plans and specifications for this Project No. SAP 02-716-04, which plans and specifications are dated March 16, 1999, and which are on file in the office of the County Engineer; and

WHEREAS, the parties agree that it is in their best interest that the cost of said project be shared; and

WHEREAS, together with the sharing of the cost of construction for the traffic signals, storm sewer, and roadway, the City will incorporate miscellaneous utility work to be covered by this Agreement; and

WHEREAS, Minn. Stat. § 471.59 authorizes political subdivisions of the State to enter into joint powers agreements for the joint exercise of powers common to each.

NOW, THEREFORE, IT IS MUTUALLY STIPULATED AND AGREED:

I. PURPOSE

The parties have joined together for the purpose of reconstructing the roadway, drainage, sidewalk, traffic control systems, as well as other utilities on a portion of County State Aid Highway 116 (Bunker Lake Boulevard) as described in the plans and specifications numbered SAP 02-716-04 on file in the office of the Anoka County Highway Department and incorporated herein by reference.

II. METHOD

The County shall provide all engineering services and shall cause the construction of Anoka County Project No. SAP 02-716-04 in conformance with said plans and specifications. The County shall do the calling for all bids and the acceptance of all bid proposals.

III. COSTS

A. The contract costs of the work, or if the work is not contracted, the cost of all labor, materials, normal engineering costs and equipment rental required to complete the work, shall constitute the actual "construction costs" and shall be so referred to herein. "Estimated costs" are good faith projects of the costs, which will be incurred for this project. Actual costs may vary and those will be the costs for which the City will be responsible.

B. The estimated cost of the total project is Six Million Five Hundred Eighty Thousand Six Hundred Ninety-One and 41/100s Dollars (\$6,580,691.41). Participation in the construction cost is as follows:

1. The City shall provide construction observation for the relocation and reconstruction of their utilities and approve for acceptance the work as it is completed.

2. The City shall pay 100% of the hydrant and curb box relocation and gate box adjustment as well as water and sewer relocation and construction that is located within existing County highway right-of-way. The estimated City cost of these items is \$303,064.52.

3. The City shall furnish and deliver to the construction site replacement hydrants for any hydrants, which is being relocated as a part of this project, which they want replaced.

4. The City shall pay for the non-participating and non-eligible portion of the storm sewer construction plus a percentage of the eligible portion of storm sewer construction. The estimated cost of the non-participating storm sewer is \$0 of which the estimated cost to the City is \$0 (100%). The non-eligible and eligible portions are defined in the State Hydraulics letter. The cost of the eligible portion will be split between the City and County based on the ratio of contributing flow determined by the product of contributing area and runoff coefficient. The estimated percentage of contributing flow from the City is 15 percent. The total eligible estimated cost of the storm sewer is \$592,799.50 of which the estimated cost to the City is \$88,919.93. The total non-eligible estimated cost of the storm sewer is \$0 of which the estimated cost to the City is \$0 (100%). The total cost of the storm sewer construction is estimated at \$592,799.50 of which the estimated cost to the City is \$88,919.93.

5. The City shall pay for 15 percent of the cost of detention basins (including ponds and their outlet structures and grit chambers/collectors). The City portion of the cost is based on contributing flow to the detention basin determined by the product of contributing area and runoff coefficient. The City shall receive a credit of \$43,000.00 for existing storm ponds to be used by the County. The total estimated cost of the detention basins is \$78,360.00 of which the City's share is \$11,754.00. The total estimated credit to the City is \$31,246.00.

6. The City shall pay 50% of the cost of mainline concrete curb and gutter (less medians). The City shall pay 100% of all new frontage road concrete curb and gutter. The estimated total cost of curb and gutter including medians is \$311,866.90, of which the City's estimated share is \$94,908.70.

7. The City shall pay the cost of decorative median above the cost of concrete median. The City's estimated cost for decorative median is included in the cost of median plantings.

8. The City shall pay 100% of the cost of median plantings. This cost shall include design by a landscape architect, installation of plantings, design/installation of an underground watering system and median widening costs needed to meet the County's 10 foot (10') minimum median width. The City's estimated cost for median plantings is \$88,919.93.

9. The City shall pay 100% of the cost of new concrete and/or bituminous driveway pavement for all upgraded driveways. The City's estimated cost for driveway pavement is \$0.00.

10. Any in-place driveway pavement disrupted by the construction will be replaced inkind by the County at no cost to the City.

11. The City shall pay for 100% of the cost of new sidewalk installed on the project. The estimated cost to the City is \$56,049.25.

12. In-place concrete walk will be replaced by the County at no cost to the City.

13. The City shall pay 100% of the cost of new bituminous trails. The City's estimated cost for the trail is \$40,128.24.

14. The City shall pay to the County the actual cost of any upgrade to the Bridge Finish Treatment and Rail Treatment over the cost of "Ordinary Finish" and Chain Link Fence. The estimated cost to the City for painted barrier strip and ornamental fence/rail is \$10,800.00.

15. The City shall pay 100% of the cost of any street lighting included in the project. The design and installation of ornamental streetlights shall be in accordance with the County's specifications. The City's estimated cost for street lighting is \$0.

16a. The City shall pay 75% of the total costs of construction and installation of the full traffic actuated signal systems at Rose Street and Heather Street, and 50% of the total costs of the full traffic actuated signal system at County State Aid Highway No. 18 (Crosstown Boulevard), and 100% of the total costs of the full traffic actuated signal system at Jay Street. The City's estimated share of the construction is \$101,400.00, \$113,850.00, \$86,600.00, and \$153,200.00, respectively.

16b. The County shall pay 100% of all interconnect costs.

16c. The City shall pay 100% of Emergency Vehicle Pre-emption (EVP) costs. The City's estimated share of the construction is \$7,600.00, \$7,600.00, \$12,000.00, and \$6,700.00, respectively

17. The total estimated cost to the City for the project is summarized below:

Right-of-Way	\$ 0.00
Construction or Adjustment of Local Utilities	\$ 303,064.52
Grading, Base & Bituminous	\$ 0.00
Storm Sewer	\$ 88,919.93
Detention Basins	\$ (31,246.00)
Concrete Curb & Gutter	\$ 94,908.70
Decorative Medians	\$ 0.00
Median Plantings	\$ 89,073.50
Driveway Upgrades	\$ 0.00
Concrete Sidewalk, Ped Ramps, Crosswalks	\$ 56,049.25
Trails	\$ 40,128.24
Painted Barrier Strip & Ornamental Fence/Rail	\$ 10,800.00

Street Lights	\$ 0.00
Internally Illuminated Signs	\$ 0.00
Traffic Signals	\$ 455,050.00
EVP	\$ 33,900.00
Construction Engineering Services	\$ 91,251.85
Grand Total Estimated Cost To The City	\$ 1,231,899.99

C. The total estimated cost to the City for the project is \$1,140,648.14 as shown on the attached Exhibits A and B. The City participation in construction engineering will be at a rate of 8% of their designated share. The estimated cost to the City for construction engineering is \$91,251.85. The total estimated construction cost to the City for the project is \$1,231,899.99.

D. Upon award of the contract, the City shall pay to the County, upon written demand by the County, 95% of its portion of the cost of the project estimated at \$1170,304.99. The City's share of the cost of the project shall include only construction and construction engineering expense and does not include administrative expenses incurred by the County.

E. Upon final completion of the project, the City's share of the construction cost will be based upon actual construction costs. If necessary, adjustments to the initial 95% charged will be made in the form of credit or additional charges to the City's share. Also, the remaining 5% of the City's portion of the construction costs shall be paid.

IV. TERM

This Agreement shall continue until (1) terminated as provided hereinafter.

V. DISBURSEMENT OF FUNDS

All funds disbursed by the County or City pursuant to this Agreement shall be disbursed by each entity pursuant to the method provided by law.

VI. CONTRACTS AND PURCHASES

All contracts let and purchases made pursuant to this Agreement shall be made by the County in conformance to the State laws.

VII. STRICT ACCOUNTABILITY

A strict accounting shall be made of all funds and report of all receipts and disbursements shall be made upon request by either party.

VIII. TERMINATION

This Agreement may be terminated by either party at any time, with or without cause, upon not less than thirty (30) days written notice delivered by mail or in person to the other party. If notice is delivered by mail, it shall be deemed to be received two (2) days after mailing. Such termination shall not be effective with respect to any solicitation of bids or any purchases of services or goods, which occurred prior to such notice of termination. The City shall pay its pro rata share of costs, which the County incurred prior to such notice of termination.

IX. SIGNALIZATION POWER

The City, shall at their sole expense, install or cause the installation of an adequate electrical power source to the service cabinet for all signal systems, including any necessary extension of power lines. The City shall be the lead agency in this matter. Upon completion of said traffic controls signal installation, the ongoing cost of the electrical power to the signal shall be the sole cost and expense of the City.

X. MAINTENANCE

A. Maintenance of the completed watermain, sanitary sewer, storm sewer (except catch basins and catch basin leads), detention basins (including ponds and their outlet structures and grit chambers/collectors) shall be the sole obligation of the City.

B. The City shall be responsible to maintain all medians in which there are plantings in a weed free condition from April 15 to November 1 of each year. The underground watering system shall be automatic and shall water the medians two or three times per week between the hours of 1:00 am and 5:00 am. The system shall have an automatic cutout, which will not allow watering when the air temperature is below 40° Fahrenheit. The plantings shall not exceed the top of curb by more than 2' 6" and shall be maintained by the City at or below that height.

C. Maintenance of sidewalks, including snow plowing, shall be the sole responsibility of the City.

D. Maintenance of the bituminous trails shall be the responsibility of the City and Anoka County Parks Department. The City shall draft and enter into an agreement with Anoka County Parks for the same. The City shall provide a copy of this agreement to the County.

E. After construction has been completed at the intersection of County State Aid Highway No. 116 (Bunker Lake Boulevard) and Heather Street, the County shall transfer to the City its interest in the property:

A permanent easement for street, utility and trail purposes over, under and across all that part of said Southwest Quarter of the Northwest Quarter of Section 33 described as follows:

Commencing at the southeast corner of said Southwest Quarter of the Northwest Quarter; thence North 00 degrees 45 minutes 20 seconds East along the east line of said Southwest Quarter of the Northwest Quarter 60.02 feet to a point on the north line of said south 60.00 feet thereof, said point being the point of beginning of the easement to be described; thence South 89 degrees 37 minutes 35 seconds West along said north line 171.30 feet; thence North 44 degrees 37 minutes 35 seconds East 43.53 feet; thence North 00 degrees 45 minutes 20 seconds East 110.34 feet; thence North 89 degrees 37 minutes 35 seconds East 141.13 feet to said east line of the Southwest Quarter of the Northwest Quarter; thence South 00 degrees 45 minutes 20 seconds West along said east line 141.12 feet to the point of beginning.

Containing 0.468 acres, more or less.

Also together with a permanent easement for trail purposes over, under and across all that part of the north 11.00 feet of the south 71.00 feet of said east 400.00 feet of the Southwest Quarter of the Northwest Quarter of Section 33 lying northwesterly of the above described street, utility and trail easement.

Containing 0.057 acres, more or less.

The City shall be responsible for the ongoing maintenance of the north and south leg of said intersection. The City may enter into a separate agreement with Meadow Creek Church and or Anoka Hennepin Independent School District No. 11 for the ongoing maintenance of the north leg of said intersection.

F. Maintenance of streetlights and cost of electrical power to the streetlights shall be the sole obligation of the City.

G. Maintenance of the completed signal and signal equipment shall be the sole obligation of the County.

H. The County shall maintain the traffic signal controller, traffic signal and pedestrian indications, loop detectors and associated wiring of the said traffic control signal at the sole obligation of the County.

I. Painting of the traffic signal shall be the sole obligation of the County.

J. Timing of the traffic signal shall be determined by the County.

K. Only the County shall have access to the controller cabinet.

L. The traffic control signal shall be the property of the County.

M. The City (or Cities if more than one) shall be responsible for maintenance of the luminaries, Luminaire relamping, and Luminaire painting.

N. All maintenance of the EVP System shall be completed by the County. The City will be billed by the County on a quarterly basis for all incurred costs.

O. EVP Emitter Units may be installed on and used only by Emergency Vehicles responding to an emergency as defined in Minnesota Statutes §169.01, Subdivision 5, and §169.03. The City shall provide a list to the County Traffic Engineer, or the County's duly appointed representative, of all such vehicles with emitter units on an annual basis.

P. Malfunctions of the EVP System shall be immediately reported to the County.

Q. All timing of said EVP System shall be determined by the County.

R. In the event said EVP System or components are, in the opinion of the County, being misused, or the conditions set forth are violated, and such misuse or violation continues after receipt by the City, written notice thereof from the County, the County shall remove the EVP System. Upon removal of the EVP System pursuant to this paragraph, the field wiring, cabinet wiring, detector receiver, infrared detector heads and indicator lamps and all other components shall become the property of the County.

XI. NOTICE

For purposes of delivery of any notices hereunder, the notice shall be effective if delivered to the County Administrator of Anoka County 2100 Third Avenue North, Anoka, Minnesota 55303, on behalf of the County, and the City Manager of Andover, 1685 Crosstown Boulevard Northwest, Andover, Minnesota 55304, on behalf of the City.

XII. INDEMNIFICATION

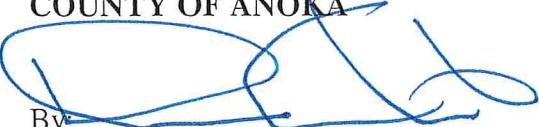
The City and the County mutually agree to indemnify and hold harmless each other from any claims, losses, costs, expenses or damages resulting from the acts or omissions of the respective officers, agents, or employees relating to activities conducted by either party under this Agreement.

XIII. ENTIRE AGREEMENT REQUIREMENT OF A WRITING

It is understood and agreed that the entire agreement of the parties is contained herein and that this Agreement supersedes all oral agreements and all negotiations between the parties relating to the subject matter thereof, as well as any previous agreement presently in effect between the parties to the subject matter thereof. Any alterations, variations, or modifications of the provisions of this Agreement shall be valid only when they have been reduced to writing and duly signed by the parties.

IN WITNESS WHEREOF, the parties of this Agreement have hereunto set their hands on the dates written below:

COUNTY OF ANOKA

By: 
Dan Erhart, Chairman
County Board of Commissioners

Dated: 10-12-99

ATTEST

By: 
John G. Olson, P.E.
County Engineer

Dated: 10-12-99

RECOMMENDED FOR APPROVAL

By: 
Jon G. Olson, P.E.
County Engineer

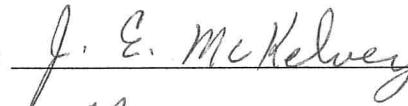
Dated: 10/8/99

APPROVED AS TO FORM

By: 
Dan Clint
Assistant County Attorney

Dated: 10-12-99

CITY OF ANDOVER

By: 
J. E. McKelvey
Mayor

Dated: 9/29/99

By: _____

Its: _____

Dated: _____

By: _____

Its: _____

Dated: _____

**ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)**

EXHIBIT "A"

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	S.A.P. 198-020-14		CITY OF ANDOVER ROADWAY		CITY OF ANDOVER NON PARTICIPATING		STORM SEWER	
					LUMP SUM	EST QTY	EST COST	EST QTY	EST COST	EST QTY	EST COST	
	2031.501	MOBILIZATION		\$300,000.00	1.00	\$300,000.00	1.00	\$300,000.00				
	2031.302	FIELD OFFICE TYPE D		\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00				
	2015.601	COMPUTER EQUIPMENT		\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00				
	2101.501	CLEARING	ha	\$4,500.00	4.82	\$21,690.00	4.82	\$21,690.00				
	2101.502	CLEARING	TREE	\$35.00	233.00	\$8,155.00	233.00	\$8,155.00				
	2101.506	GRUBBING	ha	\$4,500.00	4.82	\$21,690.00	4.82	\$21,690.00				
	2101.507	GRUBBING	TREE	\$35.00	235.00	\$8,225.00	235.00	\$8,225.00				
	2102.502	PAVEMENT MARKING REMOVAL	m	\$1.60	3,000.00	\$4,800.00	3,000.00	\$4,800.00				
	2104.501	REMOVE PIPE CULVERTS	m	\$17.00	192.70	\$3,275.90	192.70	\$3,275.90				
	2104.501	REMOVE CONCRETE CURB & GUTTER	m	\$5.00	1,873.38	\$9,366.90	1,873.38	\$9,366.90				
	2104.501	REMOVE GUARDRAIL - PLATE/BEAM	m	\$7.50	105.00	\$787.50	105.00	\$787.50				
	2104.501	REMOVE FENCE	m	\$6.00	273.00	\$1,638.00	273.00	\$1,638.00				
	2104.501	REMOVE WATERMAIN PIPE	m	\$15.00	375.00	\$5,625.00						
	2104.501	REMOVE SANITARY SEWER PIPE	m	\$15.00	433.00	\$6,495.00	69.00	\$1,035.00				
	2104.501	REMOVE SEWER PIPE (STORM)	m	\$14.00	254.50	\$3,563.00	254.50	\$3,563.00				
	2104.503	REMOVE TIMBER RETAINING WALL	m2	\$10.00	16.00	\$160.00	16.00	\$160.00				
	2104.503	REMOVE CONCRETE DRIVEWAY PAVEMENT	m2	\$3.50	188.00	\$653.00	188.00	\$653.00				
	2104.503	REMOVE CONCRETE WALK	m2	\$5.50	306.30	\$1,684.65	306.30	\$1,684.65				
	2104.503	REMOVE BITUMINOUS PAVEMENT	m2	\$1.50	65,439.70	\$98,159.70	65,439.70	\$98,159.70				
	2104.509	REMOVE GATE VALVE	EACH	\$20.00	5.00	\$1,250.00			5.00	\$1,250.00		
	2104.509	REMOVE MANHOLE (SAN)	EACH	\$50.00	7.00	\$350.00					7	
	2104.509	REMOVE DRAINAGE STRUCTURE	EACH	\$200.00	16.00	\$3,200.00	16.00	\$3,200.00				
	2104.509	REMOVE CONCRETE APRON	EACH	\$30.00	2.00	\$600.00	2.00	\$600.00				
	2104.509	REMOVE PILING ASSEMBLY	EACH	\$1,500.00	25.00	\$37,500.00	25.00	\$37,500.00				
	2104.509	REMOVE SIGN	EACH	\$1,500.00	1.00	\$1,500.00	1.00	\$1,500.00				
	2104.513	SAWING BITUMINOUS PAVEMENT	m	\$6.00	1,709.50	\$10,257.00	1,709.50	\$10,257.00				
	2104.523	SAVAGE SIGN	EACH	\$1,500.00	3.00	\$4,500.00	3.00	\$4,500.00				
	2104.523	SAVAGE HYDRANT & VALVE	EACH	\$2,000.00	4.00	\$8,000.00	4.00	\$8,000.00				
	2104.523	SAVAGE CASTING	EACH	\$50.00	23.00	\$2,200.00	22.00	\$1,980.00			1 \$90.00	
	2104.523	SAVAGE SIGN TYPE C	EACH	\$11.00	167.00	\$1,837.00	167.00	\$1,837.00				
	2104.523	SAVAGE STREET NAME SIGNS	EACH	\$5.00	18.00	\$270.00	18.00	\$270.00				
	2104.601	HAUL SALVAGED MATERIAL	LUMP SUM	\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00				
1	2105.501	COMMON EXCAVATION	m3	\$3.00	36,967.00	\$110,901.00	36,967.00	\$110,901.00				
	2105.505	MUCK EXCAVATION	m3	\$4.00	61,702.00	\$246,808.00	61,702.00	\$246,808.00				
	2105.507	SUBGRADE EXCAVATION	m3	\$1.50	26,791.00	\$40,186.50	26,791.00	\$40,186.50				
	2105.515	SPECIAL EXCAVATION	m3	\$4.00	18,215.00	\$72,860.00					18215 \$72,860.00	
	2105.522	SELECT GRANULAR BORROW (LV)	m3	\$6.00	68,050.00	\$408,300.00	68,050.00	\$408,300.00				
	2105.525	TOPSOIL BORROW (LV)	m3	\$6.00	3,389.30	\$20,334.00	3,389.30	\$20,334.00				
	2105.533	SAVAGE EXCESS MATERIAL IN STOCKPILES (SV)	m3	\$1.50	30,000.00	\$45,000.00	30,000.00	\$45,000.00				
	2105.535	SAVAGE TOPSOIL FROM STOCKPILE	m3	\$1.50	525.00	\$787.50			525.00	\$787.50		
	2451.601	DEWATERING-AREA A	LUMP SUM	\$20,000.00	1.00	\$20,000.00	1.00	\$20,000.00				
	2451.601	DEWATERING-AREA B	HOUR	\$75.00	60.00	\$4,500.00	60.00	\$4,500.00				
	2123.610	STREET SWEEPER WITH PICK UP BROOM	HOUR	\$90.00	40.00	\$3,600.00	40.00	\$3,600.00				
	2123.610	TRACTOR MOUNTED BACKHOE	m3	\$4.00	800.00	\$3,200.00	800.00	\$3,200.00				
	2130.501	WATER	m3	\$16.00	22,171.90	\$354,750.40	22,171.90	\$354,750.40				
	2211.501	AGGREGATE BASE, CLASS 5 (CV)	m3									
	2301.502	200 mm CONCRETE PAVEMENT-H-E TYPE SPECIAL	m2	\$6.00	220.00	\$13,200.00			220.00	\$13,200.00		
	2331.603	SAWED / SEALED JOINT	m	\$3.50	8,656.00	\$30,296.00						
	2232.501	MILL BITUMINOUS PAVEMENT	m2	\$1.80	2,340.00	\$4,212.00						
	2305.609	TYPE HV 4 540B WEARING COURSE MIXTURE	t	\$0.00	9,016.14	\$270,484.20	9,016.14	\$270,484.20				
	2330.609	TYPE MV 4 503B WEARING COURSE MIXTURE-TRAIL	t	\$0.00	1,114.34	\$33,430.20	1,114.34	\$33,430.20				
	2330.609	TYPE MV 4 WEARING COURSE MIXTURE-TRAIL	m2	\$3.00	13,376.08	\$40,128.24						
	2330.609	TYPE MV 4 WEARING COURSE MIXTURE-DRIVEWAY	m2	\$4.00	821.38	\$32,285.52	821.38	\$32,285.52				
	2330.609	TYPE MV 4 WEARING COURSE MIXTURE-TEMPORAR	m2	\$4.00	2,075.00	\$8,300.00	2,075.00	\$8,300.00				

ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)
ANOKA COUNTY

04/07/99

EXHIBIT "A"

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	ANOKA COUNTY ROADWAY			S.A.P. 138-020-14 CITY OF ANDOVER		100% CITY OF ANDOVER NON PARTICIPATING		STORM SEWER
					EST QTY	EST COST	EST CITY	EST QTY	EST COST	EST QTY	EST COST	
	2350.609	TYPE HV 3 NONWEARING COURSE MIXTURE	t	\$28.00	10,942.30	\$306,384.40	10,942.30	\$306,384.40				
	2350.609	TYPE MV 3 NONWEARING COURSE MIXTURE	t	\$28.00	17,229.51	\$482,426.28	17,229.51	\$482,426.28				
	2357.502	BITUMINOUS MATERIAL FOR TACK COAT	titer	\$0.35	22,819.25	\$7,986.74	22,819.25	\$7,986.74				
	2411.603	MODULAR BLOCK RETAINING WALL	m ²	\$150.00	863.18	\$129,477.00	863.18	\$129,477.00				
	2412.602	RELOCATE MAILBOX	EACH	\$10.00	20.00	\$200.00	20.00	\$200.00				
	2451.511	COARSE FILTER AGGREGATE	m ³	\$12.34	3,925.00	\$48,494.50	1,100.00	\$13,574.00				
	2501.602	TRASH GUARD FOR 300 mm RC PIPE APRON	EACH	\$250.00	3.00	\$750.00						
	2501.602	TRASH GUARD FOR 375 mm RC PIPE APRON	EACH	\$300.00	5.00	\$1,500.00						
	2501.602	TRASH GUARD FOR 525 mm RC PIPE APRON	EACH	\$350.00	1.00	\$350.00						
	2501.602	TRASH GUARD FOR 750 mm RC PIPE APRON	EACH	\$650.00	1.00	\$650.00						
	2501.602	TRASH GUARD FOR 825 mm RC PIPE APRON	EACH	\$700.00	1.00	\$700.00						
	2501.602	TRASH GUARD FOR 900 mm RC PIPE APRON	EACH	\$850.00	1.00	\$850.00						
	2501.602	TRASH GUARD FOR 750 mm SPAN PIPE APRON	EACH	\$900.00	2.00	\$1,800.00						
	2501.515	300 mm RC PIPE APRON	EACH	\$750.00	3.00	\$2,250.00						
	2501.515	375 mm RC PIPE APRON	EACH	\$100.00	5.00	\$500.00						
	2501.515	525 mm RC PIPE APRON	EACH	\$100.00	1.00	\$100.00						
	2501.515	750 mm RC PIPE APRON	EACH	\$500.00	1.00	\$500.00						
	2501.515	825 mm RC PIPE APRON	EACH	\$700.00	1.00	\$700.00						
	2501.515	900 mm RC PIPE APRON	EACH	\$875.00	1.00	\$875.00						
	2501.525	750 mm SPAN RC PIPE-ARCH APRON	EACH	\$750.00	2.00	\$1,500.00						
	2503.521	550mmSPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m	\$70.00	142.88	\$10,001.60						
	2503.521	750mmSPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m	\$80.00	191.78	\$15,342.40						
	2503.521	920mmSPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m	\$120.00	219.66	\$26,359.20						
	2503.541	300mm RC PIPE SEWER DESIGN 3006 CL V	m	\$60.00	1,080.41	\$64,824.60						
	2503.541	375 mm RC PIPE SEWER DESIGN 3006 CL V	m	\$60.00	727.73	\$43,663.80						
	2503.541	450 mm RC PIPE SEWER DESIGN 3006 CL V	m	\$60.00	725.84	\$43,660.40						
	2503.541	525 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$70.00	80.77	\$5,653.90						
	2503.541	600 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$70.00	206.43	\$14,450.10						
	2503.541	675 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$95.00	64.37	\$6,115.15						
	2503.541	750 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$125.00	795.55	\$99,443.75						
	2503.541	825 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$160.00	38.45	\$6,152.00						
	2503.541	900 mm RC PIPE SEWER DESIGN 3006 CL II	m	\$160.00	45.29	\$7,246.40						
	2503.602	CONNECT TO EXISTING MANHOLE (SAN)	EACH	\$200.00	3.00	\$600.00	1.00	\$200.00				
	2503.602	CONNECT TO EXISTING SEWER (SAN)	EACH	\$200.00	5.00	\$1,000.00						
	2503.602	RE-CONNECT TO EXISTING SERVICE	EACH	\$200.00	7.00	\$1,400.00						
	2503.602	600 x 100 mm WYE	EACH	\$130.00	2.00	\$260.00						
	2503.602	750 x 100 mm WYE	EACH	\$150.00	7.00	\$1,050.00						
	2504.603	450 mm RC PIPE SEWER DESIGN 3006 CL V (SAN)	m	\$60.00	110.00	\$6,600.00						
	2503.603	750 mm RC PIPE SEWER DESIGN 3006 CL V (SAN)	m	\$125.00	328.13	\$41,016.25	92.00	\$11,500.00				
3	2503.603	100 mm PVC PIPE SEWER SDR 35 (SERVICE)	m	\$30.00	175.00	\$5,250.00						
	2503.603	150 mm PVC PIPE SEWER SDR 35 (SERVICE)	m	\$45.00	20.00	\$900.00						
	2503.603	200 mm PVC PIPE SEWER SDR 35	m	\$54.00	54.00	\$2,916.00						
	2504.603	201 mm PVC PIPE SEWER SDR 35	m	\$57.00	78.00	\$4,446.00						
	2503.604	INSULATION 50 mm THICK	m ²	\$18.00	330.00	\$5,940.00						
	2504.601	IRRIGATION SYSTEM	LUMP SUM	\$6,500.00	1.00	\$6,500.00						
	2504.602	CORPORATION STOP (25 mm)	EACH	\$90.00	18.00	\$1,620.00						
	2504.602	CORPORATION STOP (38 mm)	EACH	\$110.00	8.00	\$880.00						
	2504.602	CURB STOP & BOX (25 mm)	EACH	\$130.00	8.00	\$1,040.00						
	2504.602	CURB STOP & BOX (38 mm)	EACH	\$500.00	4.00	\$2,000.00						
	2504.602	150 mm GATE VALVE & BOX	EACH	\$70.00	9.00	\$6,300.00						
	2504.602	200 mm GATE VALVE & BOX	EACH	\$90.00	6.00	\$5,400.00	1.00	\$900.00				
	2504.602	300 mm GATE VALVE & BOX	EACH	\$1,500.00	3.00	\$4,500.00						
	2504.602	F & HYDRANT										

ENGINEER'S ESTIMATE
CSAHO 116 (BUNKER LAKE BOULEVARD)

EXHIBIT "A"

04/07/99

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED UNIT COST	TOTAL EST QTY	ANOKA COUNTY ROADWAY		S.A.P. 198-020-14 CITY OF ANDOVER ROADWAY		CITY OF ANDOVER NON PARTICIPATING EST QTY		100% STORM SEWER	
						EST COST	EST QTY	EST COST	EST QTY	EST COST	EST QTY	EST COST	EST QTY
	2504.602	RELOCATE HYDRANT	EACH	\$1,500.00	20.00	\$30,000.00					20	\$30,000.00	
	2504.602	ADJUST HYDRANT	EACH	\$500.00	5.00	\$2,500.00					5	\$2,500.00	
2	2504.602	CONNECT TO EXISTING WATERMAIN	EACH	\$350.00	33.00	\$11,550.00					31	\$10,850.00	
	2504.602	ADJUST VALVE BOX	EACH	\$150.00	46.00	\$6,900.00					46	\$6,900.00	
	2504.602	ADJUST CURB STOP BOX	EACH	\$150.00	15.00	\$2,250.00					15	\$2,250.00	
	2504.603	25 mm COPPER SERVICE	m	\$45.00	365.00	\$16,425.00					365	\$16,425.00	
	2504.603	38 mm COPPER SERVICE	m	\$51.00	320.00	\$16,320.00					320	\$16,320.00	
	2504.603	150 mm DIP WATERMAIN	m	\$40.00	150.00	\$6,000.00					150	\$6,000.00	
	2504.603	200 mm DIP WATERMAIN	m	\$50.00	172.00	\$8,600.00					172	\$8,600.00	
	2504.603	300 mm DIP WATERMAIN	m	\$75.00	450.00	\$33,750.00					386	\$28,950.00	
	2504.603	LOWER WATER MAIN	m	\$60.00	90.00	\$4,500.00					90	\$4,500.00	
	2504.603	INSULATE WATER MAIN	m	\$50.00	100.00	\$5,000.00					100	\$5,000.00	
	2504.608	FITTINGS	kg	\$3.50	1,562.00	\$5,467.00					1,562	\$5,467.00	
													5
	2506.502	CONST DRAINAGE STRUCTURE DESIGN A or F	EACH	\$1,000.00	5.00	\$5,000.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN C or G	EACH	\$1,200.00	95.00	\$114,000.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 1500 mm 4020	EACH	\$700.00	22.00	\$15,400.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 1800 mm 4020	EACH	\$700.00	9.00	\$6,300.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 2100 mm 4020	EACH	\$3,300.00	1.00	\$3,300.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 2100 mm 4020	EACH	\$950.00	31.00	\$29,450.00							
	2506.502	CONST DRAINAGE STRUCTURE DESIGN H	EACH	\$200.00	10.00	\$2,000.00							
	2506.511	RECONSTRUCT SANITARY MANHOLES	m	\$350.00	171.00	\$59,850.00					2	\$700.00	169
	2506.516	CASTING ASSEMBLY	EACH	\$250.00	42.00	\$10,500.00							
	2506.522	ADJUST FRAME & RING CASTING	EACH	\$1,000.00	4.00	\$4,000.00							
	2506.602	CONST DRAINAGE STRUCTURE DESIGN SPECIAL 1	EACH	\$1,500.00	1.00	\$1,500.00							
	2506.602	CONST DRAINAGE STRUCTURE DESIGN SPECIAL 2	EACH	\$2,000.00	1.00	\$2,000.00							
	2506.602	CONST SANITARY MANHOLE DESIGN J (0 - 2.4 m)	EACH	\$1,200.00	8.00	\$9,600.00							
	2506.602	CONST SANITARY MANHOLE DESIGN F (0 - 2.4 m)	EACH	\$1,200.00	1.00	\$1,200.00							
	2506.602	CONST SANITARY MANHOLE EXCESS DEPTH	m	\$425.00	30.80	\$13,090.00							
	2506.603	CONSTRUCT 450 mm OUTSIDE DROP TO EXISTING MANH	m	\$425.00	2.68	\$1,140.27							
	2511.507	GROUTED RIPRAP	m3	\$50.00	58.80	\$2,940.00							
	2511.515	GEOTEXTILE FILTER TYPE IV	m2	\$2.00	90.60	\$181.20							
	2521.501	75 mm CONCRETE WALK	m2	\$21.00	7,843.65	\$160,516.65							
	2521.501	75mm CONCRETE WALK	m2	\$31.00	1,387.60	\$42,085.60							
	2521.501	100 mm CONCRETE WALK	m2	\$25.00	1,879.83	\$46,985.75							
	2531.501	CONC. CURB & GUTTER DESIGN B412	m	\$20.00	6,676.46	\$133,528.20							
	2531.501	CONC. CURB & GUTTER DESIGN B418	m	\$20.00	6,884.77	\$137,655.40							
	2531.501	CONC. CURB & GUTTER DESIGN B612	m	\$20.00	243.99	\$4,861.80							
	2531.501	CONC. CURB & GUTTER DESIGN B618	m	\$30.00	1,193.35	\$35,800.50							
	2554.501	TRAFFIC BARRIER DESIGN SPECIAL	m	\$10.00	30.40	\$3,040.00							
	2554.511	TRAFFIC BARRIER DESIGN B8307	m	\$35.00	50.40	\$1,764.00							
	2554.523	END TREATMENT-ECENTRIC LOADER BCT	EACH	\$1,000.00	4.00	\$4,000.00							
	2563.601	TRAFFIC CONTROL	LUMP SUM	\$100,000.00	1.00	\$40,000.00							
	2563.601	TRAFFIC CONTROL-STAGE TWO	LUMP SUM	\$40,000.00	1.00	\$40,000.00							
	2563.601	TRAFFIC CONTROL-STAGE THREE	LUMP SUM	\$20,000.00	1.00	\$20,000.00							
	2563.605	RAISED PAVEMENT	EACH	\$1.50	680.00	\$1,020.00							
	2563.605	PEDESTRIAN CURB RAMP	HOUR	\$75.00	20.00	\$1,500.00							
	2531.602	CONCRETE MEDIAN NOSE DESIGN 7113	m2	\$25.00	112.70	\$28,175.00							
	2564.531	F & SIGN PANEL TYPE C	EACH	\$16.50	1.00	\$165.00							
	2564.602	INSTALL SIGNS TYPE D	EACH	\$10.00	26.00	\$260.00							
	2564.602	F & STREET NAME SIGNS											

**ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)**

04/07/99

EXHIBIT 'A'

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	ANOKA COUNTY		S.A.P. 198-020-14		100% CITY OF ANDOVER		STORM SEWER
					ROADWAY	EST QTY	EST COST	ROADWAY	EST QTY	EST COST	
	2564.602	PAVEMENT MESSAGE (LEFT ARROW) EPOXY	EACH	\$80.00	27.00	\$2,160.00	27.00	\$2,160.00			
	2564.602	PAVEMENT MESSAGE (RIGHT ARROW) EPOXY	EACH	\$80.00	40.00	\$3,200.00	40.00	\$3,200.00			
	2564.603	100 mm SOLID LINE WHITE, EPOXY	m	\$0.65	10,110.00	\$6,571.50	10,110.00	\$6,571.50			
	2564.603	100 mm SOLID LINE YELLOW, EPOXY	m	\$0.80	6,960.00	\$5,568.00	6,960.00	\$5,568.00			
	2564.603	100 mm BROKEN LINE WHITE, EPOXY	m	\$0.95	6,380.00	\$6,631.00	6,380.00	\$6,631.00			
	2564.603	100 mm BROKEN LINE YELLOW, EPOXY	m	\$0.75	815.00	\$611.25	815.00	\$611.25			
	2564.603	100 mm DOUBLE SOLID LINE YELLOW, EPOXY	m	\$6.00	100.00	\$600.00	100.00	\$600.00			
	2564.603	400 mm SOLID LINE WHITE, EPOXY	m	\$6.00	140.00	\$840.00	140.00	\$840.00			
	2564.603	100 mm SOLID LINE WHITE-PAINT TEMPORARY	m	\$1.50	4,950.00	\$7,425.00	4,950.00	\$7,425.00			
	2564.603	100 mm DOUBLE SOLID LINE YELLOW-PAINT TEMPORARY	m	\$2.50	5,150.00	\$12,875.00	5,150.00	\$12,875.00			
	2564.604	ZEBRA CROSSWALK WHITE, EPOXY	m2	\$55.00	320.00	\$17,600.00	320.00	\$17,600.00			
	2564.604	CONSTRUCTION SIGNS SPECIAL	m2	\$250.00	5.20	\$1,300.00	5.20	\$1,300.00			
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "B"	SIGS	\$135,200.00	1.00	\$135,200.00	0.25	\$33,800.00	0.75	\$101,400.00	
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "C"	SIGS	\$151,800.00	1.00	\$151,800.00	0.25	\$37,950.00	0.75	\$113,850.00	
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "D"	SIGS	\$173,200.00	1.00	\$173,200.00	0.50	\$86,600.00	0.50	\$86,600.00	
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "E"	SIGS	\$153,200.00	1.00	\$153,200.00	1.00	\$153,200.00			
	2565.601	SALVAGE SIGNAL SYSTEM "B"	LUMP SUM	\$2,500.00	1.00	\$2,500.00	1.00	\$2,500.00			
	2565.601	SALVAGE SIGNAL SYSTEM "C"	LUMP SUM	\$2,500.00	1.00	\$2,500.00	1.00	\$2,500.00			
	2565.601	SALVAGE SIGNAL SYSTEM "D"	LUMP SUM	\$7,600.00	1.00	\$7,600.00	1.00	\$7,600.00			
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "B"	LUMP SUM	\$7,600.00	1.00	\$7,600.00	1.00	\$7,600.00			
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "C"	LUMP SUM	\$12,000.00	1.00	\$12,000.00	1.00	\$12,000.00			
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "D"	LUMP SUM	\$6,700.00	1.00	\$6,700.00	1.00	\$6,700.00			
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "E"	LUMP SUM	\$145,000.00	1.00	\$145,000.00	1.00	\$145,000.00			
	2565.601	TRAFFIC CONTROL INTERCONNECTION	EACH	\$600.00	26.00	\$15,600.00	26.00	\$15,600.00			
	2565.602	PVC HANDDOLE (METAL FRAME AND COVER)	m	\$60.00	360.00	\$21,000.00	350.00	\$21,000.00			
	2565.603	103 mm RIGID STEEL CONDUIT									
	2571.501	CONFEROUS TREE 2 m BASE ROOT	TREE	\$300.00	12.00	\$3,600.00	12.00	\$3,600.00			
	2571.502	DECIDUOUS TREE 3.5 m HT; B&B	TREE	\$300.00	8.00	\$2,400.00	8.00	\$2,400.00			
	2571.502	DECIDUOUS TREE 60 m CAL B&B	TREE	\$300.00	80.00	\$24,000.00	80.00	\$24,000.00			
	2571.505	DECIDUOUS SHRUB 0.6 m BASE ROOT	SHRUB	\$20.00	288.00	\$5,760.00	288.00	\$5,760.00			
	2571.507	PERENNIAL 2 YEAR BASE ROOT	PLANT	\$10.00	4,030.00	\$40,300.00	4,030.00	\$40,300.00			
	2571.507	ANNUAL FLOWER JUMBO PACK	FLOWER	\$2.00	2,440.00	\$4,880.00	2,440.00	\$4,880.00			
	2571.508	MULCH MATERIAL-TYPE 6 MODIFIED	m3	\$3.00	282.00	\$846.00	282.00	\$846.00			
	2571.503	TREE PROTECTION	m	\$9.00	200.00	\$1,800.00	200.00	\$1,800.00			
	2573.501	BALE CHECK	EACH	\$5.00	50.00	\$250.00	50.00	\$250.00			
	2573.502	SILT FENCE, TYPE PREASSEMBLED	m	\$5.00	3,038.70	\$15,193.50	3,038.70	\$15,193.50			
	2573.505	FLOATATION SILT FENCE TYPE MOVING WATER	m	\$30.00	23.80	\$714.00	23.80	\$714.00			
	2575.501	SEEDING	ha	\$625.00	1.21	\$756.25	1.21	\$756.25			
	2575.502	SEED MIXTURE 25A	kg	\$30.00	46.52	\$1,395.60	46.52	\$1,395.60			
	2575.502	SEED MIXTURE 90A	kg	\$4.50	26.36	\$118.62	26.36	\$118.62			
	2575.502	SODDING TYPE LAWN	m2	\$2.00	12,219.68	\$24,439.36	12,219.68	\$24,439.36			
	2576.505	SODDING TYPE SALT RESISTANT	m2	\$10.00	21,421.68	\$218,433.38	21,421.68	\$218,433.38			
	2576.505	MULCH MATERIAL-TYPE 1	ton	\$160.00	2.37	\$379.20	2.37	\$379.20			
	2576.511	EROSION CONTROL BLANKETS CATEGORY 2	m2	\$1.20	55,300.00	\$66,360.00	55,300.00	\$66,360.00			
	2576.532	COMM. FERT. ANALYSIS 10-10-10	kg	\$0.50	683.00	\$409.80	683.00	\$409.80			
	2401.501	STRUCTURE EXCAVATION	LUMP SUM	\$4,500.00	1.00	\$4,500.00	1.00	\$4,500.00			
	2401.501	SLOPE PREPARATION	LUMP SUM	\$4,500.00	1.00	\$4,500.00	1.00	\$4,500.00			
	2301.553	BRIDGE APPROACH PANELS	m2	\$83.00	332.00	\$27,556.00	332.00	\$27,556.00			
	1 2401.501	STRUCTURE CONCRETE (3Y43)	m3	\$350.00	252.00	\$88,200.00	252.00	\$88,200.00			
	1 2401.512	BRIDGE SLAB CONCRETE (3Y36)	m2	\$240.00	723.00	\$173,520.00	723.00	\$173,520.00			
	1 2401.513	TYPE RAILING CONCRETE (3Y46)	m	\$105.00	45.00	\$4,725.00	45.00	\$4,725.00			
	1 2401.516	RAISED MEDIUM CONCRETE (3Y48)	m2	\$50.00	42.00	\$2,100.00	42.00	\$2,100.00			
	1 2401.541	REINFORCEMENT BARS (EPOXY COATED)	kg	\$1.20	9,301.20	\$11,626.50	9,301.20	\$11,626.50			
	2401.601	STRUCTURE EXCAVATION	LUMP SUM	\$6,000.00	1.00	\$6,000.00	1.00	\$6,000.00			
	2401.601	SLOPE PREPARATION	LUMP SUM	\$4,500.00	1.00	\$4,500.00	1.00	\$4,500.00			

ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)

EXHIBIT "A"

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	S.A.P. 02-716-04 ANOKA COUNTY			S.A.P. 198-020-14 CITY OF ANDOVER			100% CITY OF ANDOVER NON PARTICIPATING			STORM SEWER		
					ROADWAY	EST QTY	EST COST	ROADWAY	EST QTY	EST COST	ROADWAY	EST QTY	EST COST	ROADWAY	EST QTY	EST COST
1	2402-583	ORNAMENTAL METAL RAILING TYPE S CONCRETE WEARING COURSE (3U17A)	m	\$265.00	45.00	\$11,925.00	45.00	\$1,125.00	45.00	\$10,800.00						
1	2404-501	REMOVE OLD BRIDGE	m2	\$25.00	848.00	\$21,200.00	848.00	\$21,200.00								
	2442-501	C-I-P CONCRETE PILING DELIVERED 310 mm	m	\$12,000.00	1.00	\$12,000.00										
	2452-507	C-I-P CONCRETE PILING DELIVERED 406 mm	m	\$48.00	728.00	\$34,944.00	728.00	\$34,944.00								
	2452-507	C-I-P CONCRETE DRIVEN 310 mm	m	\$56.00	784.00	\$43,904.00	784.00	\$43,904.00								
	2452-508	C-I-P CONCRETE DRIVEN 406 mm	m	\$4.00	728.00	\$2,912.00	728.00	\$2,912.00								
	2452-508	C-I-P TEST FILE, 29 m LONG 310 mm	EACH	\$3,700.00	2.00	\$7,400.00										
	2452-519	C-I-P TEST FILE, 31 m LONG 406 mm	EACH	\$4,000.00	2.00	\$8,000.00										
	2452-519	RANDOM RIPRAP CLASS V	m3	\$55.00	185.00	\$10,175.00	185.00	\$10,175.00								
	2511-501	GEOTEXTILE FILTER	m2	\$3.00	675.00	\$2,025.00	675.00	\$2,025.00								
	2511-515	ARTICULAR CONCRETE RIPRAP	m2	\$60.00	535.00	\$32,100.00	535.00	\$32,100.00								
	2511-604	CONDUIT SYSTEM (SIGNALS)	LUMP SUM	\$2,000.00	1.00	\$2,000.00										
	2545-509	BRIDGE SUBTOTAL														
		TOTAL ESTIMATED COST														
NOTES:	1	PLAN QUANTITY														
	2	CONNECT MAINLINE TO MAINLINE ONLY														
	3	INCLUDES 6 m, 100 mm PVC RISER														

COST PARTICIPATION		
Anoka County	Andover	State Aid Eligible
State Aid Eligible		\$756,623.89
Detention Basins		\$332,685.52
Storm Sewer share		\$11,754.00
Subtotal		(\$43,000.00)
Engineering (8%)		0.15
TOTAL		\$88,919.93
		\$1,146,983.34
		\$91,758.67
		\$1,238,742.01

Pond Excavation and structures \$78,360.00
Storm Sewer less pond ex and struct. \$592,799.50

ENGINEER'S ESTIMATE
CSA H 116 (BUNKER LAKE BOULEVARD)
ANOKA COUNTY

EXHIBIT "A"

04/08/99

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	S.A.P. 02-716-04 ANOKA COUNTY			S.A.P. 198-020-14 CITY OF ANDOVER			100% CITY OF ANDOVER NON PARTICIPATING			STORM SEWER	
					ROADWAY EST QTY	EST COST	ROADWAY EST QTY	EST COST	CITY OF ANDOVER EST QTY	EST COST	CITY OF ANDOVER EST QTY	EST COST	EST QTY	EST COST	
	2021.501	MOBILIZATION	LUMP SUM	\$300,000.00	1.00	\$300,000.00	1.00	\$300,000.00							
	2031.302	FIELD OFFICE TYPE D	EACH	\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00							
	2051.601	COMPUTER EQUIPMENT	LUMP SUM	\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00							
	2101.501	CLEARING	ha	\$4,500.00	4.82	\$21,690.00	4.82	\$21,690.00							
	2101.502	CLEARING	TREE	\$35.00	233.00	\$8,155.00	233.00	\$8,155.00							
	2101.506	GRUBBING	ha	\$4,500.00	4.82	\$21,690.00	4.82	\$21,690.00							
	2101.507	GRUBBING	TREE	\$35.00	235.00	\$8,225.00	235.00	\$8,225.00							
	2102.502	PAVEMENT MARKING REMOVAL	m	\$1.60	3,000.00	\$4,800.00	3,000.00	\$4,800.00							
	2104.501	REMOVE PIPE CULVERTS	m	\$17.00	192.70	\$3,275.90	192.70	\$3,275.90							
	2104.501	REMOVE CONCRETE CURB & GUTTER	m	\$5.00	1,873.38	\$9,366.90	1,873.38	\$9,366.90							
	2104.501	REMOVE GUARDRAIL - PLATEBEAM	m	\$5.50	105.00	\$578.50	105.00	\$578.50							
	2104.501	REMOVE FENCE	m	\$6.00	273.00	\$1,638.00	273.00	\$1,638.00							
	2104.501	REMOVE WATERMAIN PIPE	m	\$15.00	375.00	\$5,625.00	375.00	\$5,625.00							
	2104.501	REMOVE SANITARY SEWER PIPE	m	\$15.00	433.00	\$6,495.00	69.00	\$1,035.00							
	2104.501	REMOVE SEWER PIPE (STORM)	m	\$14.00	254.50	\$3,563.00	254.50	\$3,563.00							
	2104.503	REMOVE TIMBER RETAINING WALL	m2	\$10.00	16.00	\$160.00	16.00	\$160.00							
	2104.503	REMOVE CONCRETE DRIVEWAY PAVEMENT	m2	\$3.50	188.00	\$658.00	188.00	\$658.00							
	2104.503	REMOVE CONCRETE WALK	m2	\$6.50	306.30	\$1,684.65	306.30	\$1,684.65							
	2104.503	REMOVE BITUMINOUS PAVEMENT	m2	\$5.50	65,439.80	\$98,159.70	65,439.80	\$98,159.70							
	2104.509	REMOVE GATE VALVE	EA	\$250.00	5.00	\$1,250.00	5.00	\$1,250.00							
	2104.509	REMOVE MANHOLE (SAN.)	EA	\$500.00	7.00	\$3,500.00								7	
	2104.509	REMOVE DRAINAGE STRUCTURE	EA	\$200.00	16.00	\$3,200.00	16.00	\$3,200.00							
	2104.509	REMOVE CONCRETE APRON	EA	\$300.00	2.00	\$600.00	2.00	\$600.00							
	2104.509	REMOVE CONCRETE WALK	EA	\$1,500.00	25.00	\$37,500.00	25.00	\$37,500.00							
	2104.509	REMOVE PILING ASSEMBLY	EA	\$1,500.00	1.00	\$1,500.00	1.00	\$1,500.00							
	2104.509	REMOVE SIGN	m	\$6.00	1,709.50	\$10,257.00	1,709.50	\$10,257.00							
	2104.513	SAWING BITUMINOUS PAVEMENT	m	\$6.00	1,709.50	\$10,257.00	1,709.50	\$10,257.00							
	2104.523	SALVAGE SIGN	EA	\$1,500.00	3.00	\$4,500.00	3.00	\$4,500.00							
	2104.523	SALVAGE HYDRANT & VALVE	EA	\$2,000.00	4.00	\$8,000.00	4.00	\$8,000.00							
	2104.523	SALVAGE CASTING	EA	\$90.00	23.00	\$2,070.00	22.00	\$1,980.00						1	
	2104.523	SALVAGE SIGN TYPE C	EA	\$11.00	167.00	\$1,837.00	167.00	\$1,837.00							
	2104.523	SALVAGE STREET NAME SIGNS	EA	\$15.00	18.00	\$270.00	18.00	\$270.00							
	2104.523	HAUL SALVAGED MATERIAL	LUMP SUM	\$5,000.00	1.00	\$5,000.00	1.00	\$5,000.00							
1	2105.501	COMMON EXCAVATION	m3	\$3.00	36,967.00	\$110,901.00	36,967.00	\$110,901.00							
	2105.505	MUCK EXCAVATION	m3	\$4.00	61,702.00	\$246,808.00	61,702.00	\$246,808.00							
	1	2105.507	SUBGRADE EXCAVATION	m3	\$1.50	26,791.00	\$40,186.50	26,791.00	\$40,186.50						
	2105.515	SPECIAL EXCAVATION	m3	\$4.00	18,215.00	\$72,860.00								18215	
	2105.522	SELECT GRANULAR BORROW (LV)	EA	\$6.00	68,050.00	\$408,300.00	68,050.00	\$408,300.00						\$72,860.00	
	2105.523	TOPSOIL BORROW (LV)	m3	\$6.00	3,389.00	\$20,334.00	3,389.00	\$20,334.00							
	2105.533	TOPSOIL EXCESS MATERIAL IN STOCKPILES (SV)	m3	\$1.50	30,000.00	\$45,000.00	30,000.00	\$45,000.00							
	2105.535	SALVAGE TOPSOIL FROM STOCKPILE	m3	\$1.50	525.00	\$787.50								\$787.50	
	2451.601	DEWATERING AREA A	LUMP SUM	\$20,000.00	1.00	\$20,000.00	1.00	\$20,000.00						1	
	2451.601	DEWATERING AREA B	HOUR	\$75.00	60.00	\$4,500.00	60.00	\$4,500.00							
	2123.610	STREET SWEEPER WITH PICK UP BROOM	HOUR	\$90.00	40.00	\$3,600.00	40.00	\$3,600.00							
	2123.610	TRACTOR MOUNTED BACKHOE	m3	\$4.00	800.00	\$3,200.00	800.00	\$3,200.00							
	2130.501	WATER	m3	\$16.00	22,171.90	\$354,750.40	22,171.90	\$354,750.40							
	2211.501	AGGREGATE BASE, CLASS 5 (CV)	m2	\$60.00	220.00	\$13,200.00	220.00	\$13,200.00							
	2301.502	200 mm CONCRETE PAVEMENT -HE TYPE SPECIAL	m2	\$60.00	220.00	\$13,200.00	220.00	\$13,200.00							
	2331.603	SAWED / SEALED JOINT	m	\$3.50	8,656.00	\$30,296.00	8,656.00	\$30,296.00							
	2232.501	MILL BITUMINOUS PAVEMENT	m2	\$1.80	2,340.00	\$4,212.00	2,340.00	\$4,212.00							
	2350.609	TYPE HV 4 500B WEARING COURSE MIXTURE	t	\$30.00	9,016.14	\$270,484.20	9,016.14	\$270,484.20							
	2350.609	TYPE MV 4 505B WEARING COURSE MIXTURE	t	\$30.00	11,114.34	\$33,430.20	11,114.34	\$33,430.20							
	2350.609	TYPE MV 4 WEARING COURSE MIXTURE-TRAIL	m2	\$33.00	13,376.08	\$40,128.24								\$40,128.24	
	2350.609	TYPE MV 4 WEARING COURSE MIXTURE-DRIVEWAY	m2	\$4.00	821.38	\$3,285.52	821.38	\$3,285.52							
	2350.609	TYPE MV 4 WEARING COURSE MIXTURE-TEMPORAR	m2	\$4.00	2,075.00	\$8,300.00	2,075.00	\$8,300.00							

ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)
ANOKA COUNTY

EXHIBIT "A"

04/05/99

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	TOTAL	S.A.P. 02-716-04 CITY OF ANDOVER ROADWAY		S.A.P. 198-020-14 CITY OF ANDOVER ROADWAY		100% CITY OF ANDOVER NON PARTICIPATING EST QTY EST COST		STORM SEWER
						EST QTY	EST COST	EST QTY	EST COST	EST QTY	EST COST	
	2350.609	TYPE HV 3 NONWEARING COURSE MIXTURE	t	\$28.00	\$306,384.40	10,942.30	\$306,384.40	10,942.30	\$306,384.40			
	2350.609	TYPE MV 3 NONWEARING COURSE MIXTURE	t	\$28.00	\$17,229.51	482,426.28	\$17,229.51	482,426.28	\$17,229.51			
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	liter		\$0.35	\$22,619.25	\$7,986.74	\$7,986.74	\$7,986.74	\$7,986.74			
2411.603	MODULAR BLOCK RETAINING WALL	m ²		\$150.00	\$863.18	\$129,477.00	\$863.18	\$129,477.00				
2412.602	RELOCATE MAILBOX	EA/CH		\$10.00	\$20.00	\$200.00	\$20.00	\$200.00				
2451.511	COARSE FILTER AGGREGATE	m ³		\$12.34	\$3,925.00	\$48,434.50	\$1,100.00	\$13,574.00				
2501.602	TRASH GUARD FOR 300 mm RC PIPE APRON	EA/CH		\$250.00	3.00	\$750.00						3 \$750.00
2501.602	TRASH GUARD FOR 375 mm RC PIPE APRON	EA/CH		\$300.00	5.00	\$1,500.00						5 \$1,500.00
2501.602	TRASH GUARD FOR 525 mm RC PIPE APRON	EA/CH		\$350.00	1.00	\$350.00						1 \$350.00
2501.602	TRASH GUARD FOR 750 mm RC PIPE APRON	EA/CH		\$650.00	1.00	\$650.00						1 \$650.00
2501.602	TRASH GUARD FOR 825 mm RC PIPE APRON	EA/CH		\$700.00	1.00	\$700.00						1 \$700.00
2501.602	TRASH GUARD FOR 900 mm RC PIPE APRON	EA/CH		\$850.00	1.00	\$850.00						1 \$850.00
2501.602	TRASH GUARD FOR 750 mm SPAN PIPE/APRON	EA/CH		\$900.00	2.00	\$1,800.00						2 \$1,800.00
2501.515	300 mm RC PIPE APRON	EA/CH		\$750.00	3.00	\$2,250.00						3 \$2,250.00
2501.515	375 mm RC PIPE APRON	EA/CH		\$100.00	5.00	\$500.00						5 \$500.00
2501.515	525 mm RC PIPE APRON	EA/CH		\$100.00	1.00	\$100.00						1 \$100.00
2501.515	750 mm RC PIPE APRON	EA/CH		\$500.00	1.00	\$500.00						1 \$500.00
2501.515	825 mm RC PIPE APRON	EA/CH		\$700.00	1.00	\$700.00						1 \$700.00
2501.515	900 mm RC PIPE APRON	EA/CH		\$875.00	1.00	\$875.00						1 \$875.00
2501.525	750 mm SPAN RC PIPE/ARCH/APRON	EA/CH		\$750.00	2.00	\$1,500.00						2 \$1,500.00
2503.521	560mmSPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m		\$70.00	142.88	\$10,001.60						142.88 \$10,001.60
2503.521	750mm SPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m		\$80.00	191.78	\$15,342.40						191.78 \$15,342.40
2503.521	920mm SPAN RC PIPE ARCH-SEWER DESIGN CL IIIA	m		\$120.00	219.56	\$26,359.20						219.56 \$26,359.20
2503.541	300mm RC PIPE SEWER DESIGN 3006 CL V	m		\$50.00	1,080.41	\$64,824.60						1,080.41 \$64,824.60
2503.541	475 mm RC PIPE SEWER DESIGN 3006 CL V	m		\$50.00	727.73	\$43,663.80						727.73 \$43,663.80
2503.541	450 mm RC PIPE SEWER DESIGN 3006 CL V	m		\$50.00	725.84	\$43,550.40						725.84 \$43,550.40
2503.541	525 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$70.00	80.77	\$5,653.90						80.77 \$5,653.90
2503.541	600 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$70.00	206.43	\$14,450.10						206.43 \$14,450.10
2503.541	675 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$95.00	64.37	\$6,115.15						64.37 \$6,115.15
2503.541	750 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$125.00	795.55	\$98,443.75						795.55 \$98,443.75
2503.541	825 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$160.00	38.45	\$6,152.00						38.45 \$6,152.00
2503.541	900 mm RC PIPE SEWER DESIGN 3006 CL III	m		\$160.00	45.29	\$7,246.40						45.29 \$7,246.40
2503.602	CONNECT TO EXISTING MANHOLE (SAN)	EA/CH		\$200.00	3.00	\$600.00	1.00	\$200.00				2 \$400.00
2503.602	CONNECT TO EXISTING SEWER (SAN)	EA/CH		\$200.00	5.00	\$1,000.00						5 \$1,000.00
2503.602	RE-CONNECT TO EXISTING SERVICE	EA/CH		\$200.00	7.00	\$1,400.00						7 \$1,400.00
2503.602	600 x 100 mm WYE	EA/CH		\$150.00	2.00	\$300.00						2 \$300.00
2503.602	750 x 100 mm WYE	EA/CH		\$150.00	7.00	\$1,050.00						7 \$1,050.00
2503.602	INSULATION 50 mm THICK	m ²		\$18.00	330.00	\$5,940.00						330.00 \$5,940.00
2503.603	450 mm RC PIPE SEWER DESIGN 3006 CL V (SAN)	m		\$60.00	110.00	\$6,600.00						110 \$6,600.00
2503.603	750 mm RC PIPE SEWER DESIGN 3006 CL V (SAN)	m		\$25.00	328.13	\$41,016.25	92.00	\$11,500.00				238.13 \$28,516.25
3	IRRIGATION SYSTEM	LUMP SUM		\$6,500.00	1.00	\$6,500.00						1 \$6,500.00
2504.602	CORPORATION STOP (25 mm)	EACH		\$50.00	18.00	\$1,620.00						18 \$1,620.00
2504.602	CORPORATION STOP (38 mm)	EACH		\$110.00	8.00	\$880.00						8 \$880.00
2504.602	CURB STOP & BOX (25 mm)	EACH		\$110.00	18.00	\$1,980.00						18 \$1,980.00
2504.602	CURB STOP & BOX (38 mm)	EACH		\$130.00	8.00	\$1,040.00						8 \$1,040.00
2504.602	150 mm PVC PIPE SEWER SDR 35 (SERVICE)	EA/CH		\$50.00	4.00	\$200.00						4 \$2,000.00
2504.602	200 mm PVC PIPE SEWER SDR 35	EA/CH		\$70.00	9.00	\$6,300.00						9 \$6,300.00
2504.602	201 mm PVC PIPE SEWER SDR 35	EA/CH		\$90.00	6.00	\$5,400.00	1.00	\$900.00				5 \$4,500.00
2504.602	F & I HYDRANT	EA/CH		\$1,500.00	3.00	\$4,500.00						3 \$4,500.00

**ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)**

EXHIBIT "A"

04/03/99

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED		TOTAL	ANOKA COUNTY		S.A.P. 02-716-04		S.A.P. 198-020-14		STORM SEWER	
				EST QTY	UNIT COST		EST COST	EST QTY	EST COST	EST QTY	EST COST	EST QTY	EST COST	
	2504.602	RELOCATE HYDRANT	EACH	\$1,500.00	20.00	\$30,000.00				20	\$30,000.00			
	2504.602	ADJUST HYDRANT	EACH	\$500.00	5.00	\$2,500.00				5	\$2,500.00			
2	2504.602	CONNECT TO EXISTING WATERMAIN	EACH	\$350.00	33.00	\$11,550.00	2.00	\$700.00		31	\$10,850.00			
	2504.602	ADJUST VALVE BOX	EACH	\$150.00	46.00	\$6,900.00				46	\$6,900.00			
	2504.602	ADJUST CURB STOP BOX	EACH	\$150.00	15.00	\$2,250.00				15	\$2,250.00			
	2504.603	25 mm COPPER SERVICE	m	\$45.00	365.00	\$16,425.00				365	\$16,425.00			
	2504.603	38 mm COPPER SERVICE	m	\$55.00	320.00	\$16,320.00				320	\$16,320.00			
	2504.603	150 mm DIP WATERMAIN	m	\$40.00	150.00	\$6,000.00				150	\$6,000.00			
	2504.603	200 mm DIP WATERMAIN	m	\$55.00	172.00	\$8,600.00				172	\$8,600.00			
	2504.603	300 mm DIP WATERMAIN	m	\$75.00	450.00	\$33,750.00	64.00	\$4,800.00		386	\$28,950.00			
	2504.603	LOWER WATER MAIN	m	\$55.00	90.00	\$4,500.00	90.00	\$4,500.00						
	2504.603	INSULATE WATER MAIN	m	\$50.00	100.00	\$5,000.00	100.00	\$5,000.00						
	2504.608	FITTINGS	kg	\$3.50	1,562.00	\$5,467.00				1562	\$5,467.00			
												5	\$5,000.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN A or F	EACH	\$1,000.00	5.00	\$5,000.00						95	\$114,000.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN C or G	EACH	\$1,200.00	95.00	\$114,000.00						22	\$15,400.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN I	EACH	\$700.00	22.00	\$15,400.00						9	\$16,300.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 1500 mm 4020	EACH	\$700.00	9.00	\$6,300.00						1	\$3,300.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 1800 mm 4020	EACH	\$3,300.00	1.00	\$3,300.00						31	\$29,450.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN 2100 mm 4020	EACH	\$950.00	31.00	\$29,450.00						10	\$2,000.00	
	2506.502	CONST DRAINAGE STRUCTURE DESIGN H	m	\$200.00	10.00	\$2,000.00						2	\$700.00	
	2506.511	RECONSTRUCT SANITARY MANHOLES	EACH	\$350.00	171.00	\$59,850.00						37	\$9,250.00	
	2506.516	CASTING ASSEMBLY	EACH	\$250.00	42.00	\$10,500.00						4	\$4,000.00	
	2506.522	ADJUST FRAME & RING CASTING	EACH	\$1,000.00	4.00	\$4,000.00						1	\$1,500.00	
	2506.602	CONST DRAINAGE STRUCTURE DESIGN SPECIAL 1	EACH	\$1,500.00	1.00	\$1,500.00						1	\$2,000.00	
	2506.602	CONST DRAINAGE STRUCTURE DESIGN SPECIAL 2	EACH	\$2,000.00	1.00	\$2,000.00						4	\$4,800.00	
	2506.602	CONST SANITARY MANHOLE DESIGN J (0 - 2.4 m)	EACH	\$1,200.00	8.00	\$9,600.00	4.00	\$4,800.00				1	\$1,200.00	
	2506.602	CONST SANITARY MANHOLE DESIGN F (0 - 2.4 m)	EACH	\$1,200.00	1.00	\$1,200.00						10-42	\$4,428.50	
	2506.602	CONST SANITARY MANHOLE EXCESS DEPTH	m	\$425.00	30.80	\$13,080.00	20.36	\$8,661.50				2,683	\$1,140.28	
	2506.603	CONSTRUCT 450 mm OUTSIDE DROP TO EXISTING MANH	m	\$425.00	2.68	\$1,140.27						90.6	\$181.20	
												53.8	\$2,940.00	
	2511.507	GROUTED RIPRAP	m3	\$50.00	58.80	\$2,940.00						90.6	\$181.20	
	2511.515	GEOTEXTILE FILTER TYPE IV	m2	\$2.00	90.60	\$181.20								
	2521.501	75 mm CONCRETE WALK	m2	\$21.00	7,643.65	\$160,516.65	7,643.65	\$160,516.65						
	2521.501	75mm CONCRETEWALK	m2	\$31.00	1,387.60	\$42,085.60	1,357.60	\$42,085.60						
	2521.501	100 mm CONCRETE WALK	m2	\$25.00	1,879.83	\$46,985.75	335.86	\$33,986.50	1,543.97					
	2531.501	CONC. CURB & GUTTER DESIGN B4:12	m	\$20.00	6,676.46	\$133,529.20	6,676.46	\$133,529.20						
	2531.501	CONC. CURB & GUTTER DESIGN B4:8	m	\$20.00	6,884.77	\$137,695.40	3,442.39	\$68,847.70	3,442.39					
	2531.501	CONC. CURB & GUTTER DESIGN B6:12	m	\$20.00	243.09	\$4,861.80	243.09	\$4,861.80						
	2531.501	CONC. CURB & GUTTER DESIGN B6:18	m	\$30.00	1,193.35	\$35,800.50	324.65	\$9,739.50						
	2531.507	150 mm CONCRETE DRIVEWAY PAVEMENT	m2	\$40.00	455.72	\$18,228.80	455.72	\$18,228.80						
	2531.507	200 mm CONCRETE DRIVEWAY PAVEMENT - HIGH EARLY	m2	\$45.00	29.28	\$1,317.60	29.28	\$1,317.60						
	2531.602	PEDESTRIAN CURB RAMP	EACH	\$250.00	21.00	\$5,250.00	4.00	\$1,000.00						
	2531.602	CONCRETE MEDIAN NOSE DESIGN 71:3	EACH	\$50.00	22.00	\$11,000.00	22.00	\$11,000.00						
	2554.501	TRAFFIC BARRIER DESIGN SPECIAL	m	\$10.00	30.40	\$3,040.00	30.40	\$3,040.00						
	2554.501	TRAFFIC BARRIER DESIGN B8:07	EACH	\$1,00.00	4.00	\$4,000.00	4.00	\$4,000.00						
	2554.523	END TREATMENT-ECCENTRIC LOADER BCT	EACH	\$100.00	4.00	\$4,000.00	4.00	\$4,000.00						
	2863.601	TRAFFIC CONTROL	LUMP SUM	\$100,00.00	1.00	\$40,000.00	1.00	\$40,000.00						
	2863.601	TRAFFIC CONTROL-STAGE TWO	LUMP SUM	\$40,00.00	1.00	\$20,000.00	1.00	\$20,000.00						
	2863.605	RAISED PAVEMENT	EACH	\$1.50	680.00	\$1,020.00	680.00	\$1,020.00						
	2863.605	POLICE OFFICER	HOUR	\$75.00	20.00	\$1,500.00	20.00	\$1,500.00						
	2864.531	F&I SIGN PANEL TYPE C	m2	\$25.00	112.70	\$28,175.00	112.70	\$28,175.00						
	2864.602	INSTALL SIGNS TYPE D	EACH	\$165.00	1.00	\$165.00	1.00	\$165.00						
	2864.602	F&I STREET NAME SIGNS	EACH	\$100.00	26.00	\$2,600.00	26.00	\$2,600.00						

ENGINEER'S ESTIMATE
CSA H 116 (BUNKER LAKE BOULEVARD)
ANOKA COUNTY

EXHIBIT "A"

04/05/99

NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED COST	ANOKA COUNTY			S.A.P. 198-020-14 CITY OF ANDOVER			100% CITY OF ANDOVER			STORM SEWER	
					ROADWAY EST QTY	EST COST	EST QTY	ROADWAY EST QTY	EST COST	EST QTY	NON PARTICIPATING EST QTY	EST COST	EST QTY	EST COST	EST QTY
	2564.602	PAVEMENT MESSAGE (LEFT ARROW) EPOXY	EACH	\$80.00	27.00	\$2,160.00	27.00								
	2564.602	PAVEMENT MESSAGE (RIGHT ARROW) EPOXY	EACH	\$80.00	40.00	\$3,200.00	40.00								
	2564.603	100 mm SOLID LINE WHITE, EPOXY	m	\$6.65	10,110.00	\$65,715.50	10,110.00								
	2564.603	100 mm SOLID LINE YELLOW, EPOXY	m	\$0.80	6,960.00	\$5,568.00	6,960.00								
	2564.603	100 mm BROKEN LINE WHITE, EPOXY	m	\$0.95	6,980.00	\$6,631.00	6,980.00								
	2564.603	100 mm BROKEN LINE YELLOW, EPOXY	m	\$0.75	815.00	\$611.25	815.00								
	2564.603	100 mm DOUBLE SOLID LINE YELLOW, EPOXY	m	\$500.00	100.00	\$50,000.00	100.00								
	2564.603	400 mm SOLID LINE WHITE, EPOXY	m	\$6.00	140.00	\$840.00	140.00								
	2564.603	100 mm SOLID LINE WHITE-PAINT TEMPORARY	m	\$1.50	4,950.00	\$7,425.00	4,950.00								
	2564.603	100 mm DOUBLE SOLID LINE YELLOW-PAINT TEMPORARY	m	\$2.50	5,150.00	\$12,875.00	5,150.00								
	2564.604	ZEBRA CROSSWALK WHITE, EPOXY	m2	\$55.00	320.00	\$17,600.00	320.00								
	2564.604	CONSTRUCTION SIGNS SPECIAL	m2	\$250.00	5.20	\$1,300.00	5.20								
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "B"	SIGS	\$135,200.00	1.00	\$135,200.00	0.25								
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "C"	SIGS	\$151,800.00	1.00	\$151,800.00	0.25								
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "D"	SIGS	\$173,200.00	1.00	\$173,200.00	0.50								
	2565.511	TRAFFIC CONTROL SIGNAL SYSTEM "E"	LUMP SUM	\$153,200.00	1.00	\$153,200.00	1.00								
	2565.601	SAVAGE SIGNAL SYSTEM "B"	LUMP SUM	\$2,500.00	1.00	\$2,500.00	1.00								
	2565.601	SAVAGE SIGNAL SYSTEM "C"	LUMP SUM	\$2,500.00	1.00	\$2,500.00	1.00								
	2565.601	SAVAGE SIGNAL SYSTEM "D"	LUMP SUM	\$7,600.00	1.00	\$7,600.00	1.00								
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "B"	LUMP SUM	\$7,600.00	1.00	\$7,600.00	1.00								
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "C"	LUMP SUM	\$12,000.00	1.00	\$12,000.00	1.00								
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "D"	LUMP SUM	\$6,700.00	1.00	\$6,700.00	1.00								
	2565.601	EMERGENCY VEHICLE PREEMPTION SYSTEM "E"	LUMP SUM	\$145,000.00	1.00	\$145,000.00	1.00								
	2565.601	TRAFFIC CONTROL INTERCONNECTION	EACH	\$600.00	26.00	\$15,600.00	26.00								
	2565.602	PVC HANDHOLE (METAL FRAME AND COVER)	m	\$60.00	350.00	\$21,000.00	350.00								
	2565.603	103 mm RIGID STEEL CONDUIT													
	2571.501	CONIFEROUS TREE 2 m BASE ROOT	TREE	\$300.00	12.00	\$3,600.00	12.00								
	2571.502	DECIDUOUS TREE 3.5 m HT-B&B	TREE	\$300.00	8.00	\$2,400.00	8.00								
	2571.502	DECIDUOUS TREE 6.0 m CAL. B&B	TREE	\$300.00	80.00	\$24,000.00	80.00								
	2571.505	DECIDUOUS SHRUB 0.6 m BASE ROOT	SHRUB	\$20.00	288.00	\$5,760.00	288.00								
	2571.507	PERENNIAL 2 YEAR BASE ROOT	PLANT	\$10.00	4,030.00	\$40,300.00	4,030.00								
	2571.508	ANNUAL FLOWER JUMBO PACK	FLOWER	\$2.00	2,440.00	\$4,880.00	2,440.00								
	2571.600	MULCH MATERIAL-TYPE 6 MODIFIED	m3	\$3.00	282.00	\$846.00	282.00								
	2571.603	TREE PROTECTION	m	\$9.00	200.00	\$1,800.00	200.00								
	2573.501	BALE CHECK	EACH	\$5.00	50.00	\$250.00	50.00								
	2573.502	SILT FENCE, TYPE PREASSEMBLED	m	\$50.00	3,038.70	\$15,193.50	3,038.70								
	2573.505	FLOTATION SILT FENCE TYPE MOVING WATER	m	\$50.00	23.80	\$1,190.00	23.80								
	2575.501	SEEDING	ha	\$625.00	1.21	\$756.25	1.21								
	2575.502	SEED MIXTURE 25A	kg	\$50.00	46.52	\$1,395.60	46.52								
	2575.502	SEED MIXTURE 90A	kg	\$4.50	26.36	\$118.62	26.36								
	2575.505	SODDING TYPE LAWN	m2	\$2.00	12,219.68	\$24,439.36	12,219.68								
	2576.505	SODDING TYPE SALT RESISTANT	m2	\$2.00	21,421.68	\$42,843.38	21,421.68								
	2575.511	MULCH MATERIAL, TYPE 1	ton	\$160.00	2.37	\$379.20	2.37								
	2575.523	EROSION CONTROL BLANKETS CATEGORY 2	m2	\$1.25	9,301.20	\$11,626.50	9,301.20								
	2575.532	COMM. FERT. ANALYSIS 10-10-10	kg	\$0.60	683.00	\$409.80	683.00								
	BRIDGE COST ESTIMATE														
1	2301.553	BRIDGE APPROACH PANELS	m2	\$83.00	332.00	\$27,556.00	332.00								
1	2401.501	STRUCTURE CONCRETE (3Y43)	m3	\$350.00	252.00	\$88,200.00	252.00								
1	2401.512	BRIDGE SLAB CONCRETE (3Y36)	m2	\$240.00	723.00	\$173,520.00	723.00								
1	2401.513	TYPE RAILING CONCRETE (3Y46)	m	\$105.00	45.00	\$4,725.00	45.00								
1	2401.516	RAISED MEDIAN CONCRETE (3Y46)	m2	\$50.00	42.00	\$2,100.00	42.00								
1	2401.541	REINFORCEMENT BARS (EPOXY COATED)	kg	\$2.20	55,300.00	\$66,360.00	55,300.00								
1	2401.601	STRUCTURE EXCAVATION	LUMP SUM	\$6,000.00	1.00	\$6,000.00	1.00								
1	2401.601	SLOPE PREPARATION	LUMP SUM	\$4,500.00	1.00	\$4,500.00	1.00								

**ENGINEER'S ESTIMATE
CSAH 116 (BUNKER LAKE BOULEVARD)**

EXHIBIT "A"

ANOKA COUNTY		04/08/99		S.A.P. 02-716-04		S.A.P. 198-020-14		100% CITY OF ANDOVER		STORM SEWER	
NOTES	ITEM NO.	ITEM	UNIT	ESTIMATED UNIT COST	TOTAL	ROADWAY	ROADWAY	CITY OF ANDOVER	CITY OF ANDOVER	NON PARTICIPATING	EST QTY EST COST
1	2402-563	ORNAMENTAL METAL RAILING TYPE S CONCRETE WEARING COURSE (3U7TA)	m	\$265.00	45.00	\$11,925.00	45.00	\$1,125.00	\$1,125.00		\$10,800.00
1	2404-501	REMOVE OLD BRIDGE	m ²	\$25.00	848.00	\$21,200.00	848.00	\$21,200.00	\$21,200.00		
2442-501	REMOVE OLD BRIDGE	LUMP SUM	\$12,000.00	1.00	\$12,000.00	1.00	\$12,000.00				
2452-507	C-I-P CONCRETE PILING DELIVERED 310 mm	m	\$48.00	728.00	\$34,944.00	728.00	\$34,944.00				
2452-507	C-I-P CONCRETE PILING DELIVERED 406 mm	m	\$56.00	784.00	\$43,904.00	784.00	\$43,904.00				
2452-508	C-I-P CONCRETE DRIVEN 310 mm	m	\$4.00	728.00	\$2,912.00	728.00	\$2,912.00				
2452-508	C-I-P CONCRETE DRIVEN 406 mm	m	\$4.00	784.00	\$3,136.00	784.00	\$3,136.00				
2452-519	C-I-P TEST PILE, 29 m LONG 310 mm	EACH	\$3,700.00	2.00	\$7,400.00	2.00	\$7,400.00				
2452-519	C-I-P TEST PILE, 31 m LONG 406 mm	EACH	\$4,000.00	2.00	\$8,000.00	2.00	\$8,000.00				
2511.501	RANDOM RIPRAP CLASS V	m ³	\$55.00	185.00	\$10,775.00	185.00	\$10,775.00				
2511.515	GEOTEXTILE FILTER	m ²	\$3.00	675.00	\$2,025.00	675.00	\$2,025.00				
2511.604	ARTICULAR CONCRETE RIPRAP	m ²	\$60.00	535.00	\$32,100.00	535.00	\$32,100.00				
2545.509	CONDUIT SYSTEM (SIGNS)	LUMP SUM	\$2,000.00	1.00	\$2,000.00	1.00	\$2,000.00				
	BRIDGE SUBTOTAL				\$564,632.00						
		TOTAL ESTIMATED COST			\$6,580,691.41		\$4,826,557.70		\$750,283.89		\$322,685.52
											\$671,155.50

NOTES:
 1 PLAN QUANTITY
 2 CONNECT MAINLINE TO MAINLINE ONLY
 3 INCLUDES 6 m, 100 mm PVC RISER

NOTES
ITEM NO.
ITEM
UNIT
ESTIMATED UNIT COST
TOTAL
ROADWAY
ROADWAY
CITY OF ANDOVER
CITY OF ANDOVER
NON PARTICIPATING
EST QTY EST COST

COST PARTICIPATION

Anoka County					
State Aid Eligible	\$4,826,557.70				\$750,288.69
Detention Basins	\$66,606.00				\$32,685.52
Storm Sewer share	85%	\$503,879.58			\$11,754.00
Subtotal	\$5,397,043.27				($\$43,000.00$)
Engineering (8%)	\$431,763.46				\$88,919.93
TOTAL	\$5,828,806.73				\$1,140,648.14
					\$31,251.85
					\$1,231,899.99

NOTES
ITEM NO.
ITEM
UNIT
ESTIMATED UNIT COST
TOTAL
ROADWAY
ROADWAY
CITY OF ANDOVER
CITY OF ANDOVER
NON PARTICIPATING
EST QTY EST COST

Pond Excavation and structures				
				\$592,799.50

EXHIBIT B
COST-SHARING AGREEMENT
FOR PROJECTS CONSTRUCTED IN ANOKA COUNTY
USING COUNTY STATE AID FUNDS OR LOCAL TAX LEVY DOLLARS

<u>ITEMS</u>	<u>COUNTY SHARE</u>	<u>CITY SHARE</u>
Bikeways	0	100%
Concrete Curb & Gutter	50%	50%
Concrete Sidewalk	0	100%
Concrete Sidewalk Replacement	100%	0
Concrete Curb & Gutter for Median Construction	100%	0
Concrete Median	100%	0*①
Construction or Adjustment of Local Utilities	0	100%
Grading, Base and Bituminous	100%	0
Storm Sewer	based on state aid letter*②	based on state aid letter*②
Driveway Upgrades	0*⑥	100%
Traffic Signals (communities larger than 5,000)	½ the cost of its legs of the intersection	the cost of its legs of the intersection plus ½ the cost of the County legs of the intersection
Traffic Signals (communities less than 5,000)	100%	0*③
Engineering Services	*④	*④
Right-of-Way	1005	0*⑥
Street Lights	0	100%

- *① The County pays for 100% OF A Standard Median Design such as plain concrete. If a local unit of government requests decorative median such as red brick, stamped concrete, or exposed aggregate concrete, the local unit will pay the additional cost above the cost of standard median.
- *② In the event no State Aid is being used, drainage cost shares will be computed by proportions of total area to County area where the area of the road right-of-way is doubled prior to performance of the calculations.
- *③ In cities less than 5,000 people the County pays for 100% of the cost of the traffic signal effective March 1986. The County collects on behalf of the cities (less than 5,000) "Municipal State Aid Dollars" since they do not themselves qualify for state aid funds. These funds are used to pay the City Share.
- *④ Engineering shall be paid by the Lead Agency except that any participating agency will pay construction engineering in the amount of 8% of the construction costs paid by that agency.
- *⑥ In the event that the Township or City requests purchase of right-of-way in excess of those right-of-ways required by County construction, the Township or City participates to the extent an agreement can be reached in these properties. For instance, a Township or City may request a sidewalk be constructed alongside a County roadway which would require additional right-of-way, in which case the Township or City may pay for that portion of the right-of-way. Acquisition of right-of-way for new alignments shall be the responsibility of the Township or City in which the alignment is located. This provision may be waived by agreement with the County Board if the roadway replaces an existing alignment and the local unit of government takes jurisdiction of that existing alignment. In addition, any costs, including right-of-way costs, incurred by the County because a Township or City did not acquire sufficient right-of-way during the platting process or redevelopment process shall be paid by the Township or City.
- *⑥ The County will replace all driveways in-kind. Upgrades in surfacing (i.e., gravel to bituminous, bituminous to concrete) shall be at 100% expense to the Township or City).