BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

June 19, 1968

Edina Engineering Department
Edina Village Hall
4801 West 50th Street
Edina, Minnesota

Re: Morningside Area Storm Sewer

Attn: Mr. Donald Lofthus

Gentlemen:

In accordance with your request we have prepared a sketch of a revised detail for the structures in the inundation area for the above referenced project. If you have any questions concerning this sketch, please call me.

Yours truly,

John D. Dickson

JDD:ta
Enc.

Edina - Mom.
LRM 7/2

LRM Call to Ray Drake @ 1:30 PM

Meet w/ Ray in Edina tomorrow A.M. w/ all necessary info & I said I'd bring our Stopwatch!

Re: Piling

Edina - Morningside
LRM 5/22/68

Mpls Park Board 330 - 2220

Control Elev. of Lake Calhoun:
142.62 Mpls.

Edina - Morningside Corr. File

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440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

January 25, 1968

Mr. Robert F. Wittman
Soil Exploration Company
662 Cromwell
St. Paul, Minnesota 55114

Dear Mr. Wittman,

Enclosed are six copies of our map indicating soil boring locations in the Morningside area.

We have added the locations of borings 24, 25, 26 and 27, which were taken by your crews on January 16th and 17th. Since you continued with the numbering system used in your report of December 21, 1967, we would prefer to have the boring logs and soundings from the recent work included in the December 21 report. We are therefore returning four copies of the report for the insertion of the additional data.

The ground elevations of the recent borings are as follows:

Boring 24	-	Elevation 871.2
Boring 25	-	Elevation 870.9
Boring 26	-	Elevation 866.9
Boring 27	-	Elevation 870.6

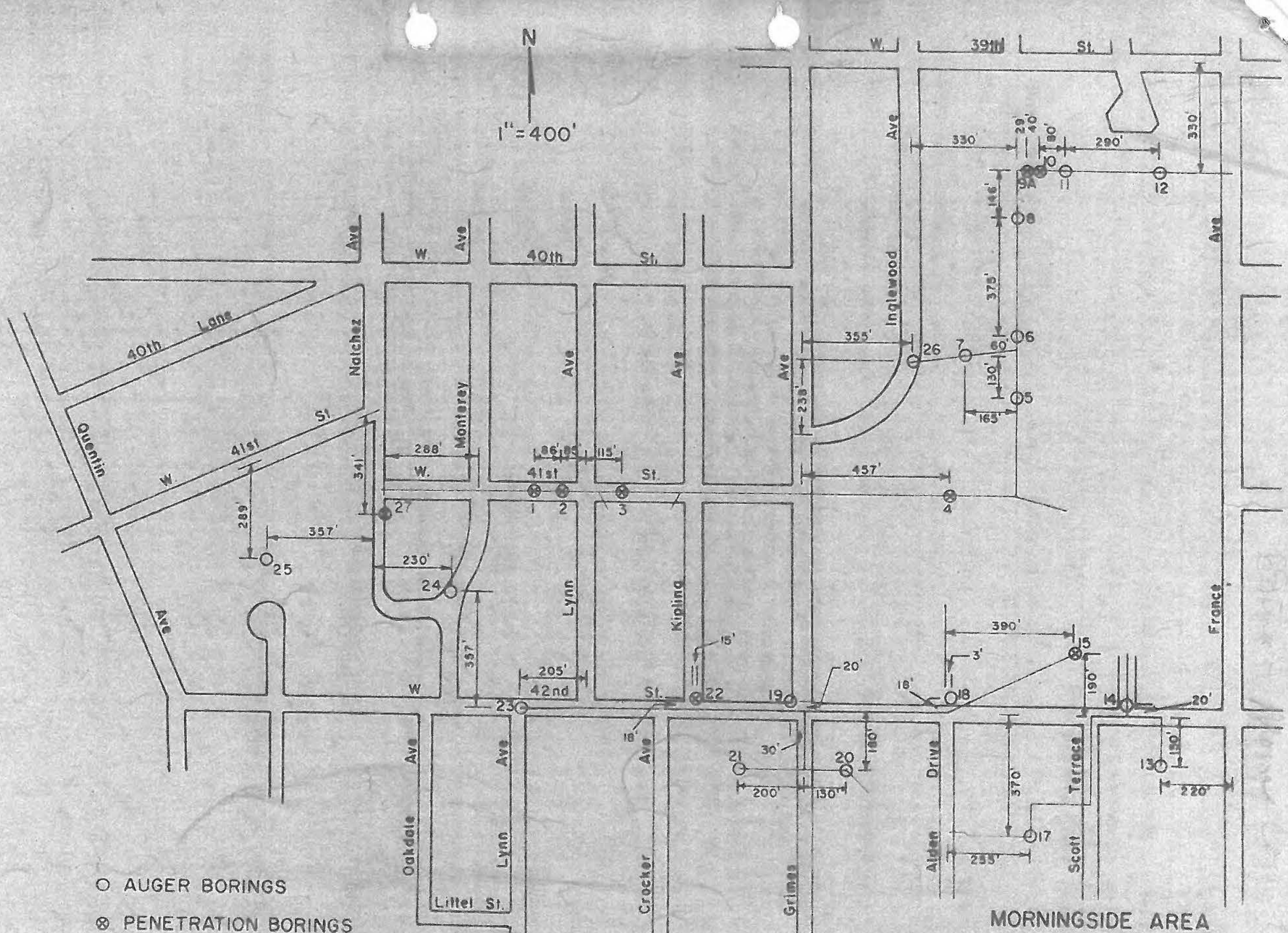
Also, would you please check the vertical scale noted on the top of the log sheets for borings 9A and 10.

Sincerely,

L. R. Molsather

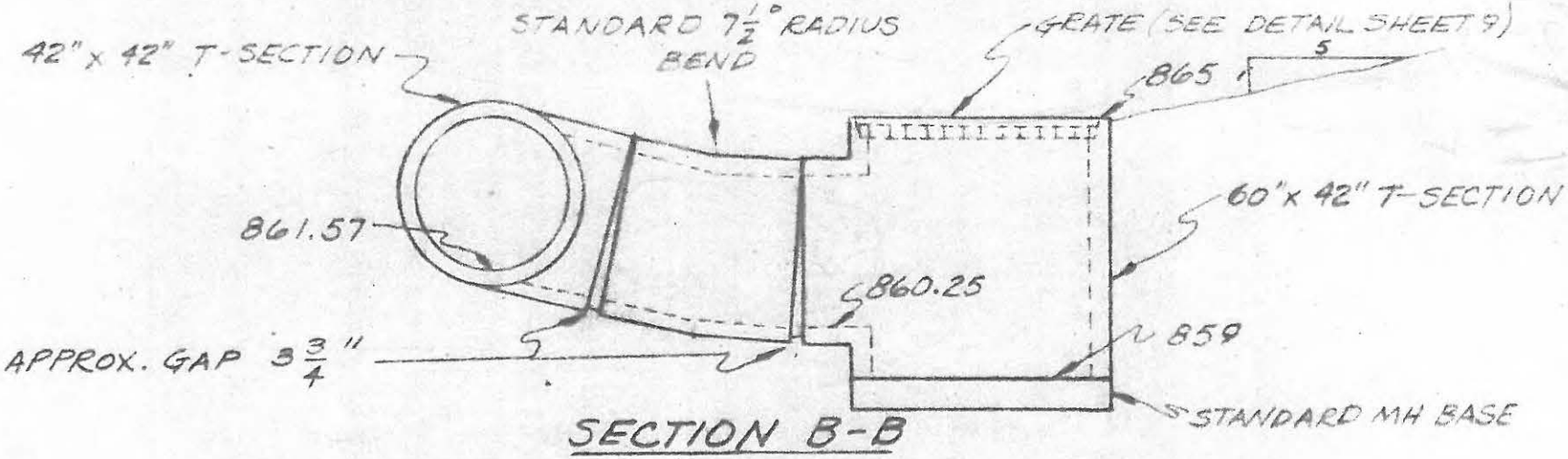
L.R. Molsather, P.E.

LRM:nc
Enc.

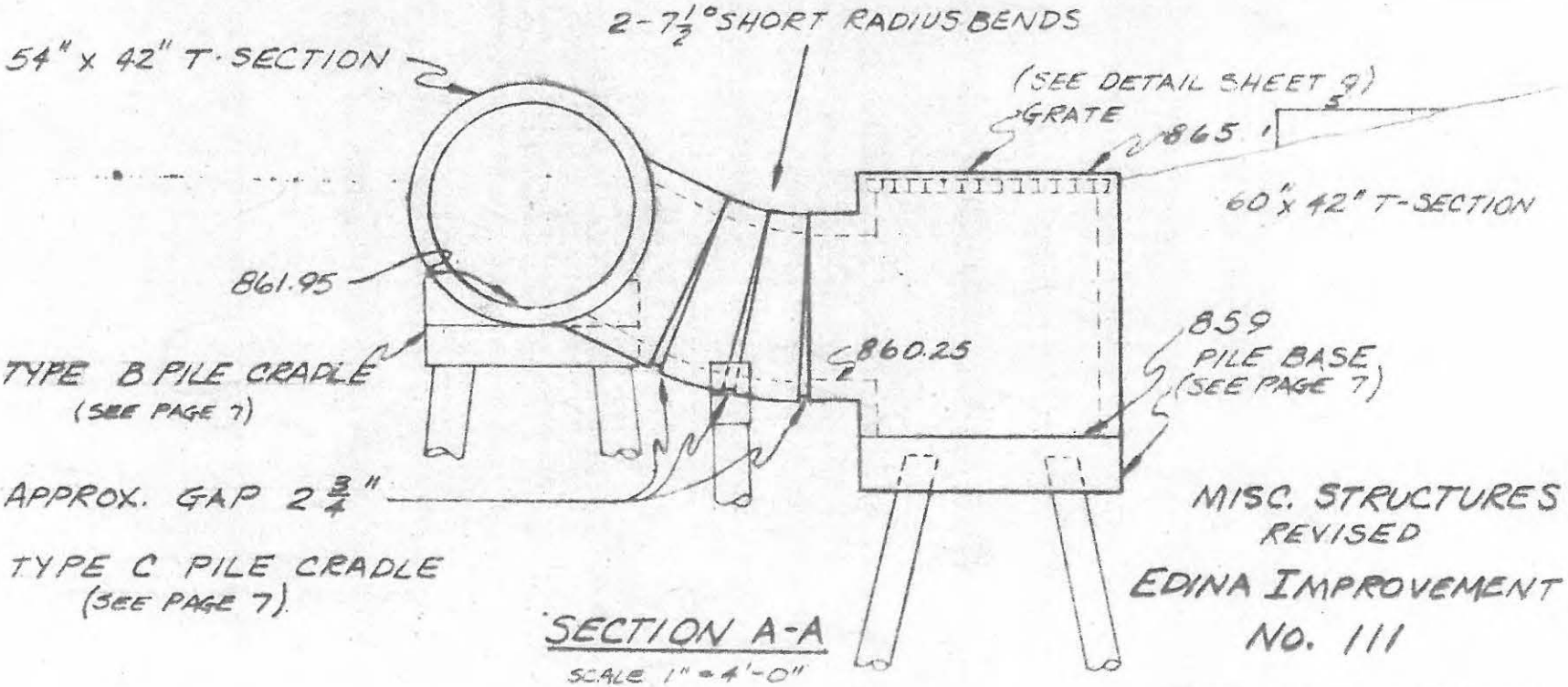


MORNINGSIDE AREA
VILLAGE OF EDINA

SOIL BORING LOCATIONS



SECTION B-B



SECTION A-A

SCALE 1" = 4'-0"

MISC. STRUCTURES
REVISED
EDINA IMPROVEMENT
NO. 111

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

TIED BID

PROPOSAL

SECTION II (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
10	L/F 54" R.C.P. 10-12' Depth, Class II	@	$
205	L/F 48" R.C.P. 0-8' Depth, Class II	@	$
307	L/F 48" R.C.P. 0-8' Depth, Class IV	@	$
118	L/F 48" R.C.P. 8-10' Depth, Class II	@	$
60	L/F 48" R.C.P. 10-12' Depth, Class II	@	$
35	L/F 48" R.C.P. 12-14' Depth, Class II	@	$
~~547~~ 44	L/F 24" R.C.P. 0-8' Depth, Class II	@	$
~~1555~~ 945	L/F 18" R.C.P. 0-8' Depth, Class II	@	$
~~901~~ 398	L/F 15" R.C.P. 0-8' Depth, Class III	@	$
~~347~~ 188	L/F 12" R.C.P. 0-8' Depth, Class IV	@	$
~~10~~ 5	Standard Manholes 0-8' Depth without Castings	@	$
~~9~~ 4	T-section Manholes 0-8' Depth without Castings	@	$
19	V/F Extra Wall Manhole	@	$
~~9~~ 2	F. & I Type "D" Castings	@	$
~~12~~ 7	F & I Type "E" Castings	@	$
~~28~~ 15	Type "B" Catch Basins with Castings 0-6' Depth	@	$
500	S/Y Cultured Sod (Includes 4" of black dirt) ~~and necessary excavation)~~ (All sodding beyond 7½' of pipe center line is incidental to the contract)	@	$
~~400~~ 180	Tons 2" Thick Bituminous replacement, M.H.D. Spec. 2331 (Includes prime coat, and utility adjustment) (For street and driveway repair)	@	$
~~1250~~ 600	Tons Class 5 gravel compacted on street 6" thick	@	$
300	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface) ~~(Price includes necessary excavation)~~	@	$
1000	C/Y Excavation (vehicle measure) (This includes all material that is loaded in trucks & hauled to [illegible])		

The pipe that will not have an R-4 joint shall have rubber gaskets with concrete grout at the joints.

A come-along shall be used on all pipe 21" or larger to draw the pipe "home" at each joint.

The section of pipe bends that are set on piling shall be strapped together using two straps per pipe. The straps shall be located one on each side, approximately in the middle of the pipe. The straps shall be 24" X 1½" X 3/16" material and secured by four shots per strap, two in each pipe using .22 cal., black S-22 stud.

All pipe set on piling foundation shall be Class IV with extra longitudinal reinforcing bars on the bottom half of the pipe. These longitudinal bars shall be #4's, spaced eight inches on center. The pipe requiring a pile foundation shall be marked "piling pipe" and the top of the pipe shall be also marked.

CONCRETE PIPE BENDS

All concrete pipe bends shall be measured for payment purposes as straight pipe. Reducers or increasers will also be measured as straight pipe and will be grouped with the larger-diameter pipe.

SOIL BORINGS

There are three soil reports in the Edina Engineer's office which are available for review. Some of the information from these soil boring reports has been transferred to the plans to assist the Engineer in preparing the plans. The soil boring reports and the information placed on the plans are for the Contractor's information and are not warrented as a complete representative sampling of all the soils that may be encountered during the construction.

POND EXCAVATION

Prior to the laying of any of the pipes which will outlet into the pond, the pond shall be excavated to the cross section shown on the plans. The material excavated shall be disposed of at locations shown on the plans, or designated by the Engineer. ~~At the back of the specifications are some grading plans where some of this material is to be disposed of.~~

The Contractor will be paid for the excavation and disposal of this material at a lump sum price.

JACKING PIPE

From station 0+25 to station 0+85 the Contractor will be required to either auger or jack 60 feet of storm sewer. The R-4 joints will not be required on this portion of the storm sewer. ~~Rubber gaskets~~ shall be used ~~along with either~~ ¼" plywood or masonite ~~at all joints. Gaskets shall be Tylox, Press seal, or approved equal~~. The plywood or masonite is to prevent point-contact of the concrete during the jacking operation. The Contractor shall be paid a unit-price per linear foot of pipe jacked which shall include the cost of all labor, equipment, and materials necessary to install the pipe as shown on the plans. This price shall include the cost of the jacking pits, the cost of the pipe and all necessary labor.

SC

TIED BID

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

IMPROVEMENT NO. 111

NOTE TO BIDDERS:

1. Bids will be opened at 11:00 A.M. (DS TIME), Friday, March 1, 1968.
2. The Proposal (Tied Bid) will not be considered unless Section I, Section II, and Section III are completed.
3. The work will be commenced within ten (10) calendar days after receipt of "Notice of Award" from the Village. All of the work shall be completed not later than September 1, 1968.

BID SUMMARY

STORM SEWER - IMPROVEMENT NO. 111

SECTION I _____ $_____

SECTION II _____ $_____

SECTION III _____ $_____

GRAND TOTAL - TIED BID _____ $_____

FIRM NAME: _____

ADDRESS: _____

BY: _____

PHONE NUMBER: _____

TIED BID

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

IMPROVEMENT NO. 111

TO THE VILLAGE COUNCIL OF THE VILLAGE OF EDINA

GENTLEMEN:

The undersigned has examined the contract documents, including advertisement for bids, instructions to bidders, general contract conditions, form of contract, and detailed specifications, including attached drawings and plans on file in the office of the Clerk of the Village of Edina, and is familiar with the site and location of the project, the work to be done, and the local conditions affecting the cost of the work under which it must be performed and hereby proposes to furnish all labor, materials, and equipment for the complete construction of the storm sewer, and to perform such work all in accordance with the contract documents for the following prices:

SECTION I

LOCATION: Along an easement the north side of the City of Minneapolis Water Department property west of France
Easement along the west side of the Minneapolis Water Department property
Easement along the south side of Registered Land Survey #567
West 41st Street from Grimes to Monterey
Easement across lot #19, Monterey to Natchez Avenue
Easement along the north side, Registered Land Survey #567
Easement on Registered Land Survey #567, near Inglewood, from north line approximately 250 feet south
Across the Village of Morningside Park area from the trunk to the pond
Grimes Avenue from 41st Street ~~approximately 320 feet north~~ to 40th Street
Monterey Avenue from West 41st Street approximately 260 feet south
40th Street, Joppa Avenue to Monterey

TIED BID

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
20	L/F 54" Asbestos Bonded Bitumunous Coated C.M.P. 0-8' Depth, 12 Gauge	@_____	$_____
114	L/F 54" R.C.P. 0-8' Depth, Class IV piling pipe	@_____	$_____
100	L/F 54" R.C.P 8-10' Depth, Class IV piling pipe	@_____	$_____
185	L/F 54" R.C.P. 8-10' Depth, Class II	@_____	$_____
145	L/F 54" R.C.P. 10-12' Depth, Class II	@_____	$_____
132	L/F 54" R.C.P. 12-14' Depth, Class II	@_____	$_____
30	L/F 54" R.C.P. 14-16' Depth, Class II	@_____	$_____
4	L/F 48" R.C.P. 0-8' Depth, Class IV piling pipe (reducer)	@_____	$_____
115	L/F 42" R.C.P. 0-8' Depth, Class IV piling pipe	@_____	$_____
418	L/F 42" R.C.P. 0-8' Depth, Class II	@_____	$_____
545	L/F 42" R.C.P. 8-10' Depth, Class II	@_____	$_____
289	L/F 42" R.C.P. 10-12' Depth, Class II	@_____	$_____
175	L/F 42" R.C.P. 12-14' Depth, Class II	@_____	$_____
4	L/F 36" R.C.P. 10-12' Depth, Class II, (reducer)	@_____	$_____
330	L/F 30" R.C.P. 0-8' Depth, Class IV piling pipe	@_____	$_____
60	L/F 30" R.C.P. Class IV jacked	@_____	$_____
245	L/F 30" R.C.P. 0-8' Depth, Class II	@_____	$_____
80	L/F 30" R.C.P. 0-8' Depth, Class IV	@_____	$_____

TIED BID

PROPOSAL

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
190	L/F 30" R.C.P. 8-10' Depth, Class II	@	$
15	L/F 30" R.C.P. 8-10' Depth, Class IV	@	$
151	L/F 30" R.C. P. 10-12' Depth, Class II	@	$
55	L/F 30" R.C. P. 10-12' Depth, Class IV	@	$
45	L/F 30" R.C.P. 12-14' Depth, Class IV	@	$
245	L/F 30" R.C.P. 14-16' Depth, Class IV	@	$
145	L/F 30" R.C. P. 16-18' Depth, Class IV	@	$
185	L/F 27" R.C.P. 0-8' Depth, Class II	@	$
135	L/F 27" R.C.P. 8-10' Depth, Class II	@	$
~~120~~ 518	L/F 24" R.C.P. 0-8' Depth, Class II	@	$
105	L/F 24" R.C.P. 8-10' Depth, Class II	@	$
35	L/F 24" R.C.P. 10-12' Depth, Class II	@	$
492	L/F 24" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 14 Gauge	@	$
8	L/F 21" R.C.P. 8-10' Depth, Class II	@	$
610	L/F 18" R.C.P. 0-8' Depth, Class II	@	$
~~24~~ 613	L/F 15" R.C.P. 0-8' Depth, Class III	@	$
~~26~~ 276	L/F 12" R.C.P. 0-8' Depth, Class IV	@	$
80	L/F 12" C.M.P. 0-8' Depth 16 gauge	@	$
~~8~~ 12	Standard Manholes, 0-8' without Castings	@	$
7	T-section Manholes, 0-8' without Castings	@	$
15	V/F Extra Wall Manhole	@	$
3	F & I Type "D" Castings	@	$
~~12~~ 16	F & I Type "E" Castings	@	$
~~8~~ 21	Type "B" Catch Basins with Castings 0-6' Depth	@	$
10	Trees, cleared, grubbed, and removed	@	$

TIED BID

PROPOSAL

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
3600	S/Y Cultured Sod (Includes 4" of black dirt) ~~and necessary excavation)~~ (All sodding beyond 7½' of pipe center line is incidental to the contract, except around perimeter of the pond)	@_____	$_____
370 ~~150~~	Tons 2" Thick Bituminous replacement, M.H.D. Spec. 2331, (Includes prime coat, and utility adjustment) (For street and driveway repair)	@_____	$_____
1125 ~~475~~	Tons Class 5 gravel compacted on street 6" thick	@_____	$_____
1000	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface) ~~(Price includes necessary excavation.)~~	@_____	$_____
2000 ~~500~~	C/Y sand, gravel for around pipe & trench backfill	@_____	$_____
3500	Cubic yds. excavation (vehicle measure) (This includes all material that is loaded in trucks and hauled to designated dump areas) (This does not include the lump sum pond excavation.)	@_____	$_____
1640	L/F 5' high fence around pond, includes gate	@_____	$_____
1	Pond excavation includes disposal of the excavated material (approx. 41,370 cu. yds.)	Lump Sum	$_____
3	M.B.F Wood Sheeting ordered left in place	@_____	$_____
6750	L/F of treated timber pile delivered	@_____	$_____
6400	L/F of treated timber pile driven	@_____	$_____
36	Type "A" cradles for 30" pipe	@_____	$_____
11	Type "A" cradles for 42" pipe	@_____	$_____
26	Type "A" cradles for 54" pipe	@_____	$_____
6	Type "B" cradles for 30" pipe	@_____	$_____
3	Type "B" cradles for 42" pipe	@_____	$_____
1	Type "B" cradle for 48" pipe	@_____	$_____
2	Type "B" cradles for 54" pipe	@_____	$_____

TIED BID

PROPOSAL

SECTION I (CONTINUED)

ESTIMATED QUANTITY	MATERIAL	UNIT PRICE	TOTAL
5	Type "C" cradles for 30" pipe	@_____	$_____
2	Type "C" cradles for 42" pipe	@_____	$_____
2	Structures in inundation area	@_____	$_____
100	LF of Curb & Gutter (Remove & Replace)	@_____	$_____
2	F & I all labor and material to lower existing 6" C.I.P. Watermain 4' for a distance of 30 feet	Lump Sum	$_____

TOTAL - SECTION I ---------- $_____

(THIS FIGURE TO BE USED IN THE GRAND TOTAL TIED BID)

SECTION II

ST. LOUIS PARK PROJECT NO. 62-85

LOCATION: Easement across school property Natchez to Quentin
Easement across lot 11 of Minikahda Park
39th Street, France Avenue to Inglewood Avenue
~~Joppa Avenue, 350 feet south of 40th Street~~
~~40th Street, Joppa Avenue to Monterey Avenue~~

TIED BID

PROPOSAL

SECTION II (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
10	L/F 54" R.C.P. 10-12' Depth, Class II	@	$
205	L/F 48" R.C.P. 0-8' Depth, Class II	@	$
307	L/F 48" R.C.P. 0-8' Depth, Class IV	@	$
118	L/F 48" R.C.P. 8-10' Depth, Class II	@	$
60	L/F 48" R.C.P. 10-12' Depth, Class II	@	$
35	L/F 48" R.C.P. 12-14' Depth, Class II	@	$
~~542~~ 44	L/F 24" R.C.P. 0-8' Depth, Class II	@	$
~~1555~~ 945	L/F 18" R.C.P. 0-8' Depth, Class II	@	$
~~901~~ 398	L/F 15" R.C.P. 0-8' Depth, Class III	@	$
~~347~~ 189	L/F 12" R.C.P. 0-8' Depth, Class IV	@	$
~~10~~ 5	Standard Manholes 0-8' Depth without Castings	@	$
3	T-section Manholes 0-8' Depth without Castings	@	$
1	F & I Type "D" Castings	@	$
~~12~~ 7	F & I Type "E" Castings	@	$
~~22~~ 15	Type "B" Catch Basins with Castings 0-6' Depth	@	$
500	S/Y Cultured Sod (Includes 4" of black dirt ~~and necessary excavation~~) (All sodding beyond 7½' of pipe center line is incidental to the contract)	@	$
~~400~~ 180	Tons 2" Thick Bituminous replacement, M.H.D. Spec. 2331 (Includes prime coat, and utility adjustment) (For street and driveway repair)	@	$
~~1250~~ 600	Tons Class 5 gravel compacted on street 6" thick	@	$
300	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface) ~~(Price includes necessary excavation)~~	@	$

TIED BID

PROPOSAL

SECTION II (CONTINUED)

ESTIMATED QUANTITY	MATERIAL	UNIT PRICE	TOTAL
150	C/Y Sand, gravel for around pipe	@_____	$_____
3	Trees cleared, grubbed and removed	@_____	$_____

TOTAL - SECTION II ---------- $_____

(THIS FIGURE TO BE USED IN THE GRAND TOTAL - TIED BID)

SECTION III

EDINA IMPROVEMENT NO. 111

LOCATION: 42nd Street, Lynn Avenue to Scott Terrace
Scott Terrace, from 42nd Street, 260 feet south
Easement south side lot 25, Morningside
Easement across lot 30 & 31, Morningside
Easement north side lot 48, Morningside
From 42nd Street north to Pond
Grimes Avenue from 42nd Street, 185 feet south
Easement across lot 76, Morningside
Easement across north side lot 3, block 1, Crocker & Crowells 1st addition
Easement across lot 15, William Scott's addition
Grimes from 41st Street, 105 feet south

ESTIMATED QUANTITIES	MATERIALS	UNIT PRICE	TOTAL
20	L/F 60" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 10 Gauge	@_____	$_____
130	L/F 48" R.C.P. 8-10' Depth, Class II	@_____	$_____
305	L/F 48" R.C.P. 10-12' Depth, Class II	@_____	$_____

TIED BID

PROPOSAL

SECTION III (CONTINUED)

ESTIMATED QUANTITY	MATERIAL	UNIT PRICE	TOTAL
225	L/F 48" R.CP. 12-14' Depth, Class II	@	$
32	L/F 48" R.C.P. 14-16' Depth, Class II	@	$
440	L/F 42" R.C.P. 14-16' Depth, Class III	@	$
36 4'	L/F 36" R.C.P. 14-16' Depth, Class III (reducer)	@	$
185	L/F 30" R.C.P. 14-16' Depth, Class II	@	$
225	L/F 30" R.C. P. 12-14' Depth, Class II	@	$
206	L/F 30" R.C. P. 12-14' Depth, Class III	@	$
8	L/F 27" R.C.P. 10-12' Depth, Class II	@	$
35	L/F 27" R.C.P. 12-14' Depth, Class II	@	$
155	L/F 24" R.C.P. 8-10' Depth, Class II	@	$
236	L/F 21" R.C.P. 0-8' Depth, Class II	@	$
142	L/F 21" R.C.P. 8-10' Depth, Class II	@	$
170	L/F 18" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 14 gauge	@	$
34	L/F 18" R.C.P. 0-8' Depth, Class II	@	$
~~1235~~ 1149	L/F 15" R.C.P. 0-8' Depth, Class III	@	$
120	L/F 15" R.C.P. 8-10' Depth, Class III	@	$
80	L/F 15" R.C.P. 10-12' Depth, Class III	@	$
~~348~~ 348	L/F 12' R.C.P. 0-8' Depth, Class IV	@	$
~~80~~	~~L/F 12" C.M.P. 0-8' Depth, 16 gauge~~	@	$
17	Standard Manholes 0-8' Depth without Castings	@	$
4	T-section Manholes 0-8' Depth without Castings	@	$

TIED BID

PROPOSAL

SECTION III (CONTINUED)

ESTIMATED QUANTITY	MATERIAL	UNIT PRICE	TOTAL
44	V/F Extra Wall Manholes	@_____	$_____
6	F & I Type "C" Castings	@_____	$_____
7	F & I Type "D" Castings	@_____	$_____
8	F & I Type "E" Castings	@_____	$_____
~~5~~ /9	Type "B" Catch Basins with Castings 0-6' Depth	@_____	$_____
1900	S/Y Cultured Sod (Includes 4" of black dirt) ~~and necessary excavation)~~ (All sodding beyond 7½' of pipe center line is incidental to the contract)	@_____	$_____
400	Tons 2" Thick Bituminous replacement, M.H.D. Spec. 2331 (Includes prime coat, and utility adjustment) (For street and driveway repair)	@_____	$_____
1275	Tons Class 5 gravel compacted on street 6" thick	@_____	$_____
~~200~~ 500	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface) (Price includes necessary excavation)	@_____	$_____
~~100~~ /000	C/Y Sand, gravel for around pipe & trench backfill	@_____	$_____
~~500~~ /000	Cubic yds., excavation (vehicle measure) (This includes all material that is loaded into truck and hauled to designated spoil areas) (This does not include the lump sum pond excavation)	@_____	$_____
2	Trees cleared, grubbed and removed	@_____	$_____
2	18" R.C.P. Apron, 4' long, strapped	@_____	$_____
2	M.B.F. Wood sheeting ordered left in place	@_____	$_____

TOTAL - SECTION III ---------- $_____

(THIS FIGURE TO BE USED IN THE GRAND TOTAL TIED BID)

GRAND TOTAL - TIED BID - STORM SEWER IMPROVEMENT NO. 111
SECTIONS I, II, & III ---------- $_____

TIED BID

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

IMPROVEMENT No. 111

SECTIONS I, II, & III

Bid security in the amount of $_____, being 10% of the high or base bid, accompanies this proposal, the same being subject to forefeiture in the event of default. It is understood by the undersigned that the right is reserved by the Village Council to reject any and all bids and that this bid may not be withdrawn until 30 days after the time the bids are opened.

If this bid is accepted, the undersigned agrees to promptly furnish Contractor's bond and execute form of contract now on file with the Village Clerk; and further agrees that if awarded this contract, work will be commenced within ten (10) calendar days after receipt of "Notice of Award" form the Village. All the work shall be completed not later than September 1, 1968.

RESPECTFULLY SUBMITTED,

FIRM NAME: _____

ADDRESS: _____

BY: _____

SPECIAL CONDITIONS

FOR

STORM SEWER

IMPROVEMENT NO. 111

VILLAGE OF EDINA, MINNESOTA

Table of Contents

Table of Contents
(continued)

SPECIAL CONDITIONS

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

IMPROVEMENT NO. 111

GENERAL

The General Conditions, the Specifications for Watermain and Specifications for Sewers as embodied in these Contract Documents shall be applied to all work and material furnished under these Special Conditions, except as hereinafter modified.

Contractors working within the Village will be expected to not only accomplish a high quality job in an orderly manner, but will also be expected to assist residents in and around job sites in every manner possible. This includes such insignificant things as pulling out vehicles stuck in sand or mud. Contractors will be expected to treat all residents with politeness, and arguing with them will not be tolerated.

Work such as this is very competitive. We want the very best job possible and are willing to pay for this quality work. We want an excellent end result and will insist on getting one.

WE CANNOT OVERLY EMPHASIZE OUR INTENTIONS TO ASSURE GOOD QUALITY WORK, ACCOMPLISHED WITH THE LEAST AMOUNT OF INCONVENIENCE TO THE PUBLIC. IF YOU DO NOT SHARE THIS INTENT AND ARE NOT WILLING TO COOPERATE FOR THIS PURPOSE, PLEASE DO NOT BID.

MAINTENANCE OF JOB SITES

Each Contractor shall submit a list of at least three men to the Edina Police Dispatcher who can be called at any time in case an emergency arises. All three men shall be capable and have the authority to drive a front-end loader, blade, and water truck. If no action is taken after one hour notice to the Contractor in the event of any emergency, Village crews will do the necessary emergency work and the Contractor will be billed for this cost. If the Contractor fails to pay the Village for this work, an equal sum will be deducted from the final payment.

No trenches shall be allowed to be left open at night unless they are fenced with snow fence or similar fencing, unless permission not to do so is given by the Village Inspector or Engineer.

We will require that ~~each~~ Contractor have at least one blade in the job area at all times, weekends and holidays included. All roads shall be maintained daily, holidays and weekends included. ~~Each~~ Contractor shall have one man check each of his job sites each non-working day. This man shall check in with the Edina Police Dispatcher at the Edina Village Hall and sign a form stating that he has personally checked each job site, and has found all barricades and flashers properly installed and in working order. That he found all open streets to be passable and reasonably dust free or if these conditions do not exist that he has taken steps to see that they are corrected. A penalty of $100.00 per day will be charged for each day that the Contractor

fails to comply with the above. This amount will be deducted from the final payment.

STARTING AND COMPLETION DATES

This work covers the installation of storm sewers and miscellaneous other work in improved and unimproved streets and on easements. It shall be understood that work shall begin within 10 calendar days after receipt of "Notice of Award" from the Village of Edina.

All the work shall be completed not later than September 1, 1968.

LIQUIDATED DAMAGES

Should the Contractor fail to complete the work on or before the dates specified or extended by change orders, he will be subject to liquidated damages in the amount of $100.00 per day for each and every calendar day, exclusive of Saturdays, Sundays, and Holidays that the work shall remain uncompleted.

RIGHT-OF-WAY ACQUISITION

It is the intention of the Village of Edina to have most of the necessary easements prior to the commencement of this project. However, if any acquisition is delayed, and this delay hinders the Contractor's progress in such a manner as to prevent completion of the work on time, an extension of time will be granted to the Contractor beyond the date of the completion of this contract. The Contractor must make a written request to the Engineer for this extension and the extension is subject to the approval of the Engineer. No payment will be made for moving charges if there are delays in obtaining easements.

CONSTRUCTION ON PRIVATE PROPERTY

Certain construction on private property is required. The Village is responsible for and is in the process of obtaining the easements therefor and a map delineating the easement widths and boundaries will be furnished the Contractor before construction. It shall be the responsibility of the Contractor to acquaint himself with the easement map and to confine his operations to the easement widths or boundaries shown. Any procedure by the Contractor of any sort beyond the boundaries indicated shall be the sole responsibility of the Contractor who shall save the Village harmless from any claim for damage due to trespass.

WORK SCHEDULE

Prior to commencing work, the Contractor shall submit a proposed work schedule to the Engineer. This schedule shall show the sequence of operations and the time scheduled for each operation. Where problems as to coordination and completion may appear to exist, the Engineer may require modifications therein.

PROTECTION OF UTILITIES

The Contractor's attention is invited to the requirements of the General Conditions concerning protection of utilities. Specialcare shall be taken

in crossing of underground gas, electric and telephone main conduits by watermains, sanitary sewers, storm sewer and their appurtenances.

The Contractor shall cooperate with the private utility company concerned in protecting and supporting conduits for uninterrupted service. The utility company shall be notified immediately of any damage to conduits.

The Contractor shall also exercise extreme care in backfilling and compacting the trench under utility conduits which cross the water and sewer trench perpendicularly. Backfill immediately under the utility conduit shall be placed in lifts not to exceed ~~two~~ (2) ~~feet~~ in depth and thoroughly compacted with an approved vibratory compactor.

REPLACEMENT OF EXISTING FACILITIES

The Contractor shall replace at no additional compensation, in kind, any and all existing facilities which he may carelessly disturb during construction such as driveways, steps, sod, hedges, etc. Any catch basins, storm sewers, or other utilities which may be affected shall come under this item and be replaced as directed by the Engineer.

DUST CONTROL

The Contractor shall be required to adequately control dust on the streets. When so directed by the Engineer, the Contractor shall provide one tank truck, adequate size, with spray bar or other suitable equipment for sprinkling streets, which shall be available at all times for street maintenance. The Village of Edina will furnish the water free of cost, but reserves the right to indicate source of supply.

TESTING OF MATERIALS

The Village of Edina will pay for all testing of materials.

NOTIFICATION BEFORE SHUTTING OFF WATERMAINS

The Contractor shall notify the Village Water Department and the affected property owners before shutting off watermains. He must plan his operation to cause the least amount of disruption of water service in the affected area.

FENCING

The fencing around the pond shall be installed in accordance with Section 2557 and Standard Plate No. 93223 of the Minnesota Department of Highways Specifications. There shall be one single vehicle gate located as shown on the plans. The height of the fence shall be five feet.

A temporary snow fence of good quality shall be installed around the pond during construction and shall remain in place and in good repair until the permanent fence is constructed.

REINFORCED CONCRETE SEWER PIPE

All of the storm sewer pipe shall have R-4 joints except the pipe that is to be jacked, the long-radius bends that require a pile foundation, and the pipe between the trunk line and the inundation structure that will be set on piling. (including the T-sections) At these locations, special pipe shall be supplied by the pipe manufacturer with R-4 joint on the one end & tongue or groove on the other end. No additional compensation will be made for these special pipe sections.

SC

The pipe that will not have an R-4 joint shall have rubber gaskets with concrete grout at the joints.

A come-along shall be used on all pipe 21" or larger to draw the pipe "home" at each joint.

The section of pipe bends that are set on piling shall be strapped together using two straps per pipe. The straps shall be located one on each side, approximately in the middle of the pipe. The straps shall be 24" X 1½" X 3/16" material and secured by four shots per strap, two in each pipe using .22 cal., black S-22 stud.

All pipe set on piling foundation shall be Class IV with extra longitudinal reinforcing bars on the bottom half of the pipe. These longitudinal bars shall be #4's, spaced eight inches on center. The pipe requiring a pile foundation shall be marked "piling pipe" and the top of the pipe shall be also marked.

CONCRETE PIPE BENDS

All concrete pipe bends shall be measured for payment purposes as straight pipe. Reducers or increasers will also be measured as straight pipe and will be grouped with the larger-diameter pipe.

SOIL BORINGS

There are three soil reports in the Edina Engineer's office which are available for review. Some of the information from these soil boring reports has been transferred to the plans to assist the Engineer in preparing the plans. The soil boring reports and the information placed on the plans are for the Contractor's information and are not warrented as a complete representative sampling of all the soils that may be encountered during the construction.

POND EXCAVATION

Prior to the laying of any of the pipes which will outlet into the pond, the pond shall be excavated to the cross section shown on the plans. The material excavated shall be disposed of at locations shown on the plans, or designated by the Engineer. At the back of the specifications are some grading plans where some of this material is to be disposed of.

The Contractor will be paid for the excavation and disposal of this material at a lump sum price.

JACKING PIPE

From station 0+25 to station 0+85 the Contractor will be required to either auger or jack 60 feet of storm sewer. The R-4 joints will not be required on this portion of the storm sewer. Rubber gaskets shall be used along with either ¼" plywood or masonite at all joints. Gaskets shall be Tylox, Press seal, or approved equal. The plywood or masonite is to prevent point-contact of the concrete during the jacking operation. The Contractor shall be paid a unit-price per linear foot of pipe jacked which shall include the cost of all labor, equipment, and materials necessary to install the pipe as shown on the plans. This price shall include the cost of the jacking pits, the cost of the pipe and all necessary labor.

STREET RESTORATION

All of the streets in this project have blacktop mats. The Contractor shall leave all of the streets after the storm sewer construction in a condition equal to or better than their present condition. The driveway east of Grimes on the Village-owned property and miscellaneous private drives will need to be replaced or repaired.

All repair shall consist of a six-inch Class V base and two inches of bituminous surfacing conforming to the requirements of the Minnesota Department of Highways Standard Specifications, Section 2331.

The streets shall be sub-cut, 6" below finish grade for installation for Class V gravel base within seven days after that portion of the storm sewer is completed and immediately filled with six inches of compacted Class V gravel. Grading and watering for dust control shall be continued until the streets are blacktopped by the Contractor.
Where it is necessary to cut the existing bituminous surfacing it shall be carefully done using a cutting tool approved by the Engineer.
The unit bid price for blacktop includes some hand-patching for catch basin lead trenches and driveways. However, a paver may be used wherever possible.

The Contractor shall be paid for Class V gravel at a unit price per ~~cubic yard~~ ton in place.

TREE REMOVAL

Trees encountered within the construction limits of the storm sewer project shall be cleared, grubbed, and removed. All trees removed shall be disposed of outside the Edina Village limits. The clearing and grubbing of trees shall be paid for at the contract unit price for each tree removed. All trees less than eight inches in diameter which need to be removed to facilitate the construction shall be removed and disposed of as previously specified, but shall be considered incidental to the other w ork. Forked trees with one root system and at least one branch eight inches in diameter shall be considered for payment purposes as one tree.

All desirable trees and shrubs which are designated by the Engineer to be preserved shall be protected from injury or defacement during the construction operation.

BACKFILLING TRENCHES

The following are additions to the backfilling requirements as set forth in the Specifications for Sewer and Appurtanences.

Backfilling of trenches in the travelled portions of the streets and under the curbs shall be accomplished in one-foot lifts. Where there is granular soil, compaction shall be obtained in each lift using a vibratory compactor. Where there are cohesive soils, the compaction of each lift shall be obtained using a sheep's foot roller. No peat or other organic soils shall be backfilled under the travelled portions of streets.

Backfilling of all trenches other than the travelled portions of streets shall be accomplished in four-foot layers or lifts. Compaction shall be obtained using the appropriate type of compactor depending on the type of soil encountered. Compaction shall continue on each lift until no further settlement occurs.

Should backcasting operations be required, the Contractor will not be required to compact the trench in four-foot lifts. The Contractor may backfill the entire trench and then he shall be required to compact the trench at the finished grade elevation using the appropriate type of compactor, depending on the soil type, until no further settlement occurs.

Where, in the opinion of the Engineer, the native soil is unsuitable for backfill material, it will be the Contractor's responsibility to excavate the trench, haul away all unsuitable backfill material to such locations as designated by the Engineer, and backfill the trench in accordance with the specifications with all acceptable excess material which may be obtained from other trenches or excavations within the project area. Payment for truck hauling this material will be made at the contract unit price bid for Class A excavation (vehicle measure). In the event that deficiencies still exist in the backfill of the trench, after all available excess material has been utilized as described above, the Contractor shall provide additional approved material as may be authorized and verified by the Engineer. Such material shall be furnished and placed at the contract unit price per cubic yard. Unsuitable material that is loaded in trucks and hauled away to the dump areas will be paid for at the contract unit price bid for Class A excavation (vehicle measure). There will be no pay for unsuitable material that is excavated and wasted in the immediate area.

Rubber-tired equipment shall be used to backfill trenches where other equipment will damage existing bituminous surfaces or sod.

BACKCASTING BY DRAGLINE ONLY

At certain locations construction operations may be limited due to backcasting by dragline only, in contrast to sidecasting methods. Such operations shall be so conducted without compensation therefore. Contractors shall not assume that sidecasting operations may be employed at all locations because backcasting may be necessary due to limitations on easements and the protection of adjacent property.

SODDING

The quality of sod replacement seems to get worse every year. The sod laid on this contract must compliment the sod that was existing prior to construction. The sod work may not be left until all of the storm sewer pipe is laid. Areas that require sod replacement will be sodded within two weeks after dig-up. The sod shall be watered and maintained in a condition suitable to the Engineer for a period of eight weeks after the sod is placed. All sod that has settled shall be corrected for a period of one year after the final payment is made.

DISPOSITION OF EXCAVATED MATERIAL

Soil from the pond excavation and excess material from trenches shall be disposed of in dump areas designated on the plan or designated by the Engineer. All dump areas will be located within ½ mile of the excavation, except for 5000 C/Y of the finest peat material which shall be truck hauled to Pamela Park, located near France Ave and W. 62nd St.

All excavated material shall be truck hauled. Scraper hauling will not be permitted.

S. C.

The Contractor shall keep the dump areas in a workable condition. These areas will require occasional blading or bulldozing. The Contractor must level off the area after he has completed all his hauling.

REPLACEMENT OF FENCES, BUSHES, AND TREES

The replacement of fences, bushes and trees, the removal of which was necessary for the construction of the proposed improvement and not due to the result of carelessness

by the Contractor, will not be incidental to the contract. This work will either be done by others or a price will be negotiated with the Contractor.

PILING

Prior to the ordering of the piles, the Contractor shall install two test piles at locations set by the Engineer. These test piles shall be forty feet in length and installed in locations where they can be incorporated into the final work. After the test piles are driven, the Engineer may revise the quantity of piling to be delivered to the site.

The Contractor will proceed to drive the piles at the location and to the batter shown on the plans. When the desired bearing values of the piles are reached, the Contractor shall stop driving the pile and cut off the pile at the desired elevation. The timber pile formulas found in the Standard Specifications for Highway Bridges adopted by the American Association of State Highway Officials shall be used in determining the bearing values of the piles.

Pipe cradles shall be constructed in accordance with the detailed drawings.

The Contractor shall be paid at a unit price per foot of pile delivered to the site. The amount of pile to be delivered to the site will be determined after the two test piles have been driven.

The Contractor shall be paid for driving timber piles at a unit price per foot of pile driven. This price shall include all the costs of driving the pile and cutting the pile off at the desired cut-off elevation.

The two test piles will be paid for under the same method of payment as that mentioned above.

The Contractor shall be paid for furnishing and installing the timber pipe cradles at a unit price per cradle installed. These cradles will be separated for type and size of pipe. Said unit price shall include the cost of all labor, equipment and materials necessary to furnish and construct the cradle complete as shown on the plans.

STRUCTURES IN INUNDATION AREA

The two structures in the inundation area shall be constructed as shown on the plans. The Contractor shall be paid for constructing these two structures at a lump sum price per structure installed. Included in the price is the T-section, grate, concrete base, excavation, and miscellaneous grading around the proposed structure. Not included in the cost of these structures is the pipe leading from the trunk line to the structure, nor any piling that may be required under the structure and connecting pipelines. The piling and the pipe leading to the structures will be handled under other sections of the specifications.

MANHOLES

Separate unit prices will be obtained on manholes for standard manholes and for T-section manholes. Shallow manholes, whether or not they are T-section manholes or standard manholes, will not be treated separately but will be listed as under the appropriate heading for manholes, 0-8 foot depth.

WATERMAIN CROSSINGS

Where the existing watermain lies within the limits of the proposed storm sewer, the existing watermain will be lowered in accordance with Fig. 7 in the back of these specifications. The cost of this relocation including all materials, labor and equipment necessary to offset the watermain as shown shall be paid for at a lump sum per watermain crossing.

Waste water

The Contractor may discharge all water from dewatering the trenches and the ponding site into existing Minneapolis Storm Sewers without cost.

SC

Morn. Corresp.

Morningside
CRM 2/67

Ten Dyer – Wheeler Lumber
Std. Sizes ✓ ✓d are available

12 x 12 ✓	16 x 16 ✓
12 x 16 ✓	20 x 20
12 x 18	
12 x 20	

30"

14 x 14 ~~use~~ 16 x 16 ~~for quote~~

12 x 16 ~~use~~ both 12" x 16" ~~for quote~~

Shim Spikes

½" x 16" Shim Spike

½" x 18

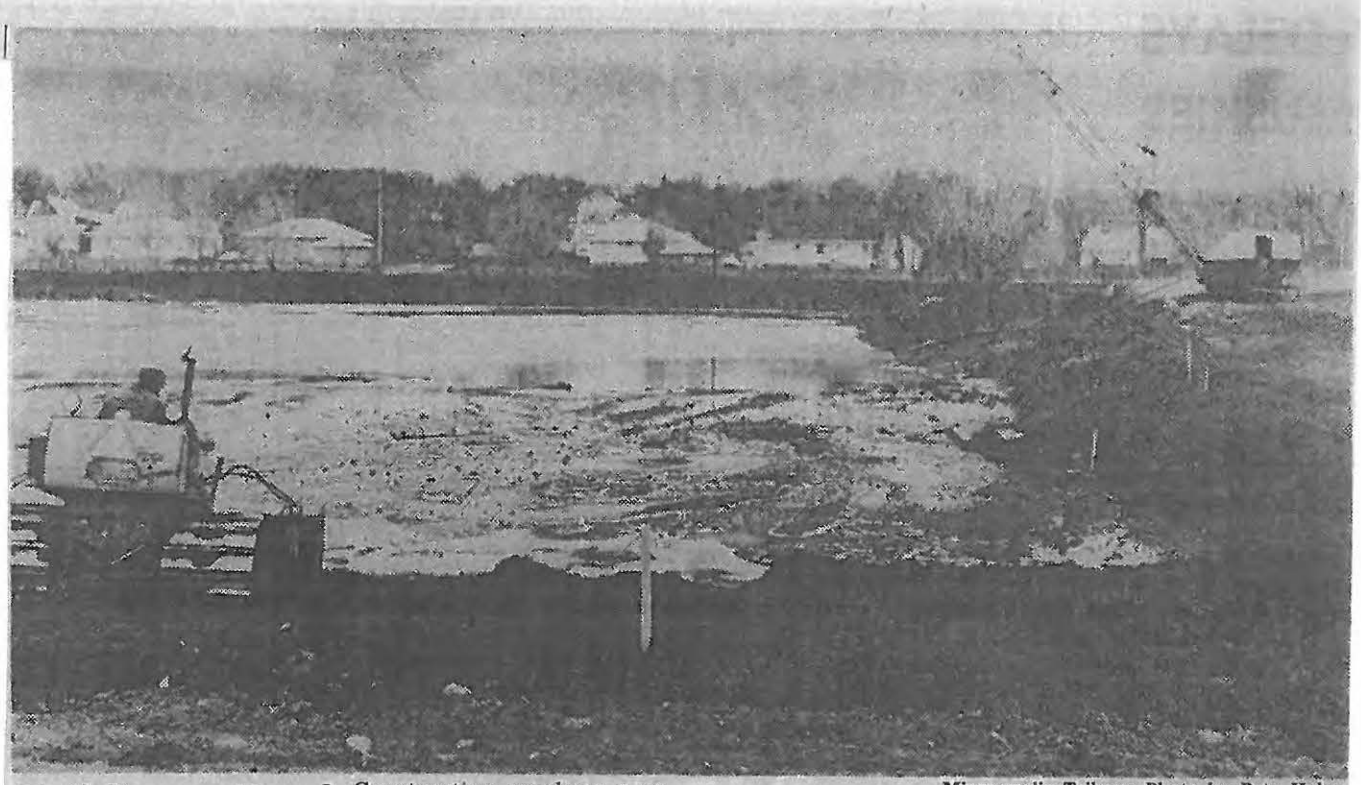
Mom - Corres.

TYPE "A" PILING AND CRADLE DETAIL

ITEM		PIPE DIAMETER		
		30" R.C.P.	42" RCP	54" RCP
MEMBERS	No. 1	12"x16"x42"	12"x16"x42"	16"x16"x48"
MEMBERS	No. 2	12"x12"x48	12"x12"x60"	12"x16"x72" — 66"
MEMBERS	No. 3	8"x12"x24"	12"x12"x30"	12"x12"x33" — 33"
DIMENSION	D-1	1'-3"	1'-3"	1'-6"
	D-2	0'-9"	0'-9"	0'-10"
	D-3	2'-0"	2'-6"	3'-0" — 2'-9"
	D-4	1'-0"	1'-0"	1'-0" — 1'-0"
	D-5	1'-6"	1'-6"	2'-0"
	D-6	1'-9"	1'-9"	2'-0"
SHIM SPIKES		3/8" x 11"	3/8" x 11"	3/8" x 11"
DRIFT PINS	No. 1	3/4" x 2'-0"	3/4" x 2'-0"	3/4" x 2'-0" — 2'-6
DRIFT PINS	No. 2	3/4" x 2'-6"	3/4" x 2'-6"	3/4" x 2'-6"

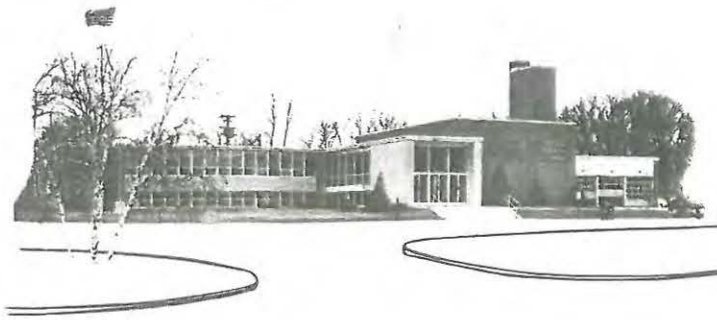
March 23, 1968
Tribune
Edina-Morningside File

23, 1968



Minneapolis Tribune Photo by Pete Hohn

Building a Pond Construction workers are building a huge pond as part of a half-million-dollar program to provide greater storm sewer protection for southeastern St. Louis Park and northeastern Edina. The pond, which will be 300 feet wide and 450 feet long, is under construction along the border of St. Louis Park and the Morningside area of Edina, north of 42nd St. and east of Weber Field. Initially, an area including about 500 homes will be connected to the pond by storm sewers. The new pond, which will be fenced off to protect children, will relieve much of the flooding danger to homes in the area, according to Edina officials.



Village of **Edina**
4801 WEST FIFTIETH STREET • EDINA, MINNESOTA 55424
927-8861

March 11, 1968

Mr. Joseph Zikan
City Engineer
City of St. Louis Park
5005 Minnetonka Blvd.
St. Louis Park, Minnesota 55416

Re: Coordination of bench mark systems
St. Louis Park, Edina, Minneapolis
for construction of Storm Sewer No. 111

Dear Joe:

This letter and enclosed notes are in reply to a letter from Mr. Ray Folland dated January 16, 1968, in which he requested that Edina Engineering Department check out the bench mark system to be used for storm sewer construction in above mentioned project. We have done the following things in this area:

1. We originally ran a bench mark loop from Minneapolis control monument No. 255 at West 42nd Street and France Avenue. The loop ran west on West 42nd Street to Monterey Avenue, north to West 41st Street, east to France Avenue and south to origin. This loop checked closely. All bench marks were established by "turning through" them. Elevations were converted from Minneapolis City datum (=0.00) to sea-level datum by adding 710.20.

2. Bench marks which had been established by the St. Louis Park Engineering Department were tied into the above loop and compared as to elevation with your department.

3. As a further check, a loop was run on France Avenue from the monument at West 42nd Street (No. 255) to West 40th Street (No. 256) and West 38th Street (No. 200). These also checked very closely. As a result no further levels were run into Minneapolis.

I am enclosing copies of field notes for above which may be useful in the future. I am confident that the elevations set and checked are all accurate and will insure proper construction and operation of this storm sewer.

Thanks for your cooperation.

Yours very truly,

Donald S. Lofthus
Chief of Surveys

DSL:rh

Enclosures

cc: R. O. Folland, St. Louis Park
J. Dickson, Barr Engineering
Wm. Ridge, Minneapolis

BENCH LOOP

Moccasin [illegible]

3-22-67

S.L.

E.P.

D.S.

	+	H.I.	−	ELEVATION		De
B.M.	3.87	876.31		872.44		MPLS, MON. 42nd + Fremont
Set B.M.			3.83	872.48		236 Top Hyd Sight Term. + W. 42nd
	4.30	876.78				
			2.79	873.99		
	6.52	880.51				
Set B.M.			0.78	879.73	✓	237 Top Hyd ALDEN DE + W 42nd
	7.13	881.86				
Set B.M.			2.15	879.71	✓	238 Top Hyd GRIMES + W 42nd
	1.31	881.02				
Set B.M.			3.15	877.87	✓	239 Top Hyd Crocker + W 42nd
	2.69	880.56				
Set B.M.			0.59	879.97	✓	240 Top Hyd Lyon + W 42nd
	6.09	886.06				
Set B.M.			1.62	884.44	✓	241 Top Hyd Lyon + LITTEL
	3.04	887.48				
Set B.M.			0.05	887.43	✓	242 Top Hyd LITTEL + OAKDALE
	1.75	889.18				
Set B.M.			11.11	878.07	✓	243 Cut Spk in P.P. No. 5, DE W 42nd at OAKDALE

	3.43	881.50			878.07	
Set B.M.			2.60	878.90	✓	244 Top Hyd on Monterey 125' ± No. of W 42nd
Set B.M.	0.71	879.61	5.40	874.21	✓	Check same (235) Top Hyd On W. 41ST 200' East of Monterey
Set B.M.	2.49	876.70	0.11	876.59	✓	245 Top Hyd. On W. 41ST & Kipling
Set B.M.	4.03	880.62	5.67	874.95	✓	246 Top Hyd. On W. 41ST & Grimes
TP	0.89	875.84	6.43	869.41	✓	8HT 60d spike NW FACE POWER POLE 200' North CALVIN CHRISTIAN School On Inglewood Ave
TP	3.93	873.34	5.05	868.29	NO	Top Cement anchor at Baseball Backstop SE Cor field, NE Cor Backstop
TP	4.79	873.08	3.49	869.59	NO	60d spike SE Face P.P. NE Cor Low Area between Inglewood & France, 39Th & W. 40Th STS

TP	10.27	879.86	2.55	877.31	✓	248	Cod Spike S Face RR 125' East of previous T.P
TP	9.12	886.45	7.91	878.52	✓	249	Cod Spike S. Face R.R., West side France Ave 150' N. of W. 42nd St
T.P.	4.05	882.57	9.78	872.79	✓	250	Top Hyd. NE Cor W. 41st & France
+P	4.05	876.84	4.39	872.45	872.44		Mpls. Monument at 42nd & France

2

BENCH LOOP
FRANCE AVENUE
FROM
W. 42TH ST. TO W. 28TH
& BACK -

1-19-68
D.H.
R.P.
26°

	+	Hi	−	Elev.		
#258 B.M.	3.18	875.62			872.44	MPLS. Monument 42nd & France Ave
T.P.	8.14	878.39	5.37	870.25		
T.P.	7.85	881.91	4.33	874.06		
BM 258 CHECK	4.39	882.53	3.77	878.14	(878.17)	MPLS Monument 40th St & France Ave.
T.P.	0.21	878.51	4.23	878.30		Top Hyd W. Side France Between W 40th St & 39th.
T.P.	12.76	885.41	5.86	872.65		T.P Hyd. N.W. Cor. 39th & France Ave.
T.P.	14.66	899.15	0.92	884.49	✓	
T.P.	6.33	903.67	1.81	897.34		
B.M.			4.42	899.25	899.25	MPLS Monument 38th & France
B.M.	4.55	903.80		899.25		"

		903.80				
T.P.	0.25	900.35	3.70	906.10		Top Hyd. SE Cor 38th + France
	0.24	887.59	13.00	887.35		TP
	5.72	878.37	14.94	872.65		Top Hyd. NW Cor 39th + France
	3.95	882.24	0.08	878.29		Top Hyd West side France between 38th & 39th
	3.11	881.25	4.10	878.14		B.M. 40th + France
	3.97	876.21	8.51	872.74		Top Hyd NE Cor 41st + France
			4.29	872.42	872.44	BM 42nd + France

DIETZGEN NO. 384-S

3

BENCH LOOP

MORNING-SIDE AREA & ST LOUIS PARK

2-6-68

D.H.

J.D.

R.P.

D.S.

DIETZGEN NO. 384-5

	+	Hi	−	ELEV.	
B.M.	2.84	880.91		878.07	
T.P.	7.07	886.34	1.64	879.27	
St. L. Park Check B.M.	2.04	883.78	4.60	881.74	(881.78)
St. L. Park Check B.M.	4.53	887.31	1.00	882.78	(884.73)
T.P.	3.74	890.01	1.04	886.27	
T.P.	6.04	895.51	0.54	889.47	
T.P.	3.30	898.30	0.51	895.00	
St. L. Park B.M. Check	13.98	898.98	13.30	885.00	(885.09)
T.P.	13.25	911.89	0.34	898.64	
T.P.	3.13	914.73	0.29	911.60	

222C
Cold Spk. in P.P. North Side W. 42nd at Oakdale

222T
Cold Spike in P.P. S.E. Corner W 42nd & Ottawa Ave

222
Top Hyd S.E. Corner W 42nd & Princeton Ave

223
Top Hyd E. Side Princeton at Raleigh Ave

224
Top Hyd W. Side Woodale Ave at W42½ St.

225
Top Hyd. W. Side Woodale Bet W.42½ St & W42nd

226
Cold. Spk. PP. SW. Cor. Woodale & 42nd St.

227
Top Hyd. N.W. Cor. W. 42nd St. & Raleigh Ave.

P.K. In Street

Bunc
Top Hyd N W Cor W 41st & Raleigh Ave

DIETZGEN NO. 384-6

		914.73					
B.M.	1.58	914.60	1.71	913.02		228	TOP HYD N.W. COR. W. 41ST & RALEIGH AVE.
ST. L. PARK B.M. CHECK	0.03	912.61	2.02	912.58	(912.60)	229	TOP HYD N.W. COR, W 41ST & QUENTIN AVE.
T.P.	3.33	908.31	7.63	904.98		230	S.E. COR. RET. WALL AT #4810 N 41 ST ST.
T.P.	2.96	909.27	2.00	906.31		231	TOP HYD. N.W. COR. 41 ST. & NATCHEZ AVE.
T.P.	0.30	906.79	2.78	906.49		232	TOP FENCE POST BACK YARD #4015 NATCHEZ
T.P.	0.85	893.93	13.71	893.08		233	N.E. COR CON PR. #4014 MONTEREY
B.M.	1.92	886.28	9.57	884.36		234	TOP HYD W. S. MONTEREY & W 41 ST ST.
CK. B.M.			12.05	874.23	(874.21)	235	TOP HYD. ON W. 41 ST. .200' ± E. OF MONTICELLO (check)

DIETZGEN NO. 384-S

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, V.CE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

March 1, 1968

Mr. Ray Drake
Village Engineer
Village of Edina
4801 West 50th Street
Edina, Minnesota 55424

Dear Ray:

We have reviewed the enclosed invoice and itemization from the Soil Exploration Company for the proposed Edina strom sewer. They both appear to be in order.

Yours truly,

John D. Dickson

JDD:nc
Enc.

INVOICE

645-6446

Soil Exploration Company

FORMERLY OPERATED AS A DEPARTMENT OF

TWIN CITY TESTING AND ENGINEERING LABORATORY, INC.

Village of Edina
4801 West 50th Street
Edina, Minnesota 55410

INVOICE NO. 11,526

662 CROMWELL AVENUE
ST. PAUL, MINNESOTA 55114

TERMS: NET CASH, NO DISCOUNT

February 14, 1968

Soil Investigation - Proposed Storm Sewer, Edina, Minnesota. Report dated December 21, 1967, and January 29, 1968.	$ 1,516.85

(This invoice submitted to Barr Engineering Company for approval and forwarding).

SOIL EXPLORATION COMPANY

Breakdown of Costs Under Invoice No. 11,526

Project PROPOSED STORM SEWER - EDINA

Report Dated December 21, 1967 and January 29, 1968

The soil investigation has been invoiced in accordance with our current schedule of fees. The fee schedule and a complete itemization of costs will be furnished upon request.

1. Field Work

Penetration	9		359	
Power auger	No. of Borings 17	Lineal Feet of Boring	399	
Penetration				900.75
Power auger	Cost of Field Work			454.95
Penetration			2.51	
Power auger	Average cost/ft. for Field Work		1.43	
	Miscellaneous Expenses			--
	Average cost/ft. including miscellaneous expenses		--	
2.	Laboratory Tests			--
3.	Engineering Supervision, Preparation of Report, Recommendations and Consultation			161.15
			Total	$1,516.85

645-6446

Soil Exploration Company

FORMERLY OPERATED AS A DEPARTMENT OF
TWIN CITY TESTING AND ENGINEERING LABORATORY, INC.

OFFICERS
CHARLES W. BRITZIUS - President
ROBERT F. WITTMAN - Executive Vice-President
NORMAN E. HENNING - Vice-President
CLINTON R. EUE - Secretary
JOHN F. GISLASON - Treasurer

662 CROMWELL AVENUE
SAINT PAUL, MINNESOTA 55114

February 22, 1968

Barr Engineering Company
Roanoke Building
Minneapolis, Minnesota 55402

Attention: Mr. L. R. Molsather

Re: Invoice No. 11,526
Village of Edina

Gentlemen:

In accordance with your request, we are submitting the following itemization of Invoice No. 11,526 for the soil investigation for the proposed storm sewer in Edina, Minnesota. Our reports were dated December 21, 1967 and January 29, 1968.

A copy of our current fee schedule which was the basis of charges for the work is attached.

Part I (See fee schedule dated 7-67)

A-1	57.8 hours at $14.00	$ 809.20
C	15.3 hours at $14.00	214.20
F-2	17 hours at $12.50	212.50
G-2 a	8½ days at $10.00	85.00
G-3	232 miles at $.15	34.80

Part II

A		50.00
B-1	1 hour at $12.50	12.50
2	3 hours at $15.00	45.00
C	6½ hours at $8.25	53.65
		$ 1,516.85

Please contact us if there are any questions.

Very truly yours,
SOIL EXPLORATION COMPANY

Robert F. Wittman, P. E.

RFW:mj
Enc.

I FEE SCHEDULE

SOIL INVESTIGATIONS - Field

A. Standard field crew of two men and soil exploration equipment:

1. Non Rotary Soils Machine: Standard penetration test borings in accordance with ASTM Designation D 1586-64T to depths of approximately 50 feet in soil — per 8 hour day — $ 112.00

2. Rotary Drill: capable of flight auger borings (including hollow auger) to depth of approximately 50 feet; standard penetration test borings in accordance with ASTM Designation D 1586-64T to depth of approximately 200 feet; rock coring to depths of approximately 400 feet; and special soil sampling — per 8 hour day — $ 140.00

B. Additional crewman (used when difficult sites require additional help, or when the use of an additional man will reduce the overall cost of the work — per 8 hour day — $ 44.00

C. Power Auger - capable of 4" or 6" flight auger boring only, to a depth of approximately 35 feet in soil (with one operator) — per 8 hour day — $ 112.00

D. Swamp Cat: Special tracked Cat - for use on sites where access is difficult due to soft surface conditions or snow - per day — $ 30.00

E. Seismic Investigation. Quoted on individual job basis.

F. Job site services and consultation:

1. Soil Technician	per hour	$ 8.25
2. Engineer	per hour	$ 12.50
3. Senior Engineer	per hour	$ 15.00
4. Engineer Consultant	per hour	$ 25.00

G. Expenses:

1. For sites away from immediate vicinity of home laboratory:

a. Transportation to _____ from _____ and return — $ _____

b. Living expenses — Note #1

2. Truck rental during exploration: a. 2 ton truck or larger - per day $ 15.00
b. 1 ton truck or smaller - per day $ 10.00

3. Vicinity and job mileage — per mile — $ .15

4. Diamond bit wear, if diamond coring is required — Actual

5. Replacement of abandoned equipment is charged when it is considered more economical to abandon sampling equipment and casing than to recover at our regular daily rates - cost — Actual

6. Miscellaneous job-incurred expenses not covered specifically by this fee schedule (such as phone calls, freight charges, special equipment rental, etc.) - cost — Note #1

Note #1 - Actual divided by 0.90

II FEE SCHEDULE — SOIL INVESTIGATIONS - Office and Laboratory

A.	ENGINEERING RECOMMENDATIONS	Minimum	$ 25.00
B.	ANALYSIS AND CONSULTATION		
	1. Engineer	per hour	$ 12.50
	2. Senior Engineer (Registered)	per hour	$ 15.00
	3. Engineer Consultant	per hour	$ 25.00
C.	REPORT PREPARATION - Technicians and Draftsmen	per hour	$ 8.25
D.	REPRODUCTION of additional copies of report	Minimum - $7.50	
	1. Offset - First 300 sheets	per sheet	$ 0.08
	- Over 300 sheets	per sheet	$ 0.05
	2. Dry copy	per sheet	$ 0.15
	3. Micro-film	per sheet	$ 1.00
	4. Library Retrieval	Minimum	$ 7.50

E. LABORATORY TESTS:

Item	Test: Identification and Physical Properties	Unit Price
1.	Moisture content and density (mercury immersion method)	$ 5.00
2.	Liquid Limit (ASTM D 423)	$ 6.25
3.	Plastic Limit (ASTM D 424)	$ 6.25
4.	Shrinkage Limit (ASTM D 427)	$ 10.00
5.	Mechanical Analysis through #200 or #270 sieve (ASTM C 136 and D 1140)	$ 10.00
6.	Mechanical Analysis through .001 mm by hydrometer (ASTM D 422) (Specific gravity may also be necessary)	$ 15.00
7.	pH Determination (by pH meter)	
8.	Maximum-Minimum Density for cohesionless soils (ASTM D 2049-64T)	$ 15.00
9.	Moisture-Density Relation for Soils (ASTM D 698-64T)	$ 15.00
10.	Specific Gravity (ASTM D 854)	$ 10.00
11.	Coefficient of Permeability	
	a. Sample preparation (varies with soil type)	$20.00 - 50.00
	b. Permeability Test	$ 40.00
12.	Organic Content of Soils (by combustion method)	$ 7.50

Strength and Compressibility

13.	Unconfined Compression Test:	
	a. Reporting maximum stress at failure	$ 7.50
	b. Reporting complete stress-strain curve	$ 15.00
14.	Direct Shear Test (per normal pressure)	$ 25.00
15.	Triaxial Compression Test (Reporting stress-strain curves)	
	a. Undrained - Quick (per confining pressure)	$ 30.00
	b. Consolidated - Quick (per confining pressure)	$ 40.00
16.	Consolidation Test (sufficient loads to determine primary compression curve (Up to 32 TSF) (Reporting P-e curve)	$ 60.00
	a. Including time curves	$ 75.00

Pen. Borings

No.	
1	45'
2	50'
3	45'
4	15'
~~8~~	~~44'~~
9A	53'
10	62'
15	40
22	17
27	32'
	359'

Auger Borings

No.	
~~4~~	~~15'~~
5	15'
6	20'
7	44'
8	24'
11	35'
12	15'
13	20'
14	29'
17	20'
18	25'
19	19'
20	19
21	29
23	15
24	32
25	14
26	24
	399

On a Daily Basis:

Pen Borings

Gary Axtell Crew	12/4		122'
	12/5		"
	12/6		"
	12/7		"
Two Crews	12/8		244
One Crew	1/17		122
			854

Auger Boring

	12/7	est	150
½ day	12/8		75
1 day	1/16		119

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

February 28, 1968

Mr. Ray Drake
Village Engineer
Village of Edina
4801 West 50th Street
Edina, Minnesota 55424

Dear Ray:

Enclosed is a copy of the completed proposal for Edina Storm Sewer Improvement No. 111. This is our cost estimate which I said I would send to you.

Yours truly,

John. D. Dickson

JDD:nc
Enc.

Edina Morningside

February 23, 1968

ADDENDUM NO. 1

VILLAGE OF EDINA, MINNESOTA

CONTRACT NO. 68-2

BIDS OPENED 11:00 A.M. (CS TIME) MARCH 1, 1968

PLAN SHEET NO. 7 OF 9

DESTROY PLAN SHEET NO. 7 OF 9.

INSERT ENCLOSED PLAN SHEET NO. 7 OF 9

(REVISED 2/21/68)

RECEIPT OF THIS ADDENDUM MUST BE ACKNOWLEDGED BOTH ON YOUR PROPOSAL AND ON THE OUTSIDE OF YOUR SEALED ENVELOPE.

TABULATION OF BIDS
VILLAGE OF EDINA, MINNESOTA
STORM SEWER
EDINA IMPROVEMENT NO. 111
ST. LOUIS PARK PROJECT NO. 62-85
BIDS OPENED 11:00 A.M., MARCH 1, 1968
(CONTRACT #68-2)

CONTRACTOR	SECTION I JOINT TRUNK EDINA-ST.S. NO. 111 AND St.LOUIS PARK NO. 62-85	SECTION II ST. LOUIS PARK LAT. ST. LOUIS PARK NO. 62-85	SECTION III EDINA LAT. EDINA-ST.S. NO. 111	GRAND TOTAL
Orfei & Sons, Inc.	$238,034.37	$ 43,630.43	$ 88,059.48	$369,724.28
Northern Contracting Co.	$237,243.60	$ 45,598.90	$ 94,787.40	$377,629.90
Austin P.Keller Const. Co.	$247,633.34	$ 41,988.18	$ 90,439.04	$380,060.56
Minn-Kota Excavating, Inc.	$245,114.30	$ 46,061.00	$ 90,608.50	$381,783.80
Phelps-Drake Co., Inc.	$245,787.86	$ 43,568.98	$ 98,517.10	$387,873.94
Arcon Const. Co. Inc.	$227,052.33	$ 46,188.13	$118,425.12	$391,665.58
G. L. Contracting, Inc.	$250,044.60	$ 47,188.10	$ 99,357.45	$396,590.15
Carl Bolander & Sons Co.	$261,527.25	$ 51,240.40	$107,253.45	$420,021.10
McDonald & Associates,Inc.	$263,512.45	$ 52,705.70	$106,322.45	$422,540.60
Johnson Bros. Highway & Heavy Constructors Inc.	$287,256.00	$ 49,657.00	$102,118.00	$439,031.00
Peter Lametti Const. Co.	$268,096.94	$ 55,126.27	$126,261.27	$449,484.48
Valbon Excavating Co.	$287,862.00	$ 57,826.50	$118,367.50	$464,056.00
Nodland Associates, Inc.	$307,532.00	$ 56,052.10	$112,336.40	$475,920.50
Hurley Construction Co.	$276,946.00	$ 54,446.00	$164,459.00	$495,851.00
Barbarossa & Sons, Inc.	$334,767.00	$ 59,764.00	$123,068.00	$517,599.00

Engineer's Current Estimate	$254,017.00	$ 50,005.50	$106,130.00	$410,152.50
October 16, 1957 Hearing Estimate	$234,507.00		$ 98,788.00	

Edna Morningside

ST. LOUIS PARK SYSTEM

Location	Size Sewer	Estimated Cost
on School Property Quentin to Natchez	48"	$26,435
on 39th St. Inglewood to Huntington	18"	$ 5,915
on 39th St. Huntington to Glenhurst	18"	$ 5,345
on 39th St. Glenhurst to France	18"	$ 5,020
on lot 11 Minikahda Park Glenhurst Circle to Trunk	15"	$ 3,090
TOTAL		$45,805

This is a construction cost estimate. It does not include engineering, administration, legal, easements, etc.

~~This estimate does not include the excavation of additional storage capacity~~ amounting to $39,000.

Edina Morningside

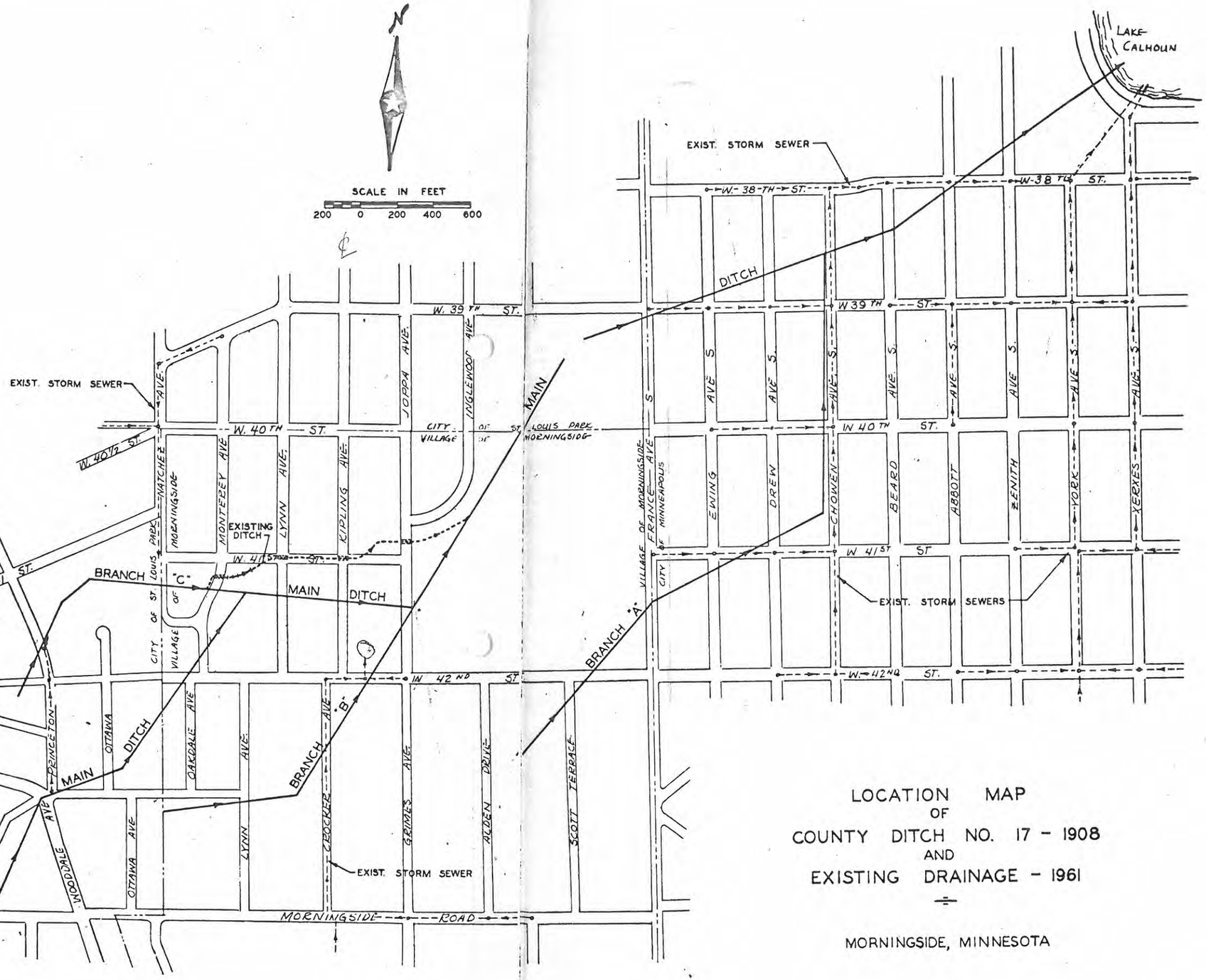
ST. LOUIS PARK--EDINA SYSTEM

Location	Size Sewer	Estimated Cost
on 41st Street Natchez to Monterey	54"	$14,025
on 41st Street Monterey to Lynn	54"	$22,095
on 41st Street Lynn to Kipling	42"	$22,500
on 41st Street Kipling to Joppa	42"	$12,175
on 41st Street Joppa to pond outlet	42"	$21,920
on west side Mpls. Water Dept. Prop. South ½	30"	$73,295
on west side Mpls. Water Dept. Prop. North ½	30"	$16,780
on north side Mpls. Water Dept Prop. to France Ave.	30"	$31,065
sub-total Trunk		$213,855
on Monterey 41st to Natchez	18"	$4,390
on 40th St. Monterey to Lynn	15"	$4,932
on 40th St. Lynn to Kipling	18"	$5,968
on 40th Street Kipling to Joppa	24"	$6,210
on Joppa 40th to Inglewood	24"-27"	$8,880

Location	Size Sewer	Estimated Cost
on Joppa Inglewood to 41st St.	27"	$4,955
on School Prop. Inglewood to M.W.D.P.	18"	$3,982
sub-total Laterals		$39,317
Total combined system		$253,172
St. Louis Park	2/3 share	$168,781.33
Edina	1/3 share	$ 84,380.67

This is a construction cost estimate. It does not include engineering, administration, legal, easements, etc.

This estimate does not include the excavation of additional storage capacity amounting to $39,000.



LOCATION MAP
OF
COUNTY DITCH NO. 17 - 1908
AND
EXISTING DRAINAGE - 1961

MORNINGSIDE, MINNESOTA

FIGURE 2

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

EDINA IMPROVEMENT NO. 111

ST. LOUIS PARK PROJECT NO. 62-85

NOTE TO BIDDERS:

1. Bids will be opened at 11:00 A.M. (CS TIME), Friday, March 1, 1968.

2. The Proposal (Tied Bid) will not be considered unless Section I, Section II and Section III are completed.

3. The work will be commenced within ten (10) calendar days after receipt of "Notice of Award" from the Village. All of the work shall be completed not later than September 1, 1968.

BID SUMMARY

STORM SEWER

SECTION I - EDINA IMPROVEMENT NO. 111 AND ST. LOUIS PARK PROJECT NO. 62-85	$ 254,017.00
SECTION II - ST. LOUIS PARK PROJECT NO. 62-85	$ 50,005.50
SECTION III - EDINA IMPROVEMENT NO. 111	$ 106,130.00
GRAND TOTAL - TIED BID ----------	$ 410,152.50

FIRM NAME: _____

ADDRESS: _____

BY: _____

PHONE NUMBER: _____

PF

 TIED BID March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

EDINA IMPROVEMENT NO. 111

ST. LOUIS PARK PROJECT NO. 62-85

TO THE VILLAGE COUNCIL OF THE VILLAGE OF EDINA

GENTLEMEN:

The undersigned has examined the contract documents, including advertisement for bids, instructions to bidders, general contract conditions, form of contract, and detailed specifications, including attached drawings and plans on file in the office of the Clerk of the Village of Edina, and is familiar with the site and location of the project, the work to be done, and the local conditions affecting the cost of the work under which it must be performed and hereby proposes to furnish all labor, materials, and equipment for the complete construction of the storm sewer, and to perform such work all in accordance with the contract documents for the following prices:

SECTION I

EDINA IMPROVEMENT NO. 111
ST. LOUIS PARK PROJECT NO. 62-85

LOCATION: Along an easement on the north side of the City of Minneapolis Water Department property west of France
Easement along the west side of the Minneapolis Water Department property
Easement along the south side of Registered Land Survey #567
West 41st Street from Grimes to Monterey
Easement across Lot #19, Monterey to Natchez Avenue
Easement along the north side, Registered Land Survey #567
Easement on Registered Land Survey #567, near Inglewood, from north line approximately 250 feet south
Across the Village of Morningside Park area from the trunk to the pond
Grimes Avenue from West 41st Street to West 40th Street
Monterey Avenue from West 41st Street approximately 260 feet south
West 40th Street from Joppa Avenue to Monterey

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
20	L/F 54" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 12 Gauge	@ $ 30.00	$ 600.00
114	L/F 54" R.C.P. 0-8' Depth, Class IV piling pipe	@ 40.00	$ 4,560.00
100	L/F 54" R.C.P. 8-10' Depth, Class IV piling pipe	@ 42.00	$ 4,200.00
185	L/F 54" R.C.P. 8-10' Depth, Class II	@ 35.00	$ 6,475.00
145	L/F 54" R.C.P. 10-12' Depth, Class II	@ 38.00	$ 5,510.00
132	L/F 54" R.C.P. 12-14' Depth, Class II	@ 42.00	$ 5,544.00
30	L/F 54" R.C.P. 14-16' Depth, Class II	@ 46.00	$ 1,380.00
4	L/F 48" R.C.P. 0-8' Depth, Class IV piling pipe (reducer)	@ 35.00	$ 140.00
115	L/F 42" R.C.P. 0-8' Depth, Class IV piling pipe	@ 29.00	$ 3,335.00
418	L/F 42" R C.P. 0-8' Depth, Class II	@ 24.00	$ 10,032.00
545	L/F 42" R.C.P. 8-10' Depth, Class II	@ 26.00	$ 14,170.00
289	L/F 42" R.C.P. 10-12' Depth, Class II	@ 28.00	$ 8,092.00
175	L/F 42" R.C.P. 12-14' Depth, Class II	@ 32.00	$ 5,600.00
4	L/F 36" R.C.P. 10-12' Depth, Class II (reducer)	@ 25.00	$ 100.00
330	L/F 30" R.C.P. 0-8' Depth, Class IV piling pipe	@ 18.00	$ 5,940.00
60	L/F 30" R.C.P. Class IV jacked	@ 50.00	$ 3,000.00

PF

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
245	L/F 30" R.C.P. 0-8' Depth, Class II	@ $ 15.00	$ 3,675.00
80	L/F 30" R.C.P. 0-8' Depth, Class IV	@ 16.00	$ 1,280.00
190	L/F 30" R.C.P. 8-10' Depth, Class II	@ 17.00	$ 3,230.00
15	L/F 30" R.C.P. 8-10' Depth, Class IV	@ 18.00	$ 270.00
151	L/F 30" R.C.P. 10-12' Depth, Class II	@ 19.00	$ 2,869.00
55	L/F 30" R.C.P. 10-12' Depth, Class IV	@ 20.00	$ 1,100.00
45	L/F 30" R.C.P. 12-14' Depth, Class IV	@ 22.00	$ 990.00
245	L/F 30" R.C.P. 14-16' Depth, Class IV	@ 25.00	$ 6,125.00
145	L/F 30" R.C.P. 16-18' Depth, Class IV	@ 28.00	$ 4,060.00
185	L/F 27" R.C.P. 0-8' Depth, Class II	@ 14.00	$ 2,590.00
135	L/F 27" R.C.P. 8-10' Depth, Class II	@ 15.00	$ 2,025.00
518	L/F 24" R.C.P. 0-8' Depth, Class II	@ 11.00	$ 5,698.00
105	L/F 24" R.C.P. 8-10' Depth, Class II	@ 13.00	$ 1,365.00
35	L/F 24" R.C.P. 10-12' Depth, Class II	@ 15.00	$ 525.00
492	L/F 24" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 14 Gauge	@ 12.00	$ 5,904.00
8	L/F 21" R.C.P. 8-10' Depth, Class II	@ 12.00	$ 96.00
610	L/F 18" R.C.P. 0-8' Depth, Class II	@ 7.50	$ 4,575.00
613	L/F 15" R.C.P. 0-8' Depth, Class III	@ 6.50	$ 3,984.50
276	L/F 12" R.C.P. 0-8' Depth, Class IV	@ 6.00	$ 1,656.00

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
80	L/F 12" C.M.P. 0-8' Depth, 16 Gauge	@ 6.50	$ 520.00
12	Standard Manholes, 0-8' without Castings	@ 180.00	$ 2,160.00
7	T-Section Manholes, 0-8' without Castings	@ 150.00	$ 1,050.00
15	V/F Extra Wall Manhole	@ 30.00	$ 450.00
3	F & I Type "D" Castings	@ 60.00	$ 180.00
16	F & I Type "E" Castings	@ 60.00	$ 960.00
27	Type "B" Catch Basins with Castings 0-6' Depth	@ 250.00	$ 6,750.00
10	Trees, cleared, grubbed and removed	@ 50.00	$ 500.00
3600	S/Y Cultured Sod (Includes 4" of black dirt) (All sodding beyond 7½' of pipe center line is incidental to the contract, except around perimeter of the pond)	@ 1.00	$ 3,600.00
370	Tons 2" Thick Bituminous Replacement, M.H.D. Spec. 2331, (Includes prime coat, and utility adjustment) (For street and driveway repair)	@ 25.00	$ 9,250.00
1125	Tons Class 5 gravel compacted on street 6" thick	@ 2.50	$ 2,812.50
1000	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface)	@ 4.00	$ 4,000.00

PF

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
2000	C/Y Sand, Gravel for around pipe and trench backfill	@ $ 2.25	$ 4,500.00
3500	C/Y Excavation (vehicle measure) (This includes all material that is loaded in trucks and hauled to designated dump areas) (This does not include the lump sum pond excavation.)	@ $ 0.90	$ 3,150.00
1640	L/F 5' high fence around pond, includes gate	@ 2.60	$ 4,264.00
1	Pond excavation includes disposal of the excavated material (approx. 41,370 cu. yds.)	Lump Sum	$ 37,200.00
3	M.B.F. Wood Sheeting ordered left in place	@ $ 250.00	$ 750.00
6750	L/F of treated timber pile delivered	@ 2.00	$ 13,500.00
6400	L/F of treated timber pile driven	@ 1.00	$ 6,400.00
36	Type "A" cradles for 30" pipe	@ 200.00	$ 7,200.00
11	Type "A" cradles for 42" pipe	@ 225.00	$ 2,475.00
26	Type "A" cradles for 54" pipe	@ 250.00	$ 6,500.00
6	Type "B" cradles for 30" pipe	@ 75.00	$ 450.00
3	Type "B" cradles for 42" pipe	@ 75.00	$ 225.00
1	Type "B" cradle for 48" pipe	@ 100.00	$ 100.00
2	Type "B" cradles for 54" pipe	@ 100.00	$ 200.00

PF

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION I (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
5	Type "C" cradles for 30" pipe	@ $ 75.00	$ 375.00
2	Type "C" cradles for 42" pipe	@ 75.00	$ 150.00
2	Structures in inundation area	@ 650.00	$ 1300.00
100	L/F of Curb and Gutter (remove and replace)	@ $ 3.50	$ 350.00
2	F & I all labor and material to lower existing 6" C.I.P. Watermain 4' for a distance of 30 feet	Lump Sum	$ 2000.00

TOTAL - SECTION I ---------- $ 254,017.00

(THIS FIGURE TO BE USED IN THE GRAND TOTAL TIED BID)

PE

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION II

ST. LOUIS PARK PROJECT NO. 62-85

LOCATION: Easement across school property from Natchez to Quentin
Easement across Lot 11 of Minikahda Park
West 39th Street from France Avenue to Inglewood Avenue

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
10	L/F 54" R.C.P. 10-12' Depth, Class II	@ $ 38.00	$ 380.00
205	L/F 48" R.C.P. 0-8' Depth, Class II	@ 28.50	$ 5,842.50
307	L/F 48" R.C.P. 0-8' Depth, Class IV	@ 33.00	$ 10,131.00
118	L/F 48" R.C.P. 8-10' Depth, Class II	@ 30.50	$ 3,599.00
60	L/F 48" R.C.P. 10-12' Depth, Class II	@ 33.00	$ 1,980.00
35	L/F 48" R.C.P. 12-14' Depth, Class II	@ 37.00	$ 1,295.00
44	L/F 24" R.C.P. 0-8' Depth, Class II	@ 12.00	$ 528.00
945	L/F 18" R.C.P. 0-8' Depth, Class II	@ 7.50	$ 7,087.50
398	L/F 15" R.C.P. 0-8' Depth, Class III	@ 6.50	$ 2,587.00
188	L/F 12" R.C.P. 0-8' Depth, Class IV	@ 6.00	$ 1,128.00
5	Standard Manholes 0-8' Depth without Castings	@ 180.00	$ 900.00
4	T-Section Manholes 0-8' Depth without Castings	@ 150.00	$ 600.00
19	V/F Extra Wall Manhole	@ 30.00	$ 570.00
2	F & I Type "D" Castings	@ 60.00	$ 120.00
7	F & I Type "E" Castings	@ 60.00	$ 420.00
15	Type "B" Catch Basins with Castings 0-6' Depth	@ 250.00	$ 3,750.00

PF

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION II (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
500	S/Y Cultured Sod (Includes 4" of black dirt) (All sodding beyond 7½' of pipe center line is incidental to the contract)	@ $ 1.00	$ 500.00
180	Tons 2" Thick Bituminous Replacement, M.H.D. Spec. 2331 (Includes prime coat, and utility adjustment) (For street and driveway repair)	@ 25.00	$ 4,500.00
600	Tons Class 5 gravel compacted on street 6" thick	@ 2.50	$ 1,500.00
300	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface)	@ 4.00	$ 1,200.00
1000	C/Y Excavation (vehicle measure) (This includes all material that is loaded in trucks and hauled to designated dump areas.)	@ 0.90	$ 900.00
150	C/Y Sand, gravel for around pipe	@ 2.25	$ 337.50
3	Trees cleared, grubbed and removed	@ 50.00	$ 150.00

TOTAL - SECTION II ---------- $ 50,005.50

(THIS FIGURE TO BE USED IN THE GRAND TOTAL TIED BID)

PF

 TIED BID March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION III

EDINA IMPROVEMENT NO. 111

LOCATION: West 42nd Street from Lynn Avenue to Scott Terrace
Scott Terrace from West 42nd Street to 260 feet south
Easement south side of Lot 25, Morningside
Easement across Lots 30 and 31, Morningside
Easement north side of Lot 48, Morningside
From West 42nd Street north to pond
Grimes Avenue from West 42nd Street to 185 feet south
Easement across Lot 76, Morningside
Easement across north side of Lot 3, Block 1,
Crocker and Crowells 1st Addition
Easement across Lot 15, William Scott's Addition
Grimes from West 41st Street to 105 feet south

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
20	L/F 60" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 10 Gauge	@ $ 44.00	$ 880.00
130	L/F 48" R.C.P. 8-10' Depth, Class II	@ 29.00	$ 3,770.00
305	L/F 48" R.C.P. 10-12' Depth, Class II	@ 32.00	$ 9,760.00
225	L/F 48" R.C.P. 12-14' Depth, Class II	@ 35.00	$ 7,875.00
32	L/F 48" R.C.P. 14-16' Depth, Class II	@ 38.00	$ 1,216.00
440	L/F 42" R.C.P. 14-16' Depth, Class III	@ 36.00	$ 15,840.00
36	L/F 36" R.C.P. 14-16' Depth, Class III (reducer)	@ 32.00	$ 1,152.00
185	L/F 30" R.C.P. 14-16' Depth, Class II	@ 24.00	$ 4,440.00
225	L/F 30" R.C.P. 12-14' Depth, Class II	@ 21.00	$ 4,725.00
206	L/F 30" R.C.P. 12-14' Depth, Class III	@ 22.00	$ 4,532.00
8	L/F 27" R.C.P. 10-12' Depth, Class II	@ 16.50	$ 132.00
35	L/F 27" R.C.P. 12-14' Depth, Class II	@ 19.00	$ 665.00

PF

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION III (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
155	L/F 24" R.C.P. 8-10' Depth, Class II	@ $ 13.50	$ 2,092.50
236	L/F 21" R.C.P. 0-8' Depth, Class II	@ 10.00	$ 2,360.00
142	L/F 21" R.C.P. 8-10' Depth, Class II	@ 11.00	$ 1,562.00
170	L/F 18" Asbestos Bonded Bituminous Coated C.M.P. 0-8' Depth, 14 Gauge	@ 9.00	$ 1,530.00
34	L/F 18" R.C.P. 0-8' Depth, Class II	@ 7.50	$ 255.00
1149	L/F 15" R.C.P. 0-8' Depth, Class III	@ 6.50	$ 7,468.50
120	L/F 15" R.C.P. 8-10' Depth, Class III	@ 8.00	$ 960.00
80	L/F 15" R.C.P. 10-12' Depth, Class III	@ 10.00	$ 800.00
348	L/F 12" R.C.P. 0-8' Depth, Class IV	@ 6.00	$ 2,088.00
17	Standard Manholes 0-8' Depth without Castings	@ 180.00	$ 3,060.00
4	T-Section Manholes 0-8' Depth without Castings	@ 150.00	$ 600.00
44	V/F Extra Wall Manholes	@ 30.00	$ 1,320.00
6	F & I Type "C" Castings	@ 80.00	$ 480.00
7	F & I Type "D" Castings	@ 60.00	$ 420.00
8	F & I Type "E" Castings	@ 60.00	$ 480.00
19	Type "B" Catch Basins with Castings 0-6' Depth	@ 250.00	$ 4,750.00
1900	S/Y Cultured Sod (Includes 4" of black dirt) (All sodding beyond 7½' of pipe center line is incidental to the contract)	@ 1.00	$ 1,900.00

PP

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

SECTION III (CONTINUED)

ESTIMATED QUANTITIES	MATERIAL	UNIT PRICE	TOTAL
400	Tons 2" Thick Bituminous Replacement, M.H.D. Spec. 2331 (Includes prime coat, and utility adjustment) (For street and driveway repair)	@ $ 25.00	$ 10,000.00
1275	Tons Class 5 gravel compacted on street 6" thick	@ 2.50	$ 3,187.00
500	C/Y 1-1½" Rock (To be used for pipe bedding and temporary street surface) (Price includes necessary excavation)	@ 4.00	$ 2,000.00
1000	C/Y Sand, gravel for around pipe and trench backfill	@ 2.25	$ 2,250.00
1000	C/Y Excavation (vehicle measure) (This includes all material that is loaded into truck and hauled to designated spoil areas) (This does not include the lump sum pond excavation)	@ 0.90	$ 900.00
2	Trees cleared, grubbed and removed	@ 50.00	$ 100.00
2	18" R.C.P. Apron, 4' long, strapped	@ 40.00	$ 80.00
2	M.B.F. Wood sheeting ordered left in place	@ 250.00	$ 500.00

TOTAL - SECTION III ---------- $106,130.00

(THIS FIGURE TO BE USED IN THE GRAND TOTAL TIED BID)

GRAND TOTAL - TIED BID - STORM SEWER - EDINA IMPROVEMENT NO. 111 AND ST. LOUIS PARK PROJECT NO. 62-85 SECTIONS I, II & III ---------- $410,152.50

PP

TIED BID

March 1, 1968

PROPOSAL

VILLAGE OF EDINA, MINNESOTA

STORM SEWER

EDINA IMPROVEMENT NO. 111

ST. LOUIS PARK PROJECT NO. 62-85

SECTIONS I, II & III

Bid security in the amount of $_____, being 10% of the high or base bid, accompanies this proposal, the same being subject to forfeiture in the event of default. It is understood by the undersigned that the right is reserved by the Village Council to reject any and all bids and that this bid may not be withdrawn until 30 days after the time the bids are opened.

If this bid is accepted, the undersigned agrees to promptly furnish Contractor's bond and execute form of contract now on file with the Village Clerk; and further agrees that if awarded this contract, work will be commenced within ten (10) calendar days after receipt of "Notice of Award" from the Village. All the work shall be completed not later than September 1, 1968.

RESPECTFULLY SUBMITTED

FIRM NAME: _____

ADDRESS: _____

BY: _____

PP

Morningside
File

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

February 27, 1968

Mr. John Berg
District Hydraulics Engineer
Minnesota Highway Department
2055 North Lilac Drive
Golden Valley, Minnesota

Re: Edina Improvement No. 111
St. Louis Park Project No. 62-85

Dear Mr. Berg:

Enclosed are copies of the proposed and special conditions, and the cost estimate for the cooperative storm sewer project between the City of St. Louis Park and the Village of Edina.

We are forwarding this information per Mr. Aswegan's request.

Sincerely,

LRM

Lawrence R. Molsather

LRM:nc
Enc.

Barr File

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

February 26, 1968

Mr. Clair Armstrong
Armstrong, Schlichting, Torseth & Skold, Inc,
4901 Olson Memorial Highway
Minneapolis, Minnesota 55422

Dear Mr. Armstrong:

Enclosed is a print of sheet 4 of the plans for construction of the storm sewer across the Susan Lindgren Elementary School property.

As we discussed previously, we have located a manhole, designated M.H. 10E, in the southeast corner of your proposed parking lot behind the school. By locating the manhole in the parking lot, and providing a grate casting for it, it can be used as a catch basin for drainage from the parking lot. This location also appears desirable for ease of access for maintenance purposes.

You may note that we propose to install a 12 inch stub at M.H. 10B to provide a connection for the storm drain to be constructed under your contract. I would suggest that you wait with the installation of your pipe until M.H. 10B is actually constructed. Our plans call for the invert of the stub to be at elevation 870.0 M.S.L. or 159.7 in St. Louis Park Datum. We are also providing six adjusting rings for M.H. 10B to provide considerable flexibility in the elevation of the grate casting. Thus, while we propose to install the grate at elevation 875.00 M.S.L. or 164.70 St. Louis Park Datum, it could be lowered to 163.70 or raised indefinitely to accomodate the final grading and surfacing in your parking lot.

We have discussed the problems concerning completion date and construction staging with Edina and St. Louis Park. They are aware of the problems which exist in coordinating the sewer construction with your project.

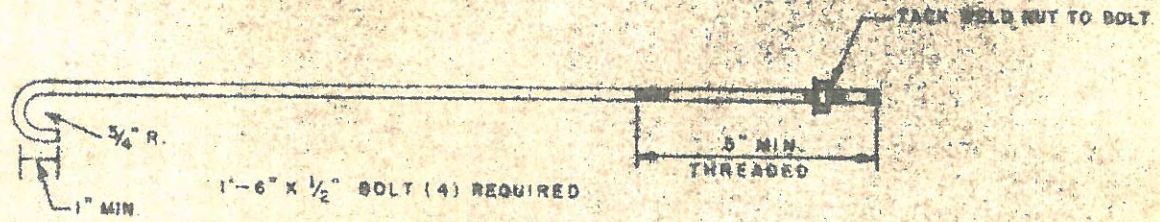
Sincerely,

LRM

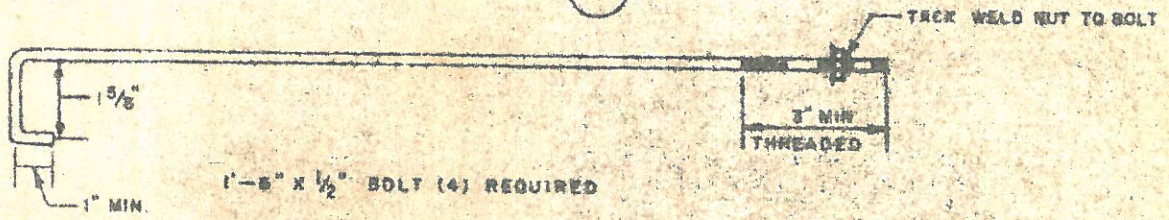
Lawrence R. Molsather

LRM:nc
Enc.

Sent 8-20-14

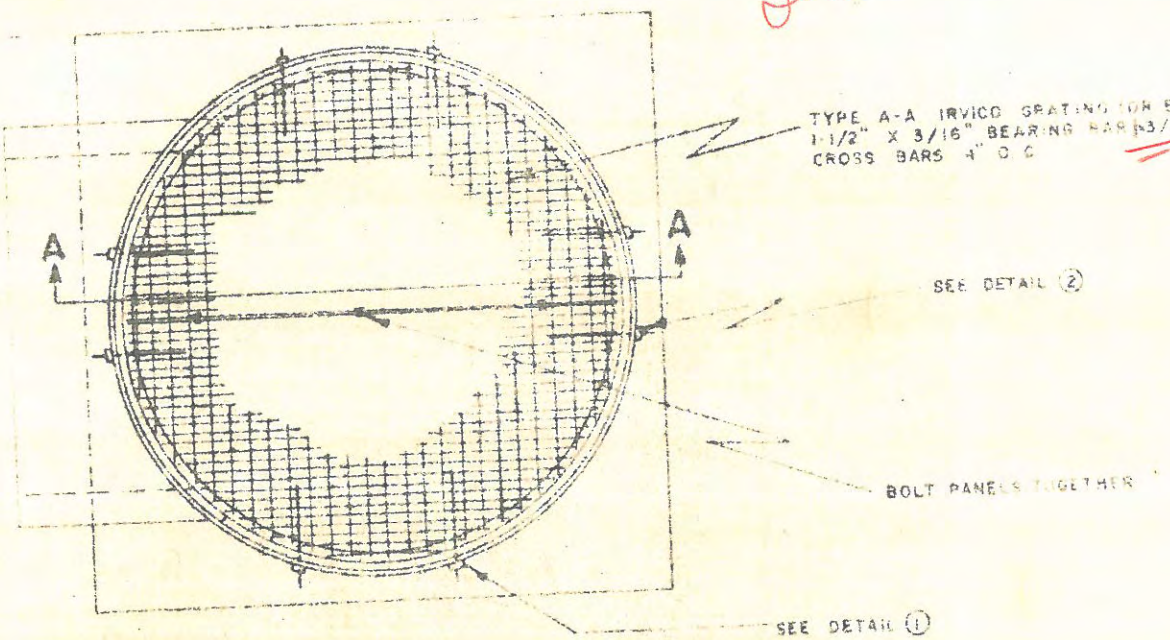


DETAIL (2)

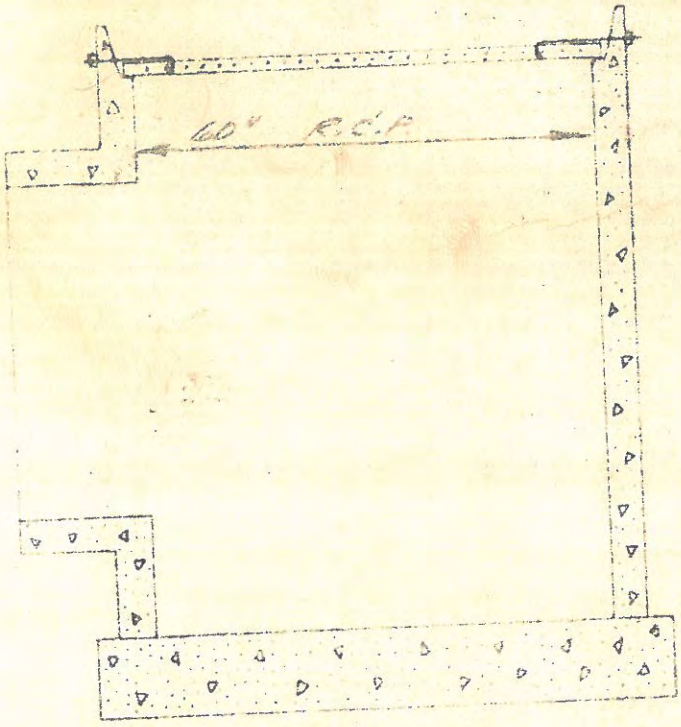


DETAIL (1)

Sent 2-20-68



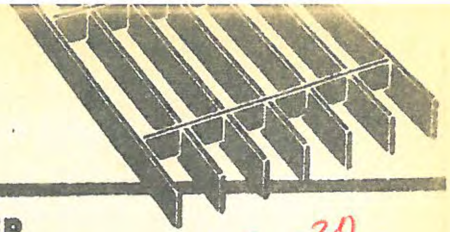
TOP VIEW



SECTION A-A

INUNDATION STRUCTURES

pressure locked

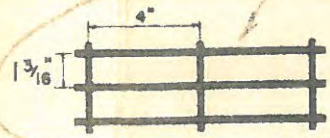


TYPE B STANDARD . . . ALL OTHER TYPES DEVELOPED FOR SPECIAL APPLICATIONS

Bearing Bar 1½ x 3/16 - 1¾ OC

2-20

BEARING BARS: B, F—1-3/16" O.C.; D, DF—15/16" O.C.

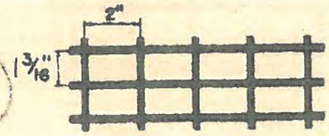


TYPE B

(standard)

ok

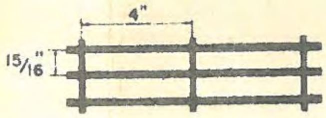
Approved for all general purposes.



TYPE F

(special)

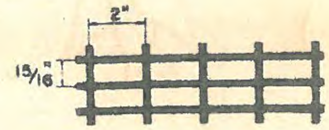
Same as type B but close cross bars for conditions where more steel area is required.



TYPE D

(special)

Close bearing bars. Best for heavy public traffic, or where smaller openings are required.



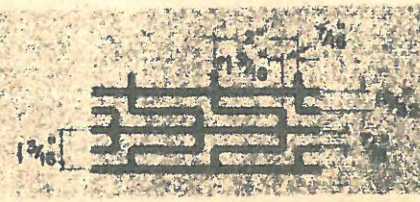
TYPE DF*

(special)

With closer cross bar and bearing bars. For conditions requiring greatly reduced net opening.

Types B-F-D & DF made in both ⅛" and 3/16" Bar Thicknesses (See Safe Load Table Page 5). ¾" Bearing Bar Depths made with ⅝ x ⅛ Cross Bars—1", 1¼", Depths with ¾ x ⅛ Cross Bars—1 ½" thru 2¼ with 1 x ⅛ Cross Bars.

where female pedestrian traffic is a particular problem.



TYPE YJ-1*

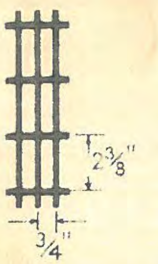
Special design for limited clear opening. Maximum of 7/16" between bars.

(See information at bottom of page opposite)

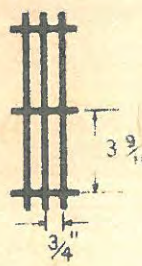
TYPE BT

(special)

Greatly Reduced Clear Opening
Bearing Bars 2 3/8" Centers
Cross Bars 3/4" Centers



Types BT & BTL made with 3/16 Bearing Bars.
1" thru 1½" Depths with ¾ x 3/16 Cross Bars—
1¾" thru 2¼ with 1 x 3/16 Cross Bars.
(Safe Load Table Below)



TYPE BTL

(special)

Lighter Weight Design
Bearing Bars 3 9/16" Centers
Cross Bars 3/4" Centers

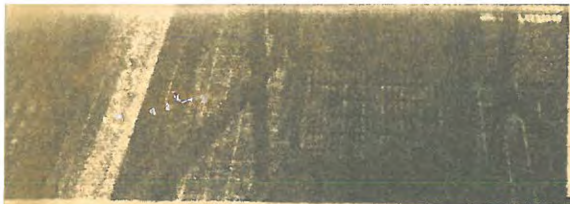
SAFE LOAD TABLES FOR TYPE BT AND BTL

SIZE NO.	BRG. BAR	CROSS BAR	WGT. PER FT.		2-0	2-6	3-0	3-6	4-0	4-6	5-0	5-6	6-0	6-6
4	1 x 3/16	3/4 x 3/16	10.51	U D C D	450 064 450 051	290 097 362 080	200 143 300 115	147 .195 250 .156	113 256 225 205					
6	1¼ x 3/16	3/4 x 3/16	11.38	U D C D	713 051 713 .041	450 081 562 064	316 115 475 092	228 157 400 .125	175 205 350 163	139 259 312 207	110 321 275 256	91 .389 250 .310		
8	1½ x 3/16	3/4 x 3/16	12.26	U D C D	1025 043 1025 034	560 067 875 053	458 094 687 077	336 131 587 .104	256 156 513 137	200 216 450 173	165 267 413 214	136 .324 375 259	113 385 [illegible] 305	96 440 [illegible] 361
9	1¾ x 3/16	1 x 3/16	15.48	U D C D	1400 038 1400 029	890 057 1112 046	615 082 930 066	457 112 800 .090	350 147 700 117	272 185 612 148	220 229 550 183	181 276 500 221	154 330 467 264	[illegible] 387 [illegible] 308
10	2 x 3/16	1 x 3/16	16.36	U D C D	1825 032 1825 026	1170 050 1462 040	809 072 1212 057	600 099 1050 078	456 128 912 .102	361 163 812 129	290 .203 725 160	241 .243 662 193	200 289 600 230	173 341 562 269
11	2¼ x 3/16	1 x 3/16	17.24	U D C D	2325 .027 2325 .023	1430 044 1850 035	1032 .064 1550 051	757 087 1325 .070	575 113 1150 091	456 .148 1025 .115	370 177 925 .142	304 214 837 172	256 255 [illegible] [illegible]	219 305 [illegible] [illegible]

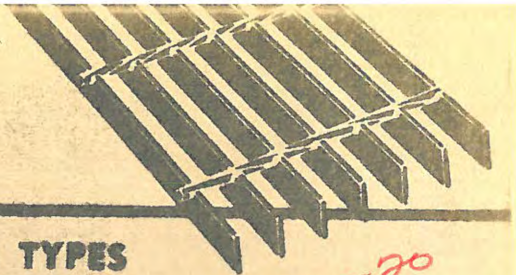
SIZE NO.	BRG. BAR	CROSS BAR	WGT. PER FT.		2-0	2-6	3-0	3-6	4-0	4-6	5-0	5-6	6-0	6-6
4	1 x 3/16	3/4 x 3/16	9.63	U D C D	300 .064 300 .051	193 .099 247 080	133 143 200 115	95 195 167 .156	75 .256 150 .205					
6	1¼ x 3/16	3/4 x 3/16	10.24	U D C D	475 .051 475 041	300 .081 375 .064	211 115 317 .092	152 .157 267 .125	117 .205 233 .163	93 259 208 207	73 321 183 256	61 389 167 310		
8	1½ x 3/16	3/4 x 3/16	10.84	U D C D	.683 043 683 034	440 067 550 .053	306 .094 458 .077	224 131 392 .104	171 166 342 137	133 216 300 173	110 267 275 214	91 .324 250 259	75 .385 225 308	64 440 308 361
9	1¾ x 3/16	1 x 3/16	13.86	U D C D	933 038 830 .027	593 057 742 .046	410 .082 620 .066	305 112 533 090	233 147 467 117	181 185 408 148	147 229 367 183	121 276 333 221	103 [illegible] 308 264	87 387 283 308
10	2 x 3/16	1 x 3/16	14.47	U D C D	1217 .037 1217 .026	780 050 975 040	539 .072 808 .057	400 .099 700 078	304 128 608 102	241 .163 542 129	193 201 483 160	161 243 442 193	133 287 400 230	115 341 375 269
11	2¼ x 3/16	1 x 3/16	15.08	U D C D	1550 .027 1550 .023	987 .044 1233 .035	688 .064 1033 .051	505 087 883 070	383 113 767 091	304 148 683 .115	242 177 617 142	202 214 555 172	172 .255 517 204	146 305 475 240

FOOTNOTES

SPANS TO RIGHT OF HEAVY LINE NOT RECOMMENDED
U—SAFE UNIFORM LOAD (IN POUNDS PER SQUARE FOOT)
C—SAFE CONCENTRATED LOAD (IN POUNDS PER FOOT OF WIDTH)
D—DEFLECTION (IN INCHES AT LOAD SHOWN)
FIBRE STRESS—STEEL 16000 POUNDS PER SQUARE INCH



all/weld

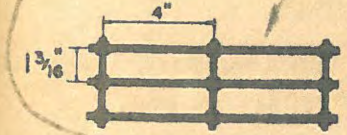


BEARING BAR 1½ x 3/16 11/16 o.c.

2-20

TYPE W/B STANDARD . . . ALL OTHER TYPES DEVELOPED FOR SPECIAL APPLICATIONS

(See Safe Load Table—page 5)

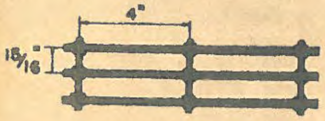


TYPE W/B

(standard)

OK

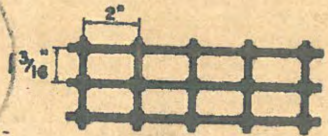
Approved for all general purposes.



TYPE W/D

(special)

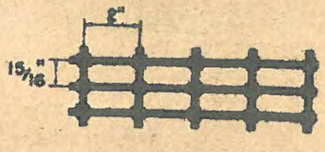
Close bearing bars. Best for heavy public traffic, or where smaller openings are required.



TYPE W/F

(special)

Same as Type W/B but close cross bars for conditions where most steel area is required.



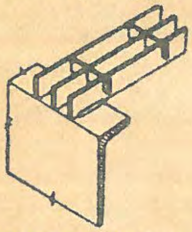
TYPE W/DF

(special)

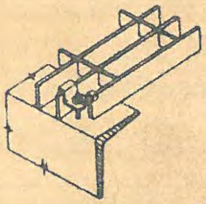
With closer cross bar and bearing bars. For conditions requiring greatly reduced net opening.

NOTE: Welded types are furnished with Twisted Square cross bars.

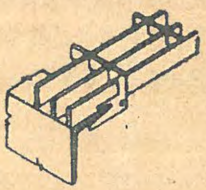
every type fastening for ALL/WELD, PRESSURE LOCKED, RIVETED GRATINGS



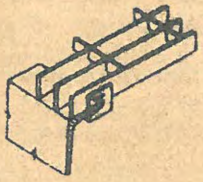
WELDED IN PLACE Most positive method of fastening and simplest method of installation.



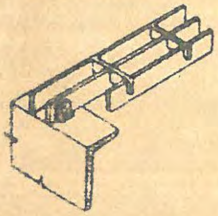
TYPE F-9 Bent clip furnished by manufacturer. Stud bolt furnished and field welded to supporting member by erector.



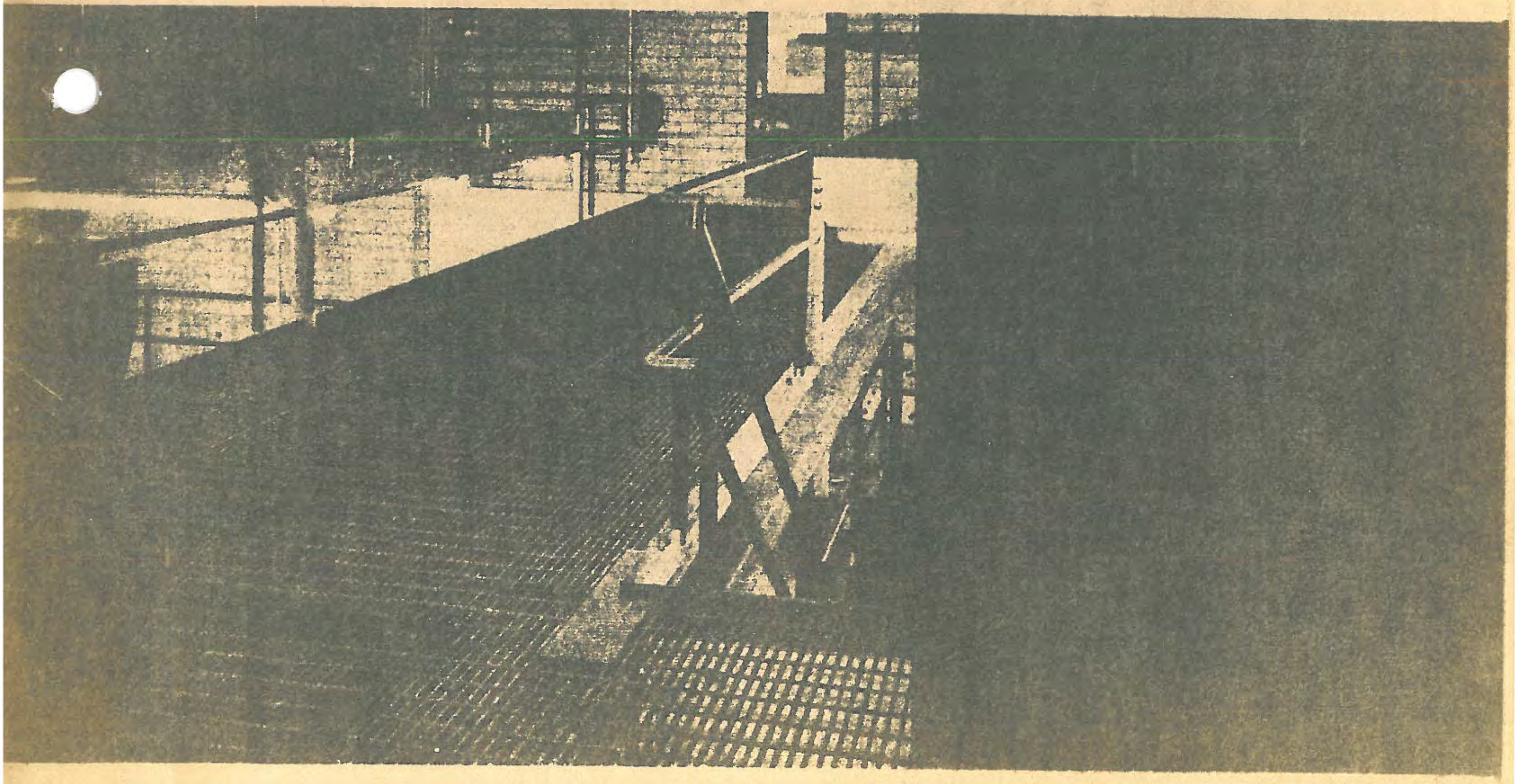
TYPE F-6 Furnished in all cases where possible or unless otherwise specified by customer.



TYPE F-2 Bolts to grating and clips to flange of supporting steel.



TYPE F-3 Furnished only when specified. Bolts to grating; welds to supporting steel.



BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

February 20, 1968

Mr. George Lowing
Unistruct-Northern, Inc.
689 Pierce Butler Rte.
St. Paul, Minnesota

Dear Mr. Lowing:

Mr. Bob Obermeyer of Edina asked me to send you this information regarding the grating on the inundation structures for the Edina Morningside storm sewer project.

Sincerely,

John D. Dickson

JDD:nc
Enc.

Minneapolis - Gen. File

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

DOUGLAS W. BARR, PRESIDENT
JOHN D. DICKSON, VICE PRESIDENT

440 ROANOKE BUILDING
MINNEAPOLIS, MINNESOTA 55402
TELEPHONE (AREA 612) 333-7221

February 20, 1968

Mr. G.F. Welch
District State Aid Engineer
Minnesota Highway Department
2055 North Lilac Drive
Golden Valley, Minnesota

Dear Mr. Welch:

Enclosed are copies of the portion of our design computations concerning the storm sewer between Quentin Avenue and Lynn Avenue along 41st Street. I am also enclosing a drainage area map for the project.

Please note that the enclosed map differs from the one I left with you on February 14. The enclosed map shows the actual watershed boundary and interior divides. The previous map was based on preliminary work and is less accurate. I would suggest that you simply destroy the old map to eliminate future confusion since the two maps appear so similar. The enclosed map has a drawing number in the upper left corner of 23/27-14 B 037. The preliminary or old map is numbered 23/27-14 B 017.

You may note in reviewing the plans, that construction of the proposed inundation site between Lynn Avenue and Crocker Avenue is not included in this contract. Edina proposes to do this work separately.

During our meeting of February 14, John Berg requested information concerning discharges in the vicinity of 39th Street and France Avenue. For the pond and trunk system in Edina and St. Louis Park to operate as designed, a discharge capacity of 35 cfs is needed at 39th and France. This includes capacity for the local area and lateral line along 39th Street. From the termination point of our project approximately 330 feet south of 39th Street to 39th and France, a capacity of 25 cfs is required.

You also requested an additional copy of the plans. Since we had already given the originals to Edina, we will request that they send you the extra set.

I spoke with Mr. Folland yesterday, and he will write you a letter formally requesting State Aid participation in this project.

As I mentioned in our meeting, Edina and St Louis Park are hopeful of letting the contract on March 4, so we would appreciate any expediency that could be attached to this request. If you have any questions, please contact us.

Sincerely,

L. R. Molsather

Lawrence R. Molsather

LRM:nc
Enc.
cc: R. Folland
R. Drake

23/27-14B037

AREA I

39TH STREET

AREA H

35 cfs

25 cfs

AREA E

AREA G

MONTEREY

CROCKER

AREA B

QUENTIN AVE.

NATCHER

AREA D

91 cfs + 41 = 92 cfs

121

134

LYNN

ERWIN AVE

FRANCE AVE

26.0 A.F.
NORMAL ELEV. 861.5
FLOOD ELEV. 868.0

42ND STREET

16.8 A.F.
GROUND ELEV. 865.0
FLOOD ELEV. 871.0

AREA C

AREA A

AREA F

STATE HWY 100

5cfs

MORNINGSIDE ROAD

POND

WOODDALE AVE.

44TH STREET

N

1" = 600'

WATERSHED BOUNDARIES
TRUNK STORM SEWER SYSTEM
EDINA - ST. LOUIS PARK

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

23/27-148037

AREA I

39TH STREET

AREA H

35 cfs

25 cfs

AREA E

AREA G

AREA B

MONTEREY

NATCHEZ

AREA D

CROCKER

QUENTIN AVE.

LYNN

ERWIN AVE.

FRANCE AVE

42ND STREET

26.0 A.F.
NORMAL ELEV. 861.5
FLOOD ELEV. 868.0

16.8 A.F.
GROUND ELEV. 865.0
FLOOD ELEV. 871.0

AREA C

AREA A

AREA F

STATE HWY. 100

5cfs

MORNINGSIDE ROAD

POND

WOODDALE AVE.

44TH STREET

N

1" = 600'

WATERSHED BOUNDARIES
TRUNK STORM SEWER SYSTEM
EDINA - ST. LOUIS PARK

BARR ENGINEERING CO.
CONSULTING HYDRAULIC ENGINEERS

CITY of

ST. LOUIS PARK

Main File

February 19, 1968

Mr. George Hite
Director of Public Works
4801 West Fiftieth Street
Edina, Minnesota 55424

Re: Storm Sewer Project 62-85
State Aid Approval of Plans

Dear Mr. Hite:

I have had some informal conversations with Larry Molsather and John Dickson regarding M.S.A. approval of the plans. They have indicated that this can be done and they would submit the plans for approval to the State Aid Division through Mr. George Welch, our District State Aid Engineer.

This is for the purpose of allowing the City of St. Louis Park to use State Aid Funds for the benefit to our MSA 284, which is Wooddale, Princeton, and Quentin from 44th Street to Excelsior Boulevard.

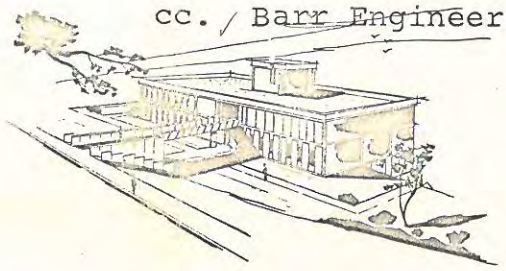
Please find enclosed to Mr. George Welch for M.S.A. approval and we would appreciate it if you would direct Barr Engineering to submit the plans as requested.

Thank you for your cooperation in this matter.

Yours very truly,

R. O. Folland, P.E.
Director of Public Works

ROF:lh
Enc.
cc. Barr Engineering



5005 minnetonka boulevard
st. louis park, minnesota 55416 phone 920-3000

Morningside File

CITY of

ST. LOUIS PARK

February 19, 1968

Mr. George Welch
District State Aid Engineer
Minnesota Department of Highways
Golden Valley, Minnesota 55422

Re: M.S.A. Approval of Plans for
Storm Sewer Project 62-85;
Section A-Calhoun to France,
by City of Minneapolis;
Section B-France to Princeton,
by Village of Edina

Dear Mr. Welch:

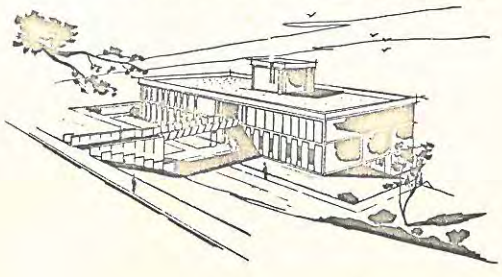
This is a request for State Aid approval of plans for the above project. This project is a cooperative project between the City of Minneapolis, the Village of Edina, the City of St. Louis Park, and the Minnesota Department of Highways.

Section A consists of the construction of an outlet trunk sewer from Lake Calhoun in Minneapolis to France Avenue south of 39th Street. This section will be constructed by the City of Minneapolis under a cooperative agreement with the City of St. Louis Park and the Village of Edina.

Section B consists of the storm sewer system and the ponding area from France Avenue to Princeton Avenue in St. Louis Park. This section is being constructed under a cooperative agreement between the Village of Edina and the City of St. Louis Park.

For your information I have attached our engineering report and assessment map so that you can get the basis of the above project and how it is to be constructed.

I requested the Barr Engineering Company to submit the plans for approval to the State Aid Division for Section B. The City of St. Louis Park requests State Aid participation for its State Aid



5005 minnetonka boulevard
st. louis park, minnesota 55416 phone 920-3000

Mr. George Welch
District State Aid Engineer

streets which drain into this system. The State Aid Street that we wish to serve with this system is MSA 284 from West 44th Street to Excelsior Boulevard.

I am also requesting Minneapolis to submit the plan for the outlet from France Avenue to Lake Calhoun to the State for a similar approval by the State Aid Division.

If you have any questions please call me.

Yours very truly,

R. O. Folland, P.E.
Director of Public Works

ROF:lh
Enc.

cc./ Barr Engr.
Orr-Schelen-Mayeron
G. Hite, Village of Edina
Clayton A. Sorenson, Mpls.

Morningside
LRM 2/13/68

Call to John Berg — MHD — G. Valley

Come in around noon — meet after lunch

— Resolution from Edina
— Sets Specs
— Estimate

Don Dunshee — 221 → 3239

1 — Set for State Aid

Morningside Proj.
LRM 2/5/68

Ray Folland

1. O.K. w/ R Folland to use Edina's Method on Gas Connections
2. I said we'd try to have a copy of everything to him tomorrow.
3. They have their hearing at council meeting tonight. They hope to approve the agreement, and get right to advertise etc.

Recd 1/68

CITY OF ST. LOUIS PARK, MINNESOTA

SPECIFICATIONS

STORM SEWERS

PART II

1. SPECIFICATIONS WHICH APPLY

The City of St. Louis Park "General Contract Conditions" shall apply. These portions of the State of Minnesota Department of Highways "Specifications For Highway Construction," dated January 1, 1964, being Sections 2101, 2104, 2301, 2452, 2503, 2506, 2521, 2331, and 2576, and any supplements thereto shall apply and are incorporated herein and made a part of this contract as fully as though set out herein in length, and shall apply to this contract except as modified herein, together with any sections referred to in said Section or necessary for proper interpretation or use of the above numbered section.

Methods of Measurement and Basis of Payment contained in the State of Minnesota, Department of Highways Specifications for Highway Construction and supplements thereto, referred to above, shall not apply. Methods of Measurements and Payment shall be in accordance with Paragraph 7, Part II of these specifications.

2. (2101) CLEARING AND GRUBBING

Clearing and grubbing shall be performed in accordance with the provisions of 2101, except as modified below.

No tree shall be cut until the Engineer has marked it for removal. Since clearing and grubbing is considered incidental to the work of this project, no additional payments will be made for this item.

3. (2104) REMOVING MISCELLANEOUS STRUCTURES

Removing miscellaneous structures shall be performed in accordance with the provisions of 2104, except as modified below:

All catch basin covers, manhole covers, frames, sewer pipe, and other material which has some salvage value shall become the property of the Owner and shall be delivered in good condition to a site designated by the Engineer within the City of St. Louis Park.

Since the removal of miscellaneous structures is considered incidental to this project, no additional payments will be made for this work.

4. (2503) PIPE SEWERS

Pipe sewers shall be installed in accordance with the provisions of 2503, except as modified below:

(a) Pipe

All pipe sewers shall be bedded as per Class C bedding requirements. Class C bedding shall consist of bedding the pipe with "ordinary care" in an earth foundation shaped to fit the lower 50% breadth of the pipe. The remainder of the pipe is surrounded to a height of at least 6 inches above its top by select fill materials, to completely fill all spaces under and adjacent to the pipe.

The reinforced concrere pipe strength classification shall be as follows:

MAXIMUM PERMISSIBLE COVER ON PIPE

PIPE SIZE D--Load	CLASS II 1000 Lb.	CLASS III 1350 Lb.	CLASS IV 2000 Lb.	CLASS V 3000 Lb.
12"	2'-9'	9'-13'	13'-17'	17'-26'
15"	2'-8'	8'-13'	13'-17'	17'-27'
18"	2'-9'	9'-13'	13'-17'	17'-26'
21"	2'-9'	9'-13'	13'-17'	17'-26'
24"	2'-9'	9'-13'	13'-18'	18'-26'
27"	2'-9'	9'-13'	13'-18'	18'-27'
30"	2'-9'	9'-13'	13'-18'	18'-27'
33"	2'-9'	9'-13'	13'-18'	18'-27'
36"	2'-9'	9'-12'	12'-17'	17'-26'
42"	2'-9'	9'-14'	14'-17'	17'-27'
48"	2'-10'	10'-13'	13'-18'	18'-28'
54"	2'-10'	10'-13'	13'-17'	17'-27'
60"	2'-10'	10'-13'	13'-18'	18'-28'
66"	2'-10'	10'-13'	13'-19'	19'-28'
72"	2'-10'	10'-14'	14'-19'	19'-28'
78"	2'-10'	10'-15'	15'-19'	
84"	2'-10'	10'-15'	15'-18'	
90"	2'-10'	10'-15'		

The pipe class to be used for pipe-arches or oval pipe designated in the plans shall be determined by using the round pipe diameter in the above table most nearly equal to the span dimensions. In using the above table for pipe-arches the maximum permissible cover shall be the cover on the pipe-arch or oval pipe.

Pipe required for piling shall be reinforced concrete pipe furnished in eight (8) foot lengths and shall be of special design in accordance with Section 10 A.S.T.M. specifications C-76-59 T. The pipe shall be capable of withstanding the load as shown on plans for planned grade.

The joints of round reinforced concrete pipe shall be made using rubber gaskets. Gaskets shall be Miller, Tylox, or Press seal gaskets or approved equal. Joints on non-reinforced concrete pipe shall be made using jute or oakum and cement mortar, one (1) part portland cement to two (2) parts mortar sand.

The joints for deformed reinforced concrete pipe shall be made using Ram-Nek flexible plastic joint material installed as per manufacturers recommendations, or cement mortar diapers.

Diapers shall be made from suitable fabric of sufficiently close weave to prevent the loss of cement from grout, but shall not be waterproof. Diapers shall be hemmed on each edge, with a steel wire or straps inserted ready for application. Cotton fabric diapers with round steel wire and eight (8) inch width shall be used on pipe of 33 inch I.D. or smaller. Burlap fabric diapers with 3/8 inch steel straps and nine (9) inch width shall be used on pipe of 36 inch I.D. or larger. Wires shall be securely fastened by twisting opposite ends together with pliers and straps shall be tightened with tensioning tool and secured with a crimped seal.

After the pipe has been laid, the trench bottom directly adjacent to the joint location shall be undercut to a width and depth sufficient to allow for full expansion of the mortar filled diaper. The diaper shall then be secured to the bell or grooved end of the pipe in place by clinching one tire-wire or strap and the diaper folded back out of the way. After the spigot or tongue of the next pipe is properly in place and the pipe pulled home, the diaper is pulled across to span the joint and the second tire-wire or strap is securely clinched around the barrel of the pipe just laid.

The diaper shall be poured completely full of cement grout until the diaper becomes taut and convex around the entire circumference of the joint. The pour shall be made from one side until the grout flows under the bottom and rises on the opposite side. The pour may then be completed from both sides. In hot, dry weather clear water may be poured into diaper to wet the pipe circumference prior to pouring the joint grout. Cement grout for filling the diaper shall be one (1) part Portland Cement to two (2) parts clean sand, free of lumps, and mixed with sufficient water to make a pourable consistency of thick cream. No backfill shall be placed about the joint until the diaper is completely poured full of grout.

(b) Excavation and Backfilling - City Streets

When, in the opinion of the Engineer, the foundation for the sewer at the established grade is unstable, the unstable material below the flow line of the pipe shall be removed for the full width of the trench, and base stabilization consisting

of binder stone size 3/4" to 2" shall be backfilled as determined by the Engineer. Granular trench backfill, where ordered by the Engineer, shall be compacted to 95% of Maximum Density as specified by the Highway Department. Granular backfill shall consist of pit-run sand, gravel, or granular soil not more than 20% of which passes the No. 200 sieve, screened as may be necessary to remove all stones which would be retained on a six (6) inch sieve. Material in the top twelve (12) inches of street grade or within twelve (12) inches of the pipe shall not exceed two (2) inch size. The Contractor will be paid for the stabilization material per unit price bid.

When, in the opinion of the Engineer, the foundation for the sewer at the established grade is unstable and, in the opinion of the Engineer, it is not feasible to stabilize the foundation using crushed rock, the Engineer may order the Contractor to install piling and piling pipe. Piling pipe used shall be the size shown on the plans and shall be designed as stated in Section 4.

If the Engineer shall order piling to be placed, the Contractor shall furnish, drive, and place all said piles. Piles shall be driven vertically in exact position at locations given by the Engineer. Piles which may become shifted must be removed and good piles driven in their places, or additional piles put in as directed by the Engineer without additional expense to the Owner. Norway Pine, Jack Pine, Douglas Fir (Coast Region), or Southern Yellow Pine may be used under these specifications.

All piling shall be "treated" piling. Preservative treatment of all piling shall be in accordance with Section 3491 of the Minnesota Department of Highways Specifications for Highway Construction, dated Jan.1, 1964

All piles shall have a butt diameter of not less than twelve (12) inches. Piles less than forty (40) feet in length shall have a tip of not less than eight (8) inches in diameter and piles over forty (40) feet long shall have a tip not less than seven (7) inches in diameter. All measurements to be made not including the bark.

Piles shall be sound and solid and free from any defects which may materially impair their strength or durability. They must be so straight that when a line is drawn from the center of

the butt to the center of the top, the line will be within the body of the pile and shall have a uniform taper from the top to the butt.

Piles shall be capped and cradles provided in accordance with the detail drawings as shown in the plans.

Ledge rock, boulders, and large stones shall be removed to provide clearance of at least 6" below outside barrel of the pipe or fittings, and a clear width of 9" on each side of the pipe shall be provided.

The space between the bottom of the trench in rock and the bottom of the pipe shall be backfilled with suitable material thoroughly tamped. Generally speaking, the material from the trench excavation, other than rock and boulders, shall be considered as suitable material. No additional compensation for placing or tamping this material shall be allowed.

Blasting the excavation will not proceed until the Contractor has notified the Engineer of the necessity to do so, such notification not being necessary where only occasional boulders are involved. This notification shall in no manner relieve the contractor of the hazard and liability contingent on blasting operations. The hours of blasting will be fixed by the Engineer.

Any damage caused by blasting shall be repaired by the Contractor at his expense. The Contractor's methods of procedure relative to blasting shall conform to local and state laws and municipal ordinances.

All excavation in trenches shall be backfilled to the original ground surface or to such grades as specified or shown on the drawings. The backfill shall begin as soon as practical after the pipe has been placed and shall thereafter be carried on as rapidly as the protection of the balance of the work will permit. Backfilling shall be done as completely as possible so as to prevent after settlement, wetting and compacting the materials to attain complete filling and using the best material available for the purpose, free from boulders or stones. Depositing of the backfill shall be done so the shock of falling material will not injure the structure. Grading over and around all parts of the work shall be done as directed by the Engineer.

Granular material, free from rocks and boulders, shall be deposited in the trench simultaneously on both sides of the pipe

for the full width of the trench to a height of at least six (6) inches above the top of the pipe, shovel placed and shovel tamped to fill completely all spaces under and adjacent to the conduit.

In the event that natural, suitable, granular material is not encountered during the normal excavation of the sewer trench or when the material encountered is determined unsuitable by the Engineer for backfilling around the conduit as required above, the Contractor shall provide and place such approved material from excavation of adjacent trenches at no extra compensation.

Wherever select material that exists in place in the upper four (4) feet of the finished grade of the paved or traveled portions of street or roadway is removed by the trench excavation, the Contractor shall replace said material or materials of equal quality as backfill in the upper four (4) feet of finished grade. Where select material does not exist in place as described above, the Contractor shall provide and place select backfill in the upper four (4) feet of the finished grade from surplus material obtained from the excavation of adjacent trenches. Under no condition shall black dirt, loam or other unsuitable materials be used as backfill in the top four (4) feet of sewer trenches lying in the street.

The Contractor shall be paid for <u>only</u> that select material required for filling or backfilling as he may be directed to purchase and place by the Engineer. All quantities of such material used shall be verified by the inspector.

An approved vibrating roller shall be used for compacting the top four (4) feet of the backfill on all trenches lying in the traveled portion of the street. At least four (4) passes of the vibratory roller over the entire excavated portion of the street is required.

All deficiencies of the quantity of material for backfilling the trenches or for filling depressions caused by settlement shall be supplied by the Contractor.

Any excess material shall be hauled away and deposited where directed by the Engineer. The haul limit shall not exceed two (2) miles one way.

When the trench excavation for the sewer and appurtenances is within the right of ways of state or county highways, the backfilling of the trench, compaction of materials and subgrade prep-

aration shall be done in strict accordance with the existing requirements and specifications of the State or County Highway Department at no additional compensation. Pavement removal and replacement on State or County highways shall be in accordance with the permit regulations.

In all cases, the Contractor shall blade the roadway after the trench has been backfilled so that it shall be passable to traffic at all times. The trench surface shall be left neatly rounded to sufficient height to allow for settlement to grade after consolidation. The Contractor shall maintain the roadway in a condition acceptable by the Engineer at all times until final acceptance of the entire work by the Owner. Therefore, the Contractor shall provide a minimum of one motor grader which shall be available on the project at all times for surface maintenance. If, in the opinion of the Engineer, the Contractor is not maintaining the street surfaces sufficiently with one motor grader, he shall provide additional blades at no additional compensation.

5. (2506) MANHOLES AND CATCH BASINS

Manholes and catch basins shall be constructed as shown on the detail plates of the Minnesota Department of Highways, or as detailed on the plans.

6. (2576) SODDING

Sodding shall be performed in accordance with the provisions of 2576 except as modified below:

Sod which is disturbed for the installation of sewer lines or appurtenances shall be replaced including necessary black dirt. The Contractor shall be reimbursed only for that sod replaced lying within ten (10) feet on either side of the sewer line or appurtenance. Any additional sod disturbed outside the ten (10) foot limit above shall be replaced but the Contractor shall receive no compensation for this replacement. Sod on embankments shall be paid for to the toe of the slope. Black dirt shall be replaced to a thickness existing at the time of removal to a maximum of one (1) foot in sodded areas. No sod shall be laid on less than four (4) inches of black dirt.

7. METHODS OF MEASUREMENT AND PAYMENT

Any item called for in the specifications or shown on the drawings but not listed in the Proposal Form will not be paid for as a separate item, but the cost of same shall be incorporated into the various unit prices provided.

(a) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe in Place

Reinforced concrete culvert, storm drain and sewer pipe for all classes

will be paid for at the contract price per linear foot, for each diameter of pipe furnished and according to the depth zone classification.

(b) Non-reinforced Concrete Sewer Pipe
Non-reinforced concrete sewer pipe will be paid for at the contract price per linear foot for each diameter of pipe furnished and according to depth zone and classification.

(c) Corrugated Metal Pipe and Pipe Arches
Corrugated metal pipe will be paid for at the contract price per lineal foot for each diameter of pipe furnished and according to depth zone classification.

Unit prices shall include excavation, pumping, sheeting, pipe completely installed, and backfilling for Items (a) through (c). All measurements will be made along the centerline of the pipe and from center of manhole to center of manhole or center to center of appurtenant structures. Depth zone classification shall be taken to include the upper limit but not the lower limit. All depth measurements shall be from the pipe invert to the original ground at the pipe centerline. As an example: 8' x 10' classification shall be taken from 8:01' to 10:00' inclusive. No deduction in depth will be made for rock encountered in the trench above the designated grade.

(d) Manholes
Manholes will be paid for to a depth of eight (8) feet at the contract unit price per manhole, which price shall include base and cover and frame. Manholes shall be measured from invert of sewer to top of cover.

(e) Excess Depth of Manhole
Manholes to be constructed to a depth greater than eight (8) feet will be paid for at the contract unit price per linear foot for each foot of depth that is greater than eight (8) feet.

(f) Catch Basins
Catch basins will be paid for at the contract unit price and shall include base and castings.

(g) End Sections
End sections will be paid for at the contract price which shall include the end sections in place, including necessary tie rods or straps.

(h) Special Sections
Special sections will be paid for at the contract price on a lump sum

basis for all work and material necessary for the complete installation or construction.

(i) Rock Excavation

Rock excavation shall be measured by volume in cubic yards, and shall be measured from the top of the rock to a point six (6) inches below and nine (9) inches on each side of the outside barrel of the pipe, and shall be paid for at the contract unit price per cubic yard.

(j) Material for Stablilizing Grade- Binder Stone

Material used for refilling to pipe foundation grade to assure firm foundation for pipe shall be paid for at the contract unit price per ton of material in place. The unit price for binder stone shall include all costs for extra depth excavation below plan grade and disposal of all unsuitable excavated material where directed by the Engineer within a two (2) mile (one way) haul distance.

(k) Sod

Sod shall be paid for at the contract unit price per square yard and the price shall include necessary black dirt.

(l) Pit Run Gravel Trench Backfill

All material that the Contractor shall purchase and place, as directed by the Engineer, as additional trench backfill or pipe foundation material, shall be paid for at the contract unit price per cubic yard per vehicular measure. The unit price for granular trench backfill shall include all costs for extra excavation below plan grade and disposal of all excess or unsuitable excavated materials within a two (2) mile haul distance measured one way, or as noted on the plans. Granular trench backfill shall conform to the requirements stated in 2503.2Q of the Highway Specifications.

(m) Highway and Railroad Crossings

All construction within the State or County highway rights-of-way or within Railroad company rights-of-way shall be done as follows:

The Contractor shall ascertain all requirements of the State, County, or Railroad companies whose rights of way are involved prior to submitting his bid.

The Contractor shall acquire all permits and shall post all bonds or other security as shall be required by the County, State or Railroad companies for said permits, and all construction within these rights-of-way shall be in accordance with the permits so granted.

(n) Piling

Piling shall be paid for at the contract unit price bid for a single double, or triple pile bent, complete in place, assuming piles to be twenty (20) feet long.

(o) Excess Length Piling

Piling over twenty (20) feet in length will be paid for at the contract unit price per linear foot for each foot of length over twenty (20) feet driven in place below cut-off.

Village of **Edina**
4801 WEST FIFTIETH STREET • EDINA, MINNESOTA 55424
927-8861

February 2, 1968

Mr. John D. Dickson
Barr Engineering Co.
440 Roanoke Building
Minneapolis, Minnesota 55402

Re: Morningside Area Storm Sewer Job

Dear John:

Please note Article 21, page 14 of our sewer specifications. I think St. Louis Park pays the Gas Company for cutting gas services. Check this with St. Louis Park and see how they wish to do this. Perhaps you can write a note in the special conditions to explain this to the contractor.

Below is our excerpt from one of our past proposals. This tends to clearly define the pay item.

_____ Each, Trees, cleared, grubbed and removed (8" diameter or larger, no pay item for trees less than 8" in diameter) (Forked trees with one root system and at least one branch 8" in diameter shall be considered for payment purposes as one tree) @_____ $_____

Probably you wish to use the following as a rough draft for the backfilling trenches portion of the special conditions.

BACKFILLING TRENCHES

Backfilling of all trenches in the traveled portion of streets or under the curb line shall be accomplished in layers or lifts by backcasting or by filling and spreading. Under no circumstances shall the trench be backfilled in a single lift by pushing the material into the trench.

If sidecasting operations are used the trench shall be compacted with an approved vibratory compactor in granular soils and a sheeps-foot compactor in clay soils in one (1) foot lifts up to finished grade elevation. Compacting shall continue on each lift until no further settlement occurs.

Backfilling of all trenches in areas other than the traveled portions of streets and boulevards shall be accomplished in four (4) foot layers or lifts. Compacting shall continue on each lift until no further settlement occurs.

If backcasting operations are used, the contractor will NOT be required to compact the trench in one foot (1') lifts. If backcasting operations are used the contractor will only be required to compact the trench with an approved vibratory compactor at the finished grade elevation until no further settlement occurs.

The work below refers only to certain areas in which peat and muck or other unsuitable backfill materials are encountered during the excavation for storm sewer lines.

It will be the contractor's responsibility to excavate the trench, haul away all unsuitable backfill material to such locations as designated by the Engineer and backfill the trench in accordance with the specifications with all acceptable excess material which may be obtained from other trenches or excavations within the project area. Payment for truck hauling this material will be made at the contract unit price bid for Class A excavation (vehicle measure). In the event that deficiencies still exist in the backfill of the trench after all available excess material has been utilized as described above, the contractor shall provide additional approved material as may be authorized and verified by the Engineer, such material will be furnished and placed at the contract unit price per cubic yard. Unsuitable material that is loaded in trucks and hauled to the dump area will be paid for at the contract unit price bid for Class A excavation (vehicle measure). There will be no pay for unsuitable material that is excavated and wasted in the immediate area.

Rubber tired equipment shall be used to backfill trenches where other equipment will damage existing bituminous surface or sod.

I talked to Mr. Friesen at 4222 Scott Terrace today. He owns the low property between the Village owned lots (lots 30 and 31) and his house. Mr. Friesen is agreeable with our proposal to fill his low property with peat. We can discuss this later.

The following are items to be included in the proposal.

950 Tons, Bituminous Replacement M.H.D. Spec. 2331 applied 2" thick. (Price includes prime coat and utility adjustments) (For street and driveway repair) See Special Conditions

3000 Tons, Class 5 Gravel compacted on streets 6" thick

4000 Cubic Yards, Excavation (vehicle measure) (This includes all material that is loaded in trucks and hauled to the designated dump areas) (This does not include the lump sum pond excavation)

Probably you can incorporate something like the following in the special conditions for street restoration.

STREET RESTORATION

All of the streets in this project have a blacktop mat. The contractor shall leave all the streets after storm sewer construction in a condition equal to or better than their present condition.

The streets shall be subcut for installation of Class 5 gravel base at least once each week on that portion of storm sewer completed each week, and immediately filled with six (6) inches of compacted Class 5 gravel. Blading and watering for dust control shall continue until the streets are blacktopped by the contractor.

The unit bid price for blacktop includes some hand patching for catch basin lead trenches and driveways, however, a paver may be used wherever possible.

Some sheeting will probably be required around the existing lift station on West 41st Street and also on West 42nd Street between Grimes Avenue and Scott Avenue.

We hope to see you Tuesday, February 6, 1968 at about 8:30 a.m.

We will give you general contract conditions and etc. when we see you Tuesday.

Yours very truly,

Raymond B. Drake

Raymond B. Drake, P.E.
Village Engineer

RBD:rh

Edina
Morningside

John Dirkswager

January 31, 1968

Mr. Cam Andre
City Manager
City of St. Louis Park
5005 Minnetonka Blvd.
St. Louis Park, Minnesota 55416

Re: Minneapolis Storm Sewer
Cost Sharing Agreement

Cam:

The proposed storm sewer cost sharing agreement with Minneapolis is generally O.K., although it is difficult to agree that the "22%" formula in any way reimburses the suburbs for their inability to assess the Water Department property. The "22%" approach obligates Minneapolis to only about $6,000 - $10,000 of cost beyond what they would have if the suburban pipe were not a part of the overall system. Even this token increase is more than wiped out if we aren't careful about what costs the 22% is applied against. The proposed agreement also needs some language to protect the suburban interest in design, Federal grant participation, and the the temporary use of existing Minneapolis systems.

On the basis of Huston's November 1966 report and the content of Clayton Sorenson's December 27, 1967 letter to Mayor Bredesen, it would appear that Minneapolis was prepared to pay 26% of a combined trunk and outlet system having a total estimated construction cost of $327,870. The Minneapolis share of $87,110 was represented by the following items:

Value of proposed new pipe on W. 38th St. to be replaced by suburban trunk	$20,710
Value of Lake Calhoun outlet for Minneapolis only	60,400
Minneapolis catch basin leads along suburban trunk	6,000
	$87,110

Except for the $6,000 in catch basin leads, this $87,110 represents the estimated cost to Minneapolis for needed additions to their system without suburban involvement. The suburban share of the November 1966 combined system estimate was $240,760.

Since November 1966, the suburban need through Minneapolis has been reduced substantially through design modification. The degree of protection for suburban storage pond flooding was lowered from 100 year to 50 year frequency, and the extent of storage within the suburban area was greatly increased. These changes have reduced the capacity needed through Minneapolis from 230 cfs to 35 cfs. The total estimated cost of the combined suburban-Minneapolis trunk and outlet is now estimated to be from $190,810 to $248,070 depending upon final design. If Minneapolis were to pay for the same items they apparently agreed to pay for in November 1966, their dollar share would be $87,110 or 45% to 35% of the total cost depending upon the final design estimate used. The suburban cost would be from $103,700 to $160,960 again dependent upon final design.

The proposed agreement as submitted by Minneapolis on January 11, 1968 establishes the Minneapolis share as 22% of the suburban trunk and outlet. Although neither the language of this agreement nor the Huston October 17, 1967 estimate are clear as to whether or not the suburban and Minneapolis York Avenue District (including the West 38th Street District) outlets are to be combined as was originally planned, it is assumed that they would be, although not necessarily in a single pipe. The $190,810 to $248,070 estimate range given in the foregoing paragraph is on the basis of such a combined system. If this is the case, then the Minneapolis share as measured in both dollars and percentage is actually lower than that suggested in the November 1966 formula. Twenty-two percent (22%) of $190,810 and $248,070 is $41,978 and $54,575 respectively. (The original Minneapolis dollar share was $87,110).

If, however, the 22% is to applied only against the cost of a separate suburban trunk and outlet (including the West 38th Street District of Minneapolis), then the Minneapolis contribution has been increased since November 1966, although nominally. The estimated cost range of a separate system is as follows:

	EDINA ESTIMATE	HUSTON ESTIMATE
Suburban & W.38th St. District trunk	$123,210	$146,970
Suburban & W.38th St. District outlet	44,800	44,800
Total	$168,010	$191,770
22% of Total	$ 36,962	$ 42,189
Minneapolis Outlet (York Avenue)	$ 56,300	$ 56,300
Total Minneapolis Cost	$ 93,262	$ 98,489
Suburban Share	$131,048	$149,581
Grand Total Construction Cost	$224,310	$248,070
Minneapolis % of Grand Total	42%	40%

The 22% formula when applied to a separate system concept thus increases the Minneapolis dollar cost by $6,000 or $11,000; i.e. Minneapolis would spend $6,000 or $11,000 more than they would have to spend if either the handling of the suburban flows were not involved or if the November 1966 formula for cost sharing was used. For this $6,000 - $11,000 Minneapolis would receive the following:

a) Fulfillment of their share of the responsibility and obligation of restoring the natural drainage pattern interrupted by streets and lots developed or permitted by Minneapolis between France Avenue and Lake Calhoun.

b) 2,310 feet of new storm sewer to replace the old systems along West 38th Street and West 39th Street between Abbott and France Avenues.

c) Fulfillment of a commitment made to Morningside that storm waters from that community could be discharged into the Minneapolis system at no cost.

Considering the extent of these benefits, it is difficult to agree that the $6,000 - $11,000 in some way also reimburses Edina and St. Louis Park for their inability to assess the Minneapolis Water Department property for the $10,000 to $25,000 in storm sewer assessments that would normally be assigned to that property.

I would suggest the following modifications to the proposed suburban-Minneapolis cost sharing agreement:

1. The suburbs should not concede their right to contest the apparent inability to assess the Minneapolis Water Department property for storm sewer benefit.

2. The suburbs should secure the right to review and approve before contracts are awarded all plans and contract documents relating to systems all or part of which are to be paid for by the suburbs.

3. If any part of the system in which the suburbs are financially participating is assisted by a Federal Grant, the suburbs should be credited with a proportionate share of the grant.

4. If the 22% formula is to be used, the project limits in Minneapolis should be more clearly defined. For instance, no part of the York Avenue District trunk or Calhoun outlet project should be included. In the event the York Avenue District and the Suburban and West 38th Street District Calhoun outlets are combined, the York Avenue District should be charged for its share of combined cost on the basis of what its separate cost would have been.

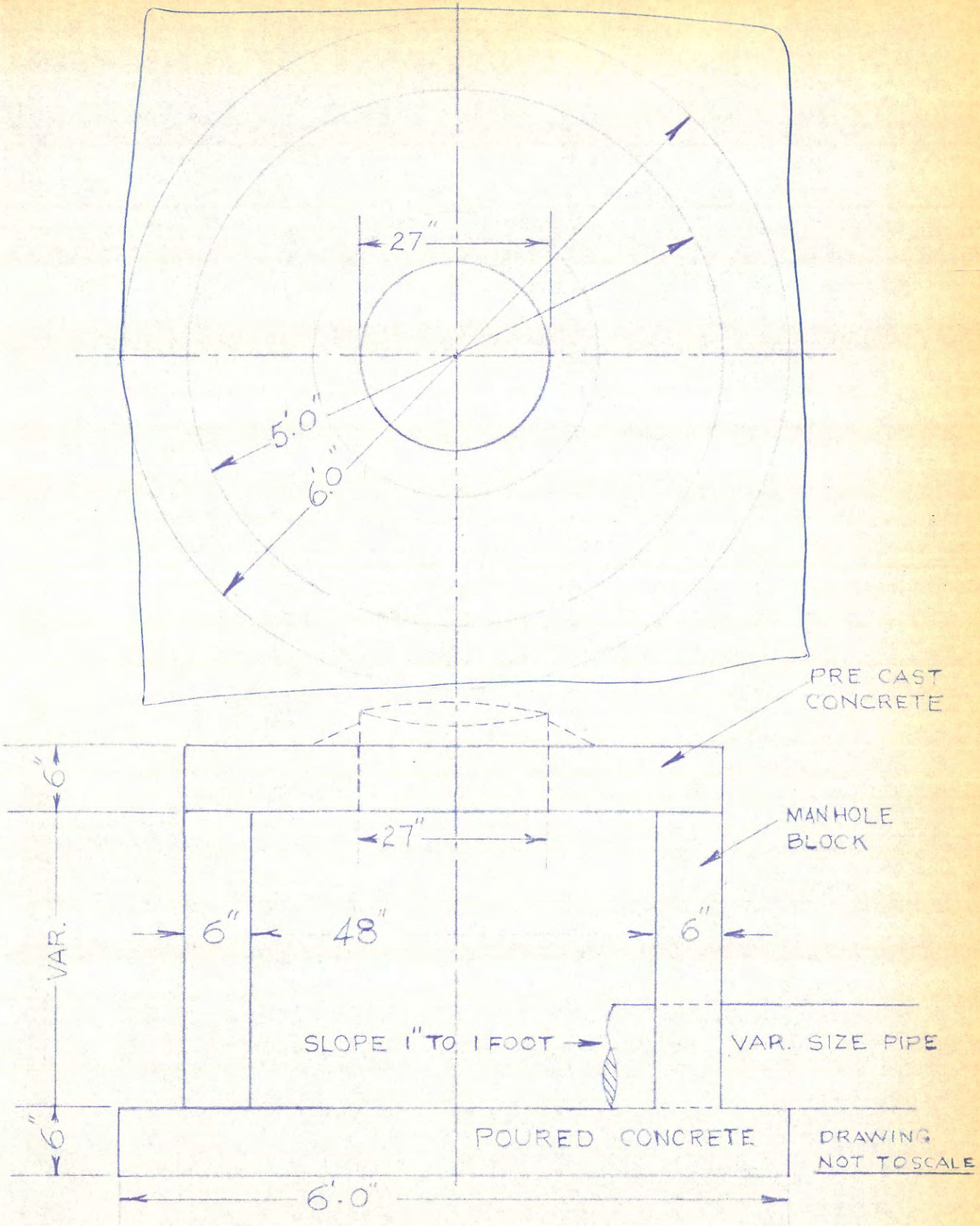
5. In the event the Minneapolis trunk is not completed prior to the construction of the Edina - St. Louis Park trunk, the suburban municipalities or their contractors should have the right to discharge waters into the existing Minneapolis system without cost.

6. Please advise Minneapolis that their neighbor Morningside left town in September 1966 and hasn't been heard from since. The forwarding address is Village of Edina.

Thank you.

George C. Hite
Director of Public Works and Engineering

GCH:rh



CATCH BASIN DETAIL USING CONCRETE BLOCKS FOR SHALLOW C. B.'s AND LARGE PIPE

VILLAGE OF EDINA
MINNESOTA
ENGINEERING JAN. 30 '68

1-30-68
CRM

Questions for Joe Zikan:

1. What do you want for Street surfacing in St. L. Park — They'll let us know
2. Discuss Casting & MH Details w/ them. Can we get by w/ Edina's specs. — We'll ask Edina to send one if needed. Look the same
3. Utilities — we arrange to meet them
4. C.B. Elev. & Locations — we set, they'll check
5. Do they want any [redacted] spot. School Site? — Armstrom says yes
6. Discuss stub to Glenhurst Court. reason for location. They'll try to get easement.

Edina SS Morningside 1/24/68

JOHN:

WE SHOULD HAVE AVAILABLE

1. ROUGH EST. OF MAJOR LINE ITEMS FOR PUBLICATION (ADV. FOR BIDS) FEB 2, 1968.

2. PLANS & SPECS AVAILABLE FOR CONSTRUCTORS TO PICK UP HERE FEB 13. FEB 12 IS A HOLIDAY FOR US.

3. PLANS, SPECS, & PROPOSAL FOR OUR REVIEW AS SOON AS POSSIBLE.

OPEN BIDS MARCH 1, 1968

PLANS LOOK ~~GOOD~~ EXCELLENT.

SEE YOU WED. JAN 31, 1968.

FRED

Edina 55 Morningside

1-75-68
Thurs. P.M.

John,

Ray Drake called to see if we had a map of Morn. Area where they had penciled on direction of gutter flow during a rain storm. He said it was a 1/4 Section Map on cardboard.

I said I was pretty sure we didn't have it but would mention it to you.

He said something else had come up. They don't feel justified in sharing the cost of the 40th St. line w/ St. Louis Park. I said that I'd ask you if this was considered previously when you figured out the 1/3 - 2/3 split. He said he'd call you, but you may want to call him yourself.

Larry

P.S. I made an appointment for myself w/ Joe Zikan for Tues AM @ 9:30. Joe said Monday was a bad day.

Morningside
LRM 1-15-68

Call to Clair Armstrong - of Armstrong - Schlichting etc. Architects for the School near 41st & Natchez

Office Far Side of High School
Supt. Office
10:00 Tues. A.M. meet with
Supt. of Schools & Clair Armstrong
at Supt. office.

Have sketch of Alternates prepared.

1-16-68

Met w/ Clair Armstrong
in his office. He said they had
no objection to moving the
easement & felt that the farther it
was from the school the better
He didn't feel it was there concern.
I said we'd been instructed by
Mr. Folland to talk it over with ~~him~~ them.
I said we'd write a letter to Mr.
Folland saying we'd discussed it
with them and include our recommendations
I said we'd send them a copy of letter.

JRM.