

COUNCIL WORKSHOP ITEM

| | |
|---------------------|--|
| ITEM: | Letters of Agreement for Geotechnical Engineering Services for various Capital Projects |
| DATE: | March 22, 2002 |
| PREPARED BY: | Brian Parks, Senior Engineer, Public Works John J. Bajor, Jr., Director of Public Works |
| PURPOSE: | Place approval of letters of agreement on the April 16, 2002 Active Agenda. |

DISCUSSION:

Attached please find Claude H. Hurley Company's proposals for the projects listed below.

The Claude H. Hurley Company and the Village have an annual master agreement in place. The unit prices in the master agreement are used to determine total cost for individual projects. It is therefore recommended that approval be given to these proposals with the not-to-exceed total cost of services being \$29,315.50.

2001 & 2002 Water Main Improvements – Projects 04-01 & 04-02

The services will include the inspection of trench backfill, base course, testing and evaluation of borrow materials, inspection of portland cement concrete ready-mix plants and asphalt batch supply plants. Testing and evaluation of design mixes and materials, field and laboratory testing, inspection of portland cement concrete, and asphalt concrete are also part of the services proposed.

Project #04-01 not-to-exceed cost of \$4,636.00 (Funding in account 481.551.0000.5807)

Project #04-02 not-to-exceed cost of \$6,370.00 (Funding in account 481.551.0000.5807)

Fairview Avenue Traffic Signal Interconnect – Project #12-00

The services will include the inspecting of signal base footing excavations and pier drill holes. Visual examination, testing and evaluation of profile materials. Inspection of portland cement concrete (PCC) ready-mix and supply plants. Inspection of reinforcing steel placement, bars size and position. Field and laboratory testing with reports documenting the results.

Project #12-00 not-to-exceed cost of \$4,944.00 (Funding in account 220.527.0000.5807)

Roadway Improvements, Valley View Estates

The pavement in this subdivision, located west of Main Street and south of 68th Street, has deteriorated rapidly. To plan for future maintenance/rehabilitation, we need subsurface information. The Geotechnical Study will include the review of the results of previous Hurley Company Studies in the vicinity. A field reconnaissance and pavement inspection to determine the type of profile materials in the area and the condition of the existing pavement. Making cores and borings and evaluating the conditions encountered and preparing an engineering report.

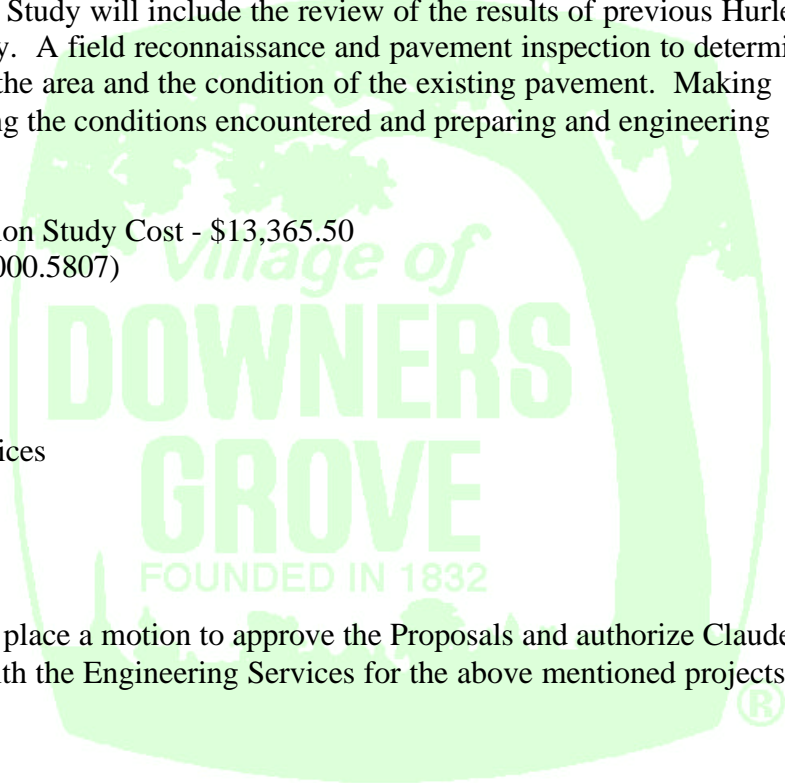
Rehabilitation and Reconstruction Study Cost - \$13,365.50
(Funding in account 220.522.0000.5807)

ATTACHMENT:

Proposals for Engineering Services

RECOMMENDATION:

Staff recommends that Council place a motion to approve the Proposals and authorize Claude H. Hurley Company to proceed with the Engineering Services for the above mentioned projects on the 4-16-02 Active Agenda.



CLAUDE H. HURLEY COMPANY

Consulting Geotechnical Engineers

175 WEST FIRST STREET
ELMHURST, ILLINOIS 60126
PHONE (630) 279-7762
FAX (630) 279-7795

February 15, 2002

**Public Works Engineering Division
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, Illinois 60515**

**Attention: Mr. Brian Parks
Senior Engineer**

**Re: 2001 Watermain Improvements
Downers Grove, Illinois
HPN4-214-I**

Gentlemen:

The following for your review and processing is the Claude H. Hurley Company Proposal to provide construction materials engineering services for the above referenced project.

Scope of Services

The following scope of services is based on the Village's February 6, 2002 Request for this Proposal, review of the Project Plans and Specifications, and previous experience on similar projects. The services will include:

1. Inspection of trench backfill and base course construction. Testing and evaluation of borrow materials.
2. Inspection of portland cement concrete (PCC) ready-mix plants, asphaltic concrete (AC) batch plants, and supply plants. Testing and evaluation of design mixes and materials.
3. Field and laboratory testing and inspection of production PCC and AC.
4. Inspection and testing of other materials and evaluation of procedures and criteria as required.

The work is to be done during Spring 2002 and Summer 2002. The scope of work will include an estimated 11 man-day involvement by our staff during various stages of the anticipated construction period.

CLAUDE H. HURLEY COMPANY

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Payment for Services

The fee for the services will be determined by extension of the actual units of work and conventional unit fees for engineering services, field operations, and laboratory tests shown in the Professional Services Agreement of April 3, 2001 with the Village and Hurley Company. Estimated quantities of work are provided for reference in the following.

| | Estimated Number | Unit Fee | Estimated Amount |
|---|-----------------------------|--|-----------------------------|
| Engineering Services | | | |
| Engineering Technician III, Per Hour | 2.0 | \$ 35.00 | \$ 70.00 |
| Engineering Technician V, Per Hour | - | 40.00 | - |
| Engineering Technician VII, Per Hour | 72.0 | 50.00 | 3,600.00 |
| Engineer VI, Per Hour | 8.0 | 50.00 | 400.00 |
| Engineer VIII, Per Hour | 2.0 | 70.00 | <u>140.00</u> |
| | | Estimated Fee: Engineering Services | \$4,210.00 |
| Laboratory Tests | | | |
| PCC Cylinder Compression Test, Each | 12 | 8.00 | 96.00 |
| Moisture-Density Relationship Test Per ASTM D-698, Each | 1 | 110.00 | 110.00 |
| Grain Size Analysis, Each | 2 | 35.00 | 70.00 |
| Atterberg Limit Determination, Each | - | 60.00 | - |
| AC Specimen Preparation and Testing, including Marshall Stability Test and Extraction Test, Per Test | - | 165.00 | - |
| AC Specimen Extraction Test, Per Test | 3 | 50.00 | 150.00 |
| Analysis of AC Core, including preparation of specimen, density determination, and thickness measurement, Per Test | - | 20.00 | <u>-</u> |
| | | Estimated Fee: Laboratory Tests | \$ 426.00 |
| | | Estimated Total Fee | \$4,636.00 |

Terms and Conditions

All terms and conditions of the April 3, 2001 Professional Services Agreement will apply to this Agreement.

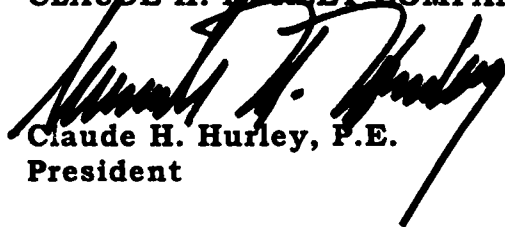
CLAUDE H. HURLEY COMPANY

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Thank you for the opportunity to be of continuing service. Please indicate your acceptance of this Proposal by signing this document in the space provided below and return one copy for our files.

Very truly yours,

CLAUDE H. HURLEY COMPANY



**Claude H. Hurley, P.E.
President**

CHH:nw

ACCEPTED BY:

Date _____, 2002

**VILLAGE OF DOWNERS GROVE
Downers Grove, Illinois**

By _____

cc: B. Parks (3)

CLAUDE H. HURLEY COMPANY

Consulting Geotechnical Engineers

175 WEST FIRST STREET
ELMHURST, ILLINOIS 60126
PHONE (630) 279-7762
FAX (630) 279-7795

February 15, 2002

Public Works Engineering Division
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, Illinois 60515

Attention: Mr. Scott A. Vasko
Staff Engineer

Re: 2002 Watermain Improvements
Downers Grove, Illinois
HPN4-215-I

Gentlemen:

The following for your review and processing is the Claude H. Hurley Company Proposal to provide construction materials engineering services for the above referenced project.

Scope of Services

The following scope of services is based on the Village's February 5, 2002 Request for this Proposal, review of the Project Plans and Specifications, and previous experience on similar projects. The services will include:

1. Inspection of trench backfill and base course construction. Testing and evaluation of borrow materials.
2. Inspection of portland cement concrete (PCC) ready-mix plants, asphaltic concrete (AC) batch plants, and supply plants. Testing and evaluation of design mixes and materials.
3. Field and laboratory testing and inspection of production PCC and AC.
4. Inspection and testing of other materials and evaluation of procedures and criteria as required.

The work is to be done during Spring 2002 and Summer 2002. The scope of work will include an estimated 14 man-day involvement by our staff during various stages of the anticipated construction period.

Payment for Services

The fee for the services will be determined by extension of the actual units of work and conventional unit fees for engineering services, field operations, and laboratory tests shown in our Professional Services Agreement of April 3, 2001 with the Village. Estimated quantities of work are provided for reference in the following.

| | Estimated Number | Unit Fee | Estimated Amount |
|--|-----------------------------|---------------------|-----------------------------|
| Engineering Services | | | |
| Engineering Technician III, Per Hour | - | \$ 35.00 | \$ - |
| Engineering Technician V, Per Hour | - | 40.00 | - |
| Engineering Technician VII, Per Hour | 104.0 | 50.00 | 5,200.00 |
| Engineer VI, Per Hour | 8.0 | 50.00 | 400.00 |
| Engineer VIII, Per Hour | 2.0 | 70.00 | <u>140.00</u> |
| Estimated Fee: Engineering Services | | | \$5,740.00 |

Laboratory Tests

| | | | |
|---|---|--------|-------------------------|
| Moisture-Density Relationship Test Per ASTM D-698, Each | 1 | 110.00 | 110.00 |
| Grain Size Analysis, Each | 2 | 35.00 | 70.00 |
| Atterberg Limit Determination, Each | - | 60.00 | - |
| AC Specimen Preparation and Testing, including Marshall Stability Test and Extraction Test, Per Test | - | 165.00 | - |
| AC Specimen Extraction Test, Per Test | 9 | 50.00 | 450.00 |
| Analysis of AC Core, including preparation of specimen, density determination, and thickness measurement, Per Test | - | 20.00 | <u>-</u> |
| Estimated Fee: Laboratory Tests | | | <u>\$ 630.00</u> |

Estimated Total Fee \$6,370.00

Terms and Conditions

All terms and conditions of the April 3, 2001 Professional Services Agreement will apply to this Agreement.

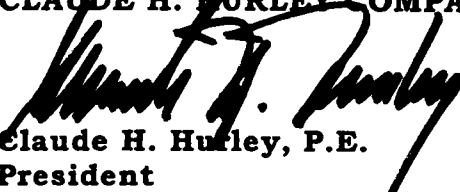
CLAUDE H. HURLEY COMPANY

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Thank you for the opportunity to be of continuing service. Please indicate your acceptance of this Proposal by signing this document in the space provided below and return one copy for our files.

Very truly yours,

CLAUDE H. HURLEY COMPANY


Claude H. Hurley, P.E.
President

CHH:nw

ACCEPTED BY:

Date _____, 2002

VILLAGE OF DOWNERS GROVE
Downers Grove, Illinois

By _____

cc: S. Vasko (3)

CLAUDE H. HURLEY COMPANY

Consulting Geotechnical Engineers

175 WEST FIRST STREET
ELMHURST, ILLINOIS 60126
PHONE (630) 279-7762
FAX (630) 279-7795

February 26, 2002

Public Works Engineering Division
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, Illinois 60515

Attention: Mr. Brian Parks
Senior Engineer

Re: Village of Downers Grove
Fairview Avenue Traffic Signal Interconnect/Modernization
Downers Grove, Illinois
HPN4-219-I

Gentlemen:

The following for your review and processing is the Claude H. Hurley Company Proposal to provide construction materials engineering services for the above referenced project.

Scope of Services

The following scope of services is based on the Village's February 20, 2002 Request for this Proposal, review of the Project Plans and Specifications, and previous experience on similar projects. The services will include:

1. Inspecting signal base footing excavations and pier drill holes. Visual examination, testing and evaluation of profile materials for adequate bearing properties.
2. Inspecting portland cement concrete (PCC) ready-mix plants and supply plants. Testing and evaluating design mixes and materials.
3. Inspecting reinforcing steel placement. Measuring bar size and position. Inspecting condition.
4. Field and laboratory testing, inspecting and monitoring production PCC.
5. Inspecting and testing other materials and evaluating procedures and criteria as required.

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6. Preparing reports to document the results of the program.

The work is to be done during Summer 2002. The scope of work will include an estimated eleven man-day involvement by the Hurley Company Staff during various stages of the anticipated construction period.

Payment for Services

The fee for the services will be determined by extension of the actual units of work and conventional unit fees for engineering services, field operations, and laboratory tests shown in the Professional Services Agreement of April 3, 2001 with the Village and Hurley Company. Estimated quantities of work are provided for reference in the following.

| | Estimated Number | Unit Fee | Estimated Amount |
|---|-----------------------------|---------------------|-----------------------------|
| Engineering Services | | | |
| Engineering Technician III, Per Hour | 8.0 | \$ 35.00 | \$ 280.00 |
| Engineering Technician V, Per Hour | - | 40.00 | - |
| Engineering Technician VII, Per Hour | 60.0 | 50.00 | 3,000.00 |
| Engineering Technician VIII, Per Hour | 10.0 | 55.00 | 550.00 |
| Engineer VI, Per Hour | 8.0 | 50.00 | 400.00 |
| Engineer VIII, Per Hour | 2.0 | 70.00 | <u>140.00</u> |
| Estimated Fee: Engineering Services | | | \$4,370.00 |
| Laboratory Tests | | | |
| PCC Cylinder Compression Test, Each | 48 | 8.00 | 384.00 |
| Moisture-Density Relationship Test Per ASTM D-698, Each | - | 110.00 | - |
| Grain Size Analysis, Each | 2 | 35.00 | 70.00 |
| Grain Size Determination, including hydrometer and fine sieve analysis, Each | 2 | 60.00 | 120.00 |
| Atterberg Limit Determination, Each | - | 60.00 | <u>-</u> |
| Estimated Fee: Laboratory Tests | | | <u>\$ 574.00</u> |
| Estimated Total Fee | | | \$4,944.00 |

Terms and Conditions

All terms and conditions of the April 3, 2001 Professional Services Agreement will apply to this Agreement.

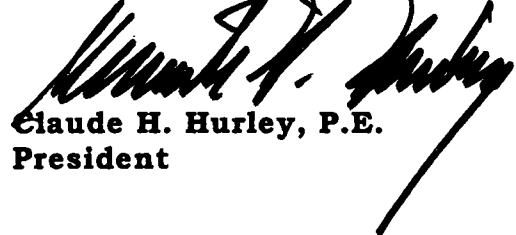
CLAUDE H. HURLEY COMPANY

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Thank you for the opportunity to be of continuing service. Please indicate your acceptance of this Proposal by signing this document in the space provided below and return one copy for our files.

Very truly yours,

CLAUDE H. HURLEY COMPANY



**Claude H. Hurley, P.E.
President**

CHH:nw

cc: B. Parks (3)

ACCEPTED BY:

Date _____, 2002

**VILLAGE OF DOWNERS GROVE
Downers Grove, Illinois**

By _____

CLAUDE H. HURLEY COMPANY

Consulting Geotechnical Engineers

175 WEST FIRST STREET
ELMHURST, ILLINOIS 60126
PHONE (630) 279-7762
FAX (630) 279-7795

February 26, 2002

**Public Works Engineering Division
Village of Downers Grove
5101 Walnut Avenue
Downers Grove, Illinois 60515**

**Attention: Mr. Scott L. Barr
Project Engineer**

**Re: Roadway Improvements
Valley View Estates
Downers Grove, Illinois
HPN4-216-D**

Gentlemen:

The following for your review and processing is the Claude H. Hurley Company Proposal to make a Geotechnical Study for the above referenced project.

Scope of Investigation

The following scope of study is based on the Village of Downers Grove February 11, 2002 Request for This Proposal and previous experience on similar projects. The Study will include:

1. Review of the results of Previous Hurley Company Studies in the vicinity,
2. A geologic reconnaissance of the site and immediate vicinity,
Inspection of the existing pavement for type and condition,
3. Making cores and borings and conducting field and laboratory tests,
4. Making an evaluation of the conditions encountered, and
5. Preparing an engineering report.

Field reconnaissance and pavement inspection, exploration and tests will be made to determine the type, deposition and variability of the profile materials in the area and type, thickness and condition of the existing pavement. The estimated drilling program will include eight Test Borings and 26 Pavement Cores-Subgrade Soil Probes. The borings will be extended to a depth of ten feet and the probes to 3.0 ft for an estimated total drilling and coring footage of 158.0 ft.

The results of a preliminary inspection of the roadways indicate pavement and curb failure by overstress under the working loads, isolated areas of poor surface and subsurface drainage, and normal wear and tear. The cores will be made to investigate and evaluate the pavement section and shallow-depth soils for material type, thickness and condition. The borings will be made if the results of the Pavement and Support Soil Study indicate the existence of problem soils and the need for pavement reconstruction. Borings will not be made if rehabilitation is indicated by the Pavement and Support Soil Study.

The location and depth of the cores and borings are based on an estimate of the conditions. The actual extent of exploration will be determined as initial data are obtained and evaluated.

The pavement materials will be sampled in 4-in. dia cores and the subgrade soils probed by split-barrel sampler. Standard split-barrel and thin-wall tube samples will be obtained in the borings. Field tests will include visual classification of the profile materials, standard penetration tests and hand penetrometer readings. The groundwater level will be measured in the open boreholes during and subsequent to the drilling operations.

Laboratory tests will be made on samples obtained in the borings and cores for engineering classification and evaluation of the strength, compressibility and drainage characteristics of the materials.

The findings of the data review, site reconnaissance and pavement inspection, field exploration and field-laboratory testing will be evaluated. An engineering report will be prepared. The report will document the field and laboratory studies and present recommendations for geotechnical design criteria and construction.

The Hurley Company will furnish all personnel, material and equipment necessary to complete field exploration and laboratory testing and prepare the engineering report.

Payment for Services

The fee for the services will be determined by extension of the actual units of work and conventional unit fees for engineering services, field operations and laboratory tests shown in the Hurley Company Professional Services Agreement of April 3, 2001 with the Village. Estimated quantities of work are provided for reference in the following.

| | <u>Estimated Number</u> | <u>Unit Fee</u> | <u>Estimated Amount</u> |
|--|-----------------------------|---------------------|-----------------------------|
| 1. Field Operations | | | |
| a. Mobilization and Demobilization of Drilling Personnel and Equipment. | | | |
| 1) Motorized Core Rig, Each | 1.0 | \$190.00 | \$ 190.00 |
| 2) Conventional Drill Rig, Each | (1.0) | 190.00 | (190.00) |

CLAUDE H. HURLEY COMPANY

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| | <u>Estimated Number</u> | <u>Unit Fee</u> | <u>Estimated Amount</u> |
|---|-----------------------------|---------------------|-----------------------------|
| 1. Field Operations (Continued) | | | |
| b. Soil Drilling, including standard penetration tests at 2.5 ft interval and standard split-barrel and thin-wall tube soil sampling. | | | |
| 1) Less than 60 bpf and less than 50 ft, Per Foot | (80.0) | \$ 9.25 | \$ (740.00) |
| 2) 60 bpf or greater and less than 50 ft, Per Foot | - | 11.25 | - |
| c. Pavement Coring, including 4-in. dia AC core, hand auger probe of subgrade soil to depth of 2.0 ft and auger sample, Per Hour | 20.0 | 120.00 | 2400.00 |
| 2. Laboratory Tests | | | |
| a. Visual Classification Test, including hand penetrometer reading, Per Test | 78 (40) | 1.75 1.75 | 136.50 (70.00) |
| b. Natural Moisture Content Test, Per Test | 52 (32) | 3.25 3.25 | 169.00 (104.00) |
| c. Grain Size Determination, including washed sieve analysis, Per Test | - | 35.00 | - |
| d. Grain Size Determination, including hydrometer and fine sieve analyses, Per Test | 8 (1) | 60.00 60.00 | 480.00 (60.00) |
| e. Atterberg Limit Test Liquid Limit and Plastic Limit, Per Test | 8 (1) | 60.00 60.00 | 480.00 (60.00) |
| f. Unconfined Compression Test Uncontrolled Strain, Per Test | 52 (32) | 6.50 6.50 | 338.00 (208.00) |
| 3. Technical and Engineering Services | | | |
| a. Planning | | | |
| 1) Engineer VIII, Per Hour | 2.0 | 70.00 | 140.00 |
| 2) Engineer VI, Per Hour | 6.0 | 50.00 | 300.00 |

CLAUDE H. HURLEY COMPANY

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| | <u>Estimated Number</u> | <u>Unit Fee</u> | <u>Estimated Amount</u> |
|--|-----------------------------|---------------------|-----------------------------|
| 3. Technical and Engineering Services (Continued) | | | |
| b. Layout-Utility Clearance-Cleanup | | | |
| 1) Engineer VI, Per Hour | 8.0 | \$50.00 | \$ 400.00 |
| | (2.0) | 50.00 | (100.00) |
| 2) Engineering Technician V, Per Hour | 12.0 | 40.00 | 480.00 |
| | (2.0) | 40.00 | (80.00) |
| c. Drilling and Coring Supervision | | | |
| 1) Engineer VIII, Per Hour | 2.0 | 70.00 | 140.00 |
| 2) Engineer VI, Per Hour | 20.0 | 50.00 | 1,000.00 |
| | (7.0) | 50.00 | (350.00) |
| d. Report-Consultation-Meetings | | | |
| 1) Engineer VIII, Per Hour | 4.0 | 70.00 | 280.00 |
| | (2.0) | 70.00 | (140.00) |
| 2) Engineer VII, Per Hour | 24.0 | 60.00 | 1,440.00 |
| | (8.0) | 60.00 | (480.00) |
| 3) Engineer VI, Per Hour | 12.0 | 50.00 | 600.00 |
| | (4.0) | 50.00 | (200.00) |
| 4) Draftsman VIII, Per Hour | 24.0 | 57.50 | 1,380.00 |
| | (4.0) | 57.50 | (230.00) |

Rehabilitation Study - Estimated Amount \$10,353.50

Rehabilitation and Reconstruction Study - Estimated Amount \$13,365.50

Terms and Conditions

All terms and conditions of the Professional Services Agreement of April 3, 2001 will apply to this Agreement.

Thank you for the opportunity to be of continuing service. Please indicate your acceptance of this Proposal by signing this document in the space provided below and return one copy for our files.


CHH:nw
fc&cc: S. Barr (3)

Very truly yours,

ACCEPTED BY:

CLAUDE H. HURLEY COMPANY

Date _____, 2002



Claude H. Hurley, P.E.
Engineering Director

VILLAGE OF DOWNERS GROVE
Downers Grove, Illinois

By _____
Assistant Director of Public Works-Engineering