

**AN ORDINANCE APPROVING AN AGREEMENT  
FOR ENGINEERING CONSULTING SERVICES**

WHEREAS, the Village of Chatham has provided to a number of electrical engineering firms a request for proposal regarding such firms providing electrical engineering consulting services to the Village;

WHEREAS, after review of a number of proposals submitted by various firms, the Public Works and Utilities Committee of the Village Board has recommended the selection of Harza Engineering Company as the electric consulting engineers for the Village;

WHEREAS, Harza has tendered an agreement for engineering consulting services to the Village, which the parties have substantially negotiated but which will require the negotiation of some final items.

*NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF CHATHAM, SANGAMON COUNTY, ILLINOIS, AS FOLLOWS:*

**SECTION 1:** That certain agreement for engineering consulting services attached hereto as Exhibit A is approved subject to such minor emendations not changing the general tenor thereof as may be approved by the Village President after consultation with the Public Works and Utilities Committee and the Village Attorney. Such emendations shall relate to completion of the blank pages on page 1 of the agreement to reflect the matters contained in a letter from Harza Engineering Company to the Village dated July 5, 1991, a copy of which is attached hereto as Exhibit B; filling in other blanks contained

on pages 3 and 4 of said agreement; and further negotiation of the provisions of the contract relating to interest in the event of default.

**SECTION 2:** The contract with Harza Engineering Company shall have a not-to-exceed price of \$107,375.00 as reflected in the July 5, 1991, letter attached hereto as Exhibit B.

**SECTION 3:** The President is authorized and directed to sign and the Clerk to attest such amended contract on behalf of the Village upon its final negotiation in accordance with Section 1 hereof.

**SECTION 4:** The proper officers and employees of the Village are authorized and directed to carry out said contract upon its execution by the President.

**SECTION 5:** This Ordinance is effective immediately.

PASSED this 27<sup>th</sup> day of August, 1991.

Carl P. Oblinger  
CARL OBLINGER, VILLAGE PRESIDENT

ATTEST:

Cassandra Cole  
Deputy Village Clerk

AYES: 6  
NAYS: 0  
PASSED: 8/27/91  
APPROVED: 8/27/91  
ABSENT: 0

AGREEMENT FOR ENGINEERING  
CONSULTING SERVICES

THIS AGREEMENT is made and entered into this \_\_\_\_\_  
day of \_\_\_\_\_ 19\_\_\_\_, by and between HARZA ENGINEERING  
COMPANY, a Delaware corporation ("Harza"), and \_\_\_\_\_  
\_\_\_\_\_  
("Client").

Client wishes \_\_\_\_\_  
\_\_\_\_\_  
located at \_\_\_\_\_;  
and to retain the services of an engineering consultant for  
the \_\_\_\_\_  
\_\_\_\_\_ (the  
"Project"); and

Harza is willing to perform services for the compensation  
and in accordance with the terms and conditions described in  
this Agreement;

NOW, THEREFORE, in consideration of the mutual benefits  
which will result to the parties in carrying out the terms of  
this Agreement, it is agreed as follows:

1. STATEMENT OF SERVICES

Harza agrees to perform engineering consultant services as defined in the Scope of Services, attached as Appendix I and made a part of this Agreement.

2. COMPENSATION

Harza shall be paid according to the Compensation Schedule, attached as Appendix II and made a part of this Agreement.

3. PAYMENT

Payment to Harza shall be made by Client upon receipt of Harza's monthly invoice. If payment is by check, payment should be messengered or mailed by most expeditious method to:

Harza Engineering Company  
150 South Wacker Drive  
Chicago, Illinois 60606  
U.S.A.

If payment is by wire transfer, payment should be wired to:

The Northern Trust Company  
50 South LaSalle Street  
Chicago, Illinois 60675  
U.S.A. - Bank Routing Number - 071-000-152

For the account of:  
Harza Engineering Company  
Account Number - 301-80764

If Client identifies an item in the invoice which appears to be in error, Client may withhold the amount in question, pay the balance of the invoiced amount and provide Harza with a statement concerning the questioned item. Alternately, Client may pay the full amount of the invoiced amount, provide

a statement of the questioned item, and adjustment, if appropriate, will be made in the next subsequent invoice submitted by Harza.

If Client fails to make any payment due Harza for services and expenses, including amounts wrongly withheld, within thirty (30) days after submittal of Harza's invoices, the amounts due Harza shall include a charge at the greater of the applicable maximum legal rate of interest or 2.0% per month from such thirtieth day; and in addition Harza may, after giving seven (7) days' written notice to Client, suspend services under this Agreement until it has been paid in full the amounts due Harza for services rendered and expenses incurred in Client's behalf. During the period of any such suspension, the parties shall have the same rights and obligations as are provided by Subsection 7 (c) of this Agreement.

4. TIME SCHEDULE

The services required by this Agreement can be accomplished within approximately \_\_\_\_ calendar months, beginning on the day this Agreement is executed. It is recognized by the parties that this estimated period of time is contingent upon factors beyond the reasonable control of either party. Both parties will take all reasonable steps to adhere to the time schedule. In no event are either this time estimate or any cost estimates to be considered a guarantee.

5. TERM OF AGREEMENT

Unless extended by Amendment, this Agreement shall terminate \_\_\_\_\_, 19\_\_\_\_, which is approximately \_\_\_\_\_ months after services are expected to be completed.

6. ADDITIONAL SERVICES

Harza shall supply such additional services as requested by Client and agreed to by Harza in connection with the Project. Separate proposals shall be submitted by Harza for furnishing these additional services. Compensation for such additional services shall be negotiated by the parties and included in this Agreement by a written Amendment.

7. GENERAL TERMS AND CONDITIONS

(a) Relationship Between Harza and Client

Harza shall serve as Client's professional engineering consultant in those phases of the Project to which this Agreement applies. The relationship is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture, agency or partnership with the other.

(b) Responsibility of the Harza

Harza will render engineering services in accordance with generally accepted and currently recognized engineering practices, procedures and

principles. Harza makes no other warranty, either express or implied, with respect to its services.

Notwithstanding anything to the contrary which may be contained in this Agreement or any other material incorporated herein by reference, or in any agreement between Client and any other party concerning the Project, Harza shall not have control or be in charge of and shall not be responsible for the means, methods, techniques, sequences or procedures of construction, or the safety, safety precautions or programs of the Client, the construction contractor, other contractors or subcontractors performing any of the work or services on the Project. Nor shall Harza be responsible for the acts or omissions of Client, or for the failure of Client, any architect, engineer, consultant, contractor or subcontractor to carry out their respective responsibilities in accordance with the Project documents, this Agreement or any other agreement concerning the Project. Any provision which purports to amend this provision shall be without effect unless it contains a reference that the content of this Subsection 7(b) is expressly amended for the purposes described in such amendment and is signed by both of the parties.

(c) Suspension of Services

Client may, at any time, by written order to Harza (identified as a Suspension of Services Order) direct Harza to stop all, or any part, of the services required to be performed by Harza under this Agreement. Upon receipt of such an order, Harza shall immediately comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the services covered by the order. Client, however, shall pay all costs associated with suspension including all costs necessary to maintain continuity and the staff required to resume the services upon expiration of the suspension of services order. Harza will not be obligated to provide the same personnel employed prior to suspension when the services are resumed, in the event the period of any suspension exceeds thirty (30) days. Client will reimburse Harza for the costs of such suspension and remobilization.

(d) Termination

This Agreement may be terminated by either party upon thirty (30) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. This Agreement



may be terminated by Client, under the same terms, whenever Client shall determine that termination is in its best interests. Cost of termination, including salaries, overhead and fee, incurred by Harza either before or after the termination date shall be reimbursed by Client.

(e) Documents Property of Client

Drawings, specifications, reports, and any other documents prepared by Harza in connection with any or all of the services furnished hereunder shall be the property of Client. Harza shall have the right to retain copies of all documents and drawings for its files.

(f) Reuse of Documents

All documents including drawings and specifications furnished by Harza pursuant to this Agreement are intended for use on the Project only. They should not be used by Client or others on extensions of the Project or any other project without specific written verification or adaptation by Harza. Any reuse without written verification or adaptation by Harza shall be at Client's sole risk, and Client shall indemnify and hold harmless Harza from all claims, damages, losses, and expenses including

attorney's fees arising out of or resulting from such unauthorized reuse.

(g) Compliance With Laws

The extent they apply to its employees or its services, Harza shall comply with all applicable United States, state, territorial and commonwealth laws, including ordinances of any political subdivisions or agencies of the United States, any such state, territory, or commonwealth thereof.

(h) Indemnification

Harza shall indemnify and hold harmless Client, up to the amount of the compensation paid by Client to Harza for its services rendered under this Agreement (excluding costs and subcontract expenses) from Client's loss or expense, including reasonable attorneys' fees, for claims for personal injury (including death) or property damage arising out of the sole negligent act, error or omission of Harza.

Client shall indemnify and hold harmless Harza, up to same amount that Harza undertakes to indemnify Client under this Agreement, from Harza's loss or expense, including reasonable attorneys' fees, for claims for personal injuries (including death) or property damage arising out of the sole negligent act, error or omission of Client.

In the event of joint or concurrent negligence of Harza and Client, each shall bear that portion of the loss or expense that it share of the joint or concurrent negligence bears to the total negligence (including that of third parties) which caused the personal injury or property damage.

In no event shall Harza at any time be liable for special, incidental or consequential damages, including but not limited to loss of profits, revenue, use of capital, claims of customers, cost of purchased or replacement power, or for any other loss of any nature, whether based on contract, tort, negligence, strict liability or otherwise, by reason of the services rendered under this Agreement.

The trustees, directors, officers, employees, agents and consultants of the respective parties are deemed to be included within the term "Harza" and "Client" for purposes of this subsection.

(i) Hazardous Substances

In the event the performance of services under this Agreement by Harza results in the discovery, location, disturbance, release, disposal or escape of hazardous or contaminating substances on or from the premises that constitute the project site, Client will defend, indemnify and hold Harza its

directors, officers, employees and subcontractors harmless from and against all claims, damages, losses and expense, including direct and indirect or consequential damages and attorneys' fees. This indemnification shall be in excess of the indemnification limits provided in Subsection 7(h) of this Agreement.

(j) Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois.

(k) Legal Proceedings

In the event Harza's employees are at any time required by the Client to provide testimony, answer interrogatories or otherwise provide information ("testimony") in preparation for or at a trial, hearing, proceeding or inquiry ("proceeding") arising out of the services that are the subject of this Agreement, where Harza is not a party to such proceeding, the Client will compensate Harza for its services pursuant to Harza's Schedule of Charges then in effect and reimburse Harza for all related direct costs incurred in connection with providing such services. This provision shall be of no effect if the parties have agreed in a separate agreement

or in an amendment to this Agreement to terms which specifically supersede this provision, nor shall this provision apply in the event the Client engages Harza to provide expert testimony or litigation support, which services shall be the subject of a separate agreement or amendment to this Agreement.

(l) Successors and Assigns

The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party shall assign this Agreement in whole or in part without the prior written approval of the other.

(m) Waiver of Contract Breach

The waiver of one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof, and shall be limited to the particular instance, shall not operate or be deemed to waive any future breaches of this Agreement and shall not be construed to be a waiver of any provision, except for the particular instance.

(n) Entire Understanding of Agreement

This Agreement represents and incorporates the entire understanding of the parties hereto, and each

party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and Harza hereby agree that any purchase orders, invoices, confirmations, acknowledgements or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of this Agreement shall be null, void, and without effect to the extent they conflict with the terms of this Agreement.

(o) Amendment

This Agreement shall not be subject to amendment unless another instrument is executed by duly authorized representatives of each of the parties and entitled "Amendment to Agreement."

(p) Severability of Invalid Provisions

If any provisions of the Agreement shall be held to contravene or be invalid under the laws of any particular state, country or jurisdiction where used, such contravention shall not invalidate the entire Agreement, but it shall be construed as if not containing the particular provisions or provisions held to be valid in the particular state,

country or jurisdiction and the rights or obligations of the parties hereto shall be construed and enforced accordingly.

(q) Force Majeure

Neither Client nor Harza shall be liable for any fault or delay caused by any contingency beyond their control including but not limited to acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.

(r) Subcontracts

Harza may subcontract portions of the services, but each subcontractor must be approved by Client in writing.

(s) Access and Permits

Client shall arrange for Harza to enter upon public and private property and obtain all necessary approvals and permits required from all governmental authorities having jurisdiction over the Project. Client shall pay costs (including Harza's employee salaries, overhead, and fee) incident to any effort incurred by Harza assisting Client in such access, permits or approvals, if Harza performs such services.

(t) Designation of Authorized Representatives

Each party shall designate one or more persons to act with authority in its behalf in respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the other party.

(u) Notices

Any notice, order or designation required to be given by either party hereto shall be in writing, and unless receipt of such notice is expressly required by the terms hereof, shall be deemed to be effectively served when deposited in the mails with sufficient first class postage affixed, and addressed to the party to whom such notice is directed at such party's place of business, which in the case of Engineer shall be:

Harza Engineering Company  
150 South Wacker Drive  
Chicago, Illinois 60606-4288

(Attention:                    )

and in case of the Client shall be:



or such other address either party shall hereafter furnish to the other party by written notice is herein provided.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date indicated above.

HARZA ENGINEERING COMPANY

(INSERT CLIENT'S NAME HERE)

By: \_\_\_\_\_

By: \_\_\_\_\_

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**HARZA**ENGINEERING COMPANY *Consulting Engineers*

July 5, 1991

Mr. Del McCord  
Village Administrator  
Village of Chatham  
116 E. Mulberry  
Chatham, IL 62629

Subject: Electric Distribution System Study

Dear Mr. McCord:

We are writing to confirm that our May 29 proposal is being revised to cover the points requested by Mr. David Hilt in his July 1 phone call to our Mr. Peter Donalek.

#### REQUESTED REVISIONS

##### Major Task 1 - Inventory of Existing Facilities:

- Delete preparation of Pole Top Configuration Drawings.
- Provide CAD mapping computer file compatibility. We will prepare maps using the Harza Intergraph system, and plan to provide paper copies of the required maps as well as a computer file on disk. The format of the computer file can be DXF which is compatible with AUTOCAD. We can also provide the files in other formats as required. Enclosed is a description of the available file formats.

Our proposal includes the cost of providing one set of map files in a specific format. If more than one file format were required, then there would be an additional charge.

We understand that the Village plans to have the maps updated from time to time. Harza would appreciate the opportunity to submit a price quote for the mapping updates.

- Revise OSMOS Subcontract and Pole Inspection Subtask.

We understand that it will not be necessary to carry out the inspection and condition evaluation of existing wood poles. Consequently, we have deleted this from our proposal. OSMOS has revised their price quote to carry out just the pole size, classing and pole numbering subtask.

Mr. Del McCord  
July 5, 1991  
Page 2

**Major Task 4 - Substation.**

We revised the scope of this task to include a cost comparison between a plan to add a third transformer and an alternative plan to replace two existing transformers with two new transformers of larger capacity.

**Major Task 5 - Replacement Schedule.**

We can refine the table for the replacement schedule to state replacement cost in terms of a dollar cost for material and a separate item for labor-hours to install replacement equipment.

**Major Task 6 - Overhead / Underground Conversion.**

This task is no longer required and is deleted from the proposal.

Optional Task 1A will not be required, and is deleted.

**REVISED COST PROPOSAL**

The impact of the requested modifications on our cost proposal is to reduce overall total cost. The revised cost summary is as follows:

<u>TASK</u>	<u>ENGINEERING</u>	<u>DIRECTS</u>	<u>TOTAL</u>
1	\$34,375.00	\$25,200.00	\$59,575.00
2	\$12,300.00	\$ 3,700.00	\$16,000.00
3	\$ 4,500.00	\$ 1,000.00	\$ 5,500.00
4	\$ 8,700.00	\$ 700.00	\$ 9,400.00
5	\$ 6,300.00	\$ 750.00	\$ 7,050.00
6	---	---	---
7	\$ 5,200.00	\$ 400.00	\$ 5,600.00
8	\$ 3,600.00	\$ 650.00	\$ 4,250.00
TOTAL	\$74,975.00	\$32,400.00	\$107,375.00

ORDINANCE CERTIFICATE

STATE OF ILLINOIS     )  
                                  )    SS.  
COUNTY OF SANGAMON    )

I, the undersigned, do hereby certify that I am the duly qualified and acting Village Clerk of the Village of Chatham, Sangamon County, Illinois.

I do further certify that the ordinance attached hereto is a full, true, and exact copy of Ordinance No. 91-40, adopted by the President and Board of Trustees of said Village on the 27<sup>th</sup> day of August, 1991, said Ordinance being entitled:

**AN ORDINANCE APPROVING AN AGREEMENT  
FOR ENGINEERING CONSULTING SERVICES**

I do further certify that prior to the making of this certificate, the said Ordinance was spread at length upon the permanent records of said Village, where it now appears and remains.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said Village this 27<sup>th</sup> day of August, 1991.

Ca. Sandra Cole  
Deputy Village Clerk

PREPARED BY:  
  
John M. Myers  
PFEIFER & KELTY, P.C.  
1300 South Eighth Street  
P. O. Box 1858  
Springfield, IL 62705-1858  
Telephone: 217/528-5604

**AGREEMENT FOR ENGINEERING  
CONSULTING SERVICES**

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of September 1991, by and between HARZA ENGINEERING COMPANY, a Delaware corporation ("Harza"), and VILLAGE OF CHATHAM, ILLINOIS ("Client").

Client wishes to have an engineering inventory and analysis of its electric distribution system, located at Chatham, Illinois; and to retain the services of an engineering consultant for the Electric Distribution System Inventory and Report (the "Project"); and

Harza is willing to perform services for the compensation and in accordance with the terms and conditions described in this Agreement;

NOW, THEREFORE, in consideration of the mutual benefits which will result to the parties in carrying out the terms of this Agreement, it is agreed as follows:

1. STATEMENT OF SERVICES

Harza agrees to perform engineering consultant services as defined in the Scope of Services, attached as Appendix I and made a part of this Agreement.

2. COMPENSATION

Harza shall be paid according to the Compensation Schedule, attached as Appendix II and made a part of this Agreement.

3. PAYMENT

Payment to Harza shall be made by Client upon receipt of Harza's monthly invoice. If payment is by check, payment should be messengered or mailed by most expeditious method to:

Harza Engineering Company  
Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606-6392

If payment is by wire transfer, payment should be wired to:

The Northern Trust Company  
50 South LaSalle Street  
Chicago, Illinois 60675  
Bank Routing Number - 071-000-152

For the account of:  
Harza Engineering Company  
Account Number - 301-80764

If Client identifies an item in the invoice which appears to be in error, Client may withhold the amount in question, pay the balance of the invoiced amount and provide Harza with a statement concerning the questioned item. Alternately, Client may pay the full amount of the invoiced amount, provide a statement of the questioned item, and adjustment, if appropriate, will be made in the next subsequent invoice submitted by Harza.

If Client fails to make any payment due Harza for services and expenses, including amounts wrongly withheld, within thirty (30) days after submittal of Harza's invoices, the amounts due Harza shall include a charge at the greater of the applicable maximum legal rate of interest or 1.0% per month from such thirtieth day; and in addition Harza may, after giving seven (7) days' written notice to Client, suspend services under this Agreement until it has been paid in full the amounts due Harza for services rendered and expenses incurred in Client's behalf. During the period of any such suspension, the parties shall have the same rights and obligations as are provided by Subsection 7 (c) of this Agreement.

#### 4. TIME SCHEDULE

The services required by this Agreement can be accomplished within approximately six (6) calendar months, beginning on the day this Agreement is executed. It is recognized by the parties that this estimated period of time is contingent upon factors beyond the reasonable control of either party. Both parties will take all reasonable steps to adhere to the time schedule. In no event are either this time estimate or any cost estimates to rehabilitate the electric distribution system are to be considered a guarantee.

#### 5. TERM OF AGREEMENT

Unless extended by Amendment, this Agreement shall terminate September, 1992, which is approximately six (6) months after services are expected to be completed.

#### 6. ADDITIONAL SERVICES

Harza shall supply such additional services as requested by Client and agreed to by Harza in connection with the Project. Separate proposals shall be submitted by Harza for furnishing these additional services. Compensation for such additional services shall be negotiated by the parties and included in this Agreement by a written Amendment.

## 7. GENERAL TERMS AND CONDITIONS

### (a) Relationship Between Harza and Client

Harza shall serve as Client's professional engineering consultant in those phases of the Project to which this Agreement applies. The relationship is that of a buyer and seller of professional services and it is understood that the parties have not entered into any joint venture, agency or partnership with the other.

### (b) Responsibility of the Harza

Harza will render engineering services in accordance with generally accepted and currently recognized engineering practices, procedures and principles. Harza makes no other warranty, either express or implied, with respect to its services.

Notwithstanding anything to the contrary which may be contained in this Agreement or any other material incorporated herein by reference, or in any agreement between Client and any other party concerning the Project, Harza shall not have control or be in charge of and shall not be responsible for the means, methods, techniques, sequences or procedures of construction, or the safety, safety precautions or programs of the Client, the construction contractor, other contractors or subcontractors performing any of the work or services on the Project. Nor shall Harza be responsible for the acts or omissions of Client, or for the failure of



Client, any architect, engineer, consultant, contractor or subcontractor to carry out their respective responsibilities in accordance with the Project documents, this Agreement or any other agreement concerning the Project. Any provision which purports to amend this provision shall be without effect unless it contains a reference that the content of this Subsection 7(b) is expressly amended for the purposes described in such amendment and is signed by both of the parties.

(c) Suspension of Services

Client may, at any time, by written order to Harza (identified as a Suspension of Services Order) direct Harza to stop all, or any part, of the services required to be performed by Harza under this Agreement. Upon receipt of such an order, Harza shall immediately comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the services covered by the order. Client, however, shall pay all costs associated with suspension including all costs necessary to maintain continuity and the staff required to resume the services upon expiration of the suspension of services order. Harza will not be obligated to provide the same personnel employed prior to suspension when the services are resumed, in the event the period of any suspension exceeds thirty (30) days. Client will reimburse Harza for the costs of such suspension and remobilization.

(d) Termination

This Agreement may be terminated by either party upon thirty (30) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. This Agreement may be terminated by Client, under the same terms, whenever Client shall determine that termination is in its best interests. Cost of termination, including salaries, overhead and fee, incurred by Harza either before or after the termination date shall be reimbursed by Client.

(e) Documents Property of Client

Drawings, specifications, reports, and any other documents prepared by Harza in connection with any or all of the services furnished hereunder shall be the property of Client. Harza shall have the right to retain copies of all documents and drawings for its files.

(f) Reuse of Documents

All documents including drawings and specifications furnished by Harza pursuant to this Agreement are intended for use on the Project only. They should not be used by Client or others on extensions of the Project or any other project without specific written verification or adaptation by Harza. Any reuse without

written verification or adaptation by Harza shall be at Client's sole risk, and Client shall indemnify and hold harmless Harza from all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from such unauthorized reuse.

Any computer disks provided by Harza to Client may develop errors because of hardware and software combinations differing from those used by Harza in preparing the disks, other failure of Client's or third parties' hardware, or the limited life expectancy and integrity of the disk and its contents for which Harza bears no responsibility.

(g) Compliance With Laws

To the extent they apply to its employees or its services, Harza shall comply with all applicable United States, state, territorial and commonwealth laws, including ordinances of any political subdivisions or agencies of the United States, any such state, territory, or commonwealth thereof.

(h) Indemnification

Harza shall indemnify and hold harmless Client, up to the amount of the compensation paid by Client to Harza for its services rendered under this Agreement (excluding costs and subcontract expenses) from Client's loss or expense,

including reasonable attorneys' fees, for claims for personal injury (including death) or property damage arising out of the sole negligent act, error or omission of Harza.

Client shall indemnify and hold harmless Harza, up to same amount that Harza undertakes to indemnify Client under this Agreement, from Harza's loss or expense, including reasonable attorneys' fees, for claims for personal injuries (including death) or property damage arising out of the sole negligent act, error or omission of Client.

In the event of joint or concurrent negligence of Harza and Client, each shall bear that portion of the loss or expense that its share of the joint or concurrent negligence bears to the total negligence (including that of third parties) which caused the personal injury or property damage.

In no event shall Harza at any time be liable for special, incidental or consequential damages, including but not limited to loss of profits, revenue, use of capital, claims of customers, cost of purchased or replacement power, or for any other loss of any nature, whether based on contract, tort, negligence, strict liability or otherwise, by reason of the services rendered under this Agreement.

The trustees, directors, officers, employees, agents and consultants of the respective parties are deemed to be included within the term "Harza" and "Client" for purposes of this subsection.

(i) Hazardous Substances

In the event the performance of services under this Agreement by Harza results in the discovery, location, disturbance, release, disposal or escape of hazardous or contaminating substances on, from or through the premises that constitute the project site, Client will defend, indemnify and hold Harza, its directors, officers, employees and subcontractors harmless from and against any and all resulting claims, damages, losses and expense, including direct and indirect or consequential damages and attorneys' fees. This indemnification shall be in excess of the indemnification limits provided in Subsection 7(h) of this Agreement.

(j) Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the State of Illinois.

(k) Legal Proceedings

In the event Harza's employees are at any time required by the Client to provide testimony, answer interrogatories or otherwise provide information ("testimony") in preparation for or at a trial, hearing, proceeding or inquiry ("proceeding") arising out of the services that are the subject of this Agreement, where Harza is not a party to such proceeding, the Client will compensate Harza for its services pursuant to Harza's Schedule of Charges then in effect and reimburse Harza for all related direct costs incurred in connection with providing such services. This provision shall be of no effect if the parties have agreed in a separate agreement or in an amendment to this Agreement to terms which specifically supersede this provision, nor shall this provision apply in the event the Client engages Harza to provide expert testimony or litigation support, which services shall be the subject of a separate agreement or amendment to this Agreement.

(l) Successors and Assigns

The terms of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns; provided, however, that neither party shall assign this Agreement in whole or in part without the prior written approval of the other.

(m) Waiver of Contract Breach

The waiver of one party of any breach of this Agreement or the failure of one party to enforce at any time, or for any period of time, any of the provisions hereof, and shall be limited to the particular instance, shall not operate or be deemed to waive any future breaches of this Agreement and shall not be construed to be a waiver of any provision, except for the particular instance.

(n) Entire Understanding of Agreement

This Agreement represents and incorporates the entire understanding of the parties hereto, and each party acknowledges that there are no warranties, representations, covenants or understandings of any kind, matter or description whatsoever, made by either party to the other except as expressly set forth herein. Client and Harza hereby agree that any purchase orders, invoices, confirmations, acknowledgements or other similar documents executed or delivered with respect to the subject matter hereof that conflict with the terms of this Agreement shall be null, void, and without effect to the extent they conflict with the terms of this Agreement.

(o) Amendment

This Agreement shall not be subject to amendment unless another instrument is executed by duly authorized representatives of each of the parties and entitled "Amendment to Agreement."

(p) Severability of Invalid Provisions

If any provisions of the Agreement shall be held to contravene or be invalid under the laws of any particular state, country or jurisdiction where used, such contravention shall not invalidate the entire Agreement, but it shall be construed as if not containing the particular provisions or provisions held to be invalid in the particular state, country or jurisdiction and the rights or obligations of the parties hereto shall be construed and enforced accordingly.

(q) Force Majeure

Neither Client nor Harza shall be liable for any fault or delay caused by any contingency beyond their control including but not limited to acts of God, wars, strikes, walkouts, fires, natural calamities, or demands or requirements of governmental agencies.



(r) Subcontracts

Harza may subcontract portions of the services, but each subcontractor must be approved by Client in writing.

(s) Access and Permits

Client shall arrange for Harza to enter upon public and private property and obtain all necessary approvals and permits required from all governmental authorities having jurisdiction over the Project. Client shall pay costs (including Harza's employee salaries, overhead, and fee) incident to any effort incurred by Harza assisting Client in such access, permits or approvals, if Harza performs such services.

(t) Designation of Authorized Representatives

Each party shall designate one or more persons to act with authority in its behalf in respect to appropriate aspects of the Project. The persons designated shall review and respond promptly to all communications received from the other party.

(u) Notices

Any notice, order or designation required to be given by either party hereto shall be in writing, and unless receipt of such notice is expressly required by the terms hereof, shall be deemed to be effectively served when deposited in the mails with sufficient first class postage affixed, and addressed to the party to whom such notice is directed at such party's place of business, which in the case of Harza shall be:

Harza Engineering Company  
Sears Tower  
233 South Wacker Drive  
Chicago, Illinois 60606-6392  
Attention: Wayne K. Kennel Project Manager

and in case of the Client shall be:

Mr. Del McCord  
Village Administrator  
Village of Chatham  
116 E. Mulberry  
Chatham, Illinois 62629

or such other address either party shall hereafter furnish to the other party by written notice is herein provided.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date indicated above.

HARZA ENGINEERING COMPANY

By Richard L. Meyer

VICE PRESIDENT

(Title)

Date: SEP 17 1991

VILLAGE OF CHATHAM

By: Carl Oberger, President

Attest: Pat Sch...

Village Clerk

(Title)

Date: 9-23-91

**VILLAGE OF CHATHAM  
ELECTRIC DISTRIBUTION SYSTEM INVENTORY AND REPORT**

**APPENDIX I  
SCOPE OF SERVICES**

**Task 1 - Inventory of Existing Facilities**

Existing maps of the Village and new subdivisions will be obtained from the Village and Sangamon county recorder. A digitized USGS 1:24,000 Chatham Quad map will be purchased from Geographic Information Systems of Houston. The Quad map will be in a digital format and will be used with the Harza CAD system to create index maps.

Using Harza's CAD system, the paper cadastral maps provided by the Village and County will be converted into standard base maps. Base maps will show curb line of the streets, highways and railroads. The base maps will be used by Harza field personnel for the purpose of recording field data, and for the required electric facilities maps, and pole location maps.

**Overhead System.** For the overhead portion of the 12.47 kV feeders, Harza field engineers will record feeder routes and identify location of distribution transformers. They will note the following information for the 12.47 kV portion:

- Conductor size and type.
- KVA and connected phase(s) for distribution transformers.
- Fuse size and type.
- Reclosures, sectionalizer and disconnect switch.
- Capacitor banks, KVAR rating and locations.
- Voltage regulator name plate data.
- Surge arrester and note any other equipment.
- Power system phasing.

Along with the tabulation of the physical and equipment information, a single line diagram will be prepared. This will indicate conductor size, aluminum or copper, number of phases, ground or neutral conductor and pertinent electrical equipment.

**Secondary Voltage.** The number of residences supplied from each distribution transformer will be estimated and noted.

**Pole Inventory, and Location.** Pole location and numbering will be done by Osmose under Harza subcontract. The Harza field engineer will coordinate the schedule of the Osmose work. A separate set of maps will be prepared to record the following data about the wood poles:

- Location
- Pole size and class
- Inventory number

During the pole inventory a number tag will be attached to each pole.

**Conductor Size.** Overhead conductor sizes will be determined from historical records or a wire caliper connected to a hot stick.

**Limitation.** The inventory of the overhead portion will be made from a vehicle with assistance from Village staff. The Harza field engineer will not go on foot to gather data at each property except where he believes it required.

**Underground Facilities.** Inventory of the underground system will be made using electronic cable tracing and locator equipment. Where required a high frequency signal will be introduced on the 12.47 kV cable at a convenient point. The field engineer will use a signal tracing device, and trace the route of the 12.47 kV cable from the riser pole to the pad mounted transformer and along the route. This survey will be limited to the public way and accessible areas. The field engineer will not enter private or fenced property unless accompanied by a member of the Village staff or access permits have been obtained by the Village. The cable route will be recorded on base maps along with necessary equipment nameplate data. A single line diagram will be prepared from the data collected by the field engineer, and from maps.

**Assistance from the Village.** The Village will make available a responsible person who will accompany the field engineer while on the data collection task. As needed the Village

representative will provide access required to connect instruments and to allow the engineer to visually inspect the facilities and to obtain name plate data. The Village will advise residents by way of a news letter, and other means, that an inventory of electrical facilities is being undertaken.

It is estimated that the inventory task will take approximately 6 weeks and that various Village personnel would be involved 50% of the time. This time will include the Line Superintendent and a bucket truck to measure the diameter of overhead conductors, and as an escort for the mapping of underground system.

General assistance of Village personnel will be required to provide historical data files for the following:

- Billing data in Kwhr by consumer category.
- Monthly bulk power consumption at the main substation including peak-demand data.
- Planning/zoning maps including all known projected additions such as new subdivisions. These maps will be used to prepare load projections.
- Record drawing depicted by single line diagram, the physical layout and equipment specifications for existing substation.

**Maps.** The data obtained by field engineer will be transferred to base maps and single line diagrams using Harza's CADD work stations. A separate set of maps will be prepared showing wood pole location and data.

**Single line diagrams** of each feeder will be prepared. The output of the analytical effort will also be used to create the required schematic diagrams of the 12.47 kV feeders. See also the discussion of single line diagram under Major Task 2 - Analytical Studies.

**Drawing and Map List:** The following maps and drawings will be provided:

Base maps without electric facilities

Electric Facilities:

1 Index Map

10 Facilities Maps Scale 1" = 400'

Pole Maps:

1 Index Map

40 Pole Location Maps Scale 1" = 200'

Schematic Diagrams

East Side Feeder 3 drawings

West Side Feeder 3 drawings

Maps will be prepared using the Harza Intergraph System, and Harza will provide, in addition to hard copies, a computer file on diskette, of the maps in one of the following formats to be selected by the Village:

- Intergraph microstation DGN files.
- Autocad drawing files.
- DXF files.

**Staffing.** The data gathering and electrical engineering aspects of this task will be carried out by Harza's Project Manager Wayne Kennel with assistance from Project Engineer Peter Donalek, T&D Engineer Mike Irvin, and Substation Engineer Bipin Shah. Mapping and CAD services would be provided by CAD operators under the supervision of Tony Klyczek. Additional technical and nontechnical support would be provided as needed to implement the project.

**Schedule.** The calendar time required for the completion of field data collection and map preparation will take about eight weeks.

## **Task 2 - Analytical Studies**

Required analytical calculations will be made using load flow and associated computer software. A data base required for the computer feeder models will be prepared from the feeder conductor data and equipment characteristics collected in Major Task 1. Conductor lengths will be taken from the electric facilities base maps.

Load data will be required and will be estimated based on connected load and typical meter billing data supplied by the Village. Load profiles for various classes of consumers will be developed. Data on real and reactive power as well as feeder voltage will be obtained from metering in the substation. As required the Village will assist in the collection of these data. Estimated load growth factors will be determined in consultation with Village representative.

Conductor overloads will be determined from load flow calculations. Voltage regulation problems will also be identified from load flow calculations. The load flow cases will be made for peak load, light load, and projected future load conditions on the existing system. Load power factors will also be a variable in these calculations. The operation of the feeder voltage regulators and shunt capacitor banks will also be modeled.

In discussion with Village personnel, alternative plans for feeder reconnection, looping and sectionalizing will be developed. These plans will take into account practicable right-of-way and route selection problems as well as possible subdivision development and annexations. A set of alternative feeder development options will be established.

Using agreed upon expansion plans, the feeder analysis will be carried out to determine the impact on existing feeders. Options for expansion that result in unrealistic results will be discarded. The result of the analytical effort will be a feeder upgrade and expansion program that can accommodate expected growth and development.

The final plan will include a set of recommendations for new feeders, upgrading of conductors, extension of feeders and laterals to provide switching and sectionalizing options, and capacitor bank installations.

Fixed capacitors may be recommended at points on feeders where low power factor and inadequate reactive power supply exists; such locations are at industrial loads such as refrigeration plants and pump stations. Switched capacitors may be applied to deal with chronic low power factor and poor reactive power supply due to seasonal loads such as residential air conditioning. In such cases capacitor bank switching would be programmed to recognize that power factor and voltage justified switching of capacitors.

**Single Line Diagrams and Load Flow Data Base.** Load flow calculations will be made for each phase of each feeder, and will be made using the EDSA feeder analysis software. The EDSA program will provide a base schematic diagram as a DXF file. The DXF file will be used in our Intergraph Micro station, and the basic schematic diagram created



from the EDSA data will be supplemented with necessary symbols and field data to provide the required feeder schematic diagrams.

### **Staffing**

Collection of field data, load characteristics, plans for expansion and development of alternatives for use in feeder analysis will be the responsibility of Harza's Project Manager. Preparation of feeder electrical characteristics and computer models, and required feeder calculations would be carried out by Harza's Project Engineer with assistance from Computer Application Engineer, Greg Magsaysay.

**Schedule.** This task will be started when the data from the field become available, and will require approximately eight weeks.

### **Task 3 - Protective Device Coordination**

The protective device coordination study will be carried out for near term system improvement. This will be done using the data base model of the feeders as developed in Major Task 2 Analytical Studies.

Fault calculations will be made for the 12.47 kV feeders and laterals. Single line to ground faults will be calculated. Where required three phase faults will also be calculated.

Each Feeder will be studied to determine location, size and type of fusing required. Selected fuses will be coordinated with main substation circuit breaker relay settings as well as reclosures.

Harza will use the EDSA Protective Device Coordination software for this task. This software includes a significant data base for fuse and circuit breakers and makes the coordination task efficient.

**Staffing.** This task will be carried Harza by our Project Engineer and Computer Applications Engineer. Plotting of protective device coordination curves will be done on CAD.

**Schedule.** This task will begin as soon as the feeder data base of the System Analytical task is ready, and will require about four weeks.

## Task 4 - Substation

The existing substation design with two transformers will be reviewed, and suggestions for future improvements will be made. The installed transformer capacity will be analyzed from the point of view of meeting existing and projected load. The date for a third transformer will be determined, based on load growth projections and contingency criteria.

The historical billing data and load information will be used to generate a load vs. year graph and would be included as part of the substation task. The number of years to be graphed would depend on availability and reliability of data for previous years.

Load data collected for study of feeders and upgrade options will also be used to provide an estimate of load growth as seen from the substation. A calculation of load demand on the transformers under normal and contingency conditions will be made. This will take into account the maximum rating of the transformers, and will be used to determine the date at which a third transformer will be required.

An estimate of probable cost will be provided for a plan for the addition of the third transformer and an alternative plan for replacement of two existing transformers with two new transformers of larger capacity. The estimate will cover the cost of transformers, as well as associated physical and electrical equipment. Preparation of the estimate will require that the Village provide record drawings for the existing substation.

Existing maintenance records will be reviewed. These should include transformer oil tests and maintenance activities as well as relay and switching activities for the substations and transformers. Suggestions for improved system operation will be made.

**Staffing.** Necessary data for this activity will be collected by our Project Manager during Task 1. Harza's Project Engineer will be responsible for the preparation of the report section. Cost estimates and substation engineering will be provided by Harza's Substation Engineer B. Shah.

**Schedule.** This task will require approximately a four week period.

## **Task 5 - Replacement Schedule**

The inventory list of the existing system will include a tabulation of plant items together with an estimate of remaining useful life. The inventory of plant items will be obtained from the digitized maps. The plant item data base will be presented to the Village on a computer disk. A schedule will be developed for retirement and replacement of facilities as they reach the end of this estimated useful life.

An estimate of annual capital requirement needed to make necessary replacements will be prepared. The estimate will be for the installed cost of replacement of distribution plant and facilities. The replacement cost schedule will be presented in a spread sheet form and will be organized by category of equipment with replacement costs estimated year by year. Estimated replacement costs will be given as manhours per unit, cost of labor and cost of material.

Village annual financial reports for prior years will be reviewed in conjunction with this task. If appropriate these reports may provide information on past level of financial expenditure for the electric distribution system.

**Staffing.** This task will be carried out by Harza's Project Engineer with assistance from our Substation and T&D engineers.

**Schedule.** About five weeks will be required to complete this task.

## **Task 6 - Load Factor and Demand Management**

The subject of load factor and demand side management will be analyzed. The nature of the existing residential and commercial loads will be studied. Various demand side management techniques (see reference 1) will be reviewed with respect to applicability to the Village. As appropriate, EPRI reports and other industry reports on the subject will also be used in this task.

Existing electrical rates, in use by the Village, will be reviewed. Suggestions will be made for the scope of a future rate and revenue study. The rate and revenue study is not part of this assignment.

**Staffing.** This task will be assigned to Harza's Project Engineer, and Project Manager.

**Schedule.** This activity will take about three weeks and will follow preparation of the Replacement Schedule.

**Reference.** (1) Proceedings of the IEEE; Special Issue on Demand Side Management for Electric Utilities edited by C. W. Gellings; vol. 73, no. 10; October 1985.

### **Task 7 - Safety Code Review**

National Electrical Safety Code aspects will be reviewed and comments made for corrective actions. National Electrical Safety Code violations observed by Harza shall be reported to the Village Administration immediately upon discovery.

Conductor clearance to ground at roads and other crossing points will be reviewed.

This activity will be limited to the extent that data collected during Task 1 provides information for review.

**Staffing.** The review of NESC and clearances will be assigned to our T&D engineers Andy Angelos and Mike Irvin. The Project Manager will also contribute to this task.

**Schedule.** A four week period is scheduled for this task.

### **Report Preparation and Deliverables**

All major tasks include preparation of text, recommendations, inventory data, tables and exhibits required for inclusion in the required report. The report will be presented to the Village together with maps and schematic diagrams on reproducible mylar. Ten paper copies of the report, maps and drawings will be supplied. One copy of digitized map files.

**VILLAGE OF CHATHAM  
ELECTRIC DISTRIBUTION SYSTEM INVENTORY AND REPORT**

**APPENDIX II  
COMPENSATION SCHEDULE**

For the consulting engineering services covered by this Agreement, Harza Engineering Company shall be paid on a basis of time and materials with a not-to-exceed total cost of \$107,375. Payments will be made based upon Harza's monthly invoices reflecting estimated percent of completion of services for specific activities and tasks, with actual manhours and expenses.

Monthly billings are estimated to be:

Sept.	\$ 14,900
Oct.	\$ 33,800
Nov.	\$ 22,900
Dec.	\$ 11,900
Jan.	\$ 18,300
Feb.	<u>\$ 5,575</u>
Total	\$107,375

Harza billings includes \$7,500.00 in direct cost for subcontractor Osmose to class, locate and number wood poles and is based on 1,000 poles.

A. Compensation

For the consulting engineering services covered by the accompanying Agreement For Engineering Consulting Services, Harza Engineering shall be paid monthly the sum of:

1. Billed Rates for Time of Personnel, and
2. Direct Costs

B. Definitions:

1. Billed Rates for time of personnel include actual salaries paid to personnel for time directly engaged on the services, overhead costs, and fee.

2. Direct Costs - Costs which are directly applicable to the work such as transportation and subsistence expenses on travel in the interest of the work, relocation expense for field assignments, long distance telephone, telegraph and telex expenses, reproductions, special insurance, Harza (in-house) and outside electronic computer rental costs, usage of computer programs and subcontracts, including model and laboratory testing, aerial and ground surveying, subsurface exploration, and special consultants.



ENGINEERING COMPANY Consulting Engineers

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September 17, 1991

Federal Express

Mr. John Myers  
Long, Morris, Myers & Rabin  
1300 S. 8th Street  
Springfield, IL 62703

Subject: Village of Chatham

Reference: Engineering Services Contract  
for Electric Distribution System Study

Dear Mr. Myers:

We are enclosing two signed original copies of our engineering services contract.

The contract has been revised to incorporate the agreed to minor changes to the contractual terms and conditions as well as to the Scope of Services.

Please add the date on page 1 when the contracts are signed by the Village of Chatham and return one original for our records.

In addition, we need a certified copy of the Minutes of Meeting including the ordinance whereby the Village Board of Trustees authorized the Village of Chatham to execute our engineering services contract.

Thanks for your support and cooperation in executing this contract, and we look forward to working with the Village of Chatham.

Very truly yours,



W. K. Kennel, P.E.  
Project Manager

WKK/srh

Enc: As noted