MICHIGAN
OCZM GRANT #NA-80-AA-H-CZ157
SUBTASK 4D-7.5

PROJECT NO LRP-410

CITY OF TAWAS CITY - GATEWAY PARK

SB
482
.M52
T39
1982

Financial Assistance Provided by
Coastal Zone Management Act
Administered by the Office of
Coastal Zone Management
National Oceanic and Atmospheric Adm.
And by the Michigan DNR

CITY OF TAWAS CITY
COASTAL MANAGEMENT AGREEMENT NO. LRP - 410
GATEWAY PARK ENGINEERING AND INTERPRETIVE EXHIBITS
FINANCIAL ASSISTANCE PROVIDED BY
COASTAL ZONE MANAGEMENT ACT
ADMINISTERED BY THE OFFICE OF
COASTAL ZONE MANAGEMENT
NATIONAL OCEANIC AND ATMOSPHERIC ADM.
AND BY THE MICHIGAN DNR
DIVISION OF LAND RESOURCE PROGRAMS

SB482.M52T39 1982 c.1

I. Purpose

The City of Tawas City, with financial assistance from the Michigan Coastal Management Program and the Land and Water Conservation Fund, is establishing its new Gateway Park, including Nothern Lake Huron Interpretive Center. Work under the two grants were coordinated and partly concurrent. The LAWCON grant and a wide range of local support provide separately for additional site improvements and for anticipated construction of the interpretive center building. In conjunction with these activities, this subgrant covers (a) final design and engineering for the park and the center building, including preparation of bid documents; (b) construction inspection for the park elements completed in fiscal year 1982; and (c) construction and temporary installation of a system of interpretive displays and exhibits for the park.

II. Personnel/Consultants

This project was under the overall supervision of the city manager of Tawas City. Design and engineering, and related assistance was provided to the city by qualified staff of the firm of Beckett, Raeder, Rankin, Inc. The firm engaged an expert consulting hydrological engineer to assure adequacy of shore protection. An interpretive planning consultant was involved in preparation of exhibits.

III. Tasks

With the help of its consultants and subcontractors, the city accomplished the following tasks under this subgrant:

TASK A. Refining Park Plan and Preparing Contract Documents

1. The City consulted all interested parties through before-and-after meetings, revising previously approved schematic park plans, accurately identifying all elements and materials to be constructed in the initial construction project. This step included a detailed, itemized cost estimate.

US Department of Commerce
NOAA Coastal Services Center Library
2234 South Hobson Avenue
Charleston, SC 29405-2413

2. All drawings and specifications necessary for bidding and construction, covering general development, site preparation, grading and drainage, utilities, erosion control, planting and landscaping, construction details, etc. were prepared. Public utility companies and other agencies with jurisdiction over affected items were adequately consulted, and all necessary permits were obtained. Cost estimates were reviewed for accuracy on the basis of final plans and specifications; and contract documents were revised accordingly.

TASK B. Producing Interpretive Center Working Drawings

1. Consulting with all interested parties through before-and-after meetings, schematic plans of the interpretive center, identifying all architectural, mechanical and electrical components were prepared.

2. All drawings and specifications necessary to construct the building were prepared, consulting as necessary with utility companies, building inspector, and other agencies having jurisdiction over items affected by the proposed construction. The City is applying through the Michigan Small Cities Program for the actual building construction.

TASK C. Soliciting and Selecting Park Construction Contractor

All necessary advertising and bidding procedures were preformed to select a contractor after adequate consultation and clearances with local and state agencies. The actual park construction was awarded to John Henry Excavating, Inc. The fund for actual construction were a 50% - 50% match Local and Land and Water Conservation Funds.

TASK D. Supervising and Inspecting Park Construction

Under this subgrant, all desirable supervision and inspection of park construction taking place (financed otherwise) during the period of this agreement was preformed.

TASK E. Designing and Assembling Interpretive Exhibits and Displays

In consultation with all interested parties, including representatives of northern Lake Huron communities involved, the final concept of the desired exhibit sequence was developed along with final design and layout plans for the exhibits. Approved by involved parties, final fabrication drawings and material specifications were obtained.

The interpretive panels and displays were constructed. Until the building is constructed they will be installed in the City Library, Local Chamber of Commerce Office, State of Michigan Information Center and other appropriate places.

DEPARTMENT OF NATURAL RESOURCES - DIVISION OF LAND RESOURCE PROGRAMS
COASTAL MANAGEMENT PROGRAM
SUBGRANTEE/CONTRACTOR'S QUARTERLY PROGRESS REPORT

Contract No. LRP- 410 For Quarter/Period September 1, 1982 through September 29, 1982

Contractor's Name City of Tawas City Date October 27, 1982 FINAL

PROGRESS ON TASKS LISTED IN FOURTH YEAR WORK PROGRAM: A. Name of individual task or major subtask. B. Description of work accomplished, time requirements, problems encountered, etc.	Target Date	Estimated % of Task Completed		Estimated total dollars spent on each task to date
		During Quarter	To Date	
PART 'A' Park Contract Documents	Complete	100%	100%	8,036.00
PART 'B' Interpretive Center Working Drawings	Complete	30%	100%	4,592.00
PART 'C' Park Bidding and Award Procedures	Complete	40%	100%	1,768.00
PART 'D' Construction Supervision and Inspection	Complete	30%	100%	3,336.00
PART 'E' Interpretive Exhibits and Displays	Complete	20%	100%	10,072.00
Fabrication of support systems to display the graphic panels	Complete	100%	100%	3,675.00
Expenses on Project				1,710.00
TOTAL				33,189.00
Local Share				6,978.00
Coastal Management Share				26,211.00
TOTAL				33,189.00

DNR/LRP 11/78

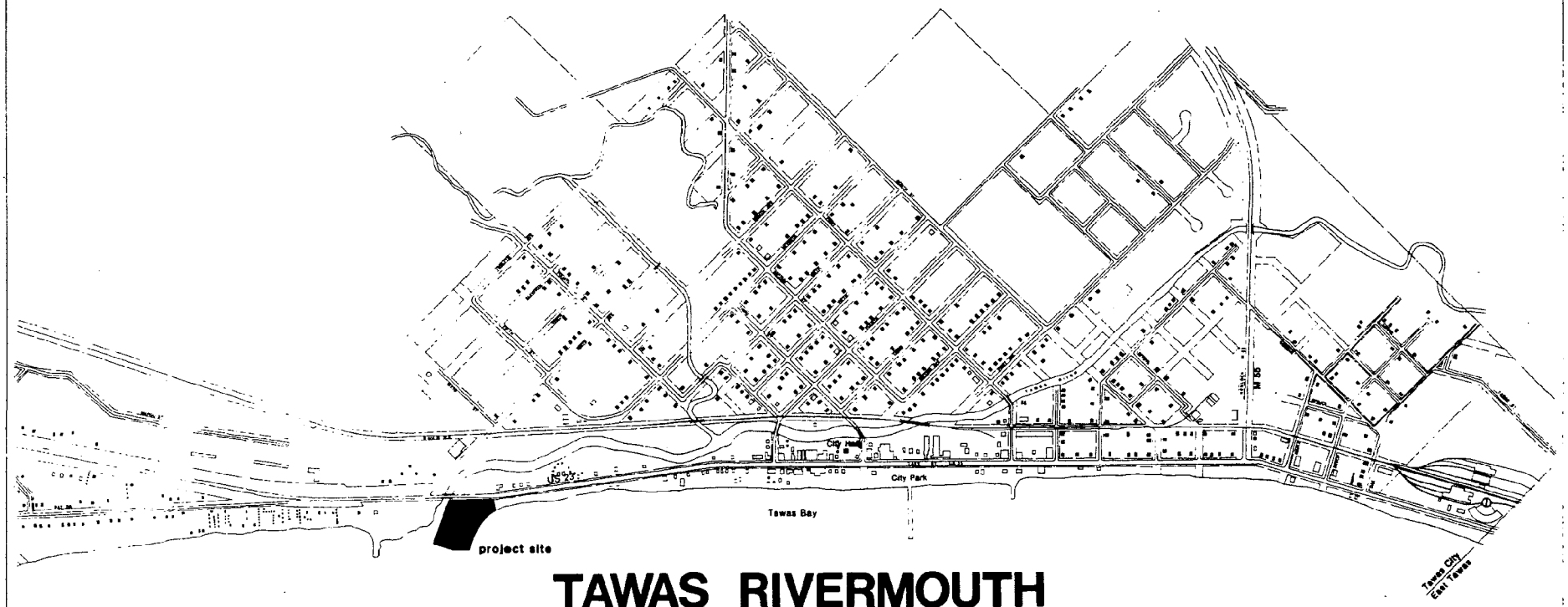
PROJECT COST/FINANCING SUMMARY

Michigan Small Cities Program

Michigan Department of Commerce — Office of Community Development

1. Applicant:	2. Small Cities Grant Amount:
City of Tawas City, Michigan	$132,150
3. Project Title: Gateway Park Tourist Center of Upper Lake Huron Shoreline Communities	**4. Project Period** From: July 1, 82 To: June 30, 1983

5. Project Cost Elements	6. Project Funding Sources						
a. Activities (List)	Small Cities Funds	Other Sources (Identify other funds – state, federal, private, applicant)					Total
		State & Federal Coastal Management		State & Federal Land & Water	County	Local	
Materials, Subcontracts, Building	$ 92,150	$	$	$	$	$	$
Parking Lot Paving	26,000						
Equipment, Furnishings & Contingencies	14,000						132,150
Engineering		26,211				7,056	33,267
Park,Development & Construction				80,000	30,000	80,000	190,000
b. Administration Local Unit	0	0	0	0	0	0	0
Totals Projected	$ 132,150	$ 26,211	$ 0	$ 80,000	$ 30,000	$ 87,056	$ 355,417



TAWAS RIVERMOUTH GATEWAY PARK

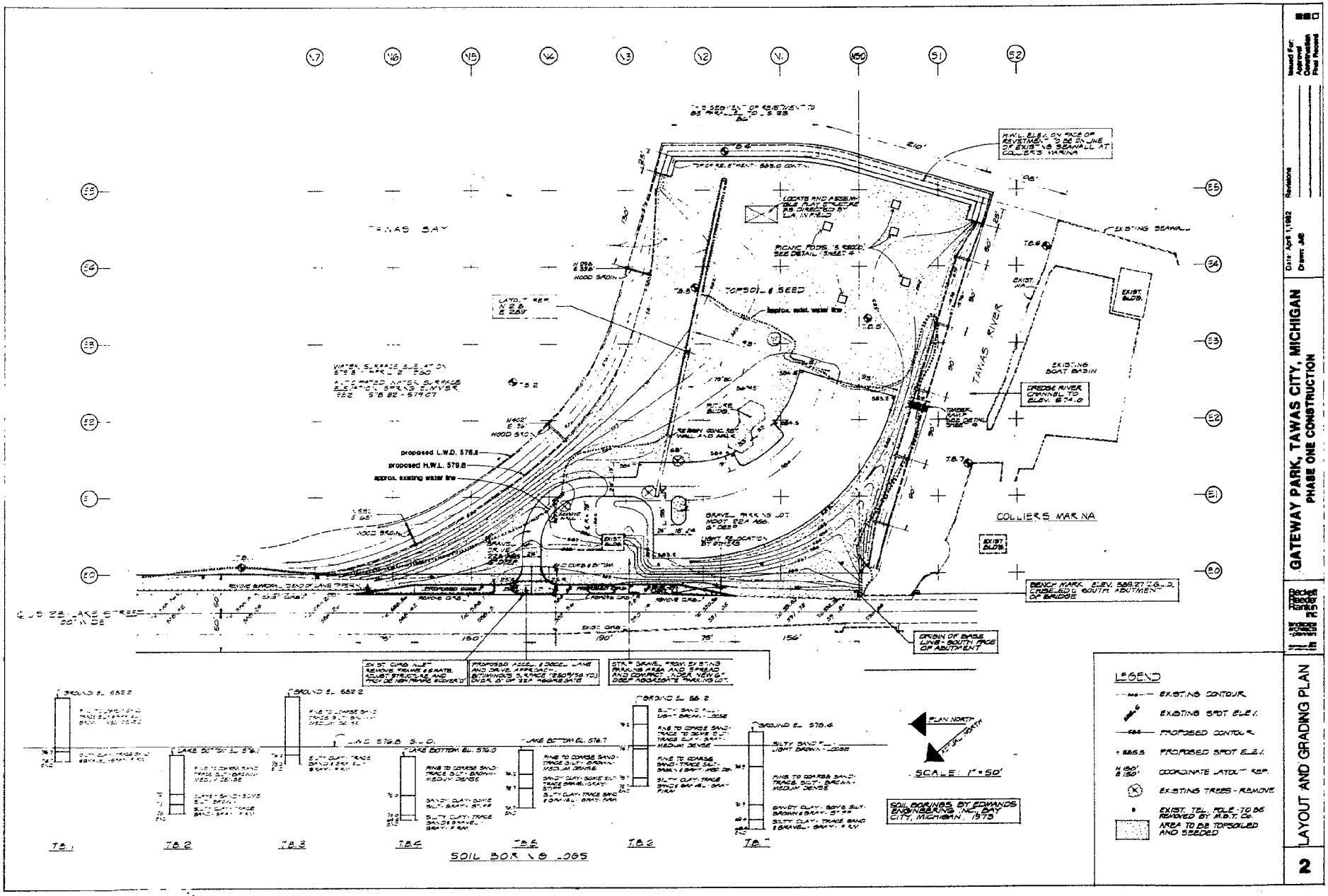
THE CITY OF TAWAS CITY

IN COOPERATION WITH
THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES
THE UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

LWCF PROJECT NO. 26-01209
APRIL 1, 1982

MDNR Permit No. 80-7-B5G
MDOT Permit No.

BECKETT RAEDER RANKIN INC
Landscape Architects and Planners
Ann Arbor, Michigan
(313) 973-0471



Issued For: Approval / Construction / Final Record

Revisions

Date: April 1, 1982

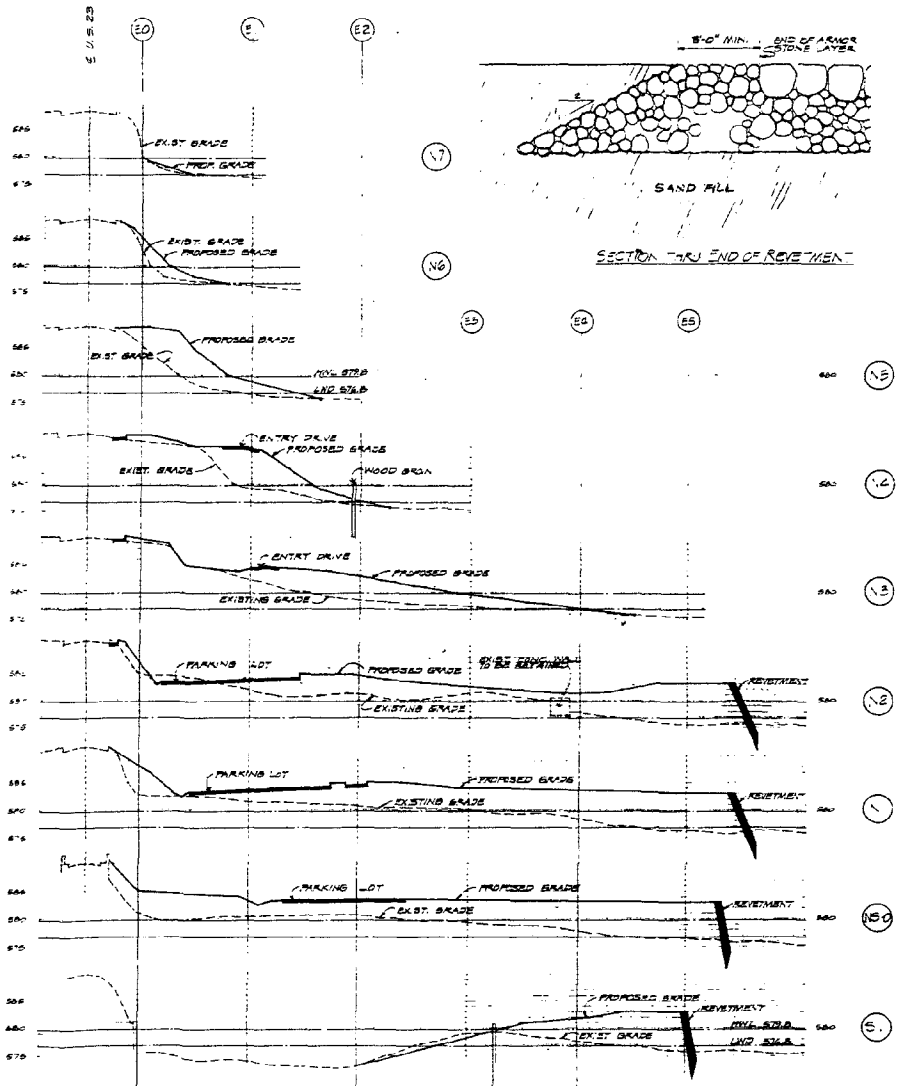
Drawn: JMB

GATEWAY PARK, TAWAS CITY, MICHIGAN
PHASE ONE CONSTRUCTION

Beckett Raeder Rankin inc
landscape architects - planners

LAYOUT AND GRADING PLAN

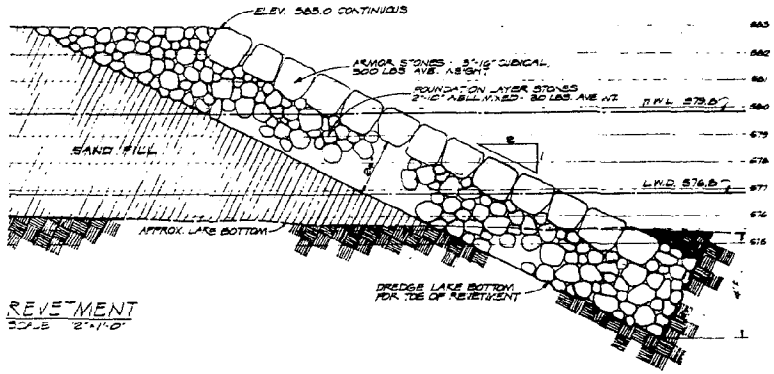
2



EAST-WEST SITE SECTIONS

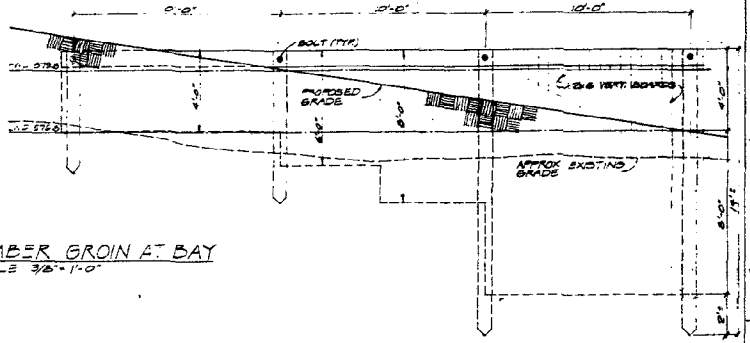
HORIZ. SCALE 1"=50' VERT. SCALE: 1"=10'

SECTION THRU END OF REVETMENT



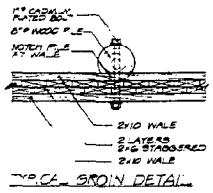
REVETMENT

SCALE 2"=1'-0"

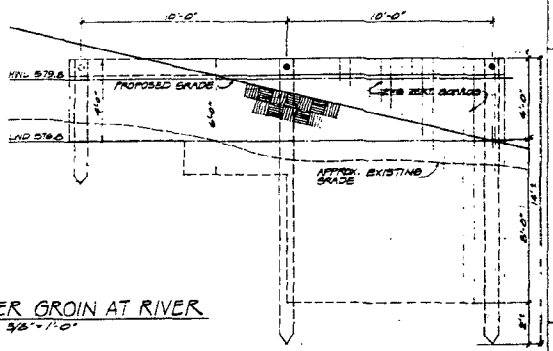


TIMBER GROIN AT BAY

SCALE 3/8"=1'-0"



TYP. GROIN DETAIL

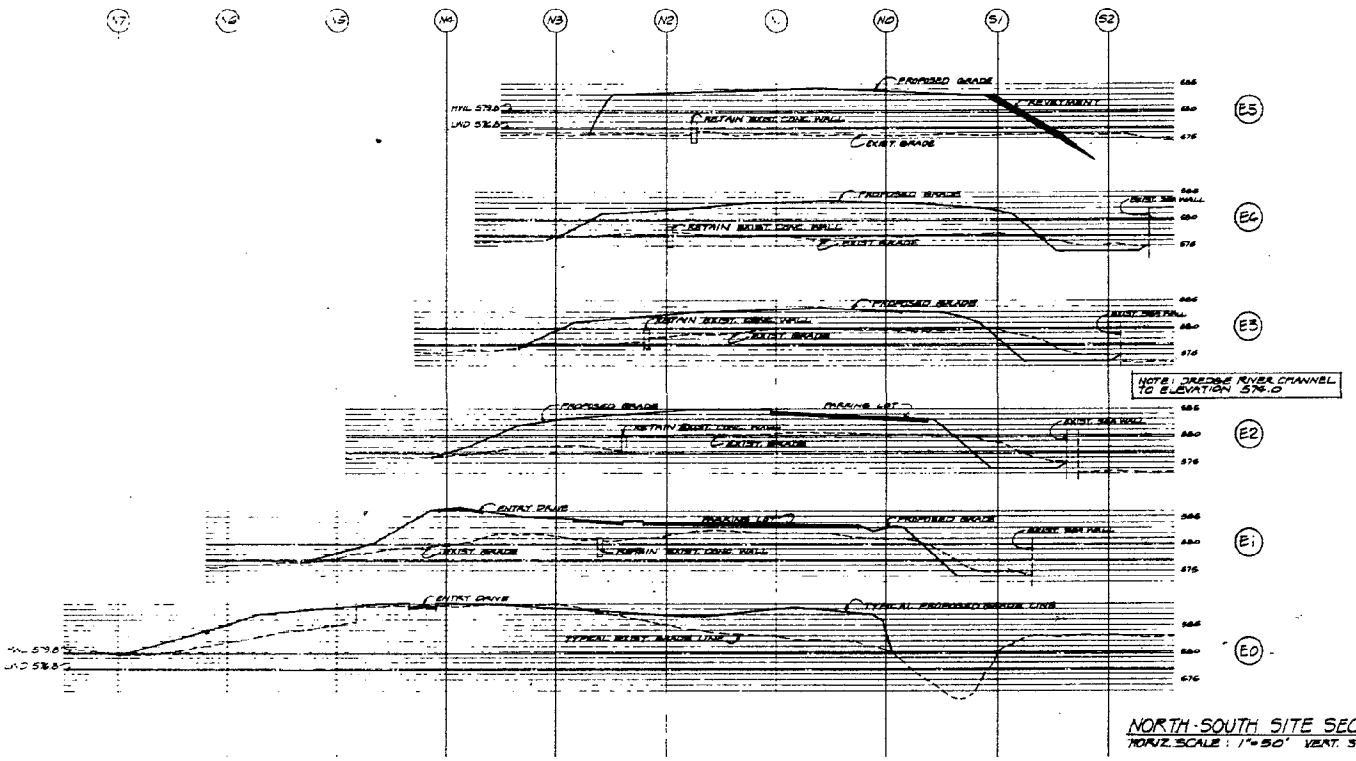


TIMBER GROIN AT RIVER

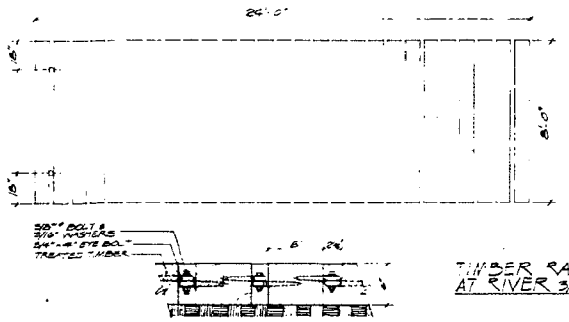
SCALE: 3/8"=1'-0"

GATEWAY PARK, TAWAS CITY, MICHIGAN
PHASE ONE CONSTRUCTION

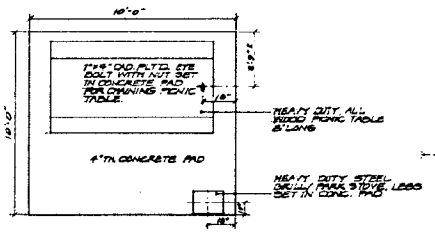
SITE SECTIONS AND DETAILS



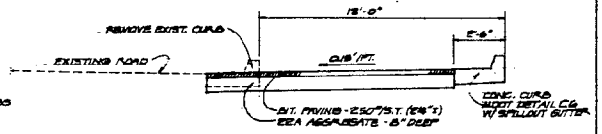
NORTH-SOUTH SITE SECTIONS
HORIZ. SCALE: 1"=50' VERT. SCALE 1"=10'



TIMBER RAMP AT RIVER 3/16"=1'0"



PICNIC POD 3/8"=1'0"



U.S. 23 ACCEL./DECEL. LANE

GATEWAY PARK, TAWAS CITY, MICHIGAN
PHASE ONE CONSTRUCTION

SITE SECTIONS AND DETAILS

4

FORM OF PROPOSAL

OWNER: City of Tawas City

PROJECT: Gateway Park - Phase I Construction

LANDSCAPE ARCHITECT: Beckett Raeder Rankin Inc

NAME OF BIDDER_____

ADDRESS_____PHONE_____

TO: City of Tawas City
508 Lake Street
Tawas City, MI 48763

BASE PROPOSAL:

Pursuant to and in compliance with your "Invitation for Bids" dated April 1, 1982 relating to the above named project, the Undersigned agrees to enter into an agreement with the Owner to furnish and install all labor, materials, equipment and supervision required to complete the entire project in accordance with said Contract Documents for the sum of

_____

_____Dollars, ($_____) as the base proposal.

ITEM	DESCRIPTION	Est. Qty.	Unit Price	TOTAL
1.	Demolition and removal, including trees concrete curb, concrete retaining walls, and paving, debris, excavation, etc. and any other items specified or shown on the Drawings.	LUMP SUM		$_____
2.	Rock revetment	LUMP SUM		$_____
3.	Site filling	35,620 cy	$_____	$_____
4.	22A Aggregate, in place	LUMP SUM		$_____
5.	Concrete curb	504 lf	$_____	$_____
6.	Bituminous paving	LUMP SUM		$_____
7.	Timber groin at river	5 ea	$_____	$_____

8.	Timber groin at bay	3 ea $_____	$_____
9.	Timber ramp	LUMP SUM	$_____
10.	Picnic pod, including concrete pad and eyebolt anchor, picnic table, and park stove installed.	5 ea $_____	$_____
11.	Play unit	LUMP SUM	$_____
12.	Topsoil, furnished and spread, 3" deep	LUMP SUM	$_____
13.	Seeding and mulching	LUMP SUM	$_____
14.	Project sign	LUMP SUM	$_____
15.	Adjusting drainage structure, including new frame and cover	LUMP SUM	$_____
16.	General Conditions, including mobilization traffic control, surveying and layout, and misc. work not included in other items.	LUMP SUM	$_____
TOTAL PROJECT:			$_____

In the case of mathematical errors or discrepancies discovered by the Owner in evaluation of the bids, between the actual extended unit prices and the totals shown, the extended unit prices shall govern and the total will be revised to reflect the correction.

ADDENDA:

The Undersigned has included in the proposal the modifications to the work described in the following addenda received prior to the submission of this proposal:

Addendum No._____, Dated_____ Addendum No._____, Dated_____

Addendum No._____, Dated_____ Addendum No._____, Dated_____

(If none have been received, write "NONE")

OWNER'S OPTIONS:

Under the "Owner's Options" section of the Standard General Conditions and the "Instructions to Bidders", we offer the following alterates to the names, makes, types, or styles specified:

Article, Work Specified or Process	Name, Make, Type or Style	Alternate Name, Make, Type of Style	Add	Deduct
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

FEES:

The following fees are offered for alterations and additions to the work in accordance with the section headed, "Extra Work and Changes in the Work", Article 15 in the Standard General Conditions.

Methods Nos. 1, 2, and 3:

A. For additional work performed as a subcontractor, a fee of _____% which shall not exceed 7½%.

B. For additional work performed upon instructions of the Owner by persons other than subcontractors, the charges shall be actual cost of all labor and materials (less all discounts) plus a fee of _____%, which fee includes all other charges such as overhead, insurance, profit, taxes, bonds, etc. Not to exceed 7½%.

BASIS OF MEASUREMENT AND PAYMENT:

A. Payment: Payment for executed work will be made on the basis of the unit prices quoted in the Proposal and in accordance with actual quantities installed. Where a lump sum price is requested, such price shall reflect all labor, material and services required to accomplish the work as shown on the Plans and described in the Specifications, and shall be the agreed contract price for that item of work.

B. Measurement: The method of measurement of executed work for the purpose of determining quantities for payment shall be as follows:

Item 1: Demolition and Removal - Lump Sum

Item 2: Rock Revetment - Lump Sum

Item 3: Site Filling - Measured in cubic yards, compacted, in place. Prior to beginning work, the Contractor's Registered Surveyor shall set grade stakes and cross section the site area within the area to be filled. The Contractor shall furnish the Landscape Architect with the quantity of fill required to bring the site to finish grade as shown on the Drawings. If finish grade revisions are required, they shall be made by the Landscape Architect prior to beginning work. The Contractor and Landscape Architect shall agree on the quantity of fill required as the basis for payment prior to any filling operations. The method and accuracy of computing the required fill are subject to review and approval by the Landscape Architect and/or an independent Registered Surveyor hired by the Owner.

Item 4: 22A Aggregate, in place - Lump Sum

Item 5: Concrete Curb - Measured in lineal feet including tapers, in place, after installation.

Item 6: Bituminous Paving - Lump Sum

Item 7: Timber Groin at River - Measured per each groin structure, installed complete.

Item 8: Timber Groin at Bay - Measured per each groin structure, installed complete.

Item 9: Timber Ramp - Lump Sum
Item 10: Picnic Pod - Measured per each unit, installed complete.
Item 11: Play Unit - Lump Sum
Item 12: Topsoil, in place - Lump Sum
Item 13: Seeding and Mulching - Lump Sum
Item 14: Project Sign - Lump Sum
Item 15: Adjusting Drainage Structure, including new frame and cover - Lump Sum
Item 16: General Conditions - Lump Sum

TIME OF COMPLETION:

Being fully aware of the Construction Schedule Limitations set forth in Section 5, the Undersigned agrees to complete all work within 120 calendar days after the official award of the contract.

PROPOSAL GUARANTEE:

The Undersigned includes with the proposal the required proposal guarantee consisting of _____

_____
(State Nature of Guarantee and Amount)

ACCEPTANCE OF PROPOSAL:

The Undersigned agrees to execute a contract for work covered by this proposal provided that he be notified of its acceptance within sixty (60) days after the opening of proposal.

Date_____ Name of Bidder_____

By_____

In Presence of: Type Name_____

_____ Title_____
Witness

SPECIFICATIONS FOR

TAWAS RIVERMOUTH
GATEWAY PARK
Phase I Construction

L.W.C.F. Project No. 26-01209

The City of Tawas City, Michigan

Beckett Raeder Rankin Inc
Landscape Architects & Planners
3200 Eisenhower Parkway
Ann Arbor, MI 48104
(313) 973-0471

April 1, 1982

E-N 23

SPECIFICATIONS FOR

TAWAS RIVERMOUTH
GATEWAY PARK
Phase I Construction

L.W.C.F. Project No. 26-01209

The City of Tawas City, Michigan

Beckett Raeder Rankin Inc
Landscape Architects & Planners
3200 Eisenhower Parkway
Ann Arbor, MI 48104
(313) 973-0471

April 1, 1982

INDEX

OWNER: City of Tawas City, Michigan
508 Lake Street
Tawas City, MI 48763
(517) 362-3731

PROJECT: Gateway Park - Phase I Construction

LANDSCAPE ARCHITECT: Beckett Raeder Rankin Inc
3200 Eisenhower Parkway
Ann Arbor, MI 48104
(313) 973-0471

PARTS OF THE CONTRACT DOCUMENTS

The Contract Documents are divided into two parts as follows:

PART 1 - SPECIFICATIONS
PART 2 - ACCOMPANYING DRAWINGS

PART 1 - SPECIFICATIONS

The Specifications applying to all work under the Contract, identified as Gateway Park-Phase I Construction.

SECTION	TITLE
1	Invitiation for Bids
2	Instructions to Bidders
3	Form of Proposal
4	Standards General Conditions with Attached Forms Arbitration Agreement Form of Guarantee
5	Construction Schedule
02110	Demolition and Removal
02200	Site Filling
02610	Drives and Parking Lot
02614	Concrete Paving
02620	Concrete Curb and Gutter
02760	Site Furnishings
02766	Timber Ramp
02821	Seeding
02933	Timber Groins
02934	Rock Revetment
03310	Concrete

INVITATION FOR BIDS

OWNER:	City of Tawas City, MI
PROJECT:	Gateway Park - Phase I Construction
LANDSCAPE ARCHITECT:	Beckett Raeder Rankin Inc
DUE DATE, TIME & PLACE:	May 3, 1982 4:00 p.m. EST at the City Hall, 508 Lake St. Tawas City, MI 48763, at which time and place, all proposals will be publicly opened and read aloud.

PROPOSALS ARE INVITED FOR THE FOLLOWING:

Removal of concrete curb and retaining walls, tree removal, construction of rock revetment, site filling, gravel surfacing, concrete curb and gutter, concrete flat work, bituminous paving, timber ramp and groin construction, seeding, and furnishing and installation of picnic and play equipment.

PROPOSAL GUARANTEE:

A certified check or bank draft payable to the City of Tawas City or a satisfactory bid bond executed by the Bidder and surety company, in an amount equal to not less than five percent (5%) of the proposal amount, shall be submitted with each proposal.

CONTRACT SECURITY:

The successful Bidder will be required to furnish a satisfactory performance bond, and labor material payment bond. Each bond shall be in an amount equal to one hundred percent (100%) of the accepted bid.

CONTRACT DOCUMENTS:

Contract Documents are on file for reference at the office of the Landscape Architect, Tawas City Hall, F. W. Dodge Reports, and Builders Exchange.

RIGHT TO REJECT:

The Owner reserves the right to reject any or all proposals and to waive informalities in bidding, as its interests may require.

WITHDRAWAL OF ANY PROPOSAL:

Withdrawal of any proposal is prohibited for a period of sixty (60) days after the time set for opening of proposals.

INSURANCE:

The successful Bidder will be required to maintain Liability Insurance, Contractor's Liability for bodily injury, sickness, disease and property damage and Fire and Extended Insurance in accordance with Articles 27, 28 & 29 of the Standard General Conditions.

BIDDING DOCUMENTS:

Bidding documents may be obtained from the Tawas City Hall on or after April 16. A deposit of $25.00 is required for each complete set of bidding documents for all trades; no partial sets of individual sheets of drawings or specifications will be issued. Deposits will be refunded in full when all documents are returned in good condition within seven (7) days after the bids are opened.

CITY OF TAWAS CITY

Wallace Stovall
City Manager

April 1, 1982

INSTRUCTIONS TO BIDDERS

OWNER: City of Tawas City, MI

PROJECT: Gateway Park - Phase I Construction

LANDSCAPE ARCHITECT: Beckett Raeder Rankin Inc

LOCATION: On U.S. 23 (Lake St.) at the mouth of the Tawas River, Tawas City, MI.

PROPOSALS AND SCOPE:

A. The Owner will receive sealed proposals for work as herein set forth at the place and until the time as stated in the "Invitation for Bids" a copy of which is bound herewith, at which time and place all proposals will be publicly opened and read aloud.

B. Proposals are invited for work in accordance with these specifications and the accompanying drawings prepared by the Landscape Architect.

C. Proposals must be submitted on forms which will be furnished with the documents. The forms must be filled out in ink or typewriting with signature in longhand; the completed forms shall be without interlineations, alterations or erasure; and shall contain no recapitulation of the work to be done. Total proposal amounts shall be stated in writing and figures. In case of a discrepancy between the written statement and the figures, the written statement shall govern. Proposals submitted in any other form will not be considered.

D. Proposals must be delivered in an opaque sealed envelope, properly addressed, and labeled as follows:

THIS ENVELOPE CONTAINS PROPOSAL AND PROPOSAL GUARANTEE FOR GATEWAY PARK - PHASE I CONSTRUCTION, TO BE RECEIVED AND READ AT: THE TAWAS CITY HALL, AT 4:00 E.S.T. ON MAY 3, 1982.

SUBMITTED BY_____
Name of Bidder

E. After the time set for opening of proposals no proposal shall be withdrawn for a period of sixty (60) days. However, any Bidder may withdraw his proposal at any time prior to the time set for opening of proposals.

F. Bidders are required to return all documents to the City of Tawas City without marks, notes or other mutilations thereon. The required $25.00 deposit for documents will be refunded in full if all documents are returned within seven (7) days after the bids are opened.

G. The Standard General Conditions shall apply to all operations which are to be conducted in the performance of any contract entered into for the work described in the "Invitation".

REQUIREMENTS FOR SIGNING PROPOSALS:

A. Proposals which are not signed by individuals making them should have attached thereto a power of attorney evidencing authority to sign the proposal in the name of the person for whom it is signed.

B. Proposals which are signed for a partnership should be signed by all of the partners or by an attorney-in-fact. If signed by an attorney-in-fact, there must be attached to the proposal a power of attorney evidencing authority to sign the proposal, executed by the partners.

C. Proposals which are signed for a corporation, should have the correct corporate name thereof and the signature of the president or other authorized officer of the corporation, manually written below the corporate name following the word, "By _____." If such a proposal is manually signed by an official other than the president of the corporation, a certified copy of resolution of the Board of Directors evidencing the authority of such official to sign the bid should be attached to it. Such proposal should also bear the attesting signature of the secretary of the corporation and the impression of the corporate seal.

D. All manual signatures must have the name typed directly under line for signature.

TELEGRAPHIC MODIFICATIONS:

Any Bidder may modify his bid by telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such telegraphic communication is received by the Owner prior to the closing time, and provided further, the Owner is satisfied that a written confirmation of the telegraphic modification over the signature of the Bidder was mailed prior to the closing time. The telegraphic communication should not reveal the bid price but should provide the addition or subtraction or other modification so that the final prices or terms will not be known by the Owner until the sealed bid is opened. If written confirmation is not received within four days from the closing time, no consideration will be given to the telegraphic modification.

EXAMINATION OF SITE:

A. Before submitting a proposal, each Bidder shall inspect the site of the proposed work to arrive at a clear understanding of the conditions under which the work is to be done. He will be held to have compared the premises with the drawings and specifications, and to have satisfied himself as to all conditions affecting the execution of the work. Any discrepancies discovered between the drawings and site conditions should be reported to the Landscape Architect.

B. No allowance or extra compensation concerning any matter or thing about which the Bidder might have fully informed himself will be allowed.

TAXES:

Each proposal submitted shall include, and the successful Bidder will be required to pay, all taxes which are levied by Federal, State or Municipal Governments upon labor and for materials entering into the work. The Owner reserves the right to require evidence of payment of such taxes prior to final payment.

OWNER'S OPTIONS:

Proposals shall be based on the employment of sub-contractors, fabricators or processes named in the Specifications and on the furnishing of the makes, types or styles of articles, materials and equipment specified, provided, however:

Where only one such name, make, type or style is specified in any instance, whether or not followed by the phrase "or other approved" or other words to that effect, proposals shall be based on the name, make, type or style so specified and the proposal shall clearly state, under the heading "Owner's Options", as provided therein, names, makes, types or styles which the Bidder may propose other than those designated in the Specifications.

Where more than one name, make, type or style are specified in any instance, the Bidder shall base his proposal on one of those names, and shall state the amount to be added to or deducted from the proposal for other names, makes, types or styles, which the Bidder may propose.

PROPOSAL GUARANTEE:

A. Each proposal shall be accompanied by a proposal guarantee in the form of a check properly and unconditionally certified by a solvent bank, or a bank draft, payable to the order of The City of Tawas City or a satisfactory bid bond executed by the Bidder and surety company, licensed to do business in the State of Michigan, in an amount equal to not less than five percent (5%) of the maximum proposal amount. Such bid bond or check shall be submitted with the understanding that it shall guarantee that the Bidder will not withdraw his bid for a period of sixty (60) days after the scheduled closing time for the receipt of bids; that if his bid is accepted, he will enter into a formal contract with the Owner in accordance with the form of agreement included as a part of the Contract Documents, and that the required performance and payment bonds will be given; and that in the event of the withdrawal of said bid within said period, or the failure to enter into said contract and give said bonds within ten (10) days after he has received notice of the acceptance of his bid, the Bidder shall be liable to the Owner for the full amount of the bid guarantee as representing the damage to the Owner on account of the default of the Bidder in any particular hereof.

B. The proposal guarantee of all except the three lowest Bidders will be returned within three days after the opening of proposals. The proposal guarantee of the three lowest Bidders will be returned within forty-eight (48) hours after the Owner and the accepted Bidder have executed the contract and the executed performance and payment bonds have been approved by the Owner. If the required contract and bonds have not been executed within sixty (60) days after the date of the opening of bids, then the bond or check of any Bidder will be returned upon his request, provided he has not been notified of the acceptance of his bid prior to the date of such request.

C. Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

CONTRACT SECURITY:

A. The amount contained in each submitted proposal shall include the premiums and all other charges, if any, for two surety bonds, each in the full amount of the proposal sum.

B. The bonds shall consist of performance bond as security for the faithful performance of the contract, and labor and material bond as security for the payment of all persons performing labor and furnishing materials in connection with the contract. Bonds and sureties shall be acceptable to the Owner.

C. However, nothing contained herein or in the Standard General Conditions relating to waivers and sworn statements in connection with payments shall make the Landscape Architect or Owner liable to the surety for adequacy of waivers and sworn statements. It shall be the responsibility of the surety to determine the adequacy of the waivers and sworn statements.

INTERPRETATION OF DOCUMENTS AND ADDENDA:

A. Neither the Owner nor Landscape Architect will give verbal answers to inquiries regarding the meaning of drawings and specifications, or verbal instruction previous to the bid due date. Any verbal statement regarding same by any persons, previous to the award shall be unauthoritative.

B. Any explanation desired by Bidders must be requested of the Landscape Architect in writing, and if explanation is necessary, a reply will be made in the form of an addendum, a copy of which will be forwarded to each Bidder, who has received a set of the Contract Documents and to such other prospective Bidders as have requested that they be furnished with a copy of each addendum.

C. Any addenda issued to Bidders prior to date of receipt of proposals shall become a part of these Specifications and all proposals are to include the work therein described. Each proposal submitted shall list all addenda which have been received prior to time scheduled for receipt of proposals.

QUALIFICATIONS OF BIDDERS:

The Owner may request the prospective Bidder to submit qualifications to satisfy the Owner that the Bidder is adequately prepared to fulfill the contract. Such information may include past performance record, list of available personnel, plant and equipment, description of work which will be done simultaneously with the Owner's project, financial statement, and other pertinent information.

NOTICE OF AWARD:

The Contract shall be deemed as having been awarded when formal notice of acceptance of his proposal has been duly served upon the intended awardee by some officer or agent of the Owner duly authorized to give such notice.

TIME OF STARTING AND COMPLETION:

The successful Bidder shall furnish required bonds and insurance. He shall commence work within thirty days of acceptance of his proposal. He shall complete the work as indicated in Section 5, Construction Schedule.

FORM OF AGREEMENT:

The agreement, which together with the General Conditions, drawings and specifications with each and every addendum thereto shall form the Contract, will be substantially in the form bound in with the Standard General Conditions of the specification. Subsequent to the award of the contract, and as soon as possible after the completed forms are presented by the Owner for signature, the successful Bidder shall execute and deliver to the Owner, in such number of counterparts as the Owner may require, said agreement covering the work.

DOCUMENTS FOR BIDDING:

The drawings which will be issued for the use of Bidders and upon which all proposals are to be based consist of those listed in these specifications.

In the event that additional documents are required to explain revisions which are made during the bidding period or to give additional information to the Bidders, the Landscape Architect will prepare such documents in the form of an addendum with accompanying drawings, if required, and will send copies of the same to all Bidders of the trades affected, prior to the date for receipt of proposals. All proposals are to include the work described and indicated on such additional documents.

UNIT PRICES:

Each unit price requested in the "Form of Proposal" shall include all charges for incidental expenses, applicable taxes, insurance, labor, equipment, fittings, overhead and profit. These shall govern for net additions to the work and net deductions from the work.

The Owner reserves the right to increase or decrease the amount of the work to be done under this Contract by amounts up to twenty-five percent (25%) on the basis of the unit prices which the successful Bidder will submit.

MDOT STANDARD SPECIFICATIONS:

Unless otherwise shown on the Drawings or specified herein, all materials, methods, and workmanship shall be in accordance with the latest edition of the Michigan Department of Transportation Standard Specifications.

FORM OF PROPOSAL

OWNER: City of Tawas City

PROJECT: Gateway Park - Phase I Construction

LANDSCAPE ARCHITECT: Beckett Raeder Rankin Inc

NAME OF BIDDER_____

ADDRESS_____PHONE_____

TO: City of Tawas City
508 Lake Street
Tawas City, MI 48763

BASE PROPOSAL:

Pursuant to and in compliance with your "Invitation for Bids" dated April 1, 1982 relating to the above named project, the Undersigned agrees to enter into an agreement with the Owner to furnish and install all labor, materials, equipment and supervision required to complete the entire project in accordance with said Contract Documents for the sum of

_____

_____Dollars, ($_____) as the base proposal.

ITEM	DESCRIPTION	Est. Qty.	Unit Price	TOTAL
1.	Demolition and removal, including trees concrete curb, concrete retaining walls, and paving, debris, excavation, etc. and any other items specified or shown on the Drawings.	LUMP SUM		$_____
2.	Rock revetment	LUMP SUM		$_____
3.	Site filling	35,620 cy	$_____	$_____
4.	22A Aggregate, in place	LUMP SUM		$_____
5.	Concrete curb	504 lf	$_____	$_____
6.	Bituminous paving	LUMP SUM		$_____
7.	Timber groin at river	5 ea	$_____	$_____

8.	Timber groin at bay	3 ea $_____	$_____
9.	Timber ramp	LUMP SUM	$_____
10.	Picnic pod, including concrete pad and eyebolt anchor, picnic table, and park stove installed.	5 ea $_____	$_____
11.	Play unit	LUMP SUM	$_____
12.	Topsoil, furnished and spread, 3" deep	LUMP SUM	$_____
13.	Seeding and mulching	LUMP SUM	$_____
14.	Project sign	LUMP SUM	$_____
15.	Adjusting drainage structure, including new frame and cover	LUMP SUM	$_____
16.	General Conditions, including mobilization traffic control, surveying and layout, and misc. work not included in other items.	LUMP SUM	$_____
TOTAL PROJECT:			$_____

In the case of mathematical errors or discrepancies discovered by the Owner in evaluation of the bids, between the actual extended unit prices and the totals shown, the extended unit prices shall govern and the total will be revised to reflect the correction.

ADDENDA:

The Undersigned has included in the proposal the modifications to the work described in the following addenda received prior to the submission of this proposal:

Addendum No._____, Dated_____ Addendum No._____, Dated_____

Addendum No._____, Dated_____ Addendum No._____, Dated_____

(If none have been received, write "NONE")

OWNER'S OPTIONS:

Under the "Owner's Options" section of the Standard General Conditions and the "Instructions to Bidders", we offer the following alterates to the names, makes, types, or styles specified:

Article, Work or Process	Specified Name, Make, Type or Style	Alternate Name, Make, Type of Style	Add	Deduct
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

FEES:

The following fees are offered for alterations and additions to the work in accordance with the section headed, "Extra Work and Changes in the Work", Article 15 in the Standard General Conditions.

Methods Nos. 1, 2, and 3:

A. For additional work performed as a subcontractor, a fee of _____% which shall not exceed 7½%.

B. For additional work performed upon instructions of the Owner by persons other than subcontractors, the charges shall be actual cost of all labor and materials (less all discounts) plus a fee of _____%, which fee includes all other charges such as overhead, insurance, profit, taxes, bonds, etc. Not to exceed 7½%.

BASIS OF MEASUREMENT AND PAYMENT:

A. Payment: Payment for executed work will be made on the basis of the unit prices quoted in the Proposal and in accordance with actual quantities installed. Where a lump sum price is requested, such price shall reflect all labor, material and services required to accomplish the work as shown on the Plans and described in the Specifications, and shall be the agreed contract price for that item of work.

B. Measurement: The method of measurement of executed work for the purpose of determining quantities for payment shall be as follows:

Item 1: Demolition and Removal - Lump Sum
Item 2: Rock Revetment - Lump Sum
Item 3: Site Filling - Measured in cubic yards, compacted, in place. Prior to beginning work, the Contractor's Registered Surveyor shall set grade stakes and cross section the site area within the area to be filled. The Contractor shall furnish the Landscape Architect with the quantity of fill required to bring the site to finish grade as shown on the Drawings. If finish grade revisions are required, they shall be made by the Landscape Architect prior to beginning work. The Contractor and Landscape Architect shall agree on the quantity of fill required as the basis for payment prior to any filling operations. The method and accuracy of computing the required fill are subject to review and approval by the Landscape Architect and/or an independent Registered Surveyor hired by the Owner.
Item 4: 22A Aggregate, in place - Lump Sum
Item 5: Concrete Curb - Measured in lineal feet including tapers, in place, after installation.
Item 6: Bituminous Paving - Lump Sum
Item 7: Timber Groin at River - Measured per each groin structure, installed complete.
Item 8: Timber Groin at Bay - Measured per each groin structure, installed complete.

Item 9: Timber Ramp - Lump Sum
Item 10: Picnic Pod - Measured per each unit, installed complete.
Item 11: Play Unit - Lump Sum
Item 12: Topsoil, in place - Lump Sum
Item 13: Seeding and Mulching - Lump Sum
Item 14: Project Sign - Lump Sum
Item 15: Adjusting Drainage Structure, including new frame and cover - Lump Sum
Item 16: General Conditions - Lump Sum

TIME OF COMPLETION:

Being fully aware of the Construction Schedule Limitations set forth in Section 5, the Undersigned agrees to complete all work within 120 calendar days after the official award of the contract.

PROPOSAL GUARANTEE:

The Undersigned includes with the proposal the required proposal guarantee consisting of _____

_____
(State Nature of Guarantee and Amount)

ACCEPTANCE OF PROPOSAL:

The Undersigned agrees to execute a contract for work covered by this proposal provided that he be notified of its acceptance within sixty (60) days after the opening of proposal.

Date_____ Name of Bidder_____

By_____

In Presence of: Type Name_____

_____ Title_____
Witness

BECKETT RAEDER RANKIN INC
Ann Arbor, MI

Section 5

STANDARD GENERAL CONDITIONS

INDEX TO ARTICLES

1. Definitions
2. Execution, Correlation and Intent of Documents
3. Routine of Business: Detail Drawings & Instructions
4. Copies of Drawings & Specifications Furnished
5. Contractor's Shop Drawings
6. Drawings & Specifications on the Work
7. Ownership of Documents and Models
8. Samples and Approvals
9. Materials: Appliances: Employees: Allocations
10. Royalties & Patents
11. Surveys, Permits & Regulations
12. Protection of Work & Property
13. Inspection of Work
14. Superintendence: Supervision: Measurements: Cooperation
15. Extra Work & Changes in the Work
16. Claims for Extra Cost
17. Deductions for Uncorrected Work: Waiver Provision
18. Delays & Extension of Time
19. Correction of Work Before Final
20. Correction of Work After Final Payment: Guarantees
21. Owner's Right to do Work
22. Owner's Right to Terminate Contract
23. Contractor's Right to Stop Work or Terminate Contract
24. Applications for Payments
25. Certificates for Payments
26. Payments Withheld
27. Liability Insurance
28. Indemnity
29. Fire & Extended Coverage Insurance
30. Guarantee Bonds
31. Damages
32. Liens
33. Assignment
34. Mutual Responsibility of Contractors: Co-Responsibility
35. Separate Contracts
36. Subcontracts
37. Relations of Contractor & Subcontractor
38. Landscape Architect's Status
39. Landscape Architect's Decisions
40. Arbitration
41. Cash Allowances
42. Use of Premises
43. Cutting, Patching & Digging
44. Cleaning Up
45. Owner's Options
46. Non-Discrimination Provision & Wage & Hour Act
47. Compliance with "Kick-Back" Statue & Regulations
48. Taxes
49. Attached Forms
50. Female Utilization
51. Clean Air Requirements

ART. 1: DEFINITIONS

A. Wherever used in any of the Contract Documents, the following meanings shall be given to the terms herein defined:

B. Contract Documents: These consist of the Agreement, the General Conditions, the Drawing and Specifications, including all modifications thereof incorporated in the document before their execution. These form the Contract.

C. Contract: The Agreement executed by the Contractor and the Owner.

D. Project: The building or facility, improvement, alteration, addition or repair, the construction for which is contemplated in whole or in part under the Contract.

E. Owner:

CITY OF TAWAS CITY
508 Lake Street
Tawas City, MI 48763

F. Contractor: The party named in the Agreement who will execute the work.

G. General Contractor: The Contractor who, according to the Contract Documents, has general charge of the project.

H. Subcontractor: This includes only those having a direct contract with the Contractor and it includes one who furnished material worked to a special design according to the drawings and specifications of this work, but does not include one who merely furnishes material not so worked.

I. Landscape Architect: Beckett Raeder Rankin, Inc.

J. Throughout the Contract Documents, the terms "Owner, and "Contractor", and "Landscape Architect", and "Subcontractor"are treated as if each were of the singular number and masculine gender.

K. The word "similar" shall be considered as meaning that items in each case are to be separately worked out to suit conditions in a manner like or similar to the example referred to and is not to be construed as meaning identical.

ART. 1: DEFINITIONS (continued)

L. The Landscape Architect shall be the judge as to what constitutes a reasonable notice to the Contractor; and whether or not materials or workmanship supplied are suitable, proper, satisfactory, necessary, equal to, or in any condition described by words of similar purport.

M. Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the corporation for whom it is intended, or if delivered at or sent by registered mail to the last business address known to him who gives the notice.

N. The term "work" of the Contractor or subcontractor includes labor or materials or both.

O. All time limits stated in the Contract Documents are of the essence of the Contract.

ART. 2: EXECUTION, CORRELATION & INTENT OF DOCUMENTS

A. The Contract Documents shall be signed in duplicate by the Owner and the Contractor. In case the Owner and the Contractor fail to sign the General Conditions, Drawings, or Specifications; Landscape Architect shall identify them.

B. The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. The intention of the Documents is to include all labor and matierals, equipment, and transportation necessary for the proper execution of the work. It is not intended, however, that materials or work not covered by or properly inferable from any heading, branch, class or trade of the specifications shall be supplied unless distinctly so noted on the drawings. Materials or work described in words which so applied have a well-known technical or trade meaning shall be held to refer to such recognized standards.

ART. 3: ROUTINE OF BUSINESS: DETAIL DRAWING & INSTRUCTIONS

A. After award of the Contract, all business relating to the work shall be trans-

acted with or through the Landscape Architect and/or the Owner, except as otherwise provided in the Contract Documents. An outline of procedure which is to be followed will be prepared by the Landscape Architect and distributed to the interested parties.

B. The Landscape Architect shall furnish with reasonable promptness, additional instructions, by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract Documents, true developments thereof, and reasonably inferable thereform.

C. The work shall be executed in conformity therewith and the Contractor shall do no work without proper drawings and instructions.

D. No approvals concerning any phase of the Contract by either the Landscape Architect or the Owner shall be valid unless given in writing.

E. The Contractor and the Landscape Architect, if either so requests, shall jointly prepare a schedule, subject to change from time to time in accordance with the progress of the work, fixing the dates at which the various detail drawings will be required, and the Landscape Architect shall furnish them in accordance with that schedule. Under like conditions, a schedule shall be prepared, fixing the dates for the submission of shop drawings, for the beginning of manufacture, and installation of materials and for the completion of the various parts of the work.

F. It is to be noted that, on certain drawings, only a portion of the detail is fully drawn and the remainder indicated in outline, in which case the general detail shall be understood as applying also to other like portions indicated by starting of the detail such must be continued throughout the course of parts in which it occurs, and to all similar parts in the project wherever such general detail shall apply, unless otherwise specifically provided in the Contract Documents.

ART. 4: COPIES OF DRAWING & SPECIFICATIONS FURNISHED

A. Unless otherwise provided in the Contract Documents, the General Contractor will be furnished, free of charge, up to five (5) sets of drawings and specifications complete for all trades. The General Contractor shall distribute these to his subcontractors.

ART. 4: COPIES OF DRAWING & SPECIFICATIONS FURNISHED (continued)

B. The General Contractor will receive three (3) prints of each scale and detail drawing for his use and one (1) additional copy for each subcontractor whose work is affected.

C. Any additional copies of drawing and specifications required for the work may be obtained at cost of duplication.

D, All full size details will be furnished in the form of blueprints on paper, and it is expected that when the Contractor requires additional copies, he will apply for same rather than furnish any tracings of the work from blueprints. This will avoid the possibility of error through tracing, and will permit of all parties working from the same drawings. The Contractor may obtain blueprints on cloth at the cost of duplication.

ART. 5: CONTRACTOR'S SHOP DRAWINGS

A. This article shall apply to all shop, setting or erection drawing , and all schedules, but not layout drawings employed by the Contractor in the field.

B. The Contractor shall submit with such promptness as to cause no delay in his own work, or in that of any other Contractor, copies of all shop drawings required for the work of the various trades, and the Landscape Architect shall pass upon them with reasonable promptness, indicating desired corrections, including all necessary corrections relating to artistic effect. In addition to any shop drawings specified under the various trades or divisions of the work, the Contractor shall submit shop drawings which in the Landscape Architect's opinion, are necessary to effect the desired result in the finished work.

C. Before submission to the Landscape Architect, all shop drawings must be checked by the Contractor or Subcontractor who prepared them, and each drawing shall bear a notation indicating that it has been checked and by whom. Shop drawing for the work of all trades included under the General Contractor must be submitt through the General Contractor and must be stamped by him before submission to the Landscape Architect. The Landscape Architect reserves the right to refuse to consider or pass on any shop drawings which do not comply with these requirements.

D. Each submission to the Landscape Architect shall be in a minimum of six copies

ART. 5: CONTRACTOR'S SHOP DRAWINGS (continued)

to provide for distribution of three (3) to the Owner, one (1) to Contractor, one (1) to party who prepared same, and one (1) to be retained by the Landscape Architect. Additional copies are to be determined by the Contractor and supplied accordingly.

E. Drawings thus submitted will be marked by the Landscape Architect with an appropriate notation. The notations which will be used and their meanings are as follows:

"RETURNED FOR CORRECTION" - Drawings thus marked shall be revised and resubmitted, and shall not be released for any work.

"APPROVED" - Drawings thus marked indicate final action by the Landscape Architect, but additional copies which the Contractor may require are to be submitted in order that all such copies are properly marked before distribution.

F. The Landscape Architect's approval of shop drawings shall not relieve the Contractor from responsibility for deviations from the Contract Documents, unless approved by the Landscape Architect and the Owner. Neither does the Landscape Architect's approval relieve the Contractor from responsibility for errors or omissions of any sort in shop drawings. The Landscape Architect assumes no responsibility for figured dimensions on shop drawings.

G. Shop drawings which do not bear the approval of the Landscape Architect are under no consideration to be used in the shop or on the work. No changes shall be made on any approved drawings without the written consent of the Landscape Architect. Any material ordered or fabricated prior to final approval of the drawings shall be at the Contractor's risk.

ART. 6: DRAWING & SPECIFICATION ON THE WORK

A. The Contractor shall keep one copy of all drawing and specifications on the work, in good order, available to all parties having rightful interest in the project.

ART. 7: OWNERSHIP OF DOCUMENTS & MODELS

A. Except the signed Contract set of Documents, all of the Contract Documents and all models are the property of the Owner. They are not to be used on other work and are to be retumed to the Owner at the completion of cessation of the work or termination of the Contract.

ART. 8: SAMPLES & APPROVALS

A. The Contractor shall furnish for approval all samples as specified and/or as may be directed by the Landscape Architect. He shall apply to the Landscape Architect for approval of samples and other items as required. The Contractor shall make written request for an approval, and submit samples where so required, at least three weeks before approval is needed, and shall not order the materials or equipment involved until written approval is obtained. Attention is called to the fact that the Contractor shall request approvals at the proper time to avoid delay. The work shall be in accordance with approved samples, and shall comply with the requirements made necessary by the approval of the various materials submitted.

B. Unless otherwise directed, samples shall be submitted in triplicate, boxed or wrapped properly, each labeled with the name, type or brand of the material, its place of origin, names of producer, and Contractor, and name of the Project for which the material is intended, and forwarded to the Landscape Architect with all shipping charges prepaid.

C. Approval of samples is generally for quality, color and finish, and does not modify the requirements of the Contract Documents as to dimensions or design.

ART. 9: MATERIALS: APPLIANCES: EMPLOYEES: ALLOCATION:

A. Unless otherwise specified, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation and other facilities necessary for the execution and completion of the work.

B. Unless otherwise specified, all materials shall be new and both workmanship and materials shall be of good quality and, if practicalbe, materials shall bear certification of quality. The Contractor shall, if required,

furnish satisfactory evidence as to the kind and quality of materials. Upon request, the Contractor shall furnish and pay for any tests and/or certifications required by the Landscape Architect, to show the material or work meets the requirements of the Contract Documents. All tests shall be conducted by an approved independent laboratory. Copies of reports of tests shall be submitted to the Landscape Architect in triplicate.

C. Unless otherwise specified, all materials, equipment and articles shall be erected, installed, applied or connected, used, cleaned and conditioned in accordance with the printed directions and instructions of the manufacturer.

D. The Contractor shall at all times enforce strict discipline and good order among his employees, and shall not employ on the work any unfit person or any one not skilled in the work assigned to him.

E. The Contractor shall classify and allocate the furnishing of materials and the performance of labor to the various trades involved in accordance with local customs, rules, jurisdictional awards, regulation, decisions, and the like insofar as same may be applicable to the work, regardless of the classification by sections or trades as they appear in the specifications. However, nothing in this Article is to prevent the Landscape Architect from requiring all work to be performed by subcontractors and workmen who are fully competent to produce the results required under the Contract.

ART. 10: ROYALTIES AND PATENTS

A. The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has information that the process or article specified is an infringement of a patent he shall be responsible for such loss unless he promptly gives such information to the Engineer or the Owner.

ART. 11: SURVEYS, PERMITS & REGULATIONS

A. The Owner shall furnish all surveys unless otherwise specified. Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities and including the general building permit, shall be secured and paid for by the Owner, unless otherwise specified.

B. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observed that the drawings and specifications are at variance therewith, he shall promptly notify the Landscape Architect in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the Landscape Architect he shall bear all cost arising therefrom.

C. Where the Contract Documents require the work or any parts of same to be above the standards required by law, such work shall be completed according to the requirements of the Contract Documents.

ART. 12: PROTECTION OF WORK & PROPERTY

A. The Contractor shall continuously maintain adequate protection of all his work from damage and shall protect the Owner's property from injury or loss arising in connection with this Contract. He shall make good any such damage, injury or loss, except such as may be directly due to errors in the Contract Documents or caused by agents or employees of the Owner. He shall adequately protect adjacent property as provided by law and the Contract Documents, which shall also include protection of structures above and below ground as conditions of the site require.

B. The Contractor shall take all necessary precautions for the safety of employees on the work and shall comply with all applicable provisions of Federal, State and Municipal safety laws and building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the work is being performed. He shall erect and properly maintain necessary safeguards for the protection of workmen and the public and shall post

danger signs warning against the hazards created by such features of construction as protruding nails, hot hoists, well holes, elevator hatchways, scaffolding, window openings, stairways, and falling materials; and he shall designate a responsible member of his organization on the work, whose duty shall be the prevention of accidents. The name and position of the person so designated shall be reported to the Landscape Architect by the Contractor.

C. In an emergency affecting the safety of life or of the work or of adjoining property, the Contractor, without special instruction or authorization from the Landscape Architect, or Owner, is hereby permitted to act, at this discretion, to prevent such threatened loss or injury, and he shall so act, without appeal, if so instructed or authorized. Any compensation, claimed by the Contractor on account of emergency work, shall be determined for arbitration.

D. The Contractor shall substantially brace and hold in place, temporarily, the various parts of the structure and adjoining structures that cannot be maintained in their positions with stability until other connecting or abutting parts or members are constructed and permanently secured. Provide against all damage from the elements, overloading of the structure, and undermining or displacement due to conditions of the site or to any methods of construction.

E. The work shall be carried on in a manner which will cause as little inconvenience as possible to the Owner in his use of the property and existing facilities and structures. The Contractor shall provide and maintain adequate protective coverings and barricades about work which might be injured during construction, shall keep same in repair throughout the entire work, and be responsible for all injury or damage resulting from his operation.

F. Should severe weather set in before the project is completed and the Landscape Architect decides the work cannot be carried on safely, the work or parts of same as directed shall be stopped and the Contractor shall furnish adequate protection until seasonable weather returns.

G. At completion all temporary work of every nature shall be dismantled and removed from the Owner's premises.

ART. 12: PROTECTION OF WORK & PROPERTY (continued)

H. The bringing in, use or disposal of gasoline, benzine or like combustible materials shall be handled in accordance with the instructions or regulations of the Owner.

I. No explosives will be permitted on the Owner's premises.

ART. 13: INSPECTION OF WORK

A. The Landscape Architect, Owner, and their representatives shall at all times have access to the work wherever it is in preparation or progress and the Contractor shall provide proper facilities for such access and for inspection.

B. If the specifications, the Landscape Architect's instructions, laws, ordinances, or any public authority require any work to be specifically tested or approved, the Contractor shall give the Landscape Architect timely notice of its readiness for inspection, and if the inspection is by another authority than the Landscape Architect, of the date fixed for such inspection. Inspections by the Landscape Architect shall be promptly made, and where practicable, at the source of supply. If any work should be covered up without approval or consent of the Landscape Architect, it must, if required by the Landscape Architect, be uncovered for examination at the Contractor's expense.

C. Re-examaination of questioned work may be ordered by the Landscape Architect or Owner and if so ordered the work must be uncovered by the Contractor. If such work be found in accordance with the Contract Documents the Contractor shall pay the cost of re-examination and replacement. If such work be found not in accordance with the Contract Documents the Contractor shall pay such cost unless he shall show that the defect in the work was caused by another Contractor , and in that event the Owner shall pay such cost.

ART. 14: SUPERINTNEDENCE: SUPERVISION: MEASUREMENTS: COOPERATION

A. The Contractor shall keep on his work, during its progress, a competent superintendent and any necessary assistants, all satisfactory to the Landscape Architect. The Superintendent shall not be changed except with

ART. 14: SUPERINTENDENCE: SUPERVISION: MEASUREMENTS: COOPERATION:

(continued)

the consent of the Landscape Architect unless the Superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The Superintendent shall represent the Contractor in his absence and all directions given to him shall be as binding as if given to the Contractor. Important directions shall be confirmed in writing to the Contractor. Other directions shall be so confirmed on written request in each case.

B. The Contractor shall give efficient supervision to the work, using his best skill and attention. He shall carefully study and compare all drawings, specifications and other instructions and shall at once report to the Landscape Architect any error, inconsistency or omission which he may discover, but he shall not be held responsible for their existence or discovery.

C. From time to time as the work progresses, the Contractor shall verify and check measurements at the building with the dimension shown on drawings, and in case of any discrepancy he shall notify the Landscape Architect promptly that same may be adjusted before subsequent work is executed.

D. Before manufacture or fabrication of materials or execution of the work the Contractor or Subcontractor involved shall obtain field measurements, prepare his work to fit conditions properly, and be responsible for the accuracy of his work. No extra charge will be allowed on account of slight variations between field measurements and the dimensions given on the Contract Drawings.

E. The Contractor and each Subcontractor shall cooperate with each other and with other Contractors or persons employed by the Owner. Each of these parties shall correlate his work and activities with the work of others, and in case of any disagreement as to proper procedure, sequence of work, use of space, responsibility for damage, etc., the interested parties shall abide by the Landscape Architect decision as to the procedure to be followed.

ART. 15: EXTRA WORK & CHANGES IN THE WORK

A. The Owner, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract Sum being adjusted accordingly. All such work shall be executed under the conditions of the original contract except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such change.

ART. 15: EXTRA WORK & CHANGES IN THE WORK (continued)

B. In giving instructions, the Landscape Architect shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the building, but otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the Owner, and no claim for an addition to the Contract Sum shall be valid unless so ordered.

C. When so directed, the Contractor shall promptly submit his itemized estimate and proposal for such extra work or changes, as well as separate unit prices on work for both additions to and deductions from the Contract.

D. Adjustments in the Contract Sum for any such extra work or change shall be determined by one or more of the following methods:

Method No. 1 - By an acceptable estimate and lump sum proposal from the Contractor.

Method No. 2 - By unit prices stated in the Contract or subsequently agreed upon.

Method No. 3 - By actual cost of all labor and materials (less all discounts) and percentage or by said actual cost and a fixed fee, which percentage or fixed fee shall include all other charges such as overhead, profit, insurance, taxes, bonds, etc. However, on any change which involves a credit to the Owner, no allowance for overhead and profit need be credited.

E. If none of the foregoing methods is agreed upon, the Contractor, provided he receives an order as hereinbefore stated, shall proceed with the work. In such case and also under Method No. 3, he shall keep and present in such form as the Landscape Architect may direct, a correct account of the cost, together with vouchers. In any case, the Landscape Architect shall certify to the amount including reasonable allowance for overhead and profit, due the Contractor. Pending final determination of actual cost, payments on account of extra work and changes shall be made on the Landscape Architect's certificate.

F. Should conditions encountered below the surface of the ground be at variance with the conditions indicated by the drawings and specifications the contract sum shall be equitable adjusted upon claim by either party made within a reasonable time after the first observance of the conditions.

ART. 16: CLAIMS FOR EXTRA COST

A. If the Contractor claims that any instructions by drawings or otherwise involve extra cost under the Contract, he shall give the Landscape Architect written notice thereof within a reasonable time after the receipt of such instructions and in any event before proceeding to execute the work, except in emergency endagering life or property, and the procedure shall then be as provided for extra work and changes in the work. No such claim shall be valid unless so made.

ART. 17: DEDUCTIONS FOR UNCORRECTED WORK: WAIVER PROVISION

A. If the Landscape Architect and Owner deem it inexpedient to correct work injured or done not in accordance with the Contract, an equitable deduction from the Contract Sum shall be made therefor.

B. Waiver of any provision, term or covenant must be in writing and shall not constitute a precedent, nor bind the Owner or the Landscape Architect to a waiver of any succeeding breach of the same or any other or the provisions, terms, or covenants of the Contract.

ART. 18: DELAYS & EXTENSION OF TIME

A. If the Contractor be delayed at any time in the progress of the work by any act or neglect of the Owner or the Landscape Architect, or of any employee or either, or by any separate Contractor employed by the Owner, or by any changes ordered in the work, or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any causes beyond the Contractor's control, or by delay authorized by the Landscape Architect pending arbitration, or by any cause which the Landscape Architect shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the Landscape Architect may decide.

B. No such extension shall be made for delay occurring more than seven days before the claim therefor is made in writing to the Landscape Architect. In case of a continuing cause of delay, only one claim is necessary.

C. If no schedule or agreement stating the dates upon which drawings shall be fumished is made, then no claim for delay shall be allowed on account of failure to fumish drawings until two weeks after demand for such drawings and not then unless such claim be reasonable.

ART. 18: DELAYS & EXTENSION OF TIME (continued)

D. This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

ART. 19: CORRECTION OF WORK BEFORE FINAL PAYMENT

A. The Contractor shall promptly remove from the premises all materials condemned by the Landscape Architect as failing to conform to the Contract, whether incorporated in the work or not, and the Contractor shall promptly relace and re-execute his own work in accordance with the Contract and without expense to the Owner and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement.

B. If the Contractor does not remove such condemned work and materials within a reasonable time, fixed by written notice, the Owner may remove them and may store the material at the expense of the Contractor. If the Contractor does not pay the expense of such removal within ten days' time thereafter, the Owner may, upon ten days' written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

ART. 20: CORRECTION OF WORK AFTER FINAL PAYMENT: GUARANTEES:

A. Neither the final certificate nor payment nor any provision in the Contract Documents shall relieve the Contractor of responsibility for faulty materials or workmanship and, unless otherwise specified, he shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which shall appear within a period of one year from the date of final certificate of Project. The Owner shall give notice of observed defects with reasonable promptness. All questions arising under this article shall be decided by the Landscape Architect subject to arbitration.

B. As a condition precedent to final payment, the Contractor shall execute a guarantee in the Owner's Standard Form, a copy of which is attached hereto or bound in the specifications, warranting all materials and workmanship to remain in serviceable and satisfactory condition, (ordinary wear, abuse

ART. 20: CORRECTION OF WORK AFTER FINAL PAYMENT: GUARANTEES:

(continued)

and causes beyond control excepted), and to make good at his own expense any imperfections which may develop during the periods specified and any damage to other work caused by such imperfections or the repairing of same. The periods shall be as specified under the various sections or trade headings of the specifications, and where not so specified the period for all work shall be one year, reckoned in all cases from date of final certificate for the entire project.

C. Each guarantee covering the work of a Subcontractor shall be executed by the Subcontractor and signed and guaranteed by the Contractor.

D. The Owner will supply the necessary printed forms on which all guarantees shall be made. Unless otherwise directed, all guarantees shall be filed in triplicate with the Landscape Architect.

ART. 21: OWNER'S RIGHT TO DO WORK

A. If the Contractor should neglect to prosecute the work properly or fail to perform any provisions of this Contract, the Owner, after three days' written notice to the Contractor may, without prejudice to any other remedy he may have, make good such deficiencies and may deduct the cost thereof from the payment then or thereafter due the Contractor, provided, however, that the Landscape Architect shall approve both such action and the amount charged to the Contractor.

ART. 22: OWNER'S RIGHT TO TERMINATE CONTRACT

A. If the Contractor should be adjudged a bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to supply enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to subcontractors or for material or labor, or persistently disregard laws, ordinances, or the

ART. 22: OWNER'S RIGHT TO TERMINATE CONTRACT (continued)

instructions of the Landscape Architect, or otherwise be guilty of a substantial violation of any provision of the Contract, then the Owner, upon the certificate of the Landscape Architect that sufficient cause exists to justify such action, may, without prejudice to any other right or remedy and after giving the Contractor seven days' written notice, terminate the employment of the Contractor and take possesion of the premises and of all materials, tools, and appliances thereon and finish the work by whatever method he may deem expedient. In such case the Contractor shall not be entitiled to receive any further payment until the work is finished. If the unpaid balance of the contract price shall exceed the expense of finishing the work including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default shall be certified by the Landscape Architect.

ART. 23: CONTRACTOR'S RIGHT TO STOP WORK OR TERMINATE CONTRACT

A. If the work should be stopped under an order of any court, or other public authority, for a period of three months, through no act or fault of the Contractor, or of anyone employed by him, or if the Landscape Architect should fail to issue any certificate for payment within seven days after it is due, or if the Owner should fail to pay to the Contractor within seven days of its maturity and presentation, any sum certified by the Landscape Architect or awarded by arbitrators, then the Contractor may, upon seven days' written notice to the Owner and the Landscape Architect, stop work or terminate this contract and recover from the Owner payment for all work executed and any loss sustained upon any plant or materials and reasonable profit and damage.

ART. 24: APPLICATIONS FOR PAYMENTS

A. The Contractor shall submit to the Landscape Architect an application for each payment, and, if required, receipts or other vouchers, showing his payments for materials and labor, including payments to subcontractors as required by Article 37.

ART. 24: APPLICATIONS FOR PAYMENTS (continued)

B. If payments are made on valuation of work done, such application shall be submitted at least ten days before each payment falls due, and, if required, the Contractor shall, before the first application, submit to the Landscape Architect, a schedule of values of the various parts of the work, including quantities, aggregating the total sum of the Contract divided so as to facilitate payments to subcontractors in accordance with Article 37 (d-2), made out in such form as the Landscape Architect and the Contractor may agree upon, and, if required, supported by such evidence as to its correctness as the Landscape Architect may direct. This schedule, when approved by the Landscape Architect shall be used as a basis for certificates of payment, unless it be found to be in error. In applying for payments, the Contractor shall submit a statement based upon this schedule and, if required, itemized in such form and supported by such evidence as the Landscape Architect may direct, showing his right to the payment claimed.

C. If payments are made on account of materials delivered, and suitably stored at the site but not incorporated in the work, they shall, if required by the Landscape Architect, or Owner, be conditional upon submission by the Contractor of bills of sale or such other procedure as will establish the Owner's title to such material or otherwise adequately protect the Owner's interest.

ART. 25: CERTIFICATES OF PAYMENTS

A. If the Contractor has made application as above, the Landscape Architect shall, not later than the date when each payment falls due, issue to the Contractor a certificate for such amount as the Landscape Architect decides to be properly due.

B. Unless otherwise provided in the Contract Documents, payments on account will be made monthly for 90 per cent of the value of labor and materials satisfactorily incorporated in the work, when certified by the Landscape Architect, but such payments will not be made until every part of the work, to the point for which payment has been claimed, is satisfactorily supplied and executed in every particular, and all defects therein to the entire satisfaction of the Landscape Architect. The final payment of 10 per cent will be made upon certificate for the final acceptance of the entire work.

ART. 25: CERTIFICATES OF PAYMENTS (continued)

C. Before monthly payments are made the Contractor shall furnish waivers of lien, and sworn statements that all bills for labor and materials have been paid for the previous month. Before final payment is made he shall furnish waivers of lien from all subcontractors and material men, together with sworn statements that all bills for labor and materials for the entire work have been paid.

D. No certificate issued nor payment made to the Contractor, nor partial or entire use or occupancy of the work by the Owner, shall be an acceptance of any work or materials not in accordance with this Contract. The making and acceptance of the final payment shall constitute a waiver of all faulty work appearing after final payment or from requirements of the specifications, and of all claims by the Contractor, except those previously made and still unsettled.

E. Should the Owner fail to pay the sum named in any certificate of the Landscape Architect or in any award by arbitration, upon demand when due, the Contractor shall receive, in addition to the sum named in the certificate, interest thereon at the legal rate in force at the place of building.

ART. 26: PAYMENTS WITHHELD

A. The Landscape Architect may withold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate to such extent as may be necessary to protect the Owner from loss on account of:

(a-1) Defective work not remedied.
(a-2) Claims filed or reasonable evidence indicating probable filing of claims.
(a-3) Failure of the Contractor to make payments properly to subcontractors or for material or labor.
(a-4) A reasonable doubt that the Contract can be completed for the balance then unpaid.
(a-5) Damage to another contractor.
(a-6) Failure of the Contractor to cause work to progress satisfactorily.

B. When the above grounds are removed payment shall be made for amounts withheld because of them.

ART. 27: LIABILITY INSURANCE

A. The Contractor shall maintain insurance as will protect him from liability under Workman's Compensation Acts and other Employee Benefits Act in accordance with the law in force where the building or structure is to be built, and from liability for damages because of Bodily Injury, including death and property damage, including accident claims due to Automobiles, all under Comprehensive General and Automobile Bodily Injury and Property Damage form of policies, which may arise both out of or during work under this Contract, whether such work be by the Contractor, himself, or by any Subcontractor or anyone directly employed by either of them.

1. This insurance shall be written for not less than the following limits of liability:

Bodily Injury	- One person	$1,000,000.00
	- Each accident-occurance	$2,000,000.00
Property Damage	- Each accident	$1,000,000.00
	- Aggregate	$2,000,000.00

2. This insurance is not intended to cover any responsibility for damages as included herein under Article 31.

B. In the event that any class of employees is engaged in hazardous work under the Contract and is not protected under the Workmen's Compensation Acts, the Contractor shall maintain Special Hazards Insurance of nature and in limits as approved by the Owner.

C. All insurance shall be carried with companies authorized to do business in the State of Michigan. No work under the Contract shall be commenced until all insurance required by the Contract Documents has been obtained and approved by the Owner.

ART. 28: INDEMNITY

A. The Contractor shall hold harmless from and indemnify the Owner against all claims, suits, actions, costs, counsel fees, expenses, damages, judgements or decrees, by reason of any person or persons or property being damaged or injured by the Contractor or any of his subcontractors, or any person employed under said Contract, or under any of his subcontractors, or in any capacity during the progress of the work, whether by negligence or otherwise.

ART. 29: FIRE AND EXTENDED COVERAGE INSURANCE

A. The Owner shall effect and maintain insurance against loss or damage arising from fire, explosion, wind damage, riot or civil commotion, physical or malicious mischief, vandalism, sprinkler leakage, smoke damage, aircraft and vehicle damage upon the entire structure on which the work of this Contract is to be done to one hundred per cent of the insurable value thereof under a form of Builder's Risk Insurance.

1. Such insurance is to include temporary structures, materials, equipment and supplies of all kinds incident to the construction of said building or structure, all forming a part of or contained in said building or structure, temporary structures, or on vehicles, or in the open; only while on the premises described or within 100 feet thereof.

2. The Contractor and his Subcontractors shall separately insure all contractor's equipment such as tools, equipment, scaffolding, towers, stagings, bunk houses and other temporary buildings owned, borrowed or rented and all materials which do not become part of the construction or included in the cost of the work.

B. Additions and Alterations Contracts: If the construction under the Contract is an addition or an alteration to a previously built building or structure, the following shall also apply:

The Owner shall insure his interest and the interest of the Contractor and all his subcontractors hereunder in and to the entire structure on which the work of this Contract is to be done, against fire and extended coverage perils, subject to any Co-Insurance Form or Superior Form presently being used to insure the Owner's existing property, and the amount of such insurance shall be maintained to at least the per cent of insurable value as stipulated in the co-insurance clause contained in the policy or policies.

C. The Contractor shall be named or designated in such capacity as insured jointly with the Owner in all policies and all subcontractors shall be included as insured jointly with the Contractor in all policies by the designation "Subcontractors, as their respective interest may appear". Certificates of such insurance shall be filed with the Contract and the Landscape Architect. If the Owner fails to carry insurance as provided above and so advised the Contractor, the Contractor may insure his interest and that of the Subcontractors at the Owner's expense. If

ART. 29: FIRE AND EXTENDED COVERAGE INSURANCE (continued)

the Owner fails to notify the Contractor that insurance is not carried, the Contractor may recover damages as may be provided under Article 31.

D. The following Subrogation Clause shall appear in all policies of insurance, including Contractor's equipment, floater covering fire, lightning and the perils insured under the Standard Extended Coverage Endorsement:

> "Subrogation Clause: It is hereby stipulated that this insurance shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for loss occurring to the property described herein."

E. The insured loss, if any, is to be adjusted with and payable to the Owner as Trustee for the insureds as their interest may appear, except where payment of all or a proportion of the insurance is to be made to a mortgages as his interest may appear.

F. In case of a loss under Fire and Extended Coverage insurance policy provided for these insurance Provisions protecting the interest of the parties hereto, the Owner, in his capacity as Trustee, shall furnish bond, if requested in writing by any interest herein and shall be empowered to adjust and approve loss settlement with the insurance companies and to receive such insurance loss funds for placement in a special bank account for such purposes only. If any party at interest herein objects to the settlement of a loss, and so states in written form prior to signing of Proofs of Loss by the Trustee, the adjustment of the loss may be submitted to arbitration in accordance with approved Arbitration procedure as specified and the Trustee shall be governed by the arbitrators' decision.

G. All insurance loss monies paid to the Trustee shall be distributed in accordance with a mutual agreement between the parties to this Contract, or under arbitration award following approved arbitration procedure as provided for above.

H. The Contractor shall report to the Landscape Architect each claim within twenty days after occurrence of loss.

ART. 30: GUARANTY BONDS

A. The Owner shall have the right, prior to the signing of the Contract, to

ART: 30 GUARANTY BONDS

require the Contractor to furnish bond covering the faithful performance of the Contract, and the payment of all obligations arising thereunder, in such form as the Owner may prescribe and with such sureties as he may approve. If such bond is required by instructions given previous to the submission of bids, the premium shall be paid by the Contractor; if subsequent thereto, it shall be paid by the Owner.

ART. 31: DAMAGES

A. The Contractor and his Subcontractors shall in no event be liable to the Owner and in no event shall the Owner be liable to the Contractor or his Subcontractors for any act which may result in a loss from fire, lightning or other Extended Coverage perils in connection with this Contract, either during or after completion of this Contract. The Contractor shall include in contracts with his Subcontractors a similar waiver of recovery rights by the Subcontractor against the Owner and the Contractor.

B. If either party to this Contract should suffer damage in any manner other than from fire, lightning or Extended Coverage perils, because of any wrongful act or neglect of the other party or of anyone employed by him, then he shall be reimbursed by the other party for such damage, provided, the Owner shall be responsible for and at his option insure against loss or use of any of his existing property, due to fire or otherwise, however caused.

C. Claims under this clause shall be made in writing to the party liable within a reasonable time of the first observance of such damage and not later than the time of final payments, except as expressly stipulated otherwise in the case of faulty work or materials, and shall be adjusted by agreement or arbitration.

ART. 32: LIENS

A. Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and, if required in either case, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any sub-contractor refuses to furnish a release or receipt in full, furnish a bond

ART. 32: LIENS (continued)

satisfactory to the Owner, to indemnify him against any lien. If any lien remain unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

ART. 33: ASSIGNMENT

A. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the Owner.

B. No assignment of the Contract shall be valid unless is shall contain a provision that the funds to be paid to the Assignee under the assignment are subject to a prior lien for services rendered and/or materials supplied for the performance of the work called for in said Contract in favor of all persons, firms, or corporation rendering such services and/or supplying such materials. Such provision, however, need not be inserted if the "Assignment" technically constitues a novation, i.e., the Assignee not only acquires the benefits under the Contract but also assumes the obligations thereunder in place of the Assignor.

ART. 34: MUTUAL RESPONSIBILITY OF CONTRACTORS: CO-RESPONSIBILITY:

A. Should the Contractor cause damage to any separate contractor on the work, the Contractor agrees, upon due notice, to settle with such contractor by agreement or arbitration, if he will so settle. If such separate contractor sued the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor, who shall defend such proceedings at the Owner's expense and, if any judgement against the Owner arise therefrom, the Contractor shall pay or satisfy it and pay all costs incurred by the Owner.

B. If the Contract Docuements require material furnished by one contractor to be set by another contractor, arrangements shall be made between the two for the time and place of its delivery. After acceptance of any such material by the contractor for setting, he shall be responsible for it in the same manner as he is for his own work.

ART. 35: SEPARATE CONTRACTS

A. The Owner reserves the right to let other contracts in connection with this work. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of their materials and execution of their work, and shall properly connect and coordinate his work with theirs.

B. If any part of the Contractor's work depends for proper execution or results upon the work of any other contractor, the Contractor shall inspect and promptly report to the Landscape Architect any defects in such work that render it unsuitable for such proper execution and results. His failure so to inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

C. To insure proper execution of his subsequent work the Contractor shall measure work already in place and shall at once report to the Landscape Architect any discrepance between the executed work and the drawings, subject to the conditions set forth in Article 14.

ART. 36: SUB-CONTRACTS

A. The Contractor shall, as soon as practicable after the execution of the contract, notify the Landscape Architect in writing of the names of subcontractors proposed for the principal parts of the work and for such others as the Landscape Architect may direct and shall not employ any that the Landscape Architect may within a reasonable time object to as incompetent or unfit.

B. If the Contractor has submitted before execution of the contract a list of subcontractors and the change of any name on such list is required in writing by the Owner after such execution, the contract price shall be increased or diminished by the difference in cost occasioned by such change.

C. The Landscape Architect shall, on request, furnish to any subcontractor, wherever practicable, evidence of the amounts certified on his account.

ART. 36: SUB-CONTRACTORS (continued)

D. The Contractor agrees that he is as fully responsible to the Owner for the acts and omissions of his subcontractors and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

E. Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and the Owner.

F. Should material or workmanship, or parties furnishing same prove objectionalbe under the provisions of the Contract, or should violations of the Contract exist at the Project or elsewhere, and continue after the Contractor has received from the Landscape Architect a reasonable warning, then, upon request of the Landscape Architect, such objectionable parties shall be dismissed, removed from the work and excluded from the Project, and the work shall be remedied and continued by others satisfactory to the Landscape Architect.

ART. 37: RELATIONS OF CONTRACTOR & SUBCONTRACTOR

A. The Contractor agrees to bind every Subcontractor and every Subcontractor agrees to be bound by the terms of the Agreement, the General Conditions, the Drawings and Specifications as far as applicable to his work, including the following provisions of this article, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the Owner or the Landscape Architect.

B. This does not apply to minor sub-contracts.

C. The Subcontractor agrees:

(c-1) To be bound to the Contractor by the terms of the Agreement, General Conditions, Drawings and Specifications, and to assume toward him the obligations and responsibilities that he, by those documents, assumes toward the Owner.

(c-2) To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment under Article 24 of the General Conditions.

(c-3) To make all claims for extras, for extensions of time and for damages for delays or otherwise, to the Contractor in the manner provided in the General Conditions for like claims by the Contractor upon the Owner, except that the time for making claims for extra cost is one week.

D. The Contractor agrees:

(d-1) To be bound to the Subcontractor by all the obligations that the Owner assumes to the Contractor under the Agreement, General Conditions, Drawing and Specifications, and by all the provisions thereof affording remedies and redress to the Contractor from the Owner.

(d-2) To pay the Subcontractor, upon the payment of certificate, if issued under the schedule of values described in Article 24 of the General Conditions, the amount allowed to the Contractor on account of the Subcontractor's work to the extent of the Subcontractor's interest therein.

(d-3) To pay the Subcontractor, upon the payment of certificates, if issued otherwise than as in (d-2), so that at all times his total payments shall be as large in proportion to the value of the work done by him as the total amount certified to the Contractor is to the value of the work done by him.

(d-4) To pay the Subcontractor to such an extent as may be provided by the Contract Documents or the subcontract, if either of these provides for earlier or larger payments than the above.

(d-5) To pay the Subcontractor on demand for his work or materials as far as executed and fixed in place, less the retained percentage, at the time the certificate should issue, even though the Landscape Architect fails to issue it for any cause not the fault of the Subcontractor.

(d-6) To pay the Subcontractor a just share of any fire and extended coverage insurance money received by him, the Contractor, under Article 29 of the General Conditions.

ART. 37: RELATIONS OF CONTRACTOR & SUBCONTRACTOR (continued)

(d-7) To make no demand for liquidated damages or penalty for delay in any sum in excess of such amount as may be specifically named in the subcontract.

(d-8) That no claim for services rendered or materials furnished by the Contractor to the Subcontractor shall be valid unless written notice thereof is given by the Contractor to the Subcontractor during the first ten days of the calendar month following that in which the claim originated.

(d-9) To give the Subcontractor an opportunity to be present and to submit evidence in any arbitration involving his rights.

(d-10) To name as arbitrator under arbitration proceedings as provided in the General Conditions the person nominated by the Subcontractor, if the sole cause of dispute in the work, materials, rights or responsibilities of the Subcontractor, or if the Subcontractor any any other subcontractor jointly, to name as such arbitrator the person upon whom they agree.

E. The Contractor and the Subcontractor agree that:

(e-1) In the matter of arbitration, their rights and obligation and all procedure shall be analogous to those set forth in this Contract.

F. Nothing in this article shall create any obligation on the part of the Owner to pay to or to see to the payment of any sums to any subcontractor.

ART. 38: LANDSCAPE ARCHITECT'S STATUS

A. The Landscape Architect shall have general supervision and direction of the work. He is the agent of the Owner only to the extent provided in the Contract Documents and when in special instances he is authorized by the Owner so to act, and in such instance he shall, upon request, show the Contractor written authority. He has authority to stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.

ART. 38: LANDSCAPE ARCHITECT'S STATUS (continued)

B. As the Landscape Architect is, in the first instance, the interpreter of the conditions of the Contract and the judge of its performance he shall side neither with the Owner nor with the Contractor, but shall use his powers under the Contract to enforce its faithful performance by both.

C. In case of the termination of the employment of the Landscape Architect, the Owner shall appoint a capable and reputable Landscape Architect against whom the Contractor makes no reasonable objection, whose status under the contract shall be that of the former Landscape Architect, any dispute in connection with such appointment ot be subject to arbitration.

ART. 39: LANDSCAPE ARCHITECT'S DECISIONS

A. The Landscape Architect shall, within a reasonable time, make decisions on all claims of the Owner or Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents.

B. The Landscape Architect's decisions, in matters relating to artistic effect, shall be final, if within the terms of the Contract Documents.

C. Except as above or as otherwise expressly provided in the Contract Documents, all the Landscape Architect's decisions are subject to arbitration.

D. If, however, the Landscape Architect fails to render a decision within ten days after the parties have presented their evidence, either party may then demand arbitration. If the Landscape Architect renders a decision after arbitration proceedings have been initiated, such decision may be entered as evidence but shall not disturb or interrupt such proceedings except where such decision is acceptable to the parties concemed.

ART. 40: ARBITRATION

A. All disputes, claims or questions subject to arbitration under this contract shall be submitted to artitration in accordance with the provisions, then obtaining, of the Standard Form of Arbitration Procedure of the American Institute of Architects, and this agreement shall be

ART. 40: ARBITRATION (continued)

specifically enforceable under the prevailing arbitration law, and judgement upon the award rendered may be entered in the highest court of the forum, State or Federal, having jurisdiction. It is mutually agreed that the decision of the arbitrators shall be a condition precedent to any right of legal action that either party may have against the other.

B. The Contractor shall not cause a delay of the work during any arbitration proceeding, except by agreement with the Owner.

C. Notice of the demand for arbitration of a dispute shall be filed in writing with the Landscape Architect and the other party to the contract. If the arbitration is an appeal from the Architect's decision, the demand therefor shall be made within ten days of its receipt; in any time after the dispute has arisen; in no case, however, shall the demand be made later than the time of final payment, except as otherwise expressly stipulated in the Contract.

D. The arbitrators, if they deem that the case requires it, are authorized to award to the party whose contention is sustained, such sums as they or a majority of them shall deem proper to compensate it for the time and expense incident to the proceeding and, if the arbitration was demanded without reasonable cause, they may also award damages for delay. The arbitrators shall fix their own compensation, unless otherwise provided by agreement, and shall assess the costs and charges of the proceeding upon either or both parties.

E. A separate Arbitration Agreement shall be executed by the parties to the main contract.

ART. 41: CASH ALLOWANCES

A. The Contractor shall include in the Contract Sum all allowances named in the Contract Documents and shall cause the work so covered to be done by such contractors and for such sums as the Landscape Architect may direct, that the Contract Sum being adjusted in conformity therewith. The Contractor declares that the Contract Sum includes such sums for expenses and profit on account of cash allowances as he deems proper. No demand for expense or profit other than those included in the Contract Sum shall be allowed. The Contractor shall not be required to employ for any such work persons against whom he has a reasor objection.

ART. 42: USE OF PREMISES

A. The Contractor shall confine his apparatus, the storage of materials and the operations of his workmen to limits indicated by law, ordinances, permits or directions of the Landscape Architect and shall not unreasonably encumber the premises with his materials.

B. If at any time it becomes necessary to move materials or equipment which have been temporarily located or stored during construction, the Contractor furnishing same shall, when directed, move them to another location without charge.

C. The Contractor shall not load or permit any part of the structure to be loaded with a weight that will endanger its safety.

D. The Contractor shall enforce the Landscape Architect's instructions regarding signs, advertisements, fires and smoking.

E. Should any room or part of the Project be temporarily used by the Contractor as shop, storeroom, locker room, or an office, for any purpose, such room or part shall, prior to completion and when directed, be thoroughly cleaned, all damaged work arising thereform made good, and the whole left in perfect condition by the party or parties making use of same. No room or part of the Project shall be so used without the consent of the Landscape Architect, or the Owner.

F. Smoke pipes and exhaust from boilers, engines, etc., shall in all cases be extended up above roofs of buildings or a substitute arrangement made subject to approval of the Landscape Architect, or the Owner.

G. The Owner, at its election, may from time to time occupy any of the units or parts of the Project as the work in connection therewith is completed to such a degree as will, in the opinion of the Owner permit of their use for the purposes for which they are intended. The Owner will, prior to any such occupancy, give notice to the Contractor thereof and such occupancy shall be upon the following terms:

(g-1) The guarantee periods shall not begin to run until substantial completion of the entire project.

(g-2) Such occupancy shall not constitute an acceptance of work not performed in accordance with the Contract Documents or relieve the Contractor of liability to perform any work required by the Contractor but not completed at the time of occupancy.

ART. 42: USE OF PREMISES (continued)

(g-3) The Contractor shall be relieved of all maintenance costs on the units or parts occupied under this agreement.

(g-4) The Contractor shall not be responsible for wear and tear or damage resulting from occupancy under this agreement.

(g-5) The Owner shall assume risk of loss with respect to any unit or part occupied under the terms of this agreement.

(g-6) The Contractor shall not be required to furnish heat, light and water or other such services used in the units or parts occupied, without proper remuneration therefor.

ART. 43: CUTTING, PATCHING & DIGGING

A. The Contractor shall do all cutting, fitting or patching of his work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors shown upon, or reasonable implied by, the Drawing and Specifications for the completed structure, and he shall make good after them as the Landscape Architect may direct.

B. Any cost caused by defective or ill-timed work shall be borne by the party responsible therefor.

C. The Contractor shall not endanger any work by cutting, digging or otherwise, and shall not cut or alter the work of any other contractor save with the consent of the Landscape Architect.

ART. 44: CLEANING UP

A. The Contractor shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work he shall remove all his rubbish from and about the building and all his tools, scaffolding and surplus materials and shall leave his work "broom clean" or its equivalent, unless more exactly specified. In case of dispute, the Owner may remove the rubbish and charge the cost to the several contractors, as the Landscape Architect shall determine to be just.

ART. 45: OWNER'S OPTIONS

Reference in the Specifications to any article, device, product, material, fixture, form, process, or type construction by name, make, type or style shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition.

However, unless otherwise specifically provided in the Agreement, the following provisions shall apply:

(A) Where the Specification mentions only one such name, make, type or style, the Contractor shall employ such sub-contractor, fabricator or process and shall furnish such named make, type or style regardless of any reference to the phrase "or other approved," or other words to that effect.

(B) Where the Specification mentions more than one name of subcontractor, fabricator of process, or more than one name, type, make or style of article, material or equipment item, the Contractor shall furnish one of the named makes, types or styles.

ART. 46: NON-DISCRIMINATION PROVISION AND WAGE AND HOUR ACT

A. During the performance of this Contract, the Contractor agrees as follows:

1. The Contractor shall not discriminate against any employee or applicant for employment, because of sex, race, creed, color or national origin. The Contractor will take affirmative action to insure that applicants are employed, and that employees are treated during employment without regard to their sex, race, creed, color, or national origin.

2. Such action shall include, but not be limited to the following: employment; upgrading; demotion; or transfer; recruitment or recruitment advertising; layoff of terminations; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

3. The Contractor will, in all solicitations, or advertisements for employees, placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to sex, race, creed, color or national origin.

4. The Contractor will send to each labor union or representative, of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. The Contractor will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor, Department of HEW or other government agency or authority having jurisdiction.

6. The Contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, Department of HEW or other government agency or authority having jurisdiction, and will permit access to his books, records, and accounts by the administrative agency and the Secretary of Labor for the purposes of investigation to ascertain compliance with such rules, regulations and orders.

7. In the event of the Contractor's noncompliance with the non-discrimination clauses of this Contract, or with any of the said rules, regulations or orders, this Contract may be cancelled, terminated or suspended in whole or in part, and the Contractor may be declared ineligible for further contracts with the Owner or federally-assisted contracts in accordance with procedure authorized in Executive Order No. 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, Department of HEW or other government agency or authority having jurisdiction.

8. The Contractor will include the provisions of Paragraph 1 through 8 in every sub-contract or purchase order unless exempted by rules, regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to Section 204 or Executive

Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each sub-contractor or vendor. The Contractor will take such action with respect to any sub-contract or purchase order as the administering agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with litigation with a sub-contractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interest of the United States.

ART. 47: COMPLIANCE WITH "KICK-BACK" STATUTE AND REGULATIONS

a. The Contractor and each of his Sub-Contractors shall comply with the following statutes (and with regulations issued pursuant thereto, which are incorporated herein by reference):

1. Title 18 U.S.C. Section 874:

"874. Kick-back from public works employees - whoever, by force, intimidation or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public works, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined not more than $5,000 or imprisioned not more than five years, or both."

2. Title 40 U.S.C. Section 276C:

"276C. Regulations governing Contractors and Sub-Contractors - The Secretary of Labor shall make reasonable regulations for contractors and sub-contractors engaged in the construction, completion or repair or public buildings, public works or buildings or works financed in whole or in part by loans or grants from the United States, including a provision that each Contractor and Sub-Contractor shall furnish weekly a sworn affidavit with respect to the wages paid each employee during the preceding week."

ART. 48: TAXES

a. The Contractor shall include in his tender and shall make payment of all applicable Federal, State, County or Municipal taxes of whatever nature and description.

b. The Contractor shall also be responsible for the payment of any payroll taxes or contributions for unemployment insurance or old age pensions or annuities which are measured by the wages, salaries, or other renumerations paid to the employees of the Contractor.

c. The Owner reserves the right to require evidence of payment of taxes prior to final payment to Contractor.

ART. 49: ATTACHED FORMS

a. Attached hereto or bound in the specifications and forming a part hereof are the Arbitration Agreement and Guarantee.

b. Refer to Article 20 for instructions relating to guarantee

ART. 50: FEMALE UTILIZATION

The following goals and timetables for female utilization shall be included in all Federal and federally assisted construction contracts and subcontracts in excess of $10,000. The goals are applicable to the contractor's aggregate on-site construction workforce whether or not part of that workforce is performing work on a Federal or federally assisted construction contract or subcontract.

Area covered: Goals for women apply nationwide.

Goals and Timetables:

Timetable	Goals (percent)
From April 1, 1978 until March 31, 1979	3.1
From April 1, 1979 until March 31, 1980	5.1
From April 1, 1980 until March 31, 1981	6.9

ART. 51: CLEAN AIR REQUIREMENTS

A. For the purpose of this clause:

1) The term 'Air Act' means the Clean Air Act, as amended (42 U.S.C. 1857, et seq. as amended by Public Law 91-604).

2) The term 'air pollution control agency' means any agency which is defined in Section 302(b) and Section 302(c) of the Air Act.

3) The term 'clean air standards' means any rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in Section 110(d) of the Air Act, an approved implementation procedure or plan under Section 111(c) and Section 111(d), respectively, of the Air Act, or an approved implementation procedure under Section 112(d) of the Air Act.

4) The term 'clean water standards' means any limitation, control, condition, prohibition, or other requirement which is set by the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency, or by a State under an approved program as authorized by Section 402 of the Water Act, or by a local government to ensure compliance with pretreatment regulations as required by Section 307 of the Water Act, including any provisions with respect to inspections, monitoring, and entry, as authorized by Section 308 of the Water Act.

5) The term 'compliance' means compliance with clean air or water standards, or a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency (EPA), or an air or water pollution control agency, in accordance with the requirements of the Air or Water Act and regulations issued pursuant thereto.

6) The term 'facility' means a non-Federal building, plant, installation, structure, mine, area, location, or site of operations, to be utilized in the performance of a contract or loan. Where an area, location, or site of operations contains or includes more than one building, plant, installation or structure, the entire area, location, or site shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are co-located in one geographical area.

7) The term 'Water Act' means Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq. as amended by Public Law 92-500).

8) The term 'water pollution control agency' means any agency which is defined in Section 502(1) or Section 502(2) of the Water Act.

B. The grantee agrees that any facility to be utilized in the performance of this grant is not listed on the EPA list of Violating Facilities pursuant to 40 CFR, Part 15.20.

C. In the event the grantee fails to comply with clean air or water standards at such facilities, the grant may be canceled, terminated for default, or suspended for such failure, in whole or in part, and the Government may refrain from further granting with the grantee.

D. The grantee agrees to comply with all the requirements of Section 114 of the Air Act and Section 308 of the Water Act relating to inspection, monitoring, entry, reports, and information, as well as all other requirements specified in Section 114 and Section 208, respectively, and all regulations and guidelines issued thereunder.

E. The grantee agrees to promptly notify the awarding official of the receipt of any notice from the Director, Office of Federal Activities, Environmental Protection Agency, indicating that any facility utilized or to be utilized under the grant is under consideration for listing on the EPA List of Violating Facilities.

F. The grantee further agrees to insert, in any subgrant, contract or subcontract hereunder, unless otherwise exempted pursuant to the EPA regulations implementing the Air or Water Act (40 CRF, Part 15.5) provisions which shall include the criteria and requirements set forth in this clause, including this paragraph (F). The grantee shall take such action as the Government may direct as a means of enforcing such provisions.

JOB TITLE _____

ARBITRATION AGREEMENT

THIS AGREEMENT made the _____ day of _____ 19____,

by and between _____

(Owner), parties to certain main contract to construct _____

_____

(described work here)

in connection with the construction of _____

_____

all in accordance with the Drawings and Specifications including any and all Addenda in the form of Bulletins prepared by Architects or Engineers, entered into the _____day of _____ 19____.

It is mutually agreed between the parties to said contract as follows:

1. That any controversy thereinafter arising between parties concerning or relating to or arising out of said contract shall be settled by artibration pursuant to and under Section 15394 of the compiled laws of 1929 of the State of Michigan as amended at the sixty-first legislation session of 1941, providing written notice of intent is filed by the aggrieved within five (5) days after such controversial ruling or request is made and the aggrieved shall not stop the work but shall diligently pursue the work in accordance with the rulings and documents of the Architect or Engineer pending the arbitration award, unless the Architect or Engineer orders the work stopped pending the award.

2. That said arbitration shall be conducted under and in accordance with the rules of The American Institute of Architects, Document No. 305.

3. That the arbitrators shall be selected as follows: one arbitrator by each party to the contract; these two to then select a third member.

4. Any award signed by at least two of the arbitrators made pursuant to this agreement, which is not subject to the charge of fraud or gross negligence, shall be final and binding upon the parties. Each arbitrator shall receive a fee as set forth in A.I.A. Document 305 and the entire cost of the arbitration shall be determined by the Board of Arbitration and assessed in the signed decision.

5. That judgment may be rendered upon any such award made pursuant to this agreement in the _____ Court of _____ _____ County of the State of Michigan in accordance with the provisions of the aforesaid statutes of the State of Michigan or any other Court having competent jurisdiction.

_____

Contractor Date

_____

Owner Date

DATE:

OWNER:

ADDRESS:

SUBJECT: Guarantee and Indebtedness Statement
Project Name: _____
Project Number: _____

The undersigned hereby provides the following statements covering the work performed under the Subject Contract with _____.

GUARANTEE:

We guarantee that all labor and materials furnished and the work performed by us in connection with the subject work are in accordance with the plans and specifications, authorized alterations and additions thereto; that should any defects develop or become apparent for a period of _____ ( ) year(s) from date of acceptance (such date being _____), and be due to imperfections in materials and/or workmanship, the same shall, upon written notice, be made good by us without expense to the Owner, and that any other work affected in correcting such defects shall also be made good.

INDEBTEDNESS STATEMENT:

We hereby certify that all payrolls, material bills, and other indebtedness connected with the work on the subject project have been paid in full.

_____ _____
Contractor Date

BY _____
Authorized Officer

Address: _____

_____

Distribution:

CONSTRUCTION SCHEDULE

OWNER: Tawas City, MI

PROJECT: Gateway Park - Phase I Construction

LANDSCAPE ARCHITECT: Beckett Raeder Rankin Inc

GENERAL REQUIREMENTS:

The work of this section is subject to all applicable requirements of the sections of these specifications forming the General Requirements herein before written for the entire work.

SEQUENCE OF OPERATIONS:

The various parts of the work shall be carried on in a manner which will best serve in providing for the continuous operations of all necessary functions of the existing building and to cause as little inconvenience to the Owner as practicable. In order to accomplish the desired results, it will be required that the work be arranged, scheduled and executed in accordance with an approved Sequence of Operations which is agreeable to the Owner and the Landscape Architect.

CONSTRUCTION SCHEDULE LIMITATIONS:

It is the intent of the Owner to achieve substantial completion of all phases of this project by or before August 31, 1982.

SECTION 02110 - DEMOLITION AND REMOVAL

SCOPE: The Contractor shall provide all equipment, transportation, services, materials, and labor to remove trees and stumps, concrete curb, concrete walls and sidewalk, guard rail, miscellaneous debris and rubble, and excavate existing grade for placement of aggregate base and pavement.

REMOVAL OF TREES AND STUMPS:

Existing trees and their stumps shall be removed where designated on the drawings. Stumps must be uprooted and removed in their entirety. Grinding of stumps will not be allowed. All logs, limbs, branches, roots, etc. must be removed from the site and disposed of by the Contractor in an approved location. Burning will not be allowed on site.

REMOVAL OF CONCRETE CURB:

Prior to removal the limit of the curb shall be marked and cut with a concrete saw, in a manner approved by the Landscape Architect. Care shall be taken during removal so as not to cave or undermine the existing adjacent roadway pavement. Any reinforcement encountered shall be left protruding at least one foot from the face of the cut and shall later be spliced to new reinforcement. Curb shall be disposed of off-site and shall in no circumstances be used in the site filling operation.

REMOVAL OF CONCRETE WALLS AND SIDEWALK:

Existing concrete walls and sidewalk shall be removed where designated on the drawings. Removed material shall be disposed of off-site and shall in no circumstances be used in the site filling operation.

REMOVAL OF GUARDRAIL:

Existing guardrail and posts shall be removed where indicated on the drawings. Removal will be to an overlap joint as determined by the Landscape Architect in the field.

REMOVAL OF MISCELLANEOUS DEBRIS AND RUBBLE:

Miscellaneous debris and rubble shall consist of broken concrete, asphalt, logs, limbs, lumber, rocks over 10" diameter, fence and posts, trash, or any other such items found laying on the surface of the existing grade. Such debris and rubble shall be removed and disposed of off-site and shall in no circumstances be used in the site filling operation.

EXCAVATION:

Excavation shall consist of the cutting, loading, hauling and disposal off-site of existing earth, gravel, etc. encountered in preparing the subgrade for installation of aggregate base and bituminous paving.

PROTECTION:

The Contractor shall exercise special precautions during construction, not to damage any remaining pavement, sidewalk, or curb and gutter and no construction equipment with tracing lugs or other defacing or damaging components will be permitted on these surfaces. Where it is necessary for such equipment to travel over paved areas, the Contractor shall provide suitable planks and blocking to prevent damaging paved surfaces.

SECTION 02200 - SITE FILLING

SCOPE: Furnish all material, labor, transportation, and equipment necessary to completely execute all site filling operations as shown on the drawings and specified herein.

SUBSURFACE CONDITIONS: It is understood and agreed that the Contractor assumes all risks in any excavating or dredging work required by this project, and that the Contractor shall make all necessary investigations of subsurface conditions before beginning work.

MEASUREMENTS AND LAYOUTS: The drawings indicate finished grades required for the construction of this project. The Contractor shall provide a Registered Surveyor to stake out all work, establish grades, and do all other layout work required.

MATERIALS:

A. Imported Fill Material: Fill shall be approved imported sand material, free from frost, roots, branches, sod, mulch, trash, rock, broken concrete, etc. In general, the material shall be of a type indigenous to the area. All borrow pits shall be subject to the approval of the Landscape Architect and will be secured by the Contractor.

B. Dredged Material: Material dredged for placement of the toe of the revetment and for deepening of the river channel shall be placed within the project limits as site fill. No additional dredging of the lake bottom will be allowed. Payment for dredging will be incidental to, and considered the same as, the unit price payment for site filling.

METHODS:

A. The Contractor shall notify the Landscape Architect one week before commencing filling operations.

B. The Contractor shall place fill as directed by the Landscape Architect as specified herein. Unless otherwise approved by the Landscape Architect, the lowest elevation shall be filled first and the fill shall be raised approximately horizontally from that level. Fill material shall be spread in approximately horizontal layers not exceeding six inches in thickness and extending generally over the entire area of fill. Fill material during construction shall be sloped to drain rain water to outer edge of embankment. As each layer is spread, all fill shall be thoroughly consolidated to prevent any settlement.

C. The initial surface upon which controlled fill is to be placed shall be cleared of debris or other unsuitable material as specified in Section 02110.

D. Fill to required subgrade levels any areas where settlement occurs.

E. The surface of the fill shall be finished to such contour that it will not impound water. If at the end of the day's work it would appear that there may be rain prior to the next working day, the surface shall be finished smooth.

F. Fill shall not be placed on muddy or frozen ground, nor any filling operations continue when the temperature is such as to permit the layer under placement to freeze.

G. Water content of fill material shall be such that four trips of the specified roller shall give compaction such that the material shows a slight rebound as equipment passes over it, but not so wet that it tends to displace or form ruts. At all times, character of material and water content thereof shall be required to produce proper compaction.

COMPACTION: Compacting equipment shall consist of tamping rollers with a tamping foot extending at least six inches from the barrel of the roller. Said roller shall be of such weight as to provide a contact pressure of 750 psi, based on the contact area of one row of feet, or pneumatic-tired rollers, or sheepsfoot rollers of equivalent compaction characteristics, as determined by the Architect, or vibratory rollers acceptable to the Architect. All material shall be compacted, at optimum moisture content of 95% maximum density as determine by AASHO T-180.

ROUGH GRADING:

A. Subgrade: Finish to depth below final grade as required for turf and/or pavement.

B. Accuracy: Grade stakes shall be set where spot elevations are shown, at breaks in grade, along drainage "swales" and as otherwise required to correctly grade the area according to elevations shown on the drawings.

C. Upon completion of rough grading obtain the Landscape Architect's written approval.

SECTION 02610 - DRIVES AND PARKING LOT

SCOPE: Provide all equipment materials, labor, transportation, and services to install gravel parking lot and entry drive, and gravel base with bituminous surfacing for new traffic lane adjacent to U.S. 23.

MATERIALS:

A. Gravel: 22A road gravel meeting the requirements of MDOT Standard Specifications, Section 8.02.04.

B. Bituminous Pavement: Shall meet the requirements of MDOT Standard Specifications, Section 4.00, No. 12 Bituminous Mixture, Type M.

METHODS:

A. Gravel shall be installed to a compacted depth of 6" for the parking lot and entry drive, such installation to be in accordance with MDOT Standard Specifications, Section 3.08, Aggregate Surface Course.

B. Gravel shall be installed to a compacted depth of 8" in areas to be surfaced with bituminous, such installation to be in accordance with MDOT Standard Specifications, Section 3.01, Aggregate Base Courses.

C. Bituminous Paving shall be installed in one course at 250 pounds per sq. yard (approximately 2¼"), such installation to be in accordance with MDOT Standard Specifications, Section 4.00.

SECTION 02614 - CONCRETE PAVING

SCOPE: Provide all equipment, transportation, services, materials and labor to construct concrete paving as indicated on the drawings and/or specified herein.

MATERIALS: Concrete shall be as specified in Section 03310.

METHOD:

A. Expansion Joints: Provide ½" transverse expansion joints in locations shown on the plan. Expansion joints shall be at right angles to slab and extend full depth thereof; premolded filler shall be extended from bottom of slab to ¼" below the top of walk surface.

B. Base: Place concrete only on a moist compacted base consisting of 22A processed gravel or clean sand, 4" deep.

C. Subgrade: Thoroughly compact subgrade prior to placement of base material. Remove and replace all spongy areas as directed by Architect with granular material.

D. Forms: All forms shall be free from wrap and substantial enough to maintain their shape and position without springing or settlement when concrete is place or vibrated. Forms shall be staked, braced and/or tied together securely. Forms shall be clean and those for surfaces to be exposed shall produce a smooth, even finish without fins or board marks. Set top of form to finish grade.

E. Grades: Provide grade stakes not less than 25 feet apart for walk construction. Check tops of forms of grade before placing concrete. Provide 1/8" per foot crown or cross slope to low side, or as indicated on the drawings.

F. Dimensions: Concrete paving shall be one course construction, four or six inches thick, as indicated on the drawings.

G. Deposit concrete so as to require as little rehandling as practicable. Placing shall be continuous between transverse joints or in individual sections of the work. Spade concrete thoroughly along forms and expansion joints, and work carefully into corners and around reinforcement. Tamp and screed to a dense mass. Vibrators may be used provided they are operated under experienced supervision and forms are constructed to withstand their action. Mix and place no concrete when the air temperature is below freezing. If the temperature is expected to fall below 40 degrees F. within 24 hours after the concrete is placed, heat water and aggregate to bring the temperature of concrete mix to at least 50 degrees F.

H. Finish: Tamp and screed concrete true to grade and section bringing sufficient mortar to surface for finishing, use wood float and steel trowel lightly and give heavy fiber street broom finish as approved by the Architect. Round all edges with 1/4" radius 1" deep, including those along expansion joints and grooves. Broom out smooth margins of scoring tool.

I. Protection and Sealing: Protect concrete walks from pedestrian traffic for a period of three days after pouring. All freshly placed concrete shall be protected from premature drying and excessively hot or cold temperatures and shall be maintained with minimal moisture loss at a relatively constant temperature for a period of time necessary for hydration and proper hardening. An approved colorless curing compound may be used; submit a sample for approval.

SECTION 02620 - CONCRETE CURB

SCOPE: Provide all labor, equipment and materials to install concrete curb as indicated on the drawings and/or as specified herein.

MATERIALS:

A. Concrete: Concrete shall be as specified in Section 03310.

B. Reinforcing Steel: As specified in Section 03310.

METHOD:

A. Construct curbs as detailed on the drawings in locations shown on the plans.

B. Forms: On radii curbs, use 3/4" oiled sheeting forms. Set top of forms to finish grade. Using snap-ties of proper length, spacers, and braces 2'-6" maximum as required to secure forms. Metal forms may be used on all straight sections.

C. Joints: Construct concrete curb in sections 20 feet maximum long by use of ½" non-extruding premolded filler or mastic strip division plates. Such plates shall be of size and shape conforming to cross section of curb.

D. Finish: Use concrete as specified, fill any honey-combed places with 1:2 mortar and give exposed surfaces a smooth finish without plastering. Finish edges of joints including vertical joints to 1/8" radius, and other corners to radii shown.

E. Curing Process: Protect concrete curbs from pedestrian traffic for a period of three days after pouring. Cover all concrete surfaces using two layers of burlap kept wet for a minimum of five days. Coat concrete with a mxiture 50-50 (by volume) of boiled linseed oil and kerosene. Two coats, the first applied at a rate of about 40 square yards per gallon, the second at a rate of about 67 square yards per gallon. The first coat must be dry before the second coat is applied.

F. Protection: Remove no forms (except face forms) for 24 hours after placing concrete. Barricade against pedestrians for three days and against vehicular traffic for seven days. Backfill behind curb shall be compacted.

SECTION 02760 - SITE FURNISHINGS

SCOPE: Provide all materials, transportation, labor and equipment to furnish the Owner with a permanent project identification plaque, and to furnish and install a project construction sign, picnic tables, park stoves, and play equipment as shown on the drawings and specified herein.

MATERIALS:

A. Identification Plaque: The Contractor shall supply the Owner with a metal plaque equal to that manufactured by Castco Products Company, P.O. Box 497, Petoskey, MI 49770. (Telephone 616/347-7222) Mounting of the plaque will be by the Owner. (A detail of the plaque is included with this section of the specifications.)

B. Project Construction Sign: The Contractor shall furnish and install a sign in accordance with the detail included with this section of the specifications. The sign shall be erected in a location designated by the Owner prior to beginning work on the project.

C. Picnic Tables: Shall be heavy duty, all wood construction, 8 foot long, with hand rubbed stain and polyurethane finish equal to that of catalog no. 74-8DPTC by Jennings Corp., 2150 South Shore Drive, Macatawa, MI 49434.

D. Park Stoves: Shall be permanent all-steel heavy duty construction equal to that of Mexico Forge catalog no. 455-000 manufactured by Kilgore Corp., PO Box 565, Reedsville, PA 17084.

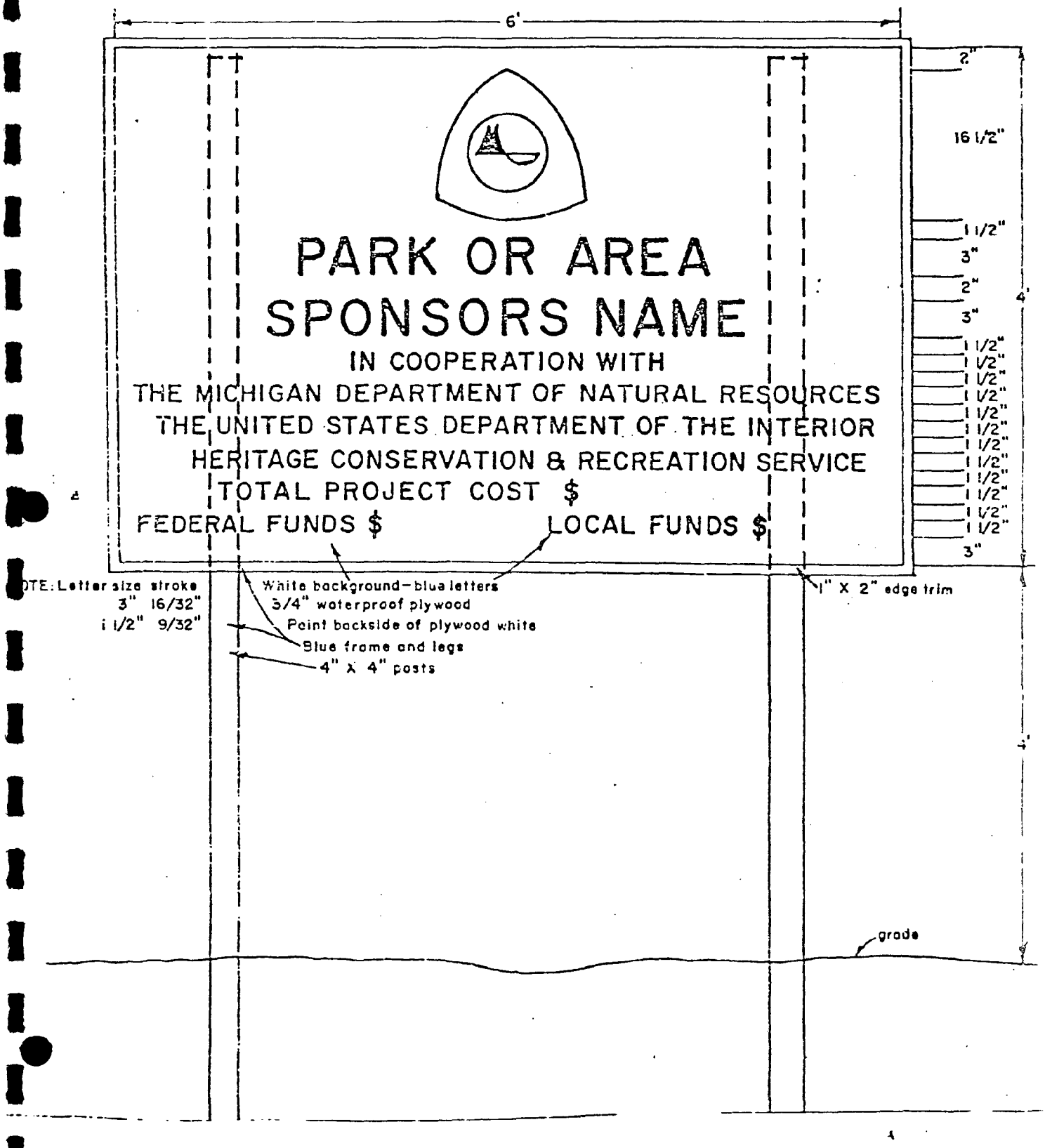
E. Play Equipment: Shall be a unit assembled on site from prefabricated wood and steel components. The unit shall be equal in layout and materials to "Playstructure 14A", manufactured by Landscape Structures, Inc., 300 Dawn Heather Drive, Delano, MN 55328, and distributed by Jack Golden Associates, East Detroit, MI (313/772-4117.)

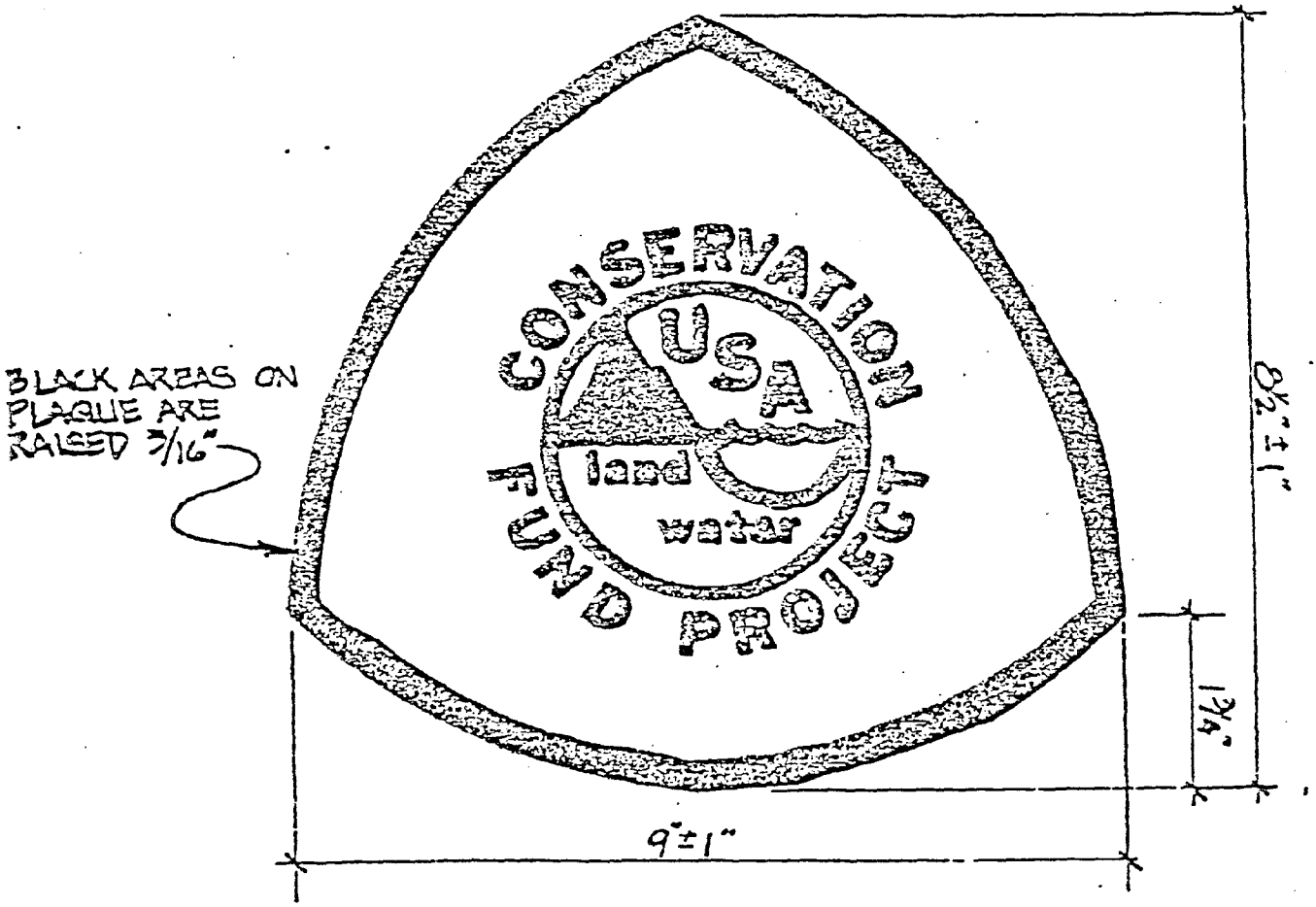
METHODS:

A. The play unit shall be assembled on site in accordance with the plans and instructions furnished with the unit by the manufacturer. Concrete for footings shall comply to Section 03310. Quantity of concrete requried is approximately 6 cu. ft.

B. The play unit will be located in the field by the Landscape Architect.

C. The park stove shall be installed such that the legs are firmly embedded in the concrete pad. Increase thickness of the concrete pad to approximately 12" around the legs.


6'
2"
16 1/2"
1 1/2"
3"
2"
3"
4'
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
1/2"
3"
PARK OR AREA
SPONSORS NAME
IN COOPERATION WITH
THE MICHIGAN DEPARTMENT OF NATURAL RESOURCES
THE UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION & RECREATION SERVICE
TOTAL PROJECT COST $
FEDERAL FUNDS $
LOCAL FUNDS $
OTE: Letter size stroke
3" 16/32"
1 1/2" 9/32"
White background-blue letters
3/4" waterproof plywood
Paint backside of plywood white
Blue frame and legs
4" x 4" posts
1" X 2" edge trim
grade
4'


BLACK AREAS ON PLAQUE ARE RAISED 3/16"
LAND CONSERVATION
USA
land
water
FIELD PROJECT
8½"±1"
1¾"
9"±1"

SECTION 02766 - TIMBER RAMP

SCOPE: Provide all materials, transportation, labor, and equipment to install complete timber ramp as shown on the drawings and specified herein.

MATERIALS: All timbers shall conform to the requirements of MDOT Standard Specifications, Section 8.12, Timber and Lumber.

A. Timbers: Shall be pressure treated Red Oak or White Oak, 6 inch by 8 inch by 8 foot long.

B. Hardware: Eyebolts, bolts, washers, and nuts shall be galvanized steel, and as detailed on the drawings.

METHODS: The timber ramp construction shall be in accordance with the requirements of MDOT Standard Specifications, Section 5.15, Timber Structures.

SECTION 02821 - SEEDING

SCOPE: The work shall consist of furnishing all labor, materials, and equipment necessary to provide and spread topsoil 3" deep, fine rake, fertilize and seed and mulch the areas designated on the drawings.

MATERIALS:

A. Seed: *175 lbs./acre

NAME	PROPORTION	PURITY	GERMINATION
Park Kentucky Bluegrass	15%	98%	85%
Aquila Kentucky Bluegrass	35%	98%	85%
Ruby Creeping Red Fescue	20%	97%	85%
Pennfine Perennial Ryegrass	10%	96%	85%
Scaldis Hard Fescue	20%	97%	85%

Weed seed content in the mix shall not exceed 0.20 of 1%.

*Northrup-King Special Park Mixture, or approved equal.

Grass seed shall be fresh, clean, new-crop seed. The Contractor shall furnish to the Architect the dealer's guaranteed statement of the composition of the mixture and the percentages of purity and germination of each variety.

B. Commercial Fertilizer: Provide fertilizer with not less than 4% phosphoric acid and not less than 2% potassium, and the percentage of nitrogen that is required to provide not less than 1 lb. of actual nitrogen per 1000 square feet of lawn area.

C. Topsoil: Topsoil is to be furnished by the Contractor and shall meet the following requirements.

1. Topsoil shall be fertile, friable loamy, clay loam, loam, silt loam, sandy clay loam or sandy loam without admixture of subsoil, and shall be free of stones two inches in diameter or larger, roots, sticks, or other extraneous material including viable plants or plant parts of bermuda grass, quack-grass, poison ivy, etc.

2. A certified analysis of the topsoil by Michigan State University Agriculture Extension Service (or approved equal) from each source shall be submitted to the Architect for approval before delivery to the site. If deficiencies in pH of the topsoil are found as a result of this analysis, they shall be corrected at no expense to the Owner to correct pH to a range of 5.0 to 7.5. Soluble salts shall not be higher than 500 parts per million; 5-30% organic; 5-25% clay.

D. Mulch: Shall be hay or straw containing not less than 1/10 gallon of rapid curing or medium curing liquid asphalt per square yard of coverage, or at the Contractor's option, a hydro-mulch containing not less than 1/25 gallon of rapid curing or medium curing emulsified asphalt per square yard of coverage.

METHOD:

A. Contractor shall request and receive written approval of subgrade from the Architect prior to spreading topsoil.

B. Final grades shall not vary more than one-tenth (1/10) of a foot from elevations shown on plan.

C. Topsoil shall be worked to a smooth, uniform surface and compacted firmly. Any lumps or depressions which occur shall be regraded and re-rolled until a satisfactory grade is obtained. Provide topsoil layer to the depth indicated on the drawings.

D. Provided that all machinery and operations are approved, and provided that a smooth finely pulverized seedbed is produced, areas may be machine-finished and seeded except for a three-foot strip adjacent to walks, roads, parking areas or structures. This three-foot strip shall be hand raked and seeded.

E. All areas to be seeded shall be thoroughly loosened and graded to true lines free from all unsightly variations, lumps, ridges, or depresssions. All sticks and stones, roots or other objectionable material over one inch in any dimension which might interfere with the formation of a finely pulverized seedbed shall be removed from the soil. The prepared area shall be thoroughly rolled with an approved lawn roller and all low spots leveled up. Apply nitrogen at a rate of 1#/1000 sq. ft. and incorporate into top ½" of soil. Immediately before sowing the seed, rework the surface until it is a fine, pulverized, smooth seedbed, varying not more than ½" in 10 feet.

F. Seed as specified shall be evenly sown at 175 lbs./acre as specified under Materials A. Seed, and lightly worked into the surface, using a mechanical seeder, such as a Lawn-Maker, or a Brillion. The Contractor may increase the seed at his option at no increase in cost to the Owner.

G. At the Contractor's option, a hydro-seed method may be used as specified in the current edition of "Standard Specifications for Construction, MDOT" with the following adjustments:

1. The fertilizer shall be applied separately from the seed, as specified under E above.

2. The seed rate shall be increased by 50%.

It shall be noted that the MDOT specifications require that the seeded area be floated and lightly compacted to incorporate the seed into the uppermost one-half inch of the soil.

It shall also be noted that the MDOT specifications require that the mulch be applied in a separate operation from the seeding.

H. Within 24 hours after seeding, all areas shall be mulched using straw or excelsior mulch. Mulch shall be spread evenly with extreme care so as to leave the seeded surface with a minimum amount of damage.

1. Straw mulch shall be applied uniformly at a rate of approximately 2 tons per acre on seeded areas. The mulch shall be loose enough to permit air to circulate but compact enough to reduce erosion.

2. Excelsior mulch shall be spread at a uniform rate of 71 bales per acre.

I. Anchoring Straw Mulch: Mulch shall be held in place by a spray coating of adhesive material. Mulch adhesive shall be applied by spraying simultaneously with the mulch or by spraying a surface application of adhesive immediately following mulching. The mulch adhesive shall be applied at the following minimum rates: Asphalt Emulsion Adhesive: 150 gallons/acre. The Contractor shall protect as necessary all vehicles, traffic, structures, etc. from being marked or disfigured by adhesive materials.

MAINTENANCE AND ACCEPTANCE: It is the responsibility of the Contractor to establish a dense lawn of permanent grasses, free from lumps and depressions. Any part of the area that fails to show a uniform germination shall be reseeded and such reseeding shall continue until a dense lawn is established. The Contractor shall water the lawn until final acceptance, and shall mow the lawn three times each time after the lawn has reached a height of three (3) inches. Damage to seeded areas resulting from erosion shall be repaired by the Contractor. Scattered bare spots will not be allowed over 3% of the lawn area. When the above requirements of the specifications have been fulfilled, the Contractor will request acceptance of the lawn work and the Owner will continue with the maintenance. Any areas that are not acceptable at this time shall be reseeded and will continue under the Contractor's maintenance until final acceptance. Continued maintenance shall include watering and mowing as necessary to keep the seeded areas in a thriving condition.

SECTION 02933 - TIMBER GROINS

SCOPE: Provide all materials, transportation, labor and equipment to install complete timber groin units as shown on the drawings and specified herein.

MATERIALS: All materials shall conform to the requirements of MDOT Standard Specifications, Section 8.12, Timber and Lumber.

A. Wood Piles: Shall be pressure treated Red Oak or White Oak, 8 inch diameter, length as shown on drawings.

B. Vertical Boarding: Shall be pressure treated Red Oak or White Oak, 2 inch by 6 inch, length as shown on drawings. The Contractor may, at his option, use 2 inch by 8 inch material at no additional cost to the Owner.

C. Wales: Shall be pressure treated Red Oak or White Oak, 2 inch by 10 inch, minimum length to be 20 feet.

D. Hardware: Bolts, washers and nuts shall be cadmium plated steel. Bolts shall be minimum one inch diameter.

METHODS: Groins shall be constructed in accordance with the requirements of MDOT Standard Specifications, Section 5.15, Timber Structures. In addition, the following requirements shall apply to the work.

A. Vertical boarding may be driven in-place, jetted with water pressure, or installed in an excavated trench. If installed in an excavated trench, backfill shall be thoroughly consolidated and compacted.

B. Vertical boards shall be full length, splicing will not be permitted.

C. Vertical boards shall be installed in two layers with all vertical joints overlapping. Spikes may be used to secure vertical boards to one another.

D. Joints in wales will be allowed only at wood piles. Wales may not be jointed both sides at the same pile. Secure wales to each vertical board with spikes.

SECTION 02934 - ROCK REVETMENT

SCOPE: Provide all necessary labor, materials, and equipment required to install the rock revetment as shown on the drawings and specified herein.

MATERIALS:

A. Quality: In general, granite, quartzite, rhyolite, traprock and certain carbonate rocks which meet the requirements of these specifications will be accepted throughout the structure. If stone is quarried during winter months it shall not be incorporated in the work until suitably cured in warm weather and shows no evidence of deterioration. If quarring is done in warm weather, the quarried proudct shall be air cured for at least six weeks prior to subjection to freezing temperature.

All quarry stone proposed for use in the work shall weigh, when dry, not less than 140 pounds per solid cubic foot, shall have an absorption not greater than 3 per cent, and shall be of such physical characteristics as to be appropriate for the conditions to be met. The stone shall be free of bedding planes, cracks, incipient cracks and seams which would cause undue deterioration of the stone from weathering or handling. Stone with chert, shale, clay or ore seams shall be rejected.

If the quality of any stone proposed for use by the Contractor is not known by the Landscape Architect to be suitable for the intended use, its suitability must be fully established to the Landscape Architect's satisfaction by the Contractor. If such stone has previously been used in breakwater, shore protection, or other structures subject to storm and frost action, the location, history and condition of such use shall be furnished by the Contractor so that inspection and determination of suitability may be made by the Landscape Architect. Where the product of any quarry is known to have been used previously in structures similar to those herein specified and to have disintegrated from frost or storm action, such quarry product will not be considered.

Representative samples of stone proposed to be used in the project shall be available to the Landscape Architect. Such samples shall be selected by the Landscape Architect from the source designated by the Contractor. Stone actually furnished under the contract shall be of equal quality, in the Landscape Architect's opinion, as the samples originally furnished.

B. Foundation Stone: Foundation stone shall consist of a well-graded mixture of size (2" to 10") averaging 30 pounds each that will form a compact mass in place. Maximum size shall be 150 pounds.

C. Armor Stone: Armor stone shall consist of stone weighing approximately 300 lbs. (13" - 16" cubical) placed in a single layer. The stone shall be compact in shape, individual pieces shall have a least dimension not less than ½" of the greatest dimension.

METHODS:

A. Placing Stone - General: For the purposes of this specification, stone shall be selected and placed with reasonable regard to relative size so that the structure cross section generally assumes the shape defined by the neat lines, and only minimum effort shall be required in preparation of bedding, in rehandling, and in fitting and shoving against adjacent stones. Stone shall be selected with reasonable care as to size and shape, the smaller stones filling the spaces between the larger ones so as to leave a reasonable minimum of voids. The heaviest stone shall be placed at the toe of the slope; they will not be allowed upslope of the lighter stones. The intention is that the work will be built generally to at least the neatline and that the outer surface of the revetment shall be reasonably even and present a workmanlike appearance.

B. Foundation Stone: Foundation stone shall be dumped or dropped into place with systematic care. The rehandling of sufficient amounts of stone to insure the proper seating of stone will be required wherever considered necessary by the Landscape Architect.

C. Armor Stone: Armor stone shall be placed with reasonable care such that the Foundation Stone is not displaced.

CESSATION OF WORK:

A. If the work should be discontinued for any reason whatsoever for periods exceeding one week, the Contractor shall provide and construct a suitable temporary closure on the exposed end of the structure to prevent the loss of previously placed stone.

B. Upon resumption of the work, all cover stone placed in the temporary closure shall be removed before continuing with the construction.

C. No separate payment will be made for the above temporary closure required in connection with cessation of the work.

INSPECTION AND APPROVAL:

When required the Contractor shall provide a suitable boat for the Landscape Architect to use in the inspection of all operations.

A. Control Inspection: Field work used in setting alignment and elevations shall be properly recorded. The Contractor shall set adequate stakes, as directed by the Landscape Architect.

B. Quality Inspection: Prior to delivery of any material, the Contractor shall meet with the Landscape Architect at each quarry designated to supply stone, at a mutually agreeable time. Representative samples of stone shall be set aside at the quarry for inspection and after approval the samples are to be kept available for reference until shipping of stone to the site has been completed. After initial approval of samples, basic inspection of quarry material shall be provided by the Contractor.

C. Armor and Foundation Stone Requirements: The stone shall conform to gradation specified and shall be hard and dense consistent with the application in the work. At least one percent of the total tonnage of stone shall be sampled and inspected closely at the quarry before shipping to the site. Sampling includes separating a two to six ton quantity of material from the stock and spreading it on the ground so that it is not more than three feet in thickness at any point. A comparison shall be made visually between the sampling and samples previously furnished for reference, and any improper deviation shall become cause for rejection of the stone. The samplings shall be withdrawn for inspection at intervals uniformly distributed throughout the total tonnage required for shipment, so as to be truly representative.

D. Placing: Measurements shall be taken to insure stone is being placed within allowable tolerances. Progress shall be indicated by reference to location and description and amount of work performed.

SECTION 03310 - CONCRETE

SCOPE: Provide all equipment, transporation, services, material, and labor to construct all concrete work as indicated on the drawings and/or specified in this and other sections of the specifications.

MATERIALS:

A. Cement - Portland Cement, ASTM C150, Type I: Type III cement may be used at Contractor's option. One brand of cement shall be used throughout the project unless otherwise approved by the Architect.

B. Aggreagtes:

1. Fine aggregates - ASTM C33, consisting of well-graded, clean, sharp, durable, uncoated, washed sand, free from loam, clay, lumps or other deleterious substances.

2. Coarse aggregates - ASTM C33, consisting of well-graded, clean, hard durable, uncoated stone or washed gravel. Maximum size pieces shall be 1½ inches.

C. Water: Water shall be clear, and free from injurious amounts of oils, acids, alkalis, organic materials, or other deleterious substances.

D. Expansion Joint: Expansion joint shall be ½ inch, non-extruding premolded filler, and shall be of size and shape conforming to cross section of concrete unit.

E. Steel Reinforcing Bars: Deformed bars conforming to one of the following: ASTM A15; A16; or A160. Deformation: conform to ASTM A305-53T. Reinforcement shall be free from scale, rust, or coating which will reduce the bond to the concrete.

F. Reinforcing Mesh: Welded wire fabric, No. 6, 6" x 6", conforming to latest ASTM A-185.

G. Poured caulking filler shall be "Iso-Flex" as manufactured by Harry J. Peterson Co.; "Dow Corning 780" by Dow Corning Co.; or "Weatherban 101" by Minnesota Mining and Manufacturing Co.

CONCRETE MIXTURES:

A. All concrete shall be plant mixed. Concrete shall be homogeneous, and when hardened shall have the required strength, resistance to deterioration, resistance to abrasion, durability, water-tightness, good appearance, and other specified properties.

B. Proportioning of concrete ingredients shall be as follows unless otherwise specified:

1. Minimum 28-day strength: 3,000 psi. See page 4 for concrete control tests.

2. Minimum cement: 6 bags/yard

3. Maximum water: 6 gallons/bag*

4. Weight: 150 pounds/foot

*Maximum water content is for non-air-entrained concrete. When air-entrainment is used, water shall be reduced.

C. Schedule of Mixture Uses: Unless otherwise specified, the following mixtures shall be used:

Location/Use	Min. 28-day strength (psi)	Air content	Admixture	Weight (lbs./ft.)
Exterior slabs, walks, curb & gutter	3000	4-6	NR**	150
Cast in place concrete appurtenances***	4500	4.5-6	water reduced	150

** NR: Not required. However, admixtures to increase cement dispersion, to provide increased workability for low slump concrete, may be used at Contractor's option, subject to the Architect's approval. When admixtures are used, a reduction in specified minimum cement will not be permitted.

***Concrete mix shall be: 6½ bag cement content, with 4½, 5% air entrainment, and maximum slump of 2½ to 3.

Dry weight per cubic yard of mix shall be:

Cement content	611	lbs.
Sand	1,230	lbs.
MDSH&T 17A stone	1,850	lbs.
Water	31.5	gal.
Water reducer	1	oz. per sack

D. Maximum Slump: Unless otherwise specified, maximum slump shall be as follows:

Footings:	3 inch
All other concrete:	4 inch

Slump tests may be ordered by the Architect at any time. Contractor shall have standard slump cone available.

E. Quantities of admixtures shall be as recommended by the manufacturer for climatic conditions prevailing at times of placement, and shall be approved by the Architect.

F. Changes during progress of work:

1. The Architect may order changes (or proportions and/or materials) in the concrete being provided, if necessary to obtain the required strength, workability, and finishing requirements.

2. If Contractor wishes to use materials other than those originally approved, or is materials from sources originally approved change in characteristics, he shall obtain approval from the Architect before any changes are made.

MIXING:

A. Plant-mixed concrete shall be mixed and transported in conformity with ASTM C94, except that revolving drum type trucks shall be used for transport.

1. The plant shall have facilities for weighing and measuring accurately all ingredients in conformity with ACI 304.

2. Water quantities shall include moisture on the surface of aggregates. Uniform slump shall be maintained.

3. All parts of the mixing plant which come in contract with concrete shall be thoroughly cleaned whenever shut down for two hours or more.

B. Concrete shall be discharged from ready-mix trucks within 1½ hrs. after leaving the central mix plant, or material shall be rejected.

C. Mixing at the site shall not be permitted except when approved by the Architect.

D. Retempering of Concrete: Concrete which has partially hardened shall not be remixed with or without additional cement, aggregate, or water.

E. Addition of Water at Job Site: When concrete arrives at the site with slump below that suitable for placing, water may be added only if the maximum permissible water-cement ratio or maximum slump is not exceeded. Water shall be incorporated by additional mixing equal to at least half the total mixing time required. Any addition of water above that permitted by the water-cement ratio shall be accompanied by a quantity of cement sufficient to maintain the required water-cement ration. All such additions shall be approved by the Architect.

ADVERSE WEATHER CONDITIONS:

A. Concrete shall not be placed during rain, sleet, or snow. Surfaces shall be protected from damage by rain, sleet or snow.

B. Cold Weather Requirements: These shall conform to ACI 306 and to the following:

1. When air temperature is, or is expected to fall, below 40 degrees Fahrenheit, all water and aggregates shall be heated before mixing as necessary to obtain a mixture temperature of at least 60 degrees Fahrenheit, not over 80 degrees Fahrenheit.

2. Use of anti-freeze agents and chemical admixtures to accelerate setting during cold weather is not permitted.

3. Frozen materials or materials containing ice shall not be used. All concrete, reinforcement, forms, fillers, and ground against which new concrete will be placed shall be free from frost.

4. When air temperature is, or is expected to fall, below 40 degrees Fahrenheit, adequate means shall be provided for maintaining a temperature of not less than 70 degrees Fahrenheit for three (3) days or 50 degrees Fahrenheit for five (5) days in the area where concrete is being placed and after placing.

5. Heating devices shall be oil-fired, blower-type with diffusers to spread heat uniformly. Temperature of air at surfaces of concrete shall not exceed 80 degrees Fahrenheit. Start heating devices a sufficient time before placing concrete to warm forms and space. Heaters shall be attended at all times.

6. Rapid dry-out of concrete due to overheating and sudden changes in temperature shall be avoided.

C. Hot Weather Requirements: These shall conform to ACI 305 and to the following:

1. Ingredients shall be cooled before mixing to maintain concrete temperature below 90 degrees Fahrenheit at time of placement.

2. Wet forms thoroughly before placing concrete.

CONCRETE CONTROL TESTS:

A. Make test cylinders from concrete as mixed and at the direction of the Architect. A minimum of two (2) test cylinders shall be made for footings and two (2) for walks. More tests may be made if ordered by the Architect.

B. Test specimen shall be taken by Contractor and tested by an approved laboratory at Contractor's expense and in accordance with ASTM Specifications for "Compression Tests of Concrete." Results of test shall immediately be submitted to the Architect.

C. Where the ultimate twenty-eight (28) days compressive strength of concrete in any test cylinder falls below the strength specified for the class of concrete tested, or below proportional minimum seven (7) day strengths, the proportions, water content, or temperature conditions shall be changed to secure the required strength.

PROJECT: Tawas Rivermouth, Gateway Park
L.W.C.F. Project No. 26-01209

DATE: March 4, 1982

LOCATION: Tawas City, Michigan

ESTIMATE: Final Construction Cost Estimate

PAGE:

PREPARED BY: Beckett Raeder Rankin Inc

Qty.	Unit	Description	Unit Cost	Unit Total	TOTAL
	ls	1. Removals and Demolition		$ 1,500.00	
446	lf	2. Rock Revetment	$ 75.00	$33,450.00	
35,620	cy	3. Site Filling	$ 1.90	$67,678.00	
983	cy	4. Aggregate Base and Surface	$ 10.00	$ 9,830.00	
504	lf	5. Concrete Curb	$ 12.00	$ 6,048.00	
79	tons	6. Bituminous Paving	$ 40.00	$ 3,160.00	
5	ea	7. Timber Groin - River	$ 700.00	$ 3,500.00	
3	ea	8. Timber Groin - Bay	$ 900.00	$ 2,700.00	
1	ea	9. Timber Ramp	$ 500.00	$ 500.00	
5	ea	10. Picnic Pods	$ 700.00	$ 3,500.00	
1	ea	11. Play Unit	$2,900.00	$ 2,900.00	
1,807	cy	12. Topsoil	$ 8.00	$14,456.00	
21,916	sy	13. Seeding	$ 0.35	$ 7,671.00	
	ls	14. Project Sign and Plaque		$ 400.00	
	ls	15. Adjust Drainage Structure		$ 300.00	
	ls	16. General Conditions		$ 2,000.00	
		PROJECT TOTAL:			$159,593.00

COUNTY of IOSCO

DEPARTMENT of BUILDING and SAFETY INSPECTION

436 W. Lake Street Tawas City, Mi. 362-6511

Soil Erosion & Sedimentation Control

P E R M I T

Under Soil and Sedimentation Control Act. 347

PERMIT Nº 365

Date Issued 5/7/82

Expiration Date 11/7/82

Under the provisions of Act 347, P. A. 1972, Authority is hereby granted to:

NAME JOHN HENRY EXCAVATING, INC. License No. _____

ADDRESS 1140 HENRY ROAD

CITY TAWAS CITY, MICHIGAN ZIP 48763

To install and maintain soil erosion and sediment control measures in CITY OF TAWAS CITY

TOWNSHIP, IOSCO COUNTY, SECTION _____ T ____ R ____; SUBDIVISION _____ LOT NO. _____

OWNER CITY OF TAWAS CITY

ADDRESS CITY HALL, 508 LAKE STREET, TAWAS CITY, MI

TYPE AND SIZE OF EARTH CHANGE 35,000 YARDS FILL/ 400 FEET ROCK REV.(RIP-RAP)

EIGHT (8) TIMBER GROINS

WORK TO BE DONE UNDER AUTHORITY OF THIS PERMIT IS SUBJECT TO THE FOLLOWING SPECIAL RESTRICTIONS, LIMITATIONS AND INSTRUCTIONS:

ALL FINAL GRADING SHALL BE SEEDED OR SODDED...

PLEASE CALL FOR FINAL INSPECTION WHEN PROJECT IS FINISHED..

POST CARD AT PROJECT..

APPROVED--Date _____

INSPECTOR _____

This instrument does not convey property rights in either real estate nor material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other applicable state statutes.

This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.

All work shall be completed in accordance with the plans and specifications submitted and attached hereto.

This permit does not prejudice or limit the right of a land owner to institute proceedings in any circuit court of this state against any person when nacessary to protect his rights.

The work specified herein shall be initiated and completed not later than _____, date of expiration.

EARTH CHANGE REQUIREMENTS

1. All earth changes shall be designed, constructed and completed in such manner which shall limit the exposed area of any disturbed land for the shortest period of time.
2. Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth change.
3. Any temporary or permanent facility designed and constructed for the conveyance of water around, through or from the earth change area shall be designed to limit the water flow to a non-erosive velocity.
4. Temporary soil erosion control facilities shall be removed and earth change areas graded and stabilized with permanent soil erosion control measures pursuant to approved standards and specifications.
5. Permanent soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within 15 calendar days after final grading or the final earth change has been completed. When it is not possible to permanently stabilize a disturbed area after an earth change has been completed or where significant earth change activity ceases, temporary soil erosion control measures shall be implemented within 30 calendar days.

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES
LAND RESOURCE PROGRAMS DIVISION

PERMIT

ISSUED TO

City of Tawas City
P.O. Box 568
508 W. Lake Street]
Tawas City, MI 48763

ATTN: Mr. Lowell Thomas

Permit No.	80-7-85G
Date Issued	Sept. 29, 1980
Extension	
Expiration	December 31, 1981

This permit is granted under provisions of:

☐ The Inland Lakes and Streams Act, 1972 P.A. 346.

☒ The Great Lakes Submerged Lands Act, 1955 P.A. 247, as amended.

Permitted Activity To place approx. 1242 cubic yards of clean riprap to form a 470' long reventment to dredge approx. 294 cubic yards of material and deposit upland. To fill shoreward of the reventment with approx. 43,000 cubic yards of sand. To build 6 wood pile and timber groins as further described below.

Water Course Affected	County	Town	Range	Sect.	Sub. and Lot Number
Lake Huron - Tawas Bay	Iosco	22N	7E	36	Mouth of Tawas River

Authority granted by this permit is subject to the following limitations:

A. Initiation of any work on the permitted project confirms the permittees acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee in exercising the authority granted by this permit shall not cause unlawful pollution as defined by Act No. 245 of the Public Acts of 1929, as amended.
C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the plans and specifications submitted with the application and/or plans and specifications attached hereto.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved herein.
F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Acts of 1974, and comply with each of the requirements of that act.
G. This permit does not convey property rights in either Real Estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
I. Permittee shall notify the Department of Natural Resources within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached, preaddressed post card to the office addressed thereon.
J. This permit shall not be assigned or transferred without the written approval of the Land Resource Programs Division, Department of Natural Resources.
K. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

1. The reventment will be comprised of clean stone (2-16 inch) along the southerly limits of the project. The project will be to develop a public recreational facility with observation docks, fishing piers, boat launching ramps, parking area and picnic park.
2. This is a public use facility and it is agreed that a public use deed for the Great Lakes bottomlands involved will be immediately applied for by the City of Tawas City.
3. Authority granted by this permit does not waive any jurisdiction of the U. S. Corps of Engineers and the need for a federal permit.
4. Authority granted by this permit does not waive permit requirements under the Soil and Sedimentation Control Act, 1972 Public Act 347, or the need to acquire applicable permits from the County Drain Commission.
5. Fill shall consist of inert materials such that will not cause siltation nor contain soluble chemicals or organic matter which is biodegradable. All fill shall be contained in such a manner as not to backfill into water. All raw banks shall be sodded, seeded, or riprapped.

HOWARD A. TANNER
Director, Department of Natural Resources

By M. C. Nielsen
M. C. Nielsen

cc: Dist. 7 Law Supv.
Region II
Corps
Public Health
Twp. Supv. -Tawas
Fisheries

MCN:JDC:nl

R2706
Rev. 9/79

2205 (11/78)

APPLICATION AND PERMIT TO CONSTRUCT, OPERATE, USE AND/OR MAINTAIN WITHIN THE RIGHT-OF-WAY; OR TO CLOSE A STATE TRUNK LINE

Prepare and Submit in Quadruplicate (Six copies required on Interstate Routes)

DO NOT WRITE IN THIS BOX		
Application No. 3503I-482		
Permit No. AC-3382		
Date of Issuance 3-30		
Fee Amount NC	Date 3-27	
Cash	Bill	By RK

NOTE: ➡ ➡ *THIS PERMIT DOES NOT RELIEVE APPLICANT FROM MEETING ANY APPLICABLE REQUIREMENTS OF LAW OR OF OTHER PUBLIC BODIES OR AGENCIES.*

Applicant's Name (Property Owner, Corp., City, County, Etc.)	(Date)	Contractor's Name (Individual, Company, Etc.)
City of Tawas City	3-25-82	To be determined after receipt of bids
Applicant's Mailing Address		Contractor's Mailing Address
508 Lake Street	(517) 362-7441 Applicant's Phone No.	Tel. No.
William Peterson	City Manager	
Applicant's Signature	(If other than Property Owner give Title)	Contractor's Signature (If signing for Contractor, give Title)

CERTIFICATION FOR RESIDENTIAL OR COMMERCIAL DRIVEWAY: Pursuant to Act 200, Public Acts 1969, I hereby certify that as applicant I am the legal owner of the property for which this driveway will serve/or I am the said owner's authorized agent.

(Signature) (Date)

The above named applicant hereby makes application for a permit to Construct, Operate, Use and/or Maintain; or Close a State Trunk Line within the right-of-way of U. S. 23 (Trunk Line No.) Tawas City (City) (Township) Iosco (County)

the exact location is as follows: approx. 450 feet northeast of bridge over Tawas River.
(Give distance and direction from nearest main intersection, and Station numbers if known.)

for a period commencing 6-1-82 and ending 9-1-82 ; a detailed description of the desired facility and/or activity is as follows: (Include size, length and type of facility on plan and if crossing under roadbed, provide profile and describe construction methods. If buried, indicate depth from top of facility to surface. If facility to run parallel to highway, indicate distance from facility to Pavement Edge and Right-of-Way Line. If driveway approach, state if Residential or Commercial; if Commercial, state type of establishment it will service. If Tree Trimming or Tree Removal, state number, species and sizes of trees involved. If application for Banner, state Legend. If Sign, Building, Awning, Marquee etc., give dimensions. If application is for parade, show street closure and temporary detours.

Construct approximately 490 lin. ft. of 12' wide acceleration and deceleration lanes including curb and gutter and one commercial drive approach to serve a public park development per attached plans.

THIS PERMIT OBLIGATES THE APPLICANT TO THE FOLLOWING CONDITIONS:

1. GIVE WRITTEN NOTICE TO THE DISTRICT UTILITIES-PERMITS ENGINEER OF THE MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION FOR THE DISTRICT IN WHICH SAID WORK IS TO BE PERFORMED AT LEAST FIVE (5) DAYS PRIOR TO COMMENCEMENT OF OPERATIONS COVERED BY THIS PERMIT. No work except emergency work shall be performed on Sundays or Legal Holidays unless authorized by the Michigan Department of State Highways and Transportation.
2. In any and all operations under this permit, meet all requirements of the Michigan Department of State Highways and Transportation Standard Specifications and Supplemental Specifications set forth on the reverse side of this application and permit.
3. Take, provide and maintain all necessary precautions to prevent injury or damage to persons and property from operations covered by this permit and use safety devices which are in accordance with the Michigan Manual of Uniform Traffic Control Devices.
4. Save harmless the Michigan State Highway Commission against any and all claims for damages arising from operations covered by this permit and upon request, furnish proof of insurance coverage for the term of this permit.
5. Upon request of the State Highway Commission, immediately remove, cease operations and surrender this permit or alter or relocate, at applicant's own expense, the facility for which this permit is granted. Upon failure to do so the Michigan Department of State Highways and Transportation shall take the necessary action and the applicant shall reimburse the Michigan Department of State Highways and Transportation for its costs in doing same.
6. Nothing in this permit shall be construed to grant any rights whatsoever to any public utilities whatsoever except as to the consent herein specifically given, not to impair anywise any existing rights granted in accordance with the constitution or laws of this State.
7. To the extent required by law, the applicant at his expense will maintain the facilities located within the Highway right of way so such facilities will not interfere with the use of the Highway by the traveling public.
8. Give notice to public utilities in accordance with Act 53, PA 1974 and comply with each of the requirements of that act.
9. Comply with the requirements of Act 347, PA 1972 controlling soil erosion and sedimentation.
10. Upon request, the applicant, if other than a governmental agency, or the contractor when the applicant is a governmental agency, shall file a bond in the sum of _____ acceptable to the Michigan State Highway Commission and conditioned upon performance of the conditions of the permit and compliance with all requirements of law.
11. Any operation in the right of way not covered by this permit and attachments thereto, or the Michigan Department of State Highways and Transportation Standard Specifications is in violation unless approved by the District Utilities-Permits Engineer. Any reconstruction, change or alteration shall require a new application and permit.

RECOMMENDED FOR ISSUANCE:

Dale Atkinson 3/30/82
(District Utilities-Permits Engineer) (Date)

Reviewed by	Appr.	Disapproved
Constr.		
Maint.	WS	
Traffic		

APPROVED FOR THE MICHIGAN STATE HIGHWAY COMMISSION
BY

Bruce Wozniak 3/30/82
Engineer of Utilities–Permits
District Utilities–Permits Engineer

SEE REVERSE SIDE OF THIS APPLICATION AND PERMIT FOR ANY ADDITIONAL CONDITIONS.

2204 (6/74)

ADVANCE NOTICE FOR
MAINTENANCE – CONSTRUCTION – TREE TRIMMING

Req #153191

To be submitted not less than 5 days prior to starting operations. Sundays and holidays excluded.

TO: MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

Date: 6-25-82

This is to advise that Consumers Power Company, 821 Hastings [illegible] Traverse City, MI [illegible]
Name of Permit Holder

plans to start normal MAINTENANCE ☐ CONSTRUCTION ☒ TREE TRIMMING ☐ operations along State Trunkline No. [illegible] Texas City

County, as authorized by Dept. of State Highways & Transportation permit No. LA-[illegible]-82 issued 1-5-82 (Date)

Work will begin on 7-6 1982 and will be completed on or about 7-16 1982

Location and Description of work: 495' NE of 9th Ave 42' NW1/2 of centerline of pavement boring pit 10' minimum pavement edge, push 2' conduit 4' under pavement and install 120/240 service. Per attached sketch. Trim box elder. Also see construction notes/[illegible]

Name of work Supervisor and Company: Joe Van [illegible]

The Permit Holder shall notify the MDSHT of any change from dates shown.
It is understood that the highway will at no time be closed to traffic.

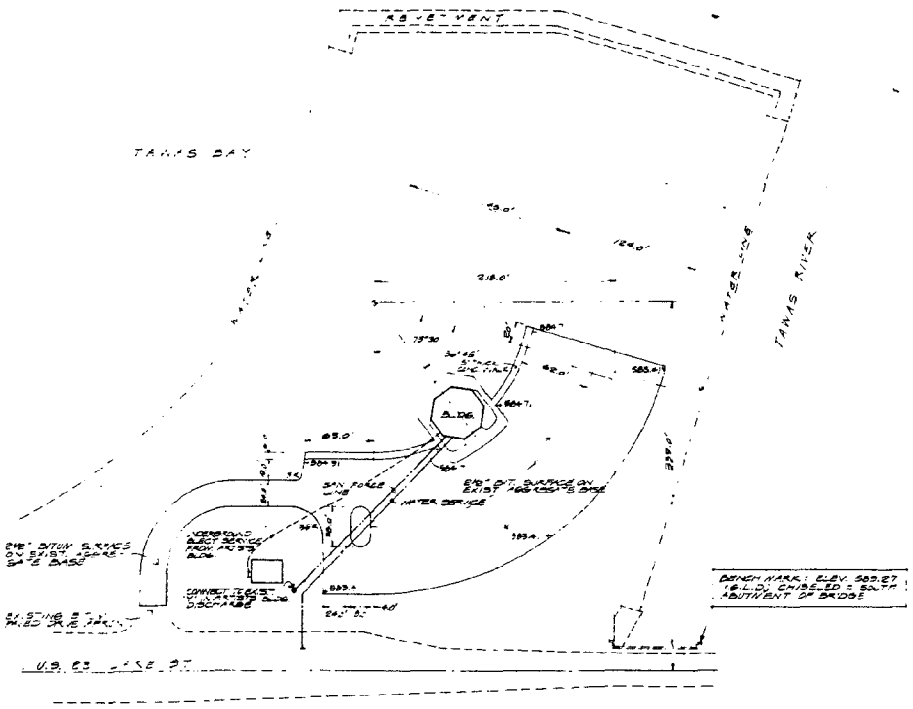
RECEIVED
JUN 28 1982
MEGCO CO. ROAD COMMISSION

Original – Dist. Permit Office
Copy – Permit Holder
Copy – County Maint. Supt.

Form 695

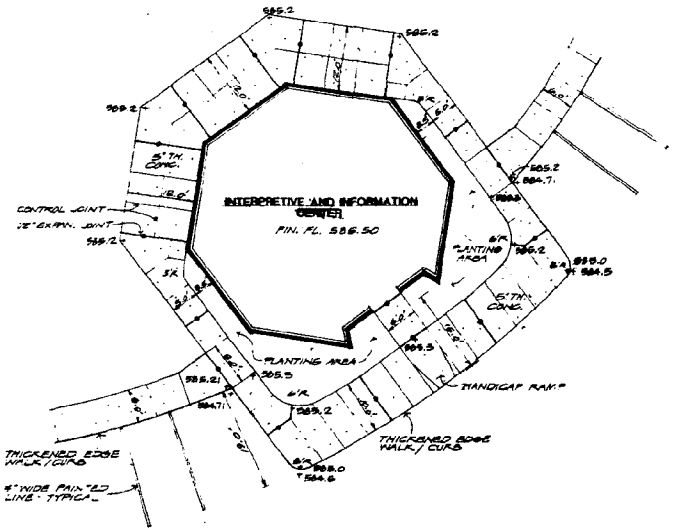
Telephone No. 941-1709
Signed Carolyn [illegible]
Address 821 Hastings St TC

TASK B



FULL SITE PLAN

SCALE 1"=50'



PARTIAL SITE PLAN

SCALE 1"=10'

Issued For
Approval
Construction
Final Record

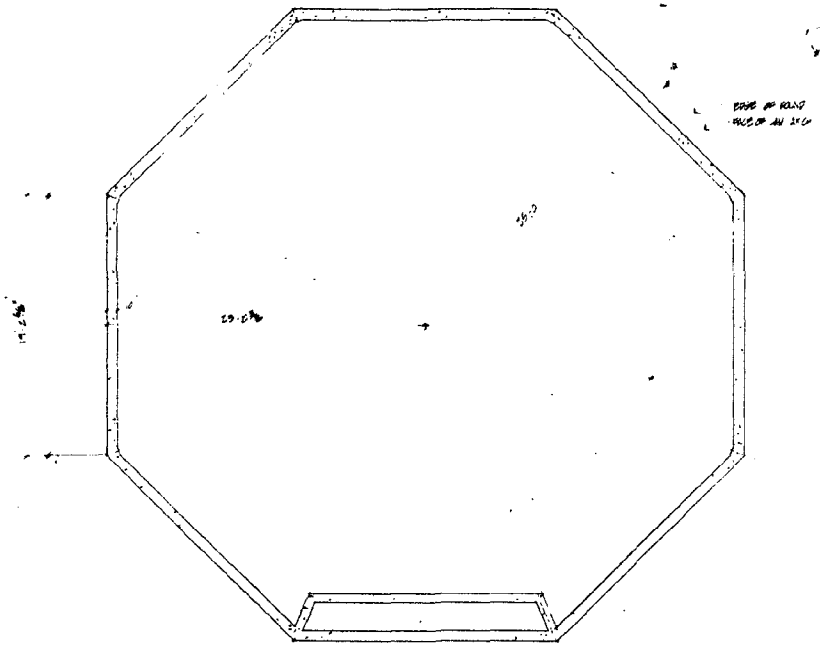
Date: Sept. 20, 1982 Revisions
Drawn: JMB

GATEWAY PARK, TAWAS CITY, MICHIGAN
INTERPRETIVE - INFORMATION CENTER

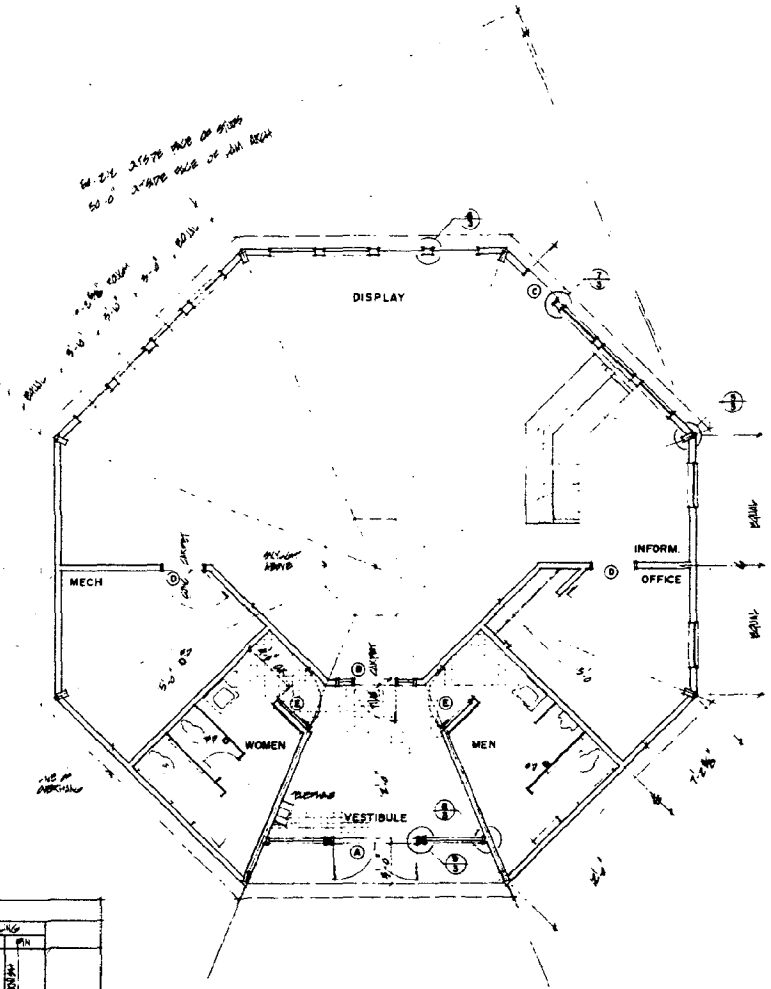
Beckett Raeder Rankin inc
landscape architects + planners

BUILDING SITE PLAN

S 1



FOUNDATION



FLOOR

FINISH SCHEDULE

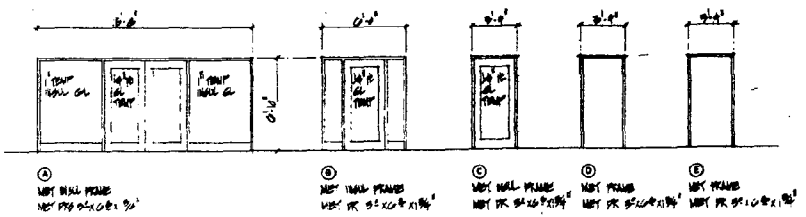
RM NAME	FLOOR	BASE	WALLS MAT.	WALLS FIN	CEILING MAT.	CEILING FIN	
	CARPET PAINTING THE CONC.	1x6 WD TRIM NONE	DRYWALL	PAINTED	STAINED	VARNISH	
VESTIBULE	o	o	o	o	o	o	
MEN	o	o	o	o	o	o	
WOMEN	o	o	o	o	o	o	
OFFICE	o	o	o	o	o	o	
DISPLAY	o	o	o	o	o	o	
INFORM	o	o	o	o	o	o	
MECH	o	o	o	o	o	o	

PLANS
1/4"=1'-0"

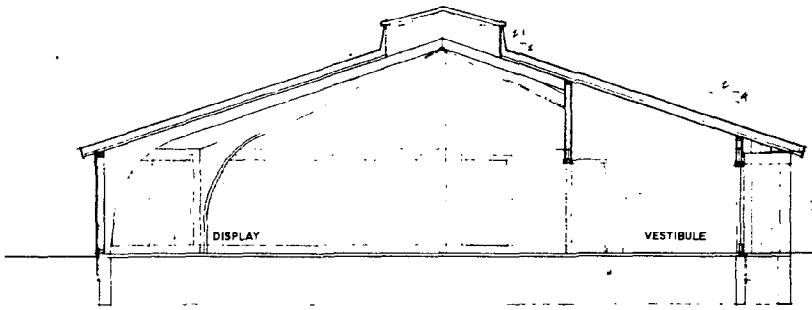
GATEWAY PARK INTERPRETIVE CENTER
TAWAS CITY, MICHIGAN

MICHAEL F. POGLIANO AIA

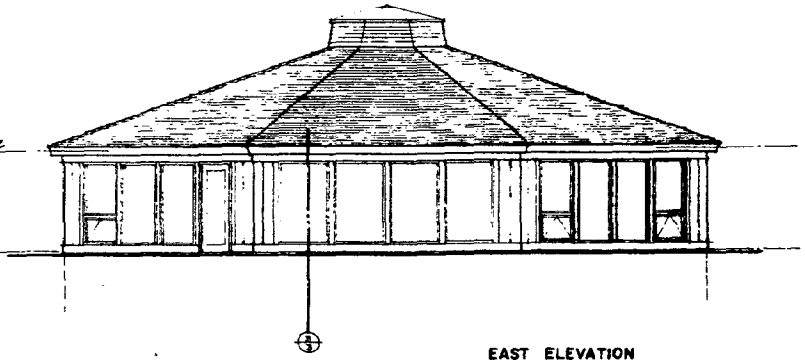
DATE
FROM 6/21/82
REVISIONS
DRAWN BY
JOB NO.
SHEET
1
OF 3



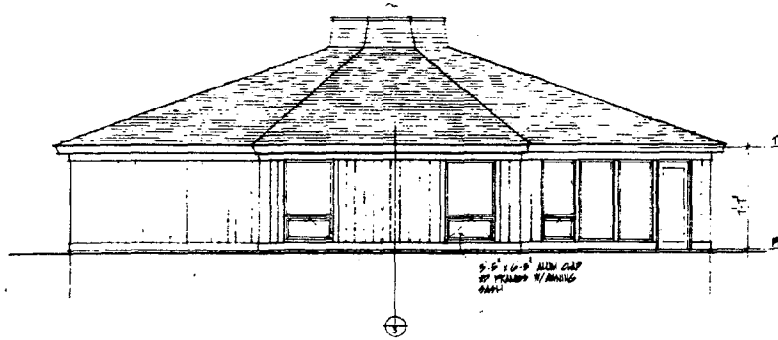
DOORS & FRAMES



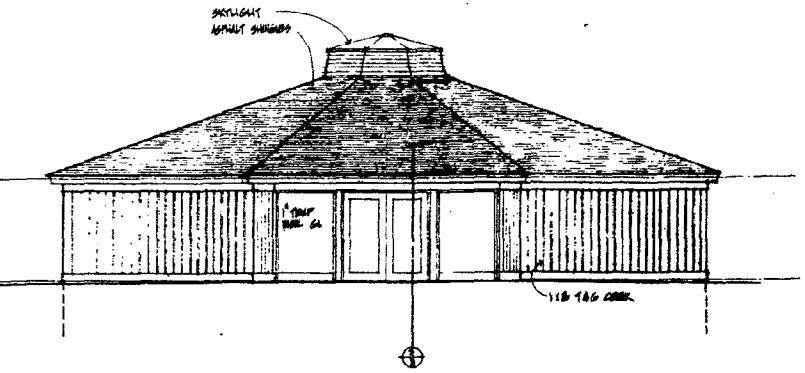
BUILDING SECTION



EAST ELEVATION



SOUTH ELEVATION

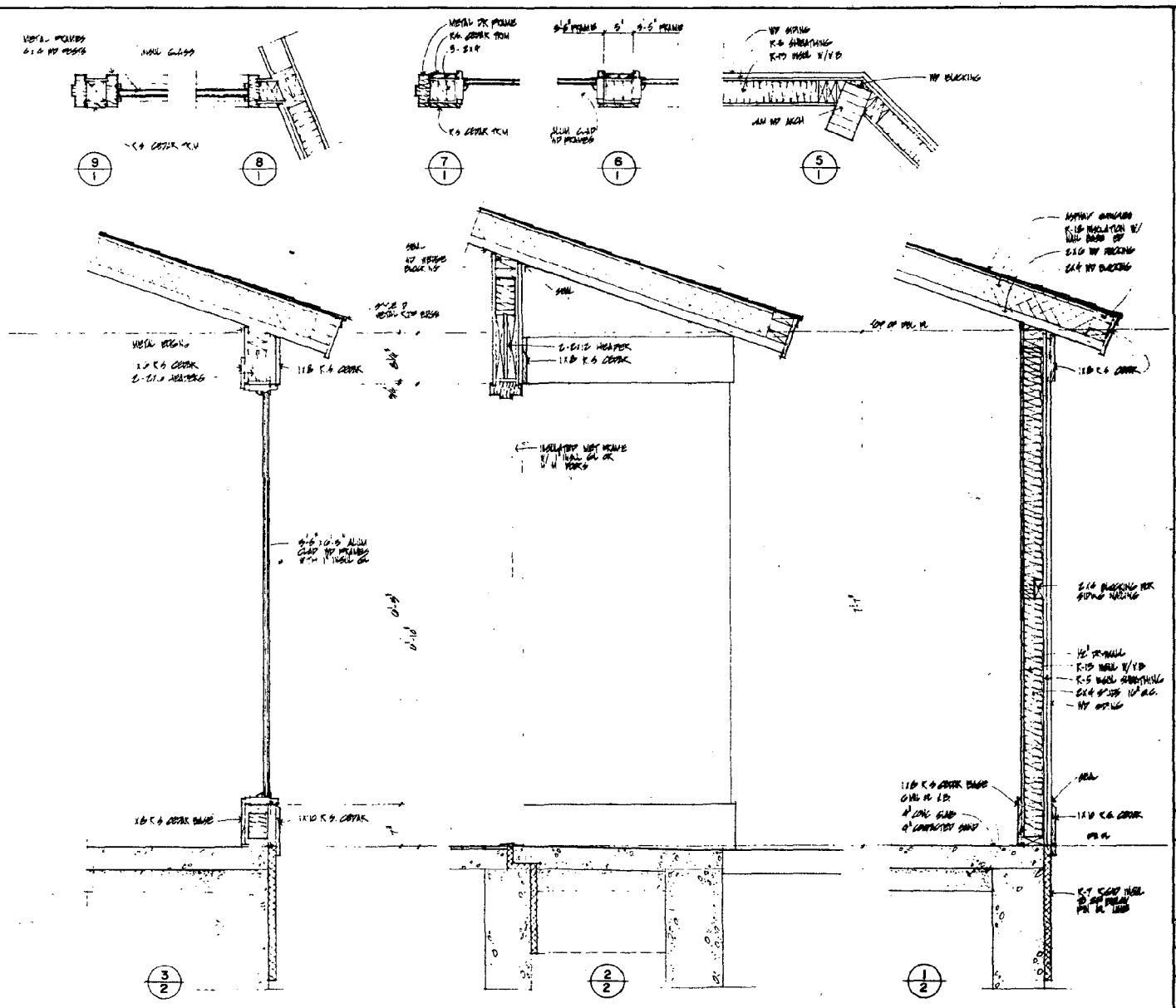


WEST ELEVATION

BLD'G SECTIONS & ELEVATIONS

MICHAEL F. POGLIANO AIA

2



WALL SECTIONS & DETAILS

MICHAEL F. POGLIANO AIA

3

OUTLINE SPECIFICATIONS

FOR

GATEWAY PARK

INTERPRETIVE CENTER

TAWAS CITY, MICHIGAN

DIVISION 1. GENERAL

List any items to be considered as alternates.

DIVISION 2. SITEWORK

Clear the site of all refuse and strip area of the top soil and stack for future use.

Excavate to depths indicated. Backfill and fill with sand gravel or a mixture of these, free from wood, roots, etc. Excavated materials meeting the requirements may be used.

At the completion of building shell, backfill and rough grade as required.

Disturbed grass areas adjacent to building or resulting from construction to be reseeded with Kentucky Blue.

DIVISION 3. CONCRETE

All concrete work shall conform to latest ACI standards and specifications.

Concrete footings and floors shall have a 28-day compressive cylinder strength of fc' = 3,000 PSI minimum.

Reinforcing steel shall be grade 40, deformed steel ASTM designation A-615 and A-617.

All floor slabs shall be pitched to floor drains.

Exposed floor slabs shall have a steel trowel finish and be treated with Master Builder's "Saniseal" or approved equal.

DIVISION 4. NOT APPLICABLE

DIVISION 5. NOT APPLICABLE

DIVISION 6. CARPENTRY

All lumber shall be thoroughly seasoned, sawn square and free from large, loose, or unsound knots and other imperfections.

Lumber shall be grade marked and identification of association having jurisdiction shall appear on each piece of lumber.

Plywoods shall meet the standards of the American Plywood Association.

Materials in General:

Framing lumber	-	#2 common or better Douglas fir, studs SPF.
Roof decking	-	Select grade, 2 x 6 tongue and groove Southern Pine.
Laminated wood	-	Laminated wood framing shall meet the provisions of The American Institute of Timber Construction's "Timber Construction Standards," AITC 100-72, with the following minimum design working stresses: Bending - Fb = 2400 psi Shear - Fv 165 psi Modulus of Elasticity - E = 1,800,000 psi
Wood trim	-	Rough sawn cedar.
Siding	-	Nominal 1 x 8 tongue and groove rough sawn cedar.
Sheathing	-	1" rigid polyurethane foam board.
Wall insulation	-	3-1/2" Fiberglass with vapor barrier R-13 at 70°F.
Roof insulation and nailable deck	-	Composite insulation consisting of expanded polystrene bonded to 3/8" wood wafer board R-18 at 70°F.

Framing and construction and securing of materials shall be as per the acceptable standards of the industry.

DIVISION 7. MOISTURE PROTECTION

Roofing

Entire roof deck of building is to be covered with one layer of 15# saturated roofing felt underlayment.

All edges and roof deck shall be provided with a metal starter strip comprised of drip edge with a return on the roof deck.

Entire roof of building is to be covered with a roof shingle equal to GAF "Timberline" U.L. Class C340# seal tab 3-in-1 - 12" x 36" asphalt shingle laid 5" to the weather. Shingles to be nailed per manufacturer's specification. Roof ridge shall receive a "Boston lap" application of asphalt shingles.

Skylight

Self-supporting segmented dome units with double-faced white Fiberglass panels and aluminum frame insulated to a minimum of R4 at 70°F., equal to the Geo-Roof by Kalwal Corp.

Sealant

All joints shown on the Plans or between adjacent materials shall be sealed with a gun-type, nonstaining, silicone base sealant equal to Dow-Corning 790. Joint backing shall be compatible to sealant to be used.

DIVISION 8. DOORS AND WINDOWS

Interior metal doors, frames and hardware shall be products of Fenestra, Pioneer, Steelcraft or approved equal.

Frames shall be standard 16-gauge steel and reinforced for hardware. Frames shall be 5-1/4" nominal width to sizes indicated on the Plans. All corners to be of welded construction and be provided with masonry anchors.

Doors shall be 1-3/4" thick constructed of (2) 16-gauge cold rolled leveled steel sheets reinforced with top, bottom, and vertical support channels. Doors shall be prepared for hardware. All surfaces and edges shall be continuously welded and finished smooth and invisible.

Hardware shall be Corbin, Stanley, Burns, LCN, or equal.

Sash

Fixed and awning wood frames with exterior color anodized aluminum cladding fitted with 1" clear insulated glass. Equal to sash unit by Pella Corporation.

DIVISION 9. FINISHES

Floors

Restrooms and vestibule - Paving tile floor and base set in epoxy resin and hardener mortar bed and grouted (thin set method).

Storage areas - Steel troweled and sealed concrete.

Other areas - Jute backed commercial grade carpeting adhesive set to concrete floors.

Walls and Ceilings

In general, surfaces will be painted or stained per the following schedule:

Drywall restrooms - One coat filler sealer; one coat latex based epoxy.

Drywall - One coat primer sealer; one coat oil base low luster enamel.

Metal - One coat primer; two coats semi-gloss enamel.

Wood trim - Two coats latex stain.

DIVISION 10. SPECIALTIES

Toilet partitions shall be floor mounted type, products of Sangmetal Products Co., Accurate Partitions Co., General Partitions Mfg. Co., or approved equal.

Partitions shall be 1" thick made of two (2) sheets of 20-gauge galvanized bonderized steel, assembled over and cemented under pressure to a dense sound-deadening core. Forming edges shall be electrically welded together and sealed with continuous oval-crown locking strip. Finish of a synthetic baked on enamel shall be applied to the panel of colors selected by the Architect. All hardware and trim shall be chrome-plated brass. Unit shall be furnished and installed completely with all hardware including coat hooks, bumpers, tissue holders, etc., for complete usage.

DIVISION 11. NOT APPLICABLE

DIVISION 12. FURNISHINGS

Cabinets and counter tops shall be fabricated of plywood. Cabinet surfaces will receive a paint finish and counter tops shall receive a plastic laminate surface.

DIVISION 13 and 14. NOT APPLICABLE

DIVISION 15. MECHANICAL

Heating, Ventilating and Air Conditioning

Heating and air conditioning will be accomplished by two (2) HVAC furnace units located in storage room. Duct work will be insulated galvanized sheet metal or rigid Fiberglass. AC optional alternate.

Plumbing

All work to be done shall be subject to all applicable plumbing codes and shall be subject to the inspection of the Owner and/or other authorized plumbing inspectors.

All fixtures shall be the best of their respective kind, free from all defects and warpage, and shall be guaranteed against crazing, dusting and discoloration. Suitable supports and hangers shall be provided as required.

All exposed metal in conjuction with plumbing fixtures shall be chromium plated brass, other metals not acceptable.

All pottery shall be of white color.

The installation of handicapped plumbing fixtures shall comply with Section 318 Construction Code Commission Rules and Regulations.

Soil and waste lines shall be cast iron. Water lines shall be type "L" hard copper with soldered joints. Water heater shall be 30-gal. capacity electric domestic type.

Plumbing Fixtures

Plumbing fixtures shall be American Standard, Kohler, Eljer or approved equals.

Urinals - Vitreous china wall siphon jet with flush valves.

Waterclosets - Wall mounted vitreous china flush valve type.

Lavoratories - Wall hung vitreous china.

Drinking fountain - Stainless steel wall mounted type.

Wall hydrants - Non-freeze all bronze with cast iron key.

Floor drains - Cast iron with chrome plated brass strainer and "P" trap.

DIVISION 16. ELECTRICAL

All work to be done shall be subject to all applicable electrical codes and shall be subject to the inspection of the Owner and/or other authorized inspectors.

All work and materials shall conform with applicable sections of the latest revisions of ANSI, ASTM, UL, IEE, IPCEA, and NESC.

Electrical service shall be a minimum 120/240- volt single phase 200-amp service. This Contractor shall provide and install one (1) surface mounted circuit breaker panelboard with dead front incorporating circuit breakers.

All wiring shall be done in conduit raceways and wiring will be copper conductors.

Lighting Fixtures

In general all lighting fixtures on the interior of the building will be rapid start flourescent type. The display area will have surface mounted incandescent fixtures.

Emergency lighting will be battery type connected to an unswitched power source.

Exterior fixtures will be incandescent recessed type and/or wall mounted fixtures of rust-resisting steel or aluminum bodies.

TASK C

Beckett
Raeder
Rankin
inc

landscape
architects
+planners

5 May 1982

Ms. Jeanne L. Powers
Grants Coordinator
M.D.N.R.
Stevens T. Mason Building
Lansing, MI 48909

Dear Jeanne:

Enclosed are bid tabulations for bids received May 3 for the Tawas City Gateway Park project. I have reviewed and checked the bids and find that all are in accordance with the requirements of the bidding procedures.

On my recommendation, the Tawas City Council awarded the contract to the John Henry Company for $154,555.00, subject to the final approval of the M.D.N.R.

We are anxious to begin work on this project and look forward to your final approval as soon as possible.

If you have any questions, please call me.

Very truly yours,

BECKETT RAEDER RANKIN INC

John M. Beckett

JMB:csh

Encl.
cc: Wallace Stovall

3200 eisenhower parkway ann arbor michigan 48104 (313) 973-0471

BID TABULATION: TAWAS GATEWAY PARK OPENED: MAY 3, 1982 · 4:00 P.M.

BIDDER	BASE BID	OWNER'S OPTIONS	FEES A	FEES B	PROPOSAL GUARANTEE	REMARKS
John Henry Excavating Inc. East Tawas, Mich.	154,555.00	Item No.7 deduct for C.C.A.# 485.00	7½%	7½%	BOND	
"		Item No.8 deduct for C.C.A.# 354.00				
Katterman Trucking, Inc. Hale, Mich.	161,603.00	none	5%	5%	BOND	
R.N. West Construction Co. Flushing, Mich.	195,541.00	none	7½%	7½%	BOND	
Ken Schaaf Builders, Inc. East Tawas, Mich.	217,994.11	none	7½%	7½%	BOND	corrected for error in extension of unit pri
Gilliland Construction Co., Inc. Alpena, Mich.	239,950.00	none	5%	7½%	BOND	
Champagne & Marx Excav., Inc. Saginaw, Mich.	279,833.00	none	7%	7%	BOND	
The Morrison Company Trenton, Mich.	369,735.00	none	7½%	7½%	BOND	

TAWAS GATEWAY PARK

BID TABULATION

May 3, 1982

ITEM	EST. QTY.	UNIT	John Henry Inc. TOTAL	UNIT	Katterman Trucking TOTAL	UNIT	R. N. West Construction TOTAL
1. Demolition/Removal	l.s.		1,200.00		2,000.00		4,000.00
2. Rock Revetment	l.s.		22,127.00		22,760.00		25,000.00
3. Site Filling	35,620 cy	2.20	78,364.00	2.30	81,926.00	2.40	85,488.00
4. 22A Aggregate	l.s.		9,600.00		6,075.00		12,000.00
5. Concrete Curb	504 lf	11.00	5,544.00	8.00	4,032.00	7.00	3,528.00
6. Bituminous Paving	l.s.		3,700.00		2,700.00		4,000.00
7. Timber Groin - River	5 ea	725.00	3,625.00	1,490.00	7,450.00	900.00	4,500.00
8. Timber Groin - Bay	3 ea.	950.00	2,850.00	1,745.00	5,235.00	1,350.00	4,050.00
9. Timber Ramp	l.s.		1,158.00		2,100.00		2,300.00
10. Picnic Pod	5 ea.	729.00	3,645.00	640.00	3,200.00	675.00	3,375.00
11. Play Unit	l.s.		2,750.00		2,575.00		2,800.00
12. Topsoil	l.s.		9,500.00		12,300.00		14,500.00
13. Seeding and Mulching	l.s.		6,800.00		4,000.00		4,000.00
14. Project Sign	l.s.		400.00		500.00		700.00
15. Adjusting Structures	l.s.		392.00		500.00		300.00
16. General Conditions	l.s.		2,900.00		4,250.00		25,000.00
TOTAL			154,555.00		161,603.00		195,541.00

	Ken Schaaf Builders		Gilliland Construction		Champagne & Marx Excavating		Morrison Company	
UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	UNIT	TOTAL	
	9,543.00		7,000.00		2,355.00		4,200.00	
	27,313.00		45,000.00		44,950.00		45,000.00	
3.04	108,284.80	3.00	106,860.00	3.25	115,765.00	4.75	169,195.00	
	10,425.00		12,000.00		12,700.00		10,500.00	
12.73	6,415.92	10.00	5,040.00	10.25	5,166.00	10.00	5,040.00	
	3,163.00		3,000.00		7,575.00		3,500.00	
930.60	4,653.00	1,400.00	7,000.00	4,741.00	23,705.00	3,000.00	15,000.00	
1,249.33	3,747.99	1,700.00	5,100.00	6,157.00	18,471.00	5,000.00	15,000.00	
	1,290.00		1,500.00		4,500.00		3,000.00	
857.00	4,285.00	1,000.00	5,000.00	718.00	3,590.00	800.00	4,000.00	
	2,794.00		3,000.00		3,791.00		3,500.00	
	15,092.00		20,000.00		20,865.00		14,000.00	
	12,978.00		12,000.00		5,800.00		4,250.00	
	272.00		200.00		250.00		300.00	
	379.00		250.00		650.00		250.00	
	7,359.00		7,000.00		9,700.00		73,000.00	
	217,994.71		239,950.00		279,833.00		369,735.00	

URAL RESOURCES COMMISSION
JACOB A. HOEFER
E. M. LAITALA
HILARY F. SNELL
PAUL H. WENDLER
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING, MI 48909
HOWARD A. TANNER, Director

May 26, 1982

Wallace Stovall, City Mgr.
City of Tawas City
508 W. Lake St.,
P.O. Box 568
Tawas City, Michigan 48763

Re: 26-01209
Tawas Rivermouth Gateway

Dear Mr. Stovall:

Our Engineering Division has reviewed the tabulation of bids and supporting information in conjunction with the above project.

Based upon their approval (memorandum attached), we concur with your recommendation to award the contract to the lowest bidder,
John Henry Co. in the amount of $154,555.00.

We are enclosing forms to be used when requesting reimbursement. Please submit two (2) copies of each request to this office, along with a summary of expenditures and a photo of the construction sign erected on the site.

Sincerely,

Jeanne L. Powers

Jeanne L. Powers
Grants Coordinator

JLP:ljw
Enclosure
cc: Engineering Division

TASK D

JOHN HENRY INC. – Excavating Contractor
1140 Henry Road, East Tawas, Michigan 48730
Phone: 517-362-3333

GATEWAY PARK CONTRACT BREAKDOWN

Draw # 4

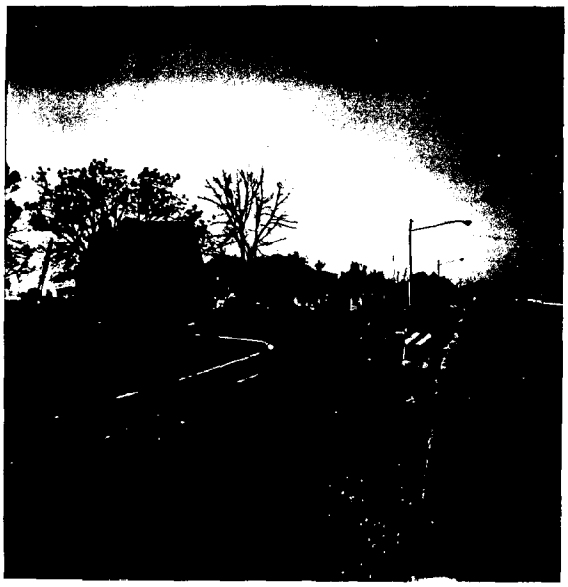
ITEMS OF WORK	CONTRACT QUANTITIES	PRICE (UNIT)	CONTRACT SUBTOTAL	% COMPLETED	AMOUNT EARNED
Demo & Removals	1	L.S.	$1200.00	100%	1200.00
Rock Revetment	1	L.S.	22127.00	100%	22127.00
Site Filling	3400 cy.	$2.20	74800.00	100%	74800.00
22 Aggregate	1	L.S.	9600.00	80%	7680.00
Concrete Curb	504 lf.	$11.00	5544.00	0%	0
Bit. Paving	1	L.S.	3700.00	0%	0
River Groin	5 ea.	628.00	3140.00	100%	3140.00
Bay Groin	3 ea.	832.00	2496.00	100%	2496.00
Timber Ramp	1	L.S.	1158.00	100%	1158.00
Picnic Pods	5 ea.	729.00	3645.00	MATERIAL STORED 40%	1458.00
Play Unit	1	L.S.	2750.00	MATERIAL STORED 50%	1375.00
Topsoil 3" deep	1	L.S.	9500.00	75%	7125.00
Seeding & Mulching	1	L.S.	6800.00	0%	0
Project Sign	1	L.S.	400.00	100%	400.00
Adj. Drainage Str.	1	L.S.	392.00	MATERIAL STORED 60%	235.20
Gen. Conditions	1	L.S.	2900.00	90%	2610.00
ADDITIONS					
Tree Removal 18" or larger	9 ea.	150.00	1350.00	100%	1350.00
18" or less	10 ea.	75.00	750.00	100%	750.00
Retaining Wall	1	L.S.	775.00	100%	775.00
12" Drain	1	L.S.	989.50	100%	989.50
Pier Removal	1	L.S.	1500.00	100%	1500.00

Revised Contract Total	$155,516.50
Total Earned	131,168.70
Less Retainage	13,116.87
Less Previous Payments	95,931.45
AMOUNT DUE THIS EST.	$22,120.38

SIGNED John Beckett

DATE 1 Oct. 1982

[illegible] 10-1-82



TASK E

GATEWAY PARK STEERING COMMITTEE

21 July Meeting at Tawas
Coyle's Restaurant noon

Jim Leidlein
City Mgr. Rogers City

PRESENT:	REPRESENTING:
John Beckett	Beckett, Raeder and Rankin, Inc. Ann Arbor
Frank Durb	Tawas Area Chamber of Commerce
Roy Silvers	Oscoda/Huron Snomobiling Assn.
John McNutt	Standish
Neil Thornton	Tawas City Park Board
Clyde Soper	City of East Tawas
Charlotte Paner	Tawas Area Chamber of Commerce
Ray Andrus	Iosco County
Bob Smarr	Oscoda/AuSable Chamber of Commerce
Kenneth Trower	Huron Shores Chamber of Commerce
Ted Planck	Rogers City
Dorothy Gheen	Alcona County
Christine Gruschke	Alpena Area Tourist Association
Frederick Kail	Cheboygan Area Chamber of Commerce
Wallace R. Stovall	Tawas City Manager
Audrey Lutz	AuGres Chamber of Commerce
Roger Rohberg	Director, Upper Great Lakes Regional Office
Joe Maxwell	Oscoda/Alcona area businessman
Gary Fralick	Oscoda Press

Tawas City Manager Wallace Stovall called the meeting to order at 12:25 and welcomed committee members.

Stovall introduced Roger Rehber, Director of Upper Great Lakes Regional Office, after opening remarks. Rehberg said the purpose of the meeting was to elect a chairman, develop rules pertaining to the formation of a Coastal Counties Alliance from Cheboygan to Arenac Counties. He added that the meeting was called before a full steering committee had been formed due to an August 1 date for approval of design plans.

John Beckett, from the architectural firm of Beckett, Raeder and Rankin, Inc. of Ann Arbor presented detailed plans for graphic displays for Cheboygan County, as an example of what could be done for each county. He spoke of the individual county display modules: six sided plexiglas suspended modules which would provide each county with three of the panels. He cited low cost, portability, and ease of changing displays for seasonal exhibits as design factors in the selection.

Beckett simplified the structure of the displays by explaining that they:

1. Identified each county
2. Identified communities within those counties
3. Identified major roadways
4. Identified major points of interest within each county

He added that the central design credo was: Discover Lake Huron an action-oriented series of displays that, for visual excitement, should be changed seasonally.

The committee was satisfied with his presentation. Comments included "This is great!" The proposals were accepted by consensus.

Roger Rehberg presented figures relevant to tourist information centers explaining that studies recently completed showed that travelers inquiring at such centers added 2.7 days more to their planned stay in those areas. That meant over $20,000,000 to the state tourist related industries.

Rehberg asked for nominations for an acting chairman and secretary to guide the committee until formal elections were held.

Kenneth Trower, representing the Huron Shores Chamber of Commerce, (a Harrisville restaurant owner and former Alcona County Commissioner) was nominated by Dorothy Gheen. Trower was elected by consensus as acting chairman.

Clyde Soper nominated Dorothy Gheen, representing Alcona County, as acting secretary. Gheen, who is the publisher of the Alcona County Review in Harrisville, had been taking notes from the beginning of the meeting. She was elected by consensus.

Trower took the chair and told the committee members, "We will get out of this exactly what we put into it" and asked for motions to select the next meeting site and date.

Ted Planck, representing Rogers City, moved that the next meeting be held at the Deckhand Restaurant in Rogers City on Wednesday, 11 August, 1982. Motion carried, with time of noon added.

The committe adjourned to the construction site on the Tawas River.

Dorothy Gheen

Dorothy Gheen
Acting secretary

Discover Lake Huron

Cheboygan

At the northernmost tip of the lower peninsula, Cheboygan County boasts more surface area on its inland lakes than any of Michigan's counties. Over 800 campsites are available throughout the county, much of which is covered by State forestland.

Near the City of Cheboygan, at the mouth of the Cheboygan River, is an important waterfowl migration habitat. From the Cheboygan Marsh Interpretive Boardwalk, visitors may enter the wetlands, the largest shoreline cattail marsh between Chicago and Saginaw Bay. The observation tower affords a view to four lighthouses and Mackinac Bridge.

Burt Lake State Park

360 campsites are found in the 405-acre park. Swimming, boating, and picnicking, in addition to fishing, are the activities the park provides.

Pine Grove State Forest Campground

has eight campsites and offers swimming, fishing, hiking, and snowmobiling to its visitors.

Fort Michilimackinac State Park

is both a maritime museum and a park. A reconstructed fur trading outpost, it portrays military and domestic life in the 18th century. Nearby, in the Mackinaw City Marina is the floating museum, the Sloop Welcome.

Mill Creek

four miles southeast of Mackinaw City on US-23 is a water-powered sawmill dating from the 1780's. In June of 1984 its reconstruction will be complete and visitors may experience the early days of the settlement, through displays and costumed interpreters. Nature trails are also planned as a part of Mill Creek.

Cheboygan State Park

is nine miles south of Cheboygan and offers a fine swimming beach and camping at 78 sites which are integrated into 932 acres. Snowmobiling, fishing, and hunting take place within designated areas of the park.

Twin Lakes State Forest Campground

seven miles southeast of Alverno has 19 campsites. Major activities here are fishing, hiking, and snowmobiling.

Black Lake State Forest Campground

has 50 campsites at the edge of Black Lake. The park offers swimming, boating, fishing, hiking, skiing, and snowmobiling. The campground can be an intermediate stop for a 3-4 day 45-mile canoe trip along Black River.

Aloha State Park

on 91 acres of land has 284 campsites and boasts a big sandy beach on Mullet Lake - tops for swimming. A boat launch, children's playground, fishing areas, and sanitary facilities are the amenities of the site.

Inland Waterway

a shuttle service operating between Crooked Lake and Lake Michigan makes the long-awaited inland waterway, a 45-mile chain of rivers and lakes connecting Lake Michigan and Lake Huron a reality. Boats up to 25 feet in length can avoid the hazards of traveling around Gray's Reef and Waugoshance Point in the Straits of Mackinac.

Maple Bay State Forest Campground

is four miles east of Brutus and has 36 campsites. Swimming, boating, fishing, hiking, and snowmobiling are offered here.

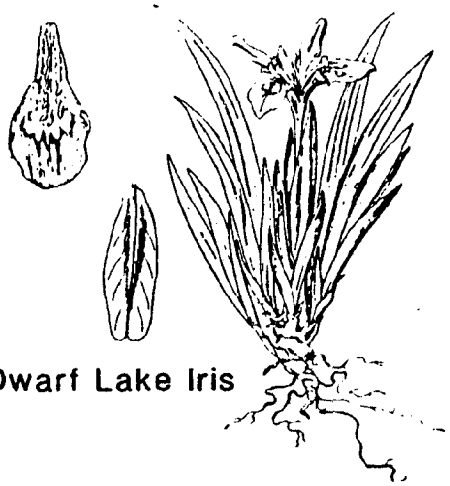
Presque Isle

Presque Isle's State Parks offer fishing, boating, camping, and winter sports. The drive along US-23 northwest of Rogers City is one of the most scenic of all the Great Lakes.

One of the world's largest limestone quarries is located near Rogers City. Visitors may observe the operations from Quarry View, at the rim of the quarry.

The Old Presque Isle Lighthouse, east of US-23 at Presque Isle Harbor, was built in 1840. Both the light and the adjoining keeper's cottage are constructed of brick and stone. Although the light easily guided ships headed northwards on Lake Huron, it was invisible to vessels sailing southwards on Lake Huron due to terrain. At the lighthouse, visitors may inspect interesting relics from all over the world, take advantage of guided tours, and picnic.

Presque Isle's southeastern shore is a habitat for the Dwarf Lake Iris, which is on the proposed federal list of threatened species. Confined to a relatively small region, it is found only in coastal Michigan, Wisconsin, and Ontario. It is only three to four inches tall and its flowers are blue with showy yellow crests. Damage to the habitat of the Dwarf Lake Iris denies the public a beautiful plant and accelerates its rate of extinction.



Dwarf Lake Iris

Hoeft State Park

four miles north of Rogers City on US-23 is in the Huron dunes country. Here, along the shores of Lake Huron, are 144 campsites on 301 acres of parkland, a swimming beach, a picnic shelter-bathhouse, and four miles of hiking and cross-country skiing trails.

Lakeside Park

in Rogers City is a place for picnicking, swimming, and boating.

Seagull Point Nature Area

just north of Rogers City offers picnicking, hiking, swimming, and rustic camping.

Fletcher County Park

three miles south of Posen provides 40 campsites. Visitors may go swimming, boating, fishing, and hiking.

Tomahawk and Shoepac Lakes State Forest Campground

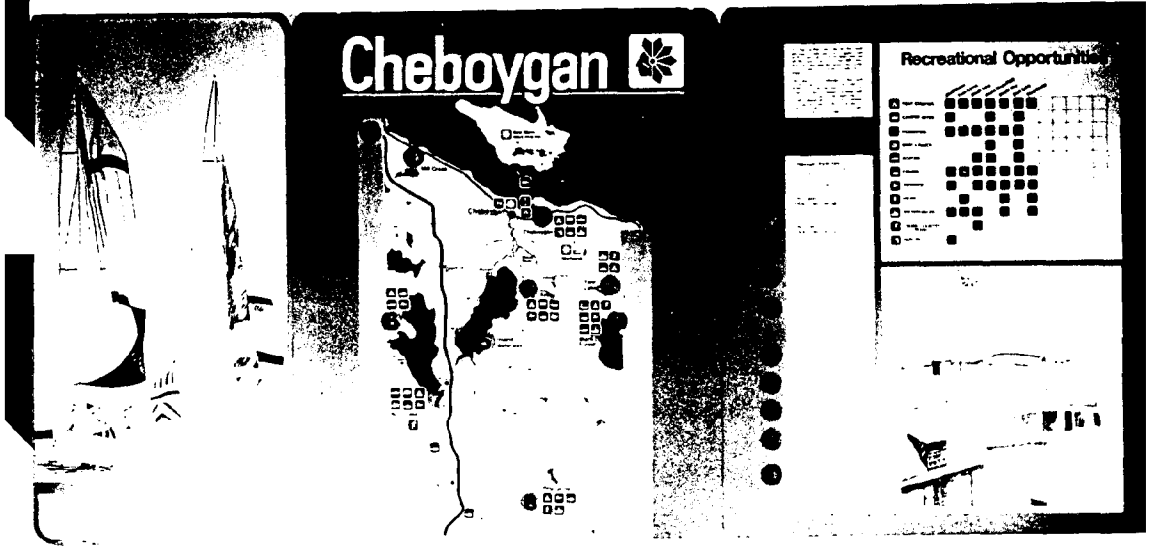
south of Onaway on M-33 have 89 campsites to offer visitors. At both lakeside parks swimming, boating, fishing, hiking, and snowmobiling are the major activities.

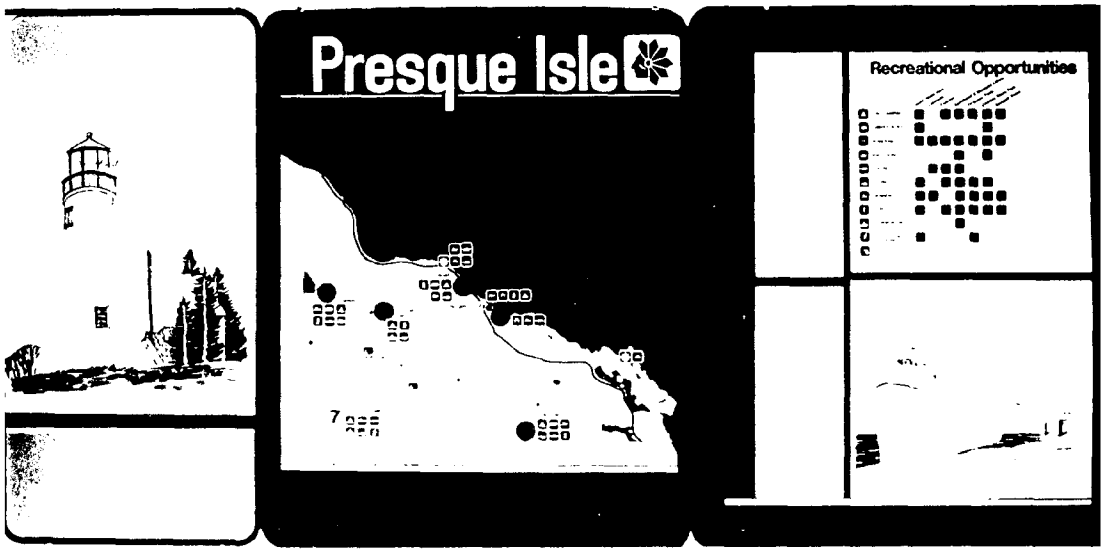
Ocqueoc Falls State Forest Campground

is five miles north of Millersburg on M-68. Twelve camping sites and opportunities for fishing, hiking, cross-country skiing and snowmobiling are available. The Swift Ocqueoc River which flows past this campground can provide skilled canoeists with a two to three day trip.

Onaway State Park

located on Black Lake and has 101 campsites on 158 acres. Picnicking, swimming, fishing, and hiking are the lakeside activities for campers.


Cheboygan
Recreational Opportunities

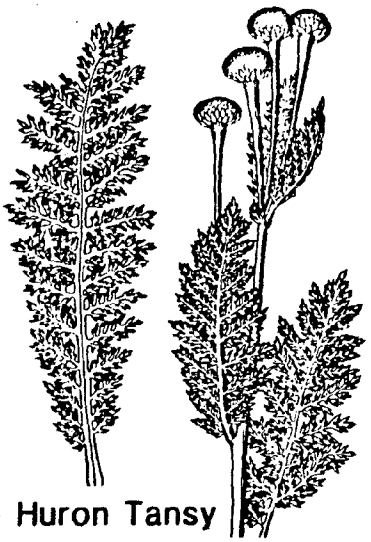

Presque Isle
Recreational Opportunities

Alpena

The coast of Alpena County is dominated by Thunder Bay, a crescent-shaped body of water which makes up half of Alpena's Lake Huron shoreline. This area has been designated an Underwater Preserve by the Michigan Department of Natural Resources; it has been identified as having one of the heaviest concentrations of Great Lakes shipwrecks. Scuba divers should find Thunder Bay rich in underwater adventures. The locations of sunken ships shown on the Lake Huron shipwrecks map attest to the dangers of Thunder Bay.

Bountiful fishing in Thunder Bay is crowned by the annual Brown Trout Festival. In the summer fishermen share the beautiful water with numerous sailboats. There are two Midget ORC Races that take place during the warm season.

The Thunder Bay area is also significant botanically; the peninsula at the north end marks the southern range of the Lake Huron Tansy, a threatened species in Michigan. On sand and gravel shores it reaches 12 to 18 inches in height and produces yellow flower heads one-half to three-quarters of an inch wide. The flowerheads of this plant should not be collected to ensure maximum seed production and survival of the species.



Lake Huron Tansy

Negwegon State Park

south of Alpena on Lake Huron, this area offers five miles of natural scenic shoreline.

Ossineke State Forest Campground

has 43 campsites to offer its visitors as well as picnicking, swimming, fishing and hiking.

Thunder Bay River State Forest Campground

is located nine miles southwest of Alpena. 14 campsites and areas for fishing, hiking, and snowmobiling are available in the nearby state forest.

Jesse Besser Museum

in Alpena is a regional museum displaying cultural, industrial, social, and artistic works which illustrate the settlement of the Thunder Bay area. A planetarium and two 19th century buildings are part of this unique museum.

Long Lake County Park

is eight miles north of Alpena. With 70 campsites, it provides electricity and places for picnicking, swimming, boating, fishing, and hiking.

Fletcher County Park

north of Long Rapids has 60 campsites and offers swimming, boating, fishing, hiking, and winter sports.

Beaver Lake County Park

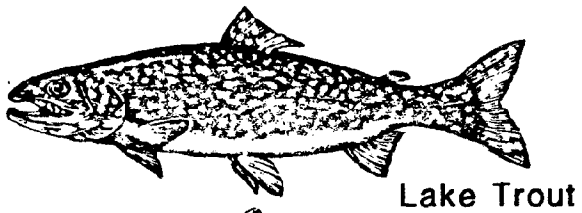
in the southwest corner of Alpena off M-65 has 60 campsites near the lakeshore. Picnicking, swimming, boating, fishing, hiking and winter sports are the park's activities.

Alcona

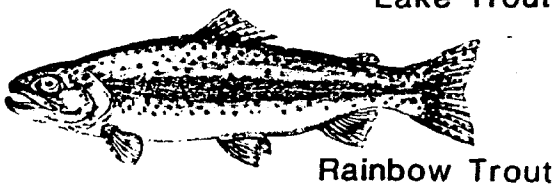
Over 900 campsites adjacent to scenic rivers and lakes are to be found in Alcona. Thirty miles of Lake Huron shoreline form its eastern border. With many public fishing sites at inland lakes and wilderness trout streams, including the famous Au-Sable River, Alcona County's choice fishing locations are plentiful.

For boating access to Lake Huron and to inland lakes, Alcona has six public boat launches. Hubbard Lake, a sizable body of water covering 9,200 acres, has two boat launches. There are three more launches at Harrisville, and the town of Black River has one.

Today Alcona bears reminders of its role in the fur trade and logging business. Just north of Greenbush is the Great Black Rock which stands 60 feet out in Lake Huron. Indians who travelled between trading posts used to place offerings in its hollowed out surface to ensure a safe journey. Important in Michigan's logging history, the forests of Alcona contributed stands of white pine. The logs were floated south and sent to the Atlantic seaboard where they became the main mast of oceangoing vessels. Sites of inland logging camps are still here for the adventuresome to visit.



Lake Trout



Rainbow Trout

Harrisville State Park

offers camping on the shore of Lake Huron amidst stately pines and cedars. 229 campsites are located on the 94 acres of the park. The amenities include a swimming beach, boat launch, hiking trails, and a nearby public marina

Jewell Lake
National Forest Campground

in Barton City, west of Harrisville off M-72, provides 32 campsites and opportunities for swimming boating, fishing, hiking, and snowmobiling.

Pine River
National Forest Campground

is six miles east of Glennie. Camping snowmobiling, swimming, and fishing are the major activities to enjoy here. There are seven campsites.

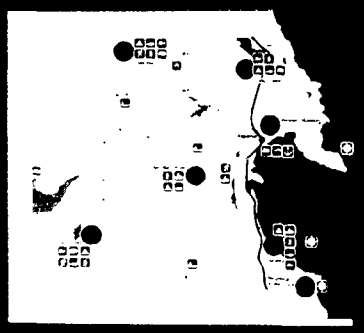
Horseshoe Lake
National Forest Campground

provides seven lakeshore campsites. In the secluded environment of Huron National Forest, visitors may fish, hike, and go snowmobiling.

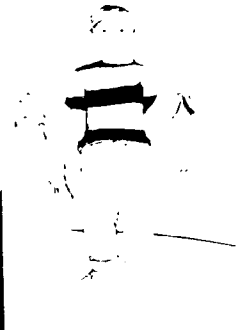
Alcona County Parks

is made up of three separate camping areas located around Alcona Dam Pond. There are 600 campsites in all. Electricity is provided in the campgrounds and picnicking, swimming, boating, fishing, hiking, and winter sports are the activities offered.

Alpena



Recreational Opportunities



Alcona

Recreational Opportunities

Iosco

With State and National forestland covering more than half of Iosco County, it provides an ideal setting for both sportsmen and nature lovers. Over 900 campsites are available throughout the county to visitors.

Among its well-known features are the AuSable River, a favorite place for fishing, camping, canoeing, and the Kirtland's Warbler; two major colonies of this rare yellow-breasted songbird are found in central Iosco County.

Enlivening the winter months, every February East Tawas hosts the Perchville USA Icefishing Festival. A wide range of winter events takes place on the frozen surface of Lake Huron; ice fishing, a polar bear swim, demolition derby, parade, and helicopter rides are some of the festivities.

Miles of cross country ski trails trace through Huron National Forest and opportunities for snowmobiling are also plentiful. 4,000 acres of inland lakes are accessible to boatsmen at seven launch sites.

Kirtland's Warbler

Tawas Point State Park

a prime site for bird migration, is 175 acres of peninsular land. Two miles of sandy beaches and 202 campsites, sanitary facilities, hiking trails, a boat launch, fishing areas, and a children's playground all add up to make the park a uniquely attractive place.

East Tawas City Park

provides 200 campsites and offers swimming, boating, fishing, and hiking to its visitors. The park also serves as the eastern terminus for the shore to shore riding/hiking trail. East Tawas has a boat launch, marina, and transient accommodations for 20 boats.

Van Etten Lake Forest Campground

has 53 lakeside campsites. Swimming, boating, fishing, hiking and snowmobiling are the major activities.

Old Orchard County Park

lies eight miles west of Oscoda. Its 500 campsites are located at the shore of Foote Dam Pond. The park provides the following recreational opportunities: swimming, boating, fishing, hiking and cross-country skiing.

Lumberman's Monument National Forest Campground

has 20 campsites near the 1929 memorial dedicated to the Michigan lumberjacks. Picnicking, camping, and snowmobiling are the major recreational activities.

Rollways National Forest Campground

is 19 miles northwest of East Tawas. It provides 20 campsites beside Loud Dam Pond. Here visitors may fish or go snowmobiling.

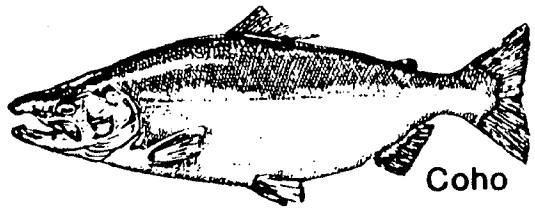
Sand Lake and Round Lake National Forest Campgrounds

are both located ten miles west of East Tawas. Visitors may go swimming, fishing, and snowmobiling at both parksites. Round Lake also offers camping.

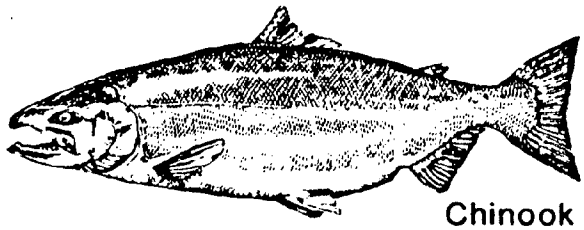
Arenac

Standish marks the departure point of northbound US-23 from I-75; it is the gateway to Lake Huron's coastal counties. The County Seat, Standish, is headquarters for hunters, fishermen, and snowmobilers. Nearby Saginaw Bay and the Rifle and Au Gres Rivers and their tributaries offer excellent fishing and canoeing.

The famous Singing Bridge over US-23 at the Whitney Drain north of Au Gres is the scene of spring smelt dipping and surf fishing for steelhead, coho, and chinook salmon.



Coho



Chinook

Whitney County Campground

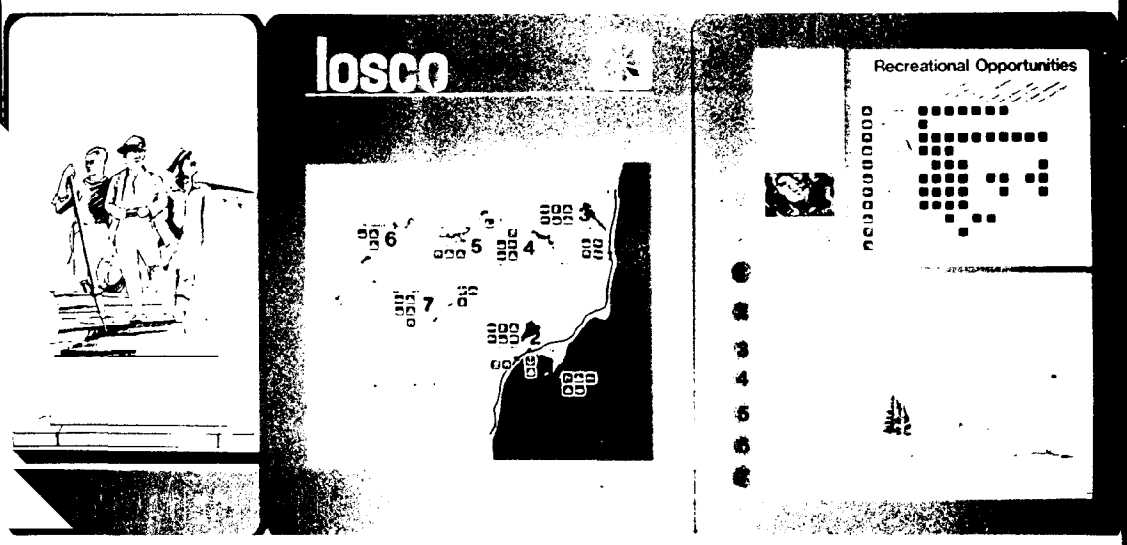
has 75 campsites to offer its visitors, who may participate in swimming, boating, fishing, and hiking.

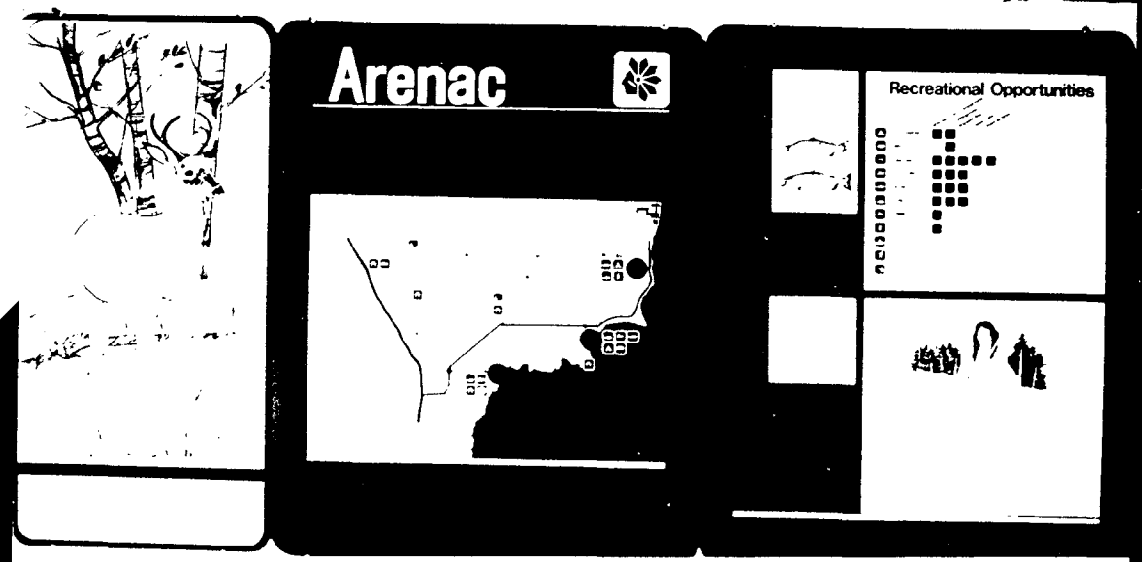
City Campground

is located in AuGres. The park amenities include 96 campsites, electricity, areas for boating, fishing, and picnicking.

Wigwam Bay Wildlife Area

offers a boat launch, picnicking, and fishing at this lakeside natural area.


Iosco
6
5
4
7
3
2
Recreational Opportunities


Arenac
Recreational Opportunities

WETLANDS

A marsh or wetland provides a very special environment. Abundant life exists here where water and land meet quietly. While unsuitable for agricultural, industrial, or residential uses, wetlands play the valuable role of providing a protective habitat for wildlife and fish, and a setting for recreation. Migratory waterfowl are dependent on the wetlands for nesting, feeding, and breeding, while fish rely on the wetlands as a spawning habitat.

In addition, wetlands decrease shoreline erosion by slowing down wave action. They recharge the groundwater supply, and by acting as collectors from surrounding uplands, they remove and store nutrients from runoff.

The parts of a wetland ecosystem are interrelated; the lives of its mammals, birds, amphibians, reptiles, fish, and invertebrates are directly related to the condition of its plants, bacteria, fungi, and nutrients.

Various programs and laws are aimed at protecting and preserving wetland areas for use and enjoyment of present and future generations. The following Lake Huron coastal areas can be visited and observed as characteristic shoreline environments:

Negwegon State Park in Alpena County is proposed for designation as a wild area under state law.

Tawas Point State Park in Iosco County, is located on land which projects into Lake Huron; it is a migration area for hawks, shorebirds and songbirds.

Wigwam Bay Wildlife Area in Arenac County, the northern part of Saginaw Bay Wetlands, is a waterfowl habitat.

Cheboygan Marsh, at the mouth of the Cheboygan River, has an interpretive boardwalk which leads into the wetlands.

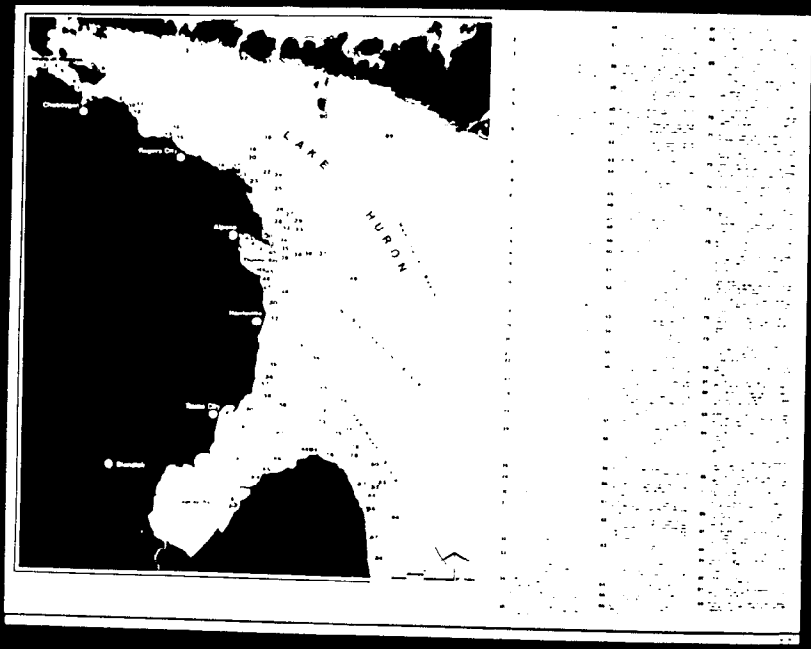
A portion of Bois Blanc Island has been designated under state law as a nature study and natural area.

Presque Isle Point in Presque Isle County and North Point Misery Bay in Alpena County are hawk and songbird migration areas.

South Point in Negwegon State Park in Alpena County has a concentration of songbirds.

Coastal Wetland

Shipwrecks



Phone 362-3731

City of Tawas City

508 Lake Street
TAWAS CITY, MICHIGAN 48763

October 26, 1982

Larry Beckon, Administrator
Management Services Division
Department of Transportation
Transportation Building, 425 West Ottawa
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. Beckon:

This letter is in regards to your letter of October 15, 1982 regarding the display panels that Micky Davis picked up from the City of Tawas City. In checking with Mr. Gordon Anderson, Coastal Management Program, Land and Resources Programs Division, Department of Natural Resources and also reviewing the Coastal Management agreement number LRP-410 under which the displays were constructed there is no restrictions regarding the duplicating of these displays for any other use. There is one requirement that an acknowledgement be made noting the financial assistance provided by the Coastal Zone Management Act administered by the office of Coastal Zone Management, National Oceanic and Atmospheric Administration. Acknowledgement shall also cite the Michigan Coastal Management Program administered by the Department of Natural Resources, Division of Land Resource Programs.

Therefore, based on the above I can see no problem in duplicating them for use in roadside parks where appropriate, providing that proper acknowledgements are made.

If you have any questions regarding this matter, please do not hesitate to contact me.

Very truly yours,

Jack H. McNutt
City Manager

jmw

TRANSPORTATION COMMISSION
HANNES MEYERS, JR.
CARL V. PELLONPAA
WESTON E. VIVIAN
LAWRENCE C. PATRICK, JR.
RODGER D. YOUNG
WILLIAM C. MARSHALL

STATE OF MICHIGAN

WILLIAM G. MILLIKEN, GOVERNOR
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION BUILDING, 425 WEST OTTAWA PHONE 517-373-2090
POST OFFICE BOX 30050, LANSING, MICHIGAN 48909

JOHN P. WOODFORD, DIRECTOR

October 15, 1982

Mr. Jack M. McNutt
City Manager
P.O. Box ~~682~~ 565
Tawas City, Michigan 48763

Dear Jack:

I am very impressed with the display panels that Micky Davis brought back from last Wednesday's meeting in Alpena. In fact, I am taking them to the EMTA Annual Meeting next week as examples of what communities can do to promote their area in the rest areas and roadside parks.

We appreciate the loan of the displays on a temporary basis.

The panels could possibly be displayed at the Linwood Rest Area. We have discussed duplicating them for use at Roadside parks where appropriate (please let me know if there are any restrictions regarding duplicating or other use).

We will take special care with the panels and return them to you upon the successful completion of Tawas City's "Gateway Park" project. You will be contacted about specific locations to install these panels.

Sincerely,

Larry Beckon, Administrator
Management Services Division

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 14104 2509