Will County Department of Highways

SHELDON C. LATZ, PE PLS
COUNTY ENGINEER

16841 W. LARAWAY ROAD
JOLIET, ILLINOIS 60433
(815) 727-8476
FAX (815) 727-9806

BRUCE D. GOULD, PE
ASSISTANT COUNTY ENGINEER

May 17, 2002

Geotech Inc.
ATTN: Jeff Allen, PE
1207 Cedarwood Drive
Joliet, IL 60435

Dear Mr. Allen,

Subject: County Highway 17
Arsenal Road
Wooded Cove Estates

This department has completed a preliminary review of the preliminary plat of subdivision submitted for the project mentioned above and has the following comments:

1) Engineering plans showing all work within the County right-of-way (entrance, storm sewer & drainage, water main etc.), including the existing roadway characteristics of the County Highway within 1000 feet of the site should be submitted as soon as possible.

2) The final recording plat of the site must include the proper Will County Engineer approval block with no access statement, and show the proposed entrance type & location.

3) The right-of-way dedication shall be 75 feet from the centerline of the County Highway per SRA requirements with minimum 50' x 50' straight corner clips at the intersection of the entrance and Arsenal Road based on the final approved right-of-way on both roads if the proposed roadway is to be a dedicated street.

4) The proposed full access entrance shall conform to the standard Will County Commercial Entrance detail included. Note the maximum width of the entrance is 24 feet without the addition of a 4-foot concrete median built with type B-6.12 curb offset from the edge of pavement of the County Highway according to IDOT design. Please include a detail of the proposed entrance with complete geometric plan including radii, width, number of lanes, striping, and curb & gutter, etc. on the plans.

5) A left turn lane built symmetrical to the centerline of Arsenal Road according to IDOT Design will be required for the proposed entrance. The roadway widening shall be 16 feet wide at full width including a 12-foot wide turn lane, and 4-foot striped median separating oncoming traffic from left turn storage bay.

6) The proposed entrance should be moved as far to the West as possible to avoid any conflict with Bush Road to the north. By swapping the location of the entrance and the cul-de-sac, you should be able to fit in between the railroad and Bush Road all the required tapers for the left turn lane without having to modify the railroad crossing and Bush Road.

7) The pavement cross-section within the County right-of-way (widening & entrance) shall consist of 4-inch sub-base granular, 9-inch bituminous base course, 2½-inch bituminous binder, and 1½-inch bituminous surface course. The pavement cross-section and widening shall include a paved shoulder matching the existing condition on the County Highway. Arsenal Road has an 18-inch wide paved shoulder constructed according to the attached details. A 4-foot wide aggregate shoulder must also be maintained along the County Highway. Please include a typical section on the plans.

8) Butt joints (50 feet long) shall be saw cut at the limits of re-striping & widening and entire width of Arsenal Road must be resurfaced with 1½" of bituminous surface course. Include a butt joint detail on the plans.

9) The pavement slope shall be 1.5% (3/16 in/ft) for the through lanes including the left turn lane / median.

10) Cross sections every 50 feet within the limits of the improvements are required to clearly illustrate that all widening can be constructed inside the existing and proposed right-of-way, and show that all roadside ditch fore slopes and back slopes can be maintained at a maximum of 3:1, and should preferably be 4:1. In addition, a 2-foot ditch bottom should be maintained.

11) The existing and / or proposed right-of-way should be clearly identified on the plan sheet and cross sections.

If there are any questions contact the undersigned or Bruce Gould.

Sincerely,

Sheldon C. Latz, PE, PLS
County Engineer

By

Jeff L. Ronaldson

Jeff L. Ronaldson, P.E.
Civil Engineer

VILLAGE OF ELWOOD
201 E. MISSISSIPPI AVE., P.O. BOX 435
ELWOOD, IL 60421
(815) 423-5011

PROFESSIONAL FEE AGREEMENT

This Professional Fee Agreement is made and entered into this 13TH day of MAY, 2002 by and between the Village of Elwood, and WOODCOVE DEVELOPMENT CORPORATION, ("Developer").

WITNESSETH:

WHEREAS, the developer desires to

DEVELOP A SINGLE FAMILY RESIDENTIAL SUBDIVISION OF 88 LOTS ON AN 88 ACRE PARCEL LOCATED ON THE SOUTH SIDE OF MANHATTAN ROAD BETWEEN BUSH ROAD AND THE ILLINOIS CENTRAL RAILROAD

and

WHEREAS, it will, therefore, be necessary for the Village to engage its independent professional staff to review and comment upon the work of the Developer and its professionals; and

WHEREAS, the fees for said professional staff in doing said work for the Village shall be paid by the Developer.

NOW THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth and contained, the receipt and sufficiency of which is hereby expressly acknowledged by each of the parties hereto.

IT IS MUTUALLY COVENANTED AND AGREED by, among and between the respective parties hereto as follows:

Section 1. PROFESSIONAL FEES. The developer shall pay to the Village any and all professional fees and expenses incurred by the Village with respect to the application of the Developer as filed with the Village. Professional fees shall include but not be limited to the fees of the Village Attorney, Village Engineer and any other professional fees of the Village that the Village Board deems reasonable and necessary in order to

review the application as well as any expenses incurred by the professionals. The Village shall in its sole discretion review the professional fees for legitimacy and reasonableness. The Developer shall provide security for the payment of said professional fees with the inclusion of the estimated professional fees and expenses in any Letter of Credit, bond or other security provided to the Village by the Developer for the construction of public improvements.

Section 2. PAYMENT. The Village shall provide the Developer with an itemized statement from the professional. The Developer shall pay the Village within thirty (30) days of the date of a statement from the Village; if the Developer does not pay the statement within the thirty (30) day period, interest at an annual rate of 18 percent (18%) on any unpaid balance shall accrue. The Village may also, following written notification to the Developer, direct that all professional staff and Village Officials cease work on the application of the Developer until the statement is paid in full.

Section 3. COOPERATION. The Developer shall fully cooperate with the Village, its officials and professional staff with respect to its application. The Developer also acknowledges that the professional staff represents the Village and not the Developer.

Section 4. CONFLICT. If the terms and provisions of this agreement conflict with any ordinance of the Village or agreement between the parties, the terms and provisions of this Professional Fee Agreement shall supersede and control any other terms or provisions.

Section 5. ATTORNEY'S FEES. If suit or action is brought to enforce this Professional Fee Agreement of any provisions hereof, or to rescind or disaffirm this Professional Fee Agreement or any provisions hereof, the prevailing party shall be entitled to recover reasonable attorney's fees and expenses, both trial and appellate, in addition to its costs and disbursements allowed by law, which shall include the costs of any discovery proceedings. The provisions of this paragraph are declared by the parties hereto to be severable from the balance of this Professional Fee Agreement, the separate consideration for this paragraph being their mutual agreement contained herein.

Section 6. SEVERABILITY. The invalidity of any paragraph or subparagraph of this Professional Fee Agreement shall not impair the validity of any other paragraph or subparagraph. If any provision of this Professional Fee Agreement is determined to be unenforceable, such provision shall be determined severable and the Professional Fee Agreement may be enforced with such provision severed or as modified by such court.

Section 7. ENTIRE AGREEMENT. This Professional Fee Agreement embodies the entire agreement and understanding between the parties and there are not other agreements, representations, warranties or understandings, oral or written, between the parties with respect to the subject matter of this Professional Fee Agreement. No alteration, modification, amendment or change of this Professional Fee Agreement shall be valid unless by like instrument.

Section 8. SECURITY. Contemporaneous with the execution of this agreement, the Developer, person, entity, corporation, association or group submitting an application for any zoning amendment or subdivision approval shall deposit with the Village Clerk, the sum of four thousand and no hundredths dollars ($4,000.00) as security for the payment of such professional fees, costs and expenses. The Village authorities are specifically permitted to apply these funds deposited as security in payment of such professional fees and costs in the event the Applicant defaults in making payments to the Village as required under this agreement. The Applicant is responsible to maintain a deposit equivalent to this sum until completion of the zoning amendment or subdivision process.

IN WITNESS THEREOF, the Village of Elwood has caused this Professional Fee Agreement to be duly executed by the Village President, attested to by the Village Clerk and its corporate seal affixed thereto, all in accordance with and pursuant to due authority vested in them by the Board of Trustees of said Village, and WOODCOVE DEVELOPMENT CORPORATION has read and affixed its hand and seal, all as of the day and year first above written.

"VILLAGE"

VILLAGE OF ELWOOD

by: _____
President

"DEVELOPER"

by: _____
its duly authorized agent

ATTEST:

_____
Clerk

LAND USE APPLICATION

VILLAGE OF ELWOOD, ILLINOIS

PETITIONER: WOODCOVE DEVELOPMENT CORPORATION
PHONE: 815-730-1010 (OFFICE) 815-467-9351 (HOME)
ADDRESS: 22961 S. ALTHEA COURT
CITY: MINOOKA STATE: IL ZIP 60447

___ PETITIONER IS THE OWNER OF THE SUBJECT PROPERTY AND IS THE SIGNER OF THIS PETITION.

X PETITIONER IS THE CONTRACT PURCHASER OF THE SUBJECT PROPERTY AND HAS ATTACHED A COPY OF SAID CONTRACT TO THIS PETITION.

___ PETITIONER IS ACTING ON BEHALF OF THE OWNER OF THE SUBJECT PROPERTY AND HAS ATTACHED A LETTER GRANTING SUCH AUTHORITY SIGNED BY THE OWNER.

IN THE EVENT THE PROPERTY IS HELD IN TRUST, A NOTARIZED LETTER FROM AN AUTHORIZED TRUST OFFICER IDENTIFYING THE PETITIONER AS AN AUTHORIZED INDIVIDUAL ACTING ON BEHALF OF THE BENEFICIARIES AND PROVIDING THE NAME, ADDRESS, AND PERCENTAGE OF INTEREST OF EACH BENEFICIARY IS ATTACHED TO THIS EXECUTED PETITION.

SUBJECT PROPERTY

LOCATION SOUTH SIDE OF MANHATTAN ROAD BETWEEN BUSH ROAD AND ILLINOIS CENTRAL RR
SIZE OF PROPERTY 88 ACRES TAX PARCEL NUMBER 11 - 17 - 400 - 034 & 11-21-100-001 & 11-20-200-002

THE FOLLOWING DOCUMENTS HAVE BEEN ATTACHED:

X LEGAL DESCRIPTION X LIST OF ADJACENT PROPERTY OWNERS X PRELIMINARY PLAT ___ PRELIMINARY PLAN ___ IMPACT FEE FORM
X PLAT OF SURVEY ___ SITE PLAN ___ FINAL PLAT ___ FINAL PLAN ___ BANK TRUST LETTER

TYPE OF ACTION REQUESTED

___ ANNEXATION X PRELIMINARY PLAT/PLAN (CIRCLE ONE) X CONDITIONAL USE
___ ANNEXATION AGREEMENT ___ FINAL PLAT/PLAN (CIRCLE ONE) ___ VARIANCE
___ CONCEPT PLAN X MAP AMENDMENT FROM A1 TO GR ___ SITE PLAN REVIEW

I HAVE SUBMITTED THE REQUIRED FILING FEE. I UNDERSTAND THAT THE FEE IS NON-REFUNDABLE. THE FEE IS DETERMINED ACCORDING TO THE ATTACHED SCHEDULE OF FEES. JJA (INITIAL HERE) $1,580.00 (FEE)

STATEMENT OF PETITION

PLEASE PROVIDE A BRIEF STATEMENT DESCRIBING THE PROPOSAL AS IT RELATES TO THE STANDARDS OF PETITION ACCOMPANYING THIS DOCUMENT (ATTACH ADDITIONAL SHEETS IF NECESSARY).

PROPOSED REZONING OF 88 ACRE PARCEL FROM A1 TO GR, AND PRELIMINARY PLAT OF P.U.D. SUBDIVISION OF 88 LOTS.

NUMBER OF DWELLING UNITS 88 TYPE OF UNITS SINGLE-FAMILY SQUARE FOOTAGE 15,000 SF MIN.
PROPOSED TIME SCHEDULE FOR DEVELOPMENT SEE ATTACHED DEVELOPMENT SCHEDULE
REQUESTED VARIANCES 150' CENTERLINE RADIUS, NO SIDEWALKS, NO STORMWATER DETENTION

AUTHORIZATION

I HEREBY AFFIRM THAT I HAVE FULL LEGAL CAPACITY TO AUTHORIZE THE FILING OF THIS PETITION AND THAT ALL THE INFORMATION AND EXHIBITS HEREWITH SUBMITTED ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. THE PETITIONER INVITES CITY REPRESENTATIVES TO MAKE ALL REASONABLE INSPECTIONS AND INVESTIGATION OF THE SUBJECT PROPERTY DURING THE PERIOD OF PROCESSING THIS PETITION.

STATE OF ILLINOIS }
COUNTY OF WILL } SS

5-10-02 DATE

SIGNATURE OF PETITIONER

OFFICIAL SEAL
DEBRA L MUTZ
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/25/06

I, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE SAID COUNTY AND STATE AFORESAID, DO HEREBY CERTIFY THAT Jeffrey J. Allen IS PERSONALLY KNOWN TO ME TO BE THE SAME PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND THAT SAID PERSON SIGNED, SEALED AND DELIVERED THE ABOVE PETITION AS A FREE AND VOLUNTARY ACT, FOR THE USES AND PURPOSES SET FORTH.

Debra L. Mutz
NOTARY SIGNATURE
MY COMMISSION EXPIRES THE 25th DAY OF Feb., A.D. 2006

GIVEN UNDER MY HAND AND NOTARY SEAL THIS 10th DAY OF May, A.D. 2002.

midwest engineering services, inc.

geotechnical • environmental • materials engineers

4243 W. 166th Street
Oak Forest, IL 60452
708-535-9981
FAX 708-535-9987
www.midwesteng.com

May 10, 2002

Mr. Jeff Allen
Geotech, Inc.
1207 Cedarwood Drive
Joliet, Illinois 60435

Re: Preliminary Subsurface Exploration and Foundation Recommendations
Proposed 80-Acre Development
Elwood, Illinois
MES Project No. 2-33039

Dear Mr. Allen:

In accordance with your request, we have completed a preliminary geotechnical exploration and subsurface evaluation for the above-referenced project. Enclosed are three (3) copies of the report, which includes our findings and recommendations for foundation design and construction.

Midwest Engineering Services, Inc. (MES) appreciates the opportunity to be of service during this phase of the project. If there are any questions or comments you may have regarding this report or if we may be of any further service, please contact us at your convenience.

Sincerely,
MIDWEST ENGINEERING SERVICES, INC.

David Lewandowski, P.E.
Geotechnical Engineer

W. K. Swartzendruber, P.E.
Chicago Geotechnical Manager

PRELIMINARY SUBSURFACE EXPLORATION AND FOUNDATION RECOMMENDATIONS

PROPOSED 80-ACRE DEVELOPMENT
Elwood, Illinois

Prepared For:
Geotech, Inc.
1207 Cedarwood Drive
Joliet, IL 60435

Prepared By:
Midwest Engineering Services, Inc.
4243 West 166th Street
Oak Forest, Illinois 60452

May 10, 2002

MES File No. 2-23039

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PRELIMINARY SUBSURFACE EXPLORATION AND FOUNDATION RECOMMENDATIONS

PROPOSED 80-ACRE DEVELOPMENT
Elwood, IL

MES Project No. 2-23039

INTRODUCTION

General

This report presents the results of a preliminary geotechnical exploration for the proposed 80-Acre Development to be located in the southwest corner of Manhattan and Bush Road, Elwood, Illinois. The purpose of this study was to determine and evaluate the preliminary subsurface conditions existing at the subject site, and to establish related parameters for use by the design engineers and architects. Included herein are the results of the preliminary subsurface exploration, field and laboratory soil test data, and recommendations regarding design and construction of the foundation system and pavement. Additional borings should be drilled once the proposed building locations have been finalized.

Scope

The scope of services included a reconnaissance of the site, the subsurface exploration, field and laboratory testing of the soil samples collected, and engineering analysis and evaluation of the data. In addition, geologic maps and literature relative to the general area of the site were reviewed. The scope of the field exploratory program, including the number, location and depth of the borings, was determined by Geotech.

Authorization

Written authorization to perform this subsurface exploration and analysis was received from Mr. Jeff Allen of Geotech, on April 12, 2002. The scope of the project and conditions for performance of the work was contained in MES Proposal No. 2-2077.

SITE AND PROJECT DESCRIPTION

Site Features

The subject site at which this exploration was performed is located in Section 17, Township 34 North, Range 10 East of the Third Principal Meridian in Will County, Illinois. Specifically, the site lies on the south side of Manhattan Road, immediately east of the Union Pacific Railroad, northeast of Elwood, Illinois.

The subject site is a generally rectangular shape as displayed in Figure 2 in the Appendix. The land is partially under cultivation as farmland, with relatively heavy woods and underbrush along the creek.

A Site Vicinity Map, labeled Figure 1, is located in the Appendix of this report. This map is a reproduction of a portion of the USGS 7.5 minute topographic map titled Elwood, Illinois. The land surface in the vicinity of the site slopes east toward Jackson Creek, which describes the east boundary of the site. The approximate elevation of the land surface in the immediate vicinity of the site is mapped at EL 590 to 650 feet (MSL), and the surface of the site ranges between EL 590 along the east boundary, to EL 630 at the midpoint of the west boundary of the site.

Geotech provided a map of the subject site that illustrates the layout of the proposed development. Considering the topography of the site, significant amounts of grading will be required in some areas to prepare the site for construction.

Utilities

No utilities were reported or observed within the boundaries of the site. However various utilities were observed in the vicinity of the site, including overhead electric, and underground telephone.

Project Description

On the basis of information provided by Geotech, it is understood that the proposed development includes the construction of an approximate 80-acre residential development. Specific information was not provided regarding the location and structural characteristics of the proposed structures. Based on the proposed type of development, it is assumed that single-family dwellings will be constructed, along with roadways, underground utilities, and other infrastructure. Structural loads are assumed to be light, and roadways are anticipated to carry mostly residential automobile traffic.

FIELD EXPLORATION

Scope

In order to determine the significant engineering characteristics of the foundation soils, a field exploratory program was undertaken. Fifteen soil borings were advanced for the project at the approximate locations shown on the Boring Location Diagram (Figure 2 in the Appendix). Each of the borings was extended to a nominal depth of 15 feet below the existing surface grade.

Drilling and Sampling Procedures

The soil borings were performed with a truck-mounted drilling rig equipped with a rotary head. Conventional, continuous flight, hollow-stem augers were used to advance the holes and representative samples of soils were obtained employing split-barrel sampling techniques. After completion of the borings and water level readings, the auger holes were backfilled with auger cuttings.

Field Tests and Measurements

Standard Penetration Tests. During the sampling procedure, Standard Penetration Tests (SPT) were performed at regular intervals through the depth of the borings in general accordance with ASTM Procedure D1586. The SPT value ("N" Counts) is defined as the number of blows required to advance a 2 inch O.D., split-barrel sampler a distance of one foot by a 140 pound hammer falling 30-inches. These values provide a useful preliminary indication of the consistency or relative density of most soil deposits and are included on the Soil Boring Logs.

Water Level Measurements. Groundwater level observations were made in the boring holes during and upon completion of the boring operations. The groundwater level measurements are noted on the boring logs presented herein.

Ground Surface Elevations. Surface elevations at the boring locations were provided by Geotech on the boring location stakes.

LABORATORY TESTING

General

Additional significant characteristics of the foundation materials were determined in the laboratory to provide data on which to classify and quantitatively assess the engineering properties of the soil samples obtained. The types of soils encountered were identified and logged on the boring records. The results of the field and laboratory tests are presented on the Soil Boring Logs in the Appendix. Representative samples of the soils encountered in the soil borings were placed in clean, glass sample jars and are now stored in the laboratory for further analysis, if desired. These samples will be disposed of in thirty (30) days unless MES is notified to the contrary.

Soil Laboratory Tests and Measurements

Visual Classification. All samples were visually classified by a soils engineer in general accordance with ASTM D 2488 terminology, and presented on the Soil Boring Logs which are located in the Appendix of this report.

Moisture Content Tests. The natural moisture content of selected samples was determined by ASTM method D 2216 and is recorded on the Soil Boring Logs as a percentage of dry weight of soil under the heading "MC".

Hand Penetrometer Tests. Samples of cohesive soils obtained from the split barrel sampler were tested with a calibrated hand penetrometer to aid in evaluating the soil strength characteristics. The results from this testing are tabulated on the Soil Boring Logs under the heading "Qp".

Unconfined Compressive Strength Tests. The undrained shear strength of the cohesive soils was determined utilizing unconfined compression tests on specimens obtained from the split-barrel and thin wall tube samplers. The values of strength tests performed on soil samples obtained from the split-barrel sampler are considered approximate recognizing that the sampler provides a representative but somewhat disturbed sample. These test results are tabulated on the Soil Boring logs under the heading, "Qu".

DESCRIPTION OF SUBSURFACE CONDITIONS

General

A description of the subsurface conditions encountered at the test boring locations is shown on the Soil Boring Logs. The lines of demarcation shown on the logs represent an approximate boundary between the various soil classifications. It must be recognized that the soil descriptions are considered representative for the specific sample location, and variations may occur between the sampling intervals and boring locations. A summary of the major soil profile components is presented in the following paragraphs.

Soil Conditions

The upper soils encountered on the site consisted of black silty clay topsoil with roots near the surface. The black silty clay had depths ranging from 6 inches to 2.5 feet. Samples exhibited moisture contents from 16 to 25 percent.

The topsoil was underlain by brown/grey silty clay and light brown fine silty clayey sand. Samples of the clay exhibited moisture contents ranging from 13 to 27 percent and unconfined compressive strengths from 1.0 to 8.8 tons per square foot (tsf). Standard Penetration Tests performed in the clayey sand exhibited N-values from 19 to 28 blows per foot.

The brown clay and sand soils were underlain by grey silty clay which extended to the termination depths of the borings. Samples of the grey silty clay exhibited unconfined compressive strengths from 1.0 to 7.5 tsf and moisture contents from 13 to 27 percent.

The foregoing discussions of soil conditions on this site represents a generalized soil profile as determined at the test boring locations. A more detailed description and supporting data for each test boring can be found on the individual Soil Boring Logs in the Appendix.

Groundwater Observations

Groundwater was encountered during the drilling operations all borings except B-2 and B-3 at depths of 5 feet to 10 feet below ground surface. The delayed groundwater readings indicated groundwater at depths of 3.5 feet to 9 feet 2-5 hours after completion. It must be recognized that groundwater levels fluctuate with time due to variations in seasonal precipitation, lateral drainage conditions, and soil permeability characteristics

EVALUATION AND RECOMMENDATIONS

General Development Considerations

In view of the subsurface conditions encountered in the test borings, together with the structural loads anticipated, conventional shallow spread and continuous wall footings founded on suitable natural soils may be used for the support of the structures. Preliminary recommendations for foundation and floor slab design, and considerations for site work and construction, are discussed in the following sections. Final recommendations can be provided after the project design is finalized and additional borings are performed in the final building locations.

Site Preparation

The presence of unsuitable materials in the subgrade can adversely affect the serviceability of various structural elements placed upon it. To reduce the potential for differential settlements, the site preparation in the building and pavement areas should include the removal of organic topsoil, root systems, and vegetation.

After the removal of unsuitable bearing materials and prior to placement of new fill, the subgrade should be thoroughly proof-rolled to detect areas of unstable yielding soils. Any such areas detected should be over-excavated or improved by appropriate preparation and compaction techniques. Scarification, drying, and recompaction of wet soils, lime stabilization or the removal and replacement of poor soils with acceptable materials are some methods which can be considered, but this determination should be made by the soils engineer at the time of construction. Low areas may then be raised to the planned grades with suitable, properly compacted fill.

It is recommended that fill materials used for structural support in the building areas consist of well-graded granular soils or low plasticity lean clays. The brown and brown/grey silty clays encountered on this site are considered suitable as fill, provided they are placed at a moisture content within 2 percent of optimum and properly compacted. In-situ moisture contents in most of the upper clay soils appeared to be near optimum values in the test samples in all borings. Fill should be placed on firm subgrades, in layers of not more than 9-inches in loose thickness, and be compacted to at least 95 percent of the maximum dry density as determined by ASTM D 698 (Standard Proctor) method of test. A sheepsfoot roller is generally required for compaction of clayey soils, whereas a vibratory smooth drum roller is preferred for granular and silty material. Small, hand-operated compactors should be used in confined areas.

Ponding water from precipitation can soften subgrade soils, resulting in subgrade rutting and pumping. During mass grading operations, the surface of the site should always be pitched to promote immediate runoff of surface water.

Field tiles encountered during construction may be a source of water flow that will disrupt construction, or be detrimental to the completed project if not properly terminated or otherwise accounted for. If a field tile is encountered, it should first be determined if the tile drains adjacent property, and what the effects would be of terminating the tile. If the tile is a part of a drainage system for the subject site only, measures must be taken to block or otherwise terminate the potential for water flow into the pavement subsoil, mass fill, or foundation excavations. Rerouting the water flow, or incorporating the tile into the storm drainage system may be required. Local drainage and stormwater control regulations should be followed.

The evaluation of the subgrade and selection of fill materials for various applications should be done in consultation with the soils engineer. Similarly, the placement and compaction of fill for structural applications should be monitored and tested by a qualified representative of the soils engineer.

Foundation Analysis

Based on the subsurface conditions encountered in the borings, it appears that shallow foundations can be used for support of the proposed structures for preliminary planning an allowable bearing capacity of 2,000 (psf) can be used. When final building locations are determined, additional soil borings should be performed within each building location to allow preparation of foundation recommendations for each building.

In general, the performance of the shallow foundation system on this site is dependent on the various factors that have been discussed. Potential, load responsive settlements should remain within tolerable limits (estimated to be less than 0.5 inch) if the suggested design and construction criteria are followed. It is recommended that the preparation and installation of the foundations be monitored and tested by a representative of the soils engineer.

Floor Slabs

Prior to the placement of concrete floors on this site, or before any floor supporting fill is placed, the recommendations for subgrade preparation in the Site Preparation section of this report should be followed. It is recommended that floor slabs be placed on a capillary barrier consisting of clean, granular material.

Pavement Considerations

Based on the proposed layout of the site, it appears that the majority of the pavement roadways will be constructed on the brown/grey silty clay soils. For purposes of this analysis, the AASHTO classification for the brown/grey silty clay is assumed to be A-6, which is considered as fair to poor for pavement subgrade, with a high frost susceptibility and moderate bearing support when wet. This soil is considered low in plasticity, and is susceptible to volume changes with moisture content fluctuations.

In general, flexible (asphalt) pavements derive their strengths from the characteristics of the subgrade soil, base course and asphalt surface mixture. In view of the existing subgrade soils, it is our recommendation that an AASHTO Structural Number of 2.7 be used for design of the Standard Duty Pavement and 3.5 be used for heavy duty areas. The following table presents the recommended thickness for a flexible pavement section for the anticipated subgrade soils, along with their recommended minimum structural coefficients.

Table 3. Recommended Pavement Sections

Pavement Type	Material	Minimum Thickness (in.)
Standard Duty, flexible	Asphaltic Concrete	3
	Crushed Stone Base (CA6)	12
Heavy Duty, flexible	Asphaltic Concrete	5
	Crushed Stone Base (CA6)	12
Heavy Duty, rigid	Portland Cement Concrete	6
	Crushed Stone Base	6

The structural number coefficients used in the flexible pavement section calculations were as follows:

Crushed Stone Base 0.13

In areas exposed to truck traffic and parking, and considerable loads may be applied, consideration should be given to utilizing Portland Cement Concrete pavement. It may also be advantageous to utilize rigid pavement at entrance and exit aprons. It is recommended a minimum of 6 inches of 4000 psi air-entrained concrete (5 to 7 percent entrained air content) be utilized along with a 6 inch thickness of aggregate base for a rigid pavement section. Contraction joints, made transverse to the direction of traffic flow, should be made at intervals of 15 feet or less, and properly designed to transfer loads from one slab to the next.

The pavement design recommendations presented herein are based upon the assumption that the subgrade and base course will be properly drained and the pavement construction will be in accordance with IDOT standard specifications. Subgrade preparation should be performed as previously outlined in this report. Crushed aggregate base should be used in accordance with Section 351 of the IDOT standard specification for road and bridge construction. Asphaltic base and surface should be and provided in accordance with Section 406. When more definite traffic loading conditions and design subgrade elevations become available, they should be reviewed and the proposed pavement sections adjusted as necessary.

CONSTRUCTION CONSIDERATIONS

Groundwater was encountered in most borings at depths of 5-10 feet, and delayed readings showed the groundwater to rise to as high as 3.5 feet below the surface. It appears that the

groundwater encountered in granular layers rises when the confining cohesive layers are removed, probably due to the changes in elevation across the site. Based on observations of the groundwater volumes and levels within the borings, sump pits and pumps will probably be needed to control groundwater in shallow excavations in some parts of the site. Whenever groundwater is encountered, steps should be taken to allow the construction to be completed in relatively dry conditions. If basements are to be constructed, footing drains should be installed to control groundwater, and surface water must be diverted from the basement excavations and backfill.

When designing site drainage patterns, site runoff should be diverted away from the foundations and directed towards on-site retention areas, or storm sewer systems. Such measures reduce the potential for softening and possible erosion of the foundation and pavement subgrade soils. It is especially important that water not be allowed to collect next to the building foundations.

Excavations

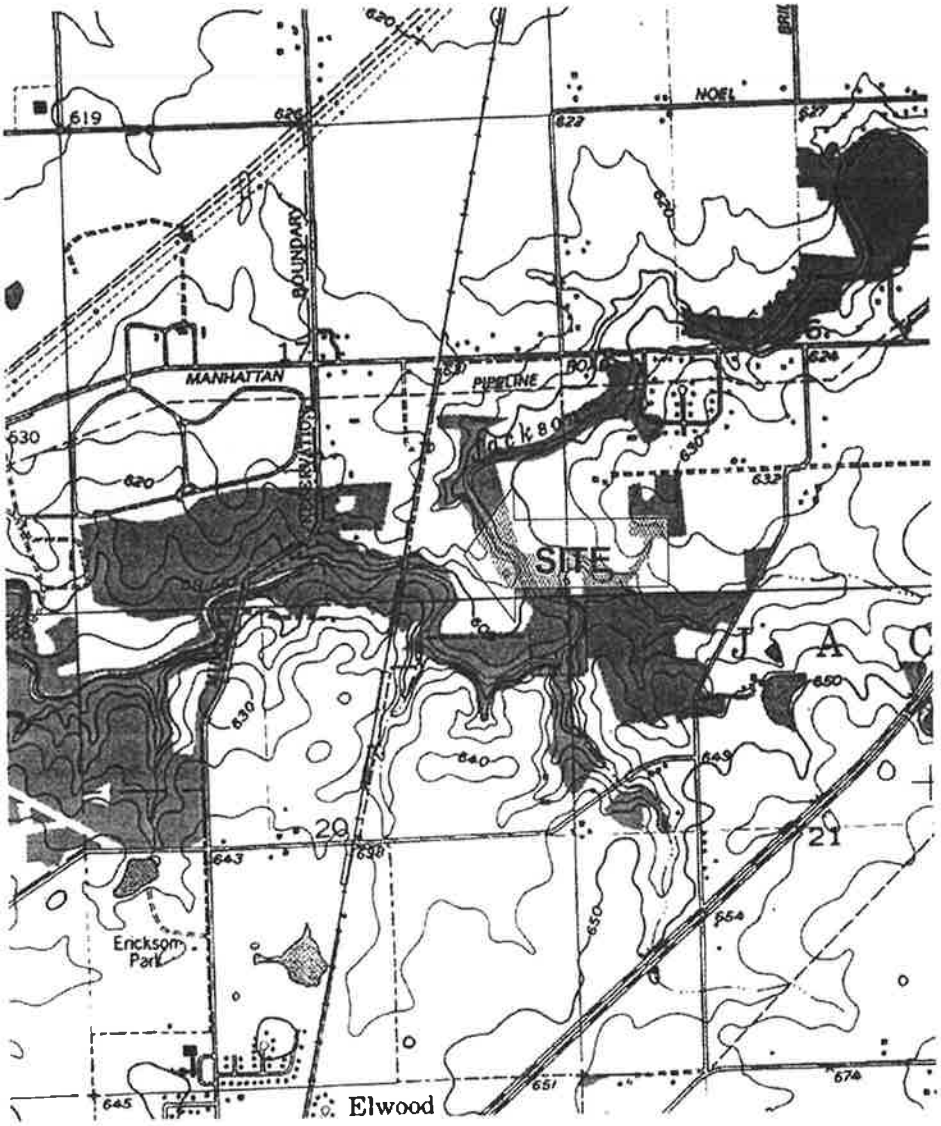
All excavating operations should comply with the requirements of OSHA 29CFR, Part 1926, Subpart P, "Excavations," which deals with excavation and trench safety. Trenches and excavations for footings, foundations, utilities, and other construction activities, are subject to caving sides, and can expose workers to engulfment hazards. All excavations should be monitored by a Competent Person, as defined by the OSHA standard, and appropriate shoring or sloping techniques used to prevent cave-ins.

GENERAL COMMENTS

This preliminary geotechnical exploration and foundation analysis has been conducted to aid in the evaluation of the foundation conditions on the site of the proposed 80-Acre Development in Elwood, Illinois. The recommendations presented herein are based on the available soil information obtained and the design information provided. Any changes in the soil conditions encountered during construction, design, or building location should be brought to the attention of the soils engineer to determine if modifications in the recommendations are required. The final design plans and specifications should also be reviewed by the soils engineer to determine that the recommendations presented herein have been interpreted and implemented as intended. It is recommended that the earthwork and foundation operations be monitored by the soils engineer, to test and evaluate the bearing capacities, and the selection, placement and compaction of controlled fills.

This geotechnical study has been conducted in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions. The findings, recommendations, and opinions contained herein have been promulgated in accordance with generally accepted practice in the fields of foundation engineering, soils mechanics, and engineering geology. No other representations, expressed or implied, and no warranty or guarantee is included or intended in this report.

APPENDIX



This form is a reproduction of a portion of the USGS 7.5 minute Elwood, Illinois Quadrangle Map (1993)

Approximate Scale: 1" = 2,000'

North

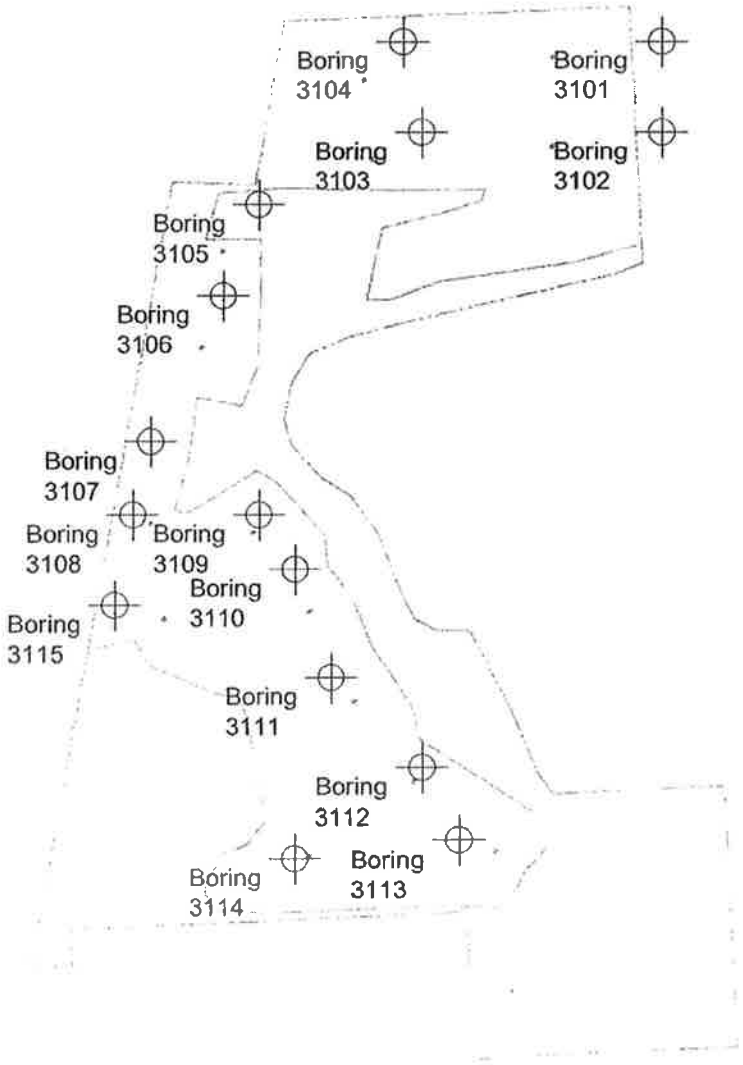
midwest engineering services, inc.

FIGURE 1

SITE VICINITY MAP
80 Acres Farm Land
Manhattan Rd. at Union Pacific R.R. and Jackson Creek
Elwood, Will County, Illinois

PROJECT NUMBER: 2-23039

DATE: May 10, 2002



midwest engineering services, inc

Elwood Development
SWC Manhattan Road and
Bush Road
Elwood, Illinois

Figure 2

May 10, 2002

MES Project No. 2-23039

SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3101
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 615.2 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					23	
Brown moist Silty CLAY, trace fine to medium Sand and Gravel									
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		14	4.5	5.3	17	
Brown wet Silty Sandy fine to medium GRAVEL		5	3-SS		20	>4.5	7.1	19	
Brown wet Sandy SILT			4-SS		41	0.75		27	▼
		10	5-SS		13			16	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		35			18	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater encountered at 8 feet while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3102
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 602.5 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					25	
Brown moist Silty CLAY, trace fine to medium Sand and Gravel									
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		8	1.75	2.5	25	
		5	3-SS		20	>4.5	6.1	23	
			4-SS		25	>4.5	6.9	23	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		21	>4.5	6.9	25	
		15	6-SS		20	>4.5	7.5	25	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was not encountered while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3103
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 617.8 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					24	
Brown moist Silty CLAY, trace fine to medium Sand and Gravel									
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		21	3.0	3.1	27	
		5	3-SS		19	>4.5	8.8	15	
Brown wet fine to medium Silty SAND			4-SS		27			20	
		10	5-SS		14	>4.5	6.7	13	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		26		7.5	15	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was not encountered while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3104
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 622.6 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					22	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
			2-SS		20	<4,5		14	
		5	3-SS		20	>4.5	7.3	16	
			4-SS		26	>4.5	8.8	17	
		10							▼
Brown wet fine to medium Silty SAND			5-SS		25			27	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		20			23	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 10 feet while drilling									
		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG

Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3105
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 619.6 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_u (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					20	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		19	4.0	4.3	17	
		5	3-SS		22	4.5		15	
Brown wet fine to medium Silty SAND			4-SS		11	2.5		12	▼
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		16	4.0	5.7	15	
		15	6-SS		16	>4.5	10.2	19	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 8 feet while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3106
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 624.4 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					22	
Brown moist Silty CLAY, trace fine Gravel									
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		27	3.5		15	
		5	3-SS		16	>4.5	6.1	15	
			4-SS		19	>4.5		19 ▼	
Brown wet fine to medium Silty SAND		10	5-SS		16	2.0		20	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		13	4.0	4.5	15	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 8.5 feet while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3107
Project No.: 2-23039
Date of Boring: 4/16/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 624.6 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Brown damp Silty Sandy CLAY Topsoil			1-AU					22	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		18		6.5	14	
		5	3-SS		18			15 ▼	
Brown wet fine to medium Silty SAND									
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			4-SS		13	3.0	3.1	14	
		10	5-SS		11	3.5	3.1	15	
Grey wet fine to medium Silty Clayey GRAVEL									
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		12			17	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 6 feet while drilling		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG

Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3108
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 621.9 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Brown damp Silty Sandy CLAY Topsoil			1-AU					16	
Brown moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		10		>4.5	23	
		5	3-SS		22			18	
Brown wet fine to medium Sandy SILT									▼
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			4-SS		22	3.3	3.5	16	
		10	5-SS		20	8.1		14	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel									
		15	6-SS		20		1.0	15	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 7.5 feet while drilling and at 3.5 feet after 4 hours		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

Lines of Demarcation represents an **approximate** boundary between soil types. Variations may occur between sampling intervals and between boring locations, and the transition may be gradual. Dashed lines are indicative of potentially erratic or unknown changes, such as fill-to-natural soil zone transitions

SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3109
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 623.1 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					22	
Brown moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		12		3.1	14	
		5	3-SS		24	>4.5	8.4	13	
			4-SS		27	>4.5		16	▼
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		24	>4.5	6.1	15	
		15	6-SS		11	3.5		17	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 9 feet while drilling and at 3.5 feet after 5 hours		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3111
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 615.7 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_U (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					19	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		11			18	
		5	3-SS		27		>4.5	16	
			4-SS		16		1.5	17	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		21	5.9	>4.5	16	
		15	6-SS		26		3.5	16	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 10 feet while drilling and at 9 feet after 4 hours		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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SOIL BORING LOG

Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3112
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 602.4 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Black Brown moist Silty Sandy CLAY Topsoil			1-AU					17	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		11			16	
		5	3-SS		25	7.7		15	
			4-SS		20		>4.5	16	▼
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		22	5.7	>4.5	16	
		15	6-SS		27		2.0	17	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 9 feet while drilling and at 4.5 feet after 6 hours		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3113
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 596.5 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_P (tsf)	Q_U (tsf)	MC (%)	Remarks
Black moist Silty Sandy CLAY Topsoil			1-AU					20	
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			2-SS		15	1.0		16	
Grey wet fine to medium Silty Clayey GRAVEL		5	3-SS		32			13	▼
Mottled Brown Grey moist Silty CLAY, trace fine to medium Sand and Gravel			4-SS		19	>4.5	6.1	24	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		10	5-SS		16	4.5	4.9	24	
		15	6-SS		20		2.2	19	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 6 feet while drilling and at 5 feet upon completion		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG GDT 10/5/02

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SOIL BORING LOG
Midwest Engineering Services, Inc

Project Name: Elwood Development
Location: SWC Manhattan Road and Bush Road
Elwood, Illinois

Boring: B-3114
Project No.: 2-23039
Date of Boring: 4/17/02
Field Representative: CW/DM

Visual Soil Classification Ground Surface Elevation: 598.9 feet	Soil Type	Depth (feet)	Sample No.	Samp Type	N	Q_p (tsf)	Q_u (tsf)	MC (%)	Remarks
Black moist Silty Sandy CLAY Topsoil			1-AU					17	
Grey wet fine to medium Silty Clayey GRAVEL			2-SS		13			21	
Grey moist Silty CLAY, trace fine to medium Sand and Gravel		5	3-SS		28			19	
			4-SS		25	2.5		14	
		10	5-SS		23	3.0		26	
Grey wet fine to medium Silty SAND									
		15	6-SS		20	1.5		23	
End of Boring: 16.5 Feet									
Note 1:									
Groundwater Observations: Groundwater was encountered at 5 feet while drilling and at 5 feet upon completion		20							
		25							
		30							
		35							
		40							

SOIL BORING LOG 2-23039ELWOODDEVELOPMENT.GPJ MIDWEST ENG.GDT 10/5/02

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2-23039

MIDWEST ENGINEERING SERVICES, INC.
Estimate Worksheet

Client: Jeff Allen
Project: Manhatten Road, 80 acre site
Location: Elwood, Illinois
MES Proposal No.: 2-2077
Date: 02/19/02

	Quantity	Unit Fee	Total
I. Field Exploration Services			
1. Mobilization of drilling equipment and personnel	1 Lump Sum	$250.00	$250.00
2. Drilling support vehicle	3 Days	$75.00	$225.00
2. Boring location elevation measurements and site reconnaissance by Project Engineer	3 Hour	$80.00	$240.00
3. Soil drilling with Split-spoon or Shelby Tube sampling at 5-ft. intervals			
-0-25 feet	225 Feet	$8.25	$1,856.25
4 Additional split-spoon samples at:			
- 0 - 25 feet	45 Samples	$10.00	$450.00
Subtotal For Field Exploration Services:			**$3,021.25**
II. Laboratory Soil Testing Services			
1. Unconfined compressive strength tests, calibrated hand penetrometer tests, visual engineering classification and moisture content tests	90 Tests	$8.75	$787.50
Subtotal for Laboratory Services:			**$787.50**
III. Engineering Services for Evaluation and Report Preparation			
1. Principal Engineer	2 Hours	$80.00	$160.00
2. Project Engineer	10 Hours	$75.00	$750.00
3. Staff Engineer or Geologist	2 Hours	$55.00	$110.00
		$60.00	
Subtotal for Engineering Services:			**$1,020.00**
Total Estimated Fee:			**$4,828.75**

midwest engineering services, inc.

GENERAL NOTES

SAMPLE IDENTIFICATION

Visual soil classifications are made in general accordance with the Unified Soil Classification System on the basis of textural and particle size categorization, and various soil behavior characteristics. Visual classifications should be substantiated by appropriate laboratory testing when a more exact soil identification is required to satisfy specific project applications criteria.

PARTICLE SIZE ±

Boulders: 8 inches Cobbles: 3 to 8 inches Gravel: 5 mm to 3 inches	Coarse Sand: 2mm to 4mm Medium Sand: 0.42mm to 2mm Fine Sand: 0.074 to 0.42mm	Silt: 0.005mm to 0.074mm Clay: -0.005mm

DRILLING & SAMPLING SYMBOLS

SS: Split-spoon, 2" O.D. by 1 3/8" I.D.
ST: Shelby Tube, 2" O.D. or 3" O.D., as noted in text
AU: Auger Sample
DB: Diamond Bit
CB: Carbide Bit
RB: Roller Bit
WS: Wash Sample
BS: Bag Sample
HA: Hand Auger

SOIL PROPERTY SYMBOLS

N: Standard penetration count, indicating number of blows of a 140 lb. hammer with a 30 inch drop, required to advance a split-spoon sampler one foot.
Qu: Unconfined compressive strength, tons per square foot (tsf)
Qp: Calibrated hand penetrometer resistance, tsf
MC: moisture content, %
LL: Liquid Limit PL: Plastic Limit PI: Plasticity Index
Dd: Dry Density, pounds per cubic foot (pcf)
PID: Photoionization Detector (Hnu meter) volatile vapor level, ppm

SOIL RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

NON-COHESIVE SOILS		COHESIVE SOILS		
Classifier	N-Value Range	Classifier	Qu Range (tsf)	N-Value Range
very loose	0 - 3	very soft	0 - 0.25	0 - 2
loose	3 - 7	soft	0.25 - 0.5	2 - 5
medium dense	7 - 15	medium stiff	0.5 - 1.0	5 - 10
dense	15 - 38	stiff	1.0 - 2.0	10 - 14
very dense	38 +	very stiff	2.0 - 4.0	14 - 32
		hard	4.0 +	32+

GROUNDWATER

▼ : Approximate Groundwater level at time noted on soil boring log, measured in open bore hole unless otherwise noted. Groundwater levels often vary with time, and are affected by soil permeability characteristics, weather conditions, & lateral drainage conditions.

AGREEMENT FOR PURCHASE AND SALE OF PROPERTY

THIS AGREEMENT FOR PURCHASE AND SALE OF PROPERTY ("Agreement") is made as of the 25th day of **January, 2002**, by and between Helen Elliott and Michael J. Elliott as Co-Trustees of the Anton Family Limited Partnership, an Illinois Limited Partnership (hereinafter "Seller"), and Jeffrey J. Allen, or his assignee or nominee, (hereinafter "Buyer"), upon the following terms and conditions:

1. **Purchase and Sale**. Subject to the terms and conditions hereof, Seller agrees to sell to Buyer, and Buyer agrees to buy from Seller, that certain real property located in Elwood, Illinois which is bordered by Manhattan Road (on the North) and the Chicago & Alton Railroad (on the West) in Jackson Township, Will County, Illinois, containing approximately 88 acres, hereinafter referred to as the ("Property"). The legal description is attached hereto as Exhibit A.

2. **Purchase Price.** The purchase price ("Purchase Price") to be paid by Buyer to Seller for the Property shall be the sum of Eight Hundred and Eighty Thousand and 00/100 Dollars ($880,000.00). The purchase price to be payable as follows:

(A) Simultaneously with the execution of this Agreement by Buyer, Buyer shall deposit the sum of Ten Thousand and 00/100 Dollars ($10,000.00) ("Earnest Money") with a Trust Account held by the Buyer's attorney. The Earnest Money shall be applied to the Purchase Price on the Closing Date (as hereinafter defined).

(B) On the Closing Date, Buyer shall deliver the balance of the Purchase Price to the Seller at the Closing, or to an escrow established with the Title Company if that option is used, by wire transfer, certified check or cashiers check, subject to the prorations and adjustments identified in Paragraphs 4 and 11 of this Agreement.

By Seller

(C) If this transaction does not close for any reason other than the default of the conditions stated elsewhere herein, the Seller shall retain the Earnest Money in consideration for Seller agreeing not to place the property for sale or sell the property during the pendency of this Contract.

3. **Contingencies.** This Agreement is contingent upon and conditioned upon resolution of the following matters in Buyer's sole discretion any one of which may be waived by Buyer:

(A) Immediately after the date of this Agreement, and for a period expiring ninety (90) days after the date of Seller's acceptance hereof (the **"Feasibility Period"**), Buyer, its employees, agents and representatives shall have the right to consult with officials of the Village of Elwood, and other governmental entities and utility companies with jurisdiction over the Property and its proposed development with respect to Buyer's proposed uses for the Property and the availability and capacity of gas, telephone and electric utilities, and municipal water, storm and sanitary sewer services; and to enter the Property to conduct any and all studies, tests, examinations and inspections (collectively the "Tests") necessary for the planning and development of the proposed use and development of the Property. Specifically, without limitation of the foregoing, Buyer shall have the right to commence immediately such soil,

hazardous waste, surface, subsurface and geologic tests with respect to the Property and prepare such topographical and other surveys and engineering tests and feasibility studies with regard to Buyer's proposed development of the Property as may be necessary in the exercise of Buyer's sole judgment. If, following the Tests and prior to the termination of the Feasibility Period, Buyer, in its sole discretion, concludes that its proposed development is not feasible for any reason, then Buyer may elect to terminate this Agreement by giving Seller written notice and explanation of such election and a copy of the Tests, prior to expiration of the Feasibility Period; thereupon, this Agreement and the obligations of the parties hereto shall become null and void and the earnest money deposit shall be retained by Seller. Buyer shall hold Seller harmless from any claims arising from, and pay all costs of, the Tests, and inspections and shall undertake reasonable restoration of the Property if the soil tests are more abusive of the Property than removal of 4" plug samples. Buyer shall name Seller as an additional insured on all policies of insurance Buyer maintains with regard to the Property.

4. Survey Within thirty (30) days from the execution of the contract, Seller shall provide Buyer, at Seller's expense, a survey (the "Survey") of the premises by a registered Illinois Land Surveyor, and to be prepared by Geotech, Inc. The Survey shall show no encroachment of any improvement located on the premises onto any adjoining property, no encroachment of any improvement located on adjoining property onto the premises, no violation of any building or setback line by any improvement on the premises and no encroachment onto any easement or right-of-way by any improvement on the premises. In the event that there is an encroachment, the Seller shall have thirty (30) days to have the Title Company insure over the encroachment, after which time the Buyer or Seller may declare the contract null and void.

5. Seller's Representations and Warranties. Seller hereby represents and warrants to Buyer, as of the date of this Agreement and upon closing, that:

(A) Seller has no knowledge of, or has not received any notice of a violation of any laws, regulations or ordinances affecting the property, and shall notify the Buyer immediately upon receipt of any notices of a violation affecting the property for the duration of the contract;

(B) Seller knows of no special taxes or assessments either pending and unpaid or not yet levied with respect to the Property, nor has Seller received notice from any insurer or other party relating to any condition or defect on or affecting the Property or the insurability thereof;

(C) There is no pending, and to the best knowledge of Seller, no threatened litigation existing with respect to the Property or the titleholders; and in the event Seller receives notice of any litigation or has reason to believe that any litigation is threatened with respect to the Property or the titleholders, Seller shall notify Buyer promptly of such pending or threatened litigation, in which event Buyer shall have the right to terminate this Agreement and receive the return of its earnest money and interest.

(D) Prior to closing, Seller, to the best of their knowledge, shall commit no waste, damage or destruction of the Property and Seller shall not move, cut down, or destroy any of the trees, shrubbery or plant life on the Property.

6. Environmental Laws. For the purposes of this Paragraph, "hazardous substance" means any matter giving rise to liability under the Resources Conservation Recovery Act ("RCRA"), 42 U.S.C. Sections 6901 et. seq., the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. Sections 9601 et. seq., the Illinois Environmental Protection Act ("IEPA"), Ill. Rev. Stat. Ch. 111-1/2 Sec. 1009, et. seq., or other applicable local, state or federal laws or regulations any common law theory based on nuisance or strict liability.

(A) . Seller represents and warrants to Buyer that to the best of their knowledge:

(i) The Property does not contain any hazardous substance;

(ii) Seller has not conducted or authorized the generation, transportation, storage, treatment, or disposal at the Property, of any hazardous substance;

(iii) Seller is not aware of any pending or threatened litigation or proceedings before any administrative agency in which any person or entity alleges the presence, release, threat of release, placement on or in the Property, or the generation, transportation, storage, treatment, or disposal at the Property, of any hazardous substance;

(iv) Seller has not received any notice of and has no actual or constructive knowledge that any governmental authority or any employee or agent thereof has determined, or threatens to determine, that there is a presence, release, threat of release, placement on or in the Property, or the generation, transportation, storage, treatment, or disposal at the Property, of any hazardous substance.

(B) Seller shall cooperate with Buyer in performing any and all tests reasonably required by Buyer to determine that Seller's representations and warranties this Paragraph above are true and correct, all at Buyer's expense. If the results of any environmental tests performed by Buyer determine otherwise, and Buyer is not satisfied with the results, the Buyer may declare the contract null and void and receive the return of its earnest money and interest. Sellers are not under any obligation to remediate any items discovered by the environmental tests. Seller shall provide any and all test results to Buyer, and both parties agree that the said results shall remain confidential. It is further understood that there is no duty to report said results by the Buyer, Seller, and/or individuals hired by the Buyer to conduct the environmental tests.

(C) The above set forth representations and warranties shall survive the Closing for a period of two (2) years.

7. Brokers. Seller warrants to Buyer and Buyer warrants to Seller that each is not a party to or any way obligated under any contract for payment of fees and expenses to any Broker or

finder in connection with the origin, negotiation, execution, or consummation of this Contract. Seller nor Buyer shall not be obligated to pay any real estate sale commission, Broker or finder fee or the like in connection with the origin, negotiation, execution or consummation of this Contract.

8. **Title**. Seller shall deliver to Buyer, within thirty (30) days after the date hereof; a commitment (the "Commitment") for a policy of title insurance on the Property in the initial amount of $10,000 issued by First American Title Insurance Company, Joliet Branch, or by a title company selected by the Buyer ("Title Company"). Buyer shall then have twenty (20) days from the receipt thereof to examine the Commitment and either approve or disapprove it, provided, however, that Buyer agrees to accept title to the property subject to: (i) general real estate taxes not yet due and payable; (ii) covenants, conditions and restrictions of record which shall be approved by Buyer; (iii) utility easements of record which shall be approved by Buyer; (iv) other matters approved by Buyer (collectively, the "Permitted Exceptions") and title exceptions pertaining to liens or encumbrances of a definite or ascertainable amount which shall be removed by Seller by the Payment of money or otherwise on the Closing Date. If Buyer disapproves of any exceptions to title in the Commitment, other than the Permitted Exceptions listed in (i) through (iv) above, Buyer shall notify Seller in writing as to his disapproval within said twenty (20) day period, and Seller shall have thirty (30) days prior to the Closing Date in which to have such unpermitted exceptions removed from the Commitment or subject to Buyer's prior approval to have the Title Company insure Buyer against suffering any loss or damage because of such unpermitted exceptions only with Buyer's prior approval. If Seller fails to have the unpermitted exceptions removed or to have Buyer insured against loss or damage therefrom as hereinbefore provided, Buyer may terminate this Agreement, in which event the Earnest Money shall be returned to Buyer.

9. Title Policy. Seller shall cause to be delivered to Buyer on the Closing Date (a) a standard ALTA 1992 owners policy of title insurance (the "Title Policy") issued by the Title Company, or (b) a commitment from the Title Company to issue the Title Policy upon demand, in the amount of the Purchase Price of Eight Hundred and Eighty Thousand and 00/100 Dollars ($880,000.00), which Title Policy shall show fee title to the Property vested in Buyer with extended coverage, zoning endorsement and encroachment endorsements, if necessary, free and clear of all exceptions except (i) the Permitted Exceptions, and (ii) those matters which appear in the Commitment and were not disapproved of by Buyer in accordance with Paragraph 8 hereof. Seller shall pay the basic premium for the Title Policy, and Buyer shall pay for the extended coverage endorsement and zoning endorsement, and any special endorsements that Buyer desires to obtain. The Buyer will obtain utility company letters regarding their ability to service the property.

10. Escrow Closing. At Buyer's option, the closing of the purchase and sale of the Property shall be effected through an escrow with the Title Company acting as escrowee ("Escrowee"). Delivery of the deed and any other documents and payment of any unpaid portion of the Purchase Price for the Property shall be effected through such escrow. The terms of such escrow shall be pursuant to an escrow agreement in customary form utilized by the Title Company modified to reflect the transaction contemplated herein. The cost of said escrow shall be borne by the Buyer. This Agreement shall not be merged into the escrow agreement, but the

latter shall be deemed auxiliary to this Agreement and the provisions of this Agreement shall be controlling as between the parties hereto.

11. Closing and Obligations at Closing. Subject to any permitted termination of this Agreement by Buyer or Seller, closing shall take place at the office of the Title Company on the 60th day following the expiration of the Feasibility Period, or within 60 days of the voluntary closure of the Feasibility Period by the Buyer within his sole discretion ("Closing Date"). The Seller, ~~with Buyer's permission~~, shall have the option of postponing the closing for an additional 60 days.

On the Closing Date, the obligations of Buyer and Seller shall be as follows:

(a) Buyer shall cause the sum specified in paragraph 2(b) hereof to be wire transferred or certified check to the title company.

(b) Seller shall execute and deliver: (i) a Warranty Deed, in recordable form, conveying title to the Property to the Buyer or nominee or assignee; (ii) an Affidavit of Title in customary form; and (iii) an ALTA statement in the form required by the Title Company.

(c) Current real estate taxes shall be prorated (based upon the most recent tax information) as of the date Escrowee is prepared to release the escrow funds.

(d) The cost of state and county transfer taxes shall be paid by Seller, the cost of local transfer taxes, if any, shall be paid by Seller, and Seller and Buyer shall execute any transfer declarations required by state and local law.

(e) All other expenses of the Property, if any, shall be prorated as of the date of closing, or if an escrow is used, the date the Escrowee is prepared to release the escrow funds. To the extent that information for any such proration is not available on the Closing Date, the parties shall effect such prorations within thirty (30) days after the Closing Date.

(f) Possession of the Property shall be delivered to Buyer, with the exception of paragraph 12 below.

12. Possession. Possession shall be granted to Buyer at time of closing. Seller will be responsible for payment of all 2001 real estate taxes.

13. Condemnation. In the event of any taking by the exercise of the power of eminent domain of a substantial portion of the Property (which shall be defined as more than 3% of the Property and which does not impair or otherwise affect Buyer's intended use of the Property, in Buyer's discretion) prior to the Closing Date, Buyer shall have the right to terminate this Agreement by giving notice to Seller within ten (10) days after receipt by Buyer of written notification of any such condemnation. Seller shall forward to Buyer, within five (5) days of receipt, any notice from any authority asserting eminent domain rights against the Property. If

Buyer elects to terminate this Agreement, all awards and compensation arising out of said condemnation shall be the property of Seller and the Earnest Money shall be promptly returned to Buyer. If Buyer fails to give Seller notice of termination within said ten (10) day period, said right to terminate shall be deemed waived and Buyer shall be credited with or assigned all of Seller's right, title and interest to all awards and compensation arising out of said condemnation, and Buyer shall remain obligated to purchase the Property with no reduction in the Purchase Price. In the event of any taking of an insubstantial portion of the Property prior to the Closing Date (such portion is not deemed substantial), Seller shall assign to Buyer all of Seller's right, title and interest to all awards and compensation therefor and Buyer shall remain obligated to purchase the Property with no reduction in the Purchase Price.

14. Notices. Any and all notices, demands, consents and approvals required under this Agreement shall be sent by certified or registered mail, postage prepaid, return receipt requested, addressed to the parties, or via facsimile transmission as follows:

SELLERS:	Anton Family Limited Partnership C/o Michael J. Elliott 2355 South Arlington Heights Road Suite 230 Arlington Heights, IL 60005 Phone: 847-545-0500 Fax: 847-545-0550
BUYER:	Mr. Jeffrey J. Allen 22961 S. Althea Court Minooka, IL 60447 Phone: 815-467-9351(Home) 815-730-1010(Work) Fax: 815-730-1093
With a copy to:	Mr. Edward F. Masters, Attorney at Law 2701 Black Road, Suite 202 Joliet, IL 60435 Phone: 815-729-3955 Fax: 815-729-1391

Notices shall be deemed to have been received on the fourth (4th) business day after they are deposited in the United States mail as provided above.

15. Assignment. Buyer shall have the right to assign or transfer Buyer's interest in this Agreement without the prior written consent of Seller; however, such assignment and/or delegation shall not relieve Buyer of its obligations hereunder.

16. Other Acts. Buyer and Seller each hereby agree to perform such other acts to execute, acknowledge, and/or deliver such other instruments, documents and materials as may be necessary to effect consummation of the transaction contemplated herein.

17. Time is of the Essence. Buyer and Seller mutually agree that time is of the essence throughout the term of this Agreement and every provision hereof in which time is an element. No extension of time for performance of any obligations or acts shall be deemed an extension of time for performance of any other obligations or acts. If any date for performance of any of the terms, conditions or provisions hereof shall fall on a Saturday, Sunday or legal holiday, then the time of such performance shall be extended to the next business day thereafter.

18. Paragraph Headings. The paragraph headings contained in this Agreement are for convenience only and shall in no way enlarge or limit the scope or meaning of the various and several paragraphs hereof.

19. Interpretation. Whenever used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of any gender shall include all genders.

20. Applicable Law and Parties Bound. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois and shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, legal representatives, successors and permitted assigns.

21. Attorneys' Fees. In the event either party elects to file any action in order to enforce the terms of this Agreement, or for a declaration of rights hereunder, the prevailing party, as determined by the court in such action, shall be entitled to recover all of its court costs and reasonable attorneys' fees as a result thereof from the losing party.

22. Amendments. All amendments and/or supplements to this Agreement must be in writing and executed by each party hereto. However, such amendments and/or supplements may be executed in counterparts, all of which shall be deemed to constitute one document.

23. No Merger. The obligations, representations and warranties herein contained shall not merge with transfer of title but shall remain in effect until fulfilled.

24. Construction. The parties acknowledge that each party and its counsel have reviewed this Agreement and that the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement or any amendments or exhibits hereto.

25. Entire Agreement. The parties acknowledge and agree that at all times they have intended that none of the preliminary negotiations concerning this transaction would be binding on either party, and that they would be bound to each other only by a single, formal, comprehensive document containing this paragraph and all of the agreements of the parties, in final form, which has been executed and delivered by Buyer and Seller. The parties acknowledge that none of the prior oral agreements between then (and none of the representations on which either of them has relied) relating to the subject matter of this Agreement shall have any force or effect whatever, except as and to the extend that such agreements and representations have been incorporated in this Agreement.

26. Signs. Buyer shall be entitled to place signs on the Property after the date the feasibility period expires, announcing the planned development of the Property.

27. Illinois Responsible Property Transfer Act. Seller agrees to comply with the requirements of the Illinois Responsible Property Transfer Act of 1988. Buyer, within his sole discretion, shall submit to Seller a copy of the Phase I Environmental Study if same is performed on the Property, within 7 days of his receipt of the same.

28. Non-Foreign Person Affidavit. Pursuant to Section 1445 of the Internal Revenue Code, Beneficiary of Seller agrees to deliver to Buyer at the Closing an affidavit meeting the requirements of Section 1445 in form and substance reasonably acceptable to Buyer.

29. Counterparts. This Agreement may be executed in counterparts, all of which counterparts shall be deemed to be but one original.

30. Starker Trusts. The purpose of this Agreement is to provide a vehicle for the Seller to effect a tax-free exchange of like kind property. The Seller's purpose is to comply with the requirements of Internal Revenue Code Section 1031 in order to allow Seller to defer taxes on the sale and transfer of the Relinquished Property.

IN WITNESS WHEREOF, this Agreement has been executed as of the date first above written.

SELLERS:

Michael J. Elliott, Trustee

Helen Elliott, Trustee

Helen Elliott, Trustee

BUYER:

Jeffrey J. Allen

EXHIBIT A

PARCEL 1:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING EAST OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; AND EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 06 MINUTES 49 SECONDS EAST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER 1736.60 FEET TO THE CENTER OF JACKSON CREEK; THENCE ALONG THE CENTERLINE OF JACKSON CREEK SOUTH 68 DEGREES 44 MINUTES 43 SECONDS WEST 91.17 FEET, SOUTH 78 DEGREES 21 MINUTES 13 SECONDS WEST 662.88 FEET, SOUTH 76 DEGREES 06 MINUTES 14 SECONDS WEST 162.02 FEET, SOUTH 68 DEGREES 05 MINUTES 32 SECONDS WEST 129.90 FEET, SOUTH 31 DEGREES 56 MINUTES 15 SECONDS WEST 107.39 FEET, SOUTH 14 DEGREES 20 MINUTES 58 SECONDS WEST 117.12 FEET, SOUTH 11 DEGREES 35 MINUTES 05 SECONDS EAST 88.55 FEET, SOUTH 37 DEGREES 11 MINUTES 48 SECONDS EAST 141.68 FEET, SOUTH 53 DEGREES 51 MINUTES 28 SECONDS EAST 108.41 FEET, SOUTH 31 DEGREES 22 MINUTES 16 SECONDS EAST 153.58 FEET, SOUTH 16 DEGREES 31 MINUTES 32 SECONDS EAST 242.98 FEET, SOUTH 25 DEGREES 34 MINUTES 20 SECONDS EAST 59.73 FEET, SOUTH 57 DEGREES 47 MINUTES 03 SECONDS EAST 69.54 FEET, SOUTH 86 DEGREES 57 MINUTES 48 SECONDS EAST 100.92 FEET, SOUTH 22 DEGREES 06 MINUTES 17 SECONDS EAST 284.14 FEET, SOUTH 18 DEGREES 09 MINUTES 35 SECONDS EAST 225.16 FEET, AND SOUTH 29 DEGREES 49 MINUTES 00 SECONDS EAST 88.14 FEET TO THE SOUTH LINE OF THE AFORESAID SOUTHEAST QUARTER; THENCE SOUTH 89 DEGREES 58 MINUTES 24 SECONDS EAST ALONG SAID SOUTH LINE 347.00 FEET TO THE POINT OF BEGINNING; AND ALSO EXCEPTING THEREFROM THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT THE CORNER POINT, WHICH IS THE INTERSECTION OF WHERE THE EASTERN RIGHT-OF-WAY OF THE GULF, MOBILE AND OHIO RAILRAD, ALSO KNOWN AS AMTRAK, MEETS THE SOUTH RIGHT-OF-WAY LINE OF MANHATTAN ROAD; THENCE SOUTHWESTERLY A DISTANCE OF 523 FEET ALONG THE EASTERN RIGHT-OF-WAY OF THE GULF, MOBILE AND OHIO RAILROAD, ALSO KNOW AS AMTRAK; THENCE EAST A DISTANCE OF 250 FEET; THENCE NORTHEASTERLY A DISTANCE OF 523 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF MANHATTAN ROAD; THENCE WEST A DISTANCE OF 250 FEET ALONG THE SOUTH RIGHT-OF-WAY LINE OF MANHATTAN ROAD TO THE POINT OF BEGINNING, ALL LOCATED IN WILL COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SECTION 17; THENCE EAST 2.54 CHAINS; THENCE SOUTH 13.09 CHAINS; THENCE WEST 11.93 CHAINS; THENCE NORTH 7.39 CHAINS; THENCE WEST 18.18 CHAINS; THENCE SOUTH 1.80 CHAINS; THENCE WEST 1.82 CHAINS TO THE EAST LINE OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTHERLY ALONG THE SAID EAST LINE OF THE RIGHT-OF-WAY TO THE SOUTH LINE OF SAID SECTION 17; THENCE EAST ALONG SAID SECTION LINE TO THE POINT OF BEGINNING; IN WILL COUNTY, ILLINOIS.

Record Date: May 01, 2004 - Apr 30, 2011; Amount: $60,000.00 - $60,000.00;

Park	Debits	Credits
Revenue	0.00	60,000.00
Asset	60,000.00	0.00
Total for Park	60,000.00	60,000.00

Grand Total	Debits	Credits
Revenue	0.00	60,000.00
Asset	60,000.00	0.00
Grand Total	60,000.00	60,000.00

Receipt Listing

Record Date: May 01, 2004 - Apr 30, 2011; Amount: $60,000.00 - $60,000.00;

Deposit Ticket	Date	Account Credited		Description	Amount	R/C/O	T
14	11/28/2005	53-389	9	pedestrian bridge at wooded cove	60,000.00	C	R

MARY ANN STUKEL 17P
Will County Recorder
Will County
R 2002168138 Page 1 of 17
PCI Date 10/09/2002 Time 11:03:00
Recording Fees: 31.00

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR WOODED COVE ESTATES P.U.D.

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR WOODED COVE ESTATES P.U.D.

Woodcove Development Corporation, an Illinois Corporation, being the owner of WOODED COVE ESTATES P.U.D., legally described as follows:

A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 17, AND PART OF THE NORTHEAST QUARTER OF SECTION 20, AND PART OF THE NORTHWEST QUARTER OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED ON OCTOBER 3, 2002, AS DOCUMENT NO. R 2002163853, IN WILL COUNTY, ILLINOIS.

does hereby declare that all future conveyances of such real estate or any part thereof shall be made upon and subject to the following covenants, conditions, restrictions, and easements for the purpose of preserving the general welfare, health, safety, and beauty of the land and of the real estate thereon adjoining presently owned by the undersigned and for the purposes of creating high property values.

ARTICLE I

DEFINITIONS

The following terms, when used in this Declaration, shall have the following meanings:

1.01 Approval or Approved shall mean the written consent or approval by the party required or permitted to give such approval.

1.02 Building Site shall mean any lot or parcel within WOODED COVE ESTATES P.U.D. hereafter designated by Developer in a document as a building site upon which a building or buildings and appurtenant structures may be erected.

1.03 Developed Building Site shall mean any building site upon which the construction, installation or erection of improvements, other than utilities or streets, has commenced.

1.04 Declarant shall mean the Woodcove Development Corporation.

1.05 Developer shall initially mean Woodcove Development Corporation and thereafter such other party or parties as shall be designated in a document executed by Woodcove Development Corporation.

1.06 Document shall mean a written, signed, and acknowledged instrument, which has been recorded in the office of the Recorder of Deeds of Will County, Illinois.

1.07 Front Yard shall mean the area between the front wall of any building and the adjacent street within WOODED COVE ESTATES P.U.D. Building sites, which are located on a corner of two streets within WOODED COVE ESTATES P.U.D., shall be considered to have two front yards.

1.08 Laws shall mean all present and future applicable laws, ordinances, rules, regulations, and orders of the United States Government, the State of Illinois, the County of Will, the Village of Elwood, and any other applicable political subdivision, and any applicable administrative agency of any of the foregoing, subject to such variances and waivers which may lawfully have been obtained.

1.09 Owner shall mean the person, persons, entity or entities holding title to a building site and as used in the context of this Declaration; should there be more than one owner of any building site, all of said owners are herein collectively called "Owner". Owner shall not mean or refer to the holder of a mortgage on such building site unless and until such mortgagee has acquired title to such building site pursuant to foreclosure or any proceeding or transfer in lieu of foreclosure.

1.10 Protective Covenants shall mean the protective covenants, conditions, restrictions, reservations, terms, and easements set forth in this Declaration.

1.11 Street shall mean any highway, street or road for vehicular and/or pedestrian traffic (whether or not dedicated to a governmental authority), which is for the common and non-exclusive use of the owners or tenants of two or more building sites and/or others.

ARTICLE II

GOAL OF DEVELOPMENT

2.01 The real property described above is subject to the covenants hereby declared to insure proper use and appropriate development and improvements of WOODED COVE ESTATES P.U.D. and every part thereof; to protect the owners of the property therein against such improper use of surrounding lots as may depreciate the value of their property; to guard against the erection thereon of buildings built of improper or unsuitable materials; to insure adequate and reasonable development of said property; to encourage the erection of attractive improvements thereon; with appropriate locations of attractive improvements thereof; to prevent haphazard and inharmonious improvements; to secure and maintain proper setbacks from streets, and adequate free spaces between structures; to insure desired high standards of maintenance and operation of community facilities and services for the benefit and convenience of all owners of the property and all of its residents and in general to provide adequately for a residential subdivision of the highest quality and character.

ARTICLE III

GENERAL COVENANTS

3.01 Architectural Review Committee. The Developer shall establish an Architectural Review Committee. The Architectural Review Committee shall mean and refer to the Developer(so long as the Developer owns at least one building site in Wooded Cove Estates P.U.D.); thereafter the Architectural Review Committee shall consist of at least three(3) building site owners initially appointed by the Developer and thereafter appointed by majority vote of all of the building site owners(each building site consisting of one vote). The Architectural Review Committee shall elect a chairman and he, or in his absence, the vice-chairman, shall be the presiding officer at its meetings. The Architectural Review Committee shall meet upon call of the chairman, and all meetings shall be held at such places as may be designated by the chairman. Two members shall constitute a quorum for the transaction of business; and the affirmative vote of a majority of those present in person or a proxy at a meeting of the Architectural Review Committee shall constitute the action of the Architectural Review Committee on any matter before it. The Architectural Review Committee is authorized to retain the services of consulting architects, landscape architects, urban designers, engineers,

inspectors, and/or attorneys in order to advise and assist the Architectural Review Committee in performing its functions set forth herein.

3.02 Permitted Improvements; Standards.

a) No improvements of any nature whatsoever shall be constructed, altered, added to or maintained upon any part of WOODED COVE ESTATES P.U.D., except (i) for dwellings and other improvements which are constructed by Developer; (ii) such improvements as are approved by the Architectural Review Committee in accordance with this Article III; or (iii) improvements which pursuant to this Article III do not require the consent of the Architectural Review Committee.

b) The Architectural Review Committee is hereby authorized to promulgate from time to time written architectural standards, policies, and guidelines (the "Standards") governing the construction, location, landscaping, and design of improvements, the contents of submissions of plans and specifications, and other information required to evidence compliance with and obtain approval pursuant to the Sections hereof. Any such Standards published by the Architectural Review Committee shall be binding and enforceable on all owners with respect to all improvements in WOODED COVE ESTATES P.U.D. requiring the approval of the Architectural Review Committee.

c) No improvements of any nature whatsoever shall be commenced, constructed, altered, added to or maintained upon any part of WOODED COVE ESTATES P.U.D. (except for dwellings and other improvements which are constructed by Developer and for improvements which pursuant to this Article III do not require the consent of the Architectural Review Committee) unless and until the Architectural Review Committee has approved in writing the proposed architect and builder of any such improvements.

3.03 Construction of Improvements.

a) Subject to the review by the Architectural Review Committee, all improvements constructed hereon shall consist solely of single-family residences and ancillary buildings or miscellaneous improvements related to or useful for single-family residential purposes, and as allowed by the zoning district, unless otherwise stated herein.

b) The front elevations of all buildings to be occupied as the residence shall be constructed of brick or "dryvit", or a combination of brick, "dryvit" or cedar or cedar equivalent. Use of vinyl siding shall only be allowed on the sides and rears of structures.

c) Dwellings may not be temporarily or permanently occupied until the exteriors thereof have been completed. All landscaping must be completed and all driveways must be paved with concrete pavement within 90 days of the issuance of the occupancy permit unless weather conditions prohibit immediate completion. No temporary house, shack, tent, barn or other outbuilding shall be permitted at any time, except for temporary structures for social functions. Construction of all dwellings shall be completed within 180 days of the commencement date of said construction. During the continuance of construction by an owner, such owner shall require its contractors to maintain the lot in a reasonable clean and uncluttered condition and, to the extent possible, all construction trash and debris shall be kept within refuse containers. Upon completion of construction, such owner shall cause its contractors to immediately remove all equipment, tools, and construction material and debris from the lot on which such construction has been completed.

3.04 Architectural Approval. To preserve the architectural and aesthetic appearance of WOODED COVE ESTATES P.U.D., no construction of improvements of any nature whatsoever shall be commenced or maintained by any owner other than the Developer, with respect to the construction or affecting the exterior appearance of any dwelling or with respect to any other portion of WOODED COVE ESTATES P.U.D., including, without limitation, the construction or installation of driveways, mail boxes, decks, patios, courtyards, swimming pools, tennis courts, greenhouses, playhouses, awnings, walls, fences, exterior lights, garages, guest or servants' quarters or other outbuildings, nor shall any exterior addition to or change or alteration therein be made unless and until two copies of the plans and specifications and related data showing the nature, color, type, shape, height, materials, and location of the same shall have been submitted to and approved in writing by the Architectural Review Committee. One copy of such plans, specifications, and related data so submitted shall be retained in the records of the Architectural Review Committee, and the other copy shall be returned to the owner marked "approved", "approved as noted" or "disapproved".

a) The Architectural Review Committee may establish a fee of $150.00 for the review of plans and specifications for the construction of any residence building, in part to cover the expense of retaining any architects, engineers, inspectors or attorneys necessary for such review. For reviewing any plans and specifications hereunder, except for construction of a residence building, the Architectural Review Committee waives any fee, but may charge the applicant as a cost of review any fees incurred by the Architectural Review Committee as an out-of-pocket expense for retaining consultants or attorneys as identified above.

b) Notwithstanding the foregoing, an owner may make interior improvements and alterations within his dwelling that do not affect the exterior appearance without the necessity of approval or review by the Architectural Review Committee. The Architectural Review Committee shall have the sole discretion to determine whether plans and specifications submitted for approval are acceptable. Following approval of any plans and specifications by the Architectural Review Committee, representatives of the Architectural Review Committee shall have the right during reasonable hours to enter upon and inspect any lot or other improvements with respect to which construction is under way to determine whether or not the plans and specifications therefore have been approved and are being complied with. In the event the Architectural Review Committee shall determine that such plans and specifications have not been approved or are not being complied with, the Architectural Review Committee shall be entitled to enjoin further construction and to require the removal or correction of any work in places which does not comply with approved plans and specifications.

c) In the event the Architectural Review Committee fails to approve or disapprove in writing any proposed plans or specifications within thirty (30) days after such plans and specifications shall have been submitted, such plans and specifications will be deemed to have been expressly approved, provided the proposed improvements are generally in harmony with the scheme of WOODED COVE ESTATES P.U.D. as set forth in this Declaration. Upon approval of plans and specifications, no further approval under this Article III shall be required with respect thereto, unless such construction has not substantially commenced within six months of the approval of such plans and specifications (e.g. clearing and grading,

pouring of footings, etc.) or unless such plans and specifications are materially altered or changed.

3.05 Landscaping Approval. To preserve the aesthetic appearance of WOODED COVE ESTATES P.U.D., no landscaping, grading, excavation or filling of any nature whatsoever shall be implemented and installed by any owner other than the Developer, unless and until the plans therefore have been submitted to and approved in writing by the Architectural Review Committee. Furthermore, no hedge or shrubbery planting or tree which obstructs sight-lines of streets and roadways within WOODED COVE ESTATES P.U.D. shall be placed or permitted to remain on any lot where such hedge, shrubbery or tree interferes with traffic sight-line, including sight-lines at the intersection of a driveway and a road or street in WOODED COVE ESTATES P.U.D.. No owner other than the Developer shall be entitled to cut, remove or mutilate any trees, shrubs, bushes or other vegetation having a trunk diameter of six inches or more at a point of four feet above ground level, without obtaining the prior approval of the Architectural Review Committee, except as set forth in the preceding sentence and provided further that dead or diseased trees as well as other dead or diseased shrubs, bushes or other vegetation, shall be cut and removed promptly.

3.06 Building Restrictions. All dwellings and other structures shall be constructed in compliance with any and all applicable state, county, and municipal zoning and building restrictions and any applicable governmental agencies. No dwelling shall be erected which is more than two and one-half stories or thirty-five feet in height, whichever is lesser.

The ground floor area of the dwelling exclusive of attached garage, carports, terraces, and exterior breezeways shall be:

i) for one story dwelling – not less than 2,000 square feet;

ii) for dwellings of more than one story – not less than 1,200 square feet on the ground floor and the total living area shall be not less than 2,300 square feet.

Even though a proposed building complies with these minimum height and size restrictions, the Architectural Review Committee retains sole discretion to determine whether the plans and specifications are to be approved.

No exterior portion of any building, structure or other improvement (except driveways) located on or with respect to any lot shall be located other than as by the applicable set-back line restrictions as set forth on the plat or herein provided that the Architectural Review Committee shall be empowered to grant variances with respect to such set-back line restrictions in its sole and absolute discretion. To assure that dwellings and other structures will be located so that the maximum view, privacy, and breeze will be available to each dwelling or structure, dwellings and structures must take into consideration the location of trees and vegetation and other aesthetic and environmental considerations, as well as the precise site and location of any dwelling or structures within WOODED COVE ESTATES P.U.D. The Architectural Review Committee shall have the authority to determine such locations for dwellings and structures. In addition, all residential structures constructed on a lot shall: (i) have a minimum lowest floor elevation including basement above the flood protection elevation, and (ii) be designed and constructed in compliance with the requirements of any building code related to construction in flood hazard areas, if any are applicable.

3.07 Outbuildings. Any storage buildings, outbuildings or detached garages, prior to the erection of same have to be reviewed by the Architectural Review Committee and if approved must be located within the rear yard, or at a location approved by the Architectural Review Committee, and shall have the front elevation built of the same material as the main residence building, or of materials as approved by the Architectural Review Committee.

3.08 Use of Lots and Dwellings. Each lot shall be used for residential purposes only, and no trade or business of any kind may be carried on therein. No more than one dwelling shall be located on any lot. The use of a portion of a dwelling as an office by an owner or his tenant shall not be considered to be in violation of this covenant if such use does not create regular customer, client or employee traffic. The use of a dwelling or a portion thereof for business meetings, entertainment or the enjoyment or business of the owner's employees, trustees, agents, clients or customers shall not be considered to be a violation of this covenant if such use does not create regular customer, client or employee traffic. Lease or rental of a dwelling for residential purposes shall also not be considered to be a violation of this covenant so long as the lease (i) is for not less than the entire dwelling and all the improvements thereon, (ii) is for the term of at least six months, and (iii) is otherwise in compliance with rules and regulations as may be promulgated and published from time to time by the Architectural Review Committee.

3.09 Exterior Appearance. The owner must submit a plan of any proposed fencing to the Architectural Review Committee for approval; such plan must show the dimensions, location in relation to the dwelling, color and type of material to be used. All swimming pools and tennis courts may have such fencing as required by the proper governmental agency. No projections of any type shall be placed or permitted to remain above the roof of any improvements, except approved chimneys or vent stacks.

3.10 Signs. Except as may be required by legal proceedings, no signs or advertising posters of any kind shall be maintained or permitted within any windows, on the exterior of any improvements located within WOODED COVE ESTATES P.U.D. without the express written permission of the Architectural Review Committee. The approval of any signs and posters, including, without limitation, name and address signs, shall be upon such conditions as may be from time to time determined by the Architectural Review Committee and may be arbitrarily withheld.

3.11 Antennas. Any satellite dish or other radio or television transmitter or receiver (except for television antenna) must be placed in the rear yard and reasonably screened in order to conceal them from view from roads and adjacent lots. Radio or television signals or any other form of electromagnetic radiation shall not be permitted to originate from any lot, which may unreasonably interfere with the reception of television or radio signals within WOODED COVE ESTATES P.U.D..

3.12 Animals. Any animals, livestock, birds, or poultry of any kind that are raised, bred or kept by any owner upon any portion of WOODED COVE ESTATES P.U.D. must comply with the regulations for the underlying zoning district. The animals shall be kept or maintained within the dwelling or outbuildings or other appropriate structure. No animals shall be allowed to make unreasonable amounts of noise or to become a nuisance.

3.13 Nuisances. No rubbish or debris of any kind shall be dumped, placed or permitted to accumulate upon any portion of WOODED COVE ESTATES P.U.D., nor shall any nuisance or odors be permitted to exist or operate upon or arise from any portion of WOODED COVE ESTATES P.U.D. so as to render any portion thereof unsanitary, unsightly, offensive or detrimental to persons using or occupying any other portions of WOODED COVE ESTATES P.U.D.. Noxious or offensive activities shall not be carried on in any lot or dwelling or in any part of WOODED COVE ESTATES P.U.D., and each owner, his family, tenants, guests,

invitees, servants, and agents shall refrain from any act or use of a lot or dwelling of WOODED COVE ESTATES P.U.D. which could cause disorderly, unsightly or unkempt conditions or which could cause embarrassment, discomfort, annoyance or nuisance to the occupants of other portions of WOODED COVE ESTATES P.U.D. or which could result in a cancellation of any insurance for any portion of WOODED COVE ESTATES P.U.D. or which would be in violation of any law or governmental code or regulation.

3.14 Motor Vehicles, Trailers, Boats, Etc. Each owner shall provide for parking of at least two automobiles in garages equipped with garage doors prior to occupancy of the dwelling owned or maintained by such owner. All automobiles owned or used by owners or occupants other than temporary guests and visitors shall be parked in garages to the extent that garage space is available. The outside storage or parking of any commercial vehicles of any type, farm equipment, buses, trailers, boats, or any other related forms of transportation devices are expressly prohibited. No owners or other occupants of any portion of WOODED COVE ESTATES P.U.D. shall repair or restore any vehicle of any kind upon or within any lot, except (i) within enclosed garages or workshops or (ii) for emergency repairs, and then only to the extent necessary to enable the movement thereof to a proper repair facility. No unregistered motor vehicles or unlicensed drivers may operate or be used within WOODED COVE ESTATES P.U.D..

3.15 Sales and Construction Activities. Notwithstanding any provisions or restrictions contained in this Declaration to the contrary, it shall be expressly permissible for the Developer and its agents, employees, successors, and assigns to maintain and carry on such facilities and activities as may be reasonably required, convenient or incidental to the completion, improvement, and sale of lots or the developing of lots, including, without limitation, the installation and operation of sales and construction trailers and offices, signs, and model dwellings.

3.16 Multiple Ownership. No lots or dwellings may be sold under any time-sharing, time-interval or similar right-to-use programs.

3.17 Developer's Right to Vary. Developer or Declarant shall have the right, at its option and discretion and without regard to any prior construction or development of any building site, to alter, vary and/or waive any of the requirements, restrictions or other provisions set forth in the Article III with respect to any building site; and no owner of a building site with respect to which such alteration, variance and/or waiver was not granted shall have any claim or cause of

action against Developer by reason of the granting of such alteration, variance and/or waiver.

ARTICLE IV

DURATION OF RESTRICTIONS

4.01 Each of the conditions, covenants, reservations, and easements contained in this Declaration shall continue in full force and effect and be binding upon all owners and their successors and assigns and shall be a covenant running with the land for twenty years from the recording of this Declaration in the office of the Recorder of Deeds of Will County, Joliet, Illinois, and may or shall be terminated or modified in any respect by the Declarant, Developer or their respective successors or assigns.

ARTICLE V

MISCELLANEOUS

5.01 Partial Invalidity. Invalidation of any of this Declaration or any part thereof by judgment or court order shall in no way affect any of the other provisions, all of which shall remain in full force and effect.

5.02 Interpretation. Any discrepancy, conflict or ambiguity which may be found herein shall be resolved and determined by Developer and, in the absence of an adjudication by a court of competent jurisdiction to the contrary, such resolution and determination shall be final.

5.03 Captions. The captions and organizational numbers and letters appearing in this Declaration are inserted only as a matter of convenience and neither in any way define, limit, construe or describe the scope or intent of this Declaration nor in any way modify or affect this Declaration.

5.04 Governing Law. This Declaration and the rights of the owners shall be governed by the laws of the State of Illinois.

5.05 No Obligation to Develop. Notwithstanding the provisions and intentions of this Declaration, no provision herein shall be deemed to require,

either expressly or implied, Developer to improve, construct and/or develop all or any portion of WOODED COVE ESTATES P.U.D. in any manner whatsoever, except to the extent of restrictions set forth in this Declaration and as required by appropriate subdivision and building code requirements of the proper governmental agency.

5.06 Notices. Any notice or other communication required to be sent to any owner under the provisions of this instrument shall be deemed to have been properly sent when mailed, postage paid, to the last known address of the person who appears as owner on the records of Developer at the time of such mailing. Notice to the Developer shall be sent in the same manner addressed to Developer at such address of which Developer shall have notified the owners in the aforesaid manner.

5.07 Repurchase Rights.

a) If, within 180 days (construction period) after the date on which an owner shall begin construction on a building site, the owner (defaulting owner) shall fail substantially to complete construction upon such subject building site of the building and other improvements which have been approved for the construction thereon by Developer pursuant to the provisions of Article III, and if such failure continues for more than 120 days (grace period) after Developer has sent to the defaulting owner written notice of such failure, Developer, its successors and assigns, shall have the right, at Developer's sole option, (repurchase option) to re-acquire all of the subject building site from the defaulting owner by the defaulting owner's general warranty deed, together with any unpaid awards the defaulting owner may be entitled to against any condemning authority by reason of a taking of any portion of the subject building site.

b) The purchase price payable by Developer to the defaulting owner in the event Developer shall exercise the repurchase option shall be equal to the purchase price paid by the defaulting owner to Developer for the subject building site, less the amount of any condemnation award received by the defaulting owner, plus all actual and direct costs of construction paid by the defaulting owner for any building and improvements theretofore constructed on the subject building site.

c) The repurchase option shall be exercisable by Developer sending to the defaulting owner within 120 days after the expiration of the

grace period written notice of such exercise in accordance with the provisions of Section above.

d) Within sixty days after the exercise of the repurchase option by Developer, closing shall occur and the defaulting owner shall tender to Developer at the offices of Developer's attorney in Will County, Illinois, the defaulting owner's general warranty deed conveying to Developer, or its successors or assigns, the subject building site, together with such structures as the defaulting owner shall have erected or partially erected thereon. Title to the subject building site at the time of closing shall be good and marketable subject only to such title exceptions as were excepted in connection with Developer's initial conveyance of the subject building site to the defaulting owner.

e) The construction period shall be extended for such additional time as is equal to time lost by the owner or the defaulting owner's contractors or suppliers in connection with the construction of the buildings and improvements upon the subject building site due to strikes or other labor troubles, governmental restrictions and limitations, scarcity of labor or materials, war or other national emergency, accidents, casualties, weather conditions or any cause similar or dissimilar to the foregoing beyond the reasonable control of the defaulting owner or defaulting owner's contractors or supplies or resulting from Developer's fault.

5.08 Successors and Assigns. Subject to the prior rights of Developer set forth herein, including, without limitation, the rights of Developer to grant approvals, to enforce this Declaration, to waive enforcement of this Declaration, or to add or remove land from this Declaration, this Declaration shall be binding upon and shall inure to the benefit of the owners and their respective heirs, executors, personal representatives, successors, and assigns; and shall be binding upon (but shall not be for the benefit of or enforceable by) any of said owners.

5.09 Enforcement. In the event any building site owner fails to adhere to any and/or all of these restrictions and covenants, the Developer or any building site owner or the Association, if any, shall have the right jointly and separately to remedy the violation or sue to have the violation remedied and lien the owner's property for the cost of materials, labor and/or fees expended, including, but not limited to, legal fees necessary to enforce said lien and these restrictions and covenants.

5.10 Amendment or Abrogation. Any of the restrictions and covenants herein contained may be amended or abrogated upon the approval of the Developer(so long as Developer owns at least one building site in Wooded Cove Estates P.U.D.) or at least seventy-five percent(75%) of the building site owners in Wooded Cove Estates P.U.D. (each building site constituting one vote), provided such approval shall be by an instrument in writing, signed, acknowledged and recorded by the Developer or said owners, as the case may be. The invalidation of any one or more of the restrictions herein by any Court of competent jurisdiction shall not in any manner affect the validity of the other restrictions herein set forth.

5.11 Option to Form Association. Upon the approval of at least seventy-five percent (75%) of the building site owners in Wooded Cove Estates P.U.D. (each building site constituting one vote), provided such approval shall be by an instrument in writing, signed, acknowledged and recorded by said owners, the building site owners may elect to form an Association (which may or may not be incorporated), to enforce these covenants and restrictions; to perform such other activities customarily undertaken by a common interest community association; and to levy assessments in aid thereof.

IN WITNESS WHEREOF, the Woodcove Development Corporation, had caused this Declaration to be executed by its President and attested to by its Secretary this 9th day of October, 2002.

Woodcove Development Corp.

By: _____
President

ATTEST:

By: _____
Its: Secretary

STATE OF ILLINOIS)
) SS
COUNTY OF W I LL)

I, Debra L. Mutz, a Notary Public in and for said County, in the State aforementioned, DO HEREBY CERTIFY that Jeffrey J. Allen, Woodcove Development Corporation, and Patricia J. Allen thereof, personally known to me to be the same persons whose names are subscribed to the foregoing instrument as such President and Secretary respectively, appeared before me this day in person and acknowledged that they signed and delivered the said instrument as their own free and voluntary act, and as the free and voluntary act of said Corporation, for the uses and purposes therein set forth; and the said President and Secretary did also then and there acknowledge that they are custodian of the corporate seal of said Corporation did affix the said corporate seal of said Corporation to said instrument as their own free and voluntary act, and as the free and voluntary act of said Corporation for the uses and purposes therein set forth.

GIVEN under my hand and Notarial Seal this 8th day of Oct., 2002.

OFFICIAL SEAL
DEBRA L MUTZ
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES:02/25/06

_____
NOTARY PUBLIC

THIS INSTRUMENT PREPARED BY
AND RETURN TO:
Woodcove Development Corporation
C/o JEFFREY J. ALLEN, President
22961 S. Althea Court
Minooka, Illinois 60447
815/467-9351

R2003079532

MARY ANN STUKEL 5P
Will County Recorder
Will County
R 2003079532 Page 1 of 5
PC2 Date 04/04/2003 Time 15:21:45
Recording Fees: 19.00

COVER SHEET

FIRST AMENDMENT TO

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS

WOODED COVE ESTATES P.U.D.

Prepared by and after recording, return to:
A. Michael Wojtak, Esq.
116 N. Chicago Street
Suite 600
Joliet, Illinois 60432
Phone (815) 723-8500

03-20-03 - #2

185

R2003079532

FIRST AMENDMENT TO
DECLARATION OF COVENANTS, CONDITIONS,
RESTRICTIONS AND EASEMENTS

WOODED COVE ESTATES P.U.D.

THIS FIRST AMENDMENT to the DECLARATION (the "Declaration") is made this 20th day of March, 2003, by WOODCOVE DEVELOPMENT CORPORATION, an Illinois corporation ("Developer").

WITNESSETH:

WHEREAS, Developer executed a "Declaration of Covenants, Conditions, Restrictions and Easements" for Wooded Cove Estates P.U.D. which Declaration was recorded on October 9, 2002 with the Will County Recorder of Deeds as Document No. R2002-168138; and

WHEREAS, the Declaration affects certain real estate in the County of Will, State of Illinois, legally described in "Exhibit A" attached hereto and made a part hereof (the "Property"); and

WHEREAS, Paragraph 5.10 of the Declaration provides that the any of the restrictions and covenants contained in the Declaration may be amended or abrogated upon the approval of the Developer (so long as the Developer owns at least one building site in Wooded Cove Estates P.U.D.) by an instrument in writing; and

WHEREAS, Developer, as of the date hereof, owns at least 66 building sites as depicted in a certain "Plat of Subdivision" recorded October 3, 2002 with the Will County Recorder of Deeds as Document No. R2002-163853 (the "Plat"); and

WHERAS, the Developer desires to amend said Declaration to clarify and set forth certain restrictions regarding the maintenance of animals on the building sites.

NOW, THEREFORE, the Developer hereby declares that the Declaration of Covenants, Conditions, Restrictions and Easements is amended by deleting Paragraph 3.12 thereof in its entirety and adding in place thereof, a revised Paragraph 3.12 as follows:

"3.12 Animals. No animals, livestock, or poultry of any kind shall be raised, bred, or kept upon any portion of Wooded Cove Estates P.U.D. except that no more than two (2) dogs, cats, or other household pets or any combination thereof not exceeding two (2) in number, may be kept provided they are not kept, bred, or maintained for any commercial purpose. In addition,

all owners shall comply with the applicable laws, ordinances and regulations of the applicable governmental authorities with respect to household pets allowed. All household pets shall be kept or maintained within the dwelling or outbuildings or other appropriate structure. No household pets shall be allowed to make unreasonable amounts of noise or to become a nuisance."

IN WITNESS WHEREOF, WOODCOVE DEVELOPMENT CORPORATION has caused its name to be signed to this First Amendment to the Declaration by its President and attested to by its Secretary, as of the day and year first set forth above.

WOODCOVE DEVELOPMENT CORPORATION

By: _____
President

Attest: Patricia J. Allen
Secretary

R2003079532

STATE OF ILLINOIS)
) SS.
COUNTY OF WILL)

I, the undersigned, a notary public in and for said County, in the State aforesaid, do hereby certify that Jeffrey J. Allen, personally known to me to be the President of WOODCOVE DEVELOPMENT CORPORATION, an Illinois corporation, and Patricia J. Allen, personally known to me to be the Secretary of said corporation, and personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that as such President and Secretary, they signed and delivered the said instrument, pursuant to authority given by the Board of Directors of said corporation as their free and voluntary act, and as the free and voluntary act of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and official seal this 20th day of March, 2003.

A. Michael Wojtak

Notary Public

"OFFICIAL SEAL"
A. MICHAEL WOJTAK
Notary Public, State of Illinois
My Commission Expires 12/30/06

03-20-03- #2

EXHIBIT A

(legal description)

WOODED COVE ESTATES P.U.D., BEING A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 17, AND PART OF THE NORTHEAST 1/4 OF SECTION 20, AND PART OF THE NORTHWEST 1/4 OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED OCTOBER 3, 2002 , AS DOCUMENT NO. R2002-163853, IN WILL COUNTY, ILLINOIS.

P.I.N. 11-17-400-034; 11-20-200-002; and 11-21-100-001

Address: Manhattan Road, Elwood, Illinois

R2002 ..168138

MARY ANN STUKEL 17P
Will County Recorder
Will County
R 2002168138 Page 1 of 17
PC1 Date 10/09/2002 Time 11:03:06
Recording Fees: 31.00

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR WOODED COVE ESTATES P.U.D.

DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR WOODED COVE ESTATES P.U.D.

Woodcove Development Corporation, an Illinois Corporation, being the owner of WOODED COVE ESTATES P.U.D., legally described as follows:

> A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 17, AND PART OF THE NORTHEAST QUARTER OF SECTION 20, AND PART OF THE NORTHWEST QUARTER OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED ON OCTOBER 3, 2002, AS DOCUMENT NO. R 2002163853, IN WILL COUNTY, ILLINOIS.

does hereby declare that all future conveyances of such real estate or any part thereof shall be made upon and subject to the following covenants, conditions, restrictions, and easements for the purpose of preserving the general welfare, health, safety, and beauty of the land and of the real estate thereon adjoining presently owned by the undersigned and for the purposes of creating high property values.

ARTICLE I

DEFINITIONS

The following terms, when used in this Declaration, shall have the following meanings:

1.01 Approval or Approved shall mean the written consent or approval by the party required or permitted to give such approval.

1.02 Building Site shall mean any lot or parcel within WOODED COVE ESTATES P.U.D. hereafter designated by Developer in a document as a building site upon which a building or buildings and appurtenant structures may be erected.

1.03 Developed Building Site shall mean any building site upon which the construction, installation or erection of improvements, other than utilities or streets, has commenced.

1.04 Declarant shall mean the Woodcove Development Corporation.

1.05 Developer shall initially mean Woodcove Development Corporation and thereafter such other party or parties as shall be designated in a document executed by Woodcove Development Corporation.

1.06 Document shall mean a written, signed, and acknowledged instrument, which has been recorded in the office of the Recorder of Deeds of Will County, Illinois.

1.07 Front Yard shall mean the area between the front wall of any building and the adjacent street within WOODED COVE ESTATES P.U.D. Building sites, which are located on a corner of two streets within WOODED COVE ESTATES P.U.D., shall be considered to have two front yards.

1.08 Laws shall mean all present and future applicable laws, ordinances, rules, regulations, and orders of the United States Government, the State of Illinois, the County of Will, the Village of Elwood, and any other applicable political subdivision, and any applicable administrative agency of any of the foregoing, subject to such variances and waivers which may lawfully have been obtained.

1.09 Owner shall mean the person, persons, entity or entities holding title to a building site and as used in the context of this Declaration; should there be more than one owner of any building site, all of said owners are herein collectively called "Owner". Owner shall not mean or refer to the holder of a mortgage on such building site unless and until such mortgagee has acquired title to such building site pursuant to foreclosure or any proceeding or transfer in lieu of foreclosure.

1.10 Protective Covenants shall mean the protective covenants, conditions, restrictions, reservations, terms, and easements set forth in this Declaration.

1.11 Street shall mean any highway, street or road for vehicular and/or pedestrian traffic (whether or not dedicated to a governmental authority), which is for the common and non-exclusive use of the owners or tenants of two or more building sites and/or others.

ARTICLE II

GOAL OF DEVELOPMENT

2.01 The real property described above is subject to the covenants hereby declared to insure proper use and appropriate development and improvements of WOODED COVE ESTATES P.U.D. and every part thereof; to protect the owners of the property therein against such improper use of surrounding lots as may depreciate the value of their property; to guard against the erection thereon of buildings built of improper or unsuitable materials; to insure adequate and reasonable development of said property; to encourage the erection of attractive improvements thereon; with appropriate locations of attractive improvements thereof; to prevent haphazard and inharmonious improvements; to secure and maintain proper setbacks from streets, and adequate free spaces between structures; to insure desired high standards of maintenance and operation of community facilities and services for the benefit and convenience of all owners of the property and all of its residents and in general to provide adequately for a residential subdivision of the highest quality and character.

ARTICLE III

GENERAL COVENANTS

3.01 Architectural Review Committee. The Developer shall establish an Architectural Review Committee. The Architectural Review Committee shall mean and refer to the Developer(so long as the Developer owns at least one building site in Wooded Cove Estates P.U.D.); thereafter the Architectural Review Committee shall consist of at least three(3) building site owners initially appointed by the Developer and thereafter appointed by majority vote of all of the building site owners(each building site consisting of one vote). The Architectural Review Committee shall elect a chairman and he, or in his absence, the vice-chairman, shall be the presiding officer at its meetings. The Architectural Review Committee shall meet upon call of the chairman, and all meetings shall be held at such places as may be designated by the chairman. Two members shall constitute a quorum for the transaction of business, and the affirmative vote of a majority of those present in person or a proxy at a meeting of the Architectural Review Committee shall constitute the action of the Architectural Review Committee on any matter before it. The Architectural Review Committee is authorized to retain the services of consulting architects, landscape architects, urban designers, engineers,

inspectors, and/or attorneys in order to advise and assist the Architectural Review Committee in performing its functions set forth herein.

3.02 Permitted Improvements; Standards.

a) No improvements of any nature whatsoever shall be constructed, altered, added to or maintained upon any part of WOODED COVE ESTATES P.U.D., except (i) for dwellings and other improvements which are constructed by Developer; (ii) such improvements as are approved by the Architectural Review Committee in accordance with this Article III; or (iii) improvements which pursuant to this Article III do not require the consent of the Architectural Review Committee.

b) The Architectural Review Committee is hereby authorized to promulgate from time to time written architectural standards, policies, and guidelines (the "Standards") governing the construction, location, landscaping, and design of improvements, the contents of submissions of plans and specifications, and other information required to evidence compliance with and obtain approval pursuant to the Sections hereof. Any such Standards published by the Architectural Review Committee shall be binding and enforceable on all owners with respect to all improvements in WOODED COVE ESTATES P.U.D. requiring the approval of the Architectural Review Committee.

c) No improvements of any nature whatsoever shall be commenced, constructed, altered, added to or maintained upon any part of WOODED COVE ESTATES P.U.D. (except for dwellings and other improvements which are constructed by Developer and for improvements which pursuant to this Article III do not require the consent of the Architectural Review Committee) unless and until the Architectural Review Committee has approved in writing the proposed architect and builder of any such improvements.

3.03 Construction of Improvements.

a) Subject to the review by the Architectural Review Committee, all improvements constructed hereon shall consist solely of single-family residences and ancillary buildings or miscellaneous improvements related to or useful for single-family residential purposes, and as allowed by the zoning district, unless otherwise stated herein.

b) The front elevations of all buildings to be occupied as the residence shall be constructed of brick or "dryvit", or a combination of brick, "dryvit" or cedar or cedar equivalent. Use of vinyl siding shall only be allowed on the sides and rears of structures.

c) Dwellings may not be temporarily or permanently occupied until the exteriors thereof have been completed. All landscaping must be completed and all driveways must be paved with concrete pavement within 90 days of the issuance of the occupancy permit unless weather conditions prohibit immediate completion. No temporary house, shack, tent, barn or other outbuilding shall be permitted at any time, except for temporary structures for social functions. Construction of all dwellings shall be completed within 180 days of the commencement date of said construction. During the continuance of construction by an owner, such owner shall require its contractors to maintain the lot in a reasonable clean and uncluttered condition and, to the extent possible, all construction trash and debris shall be kept within refuse containers. Upon completion of construction, such owner shall cause its contractors to immediately remove all equipment, tools, and construction material and debris from the lot on which such construction has been completed.

3.04 Architectural Approval. To preserve the architectural and aesthetic appearance of WOODED COVE ESTATES P.U.D., no construction of improvements of any nature whatsoever shall be commenced or maintained by any owner other than the Developer, with respect to the construction or affecting the exterior appearance of any dwelling or with respect to any other portion of WOODED COVE ESTATES P.U.D., including, without limitation, the construction or installation of driveways, mail boxes, decks, patios, courtyards, swimming pools, tennis courts, greenhouses, playhouses, awnings, walls, fences, exterior lights, garages, guest or servants' quarters or other outbuildings, nor shall any exterior addition to or change or alteration therein be made unless and until two copies of the plans and specifications and related data showing the nature, color, type, shape, height, materials, and location of the same shall have been submitted to and approved in writing by the Architectural Review Committee. One copy of such plans, specifications, and related data so submitted shall be retained in the records of the Architectural Review Committee, and the other copy shall be returned to the owner marked "approved", "approved as noted" or "disapproved".

a) The Architectural Review Committee may establish a fee of $150.00 for the review of plans and specifications for the construction of any residence building, in part to cover the expense of retaining any architects, engineers, inspectors or attorneys necessary for such review. For reviewing any plans and specifications hereunder, except for construction of a residence building, the Architectural Review Committee waives any fee, but may charge the applicant as a cost of review any fees incurred by the Architectural Review Committee as an out-of-pocket expense for retaining consultants or attorneys as identified above.

b) Notwithstanding the foregoing, an owner may make interior improvements and alterations within his dwelling that do not affect the exterior appearance without the necessity of approval or review by the Architectural Review Committee. The Architectural Review Committee shall have the sole discretion to determine whether plans and specifications submitted for approval are acceptable. Following approval of any plans and specifications by the Architectural Review Committee, representatives of the Architectural Review Committee shall have the right during reasonable hours to enter upon and inspect any lot or other improvements with respect to which construction is under way to determine whether or not the plans and specifications therefore have been approved and are being complied with. In the event the Architectural Review Committee shall determine that such plans and specifications have not been approved or are not being complied with, the Architectural Review Committee shall be entitled to enjoin further construction and to require the removal or correction of any work in places which does not comply with approved plans and specifications.

c) In the event the Architectural Review Committee fails to approve or disapprove in writing any proposed plans or specifications within thirty (30) days after such plans and specifications shall have been submitted, such plans and specifications will be deemed to have been expressly approved, provided the proposed improvements are generally in harmony with the scheme of WOODED COVE ESTATES P.U.D. as set forth in this Declaration. Upon approval of plans and specifications, no further approval under this Article III shall be required with respect thereto, unless such construction has not substantially commenced within six months of the approval of such plans and specifications (e.g. clearing and grading,

pouring of footings, etc.) or unless such plans and specifications are materially altered or changed.

3.05 Landscaping Approval. To preserve the aesthetic appearance of WOODED COVE ESTATES P.U.D., no landscaping, grading, excavation or filling of any nature whatsoever shall be implemented and installed by any owner other than the Developer, unless and until the plans therefore have been submitted to and approved in writing by the Architectural Review Committee. Furthermore, no hedge or shrubbery planting or tree which obstructs sight-lines of streets and roadways within WOODED COVE ESTATES P.U.D. shall be placed or permitted to remain on any lot where such hedge, shrubbery or tree interferes with traffic sight-line, including sight-lines at the intersection of a driveway and a road or street in WOODED COVE ESTATES P.U.D.. No owner other than the Developer shall be entitled to cut, remove or mutilate any trees, shrubs, bushes or other vegetation having a trunk diameter of six inches or more at a point of four feet above ground level, without obtaining the prior approval of the Architectural Review Committee, except as set forth in the preceding sentence and provided further that dead or diseased trees as well as other dead or diseased shrubs, bushes or other vegetation, shall be cut and removed promptly.

3.06 Building Restrictions. All dwellings and other structures shall be constructed in compliance with any and all applicable state, county, and municipal zoning and building restrictions and any applicable governmental agencies. No dwelling shall be erected which is more than two and one-half stories or thirty-five feet in height, whichever is lesser.

The ground floor area of the dwelling exclusive of attached garage, carports, terraces, and exterior breezeways shall be:

i) for one story dwelling – not less than 2,000 square feet;

ii) for dwellings of more than one story – not less than 1,200 square feet on the ground floor and the total living area shall be not less than 2,300 square feet.

Even though a proposed building complies with these minimum height and size restrictions, the Architectural Review Committee retains sole discretion to determine whether the plans and specifications are to be approved.

No exterior portion of any building, structure or other improvement (except driveways) located on or with respect to any lot shall be located other than as by the applicable set-back line restrictions as set forth on the plat or herein provided that the Architectural Review Committee shall be empowered to grant variances with respect to such set-back line restrictions in its sole and absolute discretion. To assure that dwellings and other structures will be located so that the maximum view, privacy, and breeze will be available to each dwelling or structure, dwellings and structures must take into consideration the location of trees and vegetation and other aesthetic and environmental considerations, as well as the precise site and location of any dwelling or structures within WOODED COVE ESTATES P.U.D. The Architectural Review Committee shall have the authority to determine such locations for dwellings and structures. In addition, all residential structures constructed on a lot shall: (i) have a minimum lowest floor elevation including basement above the flood protection elevation, and (ii) be designed and constructed in compliance with the requirements of any building code related to construction in flood hazard areas, if any are applicable.

3.07 Outbuildings. Any storage buildings, outbuildings or detached garages, prior to the erection of same have to be reviewed by the Architectural Review Committee and if approved must be located within the rear yard, or at a location approved by the Architectural Review Committee, and shall have the front elevation built of the same material as the main residence building, or of materials as approved by the Architectural Review Committee.

3.08 Use of Lots and Dwellings. Each lot shall be used for residential purposes only, and no trade or business of any kind may be carried on therein. No more than one dwelling shall be located on any lot. The use of a portion of a dwelling as an office by an owner or his tenant shall not be considered to be in violation of this covenant if such use does not create regular customer, client or employee traffic. The use of a dwelling or a portion thereof for business meetings, entertainment or the enjoyment or business of the owner's employees, trustees, agents, clients or customers shall not be considered to be a violation of this covenant if such use does not create regular customer, client or employee traffic. Lease or rental of a dwelling for residential purposes shall also not be considered to be a violation of this covenant so long as the lease (i) is for not less than the entire dwelling and all the improvements thereon, (ii) is for the term of at least six months, and (iii) is otherwise in compliance with rules and regulations as may be promulgated and published from time to time by the Architectural Review Committee.

3.09 Exterior Appearance. The owner must submit a plan of any proposed fencing to the Architectural Review Committee for approval; such plan must show the dimensions, location in relation to the dwelling, color and type of material to be used. All swimming pools and tennis courts may have such fencing as required by the proper governmental agency. No projections of any type shall be placed or permitted to remain above the roof of any improvements, except approved chimneys or vent stacks.

3.10 Signs. Except as may be required by legal proceedings, no signs or advertising posters of any kind shall be maintained or permitted within any windows, on the exterior of any improvements located within WOODED COVE ESTATES P.U.D. without the express written permission of the Architectural Review Committee. The approval of any signs and posters, including, without limitation, name and address signs, shall be upon such conditions as may be from time to time determined by the Architectural Review Committee and may be arbitrarily withheld.

3.11 Antennas. Any satellite dish or other radio or television transmitter or receiver (except for television antenna) must be placed in the rear yard and reasonably screened in order to conceal them from view from roads and adjacent lots. Radio or television signals or any other form of electromagnetic radiation shall not be permitted to originate from any lot, which may unreasonably interfere with the reception of television or radio signals within WOODED COVE ESTATES P.U.D..

3.12 Animals. Any animals, livestock, birds, or poultry of any kind that are raised, bred or kept by any owner upon any portion of WOODED COVE ESTATES P.U.D. must comply with the regulations for the underlying zoning district. The animals shall be kept or maintained within the dwelling or outbuildings or other appropriate structure. No animals shall be allowed to make unreasonable amounts of noise or to become a nuisance.

3.13 Nuisances. No rubbish or debris of any kind shall be dumped, placed or permitted to accumulate upon any portion of WOODED COVE ESTATES P.U.D., nor shall any nuisance or odors be permitted to exist or operate upon or arise from any portion of WOODED COVE ESTATES P.U.D. so as to render any portion thereof unsanitary, unsightly, offensive or detrimental to persons using or occupying any other portions of WOODED COVE ESTATES P.U.D.. Noxious or offensive activities shall not be carried on in any lot or dwelling or in any part of WOODED COVE ESTATES P.U.D., and each owner, his family, tenants, guests,

invitees, servants, and agents shall refrain from any act or use of a lot or dwelling of WOODED COVE ESTATES P.U.D. which could cause disorderly, unsightly or unkempt conditions or which could cause embarrassment, discomfort, annoyance or nuisance to the occupants of other portions of WOODED COVE ESTATES P.U.D. or which could result in a cancellation of any insurance for any portion of WOODED COVE ESTATES P.U.D. or which would be in violation of any law or governmental code or regulation.

3.14 Motor Vehicles, Trailers, Boats, Etc. Each owner shall provide for parking of at least two automobiles in garages equipped with garage doors prior to occupancy of the dwelling owned or maintained by such owner. All automobiles owned or used by owners or occupants other than temporary guests and visitors shall be parked in garages to the extent that garage space is available. The outside storage or parking of any commercial vehicles of any type, farm equipment, buses, trailers, boats, or any other related forms of transportation devices are expressly prohibited. No owners or other occupants of any portion of WOODED COVE ESTATES P.U.D. shall repair or restore any vehicle of any kind upon or within any lot, except (i) within enclosed garages or workshops or (ii) for emergency repairs, and then only to the extent necessary to enable the movement thereof to a proper repair facility. No unregistered motor vehicles or unlicensed drivers may operate or be used within WOODED COVE ESTATES P.U.D..

3.15 Sales and Construction Activities. Notwithstanding any provisions or restrictions contained in this Declaration to the contrary, it shall be expressly permissible for the Developer and its agents, employees, successors, and assigns to maintain and carry on such facilities and activities as may be reasonably required, convenient or incidental to the completion, improvement, and sale of lots or the developing of lots, including, without limitation, the installation and operation of sales and construction trailers and offices, signs, and model dwellings.

3.16 Multiple Ownership. No lots or dwellings may be sold under any time-sharing, time-interval or similar right-to-use programs.

3.17 Developer's Right to Vary. Developer or Declarant shall have the right, at its option and discretion and without regard to any prior construction or development of any building site, to alter, vary and/or waive any of the requirements, restrictions or other provisions set forth in the Article III with respect to any building site; and no owner of a building site with respect to which such alteration, variance and/or waiver was not granted shall have any claim or cause of

action against Developer by reason of the granting of such alteration, variance and/or waiver.

ARTICLE IV

DURATION OF RESTRICTIONS

4.01 Each of the conditions, covenants, reservations, and easements contained in this Declaration shall continue in full force and effect and be binding upon all owners and their successors and assigns and shall be a covenant running with the land for twenty years from the recording of this Declaration in the office of the Recorder of Deeds of Will County, Joliet, Illinois, and may or shall be terminated or modified in any respect by the Declarant, Developer or their respective successors or assigns.

ARTICLE V

MISCELLANEOUS

5.01 Partial Invalidity. Invalidation of any of this Declaration or any part thereof by judgment or court order shall in no way affect any of the other provisions, all of which shall remain in full force and effect.

5.02 Interpretation. Any discrepancy, conflict or ambiguity which may be found herein shall be resolved and determined by Developer and, in the absence of an adjudication by a court of competent jurisdiction to the contrary, such resolution and determination shall be final.

5.03 Captions. The captions and organizational numbers and letters appearing in this Declaration are inserted only as a matter of convenience and neither in any way define, limit, construe or describe the scope or intent of this Declaration nor in any way modify or affect this Declaration.

5.04 Governing Law. This Declaration and the rights of the owners shall be governed by the laws of the State of Illinois.

5.05 No Obligation to Develop. Notwithstanding the provisions and intentions of this Declaration, no provision herein shall be deemed to require,

either expressly or implied, Developer to improve, construct and/or develop all or any portion of WOODED COVE ESTATES P.U.D. in any manner whatsoever, except to the extent of restrictions set forth in this Declaration and as required by appropriate subdivision and building code requirements of the proper governmental agency.

5.06 Notices. Any notice or other communication required to be sent to any owner under the provisions of this instrument shall be deemed to have been properly sent when mailed, postage paid, to the last known address of the person who appears as owner on the records of Developer at the time of such mailing. Notice to the Developer shall be sent in the same manner addressed to Developer at such address of which Developer shall have notified the owners in the aforesaid manner.

5.07 Repurchase Rights.

a) If, within 180 days (construction period) after the date on which an owner shall begin construction on a building site, the owner (defaulting owner) shall fail substantially to complete construction upon such subject building site of the building and other improvements which have been approved for the construction thereon by Developer pursuant to the provisions of Article III, and if such failure continues for more than 120 days (grace period) after Developer has sent to the defaulting owner written notice of such failure, Developer, its successors and assigns, shall have the right, at Developer's sole option, (repurchase option) to re-acquire all of the subject building site from the defaulting owner by the defaulting owner's general warranty deed, together with any unpaid awards the defaulting owner may be entitled to against any condemning authority by reason of a taking of any portion of the subject building site.

b) The purchase price payable by Developer to the defaulting owner in the event Developer shall exercise the repurchase option shall be equal to the purchase price paid by the defaulting owner to Developer for the subject building site, less the amount of any condemnation award received by the defaulting owner, plus all actual and direct costs of construction paid by the defaulting owner for any building and improvements theretofore constructed on the subject building site.

c) The repurchase option shall be exercisable by Developer sending to the defaulting owner within 120 days after the expiration of the

grace period written notice of such exercise in accordance with the provisions of Section above.

d) Within sixty days after the exercise of the repurchase option by Developer, closing shall occur and the defaulting owner shall tender to Developer at the offices of Developer's attorney in Will County, Illinois, the defaulting owner's general warranty deed conveying to Developer, or its successors or assigns, the subject building site, together with such structures as the defaulting owner shall have erected or partially erected thereon. Title to the subject building site at the time of closing shall be good and marketable subject only to such title exceptions as were excepted in connection with Developer's initial conveyance of the subject building site to the defaulting owner.

e) The construction period shall be extended for such additional time as is equal to time lost by the owner or the defaulting owner's contractors or suppliers in connection with the construction of the buildings and improvements upon the subject building site due to strikes or other labor troubles, governmental restrictions and limitations, scarcity of labor or materials, war or other national emergency, accidents, casualties, weather conditions or any cause similar or dissimilar to the foregoing beyond the reasonable control of the defaulting owner or defaulting owner's contractors or supplies or resulting from Developer's fault.

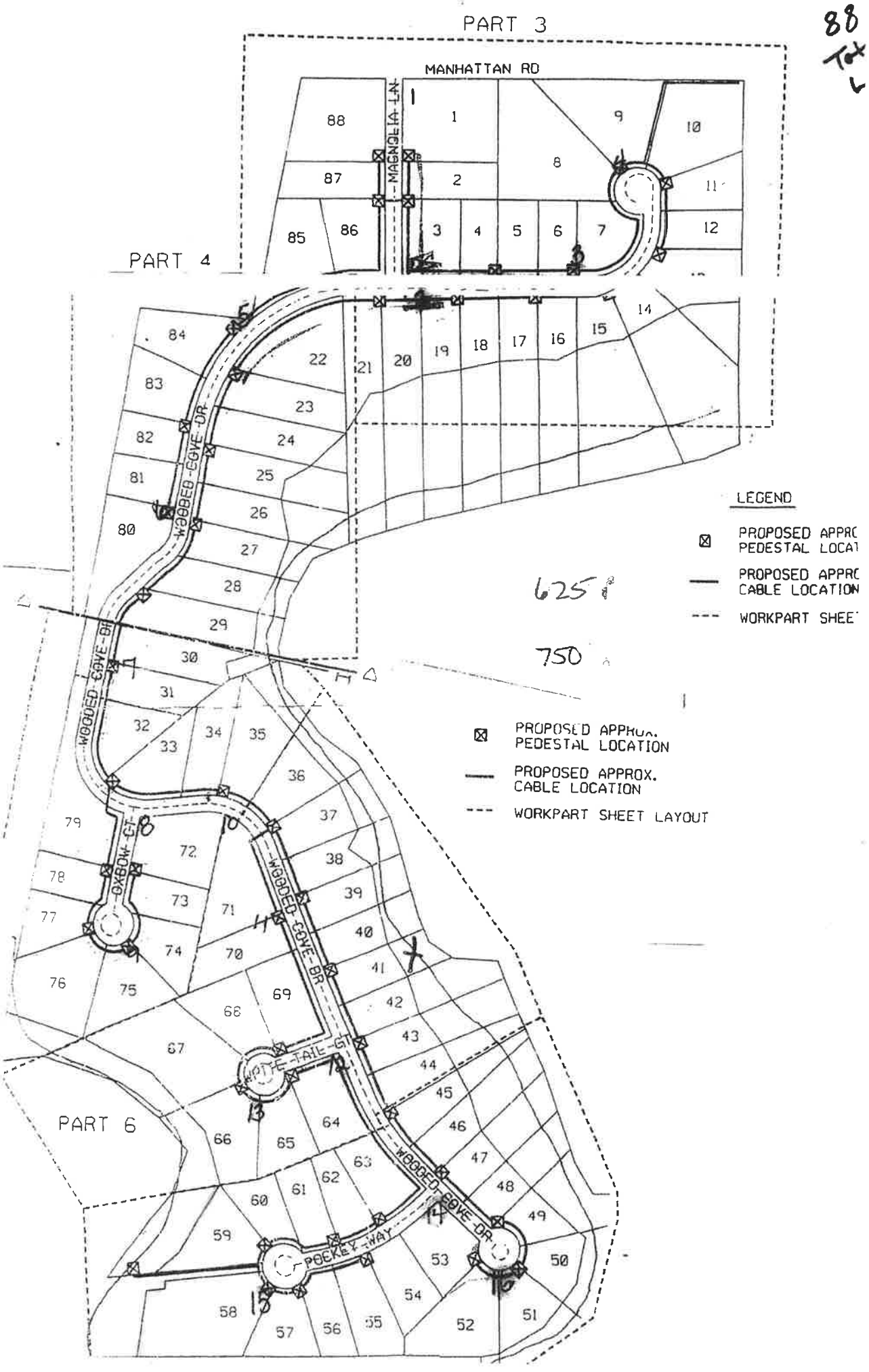
5.08 Successors and Assigns. Subject to the prior rights of Developer set forth herein, including, without limitation, the rights of Developer to grant approvals, to enforce this Declaration, to waive enforcement of this Declaration, or to add or remove land from this Declaration, this Declaration shall be binding upon and shall inure to the benefit of the owners and their respective heirs, executors, personal representatives, successors, and assigns; and shall be binding upon (but shall not be for the benefit of or enforceable by) any of said owners.

5.09 Enforcement. In the event any building site owner fails to adhere to any and/or all of these restrictions and covenants, the Developer or any building site owner or the Association, if any, shall have the right jointly and separately to remedy the violation or sue to have the violation remedied and lien the owner's property for the cost of materials, labor and/or fees expended, including, but not limited to, legal fees necessary to enforce said lien and these restrictions and covenants.

5.10 Amendment or Abrogation. Any of the restrictions and covenants herein contained may be amended or abrogated upon the approval of the Developer(so long as Developer owns at least one building site in Wooded Cove Estates P.U.D.) or at least seventy-five percent(75%) of the building site owners in Wooded Cove Estates P.U.D. (each building site constituting one vote), provided such approval shall be by an instrument in writing, signed, acknowledged and recorded by the Developer or said owners, as the case may be. The invalidation of any one or more of the restrictions herein by any Court of competent jurisdiction shall not in any manner affect the validity of the other restrictions herein set forth.

5.11 Option to Form Association. Upon the approval of at least seventy-five percent (75%) of the building site owners in Wooded Cove Estates P.U.D. (each building site constituting one vote), provided such approval shall be by an instrument in writing, signed, acknowledged and recorded by said owners, the building site owners may elect to form an Association (which may or may not be incorporated), to enforce these covenants and restrictions; to perform such other activities customarily undertaken by a common interest community association; and to levy assessments in aid thereof.

THIS INSTRUMENT PREPARED BY
AND RETURN TO:
Woodcove Development Corporation
C/o JEFFREY J. ALLEN, President
22961 S. Althea Court
Minooka, Illinois 60447
815/467-9351


PART 3
MANHATTAN RD
MAGNOLIA LN
PART 4
WOODED COVE DR
OXBOW CT
WOODED COVE BR
WHITE TAIL ST
POCKET WAY
WOODED COVE DR
PART 6
LEGEND
PROPOSED APPRO PEDESTAL LOCA
PROPOSED APPRO CABLE LOCATION
WORKPART SHEE
625'
750'
PROPOSED APPROX. PEDESTAL LOCATION
PROPOSED APPROX. CABLE LOCATION
WORKPART SHEET LAYOUT

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Arthur J. & Joyce Bergeson
19921 Munch Ln.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Joyce Bergeson

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
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- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Rita K. McPherson Trust
19903 W. Munch Ln.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Rita K. McPherson

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

James A. Fanning, Jr.
20305 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5847

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X James A Fanning Jr

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

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Thank you for using Return Receipt Service.

SENDER:
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- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

John G. & Christine Putman
20112 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5899

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-26-02

5. Received By: (Print Name)
John Putman

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

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SENDER:
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- Write "Return Receipt Requested" on the mailpiece below the article number.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

William G. & Billie J. Griffiths
20233 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5912

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-26-02

5. Received By: (Print Name)
William G Griffiths

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X William G Griffiths

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jeffrey A. Shackelford
20048 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5837

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)
Jeff Shackelford

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

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SENDER:
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- Complete items 3, 4a, and 4b.
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2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Edward & Lillian Kanive
19934 Munch Ln.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

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- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jeffrey S. Sartori
20064 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5752

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)
Jeff Sartori

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mary T. Keigher
20336 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 6018

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Russell R. & Michelle Vanderhyden
20030 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number
7000 1530 0000 5794 5762

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-25-02

5. Received By: (Print Name)
Russ Vanderhyden

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 102595-98-B-0229 Domestic Return Receipt

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Gerald & Edith Vanderhyden
25045 S. Bush Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5-25-02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Gerald Vanderhyden

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Lois T. Jones
318 S. Bluffs Edge Dr.
PO Box 134
Lake Forest, IL 60045

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

LAKE FOREST IL 30 2002 USPS

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Village of Elwood
PO Box 435
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5/25/02

5. Received By: (Print Name): Pat Buchenau

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X PAT BUCHENAU

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Thomas J. Kinsella
15639 W. Baker Rd.
Manhattan, IL 60442

4a. Article Number: 70001530 0000 5794 5803

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5/28/02

5. Received By: (Print Name): Thomas Kinsella

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Thomas J. Kinsella

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
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I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Homes by Chalen
Trust 6010
PO Box 3459
Joliet, IL 60434

JOLIET IL 60435 MAY 28 2002 USPS

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

NLSB
Trust 110
PO Box 339
New Lenox, IL 60451

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: (Print Name): Barry A. Dumbe

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Barry A. Dumbe

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Level 3 Comm. LLC
C/O Sue Fernandez/Taxes
1025 El Dorado Blvd.
Broomfield, CO 80021

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☒ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5-28-2

5. Received By: (Print Name): G. Fisher

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X G. Fisher

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
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- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

ames E. & Nanette Piontkowski
5207 S. Brandon Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5-25-02

5. Received By: (Print Name): EUGENE PIONTKOWSKI

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X Eugene Piontkowski

PS Form 3811, December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
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- Complete items 3, 4a, and 4b.
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- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Craig W. & Tina S. Fanning
25241 S. Brandon Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5/29/02

5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Robert E. & Carol A. Ryan
25044 S. Bush Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 5-28-02

5. Received By: (Print Name): Robert Ryan

8. Addressee's Address (Only if requested and fee is paid)

6. Signature: (Addressee or Agent)
X

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jack R. MCcleery
311 Sapphire Ave.
Balboa Island, CA 92662

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Pete Ferro, Jr.
19941 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

SENDER:
- Complete items 1 and/or 2 for additional services.
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- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Gary L. & Martha J. Schultz
25253 Brandon Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5/28/02

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

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- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

James E. Vanderhyden
20144 W. Manhattan Rd.
Elwood, IL 60421

4a. Article Number

4b. Service Type
☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery
5-28-02

5. Received By: *(Print Name)*
James Vanderhyden

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 102595-98-B-0229 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse

Thank you for using Return Receipt Service.

VILLAGE OF ELWOOD

P. O. BOX 435
ELWOOD, ILLINOIS 60421
(815) 423-5011
FAX (815) 423-6861

March 12, 2003

Woodcove Development Corporation
22961 S. Althea Court
Minooka, Il. 60447

ATTN: Jeff Allen

Attached please find copies of bills for the Wooded Cove Development. Also a breakdown of what has been paid by the Village of Elwood.

Total paid was $15,005.00 minus your $4,000.00 Professional Fee Agreement, you owe the Village of Elwood $11,005.00.

Payment on this would be greatly appreciated.

Thank you.

Robert Blum
Village President

Comm in 3/27/03

WOODED COVE

Professional fee Agreement	4000.00	pd	5/13/02
Map amendment	250.00	pd	5/13/02
Special Use	250.00	pd	5/13/02
Preliminary Plat 200 lots plus 88	1080.00	pd	5/13/02
Public Hearing 6/11/02 Zoning Board 6 members	60.00		
Ruettiger Tonelli (April 2002 to June 15, 2002	825.00		
Tyson Eng. (June 2002)	487.50		
Ruettiger Tonelli (June 2002)	325.00		
Tyson Eng. (July 2002)	130.00		
Tyson Eng. (Aug 2002)	325.00		
Tyson Eng. (Sept 2002)	1657.50		
Tyson Eng. (Oct 2002)	3317.50		
Tyson Eng. (Nov 2002)	3512.50		
Tyson Eng. (Dec 2002)	2085.00		
Tyson Eng. (Jan 2003)	2280.00		

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners
Landscape Architects/G.I.S. Consultants

2174 Oneida St. * Joliet, IL 60435

Phone 815-744-6600 Fax 815-744-0101

Invoice

June 19, 2002
Project No: 20021075.00
Invoice No: 0001075

Village of Elwood
P.O. Box 435
Elwood, IL 60421

Wooded Cove Estates Rezoning and PUD
Professional services from April 28, 2002 to June 15, 2002

Professional Personnel

		Hours	Rate	Amount	
Professional Planner RT					
Tonelli, Rod	5/20/02	2.00	100.00	200.00	
Review Preliminary Plat and Zoning submittal					
Tonelli, Rod	5/22/02	1.00	100.00	100.00	
Phone with John Kolata, Pat Buchneau, Jeff Allen re: schedule for zoning and plat hearing					
Tonelli, Rod	5/23/02	0.25	100.00	25.00	
Phone with Jeff Allen re: Notification letters and public hearing					
Tonelli, Rod	6/6/02	0.50	100.00	50.00	
Phone with Jeff Allen, John Kolata re: zoning hearing					
Tonelli, Rod	6/11/02	3.00	100.00	300.00	
Prepare for and attend Plan Commission					
Senior Planner					
Strassman, Joel	5/30/02	2.00	75.00	150.00	
legal notice, neighboring property owners letter					
Totals		8.75		825.00	
Total Labor					**825.00**

Total this invoice **825.00**

TERMS: NET 15 DAYS; 1 1/2% PER MONTH THEREAFTER

PLEASE INCLUDE INVOICE NUMBER ON REMITTANCE

RUETTIGER, TONELLI & ASSOCIATES, INC.
Land Surveyors/Engineers/Planners
Landscape Architects/G.I.S. Consultants

2174 Oneida St. * Joliet, IL 60435

Phone 815-744-6600 Fax 815-744-0101

Invoice

July 26, 2002
Project No: 20021075.00
Invoice No: 0001567

Village of Elwood
P.O. Box 435
Elwood, IL 60421

Wooded Cove Estates Rezoning and PUD
Professional services from June 2, 2002 to June 29, 2002

Professional Personnel

		Hours	Rate	Amount	
Professional Planner RT					
Tonelli, Rod	6/25/02	0.25	100.00	25.00	
Phone with Jeff Allen re: wooded cove status, ord. questions					
Tonelli, Rod	6/26/02	2.00	100.00	200.00	
Prepare for and attend Board Workshop re: Preliminary Plat					
Tonelli, Rod	6/28/02	1.00	100.00	100.00	
Review draft of ordinances from Village attorney/Phone with Ed Graham					
Totals		3.25		325.00	
Total Labor					**325.00**

Total this invoice **325.00**

TERMS: NET 15 DAYS; 1 1/2% PER MONTH THEREAFTER

PLEASE INCLUDE INVOICE NUMBER ON REMITTANCE

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 35894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900588

DAVID A. NOBLE, Vice President
ILLINOIS
Registered Prof. Engineer No. 45313

JOHN C. BARRETT, Vice President
ILLINOIS
Registered Prof. Land Surveyor No. 2997

LANCE G. BEIGH
ILLINOIS
Registered Prof. Engineer No. 48363

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

INVOICE #3

July 08, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOOD COVE, ELWOOD, ILLINOIS**

PLAN REVIEW SERVICES PROVIDED DURING JUNE, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Graduate Engineer	7.50	$65.00	$487.50

***** Current Project Invoice Amount** $487.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 35894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900588

DAVID A. NOBLE, Vice President
ILLINOIS
Registered Prof. Engineer No. 45313

JOHN C. BARRETT, Vice President
ILLINOIS
Registered Prof. Land Surveyor No. 2997

LANCE G. BEIGH
ILLINOIS
Registered Prof. Engineer No. 48363

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

INVOICE #4

August 13, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOOD COVE, ELWOOD, ILLINOIS**

PLAN REVIEW SERVICES PROVIDED DURING JULY, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Graduate Engineer	2.00	$65.00	$130.00

***** Current Project Invoice Amount** $130.00

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 35894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900588

DAVID A. NOBLE, Vice President
ILLINOIS
Registered Prof. Engineer No. 45313

JOHN C. BARRETT, Vice President
ILLINOIS
Registered Prof. Land Surveyor No. 2997

LANCE G. BEIGH
ILLINOIS
Registered Prof. Engineer No. 48363

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

INVOICE #5

September 12, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

PLAN REVIEW SERVICES PROVIDED DURING AUGUST, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Graduate Engineer	5.00	$65.00	$325.00

***** Current Project Invoice Amount** $325.00

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

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E-Mail: tysoneng@keynet.net

INVOICE #6

October 09, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

PLAN REVIEW AND CONSTRUCTION INSPECTION SERVICES PROVIDED DURING SEPTEMBER, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Graduate Engineer	25.50	$65.00	$1,657.50

***** Current Project Invoice Amount** $1,657.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

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(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

INVOICE #6

October 09, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

PLAN REVIEW AND CONSTRUCTION INSPECTION SERVICES PROVIDED DURING SEPTEMBER, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Graduate Engineer	25.50	$65.00	$1,657.50

***** Current Project Invoice Amount** $1,657.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

TYSON ENGINEERING INC.

Since 1952

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Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

INVOICE #7

November 12, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

PLAN REVIEW AND CONSTRUCTION INSPECTION SERVICES PROVIDED DURING OCTOBER, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Registered Engineer	2.50	$85.00	$212.50
Graduate Engineer	7.00	$65.00	$455.00
Inspector	53.00	$50.00	$2,650.00

***** Current Project Invoice Amount** $3,317.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

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Registered IL Prof. Engineer No. 55791

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Kankakee, Illinois 60901
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FAX (815) 932-2951
E-Mail: tysoneng@sbcglobal.net

INVOICE #8

December 11, 2002

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

CONSTRUCTION OFFICE AND INSPECTION SERVICES PROVIDED DURING NOVEMBER, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Registered Engineer	2.50	$85.00	$212.50
Inspector	66.00	$50.00	$3,300.00

***** Current Project Invoice Amount** $3,512.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

TYSON ENGINEERING INC.

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Kankakee, Illinois 60901
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FAX (815) 932-2951
E-Mail: tysoneng@sbcglobal.net

INVOICE #9

January 13, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

CONSTRUCTION OFFICE AND INSPECTION SERVICES PROVIDED DURING DECEMBER, 2002

Professional Services -Engineering

	HOURS	RATE	TOTAL
Registered Engineer	1.00	$85.00	$85.00
Inspector	40.00	$50.00	$2,000.00

***** Current Project Invoice Amount** $2,085.00

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

TYSON ENGINEERING INC.

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INVOICE #10

February 11, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

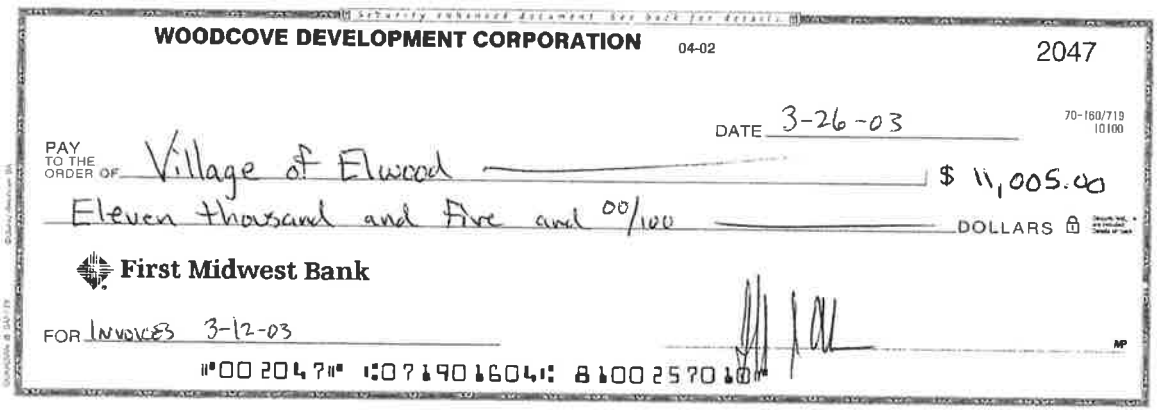
CONSTRUCTION INSPECTION SERVICES PROVIDED DURING JANUARY, 2003

Professional Services -Engineering

	HOURS	RATE	TOTAL
Inspector	38.00	$60.00	$2,280.00

*** **Current Project Invoice Amount** $2,280.00

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.



WOODCOVE DEVELOPMENT CORPORATION 04-02 2047

DATE 3-26-03 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 11,005.00

Eleven thousand and Five and 00/100 DOLLARS

First Midwest Bank

FOR Invoices 3-12-03

⑈002047⑈ ⑆071901604⑆ 8100257016⑈

VILLAGE OF ELWOOD

P. O. BOX 435
ELWOOD, ILLINOIS 60421
(815) 423-5011
FAX (815) 423-6861

April 21, 2003

Woodcove Development Corporation
22961 S. Althea Court
Minooka, Il. 60447

ATTN: Jeff Allen

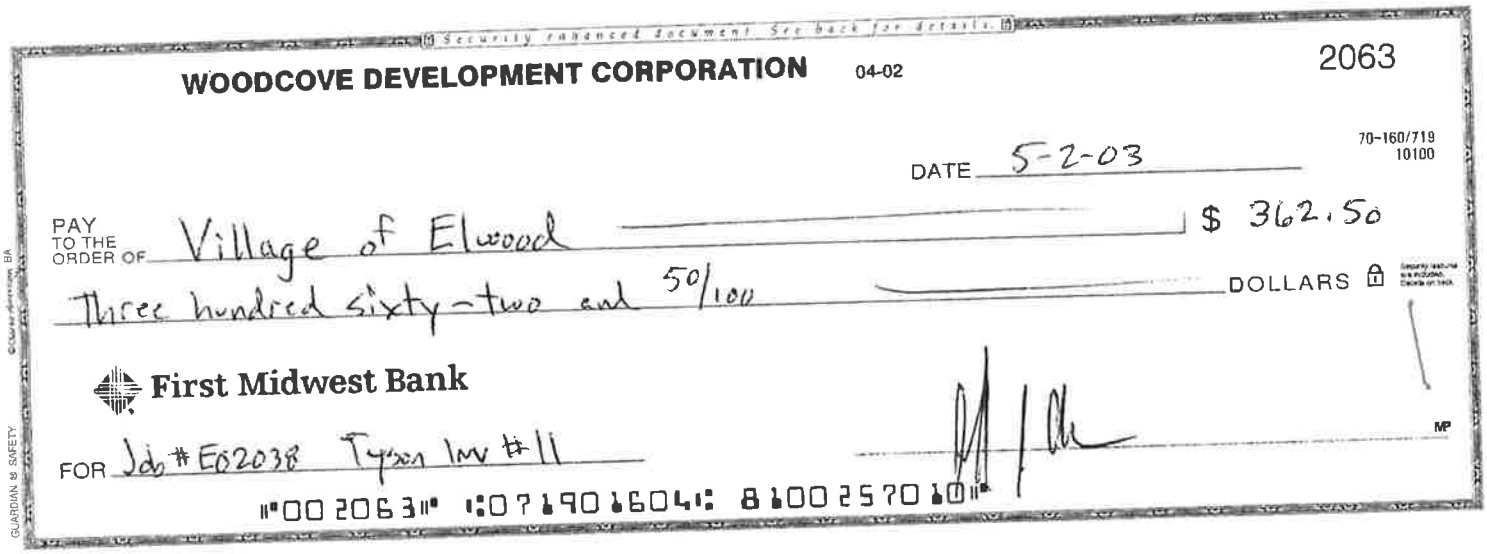
Attached please find a copy of bill for Tyson Engineering for the Wooded Cove Development.

Plan Review Services for February 2003 $ 362.50

Payment on this bill would be greatly appreciated.

Thank you.

Came in 5/5/03



Security enhanced document. See back for details.

WOODCOVE DEVELOPMENT CORPORATION 04-02 2063

70-160/719
10100

DATE 5-2-03

PAY TO THE ORDER OF Village of Elwood $ 362.50

Three hundred sixty-two and 50/100 DOLLARS

First Midwest Bank

FOR Jdo # E02038 Tyson Inv #11

⑈002063⑈ ⑆071901604⑆ 8100257010⑈

GUARDIAN ® SAFETY

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
Registered IL Prof. Engineer No. 35894
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367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@sbcglobal.net

INVOICE #11

March 12, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

PLAN REVIEW SERVICES PROVIDED DURING FEBRUARY, 2003

Professional Services -Engineering

	HOURS	RATE	TOTAL
Registered Engineer	3.50	$85.00	$297.50
Graduate Engineer	1.00	$65.00	$65.00

***** Current Project Invoice Amount** $362.50

All invoices are due net 30 days. A late charge of 1.5%

VILLAGE OF ELWOOD

P. O. BOX 435
ELWOOD, ILLINOIS 60421
(815) 423-5011
FAX (815) 423-6861

August 20, 2003

Woodcove Development Corporation
22961 S. Althea Court
Minooka, Il. 60447

ATTN: Jeff Allen

Attached please find copy of a bill for Tyson Engineering for the Wooded Cove Development for the month of May 2003.

Construction Inspection Services Provided during May 2003	$ 600.00
Total Due	$ 600.00 Come in 9/3/03

Payment on this bill would be greatly appreciated.

Thank you.

Security enhanced document. See back for details.

WOODCOVE DEVELOPMENT CORPORATION 04-02 2106

DATE 8-31-03 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 600.00

Six hundred and 00/100 DOLLARS

First Midwest Bank

FOR INVOICE #14 - TYSON

⑈002106⑈ ⑆071901604⑆ 8100257010⑈

TYSON ENGINEERING INC.

DAVID A. TYSON, President
Registered IL Prof. Engineer No. 35894
Registered IL Prof. Land Surveyor No. 2445
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Registered IL Prof. Engineer No. 55791

Since 1952

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@sbcglobal.net

INVOICE #14

June 11, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: WOODED COVE ESTATES, ELWOOD, ILLINOIS

CONSTRUCTION INSPECTION SERVICES PROVIDED DURING MAY, 2003

Professional Services -Engineering

	HOURS	RATE	TOTAL
Inspector	10.00	$60.00	$600.00

*** **Current Project Invoice Amount** $600.00

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

VILLAGE OF ELWOOD

P. O. BOX 435
ELWOOD, ILLINOIS 60421
(815) 423-5011
FAX (815) 423-6861

June 10, 2003

Woodcove Development Corporation
22961 S. Althea Court
Minooka, Il. 60447

ATTN: Jeff Allen

Attached please find copies of bills for Tyson Engineering for the Wooded Cove Development for the month of March and April.

Plan Review Services for March 2003	$ 1,062.50
Construction Inspection Services for April 2003	1,500.00
Total Due	$ 2,562.50

Approved 6/25/03

Payment on this bill would be greatly appreciated.

Thank you.

Pat

Security enhanced document. See back for details.

WOODCOVE DEVELOPMENT CORPORATION 04-02 2089

DATE 6-25-03 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 2,562.50

Two thousand five hundred sixty-two and 50/100 DOLLARS

First Midwest Bank

FOR Tyson Invoices 12 & 13

⑈002089⑈ ⑆071901604⑆ 8100257060⑈

TYSON ENGINEERING INC.

Since 1952

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INVOICE #12

April 10, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

CONSTRUCTION INSPECTION AND PLAN REVIEW SERVICES PROVIDED DURING MARCH, 2003

Professional Services -Engineering

	HOURS	RATE	TOTAL
Registered Engineer	0.50	$85.00	$42.50
Inspector	17.00	$60.00	$1,020.00

*** Current Project Invoice Amount

$1,062.50

All invoices are due net 30 days. A late charge of 1.5% per month will be added to any unpaid balance after 30 days. Minimum Finance Charge $0.50.

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INVOICE #13

May 12, 2003

VILLAGE OF ELWOOD
201 MISSISSIPPI - P.O. BOX 435
ELWOOD, IL 60421

Account #ELWOOD-V
Job No. E02038

PROJECT: **WOODED COVE ESTATES, ELWOOD, ILLINOIS**

CONSTRUCTION INSPECTION SERVICES PROVIDED DURING APRIL, 2003

Professional Services -Engineering

	HOURS	RATE	TOTAL
Inspector	25.00	$60.00	$1,500.00

***** Current Project Invoice Amount** $1,500.00

All invoic[illegible]

Village of Elwood No. 3401-T

6-28-03

Received of Woodcove Dev. Corp.

Two thousand five hundred sixty two dollars and 50/XX Dollars

Reimbursement for eng. fee

Amount Paid $ 2562.50

Balance Due $

P. B.

Commonwealth Edison Company

Supplement to Rate 25 Contract

Page: 1 OF 1
Supplement Date:
Rate 25 Contract Date:

72160-09001
Account Number

Village of Elwood
Customer Name

Elwood
Town

Shared Billing? Yes No % Shared

Mailing Address:

P.O. Box 435
Elwood, IL 60421

Shared Billing with — Account Number — Customer Name — %
Shared Billing with — Account Number — Customer Name — %
Shared Billing with — Account Number — Customer Name — %
Total %

Lot #	Transformer Number	Size	POS	Lighting Locations or Installation Components	Fac.	Class	Tot Num Lmp	Watts per Con.	Oper Hours	% Oper	Total Kwhrs	% Shared	Billing Kwhrs	Effective Date
	504174A9			21115 S Magnolia Ln	new	Strt	1	146	100	342%	49.932		49.932	
	504174A9			21139 S Magnolia Ln	new	Strt	1	146	100	342%	49.932		49.932	
	504174B7			21220 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B2			21150 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B5			21164 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B5			21242 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B9			21303 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B4			21365 S Oxbow Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174B4			21350 S Oxbow Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174C2			21404 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B6			20150 W White Tail Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174B6			21444 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504202A8			20148 W Pockey Way	new	Strt	1	146	100	342%	49.932		49.932	
	504202A8			21508 S. Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504202A9			21520 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	

Billing, reflecting the establishment or change in facilities above, commencing on the effective data shown, shall be under Rate 25 as on file with the Illinois Commerce Commission and in the Company's schedule of rates.

For the Company
Submitted by: ANNA VELA

Approved by:

For the Customer:
Accepted By: [signature] 4-13-04

Official Capacity: VILLAGE MANAGER
Print or Type

RATE25 Wooded Cove

ComEd
An Exelon Company

Commonwealth Edison Company
Aurora Business Office
2001 Aucutt Road
Montgomery, IL 60538-1191

www.exeloncorp.com

April 8, 2004

Department of public works
Village Clerks Office
Village of Elwood
P.O. Box 435
Elwood, IL 60421

The document indicated below and attached hereto are for your execution:

Supplement to Rate 25

Please sign all copies of the above document in the space indicated "For the Customer" and return ALL copies to me. Approved copies of the above will be returned to you for your files.

Please feel free to contact me at (630) 723 – 2101 if I may be of further assistance.

Sincerely,

Anna Vela

Anna Vela
General Service Representative

AV/dh

STREET LIGHT HOOK-UPS

CABLE — PED CONNECTION

STREET LIGHT

UNDERGROUND UTILITIES	PHONE	DIG NUMBER
JULIE	(800)892-0123	
DIGGER		
PUBLIC UTL		
OTHER		
OTHER		

FOR JOINT WORK—CONFER NUM TO CALL

PREPARED BY EXT

AUTHORIZED BY DATE

MAPPED BY DATE | PD/SER | JWA | SHEET ___ OF ___

TOWN OR TOWNSHIP | PROJECT ID | RO NUMBER | RELATED ORDERS

STATE VERBAL | FOR CONST. | SERVICE REQUEST | DESIGN NUMBER

LOCATION – REASON FOR WORK

WORK ORDER NUMBER

DATE REQUIRED

SPEC BK DATE WO/M

MAP (GS OR BLOCK)

VOLTAGE
- [S] EC [4] KV
- [T] SW [12] KV
- [C] ONV/M [34.5] KV

SCHEDULE GROUP

WORK
- [L] IVE [D] EAD

STATUS
- [I] NTERRUPTION
- [S] WITCH/PARALLEL
- [P] ORTABLE
- [N] OT APPLICABLE

ACCESS
- [A] CCESSIBLE
- [P] ARTLY ACCESS
- [N] OT ACCESS

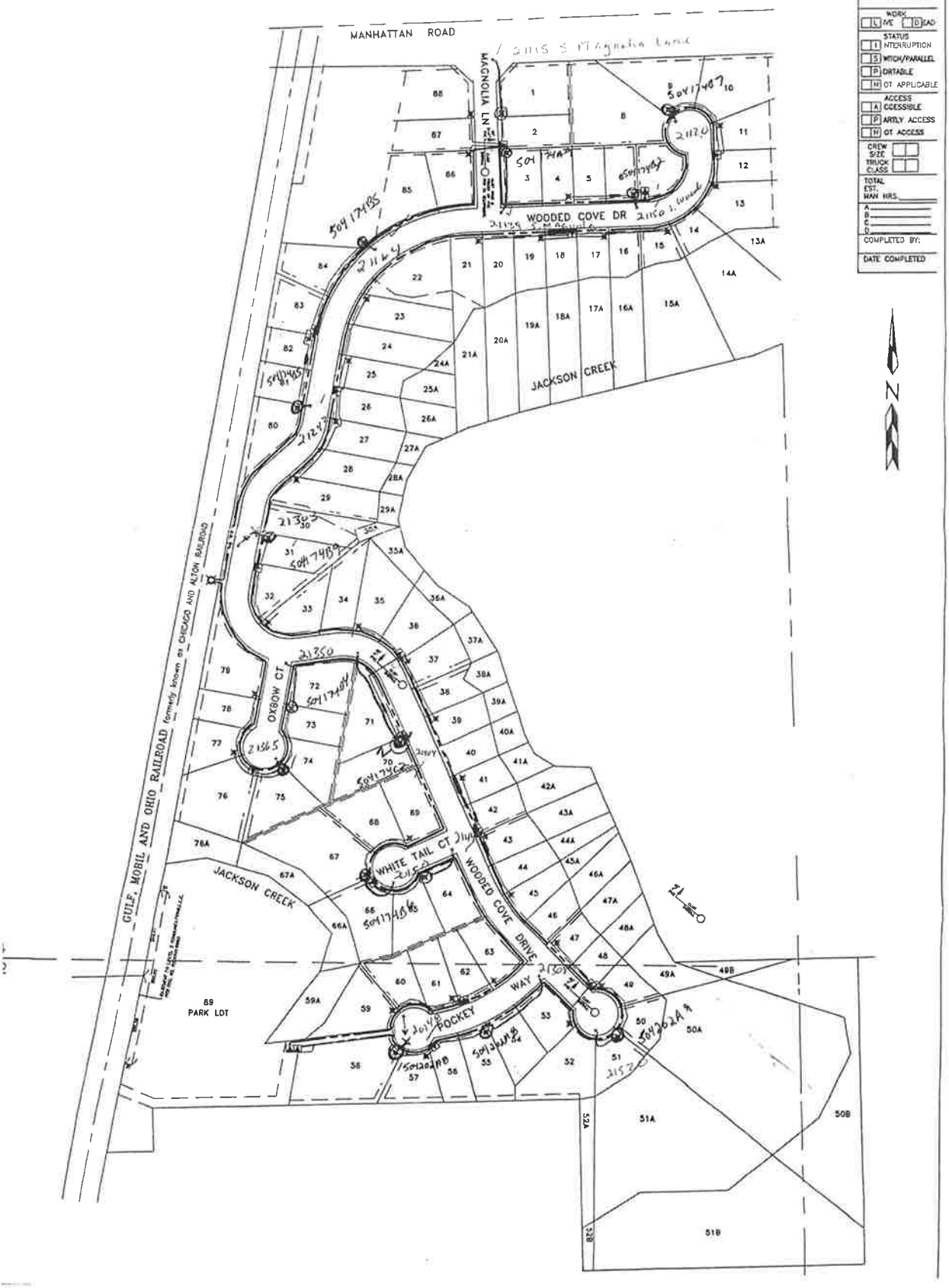
CREW SIZE
TRUCK CLASS

TOTAL EST. MAN HRS.

A
B
C
D

COMPLETED BY:

DATE COMPLETED



WOODED COVE SUB.

Commonwealth Edison Company

Supplement to Rate 25 Contract

CUSTOMER COPY

Page: 1 OF 1
Supplement Date:
Rate 25 Contract Date:

72160-09001
Account Number

Village of Elwood
Customer Name

Elwood
Town

Shared Billing? Yes No % Shared

Mailing Address:

P.O. Box 435
Elwood, IL 60421

Shared Billing with Account Number Customer Name %

Shared Billing with Account Number Customer Name %

Shared Billing with Account Number Customer Name %

Total %

Lot #	Transformer Number	Size	POS	Lighting Locations or Installation Components	Fac.	Class	Tot Num Lmp	Watts per Con.	Oper Hours	% Oper	Total Kwhrs	% Shared	Billing Kwhrs	Effective Date
	504174A9			21115 S Magnolia Ln	new	Strt	1	146	100	342%	49.932		49.932	
	504174A9			21139 S Magnolia Ln	new	Strt	1	146	100	342%	49.932		49.932	
	504174B7			21220 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B2			21150 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B5			21164 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B5			21242 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B9			21303 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B4			21365 S Oxbow Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174B4			21350 S Oxbow Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174C2			21404 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504174B6			20150 W White Tail Ct	new	Strt	1	146	100	342%	49.932		49.932	
	504174B6			21444 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504202A8			20148 W Pockey Way	new	Strt	1	146	100	342%	49.932		49.932	
	504202A8			21508 S. Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	
	504202A9			21520 S Wooded Cove Dr	new	Strt	1	146	100	342%	49.932		49.932	

Billing, reflecting the establishment or change in facilities above, commencing on the effective data shown, shall be under Rate 25 as on file with the Illinois Commerce Commission and in the Company's schedule of rates.

For the Company
Submitted by: ANNA VELA

Approved by: FOR Gary Szafranski / R.D.S. Manager

For the Customer:
Accepted By: [signature] 4-13-04

Official Capacity: VILLAGE MANAGER
Print or Type

RATE25 Wooded Cove

CC: JEFF ALLEN

WOODED COVE

Professional Fee Agreement		4000.00	pd	5/13/02
Map Amendment		250.00	pd	5/13/02
Special Use		250.00	pd	5/13/02
Preliminary Plat	200 lots @ $5.40	1080.00	pd	5/13/02
Public Hearing 6/11/02 Zoning Board 6 Members		60.00		
Ruettiger Tonelli (April 2002 to June 15, 2002		825.00		
Tyson Eng. (June 2002)		487.50		
Ruettiger Tonelli (June 2002)		325.00		
Tyson Eng. (July 2002)		130.00		
Tyson Eng. (Aug. 2002)		325.00		
Tyson Eng. (Sept 2002)		1657.50		
Tyson Eng. (Oct 2002)		3317.50		
Tyson Eng. (Nov. 2002)		3512.50		
Tyson Eng. (Dec 2002)		2085.00		
Tyson Eng. (Jan 2003)		2280.00		

	Total	15005.00
	Already paid 5/13/02	4000.00
		11005.00
	3/21/03 Received pd ck 2047	11005.00
	Tyson Eng. (Fee. 2083)	362.50
	5/5/03 Received pd ck 2063	362.00
	Tyson Eng. March 2003	1062.50
	April 2003	1500.00
		2562.50
	6/28/03 Received pd ck 2089	
	Tyson Eng. May 2003	600.00
	9/5/03 Received pd ck 2106	

WOODED COVE

© WILSON JONES 30-24 WHITE G30-24 GREEN

JUNE 14-04			
INV.	87429	1242.08	
INV.	85299	204.75	
INV.	89306	645.56	
		2092.39	Ref ck 2181
DEC. 30, 04			
INV.	94119	458.07	Ref ck 2211
JAN 17-05			
INV.	92093	377.48	Ref ck 2213
FEB. 21-05			
INV.	96843	356.27	Ref ck 2214
MAY 24-2005			
PHONE BILLS FOR LIFT STATIONS AT WOODED COVE		115.52	Ref ck 2231
OCT. 12, 2005			
BAXTER WOODMAN PHONE BILLS		$86.89	
		146.32	
		1033.21	Ref ck 2247

Voo. 2005-

Inv. 1048.54

Inv. 105-731

1378.59

1357.71

2736.30

Paid 2248

Village of Elwood
• *Established 1889* •
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P.O. Box 435 Elwood, IL 60421 • (815) 423-5011 • Fax: (815) 423-6861

November 29, 2005

Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimubursement of Engineering Fees

Attached please find a copy of engineering fee for Baxter Woodman for services at Wooded Cove Development.

Baxter Woodman	Invoice 104854	$ 1,378.59
Baxter Woodman	Invoice 105731	1,357.71
	Total Due	$ 2,736.30

Any questions, please feel free to contact our office.

Pat Buchenau
Village Clerk

Village of Elwood R 1977
12-7-05
Received of Woodcove Development
Two thousand seven hundred thirty six dollars and 30/xx Dollars
for payment on my bill
Amount Paid $ 2736.30
Balance Due $ (0 2248)
P. B.

Village President *Village Clerk*

BAXTER & WOODMAN
Consulting Engineers

Invoice Date: November 08, 2005
Invoice Number: 104854

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$452.90
Employee and general overhead is 200.00% of $452.90 or	$905.80
Professional Services	1,358.70
Expenses	$19.89
Total Now Due	**$1,378.59**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood
Project: 030598 / 001
Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing				
	10/15/2005	Secretary	2.00	37.60
General Construction Admin.				
	10/15/2005	Principal	2.50	144.58
	10/15/2005	Construction Manager	3.00	113.58
Fld Observation-Part Time				
	10/15/2005	Engineer, Staff	6.00	157.14
			13.50	$452.90
Total Professional Services			13.50	$452.90

Reimbursables

Expense		Period Ending	Charge
Mileage	Dennis Dabros	10/15/2005	$19.89
Total Reimbursables			$19.89

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

BAXTER
WOODMAN
Consulting Engineers

Invoice Date: November 23, 2005
Invoice Number: 105731

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$442.06
Employee and general overhead is 200.00% of $442.06 or	$884.12
Professional Services	1,326.18
Expenses	$31.53
Total Now Due	**$1,357.71**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood
Project: 030598 / 001
Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing				
	10/29/2005	Secretary	1.50	28.20
General Construction Admin.				
	11/12/2005	Principal	0.25	14.46
Fld Observation-Part Time				
	10/29/2005	Engineer, Staff	5.25	137.50
	11/12/2005	Engineer, Staff	10.00	261.90
			17.00	$442.06
Total Professional Services			17.00	$442.06

Reimbursables

Expense		Period Ending	Charge
Mileage	Dennis Dabros	10/29/2005	$13.10
Mileage	Dennis Dabros	11/12/2005	$18.43
Total Reimbursables			$31.53

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

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October 12, 2005

Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees
Reimbursement of Phone Bills for Lift Stations

Attached please find a copy of engineering fee for Baxter Woodman for services at Wooded Cove Development.

Baxter Woodman	Invoice 103718	$ 886.89
Phone Bills for Lift Station	424-0191	$ 73.17
Phone Bills for Lift Station	424-0192	$ 73.15
Amount Due		$ 1,033.21

Any questions, please feel free to contact our office.

Village of Elwood R 1976
12-7-05
Received of Woodcove Development
One Thousand thirty three 21/xx Dollars
for Payment on
eng. fee
Amount Paid $ 1033.21
Balance Due $ (ck 2247)
P.B

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February 21, 2005

Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees

Attached please find a copy of engineering fees for Baxter Woodman for services at Wooded Cove Development. Invoice 96843 for the amount of $350.27.

Any questions, please feel free to contact our office.

Pat Buchenau
Pat Buchenau
Village Clerk

WOODCOVE DEVELOPMENT CORPORATION 04-02 2214

Security enhanced document. See back for details.

DATE 3-7-05 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 350.27

Three hundred Fifty and 27/100 DOLLARS

First Midwest Bank

FOR Invoice 96843 Baxter Woodman

⑈002214⑈ ⑆071901604⑆ 8100257010⑈

Robert Blum
Village President

Patricia Buchenan
Village Clerk

Robert Nissen
Village Administrator

BAXTER & WOODMAN
Consulting Engineers

Invoice Date: February 16, 2005
Invoice Number: 96843

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$115.54
Employee and general overhead is 200.00% of $115.54 or	$231.08
Professional Services	346.62
Expenses	$3.65
Total Now Due	**$350.27**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood

Project: 030598 / 001

Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing	1/8/2005	Secretary	1.75	32.81
Field Work, General	1/8/2005	Engineer, Staff	1.00	26.12
Letter of Credit	1/8/2005	Construction Manager	1.50	56.61
			4.25	$115.54
Total Professional Services			4.25	$115.54

Reimbursables

Expense		Period Ending	Charge
Mileage	Dennis Dabros	01/08/2005	$3.65
Total Reimbursables			$3.65

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

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January 17, 2005

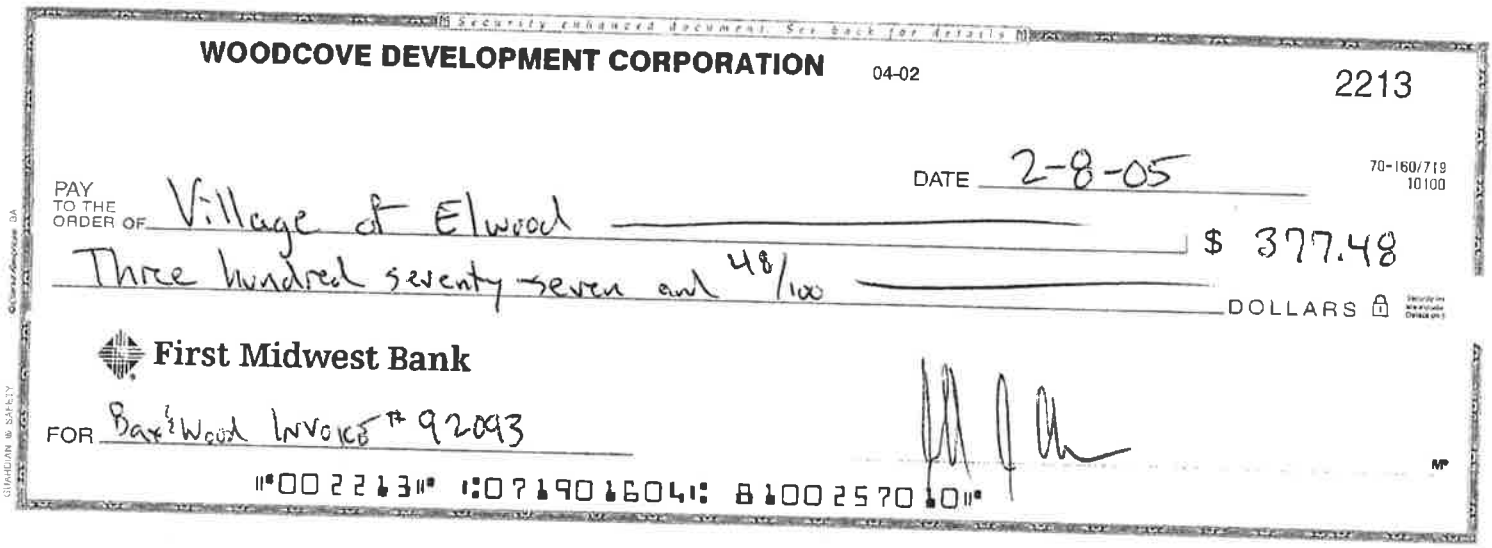
Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees

Attached please find a copy of engineering fee for Baxter Woodman for services at Wooded Cove Development. Invoice 92093 for the amount of $377.48.

Any questions, please feel free to contact our office.

Pat Buchenau
Village Clerk


Security enhanced document. See back for details.

WOODCOVE DEVELOPMENT CORPORATION 04-02 2213

DATE 2-8-05 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 377.48

Three hundred seventy-seven and 48/100 DOLLARS

First Midwest Bank

FOR Baxt Wood Invoice # 92093

⑈002213⑈ ⑆071901604⑆ 8100257010⑈

BAXTER
WOODMAN
Consulting Engineers

Invoice Date: September 14, 2004
Invoice Number: 92093

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$123.80
Employee and general overhead is 200.00% of $123.80 or	$247.60
Professional Services	371.40
Expenses	$6.08
Total Now Due	**$377.48**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood
Project: 030598 / 001
Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing				
	8/21/2004	Secretary	1.50	27.14
Normal Shop Drawing Review				
	8/21/2004	Construction Manager	2.00	72.90
Fld Observation-Part Time				
	8/21/2004	Engineer, Staff	1.00	23.76
			4.50	$123.80
Total Professional Services			4.50	$123.80

Reimbursables

Expense		Period Ending	Charge
Mileage	Dennis Dabros	08/21/2004	$6.08
Total Reimbursables			$6.08

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

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December 30, 2004

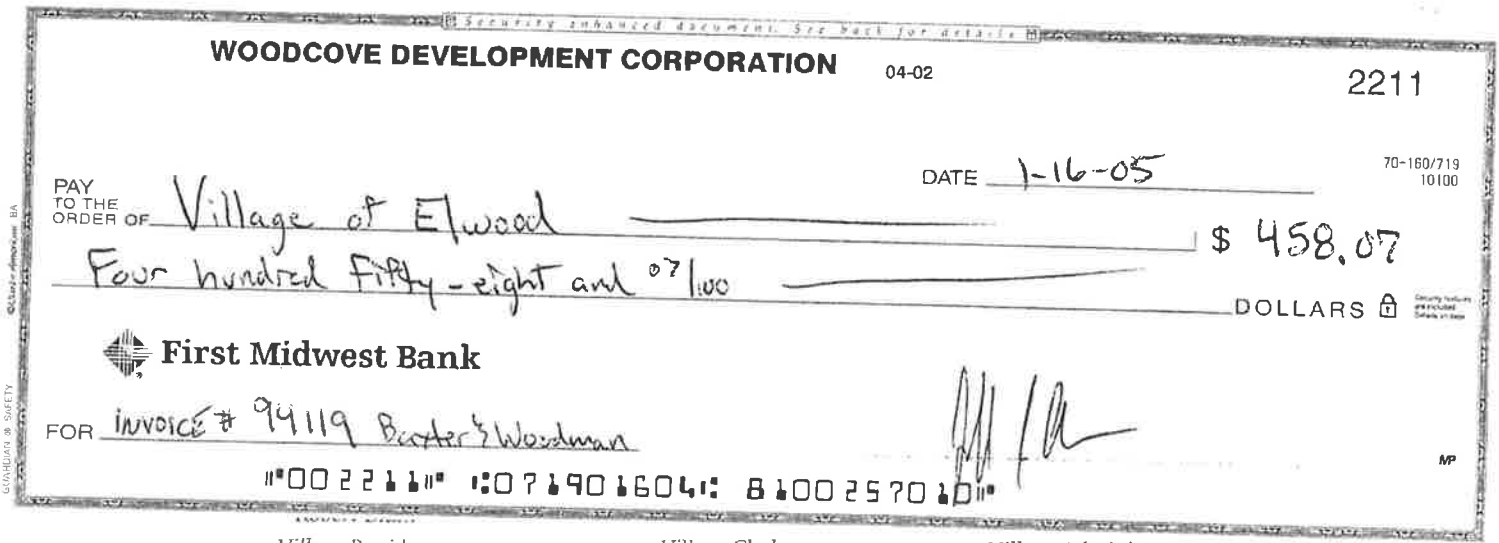
Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees

Attached please find a copy of engineering fee for Baxter Wood for services at Wooded Cove Development. Invoice 94119 for the amount of $458.07.

Any questions, please feel free to contact our office.

Pat Buchenau
Patricia Buchenau
Village Clerk



Security enhanced document. See back for details

WOODCOVE DEVELOPMENT CORPORATION 04-02 2211

DATE 1-16-05 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 458.07

Four hundred fifty-eight and 07/100 DOLLARS

First Midwest Bank

FOR INVOICE # 94119 Baxter & Woodman

⑈002211⑈ ⑆071901604⑆ 8100257010⑈

MP

BAXTER
WOODMAN
Consulting Engineers

Invoice Date: November 12, 2004
Invoice Number: 94119

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$152.69
Employee and general overhead is 200.00% of $152.69 or	$305.38
Professional Services	458.07
Total Now Due	**$458.07**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood

Project: 030598 / 001

Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Design				
Normal Shop Drawing Review				
	10/16/2004	Engineer	3.75	128.93
Construction				
Fld Observation-Part Time				
	10/16/2004	Engineer, Staff	1.00	23.76
Total Professional Services			4.75	$152.69

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

VILLAGE OF ELWOOD
Baxter Woodman
8678 Ridgefield Road

Crystal Lake IL 60012-

Check Date : 12/15/2004 54976
Check Printed : 12/15/2004

Inv Date	Invoice #	Description	Account Debited	RC	Amount
12/15/2004	94119	Wooded Cove Development	01-11-205	1	458.07

Fund 01	Total
$458.07	**$458.07**

THIS CHECK MUST BE CASHED WITHIN 60 DAYS

PAYABLE AT
HARRIS BANK JOLIET, N.A.
2005 W. RT. 34
PLANO, IL 60545

70-59/719

54976

VILLAGE OF ELWOOD
P.O. BOX 435
ELWOOD, IL 60421

Date	Check No.	Amount
Dec 15, 2004	54976	**********458.07

Pay only four hundred fifty-eight and 07 / 100

Pay To The Order Of
Baxter Woodman
8678 Ridgefield Road

Crystal Lake IL 60012-

⑈054976⑈ ⑆071900595⑆ 050204853⑈

WOODCOVE DEVELOPMENT CORPORATION 04-02 2181

DATE 6-15-04 70-160/719 10100

PAY TO THE ORDER OF Village of Elwood $ 2092.39

Two thousand ninety-two and 39/100 DOLLARS

First Midwest Bank

FOR Eng Fees - Baxter & Woodman INV 89306, 87429, 88299

⑈002181⑈ ⑆071901604⑆ 8100257010⑈

For INV. 87429 1242.08

INV. 88299 204.75

INV. 89306 645.56

2092.39

VILLAGE OF ELWOOD
P.O. BOX 435
ELWOOD, IL 60421
(815) 423-5011

June 14, 2004

Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees

Attached please find a copy of engineering fee for Baxter Woodman for services at Wooded Cove Development. Invoice 89306 for the amount of $645.56

Also past due are two (2) invoices; Invoice 87429 for the amount of $1,242.08 and Invoice 88299 for the amount of $204.75

Payment on these three (3) invoices would be appreciated as soon as possible.

Thank you.

Patricia Buchenau
Village Clerk

BAXTER WOODMAN
Consulting Engineers

Invoice Date: June 11, 2004
Invoice Number: 89306

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$204.80
Employee and general overhead is 200.00% of $204.80 or	$409.60
Professional Services	614.40
Expenses	$31.16
Total Now Due	**$645.56**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood

Project: 030598 / 001

Wooded Cove Inspection Services

Invoice Date: June 11, 2004

Invoice Number: 89306

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Fld Observation-Part Time				
	5/29/2004	Construction Manager	3.50	127.58
	5/29/2004	Engineer, Staff	3.25	77.22
			6.75	$204.80
Total Professional Services			6.75	$204.80

Reimbursables

Expense		Period Ending	Charge
Mileage	Raymond N. Koenig	05/29/2004	$16.72
Mileage	Dennis Dabros	05/29/2004	$14.44
Total Reimbursables			$31.16

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

VILLAGE OF ELWOOD
P.O. BOX 435
ELWOOD, IL 60421
(815) 423-5011

May 19, 2004

Woodcove Development
22961 S. Althea Court
Minooka, Il. 60447

RE: Reimbursement of Engineering Fees

Attached please find a copy of engineering fee for Baxter Woodman for services at Wooded Cove Development.

Please make arrangements for payment.

Thank you.

Pat

Pat Buchenau
Village Clerk

BAXTER
WOODMAN
Consulting Engineers

Invoice Date: May 14, 2004
Invoice Number: 88299

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$68.25
Employee and general overhead is 200.00% of $68.25 or	$136.50
Professional Services	204.75
Total Now Due	**$204.75**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood

Project: 030598 / 001

Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing				
	5/1/2004	Secretary	0.75	$13.57
General Construction Admin.				
	5/1/2004	Construction Manager	1.50	$54.68
			2.25	$68.25
Total Professional Services			2.25	$68.25

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

VILLAGE OF ELWOOD
P.O. BOX 435
ELWOOD, IL 60421
(815) 423-5011

May 11, 2004

Woodcove Development Corporation
22961 S. Althea Court
Minooka, Illinois 60447

ATTN: Jeff Allen

Enclosed please find a copy of a bill from Baxter Woodman regarding inspection services at Wooded Cove in Elwood.

Please make arrangements for payment.

Thank you.

Pat

Pat Buchenau
Village Clerk

BAXTER & WOODMAN
Consulting Engineers

Invoice Date: April 15, 2004
Invoice Number: 87429

Village of Elwood
201 E. Mississippi Street
P.O. Box 435
Elwood, IL 60421

Attention: Patricia Buchenau

Project: 030598 / 001	**Wooded Cove Inspection Services**
Project Coordinator:	**Steve Larson**

Inspection and review services for the Wooded Cove Development.

Direct Labor is	$407.06
Employee and general overhead is 200.00% of $407.06 or	$814.12
Professional Services	1,221.18
Expenses	$20.90
Total Now Due	**$1,242.08**

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

Village of Elwood
Project: 030598 / 001
Wooded Cove Inspection Services

Baxter & Woodman, Inc. - Detailed Invoice Documentation

Professional Services

Phase	Period Ending	Staff	Hours	Charge
Construction				
Secretarial & Printing				
	9/20/2003	Technician	0.25	$2.33
Normal Shop Drawing Review				
	5/31/2003	Engineer	0.50	$16.52
	6/28/2003	Engineer	4.00	$132.12
General Construction Admin.				
	5/3/2003	Principal	1.00	$51.77
	5/17/2003	Principal	1.00	$51.77
	5/17/2003	Construction Manager	2.25	$73.91
	5/31/2003	Principal	0.25	$12.94
Letter of Credit				
	9/20/2003	Construction Manager	2.00	$65.70
			11.25	$407.06
Total Professional Services			11.25	$407.06

Reimbursables

Expense		Period Ending	Charge
Mileage	Steve A. Larson	05/17/2003	$7.60
Mileage	Raymond N. Koenig	05/17/2003	$13.30
			$20.90
Total Reimbursables			

Please make check payable to Baxter and Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, IL 60012, and include our invoice and project numbers on your check or check stub.
Contact Steve Larson at 708.478.2090 if you have any questions regarding this invoice.

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN1.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh3749.TMP

```
**************************************
*                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991             *
*           VERSION 4.0.1E           *
*                                    *
*  RUN DATE  08/09/2002  TIME  07:07:30*
*                                    *
**************************************
```

```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 756-1104           *
*                                    *
**************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::                 by                   :::
:::       Haestad Methods, Inc.          :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
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NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID  WOODED COVE ESTATES EXISTING BASIN #1
   2          IT      12                   300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE EXISTING BASIN #1-48H
   7          KO                                   22
   8          BA  0.0286
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              80
  15          UD   0.402

  16          KK  Node2
  17          KM  WOODED ESTATES EXISTING BASIN #1-24H
  18          KO                                   22
  19          BA  0.0286
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              80
26          UD   0.402

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #1-18H
29          KO                                  22
30          BA  0.0286
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              80
37          UD   0.402

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #1-12H
40          KO                                  22
41          BA  0.0286
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              80
48          UD   0.402
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #1-6H
51          KO                                  22
52          BA  0.0286
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              80
59          UD   0.402

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #1-3H
62          KO                                  22
63          BA  0.0286
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              80
70          UD   0.402

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #1-2H
73          KO                                  22
74          BA  0.0286
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              80
81          UD   0.402

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #1-1H
84          KO                                  22
85          BA  0.0286
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              80
          92          UD  0.402
          93          ZZ
`HEC1 S/N: 1343001909        HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh3749.TMP
```

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:07:30 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

WOODED COVE ESTATES EXISTING BASIN #1

```
  3 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          12  MINUTES IN COMPUTATION INTERVAL
                      IDATE       1    0  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE       3    0  ENDING DATE
                     NDTIME        1148  ENDING TIME
                      ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                       TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                      NPLAN           1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *    Node1   *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 49 KK    *    Node5   *
```

```
          *           *
          *************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN1.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.03	1	FLOW	8.	7.	4.	2.
				TIME	40.80	40.80	40.80	41.00
HYDROGRAPH AT	Node2	0.03	1	FLOW	15.	12.	7.	4.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.03	1	FLOW	18.	14.	9.	5.
				TIME	11.80	11.80	11.80	11.80
HYDROGRAPH AT	Node4	0.03	1	FLOW	21.	16.	9.	5.
				TIME	5.40	5.40	5.60	5.60
HYDROGRAPH AT	Node5	0.03	1	FLOW	26.	19.	11.	5.
				TIME	1.40	1.60	1.60	1.80
HYDROGRAPH AT	Node6	0.03	1	FLOW	35.	25.	13.	6.
				TIME	1.00	1.00	1.20	1.20
HYDROGRAPH AT	Node7	0.03	1	FLOW	37.	27.	14.	6.
				TIME	0.80	1.00	1.00	1.00
HYDROGRAPH AT	Node8	0.03	1	FLOW	37.	27.	14.	5.
				TIME	0.80	0.80	0.80	1.00

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN1.OUT

^HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh0452.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:22:11 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X               X
XXXXXXX  XXXX     X         XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::                 by                   :::
:::        Haestad Methods, Inc.         :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

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DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES PROPOSED BASIN #1
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #1-48H
   7          KO                                    22
   8          BA  0.0286
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              77
  15          UD   0.534

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #1-24H
  18          KO                                    22
  19          BA  0.0286
```

```
20          PB      8.5
21          IN       72
22          PC     0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC     0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC     1.00    1.00    1.00    1.00    1.00
25          LS               77
26          UD    0.534

27          KK  Node3
28          KM  WOODED ESTATES PROPOSED BASIN #1-18H
29          KO                                  22
30          BA  0.0286
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
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36          LS               77
37          UD    0.534

38          KK  Node4
39          KM  WOODED ESTATES PROPOSED BASIN #1-12H
40          KO                                  22
41          BA  0.0286
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS               77
48          UD    0.534
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES PROPOSED BASIN #1-6H
51          KO                                  22
52          BA  0.0286
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS               77
59          UD    0.534

60          KK  Node6
61          KM  WOODED ESTATES PROPOSED BASIN #1-3H
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63          BA  0.0286
64          PB    5.44
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72          KM  WOODED ESTATES PROPOSED BASIN #1-2H
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74          BA  0.0286
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78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS               77
81          UD    0.534

82          KK  Node8
83          KM  WOODED ESTATES PROPOSED BASIN #1-1H
84          KO                                  22
85          BA  0.0286
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              77
          92          UD   0.534
          93          ZZ
~HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh0452.TMP

*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:22:11 *
*                                       *
*****************************************

*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*        DAVIS, CALIFORNIA 95616        *
*            (916) 756-1104             *
*                                       *
*****************************************

                    WOODED COVE ESTATES PROPOSED BASIN #1

  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT        0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

         **************
         *            *
 16 KK   *    Node2   *
         *            *
         **************

 18 KO       OUTPUT CONTROL VARIABLES
                   IPRNT          5  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                   IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                    IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT      0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

         **************
         *            *
 27 KK   *    Node3   *
         *            *
         **************

 29 KO       OUTPUT CONTROL VARIABLES
                   IPRNT          5  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                   IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                    IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT      0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

         **************
         *            *
 38 KK   *    Node4   *
         *            *
         **************

 40 KO       OUTPUT CONTROL VARIABLES
                   IPRNT          5  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                   IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                    IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                   ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                   ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                  TIMINT      0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

         **************
         *            *
 49 KK   *    Node5   *
```

```
          *              *
          ***************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 60 KK    *    Node6     *
          *              *
          ***************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 71 KK    *    Node7     *
          *              *
          ***************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 82 KK    *    Node8     *
          *              *
          ***************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN1.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

					RATIOS APPLIED TO PRECIPITATION			
OPERATION	STATION	AREA	PLAN		RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.03	1	FLOW	8.	6.	4.	2.
				TIME	40.80	41.00	41.00	43.20
HYDROGRAPH AT	Node2	0.03	1	FLOW	14.	11.	7.	3.
				TIME	15.60	15.60	15.80	15.80
HYDROGRAPH AT	Node3	0.03	1	FLOW	17.	13.	8.	4.
				TIME	11.80	11.80	11.80	12.00
HYDROGRAPH AT	Node4	0.03	1	FLOW	19.	15.	8.	4.
				TIME	5.60	5.60	5.60	5.80
HYDROGRAPH AT	Node5	0.03	1	FLOW	22.	16.	9.	4.
				TIME	1.60	1.80	1.80	2.20
HYDROGRAPH AT	Node6	0.03	1	FLOW	28.	20.	11.	4.
				TIME	1.20	1.20	1.40	1.60
HYDROGRAPH AT	Node7	0.03	1	FLOW	30.	21.	11.	4.
				TIME	1.00	1.20	1.20	1.40
HYDROGRAPH AT	Node8	0.03	1	FLOW	29.	21.	10.	3.
				TIME	1.00	1.00	1.00	1.20

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN2.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh140C.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY  1991                 *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:34:27 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X        XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                        :::
:::  Full Microcomputer Implementation     :::
:::              by                        :::
:::         Haestad Methods, Inc.          :::
:::                                        :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID  WOODED COVE ESTATES EXISTING BASIN #2
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE EXISTING BASIN #2-48H
   7          KO                                  22
   8          BA  0.0159
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              76
  15          UD   0.264

  16          KK  Node2
  17          KM  WOODED ESTATES EXISTING BASIN #2-24H
  18          KO                                  22
  19          BA  0.0159
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              76
26          UD   0.264

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #2-18H
29          KO                                  22
30          BA  0.0159
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              76
37          UD   0.264

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #2-12H
40          KO                                  22
41          BA  0.0159
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              76
48          UD   0.264
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #2-6H
51          KO                                  22
52          BA  0.0159
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              76
59          UD   0.264

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #2-3H
62          KO                                  22
63          BA  0.0159
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              76
70          UD   0.264

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #2-2H
73          KO                                  22
74          BA  0.0159
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              76
81          UD   0.264

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #2-1H
84          KO                                  22
85          BA  0.0159
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              76
          92          UD   0.264
          93          ZZ
~HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh140C.TMP
```

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*               MAY   1991              *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:34:27 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

WOODED COVE ESTATES EXISTING BASIN #2

```
  3 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          12  MINUTES IN COMPUTATION INTERVAL
                      IDATE       1    0  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      3    0  ENDING DATE
                      NDTIME       1148  ENDING TIME
                      ICENT          19  CENTURY MARK

                    COMPUTATION INTERVAL     0.20 HOURS
                         TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                      NPLAN           1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                   RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS
```

```
          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS
```

```
          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS
```

```
          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS
```

```
          **************
          *            *
 49 KK    *    Node5   *
```

```
          .             .
          *************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          *************
          .             .
 60 KK    *    Node6    *
          .             .
          *************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          *************
          .             .
 71 KK    *    Node7    *
          .             .
          *************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	4.	4.	2.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	8.	6.	4.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	10.	8.	4.	2.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	11.	8.	5.	2.
				TIME	5.40	5.40	5.40	5.40
HYDROGRAPH AT	Node5	0.02	1	FLOW	13.	10.	5.	2.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.02	1	FLOW	18.	13.	6.	2.
				TIME	0.80	1.00	1.00	1.20
HYDROGRAPH AT	Node7	0.02	1	FLOW	20.	14.	7.	3.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	20.	14.	7.	2.
				TIME	0.60	0.60	0.60	0.80

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN2.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh1F32.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:37:32 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXX
```

```
:::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::
:::                                     :::
:::  Full Microcomputer Implementation  :::
:::                 by                  :::
:::        Haestad Methods, Inc.        :::
:::                                     :::
:::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES PROPOSED BASIN #2
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #2-48H
   7          KO                                  22
   8          BA  0.0159
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              76
  15          UD   0.288

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #2-24H
  18          KO                                  22
  19          BA  0.0159
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              76
26          UD   0.288

27          KK  Node3
28          KM  WOODED ESTATES PROPOSED BASIN #2-18H
29          KO                                  22
30          BA  0.0159
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              76
37          UD   0.288

38          KK  Node4
39          KM  WOODED ESTATES PROPOSED BASIN #2-12H
40          KO                                  22
41          BA  0.0159
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              76
48          UD   0.288
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES PROPOSED BASIN #2-6H
51          KO                                  22
52          BA  0.0159
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              76
59          UD   0.288

60          KK  Node6
61          KM  WOODED ESTATES PROPOSED BASIN #2-3H
62          KO                                  22
63          BA  0.0159
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              76
70          UD   0.288

71          KK  Node7
72          KM  WOODED ESTATES PROPOSED BASIN #2-2H
73          KO                                  22
74          BA  0.0159
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              76
81          UD   0.288

82          KK  Node8
83          KM  WOODED ESTATES PROPOSED BASIN #2-1H
84          KO                                  22
85          BA  0.0159
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              76
          92          UD   0.288
          93          ZZ
 HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh1F32.TMP
```

```
**************************************
*                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*              MAY  1991             *
*           VERSION 4.0.1E           *
*                                    *
*  RUN DATE  08/09/2002  TIME  07:37:32*
*                                    *
**************************************
```

```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 756-1104           *
*                                    *
**************************************
```

WOODED COVE ESTATES PROPOSED BASIN #2

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                       TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          ***************
          *             *
  5 KK    *    Node1    *
          *             *
          ***************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 49 KK    *    Node5   *
```

```
          *              *
          ***************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 60 KK    *    Node6     *
          *              *
          ***************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 71 KK    *    Node7     *
          *              *
          ***************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *              *
 82 KK    *    Node8     *
          *              *
          ***************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	4.	4.	2.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	8.	6.	4.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	10.	8.	4.	2.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	11.	8.	5.	2.
				TIME	5.40	5.40	5.40	5.60
HYDROGRAPH AT	Node5	0.02	1	FLOW	13.	9.	5.	2.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.02	1	FLOW	18.	13.	6.	2.
				TIME	1.00	1.00	1.00	1.20
HYDROGRAPH AT	Node7	0.02	1	FLOW	20.	14.	7.	2.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	20.	14.	6.	2.
				TIME	0.60	0.60	0.80	0.80

*** NORMAL END OF HEC-1 ***

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              77
26          UD   0.222

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #3-18H
29          KO                                  22
30          BA  0.0141
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              77
37          UD   0.222

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #3-12H
40          KO                                  22
41          BA  0.0141
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              77
48          UD   0.222
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #3-6H
51          KO                                  22
52          BA  0.0141
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              77
59          UD   0.222

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #3-3H
62          KO                                  22
63          BA  0.0141
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              77
70          UD   0.222

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #3-2H
73          KO                                  22
74          BA  0.0141
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              77
81          UD   0.222

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #3-1H
84          KO                                  22
85          BA  0.0141
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              77
          92          UD   0.222
          93          ZZ
^HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh067E.TMP
```

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:50:12 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*            (916) 756-1104         *
*                                   *
*************************************
```

WOODED COVE ESTATES EXISTING BASIN #3

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *    Node1   *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 49 KK    *    Node5   *
```

```
          *            *
          **************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN3.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.01	1	FLOW	4.	3.	2.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.01	1	FLOW	7.	6.	3.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.01	1	FLOW	9.	7.	4.	2.
				TIME	11.60	11.60	11.60	11.60
HYDROGRAPH AT	Node4	0.01	1	FLOW	10.	8.	4.	2.
				TIME	5.40	5.40	5.40	5.40
HYDROGRAPH AT	Node5	0.01	1	FLOW	12.	9.	5.	2.
				TIME	1.20	1.40	1.40	1.60
HYDROGRAPH AT	Node6	0.01	1	FLOW	17.	12.	6.	2.
				TIME	0.80	0.80	1.00	1.00
HYDROGRAPH AT	Node7	0.01	1	FLOW	19.	13.	7.	2.
				TIME	0.60	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.01	1	FLOW	19.	14.	7.	2.
				TIME	0.60	0.60	0.60	0.80

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN3.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh0C0E.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:53:28 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X         X     X        XX
X     X  X         X              X
XXXXXXX  XXXX      X        XXXXX X
X     X  X         X              X
X     X  X         X     X        X
X     X  XXXXXXX   XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::                by                    :::
:::        Haestad Methods, Inc.         :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES PROPOSED BASIN #3
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #3-48H
   7          KO                                   22
   8          BA  0.0141
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              77
  15          UD   0.288

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #3-24H
  18          KO                                   22
  19          BA  0.0141
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              77
26          UD   0.288

27          KK  Node3
28          KM  WOODED ESTATES PROPOSED BASIN #3-18H
29          KO                                  22
30          BA  0.0141
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              77
37          UD   0.288

38          KK  Node4
39          KM  WOODED ESTATES PROPOSED BASIN #3-12H
40          KO                                  22
41          BA  0.0141
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              77
48          UD   0.288
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES PROPOSED BASIN #3-6H
51          KO                                  22
52          BA  0.0141
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              77
59          UD   0.288

60          KK  Node6
61          KM  WOODED ESTATES PROPOSED BASIN #3-3H
62          KO                                  22
63          BA  0.0141
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              77
70          UD   0.288

71          KK  Node7
72          KM  WOODED ESTATES PROPOSED BASIN #3-2H
73          KO                                  22
74          BA  0.0141
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              77
81          UD   0.288

82          KK  Node8
83          KM  WOODED ESTATES PROPOSED BASIN #3-1H
84          KO                                  22
85          BA  0.0141
86          PB    4.00
87          IN       3
```

```
          88           PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89           PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90           PC    1.00    1.00    1.00    1.00    1.00
          91           LS              77
          92           UD   0.288
          93           ZZ
^HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh0C0E.TMP

****************************************
*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              MAY  1991               *
*            VERSION 4.0.1E            *
*                                      *
*  RUN DATE  08/09/2002  TIME  07:53:28 *
*                                      *
****************************************

****************************************
*                                      *
*    U.S. ARMY CORPS OF ENGINEERS      *
*    HYDROLOGIC ENGINEERING CENTER     *
*          609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616        *
*           (916) 756-1104             *
*                                      *
****************************************

                    WOODED COVE ESTATES PROPOSED BASIN #3

  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 49 KK    *    Node5   *
```

```
          *            *
          **************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *             *
 60 KK    *    Node6    *
          *             *
          ***************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *             *
 71 KK    *    Node7    *
          *             *
          ***************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          ***************
          *             *
 82 KK    *    Node8    *
          *             *
          ***************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT            5  PRINT CONTROL
                      IPLOT            0  PLOT CONTROL
                      QSCAL           0.  HYDROGRAPH PLOT SCALE
                      IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                       IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN3.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
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				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.01	1	FLOW	7.	6.	3.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.01	1	FLOW	9.	7.	4.	2.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.01	1	FLOW	10.	7.	4.	2.
				TIME	5.40	5.40	5.40	5.60
HYDROGRAPH AT	Node5	0.01	1	FLOW	12.	9.	5.	2.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.01	1	FLOW	16.	12.	6.	2.
				TIME	1.00	1.00	1.00	1.20
HYDROGRAPH AT	Node7	0.01	1	FLOW	18.	13.	6.	2.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.01	1	FLOW	18.	13.	6.	2.
				TIME	0.60	0.60	0.60	0.80

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN4.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh360F.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:59:58 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X               X
XXXXXXX  XXXX     X         XXXXX X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

```
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::  Full Microcomputer Implementation    :::
:::                 by                    :::
:::        Haestad Methods, Inc.          :::
:::                                       :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

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THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

  1           ID  WOODED COVE ESTATES EXISTING BASIN #4
  2           IT      12                  300
  3           IO       5       0
  4           JR    PREC       1  0.8235  0.5765  0.3765

  5           KK  Node1
  6           KM  WOODED COVE EXISTING BASIN #4-48H
  7           KO                                  22
  8           BA  0.0188
  9           PB    9.18
 10           IN     144
 11           PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
 12           PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
 13           PC    1.00    1.00    1.00    1.00    1.00
 14           LS              78
 15           UD    0.24

 16           KK  Node2
 17           KM  WOODED ESTATES EXISTING BASIN #4-24H
 18           KO                                  22
 19           BA  0.0188
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              78
26          UD    0.24

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #4-18H
29          KO                                  22
30          BA  0.0188
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              78
37          UD    0.24

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #4-12H
40          KO                                  22
41          BA  0.0188
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              78
48          UD    0.24
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #4-6H
51          KO                                  22
52          BA  0.0188
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              78
59          UD    0.24

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #4-3H
62          KO                                  22
63          BA  0.0188
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              78
70          UD    0.24

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #4-2H
73          KO                                  22
74          BA  0.0188
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              78
81          UD    0.24

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #4-1H
84          KO                                  22
85          BA  0.0188
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS                 78
          92          UD    0.24
          93          ZZ
`HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh360F.TMP
```

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  07:59:58 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

WOODED COVE ESTATES EXISTING BASIN #4

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                   NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                   RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
              TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  16 KK    *   Node2    *
           *            *
           **************

  18 KO         OUTPUT CONTROL VARIABLES
                       IPRNT          5  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                       IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                        IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT      0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  27 KK    *   Node3    *
           *            *
           **************

  29 KO         OUTPUT CONTROL VARIABLES
                       IPRNT          5  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                       IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                        IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT      0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  38 KK    *   Node4    *
           *            *
           **************

  40 KO         OUTPUT CONTROL VARIABLES
                       IPRNT          5  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                       IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                        IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                       ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                       ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                      TIMINT      0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  49 KK    *   Node5    *
```

```
          *              *
          ***************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          ***************
          *              *
 60 KK    *    Node6     *
          *              *
          ***************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          ***************
          *              *
 71 KK    *    Node7     *
          *              *
          ***************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          ***************
          *              *
 82 KK    *    Node8     *
          *              *
          ***************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

					RATIOS APPLIED TO PRECIPITATION			
OPERATION	STATION	AREA	PLAN		RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	3.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	10.	8.	5.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	12.	9.	6.	3.
				TIME	11.60	11.60	11.60	11.60
HYDROGRAPH AT	Node4	0.02	1	FLOW	13.	10.	6.	3.
				TIME	5.40	5.40	5.40	5.40
HYDROGRAPH AT	Node5	0.02	1	FLOW	17.	12.	7.	3.
				TIME	1.20	1.40	1.40	1.60
HYDROGRAPH AT	Node6	0.02	1	FLOW	23.	17.	9.	3.
				TIME	0.80	0.80	1.00	1.00
HYDROGRAPH AT	Node7	0.02	1	FLOW	25.	18.	10.	4.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	27.	19.	9.	3.
				TIME	0.60	0.60	0.60	0.80

*** NORMAL END OF HEC-1 ***

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:02:28 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::              by                      :::
:::        Haestad Methods, Inc.         :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES PROPOSED BASIN #4
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #4-48H
   7          KO                                    22
   8          BA  0.0188
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              78
  15          UD   0.276

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #4-24H
  18          KO                                    22
  19          BA  0.0188
```

```
20          PB      8.5
21          IN       72
22          PC     0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC     0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC     1.00    1.00    1.00    1.00    1.00
25          LS               78
26          UD    0.276

27          KK    Node3
28          KM    WOODED ESTATES PROPOSED BASIN #4-18H
29          KO                                     22
30          BA    0.0188
31          PB      7.99
32          IN       54
33          PC     0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC     0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC     1.00    1.00    1.00    1.00    1.00
36          LS               78
37          UD    0.276

38          KK    Node4
39          KM    WOODED ESTATES PROPOSED BASIN #4-12H
40          KO                                     22
41          BA    0.0188
42          PB      7.40
43          IN       36
44          PC     0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC     0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC     1.00    1.00    1.00    1.00    1.00
47          LS               78
48          UD    0.276
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK    Node5
50          KM    WOODED ESTATES PROPOSED BASIN #4-6H
51          KO                                     22
52          BA    0.0188
53          PB      6.38
54          IN       18
55          PC     0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC     0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC     1.00    1.00    1.00    1.00    1.00
58          LS               78
59          UD    0.276

60          KK    Node6
61          KM    WOODED ESTATES PROPOSED BASIN #4-3H
62          KO                                     22
63          BA    0.0188
64          PB      5.44
65          IN        9
66          PC     0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC     0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC     1.00    1.00    1.00    1.00    1.00
69          LS               78
70          UD    0.276

71          KK    Node7
72          KM    WOODED ESTATES PROPOSED BASIN #4-2H
73          KO                                     22
74          BA    0.0188
75          PB      4.93
76          IN        6
77          PC     0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC     0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC     1.00    1.00    1.00    1.00    1.00
80          LS               78
81          UD    0.276

82          KK    Node8
83          KM    WOODED ESTATES PROPOSED BASIN #4-1H
84          KO                                     22
85          BA    0.0188
86          PB      4.00
87          IN        3
```

```
88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
90          PC    1.00    1.00    1.00    1.00    1.00
91          LS              78
92          UD   0.276
93          ZZ
```

˜HEC1 S/N: 1343001909 HMVersion: 6.33 Data File:
C:\WINNT\TEMP\~vbh1C2A.TMP

```
*****************************************                 *****************************************
*                                       *                 *                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *                 *   U.S. ARMY CORPS OF ENGINEERS        *
*             MAY  1991                 *                 *   HYDROLOGIC ENGINEERING CENTER       *
*          VERSION 4.0.1E               *                 *          609 SECOND STREET            *
*                                       *                 *       DAVIS, CALIFORNIA 95616         *
* RUN DATE  08/09/2002  TIME  08:02:28  *                 *            (916) 756-1104             *
*                                       *                 *                                       *
*****************************************                 *****************************************
```

WOODED COVE ESTATES PROPOSED BASIN #4

```
 3 IO       OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 QSCAL         0.  HYDROGRAPH PLOT SCALE

   IT       HYDROGRAPH TIME DATA
                 NMIN          12  MINUTES IN COMPUTATION INTERVAL
                 IDATE      1   0  STARTING DATE
                 ITIME       0000  STARTING TIME
                   NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                NDDATE      3   0  ENDING DATE
                NDTIME       1148  ENDING TIME
                 ICENT         19  CENTURY MARK

             COMPUTATION INTERVAL    0.20 HOURS
                  TOTAL TIME BASE   59.80 HOURS

        ENGLISH UNITS
            DRAINAGE AREA          SQUARE MILES
            PRECIPITATION DEPTH    INCHES
            LENGTH, ELEVATION      FEET
            FLOW                   CUBIC FEET PER SECOND
            STORAGE VOLUME         ACRE-FEET
            SURFACE AREA           ACRES
            TEMPERATURE            DEGREES FAHRENHEIT

   JP       MULTI-PLAN OPTION
                 NPLAN          1  NUMBER OF PLANS

   JR       MULTI-RATIO OPTION
                RATIOS OF PRECIPITATION
               1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
 5 KK     *   Node1    *
          *            *
          **************

 7 KO       OUTPUT CONTROL VARIABLES
                 IPRNT          5  PRINT CONTROL
                 IPLOT          0  PLOT CONTROL
                 QSCAL         0.  HYDROGRAPH PLOT SCALE
                 IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                  IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                 ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                 ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 49 KK    *    Node5   *
```

```
          *            *
          **************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *   Node6    *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *   Node7    *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *   Node8    *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN4.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	3.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	10.	8.	5.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	12.	9.	6.	3.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	13.	10.	6.	3.
				TIME	5.40	5.40	5.40	5.40
HYDROGRAPH AT	Node5	0.02	1	FLOW	16.	12.	7.	3.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.02	1	FLOW	23.	16.	9.	3.
				TIME	0.80	1.00	1.00	1.20
HYDROGRAPH AT	Node7	0.02	1	FLOW	25.	18.	9.	4.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	26.	18.	9.	3.
				TIME	0.60	0.60	0.60	0.80

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN5.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh322E.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY  1991                 *
*          VERSION 4.0.1E               *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:08:05 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX  XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::              by                      :::
:::        Haestad Methods, Inc.         :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID  WOODED COVE ESTATES EXISTING BASIN #5
   2          IT      12                    300
   3          IO       5        0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE EXISTING BASIN #5-48H
   7          KO                                  22
   8          BA  0.0173
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              74
  15          UD    0.27

  16          KK  Node2
  17          KM  WOODED ESTATES EXISTING BASIN #5-24H
  18          KO                                  22
  19          BA  0.0173
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              74
26          UD    0.27

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #5-18H
29          KO                                  22
30          BA  0.0173
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              74
37          UD    0.27

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #5-12H
40          KO                                  22
41          BA  0.0173
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              74
48          UD    0.27
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #5-6H
51          KO                                  22
52          BA  0.0173
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              74
59          UD    0.27

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #5-3H
62          KO                                  22
63          BA  0.0173
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              74
70          UD    0.27

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #5-2H
73          KO                                  22
74          BA  0.0173
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              74
81          UD    0.27

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #5-1H
84          KO                                  22
85          BA  0.0173
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              74
          92          UD    0.27
          93          ZZ
*HEC1 S/N: 1343001909        HMVersion: 6.33    Data File:
C:\WINNT\TEMP\-vbh322E.TMP

**********************************************
*                                            *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)        *
*              MAY   1991                    *
*            VERSION 4.0.1E                  *
*                                            *
*  RUN DATE  08/09/2002  TIME  08:08:05      *
*                                            *
**********************************************

**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET         *
*        DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104           *
*                                    *
**************************************

                    WOODED COVE ESTATES EXISTING BASIN #5

  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN          12  MINUTES IN COMPUTATION INTERVAL
                     IDATE       1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ          300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE       3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN           1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           5  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                      IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

```
                  TIMINT        0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  16 KK    *   Node2    *
           *            *
           **************

  18 KO         OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  27 KK    *   Node3    *
           *            *
           **************

  29 KO         OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  38 KK    *   Node4    *
           *            *
           **************

  40 KO         OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

           **************
           *            *
  49 KK    *   Node5    *
```

```
          *           *
          *************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	2.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	8.	7.	4.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	10.	8.	5.	2.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	11.	8.	5.	2.
				TIME	5.40	5.40	5.40	5.60
HYDROGRAPH AT	Node5	0.02	1	FLOW	13.	10.	5.	2.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.02	1	FLOW	18.	13.	6.	2.
				TIME	1.00	1.00	1.00	1.20
HYDROGRAPH AT	Node7	0.02	1	FLOW	20.	14.	7.	2.
				TIME	0.80	0.80	0.80	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	20.	14.	6.	2.
				TIME	0.60	0.60	0.80	0.80

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN5.OUT

^HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh073A.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             MAY   1991                *
*          VERSION 4.0.1E               *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:13:24 *
*                                       *
*****************************************
```

```
************************************
*                                  *
*    U.S. ARMY CORPS OF ENGINEERS  *
*    HYDROLOGIC ENGINEERING CENTER *
*         609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616    *
*           (916) 756-1104         *
*                                  *
************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                      :::
:::  Full Microcomputer Implementation   :::
:::                 by                   :::
:::        Haestad Methods, Inc.         :::
:::                                      :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

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NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

* HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID  WOODED COVE ESTATES PROPOSED BASIN #5
   2          IT      12                    300
   3          IO       5       0
   4          JR    PREC       1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #5-48H
   7          KO                                   22
   8          BA  0.0173
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              74
  15          UD   0.282

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #5-24H
  18          KO                                   22
  19          BA  0.0173
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              74
26          UD   0.282

27          KK  Node3
28          KM  WOODED ESTATES PROPOSED BASIN #5-18H
29          KO                                  22
30          BA  0.0173
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              74
37          UD   0.282

38          KK  Node4
39          KM  WOODED ESTATES PROPOSED BASIN #5-12H
40          KO                                  22
41          BA  0.0173
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              74
48          UD   0.282
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES PROPOSED BASIN #5-6H
51          KO                                  22
52          BA  0.0173
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              74
59          UD   0.282

60          KK  Node6
61          KM  WOODED ESTATES PROPOSED BASIN #5-3H
62          KO                                  22
63          BA  0.0173
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              74
70          UD   0.282

71          KK  Node7
72          KM  WOODED ESTATES PROPOSED BASIN #5-2H
73          KO                                  22
74          BA  0.0173
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              74
81          UD   0.282

82          KK  Node8
83          KM  WOODED ESTATES PROPOSED BASIN #5-1H
84          KO                                  22
85          BA  0.0173
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS                74
          92          UD   0.282
          93          ZZ
~HEC1 S/N: 1343001909         HMVersion: 6.33     Data File:
C:\WINNT\TEMP\~vbh073A.TMP
```

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*               MAY   1991              *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:13:24 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

WOODED COVE ESTATES PROPOSED BASIN #5

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      3    0  ENDING DATE
                     NDTIME        1148  ENDING TIME
                     ICENT           19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE     59.80 HOURS

       ENGLISH UNITS
            DRAINAGE AREA          SQUARE MILES
            PRECIPITATION DEPTH    INCHES
            LENGTH, ELEVATION      FEET
            FLOW                   CUBIC FEET PER SECOND
            STORAGE VOLUME         ACRE-FEET
            SURFACE AREA           ACRES
            TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *    Node1   *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                  TIMINT          0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 16 KK      *   Node2    *
            *            *
            **************

 18 KO          OUTPUT CONTROL VARIABLES
                     IPRNT            5  PRINT CONTROL
                     IPLOT            0  PLOT CONTROL
                     QSCAL           0.  HYDROGRAPH PLOT SCALE
                     IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                      IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT        0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 27 KK      *   Node3    *
            *            *
            **************

 29 KO          OUTPUT CONTROL VARIABLES
                     IPRNT            5  PRINT CONTROL
                     IPLOT            0  PLOT CONTROL
                     QSCAL           0.  HYDROGRAPH PLOT SCALE
                     IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                      IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT        0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 38 KK      *   Node4    *
            *            *
            **************

 40 KO          OUTPUT CONTROL VARIABLES
                     IPRNT            5  PRINT CONTROL
                     IPLOT            0  PLOT CONTROL
                     QSCAL           0.  HYDROGRAPH PLOT SCALE
                     IPNCH            0  PUNCH COMPUTED HYDROGRAPH
                      IOUT           22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1            1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2          300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT        0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

            **************
            *            *
 49 KK      *   Node5    *
```

```
          *           *
          *************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	2.	1.
				TIME	40.80	40.80	40.80	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	8.	7.	4.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	10.	8.	5.	2.
				TIME	11.60	11.60	11.60	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	11.	8.	5.	2.
				TIME	5.40	5.40	5.40	5.60
HYDROGRAPH AT	Node5	0.02	1	FLOW	13.	10.	5.	2.
				TIME	1.40	1.40	1.60	1.80
HYDROGRAPH AT	Node6	0.02	1	FLOW	18.	13.	6.	2.
				TIME	1.00	1.00	1.00	1.40
HYDROGRAPH AT	Node7	0.02	1	FLOW	20.	14.	7.	2.
				TIME	0.80	0.80	1.00	1.00
HYDROGRAPH AT	Node8	0.02	1	FLOW	20.	13.	6.	2.
				TIME	0.60	0.60	0.80	1.00

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN6.OUT
~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh3029.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*            VERSION 4.0.1E             *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:19:08 *
*                                       *
*****************************************
```

```
*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

```
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
:::                                       :::
:::  Full Microcomputer Implementation    :::
:::                 by                    :::
:::        Haestad Methods, Inc.          :::
:::                                       :::
:::::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
   1          ID  WOODED COVE ESTATES EXISTING BASIN #6
   2          IT     12                    300
   3          IO      5       0
   4          JR    PREC      1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE EXISTING BASIN #6-48H
   7          KO                                  22
   8          BA  0.0206
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              70
  15          UD   0.342

  16          KK  Node2
  17          KM  WOODED ESTATES EXISTING BASIN #6-24H
  18          KO                                  22
  19          BA  0.0206
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              70
26          UD   0.342

27          KK  Node3
28          KM  WOODED ESTATES EXISTING BASIN #6-18H
29          KO                                  22
30          BA  0.0206
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              70
37          UD   0.342

38          KK  Node4
39          KM  WOODED ESTATES EXISTING BASIN #6-12H
40          KO                                  22
41          BA  0.0206
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              70
48          UD   0.342
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES EXISTING BASIN #6-6H
51          KO                                  22
52          BA  0.0206
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              70
59          UD   0.342

60          KK  Node6
61          KM  WOODED ESTATES EXISTING BASIN #6-3H
62          KO                                  22
63          BA  0.0206
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              70
70          UD   0.342

71          KK  Node7
72          KM  WOODED ESTATES EXISTING BASIN #6-2H
73          KO                                  22
74          BA  0.0206
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              70
81          UD   0.342

82          KK  Node8
83          KM  WOODED ESTATES EXISTING BASIN #6-1H
84          KO                                  22
85          BA  0.0206
86          PB    4.00
87          IN       3
```

```
        88            PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
        89            PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
        90            PC    1.00    1.00    1.00    1.00    1.00
        91            LS              70
        92            UD   0.342
        93            ZZ
~HEC1 S/N: 1343001909        HMVersion: 6.33     Data File:
C:\WINNT\TEMP\~vbh3029.TMP

****************************************                          ****************************************
*                                      *                          *                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *                          *   U.S. ARMY CORPS OF ENGINEERS       *
*             MAY  1991                *                          *   HYDROLOGIC ENGINEERING CENTER      *
*           VERSION 4.0.1E             *                          *        609 SECOND STREET             *
*                                      *                          *     DAVIS, CALIFORNIA 95616          *
*  RUN DATE  08/09/2002  TIME  08:19:08 *                         *         (916) 756-1104               *
*                                      *                          *                                      *
****************************************                          ****************************************


                      WOODED COVE ESTATES EXISTING BASIN #6

  3 IO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                       NMIN          12  MINUTES IN COMPUTATION INTERVAL
                      IDATE      1    0  STARTING DATE
                      ITIME        0000  STARTING TIME
                         NQ         300  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      3    0  ENDING DATE
                     NDTIME        1148  ENDING TIME
                      ICENT          19  CENTURY MARK

                COMPUTATION INTERVAL     0.20 HOURS
                     TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
            DRAINAGE AREA           SQUARE MILES
            PRECIPITATION DEPTH     INCHES
            LENGTH, ELEVATION       FEET
            FLOW                    CUBIC FEET PER SECOND
            STORAGE VOLUME          ACRE-FEET
            SURFACE AREA            ACRES
            TEMPERATURE             DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                      NPLAN           1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00       0.82       0.58       0.38

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

             **************
             *            *
  5 KK       *   Node1    *
             *            *
             **************

  7 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

```
               TIMINT        0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 49 KK    *    Node5   *
```

```
          *            *
          **************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

P:\PROJECTS\GJN15438\ENGINEER\EXBASIN6.OUT

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

OPERATION	STATION	AREA	PLAN		RATIOS APPLIED TO PRECIPITATION RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	2.	1.
				TIME	40.80	40.80	43.20	43.20
HYDROGRAPH AT	Node2	0.02	1	FLOW	9.	7.	4.	2.
				TIME	15.60	15.60	15.60	15.60
HYDROGRAPH AT	Node3	0.02	1	FLOW	11.	8.	5.	2.
				TIME	11.80	11.80	11.80	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	12.	9.	5.	2.
				TIME	5.40	5.40	5.60	5.60
HYDROGRAPH AT	Node5	0.02	1	FLOW	14.	10.	5.	2.
				TIME	1.60	1.60	1.80	2.00
HYDROGRAPH AT	Node6	0.02	1	FLOW	18.	12.	5.	2.
				TIME	1.00	1.20	1.20	1.60
HYDROGRAPH AT	Node7	0.02	1	FLOW	19.	13.	6.	2.
				TIME	1.00	1.00	1.00	1.20
HYDROGRAPH AT	Node8	0.02	1	FLOW	18.	12.	5.	1.
				TIME	0.80	0.80	0.80	1.00

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\PRBASIN6.OUT
^HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh253E.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY   1991               *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  08:21:53 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX          X
X     X  X        X     X        XX
X     X  X        X              X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X              X
X     X  X        X     X        X
X     X  XXXXXXX   XXXXX         XXX
```

```
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
:::                                        :::
:::  Full Microcomputer Implementation     :::
:::                by                      :::
:::        Haestad Methods, Inc.           :::
:::                                        :::
::::::::::::::::::::::::::::::::::::::::::::
::::::::::::::::::::::::::::::::::::::::::::
```

37 Brookside Road * Waterbury, Connecticut 06708 * (203) 755-1666

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES PROPOSED BASIN #6
   2          IT     12                    300
   3          IO      5       0
   4          JR    PREC      1  0.8235  0.5765  0.3765

   5          KK  Node1
   6          KM  WOODED COVE PROPOSED BASIN #6-48H
   7          KO                                  22
   8          BA  0.0206
   9          PB    9.18
  10          IN     144
  11          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  12          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  13          PC    1.00    1.00    1.00    1.00    1.00
  14          LS              68
  15          UD   0.402

  16          KK  Node2
  17          KM  WOODED ESTATES PROPOSED BASIN #6-24H
  18          KO                                  22
  19          BA  0.0206
```

```
20          PB     8.5
21          IN      72
22          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
23          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
24          PC    1.00    1.00    1.00    1.00    1.00
25          LS              68
26          UD    .402

27          KK  Node3
28          KM  WOODED ESTATES PROPOSED BASIN #6-18H
29          KO                                  22
30          BA  0.0206
31          PB    7.99
32          IN      54
33          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
34          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
35          PC    1.00    1.00    1.00    1.00    1.00
36          LS              68
37          UD   0.402

38          KK  Node4
39          KM  WOODED ESTATES PROPOSED BASIN #6-12H
40          KO                                  22
41          BA  0.0206
42          PB    7.40
43          IN      36
44          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
45          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
46          PC    1.00    1.00    1.00    1.00    1.00
47          LS              68
48          UD   0.402
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

49          KK  Node5
50          KM  WOODED ESTATES PROPOSED BASIN #6-6H
51          KO                                  22
52          BA  0.0206
53          PB    6.38
54          IN      18
55          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
56          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
57          PC    1.00    1.00    1.00    1.00    1.00
58          LS              68
59          UD   0.402

60          KK  Node6
61          KM  WOODED ESTATES PROPOSED BASIN #6-3H
62          KO                                  22
63          BA  0.0206
64          PB    5.44
65          IN       9
66          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
67          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
68          PC    1.00    1.00    1.00    1.00    1.00
69          LS              68
70          UD   0.402

71          KK  Node7
72          KM  WOODED ESTATES PROPOSED BASIN #6-2H
73          KO                                  22
74          BA  0.0206
75          PB    4.93
76          IN       6
77          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
78          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
79          PC    1.00    1.00    1.00    1.00    1.00
80          LS              68
81          UD   0.402

82          KK  Node8
83          KM  WOODED ESTATES PROPOSED BASIN #6-1H
84          KO                                  22
85          BA  0.0206
86          PB    4.00
87          IN       3
```

```
          88          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
          89          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          90          PC    1.00    1.00    1.00    1.00    1.00
          91          LS              68
          92          UD  0.402
          93          ZZ
HEC1 S/N: 1343001909        HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh253E.TMP
```

```
**************************************
*                                    *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)*
*             MAY  1991              *
*          VERSION 4.0.1E            *
*                                    *
*  RUN DATE  08/09/2002  TIME  08:21:53 *
*                                    *
**************************************
```

```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*          609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 756-1104           *
*                                    *
**************************************
```

WOODED COVE ESTATES PROPOSED BASIN #6

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME         0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME        1148  ENDING TIME
                     ICENT          19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                      TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT

    JP          MULTI-PLAN OPTION
                     NPLAN          1  NUMBER OF PLANS

    JR          MULTI-RATIO OPTION
                    RATIOS OF PRECIPITATION
                  1.00      0.82      0.58      0.38
```

*** ***

```
          **************
          *            *
  5 KK    *   Node1    *
          *            *
          **************

  7 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
```

```
                TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 16 KK    *    Node2   *
          *            *
          **************

 18 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 27 KK    *    Node3   *
          *            *
          **************

 29 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 38 KK    *    Node4   *
          *            *
          **************

 40 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS

*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 49 KK    *    Node5   *
```

```
          *            *
          **************

 51 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 60 KK    *    Node6   *
          *            *
          **************

 62 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 71 KK    *    Node7   *
          *            *
          **************

 73 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 82 KK    *    Node8   *
          *            *
          **************

 84 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
```

TIMINT 0.200 TIME INTERVAL IN HOURS

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS
FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
TIME TO PEAK IN HOURS

					RATIOS APPLIED TO PRECIPITATION			
OPERATION	STATION	AREA	PLAN		RATIO 1 1.00	RATIO 2 0.82	RATIO 3 0.58	RATIO 4 0.38
HYDROGRAPH AT	Node1	0.02	1	FLOW	5.	4.	2.	1.
				TIME	40.80	40.80	43.20	43.20
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				TIME	15.60	15.60	15.60	15.80
HYDROGRAPH AT	Node3	0.02	1	FLOW	11.	8.	4.	2.
				TIME	11.80	11.80	11.80	11.80
HYDROGRAPH AT	Node4	0.02	1	FLOW	11.	8.	4.	1.
				TIME	5.60	5.60	5.60	6.00
HYDROGRAPH AT	Node5	0.02	1	FLOW	12.	9.	4.	1.
				TIME	1.60	1.80	2.00	2.40
HYDROGRAPH AT	Node6	0.02	1	FLOW	16.	11.	5.	1.
				TIME	1.20	1.20	1.40	1.60
HYDROGRAPH AT	Node7	0.02	1	FLOW	17.	11.	5.	1.
				TIME	1.00	1.00	1.20	1.40
HYDROGRAPH AT	Node8	0.02	1	FLOW	16.	10.	4.	1.
				TIME	0.80	0.80	1.00	1.20

*** NORMAL END OF HEC-1 ***

P:\PROJECTS\GJN15438\ENGINEER\B2CULVRT.OUT

~HEC1 S/N: 1343001909 HMVersion: 6.33 Data File: C:\WINNT\TEMP\~vbh2515.TMP

```
*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              MAY  1991                *
*           VERSION 4.0.1E              *
*                                       *
*  RUN DATE  08/09/2002  TIME  09:05:54 *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*         609 SECOND STREET         *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

```
:::::::::::::::::::::::::::::::::::::::::::
:::::::::::::::::::::::::::::::::::::::::::
:::                                     :::
:::  Full Microcomputer Implementation  :::
:::              by                     :::
:::        Haestad Methods, Inc.        :::
:::                                     :::
:::::::::::::::::::::::::::::::::::::::::::
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```

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NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   1          ID  WOODED COVE ESTATES BASIN #2 CULVERT CROSSING
   2          IT      12                    300
   3          IO       5       0

   4          KK  Node1
   5          KM
   6          KO                                    22
   7          BA  0.0519
   8          PB    9.18
   9          IN     144
  10          PC    0.00    0.02    0.05    0.08    0.10    0.13    0.16    0.19    0.22    0.25
  11          PC    0.28    0.32    0.35    0.39    0.45    0.51    0.59    0.72    0.84    0.92
  12          PC    1.00    1.00    1.00    1.00    1.00
  13          LS              76
  14          UD   0.504

  15          KK  Node2
  16          KM  WOODED ESTATES CULVERT BASIN #2-24H
  17          KO                                    22
  18          BA  0.0519
  19          PB     8.5
```

```
20          IN      72
21          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
22          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
23          PC    1.00    1.00    1.00    1.00    1.00
24          LS              76
25          UD   0.504

26          KK  Node3
27          KM  WOODED ESTATES CULVERT BASIN #2-18H
28          KO                              22
29          BA  0.0519
30          PB    7.99
31          IN      54
32          PC    0.00    0.03    0.06    0.09    0.12    0.15    0.19    0.23    0.27    0.32
33          PC    0.38    0.45    0.57    0.70    0.79    0.85    0.89    0.92    0.95    0.97
34          PC    1.00    1.00    1.00    1.00    1.00
35          LS              76
36          UD   0.504

37          KK  Node4
38          KM  WOODED ESTATES CULVERT BASIN #2-12H
39          KO                              22
40          BA  0.0519
41          PB    7.40
42          IN      36
43          PC    0.00    0.03    0.08    0.12    0.16    0.22    0.29    0.39    0.51    0.62
44          PC    0.70    0.76    0.81    0.85    0.88    0.91    0.93    0.95    0.97    0.98
45          PC    1.00    1.00    1.00    1.00    1.00
46          LS              76
47          UD   0.504
```



```
LINE        ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

48          KK  Node5
49          KM  WOODED ESTATES CULVERT BASIN #2-6H
50          KO                              22
51          BA  0.0519
52          PB    6.38
53          IN      18
54          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
55          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
56          PC    1.00    1.00    1.00    1.00    1.00
57          LS              76
58          UD   0.504

59          KK  Node6
60          KM  WOODED ESTATES CULVERT BASIN #2-3H
61          KO                              22
62          BA  0.0519
63          PB    5.44
64          IN       9
65          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
66          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
67          PC    1.00    1.00    1.00    1.00    1.00
68          LS              76
69          UD   0.504

70          KK  Node7
71          KM  WOODED ESTATES CULVERT BASIN #2-2H
72          KO                              22
73          BA  0.0519
74          PB    4.93
75          IN       6
76          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
77          PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
78          PC    1.00    1.00    1.00    1.00    1.00
79          LS              76
80          UD   0.504

81          KK  Node8
82          KM  WOODED ESTATES CULVERT BASIN #2-1H
83          KO                              22
84          BA  0.0519
85          PB    4.00
86          IN       3
87          PC    0.00    0.16    0.33    0.43    0.52    0.60    0.66    0.71    0.75    0.79
```

```
          88           PC    0.82    0.84    0.86    0.88    0.90    0.92    0.94    0.96    0.97    0.98
          89           PC    1.00    1.00    1.00    1.00    1.00
          90           LS              76
          91           UD   0.504
          92           ZZ
`HEC1 S/N: 1343001909         HMVersion: 6.33    Data File:
C:\WINNT\TEMP\~vbh2515.TMP
```

```
**********************************************
*                                            *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)        *
*              MAY   1991                    *
*           VERSION 4.0.1E                   *
*                                            *
*  RUN DATE  08/09/2002  TIME  09:05:54      *
*                                            *
**********************************************
```

```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET          *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 756-1104           *
*                                    *
**************************************
```

WOODED COVE ESTATES BASIN #2 CULVERT CROSSING

```
  3 IO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE

    IT          HYDROGRAPH TIME DATA
                      NMIN         12  MINUTES IN COMPUTATION INTERVAL
                     IDATE      1    0  STARTING DATE
                     ITIME       0000  STARTING TIME
                        NQ        300  NUMBER OF HYDROGRAPH ORDINATES
                    NDDATE      3    0  ENDING DATE
                    NDTIME       1148  ENDING TIME
                     ICENT         19  CENTURY MARK

                  COMPUTATION INTERVAL     0.20 HOURS
                       TOTAL TIME BASE    59.80 HOURS

        ENGLISH UNITS
             DRAINAGE AREA          SQUARE MILES
             PRECIPITATION DEPTH    INCHES
             LENGTH, ELEVATION      FEET
             FLOW                   CUBIC FEET PER SECOND
             STORAGE VOLUME         ACRE-FEET
             SURFACE AREA           ACRES
             TEMPERATURE            DEGREES FAHRENHEIT
```

*** ***

```
          **************
          *            *
  4 KK    *   Node1    *
          *            *
          **************
```

```
  6 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          5  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                     IPNCH          0  PUNCH COMPUTED HYDROGRAPH
                      IOUT         22  SAVE HYDROGRAPH ON THIS UNIT
                     ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
                     ISAV2        300  LAST ORDINATE PUNCHED OR SAVED
                    TIMINT      0.200  TIME INTERVAL IN HOURS
```

*** ***

```
          **************
          *            *
 15 KK    *    Node2   *
          *            *
          **************

 17 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 26 KK    *    Node3   *
          *            *
          **************

 28 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 37 KK    *    Node4   *
          *            *
          **************

 39 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
                       IOUT          22  SAVE HYDROGRAPH ON THIS UNIT
                      ISAV1           1  FIRST ORDINATE PUNCHED OR SAVED
                      ISAV2         300  LAST ORDINATE PUNCHED OR SAVED
                     TIMINT       0.200  TIME INTERVAL IN HOURS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 48 KK    *    Node5   *
          *            *
          **************

 50 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           5  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                      IPNCH           0  PUNCH COMPUTED HYDROGRAPH
```

IOUT	22	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	300	LAST ORDINATE PUNCHED OR SAVED
TIMINT	0.200	TIME INTERVAL IN HOURS

*** ***

```
          **************
          *            *
59 KK     *   Node6    *
          *            *
          **************
```

61 KO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	0	PUNCH COMPUTED HYDROGRAPH
IOUT	22	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	300	LAST ORDINATE PUNCHED OR SAVED
TIMINT	0.200	TIME INTERVAL IN HOURS

*** ***

```
          **************
          *            *
70 KK     *   Node7    *
          *            *
          **************
```

72 KO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	0	PUNCH COMPUTED HYDROGRAPH
IOUT	22	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	300	LAST ORDINATE PUNCHED OR SAVED
TIMINT	0.200	TIME INTERVAL IN HOURS

*** ***

```
          **************
          *            *
81 KK     *   Node8    *
          *            *
          **************
```

83 KO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	0	PUNCH COMPUTED HYDROGRAPH
IOUT	22	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	300	LAST ORDINATE PUNCHED OR SAVED
TIMINT	0.200	TIME INTERVAL IN HOURS

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE

24-HOUR	72-HOUR						
HYDROGRAPH AT		Node1	14.	40.80	13.	8.	3.	0.05
HYDROGRAPH AT		Node2	26.	15.60	18.	8.	3.	0.05
HYDROGRAPH AT		Node3	31.	11.80	20.	7.	3.	0.05
HYDROGRAPH AT		Node4	34.	5.60	21.	6.	3.	0.05
HYDROGRAPH AT		Node5	40.	1.60	20.	5.	2.	0.05
HYDROGRAPH AT		Node6	51.	1.20	16.	4.	2.	0.05
HYDROGRAPH AT		Node7	54.	1.00	14.	3.	1.	0.05
HYDROGRAPH AT		Node8	51.	0.80	10.	2.	1.	0.05

*** NORMAL END OF HEC-1 ***

FLOOD ROUTE LOTLINE 14-15 FLOW DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 14-15
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

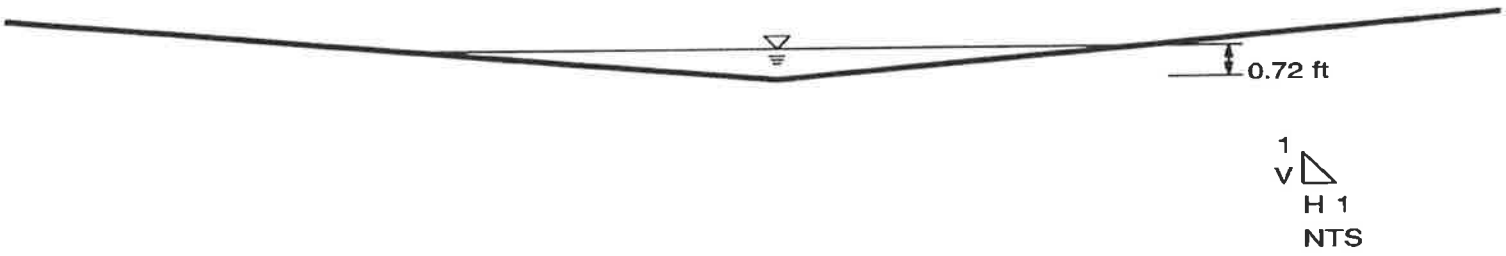
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.038000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	30.00	cfs

Results		
Depth	0.72	ft
Flow Area	6.17	ft^2
Wetted Perimeter	17.27	ft
Top Width	17.21	ft
Critical Depth	0.83	ft
Critical Slope	0.017680	ft/ft
Velocity	4.86	ft/s
Velocity Head	0.37	ft
Specific Energy	1.08	ft
Froude Number	1.43	
Flow is supercritical.		

Cross Section LOTLINE 14-15
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 14-15
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.038000	ft/ft
Depth	0.72	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	30.00	cfs



FLOOD ROUTE LOTLINE 22-23 FLOW DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 22-23
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

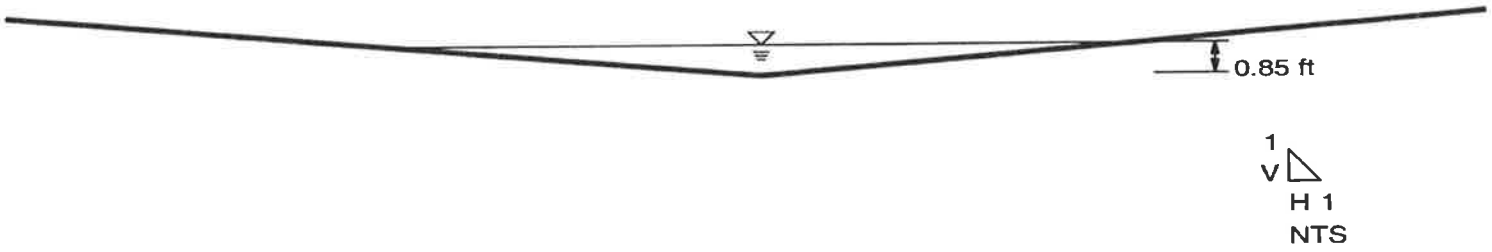
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.050000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	54.00	cfs

Results		
Depth	0.85	ft
Flow Area	8.65	ft^2
Wetted Perimeter	20.45	ft
Top Width	20.38	ft
Critical Depth	1.05	ft
Critical Slope	0.016348	ft/ft
Velocity	6.24	ft/s
Velocity Head	0.61	ft
Specific Energy	1.45	ft
Froude Number	1.69	
Flow is supercritical.		

Cross Section LOTLINE 22-23
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 22-23
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.050000	ft/ft
Depth	0.85	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	54.00	cfs



FLOOD ROUTE LOTLINE 32-33 & 29-30 DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 32-33 & 29-30
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

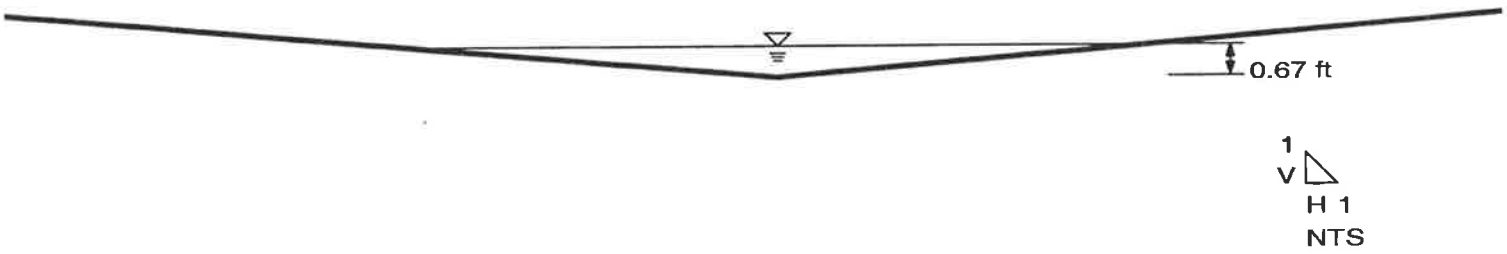
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	18.00	cfs

Results		
Depth	0.67	ft
Flow Area	5.35	ft^2
Wetted Perimeter	16.08	ft
Top Width	16.03	ft
Critical Depth	0.67	ft
Critical Slope	0.018926	ft/ft
Velocity	3.36	ft/s
Velocity Head	0.18	ft
Specific Energy	0.84	ft
Froude Number	1.03	
Flow is supercritical.		

Cross Section LOTLINE 32-33 & 29-30
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 32-33 & 29-30
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Depth	0.67	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	18.00	cfs



FLOOD ROUTE LOTLINES 57-58 & 50-51 DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINES 57-58 & 50-51
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

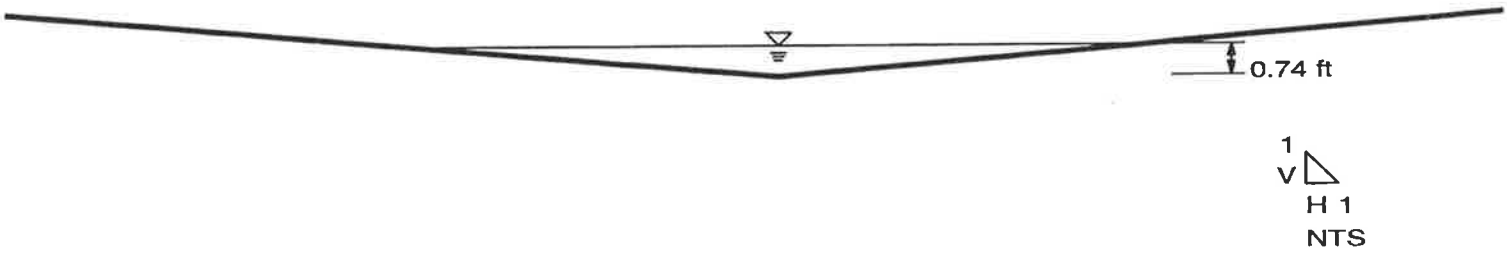
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.010000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	17.00	cfs

Results		
Depth	0.74	ft
Flow Area	6.65	ft^2
Wetted Perimeter	17.93	ft
Top Width	17.86	ft
Critical Depth	0.66	ft
Critical Slope	0.019071	ft/ft
Velocity	2.56	ft/s
Velocity Head	0.10	ft
Specific Energy	0.85	ft
Froude Number	0.74	
Flow is subcritical.		

Cross Section LOTLINES 57-58 & 50-51
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINES 57-58 & 50-51
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.010000	ft/ft
Depth	0.74	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	17.00	cfs



FLOOD ROUTE LOTLINE 37-38 FLOW DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 37-38
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

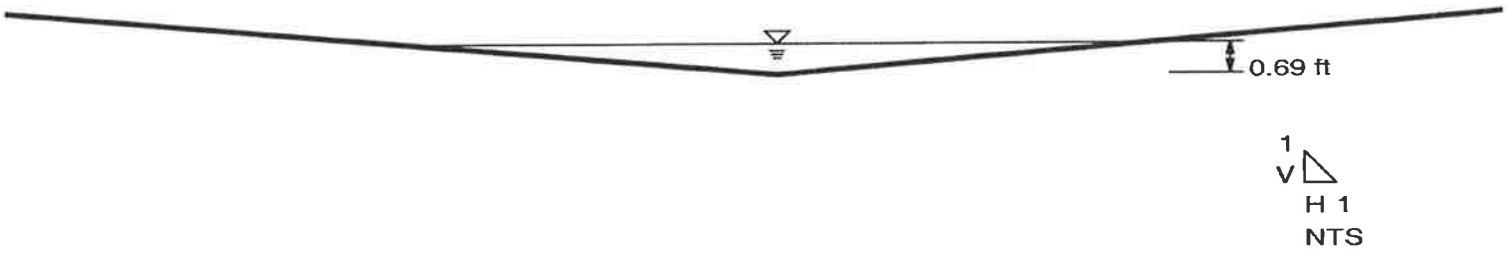
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	20.00	cfs

Results		
Depth	0.69	ft
Flow Area	5.79	ft^2
Wetted Perimeter	16.73	ft
Top Width	16.67	ft
Critical Depth	0.70	ft
Critical Slope	0.018661	ft/ft
Velocity	3.45	ft/s
Velocity Head	0.19	ft
Specific Energy	0.88	ft
Froude Number	1.03	
Flow is supercritical.		

Cross Section LOTLINE 37-38
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINE 37-38
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Depth	0.69	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	20.00	cfs



FLOOD ROUTE LOTLINES 75-76 & 66-67 DEPTH
Worksheet for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINES 75-76 & 66-67
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

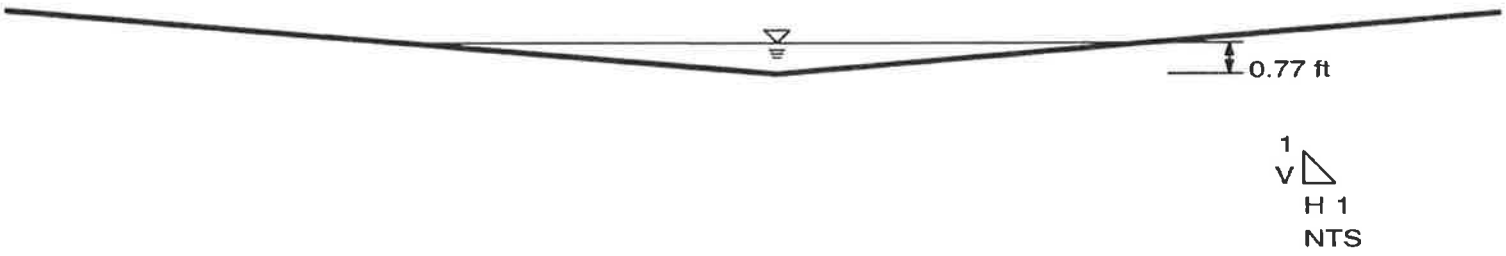
Input Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	26.00	cfs

Results		
Depth	0.77	ft
Flow Area	7.05	ft^2
Wetted Perimeter	18.46	ft
Top Width	18.40	ft
Critical Depth	0.78	ft
Critical Slope	0.018020	ft/ft
Velocity	3.69	ft/s
Velocity Head	0.21	ft
Specific Energy	0.98	ft
Froude Number	1.05	
Flow is supercritical.		

Cross Section LOTLINES 75-76 & 66-67
Cross Section for Triangular Channel

Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	FLOOD ROUTE LOTLINES 75-76 & 66-67
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth

Section Data		
Mannings Coefficient	0.030	
Channel Slope	0.020000	ft/ft
Depth	0.77	ft
Left Side Slope	12.000000	H : V
Right Side Slope	12.000000	H : V
Discharge	26.00	cfs



DETERMINATION OF FIRE FLOW CAPACITY
Worksheet for Pressure Pipe

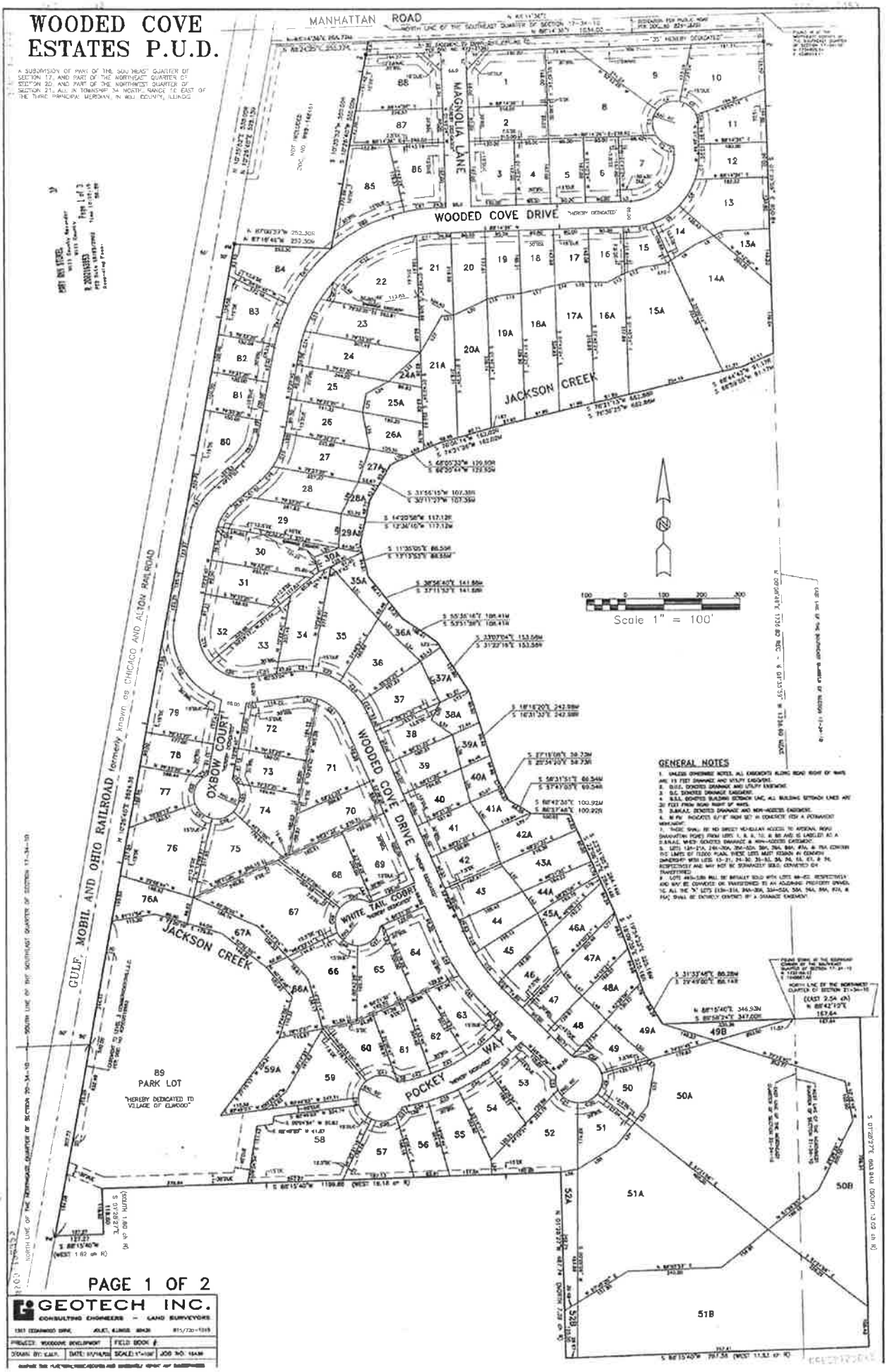
Project Description	
Project File	p:\projects\gjn15438\engineer\flm15438.fm2
Worksheet	WATERMAIN SIZING WORKSHEET
Flow Element	Pressure Pipe
Method	Hazen-Williams Formula
Solve For	Discharge

Input Data	
Pressure at 1	55.00 psi
Pressure at 2	20.00 psi
Elevation at 1	633.00 ft
Elevation at 2	626.00 ft
Length	5,930.00 ft
C Coefficient	100.0
Diameter	10.00 in

Results		
Discharge	1,234.2	gal/min
Headloss	87.73	ft
Energy Grade at 1	760.20	ft
Energy Grade at 2	672.47	ft
Hydraulic Grade at 1	759.86	ft
Hydraulic Grade at 2	672.13	ft
Flow Area	0.55	ft^2
Wetted Perimeter	2.62	ft
Velocity	5.04	ft/s
Velocity Head	0.40	ft
Friction Slope	0.014794	ft/ft

WOODED COVE ESTATES P.U.D.

A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 17, AND PART OF THE NORTHEAST QUARTER OF SECTION 20, AND PART OF THE NORTHWEST QUARTER OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN WILL COUNTY, ILLINOIS



PAGE 1 OF 2

GEOTECH INC.
CONSULTING ENGINEERS — LAND SURVEYORS

WOODED COVE ESTATES P.U.D.

A SUBDIVISION OF PART OF THE SOUTHEAST QUARTER OF SECTION 17, AND PART OF THE NORTHEAST QUARTER OF SECTION 20, AND PART OF THE NORTHWEST QUARTER OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, IN WILL COUNTY, ILLINOIS

STATE OF ILLINOIS }
COUNTY OF WILL } SS

I, GERALD M. PARISH, A PROFESSIONAL LAND SURVEYOR IN THE STATE OF ILLINOIS, DO HEREBY CERTIFY THAT UNDER THE DIRECTION OF THE OWNER THEREOF, I HAVE SURVEYED, SUBDIVIDED AND PLATTED INTO [illegible] LOTS AND 5 STREETS THAT PART OF THE SOUTHEAST QUARTER OF SECTION 17, AND THAT PART OF THE [illegible] QUARTER OF SECTION 20, AND THAT PART OF THE NORTHWEST QUARTER OF SECTION 21, ALL IN TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS:

THAT PART OF THE SOUTHEAST QUARTER OF SAID SECTION 17, LYING EAST OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 01 MINUTES 48 SECONDS EAST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER 1236.80 FEET TO THE CENTER OF JACKSON CREEK; THENCE ALONG THE CENTERLINE OF JACKSON CREEK SOUTH [illegible] DEGREES 44 MINUTES 45 SECONDS WEST [illegible] ... MINUTES 36 SECONDS WEST 117.12 FEET; SOUTH 11 DEGREES 35 MINUTES 06 SECONDS EAST 88.58 FEET; SOUTH 37 DEGREES 11 MINUTES 42 SECONDS EAST 141.60 FEET; SOUTH 52 DEGREES 51 MINUTES 76 SECONDS EAST 100.41 FEET; SOUTH 31 DEGREES 22 MINUTES 14 SECONDS EAST 153.58 FEET; SOUTH 16 DEGREES 31 MINUTES 32 SECONDS EAST 242.68 FEET; SOUTH 25 DEGREES 34 MINUTES 22 SECONDS EAST 38.73 FEET; SOUTH 51 DEGREES 47 MINUTES 02 SECONDS EAST 89.54 FEET; SOUTH 82 DEGREES 57 MINUTES 48 SECONDS EAST 100.82 FEET; SOUTH 22 DEGREES 08 MINUTES 17 SECONDS EAST 284.14 FEET; [illegible] AND ALSO EXCEPTING THEREFROM THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT A CONCRETE RIGHT-OF-WAY MARKER AT THE INTERSECTION OF THE SOUTHERLY LINE OF MANHATTAN ROAD, 50 FEET WIDE, AS DESCRIBED IN DOCUMENT NO. R74-16722, WITH THE EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD 100 WIDE, RECORDED IN MAP BOOK 3, PAGE 76; THENCE NORTH 88 DEGREES 24 MINUTES 28 SECONDS EAST 255.77 FEET ALONG THE SOUTHERN LINE OF SAID MANHATTAN ROAD; THENCE SOUTH 10 DEGREES 33 MINUTES 52 SECONDS WEST [illegible] FEET; THENCE NORTH 87 DEGREES 06 MINUTES 62 SECONDS WEST 252.30 FEET TO THE AFORESAID EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTH 10 DEGREES 35 MINUTES 52 SECONDS EAST 332.20 FEET ALONG SAID EASTERN LINE TO THE POINT OF BEGINNING; AND THAT PART OF THE NORTHEAST QUARTER OF AFORESAID SECTION 20, AND THAT PART OF THE NORTHWEST QUARTER OF THE [illegible] NORTHERLY ALONG THE SAID EAST LINE OF THE RIGHT-OF-WAY TO THE SOUTH LINE OF SAID SECTION 17; THENCE EAST ALONG SAID SECTION LINE TO THE POINT OF BEGINNING, IN WILL COUNTY, ILLINOIS, CONTAINING [illegible] ACRES MORE OR LESS.

I DO FURTHER CERTIFY THAT:

1. THE ACCOMPANYING PLAT IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY AND SUBDIVISION MADE BY ME.
2. PART OF THE PROPERTY COVERED BY THIS PLAT OF SUBDIVISION IS SITUATED WITHIN A SPECIAL FLOOD HAZARD AREA AS IDENTIFIED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM MAPS, MAP NUMBER [illegible], EFFECTIVE SEPTEMBER 6, 1995.
3. THE PROPERTY OF PLAT IS SITUATED WITHIN THE CORPORATE LIMITS OF THE VILLAGE OF ELWOOD.
4. THAT ALL REGULATIONS ENACTED BY THE SUBDIVISION AND PLAT ORDINANCES OF THE VILLAGE OF ELWOOD HAVE BEEN COMPLIED WITH IN THE PREPARATION OF THIS PLAT.
5. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PART THEREOF AND ARE CORRECT AT 68 FAHRENHEIT.
6. [illegible] SET AT ALL LOT CORNERS UNLESS OTHERWISE NOTED.

[illegible] THIS 10th DAY OF September 20 02 A.D.

[signature]
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. [illegible]

STATE OF ILLINOIS }
COUNTY OF WILL } SS

THIS IS TO CERTIFY THAT [illegible] DEVELOPMENT CORPORATION, AN ILLINOIS CORPORATION, IS THE HOLDER OF RECORD TITLE TO THE PROPERTY DESCRIBED HEREON, AND HAS CAUSED THE SAME TO BE SURVEYED, PLATTED, AND DEDICATED TO THE VILLAGE OF ELWOOD AS SHOWN BY THIS PLAT FOR THE USES AND PURPOSES HEREIN SET FORTH AND THAT SAID [illegible] DEVELOPMENT CORPORATION HEREBY ACKNOWLEDGES AND ADOPTS THE SAME UNDER THE STYLE AND TITLE HEREON SHOWN.

DATED THIS 1st DAY OF October 20 02 A.D.

[illegible] DEVELOPMENT CORP.
[illegible]

ATTEST: [signature]
SECRETARY

[signature]
PRESIDENT

STATE OF ILLINOIS }
COUNTY OF WILL } SS

I, Deborah L. Mutz, A NOTARY PUBLIC IN SAID COUNTY IN THE STATE AFORESAID, DO HEREBY CERTIFY THAT Jeffrey J. Allen, PRESIDENT, Patricia J. Allen, SECRETARY, PERSONALLY KNOWN TO ME TO BE THE SAME PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE FOREGOING INSTRUMENT, APPEARED BEFORE ME THIS DAY IN PERSON AND ACKNOWLEDGED THAT THEY SIGNED AND DELIVERED THE FOREGOING INSTRUMENT AS THEIR OWN FREE AND VOLUNTARY ACT, AS OFFICERS OF [illegible] DEVELOPMENT CORPORATION, AN ILLINOIS CORPORATION, FOR THE USES AND PURPOSES SET FORTH.

GIVEN UNDER MY HAND AND SEAL THIS 1st DAY OF October 20 02 A.D.

OFFICIAL SEAL
DEBRA L MUTZ
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES [illegible]

[signature]
NOTARY PUBLIC

STATE OF ILLINOIS }
COUNTY OF WILL } SS

THIS IS TO CERTIFY THAT I FIND NO DELINQUENT OR UNPAID [illegible] AGAINST ANY OF THE REAL ESTATE DESCRIBED IN THE FOREGOING INSTRUMENT.

DATED THIS 24th DAY OF September 20 02 A.D.

[illegible]
WILL COUNTY [illegible]

STATE OF ILLINOIS }
COUNTY OF WILL } SS

I, Richard A. Ladzinski, DIRECTOR OF THE TAX MAPPING AND PLATTING OFFICE OF WILL COUNTY, DO HEREBY CERTIFY THAT I HAVE CHECKED THE PROPERTY DESCRIPTION ON THE PLAT AGAINST AVAILABLE COUNTY RECORDS AND FIND SAID DESCRIPTION TO BE TRUE AND CORRECT. THE PROPERTY HEREIN DESCRIBED IS LOCATED ON TAX MAP NO. [illegible] CERTIFIED AS PERMANENT REAL ESTATE TAX INDEX NUMBER [illegible] 11-21-[illegible]

DATED THIS 26th DAY OF September 20 02 A.D.

[signature]
DIRECTOR

STATE OF ILLINOIS }
COUNTY OF WILL } SS

THIS IS TO CERTIFY THAT PROVISIONS HAVE BEEN MADE IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS FOR THE GUARANTEE OF PERFORMANCE IN THE CONSTRUCTION OF THE FOLLOWING IMPROVEMENTS: WOODED COVE ESTATES P.U.D.

[signature]
ENGINEER
Oct. 2, 2002
DATE

STATE OF ILLINOIS }
COUNTY OF WILL } SS

THIS PLAT HAS BEEN CHECKED FOR CONFORMANCE TO THE VILLAGE OF ELWOOD STANDARDS AND REQUIREMENTS, AND WORKING DRAWINGS AND SPECIFICATIONS OF ROADWAYS, STORM SEWERS, SANITARY SEWERS AND WATERMAIN IMPROVEMENTS HAVE BEEN PREPARED IN CONFORMANCE WITH THE VILLAGE OF ELWOOD STANDARDS AND REQUIREMENTS AND ALL ENGINEERING FEES DUE TO THE VILLAGE OF ELWOOD HAVE BEEN PAID, AND TO CERTIFY THAT PROVISIONS HAVE BEEN MADE IN ACCORDANCE WITH THE SUBDIVISION REQUIREMENTS FOR THE GUARANTEE OF PERFORMANCE IN CONSTRUCTION OF THESE IMPROVEMENTS.

[signature]
ENGINEER
Oct. 2, 2002
DATE

STATE OF ILLINOIS }
COUNTY OF WILL } SS

I, LANCE A. VINKEL, CHAIRMAN OF THE VILLAGE OF ELWOOD PLAN COMMISSION, DO HEREBY CERTIFY THAT ON THIS 1st DAY OF OCTOBER 20 02 A.D. THIS PLAT OF SUBDIVISION [illegible] WAS DULY APPROVED BY THE PLAN COMMISSION OF THE VILLAGE OF ELWOOD AND A RECOMMENDATION WAS MADE TO THE VILLAGE PRESIDENT AND BOARD OF TRUSTEES.

ATTEST: [signature]
SECRETARY

[signature]
CHAIRPERSON

STATE OF ILLINOIS }
COUNTY OF WILL } SS

APPROVED BY THE PRESIDENT AND THE BOARD OF TRUSTEES OF THE VILLAGE OF ELWOOD, WILL COUNTY, ILLINOIS, THIS 1 DAY OF [illegible] 20 02 A.D.

CORPORATE SEAL

ATTEST: [signature]
VILLAGE CLERK

[signature]
VILLAGE PRESIDENT
WEST MISSISSIPPI AVENUE
ELWOOD, IL 60421

STATE OF ILLINOIS }
COUNTY OF WILL } SS

THIS INSTRUMENT NO. R2002-[illegible]859 WAS FILED FOR RECORD IN THE RECORDER'S OFFICE OF WILL COUNTY, AFORESAID ON THE 3rd DAY OF October 20 02 A.D. AT 10:30 O'CLOCK A.M.

[signature]
WILL COUNTY RECORDER

EASEMENT PROVISIONS

AN EASEMENT FOR SERVING THE SUBDIVISION AND OTHER PROPERTY WITH ELECTRIC AND COMMUNICATIONS SERVICE IS HEREBY RESERVED FOR AND GRANTED TO

COMMONWEALTH EDISON COMPANY,
AMERITECH TELEPHONE COMPANY,
APPLICABLE CABLE TELEVISION COMPANY,
GRANTEES

[illegible]

LOT NUMBER	LOT AREA (SQ. FT.)	STREET ADDRESS
1	28856	21115 SOUTH MAGNOLIA LANE
2	16000	21125 SOUTH MAGNOLIA LANE
3	30040	21135 SOUTH MAGNOLIA LANE
4	15030	[illegible] SOUTH WOODED COVE DRIVE
5	15030	[illegible] SOUTH WOODED COVE DRIVE
6	15030	[illegible] SOUTH WOODED COVE DRIVE
7	20118	[illegible] SOUTH WOODED COVE DRIVE
8	48702	[illegible] SOUTH WOODED COVE DRIVE
9	30193	[illegible] SOUTH WOODED COVE DRIVE
10	33254	[illegible] SOUTH WOODED COVE DRIVE
11	18556	[illegible] SOUTH WOODED COVE DRIVE
12	16474	[illegible] SOUTH WOODED COVE DRIVE
13	27874	[illegible] SOUTH WOODED COVE DRIVE
13A	11738	
14	11318	21147 SOUTH WOODED COVE DRIVE
14A	59158	
15	11398	[illegible] SOUTH WOODED COVE DRIVE
15A	38473	
16	12410	[illegible] SOUTH WOODED COVE DRIVE
16A	27979	
17	12810	[illegible] SOUTH WOODED COVE DRIVE
17A	29217	
18	14388	[illegible] SOUTH WOODED COVE DRIVE
18A	28836	
19	15379	[illegible] SOUTH WOODED COVE DRIVE
19A	30086	
20	17752	[illegible] SOUTH WOODED COVE DRIVE
20A	28514	
21	23248	[illegible] SOUTH WOODED COVE DRIVE
21A	27029	
22	33842	21163 SOUTH WOODED COVE DRIVE
23	25845	21209 SOUTH WOODED COVE DRIVE
24	24833	21218 SOUTH WOODED COVE DRIVE
24A	3807	
25	18337	[illegible] SOUTH WOODED COVE DRIVE
25A	12334	
26	18769	[illegible] SOUTH WOODED COVE DRIVE
26A	13613	
27	30077	[illegible] SOUTH WOODED COVE DRIVE
27A	4120	
28	21780	[illegible] SOUTH WOODED COVE DRIVE
28A	5020	
29	26736	[illegible] SOUTH WOODED COVE DRIVE
29A	3302	
30	23213	[illegible] SOUTH WOODED COVE DRIVE
30A	3828	
31	20470	21311 SOUTH WOODED COVE DRIVE
32	19004	21323 SOUTH WOODED COVE DRIVE
33	21053	21339 SOUTH WOODED COVE DRIVE
34	22095	21341 SOUTH WOODED COVE DRIVE
35	27428	21343 SOUTH WOODED COVE DRIVE
35A	10087	
36	21067	[illegible] SOUTH WOODED COVE DRIVE
36A	8217	
37	16873	21347 SOUTH WOODED COVE DRIVE
37A	8681	
38	14859	[illegible] SOUTH WOODED COVE DRIVE
38A	8878	
39	15533	[illegible] SOUTH WOODED COVE DRIVE
39A	7283	
40	14234	[illegible] SOUTH WOODED COVE DRIVE
40A	7888	
41	14416	[illegible] SOUTH WOODED COVE DRIVE
41A	6803	
42	14844	[illegible] SOUTH WOODED COVE DRIVE
42A	16687	
43	15587	[illegible] SOUTH WOODED COVE DRIVE
43A	18567	
44	15603	[illegible] SOUTH WOODED COVE DRIVE
44A	10330	
45	16112	[illegible] SOUTH WOODED COVE DRIVE
45A	7363	
46	14229	[illegible] SOUTH WOODED COVE DRIVE
46A	16168	
47	12013	[illegible] SOUTH WOODED COVE DRIVE
47A	16884	
48	11913	[illegible] SOUTH WOODED COVE DRIVE
48A	12063	
49	12975	[illegible] SOUTH WOODED COVE DRIVE
49A	21888	
49B	8198	
50	15154	[illegible] SOUTH WOODED COVE DRIVE
50A	174627	
50B	89427	
51	18867	[illegible] SOUTH WOODED COVE DRIVE
51A	130425	
51B	[illegible]	
52	31878	[illegible] SOUTH WOODED COVE DRIVE
52A	13620	
52B	4203	
53	30220	21508 SOUTH WOODED COVE DRIVE
		20112 WEST POCKEY WAY
54	20388	20118 WEST POCKEY WAY
55	22493	20128 WEST POCKEY WAY
56	17323	20134 WEST POCKEY WAY
57	18538	20142 WEST POCKEY WAY
58	48850	20148 WEST POCKEY WAY
59	25043	20147 WEST POCKEY WAY
59A	23078	
60	18868	20143 WEST POCKEY WAY
61	17877	20135 WEST POCKEY WAY
62	18616	20125 WEST POCKEY WAY
63	20681	20117 WEST POCKEY WAY
		21458 SOUTH WOODED COVE DRIVE
64	24321	21444 SOUTH WOODED COVE DRIVE
		20138 WEST WHITE TAIL COURT
65	21878	20144 WEST WHITE TAIL COURT
66	28249	20150 WEST WHITE TAIL COURT
66A	14894	
67	47417	20152 WEST WHITE TAIL COURT
67A	16625	
68	24190	20147 WEST WHITE TAIL COURT
69	24030	20137 WEST WHITE TAIL COURT
		21418 SOUTH WOODED COVE DRIVE
70	21823	21404 SOUTH WOODED COVE DRIVE
71	34398	21358 SOUTH WOODED COVE DRIVE
72	28893	21350 SOUTH WOODED COVE DRIVE
		21347 SOUTH OXBOW COURT
73	16150	21359 SOUTH OXBOW COURT
74	18840	21367 SOUTH OXBOW COURT
75	26001	21368 SOUTH OXBOW COURT
76	38513	21364 SOUTH OXBOW COURT
76A	18408	
77	18183	21360 SOUTH OXBOW COURT
78	15880	21380 SOUTH OXBOW COURT
79	33753	21344 SOUTH OXBOW COURT
		21342 SOUTH WOODED COVE DRIVE
80	28747	21242 SOUTH WOODED COVE DRIVE
81	15000	21230 SOUTH WOODED COVE DRIVE
82	15000	21220 SOUTH WOODED COVE DRIVE
83	21037	21210 SOUTH WOODED COVE DRIVE
84	24753	21184 SOUTH WOODED COVE DRIVE
85	38256	21160 SOUTH WOODED COVE DRIVE
86	21448	21158 SOUTH WOODED COVE DRIVE
		21140 SOUTH MAGNOLIA DRIVE
87	31287	21128 SOUTH MAGNOLIA DRIVE
88	29811	21118 SOUTH MAGNOLIA DRIVE
89	328023	PARK LOT

NUMBER	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

NUMBER	DIRECTION	DISTANCE
[illegible]	[illegible]	[illegible]

STATE OF ILLINOIS }
COUNTY OF WILL } SS

DIRECT ACCESS TO MANHATTAN ROAD (ARSENAL ROAD), COUNTY HIGHWAY 17 FROM LOTS 1, 3, 9, 10 AND 28 IS PROHIBITED.

APPROVED THIS 24th DAY OF Sept 20 02 A.D. AS TO ROADWAY ACCESS TO COUNTY HIGHWAY 17, ALSO KNOWN AS MANHATTAN ROAD (ARSENAL ROAD).

[signature]
WILL COUNTY ENGINEER

2	GEOTECH INC. CONSULTING ENGINEERS - LAND SURVEYORS 1807 CEDARWOOD DRIVE JOLIET, ILLINOIS 60435 815/730-1010	WOODED COVE ESTATES P.U.D.	DRAWN BY: C.M.P. CHECKED BY: J.M.F. JOB # 15438 DATE: 07/18/02	DATE BY REVISION

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 35894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900588

DAVID A. NOBLE, Vice President
ILLINOIS
Registered Prof. Engineer No. 45313

JOHN C. BARRETT, Vice President
ILLINOIS
Registered Prof. Land Surveyor No. 2997

LANCE G. BEIGH
ILLINOIS
Registered Prof. Engineer No. 48363

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

June 11, 2002

Village of Elwood
201 Mississippi
P.O. Box 435
Elwood, IL 60421

Attention: Mr. Robert Blum, Village President

RE: WOODED COVE ESTATES
PRELIMINARY PLAT REVIEW
TEI JOB NO. E02038

Gentlemen:

The Wooded Cove Preliminary Plat was submitted to our office for review. The plan is in conformance with a Concept Plan previously provided to the Village.

The Village has established a Developer's Handbook. That Handbook clarifies the requirements for a Preliminary Plat submittal. The following items were not addressed by this submittal.

1. No park land is shown as dedicated to the Village.

2. No road centerline elevations have been provided.

3. State plane coordinates for monuments and benchmarks are not provided.

4. The lot coverage ratio for the subdivision is not provided.

5. Profile drawings of the stream, as discussed in the Developer's Handbook, are not included with the submittal.

The Developers have noted on the Preliminary Plat that they are requesting the following three variances.

6. A variance from the Engineering Technical Specifications Local Street Geometry requirements of centerline radius from 250 feet to 150 feet. The centerline radius controls the sharpness of the road curves through the development. With a smaller radius, the turns will be sharper and vehicles will be required to take the curves at a slower velocity. The smaller radius will also reduce the sight distance along the road curves. If the Village decides to grant the variance for road geometry, the Village may want to consider requiring either a lower subdivision speed limit or the installation of speed bumps prior to turns or curves in the road.

7. A variance from the Stormwater Detention Ordinance. The Developer is indicating that the rate of stormwater run-off from the property will be slower after development than the current rate of run-off. The Village's Stormwater Ordinance does not compare pre-development and post development run-off rates. The Village requires that specifically designated discharge rates be met for developed property. The layout of the subdivision and the proximity of Jackson Creek cause difficulties in meeting the existing Stormwater Ordinance.

   Prior to considering waiving the Stormwater Ordinance, the Village should require extensive stormwater run-off calculations comparing predevelopment with post development conditions. Depending on those calculations, the Village may consider reducing the stormwater detention requirements.

8. Variance from Engineering Technical specifications to not require the installation of sidewalks along the roadway. The Village should decide upon this requirement based on past and future development concerns. The presence of sidewalks will contribute to the movement of pedestrians through the subdivision. Sidewalks will also contribute to the rate of stormwater run-off from the development.

This Preliminary Plat shows the installation of two sanitary sewer lift stations for servicing the subdivision with sewer. The original concept showed only one lift station. The additional lift station will reduce the depth of the sanitary sewers installed through rock. The Village should consider whether the upkeep and maintenance of an additional lift station is a greater benefit than having a deep sanitary sewer line installed.

I will be in attendance at the Village of Elwood Plan Commission meeting to discuss any or all of the above items as needed. If you have any questions or need any additional information, please contact this office.

Very truly yours,

TYSON ENGINEERING, INC.

James P. Brooks, P.E.I.

JPB/mc
cc: Mr. Jeff Allen, Geotech

May 24, 2002

Village of Elwood
PO Box 435
Elwood, IL 60421

VIA CERTIFIED MAIL – RETURN RECEIPT

Dear Village of Elwood :

Woodcove Development Corporation has submitted applications to the Village of Elwood to request an amendment to the Official Zoning Map (zoning reclassification), and for a Special Use Permit for a Planned Unit Development. This letter is being sent to you as required by the Village of Elwood to inform you and all adjacent property owners of a public hearing for these applications.

The property proposed for zoning reclassification and Planned Unit Development is located at the southwest corner of Bush and Manhattan roads. The property covers 88.21 acres and is generally bounded by Manhattan Road on the north, the Gulf, Mobil, and Ohio Railroad on the west, and Jackson Creek on the east and south.

The zoning reclassification application is to change the existing A-1 Agricultural District designation for this property to G-R General Residence District The intended use for the Planned Unit Development is 88 detached single-family residences.

The Plan Commission of the Village of Elwood has scheduled the public hearing for these applications on June 11, 2002 at 7:00 pm at the Elwood Grade School, 409 N. Chicago Avenue, Elwood, Illinois. A copy of these applications is available for review at the office of the Village Clerk, 201 E. Mississippi Street, Elwood, Illinois.

If you have any questions, please call me at .

Yours truly,

WOODCOVE DEVELOPMENT CORPORATION

Jeffrey J. Allen, President

Woodcove Development Corp.
22961 S. Althea Ct.
Minooka, IL 60447

CERTIFIED MAIL

7000 1530 0000 5794 5790

UNITED STATES POSTAL SERVICE

9264

60421

Village of Elwood
PO Box 435
Elwood, IL 60421

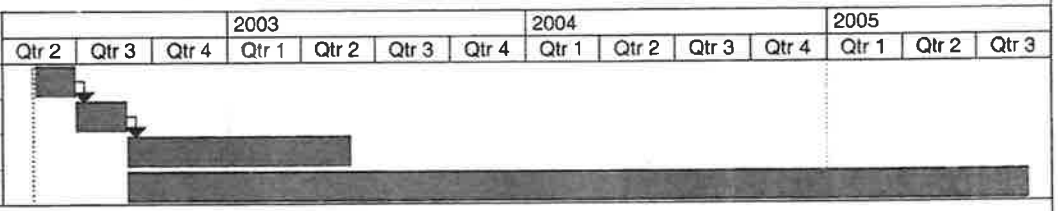
5-25

RETURN RECEIPT REQUESTED

60421-0435

WOODED COVE ESTATES P.U.D.
DEVELOPMENT SCHEDULE

ID	Task Name	Start	Finish
1	Preliminary Plat	Thu 5/9/02	Fri 6/28/02
2	Final Engineering & Plat	Mon 7/1/02	Fri 8/30/02
3	Development Construction	Mon 9/2/02	Sat 5/31/03
4	Lot Sales & House Construction	Mon 9/2/02	Thu 9/1/05



Project: WOODED COVE ESTATES
Date: Thu 5/9/02

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 36894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900666
DAVID A. NOBLE, Vice President
ILLINOIS
Registered Prof. Engineer No. 45313
JOHN C. BARRETT, Vice President
ILLINOIS
Registered Prof. Land Surveyor No. 2987
LANCE G. BEIGH
ILLINOIS
Registered Prof. Engineer No. 46363

367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
FAX (815) 932-2951
E-Mail: tysoneng@keynet.net

FACSIMILE

TO: Bob Blum

OF: Village of Elwood

COPY TO:

FROM: James Brooks

DATE: 6/11/02

FAX NO.: (815)423-6861

JOB NO.: E02038

PAGES: 4
(Including this Cover Sheet)

COMMENTS: Letter relative to Preliminary Plat Review for Wooded Cove Estates.

Hard copy to follow.

TYSON ENGINEERING INC.

Since 1952

DAVID A. TYSON, President
ILLINOIS
Registered Prof. Engineer No. 35894
Registered Prof. Land Surveyor No. 2445
INDIANA
Registered Prof. Engineer No. 19900586
DAVID A. NOBLE, Vice President
ILLINOIS
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367 South Schuyler Avenue
Kankakee, Illinois 60901
(815) 932-7406
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June 11, 2002

Village of Elwood
201 Mississippi
P.O. Box 435
Elwood, IL 60421

Attention: Mr. Robert Blum, Village President

RE: WOODED COVE ESTATES
PRELIMINARY PLAT REVIEW
TEI JOB NO. E02038

Gentlemen:

The Wooded Cove Preliminary Plat was submitted to our office for review. The plan is in conformance with a Concept Plan previously provided to the Village.

The Village has established a Developer's Handbook. That Handbook clarifies the requirements for a Preliminary Plat submittal. The following items were not addressed by this submittal.

1. No park land is shown as dedicated to the Village.
2. No road centerline elevations have been provided. (Roads)
3. State plane coordinates for monuments and benchmarks are not provided.
4. The lot coverage ratio for the subdivision is not provided.
5. Profile drawings of the stream, as discussed in the Developer's Handbook, are not included with the submittal. Paper of Flood FEMA Flood Insurance Unusual

The Developers have noted on the Preliminary Plat that they are requesting the following three variances.

6. A variance from the Engineering Technical Specifications Local Street Geometry requirements of centerline radius from 250 feet to 150 feet. The centerline radius controls the sharpness of the road curves through the development. With a smaller radius, the turns will be sharper and vehicles will be required to take the curves at a slower velocity. The smaller radius will also reduce the sight distance along the road curves. If the Village decides to grant the variance for road geometry, the Village may want to consider requiring either a lower subdivision speed limit or the installation of speed bumps prior to turns or curves in the road.

7. A variance from the Stormwater Detention Ordinance. The Developer is indicating that the rate of stormwater run-off from the property will be slower after development than the current rate of run-off. The Village's Stormwater Ordinance does not compare pre-development and post development run-off rates. The Village requires that specifically designated discharge rates be met for developed property. The layout of the subdivision and the proximity of Jackson Creek cause difficulties in meeting the existing Stormwater Ordinance.

   Prior to considering waiving the Stormwater Ordinance, the Village should require extensive stormwater run-off calculations comparing predevelopment with post development conditions. Depending on those calculations, the Village may consider reducing the stormwater detention requirements.

8. Variance from Engineering Technical specifications to not require the installation of sidewalks along the roadway. The Village should decide upon this requirement based on past and future development concerns. The presence of sidewalks will contribute to the movement of pedestrians through the subdivision. Sidewalks will also contribute to the rate of stormwater run-off from the development.

This Preliminary Plat shows the installation of two sanitary sewer lift stations for servicing the subdivision with sewer. The original concept showed only one lift station. The additional lift station will reduce the depth of the sanitary sewers installed through rock. The Village should consider whether the upkeep and maintenance of an additional lift station is a greater benefit than having a deep sanitary sewer line installed.

I will be in attendance at the Village of Elwood Plan Commission meeting to discuss any or all of the above items as needed. If you have any questions or need any additional information, please contact this office.

Very truly yours,

TYSON ENGINEERING, INC.

James P. Brooks, P.E.I.

JPB/mc
cc: Mr. Jeff Allen, Geotech

GEOTECH INC.
CONSULTING ENGINEERS — LAND SURVEYORS
1207 CEDARWOOD DRIVE JOLIET, ILLINOIS 60435
PHONE (815) 730-1010 FAX (815) 730-1093 E-MAIL GEOTECHINC@HOME.COM

June 7, 2002

Ms. Pat Buchenau
Village of Elwood
P.O. Box 435, Mississippi Street
Elwood, Illinois 60421

RE: Wooded Cove Estates
Revised Preliminary Plat
Geotech Job # 15438

Dear Ms. Buchenau:

Please find enclosed ten (10) copies of the revised Preliminary Plat of Wooded Cove Estates. The Plat has been revised in accordance with the attached review comments received by the Will County Highway Department. The overall layout and number of lots has not changed as a result of their comments, just the entrance location.

If you have any questions please do not hesitate to contact us.

Sincerely,

GEOTECH, Inc.

Jeffrey J. Allen, P.E.
Engineering Director

Enclosure

cc: James Brooks, Tyson Engineering
Rod Tonelli, Ruettiger and Tonelli

RHG:njs 4/2/71

R73-07881
FILED-RECORDERS OFFICE
WILL COUNTY, ILL.
'73 MAR 21 PM 2:39
RECORDER
MICROFILMED
4.00

STATE OF ILLINOIS)
) SS.
COUNTY OF WILL)

I, KATHLEEN ERICKSON, duly elected and acting Clerk of the Village of Elwood, Will County, Illinois, do hereby certify that I have custody and possession of the records and ordinances of said Village.

I further certify that the foregoing is a true and exact copy of Ordinance No. 309 of the Village of Elwood providing for an Ordinance to amend Ordinance No. 290 of the Village of Elwood dated June 2, 1969 and known as the Village of Elwood Zoning Ordinance.

I further certify that said Ordinance was passed at a regular meeting of the Board of Trustees of said Village held on the 5th day of April, A. D., 1971, and that the vote on said Ordinance was:

AYES 6

NAYS 0

Whereupon said Ordinance was declared duly adopted.

VILLAGE OF ELWOOD, ILLINOIS

Kathleen Erickson
Village Clerk

(SEAL)

R73-07881 RHG:njs 4/2/71

ORDINANCE NO. 309

AN ORDINANCE TO AMEND ORDINANCE NO. 290 OF THE VILLAGE OF ELWOOD: SAID ORDINANCE BEING PASSED JUNE 2, 1969, KNOWN AS "VILLAGE OF ELWOOD ZONING ORDINANCE".

WHEREAS, the Elwood Zoning Board of Appeals and Plan Commission have held a public hearing on the question of the zoning of the property described below on January 18, 1971, at 7:30 P. M., pursuant to the published Notice and said Zoning Board of Appeals and Plan Commission has recommended approval of the following:

WHEREAS, proper statutory notice was given by the Village of Elwood concerning such zoning;

NOW, THEREFORE, BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF ELWOOD, ILLINOIS:

That Ordinance No. 290 (being the "Village of Elwood Zoning Ordinance") passed June 2, 1969, be, and the same is, hereby amended as follows:

That the Village Zoning Ordinances and the Zoning Districts as established by the Zoning Map of Elwood, which is incorporated in and made a part of Ordinance No. 290, be, and the same are, hereby amended, and classification under said Zoning Ordinance are hereby made as follows:

SECTION 1: The following described territory is hereby classified and established as a B-2 District:

The North Half (N 1/2) of the Northeast Quarter (NE 1/4) of Section 29, Township 34 North, and in Range 10 East of the Third Principal Meridian, in Will County, Illinois.

SECTION 2: The following described territory is hereby classified and established as an I-2 District:

That part of the West Half (W 1/2) of the West Half (W 1/2) of the Southeast Quarter (SE 1/4) and the East Half (E 1/2) of the Southwest Quarter (SW 1/4) of Section 20 lying East of the right-of-way of the Chicago and Alton Railway, all in Township 34 North, Range 10 East of the Third Principal Meridian, in Will County, Illinois.

SECTION 3: The following described territory is hereby classified and established as an R-3 District with the specific additional authority for R-1 and R-2 uses within said R-3 District.

That part of the West Half (W 1/2) of the West Half (W 1/2) of the Southeast Quarter (SE 1/4) and the East Half (E 1/2) of the Southwest Quarter (SW 1/4) of Section 20, lying West

of the right-of-way of the Chicago and Alton Railway all in Township 34 North, Range 10 East of the Third Principal Meridian in Will County, Illinois, excepting therefrom the North 800 feet thereof.

SECTION 4: The following described territory is hereby classified and established as a B-5 District with the specific additional authority for B-1-A uses within said B-5 District.

That part of the Southeast Quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section 17, Township 34 North, and in Range 10 East of the Third Principal Meridian in Will County, Illinois, lying South of the Public Highway running Northeasterly and Southwesterly through said Quarter Section (except that part conveyed by Document No. 957241), and that part of the West Half (W 1/2) of the Northeast Quarter (NE 1/4) of Section 20, Township 34 North, and in Range 10 East of the Third Principal Meridian, in Will County, Illinois lying West of the right-of-way of the Chicago and Alton Railroad, and that part of the East Half (E 1/2) of the Northwest Quarter (NW 1/4) of Section 20, Township 34 North, and in Range 10 East of the Third Principal Meridian, in Will County, Illinois, lying East of the Highway, running Northeasterly and Southwesterly through said tract of land, except that part conveyed by Document No. 683387.

SECTION 5: The following described territory is hereby classified and established as an "F: District:

That part of the Southeast Quarter (SE 1/4) of Section 17, Township 34 North, and in Range 10 East of the Third Principal Meridian, lying East of the right-of-way of the Chicago and Alton Railroad Company, in Will County, Illinois, and that part of the Northeast Quarter (NE 1/4) of Section 20, Township 34 North, and in Range 10 East of the Third Principal Meridian, and of the Northwest Quarter (NW 1/4) of the Northwest Quarter (NW 1/4) of Section 21, Township 34 North, Range 10 East of the Third Principal Meridian, described as follows: Commencing at the Southeast corner of Section 17; thence East 2.54 chains; thence South 13.09 chains; thence West 11.93 chains; thence North 7.39 chains; thence West 18.18 chains; thence South 1.80 chains; thence West 1.82 chains to the East line of the right-of-way of the Chicago and Alton Railway; thence Northerly along the said east line of the right-of-way to the South line of said Section 17; thence East along said Section line to place of beginning, in Will County, Illinois.

SECTION 6: The following described territory is hereby classified and established as an R-2 District with specific additional authority to construct modular housing within said District:

The North 800 feet of that part of the West Half (W 1/2) of the West Half (W 1/2) of the Southeast Quarter (SE 1/4) and the East Half (E 1/2) of the Southwest Quarter (SW 1/4) of Section 20, lying West of the right-of-way of the Chicago and Alton Railway, all in Township 34 North, Range 10 East of the Third Principal Meridian in Will County, Illinois.

SECTION 7: There is hereby granted the specific additional authority to construct, reconstruct, expand and maintain a sanitary sewage treatment plant, appurtenances and facilities upon any territory described in Sections 1 through 6 of this Ordinance.

SECTION 8: The Zoning Map of the Village is hereby amended to conform to the above changes.

SECTION 9: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 10: This Ordinance shall take effect upon its passage, approval and recording according to law.

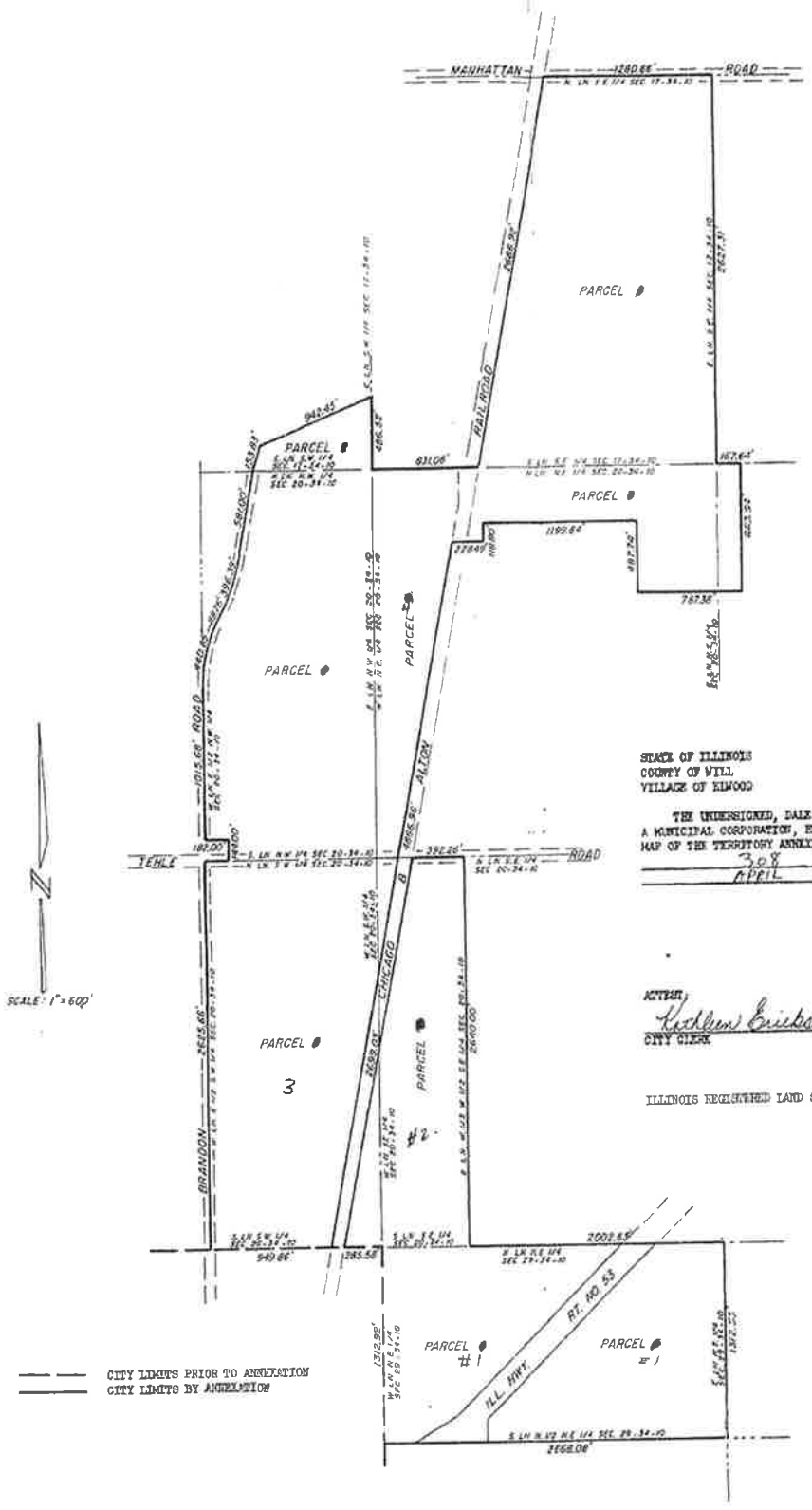
ADOPTED, PASSED AND APPROVED this 5th day of April, 1971, by the vote of 6 for and 0 against.

Dale Archer
VILLAGE PRESIDENT

ATTEST:

Kathleen Erickson
VILLAGE CLERK

P.5



STATE OF ILLINOIS
COUNTY OF WILL
VILLAGE OF KINWOOD

THE UNDERSIGNED, DALE ARCHER, VILLAGE PRESIDENT OF THE VILLAGE OF KINWOOD, A MUNICIPAL CORPORATION, HEREWITH CERTIFIES THAT THE ABOVE PLAT IS AN ACCURATE MAP OF THE TERRITORY ANNEXED TO THE VILLAGE OF KINWOOD UNDER ORDINANCE NO. _____ OF THE VILLAGE OF KINWOOD, DATED 5th DAY OF April, 1971. A. D.

Dale Archer
DALE ARCHER
VILLAGE PRESIDENT

ATTEST:
Kathleen Erickson
CITY CLERK

ILLINOIS REGISTERED LAND SURVEYOR NO. 1691 William C. Fleming
WILLIAM C. FLEMING

P.5

E. INDEXED Ord. #309
Vil. Elwood

for 1972 tax yr.

cert to Dept of Local Gov Affairs
2/16/73 U.H.

R73-7881

FILED
FEB 16 2 38 PM '73
CLARA HARTLEY WOODARD
COUNTY CLERK
WILL COUNTY, ILLINOIS

Mr.
Mrs. Fred Blatt
Village Clerk
Elwood, Ill. 60421

GALOWICH, GALOWICH, MCSTEEN & PHELAN
ATTORNEYS AT LAW
SUITE 612 EMCO PLAZA
57 N. OTTAWA STREET
JOLIET, ILLINOIS 60431
TELEPHONE: 727-4578
AREA CODE 815

LEGAL DESCRIPTION OF PROPERTY

PARCEL 1:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING EAST OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; AND EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 06 MINUTES 49 SECONDS EAST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER 1736.60 FEET TO THE CENTER OF JACKSON CREEK; THENCE ALONG THE CENTERLINE OF JACKSON CREEK SOUTH 68 DEGREES 44 MINUTES 43 SECONDS WEST 91.17 FEET, SOUTH 78 DEGREES 21 MINUTES 13 SECONDS WEST 862.88 FEET, SOUTH 76 DEGREES 06 MINUTES 14 SECONDS WEST 162.02 FEET, SOUTH 68 DEGREES 05 MINUTES 32 SECONDS WEST 129.90 FEET, SOUTH 37 DEGREES 56 MINUTES 15 SECONDS WEST 107.39 FEET, SOUTH 14 DEGREES 20 MINUTES 58 SECONDS WEST 117.12 FEET, SOUTH 17 DEGREES 55 MINUTES 05 SECONDS EAST 88.55 FEET, SOUTH 37 DEGREES 11 MINUTES 48 SECONDS EAST 14.68 FEET, SOUTH 53 DEGREES 51 MINUTES 28 SECONDS EAST 108.41 FEET, SOUTH 31 DEGREES 22 MINUTES 16 SECONDS EAST 153.55 FEET, SOUTH 16 DEGREES 31 MINUTES 32 SECONDS EAST 242.98 FEET, SOUTH 25 DEGREES 34 MINUTES 20 SECONDS EAST 59.73 FEET, SOUTH 57 DEGREES 47 MINUTES 03 SECONDS EAST 69.84 FEET, SOUTH 86 DEGREES 57 MINUTES 48 SECONDS EAST 100.92 FEET, SOUTH 22 DEGREES 06 MINUTES 17 SECONDS EAST 284.14 FEET, SOUTH 18 DEGREES 09 MINUTES 35 SECONDS EAST 225.16 FEET, AND SOUTH 29 DEGREES 49 MINUTES 00 SECONDS EAST 88.14 FEET TO THE SOUTH LINE OF THE AFORESAID SOUTHEAST QUARTER; THENCE SOUTH 89 DEGREES 58 MINUTES 24 SECONDS EAST ALONG SAID SOUTH LINE 347.00 FEET TO THE POINT OF BEGINNING; AND ALSO EXCEPTING THEREFROM THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT A CONCRETE RIGHT-OF-WAY MARKER, AT THE INTERSECTION OF THE SOUTHERN LINE OF MANHATTAN ROAD, 80 FEET WIDE, AS DESCRIBED IN DOCUMENT NO. R74-16722, WITH THE EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD, 100' WIDE, RECORDED IN MAP BOOK 3, PAGE 78; THENCE NORTH 88 DEGREES 24 MINUTES 25 SECONDS EAST 255.77 FEET ALONG THE SOUTHERN LINE OF SAID MANHATTAN ROAD; THENCE SOUTH 10 DEGREES 35 MINUTES 52 SECONDS WEST 550.00 FEET; THENCE NORTH 87 DEGREES 08 MINUTES 57 SECONDS WEST 252.30 FEET TO THE AFORESAID EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTH 10 DEGREES 35 MINUTES 52 SECONDS EAST 530.00 FEET ALONG SAID EASTERN LINE, TO THE POINT OF BEGINNING, IN WILL COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SECTION 17; THENCE EAST 2.54 CHAINS; THENCE SOUTH 13.09 CHAINS; THENCE WEST 11.93 CHAINS; THENCE NORTH 7.39 CHAINS; THENCE WEST 18.18 CHAINS; THENCE SOUTH 1.80 CHAINS; THENCE WEST 1.82 CHAINS TO THE EAST LINE OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTHERLY ALONG THE SAID EAST LINE OF THE RIGHT-OF-WAY TO THE SOUTH LINE OF SAID SECTION 17; THENCE EAST ALONG SAID SECTION LINE TO THE POINT OF BEGINNING; IN WILL COUNTY, ILLINOIS.

RECOMMENDATION FROM ZONING BOARD REGARDING WOODCOVE DEVELOPMENT

REZONING OF PROPERTY

Recommend to Village Board to approve rezoning from A-1 to GR.

SPECIAL PERMIT FOR PUD AND PRELIMINARY PLAT

Recommend to Village Board to approve Special Use Permit for PUD and Preliminary Plat with a waiver of storm water requirements pending final Engineering calculations showing that they meet Village Storm Water Ordinance And waiver of sidewalks pending discussions with Parks and Recreation.

LEGAL NOTICE
VILLAGE OF ELWOOD
PLAN COMMISSION
PUBLIC HEARING

Notice is hereby given of a public hearing of the Plan Commission of the Village of Elwood to commence at 7:00 pm on Tuesday, June 11, 2002 at Elwood Grade School, 409 N. Chicago Avenue, Elwood Illinois. All interested parties are invited to attend and provide their input. The hearing may be continued on said date to a future time, date, and place without further notice being given. The purpose of this hearing is to consider a request for an amendment to the Zoning Map of the Village of Elwood from the current A-1 Agricultural District to G-R General Residence District, and for a Special Use Permit for Planned Unit Development under the Official Zoning Ordinance of the Village of Elwood, contained within Applications submitted by applicant Woodcove Development Corporation, c/o Jeffrey Allen, 22961 S. Althea Court, Minooka, Illinois, 60447, on certain property, legally described as follows:

PARCEL 1:

THAT PART OF THE SOUTHEAST QUARTER OF SECTION 17, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING EAST OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; AND EXCEPTING THEREFROM THAT PART THEREOF DESCRIBED AS FOLLOWS: BEGINNING AT THE SOUTHEAST CORNER OF SAID SOUTHEAST QUARTER; THENCE NORTH 00 DEGREES 06 MINUTES 49 SECONDS EAST ALONG THE EAST LINE OF SAID SOUTHEAST QUARTER 1736.60 FEET TO THE CENTER OF JACKSON CREEK; THENCE ALONG THE CENTERLINE OF JACKSON CREEK SOUTH 68 DEGREES 44 MINUTES 43 SECONDS WEST 91.17 FEET, SOUTH 78 DEGREES 21 MINUTES 13 SECONDS WEST 662.88 FEET, SOUTH 76 DEGREES 06 MINUTES 14 SECONDS WEST 162.02 FEET, SOUTH 68 DEGREES 05 MINUTES 32 SECONDS WEST 129.90 FEET, SOUTH 31 DEGREES 56 MINUTES 15 SECONDS WEST 107.39 FEET, SOUTH 14 DEGREES 20 MINUTES 58 SECONDS WEST 117.12 FEET, SOUTH 11 DEGREES 35 MINUTES 05 SECONDS EAST 88.55 FEET, SOUTH 37 DEGREES 11 MINUTES 48 SECONDS EAST 141.68 FEET, SOUTH 53 DEGREES 51 MINUTES 28 SECONDS EAST 108.41 FEET, SOUTH 31 DEGREES 22 MINUTES 16 SECONDS EAST 153.58 FEET, SOUTH 16 DEGREES 31 MINUTES 32 SECONDS EAST 242.98 FEET, SOUTH 25 DEGREES 34 MINUTES 20 SECONDS EAST 59.73 FEET, SOUTH 57 DEGREES 47 MINUTES 03 SECONDS EAST 69.54 FEET, SOUTH 86 DEGREES 57 MINUTES 48 SECONDS EAST 100.92 FEET, SOUTH 22 DEGREES 06 MINUTES 17 SECONDS EAST 284.14 FEET, SOUTH 18 DEGREES 09 MINUTES 35 SECONDS EAST 225.16 FEET, AND SOUTH 29 DEGREES 49 MINUTES 00 SECONDS EAST 88.14 FEET TO THE SOUTH LINE OF THE AFORESAID SOUTHEAST QUARTER; THENCE SOUTH 89 DEGREES 58 MINUTES 24 SECONDS EAST ALONG SAID SOUTH LINE 347.00 FEET TO THE POINT OF BEGINNING; AND ALSO EXCEPTING THEREFROM THAT PART DESCRIBED AS FOLLOWS: BEGINNING AT A CONCRETE RIGHT-OF-WAY MARKER, AT THE INTERSECTION OF THE SOUTHERN LINE OF MANHATTAN ROAD, 80 FEET WIDE, AS DESCRIBED IN DOCUMENT NO. R74-16722, WITH THE EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD, 100' WIDE, RECORDED IN MAP BOOK 3, PAGE 78; THENCE NORTH 88 DEGREES 24 MINUTES 25 SECONDS EAST 255.77 FEET ALONG THE SOUTHERN LINE OF SAID MANHATTAN ROAD; THENCE SOUTH 10 DEGREES 35 MINUTES 52 SECONDS WEST 550.00 FEET; THENCE NORTH 87 DEGREES 08 MINUTES 57 SECONDS WEST 252.30 FEET TO THE AFORESAID EASTERN LINE OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTH 10 DEGREES 35 MINUTES 52 SECONDS EAST 530.00 FEET ALONG SAID EASTERN LINE, TO THE POINT OF BEGINNING, IN WILL COUNTY, ILLINOIS. PIN 11-17-400-034

PARCEL 2:

THAT PART OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, AND OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 21, TOWNSHIP 34 NORTH, RANGE 10 EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SECTION 17, THENCE EAST 2.54 CHAINS; THENCE SOUTH 13.09 CHAINS; THENCE WEST 11.93 CHAINS; THENCE NORTH 7.39 CHAINS; THENCE WEST 18.18 CHAINS; THENCE SOUTH 1.80 CHAINS; THENCE WEST 1.82 CHAINS TO THE EAST LINE OF THE RIGHT-OF-WAY OF THE CHICAGO AND ALTON RAILROAD; THENCE NORTHERLY ALONG THE SAID EAST LINE OF THE RIGHT-OF-WAY TO THE SOUTH LINE OF SAID SECTION 17; THENCE EAST ALONG SAID SECTION LINE TO THE POINT OF BEGINNING; IN WILL COUNTY, ILLINOIS. PIN 11-20-200-002 and 11-21-100-001

The application may be changed, altered, modified, or retracted after the public hearing. A copy of the Application is available for review at the office of the Village Clerk, 201 E. Mississippi Street, Elwood, Illinois.

Lance Vinsel, Chairman
Village of Elwood Plan Commission

2174 Oneida Street
Joliet, Illinois 60435
Phone: 815-744-6600
Fax: 815-744-0101

Ruettiger Tonelli & Associates, Inc.

5-23-02 10:21

FAX

To: **Pat Buchenau**
Village of Elwood

From: Joel Strassman

Attn.:

Fax: 815-423-6861 **Pages: 3 Total**

Phone: **Date: May 23, 2002**

Re: Wooded Cove Rezoning and PUD

Urgent X For Review Please Comment Please Reply Please Recycle

IF ANY OF THIS MESSAGE IS RECEIVED IN POOR CONDITION, OR IS MISSING, PLEASE CALL OUR OFFICE AT THE ABOVE NUMBER.

- COMMENTS:

Attached is the legal notice for publication for Wooded Cove. Please check the time, date, and place of the hearing. I have the school as the place for the hearing. I do not have a copy of the application, so I copied the name of the applicant from the Plat. Please check this as well.

If you have any questions, please call me at 744-6600.

☐ Hard copy to follow via U.S. Mail ____
(initials)

Patricia Buchenau
Village Clerk

Robert Blum
Village President

John D. Kolata
Village Administrator

Village of Elwood
201 E. Mississippi – PO Box 435
Elwood, Illinois 60421-0435
815/423-5011 – fax815/423-6861

Fax

To: FREE PRESS **From:** PAT

Fax: **Pages:** 3

Phone: **Date:** 5/23/02

Re: **CC:**

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply**

TO BE PUBLISHED IN LEGAL.
ANY QUESTIONS FEEL FREE
TO CALL

Thanks
Pat