CITIES OF FRIENDSWOOD AND LEAGUE CITY

CLEAR CREEK DRAINAGE IMPROVEMENT STUDY

AUGUST, 1985

BJI J.O. 84027

BERNARD JOHNSON INCORPORATED

ENGINEERS • ARCHITECTS • PLANNERS
HOUSTON • WASHINGTON • SAN ANTONIO

BERNARD JOHNSON INCORPORATED
5050 WESTHEIMER • HOUSTON, TEXAS 77056 • 713/622-1400 • CABLE: JOHNSENG

August 7, 1985

Dr. Herbert W. Grubb
Principal Planner
Texas Department of Water Resources
P.O. Box 13087, Capitol Station
Austin, TX 78711

Reference: Cities of Friendswood and League City
Clear Creek Drainage Improvement Study
BJI J.O. 84027

Dear Dr. Grubb:

We have completed the final engineering report on the drainage improvement study of Clear Creek. This final report, updated to reflect comments received on the draft report from your staff and the cities, was prepared in accordance with the agreement between the Texas Department of Water Resources (TDWR) and the Cities of Friendswood and League City dated July 2, 1984.

Our findings indicate the need for, and potential flood damage reductions resulting from, drainage improvements to Clear Creek between the Farm-to-Market Road 528 crossing of Clear Creek and a point downstream of the State Highway 3 crossing. Study methodology and preliminary construction estimates of the proposed improvements are included.

We would like to acknowledge the valuable assistance that Mr. Gary Laneman of the TDWR staff provided throughout the duration of the project. Additionally, the U.S. Army Corps of Engineers, Galveston District assisted in the data collection and economic analysis phases of the project. The collective guidance and assistance by both agencies minimized procedural delays, project time and overall costs, thereby affording timely completion of the project.

Transmitted herewith are ten copies of the final report. Should you have any questions or require additional copies of the report, please call.

Sincerely,

Franklin B. Moon, P.E.
Vice President

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Enclosures

BERNARD JOHNSON INCORPORATED
5050 WESTHEIMER • HOUSTON, TEXAS 77056 • 713/622-1400 • CABLE: JOHNSENG

August 7, 1985

The Honorable Ralph L. Lowe, Mayor
City of Friendswood
109 Willowick Avenue
Friendswood, TX 77546

The Honorable Joe L. Lamb, Mayor
City of League City
300 West Walker
League City, TX 77573

Reference: Cities of Friendswood and League City
Clear Creek Drainage Improvement Study
BJI J.O. 84027

Gentlemen:

We have completed the final engineering report on the drainage improvement study of Clear Creek. The final report reflects all comments received on the draft report from each city staff and the Texas Department of Water Resources (TDWR).

Our findings indicate the need for, and potential flood damage reductions resulting from, drainage improvements to Clear Creek between the Farm-to-Market Road 528 crossing of Clear Creek and a point downstream of the State Highway 3 crossing. Study methodology and preliminary construction estimates of the proposed improvements are included.

We would like to acknowledge the valuable assistance that Mr. Gary Laneman of the TDWR staff provided throughout the duration of the project. Additionally, the U.S. Army Corps of Engineers, Galveston District assisted in the data collection and economic analysis phases of the project. The collective guidance and assistance by both agencies minimized procedural delays, project time and overall costs, thereby affording timely completion of the project.

Transmitted herewith are ten copies of the report for each city. Additionally, ten copies of the final report are being forwarded to TDWR pursuant to the agreement between the TWDR and the Cities of Friendswood and League City dated July 2, 1984.

We are prepared to assist the cities in the design and implementation of the improvements identified in the report and appreciate the opportunity to work on this interesting project.

Sincerely,

Franklin B. Moon, P.E.
Vice President

cl
Enclosures

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

FOR

CITIES OF FRIENDSWOOD AND
LEAGUE CITY, TEXAS

AUGUST 1985

BJI J.O. 84027

PREPARED BY

BERNARD JOHNSON INCORPORATED
5050 Westheimer
Houston, Texas 77056

EXECUTIVE SUMMARY

Introduction

On March 5, 1984, the cities of Friendswood and League City, Texas commissioned Bernard Johnson Incorporated to conduct a hydrologic and hydraulic analysis of the Clear Creek watershed. The purpose of the study was to determine the effects of implementing a portion of the federally authorized project along Clear Creek between State Highway 3 (S.H. 3) and Farm-to-Market Road 528 (F.M. 528).

General Methodology

This study was conducted by utilizing the state-of-the-art computer modeling techniques developed by the U.S. Army Corps of Engineers and other recognized engineering procedures. Field investigations were made to verify the existing hydraulic information originally developed by the Corps of Engineers for the flood control project of Clear Creek. For study purposes the second outlet from Clear Lake to Galveston Bay, which is proposed to be constructed by the Harris County Flood Control District, shall be assumed to be in place prior to upstream improvements along Clear Creek.

Findings and Conclusions

A. Under existing conditions there are approximately 2,645 acres of land between S.H. 3 and the Galveston County/Brazoria County line that are inundated due to flooding along the main channel of Clear Creek resulting from the occurrence of the 10-year frequency storm.

B. Construction of the proposed improvements will result in lowering the 10-year flood elevations approximately 0-7 feet between S.H. 3 and F.M. 528. The proposed improvements will remove from the 10-year floodplain approximately 30 percent of the land between S.H. 3 and F.M. 528, and 10 percent of the land between F.M. 528 and the Galveston County/Brazoria County line.

C. For existing and future watershed conditions, respectively, the average annual damages incurred throughout the study area will be reduced by approximately 30 and 10 percent, and approximately 250 and 180 existing structures will be removed from the 10-year floodplain as a result of construction of the proposed improvements.

D. The total cost of the improvements proposed as a result of this study is approximately $21,223,000.

Recommendations

A. That the proposed improvements be constructed.

B. That further improvements to Clear Creek, upstream of the reach investigated in this report, be investigated and evaluated.

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY
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1.0 INTRODUCTION

1.1. Authorization

This report was prepared in accordance with the letter agreement between the cities of Friendswood and League City, Texas ("Cities") and Bernard Johnson Incorporated (BJI), dated March 5, 1984, for conduct of a hydrologic and hydraulic analysis of Clear Creek. The report describes the results of that analysis.

1.2 Objective and Scope

The scope of services as defined in the letter agreement is as follows:

A. Prepare application for a flood control planning contract between the Cities and the Texas Department of Water Resources (TDWR), the contract to be funded from the TDWR Research and Planning Fund. Represent the Cities, as required, in correspondence, meetings, etc. prior to final Board decision on the application. No further work is to be undertaken pending advice of favorable Board action and then only if such work is within the scope of the Cities' contract with TDWR.

B. Hold Project start-up meeting with the Cities, establish lines of communication and coordination, discuss scheduling, etc.

C. Collect available pertinent data on the Clear Creek watershed from the District and from the Galveston District office of the U. S. Army Corps of Engineers, such as hydrology and hydraulic models, flood maps, aerial photos and maps, design memorandums, survey data, etc. Conduct field reconnaissance of watershed area to be investigated. Review and evaluate data and determine additional requirements, if any, and advise the Cities of results.

D. Assess existing watershed conditions under 10 year storm frequency.

1. Establish available hydrology/hydraulic models on in-house computer and update as required to reflect known existing conditions.

2. Develop flood flows, flood maps and flood profiles, define floodplains and evaluate flood damage potential.

3. Review findings with the Cities.

E. Develop program of improvements.

1. Again utilizing the hydrology/hydraulic models and the existing conditions information developed in item D, determine the design storm frequency to be used and test various improvements on the model to identify those which offer significant damage reduction within the project cost parameter and without imposing the hazard of increased downstream damage.

2. Determine that all improvements selected for inclusion in the program are within the scope of the Corps of Engineers improvement project for Clear Creek.

3. Prepare flood profiles and floodplain maps for the improved condition, taking into consideration all proposed improvements.

4. Review findings with the Cities.

F. Present the recommended results of the investigation in a bound report, all improvements to be prioritized and described and sketched in sufficient detail to permit design engineers to prepare detailed plans and specifications for construction without further hydrologic/hydraulic investigation or study. Construction cost estimates for all recommended improvements would be included. The report will also contain a map(s) which will comparatively depict the floodplains resulting from a 10 year storm (and other storm events, such as 5 year, 25 year, etc., as may be desired) under:

1. Existing conditions,

2. Improved conditions contemplated by this plan,

3. Improved conditions contemplated by the Corps of Engineers' authorized plan for Clear Creek.

G. Assist the Cities, as desired, in preparing information for dissemination to the public and in making presentations to elected officials and/or at public meetings.

H. Assist the Cities in preparation of permit applications to enable improvements to be constructed. Take follow-up actions, as required, aimed at securing approval of the applications by cognizant governmental agencies.

Subsequent to the agreement between the Cities and BJI, on July 2, 1984 the Cities entered into an agreement with Texas Department of Water Resources to obtain financial assistance for the hydrologic and hydraulic analysis of Clear Creek. This financial assistance was made possible through the Water Conservation, Water Quality, and Water Development Planning and Research, and Flood Control Planning Fund. The scope of services to be furnished by the Cities under this agreement modified the scope of services between the Cities and BJI as follows:

A. Conduct public meetings to solicit comments from the general public as to the scope and content of the drainage study.

B. Obtain additional field surveys where necessary to update the hydrologic and hydraulic models for current watershed conditions.

C. Develop preliminary flood control channel designs to contain the 10-year frequency flood event within banks.

D. Estimate the potential flood damage reduction expected from the proposed improvements. This task will be limited to calculating the reduction in floodplain surface area.

On September 25, 1984 a meeting was held at the Friendswood City Hall to discuss recent correspondence received by the City of Friendswood from the Corps of Engineers. The correspondence stated the status of the federal project along Clear Creek and included a revised cost estimate for the federal project. The federal project total cost is now estimated at $120 million, up approximately $28 million from the last estimate.

As previously stated, the purpose of this study was to determine the improvements which offer significant damage reduction within a project cost of $10-12 million dollars. This project cost limitation was based upon an earlier estimate of the cost of the federal project between F.M. 528 and S.H. 3. In light of the recently revised federal project cost estimate, it was agreed that this drainage study would investigate the effects of the improvements identified in the federal project between F.M. 528 and S.H. 3 with the requirement that such improvements would not impose a hazard of increased downstream damage. Estimate of the construction cost for those improvements would be calculated.

Discussions of the detailed hydrologic and hydraulic analysis along with the recommended improvements and estimated construction costs are outlined in the following sections.

2.0 GENERAL INFORMATION

2.1 Background

Since 1930, major rainfall events have occurred within the Clear Creek watershed, causing widespread flooding throughout the watershed. In July 1979, tropical storm Claudette deposited between 10 and 20 inches of rain throughout the watershed resulting in flood damages estimated at $95 million dollars.(2)

Recognizing the existing flooding potential of the Clear Creek watershed, the federal government had initiated planning studies to investigate the improvements necessary to reduce the flooding throughout the watershed. In 1968, the U.S. Congress authorized a flood control improvement plan for Clear Creek, upstream of Clear Lake. The improved channel, designed to convey the 100-year flood flows within channel banks, would be approximately 31 miles in length, thereby reducing the natural channel length by 10 miles.

In January 1974, the U.S. Army Corps of Engineers held a public meeting to discuss the federally authorized plan. There was public expression of a strong desire to develop a plan which would provide flood protection with minimal disturbance to the natural environment. Additionally, residents in the Clear Lake area requested that the project include additional outlet capacity from Clear Lake to Galveston Bay to offset the potential increase in flooding around the lake that would be caused by upstream drainage improvements.

Subsequent to the January 1974 public meeting, numerous flood control alternatives were investigated, such as reduced levels of flood protection, channel bypasses around populated areas, and reducing the total length of improved channels. The current plan is commonly referred to as the "Modified 10-Year Channel". This plan consists of approximately 23 miles of improved channel upstream of Clear Lake, designed to provide flood protection against the 10-year frequency flood. Non-structural measures, such as floodplain management of the residual 100-year floodplain, are recommended. Additionally, a second outlet between Clear Lake and Galveston Bay is proposed. The federal project is now in the design phase, and construction plans and specifications are being prepared

for the first phase of construction between the headwaters of Clear Lake upstream to the S.H. 3 crossing. No appropriations for construction have been made to date.

On September 27, 1983 the City of Friendswood held a public meeting of local, state and federal officials to discuss the status of the Corps of Engineers' Clear Creek flood control project. At that time, federal budgetary reductions were anticipated and the likelihood of Congress appropriating funds for "new construction starts" of water-related projects appeared remote. Realizing these Congressional sentiments and the future implications upon the Clear Creek project, the City of Friendswood proposed participation from local communities along Clear Creek to finance the cost of an independent engineering study of the Clear Creek watershed. This study, designated as the Clear Creek Safety Valve Plan, would investigate the hydrologic and hydraulic effects of implementing a portion of the federal project as outlined in the Clear Creek Preconstruction Authorization Planning Report, of the Corps of Engineers. In the event that the local sponsors elect to construct the Safety Valve Plan prior to federal appropriations for construction funding, the local sponsors plan to seek credit for the cost of constructing the proposed improvements toward the local share of the federal project prior to start of construction.

On July 2, 1984 the cities of Friendswood and League City contracted with the Texas Department of Water Resources to jointly finance a study of Clear Creek. The goal of the investigation was to determine the potential reduction in flood elevations resulting from certain channel improvements along Clear Creek from F.M. 528 to S.H. 3. The study was to be based upon the assumption that the second outlet from Clear Lake to Galveston Bay would have been constructed prior to construction of the upstream improvement. Preliminary cost estimates would be prepared for the improvements identified in the analysis.

2.2 Location

Clear Creek forms the southern boundary of Harris County and the northern boundary of Galveston County and portions of Brazoria County. Clear Creek originates in Fort Bend County and flows in a southeasterly direction to its outfall into Clear Lake. The stream is approximately 45 miles in length and

drains a watershed of approximately 260 square miles upstream of the Clear Lake outlet to Galveston Bay. The stream reach that was investigated in detail in this report lies between the S.H. 3 crossing of Clear Creek and the F.M. 528 crossing, some eight miles upstream. (See Exhibit 1).

2.3 Topography

The majority of the land within the Clear Creek watershed is relatively flat with a mild slope of approximately 0.03% in a southeasterly direction. Elevations vary from approximately mean sea level (MSL) in the Clear Lake area, to approximately 75 feet MSL in the western portion of the watershed. All elevations were obtained from United States Geological Survey (U.S.G.S.) 7.5 minute quadrangle maps and are based upon 1927 datum, 1973 adjustment.

2.4 Soil Characteristics

The predominant soil deposits in the Clear Creek watershed are comprised of clays, silts and localized sandy pockets. The soil has high shrink-swell potential, low bearing capacity, high moisture content and low permeability.[3]

2.5 Climate

The climate of the area is humid with a moderate range of temperatures. Based upon data obtained from historical weather records from the Alvin Weather Station,[4] average temperatures range from 54° in the winter to 80° in the summer. The average annual precipitation on the watershed is approximately 47 inches.

3.0 EXISTING WATERSHED CONDITIONS

3.1 General

In the development of a flood control project, the existing flooding potential of the stream under investigation is established. The existing watershed conditions direct the investigation toward stream reaches where flood control measures are necessary. This phase of the analysis provides a basis for comparison between the pre and post improvement conditions to assess the merits of the proposed flood control improvements.

The following sections describe the models and methods utilized to establish the flooding potential along Clear Creek. Sources of the base data, and procedures utilized to update the data to reflect 1984 watershed conditions, will be addressed.

3.2 Hydrology

3.2.1 Hydrologic Model Source

The Galveston District of the Corps of Engineers prepared (in 1981) the original hydrologic model of the Clear Creek watershed for their Clear Creek Preconstruction Authorization Planning Report. This model was developed to investigate the rainfall/runoff/diversion characteristics throughout the watershed.

3.2.2 Hydrologic Parameters

The basic information required to construct a hydrologic model include: drainage area, subarea characteristics, rainfall, infiltration loss rates, and stream routing components. The following paragraphs describe each element of the hydrologic model and the methods utilized to develop each element.

a. Drainage Areas - The drainage area of the Clear Creek watershed, as shown on Exhibit 2, encompasses an area of approximately two hundred and sixty (260) square miles. Of this total drainage area, approximately 174 square miles are tributary to the mainstream of Clear Creek upstream of Clear Lake. In the original hydrologic model, seventy-four individual subareas were identified to develop runoff hydrographs (quantity of runoff over time measured at a fixed location). The subareas were delineated utilizing topographic data from U.S.G.S. 7.5 minute quadrangle maps supplemented with one-foot contour interval aerial topographic maps. Shown on Exhibit 3 are the subareas utilized in the hydrologic model.

b. Subarea Characteristics - Subarea characteristics were utilized to develop the runoff hydrograph of each subarea under investigation. The methodology used to calculate the runoff hydrographs was the Clark Unit Hydrograph Method. The two main variables in the derivation of the Clark unit hydrograph are time of concentration (Tc) and Clark storage coefficient (R). Time of concentration is a function of the length and type of flow path that the runoff assumes within a subarea. It is assumed that the longest travel time necessary for runoff to travel from the hydraulically most distant point of the subarea to its outlet or other reference point downstream is equal to the time of concentration. This variable affects the peak flow of the runoff hydrograph. The Clark storage coefficient is a value that simulates the storage characteristics of the subarea (eg: detention facilities, rice fields, etc.) and affects the overall shape of the runoff hydrograph.

The simultaneous equations for calculating Tc and R are:

$$Tc + R = 0.966\ L^{0.411}\ (I\%)^{-0.60}$$

$$\frac{R}{Tc + R} = 0.66$$

where:

Tc	=	time of concentration, in hours
R	=	Clark storage coefficient, in hours
L	=	Stream length from its outfall to drainage divide, in miles
I%	=	Percentage of impervious area

The above equations were developed by the Galveston District of the Corps of Engineers from a linear regression analysis of twenty-seven stream gages throughout the Houston Metropolitan Area. The analysis studied the hydrologic effects of over 470 storms ranging in magnitude from 0.29 to 10.60 inches of rainfall. Shown in Table 1 (Section 8) are the subarea characteristics in the original model which were used to calculate the existing runoff potential of each subarea investigated.

c. Rainfall - The 10-year frequency storm was used as the basis for establishing existing watershed conditions. This storm was selected since the federal project has been modified to a 10-year flood control project. The point rainfall values utilized in the original hydrologic model were obtained from a National Weather Bureau Technical Paper[5]. The point rainfall values were adjusted according to the depth-area-duration procedures outlined in this technical paper when simulating storm centerings throughout the watershed. The unadjusted 10-year point rainfall value is approximately 8.6 inches.

d. Infiltration Loss Rates - Infiltration loss rate is the quantity of rainfall which is expected to be absorbed into the soil and which does not contribute to subarea runoff. The original model utilized an initial loss rate of 1.0 inch and a uniform rate of 0.05 inches per hour. The values were selected based upon storm reproductions for the Houston Metropolitan Area. In the absence of available gage records within the Clear Creek watershed, the selected values were considered to be representative.

e. Stream Routing Components - The original hydrologic model utilized the modified Puls methods of routing to study the flow characteristics of the flood wave traveling downstream along Clear Creek. This method determines the amount of attenuation (reduction in peak flow) of the floodwave along the mainstream caused by basin storage (overbank flooding). The routing components required for the modified Puls routing are storage-discharge relationships and routing steps. Both components are derived from steady state backwater runs of the mainstream of Clear Creek. Utilizing various steady state runs reflecting a range of synthetic flood conditions, routing nodes and steps are selected based upon average travel time. Storage volumes are calculated between each pre-selected routing node.

3.2.3 Model Revisions

Prior to calculating the potential 10-year frequency flood flows throughout the Clear Creek watershed, several revisions to the original hydrologic model were required.

Initially, the Clear Creek watershed was modeled utilizing the "HEC-1 Flood Hydrograph Package for Dam Safety Investigation", which was developed by the Hydrologic Engineering Center of the U.S. Army Corps of Engineers in September, 1978. A newer version of HEC-1 was introduced by the Hydrologic Engineering Center in September, 1981.[6] The original model was revised to be compatible with the latest version of HEC-1. Upon completion of the hydrologic model recoding and formatting, flood flows for 1981 existing watershed conditions, subject to the occurrence of the 10-year frequency flood, were calculated and compared to the flood flows documented in the Clear Creek Preconstruction Authorization Planning Report to ensure correct model conversion.

Since development of the original model, local drainage districts operating within the Clear Creek watershed have constructed improvements to several reaches of the mainstream of Clear Creek and one

major tributary--Marys Creek. The improvements included channel clearing and widening, channel excavation, concrete lining, and high-stage overflow channels across oxbows. Due to the sporadic and isolated nature of the improvements and the fact that only minor changes in development occurred between 1981 and 1984, the subarea characteristics developed for 1981 conditions were considered appropriate. However, these improvements could conceivably alter the storage-outflow relationships utilized to investigate the attenuation of the peak flood flows along Clear Creek. Therefore, the backwater models of Clear Creek and Marys Creek were modified to reflect all improvements constructed since development of the original models, and revised steady-state backwater runs were prepared. (Refer to Section 3.3.2 below, for further description.) Based upon the revised steady-state analysis and maintenance of the pre-selected routing reaches, new storage-outflow relationships and routing steps were calculated.

Utilizing the revised hydrologic model of the watershed, which reflected the changes previously described, 10-year frequency flood flows were recalculated to represent 1984 existing watershed conditions. Shown in Table 2 is a tabulation of the 10-year frequency flood flows for 1981 and 1984 existing watershed conditions. A comparison of the flows reveals an increase of some 15-20 percent throughout most of the watershed between 1981 and 1984. The computer summary printouts of the flood routings are included in Appendix 1 (Section 10) to this report.

3.3 Hydraulics

3.3.1 Hydraulic Model Source

The Galveston District of the Corps of Engineers prepared (in 1981) the original hydraulic model of Clear Creek for the Preconstruction Authorization Planning Report. The hydraulic model was developed to calculate the potential flood elevations along the channel utilizing physical data describing the flow characteristics of Clear Creek and the flood flows obtained in the hydrologic analysis. The following paragraphs describe the basic data input for the model.

A. Floodplain Reconnaissance - Field investigations were made in order to verify factors needed to estimate channel and floodplain roughness coefficients required for the hydraulic analysis.

B. Cross Sections - Cross section measurements were performed utilizing field survey methods to an accuracy of ±0.1 of a foot. Field measurements included the preparation of a base level line throughout the project area tied to the 1973 datum.

C. Surveys of Bridges and Structures - Bridge dimensions were measured in the field to an accuracy of ±0.1 of a foot. A bridge centerline cross section was measured at the same time as other cross section work to determine the obstructive characteristics of the roadway located in the overbank areas.

D. Roughness Coefficients - Roughness coefficients (Mannings "n") for the Clear Creek watershed were estimated from field inspection, field photographs and aerial photographs. Roughness values for the channel areas varied between 0.03 and 0.06, while roughness values for the overbank areas varied between 0.07 and 0.15. The above "n" values appeared to be adequate and representative of the flow characteristics of the watershed as compared to floodplain studies on drainageways of similar characteristics.

The original hydraulic model was prepared utilizing the Corps of Engineers HEC-2 computer model[7] to calculate the existing flood potential along Clear Creek. This program incorporates the field survey data, topographic map information and flood flows computed in the hydrologic analysis to calculate potential flood elevations.

3.3.2 Model Revisions

As previously described in Section 3.2.3, numerous improvements have been constructed within the Clear Creek watershed since development of the original hydrologic and hydraulic models. Hydraulic information relating to the drainage improvements was collected from the following sources:

Clear Creek Drainage District (CCDD)

(1) As-built drawings of five high stage overflow channels across oxbows along Clear Creek between Interstate Highway 45 (I.H. 45) and the Marys Creek outfall.

(2) Construction plans of improvements along Marys Creek downstream of the Brazoria/Galveston County line.

(3) General limits of channel maintenance performed along Cowarts and Chigger Creeks.

Brazoria County Drainage District No. 4 (BCDD #4)

(1) Field Surveys - cross-sectional field surveys of the channel widening and south bank excavation along Clear Creek from State Highway 35 (S.H. 35) downstream to the reservoirs located along the north bank of Clear Creek in Harris County.

Harris County Flood Control District (HCFCD)

(1) Preliminary engineering report of the proposed second outlet from Clear Lake to Galveston Bay.[8]

(2) As-built drawing of one high stage overflow channel across an oxbow along Clear Creek.

(3) Hydraulic model of Clear Creek reflecting channel improvements along the upper reaches of Clear Creek and improvements to three bridges crossing in the vicinity of S.H. 35.

City of League City

(1) Watershed reports of tributaries located in the vicinity of I.H. 45 (Magnolia Creek, Newport Ditch and Corum Ditch), which describe drainage improvements along each tributary.

Prior to revising the hydraulic model, a field reconnaissance of the watershed was performed to confirm the limits and extent of the

improvements described above and verify channel reach lengths and roughness coefficients between surveyed cross-sections. The original hydraulic model of Clear Creek was then adjusted to reflect conditions observed in the field.

Utilizing the hydraulic information provided by HCFCD, CCDD and BCDD #4, the hydraulic model of Clear Creek was revised to reflect the improvements upstream and downstream of S.H. 35 and the six high stage overflow channels. These improvements resulted in significant changes in the hydraulic capacity of Clear Creek and reduced the total length of direct flow in the mainstream during flood stage. Although this study did not address the existing flooding potential along the major tributaries, the hydraulic information on the improvements to the tributaries was required to assess the subarea characteristics and the resultant impact upon the computed runoff hydrographs in the hydrologic analysis.

The improvements along Marys Creek were modeled in the hydrologic analysis since a separate routing of this stream was established within the watershed routing model. The subarea characteristics (time of concentration and Clark storage coefficient) for Cowarts Creek, Chigger Creek, Magnolia Creek, Newport Ditch and Corum Ditch were recalculated to reflect the improvements constructed since development of the original hydrologic model. The improved subarea characteristics were compared to the subarea characteristics utilized in the Corps hydrologic and hydraulic analysis. The comparison indicated that the improvements along these streams had not significantly affected the overall time of concentration of each subarea, therefore the improvements were disregarded.

3.3.3 Initial Conditions

A study of the coincident occurrence of rainfall within the Clear Creek watershed and normal tide levels of Galveston Bay was performed by the Galveston District of the Corps of Engineers for the Preconstruction Authorization Planning Report. The analysis determined that a peak tide

level of 3.3 feet above MSL would occur about one time per year with a median tide level of 2.0 feet above MSL. The original model utilized the median tide elevation of 2.0 MSL as the starting elevation for the water surface profile computations for Clear Creek. This elevation appeared to be representative and was utilized as the starting elevation for this report.

3.3.4 Water Surface Profiles

The water surface profiles along Clear Creek for 1984 existing watershed conditions were computed utilizing the updated HEC-2 computer model with the revised flood flows from the hydrologic analysis. Shown on Exhibit 4* is the cross-sectional layout of the original field surveys used in the computer modeling. Shown in Table 3 is a comparison of the original versus revised hydraulic model cross-section designations at key locations along Clear Creek. This table illustrates the revised channel length of Clear Creek due to reach length adjustments made as a result of field observations. Shown on Exhibit 5* are the 10-year frequency water surface profiles for existing conditions with and without the proposed improvements. (See Section 4.0 for description of existing conditions with proposed improvements.) Shown on Exhibit 6* are the 10-year frequency floodplain limits for existing conditions with and without the proposed improvements. The HEC-2 computer summary printouts for the 1984 existing conditions water surface profiles are provided in Appendix 2.

*The total length of Clear Creek (including Clear Lake) is approximately 45 miles. This report addresses the effects of improving a 5-mile reach of the mainstream located in the downstream reaches of the watershed. For the purpose of this report, all exhibits of the mainstream were limited to the lower 25 miles of Clear Creek (including Clear Lake).

4.0 PROPOSED IMPROVEMENTS

4.1 General

As earlier stated, the goal of this study of Clear Creek was to determine the feasibility of implementing a portion of the federally authorized flood control project of Clear Creek. The study investigated the potential reduction in the 10-year frequency flood elevations along Clear Creek between F.M. 528 downstream to S.H. 3, assuming the following improvements were constructed:

(1) Second outlet from Clear Lake to Galveston Bay

(2) Channel improvements along Clear Creek from F.M. 528 downstream to S.H. 3

The study was based upon the following constraints:

(1) Maintain the alignment and channel sizes identified in the federal project

(2) Assume compliance with all environmental requirements identified in the federal project

(3) No increase in the flood levels along Clear Creek downstream of the Safety Valve Plan

The following sections describe the hydrologic and hydraulic analysis of the proposed improvements and an economic assessment of the potential reduction in flood damages resulting from implementation of the proposed improvements.

4.2 Hydrologic Conditions

Generally, in the investigation of flood control improvements, two variables (development and channel improvements) affect the resultant design flood flows utilized in the final analysis. Dependent upon the existing developed condition of the watershed and the natural characteristics of the stream under investigation, future watershed development with fully improved channels may result in approximately 200-300% increase in the existing condition peak flood flows.

This increase in flows results from the increased volume of runoff associated with development combined with the decreased hydraulic travel time due to storm sewers and improved open channels. For this reason, two hydrologic watershed conditions were investigated--existing and future--with the proposed improvements constructed in each case. The following is a general description of each of these hydrologic conditions:

4.2.1 Existing Watershed Conditions with the Proposed Improvements

The hydrologic and hydraulic effects of construction of the proposed improvements, with no increase in development within the watershed, were analyzed. The results of this analysis illustrates the immediate effects, throughout the watershed, of the proposed channel improvements. The improved channel reduces travel time and basin storage, thus increasing the computed peak flood flows with no increase in the volume of runoff, since development within the watershed is assumed to remain unchanged. The stream routing coefficients developed for the existing stream characteristics were modified to reflect the improved channels identified in the federal project.

4.2.2 Future Watershed Conditions with the Proposed Improvements

The hydrologic and hydraulic effects of future development of the watershed, combined with the construction of the proposed improvements, were analyzed. The results of this analysis illustrates the potential increase in peak flood flows due to the increased volume of runoff attributed to future development and reduced travel time associated with the proposed channel improvements. The hydrologic model developed for existing watershed conditions with the proposed improvements was modified to reflect future watershed conditions. The subarea characteristics (Tc & R) utilized to calculate the runoff from each subarea were revised to reflect future development. The revised subarea characteristics were obtained from the Corps of Engineers Preconstruction Authorization Planning Report. These subarea characteristics were based upon estimated growth patterns and future land use predictions for the Clear Creek watershed (See Table 4).

Shown in Table 5 are the computed 10-year frequency flood flows for the existing watershed conditions assuming no improvement, and for existing and future watershed conditions assuming construction of the proposed improvements. The computer summary printouts of the flood routings are included in Appendix 1 to this report.

4.3 Proposed Improvements

4.3.1 Second Outlet

An underlying assumption of the Safety Valve Plan is that the second outlet from Clear Lake to Galveston Bay will have been constructed. Without provision for a second outlet, ultimate improvements to Clear Creek would cause a rise in the levels of Clear Lake of approximately 2-3 feet, as indicated in the Corps of Engineers report on the federal project. The proposed second outlet would provide the necessary flow area and hydraulic gradient to accommodate drainage improvements to Clear Creek without increasing the flood potential to residents located adjacent to the lake. Utilizing data obtained from HCFCD, the outlet's cross-sectional flow area and alignment were incorporated into this analysis.

4.3.2 Safety Valve Plan

The proposed improvements identified in the federal project between F.M. 528 and S.H. 3 were maintained for this investigation. Specifically, the proposed channel alignment, channel geometry and flow line were used. The bridge improvements proposed at S.H. 3 and I.H. 45 were incorporated into the analysis.

4.3.3 Downstream Improvements

The initial hydraulic analysis of the effects of the improvements proposed in the Safety Valve Plan, combined with the second outlet, indicated significant reductions in the flood levels between S.H. 3 and a point approximately three miles upstream of F.M. 528. However, since the improvements begin approximately two miles upstream of the Clear Creek

outfall into Clear Lake, the flood levels along this two mile reach of Clear Creek increase approximately 0.5 feet due to the upstream drainage improvements. Additional improvements were therefore proposed downstream of S.H. 3 to offset the effects associated with the upstream improvements. The downstream improvement requirements were determined based upon the anticipated flood flows resulting from future watershed development. Therefore, this reach of Clear Creek will experience minor reduction in flood levels immediately and until such time as the watershed achieves future development. Assuming no further improvements to the mainstream of Clear Creek, the flood levels along this reach of the stream will increase back to the levels presently being experienced.

Shown in Table 6 is a comparison of the existing versus improved conditions hydraulic model cross-section designations, at selected bridge locations throughout the watershed. This table illustrates the reduced channel length of Clear Creek resulting from construction of the proposed improvements. Table 7 contains a prioritized tabulation of the proposed improvements. Exhibits 5 and 6 show the water surface profiles and floodplains comparing the existing watershed conditions for both pre and post construction of the proposed improvements. Shown on Exhibits 7 through 11 are sketches of the typical channels, pipeline relocations and bridge improvements recommended. The computer summary printout of the flood profiles is included in Appendix 2 to this report.

The flood profiles for future watershed conditions with the proposed improvements were also calculated. The results of this analysis indicate that the levels are approximately 0.3 to 0.5 feet above the flood levels calculated for existing watershed conditions with the proposed improvements. For purposes of clarity, the calculated water surface profile and floodplain limits for future watershed conditions with the proposed improvements have been omitted from Exhibits 5 and 6.

Review of the computed flood elevations for future watershed conditions indicate that flood levels upstream of F.M. 528 will be greater than the flood elevations calculated for existing watershed conditions (1984). This

is due to the increased runoff associated with future development with no drainage improvements to Clear Creek upstream of F.M. 528. Therefore, it is recommended that future studies be made of the Clear Creek watershed, upstream of the Safety Valve Plan, to provide the necessary drainage improvements to Clear Creek to accommodate upstream development without increasing the flood potential to existing developed areas.

4.4 Economic Analysis

4.4.1 Damage Reduction

A flood damage analysis was performed to determine the extent of damages anticipated throughout the study reach under existing watershed and channel conditions and the amount of reduced damages resulting from the construction of the proposed improvements. Utilizing the original stage-damage relationship prepared for the federal project, (relationship between depth of flooding and dollar amount of damages), total damages and number of inundated structures were calculated for each watershed condition investigated for a range of storm events (2, 10, 25, 50, 100-year and Standard Project Flood), in order to compute average annual flood damages. Shown in Table 8 are the results of the economic analysis,* indicating that damages within the study area will be reduced approximately 30 percent and 10 percent, respectively, as a result of the construction of the proposed improvements for existing and future watershed conditions.

The above analysis concentrated on damages associated with flooding to existing structures only. The analysis does not address other benefits such as reduction in flood insurance costs, restoration of land values and projected benefits associated with future development.

*This information was developed with direct assistance from the Economics Branch of the Galveston District, Corps of Engineers.

4.4.2 Cost Estimate

The construction cost estimates (Table 9) for the improvements identified in this report were based upon the itemized cost estimate from Appendix V - Engineering and Cost Data of the "Clear Creek, Texas -Flood Control, Preconstruction Authorization Planning Report" prepared by the Galveston District, Corps of Engineers. Through discussion with District personnel, inflation factors were obtained to adjust the original cost estimate to reflect 1984 conditions. Construction cost figures include estimates for engineering and design, contingencies, supervision and administration.

5.0 CONCLUSIONS

The analysis indicates the following:

A. Under existing conditions there are approximately 2,645 acres of land, between S.H. 3 and the Galveston County/Brazoria County line, that are inundated due to flooding along the main channel of Clear Creek resulting from the occurrence of the 10-year frequency storm.

B. Construction of the proposed improvements will result in lowering the 10-year flood elevation approximately 0-7 feet between S.H. 3 and F.M. 528. The proposed improvements will remove from the 10-year floodplain approximately 30 percent of the land between S.H. 3 and F.M. 528 and 10 percent of the land between F.M. 528 and the Galveston County/Brazoria County line.

C. The average annual damages incurred throughout the study area will be reduced by approximately 30 and 10 percent, and approximately 250 and 180 existing structures, respectively, will be removed from the 10-year floodplain as a result of construction of the proposed improvements, under existing and future watershed conditions.

D. The total cost of the proposed improvements, excluding the cost of the second outlet, is approximately $21,223,000.

6.0 RECOMMENDATIONS

A. That the Safety Valve Plan and downstream improvements be constructed.

B. That further improvements to Clear Creek, upstream of the reach investigated in this report, be investigated and evaluated.

7.0 REFERENCES

1. "Clear Creek, Texas, Flood Control, Preconstruction Authorization Planning Report," Department of the Army, Galveston District, Corps of Engineers, Galveston, Texas, May 1982.

2. "Tropical Storm Claudette," U.S. Army Engineer District, Galveston, Corps of Engineers, Galveston, Texas, September 1980.

3. "Brazoria County Municipal Utility District Nos. 4 and 5, 100-Year Flood Drainage Study and Proposed Improvements Adjacent to Clear Creek Trousdale Tract," Bernard Johnson Incorporated, July 1980.

4. "Climatological Data," United States Department of Commerce, National Oceanic and Atmospheric Administration.

5. "Technical Paper No. 40, Rainfall Frequency Atlas of the United States," David M. Heshfield, U.S. Department of Commerce, Weather Bureau, Washington, D.C., May 1961.

6. "HEC-1 Flood Hydrograph Package, Users Manual," Hydrologic Engineering Center, U.S. Army Corps of Engineers, Davis, California, September 1981.

7. "HEC-2 Water Surface Profiles, Users Manual," Hydrologic Engineering Center, U.S. Army Corps of Engineers, Davis, California, November 1982.

8. "Preliminary Engineering Report, Clear Lake Second Outlet, A100-00-00," Dannenbaum Engineering Corporation, December 1983.

TABLE 1

SUBAREA CHARACTERISTICS

Location	Subarea Description*	Area (Sq. Miles)	Length (Miles)	Percent Impervious	Tc (Hrs.)	R (Hrs.)
1	Above SM 45.31	4.04	3.67	3	4.58	8.88
2	SM 45.31 to SM 44.12	3.27	2.73	3	4.04	7.85
3	SM 44.12 to SM 42.49	8.33	4.33	3	4.90	9.51
4	SM 42.49 to SM 40.55	6.93	3.56	3	4.52	8.78
5	SM 40.55 to SM 38.88	6.95	3.60	4	3.81	7.38
6	SM 38.88 to SM 36.61	5.87	3.77	5	3.40	6.61
7	SM 36.61 to SM 35.18	3.33	3.63	5	3.35	6.49
8	SM 35.18 to SM 34.22	3.71	3.00	6	2.77	5.38
9	SM 34.22 to SM 33.17	3.03	2.50	15	1.49	2.88
10	SM 33.17 to SM 32.49	1.23	2.80	4	3.44	6.69
11	SM 32.49 to SM 31.63	1.61	3.65	4	3.83	7.43
12	SM 31.63 to SM 29.98	4.05	3.10	10	2.02	4.26
13	SM 29.98 to SM 23.20	4.53	6.82	10	2.86	5.55
14	Trib. at SM 23.20	8.33	6.93	15	2.26	4.39
15A1	Turkey Creek A1	4.23	3.57	12	1.97	3.82
15A2	Turkey Creek A2	2.15	2.71	3	4.04	7.84
15A3	Turkey Creek A3	2.60	3.15	4	3.60	7.00
15A4	Turkey Creek A4	1.39	2.59	3	3.96	7.68
16	SM 23.20 to SM 19.55	1.98	4.73	3	5.06	9.82
17A1	Marys Creek A1	3.47	2.56	3	3.83	7.64
17A2	Marys Creek A2	3.88	3.00	5	3.09	6.00
17A3	Marys Creek A3	2.90	2.78	5	1.77	3.44
17A4	Marys Creek A4	2.22	3.02	3	3.09	6.00
17A5	Marys Creek A5	4.92	5.33	5	2.59	5.02
18	SM 19.55 to SM 17.04	2.82	3.49	10	2.17	4.21
19A1	Chigger Creek A1	2.48	3.00	3	4.20	8.16
19A2	Chigger Creek A2	1.07	1.35	3	3.02	5.87
19A3	Chigger Creek A3	1.12	2.97	3	4.18	8.13
19A4	Chigger Creek A4	1.38	2.49	5	2.81	5.56
19A5	Chigger Creek A5	0.66	1.72	3	3.35	6.49
19A6	Chigger Creek A6	1.19	2.84	5	3.03	5.87
19A7	Chigger Creek A7	0.63	2.55	5	2.89	5.62
19A8	Chigger Creek A8	1.94	2.74	3	4.05	7.86
19A9	Chigger Creek A9	1.05	2.50	3	3.90	7.57
19A10	Chigger Creek A10	0.20	1.15	3	2.84	5.50
19A11	Chigger Creek A11	0.43	1.23	3	2.91	5.66
19A12	Chigger Creek A12	3.54	6.10	5	4.14	8.04
20	SM 17.04 to SM 13.52	4.15	3.83	8	2.58	5.02

*Stream Mile designations refer to the original Corps model.

TABLE 1 (con't)

SUBAREA CHARACTERISTICS

Location	Subarea Description*	Area (Sq. Miles)	Length (Miles)	Percent Impervious	Tc (Hrs.)	R (Hrs.)
21A1	Cowart Creek A1	7.06	2.75	4	3.40	6.60
21A2	Cowart Creek A2	3.82	1.88	4	2.93	6.90
21A3	Cowart Creek A3	2.62	2.36	3	3.80	7.38
21A4	Cowart Creek A4	7.55	7.35	10	2.95	5.72
22	SM 13.53 to SM 9.88	4.17	4.27	4	4.10	7.95
23	Magnolia Bayou	4.09	4.95	3	5.17	10.02
24	Trib. on S at SM 11.0	3.06	5.48	4	4.53	8.78
25	Trib. on N at SM 9.8	4.25	5.17	4	4.41	8.57
26	SM 9.88 to SM 6.02	6.07	5.00	15	1.98	3.83
27	Trib. on N at SM 6.4	7.17	7.20	12	2.62	5.09
28	Trib. on S at SM 5.3	2.80	2.48	9	2.01	3.89
29	SM 6.02 to SM 3.43	2.60	2.61	15	1.51	2.92
30	Upper Portion Lake	1.13	-	-	-	-
31A1	Middle Bayou A1	7.46	5.02	12	2.26	4.39
31A2	Middle Bayou A2	2.88	4.55	3	4.98	9.66
31A3	Middle Bayou A3	2.47	4.37	3	4.90	9.51
31A4	Middle Bayou A4	8.33	5.50	7	3.23	6.28
31A5	Middle Bayou A5	4.94	6.64	3	5.84	11.32
31A6	Middle Bayou A6	2.95	3.67	3	4.58	8.88
31A7	Middle Bayou A7	10.57	5.05	4	4.39	8.53
31A8	Middle Bayou A8	6.16	5.40	15	2.04	3.95
31A9	Middle Bayou A9	4.50	3.70	4	3.85	7.48
31A10	Middle Bayou A10	3.92	4.45	4	4.16	8.09
31A11	Middle Bayou A11	4.53	4.80	5	3.76	7.30
32A1	Taylors Bayou A1	0.74	1.85	18	1.14	2.21
32A2	Taylors Bayou A2	1.46	2.75	3	4.07	7.91
32A3	Taylors Bayou A3	1.19	2.24	10	1.80	3.51
32A4	Taylors Bayou A4	1.90	4.20	3	4.83	9.37
32A5	Taylors Bayou A5	4.18	5.00	12	2.26	4.38
32A6	Taylors Bayou A6	2.37	2.68	5	2.96	5.73
32A7	Taylors Bayou A7	1.58	2.05	3	3.59	6.98
32A8	Taylors Bayou A8	2.41	2.70	16	1.48	2.86
33	Trib. at SM 2.1	1.42	2.20	5	3.75	7.27
34	Trib. at SM 1.5	3.98	2.90	4	1.91	3.72
35	SM 3.43 to SM 0.0	4.35	4.66	15	3.49	6.78
36	Lower Portion Lake	1.96	-	-	-	-

*Stream Mile designations refer to the original Corps model.

TABLE 2

SUMMARY OF DISCHARGES
EXISTING WATERSHED CONDITIONS
10-YEAR FREQUENCY FLOOD FLOWS

Routing Node	Drainage Area[1] (Sq. Miles)	Flood Flows (CFS) 1981[2]	1984
1	268.8	24,562	27,926
2	174.6	14,143	16,268
3	139.3	13,700	15,029
4	97.8	9,344	12,618
5	77.6	7,436	10,669
6	56.9	5,900	6,111
7	38.8	3,513	4,451
8	29.5	3,359	3,959

1 Total drainage area calculated upstream of routing node.
2 Flood flows obtained from Appendix IV "Clear Creek, Texas, Flood Control, Preconstruction Authorization Planning Report", Department of Army, Galveston District, Corps of Engineers, Galveston, Texas, May 1982.

TABLE 3

EXISTING WATERSHED CONDITIONS
CROSS SECTION DESIGNATIONS
BRIDGES

Location	Stream Mile Designations	
	Original	Revised
S.H. 146	0.400	0.388
Southern Pacific Railroad	0.492	0.464
S.H. 270	6.565	6.788
Galveston Houston Henderson Railroad	8.239	8.339
Northbound S.H. 3	8.259	8.389
Southbound S.H. 3	8.269	8.401
I.H. 45 Northbound Access	9.922	10.212
I.H. 45	9.950	10.241
I.H. 45 Southbound Access	9.963	10.254
F.M. 528	16.364	16.900
F.M. 2358	17.263	17.938
F.M. 2351	20.463	20.366
Choate Road	25.896	26.331
Country Club Road	29.192	29.980
S.H. 35	34.195	34.987

TABLE 4

FUTURE WATERSHED CONDITIONS
SUBAREA CHARACTERISTICS

Location	Subarea Description*	Area (Sq. Miles)	Tc (Hrs.)	R (Hrs.)
1	Above SM 45.31	4.04	1.46	2.84
2	SM 45.31 to SM 44.12	3.27	1.30	2.51
3	SM 44.12 to SM 42.49	8.33	1.57	3.04
4	SM 42.49 to SM 40.55	6.93	1.45	2.80
5	SM 40.55 to SM 38.88	6.95	1.45	2.82
6	SM 38.88 to SM 36.61	5.87	1.48	2.87
7	SM 36.61 to SM 35.18	3.33	1.45	2.83
8	SM 35.18 to SM 34.22	3.71	1.15	2.23
9	SM 34.22 to SM 33.17	3.03	0.92	1.80
10	SM 33.17 to SM 32.49	1.23	1.31	2.54
11	SM 32.49 to SM 31.63	1.61	1.46	2.83
12	SM 31.63 to SM 29.98	4.05	1.07	2.09
13	SM 29.98 to SM 23.20	4.53	1.40	2.71
14	Trib. at SM 23.20	8.33	1.41	2.73
15A1	Turkey Creek A1	4.23	1.07	2.08
15A2	Turkey Creek A2	2.15	1.29	2.51
15A3	Turkey Creek A3	2.60	1.37	2.67
15A4	Turkey Creek A4	1.39	1.27	2.46
16	SM 23.20 to SM 19.55	1.98	1.63	3.15
17A1	Marys Creek A1	3.47	1.26	2.45
17A2	Marys Creek A2	3.88	1.35	2.61
17A3	Marys Creek A3	2.90	1.31	2.53
17A4	Marys Creek A4	2.22	1.35	2.62
17A5	Marys Creek A5	4.92	1.71	3.31
18	SM 19.55 to SM 17.04	2.82	1.12	2.18
19A1	Chigger Creek A1	2.48	1.35	2.61
19A2	Chigger Creek A2	1.07	0.97	1.88
19A3	Chigger Creek A3	1.12	1.34	2.61
19A4	Chigger Creek A4	1.38	1.25	2.42
19A5	Chigger Creek A5	0.66	1.07	2.08
19A6	Chigger Creek A6	1.19	1.32	2.55
19A7	Chigger Creek A7	0.63	1.26	2.45
19A8	Chigger Creek A8	1.94	2.30	2.52
19A9	Chigger Creek A9	1.05	1.25	2.43
19A10	Chigger Creek A10	0.20	0.91	1.76
19A11	Chigger Creek A11	0.43	0.93	1.82
19A12	Chigger Creek A12	3.54	1.80	3.50
20	SM 17.04 to SM 13.52	4.15	1.27	2.47

*Stream mile designation refers to the original Corps model.

TABLE 4 (con't)

FUTURE WATERSHED CONDITIONS
SUBAREA CHARACTERISTICS

Location	Subarea Description*	Area (Sq. Miles)	Tc (Hrs.)	R (Hrs.)
21A1	Cowart Creek A1	7.06	1.30	2.52
21A2	Cowart Creek A2	3.82	1.11	2.16
21A3	Cowart Creek A3	2.62	1.77	2.37
21A4	Cowart Creek A4	7.55	1.22	2.37
22	SM 13.53 to SM 9.88	4.17	1.56	3.02
23	Magnolia Bayou	4.09	1.66	3.21
24	Trib. on S at SM 11.0	3.06	1.73	3.35
25	Trib. on N at SM 9.8	4.25	1.69	3.27
26	SM 9.88 to SM 6.02	6.07	1.23	2.39
27	Trib. on N at SM 6.4	7.17	1.43	2.77
28	Trib. on S at SM 5.3	2.80	0.97	1.90
29	SM 6.02 to SM 3.43	2.60	0.94	1.83
30	Upper Portion Lake	1.13	-	-
31A1	Middle Bayou A1	7.46	1.23	2.39
31A2	Middle Bayou A2	2.88	1.60	3.10
31A3	Middle Bayou A3	2.47	1.57	3.05
31A4	Middle Bayou A4	8.33	1.48	2.86
31A5	Middle Bayou A5	4.94	1.87	3.62
31A6	Middle Bayou A6	2.95	1.46	2.84
31A7	Middle Bayou A7	10.57	1.67	3.24
31A8	Middle Bayou A8	6.16	1.27	2.46
31A9	Middle Bayou A9	4.50	1.47	2.85
31A10	Middle Bayou A10	3.92	1.58	3.08
31A11	Middle Bayou A11	4.53	1.64	3.17
32A1	Taylors Bayou A1	0.74	0.81	1.59
32A2	Taylors Bayou A2	1.46	1.30	2.52
32A3	Taylors Bayou A3	1.19	0.93	1.82
32A4	Taylors Bayou A4	1.90	1.55	3.00
32A5	Taylors Bayou A5	4.18	1.23	2.39
32A6	Taylors Bayou A6	2.37	1.29	2.49
32A7	Taylors Bayou A7	1.58	1.15	2.24
32A8	Taylors Bayou A8	2.41	0.96	1.85
33	Trib. at SM 2.1	1.42	1.19	2.30
34	Trib. at SM 1.5	3.98	1.19	2.32
35	SM 3.43 to SM 0.0	4.35	1.33	2.58
36	Lower Portion Lake	1.96	-	-

*Stream mile designation refers to the original Corps model.

TABLE 5

COMPARISON OF 10-YEAR FREQUENCY FLOOD FLOWS

Routing Node	Existing Watershed Conditions		Future Watershed Conditions
	Without Proposed Improvements	With Proposed Improvements*	With Proposed Improvements*
1	27,926	30,915	33,029
2	16,268	17,938	19,088
3	15,029	15,475	16,863
4	12,618	12,696	13,466
5	10,669	10,669	11,229
6	6,111	6,111	6,657
7	4,451	4,451	6,130
8	3,959	3,959	6,130

* Includes the Safety Valve Plan, downstream improvements and construction of the second outlet from Clear Lake to Galveston Bay.

TABLE 6

COMPARISON OF EXISTING AND IMPROVED
CROSS SECTION DESIGNATION
BRIDGES

Location	Existing Condition Stream Mile	Improved Condition Stream Mile
S.H. 146	0.388	0.421
Southern Pacific Railroad	0.464	0.482
S.H. 270	6.788	6.408
Galveston Houston Henderson Railroad	8.339	7.959
Northbound S.H. 3	8.389	8.009
Southbound S.H. 3	8.401	8.020
I.H. 45 Northbound Access	10.212	9.676
I.H. 45	10.241	9.704
I.H. 45 Southbound Access	10.254	9.718
F.M. 528	16.900	14.681
F.M. 2358	17.938	15.718
F.M. 2351	20.366	18.146
Choate Road	26.331	24.111
Country Club Road	29.980	27.711
S.H. 35	34.987	32.717

TABLE 7

PROPOSED IMPROVEMENTS

Proposed Improvement	Location*	Proposed Improvement	Required Right-of-Way**
SECOND OUTLET+	SM 0.00 to SM 0.80	140' Bottom Width Trapezoidal Channel	18 acres
	SM 0.250	Toddville Road Bridge	
	SM 0.421	S.H. 146 Bridge	
	SM 0.482	Southern Pacific Railroad Bridge	
DOWNSTREAM IMPROVEMENTS	SM 6.408 to SM 8.009	40' Bottom Width Trapezoidal Channel	43 acres
	SM 7.959	Galveston, Houston, Henderson Railroad Bridge	
SAFETY VALVE PLAN	SM 8.009 to SM 10.218	115' Bottom Width Trapezoidal Channel	87 acres
	SM 8.009	Northbound S.H. 3 Bridge	
	SM 8.020	Southbound S.H. 3 Bridge	
	SM 9.676	I.H. 45 Northbound Access	
	SM 9.704	I.H. 45	
	SM 9.718	I.H. 45 Southbound Access	
	SM 10.218 to SM 14.681	130' Bottom Width Trapezoidal Channel	187 acres

*Stream miles refer to improved condition cross section designation.
**Excludes disposal sites and environmental mitigation.
+Improvements to be constructed by the Harris County Flood Control District.

TABLE 8

DAMAGE ASSESSMENT

Watershed Condition	Damages*	Inundated Structures**	Damage Reduction
Existing Conditions	$5,859,000	537	--
Existing Conditions with Proposed Improvements	$4,142,000	288	$1,716,000
Future Conditions with Proposed Improvements	$5,222,000	358	$ 636,000

*Damages indicated are average annual damages to existing structures only, without consideration of future development.

**Existing structures inundated subject to the occurrence of the 10-year frequency flood.

TABLE 9

CONSTRUCTION COST ESTIMATE

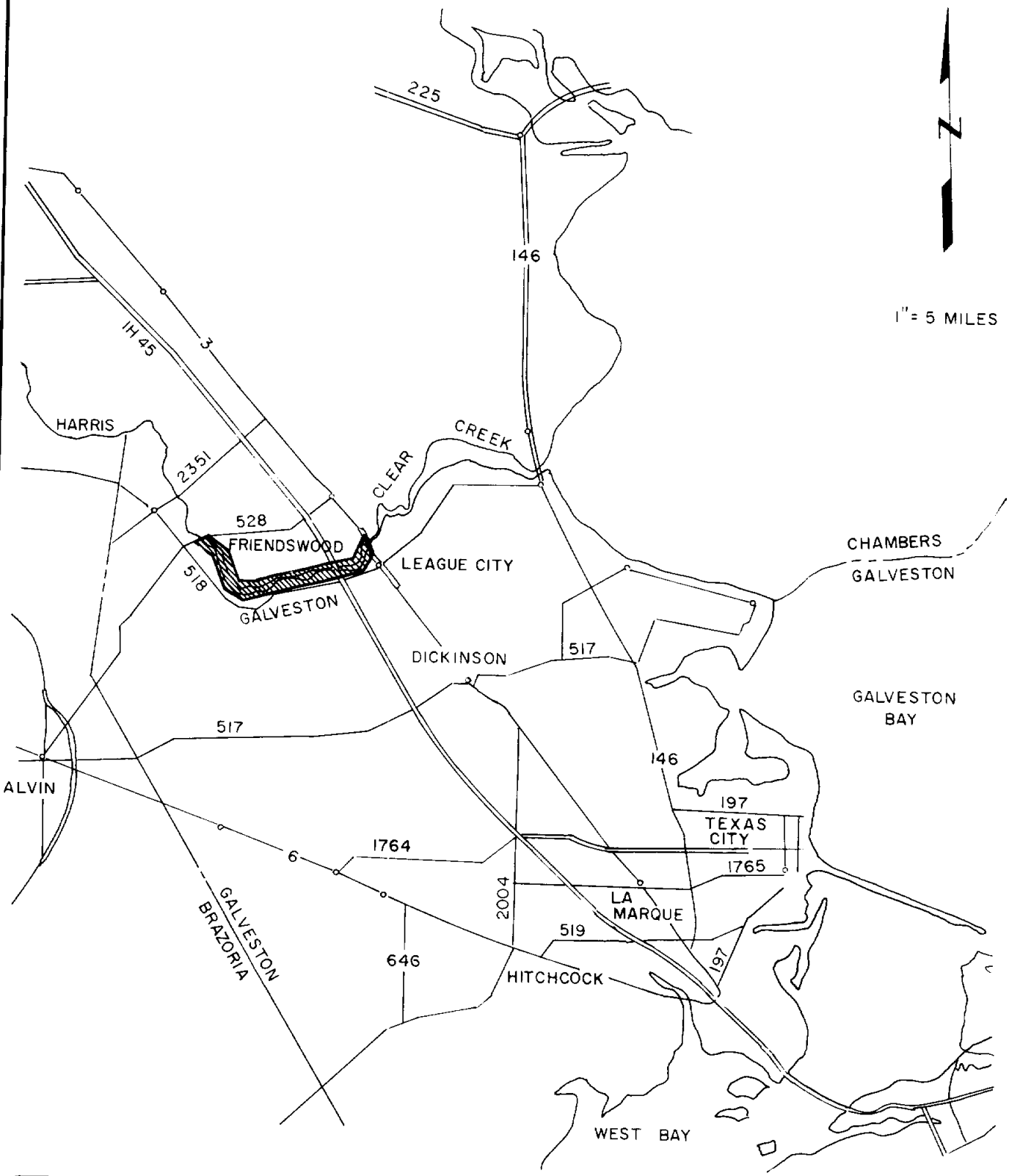
SAFETY VALVE PLAN	
Channel Improvements	$11,493,000
Lands and Damages[1][2]	1,481,000
Relocations[3]	5,175,000
Environmental Measures[1]	131,000
TOTAL	$18,280,000
DOWNSTREAM IMPROVEMENTS	
Channel Improvements	$ 1,444,000
Lands and Damages[1][2]	546,000
Relocations[3]	904,000
Environmental Measures[1]	49,000
TOTAL	$ 2,943,000
PROJECT TOTAL[4]	
SAFETY VALVE PLAN	$18,280,000
DOWNSTREAM IMPROVEMENTS	2,943,000
TOTAL	$21,223,000

(1) Cost estimated as a pro-rata portion of the total federal project costs applicable to the reach of Clear Creek under investigation.

(2) Includes costs for acquisition of right-of-way for channel improvements, disposal areas and severance cost associated with damage to existing properties.

(3) Includes construction costs for bridge improvements, pipelines, storm sewer outfalls and other structures requiring relocation.

(4) Project total excludes the cost of constructing the second outlet being planned by HCFCD. Estimated construction cost of the outlet is approximately $16,000,000.



STREAM LIMITS OF STUDY

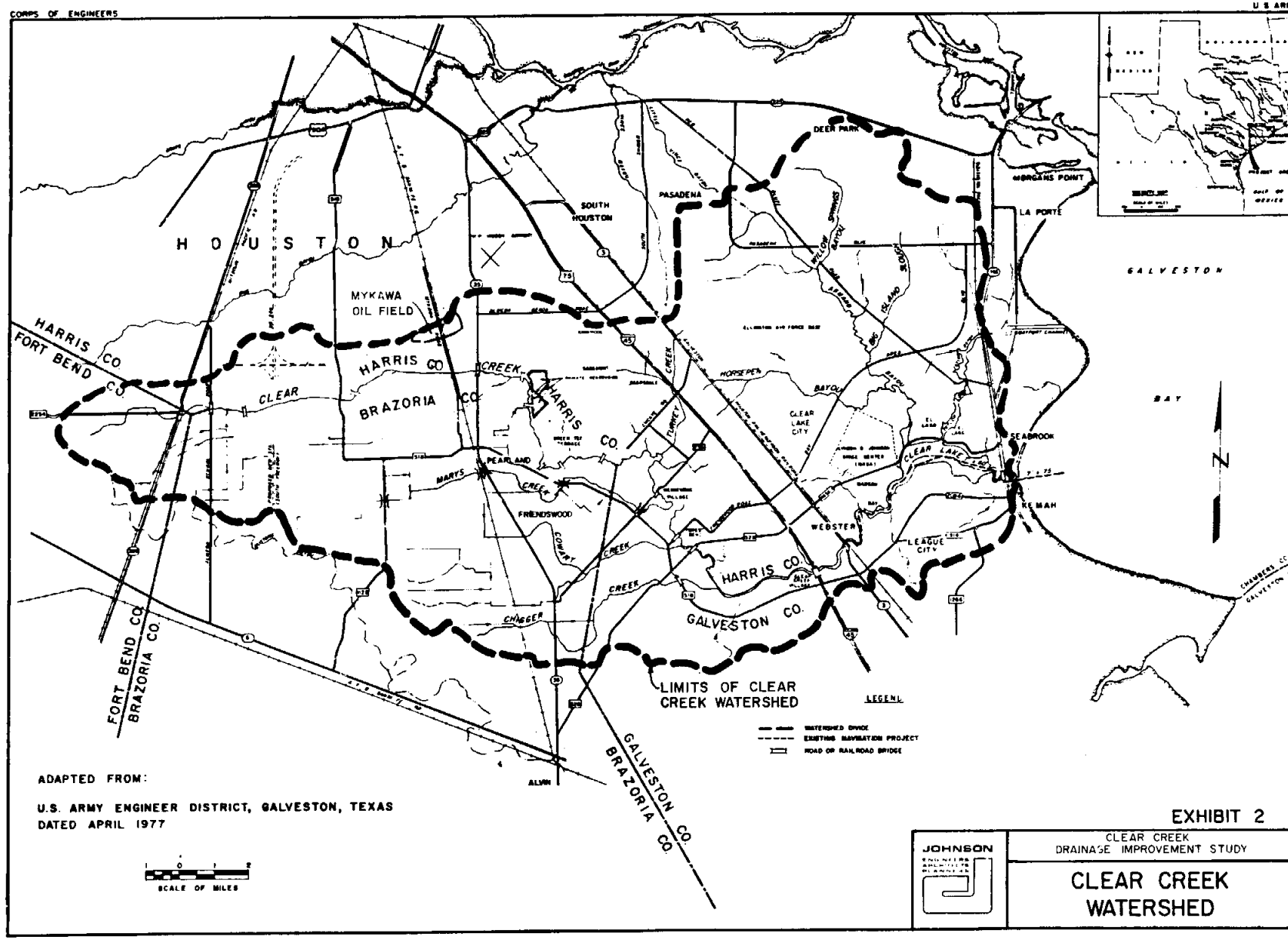
NOTE:
THIS VICINITY MAP IS ADOPTED FROM THE TEXAS STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION OFFICIAL HIGHWAY TRAVEL MAP.

EXHIBIT 1

JOHNSON
ENGINEERS
ARCHITECTS
PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

VICINITY MAP


CORPS OF ENGINEERS
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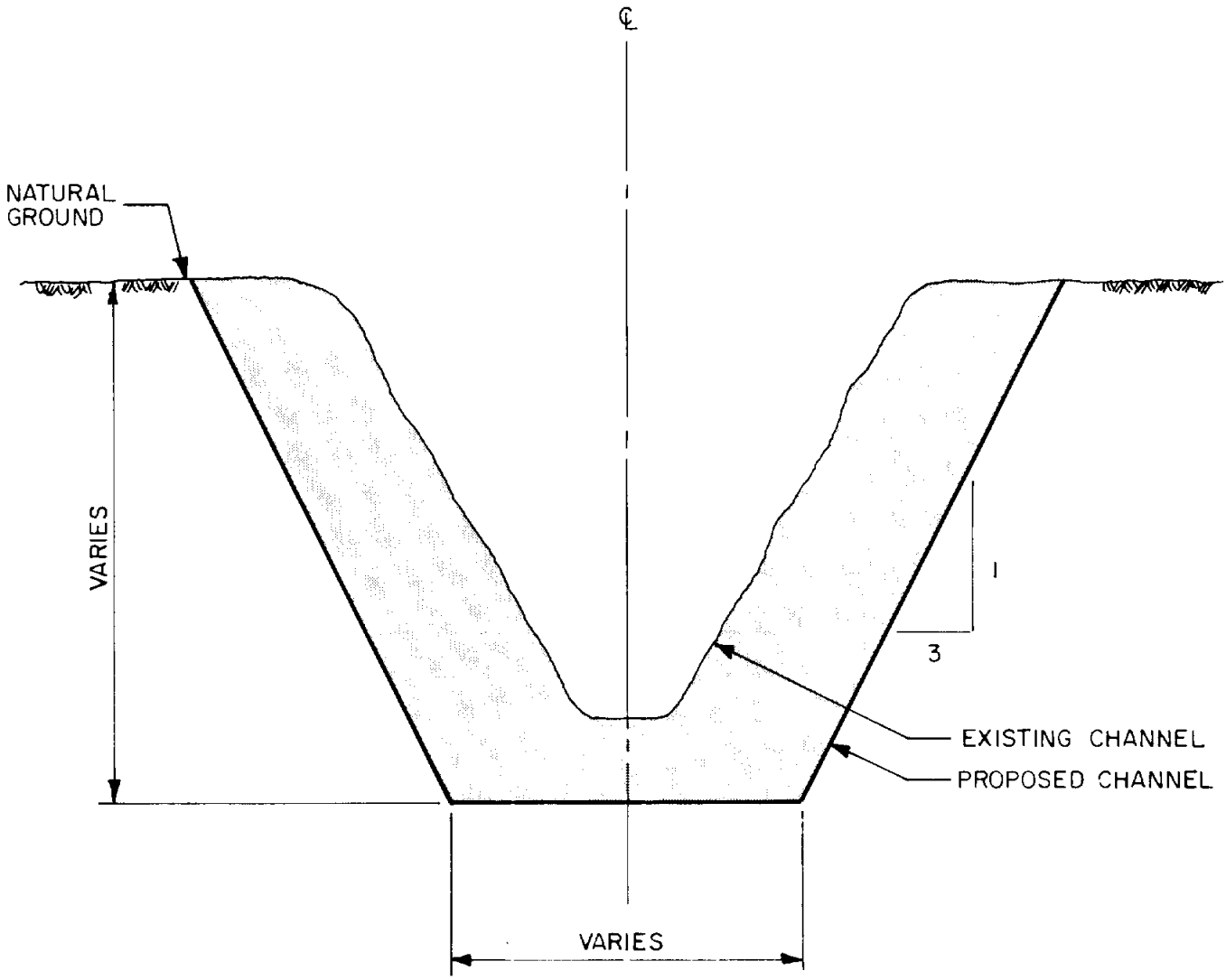
HOUSTON
SOUTH HOUSTON
PASADENA
DEER PARK
MORGANS POINT
LA PORTE
GALVESTON BAY
MYKAWA OIL FIELD
HARRIS CO.
FORT BEND CO.
BRAZORIA CO.
CLEAR CREEK
HORSEPEN BAYOU
TURKEY CREEK
CLEAR LAKE CITY
SEABROOK
KEMAH
CLEAR LAKE
WEBSTER
LEAGUE CITY
PEARLAND
MARYS CREEK
FRIENDSWOOD
COWART CREEK
CHIGGER CREEK
ALVIN
GALVESTON CO.
LIMITS OF CLEAR CREEK WATERSHED
LEGEND
WATERSHED DIVIDE
EXISTING NAVIGATION PROJECT
ROAD OR RAILROAD BRIDGE
ADAPTED FROM:
U.S. ARMY ENGINEER DISTRICT, GALVESTON, TEXAS
DATED APRIL 1977
SCALE OF MILES
N
EXHIBIT 2
JOHNSON
CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY
CLEAR CREEK
WATERSHED



TYPICAL CHANNEL IMPROVEMENT

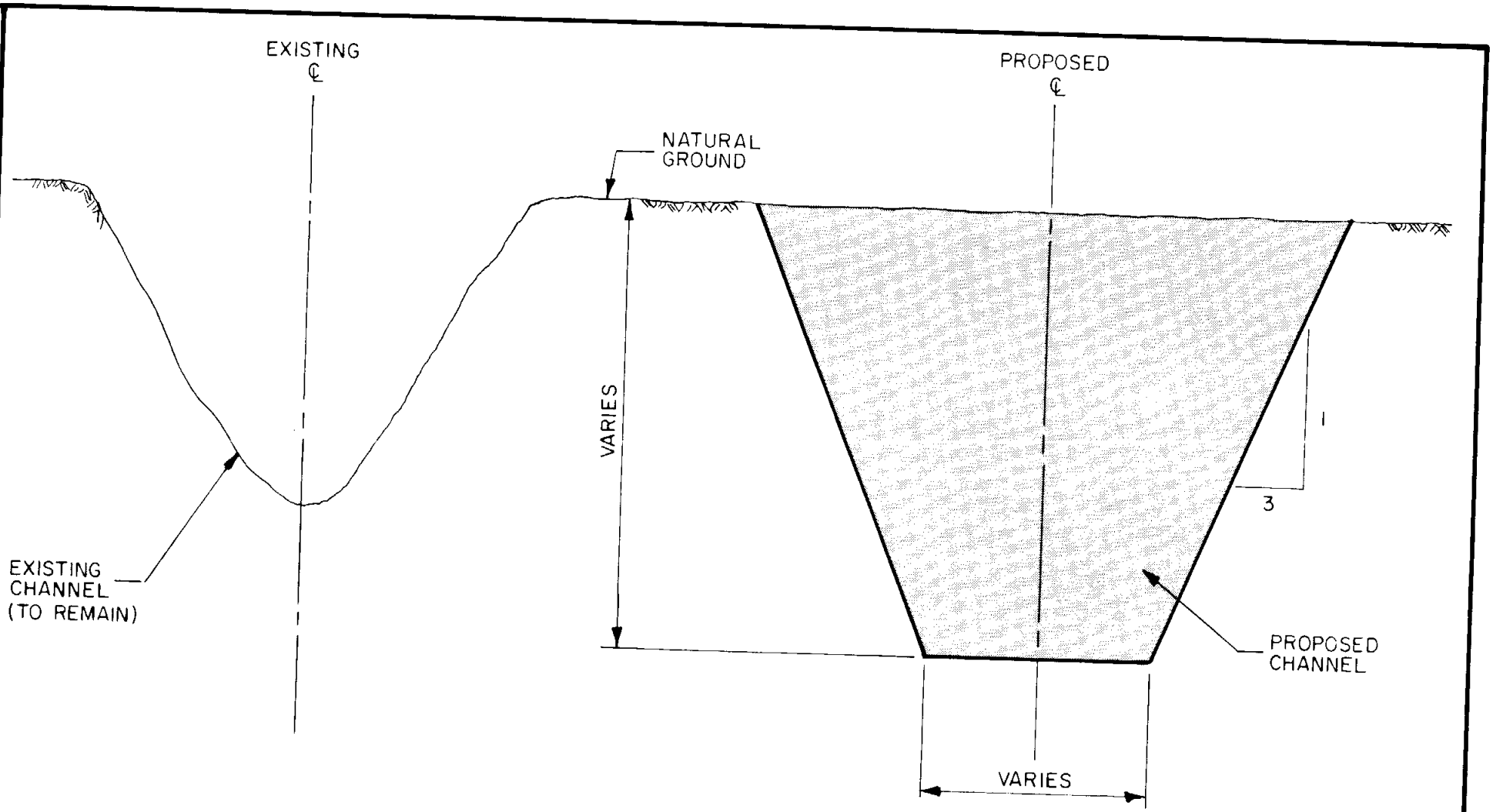
N.T.S.

EXHIBIT 7

JOHNSON
ENGINEERS
ARCHITECTS
PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

TYPICAL CHANNEL IMPROVEMENT
EXISTING CENTERLINE MAINTAINED



TYPICAL CHANNEL IMPROVEMENT

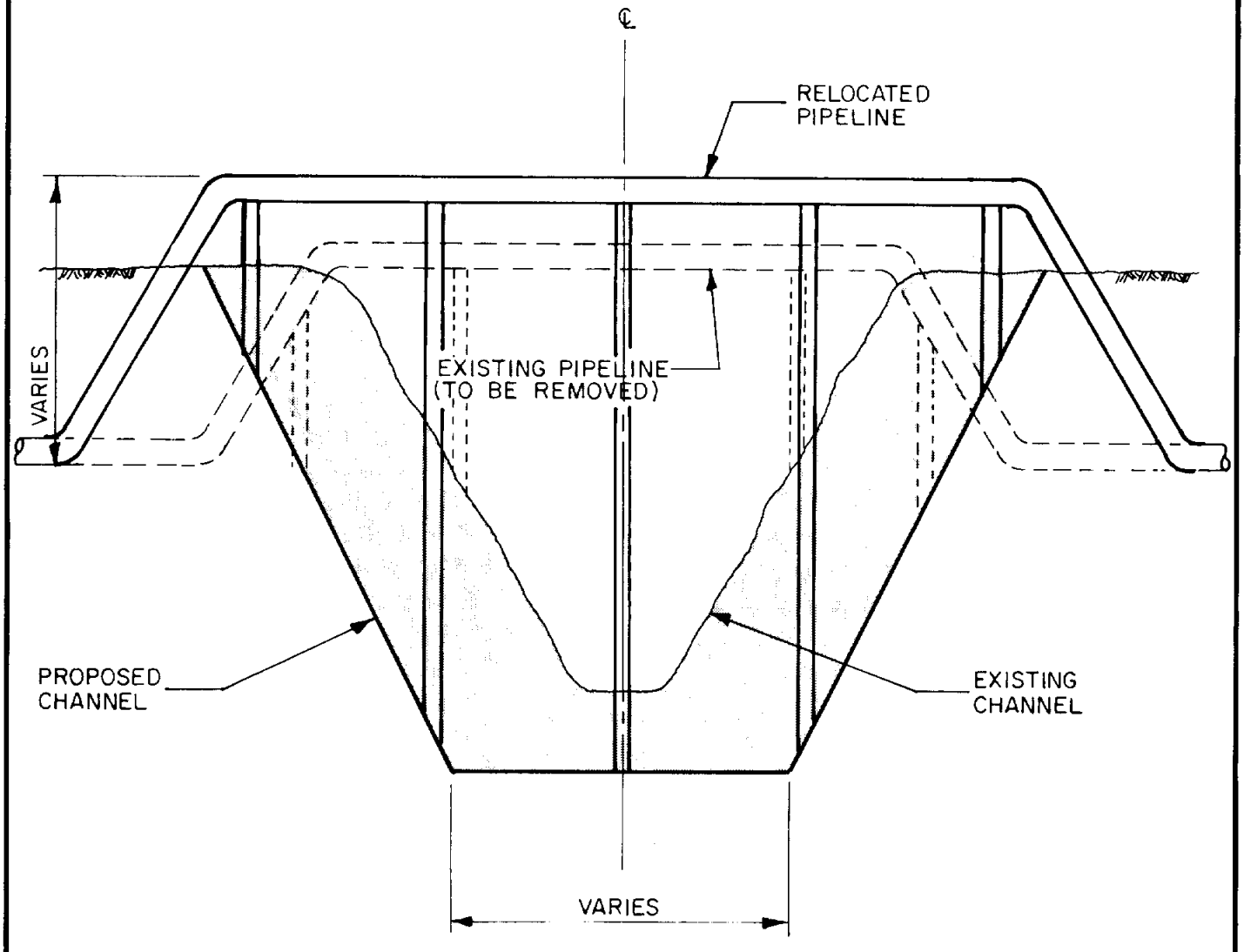
N.T.S.

EXHIBIT 8

JOHNSON
ENGINEERS
ARCHITECTS
PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

TYPICAL
CHANNEL IMPROVEMENT
CHANNEL REALIGNED



TYPICAL PIPELINE RELOCATION

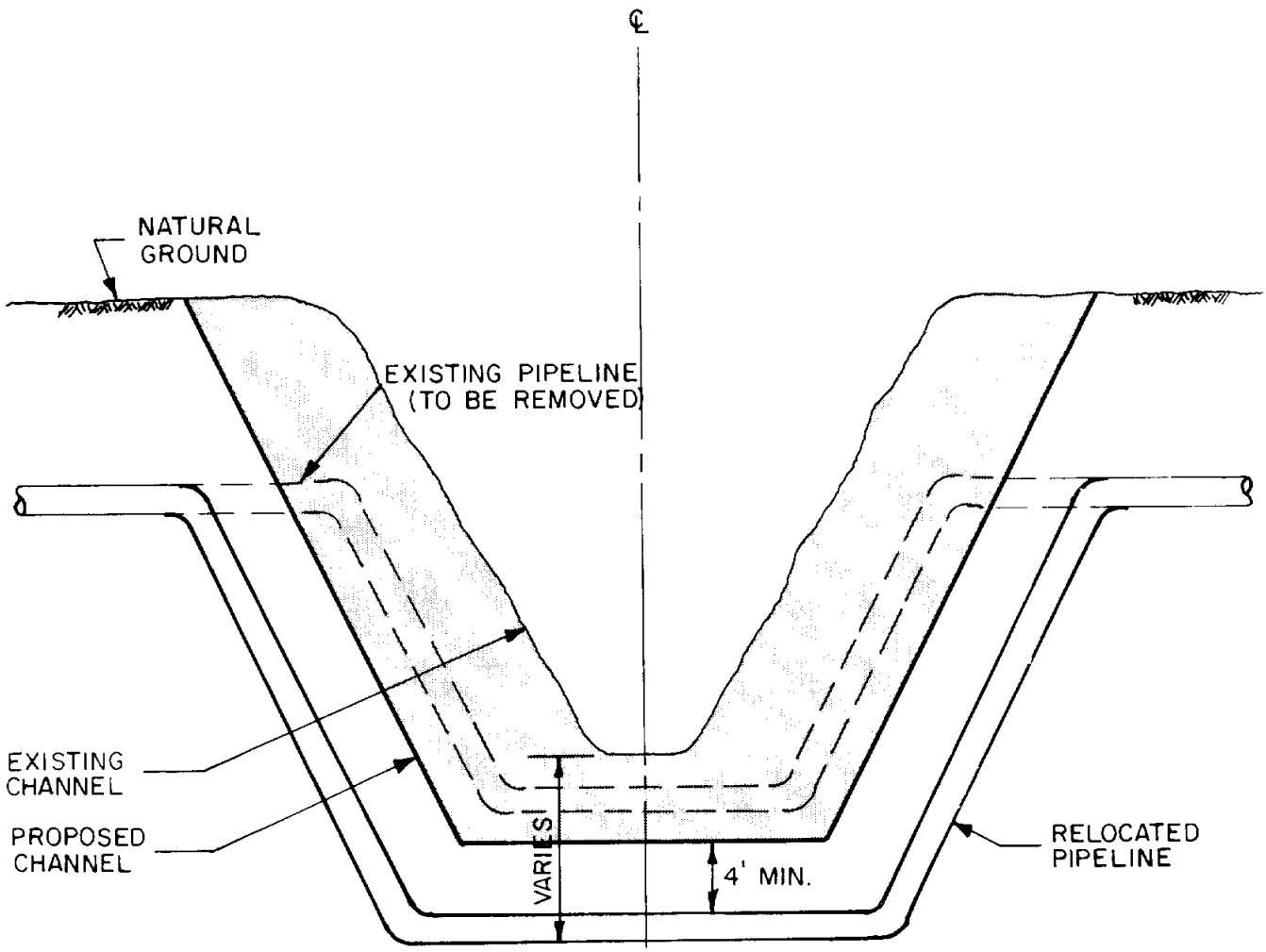
N.T.S.

EXHIBIT 9

JOHNSON ENGINEERS ARCHITECTS PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

TYPICAL
PIPELINE RELOCATION
AERIAL CROSSING



TYPICAL PIPELINE RELOCATION

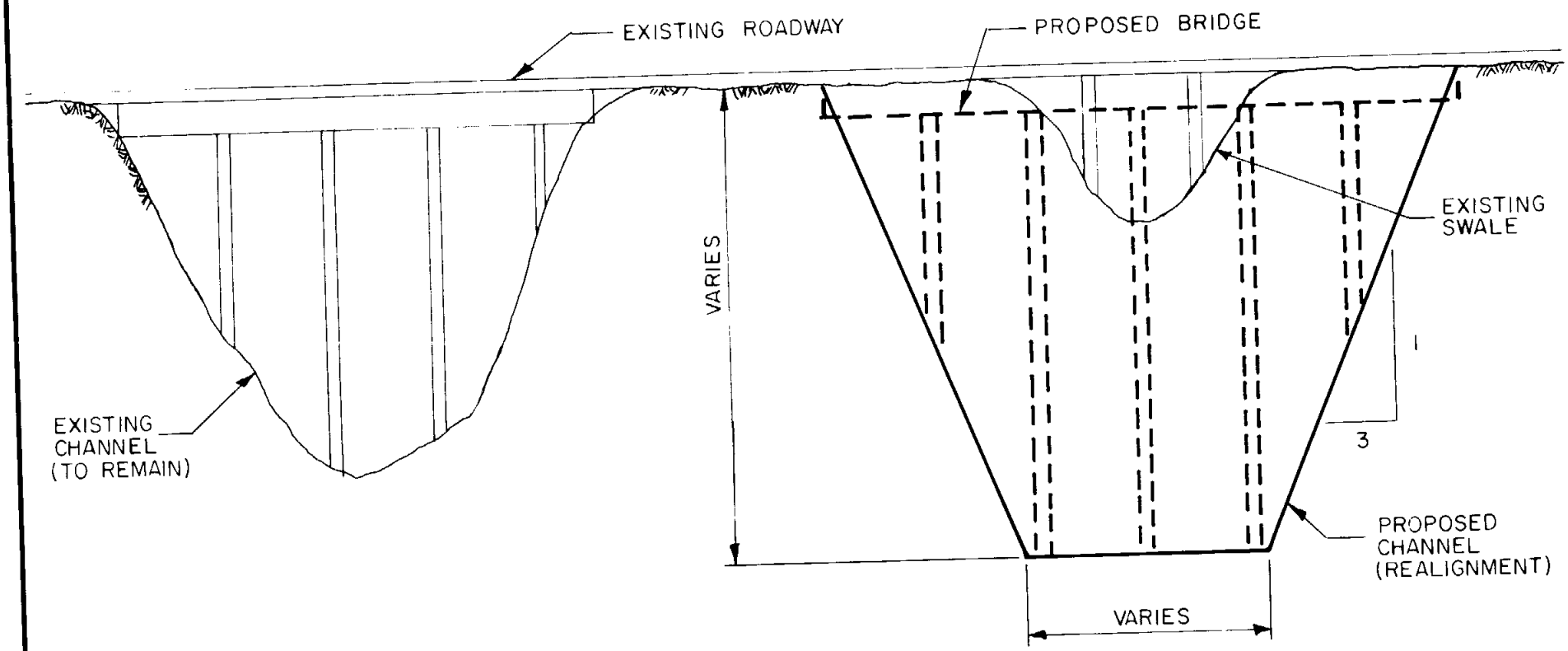
N.T.S.

EXHIBIT 10

JOHNSON ENGINEERS ARCHITECTS PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

TYPICAL
PIPELINE RELOCATION
BURIED CROSSING



TYPICAL BRIDGE IMPROVEMENT
I-45, S.H. 3
N.T.S.

EXHIBIT II

JOHNSON ENGINEERS ARCHITECTS PLANNERS

CLEAR CREEK
DRAINAGE IMPROVEMENT STUDY

CROSSING PLAN OF
TYPICAL BRIDGE IMPROVEMENT

APPENDIX 1

HEC-1 FLOOD ROUTINGS

EXISTING WATERSHED CONDITIONS WITHOUT PROPOSED IMPROVEMENTS

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	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	13.53	605.	19.50	709.	392.	146.	2.48		
ROUTED TO	10.55	191.	87.50	190.	184.	137.	2.48		
DIVERSION TO	10.55N	0.	0.50	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	191.	87.50	190.	184.	137.	2.48		
DIVERSION TO	10.55S	0.	0.50	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	191.	87.50	190.	184.	137.	2.48		
HYDROGRAPH AT	10.55	448.	18.50	373.	179.	63.	1.07		
2 COMBINED AT	10.55	446.	18.50	372.	195.	156.	3.55		
ROUTED TO	9.205	164.	119.00	164.	156.	140.	3.55		
DIVERSION TO	9.205	56.	119.00	55.	49.	36.	3.55		
HYDROGRAPH AT	9.205	108.	119.00	108.	107.	104.	3.55		
HYDROGRAPH AT	9.205	365.	19.50	321.	178.	66.	1.12		
HYDROGRAPH AT	9.205	605.	18.00	495.	233.	81.	1.38		
3 COMBINED AT	9.205	999.	18.50	878.	487.	238.	6.05		
ROUTED TO	7.515	250.	92.00	250.	245.	213.	6.05		
DIVERSION TO	7.515	127.	92.00	127.	123.	94.	6.05		
HYDROGRAPH AT	7.515	123.	92.00	123.	122.	119.	6.05		
HYDROGRAPH AT	7.515	256.	18.50	216.	109.	39.	0.65		
HYDROGRAPH AT	7.515	760.	18.50	633.	304.	107.	1.82		
3 COMBINED AT	7.515	1007.	18.50	842.	421.	218.	8.52		

ROUTED TO	4.675	591.	29.50	545.	359.	210.	8.52
DIVERSION TO	4.675	0.	0.50	0.	0.	0.	8.52
HYDROGRAPH AT	4.65	591.	29.50	545.	359.	210.	8.52
HYDROGRAPH AT	4.675	273.	18.00	224.	106.	37.	0.63
HYDROGRAPH AT	4.675	646.	19.00	568.	310.	114.	1.94
HYDROGRAPH AT	4.675	362.	19.00	315.	169.	62.	1.05
4 COMBINED AT	4.675	1284.	19.00	1131.	854.	403.	12.14
HYDROGRAPH AT	4.675	90.	18.00	74.	35.	12.	0.20
HYDROGRAPH AT	4.675	185.	18.00	153.	72.	25.	0.43
HYDROGRAPH AT	4.675	1158.	19.50	1018.	560.	207.	3.54
4 COMBINED AT	4.675	2681.	19.00	2353.	1505.	643.	16.31
ROUTED TO	0.0	2378.	24.50	2211.	1492.	642.	16.31
DIVERSION TO	0.08	0.	0.50	0.	0.	0.	16.31
HYDROGRAPH AT	0.0	2378.	24.50	2211.	1492.	642.	16.31
DIVERSION TO	0.0N	83.	24.50	48.	12.	4.	16.31
HYDROGRAPH AT	0.0	2295.	24.50	2163.	1480.	638.	16.31
HYDROGRAPH AT	45.31	1217.	19.50	1085.	625.	236.	4.04
ROUTED TO	1	918.	29.50	818.	569.	236.	4.04
HYDROGRAPH AT	44.12	1089.	19.00	954.	520.	191.	3.27
2 COMBINED AT	45.31	1513.	29.00	1172.	949.	426.	7.31
ROUTED TO	44.12	1016.	42.50	1002.	857.	425.	7.31
HYDROGRAPH AT	42.119	2369.	20.00	2130.	1262.	485.	8.33
2 COMBINED AT	44.12	2373.	20.00	2151.	1658.	904.	15.64
ROUTED TO	42.119	1930.	29.00	1886.	1607.	903.	15.64

DIVERSION TO	42.12	1.	29.00	0.	0.	0.	15.64
HYDROGRAPH AT	42.12	1929.	29.00	1885.	1607.	903.	15.64
HYDROGRAPH AT	40.55	2104.	19.50	1871.	1072.	404.	6.93
2 COMBINED AT	42.119	2992.	26.50	2908.	2407.	1299.	22.57
ROUTED TO	40.55	2951.	30.00	2887.	2392.	1299.	22.57
DIVERSION TO	40.55	0.	0.50	0.	0.	0.	22.57
HYDROGRAPH AT	50.55	2951.	30.00	2887.	2392.	1299.	22.57
HYDROGRAPH AT	38.88	2428.	19.00	2102.	1114.	405.	6.95
2 COMBINED AT	40.55	4051.	23.50	3975.	3277.	1694.	29.52
ROUTED TO	38.88	3959.	29.00	3898.	3205.	1691.	29.52
DIVERSION TO	38.88	0.	0.50	0.	0.	0.	29.52
HYDROGRAPH AT	38.88	3959.	29.00	3898.	3205.	1691.	29.52
HYDROGRAPH AT	36.61	2236.	18.50	1897.	959.	343.	5.87
2 COMBINED AT	38.88	4660.	27.00	4540.	3690.	2004.	35.39
ROUTED TO	36.61	4400.	34.50	4332.	3661.	2004.	35.39
DIVERSION TO	36.61	0.	0.50	0.	0.	0.	35.39
HYDROGRAPH AT	36.61	4400.	34.50	4332.	3661.	2004.	35.39
HYDROGRAPH AT	35.18	1291.	18.50	1091.	547.	195.	3.33
2 COMBINED AT	36.61	4535.	34.00	4466.	3872.	2184.	38.72
ROUTED TO	35.18	4451.	37.00	4393.	3855.	2183.	38.72
DIVERSION TO	35.18	0.	0.50	0.	0.	0.	38.72
HYDROGRAPH AT	35.18	4451.	37.00	4393.	3855.	2183.	38.72
HYDROGRAPH AT	34.22	1659.	18.00	1347.	625.	217.	3.71
2 COMBINED AT	35.18	4505.	36.50	4451.	4091.	2383.	42.43

ROUTED TO	34.22	4426.	40.00	4382.	4058.	2383.	42.43
DIVERSION TO	34.22	0.	0.50	0.	0.	0.	42.43
HYDROGRAPH AT	34.22	4426.	40.00	4382.	4058.	2383.	42.43
HYDROGRAPH AT	33.17	2104.	17.00	1425.	531.	178.	3.03
2 COMBINED AT	34.22	4536.	18.50	4382.	4163.	2550.	45.46
ROUTED TO	33.17	4470.	19.00	4368.	4152.	2543.	45.46
DIVERSION TO	33.17	0.	0.50	0.	0.	0.	45.46
HYDROGRAPH AT	33.17	4470.	19.00	4368.	4152.	2543.	45.46
HYDROGRAPH AT	32.49	466.	18.50	398.	202.	72.	1.23
2 COMBINED AT	33.17	4917.	19.00	4677.	4316.	2609.	46.69
ROUTED TO	32.49	4733.	20.00	4617.	4301.	2609.	46.69
DIVERSION TO	32.49	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	32.49	4733.	20.00	4617.	4301.	2609.	46.69
HYDROGRAPH AT	31.63	564.	19.00	488.	260.	95.	1.61
2 COMBINED AT	32.49	5248.	20.00	5057.	4510.	2696.	48.30
ROUTED TO	31.63	5085.	21.50	4991.	4493.	2696.	48.30
DIVERSION TO	31.63	65.	21.50	61.	39.	16.	48.30
HYDROGRAPH AT	31.63	5021.	21.50	4931.	4454.	2680.	48.30
HYDROGRAPH AT	29.98	2161.	17.50	1650.	697.	237.	4.05
2 COMBINED AT	31.63	6294.	20.00	6004.	4906.	2895.	52.35
ROUTED TO	29.98	5901.	23.50	5775.	4867.	2894.	52.35
DIVERSION TO	29.98	176.	23.50	166.	95.	38.	52.35
HYDROGRAPH AT	29.98	5723.	23.50	5609.	4772.	2856.	52.35
HYDROGRAPH AT	23.20	1974.	18.00	1619.	760.	265.	4.53

2 COMBINED AT	29.98	6800.	21.50	6677.	5348.	3098.	56.88
ROUTED TO	23.20	6502.	28.50	6370.	5249.	3094.	56.88
DIVERSION TO	23.20R	386.	28.50	361.	200.	80.	56.88
HYDROGRAPH AT	23.20	6117.	28.50	6008.	5049.	3014.	56.88
DIVERSION TO	23.20L	0.	0.50	0.	0.	0.	56.88
HYDROGRAPH AT	23.20	6117.	28.50	6008.	5049.	3014.	56.88
HYDROGRAPH AT	23.20	4308.	17.50	3331.	1425.	485.	8.33
HYDROGRAPH AT	23.20	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	23.20	65.	21.50	61.	39.	16.	48.30
HYDROGRAPH AT	23.20	178.	23.50	166.	95.	38.	52.35
4 COMBINED AT	23.20	4320.	17.50	3446.	1542.	545.	8.33
HYDROGRAPH AT	23.20	0.	0.50	0.	0.	0.	56.88
2 COMBINED AT	23.20	4320.	17.50	3446.	1542.	545.	8.33
ROUTED TO	00	2501.	31.50	2413.	1534.	545.	8.33
DIVERSION TO	OUT	31.	31.50	24.	6.	2.	8.33
HYDROGRAPH AT	00	2470.	31.50	2389.	1528.	543.	8.33
2 COMBINED AT	23.20	8442.	29.50	8303.	6292.	3518.	65.21
HYDROGRAPH AT	23.20	2407.	17.50	1802.	733.	247.	4.23
ROUTED TO	3.00	1292.	30.00	1240.	731.	247.	4.23
HYDROGRAPH AT	3.00	31.	31.50	24.	6.	2.	8.33
2 COMBINED AT	3.00	1320.	30.00	1261.	737.	250.	4.23
HYDROGRAPH AT	3.00	716.	19.00	629.	343.	126.	2.15
HYDROGRAPH AT	00	950.	19.00	817.	423.	152.	2.60
3 COMBINED AT	3.00	2171.	19.00	2090.	1493.	525.	8.98

ROUTED TO	00	2069.	27.00	2044.	1491.	525.	8.98
HYDROGRAPH AT	00	474.	19.00	413.	223.	82.	1.39
2 COMBINED AT	00	2311.	25.50	2274.	1707.	605.	10.37
2 COMBINED AT	23.20	10543.	29.00	10398.	7782.	4082.	75.58
HYDROGRAPH AT	19.55	552.	20.00	499.	300.	116.	1.98
2 COMBINED AT	23.20	10809.	28.50	10663.	8032.	4189.	77.56
ROUTED TO	19.55	10669.	32.00	10526.	8007.	4186.	77.56
HYDROGRAPH AT	19.55	1187.	19.00	1032.	555.	203.	3.47
ROUTED TO	11.53	996.	26.00	921.	550.	203.	3.47
HYDROGRAPH AT	9.32	1595.	18.50	1331.	645.	227.	3.88
2 COMBINED AT	11.53	1719.	18.50	1604.	1155.	428.	7.35
ROUTED TO	11.53	1567.	30.50	1514.	1069.	428.	7.35
HYDROGRAPH AT	7.73	1789.	17.00	1288.	506.	170.	2.90
2 COMBINED AT	9.32	1932.	17.00	1591.	1360.	596.	10.25
ROUTED TO	7.73	1481.	39.50	1450.	1316.	596.	10.25
HYDROGRAPH AT	5.19	915.	18.50	764.	370.	130.	2.22
2 COMBINED AT	7.73	1694.	25.50	1657.	1528.	725.	12.47
ROUTED TO	5.19	1579.	36.00	1564.	1480.	725.	12.47
HYDROGRAPH AT	0.0	2311.	18.00	1852.	834.	287.	4.92
2 COMBINED AT	5.19	2948.	18.00	2599.	1961.	1009.	17.39
HYDROGRAPH AT	5.19	386.	28.50	361.	200.	80.	56.88
2 COMBINED AT	5.19	2948.	18.00	2617.	2153.	1095.	17.39
ROUTED TO	0.0	2537.	24.50	2391.	2063.	1095.	17.39
2 COMBINED AT	19.55	12669.	32.00	12527.	9898.	5176.	94.95

HYDROGRAPH AT	17.04	1512.	17.50	1153.	487.	165.	2.82
2 COMBINED AT	19.55	12734.	31.50	12610.	10043.	5312.	97.77
ROUTED TO	17.04	12618.	34.50	12465.	10017.	5308.	97.77
HYDROGRAPH AT	17.04	2690.	18.50	2282.	1153.	412.	7.06
HYDROGRAPH AT	9.10	0.	0.50	0.	0.	0.	2.48
2 COMBINED AT	9.10	2690.	18.50	2282.	1153.	412.	7.06
ROUTED TO	9.10	2170.	25.00	1991.	1113.	412.	7.06
HYDROGRAPH AT	7.62	1431.	18.50	1220.	622.	224.	3.82
2 COMBINED AT	9.10	2914.	24.50	2690.	1652.	633.	10.88
HYDROGRAPH AT	9.10	56.	119.00	55.	49.	36.	3.55
2 COMBINED AT	9.10	2921.	24.50	2697.	1662.	657.	10.88
ROUTED TO	7.62	2422.	30.00	1945.	1073.	621.	10.88
HYDROGRAPH AT	6.50	920.	19.00	796.	422.	154.	2.62
2 COMBINED AT	7.62	2691.	30.00	2155.	1181.	724.	13.50
ROUTED TO	6.50	2408.	33.50	2027.	1168.	706.	13.50
HYDROGRAPH AT	0.0	3199.	18.00	2650.	1258.	440.	7.55
2 COMBINED AT	6.50	3192.	18.00	2663.	1992.	1071.	21.05
HYDROGRAPH AT	6.50	127.	92.00	127.	123.	94.	6.05
HYDROGRAPH AT	6.50	0.	0.50	0.	0.	0.	8.52
3 COMBINED AT	6.50	3192.	18.00	2663.	1992.	1113.	21.05
HYDROGRAPH AT	6.50	83.	24.50	48.	12.	4.	16.31
2 COMBINED AT	6.50	3192.	18.00	2665.	2003.	1117.	21.05
ROUTED TO	0.0	2782.	22.50	2504.	1974.	1113.	21.05
2 COMBINED AT	17.04	14160.	37.00	13890.	11706.	6340.	118.82

HYDROGRAPH AT	13.53	1951.	18.00	1564.	704.	243.	4.15
2 COMBINED AT	17.04	14214.	36.50	13971.	11974.	6540.	122.97
ROUTED TO	13.53	14097.	38.00	13921.	11934.	6525.	122.97
2 COMBINED AT	13.53	15029.	34.00	14999.	13181.	7113.	139.28
HYDROGRAPH AT	9.88	1373.	19.50	1206.	660.	244.	4.17
2 COMBINED AT	13.53	15292.	33.50	15224.	13545.	7312.	143.45
HYDROGRAPH AT	13.53	1115.	20.50	1011.	613.	239.	4.09
HYDROGRAPH AT	13.53	0.	0.50	0.	0.	0.	16.31
3 COMBINED AT	13.53	15638.	33.00	15549.	13963.	7519.	147.54
ROUTED TO	9.88	15591.	35.50	15529.	13867.	7487.	147.54
HYDROGRAPH AT	9.88	933.	19.50	830.	475.	179.	3.06
HYDROGRAPH AT	9.88	1320.	19.50	1169.	662.	248.	4.25
HYDROGRAPH AT	9.88	3444.	17.50	2578.	1050.	354.	6.07
4 COMBINED AT	9.88	16092.	33.50	16065.	14581.	8074.	160.92
ROUTED TO	6.02	16084.	35.50	16042.	14517.	7998.	160.92
HYDROGRAPH AT	6.02	3331.	18.00	2676.	1212.	418.	7.17
HYDROGRAPH AT	5.30	1581.	17.50	1186.	486.	164.	2.80
HYDROGRAPH AT	3.43	1794.	17.00	1219.	456.	152.	2.60
4 COMBINED AT	6.02	16286.	33.50	16228.	14825.	8522.	173.49
HYDROGRAPH AT	3.43	823.	17.00	571.	245.	85.	1.13
2 COMBINED AT	6.02	16288.	33.50	16229.	14841.	8582.	174.62
ROUTED TO	3.43	16268.	35.50	16209.	14832.	8294.	174.62
HYDROGRAPH AT	10.86	3860.	17.50	2984.	1277.	435.	7.46
ROUTED TO	10.86	2119.	26.50	2032.	1271.	435.	7.46

HYDROGRAPH AT	10.86	813.	20.00	732.	437.	169.	2.88
HYDROGRAPH AT	10.86	707.	20.00	636.	377.	145.	2.47
HYDROGRAPH AT	10.86	3301.	18.50	2772.	1369.	485.	8.33
ROUTED TO	0.00	2065.	29.50	1972.	1253.	485.	8.33
4 COMBINED AT	10.86	4881.	27.50	4686.	3226.	1225.	21.14
HYDROGRAPH AT	10.86	1217.	21.00	1118.	713.	288.	4.94
HYDROGRAPH AT	10.86	890.	19.50	794.	457.	173.	2.95
3 COMBINED AT	10.86	6186.	26.50	5975.	4377.	1679.	29.03
ROUTED TO	4.22	5769.	35.50	5631.	4323.	1678.	29.03
HYDROGRAPH AT	4.0	3282.	19.50	2906.	1641.	615.	10.57
ROUTED TO	4.0	1420.	40.50	1396.	1376.	614.	10.57
HYDROGRAPH AT	0.0	3435.	17.50	2582.	1063.	359.	6.16
2 COMBINED AT	4.0	3661.	17.50	3290.	2138.	970.	16.73
ROUTED TO	0.0	3283.	22.00	3038.	2080.	968.	16.73
HYDROGRAPH AT	4.05	1559.	19.00	1352.	721.	263.	4.50
ROUTED TO	4.05	1539.	20.50	1344.	720.	263.	4.50
HYDROGRAPH AT	4.05	1275.	19.50	1122.	619.	229.	3.92
2 COMBINED AT	4.05	2760.	20.00	2434.	1333.	490.	8.42
ROUTED TO	0.0	2492.	25.00	2337.	1319.	490.	8.42
HYDROGRAPH AT	0.0	1600.	19.00	1383.	729.	265.	4.53
4 COMBINED AT	4.22	10077.	24.50	9727.	8036.	3300.	58.71
ROUTED TO	0.0	9387.	32.00	9197.	7726.	3285.	58.71
HYDROGRAPH AT	5.53	619.	16.50	374.	131.	44.	0.74
HYDROGRAPH AT	5.53	485.	19.50	426.	233.	86.	1.46

HYDROGRAPH AT	5.53	726.	17.00	527.	209.	70.	1.19
3 COMBINED AT	5.53	1590.	17.00	1263.	560.	198.	3.39
ROUTED TO	3.92	1293.	23.00	1173.	541.	198.	3.39
HYDROGRAPH AT	3.92	551.	20.00	495.	291.	112.	1.90
HYDROGRAPH AT	3.92	2172.	17.50	1679.	718.	244.	4.18
3 COMBINED AT	3.92	3531.	18.00	3131.	1514.	551.	9.47
HYDROGRAPH AT	3.92	1006.	18.00	836.	397.	139.	2.37
HYDROGRAPH AT	3.92	580.	19.00	499.	258.	93.	1.58
3 COMBINED AT	3.92	5064.	18.00	4439.	2158.	780.	13.42
ROUTED TO	2.25	4410.	22.00	3899.	2040.	779.	13.42
HYDROGRAPH AT	2.25	1681.	17.00	1137.	423.	141.	2.41
2 COMBINED AT	2.25	4862.	22.00	4206.	2253.	918.	15.83
ROUTED TO	0.0	3794.	27.50	3499.	2056.	889.	15.83
HYDROGRAPH AT	3.43	506.	19.00	437.	230.	84.	1.42
4 COMBINED AT	3.43	27459.	32.50	27244.	24162.	12277.	250.58
HYDROGRAPH AT	3.43	2303.	17.00	1714.	691.	233.	3.98
HYDROGRAPH AT	3.43	1624.	18.50	1389.	709.	254.	4.35
HYDROGRAPH AT	3.43	814.	18.50	705.	386.	147.	1.96
4 COMBINED AT	3.43	27953.	32.00	27766.	24565.	12692.	260.87
ROUTED TO	0.0	27926.	33.50	27684.	24504.	12046.	260.87

*** NORMAL END OF HEC-1 ***

EXISTING WATERSHED CONDITIONS WITH PROPOSED IMPROVEMENTS

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	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	13.53	805.	19.50	709.	392.	146.	2.48		
ROUTED TO	10.55	191.	87.50	190.	184.	137.	2.48		
DIVERSION TO	10.55N	0.	0.50	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	191.	87.50	190.	184.	137.	2.48		
DIVERSION TO	10.55S	0.	0.50	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	191.	87.50	190.	184.	137.	2.48		
HYDROGRAPH AT	10.55	448.	18.50	373.	179.	63.	1.07		
2 COMBINED AT	10.55	446.	18.50	372.	195.	156.	3.55		
ROUTED TO	9.205	164.	119.00	164.	156.	140.	3.55		
DIVERSION TO	9.205	56.	119.00	55.	49.	36.	3.55		
HYDROGRAPH AT	9.205	108.	119.00	108.	107.	104.	3.55		
HYDROGRAPH AT	9.205	365.	19.50	321.	178.	66.	1.12		
HYDROGRAPH AT	9.205	605.	18.00	495.	233.	81.	1.38		
3 COMBINED AT	9.205	999.	18.50	878.	487.	238.	6.05		
ROUTED TO	7.515	250.	92.00	250.	245.	213.	6.05		
DIVERSION TO	7.515	127.	92.00	127.	123.	94.	6.05		
HYDROGRAPH AT	7.515	123.	92.00	123.	122.	119.	6.05		
HYDROGRAPH AT	7.515	256.	18.50	216.	109.	39.	0.65		
HYDROGRAPH AT	7.515	760.	18.50	633.	304.	107.	1.82		
3 COMBINED AT	7.515	1007.	18.50	842.	421.	218.	8.52		

ROUTED TO	4.675	591.	29.50	545.	359.	210.	8.52
DIVERSION TO	4.675	0.	0.50	0.	0.	0.	8.52
HYDROGRAPH AT	4.65	591.	29.50	545.	359.	210.	8.52
HYDROGRAPH AT	4.675	273.	18.00	224.	106.	37.	0.63
HYDROGRAPH AT	4.675	648.	19.00	568.	310.	114.	1.94
HYDROGRAPH AT	4.675	362.	19.00	315.	169.	62.	1.05
4 COMBINED AT	4.675	1284.	19.00	1131.	854.	403.	12.14
HYDROGRAPH AT	4.675	90.	18.00	74.	35.	12.	0.20
HYDROGRAPH AT	4.675	185.	18.00	153.	72.	25.	0.43
HYDROGRAPH AT	4.675	1158.	19.50	1018.	560.	207.	3.54
4 COMBINED AT	4.675	2681.	19.00	2353.	1505.	643.	16.31
ROUTED TO	0.0	2378.	24.50	2211.	1492.	642.	16.31
DIVERSION TO	0.05	0.	0.50	0.	0.	0.	16.31
HYDROGRAPH AT	0.0	2378.	24.50	2211.	1492.	642.	16.31
DIVERSION TO	0.0N	83.	24.50	48.	12.	4.	16.31
HYDROGRAPH AT	0.0	2295.	24.50	2163.	1480.	638.	16.31
HYDROGRAPH AT	44.102	1217.	19.50	1085.	625.	236.	4.04
ROUTED TO	1	918.	29.50	818.	569.	236.	4.04
HYDROGRAPH AT	42.863	1089.	19.00	954.	520.	191.	3.27
2 COMBINED AT	44.102	1313.	29.00	1172.	949.	426.	7.31
ROUTED TO	42.863	1016.	42.50	1002.	857.	425.	7.31
HYDROGRAPH AT	40.863	2369.	20.00	2130.	1262.	485.	8.33
2 COMBINED AT	42.863	2373.	20.00	2151.	1658.	904.	15.64
ROUTED TO	40.863	1930.	29.00	1886.	1607.	903.	15.64

DIVERSION TO	40.863	1.	29.00	0.	0.	0.	15.64
HYDROGRAPH AT	40.863	1929.	29.00	1885.	1607.	903.	15.64
HYDROGRAPH AT	39.259	2104.	19.50	1871.	1072.	404.	6.93
2 COMBINED AT	40.863	2992.	20.50	2908.	2407.	1299.	22.57
ROUTED TO	39.259	2951.	30.00	2887.	2392.	1299.	22.57
DIVERSION TO	39.259	0.	0.50	0.	0.	0.	22.57
HYDROGRAPH AT	39.259	2951.	30.00	2887.	2392.	1299.	22.57
HYDROGRAPH AT	37.495	2428.	19.00	2102.	1114.	405.	6.95
2 COMBINED AT	39.259	4051.	23.50	3975.	3277.	1694.	29.52
ROUTED TO	37.495	3959.	29.00	3898.	3205.	1691.	29.52
DIVERSION TO	37.495	0.	0.50	0.	0.	0.	29.52
HYDROGRAPH AT	37.495	3959.	29.00	3898.	3205.	1691.	29.52
HYDROGRAPH AT	35.179	2236.	18.50	1897.	959.	343.	5.87
2 COMBINED AT	37.495	4666.	27.00	4540.	3690.	2004.	35.39
ROUTED TO	35.179	4400.	34.50	4332.	3661.	2004.	35.39
DIVERSION TO	35.179	0.	0.50	0.	0.	0.	35.39
HYDROGRAPH AT	35.179	4400.	34.50	4332.	3661.	2004.	35.39
HYDROGRAPH AT	33.739	1291.	18.50	1091.	547.	195.	3.33
2 COMBINED AT	35.179	4535.	34.00	4466.	3872.	2184.	38.72
ROUTED TO	33.739	4451.	37.00	4393.	3855.	2183.	38.72
DIVERSION TO	33.739	0.	0.50	0.	0.	0.	38.72
HYDROGRAPH AT	33.739	4451.	37.00	4393.	3855.	2183.	38.72
HYDROGRAPH AT	32.797	1659.	18.00	1347.	625.	217.	3.71
2 COMBINED AT	33.739	4505.	36.50	4451.	4091.	2383.	42.43

ROUTED TO	32.797	4426.	40.00	4382.	4058.	2383.	42.43
DIVERSION TO	32.797	0.	0.50	0.	0.	0.	42.43
HYDROGRAPH AT	32.797	4426.	40.00	4382.	4058.	2383.	42.43
HYDROGRAPH AT	31.702	2104.	17.00	1425.	531.	178.	3.03
2 COMBINED AT	32.797	4536.	18.50	4382.	4163.	2550.	45.46
ROUTED TO	31.702	4470.	19.00	4368.	4152.	2543.	45.46
DIVERSION TO	31.702	0.	0.50	0.	0.	0.	45.46
HYDROGRAPH AT	31.702	4470.	19.00	4368.	4152.	2543.	45.46
HYDROGRAPH AT	31.012	468.	18.50	398.	202.	72.	1.23
2 COMBINED AT	31.702	4917.	19.00	4677.	4316.	2609.	46.69
ROUTED TO	31.012	4733.	20.00	4617.	4301.	2609.	46.69
DIVERSION TO	31.012	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	31.012	4733.	20.00	4617.	4301.	2609.	46.69
HYDROGRAPH AT	30.197	564.	19.00	488.	260.	95.	1.61
2 COMBINED AT	31.012	5248.	20.00	5057.	4510.	2696.	48.30
ROUTED TO	30.197	5085.	21.50	4991.	4493.	2696.	48.30
DIVERSION TO	30.197	65.	21.50	61.	39.	16.	48.30
HYDROGRAPH AT	30.197	5021.	21.50	4931.	4454.	2680.	48.30
HYDROGRAPH AT	28.52	2161.	17.50	1650.	697.	237.	4.05
2 COMBINED AT	30.197	6294.	20.00	6004.	4906.	2895.	52.35
ROUTED TO	28.52	5901.	23.50	5775.	4867.	2894.	52.35
DIVERSION TO	28.52	178.	23.50	166.	95.	38.	52.35
HYDROGRAPH AT	28.52	5723.	23.50	5609.	4772.	2856.	52.35
HYDROGRAPH AT	21.105	1974.	18.00	1619.	760.	265.	4.53

2 COMBINED AT	28.52	6800.	21.50	6677.	5348.	3098.	56.88
ROUTED TO	21.105	6502.	28.50	6370.	5249.	3094.	56.88
DIVERSION TO	21105K	386.	28.50	361.	200.	80.	56.88
HYDROGRAPH AT	21.105	6117.	28.50	6008.	5049.	3014.	56.88
DIVERSION TO	21105L	0.	0.50	0.	0.	0.	56.88
HYDROGRAPH AT	21.105	6117.	28.50	6008.	5049.	3014.	56.88
HYDROGRAPH AT	21.105	4308.	17.50	3331.	1425.	485.	8.33
HYDROGRAPH AT	21.105	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	21.105	65.	21.50	61.	39.	16.	48.30
HYDROGRAPH AT	21.105	178.	23.50	166.	95.	38.	52.35
4 COMBINED AT	21.105	4320.	17.50	3446.	1542.	545.	8.33
HYDROGRAPH AT	21.105	0.	0.50	0.	0.	0.	56.88
2 COMBINED AT	21.105	4320.	17.50	3446.	1542.	545.	8.33
ROUTED TO	00	2501.	31.50	2413.	1534.	545.	8.33
DIVERSION TO	OUT	31.	31.50	24.	6.	2.	8.33
HYDROGRAPH AT	00	2470.	31.50	2389.	1528.	543.	8.33
2 COMBINED AT	21.105	8442.	29.50	8303.	6292.	3518.	65.21
HYDROGRAPH AT	21.105	2407.	17.50	1802.	733.	247.	4.23
ROUTED TO	3.00	1292.	30.00	1240.	731.	247.	4.23
HYDROGRAPH AT	3.00	31.	31.50	24.	6.	2.	8.33
2 COMBINED AT	3.00	1320.	30.00	1261.	737.	250.	4.23
HYDROGRAPH AT	3.00	718.	19.00	629.	343.	126.	2.15
HYDROGRAPH AT	00	950.	19.00	817.	423.	152.	2.60
3 COMBINED AT	3.00	2171.	19.00	2090.	1493.	525.	8.98

ROUTED TO	00	2069.	27.00	2044.	1491.	525.	8.98
HYDROGRAPH AT	00	474.	19.00	413.	223.	82.	1.39
2 COMBINED AT	00	2311.	25.50	2274.	1707.	605.	10.37
2 COMBINED AT	21.105	10543.	29.00	10398.	7782.	4082.	75.58
HYDROGRAPH AT	17.548	552.	20.00	499.	300.	116.	1.98
2 COMBINED AT	21.105	10809.	28.50	10663.	8032.	4189.	77.56
ROUTED TO	17.548	10669.	32.00	10526.	8007.	4186.	77.56
HYDROGRAPH AT	17.548	1187.	19.00	1032.	555.	203.	3.47
ROUTED TO	11.53	996.	26.00	921.	550.	203.	3.47
HYDROGRAPH AT	9.32	1595.	18.50	1331.	645.	227.	3.88
2 COMBINED AT	11.53	1719.	18.50	1604.	1155.	428.	7.35
ROUTED TO	11.53	1567.	30.50	1514.	1069.	428.	7.35
HYDROGRAPH AT	7.73	1789.	17.00	1288.	506.	170.	2.90
2 COMBINED AT	9.32	1932.	17.00	1591.	1360.	596.	10.25
ROUTED TO	7.73	1491.	39.50	1450.	1316.	596.	10.25
HYDROGRAPH AT	5.19	915.	18.50	764.	370.	130.	2.22
2 COMBINED AT	7.73	1694.	25.50	1657.	1528.	725.	12.47
ROUTED TO	5.19	1579.	36.00	1564.	1480.	725.	12.47
HYDROGRAPH AT	0.0	2311.	18.00	1852.	834.	287.	4.92
2 COMBINED AT	5.19	2948.	18.00	2599.	1961.	1009.	17.39
HYDROGRAPH AT	5.19	386.	28.50	361.	200.	80.	56.88
2 COMBINED AT	5.19	2948.	18.00	2617.	2153.	1095.	17.39
ROUTED TO	0.0	2537.	24.50	2391.	2063.	1095.	17.39
2 COMBINED AT	17.548	12669.	32.00	12527.	9898.	5176.	94.95

HYDROGRAPH AT	15.505	1512.	17.50	1153.	487.	165.	2.82
2 COMBINED AT	17.548	12734.	31.50	12610.	10043.	5312.	97.77
ROUTED TO	15.505	12696.	33.50	12562.	10027.	5311.	97.77
HYDROGRAPH AT	15.505	2690.	18.50	2282.	1153.	412.	7.06
HYDROGRAPH AT	9.10	0.	0.50	0.	0.	0.	2.48
2 COMBINED AT	9.10	2690.	18.50	2282.	1153.	412.	7.06
ROUTED TO	9.10	2212.	25.00	2020.	1117.	412.	7.06
HYDROGRAPH AT	7.62	1431.	18.50	1220.	622.	224.	3.82
2 COMBINED AT	9.10	2960.	24.50	2719.	1653.	633.	10.88
HYDROGRAPH AT	9.10	56.	119.00	55.	49.	36.	3.55
2 COMBINED AT	9.10	2967.	24.50	2726.	1664.	657.	10.88
ROUTED TO	7.62	2441.	30.00	1952.	1075.	621.	10.88
HYDROGRAPH AT	6.50	920.	19.00	796.	422.	154.	2.62
2 COMBINED AT	7.62	2710.	30.00	2161.	1183.	725.	13.50
ROUTED TO	6.50	2419.	33.50	2032.	1169.	707.	13.50
HYDROGRAPH AT	0.0	3199.	18.00	2650.	1258.	440.	7.55
2 COMBINED AT	6.50	3192.	18.00	2663.	1993.	1071.	21.05
HYDROGRAPH AT	6.50	127.	92.00	127.	123.	94.	6.05
HYDROGRAPH AT	6.50	0.	0.50	0.	0.	0.	8.52
3 COMBINED AT	6.50	3192.	18.00	2663.	1993.	1113.	21.05
HYDROGRAPH AT	6.50	83.	24.50	48.	12.	4.	16.31
2 COMBINED AT	6.50	3196.	18.00	2665.	2005.	1117.	21.05
ROUTED TO	0.0	2782.	22.50	2504.	1976.	1114.	21.05
2 COMBINED AT	15.505	13916.	36.00	13853.	11740.	6339.	118.82

HYDROGRAPH AT	12.606	1951.	18.00	1564.	704.	243.	4.15
2 COMBINED AT	15.505	14047.	31.50	13980.	12020.	6546.	122.97
ROUTED TO	12.606	14039.	32.50	13977.	12013.	6518.	122.97
2 COMBINED AT	12.606	15475.	31.50	15367.	13325.	7105.	139.28
HYDROGRAPH AT	9.586	1373.	19.50	1206.	660.	244.	4.17
2 COMBINED AT	12.606	15840.	31.00	15743.	13730.	7302.	143.45
HYDROGRAPH AT	12.606	1115.	20.50	1011.	613.	239.	4.09
HYDROGRAPH AT	12.606	0.	0.50	0.	0.	0.	16.31
3 COMBINED AT	12.606	16296.	30.00	16232.	14184.	7508.	147.54
ROUTED TO	9.586	16275.	32.00	16211.	14151.	7420.	147.54
HYDROGRAPH AT	9.586	933.	19.50	830.	475.	179.	3.06
HYDROGRAPH AT	9.586	1320.	19.50	1169.	662.	248.	4.25
HYDROGRAPH AT	9.586	3444.	17.50	2578.	1050.	354.	6.07
4 COMBINED AT	9.586	17372.	28.00	17192.	15137.	7979.	160.92
ROUTED TO	5.857	17312.	30.00	17158.	15080.	7895.	160.92
HYDROGRAPH AT	5.857	3331.	18.00	2676.	1212.	418.	7.17
HYDROGRAPH AT	5.30	1581.	17.50	1186.	486.	164.	2.80
HYDROGRAPH AT	2.988	1794.	17.00	1219.	456.	152.	2.60
4 COMBINED AT	5.857	17923.	29.00	17674.	15633.	8422.	173.49
HYDROGRAPH AT	2.986	823.	17.00	571.	245.	85.	1.13
2 COMBINED AT	5.857	17955.	29.00	17699.	15672.	8482.	174.62
ROUTED TO	2.988	17938.	30.00	17691.	15670.	8195.	174.62
HYDROGRAPH AT	10.86	3860.	17.50	2984.	1277.	435.	7.46
ROUTED TO	10.86	2417.	27.00	2267.	1273.	435.	7.46

HYDROGRAPH AT	10.86	813.	20.00	732.	437.	169.	2.88
HYDROGRAPH AT	10.86	707.	20.00	636.	377.	145.	2.47
HYDROGRAPH AT	10.86	3301.	18.50	2772.	1369.	485.	8.33
ROUTED TO	0.00	2192.	29.00	2075.	1261.	485.	8.33
4 COMBINED AT	10.86	5290.	27.50	5013.	3239.	1225.	21.14
HYDROGRAPH AT	10.86	1217.	21.00	1118.	713.	288.	4.94
HYDROGRAPH AT	10.86	890.	19.50	794.	457.	173.	2.95
3 COMBINED AT	10.86	6554.	27.00	6244.	4390.	1679.	29.03
ROUTED TO	4.22	5955.	36.00	5762.	4337.	1678.	29.03
HYDROGRAPH AT	4.0	3282.	19.50	2906.	1641.	615.	10.57
ROUTED TO	4.0	1420.	40.50	1396.	1376.	614.	10.57
HYDROGRAPH AT	0.0	3435.	17.50	2582.	1063.	359.	6.16
2 COMBINED AT	4.0	3661.	17.50	3290.	2138.	970.	16.73
ROUTED TO	0.0	3441.	21.50	3150.	2100.	968.	16.73
HYDROGRAPH AT	4.05	1559.	19.00	1352.	721.	263.	4.50
ROUTED TO	4.05	1539.	20.50	1344.	720.	263.	4.50
HYDROGRAPH AT	4.05	1275.	19.50	1122.	619.	229.	3.92
2 COMBINED AT	4.05	2766.	20.00	2434.	1333.	490.	8.42
ROUTED TO	0.0	2492.	25.00	2337.	1319.	490.	8.42
HYDROGRAPH AT	0.0	1600.	19.00	1383.	729.	265.	4.53
4 COMBINED AT	4.22	10077.	24.50	9734.	8070.	3300.	58.71
ROUTED TO	0.0	9466.	31.50	9251.	7775.	3287.	58.71
HYDROGRAPH AT	5.53	619.	16.50	374.	131.	44.	0.74
HYDROGRAPH AT	5.53	485.	19.50	426.	233.	86.	1.46

HYDROGRAPH AT	5.53	726.	17.00	527.	209.	70.	1.19
3 COMBINED AT	5.53	1590.	17.00	1263.	560.	198.	3.39
ROUTED TO	3.92	1293.	23.00	1173.	541.	198.	3.39
HYDROGRAPH AT	3.92	551.	20.00	495.	291.	112.	1.90
HYDROGRAPH AT	3.92	2172.	17.50	1679.	718.	244.	4.18
3 COMBINED AT	3.92	3531.	18.00	3131.	1514.	551.	9.47
HYDROGRAPH AT	3.92	1008.	18.00	836.	397.	139.	2.37
HYDROGRAPH AT	3.92	580.	19.00	499.	258.	93.	1.58
3 COMBINED AT	3.92	5064.	18.00	4439.	2158.	780.	13.42
ROUTED TO	2.25	4410.	22.00	3899.	2040.	779.	13.42
HYDROGRAPH AT	2.25	1681.	17.00	1137.	423.	141.	2.41
2 COMBINED AT	2.25	4862.	22.00	4206.	2253.	918.	15.83
ROUTED TO	0.0	3941.	27.50	3617.	2078.	892.	15.83
HYDROGRAPH AT	2.988	506.	19.00	437.	230.	84.	1.42
4 COMBINED AT	2.988	30261.	30.00	29604.	24782.	12182.	250.58
HYDROGRAPH AT	2.988	2303.	17.00	1714.	691.	233.	3.98
HYDROGRAPH AT	2.988	1624.	18.50	1389.	709.	254.	4.35
HYDROGRAPH AT	2.988	814.	18.50	705.	386.	147.	1.96
4 COMBINED AT	2.988	30976.	30.00	30292.	25301.	12594.	260.87
ROUTED TO	0.0	30915.	31.00	30249.	25256.	11907.	260.87

*** NORMAL END OF HEC-1 ***

ULTIMATE WATERSHED CONDITIONS WITH PROPOSED IMPROVEMENTS

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	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	13.53	1823.	16.50	1203.	437.	146.	2.48		
ROUTED TO	10.55	200.	80.50	199.	192.	139.	2.48		
DIVERSION TO	10.55B	0.	0.50	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	200.	80.50	199.	192.	139.	2.48		
DIVERSION TO	10.55S	0.	81.00	0.	0.	0.	2.48		
HYDROGRAPH AT	10.55	200.	80.50	199.	192.	139.	2.48		
HYDROGRAPH AT	10.55	977.	16.50	558.	189.	63.	1.07		
2 COMBINED AT	10.55	972.	16.50	556.	201.	166.	3.55		
ROUTED TO	9.205	175.	43.50	175.	163.	140.	3.55		
DIVERSION TO	9.205	65.	43.50	64.	55.	37.	3.55		
HYDROGRAPH AT	9.205	110.	43.50	110.	108.	103.	3.55		
HYDROGRAPH AT	9.205	825.	16.50	544.	197.	66.	1.12		
HYDROGRAPH AT	9.205	1077.	16.50	682.	243.	81.	1.38		
3 COMBINED AT	9.205	1969.	16.50	1303.	513.	240.	6.05		
ROUTED TO	7.515	256.	85.50	255.	250.	215.	6.05		
DIVERSION TO	7.515	132.	85.50	132.	128.	96.	6.05		
HYDROGRAPH AT	7.515	123.	85.50	123.	123.	119.	6.05		
HYDROGRAPH AT	7.515	571.	16.50	336.	116.	39.	0.65		
HYDROGRAPH AT	7.515	1360.	16.50	886.	320.	107.	1.82		
3 COMBINED AT	7.515	1914.	16.50	1211.	441.	220.	8.52		

ROUTED TO	4.675	851.	25.50	734.	401.	212.	8.52
DIVERSION TO	4.675	0.	0.50	0.	0.	0.	8.52
HYDROGRAPH AT	4.65	851.	25.50	734.	401.	212.	8.52
HYDROGRAPH AT	4.675	487.	16.50	310.	111.	37.	0.63
HYDROGRAPH AT	4.675	1468.	16.50	950.	342.	114.	1.94
HYDROGRAPH AT	4.675	818.	16.50	519.	185.	62.	1.05
4 COMBINED AT	4.675	2769.	16.50	1804.	934.	406.	12.14
HYDROGRAPH AT	4.675	192.	16.50	108.	36.	12.	0.20
HYDROGRAPH AT	4.675	396.	16.50	225.	76.	25.	0.43
HYDROGRAPH AT	4.675	2154.	17.00	1562.	617.	207.	3.54
4 COMBINED AT	4.675	5320.	17.00	3657.	1642.	647.	16.31
ROUTED TO	0.0	3892.	22.00	3296.	1635.	644.	16.31
DIVERSION TO	0.08	0.	0.50	0.	0.	0.	16.31
HYDROGRAPH AT	0.0	3892.	22.00	3296.	1635.	644.	16.31
DIVERSION TO	0.08	920.	22.00	546.	139.	46.	16.31
HYDROGRAPH AT	0.0	2971.	22.00	2750.	1496.	598.	16.31
HYDROGRAPH AT	44.102	2818.	17.00	1906.	707.	236.	4.04
ROUTED TO	1	1125.	32.00	1092.	677.	236.	4.04
HYDROGRAPH AT	42.863	2473.	16.50	1598.	574.	191.	3.27
2 COMBINED AT	44.102	2552.	16.50	1739.	1139.	426.	7.31
ROUTED TO	42.863	1141.	37.50	1136.	998.	426.	7.31
HYDROGRAPH AT	40.863	5582.	17.00	3829.	1451.	485.	8.33
2 COMBINED AT	42.863	5575.	17.00	3845.	1891.	908.	15.64
ROUTED TO	40.863	4032.	22.00	3139.	1840.	908.	15.64

DIVERSION TO	40.863	144.	22.00	83.	21.	7.	15.64
HYDROGRAPH AT	40.863	3888.	22.00	3057.	1819.	901.	15.64
HYDROGRAPH AT	39.259	4857.	17.00	3275.	1210.	404.	6.93
2 COMBINED AT	40.863	5325.	17.00	4850.	2790.	1300.	22.57
ROUTED TO	39.259	4998.	24.50	4699.	2775.	1300.	22.57
DIVERSION TO	39.259	0.	0.50	0.	0.	0.	22.57
HYDROGRAPH AT	39.259	4998.	24.50	4699.	2775.	1300.	22.57
HYDROGRAPH AT	37.495	4852.	17.00	3278.	1213.	405.	6.95
2 COMBINED AT	39.259	6603.	20.00	6150.	3815.	1700.	29.52
ROUTED TO	37.495	6130.	24.50	5923.	3755.	1699.	29.52
DIVERSION TO	37.495	0.	0.50	0.	0.	0.	29.52
HYDROGRAPH AT	37.495	6130.	24.50	5923.	3755.	1699.	29.52
HYDROGRAPH AT	35.179	4069.	17.00	2755.	1025.	343.	5.87
2 COMBINED AT	37.495	6794.	24.00	6445.	4475.	2021.	35.39
ROUTED TO	35.179	6165.	31.00	5999.	4435.	2021.	35.39
DIVERSION TO	35.179	0.	0.50	0.	0.	0.	35.39
HYDROGRAPH AT	35.179	6165.	31.00	5999.	4435.	2021.	35.39
HYDROGRAPH AT	33.739	2329.	17.00	1574.	584.	195.	3.33
2 COMBINED AT	35.179	6174.	31.00	6017.	4766.	2204.	38.72
ROUTED TO	33.739	5646.	30.00	5574.	4697.	2204.	38.72
DIVERSION TO	33.739	0.	0.50	0.	0.	0.	38.72
HYDROGRAPH AT	33.739	5646.	30.00	5574.	4697.	2204.	38.72
HYDROGRAPH AT	32.797	3063.	16.50	1858.	651.	217.	3.71
2 COMBINED AT	33.739	5646.	30.00	5575.	5008.	2415.	42.43

ROUTED TO	32.797	5406.	40.00	5348.	4866.	2406.	42.43
DIVERSION TO	32.797	0.	0.50	0.	0.	0.	42.43
HYDROGRAPH AT	32.797	5406.	40.00	5348.	4866.	2406.	42.43
HYDROGRAPH AT	31.702	2806.	16.50	1585.	532.	177.	3.03
2 COMBINED AT	32.797	5807.	16.50	5346.	4988.	2577.	45.46
ROUTED TO	31.702	5550.	17.50	5333.	4975.	2571.	45.46
DIVERSION TO	31.702	0.	0.50	0.	0.	0.	45.46
HYDROGRAPH AT	31.702	5550.	17.50	5333.	4975.	2571.	45.46
HYDROGRAPH AT	31.012	926.	16.50	602.	217.	72.	1.23
2 COMBINED AT	31.702	6390.	17.00	5784.	5116.	2638.	46.69
ROUTED TO	31.012	5928.	19.00	5630.	5085.	2638.	46.69
DIVERSION TO	31.012	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	31.012	5928.	19.00	5630.	5085.	2638.	46.69
HYDROGRAPH AT	30.197	1130.	17.00	764.	283.	95.	1.61
2 COMBINED AT	31.012	6696.	18.50	6221.	5263.	2725.	48.30
ROUTED TO	30.197	6213.	20.50	5980.	5226.	2725.	48.30
DIVERSION TO	30.197	114.	20.50	103.	71.	29.	48.30
HYDROGRAPH AT	30.197	6099.	20.50	5877.	5155.	2696.	48.30
HYDROGRAPH AT	28.52	3490.	16.50	2059.	711.	237.	4.05
2 COMBINED AT	30.197	7725.	17.50	7203.	5593.	2916.	52.35
ROUTED TO	28.52	6932.	21.50	6712.	5530.	2915.	52.35
DIVERSION TO	28.52	358.	21.50	319.	167.	66.	52.35
HYDROGRAPH AT	28.52	6574.	21.50	6393.	5363.	2849.	52.35
HYDROGRAPH AT	21.105	3228.	17.00	2166.	793.	265.	4.53

2 COMBINED AT	28.52	7913.	18.50	7645.	5904.	3094.	56.88
ROUTED TO	21.105	7218.	24.00	6992.	5763.	3090.	56.88
DIVERSION TO	21105R	561.	24.00	506.	281.	109.	56.88
HYDROGRAPH AT	21.105	6657.	24.00	6486.	5483.	2981.	56.88
DIVERSION TO	21105L	0.	0.50	0.	0.	0.	56.88
HYDROGRAPH AT	21.105	6657.	24.00	6486.	5483.	2981.	56.88
HYDROGRAPH AT	21.105	5899.	17.00	3962.	1453.	485.	8.33
HYDROGRAPH AT	21.105	0.	0.50	0.	0.	0.	46.69
HYDROGRAPH AT	21.105	114.	20.50	103.	71.	29.	48.30
HYDROGRAPH AT	21.105	358.	21.50	319.	167.	66.	52.35
4 COMBINED AT	21.105	6015.	17.00	4195.	1652.	588.	8.33
HYDROGRAPH AT	21.105	0.	0.50	0.	0.	0.	56.88
2 COMBINED AT	21.105	6015.	17.00	4195.	1652.	588.	8.33
ROUTED TO	00	2819.	30.50	2696.	1643.	588.	8.33
DIVERSION TO	OUT	56.	30.50	46.	13.	4.	8.33
HYDROGRAPH AT	00	2763.	30.50	2650.	1630.	584.	8.33
2 COMBINED AT	21.105	8988.	28.50	8868.	6829.	3528.	65.21
HYDROGRAPH AT	21.105	3653.	16.50	2152.	742.	248.	4.23
ROUTED TO	3.00	1435.	28.50	1356.	741.	248.	4.23
HYDROGRAPH AT	3.00	56.	30.50	46.	13.	4.	8.33
2 COMBINED AT	3.00	1482.	28.50	1394.	755.	252.	4.23
HYDROGRAPH AT	3.00	1631.	16.50	1053.	378.	126.	2.15
HYDROGRAPH AT	00	1876.	16.50	1252.	457.	152.	2.60
3 COMBINED AT	3.00	3925.	16.50	2826.	1574.	528.	8.98

ROUTED TO	00	2846.	23.50	2585.	1568.	528.	8.98
HYDROGRAPH AT	00	1073.	16.50	685.	245.	82.	1.39
2 COMBINED AT	00	3007.	23.50	2764.	1799.	608.	10.37
2 COMBINED AT	21.105	11504.	24.00	11075.	8237.	4095.	75.58
HYDROGRAPH AT	17.548	1305.	17.00	906.	347.	116.	1.98
2 COMBINED AT	21.105	11763.	24.00	11260.	8459.	4201.	77.56
ROUTED TO	17.548	11229.	28.00	11044.	8432.	4199.	77.56
HYDROGRAPH AT	17.548	2676.	16.50	1705.	609.	203.	3.47
ROUTED TO	11.53	1801.	22.50	1459.	607.	203.	3.47
HYDROGRAPH AT	9.32	2842.	16.50	1875.	680.	227.	3.88
2 COMBINED AT	11.53	3036.	17.00	2417.	1271.	429.	7.35
ROUTED TO	11.53	2190.	27.00	2084.	1224.	429.	7.35
HYDROGRAPH AT	7.73	2180.	16.50	1415.	509.	170.	2.90
2 COMBINED AT	9.32	2450.	16.50	2212.	1622.	597.	10.25
ROUTED TO	7.73	2017.	35.50	1961.	1586.	597.	10.25
HYDROGRAPH AT	5.19	1627.	16.50	1075.	390.	130.	2.22
2 COMBINED AT	7.73	2200.	17.00	1961.	1773.	725.	12.47
ROUTED TO	5.19	1848.	45.50	1824.	1661.	725.	12.47
HYDROGRAPH AT	0.0	3116.	17.00	2208.	857.	287.	4.92
2 COMBINED AT	5.19	3799.	17.00	3009.	2055.	1009.	17.39
HYDROGRAPH AT	5.19	561.	24.00	506.	281.	109.	56.88
2 COMBINED AT	5.19	3799.	17.00	3058.	2327.	1126.	17.39
ROUTED TO	0.0	2982.	23.00	2748.	2228.	1126.	17.39
2 COMBINED AT	17.548	13515.	28.00	13311.	10447.	5223.	94.95

HYDROGRAPH AT	15.505	2368.	16.50	1422.	496.	165.	2.82
2 COMBINED AT	17.548	13537.	28.00	13342.	10552.	5362.	97.77
ROUTED TO	15.505	13466.	29.50	13291.	10542.	5362.	97.77
HYDROGRAPH AT	15.505	5306.	16.50	3433.	1234.	412.	7.06
HYDROGRAPH AT	9.10	0.	0.50	0.	0.	0.	2.48
2 COMBINED AT	9.10	5306.	16.50	3433.	1234.	412.	7.06
ROUTED TO	9.10	3656.	21.00	2894.	1215.	412.	7.06
HYDROGRAPH AT	7.62	3223.	16.50	1928.	670.	223.	3.82
2 COMBINED AT	9.10	4438.	20.50	3496.	1816.	633.	10.88
HYDROGRAPH AT	9.10	65.	43.50	64.	55.	37.	3.55
2 COMBINED AT	9.10	4445.	20.50	3503.	1832.	660.	10.88
ROUTED TO	7.62	3453.	25.00	2635.	1205.	636.	10.88
HYDROGRAPH AT	6.50	2005.	17.00	1294.	460.	154.	2.62
2 COMBINED AT	7.62	3661.	25.00	2744.	1425.	756.	13.50
ROUTED TO	6.50	3193.	28.50	2554.	1312.	739.	13.50
HYDROGRAPH AT	0.0	5948.	16.50	3723.	1319.	440.	7.55
2 COMBINED AT	6.50	5933.	16.50	3825.	2327.	1125.	21.05
HYDROGRAPH AT	6.50	132.	85.50	132.	128.	96.	6.05
HYDROGRAPH AT	6.50	0.	0.50	0.	0.	0.	8.52
3 COMBINED AT	6.50	5933.	16.50	3825.	2327.	1171.	21.05
HYDROGRAPH AT	6.50	920.	22.00	546.	139.	46.	16.31
2 COMBINED AT	6.50	5933.	16.50	4004.	2465.	1217.	21.05
ROUTED TO	0.0	4229.	21.50	3707.	2457.	1215.	21.05
2 COMBINED AT	15.505	15538.	32.50	15198.	12681.	6484.	118.82

HYDROGRAPH AT	12.606	3178.	16.50	2033.	727.	243.	4.15
2 COMBINED AT	15.505	15538.	32.50	15210.	12947.	6695.	122.97
ROUTED TO	12.606	15499.	33.50	15204.	12937.	6675.	122.97
2 COMBINED AT	12.606	16863.	26.00	16696.	14268.	7225.	139.28
HYDROGRAPH AT	9.586	2815.	17.00	1928.	729.	244.	4.17
2 COMBINED AT	12.606	17141.	25.50	16987.	14650.	7423.	143.45
HYDROGRAPH AT	12.606	2651.	17.00	1855.	714.	239.	4.09
HYDROGRAPH AT	12.606	0.	0.50	0.	0.	0.	16.31
3 COMBINED AT	12.606	17615.	24.00	17349.	15095.	7625.	147.54
ROUTED TO	9.586	17515.	26.50	17295.	15012.	7554.	147.54
HYDROGRAPH AT	9.586	1925.	17.00	1371.	534.	179.	3.06
HYDROGRAPH AT	9.586	2716.	17.00	1914.	741.	248.	4.25
HYDROGRAPH AT	9.586	4757.	16.50	2991.	1062.	354.	6.07
4 COMBINED AT	9.586	18464.	25.00	18165.	15972.	8147.	160.92
ROUTED TO	5.857	18400.	26.50	18125.	15929.	8076.	160.92
HYDROGRAPH AT	5.857	5050.	17.00	3400.	1252.	418.	7.17
HYDROGRAPH AT	5.30	2538.	16.50	1453.	493.	164.	2.80
HYDROGRAPH AT	2.988	2395.	16.50	1358.	458.	153.	2.60
4 COMBINED AT	5.857	19011.	25.00	18743.	16695.	8624.	173.49
HYDROGRAPH AT	2.988	1082.	16.50	629.	250.	85.	1.13
2 COMBINED AT	5.857	19101.	24.50	18815.	16780.	8684.	174.62
ROUTED TO	2.988	19088.	25.50	18808.	16755.	8393.	174.62
HYDROGRAPH AT	10.86	5841.	16.50	3672.	1303.	435.	7.46
ROUTED TO	10.86	2961.	25.00	2671.	1300.	435.	7.46

HYDROGRAPH AT	10.86	1915.	17.00	1322.	504.	169.	2.88
HYDROGRAPH AT	10.86	1662.	17.00	1141.	433.	145.	2.47
HYDROGRAPH AT	10.86	5775.	17.00	3908.	1452.	485.	8.33
ROUTED TO	0.00	2981.	26.00	2688.	1383.	485.	8.33
4 COMBINED AT	10.86	6370.	25.00	5741.	3532.	1225.	21.14
HYDROGRAPH AT	10.86	2917.	17.00	2148.	858.	289.	4.94
HYDROGRAPH AT	10.86	2061.	17.00	1394.	517.	173.	2.95
3 COMBINED AT	10.86	9912.	17.00	7471.	4855.	1679.	29.03
ROUTED TO	4.22	6686.	27.00	6588.	4816.	1679.	29.03
HYDROGRAPH AT	4.0	6777.	17.00	4757.	1836.	615.	10.57
ROUTED TO	4.0	2535.	30.50	2333.	1696.	615.	10.57
HYDROGRAPH AT	0.0	4720.	16.50	3015.	1077.	360.	6.16
2 COMBINED AT	4.0	5464.	16.50	4066.	2543.	971.	16.73
ROUTED TO	0.0	4678.	20.50	3824.	2499.	971.	16.73
HYDROGRAPH AT	4.05	3133.	17.00	2120.	787.	263.	4.50
ROUTED TO	4.05	2444.	18.00	2093.	785.	263.	4.50
HYDROGRAPH AT	4.05	2615.	17.00	1801.	686.	229.	3.92
2 COMBINED AT	4.05	4823.	17.50	3814.	1462.	491.	8.42
ROUTED TO	0.0	2605.	29.00	2565.	1449.	491.	8.42
HYDROGRAPH AT	0.0	2960.	17.00	2061.	791.	265.	4.53
4 COMBINED AT	4.22	11932.	21.00	11493.	9071.	3307.	58.71
ROUTED TO	0.0	11275.	31.50	11140.	8718.	3304.	58.71
HYDROGRAPH AT	5.53	726.	16.00	396.	131.	44.	0.74
HYDROGRAPH AT	5.53	1105.	16.50	715.	257.	86.	1.46

HYDROGRAPH AT	5.53	1102.	16.50	624.	210.	70.	1.19
3 COMBINED AT	5.53	2912.	16.50	1721.	595.	199.	3.39
ROUTED TO	3.92	1861.	21.50	1531.	584.	199.	3.39
HYDROGRAPH AT	3.92	1293.	17.00	884.	334.	112.	1.90
HYDROGRAPH AT	3.92	3282.	16.50	2063.	733.	244.	4.18
3 COMBINED AT	3.92	5424.	16.50	4075.	1624.	551.	9.47
HYDROGRAPH AT	3.92	1806.	16.50	1162.	417.	139.	2.37
HYDROGRAPH AT	3.92	1306.	16.50	794.	278.	93.	1.58
3 COMBINED AT	3.92	8500.	16.50	5962.	2308.	780.	13.42
ROUTED TO	2.25	6879.	19.50	5043.	2178.	780.	13.42
HYDROGRAPH AT	2.25	2213.	16.50	1257.	424.	141.	2.41
2 COMBINED AT	2.25	7578.	19.50	5419.	2524.	919.	15.83
ROUTED TO	0.0	5375.	23.50	4508.	2346.	915.	15.83
HYDROGRAPH AT	2.988	1152.	16.50	710.	250.	84.	1.42
4 COMBINED AT	2.988	32770.	27.50	32166.	26596.	12405.	250.58
HYDROGRAPH AT	2.988	3196.	16.50	1977.	698.	233.	3.98
HYDROGRAPH AT	2.988	3217.	16.50	2108.	762.	254.	4.35
HYDROGRAPH AT	2.988	1524.	16.50	1020.	427.	147.	1.96
4 COMBINED AT	2.988	33075.	27.00	32504.	27118.	12854.	260.87
ROUTED TO	0.0	33029.	28.50	32464.	26874.	12098.	260.87

*** NORMAL END OF HEC-1 ***

APPENDIX 2

HEC-2 WATER SURFACE PROFILES

CLEAR CREEK

SUMMARY PRINTOUT TABLE 150

	SECNO	XLOC	FLTRD	FLLC	FLMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
	0.038	0.00	0.00	0.00	-22.40	21382.00	2.00	0.00	2.38	2.44	4.96	4311.35	13679.01
10-YEAR	0.038	0.00	0.00	0.00	-22.40	27926.00	2.00	0.00	2.65	4.17	6.48	4311.35	13679.01
	0.038	0.00	0.00	0.00	-22.40	32315.00	2.00	0.00	2.87	5.58	7.50	4311.35	13679.01
	0.038	0.00	0.00	0.00	-22.40	36584.00	2.00	0.00	3.12	7.15	8.49	4311.35	13679.01
	0.038	0.00	0.00	0.00	-22.40	40736.00	2.00	0.00	3.39	8.87	9.45	4311.35	13679.01
	0.038	0.00	0.00	0.00	-22.40	40736.00	2.00	0.00	3.39	8.87	9.45	4311.35	13679.01
	0.076	200.00	0.00	0.00	-22.40	21382.00	2.05	0.00	2.43	2.42	4.95	4323.37	13739.27
	0.076	200.00	0.00	0.00	-22.40	27926.00	2.09	0.00	2.73	4.11	6.45	4331.85	13781.84
	0.076	200.00	0.00	0.00	-22.40	32315.00	2.12	0.00	2.98	5.46	7.45	4340.16	13823.57
	0.076	200.00	0.00	0.00	-22.40	36584.00	2.16	0.00	3.26	6.95	8.41	4351.60	13881.12
	0.076	200.00	0.00	0.00	-22.40	40736.00	2.21	0.00	3.56	8.54	9.34	4362.99	13938.52
	0.076	200.00	0.00	0.00	-22.40	40736.00	2.21	0.00	3.56	8.54	9.34	4362.99	13938.52
	0.114	200.00	0.00	0.00	-22.40	21382.00	2.10	0.00	2.48	2.40	4.93	4335.86	13801.97
	0.114	200.00	0.00	0.00	-22.40	27926.00	2.18	0.00	2.82	4.04	6.41	4353.72	13891.80
	0.114	200.00	0.00	0.00	-22.40	32315.00	2.24	0.00	3.09	5.35	7.39	4370.05	13974.13
	0.114	200.00	0.00	0.00	-22.40	36584.00	2.32	0.00	3.40	6.77	8.34	4388.15	14065.52
	0.114	200.00	0.00	0.00	-22.40	40736.00	2.41	0.00	3.73	8.24	9.23	4412.43	14188.48
	0.114	200.00	0.00	0.00	-22.40	40736.00	2.41	0.00	3.73	8.24	9.23	4412.43	14188.48
	0.152	200.00	0.00	0.00	-22.40	21382.00	2.15	0.00	2.53	2.38	4.92	4348.21	13864.05
	0.152	200.00	0.00	0.00	-22.40	27926.00	2.27	0.00	2.90	3.98	6.38	4375.20	14000.09
	0.152	200.00	0.00	0.00	-22.40	32315.00	2.36	0.00	3.20	5.24	7.35	4398.01	14115.42
	0.152	200.00	0.00	0.00	-22.40	36584.00	2.47	0.00	3.54	6.58	8.27	4425.89	14256.81
	0.152	200.00	0.00	0.00	-22.40	40736.00	2.60	0.00	3.90	7.97	9.13	4459.88	14429.80
	0.152	200.00	0.00	0.00	-22.40	40736.00	2.60	0.00	3.90	7.97	9.13	4459.88	14429.80
	0.190	203.00	0.00	0.00	-21.50	21382.00	2.32	0.00	2.57	1.40	4.08	5236.15	18062.59
	0.190	203.00	0.00	0.00	-21.50	27926.00	2.55	0.00	2.98	2.31	5.27	5295.86	18387.44
	0.190	203.00	0.00	0.00	-21.50	32315.00	2.74	0.00	3.30	3.00	6.04	5345.80	18660.57
	0.190	203.00	0.00	0.00	-21.50	36584.00	2.95	0.00	3.67	3.72	6.77	5402.33	18971.42
	0.190	203.00	0.00	0.00	-21.50	40736.00	3.20	0.00	4.06	4.45	7.45	5465.09	19318.43
	0.190	203.00	0.00	0.00	-21.50	40736.00	3.20	0.00	4.06	4.45	7.45	5465.09	19318.43
	0.236	255.00	0.00	0.00	-22.30	21382.00	2.42	0.00	2.61	1.02	3.50	6114.17	21200.39

0.238	255.00	0.00	0.00	-22.30	27926.00	2.72	0.00	3.04	1.65	4.50	6207.49	21715.94
0.238	255.00	0.00	0.00	-22.30	32315.00	2.97	0.00	3.38	2.13	5.14	6284.63	22145.31
0.238	255.00	0.00	0.00	-22.30	36584.00	3.25	0.00	3.76	2.61	5.74	6371.03	22629.58
0.238	255.00	0.00	0.00	-22.30	40736.00	3.56	0.00	4.18	3.09	6.30	6465.83	23165.02
0.238	255.00	0.00	0.00	-22.30	40736.00	3.56	0.00	4.18	3.09	6.30	6465.83	23165.02

SECNO	XLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
0.302	335.00	0.00	0.00	-23.80	21382.00	2.44	0.00	2.66	1.14	3.74	5875.40	20067.47
0.302	335.00	0.00	0.00	-23.80	27926.00	2.75	0.00	3.11	1.84	4.81	6020.32	20590.52
0.302	335.00	0.00	0.00	-23.80	32315.00	3.01	0.00	3.48	2.36	5.49	6145.73	21027.55
0.302	335.00	0.00	0.00	-23.80	36584.00	3.30	0.00	3.88	2.89	6.13	6292.24	21522.41
0.302	335.00	0.00	0.00	-23.80	40736.00	3.61	0.00	4.31	3.41	6.71	6460.42	22073.02
0.302	335.00	0.00	0.00	-23.80	40736.00	3.61	0.00	4.31	3.41	6.71	6460.42	22073.02
0.363	325.00	0.00	0.00	-23.80	19506.00	2.42	0.00	2.77	2.18	4.73	4119.70	13216.16
0.363	325.00	0.00	0.00	-23.80	26735.00	2.70	0.00	3.33	3.91	6.39	4184.82	13512.24
0.363	325.00	0.00	0.00	-23.80	30735.00	2.95	0.00	3.76	4.98	7.24	4242.95	13777.92
0.363	325.00	0.00	0.00	-23.80	35078.00	3.21	0.00	4.24	6.22	8.15	4305.51	14065.32
0.363	325.00	0.00	0.00	-23.80	39472.00	3.49	0.00	4.76	7.53	9.02	4374.20	14382.66
0.363	325.00	0.00	0.00	-23.80	39472.00	3.49	0.00	4.76	7.53	9.02	4374.20	14382.66
0.387	125.00	0.00	0.00	-37.40	19506.00	2.72	0.00	2.85	0.98	2.94	7446.13	19752.64
0.387	125.00	0.00	0.00	-37.40	26735.00	3.26	0.00	3.49	1.61	3.87	8054.46	21085.61
0.387	125.00	0.00	0.00	-37.40	30735.00	3.68	0.00	3.96	1.92	4.30	8547.66	22186.80
0.387	125.00	0.00	0.00	-37.40	35078.00	4.16	0.00	4.49	2.23	4.72	9112.74	23502.04
0.387	125.00	0.00	0.00	-37.40	39472.00	4.69	0.00	5.07	2.49	5.10	9734.87	25014.06
0.387	125.00	0.00	0.00	-37.40	39472.00	4.69	0.00	5.07	2.49	5.10	9734.87	25014.06
0.388	1.00	5.30	23.40	-37.40	19506.00	2.73	0.00	2.86	0.94	2.90	7433.48	20079.54
0.388	1.00	5.30	23.40	-37.40	26735.00	3.28	0.00	3.49	1.52	3.77	8064.41	21674.67
0.388	1.00	5.30	23.40	-37.40	30735.00	3.71	0.00	3.97	1.78	4.15	8571.68	23014.94
0.388	1.00	5.30	23.40	-37.40	35078.00	4.21	0.00	4.50	2.02	4.51	9155.80	24652.21
0.388	1.00	5.30	23.40	-37.40	39472.00	4.76	0.00	5.09	2.21	4.81	9801.24	26570.48
0.388	1.00	5.30	23.40	-37.40	39472.00	4.76	0.00	5.09	2.21	4.81	9801.24	26570.48
0.395	41.00	5.30	23.40	-37.40	19506.00	2.73	0.00	2.86	0.94	2.89	7446.49	20111.88
0.395	41.00	5.30	23.40	-37.40	26735.00	3.29	0.00	3.50	1.52	3.76	8071.86	21693.79
0.395	41.00	5.30	23.40	-37.40	30735.00	3.72	0.00	3.97	1.78	4.15	8580.58	23039.15
0.395	41.00	5.30	23.40	-37.40	35078.00	4.22	0.00	4.51	2.02	4.51	9166.03	24681.74
0.395	41.00	5.30	23.40	-37.40	39472.00	4.77	0.00	5.10	2.20	4.80	9812.55	26605.05
0.395	41.00	5.30	23.40	-37.40	39472.00	4.77	0.00	5.10	2.20	4.80	9812.55	26605.05
0.396	1.00	0.00	0.00	-37.40	19506.00	2.73	0.00	2.86	0.94	2.89	7464.54	20117.63
0.396	1.00	0.00	0.00	-37.40	26735.00	3.29	0.00	3.50	1.52	3.76	8095.38	21702.01
0.396	1.00	0.00	0.00	-37.40	30735.00	3.72	0.00	3.97	1.78	4.15	8607.58	23049.50
0.396	1.00	0.00	0.00	-37.40	35078.00	4.22	0.00	4.51	2.02	4.50	9195.89	24693.85
0.396	1.00	0.00	0.00	-37.40	39472.00	4.77	0.00	5.10	2.20	4.80	9844.16	26617.88
0.396	1.00	0.00	0.00	-37.40	39472.00	4.77	0.00	5.10	2.20	4.80	9844.16	26617.88

0.428	174.00	0.00	0.00	-24.00	19506.00	2.72	0.00	2.91	1.15	3.55	5501.14	18208.03
0.428	174.00	0.00	0.00	-24.00	26735.00	3.25	0.00	3.60	1.95	4.72	5665.98	19126.44
0.428	174.00	0.00	0.00	-24.00	30735.00	3.66	0.00	4.10	2.40	5.30	5794.84	19856.91
0.428	174.00	0.00	0.00	-24.00	35078.00	4.14	0.00	4.68	2.87	5.90	5941.38	20700.84
0.428	174.00	0.00	0.00	-24.00	39472.00	4.66	0.00	5.30	3.33	6.47	6101.78	21640.70
0.428	174.00	0.00	0.00	-24.00	39472.00	4.66	0.00	5.30	3.33	6.47	6101.78	21640.70

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
0.461	174.00	0.00	0.00	-24.00	19506.00	2.74	0.00	2.93	1.14	3.54	5505.19	18230.40
0.461	174.00	0.00	0.00	-24.00	26735.00	3.26	0.00	3.63	1.94	4.71	5674.78	19175.95
0.461	174.00	0.00	0.00	-24.00	30735.00	3.71	0.00	4.14	2.38	5.29	5805.58	19918.31
0.461	174.00	0.00	0.00	-24.00	35078.00	4.19	0.00	4.73	2.84	5.89	5958.01	20797.50
0.461	174.00	0.00	0.00	-24.00	39472.00	4.72	0.00	5.36	3.29	6.45	6121.29	21756.16
0.461	174.00	0.00	0.00	-24.00	39472.00	4.72	0.00	5.36	3.29	6.45	6121.29	21756.16
0.464	16.00	5.30	24.00	-24.00	19236.00	2.81	0.00	3.00	1.10	3.48	5529.77	18366.24
0.464	16.00	5.30	24.00	-24.00	26382.00	3.42	0.00	3.75	1.84	4.61	5720.06	19431.68
0.464	16.00	5.30	24.00	-24.00	30332.00	3.89	0.00	4.31	2.24	5.17	5865.37	20261.37
0.464	16.00	5.30	24.00	-24.00	34619.00	4.43	0.00	4.94	2.66	5.74	6031.88	21229.08
0.464	16.00	5.30	24.00	-24.00	38967.00	6.12	0.00	6.31	1.23	4.13	23312.76	35108.69
0.464	16.00	5.30	24.00	-24.00	38967.00	6.12	0.00	6.31	1.23	4.13	23312.76	35108.69
0.512	256.00	0.00	0.00	-22.00	19110.00	2.98	0.00	3.06	0.98	2.24	8857.61	19349.16
0.512	256.00	0.00	0.00	-22.00	26215.00	3.73	0.00	3.86	1.42	2.84	9969.53	22032.53
0.512	256.00	0.00	0.00	-22.00	30142.00	4.29	0.00	4.44	1.55	3.07	10876.15	24186.00
0.512	256.00	0.00	0.00	-22.00	34403.00	4.94	0.00	5.10	1.64	3.28	11961.12	26831.43
0.512	256.00	0.00	0.00	-22.00	38730.00	6.21	0.00	6.35	1.32	3.14	17195.00	33769.17
0.512	256.00	0.00	0.00	-22.00	38730.00	6.21	0.00	6.35	1.32	3.14	17195.00	33769.17
0.802	1531.00	0.00	0.00	-20.60	18448.00	3.06	0.00	3.14	0.34	2.27	8118.12	31408.67
0.802	1531.00	0.00	0.00	-20.60	25346.00	3.85	0.00	3.99	0.57	2.98	8495.75	33700.61
0.802	1531.00	0.00	0.00	-20.60	29156.00	4.42	0.00	4.59	0.68	3.32	8769.91	35408.14
0.802	1531.00	0.00	0.00	-20.60	33277.00	5.08	0.00	5.28	0.79	3.66	9084.11	37398.62
0.802	1531.00	0.00	0.00	-20.60	37491.00	6.32	0.00	6.55	0.82	3.86	10474.46	41423.36
0.802	1531.00	0.00	0.00	-20.60	37491.00	6.32	0.00	6.55	0.82	3.86	10474.46	41423.36
1.262	2429.00	0.00	0.00	-11.40	17153.00	3.23	0.00	3.30	0.96	2.11	8138.16	17529.22
1.262	2429.00	0.00	0.00	-11.40	23644.00	4.13	0.00	4.23	1.32	2.56	9257.06	20563.27
1.262	2429.00	0.00	0.00	-11.40	27222.00	4.83	0.00	4.93	1.96	2.64	10625.72	19427.49
1.262	2429.00	0.00	0.00	-11.40	31068.00	5.51	0.00	5.62	1.74	2.68	12428.37	23585.39
1.262	2429.00	0.00	0.00	-11.40	35066.00	6.74	0.00	6.83	1.19	2.50	16025.00	32095.66
1.262	2429.00	0.00	0.00	-11.40	35066.00	6.74	0.00	6.83	1.19	2.50	16025.00	32095.66
1.398	713.00	0.00	0.00	-9.60	17153.00	3.32	0.00	3.33	0.09	0.66	26024.41	56747.18
1.398	713.00	0.00	0.00	-9.60	23644.00	4.26	0.00	4.27	0.11	0.80	29508.11	69933.36
1.398	713.00	0.00	0.00	-9.60	27222.00	4.97	0.00	4.98	0.11	0.85	32131.76	80568.40
1.398	713.00	0.00	0.00	-9.60	31068.00	5.65	0.00	5.66	0.12	0.90	34677.54	91446.51
1.398	713.00	0.00	0.00	-9.60	35066.00	6.86	0.00	6.87	0.10	0.90	39170.98	111943.80
1.398	713.00	0.00	0.00	-9.60	35066.00	6.86	0.00	6.87	0.10	0.90	39170.98	111943.80

1.668	1426.00	0.00	0.00	-9.60	17153.00	3.33	0.00	3.34	0.08	0.62	27903.21 61196.56
1.668	1426.00	0.00	0.00	-9.60	23644.00	4.28	0.00	4.29	0.10	0.75	31644.69 75337.28
1.668	1426.00	0.00	0.00	-9.60	27222.00	4.98	0.00	4.99	0.10	0.79	34461.77 86701.68
1.668	1426.00	0.00	0.00	-9.60	31068.00	5.67	0.00	5.68	0.10	0.84	37203.52 98328.85
1.668	1426.00	0.00	0.00	-9.60	35066.00	6.87	0.00	6.89	0.08	0.84	42781.48120308.65
1.668	1426.00	0.00	0.00	-9.60	35066.00	6.87	0.00	6.89	0.08	0.84	42781.48120308.65

SECND	YLCH	ELTKD	ELLC	ELMIN	U	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
1.878	1109.00	0.00	0.00	-9.60	15541.00	3.34	0.00	3.36	0.19	0.88	17724.78	36102.25
1.878	1109.00	0.00	0.00	-9.60	21525.00	4.29	0.00	4.31	0.22	1.06	20402.25	45468.32
1.878	1109.00	0.00	0.00	-9.60	24814.00	4.99	0.00	5.01	0.22	1.11	22439.40	53033.39
1.878	1109.00	0.00	0.00	-9.60	26320.00	5.68	0.00	5.70	0.22	1.17	24452.79	60820.02
1.878	1109.00	0.00	0.00	-9.60	32045.00	6.88	0.00	6.90	0.18	1.16	28136.51	75547.46
1.878	1109.00	0.00	0.00	-9.60	32045.00	6.88	0.00	6.90	0.18	1.16	28136.51	75547.46
2.278	2112.00	0.00	0.00	-9.60	14536.00	3.37	0.00	3.37	0.05	0.47	31285.20	64936.73
2.278	2112.00	0.00	0.00	-9.60	20205.00	4.32	0.00	4.33	0.06	0.57	35883.10	81400.00
2.278	2112.00	0.00	0.00	-9.60	23315.00	5.03	0.00	5.03	0.06	0.60	39309.74	94575.18
2.278	2112.00	0.00	0.00	-9.60	26608.00	5.72	0.00	5.72	0.06	0.63	42646.18	108112.32
2.278	2112.00	0.00	0.00	-9.60	30164.00	6.91	0.00	6.92	0.05	0.63	48533.39	133513.41
2.278	2112.00	0.00	0.00	-9.60	30164.00	6.91	0.00	6.92	0.05	0.63	48533.39	133513.41
2.588	1637.00	0.00	0.00	-9.60	13717.00	3.38	0.00	3.38	0.07	0.63	21807.86	50270.46
2.588	1637.00	0.00	0.00	-9.60	19127.00	4.33	0.00	4.34	0.10	0.78	24551.90	61128.76
2.588	1637.00	0.00	0.00	-9.60	22091.00	5.04	0.00	5.05	0.10	0.83	26590.92	69705.63
2.588	1637.00	0.00	0.00	-9.60	25211.00	5.72	0.00	5.74	0.10	0.88	28577.08	78460.05
2.588	1637.00	0.00	0.00	-9.60	28629.00	6.92	0.00	6.93	0.09	0.90	32057.34	94712.11
2.588	1637.00	0.00	0.00	-9.60	28629.00	6.92	0.00	6.93	0.09	0.90	32057.34	94712.11
2.878	1531.00	0.00	0.00	-9.60	12950.00	3.39	0.00	3.39	0.02	0.37	34755.74	84108.99
2.878	1531.00	0.00	0.00	-9.60	18119.00	4.35	0.00	4.35	0.03	0.47	38814.32	100977.66
2.878	1531.00	0.00	0.00	-9.60	20947.00	5.05	0.00	5.06	0.03	0.50	41822.04	114226.90
2.878	1531.00	0.00	0.00	-9.60	23903.00	5.74	0.00	5.74	0.04	0.54	44748.82	127706.67
2.878	1531.00	0.00	0.00	-9.60	27193.00	6.94	0.00	6.94	0.03	0.55	49901.53	152622.03
2.878	1531.00	0.00	0.00	-9.60	27193.00	6.94	0.00	6.94	0.03	0.55	49901.53	152622.03
3.368	2587.00	0.00	0.00	-9.60	10998.00	3.39	0.00	3.40	0.02	0.35	31873.58	72196.30
3.368	2587.00	0.00	0.00	-9.60	16268.00	4.35	0.00	4.36	0.03	0.45	35995.60	88403.88
3.368	2587.00	0.00	0.00	-9.60	18714.00	5.06	0.00	5.07	0.03	0.48	39038.23	101166.12
3.368	2587.00	0.00	0.00	-9.60	21528.00	5.75	0.00	5.75	0.04	0.51	42042.23	114212.72
3.368	2587.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.95	0.03	0.53	47410.54	138404.50
3.368	2587.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.95	0.03	0.53	47410.54	138404.50
3.798	2270.00	0.00	0.00	-9.60	10998.00	3.40	0.00	3.40	0.03	0.39	28067.29	62808.11
3.798	2270.00	0.00	0.00	-9.60	16268.00	4.36	0.00	4.37	0.04	0.51	31818.08	77167.08
3.798	2270.00	0.00	0.00	-9.60	18714.00	5.07	0.00	5.08	0.04	0.54	34602.66	88484.36
3.798	2270.00	0.00	0.00	-9.60	21528.00	5.76	0.00	5.76	0.05	0.58	37330.12	100066.75
3.798	2270.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.96	0.04	0.60	42118.55	121545.12
3.798	2270.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.96	0.04	0.60	42118.55	121545.12

3.988	1003.00	0.00	0.00	-9.60	10998.00	3.40	0.00	3.41	0.15	0.80	13802.16	28498.35
3.988	1003.00	0.00	0.00	-9.60	16268.00	4.36	0.00	4.38	0.21	1.03	15868.17	35903.19
3.988	1003.00	0.00	0.00	-9.60	18714.00	5.07	0.00	5.09	0.20	1.08	17390.74	41772.33
3.988	1003.00	0.00	0.00	-9.60	21528.00	5.76	0.00	5.78	0.20	1.14	18873.47	47809.63
3.988	1003.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.97	0.18	1.16	21457.21	59056.45
3.988	1003.00	0.00	0.00	-9.60	24814.00	6.95	0.00	6.97	0.18	1.16	21457.21	59056.45

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SECND	XLCH	FLTRD	ELLC	ELMIN	W	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
4.358	1954.00	0.00	0.00	-9.60	10998.00	3.44	0.00	3.45	0.26	0.94	11732.78	21546.34
4.358	1954.00	0.00	0.00	-9.60	16268.00	4.41	0.00	4.43	0.33	1.18	13861.68	28408.31
4.358	1954.00	0.00	0.00	-9.60	18714.00	5.12	0.00	5.14	0.31	1.22	15392.39	33787.27
4.358	1954.00	0.00	0.00	-9.60	21528.00	5.80	0.00	5.83	0.30	1.28	16885.61	39376.79
4.358	1954.00	0.00	0.00	-9.60	24814.00	6.99	0.00	7.01	0.25	1.28	19458.27	49753.79
4.358	1954.00	0.00	0.00	-9.60	24814.00	6.99	0.00	7.01	0.25	1.28	19458.27	49753.79
4.608	1320.00	0.00	0.00	-13.60	10998.00	3.48	0.00	3.57	1.48	2.45	4497.18	9032.20
4.608	1320.00	0.00	0.00	-13.60	16268.00	4.45	0.00	4.61	2.00	3.12	5215.19	11512.54
4.608	1320.00	0.00	0.00	-14.20	18714.00	5.17	0.00	5.20	0.27	1.23	14103.27	35766.27
4.608	1320.00	0.00	0.00	-14.20	21528.00	5.86	0.00	5.89	0.28	1.33	15663.12	40379.42
4.608	1320.00	0.00	0.00	-14.20	24814.00	7.04	0.00	7.06	0.25	1.37	18963.66	49181.93
4.608	1320.00	0.00	0.00	-14.20	24814.00	7.04	0.00	7.06	0.25	1.37	18963.66	49181.93
5.238	3326.00	0.00	0.00	-8.20	10998.00	3.68	0.00	3.70	0.17	1.06	10360.63	26473.85
5.238	3326.00	0.00	0.00	-14.20	16268.00	4.69	0.00	4.70	0.09	0.82	20493.83	54553.16
5.238	3326.00	0.00	0.00	-14.20	18714.00	5.23	0.00	5.24	0.10	0.89	21993.13	59746.08
5.238	3326.00	0.00	0.00	-14.20	21528.00	5.92	0.00	5.93	0.10	0.96	23912.53	66695.81
5.238	3326.00	0.00	0.00	-14.20	24814.00	7.09	0.00	7.10	0.10	0.99	27174.31	79264.89
5.238	3326.00	0.00	0.00	-14.20	24814.00	7.09	0.00	7.10	0.10	0.99	27174.31	79264.89
5.827	3115.00	0.00	0.00	-12.80	10998.00	3.75	0.00	4.04	2.51	4.35	3039.38	6944.87
5.827	3115.00	0.00	0.00	-12.80	16268.00	4.97	0.00	5.40	3.37	5.45	4939.87	8858.25
5.827	3115.00	0.00	0.00	-12.80	18714.00	5.51	0.00	5.99	3.58	5.79	5960.95	9896.28
5.827	3115.00	0.00	0.00	-12.80	21528.00	6.20	0.00	6.69	3.58	6.02	7402.87	11374.27
5.827	3115.00	0.00	0.00	-12.80	24814.00	7.32	0.00	7.75	3.02	5.85	10124.45	14287.88
5.827	3115.00	0.00	0.00	-12.80	24814.00	7.32	0.00	7.75	3.02	5.85	10124.45	14287.88
6.027	1056.00	0.00	0.00	-12.90	10998.00	4.11	0.00	4.29	1.69	3.38	3434.13	8467.53
6.027	1056.00	0.00	0.00	-12.90	16268.00	5.57	0.00	5.65	0.86	2.66	9850.45	17564.04
6.027	1056.00	0.00	0.00	-12.90	18714.00	6.17	0.00	6.25	0.82	2.70	11493.38	20635.82
6.027	1056.00	0.00	0.00	-12.90	21528.00	6.87	0.00	6.94	0.77	2.71	13455.11	24596.12
6.027	1056.00	0.00	0.00	-12.90	24814.00	7.90	0.00	7.96	0.64	2.61	16385.77	31092.68
6.027	1056.00	0.00	0.00	-12.90	24814.00	7.90	0.00	7.96	0.64	2.61	16385.77	31092.68
6.238	1109.00	0.00	0.00	-10.10	10998.00	4.37	0.00	4.51	2.47	3.38	4048.54	7003.31
6.238	1109.00	0.00	0.00	-10.10	16268.00	5.69	0.00	5.86	2.69	3.82	5486.31	9920.62
6.238	1109.00	0.00	0.00	-10.10	18714.00	6.28	0.00	6.46	2.67	3.94	6365.22	11457.64
6.238	1109.00	0.00	0.00	-10.10	21528.00	6.97	0.00	7.14	2.55	4.01	7664.09	13478.39
6.238	1109.00	0.00	0.00	-10.10	24814.00	7.98	0.00	8.13	2.18	3.90	9577.58	16815.09
6.238	1109.00	0.00	0.00	-10.10	24814.00	7.98	0.00	8.13	2.18	3.90	9577.58	16815.09

6.778	2857.00	0.00	0.00	-9.40	10998.00	4.95	0.00	5.10	2.10	3.17	4304.65	7581.31
6.778	2857.00	0.00	0.00	-9.40	16268.00	6.33	0.00	6.55	2.71	3.94	5599.27	9884.09
6.778	2857.00	0.00	0.00	-9.40	18714.00	6.91	0.00	7.17	2.91	4.23	6178.02	10972.76
6.778	2857.00	0.00	0.00	-9.40	21528.00	7.57	0.00	7.86	3.08	4.52	6853.87	12274.51
6.778	2857.00	0.00	0.00	-9.40	24814.00	8.49	0.00	8.80	3.05	4.73	7831.03	14217.94
6.778	2857.00	0.00	0.00	-9.40	24814.00	8.49	0.00	8.80	3.05	4.73	7831.03	14217.94

SECNO	XLOC	FLTKD	FLLC	ELMIN	U	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
6.788	50.00	15.00	20.00	-9.40	10998.00	4.96	0.00	5.11	2.10	3.17	4307.06	7585.39
6.788	50.00	15.00	20.00	-9.40	16268.00	6.33	0.00	6.56	2.70	3.94	5603.82	9892.53
6.788	50.00	15.00	20.00	-9.40	18714.00	6.92	0.00	7.17	2.90	4.23	6183.34	10982.89
6.788	50.00	15.00	20.00	-9.40	21528.00	7.58	0.00	7.87	3.07	4.52	6860.04	12286.44
6.788	50.00	15.00	20.00	-9.40	24814.00	8.50	0.00	8.81	3.04	4.73	7837.51	14231.32
6.788	50.00	15.00	20.00	-9.40	24814.00	8.50	0.00	8.81	3.04	4.73	7837.51	14231.32
6.985	1039.00	0.00	0.00	-9.40	10998.00	5.19	0.00	5.32	1.82	2.99	5535.32	8158.91
6.985	1039.00	0.00	0.00	-9.40	16268.00	6.65	0.00	6.82	2.06	3.51	8400.82	11338.35
6.985	1039.00	0.00	0.00	-9.40	18714.00	7.28	0.00	7.45	2.10	3.67	9686.04	12926.64
6.985	1039.00	0.00	0.00	-9.40	21528.00	7.98	0.00	8.16	2.10	3.82	11171.32	14861.93
6.985	1039.00	0.00	0.00	-9.40	24814.00	8.92	0.00	9.09	1.96	3.88	13290.52	17729.64
6.985	1039.00	0.00	0.00	-9.40	24814.00	8.92	0.00	9.09	1.96	3.88	13290.52	17729.64
7.098	596.00	0.00	0.00	-11.00	10998.00	5.33	0.00	5.35	0.22	1.12	10502.40	23524.02
7.098	596.00	0.00	0.00	-11.00	16268.00	6.83	0.00	6.86	0.30	1.44	12354.11	29530.88
7.098	596.00	0.00	0.00	-11.00	18714.00	7.46	0.00	7.50	0.34	1.57	13139.97	32237.16
7.098	596.00	0.00	0.00	-11.00	21528.00	8.17	0.00	8.21	0.37	1.71	14018.66	35368.23
7.098	596.00	0.00	0.00	-11.00	24814.00	9.10	0.00	9.15	0.39	1.83	15187.21	39697.71
7.098	596.00	0.00	0.00	-11.00	24814.00	9.10	0.00	9.15	0.39	1.83	15187.21	39697.71
7.408	1637.00	0.00	0.00	-6.90	10776.00	5.39	0.00	5.42	0.61	1.54	7252.53	13853.32
7.408	1637.00	0.00	0.00	-6.90	16337.00	6.90	0.00	6.96	0.75	1.93	9680.82	18915.46
7.408	1637.00	0.00	0.00	-6.90	18664.00	7.53	0.00	7.60	0.77	2.05	11197.41	21322.01
7.408	1637.00	0.00	0.00	-6.90	21429.00	8.24	0.00	8.31	0.78	2.17	12985.59	24193.41
7.408	1637.00	0.00	0.00	-6.90	24558.00	9.17	0.00	9.25	0.75	2.26	15465.08	28276.01
7.408	1637.00	0.00	0.00	-6.90	24558.00	9.17	0.00	9.25	0.75	2.26	15465.08	28276.01
7.688	1478.00	0.00	0.00	-8.90	10776.00	5.52	0.00	5.56	1.33	1.69	7829.23	9328.77
7.688	1478.00	0.00	0.00	-8.90	16337.00	7.07	0.00	7.12	1.55	1.86	10759.25	13107.08
7.688	1478.00	0.00	0.00	-8.90	18664.00	7.71	0.00	7.76	1.57	1.90	12013.27	14887.90
7.688	1478.00	0.00	0.00	-8.90	21429.00	8.43	0.00	8.48	1.59	1.95	13434.04	17010.20
7.688	1478.00	0.00	0.00	-8.90	24558.00	9.36	0.00	9.41	1.51	1.96	15330.16	19987.98
7.688	1478.00	0.00	0.00	-8.90	24558.00	9.36	0.00	9.41	1.51	1.96	15330.16	19987.98
7.858	898.00	0.00	0.00	-6.70	10776.00	5.59	0.00	5.62	0.39	1.22	9154.50	17159.58
7.858	898.00	0.00	0.00	-6.70	16337.00	7.15	0.00	7.19	0.48	1.53	11566.91	23473.04
7.858	898.00	0.00	0.00	-6.70	18664.00	7.79	0.00	7.83	0.50	1.63	12604.95	26341.29
7.858	898.00	0.00	0.00	-6.70	21429.00	8.51	0.00	8.55	0.52	1.74	13786.07	29702.69
7.858	898.00	0.00	0.00	-6.70	24558.00	9.43	0.00	9.48	0.51	1.82	15362.37	34309.93
7.858	898.00	0.00	0.00	-6.70	24558.00	9.43	0.00	9.48	0.51	1.82	15362.37	34309.93

8.338	2534.00	0.00	0.00	-11.50	10776.00	5.73	0.00	5.94	2.07	3.71	2906.58	7497.04
8.338	2534.00	0.00	0.00	-11.50	16337.00	7.29	0.00	7.67	3.16	4.97	3284.41	9190.74
8.338	2534.00	0.00	0.00	-11.50	18664.00	7.92	0.00	8.38	3.53	5.43	3439.86	9927.10
8.338	2534.00	0.00	0.00	-11.50	21429.00	8.62	0.00	9.17	3.98	5.94	3605.70	10737.53
8.338	2534.00	0.00	0.00	-11.50	24558.00	9.51	0.00	10.15	4.32	6.43	3819.64	11820.25
8.338	2534.00	0.00	0.00	-11.50	24558.00	9.51	0.00	10.15	4.32	6.43	3819.64	11820.25

SECNO	XLOB	FLTRO	FLLC	FLMIN	Q	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
8.339	2.00	12.10	17.50	-11.50	10776.00	5.82	0.00	5.96	3.69	3.18	3542.69	5608.99
8.339	2.00	12.10	17.50	-11.50	16337.00	7.47	0.00	7.71	5.91	4.15	4100.52	6720.14
8.339	2.00	12.10	17.50	-11.50	18664.00	8.14	0.00	8.43	6.74	4.48	4330.88	7189.14
8.339	2.00	12.10	17.50	-11.50	21429.00	8.89	0.00	9.23	7.70	4.85	4589.69	7722.81
8.339	2.00	12.10	17.50	-11.50	24558.00	9.81	0.00	10.22	12.49	5.39	4862.26	6948.45
8.339	2.00	12.10	17.50	-11.50	24558.00	9.81	0.00	10.22	12.49	5.39	4862.26	6948.45
8.340	12.00	12.10	17.50	-11.50	10776.00	5.82	0.00	5.97	3.69	3.18	3543.84	5611.24
8.340	12.00	12.10	17.50	-11.50	16337.00	7.47	0.00	7.72	5.90	4.15	4102.35	6723.83
8.340	12.00	12.10	17.50	-11.50	18664.00	8.15	0.00	8.44	6.73	4.48	4332.93	7193.36
8.340	12.00	12.10	17.50	-11.50	21429.00	8.90	0.00	9.24	7.69	4.85	4592.00	7727.62
8.340	12.00	12.10	17.50	-11.50	24558.00	9.83	0.00	10.23	12.57	5.38	4863.89	6927.61
8.340	12.00	12.10	17.50	-11.50	24558.00	9.83	0.00	10.23	12.57	5.38	4863.89	6927.61
8.341	2.00	0.00	0.00	-11.50	10776.00	5.79	0.00	6.00	2.03	3.69	2923.61	7570.38
8.341	2.00	0.00	0.00	-11.50	16337.00	7.41	0.00	7.79	3.07	4.93	3314.36	9330.82
8.341	2.00	0.00	0.00	-11.50	18664.00	8.07	0.00	8.52	3.42	5.37	3473.11	10087.57
8.341	2.00	0.00	0.00	-11.50	21429.00	8.80	0.00	9.34	3.82	5.87	3649.89	10957.78
8.341	2.00	0.00	0.00	-11.50	24558.00	9.72	0.00	10.34	4.13	6.34	3871.04	12086.56
8.341	2.00	0.00	0.00	-11.50	24558.00	9.72	0.00	10.34	4.13	6.34	3871.04	12086.56
8.388	250.00	0.00	0.00	-12.70	10776.00	5.83	0.00	6.06	2.27	3.87	2784.54	7157.59
8.388	250.00	0.00	0.00	-12.70	16337.00	7.47	0.00	7.89	3.40	5.16	3165.27	8862.01
8.388	250.00	0.00	0.00	-12.70	18664.00	8.14	0.00	8.63	3.78	5.62	3319.55	9593.56
8.388	250.00	0.00	0.00	-12.70	21429.00	8.88	0.00	9.46	4.22	6.14	3491.30	10435.03
8.388	250.00	0.00	0.00	-12.70	24558.00	9.80	0.00	10.48	4.54	6.63	3705.16	11521.98
8.388	250.00	0.00	0.00	-12.70	24558.00	9.80	0.00	10.48	4.54	6.63	3705.16	11521.98
8.389	5.00	11.90	17.20	-12.70	10776.00	5.92	0.00	6.09	3.22	3.38	3353.07	6005.23
8.389	5.00	11.90	17.20	-12.70	16337.00	7.67	0.00	7.93	4.69	4.26	4021.40	7540.95
8.389	5.00	11.90	17.20	-12.70	18664.00	8.39	0.00	8.69	5.17	4.54	4307.67	8211.18
8.389	5.00	11.90	17.20	-12.70	21429.00	9.20	0.00	9.54	5.68	4.83	4632.24	8990.59
* 8.389	5.00	11.90	17.20	-12.70	24558.00	10.16	0.00	10.57	9.71	5.42	4947.90	7879.02
* 8.389	5.00	11.90	17.20	-12.70	24558.00	10.16	0.00	10.57	9.71	5.42	4947.90	7879.02
8.391	12.00	11.90	17.20	-12.70	10776.00	5.92	0.00	6.09	3.22	3.38	3354.27	6007.97
8.391	12.00	11.90	17.20	-12.70	16337.00	7.68	0.00	7.94	4.69	4.26	4023.24	7545.22
8.391	12.00	11.90	17.20	-12.70	18664.00	8.40	0.00	8.69	5.16	4.54	4309.67	8215.93
8.391	12.00	11.90	17.20	-12.70	21429.00	9.21	0.00	9.55	5.67	4.83	4634.39	8995.82
* 8.391	12.00	11.90	17.20	-12.70	24558.00	10.17	0.00	10.58	9.71	5.42	4947.80	7880.58
* 8.391	12.00	11.90	17.20	-12.70	24558.00	10.17	0.00	10.58	9.71	5.42	4947.80	7880.58

8.392	5.00	0.00	0.00	-12.70	10776.00	5.90	0.00	6.12	2.22	3.80	2833.53	7231.57
8.392	5.00	0.00	0.00	-12.70	16337.00	7.62	0.00	8.00	3.26	4.98	3278.12	9048.85
8.392	5.00	0.00	0.00	-12.70	18664.00	8.32	0.00	8.77	3.59	5.38	3466.31	9844.71
8.392	5.00	0.00	0.00	-12.70	21429.00	9.12	0.00	9.64	3.96	5.82	3679.70	10774.30
8.392	5.00	0.00	0.00	-12.70	24558.00	10.07	0.00	10.68	4.23	6.23	3939.46	11944.52
8.392	5.00	0.00	0.00	-12.70	24558.00	10.07	0.00	10.68	4.23	6.23	3939.46	11944.52

	SECNO	YLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	8.396	30.00	0.00	0.00	-12.70	10776.00	5.90	0.00	6.13	2.22	3.80	2835.58	7239.77
	8.398	30.00	0.00	0.00	-12.70	16337.00	7.63	0.00	8.01	3.25	4.98	3281.27	9062.04
	8.398	30.00	0.00	0.00	-12.70	18664.00	8.33	0.00	8.78	3.58	5.38	3469.83	9859.79
	8.398	30.00	0.00	0.00	-12.70	21429.00	9.13	0.00	9.65	3.94	5.82	3683.59	10791.54
	8.398	30.00	0.00	0.00	-12.70	24558.00	10.09	0.00	10.69	4.21	6.22	3945.14	11970.58
	8.398	30.00	0.00	0.00	-12.70	24558.00	10.09	0.00	10.69	4.21	6.22	3945.14	11970.58
	8.401	15.00	10.50	16.10	-13.30	10776.00	6.00	0.00	6.15	2.99	3.28	3479.99	6231.79
	8.401	15.00	10.50	16.10	-13.30	16337.00	7.82	0.00	8.06	3.94	4.07	4211.26	8231.30
*	8.401	15.00	10.50	16.10	-13.30	18664.00	8.53	0.00	8.83	5.05	4.73	4456.60	8307.44
*	8.401	15.00	10.50	16.10	-13.30	21429.00	9.34	0.00	9.71	5.71	5.17	4672.26	8967.59
*	8.401	15.00	10.50	16.10	-13.30	24558.00	10.31	0.00	10.75	6.30	5.60	4933.86	9785.17
*	8.401	15.00	10.50	16.10	-13.30	24558.00	10.31	0.00	10.75	6.30	5.60	4933.86	9785.17
	8.403	12.00	10.50	16.10	-13.30	10776.00	6.00	0.00	6.16	2.99	3.28	3481.20	6234.90
	8.403	12.00	10.50	16.10	-13.30	16337.00	7.83	0.00	8.07	3.94	4.07	4212.74	8235.51
*	8.403	12.00	10.50	16.10	-13.30	18664.00	8.53	0.00	8.84	5.04	4.73	4459.01	8314.74
*	8.403	12.00	10.50	16.10	-13.30	21429.00	9.34	0.00	9.72	5.70	5.17	4673.78	8972.28
*	8.403	12.00	10.50	16.10	-13.30	24558.00	10.32	0.00	10.76	6.29	5.60	4935.55	9790.52
*	8.403	12.00	10.50	16.10	-13.30	24558.00	10.32	0.00	10.76	6.29	5.60	4935.55	9790.52
	8.405	11.00	0.00	0.00	-13.30	10776.00	5.96	0.00	6.20	2.50	3.92	2746.92	6811.78
	8.405	11.00	0.00	0.00	-13.30	16337.00	7.75	0.00	8.16	3.54	5.14	3178.76	8688.56
	8.405	11.00	0.00	0.00	-13.30	18664.00	8.45	0.00	8.93	3.88	5.57	3348.74	9476.64
	8.405	11.00	0.00	0.00	-13.30	21429.00	9.25	0.00	9.82	4.24	6.05	3542.94	10410.19
	8.405	11.00	0.00	0.00	-13.30	24558.00	10.21	0.00	10.87	4.50	6.50	3775.91	11575.97
	8.405	11.00	0.00	0.00	-13.30	24558.00	10.21	0.00	10.87	4.50	6.50	3775.91	11575.97
	8.408	15.00	0.00	0.00	-13.30	10776.00	6.20	0.00	6.22	0.37	1.52	10223.00	17774.97
	8.408	15.00	0.00	0.00	-13.30	16337.00	8.17	0.00	8.20	0.34	1.62	14410.61	28119.40
	8.408	15.00	0.00	0.00	-13.30	18664.00	8.95	0.00	8.98	0.32	1.64	16234.18	33039.32
	8.408	15.00	0.00	0.00	-13.30	21429.00	9.85	0.00	9.87	0.29	1.64	18427.65	39468.89
	8.408	15.00	0.00	0.00	-13.30	24558.00	10.91	0.00	10.93	0.26	1.62	21164.48	47909.44
	8.408	15.00	0.00	0.00	-13.30	24558.00	10.91	0.00	10.93	0.26	1.62	21164.48	47909.44
	8.652	1290.00	0.00	0.00	-11.70	10776.00	6.23	0.00	6.31	1.16	2.71	7859.90	10021.17
	8.652	1290.00	0.00	0.00	-11.70	16337.00	8.20	0.00	8.28	1.22	3.08	11172.08	14780.36
	8.652	1290.00	0.00	0.00	-11.70	18664.00	8.97	0.00	9.06	1.21	3.17	12659.01	16975.41
	8.652	1290.00	0.00	0.00	-11.70	21429.00	9.87	0.00	9.96	1.18	3.26	14506.17	19718.88
	8.652	1290.00	0.00	0.00	-11.70	24558.00	10.92	0.00	11.01	1.11	3.30	16924.85	23334.31
	8.652	1290.00	0.00	0.00	-11.70	24558.00	10.92	0.00	11.01	1.11	3.30	16924.85	23334.31

8.772	634.00	0.00	0.00	-9.80	10776.00	6.35	0.00	6.39	1.14	1.59	6894.96	10077.58
8.772	634.00	0.00	0.00	-9.80	16337.00	8.31	0.00	8.37	1.26	1.88	9075.49	14545.82
8.772	634.00	0.00	0.00	-9.80	18664.00	9.09	0.00	9.15	1.28	1.98	10019.72	16526.97
8.772	634.00	0.00	0.00	-9.80	21029.00	9.97	0.00	10.04	1.28	2.07	11174.96	18952.85
8.772	634.00	0.00	0.00	-9.80	24558.00	11.02	0.00	11.09	1.24	2.15	12651.33	22048.40
8.772	634.00	0.00	0.00	-9.80	24558.00	11.02	0.00	11.09	1.24	2.15	12651.33	22048.40

SECNO	XLOH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
8.972	1056.00	0.00	0.00	-11.30	10776.00	6.49	0.00	6.52	1.32	1.37	8177.73	9390.33
8.972	1056.00	0.00	0.00	-11.30	16337.00	8.46	0.00	8.50	1.17	1.55	11229.02	15114.04
8.972	1056.00	0.00	0.00	-11.30	18664.00	9.23	0.00	9.27	1.11	1.61	12495.42	17690.68
8.972	1056.00	0.00	0.00	-11.30	21429.00	10.12	0.00	10.16	1.05	1.67	13997.80	20864.53
8.972	1056.00	0.00	0.00	-11.30	24558.00	11.16	0.00	11.20	0.97	1.72	15853.00	24912.12
8.972	1056.00	0.00	0.00	-11.30	24558.00	11.16	0.00	11.20	0.97	1.72	15853.00	24912.12
9.382	2165.00	0.00	0.00	-10.30	10665.00	6.80	0.00	6.90	2.06	2.59	5251.88	7432.21
9.382	2165.00	0.00	0.00	-10.30	15957.00	8.72	0.00	8.83	1.80	2.84	8581.87	11896.13
9.382	2165.00	0.00	0.00	-10.30	18233.00	9.48	0.00	9.59	1.70	2.92	9999.74	13972.92
9.382	2165.00	0.00	0.00	-10.30	20968.00	10.34	0.00	10.46	1.60	3.00	11761.50	16564.14
9.382	2165.00	0.00	0.00	-10.30	24072.00	11.36	0.00	11.48	1.45	3.04	14138.31	19990.41
9.382	2165.00	0.00	0.00	-10.30	24072.00	11.36	0.00	11.48	1.45	3.04	14138.31	19990.41
9.592	1109.00	0.00	0.00	-10.90	10665.00	7.01	0.00	7.06	1.01	1.76	6387.64	10630.49
9.592	1109.00	0.00	0.00	-10.90	15957.00	8.91	0.00	8.98	0.96	2.02	8589.08	16317.41
9.592	1109.00	0.00	0.00	-10.90	18233.00	9.66	0.00	9.73	0.94	2.12	9522.47	18840.27
9.592	1109.00	0.00	0.00	-10.90	20968.00	10.52	0.00	10.60	0.91	2.22	10646.63	21934.51
9.592	1109.00	0.00	0.00	-10.90	24072.00	11.52	0.00	11.60	0.87	2.30	12037.63	25810.86
9.592	1109.00	0.00	0.00	-10.90	24072.00	11.52	0.00	11.60	0.87	2.30	12037.63	25810.86
9.902	1637.00	0.00	0.00	-12.50	10665.00	7.15	0.00	7.18	0.57	1.27	8662.18	14172.57
9.902	1637.00	0.00	0.00	-12.50	15957.00	9.06	0.00	9.09	0.52	1.45	11710.75	22159.03
9.902	1637.00	0.00	0.00	-12.50	18233.00	9.81	0.00	9.84	0.50	1.52	12968.05	25718.19
9.902	1637.00	0.00	0.00	-12.50	20968.00	10.66	0.00	10.70	0.49	1.58	14485.88	30088.20
9.902	1637.00	0.00	0.00	-12.50	24072.00	11.66	0.00	11.70	0.46	1.64	16455.07	35568.40
9.902	1637.00	0.00	0.00	-12.50	24072.00	11.66	0.00	11.70	0.46	1.64	16455.07	35568.40
10.122	1162.00	0.00	0.00	-17.00	10621.00	7.25	0.00	7.29	1.50	1.68	7061.46	8681.04
10.122	1162.00	0.00	0.00	-17.00	15086.00	9.14	0.00	9.19	1.29	1.82	9937.78	13291.28
10.122	1162.00	0.00	0.00	-17.00	18061.00	9.89	0.00	9.95	1.38	1.98	11173.43	15383.19
10.122	1162.00	0.00	0.00	-17.00	20784.00	10.75	0.00	10.81	1.34	2.06	12675.17	17980.12
10.122	1162.00	0.00	0.00	-17.00	23878.00	11.74	0.00	11.80	1.26	2.13	14522.88	21257.74
10.122	1162.00	0.00	0.00	-17.00	23878.00	11.74	0.00	11.80	1.26	2.13	14522.88	21257.74
10.209	460.00	0.00	0.00	-13.40	10621.00	7.32	0.00	7.47	3.98	3.09	3441.09	5324.87
10.209	460.00	0.00	0.00	-13.40	15086.00	9.20	0.00	9.40	4.32	3.59	4201.57	7259.09
10.209	460.00	0.00	0.00	-13.40	18061.00	9.94	0.00	10.19	4.97	4.00	4511.69	8101.30
10.209	460.00	0.00	0.00	-13.40	20784.00	10.79	0.00	11.07	5.19	4.26	4873.20	9119.25
10.209	460.00	0.00	0.00	-13.40	23878.00	11.76	0.00	12.08	5.31	4.51	5296.31	10357.36
10.209	460.00	0.00	0.00	-13.40	23878.00	11.76	0.00	12.08	5.31	4.51	5296.31	10357.36

10.212	16.00	14.20	13.50	-13.40	10621.00	7.33	0.00	7.46	3.97	3.08	3443.71	5331.17
10.212	16.00	14.20	13.50	-13.40	15086.00	9.20	0.00	9.40	4.30	3.59	4207.86	7275.85
10.212	16.00	14.20	13.50	-13.40	18061.00	9.95	0.00	10.20	4.94	4.00	4519.75	8123.60
10.212	16.00	14.20	13.50	-13.40	20784.00	10.80	0.00	11.08	5.18	4.26	4878.05	9133.14
10.212	16.00	14.20	13.50	-13.40	23878.00	11.78	0.00	12.09	5.30	4.51	5299.65	10367.31
10.212	16.00	14.20	13.50	-13.40	23878.00	11.78	0.00	12.09	5.30	4.51	5299.65	10367.31

SECNO	XLCH	FLTND	ELLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
10.221	47.00	0.00	0.00	-16.40	10621.00	7.40	0.00	7.51	2.89	2.66	4000.12	6251.14
10.221	47.00	0.00	0.00	-16.40	15086.00	9.29	0.00	9.44	3.10	3.10	4871.48	8562.32
10.221	47.00	0.00	0.00	-16.40	18061.00	10.05	0.00	10.24	3.55	3.45	5228.94	9581.76
10.221	47.00	0.00	0.00	-16.40	20784.00	10.91	0.00	11.12	3.78	3.69	5635.46	10694.95
10.221	47.00	0.00	0.00	-16.40	23878.00	11.90	0.00	12.14	3.87	3.91	6113.79	12139.17
10.221	47.00	0.00	0.00	-16.40	23878.00	11.90	0.00	12.14	3.87	3.91	6113.79	12139.17
10.241	102.00	14.60	11.60	-16.40	10621.00	7.40	0.00	7.51	2.88	2.65	4002.08	6256.05
10.241	102.00	14.60	11.60	-16.40	15086.00	9.29	0.00	9.44	3.10	3.10	4874.23	8570.00
10.241	102.00	14.60	11.60	-16.40	18061.00	10.06	0.00	10.25	3.55	3.45	5232.48	9592.09
10.241	102.00	14.60	11.60	-16.40	20784.00	10.92	0.00	11.13	3.77	3.69	5639.63	10707.21
10.241	102.00	14.60	11.60	-16.40	23878.00	12.05	0.00	12.29	3.73	3.86	6188.24	12369.89
10.241	102.00	14.60	11.60	-16.40	23878.00	12.05	0.00	12.29	3.73	3.86	6188.24	12369.89
10.248	39.00	0.00	0.00	-13.40	10621.00	7.40	0.00	7.54	3.87	3.06	3473.00	5402.05
10.248	39.00	0.00	0.00	-13.40	15086.00	9.28	0.00	9.48	4.20	3.56	4240.67	7363.65
10.248	39.00	0.00	0.00	-13.40	18061.00	10.05	0.00	10.29	4.81	3.96	4559.92	8234.91
10.248	39.00	0.00	0.00	-13.40	20784.00	10.90	0.00	11.18	5.04	4.22	4923.02	9262.45
10.248	39.00	0.00	0.00	-13.40	23878.00	12.04	0.00	12.34	4.98	4.41	5411.46	10702.65
10.248	39.00	0.00	0.00	-13.40	23878.00	12.04	0.00	12.34	4.98	4.41	5411.46	10702.65
10.254	32.00	14.20	13.50	-13.40	10621.00	7.40	0.00	7.55	3.87	3.06	3472.31	5400.38
10.254	32.00	14.20	13.50	-13.40	15086.00	9.29	0.00	9.49	4.19	3.55	4244.25	7373.24
10.254	32.00	14.20	13.50	-13.40	18061.00	10.06	0.00	10.30	4.80	3.96	4564.54	8247.76
10.254	32.00	14.20	13.50	-13.40	20784.00	10.92	0.00	11.19	5.02	4.22	4928.38	9277.89
10.254	32.00	14.20	13.50	-13.40	23878.00	12.05	0.00	12.35	4.96	4.41	5417.35	10720.41
10.254	32.00	14.20	13.50	-13.40	23878.00	12.05	0.00	12.35	4.96	4.41	5417.35	10720.41
10.257	14.00	0.00	0.00	-13.40	10621.00	7.40	0.00	7.56	3.53	3.17	3559.97	5655.25
10.257	14.00	0.00	0.00	-13.40	15086.00	9.29	0.00	9.50	3.86	3.73	4424.65	7681.54
10.257	14.00	0.00	0.00	-13.40	18061.00	10.05	0.00	10.32	4.43	4.17	4792.88	8583.53
10.257	14.00	0.00	0.00	-13.40	20784.00	10.91	0.00	11.21	4.64	4.46	5256.12	9650.53
10.257	14.00	0.00	0.00	-13.40	23878.00	12.05	0.00	12.37	4.56	4.67	6041.96	11186.56
10.257	14.00	0.00	0.00	-13.40	23878.00	12.05	0.00	12.37	4.56	4.67	6041.96	11186.56
10.607	1848.00	0.00	0.00	-12.70	10621.00	8.07	0.00	8.20	3.05	3.56	7122.35	6079.91
10.607	1848.00	0.00	0.00	-12.70	15086.00	10.04	0.00	10.19	3.12	3.93	9877.99	8546.39
10.607	1848.00	0.00	0.00	-12.70	18061.00	10.92	0.00	11.09	3.36	4.24	11258.14	9846.42
10.607	1848.00	0.00	0.00	-12.70	20784.00	11.83	0.00	12.00	3.36	4.39	12824.58	11338.81
10.607	1848.00	0.00	0.00	-12.70	23878.00	12.97	0.00	13.13	3.14	4.42	15679.63	13483.19
10.607	1848.00	0.00	0.00	-12.70	23878.00	12.97	0.00	13.13	3.14	4.42	15679.63	13483.19

10.987	2006.00	0.00	0.00	-11.30	10621.00	8.57	0.00	8.62	1.68	2.02	8295.24	8188.89
10.987	2006.00	0.00	0.00	-11.30	15086.00	10.54	0.00	10.60	1.63	2.17	11657.28	11807.30
10.987	2006.00	0.00	0.00	-11.30	18061.00	11.46	0.00	11.51	1.72	2.31	13359.94	13769.08
10.987	2006.00	0.00	0.00	-11.30	20784.00	12.36	0.00	12.42	1.71	2.38	15188.57	15905.47
10.987	2006.00	0.00	0.00	-11.30	23878.00	13.46	0.00	13.52	1.61	2.41	17750.58	18833.36
10.987	2006.00	0.00	0.00	-11.30	23878.00	13.46	0.00	13.52	1.61	2.41	17750.58	18833.36

SECNO	XLCH	FLTRD	FLLC	FLMIN	W	CWSEL	CKTWS	EG	10K*S	VCH	AREA	.01K
11.387	2112.00	0.00	0.00	-14.40	10621.00	8.78	0.00	8.83	0.81	1.99	9028.32	11778.57
11.387	2112.00	0.00	0.00	-14.40	15086.00	10.77	0.00	10.84	0.97	2.31	11882.85	15333.87
11.387	2112.00	0.00	0.00	-14.40	18061.00	11.70	0.00	11.78	1.09	2.52	13458.01	17285.84
11.387	2112.00	0.00	0.00	-14.40	20784.00	12.61	0.00	12.69	1.15	2.65	15149.61	19405.53
11.387	2112.00	0.00	0.00	-14.40	23878.00	13.70	0.00	13.78	1.15	2.73	17342.49	22238.00
11.387	2112.00	0.00	0.00	-14.40	23878.00	13.70	0.00	13.78	1.15	2.73	17342.49	22238.00
11.677	1531.00	0.00	0.00	-12.00	10621.00	8.95	0.00	9.04	1.74	2.82	7173.70	8042.69
11.677	1531.00	0.00	0.00	-12.00	15086.00	10.96	0.00	11.07	1.92	3.23	9712.40	10899.60
11.677	1531.00	0.00	0.00	-12.00	18061.00	11.91	0.00	12.04	2.09	3.51	11141.83	12483.23
11.677	1531.00	0.00	0.00	-12.00	20784.00	12.82	0.00	12.96	2.14	3.68	12655.67	14192.01
11.677	1531.00	0.00	0.00	-12.00	23878.00	13.91	0.00	14.05	2.10	3.79	14627.17	16459.36
11.677	1531.00	0.00	0.00	-12.00	23878.00	13.91	0.00	14.05	2.10	3.79	14627.17	16459.36
11.907	1214.00	0.00	0.00	-17.60	10621.00	9.13	0.00	9.24	1.56	3.01	6790.29	8511.68
11.907	1214.00	0.00	0.00	-17.60	15086.00	11.16	0.00	11.28	1.64	3.33	10324.66	11776.58
11.907	1214.00	0.00	0.00	-17.60	18061.00	12.13	0.00	12.26	1.72	3.52	12239.92	13776.09
11.907	1214.00	0.00	0.00	-17.60	20784.00	13.06	0.00	13.18	1.70	3.61	14362.18	15947.53
11.907	1214.00	0.00	0.00	-17.60	23878.00	14.15	0.00	14.26	1.59	3.61	17296.49	18929.65
11.907	1214.00	0.00	0.00	-17.60	23878.00	14.15	0.00	14.26	1.59	3.61	17296.49	18929.65
12.257	1848.00	0.00	0.00	-8.90	10621.00	9.41	0.00	9.47	1.03	2.11	7718.71	10465.28
12.257	1848.00	0.00	0.00	-8.90	15086.00	11.45	0.00	11.52	1.13	2.43	10447.98	14197.48
12.257	1848.00	0.00	0.00	-8.90	18061.00	12.43	0.00	12.52	1.24	2.65	11926.31	16249.78
12.257	1848.00	0.00	0.00	-8.90	20784.00	13.35	0.00	13.45	1.28	2.80	13402.75	18350.30
12.257	1848.00	0.00	0.00	-8.90	23878.00	14.42	0.00	14.52	1.29	2.93	15214.43	20987.27
12.257	1848.00	0.00	0.00	-8.90	23878.00	14.42	0.00	14.52	1.29	2.93	15214.43	20987.27
12.517	1373.00	0.00	0.00	-14.70	10621.00	9.56	0.00	9.67	1.68	2.92	6808.58	8182.15
12.517	1373.00	0.00	0.00	-14.70	15086.00	11.61	0.00	11.73	1.76	3.25	9381.26	11361.51
12.517	1373.00	0.00	0.00	-14.70	18061.00	12.61	0.00	12.74	1.88	3.48	10718.97	13179.25
12.517	1373.00	0.00	0.00	-14.70	20784.00	13.54	0.00	13.67	1.92	3.63	11999.86	15005.77
12.517	1373.00	0.00	0.00	-14.70	23878.00	14.60	0.00	14.74	1.91	3.75	13534.33	17292.71
12.517	1373.00	0.00	0.00	-14.70	23878.00	14.60	0.00	14.74	1.91	3.75	13534.33	17292.71
12.917	2112.00	0.00	0.00	-13.40	10621.00	9.86	0.00	9.95	1.24	2.73	8390.89	9526.34
12.917	2112.00	0.00	0.00	-13.40	15086.00	11.92	0.00	12.02	1.38	3.09	11152.18	12835.72
12.917	2112.00	0.00	0.00	-13.40	18061.00	12.94	0.00	13.05	1.51	3.34	12706.53	14704.39
12.917	2112.00	0.00	0.00	-13.40	20784.00	13.87	0.00	13.99	1.57	3.51	14395.99	16586.49
12.917	2112.00	0.00	0.00	-13.40	23878.00	14.93	0.00	15.05	1.58	3.64	16522.25	18989.24
12.917	2112.00	0.00	0.00	-13.40	23878.00	14.93	0.00	15.05	1.58	3.64	16522.25	18989.24

13.427	2693.00	0.00	0.00	-16.90	10621.00	10.23	0.00	10.38	2.18	3.62	6336.16	7196.20
13.427	2693.00	0.00	0.00	-16.90	15086.00	12.32	0.00	12.50	2.42	4.10	8503.42	9690.01
13.427	2693.00	0.00	0.00	-16.90	18061.00	13.37	0.00	13.56	2.63	4.42	9666.62	11127.49
13.427	2693.00	0.00	0.00	-16.90	20784.00	14.31	0.00	14.52	2.75	4.65	10747.42	12527.13
13.427	2693.00	0.00	0.00	-16.90	23878.00	15.38	0.00	15.59	2.82	4.85	12004.36	14221.81
13.427	2693.00	0.00	0.00	-16.90	23878.00	15.38	0.00	15.59	2.82	4.85	12004.36	14221.81

SECNO	XLCH	ELTRD	ELLC	ELMIN	U	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
13.977	2904.00	0.00	0.00	-13.00	9556.00	10.83	0.00	11.01	2.16	3.61	4640.86	6505.79
13.977	2904.00	0.00	0.00	-13.00	15029.00	13.02	0.00	13.28	2.94	4.56	7010.11	8766.08
13.977	2904.00	0.00	0.00	-13.00	17778.00	14.12	0.00	14.39	3.06	4.82	8408.29	10156.12
13.977	2904.00	0.00	0.00	-13.00	20556.00	15.09	0.00	15.37	3.16	5.04	9746.60	11558.95
13.977	2904.00	0.00	0.00	-13.00	23643.00	16.16	0.00	16.45	3.17	5.21	11309.03	13283.85
13.977	2904.00	0.00	0.00	-13.00	23643.00	16.16	0.00	16.45	3.17	5.21	11309.03	13283.85
14.447	2482.00	0.00	0.00	-13.80	9556.00	11.36	0.00	11.48	1.85	3.13	5110.05	7032.90
14.447	2482.00	0.00	0.00	-13.80	15029.00	13.71	0.00	13.90	2.46	3.96	7273.34	9588.55
14.447	2482.00	0.00	0.00	-13.80	17778.00	14.82	0.00	15.03	2.60	4.24	8531.37	11026.56
14.447	2482.00	0.00	0.00	-13.80	20556.00	15.80	0.00	16.03	2.73	4.49	9831.41	12442.42
14.447	2482.00	0.00	0.00	-13.80	23643.00	16.87	0.00	17.11	2.79	4.70	11409.33	14153.35
14.447	2482.00	0.00	0.00	-13.80	23643.00	16.87	0.00	17.11	2.79	4.70	11409.33	14153.35
14.957	2693.00	0.00	0.00	-16.90	9556.00	11.83	0.00	11.91	1.48	2.40	5486.15	7846.36
14.957	2693.00	0.00	0.00	-16.90	15029.00	14.35	0.00	14.47	2.04	3.08	7740.57	10527.86
14.957	2693.00	0.00	0.00	-16.90	17778.00	15.50	0.00	15.64	2.19	3.31	9100.48	12009.48
14.957	2693.00	0.00	0.00	-16.90	20556.00	16.51	0.00	16.66	2.32	3.52	10485.55	13481.21
14.957	2693.00	0.00	0.00	-16.90	23643.00	17.59	0.00	17.75	2.41	3.70	12097.75	15224.10
14.957	2693.00	0.00	0.00	-16.90	23643.00	17.59	0.00	17.75	2.41	3.70	12097.75	15224.10
15.257	1584.00	0.00	0.00	-10.30	9556.00	12.07	0.00	12.26	2.60	3.66	4174.31	5924.55
15.257	1584.00	0.00	0.00	-10.30	15029.00	14.65	0.00	14.90	3.17	4.48	6580.28	8445.52
15.257	1584.00	0.00	0.00	-10.30	17778.00	15.80	0.00	16.07	3.25	4.73	7983.24	9860.73
15.257	1584.00	0.00	0.00	-10.30	20556.00	16.83	0.00	17.11	3.32	4.95	9397.50	11284.23
15.257	1584.00	0.00	0.00	-10.30	23643.00	17.91	0.00	18.19	3.33	5.13	11053.02	12953.12
15.257	1584.00	0.00	0.00	-10.30	23643.00	17.91	0.00	18.19	3.33	5.13	11053.02	12953.12
15.487	1214.00	0.00	0.00	-9.70	9556.00	12.46	0.00	12.57	2.49	3.32	7406.51	6055.79
15.487	1214.00	0.00	0.00	-9.70	15029.00	15.13	0.00	15.23	2.35	3.56	12123.67	9798.47
15.487	1214.00	0.00	0.00	-9.70	17778.00	16.30	0.00	16.40	2.24	3.61	14513.71	11877.62
15.487	1214.00	0.00	0.00	-9.70	20556.00	17.34	0.00	17.43	2.17	3.67	16730.09	13944.88
15.487	1214.00	0.00	0.00	-9.70	23643.00	18.42	0.00	18.51	2.10	3.72	19125.32	16325.13
15.487	1214.00	0.00	0.00	-9.70	23643.00	18.42	0.00	18.51	2.10	3.72	19125.32	16325.13
15.887	2112.00	0.00	0.00	-10.60	9556.00	12.97	0.00	13.20	4.14	4.29	3985.12	4698.74
15.887	2112.00	0.00	0.00	-10.60	15029.00	15.59	0.00	15.89	4.91	5.13	6464.06	6783.74
15.887	2112.00	0.00	0.00	-10.60	17778.00	16.74	0.00	17.03	4.84	5.29	8299.25	8078.35
15.887	2112.00	0.00	0.00	-10.60	20556.00	17.75	0.00	18.03	4.70	5.37	10337.00	9482.86
15.887	2112.00	0.00	0.00	-10.60	23643.00	18.82	0.00	19.07	4.38	5.35	12916.91	11300.89
15.887	2112.00	0.00	0.00	-10.60	23643.00	18.82	0.00	19.07	4.38	5.35	12916.91	11300.89

16.017	686.00	0.00	0.00	-5.40	9556.00	13.27	0.00	13.45	3.24	3.69	4273.95	5305.15
16.017	686.00	0.00	0.00	-5.40	15029.00	15.95	0.00	16.16	3.45	4.23	8262.21	8085.79
16.017	686.00	0.00	0.00	-5.40	17778.00	17.10	0.00	17.28	3.23	4.26	11388.55	9888.36
16.017	686.00	0.00	0.00	-5.40	20556.00	18.10	0.00	18.27	3.01	4.25	14347.08	11851.51
16.017	686.00	0.00	0.00	-5.40	23643.00	19.14	0.00	19.29	2.76	4.21	17602.22	14220.17
16.017	686.00	0.00	0.00	-5.40	23643.00	19.14	0.00	19.29	2.76	4.21	17602.22	14220.17

SECNO	XLCH	ELTKO	ELIC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
16.457	2323.00	0.00	0.00	-12.50	9556.00	13.88	0.00	14.04	2.50	3.71	5605.93	6045.18
16.457	2323.00	0.00	0.00	-12.50	15029.00	16.59	0.00	16.77	2.88	4.31	9008.11	8852.06
16.457	2323.00	0.00	0.00	-12.50	17778.00	17.68	0.00	17.87	2.98	4.51	10890.62	10306.57
16.457	2323.00	0.00	0.00	-12.50	20556.00	18.64	0.00	18.83	3.03	4.66	12894.24	11814.97
16.457	2323.00	0.00	0.00	-12.50	23643.00	19.63	0.00	19.81	3.02	4.78	15218.83	13595.78
16.457	2323.00	0.00	0.00	-12.50	23643.00	19.63	0.00	19.81	3.02	4.78	15218.83	13595.78
16.836	2006.00	0.00	0.00	-12.00	9556.00	14.48	0.00	14.86	5.99	5.21	2846.95	3903.61
16.836	2006.00	0.00	0.00	-12.00	15029.00	17.22	0.00	17.73	7.33	6.33	4600.98	5549.44
16.836	2006.00	0.00	0.00	-12.00	17778.00	18.32	0.00	18.85	7.76	6.73	5516.26	6382.48
16.836	2006.00	0.00	0.00	-12.00	20556.00	19.27	0.00	19.84	8.13	7.08	6407.58	7210.33
16.836	2006.00	0.00	0.00	-12.00	23643.00	20.23	0.00	20.83	8.43	7.41	7394.65	8142.48
16.836	2006.00	0.00	0.00	-12.00	23643.00	20.23	0.00	20.83	8.43	7.41	7394.65	8142.48
16.893	296.00	0.00	0.00	-11.90	9556.00	14.84	0.00	15.05	3.64	3.65	2621.40	5007.84
16.893	296.00	0.00	0.00	-11.90	15029.00	17.60	0.00	17.95	5.48	4.80	3130.18	6420.93
16.893	296.00	0.00	0.00	-11.90	17778.00	18.65	0.00	19.09	6.43	5.33	3333.86	7010.95
16.893	296.00	0.00	0.00	-11.90	20556.00	19.55	0.00	20.08	7.44	5.85	3511.33	7535.66
16.893	296.00	0.00	0.00	-11.90	23643.00	20.46	0.00	21.10	8.36	6.40	3695.09	8174.88
16.893	296.00	0.00	0.00	-11.90	23643.00	20.46	0.00	21.10	8.36	6.40	3695.09	8174.88
16.900	42.00	23.60	21.50	-11.90	9556.00	14.86	0.00	15.06	3.63	3.64	2623.98	5014.74
16.900	42.00	23.60	21.50	-11.90	15029.00	17.62	0.00	17.98	5.45	4.79	3135.23	6435.40
16.900	42.00	23.60	21.50	-11.90	17778.00	18.68	0.00	19.12	6.39	5.32	3340.45	7030.29
16.900	42.00	23.60	21.50	-11.90	20556.00	19.59	0.00	20.12	7.39	5.84	3519.74	7560.79
16.900	42.00	23.60	21.50	-11.90	23643.00	20.51	0.00	21.15	8.29	6.38	3705.57	8213.54
16.900	42.00	23.60	21.50	-11.90	23643.00	20.51	0.00	21.15	8.29	6.38	3705.57	8213.54
16.934	179.00	0.00	0.00	-11.90	9556.00	14.92	0.00	15.12	2.66	3.69	3639.38	5861.81
16.934	179.00	0.00	0.00	-11.90	15029.00	17.81	0.00	18.08	3.34	4.55	6184.97	8222.70
16.934	179.00	0.00	0.00	-11.90	17778.00	18.96	0.00	19.25	3.54	4.84	7476.11	9452.56
16.934	179.00	0.00	0.00	-11.90	20556.00	19.96	0.00	20.27	3.72	5.11	8650.82	10658.47
16.934	179.00	0.00	0.00	-11.90	23643.00	21.01	0.00	21.33	3.86	5.35	9940.38	12041.73
16.934	179.00	0.00	0.00	-11.90	23643.00	21.01	0.00	21.33	3.86	5.35	9940.38	12041.73
17.354	2218.00	0.00	0.00	-6.90	9556.00	15.66	0.00	15.93	5.31	4.72	3833.50	4148.83
17.354	2218.00	0.00	0.00	-6.90	15029.00	18.66	0.00	18.97	6.03	5.53	5958.23	6119.65
17.354	2218.00	0.00	0.00	-6.90	17778.00	19.83	0.00	20.15	6.28	5.84	7005.54	7095.23
17.354	2218.00	0.00	0.00	-6.90	20556.00	20.85	0.00	21.18	6.50	6.11	8055.58	8063.90
17.354	2218.00	0.00	0.00	-6.90	23643.00	21.90	0.00	22.24	6.63	6.34	9318.20	9185.56
17.354	2218.00	0.00	0.00	-6.90	23643.00	21.90	0.00	22.24	6.63	6.34	9318.20	9185.56

17.725	1954.00	0.00	0.00	-6.30	8346.00	16.19	0.00	16.24	0.92	2.08	6107.96	8708.84
17.725	1954.00	0.00	0.00	-6.30	12618.00	19.26	0.00	19.33	1.12	2.52	8579.72	11935.58
17.725	1954.00	0.00	0.00	-6.30	13857.00	20.43	0.00	20.50	1.07	2.54	9702.52	13398.61
17.725	1954.00	0.00	0.00	-6.30	15253.00	21.46	0.00	21.53	1.06	2.60	10834.97	14805.46
17.725	1954.00	0.00	0.00	-6.30	16777.00	22.51	0.00	22.59	1.05	2.66	12243.33	16381.32
17.725	1954.00	0.00	0.00	-6.30	16777.00	22.51	0.00	22.59	1.05	2.66	12243.33	16381.32

SECND	YLCH	FLTRD	ELLC	FLMIN	Q	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
17.826	533.00	0.00	0.00	-6.30	8346.00	16.23	0.00	16.27	0.23	1.72	6135.07	17544.22
17.826	533.00	0.00	0.00	-6.30	12618.00	19.32	0.00	19.36	0.24	1.96	8635.05	25630.29
17.826	533.00	0.00	0.00	-6.30	13857.00	20.49	0.00	20.53	0.22	1.93	9764.58	29460.89
17.826	533.00	0.00	0.00	-6.30	15253.00	21.52	0.00	21.56	0.21	1.94	10908.74	33237.63
17.826	533.00	0.00	0.00	-6.30	16777.00	22.57	0.00	22.61	0.20	1.93	12354.28	37581.43
17.826	533.00	0.00	0.00	-6.30	16777.00	22.57	0.00	22.61	0.20	1.93	12354.28	37581.43
17.932	560.00	0.00	0.00	-1.10	8346.00	16.36	0.00	16.71	9.95	4.72	1769.44	2645.61
17.932	560.00	0.00	0.00	-1.10	12618.00	19.42	0.00	19.91	11.42	5.62	2244.96	3734.59
17.932	560.00	0.00	0.00	-1.10	13857.00	20.56	0.00	21.06	10.61	5.71	2428.98	4253.64
17.932	560.00	0.00	0.00	-1.10	15253.00	21.57	0.00	22.09	10.13	5.82	3195.15	4791.86
17.932	560.00	0.00	0.00	-1.10	16777.00	22.61	0.00	23.08	8.91	5.69	4893.87	5620.90
17.932	560.00	0.00	0.00	-1.10	16777.00	22.61	0.00	23.08	8.91	5.69	4893.87	5620.90
17.938	32.00	20.70	18.70	-1.10	8346.00	16.40	0.00	16.75	9.85	4.70	1775.79	2658.82
17.938	32.00	20.70	18.70	-1.10	12618.00	19.83	0.00	20.29	10.37	5.46	2310.64	3918.41
17.938	32.00	20.70	18.70	-1.10	13857.00	20.96	0.00	21.44	9.72	5.56	2567.26	4445.60
17.938	32.00	20.70	18.70	-1.10	15253.00	21.70	0.00	22.21	9.76	5.75	3383.22	4682.74
17.938	32.00	20.70	18.70	-1.10	16777.00	22.61	0.00	23.08	8.89	5.69	4904.69	5626.71
17.938	32.00	20.70	18.70	-1.10	16777.00	22.61	0.00	23.08	8.89	5.69	4904.69	5626.71
17.988	264.00	0.00	0.00	-5.40	8346.00	16.77	0.00	16.95	4.53	4.18	4058.40	3922.92
17.988	264.00	0.00	0.00	-5.40	12618.00	20.36	0.00	20.52	3.82	4.32	6779.39	6455.99
17.988	264.00	0.00	0.00	-5.40	13857.00	21.52	0.00	21.67	3.41	4.22	7792.23	7498.90
17.988	264.00	0.00	0.00	-5.40	15253.00	22.29	0.00	22.44	3.41	4.31	8612.96	8260.90
17.988	264.00	0.00	0.00	-5.40	16777.00	23.16	0.00	23.30	3.29	4.34	9831.21	9249.24
17.988	264.00	0.00	0.00	-5.40	16777.00	23.16	0.00	23.30	3.29	4.34	9831.21	9249.24
18.054	350.00	0.00	0.00	-5.40	8346.00	17.00	0.00	17.08	2.11	2.87	4958.62	5749.66
18.054	350.00	0.00	0.00	-5.40	12618.00	20.55	0.00	20.63	1.82	2.99	7843.39	9365.61
18.054	350.00	0.00	0.00	-5.40	13857.00	21.69	0.00	21.76	1.65	2.95	8854.85	10775.74
18.054	350.00	0.00	0.00	-5.40	15253.00	22.46	0.00	22.53	1.66	3.03	9749.53	11826.28
18.054	350.00	0.00	0.00	-5.40	16777.00	23.31	0.00	23.39	1.63	3.07	10974.74	13137.20
18.054	350.00	0.00	0.00	-5.40	16777.00	23.31	0.00	23.39	1.63	3.07	10974.74	13137.20
18.092	200.00	0.00	0.00	-2.20	8346.00	17.04	0.00	17.14	3.07	3.24	3952.57	4763.58
18.092	200.00	0.00	0.00	-2.20	12618.00	20.58	0.00	20.69	2.70	3.46	5777.23	7679.00
18.092	200.00	0.00	0.00	-2.20	13857.00	21.71	0.00	21.81	2.45	3.42	6855.98	8857.04
18.092	200.00	0.00	0.00	-2.20	15253.00	22.49	0.00	22.58	2.39	3.46	8114.18	9873.82
18.092	200.00	0.00	0.00	-2.20	16777.00	23.34	0.00	23.43	2.24	3.43	9877.02	11217.68
18.092	200.00	0.00	0.00	-2.20	16777.00	23.34	0.00	23.43	2.24	3.43	9877.02	11217.68

18.120	150.00	0.00	0.00	-2.20	8346.00	17.11	0.00	17.21	3.03	3.22	3971.78	4795.51
18.120	150.00	0.00	0.00	-2.20	12618.00	20.64	0.00	20.75	2.69	3.46	5734.29	7700.03
18.120	150.00	0.00	0.00	-2.20	13857.00	21.77	0.00	21.88	2.49	3.45	6371.48	8788.79
18.120	150.00	0.00	0.00	-2.20	15253.00	22.54	0.00	22.65	2.51	3.55	7222.73	9636.11
18.120	150.00	0.00	0.00	-2.20	16777.00	23.39	0.00	23.50	2.42	3.58	8733.38	10774.99
18.120	150.00	0.00	0.00	-2.20	16777.00	23.39	0.00	23.50	2.42	3.58	8733.38	10774.99

SECNO	XLOC	ELTRD	ELLC	ELMIN	Q	CWSEL	CRI*S	EG	10K*S	VCH	AREA	.01K
18.423	1600.00	0.00	0.00	-2.20	8346.00	17.54	0.00	17.78	6.15	4.67	3253.90	3364.86
18.423	1600.00	0.00	0.00	-2.20	12618.00	21.00	0.00	21.25	5.82	5.15	4814.65	5230.60
18.423	1600.00	0.00	0.00	-2.20	13857.00	22.09	0.00	22.33	5.30	5.09	5969.14	6020.74
18.423	1600.00	0.00	0.00	-2.20	15253.00	22.86	0.00	23.08	5.08	5.10	7395.36	6767.74
18.423	1600.00	0.00	0.00	-2.20	16777.00	23.69	0.00	23.89	4.66	5.00	9217.22	7774.01
18.423	1600.00	0.00	0.00	-2.20	16777.00	23.69	0.00	23.89	4.66	5.00	9217.22	7774.01
18.843	2218.00	0.00	0.00	-3.70	8346.00	17.96	0.00	17.98	0.52	1.52	9325.65	11547.03
18.843	2218.00	0.00	0.00	-3.70	12618.00	21.43	0.00	21.45	0.52	1.69	13156.85	17551.67
18.843	2218.00	0.00	0.00	-3.70	13857.00	22.50	0.00	22.52	0.49	1.70	14585.99	19749.34
18.843	2218.00	0.00	0.00	-3.70	15253.00	23.25	0.00	23.27	0.51	1.76	15714.63	21421.16
18.843	2218.00	0.00	0.00	-3.70	16777.00	24.06	0.00	24.08	0.52	1.81	17042.78	23331.00
18.843	2218.00	0.00	0.00	-3.70	16777.00	24.06	0.00	24.08	0.52	1.81	17042.78	23331.00
19.193	1848.00	0.00	0.00	-2.60	8346.00	18.46	0.00	18.77	8.84	5.65	2951.77	2807.30
19.193	1848.00	0.00	0.00	-2.60	12618.00	21.83	0.00	22.09	7.38	5.81	6036.80	4645.91
19.193	1848.00	0.00	0.00	-2.60	13857.00	22.82	0.00	23.04	6.12	5.46	7661.64	5600.15
19.193	1848.00	0.00	0.00	-2.60	15253.00	23.55	0.00	23.75	5.66	5.36	8903.55	6412.01
19.193	1848.00	0.00	0.00	-2.60	16777.00	24.34	0.00	24.51	5.14	5.23	10507.19	7401.80
19.193	1848.00	0.00	0.00	-2.60	16777.00	24.34	0.00	24.51	5.14	5.23	10507.19	7401.80
19.430	1250.00	0.00	0.00	-3.20	8346.00	20.13	0.00	20.27	3.10	3.68	4100.18	4740.85
19.430	1250.00	0.00	0.00	-3.20	12618.00	23.46	0.00	23.57	2.62	3.76	7274.12	7792.22
19.430	1250.00	0.00	0.00	-3.20	13857.00	24.32	0.00	24.42	2.40	3.69	8547.32	8936.99
19.430	1250.00	0.00	0.00	-3.20	15253.00	25.01	0.00	25.11	2.32	3.70	9742.28	10007.74
19.430	1250.00	0.00	0.00	-3.20	16777.00	25.74	0.00	25.83	2.22	3.68	11157.48	11269.74
19.430	1250.00	0.00	0.00	-3.20	16777.00	25.74	0.00	25.83	2.22	3.68	11157.48	11269.74
19.477	250.00	0.00	0.00	-3.20	8346.00	20.24	0.00	20.32	1.88	2.98	4467.81	6079.36
19.477	250.00	0.00	0.00	-3.20	12618.00	23.53	0.00	23.62	1.84	3.26	7686.97	9290.67
19.477	250.00	0.00	0.00	-3.20	13857.00	24.38	0.00	24.47	1.77	3.27	8963.69	10401.77
19.477	250.00	0.00	0.00	-3.20	15253.00	25.08	0.00	25.16	1.79	3.34	10166.43	11415.09
19.477	250.00	0.00	0.00	-3.20	16777.00	25.80	0.00	25.88	1.78	3.39	11587.25	12583.18
19.477	250.00	0.00	0.00	-3.20	16777.00	25.80	0.00	25.88	1.78	3.39	11587.25	12583.18
19.506	150.00	0.00	0.00	-3.20	8346.00	20.26	0.00	20.35	1.88	2.98	4476.56	6085.27
19.506	150.00	0.00	0.00	-3.20	12618.00	23.55	0.00	23.64	1.85	3.26	7714.29	9288.63
19.506	150.00	0.00	0.00	-3.20	13857.00	24.41	0.00	24.49	1.78	3.27	8994.52	10396.07
19.506	150.00	0.00	0.00	-3.20	15253.00	25.10	0.00	25.18	1.79	3.34	10201.83	11407.04
19.506	150.00	0.00	0.00	-3.20	16777.00	25.82	0.00	25.90	1.78	3.40	11626.76	12572.10
19.506	150.00	0.00	0.00	-3.20	16777.00	25.82	0.00	25.90	1.78	3.40	11626.76	12572.10

19.553	250.00	0.00	0.00	-3.20	8346.00	20.33	0.00	20.36	1.28	2.36	5100.51	7389.95
19.553	250.00	0.00	0.00	-3.20	12618.00	23.62	0.00	23.67	1.22	2.57	8386.32	11435.88
19.553	250.00	0.00	0.00	-3.20	13857.00	24.47	0.00	24.52	1.16	2.58	9676.55	12848.53
19.553	250.00	0.00	0.00	-3.20	15253.00	25.16	0.00	25.21	1.16	2.62	10896.14	14147.36
19.553	250.00	0.00	0.00	-3.20	16777.00	25.88	0.00	25.93	1.15	2.66	12332.23	15648.94
19.553	250.00	0.00	0.00	-3.20	16777.00	25.88	0.00	25.93	1.15	2.66	12332.23	15648.94

SECNO	XLOB	ELTRD	ELLC	FLMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
19.600	250.00	0.00	0.00	-3.20	8346.00	20.34	0.00	20.42	1.84	2.96	4525.07	6148.96
19.600	250.00	0.00	0.00	-3.20	12618.00	23.63	0.00	23.71	1.81	3.23	7823.21	9383.77
19.600	250.00	0.00	0.00	-3.20	13857.00	24.47	0.00	24.55	1.74	3.25	9116.23	10499.52
19.600	250.00	0.00	0.00	-3.20	15253.00	25.17	0.00	25.24	1.75	3.32	10339.35	11520.49
19.600	250.00	0.00	0.00	-3.20	16777.00	25.89	0.00	25.96	1.75	3.37	11778.77	12695.34
19.600	250.00	0.00	0.00	-3.20	16777.00	25.89	0.00	25.96	1.75	3.37	11778.77	12695.34
19.618	90.00	0.00	0.00	-4.80	8346.00	20.30	0.00	20.47	3.70	4.12	3813.46	4337.94
19.618	90.00	0.00	0.00	-4.80	12618.00	23.59	0.00	23.76	3.67	4.50	7364.92	6588.03
19.618	90.00	0.00	0.00	-4.80	13857.00	24.44	0.00	24.60	3.41	4.44	8865.44	7501.07
19.618	90.00	0.00	0.00	-4.80	15253.00	25.14	0.00	25.29	3.32	4.46	10257.67	8369.96
19.618	90.00	0.00	0.00	-4.80	16777.00	25.86	0.00	26.00	3.19	4.45	11873.63	9396.98
19.618	90.00	0.00	0.00	-4.80	16777.00	25.86	0.00	26.00	3.19	4.45	11873.63	9396.98
19.646	150.00	0.00	0.00	-4.80	8346.00	20.42	0.00	20.51	1.61	2.79	4340.49	6573.28
19.646	150.00	0.00	0.00	-4.80	12618.00	23.73	0.00	23.79	1.54	2.99	8068.79	10180.13
19.646	150.00	0.00	0.00	-4.80	13857.00	24.57	0.00	24.63	1.44	2.95	9581.80	11560.18
19.646	150.00	0.00	0.00	-4.80	15253.00	25.26	0.00	25.31	1.41	2.97	10987.24	12858.91
19.646	150.00	0.00	0.00	-4.80	16777.00	25.97	0.00	26.03	1.36	2.98	12609.55	14375.97
19.646	150.00	0.00	0.00	-4.80	16777.00	25.97	0.00	26.03	1.36	2.98	12609.55	14375.97
19.665	100.00	0.00	0.00	-4.80	8346.00	20.44	0.00	20.52	1.75	2.91	4324.54	6306.10
19.665	100.00	0.00	0.00	-4.80	12618.00	23.74	0.00	23.81	1.60	3.05	8079.80	9963.47
19.665	100.00	0.00	0.00	-4.80	13857.00	24.58	0.00	24.64	1.49	3.00	9604.75	11367.66
19.665	100.00	0.00	0.00	-4.80	15253.00	25.27	0.00	25.33	1.45	3.02	11013.67	12680.78
19.665	100.00	0.00	0.00	-4.80	16777.00	25.99	0.00	26.04	1.39	3.01	12638.84	14213.02
19.665	100.00	0.00	0.00	-4.80	16777.00	25.99	0.00	26.04	1.39	3.01	12638.84	14213.02
19.693	150.00	0.00	0.00	-4.80	8346.00	20.45	0.00	20.54	1.60	2.78	4353.58	6594.06
19.693	150.00	0.00	0.00	-4.80	12618.00	23.76	0.00	23.82	1.53	2.98	8107.68	10215.01
19.693	150.00	0.00	0.00	-4.80	13857.00	24.60	0.00	24.65	1.43	2.94	9624.28	11599.28
19.693	150.00	0.00	0.00	-4.80	15253.00	25.28	0.00	25.34	1.40	2.96	11033.85	12902.20
19.693	150.00	0.00	0.00	-4.80	16777.00	26.00	0.00	26.05	1.35	2.97	12659.75	14423.27
19.693	150.00	0.00	0.00	-4.80	16777.00	26.00	0.00	26.05	1.35	2.97	12659.75	14423.27
19.731	200.00	0.00	0.00	-4.80	8346.00	20.44	0.00	20.60	3.59	4.08	3876.54	4402.51
19.731	200.00	0.00	0.00	-4.80	12618.00	23.72	0.00	23.89	3.52	4.43	7591.11	6723.07
19.731	200.00	0.00	0.00	-4.80	13857.00	24.57	0.00	24.72	3.28	4.37	9103.96	7648.98
19.731	200.00	0.00	0.00	-4.80	15253.00	25.26	0.00	25.40	3.20	4.39	10510.85	8529.50
19.731	200.00	0.00	0.00	-4.80	16777.00	25.97	0.00	26.10	3.08	4.38	12136.06	9565.75
19.731	200.00	0.00	0.00	-4.80	16777.00	25.97	0.00	26.10	3.08	4.38	12136.06	9565.75

19.754	120.00	0.00	0.00	-4.80	8346.00	20.52	0.00	20.69	3.53	4.05	3920.27	4443.86
19.754	120.00	0.00	0.00	-4.80	12618.00	23.85	0.00	24.01	3.38	4.36	7821.14	6860.68
19.754	120.00	0.00	0.00	-4.80	13857.00	24.70	0.00	24.84	3.15	4.30	9352.07	7803.23
19.754	120.00	0.00	0.00	-4.80	15253.00	25.40	0.00	25.53	3.06	4.31	10800.65	8712.73
19.754	120.00	0.00	0.00	-4.80	16777.00	26.12	0.00	26.25	2.93	4.29	12496.61	9801.82
19.754	120.00	0.00	0.00	-4.80	16777.00	26.12	0.00	26.25	2.93	4.29	12496.61	9801.82

SECNO	XLOB	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
19.768	75.00	0.00	0.00	-4.80	6883.00	20.61	0.00	20.72	2.35	3.32	3968.59	4487.08
19.768	75.00	0.00	0.00	-4.80	10669.00	23.94	0.00	24.05	2.36	3.65	7961.52	6944.81
19.768	75.00	0.00	0.00	-4.80	11585.00	24.79	0.00	24.89	2.14	3.55	9543.42	7922.48
19.768	75.00	0.00	0.00	-4.80	12464.00	25.49	0.00	25.58	1.98	3.48	11025.57	8855.39
19.768	75.00	0.00	0.00	-4.80	13498.00	26.21	0.00	26.29	1.84	3.41	12719.32	9948.29
19.768	75.00	0.00	0.00	-4.80	13498.00	26.21	0.00	26.29	1.84	3.41	12719.32	9948.29
19.782	75.00	0.00	0.00	-4.80	6883.00	20.69	0.00	20.73	0.83	1.98	5009.09	7553.21
19.782	75.00	0.00	0.00	-4.80	10669.00	24.04	0.00	24.07	0.84	2.18	9113.50	11672.19
19.782	75.00	0.00	0.00	-4.80	11585.00	24.87	0.00	24.90	0.77	2.14	10697.56	13189.32
19.782	75.00	0.00	0.00	-4.80	12464.00	25.56	0.00	25.59	0.73	2.11	12178.77	14613.51
19.782	75.00	0.00	0.00	-4.80	13498.00	26.28	0.00	26.30	0.69	2.09	13870.90	16265.57
19.782	75.00	0.00	0.00	-4.80	13498.00	26.28	0.00	26.30	0.69	2.09	13870.90	16265.57
19.801	100.00	0.00	0.00	-4.80	6883.00	20.71	0.00	20.74	0.76	1.90	5446.67	7874.83
19.801	100.00	0.00	0.00	-4.80	10669.00	24.05	0.00	24.07	0.74	2.05	9577.87	12362.73
19.801	100.00	0.00	0.00	-4.80	11585.00	24.88	0.00	24.91	0.69	2.02	11162.89	13967.72
19.801	100.00	0.00	0.00	-4.80	12464.00	25.57	0.00	25.60	0.65	1.99	12644.76	15465.34
19.801	100.00	0.00	0.00	-4.80	13498.00	26.29	0.00	26.31	0.62	1.98	14337.66	17194.34
19.801	100.00	0.00	0.00	-4.80	13498.00	26.29	0.00	26.31	0.62	1.98	14337.66	17194.34
19.811	50.00	0.00	0.00	-4.70	6883.00	20.73	0.00	20.75	0.61	1.57	7721.33	8806.94
19.811	50.00	0.00	0.00	-4.70	10669.00	24.06	0.00	24.08	0.57	1.68	11804.88	14114.61
19.811	50.00	0.00	0.00	-4.70	11585.00	24.89	0.00	24.91	0.54	1.67	13163.39	15808.27
19.811	50.00	0.00	0.00	-4.70	12464.00	25.58	0.00	25.60	0.52	1.67	14380.80	17325.31
19.811	50.00	0.00	0.00	-4.70	13498.00	26.30	0.00	26.31	0.50	1.67	15760.74	19034.83
19.811	50.00	0.00	0.00	-4.70	13498.00	26.30	0.00	26.31	0.50	1.67	15760.74	19034.83
19.834	125.00	0.00	0.00	-4.70	6883.00	20.72	0.00	20.77	1.72	2.63	6927.74	5250.83
19.834	125.00	0.00	0.00	-4.70	10669.00	24.06	0.00	24.10	1.52	2.74	11027.26	8647.66
19.834	125.00	0.00	0.00	-4.70	11585.00	24.89	0.00	24.93	1.41	2.70	12385.72	9760.25
19.834	125.00	0.00	0.00	-4.70	12464.00	25.58	0.00	25.62	1.34	2.68	13611.26	10775.92
19.834	125.00	0.00	0.00	-4.70	13498.00	26.30	0.00	26.33	1.28	2.67	14992.33	11929.32
19.834	125.00	0.00	0.00	-4.70	13498.00	26.30	0.00	26.33	1.28	2.67	14992.33	11929.32
19.916	430.00	0.00	0.00	-4.70	6883.00	20.82	0.00	20.86	1.67	2.61	7006.20	5321.22
19.916	430.00	0.00	0.00	-4.70	10669.00	24.15	0.00	24.19	1.49	2.72	11149.76	8747.65
19.916	430.00	0.00	0.00	-4.70	11585.00	24.98	0.00	25.02	1.38	2.68	12512.90	9865.04
19.916	430.00	0.00	0.00	-4.70	12464.00	25.67	0.00	25.70	1.31	2.66	13743.48	10886.35
19.916	430.00	0.00	0.00	-4.70	13498.00	26.38	0.00	26.41	1.25	2.65	15141.22	12049.51
19.916	430.00	0.00	0.00	-4.70	13498.00	26.38	0.00	26.41	1.25	2.65	15141.22	12049.51

19.995	420.00	0.00	0.00	-4.70	6863.00	20.87	0.00	20.91	1.65	2.59	7051.27	5361.39
19.995	420.00	0.00	0.00	-4.70	10669.00	24.19	0.00	24.23	1.47	2.70	11221.58	8806.28
19.995	420.00	0.00	0.00	-4.70	11585.00	25.01	0.00	25.05	1.36	2.66	12587.64	9926.68
19.995	420.00	0.00	0.00	-4.70	12464.00	25.70	0.00	25.73	1.30	2.65	13821.18	10951.32
19.995	420.00	0.00	0.00	-4.70	13498.00	26.41	0.00	26.44	1.24	2.64	15229.62	12120.36
					13498.00	26.41	0.00	26.44	1.24	2.64	15229.62	12120.36

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SECNO	XLOC	ELTRO	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
20.033	200.00	0.00	0.00	-4.70	6883.00	20.92	0.00	20.94	0.81	1.82	7564.93	7656.23
20.033	200.00	0.00	0.00	-4.70	10669.00	24.23	0.00	24.25	0.69	1.85	11752.68	12886.67
20.033	200.00	0.00	0.00	-4.70	11585.00	25.06	0.00	25.07	0.63	1.82	13118.67	14552.27
20.033	200.00	0.00	0.00	-4.70	12464.00	25.74	0.00	25.76	0.60	1.81	14352.41	16061.44
20.033	200.00	0.00	0.00	-4.70	13498.00	26.45	0.00	26.46	0.58	1.80	15756.72	17750.19
20.033	200.00	0.00	0.00	-4.70	13498.00	26.45	0.00	26.46	0.58	1.80	15756.72	17750.19
20.062	150.00	0.00	0.00	-4.70	6883.00	20.94	0.00	20.95	0.46	1.37	8863.83	10155.29
20.062	150.00	0.00	0.00	-4.70	10669.00	24.25	0.00	24.26	0.43	1.46	13075.60	16295.53
20.062	150.00	0.00	0.00	-4.70	11585.00	25.07	0.00	25.08	0.41	1.46	14442.17	18176.57
20.062	150.00	0.00	0.00	-4.70	12464.00	25.75	0.00	25.77	0.39	1.46	15676.62	19864.90
20.062	150.00	0.00	0.00	-4.70	13498.00	26.46	0.00	26.47	0.39	1.47	17096.77	21752.10
20.062	150.00	0.00	0.00	-4.70	13498.00	26.46	0.00	26.47	0.39	1.47	17096.77	21752.10
20.085	125.00	0.00	0.00	-4.70	6883.00	20.94	0.00	20.96	0.50	1.44	8231.87	9701.10
20.085	125.00	0.00	0.00	-4.70	10669.00	24.26	0.00	24.27	0.48	1.55	12434.74	15394.19
20.085	125.00	0.00	0.00	-4.70	11585.00	25.08	0.00	25.09	0.46	1.54	13801.67	17169.20
20.085	125.00	0.00	0.00	-4.70	12464.00	25.76	0.00	25.77	0.44	1.55	15036.42	18769.24
20.085	125.00	0.00	0.00	-4.70	13498.00	26.47	0.00	26.48	0.43	1.56	16457.59	20565.04
20.085	125.00	0.00	0.00	-4.70	13498.00	26.47	0.00	26.48	0.43	1.56	16457.59	20565.04
20.133	250.00	0.00	0.00	-4.70	6883.00	20.94	0.00	20.98	1.61	2.56	7129.00	5430.26
20.133	250.00	0.00	0.00	-4.70	10669.00	24.25	0.00	24.29	1.44	2.68	11328.16	8893.31
20.133	250.00	0.00	0.00	-4.70	11585.00	25.07	0.00	25.11	1.34	2.64	12704.13	10022.85
20.133	250.00	0.00	0.00	-4.70	12464.00	25.76	0.00	25.79	1.27	2.63	13939.52	11050.40
20.133	250.00	0.00	0.00	-4.70	13498.00	26.46	0.00	26.49	1.22	2.62	15362.36	12226.06
20.133	250.00	0.00	0.00	-4.70	13498.00	26.46	0.00	26.49	1.22	2.62	15362.36	12226.06
20.212	420.00	0.00	0.00	-0.90	6883.00	20.98	0.00	21.19	6.37	4.69	2832.50	2727.39
20.212	420.00	0.00	0.00	-0.90	10669.00	24.28	0.00	24.48	5.63	4.97	5524.27	4497.25
20.212	420.00	0.00	0.00	-0.90	11585.00	25.10	0.00	25.27	5.03	4.82	6605.55	5165.40
20.212	420.00	0.00	0.00	-0.90	12464.00	25.78	0.00	25.94	4.61	4.72	7636.14	5805.46
20.212	420.00	0.00	0.00	-0.90	13498.00	26.49	0.00	26.63	4.22	4.61	8839.66	6567.79
20.212	420.00	0.00	0.00	-0.90	13498.00	26.49	0.00	26.63	4.22	4.61	8839.66	6567.79
20.360	782.00	0.00	0.00	-0.90	6883.00	21.41	0.00	21.73	8.70	4.55	1513.50	2333.90
20.360	782.00	0.00	0.00	-0.90	10669.00	24.61	0.00	25.05	9.60	5.34	1997.80	3443.05
20.360	782.00	0.00	0.00	-0.90	11585.00	25.37	0.00	25.81	9.05	5.39	2552.88	3650.45
20.360	782.00	0.00	0.00	-0.90	12464.00	26.01	0.00	26.44	8.40	5.36	3345.46	4299.74
20.360	782.00	0.00	0.00	-0.90	13498.00	26.68	0.00	27.06	7.48	5.22	4450.37	4934.64
20.360	782.00	0.00	0.00	-0.90	13498.00	26.68	0.00	27.06	7.48	5.22	4450.37	4934.64

20.366	32.00	26.00	24.00	-0.90	6883.00	21.42	0.00	21.74	8.67	4.54	1515.28	2337.59
20.366	32.00	26.00	24.00	-0.90	10669.00	24.78	0.00	25.21	9.18	5.27	2024.69	3520.62
20.366	32.00	26.00	24.00	-0.90	11585.00	25.40	0.00	25.86	9.25	5.46	2122.41	3808.38
20.366	32.00	26.00	24.00	-0.90	12464.00	26.01	0.00	26.44	8.40	5.36	3346.50	4300.33
20.366	32.00	26.00	24.00	-0.90	13498.00	26.68	0.00	27.06	7.48	5.21	4452.21	4935.72
20.366	32.00	26.00	24.00	-0.90	13498.00	26.68	0.00	27.06	7.48	5.21	4452.21	4935.72

SECNO	YLCH	ELTRO	ELLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
20.433	354.00	0.00	0.00	-0.90	6883.00	21.84	0.00	22.01	5.00	4.30	3295.36	3078.32
20.433	354.00	0.00	0.00	-0.90	10669.00	25.35	0.00	25.49	3.91	4.29	6975.49	5394.48
20.433	354.00	0.00	0.00	-0.90	11585.00	26.02	0.00	26.14	3.67	4.24	8021.00	6046.59
20.433	354.00	0.00	0.00	-0.90	12464.00	26.56	0.00	26.69	3.49	4.20	9008.82	6675.02
20.433	354.00	0.00	0.00	-0.90	13498.00	27.19	0.00	27.29	3.30	4.16	10207.78	7434.28
20.433	354.00	0.00	0.00	-0.90	13498.00	27.19	0.00	27.29	3.30	4.16	10207.78	7434.28
20.673	1267.00	0.00	0.00	1.60	6883.00	22.30	0.00	22.34	1.62	2.40	5894.64	5410.18
20.673	1267.00	0.00	0.00	1.60	10669.00	25.72	0.00	25.75	1.40	2.52	9895.43	9021.45
20.673	1267.00	0.00	0.00	1.60	11585.00	26.36	0.00	26.39	1.36	2.54	10940.68	9918.16
20.673	1267.00	0.00	0.00	1.60	12464.00	26.90	0.00	26.93	1.34	2.56	11935.62	10750.49
20.673	1267.00	0.00	0.00	1.60	13498.00	27.50	0.00	27.53	1.32	2.59	13136.13	11735.23
20.673	1267.00	0.00	0.00	1.60	13498.00	27.50	0.00	27.53	1.32	2.59	13136.13	11735.23
20.884	1109.00	0.00	0.00	2.00	6883.00	22.49	0.00	22.62	4.06	3.75	3733.10	3414.49
20.884	1109.00	0.00	0.00	2.00	10669.00	25.86	0.00	25.97	3.21	3.78	8025.54	5958.67
20.884	1109.00	0.00	0.00	2.00	11585.00	26.50	0.00	26.60	2.96	3.71	9477.94	6736.51
20.884	1109.00	0.00	0.00	2.00	12464.00	27.04	0.00	27.13	2.77	3.65	10822.03	7495.44
20.884	1109.00	0.00	0.00	2.00	13498.00	27.63	0.00	27.71	2.57	3.58	12398.07	8420.40
20.884	1109.00	0.00	0.00	2.00	13498.00	27.63	0.00	27.71	2.57	3.58	12398.07	8420.40
21.284	2112.00	0.00	0.00	-3.70	6883.00	23.51	0.00	23.70	8.38	4.84	4970.69	2377.08
21.284	2112.00	0.00	0.00	-3.70	10669.00	26.48	0.00	26.53	3.27	3.29	12308.64	5896.54
21.284	2112.00	0.00	0.00	-3.70	11585.00	27.05	0.00	27.08	2.81	3.09	14204.30	6916.95
21.284	2112.00	0.00	0.00	-3.70	12464.00	27.54	0.00	27.57	2.49	2.94	15963.85	7899.68
21.284	2112.00	0.00	0.00	-3.70	13498.00	28.07	0.00	28.10	2.20	2.81	18033.64	9099.92
21.284	2112.00	0.00	0.00	-3.70	13498.00	28.07	0.00	28.10	2.20	2.81	18033.64	9099.92
21.554	1426.00	0.00	0.00	0.90	6883.00	24.03	0.00	24.13	2.19	2.91	5102.41	4653.02
21.554	1426.00	0.00	0.00	0.90	10669.00	26.71	0.00	26.78	1.71	2.82	11942.52	8160.74
21.554	1426.00	0.00	0.00	0.90	11585.00	27.25	0.00	27.31	1.59	2.77	13653.32	9176.16
21.554	1426.00	0.00	0.00	0.90	12464.00	27.72	0.00	27.78	1.51	2.74	15219.07	10149.39
21.554	1426.00	0.00	0.00	0.90	13498.00	28.24	0.00	28.29	1.42	2.70	17057.84	11333.31
21.554	1426.00	0.00	0.00	0.90	13498.00	28.24	0.00	28.29	1.42	2.70	17057.84	11333.31
22.274	3802.00	0.00	0.00	2.70	6883.00	24.81	0.00	24.92	2.88	3.19	5716.35	4053.10
22.274	3802.00	0.00	0.00	2.70	10669.00	27.18	0.00	27.25	2.06	2.96	12911.08	7402.68
22.274	3802.00	0.00	0.00	2.70	11585.00	27.66	0.00	27.72	1.90	2.88	15001.16	8595.98
22.274	3802.00	0.00	0.00	2.70	12464.00	28.09	0.00	28.15	1.76	2.81	17064.27	9398.04
22.274	3802.00	0.00	0.00	2.70	13498.00	28.57	0.00	28.62	1.60	2.72	19555.56	10683.53
22.274	3802.00	0.00	0.00	2.70	13498.00	28.57	0.00	28.62	1.60	2.72	19555.56	10683.53

22.964	3643.00	0.00	0.00	2.10	6883.00	25.95	0.00	26.16	5.52	4.46	3772.25	2929.85
22.964	3643.00	0.00	0.00	2.10	10669.00	27.98	0.00	28.16	5.33	4.70	7782.71	4620.56
22.964	3643.00	0.00	0.00	2.10	11585.00	28.36	0.00	28.54	5.06	4.64	9062.05	5148.71
22.964	3643.00	0.00	0.00	2.10	12464.00	28.74	0.00	28.89	4.79	4.57	10396.34	5693.56
22.964	3643.00	0.00	0.00	2.10	13498.00	29.14	0.00	29.27	4.45	4.46	12098.05	6399.72
22.964	3643.00	0.00	0.00	2.10	13498.00	29.14	0.00	29.27	4.45	4.46	12098.05	6399.72

SECNO	XLCH	FLTRD	FLLC	FLMIN	G	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
23.075	590.00	0.00	0.00	2.10	6883.00	26.22	0.00	26.37	3.40	3.93	4084.64	3731.15
23.075	590.00	0.00	0.00	2.10	10669.00	28.22	0.00	28.33	3.01	3.96	8523.60	6151.04
23.075	590.00	0.00	0.00	2.10	11585.00	28.60	0.00	28.70	2.84	3.89	9860.59	6878.89
23.075	590.00	0.00	0.00	2.10	12464.00	28.94	0.00	29.03	2.68	3.82	11222.97	7615.60
23.075	590.00	0.00	0.00	2.10	13498.00	29.32	0.00	29.40	2.49	3.73	12898.45	8555.11
23.075	590.00	0.00	0.00	2.10	13498.00	29.32	0.00	29.40	2.49	3.73	12898.45	8555.11
23.142	353.00	0.00	0.00	4.90	6883.00	26.36	0.00	26.66	8.75	4.64	2578.38	2326.99
23.142	353.00	0.00	0.00	4.90	10669.00	28.34	0.00	28.59	7.80	4.82	6555.37	3819.44
23.142	353.00	0.00	0.00	4.90	11585.00	28.72	0.00	28.94	7.24	4.72	7834.24	4306.32
23.142	353.00	0.00	0.00	4.90	12464.00	29.05	0.00	29.25	6.69	4.60	9124.47	4819.62
23.142	353.00	0.00	0.00	4.90	13498.00	29.43	0.00	29.59	6.13	4.46	10648.77	5452.87
23.142	353.00	0.00	0.00	4.90	13498.00	29.43	0.00	29.59	6.13	4.48	10648.77	5452.87
23.145	14.00	23.50	22.30	4.90	6883.00	26.44	0.00	26.72	8.51	4.59	2639.10	2359.06
23.145	14.00	23.50	22.30	4.90	10669.00	28.41	0.00	28.64	7.47	4.73	6779.06	3902.98
23.145	14.00	23.50	22.30	4.90	11585.00	28.83	0.00	29.03	6.73	4.57	8241.17	4465.87
23.145	14.00	23.50	22.30	4.90	12464.00	29.20	0.00	29.37	6.10	4.42	9682.92	5048.35
23.145	14.00	23.50	22.30	4.90	13498.00	29.62	0.00	29.76	5.42	4.24	11448.87	5796.22
23.145	14.00	23.50	22.30	4.90	13498.00	29.62	0.00	29.76	5.42	4.24	11448.87	5796.22
23.154	50.00	0.00	0.00	4.90	6883.00	26.49	0.00	26.77	8.36	4.56	2679.30	2380.22
23.154	50.00	0.00	0.00	4.90	10669.00	28.46	0.00	28.68	7.30	4.68	6900.52	3948.63
23.154	50.00	0.00	0.00	4.90	11585.00	28.87	0.00	29.06	6.58	4.53	8366.70	4515.53
23.154	50.00	0.00	0.00	4.90	12464.00	29.24	0.00	29.41	5.97	4.38	9809.86	5100.88
23.154	50.00	0.00	0.00	4.90	13498.00	29.65	0.00	29.79	5.32	4.21	11575.76	5851.35
23.154	50.00	0.00	0.00	4.90	13498.00	29.65	0.00	29.79	5.32	4.21	11575.76	5851.35
23.325	900.00	0.00	0.00	4.10	5491.00	26.97	0.00	27.01	1.82	2.68	6631.20	4068.93
23.325	900.00	0.00	0.00	4.10	8442.00	28.85	0.00	28.88	1.56	2.64	12731.03	6753.83
23.325	900.00	0.00	0.00	4.10	9014.00	29.21	0.00	29.24	1.44	2.56	14347.43	7505.77
23.325	900.00	0.00	0.00	4.10	9440.00	29.54	0.00	29.56	1.31	2.47	15869.23	8243.29
23.325	900.00	0.00	0.00	4.10	10011.00	29.91	0.00	29.93	1.20	2.38	17684.42	9156.13
23.325	900.00	0.00	0.00	4.10	10011.00	29.91	0.00	29.93	1.20	2.38	17684.42	9156.13
23.865	2851.00	0.00	0.00	4.10	5491.00	27.30	0.00	27.37	2.52	3.19	6553.21	3457.74
23.865	2851.00	0.00	0.00	4.10	8442.00	29.09	0.00	29.14	2.12	3.10	11396.92	5795.81
23.865	2851.00	0.00	0.00	4.10	9014.00	29.43	0.00	29.47	2.00	3.04	12493.81	6367.08
23.865	2851.00	0.00	0.00	4.10	9440.00	29.74	0.00	29.77	1.87	2.96	13515.32	6909.23
23.865	2851.00	0.00	0.00	4.10	10011.00	30.09	0.00	30.12	1.74	2.89	14750.33	7580.44
23.865	2851.00	0.00	0.00	4.10	10011.00	30.09	0.00	30.12	1.74	2.89	14750.33	7580.44

CLEAR CREEK CHANNEL IMP

SUMMARY PRINTOUT TABLE 150

	SECNO	XLOB	FLTRD	ELLC	ELMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
	0.000	0.00	0.00	0.00	-22.10	27299.00	2.00	0.00	2.22	1.20	4.35	8923.71	24884.01
10-YEAR	0.000	0.00	0.00	0.00	-22.10	30915.00	2.00	0.00	2.29	1.54	4.92	8923.71	24884.01
	0.000	0.00	0.00	0.00	-22.10	35411.00	2.00	0.00	2.37	2.03	5.64	8923.71	24884.01
	0.000	0.00	0.00	0.00	-22.10	39871.00	2.00	0.00	2.47	2.57	6.35	8923.71	24884.01
	0.000	0.00	0.00	0.00	-22.10	44521.00	2.00	0.00	2.59	3.20	7.09	8923.71	24884.01
	0.000	0.00	0.00	0.00	-22.10	71731.00	2.00	0.00	3.54	8.31	11.42	8923.71	24884.01
*	0.042	220.00	0.00	0.00	-22.40	27299.00	2.01	0.00	2.22	1.31	3.16	7563.22	23840.22
*	0.042	220.00	0.00	0.00	-22.40	30915.00	2.01	0.00	2.28	1.68	3.57	7563.22	23840.22
*	0.042	220.00	0.00	0.00	-22.40	35411.00	2.01	0.00	2.36	2.21	4.09	7563.22	23840.22
*	0.042	220.00	0.00	0.00	-22.40	39871.00	2.01	0.00	2.46	2.80	4.61	7563.22	23840.22
*	0.042	220.00	0.00	0.00	-22.40	44521.00	2.01	0.00	2.57	3.49	5.15	7563.22	23840.22
*	0.042	220.00	0.00	0.00	-22.40	71731.00	2.01	0.00	3.46	9.05	8.29	7563.22	23840.22
	0.083	220.00	0.00	0.00	-22.40	27299.00	2.04	0.00	2.25	1.30	3.15	7575.90	23898.88
	0.083	220.00	0.00	0.00	-22.40	30915.00	2.05	0.00	2.31	1.67	3.57	7579.50	23915.47
	0.083	220.00	0.00	0.00	-22.40	35411.00	2.06	0.00	2.41	2.19	4.08	7584.57	23938.98
	0.083	220.00	0.00	0.00	-22.40	39871.00	2.07	0.00	2.51	2.77	4.59	7590.27	23965.41
	0.083	220.00	0.00	0.00	-22.40	44521.00	2.09	0.00	2.64	3.44	5.13	7596.97	23996.40
	0.083	220.00	0.00	0.00	-22.40	71731.00	2.24	0.00	3.64	8.67	8.18	7675.81	24362.54
	0.125	220.00	0.00	0.00	-22.40	27299.00	2.07	0.00	2.27	1.30	3.15	7590.07	23964.38
	0.125	220.00	0.00	0.00	-22.40	30915.00	2.08	0.00	2.35	1.66	3.56	7597.75	24000.00
	0.125	220.00	0.00	0.00	-22.40	35411.00	2.11	0.00	2.45	2.17	4.07	7608.72	24050.89
	0.125	220.00	0.00	0.00	-22.40	39871.00	2.13	0.00	2.57	2.74	4.58	7621.24	24108.88
	0.125	220.00	0.00	0.00	-22.40	44521.00	2.16	0.00	2.71	3.39	5.10	7635.99	24177.40
	0.125	220.00	0.00	0.00	-22.40	71731.00	2.46	0.00	3.82	8.32	8.07	7782.97	24863.13
	0.167	220.00	0.00	0.00	-22.40	27299.00	2.09	0.00	2.30	1.29	3.14	7603.59	24027.08
	0.167	220.00	0.00	0.00	-22.40	30915.00	2.12	0.00	2.38	1.65	3.55	7615.22	24080.96
	0.167	220.00	0.00	0.00	-22.40	35411.00	2.15	0.00	2.50	2.15	4.06	7631.83	24158.07
	0.167	220.00	0.00	0.00	-22.40	39871.00	2.19	0.00	2.63	2.70	4.56	7650.77	24246.08
	0.167	220.00	0.00	0.00	-22.40	44521.00	2.24	0.00	2.78	3.34	5.08	7673.23	24350.53
	0.167	220.00	0.00	0.00	-22.40	71731.00	2.67	0.00	4.00	8.01	7.97	7885.33	25344.39
	0.207	215.00	0.00	0.00	-21.50	27299.00	2.11	0.00	2.36	3.22	4.96	8457.71	15219.19

0.207	215.00	0.00	0.00	-21.50	30915.00	2.15	0.00	2.46	4.10	5.61	8472.59	15262.17
0.207	215.00	0.00	0.00	-21.50	35411.00	2.17	0.00	2.60	5.35	6.41	8488.38	15307.83
0.207	215.00	0.00	0.00	-21.50	39871.00	2.22	0.00	2.76	6.73	7.20	8511.21	15373.88
0.207	215.00	0.00	0.00	-21.50	44521.00	2.27	0.00	2.94	8.30	8.01	8538.29	15452.40
0.207	215.00	0.00	0.00	-21.50	71731.00	2.74	0.00	4.38	19.75	12.54	8773.33	16139.63

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SECNO	YLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
0.255	250.00	0.00	0.00	-22.30	27299.00	2.23	0.00	2.44	2.73	4.59	9359.10	16526.24
0.255	250.00	0.00	0.00	-22.30	30915.00	2.30	0.00	2.56	3.46	5.17	9394.19	16625.41
0.255	250.00	0.00	0.00	-22.30	35411.00	2.39	0.00	2.73	4.46	5.89	9444.42	16767.77
0.255	250.00	0.00	0.00	-22.30	39871.00	2.49	0.00	2.92	5.55	6.59	9501.29	16929.43
0.255	250.00	0.00	0.00	-22.30	44521.00	2.61	0.00	3.14	6.76	7.31	9568.33	17120.74
0.255	250.00	0.00	0.00	-22.30	71731.00	3.61	0.00	4.85	14.64	11.09	10128.14	18748.10
0.319	340.00	0.00	0.00	-23.80	27299.00	2.32	0.00	2.53	2.74	4.61	9151.69	16480.52
0.319	340.00	0.00	0.00	-23.80	30915.00	2.41	0.00	2.68	3.46	5.19	9213.08	16619.35
0.319	340.00	0.00	0.00	-23.80	35411.00	2.53	0.00	2.88	4.44	5.91	9293.63	16800.39
0.319	340.00	0.00	0.00	-23.80	39871.00	2.67	0.00	3.11	5.49	6.59	9392.14	17020.11
0.319	340.00	0.00	0.00	-23.80	44521.00	2.83	0.00	3.37	6.64	7.29	9509.10	17278.72
0.319	340.00	0.00	0.00	-23.80	71731.00	4.14	0.00	5.32	13.55	10.83	10560.41	19484.16
0.385	350.00	0.00	0.00	-23.80	23203.00	2.40	0.00	2.63	2.66	4.55	7462.88	14237.72
0.385	350.00	0.00	0.00	-23.80	29537.00	2.49	0.00	2.86	4.24	5.76	7500.56	14346.66
0.385	350.00	0.00	0.00	-23.80	33859.00	2.63	0.00	3.11	5.41	6.54	7570.94	14550.80
0.385	350.00	0.00	0.00	-23.80	38393.00	2.79	0.00	3.40	6.75	7.34	7648.12	14775.63
0.385	350.00	0.00	0.00	-23.80	42578.00	2.99	0.00	3.71	8.01	8.04	7740.44	15045.82
0.385	350.00	0.00	0.00	-23.80	68568.00	4.50	-4.64	5.93	15.02	11.57	10374.97	17691.84
0.418	175.00	0.00	0.00	-37.40	23203.00	2.59	0.00	2.70	1.49	3.43	10984.63	19022.88
0.418	175.00	0.00	0.00	-37.40	29537.00	2.79	0.00	2.96	2.31	4.30	11369.98	19416.15
0.418	175.00	0.00	0.00	-37.40	33859.00	3.04	0.00	3.25	2.89	4.84	11856.69	19903.34
0.418	175.00	0.00	0.00	-37.40	38393.00	3.31	0.00	3.57	3.51	5.38	12454.61	20482.95
0.418	175.00	0.00	0.00	-37.40	42578.00	3.62	0.00	3.92	4.05	5.83	13186.08	21169.57
0.418	175.00	0.00	0.00	-37.40	68568.00	5.90	0.00	6.35	5.73	7.54	23426.08	28633.94
0.421	14.00	5.30	23.40	-37.40	23203.00	2.64	0.00	2.71	0.47	1.92	10745.28	33996.01
0.421	14.00	5.30	23.40	-37.40	29537.00	2.87	0.00	2.98	0.72	2.41	11059.71	34734.53
0.421	14.00	5.30	23.40	-37.40	33859.00	3.14	0.00	3.27	0.90	2.72	11425.47	35606.47
0.421	14.00	5.30	23.40	-37.40	38393.00	3.44	0.00	3.60	1.10	3.02	11850.22	36636.39
0.421	14.00	5.30	23.40	-37.40	42578.00	3.77	0.00	3.96	1.27	3.28	12322.85	37822.09
0.421	14.00	5.30	23.40	-37.40	68568.00	6.15	0.00	6.41	2.02	4.42	17781.98	48239.54
0.426	28.00	5.30	23.40	-37.40	23203.00	2.64	0.00	2.71	0.47	1.92	10748.90	34004.46
0.426	28.00	5.30	23.40	-37.40	29537.00	2.87	0.00	2.99	0.72	2.41	11065.50	34748.22
0.426	28.00	5.30	23.40	-37.40	33859.00	3.14	0.00	3.28	0.90	2.71	11432.83	35624.14
0.426	28.00	5.30	23.40	-37.40	38393.00	3.44	0.00	3.61	1.10	3.02	11859.30	36658.73
0.426	28.00	5.30	23.40	-37.40	42578.00	3.77	0.00	3.96	1.27	3.28	12333.27	37848.73
0.426	28.00	5.30	23.40	-37.40	68568.00	6.16	0.00	6.42	2.01	4.41	17842.46	48308.33

0.427	1.00	0.00	0.00	-37.40	23203.00	2.64	0.00	2.72	0.94	2.75	10949.92	23941.63
0.427	1.00	0.00	0.00	-37.40	29537.00	2.87	0.00	2.99	1.45	3.45	11352.54	24532.21
0.427	1.00	0.00	0.00	-37.40	33859.00	3.13	0.00	3.28	1.80	3.89	11851.63	25233.44
0.427	1.00	0.00	0.00	-37.40	36393.00	3.43	0.00	3.61	2.17	4.33	12470.88	26071.15
0.427	1.00	0.00	0.00	-37.40	42578.00	3.76	0.00	3.97	2.48	4.70	13198.56	27033.82
0.427	1.00	0.00	0.00	-37.40	68568.00	6.14	0.00	6.44	3.57	6.22	21634.44	36287.86

	SECND	YLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	0.446	101.00	0.00	0.00	-24.00	23203.00	2.65	0.00	2.74	1.26	3.16	15647.72	20635.70
	0.446	101.00	0.00	0.00	-24.00	29537.00	2.89	0.00	3.02	1.89	3.90	16568.31	21475.13
	0.446	101.00	0.00	0.00	-24.00	33859.00	3.16	0.00	3.31	2.27	4.30	17708.94	22478.44
	0.446	101.00	0.00	0.00	-24.00	38393.00	3.47	0.00	3.65	2.60	4.66	19133.77	23793.96
	0.446	101.00	0.00	0.00	-24.00	42578.00	3.83	0.00	4.01	2.83	4.90	20757.57	25324.60
	0.446	101.00	0.00	0.00	-24.00	68568.00	6.34	0.00	6.52	3.01	5.42	34130.53	39550.78
	0.479	174.00	0.00	0.00	-24.00	23203.00	2.62	0.00	2.81	1.26	3.70	12148.56	20678.35
	0.479	174.00	0.00	0.00	-24.00	29537.00	2.84	0.00	3.12	1.89	4.58	12978.07	21466.02
	0.479	174.00	0.00	0.00	-24.00	33859.00	3.11	0.00	3.44	2.28	5.07	13998.74	22432.27
	0.479	174.00	0.00	0.00	-24.00	38393.00	3.41	0.00	3.80	2.64	5.51	15248.38	23644.72
	0.479	174.00	0.00	0.00	-24.00	42578.00	3.75	0.00	4.18	2.87	5.83	16739.14	25116.09
	0.479	174.00	0.00	0.00	-24.00	68568.00	6.26	0.00	6.69	3.09	6.57	29330.83	38989.11
*	0.482	16.00	100000.00	100000.00	-24.00	22881.00	2.65	0.00	2.73	1.23	3.12	15662.18	20648.62
*	0.482	16.00	100000.00	100000.00	-24.00	29146.00	2.87	0.00	3.00	1.85	3.85	16553.06	21443.68
*	0.482	16.00	100000.00	100000.00	-24.00	33415.00	3.15	0.00	3.30	2.21	4.25	17688.01	22459.48
*	0.482	16.00	100000.00	100000.00	-24.00	37892.00	3.45	0.00	3.62	2.56	4.61	19021.28	23689.20
*	0.482	16.00	100000.00	100000.00	-24.00	42033.00	3.80	0.00	3.99	2.78	4.85	20653.92	25225.48
*	0.482	16.00	100000.00	100000.00	-24.00	67813.00	6.31	0.00	6.49	2.97	5.39	33962.16	39358.74
	0.499	90.00	0.00	0.00	-22.00	22732.00	2.68	0.00	2.76	1.16	3.04	17378.54	21064.99
	0.499	90.00	0.00	0.00	-22.00	28962.00	2.92	0.00	3.04	1.74	3.74	18379.19	21954.05
	0.499	90.00	0.00	0.00	-22.00	33207.00	3.20	0.00	3.34	2.08	4.12	19585.91	23037.71
	0.499	90.00	0.00	0.00	-22.00	37655.00	3.52	0.00	3.67	2.38	4.46	21040.18	24391.50
	0.499	90.00	0.00	0.00	-22.00	41777.00	3.88	0.00	4.04	2.58	4.69	22725.56	25998.49
	0.499	90.00	0.00	0.00	-22.00	67458.00	6.38	0.00	6.55	2.83	5.27	35718.75	40066.61
	0.660	850.00	0.00	0.00	-20.60	21945.00	2.77	0.00	2.85	0.99	2.82	11424.05	22016.92
	0.660	850.00	0.00	0.00	-20.60	28001.00	3.06	0.00	3.18	1.53	3.53	11632.30	22613.43
	0.660	850.00	0.00	0.00	-20.60	32121.00	3.37	0.00	3.52	1.91	3.98	11848.19	23237.54
	0.660	850.00	0.00	0.00	-20.60	36422.00	3.70	0.00	3.89	2.31	4.42	12092.46	23951.22
	0.660	850.00	0.00	0.00	-20.60	40441.00	4.07	0.00	4.29	2.67	4.80	12364.59	24755.49
	0.660	850.00	0.00	0.00	-20.60	65609.00	6.56	0.00	6.99	4.55	6.74	15267.63	30741.22
	0.882	1175.00	0.00	0.00	-15.00	20404.00	2.90	0.00	2.98	1.15	2.16	9424.68	18994.66
	0.882	1175.00	0.00	0.00	-15.00	26122.00	3.26	0.00	3.37	1.71	2.66	9832.93	19956.38
	0.882	1175.00	0.00	0.00	-15.00	29990.00	3.62	0.00	3.75	2.04	2.92	10276.48	21018.48
	0.882	1175.00	0.00	0.00	-15.00	34004.00	4.02	0.00	4.17	2.34	3.16	10765.69	22208.98
	0.882	1175.00	0.00	0.00	-15.00	37825.00	4.44	0.00	4.61	2.57	3.34	11432.37	23575.57
	0.882	1175.00	0.00	0.00	-15.00	61985.00	7.27	0.00	7.48	2.94	3.68	19357.57	36124.24

1.017	713.00	0.00	0.00	-9.60	20404.00	3.01	0.00	3.02	0.22	0.82	24868.25	43845.30
1.017	713.00	0.00	0.00	-9.60	26122.00	3.42	0.00	3.43	0.29	0.99	26386.95	48390.59
1.017	713.00	0.00	0.00	-9.60	29990.00	3.81	0.00	3.83	0.32	1.08	27831.76	52877.53
1.017	713.00	0.00	0.00	-9.60	34004.00	4.23	0.00	4.25	0.34	1.16	29402.17	57930.92
1.017	713.00	0.00	0.00	-9.60	37825.00	4.68	0.00	4.70	0.35	1.22	31068.70	63490.69
1.017	713.00	0.00	0.00	-9.60	61985.00	7.54	0.00	7.57	0.36	1.49	41706.21	103518.24

SECNO	XLCH	ELTRD	ELLC	FLMIN	Q	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
1.288	1426.00	0.00	0.00	-9.60	20404.00	3.03	0.00	3.04	0.13	0.76	26714.69	56941.00
1.288	1426.00	0.00	0.00	-9.60	26122.00	3.45	0.00	3.47	0.17	0.92	28370.26	62900.55
1.288	1426.00	0.00	0.00	-9.60	29990.00	3.85	0.00	3.86	0.19	1.00	29929.71	68717.65
1.288	1426.00	0.00	0.00	-9.60	34004.00	4.27	0.00	4.29	0.20	1.08	31623.09	75252.48
1.288	1426.00	0.00	0.00	-9.60	37825.00	4.72	0.00	4.74	0.21	1.13	33416.97	82416.83
1.288	1426.00	0.00	0.00	-9.60	61985.00	7.58	0.00	7.61	0.21	1.39	46530.75	134285.34
1.498	1109.00	0.00	0.00	-9.60	18486.00	3.05	0.00	3.07	0.31	1.10	16906.51	33403.38
1.498	1109.00	0.00	0.00	-9.60	23780.00	3.47	0.00	3.50	0.40	1.32	18106.27	37387.60
1.498	1109.00	0.00	0.00	-9.60	27337.00	3.87	0.00	3.90	0.44	1.43	19226.22	41258.64
1.498	1109.00	0.00	0.00	-9.60	30996.00	4.29	0.00	4.33	0.46	1.53	20427.64	45560.54
1.498	1109.00	0.00	0.00	-9.60	34566.00	4.74	0.00	4.78	0.47	1.60	21722.53	50333.59
1.498	1109.00	0.00	0.00	-9.60	57473.00	7.60	0.00	7.66	0.46	1.94	30507.33	85035.23
1.898	2112.00	0.00	0.00	-9.60	17292.00	3.09	0.00	3.10	0.08	0.58	29951.63	60433.65
1.898	2112.00	0.00	0.00	-9.60	22322.00	3.53	0.00	3.54	0.11	0.70	32065.22	67628.20
1.898	2112.00	0.00	0.00	-9.60	25685.00	3.93	0.00	3.94	0.12	0.76	33999.77	74483.73
1.898	2112.00	0.00	0.00	-9.60	29122.00	4.36	0.00	4.37	0.13	0.81	36086.29	82160.15
1.898	2112.00	0.00	0.00	-9.60	32536.00	4.82	0.00	4.83	0.13	0.85	38278.91	90532.84
1.898	2112.00	0.00	0.00	-9.60	54662.00	7.69	0.00	7.70	0.13	1.06	52375.61	150944.77
2.208	1637.00	0.00	0.00	-9.60	16317.00	3.11	0.00	3.11	0.12	0.78	21036.01	47362.81
2.208	1637.00	0.00	0.00	-9.60	21132.00	3.55	0.00	3.56	0.16	0.95	22276.98	52069.62
2.208	1637.00	0.00	0.00	-9.60	24337.00	3.95	0.00	3.97	0.18	1.04	23433.73	56607.43
2.208	1637.00	0.00	0.00	-9.60	27594.00	4.38	0.00	4.40	0.20	1.12	24680.31	61656.38
2.208	1637.00	0.00	0.00	-9.60	30881.00	4.84	0.00	4.86	0.21	1.19	25989.99	67134.02
2.208	1637.00	0.00	0.00	-9.60	52367.00	7.70	0.00	7.74	0.24	1.53	36145.11	106263.97
2.498	1531.00	0.00	0.00	-9.60	15405.00	3.12	0.00	3.12	0.04	0.46	33624.23	79621.47
2.498	1531.00	0.00	0.00	-9.60	20019.00	3.57	0.00	3.57	0.05	0.56	35524.50	87212.16
2.498	1531.00	0.00	0.00	-9.60	23077.00	3.98	0.00	3.98	0.06	0.62	37243.46	94307.69
2.498	1531.00	0.00	0.00	-9.60	26163.00	4.41	0.00	4.42	0.07	0.67	39090.90	102169.95
2.498	1531.00	0.00	0.00	-9.60	29332.00	4.87	0.00	4.88	0.07	0.72	41027.78	110667.93
2.498	1531.00	0.00	0.00	-9.60	50224.00	7.75	0.00	7.76	0.09	0.95	53653.09	170462.72
2.988	2587.00	0.00	0.00	-9.60	12041.00	3.13	0.00	3.13	0.03	0.39	30736.83	67958.68
2.988	2587.00	0.00	0.00	-9.60	17938.00	3.58	0.00	3.59	0.06	0.55	32688.46	75296.56
2.988	2587.00	0.00	0.00	-9.60	20725.00	3.99	0.00	4.00	0.06	0.60	34441.24	82139.48
2.988	2587.00	0.00	0.00	-9.60	23663.00	4.43	0.00	4.44	0.07	0.65	36320.40	89735.85
2.988	2587.00	0.00	0.00	-9.60	26424.00	4.89	0.00	4.90	0.07	0.69	38287.67	97964.69
2.988	2587.00	0.00	0.00	-9.60	46985.00	7.77	0.00	7.78	0.09	0.93	51167.72	156250.78

3.417	2270.00	0.00	0.00	-9.60	12041.00	3.14	0.00	3.14	0.04	0.45	27053.85 59118.49
3.417	2270.00	0.00	0.00	-9.60	17938.00	3.60	0.00	3.60	0.07	0.62	28837.16 65664.41
3.417	2270.00	0.00	0.00	-9.60	20725.00	4.01	0.00	4.01	0.08	0.68	30433.82 71741.13
3.417	2270.00	0.00	0.00	-9.60	23663.00	4.45	0.00	4.46	0.09	0.74	32150.36 78489.41
3.417	2270.00	0.00	0.00	-9.60	26424.00	4.91	0.00	4.91	0.09	0.78	33954.22 85600.55
3.417	2270.00	0.00	0.00	-9.60	46985.00	7.79	0.00	7.81	0.12	1.05	45512.70137640.53

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SECNO	XLOC	ELTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
3.607	1003.00	0.00	0.00	-9.60	12041.00	3.14	0.00	3.15	0.20	0.91	13243.96	26612.43
3.607	1003.00	0.00	0.00	-9.60	17938.00	3.60	0.00	3.63	0.36	1.26	14235.38	29996.21
3.607	1003.00	0.00	0.00	-9.60	20725.00	4.01	0.00	4.04	0.39	1.37	15115.41	33129.15
3.607	1003.00	0.00	0.00	-9.60	23663.00	4.45	0.00	4.48	0.42	1.48	16059.41	36621.55
3.607	1003.00	0.00	0.00	-9.60	26424.00	4.91	0.00	4.94	0.43	1.55	17046.27	40414.73
3.607	1003.00	0.00	0.00	-9.60	46985.00	7.78	0.00	7.85	0.49	2.03	23246.91	67365.50
3.977	1954.00	0.00	0.00	-9.60	12041.00	3.19	0.00	3.21	0.36	1.07	11219.28	20003.61
3.977	1954.00	0.00	0.00	-9.60	17938.00	3.69	0.00	3.72	0.59	1.46	12291.77	23276.26
3.977	1954.00	0.00	0.00	-9.60	20725.00	4.10	0.00	4.14	0.63	1.57	13191.56	26169.02
3.977	1954.00	0.00	0.00	-9.60	23663.00	4.55	0.00	4.59	0.65	1.68	14151.34	29398.27
3.977	1954.00	0.00	0.00	-9.60	26424.00	5.00	0.00	5.05	0.65	1.75	15146.40	32898.56
3.977	1954.00	0.00	0.00	-9.60	46985.00	7.89	0.00	7.96	0.65	2.20	21447.26	58379.42
4.227	1320.00	0.00	0.00	-13.60	12041.00	3.25	0.00	3.37	2.01	2.78	4332.33	8493.43
4.227	1320.00	0.00	0.00	-13.60	17938.00	3.78	0.00	4.00	3.38	3.81	4713.40	9756.56
4.227	1320.00	0.00	0.00	-13.60	20725.00	4.19	0.00	4.45	3.67	4.13	5020.89	10820.44
4.227	1320.00	0.00	0.00	-14.20	23663.00	4.65	0.00	4.71	0.53	1.64	13024.92	32505.86
4.227	1320.00	0.00	0.00	-14.20	26424.00	5.12	0.00	5.17	0.56	1.75	13984.70	35411.07
4.227	1320.00	0.00	0.00	-14.20	46985.00	8.01	0.00	8.09	0.67	2.37	21838.37	57361.19
4.857	3326.00	0.00	0.00	-8.20	12041.00	3.51	0.00	3.53	0.22	1.18	10172.99	25693.11
4.857	3326.00	0.00	0.00	-14.20	17938.00	4.13	0.00	4.14	0.13	0.96	18956.84	49452.27
4.857	3326.00	0.00	0.00	-14.20	20725.00	4.60	0.00	4.61	0.15	1.05	20244.32	53710.07
4.857	3326.00	0.00	0.00	-14.20	23663.00	4.76	0.00	4.78	0.18	1.18	20693.34	55231.68
4.857	3326.00	0.00	0.00	-14.20	26424.00	5.23	0.00	5.25	0.20	1.26	21982.57	59708.75
4.857	3326.00	0.00	0.00	-14.20	46985.00	8.15	0.00	8.19	0.26	1.72	30218.89	91547.23
5.447	3115.00	0.00	0.00	-12.80	12041.00	3.60	0.00	3.96	3.18	4.85	2869.64	6755.08
5.447	3115.00	0.00	0.00	-12.80	17938.00	4.54	0.00	5.15	4.89	6.39	4198.34	8113.51
5.447	3115.00	0.00	0.00	-12.80	20725.00	5.04	0.00	5.72	5.33	6.87	5058.19	8977.14
5.447	3115.00	0.00	0.00	-12.80	23663.00	5.28	0.00	6.10	6.31	7.58	5498.49	9420.93
5.447	3115.00	0.00	0.00	-12.80	26424.00	5.75	0.00	6.62	6.49	7.90	6418.69	10375.96
5.447	3115.00	0.00	0.00	-12.80	46985.00	8.66	0.00	9.61	6.52	9.15	13463.74	18403.59
5.647	1056.00	0.00	0.00	-12.90	12041.00	4.06	0.00	4.27	2.06	3.72	3380.52	8384.63
5.647	1056.00	0.00	0.00	-12.90	17938.00	5.39	0.00	5.49	1.15	3.04	9378.57	16708.35
5.647	1056.00	0.00	0.00	-12.90	20725.00	5.99	0.00	6.09	1.11	3.10	10988.81	19672.42
5.647	1056.00	0.00	0.00	-12.90	23663.00	6.41	0.00	6.52	1.16	3.25	12166.70	21957.62
5.647	1056.00	0.00	0.00	-12.90	26424.00	6.94	0.00	7.04	1.12	3.28	13645.28	24997.27
5.647	1056.00	0.00	0.00	-12.90	46985.00	9.91	0.00	10.03	1.04	3.67	22430.13	45972.40

5.857	1050.00	0.00	0.00	-15.00	12041.00	4.27	0.00	4.55	2.77	4.38	4070.39	7229.40
5.857	1050.00	0.00	0.00	-15.00	17938.00	5.44	0.00	5.88	3.95	5.59	5297.73	9030.01
5.857	1050.00	0.00	0.00	-15.00	20725.00	6.01	0.00	6.50	4.27	6.01	6005.64	10033.93
5.857	1050.00	0.00	0.00	-15.00	23663.00	6.41	0.00	6.98	4.79	6.51	6723.85	10816.11
5.857	1050.00	0.00	0.00	-15.00	26424.00	6.91	0.00	7.53	4.95	6.80	7675.28	11876.57
5.857	1050.00	0.00	0.00	-15.00	46985.00	9.79	0.00	10.63	5.88	8.47	13308.82	19371.96

	SECND	XLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	6.398	750.00	0.00	0.00	-15.00	12041.00	4.58	0.00	4.83	4.20	5.44	5684.16	5877.97
	6.398	750.00	0.00	0.00	-15.00	17938.00	5.96	0.00	6.28	5.26	6.37	8377.10	7820.59
	6.398	750.00	0.00	0.00	-15.00	20725.00	6.63	0.00	6.95	5.33	6.55	9801.37	8980.60
	6.398	750.00	0.00	0.00	-15.00	23663.00	7.15	0.00	7.48	5.61	6.83	10944.21	9986.11
	6.398	750.00	0.00	0.00	-15.00	26424.00	7.71	0.00	8.05	5.60	6.93	12214.34	11170.34
	6.398	750.00	0.00	0.00	-15.00	46985.00	10.93	0.00	11.27	5.69	7.62	20120.88	19700.66
*	6.408	50.00	100000.00	100000.00	-15.00	12041.00	4.60	0.00	4.84	3.46	5.16	5875.77	6469.62
*	6.408	50.00	100000.00	100000.00	-15.00	17938.00	5.99	0.00	6.30	4.45	6.10	8604.04	8502.29
*	6.408	50.00	100000.00	100000.00	-15.00	20725.00	6.66	0.00	6.97	4.57	6.30	10031.67	9699.22
*	6.408	50.00	100000.00	100000.00	-15.00	23663.00	7.18	0.00	7.51	4.86	6.60	11175.13	10731.40
*	6.408	50.00	100000.00	100000.00	-15.00	26424.00	7.74	0.00	8.08	4.89	6.72	12449.52	11947.52
	6.408	50.00	100000.00	100000.00	-15.00	46985.00	10.98	0.00	11.32	5.12	7.48	20460.04	20763.09
	6.605	500.00	0.00	0.00	-15.00	12041.00	4.77	0.00	5.01	2.76	4.91	6156.12	7254.15
	6.605	500.00	0.00	0.00	-15.00	17938.00	6.19	0.00	6.51	3.49	5.97	8808.11	9599.61
	6.605	500.00	0.00	0.00	-15.00	20725.00	6.86	0.00	7.19	3.60	6.27	10155.86	10927.50
	6.605	500.00	0.00	0.00	-15.00	23663.00	7.39	0.00	7.75	3.84	6.64	11252.87	12078.85
	6.605	500.00	0.00	0.00	-15.00	26424.00	7.95	0.00	8.33	3.89	6.86	12454.82	13395.44
	6.605	500.00	0.00	0.00	-15.00	46985.00	11.18	0.00	11.62	4.27	8.19	20002.35	22741.37
	6.718	500.00	0.00	0.00	-12.00	12041.00	5.02	0.00	5.05	0.18	1.23	10390.37	28016.38
	6.718	500.00	0.00	0.00	-12.00	17938.00	6.53	0.00	6.57	0.26	1.60	12242.98	35150.00
	6.718	500.00	0.00	0.00	-12.00	20725.00	7.20	0.00	7.25	0.29	1.74	13084.01	38589.69
	6.718	500.00	0.00	0.00	-12.00	23663.00	7.76	0.00	7.81	0.33	1.90	13775.44	41506.97
	6.718	500.00	0.00	0.00	-12.00	26424.00	8.33	0.00	8.39	0.35	2.03	14488.89	44599.14
	6.718	500.00	0.00	0.00	-12.00	46985.00	11.58	0.00	11.70	0.54	2.90	18607.67	63969.67
	7.028	1584.00	0.00	0.00	-15.00	11590.00	5.06	0.00	5.10	0.45	1.58	7541.48	17333.68
	7.028	1584.00	0.00	0.00	-15.00	17569.00	6.57	0.00	6.63	0.57	2.00	9603.35	23267.40
	7.028	1584.00	0.00	0.00	-15.00	20142.00	7.25	0.00	7.32	0.59	2.13	11183.07	26249.85
	7.028	1584.00	0.00	0.00	-15.00	22987.00	7.81	0.00	7.89	0.63	2.29	12558.81	28856.50
	7.028	1584.00	0.00	0.00	-15.00	25720.00	8.39	0.00	8.48	0.66	2.42	14032.57	31669.20
	7.028	1584.00	0.00	0.00	-15.00	44356.00	11.67	0.00	11.81	0.77	3.11	23383.43	50388.95
	7.308	1350.00	0.00	0.00	-15.00	11590.00	5.16	0.00	5.21	1.39	1.90	7513.51	9841.43
	7.308	1350.00	0.00	0.00	-15.00	17569.00	6.68	0.00	6.75	1.19	2.13	10363.76	16127.54
	7.308	1350.00	0.00	0.00	-15.00	20142.00	7.36	0.00	7.43	1.08	2.19	11678.51	19352.40
	7.308	1350.00	0.00	0.00	-15.00	22967.00	7.93	0.00	8.01	1.07	2.30	12792.10	22222.57
	7.308	1350.00	0.00	0.00	-15.00	25720.00	8.51	0.00	8.59	1.03	2.37	13945.80	25318.44
	7.308	1350.00	0.00	0.00	-15.00	44356.00	11.82	0.00	11.93	0.92	2.83	21110.61	46304.62

7.478	800.00	0.00	0.00	-15.00	11590.00	5.23	0.00	5.25	0.26	1.22	9648.40	22662.20
7.478	800.00	0.00	0.00	-15.00	17569.00	6.76	0.00	6.80	0.33	1.55	11943.17	30359.19
7.478	800.00	0.00	0.00	-15.00	20142.00	7.44	0.00	7.48	0.35	1.65	13031.41	34150.54
7.478	800.00	0.00	0.00	-15.00	22987.00	8.01	0.00	8.06	0.38	1.78	13956.89	37456.66
7.478	800.00	0.00	0.00	-15.00	25720.00	8.59	0.00	8.64	0.39	1.89	14916.25	40951.03
7.478	800.00	0.00	0.00	-15.00	44356.00	11.89	0.00	11.99	0.49	2.49	20947.38	63594.52

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
	7.958	700.00	0.00	0.00	-15.00	11590.00	5.22	0.00	5.31	0.61	2.38	4887.13	14801.87
	7.958	700.00	0.00	0.00	-15.00	17569.00	6.75	0.00	6.90	1.29	3.14	5870.69	15439.59
	7.958	700.00	0.00	0.00	-15.00	20142.00	7.43	0.00	7.60	1.65	3.34	6443.29	15686.35
	7.958	700.00	0.00	0.00	-15.00	22987.00	8.00	0.00	8.19	2.01	3.57	6982.47	16200.86
	7.958	700.00	0.00	0.00	-15.00	25720.00	8.58	0.00	8.79	2.30	3.72	7586.10	16970.71
	7.958	700.00	0.00	0.00	-15.00	44356.00	11.93	0.00	12.12	3.05	3.64	14873.51	25393.97
	7.959	2.00	12.10	17.50	-15.00	11590.00	5.22	0.00	5.32	1.21	2.56	4531.57	10520.70
	7.959	2.00	12.10	17.50	-15.00	17569.00	6.73	0.00	6.92	2.05	3.44	5106.17	12257.57
	7.959	2.00	12.10	17.50	-15.00	20142.00	7.40	0.00	7.62	2.38	3.76	5362.79	13065.04
	7.959	2.00	12.10	17.50	-15.00	22987.00	7.96	0.00	8.23	2.80	4.12	5581.31	13745.27
	7.959	2.00	12.10	17.50	-15.00	25720.00	8.53	0.00	8.83	3.17	4.43	5805.13	14448.71
*	7.959	2.00	12.10	17.50	-15.00	44356.00	11.66	0.00	12.39	11.98	6.87	6456.85	12812.78
	7.960	12.00	12.10	17.50	-15.00	11590.00	5.22	0.00	5.32	1.22	2.56	4529.46	10514.62
	7.960	12.00	12.10	17.50	-15.00	17569.00	6.73	0.00	6.92	2.06	3.44	5103.96	12250.61
	7.960	12.00	12.10	17.50	-15.00	20142.00	7.41	0.00	7.63	2.38	3.76	5363.74	13067.96
	7.960	12.00	12.10	17.50	-15.00	22987.00	7.97	0.00	8.23	2.80	4.12	5582.46	13748.84
	7.960	12.00	12.10	17.50	-15.00	25720.00	8.53	0.00	8.84	3.17	4.43	5806.44	14452.83
*	7.960	12.00	12.10	17.50	-15.00	44356.00	11.67	0.00	12.41	11.98	6.87	6457.69	12814.77
	7.961	2.00	0.00	0.00	-15.00	11590.00	5.19	0.00	5.35	1.45	3.77	4824.79	9634.78
	7.961	2.00	0.00	0.00	-15.00	17569.00	6.72	0.00	6.93	3.22	4.45	5796.74	9791.29
	7.961	2.00	0.00	0.00	-15.00	20142.00	7.43	0.00	7.63	4.10	4.40	6365.34	9951.68
	7.961	2.00	0.00	0.00	-15.00	22987.00	8.04	0.00	8.25	4.83	4.44	6944.13	10459.51
	7.961	2.00	0.00	0.00	-15.00	25720.00	8.65	0.00	8.87	5.25	4.43	7585.85	11220.12
	7.961	2.00	0.00	0.00	-15.00	44356.00	12.33	0.00	12.56	3.95	4.68	14845.38	22327.94
	8.008	528.00	0.00	0.00	-15.00	11590.00	5.37	0.00	5.43	1.24	2.29	7569.80	10410.33
	8.008	528.00	0.00	0.00	-15.00	17569.00	6.95	0.00	7.05	1.41	2.83	9986.04	14783.22
	8.008	528.00	0.00	0.00	-15.00	20142.00	7.65	0.00	7.75	1.41	2.99	11131.82	16944.68
	8.008	528.00	0.00	0.00	-15.00	22987.00	8.25	0.00	8.37	1.47	3.18	12188.26	18972.51
	8.008	528.00	0.00	0.00	-15.00	25720.00	8.86	0.00	8.99	1.48	3.33	13298.53	21134.02
	8.008	528.00	0.00	0.00	-15.00	44356.00	12.49	0.00	12.66	1.44	4.05	21389.93	36917.22
	8.009	5.00	11.90	17.20	-15.00	11590.00	5.24	0.00	5.56	2.50	4.84	4584.08	7328.91
	8.009	5.00	11.90	17.20	-15.00	17569.00	6.71	0.00	7.29	4.11	6.55	5194.17	8670.01
	8.009	5.00	11.90	17.20	-15.00	20142.00	7.35	0.00	8.04	4.70	7.18	5468.78	9290.41
	8.009	5.00	11.90	17.20	-15.00	22987.00	7.89	0.00	8.73	5.47	7.89	5706.85	9832.97
	8.009	5.00	11.90	17.20	-15.00	25720.00	8.44	0.00	9.41	6.12	8.50	5950.42	10396.26
*	8.009	5.00	11.90	17.20	-15.00	44356.00	11.43	0.00	13.72	22.50	12.99	6809.48	9351.48

	8.011	12.00	11.90	17.20	-15.00	11590.00	5.25	0.00	5.56	2.50	4.84	4584.98	7330.63
	8.011	12.00	11.90	17.20	-15.00	17569.00	6.72	0.00	7.30	4.10	6.55	5195.53	8673.06
	8.011	12.00	11.90	17.20	-15.00	20142.00	7.36	0.00	8.05	4.70	7.18	5470.30	9293.86
	8.011	12.00	11.90	17.20	-15.00	22987.00	7.90	0.00	8.74	5.46	7.88	5708.54	9836.85
	8.011	12.00	11.90	17.20	-15.00	25720.00	8.45	0.00	9.42	6.12	8.50	5952.20	10400.43
*	8.011	12.00	11.90	17.20	-15.00	44356.00	11.46	0.00	13.75	22.47	12.98	6811.05	9356.84

	SECNO	XLCH	ELTRD	ELLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
	8.012	5.00	0.00	0.00	-15.00	11590.00	5.30	0.00	5.57	2.20	4.65	4733.09	7811.95
	8.012	5.00	0.00	0.00	-15.00	17569.00	6.83	0.00	7.32	3.66	6.22	5378.90	9185.56
	8.012	5.00	0.00	0.00	-15.00	20142.00	7.50	0.00	8.09	4.24	6.76	5674.47	9781.76
	8.012	5.00	0.00	0.00	-15.00	22987.00	8.09	0.00	8.78	4.87	7.39	5936.34	10415.94
	8.012	5.00	0.00	0.00	-15.00	25720.00	8.68	0.00	9.47	5.37	7.92	6206.67	11096.20
	8.012	5.00	0.00	0.00	-15.00	44356.00	12.85	0.00	14.08	6.31	10.06	11458.88	17659.69
	8.018	30.00	0.00	0.00	-15.00	11590.00	5.31	0.00	5.58	2.10	4.58	4775.30	7993.93
	8.018	30.00	0.00	0.00	-15.00	17569.00	6.86	0.00	7.34	3.50	6.13	5427.90	9396.81
	8.018	30.00	0.00	0.00	-15.00	20142.00	7.54	0.00	8.10	4.06	6.66	5725.57	9999.78
	8.018	30.00	0.00	0.00	-15.00	22987.00	8.12	0.00	8.80	4.65	7.28	5995.24	10663.01
	8.018	30.00	0.00	0.00	-15.00	25720.00	8.72	0.00	9.50	5.13	7.81	6268.71	11356.95
	8.018	30.00	0.00	0.00	-15.00	44356.00	12.91	0.00	14.10	6.05	9.92	11637.15	18039.23
	8.020	15.00	10.50	16.10	-15.00	11590.00	5.30	0.00	5.61	2.31	4.81	4563.63	7620.93
	8.020	15.00	10.50	16.10	-15.00	17569.00	6.82	0.00	7.38	3.84	6.45	5202.57	8961.81
	8.020	15.00	10.50	16.10	-15.00	20142.00	7.49	0.00	8.16	4.41	7.03	5490.43	9592.06
	8.020	15.00	10.50	16.10	-15.00	22987.00	8.08	0.00	8.87	5.12	7.69	5742.95	10157.75
	8.020	15.00	10.50	16.10	-15.00	25720.00	8.70	0.00	9.53	8.08	8.03	5993.64	9047.64
*	8.020	15.00	10.50	16.10	-15.00	44356.00	12.92	0.00	14.13	20.73	10.14	9006.47	9742.92
	8.022	12.00	10.50	16.10	-15.00	11590.00	5.30	0.00	5.61	2.31	4.81	4564.72	7623.14
	8.022	12.00	10.50	16.10	-15.00	17569.00	6.83	0.00	7.39	3.84	6.45	5204.45	8965.89
	8.022	12.00	10.50	16.10	-15.00	20142.00	7.50	0.00	8.16	4.40	7.03	5492.63	9596.94
	8.022	12.00	10.50	16.10	-15.00	22987.00	8.08	0.00	8.87	5.12	7.68	5745.51	10163.55
	8.022	12.00	10.50	16.10	-15.00	25720.00	8.71	0.00	9.54	8.09	8.02	5996.64	9044.59
*	8.022	12.00	10.50	16.10	-15.00	44356.00	12.95	0.00	14.15	20.61	10.12	9045.72	9770.51
	8.025	11.00	0.00	0.00	-15.00	11590.00	5.67	0.00	5.70	0.45	1.38	10565.31	17201.72
	8.025	11.00	0.00	0.00	-15.00	17569.00	7.51	0.00	7.54	0.46	1.65	14302.21	25860.93
	8.025	11.00	0.00	0.00	-15.00	20142.00	8.31	0.00	8.35	0.45	1.72	16094.89	30175.24
	8.025	11.00	0.00	0.00	-15.00	22987.00	9.05	0.00	9.10	0.44	1.81	17841.78	34488.75
	8.025	11.00	0.00	0.00	-15.00	25720.00	9.73	0.00	9.78	0.44	1.89	19508.93	38743.61
	8.025	11.00	0.00	0.00	-15.00	44356.00	14.44	0.00	14.50	0.35	2.16	32848.63	74704.30
	8.269	15.00	0.00	0.00	-15.00	11590.00	5.67	0.00	5.70	0.45	1.38	10568.98	17209.97
	8.269	15.00	0.00	0.00	-15.00	17569.00	7.51	0.00	7.54	0.46	1.65	14308.19	25875.17
	8.269	15.00	0.00	0.00	-15.00	20142.00	8.31	0.00	8.35	0.45	1.72	16101.74	30191.87
	8.269	15.00	0.00	0.00	-15.00	22987.00	9.05	0.00	9.10	0.44	1.81	17849.82	34509.07
	8.269	15.00	0.00	0.00	-15.00	25720.00	9.73	0.00	9.78	0.44	1.88	19522.12	38777.61
	8.269	15.00	0.00	0.00	-15.00	44356.00	14.44	0.00	14.50	0.35	2.16	32869.85	74762.34

8.379	581.00	0.00	0.00	-15.00	11590.00	5.65	0.00	5.75	0.53	2.72	8155.56	15974.58
8.379	581.00	0.00	0.00	-15.00	17569.00	7.47	0.00	7.61	0.72	3.42	11052.08	20660.02
8.379	581.00	0.00	0.00	-15.00	20142.00	8.26	0.00	8.42	0.77	3.62	12471.85	22991.59
8.379	581.00	0.00	0.00	-15.00	22987.00	9.00	0.00	9.17	0.82	3.85	13886.15	25311.77
8.379	581.00	0.00	0.00	-15.00	25720.00	9.67	0.00	9.86	0.87	4.05	15274.79	27582.32
8.379	581.00	0.00	0.00	-15.00	44356.00	14.37	0.00	14.57	0.86	4.62	27640.61	47912.09

SECNO	XLOH	ELTRD	ELLL	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
8.578	581.00	0.00	0.00	-15.00	11590.00	5.74	0.00	5.78	0.43	1.56	7510.94	17626.55
8.578	581.00	0.00	0.00	-15.00	17569.00	7.60	0.00	7.65	0.49	1.91	9494.42	25036.43
8.578	581.00	0.00	0.00	-15.00	20142.00	8.40	0.00	8.46	0.50	2.02	10421.48	28599.00
8.578	581.00	0.00	0.00	-15.00	22987.00	9.15	0.00	9.22	0.51	2.15	11336.76	32099.05
8.578	581.00	0.00	0.00	-15.00	25720.00	9.83	0.00	9.91	0.53	2.26	12223.53	35466.93
8.578	581.00	0.00	0.00	-15.00	44356.00	14.50	0.00	14.61	0.49	2.72	20099.46	63158.33
8.777	1050.00	0.00	0.00	-15.00	11590.00	5.80	0.00	5.82	0.30	1.24	9510.78	21073.84
8.777	1050.00	0.00	0.00	-15.00	17569.00	7.66	0.00	7.70	0.33	1.50	12322.92	30769.75
8.777	1050.00	0.00	0.00	-15.00	20142.00	8.47	0.00	8.51	0.32	1.57	13596.57	35444.94
8.777	1050.00	0.00	0.00	-15.00	22987.00	9.22	0.00	9.26	0.33	1.67	14822.21	40052.90
8.777	1050.00	0.00	0.00	-15.00	25720.00	9.91	0.00	9.95	0.33	1.75	15988.13	44519.72
8.777	1050.00	0.00	0.00	-15.00	44356.00	14.60	0.00	14.66	0.29	2.04	30823.29	62416.71
8.976	1052.00	0.00	0.00	-15.00	11471.00	5.79	0.00	5.88	0.55	2.69	7256.22	15499.61
8.976	1052.00	0.00	0.00	-15.00	17161.00	7.63	0.00	7.78	0.78	3.44	10194.52	19469.00
8.976	1052.00	0.00	0.00	-15.00	19678.00	8.43	0.00	8.60	0.84	3.68	11592.08	21472.13
8.976	1052.00	0.00	0.00	-15.00	22492.00	9.17	0.00	9.36	0.92	3.96	12956.30	23469.99
8.976	1052.00	0.00	0.00	-15.00	25210.00	9.85	0.00	10.06	0.98	4.19	14263.74	25413.35
8.976	1052.00	0.00	0.00	-15.00	43888.00	14.52	0.00	14.78	1.05	5.00	27757.23	42769.56
9.101	659.00	0.00	0.00	-15.00	11471.00	5.89	0.00	5.92	0.34	1.46	8007.00	19626.75
9.101	659.00	0.00	0.00	-15.00	17161.00	7.78	0.00	7.83	0.39	1.78	10102.76	27391.84
9.101	659.00	0.00	0.00	-15.00	19678.00	8.59	0.00	8.65	0.40	1.89	11050.19	31063.14
9.101	659.00	0.00	0.00	-15.00	22492.00	9.35	0.00	9.42	0.42	2.03	11979.34	34675.41
9.101	659.00	0.00	0.00	-15.00	25210.00	10.05	0.00	10.12	0.44	2.14	12866.37	38130.55
9.101	659.00	0.00	0.00	-15.00	43888.00	14.73	0.00	14.83	0.45	2.67	20223.75	65405.85
9.366	1400.00	0.00	0.00	-15.00	11471.00	5.91	0.00	5.97	0.30	2.09	9105.11	21065.90
9.366	1400.00	0.00	0.00	-15.00	17161.00	7.81	0.00	7.90	0.42	2.65	11974.82	26617.29
9.366	1400.00	0.00	0.00	-15.00	19678.00	8.62	0.00	8.72	0.45	2.85	13283.35	29257.59
9.366	1400.00	0.00	0.00	-15.00	22492.00	9.38	0.00	9.50	0.50	3.07	14540.10	31866.65
9.366	1400.00	0.00	0.00	-15.00	25210.00	10.07	0.00	10.21	0.54	3.26	15716.63	34367.52
9.366	1400.00	0.00	0.00	-15.00	43888.00	14.75	0.00	14.93	0.63	4.03	28001.15	55368.50
9.586	1161.00	0.00	0.00	-15.00	11423.00	5.94	0.00	6.02	0.45	2.54	8044.30	17108.40
9.586	1161.00	0.00	0.00	-15.00	16998.00	7.85	0.00	7.98	0.63	3.24	10733.11	21417.52
9.586	1161.00	0.00	0.00	-15.00	19492.00	8.66	0.00	8.81	0.69	3.49	11972.47	23497.49
9.586	1161.00	0.00	0.00	-15.00	22294.00	9.42	0.00	9.59	0.76	3.76	13192.04	25574.27
9.586	1161.00	0.00	0.00	-15.00	25008.00	10.12	0.00	10.31	0.82	4.00	14367.82	27580.23
9.586	1161.00	0.00	0.00	-15.00	43704.00	14.80	0.00	15.06	0.99	5.02	24180.13	44000.26

9.673	460.00	0.00	0.00	-15.00	11423.00	5.96	0.00	6.05	0.48	2.52	6628.05	16441.02
9.673	460.00	0.00	0.00	-15.00	16998.00	7.88	0.00	8.01	0.73	3.24	7860.14	19928.52
9.673	460.00	0.00	0.00	-15.00	19492.00	8.69	0.00	8.85	0.82	3.51	8401.44	21541.68
9.673	460.00	0.00	0.00	-15.00	22294.00	9.46	0.00	9.64	0.93	3.80	8924.16	23120.21
9.673	460.00	0.00	0.00	-15.00	25008.00	10.15	0.00	10.36	1.03	4.06	9581.07	24642.96
9.673	460.00	0.00	0.00	-15.00	43704.00	14.86	0.00	15.11	1.09	4.83	22708.66	41799.50

	SECNO	XLCH	FLTRD	FLLC	ELMIN	Q	CWSEL	CRI*S	EG	10K*S	VCH	AREA	.01K
*	9.676	16.00	100000.00	100000.00	-15.00	11423.00	5.98	0.00	6.07	0.48	2.51	6643.86	16484.03
*	9.676	16.00	100000.00	100000.00	-15.00	16998.00	7.90	0.00	8.03	0.72	3.24	7876.82	19977.51
*	9.676	16.00	100000.00	100000.00	-15.00	19492.00	8.72	0.00	8.88	0.81	3.50	8424.57	21611.63
*	9.676	16.00	100000.00	100000.00	-15.00	22294.00	9.49	0.00	9.67	0.92	3.79	8950.48	23190.93
*	9.676	16.00	100000.00	100000.00	-15.00	25008.00	10.18	0.00	10.39	1.02	4.05	9616.67	24715.88
*	9.676	16.00	100000.00	100000.00	-15.00	43704.00	14.91	0.00	15.15	1.08	4.80	23002.01	42071.11
	9.685	47.00	0.00	0.00	-15.00	11423.00	6.00	0.00	6.07	0.44	2.41	7085.89	17191.21
	9.685	47.00	0.00	0.00	-15.00	16998.00	7.92	0.00	8.04	0.67	3.10	8429.49	20835.01
	9.685	47.00	0.00	0.00	-15.00	19492.00	8.75	0.00	8.88	0.75	3.35	9030.37	22566.20
	9.685	47.00	0.00	0.00	-15.00	22294.00	9.52	0.00	9.68	0.85	3.63	9587.15	24222.59
	9.685	47.00	0.00	0.00	-15.00	25008.00	10.22	0.00	10.40	0.94	3.89	10100.35	25792.01
	9.685	47.00	0.00	0.00	-15.00	43704.00	15.05	0.00	15.19	3.72	3.43	14757.00	22671.12
*	9.704	102.00	100000.00	100000.00	-15.00	11423.00	6.02	0.00	6.09	0.44	2.41	7103.76	17237.47
*	9.704	102.00	100000.00	100000.00	-15.00	16998.00	7.94	0.00	8.06	0.66	3.10	8450.58	20894.76
*	9.704	102.00	100000.00	100000.00	-15.00	19492.00	8.78	0.00	8.91	0.74	3.34	9051.97	22629.55
*	9.704	102.00	100000.00	100000.00	-15.00	22294.00	9.55	0.00	9.71	0.84	3.63	9609.00	24288.59
*	9.704	102.00	100000.00	100000.00	-15.00	25008.00	10.25	0.00	10.43	0.94	3.88	10122.43	25860.44
*	9.704	102.00	100000.00	100000.00	-15.00	43704.00	15.10	0.00	15.24	3.76	3.34	14926.93	22551.06
	9.712	39.00	0.00	0.00	-15.00	11423.00	6.01	0.00	6.10	0.48	2.51	6666.45	16545.57
	9.712	39.00	0.00	0.00	-15.00	16998.00	7.93	0.00	8.07	0.72	3.23	7906.48	20064.75
	9.712	39.00	0.00	0.00	-15.00	19492.00	8.77	0.00	8.92	0.80	3.48	8464.11	21731.43
	9.712	39.00	0.00	0.00	-15.00	22294.00	9.54	0.00	9.72	0.91	3.78	8982.85	23325.19
	9.712	39.00	0.00	0.00	-15.00	25008.00	10.24	0.00	10.44	1.01	4.04	9506.73	24826.07
	9.712	39.00	0.00	0.00	-15.00	43704.00	15.12	0.00	15.25	1.49	3.65	23590.84	35764.31
*	9.718	32.00	100000.00	100000.00	-15.00	11423.00	6.03	0.00	6.12	0.48	2.50	6676.32	16572.50
*	9.718	32.00	100000.00	100000.00	-15.00	16998.00	7.95	0.00	8.09	0.72	3.22	7914.94	20089.68
*	9.718	32.00	100000.00	100000.00	-15.00	19492.00	8.80	0.00	8.95	0.80	3.48	8478.74	21775.82
*	9.718	32.00	100000.00	100000.00	-15.00	22294.00	9.57	0.00	9.75	0.91	3.77	8996.74	23368.42
*	9.718	32.00	100000.00	100000.00	-15.00	25008.00	10.27	0.00	10.47	1.01	4.03	9531.96	24880.57
*	9.718	32.00	100000.00	100000.00	-15.00	43704.00	15.17	0.00	15.30	1.46	3.62	23842.86	36111.96
	9.721	14.00	0.00	0.00	-15.00	11423.00	6.04	0.00	6.12	0.60	2.37	7032.23	14793.61
	9.721	14.00	0.00	0.00	-15.00	16998.00	7.97	0.00	8.09	0.90	3.06	8373.25	17874.76
	9.721	14.00	0.00	0.00	-15.00	19492.00	8.82	0.00	8.96	1.01	3.31	8992.25	19349.75
	9.721	14.00	0.00	0.00	-15.00	22294.00	9.59	0.00	9.75	1.15	3.59	9566.53	20745.23
	9.721	14.00	0.00	0.00	-15.00	25008.00	10.29	0.00	10.48	1.28	3.85	10105.87	22071.14
	9.721	14.00	0.00	0.00	-15.00	43704.00	15.10	0.00	15.37	1.59	4.80	19597.44	34709.09

9.840	633.00	0.00	0.00	-15.00	11423.00	6.08	0.00	6.16	0.61	2.40	7363.11	14583.03
9.840	633.00	0.00	0.00	-15.00	16998.00	8.02	0.00	8.16	0.86	3.06	9724.82	18312.88
9.840	633.00	0.00	0.00	-15.00	19492.00	8.88	0.00	9.03	0.94	3.30	10877.87	20156.92
9.840	633.00	0.00	0.00	-15.00	22294.00	9.66	0.00	9.83	1.03	3.56	11985.73	21925.95
9.840	633.00	0.00	0.00	-15.00	25008.00	10.37	0.00	10.57	1.12	3.80	13050.64	23620.96
9.840	633.00	0.00	0.00	-15.00	43704.00	15.21	0.00	15.48	1.30	4.73	26385.77	38265.01

SECNO	XLOB	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
10.200	1900.00	0.00	0.00	-15.00	11423.00	6.22	0.00	6.28	0.54	1.99	7404.54	15497.87
10.200	1900.00	0.00	0.00	-15.00	16998.00	8.22	0.00	8.30	0.67	2.44	10253.63	20697.75
10.200	1900.00	0.00	0.00	-15.00	19492.00	9.10	0.00	9.19	0.70	2.58	11678.59	23326.98
10.200	1900.00	0.00	0.00	-15.00	22294.00	9.90	0.00	10.01	0.74	2.75	13025.03	25918.41
10.200	1900.00	0.00	0.00	-15.00	25008.00	10.64	0.00	10.75	0.77	2.89	14350.38	28441.75
10.200	1900.00	0.00	0.00	-15.00	43704.00	15.54	0.00	15.67	0.76	3.39	27033.69	50034.46
10.490	1531.00	0.00	0.00	-15.00	11423.00	6.32	0.00	6.35	0.40	1.83	10196.12	18092.13
10.490	1531.00	0.00	0.00	-15.00	16998.00	8.35	0.00	8.40	0.53	2.28	12729.56	23339.62
10.490	1531.00	0.00	0.00	-15.00	19492.00	9.23	0.00	9.30	0.56	2.43	13900.79	25961.99
10.490	1531.00	0.00	0.00	-15.00	22294.00	10.05	0.00	10.12	0.61	2.61	15052.76	28521.20
10.490	1531.00	0.00	0.00	-15.00	25008.00	10.79	0.00	10.87	0.65	2.77	16192.24	30983.81
10.490	1531.00	0.00	0.00	-15.00	43704.00	15.69	0.00	15.80	0.74	3.44	26287.50	50959.06
10.670	950.00	0.00	0.00	-15.00	11423.00	6.32	0.00	6.42	0.65	2.62	6340.42	14122.67
10.670	950.00	0.00	0.00	-15.00	16998.00	8.35	0.00	8.51	0.92	3.34	8232.93	17722.43
10.670	950.00	0.00	0.00	-15.00	19492.00	9.23	0.00	9.41	1.00	3.60	9187.38	19463.34
10.670	950.00	0.00	0.00	-15.00	22294.00	10.04	0.00	10.24	1.11	3.88	10170.62	21173.04
10.670	950.00	0.00	0.00	-15.00	25008.00	10.78	0.00	11.01	1.20	4.13	11157.64	22831.58
10.670	950.00	0.00	0.00	-15.00	43704.00	15.66	0.00	15.97	1.42	5.15	20323.16	36670.88
10.890	1160.00	0.00	0.00	-17.60	11423.00	6.39	0.00	6.50	0.64	2.67	5397.16	14227.16
10.890	1160.00	0.00	0.00	-17.60	16998.00	8.45	0.00	8.62	0.92	3.44	7404.15	17680.89
10.890	1160.00	0.00	0.00	-17.60	19492.00	9.33	0.00	9.53	1.01	3.69	8598.61	19422.35
10.890	1160.00	0.00	0.00	-17.60	22294.00	10.16	0.00	10.38	1.11	3.97	9925.96	21196.06
10.890	1160.00	0.00	0.00	-17.60	25008.00	10.91	0.00	11.15	1.18	4.20	11362.37	23020.75
10.890	1160.00	0.00	0.00	-17.60	43704.00	15.86	0.00	16.13	1.24	4.91	24527.14	39279.16
11.240	1850.00	0.00	0.00	-15.00	11423.00	6.56	0.00	6.59	0.32	1.45	8901.85	20135.14
11.240	1850.00	0.00	0.00	-15.00	16998.00	8.69	0.00	8.74	0.42	1.77	11626.60	26131.20
11.240	1850.00	0.00	0.00	-15.00	19492.00	9.60	0.00	9.66	0.44	1.88	12864.21	29468.87
11.240	1850.00	0.00	0.00	-15.00	22294.00	10.45	0.00	10.51	0.46	2.01	14045.73	32757.87
11.240	1850.00	0.00	0.00	-15.00	25008.00	11.23	0.00	11.29	0.49	2.12	15130.23	35904.43
11.240	1850.00	0.00	0.00	-15.00	43704.00	16.16	0.00	16.28	0.53	2.66	23558.20	60150.85
11.460	1162.00	0.00	0.00	-15.00	11423.00	6.56	0.00	6.66	0.67	2.64	5436.88	13961.12
11.460	1162.00	0.00	0.00	-15.00	16998.00	8.68	0.00	8.84	0.92	3.34	7543.27	17755.56
11.460	1162.00	0.00	0.00	-15.00	19492.00	9.59	0.00	9.77	0.98	3.57	8600.45	19645.53
11.460	1162.00	0.00	0.00	-15.00	22294.00	10.44	0.00	10.64	1.07	3.82	9636.15	21548.42
11.460	1162.00	0.00	0.00	-15.00	25008.00	11.20	0.00	11.42	1.14	4.05	10608.48	23390.24
11.460	1162.00	0.00	0.00	-15.00	43704.00	16.14	0.00	16.44	1.33	5.01	17669.59	37904.96

11.726	1400.00	0.00	0.00	-15.00	11423.00	6.69	0.00	6.75	0.49	2.20	8484.33 16386.77
11.726	1400.00	0.00	0.00	-15.00	16998.00	8.87	0.00	8.96	0.66	2.74	11158.57 20884.74
11.726	1400.00	0.00	0.00	-15.00	19492.00	9.79	0.00	9.89	0.72	2.93	12335.89 23022.88
11.726	1400.00	0.00	0.00	-15.00	22294.00	10.66	0.00	10.77	0.78	3.14	13465.80 25214.73
11.726	1400.00	0.00	0.00	-15.00	25008.00	11.44	0.00	11.57	0.84	3.34	14521.12 27350.91
11.726	1400.00	0.00	0.00	-15.00	43704.00	16.42	0.00	16.61	0.99	4.19	23606.53 44016.23

SECNO	XLOC	FLTRD	FLLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
12.146	2218.00	0.00	0.00	-16.90	11423.00	6.78	0.00	6.88	0.64	2.63	5327.27	14270.37
12.146	2218.00	0.00	0.00	-16.90	16998.00	8.98	0.00	9.15	0.89	3.34	7241.01	18056.86
12.146	2218.00	0.00	0.00	-16.90	19492.00	9.91	0.00	10.10	0.96	3.60	8113.57	19853.96
12.146	2219.00	0.00	0.00	-16.90	22294.00	10.79	0.00	11.00	1.06	3.88	8970.36	21649.80
12.146	2219.00	0.00	0.00	-16.90	25008.00	11.57	0.00	11.81	1.15	4.13	9783.45	23362.03
12.146	2218.00	0.00	0.00	-16.90	43704.00	16.56	0.00	16.91	1.46	5.32	15539.68	36227.16
12.606	2429.00	0.00	0.00	-15.00	10118.00	6.95	0.00	7.01	0.43	2.05	6301.01	15418.68
12.606	2429.00	0.00	0.00	-15.00	15475.00	9.24	0.00	9.34	0.65	2.73	7477.81	19164.37
12.606	2429.00	0.00	0.00	-15.00	18017.00	10.19	0.00	10.31	0.74	3.01	8208.27	20954.57
12.606	2429.00	0.00	0.00	-15.00	20906.00	11.09	0.00	11.24	0.84	3.31	9024.89	22770.43
12.606	2429.00	0.00	0.00	-15.00	24021.00	11.90	0.00	12.08	0.96	3.63	9856.43	24507.21
12.606	2429.00	0.00	0.00	-15.00	44108.00	16.96	0.00	17.27	1.36	4.98	16650.10	37878.84
12.966	1901.00	0.00	0.00	-15.00	10118.00	7.02	0.00	7.11	0.50	2.34	4727.39	14359.55
12.966	1901.00	0.00	0.00	-15.00	15475.00	9.33	0.00	9.48	0.75	3.12	5849.90	17850.72
12.966	1901.00	0.00	0.00	-15.00	18017.00	10.30	0.00	10.48	0.86	3.44	6452.04	19465.28
12.966	1901.00	0.00	0.00	-15.00	20906.00	11.21	0.00	11.43	0.96	3.79	7112.90	21097.13
12.966	1901.00	0.00	0.00	-15.00	24021.00	12.04	0.00	12.29	1.12	4.15	7789.31	22660.81
12.966	1901.00	0.00	0.00	-15.00	44108.00	17.14	0.00	17.57	1.61	5.69	13948.72	34747.27
13.316	1848.00	0.00	0.00	-16.90	10118.00	7.12	0.00	7.20	0.52	2.31	4390.22	14019.28
13.316	1848.00	0.00	0.00	-16.90	15475.00	9.48	0.00	9.62	0.78	3.07	5575.37	17538.16
13.316	1848.00	0.00	0.00	-16.90	18017.00	10.46	0.00	10.64	0.88	3.38	6173.20	19189.67
13.316	1848.00	0.00	0.00	-16.90	20906.00	11.40	0.00	11.61	1.00	3.72	6799.08	20854.87
13.316	1848.00	0.00	0.00	-16.90	24021.00	12.25	0.00	12.50	1.14	4.08	7422.06	22450.92
13.316	1848.00	0.00	0.00	-16.90	44108.00	17.43	0.00	17.87	1.64	5.62	13478.12	34433.46
13.586	1426.00	0.00	0.00	-14.20	10118.00	7.19	0.00	7.28	0.61	2.44	4173.04	13001.87
13.586	1426.00	0.00	0.00	-14.20	15475.00	9.59	0.00	9.75	0.89	3.24	5102.96	16405.16
13.586	1426.00	0.00	0.00	-14.20	18017.00	10.58	0.00	10.78	1.01	3.56	5604.60	17961.09
13.586	1426.00	0.00	0.00	-14.20	20906.00	11.53	0.00	11.77	1.15	3.92	6201.29	19536.93
13.586	1426.00	0.00	0.00	-14.20	24021.00	12.40	0.00	12.69	1.30	4.30	6851.91	21064.66
13.586	1426.00	0.00	0.00	-14.20	44108.00	17.64	0.00	18.14	1.84	5.91	13061.53	32500.91
13.816	1214.00	0.00	0.00	-13.50	10118.00	7.26	0.00	7.36	0.65	2.53	4187.51	12522.48
13.816	1214.00	0.00	0.00	-13.50	15475.00	9.69	0.00	9.86	0.92	3.30	6020.07	16110.26
13.816	1214.00	0.00	0.00	-13.50	18017.00	10.71	0.00	10.90	1.01	3.59	7208.25	17909.55
13.816	1214.00	0.00	0.00	-13.50	20906.00	11.69	0.00	11.91	1.11	3.88	8557.93	19820.90
13.816	1214.00	0.00	0.00	-13.50	24021.00	12.59	0.00	12.84	1.22	4.18	9967.30	21765.30
13.816	1214.00	0.00	0.00	-13.50	44108.00	18.01	0.00	18.34	1.40	5.21	20567.57	37217.39

14.046	1214.00	0.00	0.00	-12.75	10118.00	7.34	0.00	7.45	0.77	2.65	3827.36	11521.61
14.046	1214.00	0.00	0.00	-12.75	15475.00	9.80	0.00	9.99	1.10	3.47	4747.01	14787.32
14.046	1214.00	0.00	0.00	-12.75	18017.00	10.82	0.00	11.05	1.22	3.81	5217.29	16288.35
14.046	1214.00	0.00	0.00	-12.75	20906.00	11.81	0.00	12.07	1.38	4.18	5729.52	17826.29
14.046	1214.00	0.00	0.00	-12.75	24021.00	12.71	0.00	13.03	1.55	4.56	6265.67	19320.35
14.046	1214.00	0.00	0.00	-12.75	44108.00	18.09	0.00	18.62	2.05	6.13	13548.19	30831.73

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SECND	XLOC	FLTRD	ELLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
14.197	800.00	0.00	0.00	-12.24	10118.00	7.42	0.00	7.51	0.69	2.50	5306.34	12202.78
14.197	800.00	0.00	0.00	-12.24	15475.00	9.93	0.00	10.07	0.97	3.22	6520.66	15713.82
14.197	800.00	0.00	0.00	-12.24	18017.00	10.97	0.00	11.14	1.08	3.51	7059.51	17308.88
14.197	800.00	0.00	0.00	-12.24	20906.00	11.98	0.00	12.18	1.22	3.83	7615.12	18930.22
14.197	800.00	0.00	0.00	-12.24	24021.00	12.91	0.00	13.15	1.36	4.16	8252.01	20605.30
14.197	800.00	0.00	0.00	-12.24	44108.00	18.43	0.00	18.77	1.58	5.29	19675.93	35086.35
14.443	1300.00	0.00	0.00	-12.50	10118.00	7.52	0.00	7.60	0.76	2.53	5333.73	11601.88
14.443	1300.00	0.00	0.00	-12.50	15475.00	10.06	0.00	10.20	1.07	3.21	6802.62	14976.89
14.443	1300.00	0.00	0.00	-12.50	18017.00	11.13	0.00	11.29	1.18	3.47	7599.23	16562.33
14.443	1300.00	0.00	0.00	-12.50	20906.00	12.16	0.00	12.35	1.30	3.74	8642.75	18309.28
14.443	1300.00	0.00	0.00	-12.50	24021.00	13.12	0.00	13.33	1.42	4.02	9699.57	20160.89
14.443	1300.00	0.00	0.00	-12.50	44108.00	18.67	0.00	18.98	1.65	5.12	17902.22	34372.98
14.633	1000.00	0.00	0.00	-12.00	10118.00	7.59	0.00	7.72	1.08	2.97	3409.67	9727.85
14.633	1000.00	0.00	0.00	-12.00	15475.00	10.15	0.00	10.38	1.56	3.83	4045.32	12397.27
14.633	1000.00	0.00	0.00	-12.00	18017.00	11.22	0.00	11.49	1.73	4.17	4343.47	13697.99
14.633	1000.00	0.00	0.00	-12.00	20906.00	12.26	0.00	12.58	1.93	4.55	4700.76	15049.70
14.633	1000.00	0.00	0.00	-12.00	24021.00	13.22	0.00	13.60	2.15	4.94	5087.71	16374.72
14.633	1000.00	0.00	0.00	-12.00	44108.00	18.72	0.00	19.39	2.82	6.71	8713.09	26277.00
14.673	211.00	0.00	0.00	-11.90	10118.00	7.33	0.00	8.11	8.91	7.07	1432.03	3389.65
14.673	211.00	0.00	0.00	-11.90	15475.00	9.77	0.00	10.95	12.63	8.71	1775.90	4355.13
14.673	211.00	0.00	0.00	-11.90	18017.00	10.78	0.00	12.13	13.59	9.31	1935.23	4887.52
14.673	211.00	0.00	0.00	-11.90	20906.00	11.75	0.00	13.30	14.65	9.99	2092.53	5462.67
14.673	211.00	0.00	0.00	-11.90	24021.00	12.64	0.00	14.42	15.95	10.73	2239.61	6015.30
14.673	211.00	0.00	0.00	-11.90	44108.00	17.69	0.00	20.74	20.60	14.00	3150.44	9718.50
14.681	42.00	23.60	21.50	-11.90	10118.00	7.45	0.00	8.21	8.65	6.99	1447.53	3439.28
14.681	42.00	23.60	21.50	-11.90	15475.00	9.97	0.00	11.11	12.13	8.56	1806.80	4443.57
14.681	42.00	23.60	21.50	-11.90	18017.00	11.02	0.00	12.31	12.86	9.13	1972.87	5023.64
14.681	42.00	23.60	21.50	-11.90	20906.00	12.04	0.00	13.52	13.76	9.77	2138.86	5635.24
14.681	42.00	23.60	21.50	-11.90	24021.00	12.98	0.00	14.68	14.84	10.46	2297.02	6234.73
14.681	42.00	23.60	21.50	-11.90	44108.00	18.36	0.00	21.17	18.46	13.46	3276.91	10266.99
14.714	179.00	0.00	0.00	-11.90	10118.00	7.71	0.00	8.44	17.18	6.83	1486.65	2440.74
14.714	179.00	0.00	0.00	-11.90	15475.00	10.29	0.00	11.40	20.48	8.50	1961.19	3419.81
14.714	179.00	0.00	0.00	-11.90	18017.00	11.35	0.00	12.62	21.40	9.12	2249.96	3694.28
14.714	179.00	0.00	0.00	-11.90	20906.00	12.42	0.00	13.85	22.38	9.75	2595.31	4419.15
14.714	179.00	0.00	0.00	-11.90	24021.00	13.46	0.00	15.04	23.26	10.35	2970.02	4980.40
14.714	179.00	0.00	0.00	-11.90	44108.00	20.76	0.00	21.95	14.22	10.21	9622.71	11698.35

15.135	2218.00	0.00	0.00	-6.90	10118.00	11.51	0.00	12.27	18.66	7.55	2046.09	2341.13
15.135	2218.00	0.00	0.00	-6.90	15475.00	14.59	0.00	15.45	18.57	8.50	3252.43	3591.29
15.135	2218.00	0.00	0.00	-6.90	18017.00	15.79	0.00	16.67	18.30	8.80	3901.35	4211.86
15.135	2218.00	0.00	0.00	-6.90	20906.00	17.00	0.00	17.88	17.95	9.07	4661.26	4934.83
15.135	2218.00	0.00	0.00	-6.90	24021.00	18.16	0.00	19.04	17.53	9.29	5547.11	5736.51
15.135	2218.00	0.00	0.00	-6.90	44108.00	23.69	0.00	24.37	13.98	9.63	13998.09	11795.08

SECNO	YLCH	ELTRD	FLLC	ELMIN	U	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
15.505	1954.00	0.00	0.00	-6.30	8494.00	12.91	0.00	13.02	1.99	2.71	4286.41	6028.05
15.505	1954.00	0.00	0.00	-6.30	12696.00	16.11	0.00	16.24	2.16	3.18	6058.49	8637.47
15.505	1954.00	0.00	0.00	-6.30	13932.00	17.29	0.00	17.42	2.03	3.20	6888.93	9773.34
15.505	1954.00	0.00	0.00	-6.30	15297.00	18.47	0.00	18.60	1.92	3.23	7872.49	11025.67
15.505	1954.00	0.00	0.00	-6.30	16762.00	19.59	0.00	19.72	1.84	3.26	8893.13	12343.26
15.505	1954.00	0.00	0.00	-6.30	26469.00	24.81	0.00	24.93	1.61	3.48	18251.14	20689.86
15.606	533.00	0.00	0.00	-6.30	8494.00	12.96	0.00	13.08	0.77	2.82	4310.85	9691.10
15.606	533.00	0.00	0.00	-6.30	12696.00	16.16	0.00	16.31	0.88	3.38	6087.61	13534.25
15.606	533.00	0.00	0.00	-6.30	13932.00	17.33	0.00	17.49	0.84	3.44	6920.00	15160.33
15.606	533.00	0.00	0.00	-6.30	15297.00	18.51	0.00	18.67	0.82	3.51	7903.23	16925.17
15.606	533.00	0.00	0.00	-6.30	16762.00	19.62	0.00	19.79	0.80	3.58	8921.64	18753.23
15.606	533.00	0.00	0.00	-6.30	26469.00	24.82	0.00	25.00	0.78	4.03	18300.51	30039.75
15.712	560.00	0.00	0.00	-1.10	8494.00	13.35	0.00	13.97	22.13	6.31	1346.43	1805.75
15.712	560.00	0.00	0.00	-1.10	12696.00	16.49	0.00	17.28	22.33	7.10	1789.28	2686.95
15.712	560.00	0.00	0.00	-1.10	13932.00	17.63	0.00	18.41	20.83	7.10	1961.41	3052.29
15.712	560.00	0.00	0.00	-1.10	15297.00	18.76	0.00	19.56	19.67	7.15	2140.50	3449.44
15.712	560.00	0.00	0.00	-1.10	16762.00	19.83	0.00	20.65	18.28	7.25	2311.90	3920.21
15.712	560.00	0.00	0.00	-1.10	26469.00	24.95	0.00	25.46	9.72	6.47	9526.19	8489.75
15.718	32.00	20.70	18.70	-1.10	8494.00	13.46	0.00	14.07	21.44	6.24	1361.52	1634.27
15.718	32.00	20.70	18.70	-1.10	12696.00	16.63	0.00	17.39	21.64	7.02	1809.61	2729.48
15.718	32.00	20.70	18.70	-1.10	13932.00	17.76	0.00	18.53	20.25	7.03	1981.49	3095.66
15.718	32.00	20.70	18.70	-1.10	15297.00	19.32	0.00	20.05	17.18	6.86	2228.96	3690.27
15.718	32.00	20.70	18.70	-1.10	16762.00	20.51	0.00	21.26	15.71	6.93	2418.88	4229.09
15.718	32.00	20.70	18.70	-1.10	26469.00	24.96	0.00	25.46	9.71	6.47	9530.50	8492.76
15.768	264.00	0.00	0.00	-5.40	8494.00	14.11	0.00	14.50	10.37	5.70	2670.87	2637.69
15.768	264.00	0.00	0.00	-5.40	12696.00	17.49	0.00	17.83	8.53	5.88	4530.77	4346.45
15.768	264.00	0.00	0.00	-5.40	13932.00	18.63	0.00	18.94	7.44	5.71	5374.13	5108.56
15.768	264.00	0.00	0.00	-5.40	15297.00	20.16	0.00	20.42	5.92	5.34	6612.25	6289.56
15.768	264.00	0.00	0.00	-5.40	16762.00	21.39	0.00	21.61	5.17	5.18	7674.78	7375.10
15.768	264.00	0.00	0.00	-5.40	26469.00	25.51	0.00	25.69	4.35	5.30	13867.67	12685.50
15.834	350.00	0.00	0.00	-5.40	8494.00	14.63	0.00	14.78	4.57	3.87	3527.49	3974.89
15.834	350.00	0.00	0.00	-5.40	12696.00	17.93	0.00	18.07	3.72	3.94	5648.23	6583.09
15.834	350.00	0.00	0.00	-5.40	13932.00	19.01	0.00	19.14	3.31	3.86	6517.36	7653.49
15.834	350.00	0.00	0.00	-5.40	15297.00	20.46	0.00	20.58	2.73	3.66	7763.38	9258.34
15.834	350.00	0.00	0.00	-5.40	16762.00	21.64	0.00	21.75	2.45	3.59	8814.19	10716.62
15.834	350.00	0.00	0.00	-5.40	26469.00	25.70	0.00	25.80	2.25	3.83	15168.00	17631.77

15.872	200.00	0.00	0.00	-2.20	8494.00	14.72	0.00	14.92	6.81	4.35	2880.07	3255.31
15.872	200.00	0.00	0.00	-2.20	12696.00	17.99	0.00	18.18	5.39	4.45	4406.12	5470.45
15.872	200.00	0.00	0.00	-2.20	13932.00	19.06	0.00	19.25	4.83	4.39	4936.82	6338.38
15.872	200.00	0.00	0.00	-2.20	15297.00	20.50	0.00	20.67	4.05	4.22	5721.25	7605.50
15.872	200.00	0.00	0.00	-2.20	16762.00	21.68	0.00	21.83	3.61	4.15	6818.22	8820.10
15.872	200.00	0.00	0.00	-2.20	26469.00	25.76	0.00	25.85	2.63	3.98	15936.72	16334.56

SECNO	XLOC	FLTRD	FLLC	FLMIN	Q	CWSEL	CRTWS	EG	10K*S	VCH	AREA	.01K
15.900	150.00	0.00	0.00	-2.20	8494.00	14.86	0.00	15.05	6.51	4.28	2934.91	3329.14
15.900	150.00	0.00	0.00	-2.20	12696.00	18.11	0.00	18.30	5.24	4.41	4450.88	5545.97
15.900	150.00	0.00	0.00	-2.20	13932.00	19.18	0.00	19.36	4.73	4.36	4976.13	6408.01
15.900	150.00	0.00	0.00	-2.20	15297.00	20.59	0.00	20.76	3.99	4.21	5709.32	7657.26
15.900	150.00	0.00	0.00	-2.20	16762.00	21.76	0.00	21.92	3.64	4.17	6367.55	8782.09
15.900	150.00	0.00	0.00	-2.20	26469.00	25.83	0.00	25.94	2.88	4.17	14830.83	15610.33
16.203	1600.00	0.00	0.00	-2.20	8494.00	15.79	0.00	16.17	10.72	5.74	2596.13	2594.21
16.203	1600.00	0.00	0.00	-2.20	12696.00	18.83	0.00	19.23	10.07	6.28	3748.76	4001.75
16.203	1600.00	0.00	0.00	-2.20	13932.00	19.81	0.00	20.21	9.46	6.30	4143.15	4530.17
16.203	1600.00	0.00	0.00	-2.20	15297.00	21.12	0.00	21.48	8.30	6.17	4914.02	5310.83
16.203	1600.00	0.00	0.00	-2.20	16762.00	22.23	0.00	22.56	7.44	6.05	6214.42	6145.63
16.203	1600.00	0.00	0.00	-2.20	26469.00	26.16	0.00	26.34	4.84	5.46	15554.25	12028.97
16.623	2218.00	0.00	0.00	-3.70	8494.00	16.47	0.00	16.50	0.82	1.80	7999.30	9393.67
16.623	2218.00	0.00	0.00	-3.70	12696.00	19.53	0.00	19.56	0.82	2.00	10877.18	14043.56
16.623	2218.00	0.00	0.00	-3.70	13932.00	20.49	0.00	20.52	0.78	2.02	11985.59	15746.98
16.623	2218.00	0.00	0.00	-3.70	15297.00	21.73	0.00	21.76	0.71	1.99	13546.79	18153.88
16.623	2218.00	0.00	0.00	-3.70	16762.00	22.79	0.00	22.82	0.68	2.00	15019.67	20398.61
16.623	2218.00	0.00	0.00	-3.70	26469.00	26.56	0.00	26.59	0.77	2.36	21733.72	30139.76
16.973	1848.00	0.00	0.00	-2.60	8494.00	16.68	0.00	17.18	15.36	6.94	2378.37	2167.07
16.973	1848.00	0.00	0.00	-2.60	12696.00	19.68	0.00	20.23	14.79	7.65	3367.23	3301.44
16.973	1848.00	0.00	0.00	-2.60	13932.00	20.63	0.00	21.15	13.63	7.59	4226.14	3773.59
16.973	1848.00	0.00	0.00	-2.60	15297.00	22.23	0.00	22.57	9.31	6.61	6689.49	5012.52
16.973	1848.00	0.00	0.00	-2.60	16762.00	23.21	0.00	23.48	7.75	6.22	8316.48	6020.25
16.973	1848.00	0.00	0.00	-2.60	26469.00	26.85	0.00	27.00	5.04	5.54	17078.53	11789.79
17.210	1250.00	0.00	0.00	-3.20	8494.00	19.07	0.00	19.25	4.34	4.20	3559.23	4075.96
17.210	1250.00	0.00	0.00	-3.20	12696.00	22.23	0.00	22.40	3.89	4.41	5781.84	6436.18
17.210	1250.00	0.00	0.00	-3.20	13932.00	23.08	0.00	23.23	3.60	4.36	6770.55	7339.92
17.210	1250.00	0.00	0.00	-3.20	15297.00	24.23	0.00	24.36	3.01	4.12	8409.45	8812.38
17.210	1250.00	0.00	0.00	-3.20	16762.00	25.05	0.00	25.16	2.78	4.04	9802.74	10061.67
17.210	1250.00	0.00	0.00	-3.20	26469.00	28.41	0.00	28.49	2.32	4.03	17220.79	17367.42
17.258	250.00	0.00	0.00	-3.20	8494.00	19.21	0.00	19.33	2.54	3.34	3939.12	5334.06
17.258	250.00	0.00	0.00	-3.20	12696.00	22.35	0.00	22.47	2.54	3.70	6225.30	7960.58
17.258	250.00	0.00	0.00	-3.20	13932.00	23.18	0.00	23.30	2.46	3.73	7221.14	8877.08
17.258	250.00	0.00	0.00	-3.20	15297.00	24.32	0.00	24.42	2.20	3.64	8852.46	10306.21
17.258	250.00	0.00	0.00	-3.20	16762.00	25.12	0.00	25.22	2.13	3.65	10250.63	11484.98
17.258	250.00	0.00	0.00	-3.20	26469.00	28.46	0.00	28.54	2.16	3.99	17670.75	18004.27

17.286	150.00	0.00	0.00	-3.20	8494.00	19.25	0.00	19.36	2.52	3.34	3950.53	5347.88
17.286	150.00	0.00	0.00	-3.20	12696.00	22.38	0.00	22.50	2.54	3.69	6257.33	7972.53
17.286	150.00	0.00	0.00	-3.20	13932.00	23.21	0.00	23.33	2.46	3.73	7258.06	8886.31
17.286	150.00	0.00	0.00	-3.20	15297.00	24.34	0.00	24.44	2.20	3.64	8892.21	10308.78
17.286	150.00	0.00	0.00	-3.20	16762.00	25.15	0.00	25.24	2.13	3.65	10294.82	11483.79
17.286	150.00	0.00	0.00	-3.20	26469.00	28.48	0.00	28.57	2.16	4.00	17732.26	17990.81

SLOPE	XLOC	ELTRD	FLLC	ELMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
17.333	250.00	0.00	0.00	-3.20	8494.00	19.34	0.00	19.41	1.72	2.67	4578.78	6483.17
17.333	250.00	0.00	0.00	-3.20	12696.00	22.47	0.00	22.55	1.68	2.92	6938.59	9796.00
17.333	250.00	0.00	0.00	-3.20	13932.00	23.30	0.00	23.38	1.62	2.94	7952.94	10954.98
17.333	250.00	0.00	0.00	-3.20	15297.00	24.42	0.00	24.48	1.44	2.86	9596.52	12761.99
17.333	250.00	0.00	0.00	-3.20	16762.00	25.22	0.00	25.28	1.38	2.86	11011.43	14268.70
17.333	250.00	0.00	0.00	-3.20	26469.00	28.55	0.00	28.60	1.36	3.09	18501.32	22734.49
17.381	250.00	0.00	0.00	-3.20	8494.00	19.35	0.00	19.46	2.46	3.31	3999.35	5416.68
17.381	250.00	0.00	0.00	-3.20	12696.00	22.48	0.00	22.60	2.47	3.66	6364.63	8073.34
17.381	250.00	0.00	0.00	-3.20	13932.00	23.31	0.00	23.42	2.40	3.69	7380.18	8994.66
17.381	250.00	0.00	0.00	-3.20	15297.00	24.43	0.00	24.53	2.15	3.61	9024.50	10421.60
17.381	250.00	0.00	0.00	-3.20	16762.00	25.23	0.00	25.32	2.09	3.62	10440.83	11604.03
17.381	250.00	0.00	0.00	-3.20	26469.00	28.56	0.00	28.64	2.12	3.96	17936.31	18166.51
17.398	90.00	0.00	0.00	-4.80	8494.00	19.31	0.00	19.53	4.76	4.53	3489.43	3892.35
17.398	90.00	0.00	0.00	-4.80	12696.00	22.42	0.00	22.67	5.17	5.18	5674.56	5582.48
17.398	90.00	0.00	0.00	-4.80	13932.00	23.26	0.00	23.49	4.92	5.17	6845.22	6278.55
17.398	90.00	0.00	0.00	-4.80	15297.00	24.39	0.00	24.58	4.23	4.94	8761.69	7436.84
17.398	90.00	0.00	0.00	-4.80	16762.00	25.19	0.00	25.37	3.94	4.86	10379.67	8446.77
17.398	90.00	0.00	0.00	-4.80	26469.00	28.55	0.00	28.67	3.30	4.81	19628.05	14577.22
17.426	150.00	0.00	0.00	-4.80	8494.00	19.47	0.00	19.57	2.09	3.09	3987.65	5874.29
17.426	150.00	0.00	0.00	-4.80	12696.00	22.63	0.00	22.72	2.14	3.42	6409.13	8686.42
17.426	150.00	0.00	0.00	-4.80	13932.00	23.45	0.00	23.54	2.03	3.41	7615.58	9773.68
17.426	150.00	0.00	0.00	-4.80	15297.00	24.55	0.00	24.62	1.76	3.27	9537.48	11519.41
17.426	150.00	0.00	0.00	-4.80	16762.00	25.34	0.00	25.40	1.66	3.23	11161.11	13020.49
17.426	150.00	0.00	0.00	-4.80	26469.00	28.65	0.00	28.70	1.45	3.27	20473.19	21963.34
17.445	100.00	0.00	0.00	-4.80	8494.00	19.48	0.00	19.59	2.29	3.24	3955.15	5607.15
17.445	100.00	0.00	0.00	-4.80	12696.00	22.64	0.00	22.74	2.25	3.52	6423.64	8458.31
17.445	100.00	0.00	0.00	-4.80	13932.00	23.47	0.00	23.56	2.12	3.49	7634.22	9560.03
17.445	100.00	0.00	0.00	-4.80	15297.00	24.56	0.00	24.63	1.82	3.33	9558.14	11324.40
17.445	100.00	0.00	0.00	-4.80	16762.00	25.35	0.00	25.42	1.70	3.28	11184.23	12840.61
17.445	100.00	0.00	0.00	-4.80	26469.00	28.66	0.00	28.71	1.46	3.28	20534.26	21878.92
17.473	150.00	0.00	0.00	-4.80	8494.00	19.51	0.00	19.61	2.07	3.08	3999.33	5898.15
17.473	150.00	0.00	0.00	-4.80	12696.00	22.67	0.00	22.76	2.12	3.41	6452.62	8725.92
17.473	150.00	0.00	0.00	-4.80	13932.00	23.49	0.00	23.57	2.01	3.40	7664.51	9817.57
17.473	150.00	0.00	0.00	-4.80	15297.00	24.58	0.00	24.65	1.75	3.26	9589.38	11567.17
17.473	150.00	0.00	0.00	-4.80	16762.00	25.37	0.00	25.43	1.64	3.22	11216.66	13072.17
17.473	150.00	0.00	0.00	-4.80	26469.00	28.67	0.00	28.72	1.44	3.26	20560.24	22043.19

17.511	200.00	0.00	0.00	-4.80	8494.00	19.49	0.00	19.70	4.58	4.47	3543.56	3969.70
17.511	200.00	0.00	0.00	-4.80	12696.00	22.62	0.00	22.86	4.90	5.07	5933.71	5736.83
17.511	200.00	0.00	0.00	-4.80	13932.00	23.44	0.00	23.66	4.66	5.06	7135.58	6451.33
17.511	200.00	0.00	0.00	-4.80	15297.00	24.54	0.00	24.73	4.03	4.84	9057.36	7620.06
17.511	200.00	0.00	0.00	-4.80	16762.00	25.34	0.00	25.50	3.77	4.77	10683.52	8638.59
17.511	200.00	0.00	0.00	-4.80	26469.00	28.65	0.00	28.77	3.18	4.74	20023.19	14832.98

SECNO	XLOC	FLTRD	FLLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
17.534	120.00	0.00	0.00	-4.80	8494.00	19.60	0.00	19.80	4.47	4.43	3576.45	4016.98
17.534	120.00	0.00	0.00	-4.80	12696.00	22.77	0.00	23.00	4.70	4.99	6138.01	5858.32
17.534	120.00	0.00	0.00	-4.80	13932.00	23.61	0.00	23.82	4.43	4.96	7412.91	6616.65
17.534	120.00	0.00	0.00	-4.80	15297.00	24.71	0.00	24.88	3.84	4.74	9361.32	7808.99
17.534	120.00	0.00	0.00	-4.80	16762.00	25.51	0.00	25.66	3.56	4.66	11062.36	8878.77
17.534	120.00	0.00	0.00	-4.80	26469.00	28.85	0.00	28.96	2.98	4.61	20784.28	15320.48
17.548	75.00	0.00	0.00	-4.80	6883.00	19.71	0.00	19.84	2.86	3.56	3611.55	4067.70
17.548	75.00	0.00	0.00	-4.80	10669.00	22.90	0.00	23.05	3.20	4.13	6311.58	5961.44
17.548	75.00	0.00	0.00	-4.80	11585.00	23.73	0.00	23.87	2.96	4.06	7602.71	6730.00
17.548	75.00	0.00	0.00	-4.80	12464.00	24.82	0.00	24.93	2.45	3.80	9609.53	7963.74
17.548	75.00	0.00	0.00	-4.80	13498.00	25.62	0.00	25.71	2.23	3.70	11309.70	9036.20
17.548	75.00	0.00	0.00	-4.80	20426.00	28.95	0.00	29.01	1.72	3.51	21185.07	15575.04
17.562	75.00	0.00	0.00	-4.80	6883.00	19.81	0.00	19.86	1.02	2.13	4614.72	6808.92
17.562	75.00	0.00	0.00	-4.80	10669.00	23.02	0.00	23.07	1.11	2.44	7485.77	10135.88
17.562	75.00	0.00	0.00	-4.80	11585.00	23.85	0.00	23.89	1.04	2.41	8790.90	11367.91
17.562	75.00	0.00	0.00	-4.80	12464.00	24.92	0.00	24.95	0.88	2.29	10788.95	13276.93
17.562	75.00	0.00	0.00	-4.80	13498.00	25.70	0.00	25.73	0.82	2.25	12486.16	14910.53
17.562	75.00	0.00	0.00	-4.80	20426.00	29.00	0.00	29.02	0.69	2.22	22389.33	24593.95
17.581	100.00	0.00	0.00	-4.80	6883.00	19.82	0.00	19.87	0.95	2.06	4988.04	7052.87
17.581	100.00	0.00	0.00	-4.80	10669.00	23.04	0.00	23.08	0.99	2.31	7952.42	10724.18
17.581	100.00	0.00	0.00	-4.80	11585.00	23.86	0.00	23.90	0.93	2.28	9259.44	12042.97
17.581	100.00	0.00	0.00	-4.80	12464.00	24.93	0.00	24.96	0.79	2.16	11257.43	14063.20
17.581	100.00	0.00	0.00	-4.80	13498.00	25.71	0.00	25.73	0.73	2.12	12955.30	15779.87
17.581	100.00	0.00	0.00	-4.80	20426.00	29.00	0.00	29.03	0.63	2.12	22869.24	25829.27
17.591	50.00	0.00	0.00	-4.70	6883.00	19.84	0.00	19.87	0.80	1.74	6995.83	7702.24
17.591	50.00	0.00	0.00	-4.70	10669.00	23.06	0.00	23.08	0.75	1.87	10346.05	12296.59
17.591	50.00	0.00	0.00	-4.70	11585.00	23.88	0.00	23.90	0.71	1.86	11527.09	13770.05
17.591	50.00	0.00	0.00	-4.70	12464.00	24.94	0.00	24.96	0.61	1.79	13244.46	15909.23
17.591	50.00	0.00	0.00	-4.70	13498.00	25.72	0.00	25.74	0.59	1.76	14633.95	17641.22
17.591	50.00	0.00	0.00	-4.70	20426.00	29.01	0.00	29.03	0.55	1.87	24300.16	27542.92
17.614	125.00	0.00	0.00	-4.70	6883.00	19.84	0.00	19.90	2.27	2.94	6200.52	4564.30
17.614	125.00	0.00	0.00	-4.70	10669.00	23.06	0.00	23.11	2.04	3.09	9571.76	7471.16
17.614	125.00	0.00	0.00	-4.70	11585.00	23.88	0.00	23.93	1.89	3.04	10753.15	8425.90
17.614	125.00	0.00	0.00	-4.70	12464.00	24.94	0.00	24.98	1.61	2.89	12469.21	9829.03
17.614	125.00	0.00	0.00	-4.70	13498.00	25.72	0.00	25.76	1.51	2.86	13867.72	10990.27
17.614	125.00	0.00	0.00	-4.70	20426.00	29.02	0.00	29.05	1.26	2.84	23577.02	18172.10

17.696	430.00	0.00	0.00	-4.70	6883.00	19.97	0.00	20.03	2.19	2.90	6286.84	4647.99
17.696	430.00	0.00	0.00	-4.70	10669.00	23.18	0.00	23.23	1.98	3.05	9713.34	7586.12
17.696	430.00	0.00	0.00	-4.70	11585.00	23.99	0.00	24.04	1.84	3.01	10901.62	8545.40
17.696	430.00	0.00	0.00	-4.70	12464.00	25.04	0.00	25.08	1.57	2.86	12615.41	9949.59
17.696	430.00	0.00	0.00	-4.70	13498.00	25.82	0.00	25.86	1.47	2.83	14019.52	11117.46
17.696	430.00	0.00	0.00	-4.70	20426.00	29.11	0.00	29.14	1.23	2.80	23940.51	18434.83

SECNO	XLCH	ELTRD	FLLC	FLMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
17.776	420.00	0.00	0.00	-4.70	6883.00	20.03	0.00	20.08	2.15	2.88	6335.62	4695.73
17.776	420.00	0.00	0.00	-4.70	10669.00	23.23	0.00	23.28	1.94	3.03	9795.87	7653.05
17.776	420.00	0.00	0.00	-4.70	11585.00	24.04	0.00	24.09	1.81	2.99	10988.57	8616.09
17.776	420.00	0.00	0.00	-4.70	12464.00	25.08	0.00	25.12	1.55	2.85	12701.29	10020.50
17.776	420.00	0.00	0.00	-4.70	13498.00	25.85	0.00	25.89	1.45	2.82	14108.67	11192.28
17.776	420.00	0.00	0.00	-4.70	20426.00	29.14	0.00	29.16	1.21	2.79	24075.63	18532.87
17.813	200.00	0.00	0.00	-4.70	6883.00	20.10	0.00	20.12	1.07	2.04	6847.84	6647.07
17.813	200.00	0.00	0.00	-4.70	10669.00	23.29	0.00	23.31	0.91	2.08	10338.54	11171.30
17.813	200.00	0.00	0.00	-4.70	11585.00	24.10	0.00	24.12	0.84	2.04	11532.53	12618.20
17.813	200.00	0.00	0.00	-4.70	12464.00	25.13	0.00	25.15	0.72	1.94	13240.84	14701.43
17.813	200.00	0.00	0.00	-4.70	13498.00	25.90	0.00	25.92	0.68	1.92	14648.06	16424.24
17.813	200.00	0.00	0.00	-4.70	20426.00	29.17	0.00	29.19	0.60	1.96	24646.86	26407.32
17.842	150.00	0.00	0.00	-4.70	6883.00	20.12	0.00	20.14	0.59	1.52	8068.84	8938.19
17.842	150.00	0.00	0.00	-4.70	10669.00	23.31	0.00	23.33	0.55	1.62	11669.01	14341.98
17.842	150.00	0.00	0.00	-4.70	11585.00	24.12	0.00	24.13	0.52	1.61	12864.65	16003.17
17.842	150.00	0.00	0.00	-4.70	12464.00	25.14	0.00	25.16	0.46	1.56	14570.69	18352.66
17.842	150.00	0.00	0.00	-4.70	13498.00	25.91	0.00	25.93	0.44	1.56	15978.50	20277.10
17.842	150.00	0.00	0.00	-4.70	20426.00	29.19	0.00	29.20	0.43	1.66	26035.40	31151.68
17.866	125.00	0.00	0.00	-4.70	6883.00	20.13	0.00	20.15	0.64	1.58	7520.61	8589.10
17.866	125.00	0.00	0.00	-4.70	10669.00	23.32	0.00	23.34	0.62	1.71	11028.38	13563.24
17.866	125.00	0.00	0.00	-4.70	11585.00	24.12	0.00	24.14	0.59	1.71	12224.48	15120.14
17.866	125.00	0.00	0.00	-4.70	12464.00	25.15	0.00	25.17	0.52	1.65	13930.78	17336.54
17.866	125.00	0.00	0.00	-4.70	13498.00	25.92	0.00	25.93	0.50	1.65	15338.96	19161.48
17.866	125.00	0.00	0.00	-4.70	20426.00	29.19	0.00	29.20	0.48	1.75	25407.16	29613.18
17.913	250.00	0.00	0.00	-4.70	6883.00	20.12	0.00	20.18	2.08	2.84	6416.43	4774.61
17.913	250.00	0.00	0.00	-4.70	10669.00	23.31	0.00	23.36	1.89	2.99	9921.16	7754.53
17.913	250.00	0.00	0.00	-4.70	11585.00	24.12	0.00	24.16	1.76	2.96	11117.62	8721.41
17.913	250.00	0.00	0.00	-4.70	12464.00	25.15	0.00	25.19	1.52	2.82	12824.59	10122.41
17.913	250.00	0.00	0.00	-4.70	13498.00	25.92	0.00	25.95	1.43	2.80	14233.31	11297.01
17.913	250.00	0.00	0.00	-4.70	20426.00	29.19	0.00	29.22	1.19	2.77	24326.48	18715.39
17.992	420.00	0.00	0.00	-0.90	6883.00	20.18	0.00	20.44	7.93	5.07	2532.85	2444.13
17.992	420.00	0.00	0.00	-0.90	10669.00	23.35	0.00	23.62	7.60	5.60	4499.87	3669.38
17.992	420.00	0.00	0.00	-0.90	11585.00	24.15	0.00	24.39	6.93	5.49	5369.73	4401.48
17.992	420.00	0.00	0.00	-0.90	12464.00	25.18	0.00	25.37	5.67	5.13	6715.01	5233.12
17.992	420.00	0.00	0.00	-0.90	13498.00	25.94	0.00	26.12	5.11	4.99	7899.20	5969.91
17.992	420.00	0.00	0.00	-0.90	20426.00	29.22	0.00	29.32	3.64	4.63	15473.12	10700.39

18.140	782.00	0.00	0.00	-0.90	6883.00	20.72	0.00	21.09	10.36	4.85	1418.15	2138.48
18.140	782.00	0.00	0.00	-0.90	10669.00	23.83	0.00	24.33	11.78	5.69	1873.83	3109.03
18.140	782.00	0.00	0.00	-0.90	11585.00	24.56	0.00	25.09	11.47	5.82	1989.99	3420.63
18.140	782.00	0.00	0.00	-0.90	12464.00	25.48	0.00	25.98	10.12	5.73	2665.18	3918.10
18.140	782.00	0.00	0.00	-0.90	13498.00	26.19	0.00	26.66	9.17	5.65	3624.76	4457.83
18.140	782.00	0.00	0.00	-0.90	20426.00	29.35	0.00	29.57	4.87	4.70	11512.36	9256.12

SECNO	XLOB	ELTRO	ELLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
18.146	32.00	26.00	24.00	-0.90	6883.00	20.74	0.00	21.10	10.32	4.85	1420.26	2142.75
18.146	32.00	26.00	24.00	-0.90	10669.00	23.93	0.00	24.43	11.50	5.64	1890.71	3146.68
18.146	32.00	26.00	24.00	-0.90	11585.00	24.76	0.00	25.27	10.89	5.73	2021.49	3511.38
18.146	32.00	26.00	24.00	-0.90	12464.00	25.47	0.00	26.00	10.52	5.84	2134.16	3843.65
18.146	32.00	26.00	24.00	-0.90	13498.00	26.19	0.00	26.66	9.16	5.64	3626.90	4459.04
18.146	32.00	26.00	24.00	-0.90	20426.00	29.35	0.00	29.57	4.87	4.70	11513.88	9257.03
18.214	354.00	0.00	0.00	-0.90	6883.00	21.22	0.00	21.42	5.95	4.58	2948.58	2821.28
18.214	354.00	0.00	0.00	-0.90	10669.00	24.58	0.00	24.76	5.08	4.77	5907.46	4734.14
18.214	354.00	0.00	0.00	-0.90	11585.00	25.44	0.00	25.59	4.48	4.60	7104.43	5474.49
18.214	354.00	0.00	0.00	-0.90	12464.00	26.18	0.00	26.32	4.01	4.45	8303.23	6226.85
18.214	354.00	0.00	0.00	-0.90	13498.00	26.81	0.00	26.94	3.76	4.39	9460.06	6960.79
18.214	354.00	0.00	0.00	-0.90	20426.00	29.64	0.00	29.73	3.10	4.31	16988.82	11602.63
18.454	1267.00	0.00	0.00	1.60	6883.00	21.77	0.00	21.81	1.91	2.55	5516.21	4979.13
18.454	1267.00	0.00	0.00	1.60	10669.00	25.05	0.00	25.09	1.70	2.72	8914.81	8176.85
18.454	1267.00	0.00	0.00	1.60	11585.00	25.85	0.00	25.89	1.58	2.69	10107.53	9203.46
18.454	1267.00	0.00	0.00	1.60	12464.00	26.55	0.00	26.59	1.49	2.67	11287.73	10210.90
18.454	1267.00	0.00	0.00	1.60	13498.00	27.16	0.00	27.20	1.46	2.69	12450.14	11174.37
18.454	1267.00	0.00	0.00	1.60	20426.00	29.93	0.00	29.96	1.41	2.86	20911.60	17200.19
18.664	1109.00	0.00	0.00	2.00	6883.00	21.99	0.00	22.14	4.73	3.97	3421.71	3164.45
18.664	1109.00	0.00	0.00	2.00	10669.00	25.23	0.00	25.37	4.02	4.14	6790.46	5320.49
18.664	1109.00	0.00	0.00	2.00	11585.00	26.02	0.00	26.14	3.57	4.01	8364.22	6131.81
18.664	1109.00	0.00	0.00	2.00	12464.00	26.71	0.00	26.81	3.15	3.86	9984.79	7019.19
18.664	1109.00	0.00	0.00	2.00	13498.00	27.31	0.00	27.40	2.91	3.78	11535.89	7910.02
18.664	1109.00	0.00	0.00	2.00	20426.00	30.06	0.00	30.12	2.25	3.60	21200.47	13618.10
19.064	2112.00	0.00	0.00	-3.70	6883.00	23.20	0.00	23.44	10.26	5.31	4418.41	2149.27
19.064	2112.00	0.00	0.00	-3.70	10669.00	26.03	0.00	26.09	4.27	3.71	10895.08	5163.08
19.064	2112.00	0.00	0.00	-3.70	11585.00	26.69	0.00	26.74	3.43	3.38	12986.38	6256.61
19.064	2112.00	0.00	0.00	-3.70	12464.00	27.28	0.00	27.32	2.86	3.13	15026.18	7371.86
19.064	2112.00	0.00	0.00	-3.70	13498.00	27.82	0.00	27.85	2.51	2.98	17046.93	8520.62
19.064	2112.00	0.00	0.00	-3.70	20426.00	30.40	0.00	30.42	1.61	2.54	28858.14	16096.32
19.334	1426.00	0.00	0.00	0.90	6883.00	23.82	0.00	23.93	2.36	2.99	4742.64	4484.42
19.334	1426.00	0.00	0.00	0.90	10669.00	26.32	0.00	26.41	2.03	3.04	10746.73	7483.90
19.334	1426.00	0.00	0.00	0.90	11585.00	26.93	0.00	27.01	1.83	2.94	12630.63	8562.79
19.334	1426.00	0.00	0.00	0.90	12464.00	27.49	0.00	27.55	1.67	2.85	14436.44	9657.96
19.334	1426.00	0.00	0.00	0.90	13498.00	28.01	0.00	28.07	1.56	2.81	16217.13	10790.10
19.334	1426.00	0.00	0.00	0.90	20426.00	30.53	0.00	30.57	1.21	2.65	28509.01	18607.10

20.054	3802.00	0.00	0.00	2.70	8883.00	24.67	0.00	24.79	3.09	3.28	5410.00	3915.83
20.054	3802.00	0.00	0.00	2.70	10669.00	26.89	0.00	26.97	2.40	3.15	11807.09	6882.19
20.054	3802.00	0.00	0.00	2.70	11585.00	27.42	0.00	27.49	2.15	3.04	13943.87	7891.94
20.054	3802.00	0.00	0.00	2.70	12464.00	27.91	0.00	27.97	1.94	2.93	16168.51	8956.81
20.054	3802.00	0.00	0.00	2.70	13498.00	28.38	0.00	28.43	1.76	2.84	18567.24	10166.27
20.054	3802.00	0.00	0.00	2.70	20426.00	30.75	0.00	30.78	1.21	2.53	32776.52	18572.95

SECNO	XLOC	ELTRD	ELLC	ELMIN	Q	CmSEL	CHIWS	EG	10K*S	VCH	AREA	.01K
20.744	3643.00	0.00	0.00	2.10	6883.00	25.88	0.00	26.10	5.68	4.51	3697.83	2888.99
20.744	3643.00	0.00	0.00	2.10	10669.00	27.81	0.00	28.01	5.80	4.88	7293.56	4428.46
20.744	3643.00	0.00	0.00	2.10	11585.00	28.23	0.00	28.41	5.50	4.82	8555.52	4940.85
20.744	3643.00	0.00	0.00	2.10	12464.00	28.62	0.00	28.78	5.13	4.71	9932.87	5504.28
20.744	3643.00	0.00	0.00	2.10	13498.00	29.01	0.00	29.15	4.80	4.61	11538.09	6162.46
20.744	3643.00	0.00	0.00	2.10	20426.00	31.10	0.00	31.17	3.13	3.96	22106.78	11551.99
20.855	590.00	0.00	0.00	2.10	6883.00	26.16	0.00	26.31	3.50	3.98	4007.26	3680.07
20.855	590.00	0.00	0.00	2.10	10669.00	28.07	0.00	28.20	3.28	4.11	8059.13	5894.02
20.855	590.00	0.00	0.00	2.10	11585.00	28.47	0.00	28.58	3.06	4.02	9364.04	6620.65
20.855	590.00	0.00	0.00	2.10	12464.00	28.84	0.00	28.93	2.85	3.93	10796.40	7384.86
20.855	590.00	0.00	0.00	2.10	13498.00	29.21	0.00	29.29	2.66	3.84	12401.17	8269.59
20.855	590.00	0.00	0.00	2.10	20426.00	31.20	0.00	31.25	1.85	3.39	22696.78	15030.42
20.922	353.00	0.00	0.00	4.90	6883.00	26.31	0.00	26.60	8.96	4.68	2527.01	2299.75
20.922	353.00	0.00	0.00	4.90	10669.00	28.21	0.00	28.48	8.50	5.00	6122.18	3659.63
20.922	353.00	0.00	0.00	4.90	11585.00	28.60	0.00	28.84	7.82	4.88	7408.82	4141.88
20.922	353.00	0.00	0.00	4.90	12464.00	28.96	0.00	29.17	7.17	4.74	8719.86	4656.34
20.922	353.00	0.00	0.00	4.90	13498.00	29.32	0.00	29.51	6.56	4.61	10215.88	5270.19
20.922	353.00	0.00	0.00	4.90	20426.00	31.28	0.00	31.37	4.03	3.91	20158.43	10175.91
20.925	14.00	23.50	22.30	4.90	6883.00	26.39	0.00	26.68	8.68	4.63	2596.21	2336.42
20.925	14.00	23.50	22.30	4.90	10669.00	28.27	0.00	28.53	8.18	4.92	6316.09	3730.85
20.925	14.00	23.50	22.30	4.90	11585.00	28.70	0.00	28.92	7.34	4.75	7754.14	4275.17
20.925	14.00	23.50	22.30	4.90	12464.00	29.10	0.00	29.29	6.53	4.56	9267.66	4877.90
20.925	14.00	23.50	22.30	4.90	13498.00	29.50	0.00	29.66	5.84	4.38	10956.44	5584.04
20.925	14.00	23.50	22.30	4.90	20426.00	31.67	0.00	31.74	3.15	3.51	22455.27	11501.52
20.934	50.00	0.00	0.00	4.90	6883.00	26.44	0.00	26.73	8.52	4.60	2636.30	2357.58
20.934	50.00	0.00	0.00	4.90	10669.00	28.32	0.00	28.57	7.98	4.86	6442.28	3777.47
20.934	50.00	0.00	0.00	4.90	11585.00	28.74	0.00	28.96	7.17	4.70	7884.83	4326.04
20.934	50.00	0.00	0.00	4.90	12464.00	29.14	0.00	29.32	6.39	4.51	9399.74	4931.88
20.934	50.00	0.00	0.00	4.90	13498.00	29.54	0.00	29.69	5.73	4.35	11088.96	5640.87
20.934	50.00	0.00	0.00	4.90	20426.00	31.69	0.00	31.75	3.12	3.49	22564.78	11566.40
21.105	900.00	0.00	0.00	4.10	5491.00	26.93	0.00	26.97	1.86	2.70	6542.54	4030.94
21.105	900.00	0.00	0.00	4.10	8442.00	28.75	0.00	28.78	1.66	2.71	12297.84	6558.44
21.105	900.00	0.00	0.00	4.10	9014.00	29.11	0.00	29.14	1.53	2.63	13903.06	7295.64
21.105	900.00	0.00	0.00	4.10	9440.00	29.46	0.00	29.48	1.37	2.52	15493.44	8058.69
21.105	900.00	0.00	0.00	4.10	10011.00	29.82	0.00	29.84	1.26	2.44	17240.56	8929.79
21.105	900.00	0.00	0.00	4.10	14004.00	31.82	0.00	31.83	0.81	2.08	28942.24	15519.41

21.645	2851.00	0.00	0.00	4.10	5491.00	27.27	0.00	27.34	2.57	3.21	6479.99	3426.75
21.645	2851.00	0.00	0.00	4.10	8442.00	29.01	0.00	29.05	2.23	3.16	11130.28	5658.70
21.645	2851.00	0.00	0.00	4.10	9014.00	29.35	0.00	29.39	2.10	3.10	12216.54	6221.60
21.645	2851.00	0.00	0.00	4.10	9440.00	29.67	0.00	29.71	1.94	3.01	13277.29	6782.05
21.645	2851.00	0.00	0.00	4.10	10011.00	30.01	0.00	30.04	1.82	2.95	14464.71	7421.83
21.645	2851.00	0.00	0.00	4.10	14004.00	31.94	0.00	31.96	1.33	2.66	22946.03	12135.01

CLEAR CREEK (CHANNEL IMP

SUMMARY PRINTOUT TABLE 150

	SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
	0.000	0.00	0.00	0.00	-22.10	33029.00	2.00	0.00	2.33	1.76	5.26	8923.71	24884.01
*	0.042	220.00	0.00	0.00	-22.40	33029.00	2.01	0.00	2.32	1.92	3.82	7563.22	23840.22
	0.083	220.00	0.00	0.00	-22.40	33029.00	2.05	0.00	2.36	1.91	3.81	7581.81	23926.14
	0.125	220.00	0.00	0.00	-22.40	33029.00	2.09	0.00	2.40	1.89	3.80	7602.72	24023.02
	0.167	220.00	0.00	0.00	-22.40	33029.00	2.13	0.00	2.44	1.88	3.79	7622.71	24115.76
	0.207	215.00	0.00	0.00	-21.50	33029.00	2.15	0.00	2.52	4.67	5.98	8482.21	15289.98
	0.255	250.00	0.00	0.00	-22.30	33029.00	2.34	0.00	2.64	3.92	5.51	9416.80	16689.43
	0.319	340.00	0.00	0.00	-23.80	33029.00	2.46	0.00	2.77	3.91	5.53	9252.83	16708.84
	0.385	350.00	0.00	0.00	-23.80	31482.00	2.56	0.00	2.97	4.75	6.12	7532.75	14439.92
	0.418	175.00	0.00	0.00	-37.40	31482.00	2.90	0.00	3.09	2.57	4.55	11583.22	19631.68
	0.421	14.00	5.30	23.40	-37.40	31482.00	2.99	0.00	3.11	0.80	2.55	11222.09	35120.09
	0.426	28.00	5.30	23.40	-37.40	31482.00	2.99	0.00	3.12	0.80	2.55	11228.59	35135.55
	0.427	1.00	0.00	0.00	-37.40	31482.00	2.99	0.00	3.12	1.61	3.65	11570.08	24841.46
	0.446	101.00	0.00	0.00	-24.00	31482.00	3.01	0.00	3.15	2.06	4.09	17081.52	21915.57
	0.479	174.00	0.00	0.00	-24.00	31482.00	2.96	0.00	3.27	2.07	4.80	13426.22	21890.47
*	0.482	16.00	100000.00	100000.00	-24.00	31063.00	2.99	0.00	3.13	2.02	4.04	17033.09	21872.30
	0.499	90.00	0.00	0.00	-22.00	30869.00	3.04	0.00	3.17	1.90	3.92	18891.91	22411.79
	0.660	850.00	0.00	0.00	-20.60	29845.00	3.19	0.00	3.32	1.70	3.73	11729.23	22892.87

0.882	1175.00	0.00	0.00	-15.00	27842.00	3.42	0.00	3.54	1.86	2.78	10022.05	20407.11
1.017	713.00	0.00	0.00	-9.60	27842.00	3.59	0.00	3.61	0.31	1.03	27017.04	50328.05
1.288	1426.00	0.00	0.00	-9.60	27842.00	3.62	0.00	3.64	0.18	0.96	29050.67	65414.66
1.498	1109.00	0.00	0.00	-9.60	25346.00	3.64	0.00	3.67	0.42	1.37	18595.25	59059.96
1.898	2112.00	0.00	0.00	-9.60	23792.00	3.71	0.00	3.71	0.11	0.72	32911.13	70594.51
2.208	1637.00	0.00	0.00	-9.60	22524.00	3.72	0.00	3.74	0.17	0.99	22782.63	54035.59

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SECNO	XLOC	FLTKD	FLLC	ELMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
2.498	1531.00	0.00	0.00	-9.60	21337.00	3.75	0.00	3.75	0.06	0.59	36276.30	90288.94
2.988	2587.00	0.00	0.00	-9.60	19088.00	3.76	0.00	3.77	0.06	0.57	33455.12	78260.46
3.417	2270.00	0.00	0.00	-9.60	19088.00	3.78	0.00	3.78	0.08	0.65	29535.13	68295.02
3.607	1003.00	0.00	0.00	-9.60	19088.00	3.78	0.00	3.81	0.37	1.31	14619.89	31350.30
3.977	1954.00	0.00	0.00	-9.60	19088.00	3.87	0.00	3.90	0.61	1.51	12684.23	24521.71
4.227	1320.00	0.00	0.00	-13.60	19088.00	3.96	0.00	4.20	3.49	3.94	4847.09	10214.33
4.857	3326.00	0.00	0.00	-14.20	19088.00	4.33	0.00	4.35	0.14	1.00	19510.21	51266.27
5.447	3115.00	0.00	0.00	-12.80	19088.00	4.75	0.00	5.40	5.07	6.59	4557.50	8474.18
5.647	1056.00	0.00	0.00	-12.90	19088.00	5.65	0.00	5.75	1.13	3.06	10058.77	17945.34
5.857	1050.00	0.00	0.00	-15.00	19088.00	5.68	0.00	6.14	4.08	5.77	5589.34	9452.48
6.396	750.00	0.00	0.00	-15.00	19088.00	6.25	0.00	6.56	5.29	6.45	8980.14	8297.68
* 6.408	50.00	100000.00	100000.00	-15.00	19088.00	6.28	0.00	6.59	4.50	6.19	9209.41	8996.22
6.605	500.00	0.00	0.00	-15.00	19088.00	6.48	0.00	6.80	3.54	6.10	9380.70	10151.39
6.718	500.00	0.00	0.00	-12.00	19088.00	6.82	0.00	6.86	0.27	1.66	12601.77	36602.58
7.028	1584.00	0.00	0.00	-15.00	18110.00	6.86	0.00	6.93	0.55	2.00	10266.93	24518.07
7.308	1350.00	0.00	0.00	-15.00	18110.00	6.97	0.00	7.03	1.08	2.10	10910.55	17446.21
7.476	800.00	0.00	0.00	-15.00	18110.00	7.04	0.00	7.08	0.32	1.55	12385.86	31888.30
7.958	700.00	0.00	0.00	-15.00	18110.00	7.03	0.00	7.18	1.37	3.14	6097.86	15487.86
7.959	2.00	12.10	17.50	-15.00	18110.00	7.01	0.00	7.20	2.07	3.47	5213.99	12596.55
7.960	12.00	12.10	17.50	-15.00	18110.00	7.01	0.00	7.20	2.07	3.48	5211.44	12588.54
7.961	2.00	0.00	0.00	-15.00	18110.00	7.01	0.00	7.21	3.42	4.31	6022.86	9793.39

8.008	528.00	0.00	0.00	-15.00	18110.00	7.22	0.00	7.31	1.35	2.82	10425.74	15607.47
8.009	5.00	11.90	17.20	-15.00	18110.00	6.97	0.00	7.57	4.12	6.63	5306.26	8922.55
8.011	12.00	11.90	17.20	-15.00	18110.00	6.98	0.00	7.57	4.12	6.63	5307.61	8925.61
8.012	5.00	0.00	0.00	-15.00	18110.00	7.10	0.00	7.60	3.69	6.28	5495.56	9422.82
8.018	30.00	0.00	0.00	-15.00	18110.00	7.12	0.00	7.62	3.53	6.19	5544.98	9634.95

	SECNO	XLCH	FLTRD	ELLC	ELMIN	Q	CWSEL	CRITWS	EG	10K*S	VCH	AREA	.01K
	8.020	15.00	10.50	16.10	-15.00	18110.00	7.09	0.00	7.66	3.87	6.52	5316.88	9210.21
	8.022	12.00	10.50	16.10	-15.00	18110.00	7.10	0.00	7.66	3.86	6.51	5318.79	9214.38
	8.025	11.00	0.00	0.00	-15.00	18110.00	7.79	0.00	7.83	0.44	1.64	14921.08	27340.28
	8.269	15.00	0.00	0.00	-15.00	18110.00	7.79	0.00	7.83	0.44	1.64	14927.19	27354.94
	8.379	581.00	0.00	0.00	-15.00	18110.00	7.75	0.00	7.89	0.71	3.43	11542.96	21463.64
	8.578	581.00	0.00	0.00	-15.00	18110.00	7.88	0.00	7.93	0.48	1.91	9811.06	26249.58
	8.777	1050.00	0.00	0.00	-15.00	18110.00	7.94	0.00	7.97	0.31	1.50	12757.53	32348.36
	8.976	1052.00	0.00	0.00	-15.00	17793.00	7.91	0.00	8.06	0.78	3.48	10670.02	20141.91
	9.101	659.00	0.00	0.00	-15.00	17793.00	8.06	0.00	8.11	0.39	1.80	10420.25	28618.39
	9.366	1400.00	0.00	0.00	-15.00	17793.00	8.08	0.00	8.18	0.42	2.69	12414.97	27495.77
	9.586	1161.00	0.00	0.00	-15.00	17634.00	8.12	0.00	8.26	0.64	3.29	11147.42	22106.00
	9.673	460.00	0.00	0.00	-15.00	17634.00	8.15	0.00	8.29	0.74	3.30	8042.04	20465.35
*	9.676	16.00	100000.00	100000.00	-15.00	17634.00	8.17	0.00	8.31	0.74	3.29	8058.63	20514.60
	9.685	47.00	0.00	0.00	-15.00	17634.00	8.19	0.00	8.32	0.68	3.16	8626.24	21395.25
*	9.704	102.00	100000.00	100000.00	-15.00	17634.00	8.21	0.00	8.34	0.66	3.15	8647.61	21456.51
	9.712	39.00	0.00	0.00	-15.00	17634.00	8.21	0.00	8.35	0.73	3.28	8088.87	20604.46
*	9.718	32.00	100000.00	100000.00	-15.00	17634.00	8.23	0.00	8.37	0.73	3.28	8097.30	20629.52
	9.721	14.00	0.00	0.00	-15.00	17634.00	8.24	0.00	8.37	0.92	3.12	8572.67	18346.52
	9.840	653.00	0.00	0.00	-15.00	17634.00	8.30	0.00	8.44	0.87	3.11	10090.37	18897.96
	10.200	1900.00	0.00	0.00	-15.00	17634.00	8.50	0.00	8.59	0.67	2.47	10704.57	21516.15
	10.490	1531.00	0.00	0.00	-15.00	17634.00	8.63	0.00	8.69	0.53	2.31	13092.65	24155.38

10.670	950.00	0.00	0.00	-15.00	17634.00	8.63	0.00	8.79	0.93	3.40	8524.94	18263.08
10.890	1160.00	0.00	0.00	-17.60	17634.00	8.73	0.00	8.90	0.94	3.49	7756.56	18213.43
11.240	1850.00	0.00	0.00	-15.00	17634.00	8.98	0.00	9.02	0.42	1.79	12009.26	27151.85
11.460	1162.00	0.00	0.00	-15.00	17634.00	8.97	0.00	9.13	0.93	3.39	7867.14	18329.17
11.720	1400.00	0.00	0.00	-15.00	17634.00	9.15	0.00	9.25	0.67	2.78	11520.03	21532.26

SECNO	XLCH	ELTRD	ELLC	ELMIN	Q	CwSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
12.146	2218.00	0.00	0.00	-16.90	17634.00	9.27	0.00	9.44	0.90	3.40	7506.11	18598.16
12.606	2429.00	0.00	0.00	-15.00	16863.00	9.52	0.00	9.64	0.73	2.92	7682.35	19694.95
12.966	1901.00	0.00	0.00	-15.00	16863.00	9.64	0.00	9.80	0.85	3.34	6028.57	18343.44
13.316	1848.00	0.00	0.00	-16.90	16863.00	9.80	0.00	9.96	0.87	3.29	5764.24	18062.39
13.586	1426.00	0.00	0.00	-14.20	16863.00	9.92	0.00	10.10	0.99	3.46	5259.04	16911.80
13.616	1214.00	0.00	0.00	-13.50	16863.00	10.04	0.00	10.22	1.02	3.52	6392.45	16689.22
14.046	1214.00	0.00	0.00	-12.75	16863.00	10.15	0.00	10.37	1.21	3.71	4905.80	15304.86
14.197	800.00	0.00	0.00	-12.24	16863.00	10.30	0.00	10.46	1.07	3.42	6708.30	16272.16
14.443	1300.00	0.00	0.00	-12.50	16863.00	10.45	0.00	10.61	1.18	3.40	7060.81	15538.55
14.633	1000.00	0.00	0.00	-12.00	16863.00	10.55	0.00	10.80	1.72	4.07	4147.82	12858.72
14.673	211.00	0.00	0.00	-11.90	16863.00	10.12	0.00	11.44	13.96	9.21	1830.12	4512.85
14.681	42.00	23.60	21.50	-11.90	16863.00	10.36	0.00	11.62	13.18	9.03	1867.21	4644.14
14.714	179.00	0.00	0.00	-11.90	16863.00	10.70	0.00	11.94	21.95	8.97	2066.84	3599.25
15.135	2218.00	0.00	0.00	-6.90	16863.00	15.22	0.00	16.10	18.62	8.70	3577.25	3907.53
15.505	1954.00	0.00	0.00	-6.30	13465.00	16.75	0.00	16.89	2.12	3.22	6488.97	9240.83
15.606	533.00	0.00	0.00	-6.30	13465.00	16.80	0.00	16.96	0.87	3.44	6519.81	14401.89
15.712	560.00	0.00	0.00	-1.10	13465.00	17.11	0.00	17.91	21.80	7.15	1882.62	2883.61
15.716	32.00	20.70	18.70	-1.10	13465.00	17.25	0.00	18.03	21.15	7.07	1903.26	2927.56
15.766	264.00	0.00	0.00	-5.40	13465.00	18.13	0.00	18.46	8.00	5.82	4993.27	4759.92
15.834	350.00	0.00	0.00	-5.40	13465.00	18.54	0.00	18.68	3.52	3.92	6130.77	7172.25
15.872	200.00	0.00	0.00	-2.20	13465.00	18.60	0.00	18.79	5.12	4.44	4703.73	5953.08

15.900	150.00	0.00	0.00	-2.20	13465.00	18.72	0.00	18.90	4.99	4.40	4746.05	6026.43
16.203	1600.00	0.00	0.00	-2.20	13465.00	19.39	0.00	19.80	9.81	6.33	3972.71	4299.77
16.623	2218.00	0.00	0.00	-3.70	13465.00	20.08	0.00	20.12	0.80	2.02	11506.66	15009.82
16.973	1848.00	0.00	0.00	-2.60	13465.00	20.23	0.00	20.77	14.38	7.69	3730.44	3550.53
17.210	1250.00	0.00	0.00	-3.20	13465.00	22.74	0.00	22.91	3.73	4.39	6359.97	6968.15

SECNO	XLOn	FLTRO	FLLC	FLMIN	Q	CnSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
17.258	250.00	0.00	0.00	-3.20	13465.00	22.86	0.00	22.98	2.51	3.72	6809.67	8504.90
17.286	150.00	0.00	0.00	-3.20	13465.00	22.89	0.00	23.01	2.50	3.72	6844.99	8515.46
17.333	250.00	0.00	0.00	-3.20	13465.00	22.98	0.00	23.05	1.65	2.94	7535.27	10484.68
17.381	250.00	0.00	0.00	-3.20	13465.00	22.99	0.00	23.10	2.44	3.69	6962.12	8621.37
17.396	90.00	0.00	0.00	-4.80	13465.00	22.93	0.00	23.17	5.05	5.19	6361.28	5990.97
17.426	150.00	0.00	0.00	-4.80	13465.00	23.13	0.00	23.22	2.08	3.42	7120.79	9329.27
17.445	100.00	0.00	0.00	-4.80	13465.00	23.15	0.00	23.24	2.18	3.51	7138.05	9110.06
17.473	150.00	0.00	0.00	-4.80	13465.00	23.17	0.00	23.25	2.06	3.41	7167.87	9371.62
17.511	200.00	0.00	0.00	-4.80	13465.00	23.12	0.00	23.35	4.78	5.08	6642.15	6157.84
17.534	120.00	0.00	0.00	-4.80	13465.00	23.28	0.00	23.50	4.57	4.99	6882.68	6300.82
17.548	75.00	0.00	0.00	-4.80	11229.00	23.41	0.00	23.55	3.06	4.10	7077.12	6416.52
17.562	75.00	0.00	0.00	-4.80	11229.00	23.53	0.00	23.57	1.07	2.43	8261.29	10869.71
17.581	100.00	0.00	0.00	-4.80	11229.00	23.54	0.00	23.58	0.95	2.29	8729.21	11511.20
17.591	50.00	0.00	0.00	-4.70	11229.00	23.56	0.00	23.59	0.73	1.87	11054.14	13183.25
17.614	125.00	0.00	0.00	-4.70	11229.00	23.56	0.00	23.61	1.95	3.06	10280.12	8044.66
17.696	430.00	0.00	0.00	-4.70	11229.00	23.68	0.00	23.73	1.89	3.03	10426.16	8162.46
17.776	420.00	0.00	0.00	-4.70	11229.00	23.73	0.00	23.77	1.86	3.00	10511.55	8231.30
17.813	200.00	0.00	0.00	-4.70	11229.00	23.78	0.00	23.81	0.87	2.06	11055.19	12040.47
17.842	150.00	0.00	0.00	-4.70	11229.00	23.80	0.00	23.82	0.54	1.62	12386.81	15342.26
17.866	125.00	0.00	0.00	-4.70	11229.00	23.81	0.00	23.83	0.60	1.71	11746.46	14499.47
17.913	250.00	0.00	0.00	-4.70	11229.00	23.81	0.00	23.85	1.82	2.97	10639.46	8334.35

17.992	420.00	0.00	0.00	-0.90	11229.00	23.84	0.00	24.09	7.20	5.54	5013.99	4183.47
18.140	782.00	0.00	0.00	-0.90	11229.00	24.26	0.00	24.80	11.62	5.77	1945.26	3293.44
18.146	32.00	26.00	24.00	-0.90	11229.00	24.44	0.00	24.94	11.13	5.70	1970.94	3366.25
18.214	354.00	0.00	0.00	-0.90	11229.00	25.11	0.00	25.27	4.71	4.67	6619.86	5174.25
18.454	1267.00	0.00	0.00	1.60	11229.00	25.54	0.00	25.58	1.63	2.70	9630.44	8793.79

SECNO	XLCH	FLTRD	FLLC	FLMIN	Q	CWSEL	CRIWS	EG	10K*S	VCH	AREA	.01K
18.664	1109.00	0.00	0.00	2.00	11229.00	25.72	0.00	25.84	3.75	4.07	7713.17	5799.14
19.064	2112.00	0.00	0.00	-3.70	11229.00	26.43	0.00	26.49	3.73	3.50	12151.37	5813.76
19.334	1426.00	0.00	0.00	0.90	11229.00	26.69	0.00	26.77	1.91	2.98	11884.11	8127.03
20.054	3802.00	0.00	0.00	2.70	11229.00	27.21	0.00	27.28	2.25	3.08	13085.77	7485.25
20.744	3643.00	0.00	0.00	2.10	11229.00	28.07	0.00	28.25	5.64	4.85	8038.36	4726.43
20.855	590.00	0.00	0.00	2.10	11229.00	28.32	0.00	28.43	3.15	4.06	8848.18	6328.92
20.922	353.00	0.00	0.00	4.90	11229.00	28.45	0.00	28.70	8.09	4.93	6896.40	3947.08
20.925	14.00	23.50	22.30	4.90	11229.00	28.53	0.00	28.76	7.69	4.82	7167.61	4049.73
20.934	50.00	0.00	0.00	4.90	11229.00	28.57	0.00	28.80	7.50	4.77	7296.96	4099.05
21.105	900.00	0.00	0.00	4.10	8988.00	28.97	0.00	29.00	1.65	2.72	13283.76	7007.03
21.645	2851.00	0.00	0.00	4.10	8988.00	29.23	0.00	29.28	2.23	3.19	11829.62	6019.79

Cities of Friendswood and League City
Clear Creek Drainage Improvement Study
Contract No. 55-41016

The following maps are not attached to this report. They are located in the official file and may be copied upon request.

Exhibit 3 - Subarea Delineations
Exhibit 4 - cross-sectional Layout
Exhibit 5 - Water Surface Profile Existing Conditions and Existing Conditions with Proposed Improvements
Exhibit 6 - 10 Year Floodplains

Please contact Research and Planning Fund Grants Management Division at (512) 463-7926 for copies.