DESIGN CONCEPT REPORT
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CHANNELIZATION AND BANK PROTECTION ON THE SALT RIVER THROUGH THE SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

FOR THE
SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

BRW

MARCH 17, 1992

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Prepared For The

SALT RIVER PIMA-MARICOPA INDIAN COMMUNITY

Prepared By

BRW, Inc.
2700 North Central Avenue
Suite 1000
Phoenix, Arizona 85004

Daniel W Cook
3-19-92

March 19, 1992

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EXECUTIVE SUMMARY

This Design Concept Report is being performed at the authorization of the Salt River Pima-Maricopa Indian Community for the primary purpose of providing flood protection to existing developments along the Salt River within the Community. The purpose of this Design Concept Report is develop conceptual plans and cost estimates for funding appropriations for channelization and bank protection for the Salt River from Alma School Road on the west to the Greenfield Road alignment on the east, a distance of approximately seven river miles.

This project is located in the Phoenix metropolitan area in Maricopa County in the State of Arizona.

The objective of the proposed channelization and bank protection is to provide a 100-year level of flood protection to existing developments and to other Community owned undeveloped land. The existing developments that would benefit from this project include two landfill areas adjacent to the river, six sand and gravel mining operations and a cemetery.

The construction of the Salt River channelization and bank protection within the project limits is proposed to be completed in three phases. The three phases in order of priority are as follows:

- Phase 1 Country Club Drive to Horne Road - 2 river miles
  - 1A - Bank protection adjacent to landfill areas
  - 1B - Channelization and remaining bank protection
- Phase 2 Alma School Road to Country Club Drive - 1 river mile
- Phase 3 Horne Road to Greenfield Road - 4 river miles

The first phase, Country Club Drive to Horne Road, is the highest priority because the two landfill areas and the cemetery are located within this reach of the project. Protection of the landfill areas from potential flood damages is an immediate concern. The south embankment of the Tri-Cities Landfill forms the north bank of the existing Salt River floodway.

This bank protection is very important from a public health and safety perspective, as it provides for protection of the landfill areas from river scour and erosion. It is the desire of the Salt River Pima-Maricopa Indian Community to complete this Phase 1A work immediately.

The second and third phase channelization will help to alleviate the long term channel bed degradation that is occurring from the sand and gravel mining operations, will stabilize the channel banks, will improve public health and safety concerns of flooding of

the sand and gravel pits and will result in economic gains by removing 1,900 acres of undeveloped land from the existing FEMA designated floodplain.

The preliminary channelization alignment of the Salt River for this project was established based on several manmade constraints, the currently existing low flow channel, and the existing river banks. This preliminary alignment is within a 1,000 to 1,300 foot wide corridor. The typical bank protection on the side slopes of the new channelization will consist of a hard material of sufficient thickness to withstand the substantial scour and erosion forces developed by the flood flows in the River. The bank protection adjacent to the two landfill areas will also have an impervious layer behind it and a concrete slurry cutoff wall below it to protect against flood waters seeping into the landfill.

The total project design and construction costs for all phases of the project is estimated to be $40,859,000. The project costs by phase are as follows:

Phase 1A Country Club Drive to Horne Road Bank Protection Adjacent to Landfill	**$ 3,991,000.00**
Phase 1B Country Club Drive to Horne Road Channelization and Bank Protection	$11,923,000.00
Phase 2 Alma School Road to Country Club Drive Channelization and Bank Protection	$ 7,588,000.00
Phase 3 Horne Road to Greenfield Road Channelization and Bank Protection	$17,357,000.00
	$40,859,000.00

The design and construction of all phases of this project can logically be completed in five fiscal years. The design and construction of Phase 1A can be completed within the first two fiscal years.

1.0 INTRODUCTION

1.1 Authorization and Purpose

This Design Concept Report is being performed at the authorization of the Salt River Pima–Maricopa Indian Community for the primary purpose of providing flood protection to existing developments along the Salt River within the Community. The purpose of this Design Concept Report is to develop conceptual plans and cost estimates for funding appropriations for channelization and bank protection for the Salt River from Alma School Road on the west to the Greenfield Road alignment on the east, a distance of approximately seven river miles.

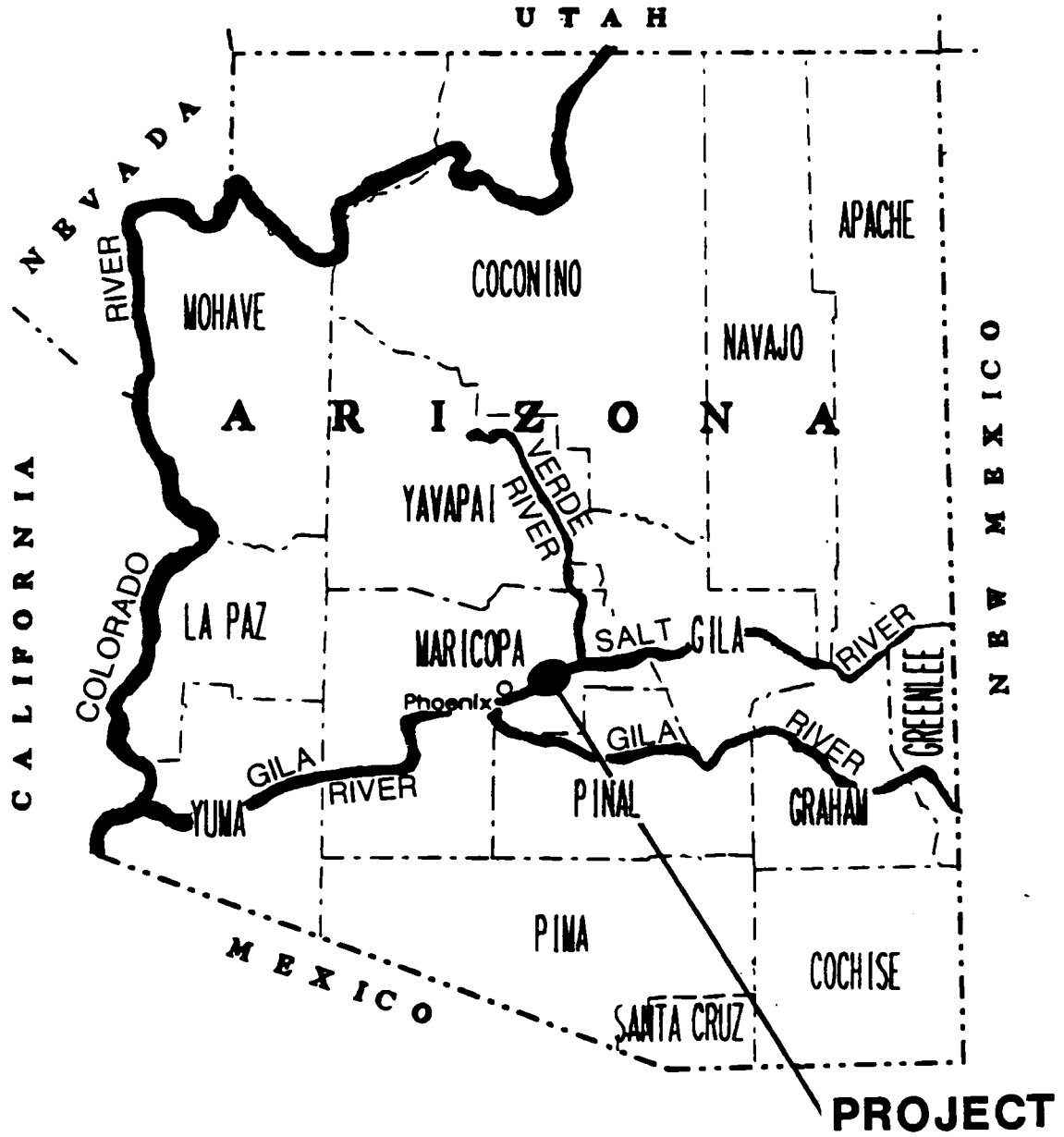
The Salt River Pima–Maricopa Indian Community has several developments adjacent to the Salt River within the project area. The objective of the proposed channelization and bank protection is to provide a 100–year level of flood protection to these developments and to other Community owned undeveloped land. The existing developments that would benefit from this project include six sand and gravel mining operations, a cemetery and two landfill areas. Approximately 1,900 acres of undeveloped land area adjacent to the Salt River that is currently within the FEMA designated 100–year floodplain would no longer be within the designated floodplain at a result of this project.

The flood protection along this reach of the Salt River will consist of channelization of the River and construction of bank protection. The channel will be excavated to a trapezoidal shape along a defined horizontal and vertical alignment. The channelization will be discussed in more detail in Section 3 of this Report. The bank protection on the side slopes of the new channelization will consist of a hard material of sufficient thickness to withstand the substantial scour and erosion forces developed by the flood flows in the River. Grade control structures will be constructed across the channel bottom between the bank protection to control channel bed degradation. The bank protection and grade control structures will be discussed in more detail in Section 4 of this Report.

This project will be designed, approved and constructed in accordance with Flood Control District of Maricopa County criteria. The U.S. Army Corps of Engineers will review and comment on the project design.

1.2 Project Location

This project is located in the Phoenix metropolitan area in Maricopa County in the State of Arizona. The project location is shown in Figures 1 and 2. The Salt River Pima–Maricopa Indian Community is located in the east central portion of the Phoenix metropolitan area as shown in Figure 2. Approximately sixteen miles of the Salt River flows through the southern most portion of the Community.



Project Location Map

DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Figure 1

This project is for improvements to approximately seven miles of the Salt River. The downstream limit of the project is approximately 200 feet downstream, or west, of the existing Alma School Road bridge. This downstream limit was established based on the design requirement to protect the bridge from scour damage resulting from the higher flow velocities exiting the channelized segment. The upstream limit of the project is approximately one half mile west of Greenfield Road. This upstream limit was established based on the location where the new bank protection can be terminated into existing channel banks in a relatively narrow portion of the river, thus providing a hydraulically efficient transition into the channelization.

1.3 Existing Land Uses

The existing land uses adjacent to the Salt River within the project study area consist of six sand and gravel mining operations, a cemetery, two landfill areas and undeveloped land. The existing land uses are shown on Figures 3A, 3B, 3C, 3D and 3E in Section 3. The sand and gravel mining operations are an acceptable land use in the river floodplain. During flooding the mining operations in the floodplain cannot operate. The general location of the six mining operations are as follows:

- Alma School Road in the southwest quadrant
- Country Club Road in the southwest quadrant
- Country Club Road in the northeast quadrant
- Gilbert Road in the southwest and the southeast quadrant
- Val Vista Road in the southwest quadrant
- Val Vista Road in the northwest quadrant

The cemetery is located on the south bank of the Salt River immediately east of Horne Road. During 100-year flood flow events the potential exists for eroding a portion of the cemetery.

One landfill area, the Tri-Cities Landfill, is located on the north bank of the Salt River between Center Street and Horne Road, approximately one mile in length along the river. The other smaller landfill area is located on the south bank of the river east of Center Street, approximately one-quarter mile in length along the river. During various flood flow events the potential exists for eroding a portion of these landfills. Flood protection for the Salt River banks that are adjacent to the landfill areas, as well as the cemetery, is a very important consideration and justification of this project.

Undeveloped land areas comprise the remaining land uses along the Salt River within the project area. One aspect of floodplain management involves the balancing the economic gain from floodplain development against the potential flood damages, in terms of dollars, and the cost of any proposed or needed river channel/floodplain improvements. The approximate 1,900 acres of undeveloped land currently within the regulated 100-year floodplain represents a significant potential economic gain to the Community. Of this

1,900 acres, approximately 750 acres is within the designated floodway and 1,150 acres is within the flood fringe area. (The floodplain consists of the floodway and the flood fringe area.) Development within a floodway is restricted and development within a flood fringe must be protected from flood waters (i.e., in the case of a building the first flood must be one foot above the high water elevation). However, land areas that are adjacent to and lower than the revised 100-year flood water surface elevations in the channelized Salt River should still consider some level of flood protection from local stormwater runoff and from potential overtopping or failure of the channelization.

The Salt River Pima-Maricopa Indian Community is in the process of preparing a land use Master Plan for the Salt River corridor within the Community. This plan will be used to guide future development along the river corridor. The channelization of the Salt River is an important element of the Master Plan.

1.4 Project Phasing

The construction of the Salt River channelization and bank protection is proposed to be completed in phases. The phases in order of priority are as follows:

Phase 1	Country Club Drive to Horne Road - 2 river miles
	1A - Bank protection adjacent to landfill areas
	1B - Channelization and remaining bank protection
Phase 2	Alma School Road to Country Club Drive - 1 river mile
Phase 3	Horne Road to Greenfield Road - 4 river miles

The first phase, Country Club Drive to Horne Road, is the highest priority because the two landfill areas and the cemetery are located within this reach of the project. Protection of these three areas from potential flood damages is an immediate concern.

The first phase is further subdivided into phases 1A and 1B. Phase 1A is the immediate construction of the bank protection adjacent to the two existing landfill areas. This bank protection is very important from a public health and safety perspective, as it provides for protection of the landfill areas from river scour and erosion. It is the desire of the Salt River Pima-Maricopa Indian Community to complete this Phase 1A work immediately. Phase 1B is the construction of the remaining bank protection and the channelization of the Salt River between Country Club Drive and Horne Road. The complete bank protection and channelization of the river in this reach provides the necessary long term "control" of the river for long term protection of the landfill areas from major flood events.

The second phase, Alma School Road to Country Club Drive, will provide channelization in a reach of the Salt River where existing channel banks are unstable, where flow is separated in the existing channel near Alma School Road and where flow is undefined near Country Club Drive because of sand and gravel mining operations. The third phase,

Horne Road to Greenfield Road, will provide channelization in a reach of the Salt River that is wide and undefined because of the meandering nature of the river.

The second and third phase channelization will help to alleviate the long term channel bed degradation that is occurring from the sand and gravel mining operations, will stabilize the channel banks, will improve public health and safety concerns of flooding of the sand and gravel pits and will result in economic gains by removing 1,900 acres of undeveloped land from the existing FEMA designated floodplain.

2.0 EXISTING SITE CONDITIONS

2.1 Salt River Geomorphology

The Salt River within the limits of the project can be characterized as a wide ephemeral stream with material that consists of predominantly sands and gravels. The sand and gravel deposition is largely a result of historic in-stream sediment transport. The low relief valley and alluvial fan characteristics contribute to the accumulation of sand and gravel in the bed of the Salt River.

The natural floodplain of the Salt River is relatively shallow and wide compared to the main river channel. The river channel has very few natural levees and is not incised into the topography. The channel boundaries are poorly defined which is characteristic of a river that is bedded in sand and gravel alluvial material. The lack of natural levees, incisions and defined channel boundaries characterizes a river that is susceptible to lateral migration and bank instability.

The river channel can be considered to be meandering with portions of the channel being locally braided. The braiding in the Salt River is caused by a large bed load or sediment transport and easily erodible channel banks. The width of the river channel exhibits random variation which is also a characteristic of lateral instability in the river.

The result of in-stream sand and gravel mining operations on the river geomorphology is degradation of the channel invert elevation. Recent studies[1] of degradation in the Salt River have illustrated that the river has degraded approximately 14 feet since 1962 with some areas being degraded as much as 35 feet. The degradation is primarily a result of the following:

- A deficit of sediment in the water resulting from sediment being trapped in the sand and gravel pits in the existing river channel and/or floodplain.
- A lowering of the channel bed through a physical process known as headcutting. Headcutting occurs in sand and gravel pits and in scour holes as a result of the flood flows through the pits/holes and the instability of the channel bed material.

The continued mining operations within the river floodplain have the potential for continual channel bed degradation and possible impacts to existing bridges, bank protection and other downstream improvements adjacent to the river. The degradation increases the

[1] *Preliminary Hydraulic Analysis of the Salt River for the East Papago Freeways and Red Mountain Interchange*, Simons, Li & Associates, Inc., September 1989, Page 4.

Effects of In-Stream Mining on Channel Stability, Final Report, June 1989, Arizona Department of Transportation.

instability of the channel banks and other river improvements by undercutting foundations and lowering the depth of scour.

2.2 River Hydrology

Flood flows in the Salt River generally occur from three distinctly different weather conditions. Moisture from storms during the summer months which typically originate in the Gulf of Mexico tend to be intense and of short duration. Moisture from storms at other times of the year typically originate in the Pacific Ocean and these storms tend to be more gentle rains of longer duration. Moisture from snowmelt runoff from the most upstream reaches and much higher elevations of the Salt River watershed can produce flood flows in the spring. Flooding in the river may occur at any time of the year; however, historically the larger flood events on the Salt River are associated with the spring snow melt runoffs.

Low flows in the Salt River are controlled by six dams for water supply purposes. Water is released from the various reservoirs behind the dams at controlled rates for the purpose of distribution into the irrigation canals on the downstream side of the Granite Reef dam. The Granite Reef dam is approximately 3.5 miles east from the upstream limits of this project at Greenfield Road. Flood waters are released into the Salt River downstream of the Granite Reef dam if its reservoir is at capacity.

The six dams and associated reservoirs in the Salt River watershed are operated by the Salt River Project for water supply purposes. These dams provide limited protection from flood flows of low magnitude, but offer little protection from floods of larger magnitude, such as the 10-year flood event.

The peak 100-year flood discharges in the Salt River as reported in the Salt River Flood Delineation Study, dated October 1988, prepared by the Flood Control District of Maricopa County, are as follows:

Location	Discharge Cubic Feet Per Second
Alma School Road	220,000[1]
Country Club Drive	225,000
Gilbert Road	230,000
Granite Reef Dam	245,000

(1) Discharge obtained from the U.S. Army Corps of Engineers' HEC-2 Model.

The 100-year flood discharges decrease in the downstream direction due to the significant volume attenuation of the flood peak as flood water is partially stored in the river channel and floodplain. Channelization of the Salt River will reduce the volume attenuation characteristics of the river and is discussed in more detail in Section 3.

2.3 River Corridor Geology

The general subsurface geology within the river corridor consists of alluvial deposits above a depth of about 400 feet. In the Spring of 1990, the depth to groundwater in the vicinity of the Tri-Cities landfill ranged from 170 to 190 feet.[2] The alluvial deposits above the water table are primarily coarse-grained materials, sand, gravel and cobbles. Below the groundwater table, layers of sandy clay are present.

2.4 Roadway Crossings of the Salt River

There are five existing roadway crossings of the Salt River within the project limits of Alma School Road to Greenfield Road (see photographs in Appendix A). Three are bridge crossings and two are at-grade crossings of the river bottom. The five crossings are as follows:

Location	Type of Crossing
Alma School Road	Bridge[1]
McKellips Road	At-Grade
Country Club Drive	Bridge
Horne Road	At-Grade
Gilbert Road	Bridge

(1) Two bridges; one on the main channel and one on the south floodplain.

The three bridge crossings represent a constraint on the design of the channelization by controlling both the horizontal and vertical location of the proposed channel. The two at-grade crossings of the river do not represent a constraint on the design of the channelization. The at-grade crossings of the Salt River would be reconstructed to conform to the design of the channelization.

2.5 Landfill

There are two existing landfill areas adjacent to the banks of the Salt River within the project area. One area is the existing Tri-Cities landfill which is located on the north bank of the river between Center Street and Horne Road, approximately one mile in length along the river. This landfill area is shown on Figure 3B in Section 3 (see photographs in Appendix A). The Tri-Cities landfill is constructed such that the south embankment of the landfill forms the north bank of the existing Salt River floodway as previously designated in the October 1988 Salt River Flood Delineation Study prepared by the Flood Control District of Maricopa County.

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2 *Groundwater Quality in the Vicinity of the Tri-Cities Landfill*, Kenneth D. Schmidt and Associates, Inc., July 16, 1990

During major flood events water will flow against the Tri-Cities landfill embankment. These flows against the embankment represent a potential for erosion, scour or a localized failure of the embankment. The channelization and bank protection adjacent to the landfill will virtually eliminate any potential for damage to the landfill embankment.

The Tri-Cities landfill is estimated to have a bottom elevation of approximately 1,180 based on data from 1984 topography maps. The existing Salt River channel invert elevation adjacent to the landfill varies from approximately 1,200 to 1,220. At the upstream end of the landfill, the depth of the fill portion, or body of the landfill below the channel bottom is approximately 40 feet. A geotechnical investigation will be necessary during final design to confirm the bottom elevation of this landfill area.

The second existing landfill area is located on the south side bank of the river on the east side of Center Street, approximately one quarter mile in length along the river. This landfill area is shown in Figure 3B in Section 3. This landfill area is much smaller than the Tri-Cities landfill and is set back about 100 feet from the designated 100-year floodplain. During major flood events the 100 feet of thickness of the existing channel bank would need to erode before any potential damage to the landfill area would occur. However, because of the instability of the river channel banks, such a situation is possible during major flood flow events.

The elevation of the bottom of this second landfill area is unknown. A geotechnical investigation will be necessary during final design to determine the bottom elevation.

2.6 Existing Salt River Channelization

Existing channelization of the Salt River occurs in reaches of the river downstream of the limits of this project. The Arizona Department of Transportation (ADOT), the City of Tempe and the City of Phoenix Aviation Department have completed various river channelization projects. These existing channelization projects are similar in concept and design to that being considered in this report (see photographs in Appendix A).

The existing channelization of the Salt River occurs from the I-10 Maricopa Freeway, approximately 28th Street in the City of Phoenix, to McClintock Drive in the City of Tempe, a distance of approximately seven river miles. ADOT is currently preparing final construction documents for channelization and bank protection for the river from McClintock Drive to one half mile east of Price Road, one and one half river miles, and for bank protection along the south bank of the river from one half mile east of Price Road to one half mile east of Dobson Road, one river mile.

2.7 Existing Utilities

There are only two existing utilities that could be impacted by this project, a four inch diameter high pressure gas (HPG) line and an overhead electric (OHE) transmission line. These utilities are shown in Figures 3A, 3B, 3C, 3D and 3E in Section 3. The HPG line

is located in the Country Club Drive alignment. At the Salt River bridge crossing on Country Club Drive the four inch HPG is attached to the bridge superstructure. It is not likely that the construction of the channelization and the bank protection will impact the HPG line, however, any potential conflict will be evaluated during final design. The HPG line is owned by Southwest Gas Company.

There are two OHE transmission lines that run along the north bank of the Salt River from Alma School Road to one-quarter mile east of Stapley Drive. The OHE lines vary from 200 feet to 1,000 feet north of the existing north bank of the river. At a point one-quarter mile east of Stapley Drive the OHE lines turn and run to the north and one OHE line runs to the south across the Salt River. The OHE lines on the north bank of the river are owned by the Salt River Project (SRP) and the Arizona Public Service Company (APS). Ownership of the OHE line that runs to the south across the Salt River is unconfirmed. However, the line may be owned by the Western Area Power Association (WAPA).

The OHE transmission lines will be impacted by this project in two locations. One location is where the one OHE line crosses the river one-quarter mile east of Stapley Drive. The second location is where the OHE lines cross the proposed channelization on the north side of the river at Horne Road. Each of these potential conflicts need to be coordinated with the respective owners of the OHE lines. Any necessary protection to the foundations of the transmission towers will need to be included in the final design of the channelization and bank protection.

2.8 Sand and Gravel Mining Operations

The existing sand and gravel mining operations, pits, occur in the Salt River because the resources are easily accessible, close to the point of consumption and are an economical source of high quality sand and gravel. The quality of the sand and gravel meets or exceed the local specifications for aggregate material used in the construction of roads, bridges and buildings in Arizona.

The presence of in-stream pits can increase the slope of the water surface upstream of the pit during flood flows. This increased water surface slope has greater erosive power which increases the possibility of erosion and/or headcutting of the sides of the pit. Headcutting can endanger bridges and other structures located upstream of the pit. In addition, flow through the pit will be of a slower velocity and sediment being carried in the water will settle out and be retained in the pit. Clearer water flows back into the river downstream of the pit. The clearer water has the ability (capacity) to take into suspension and carry sediment from the channel downstream of the pit. This condition causes additional erosion and/or tailcutting which can damage bridges and other structures downstream of the pit.

Water, which ponds in the sand and gravel pits following flooding, can also be a nuisance. This ponded water can create a public health and safety problem should individuals decide to use them for recreational purposes.

3.0 PROPOSED CHANNELIZATION

3.1 Channelization Alignment

The preliminary channelization alignment of the Salt River for this project was established based on several manmade constraints, the currently existing low flow channel, and the existing river banks. This preliminary alignment is depicted on Figures 3A, 3B, 3C, 3D and 3E as a 1,000 to 1,300 foot wide corridor. A curvilinear alignment with radii ranging from 1,300 to 3,800 feet was required to thread the alignment through the constraints.

The constraints and their general locations in a downstream to upstream direction are:

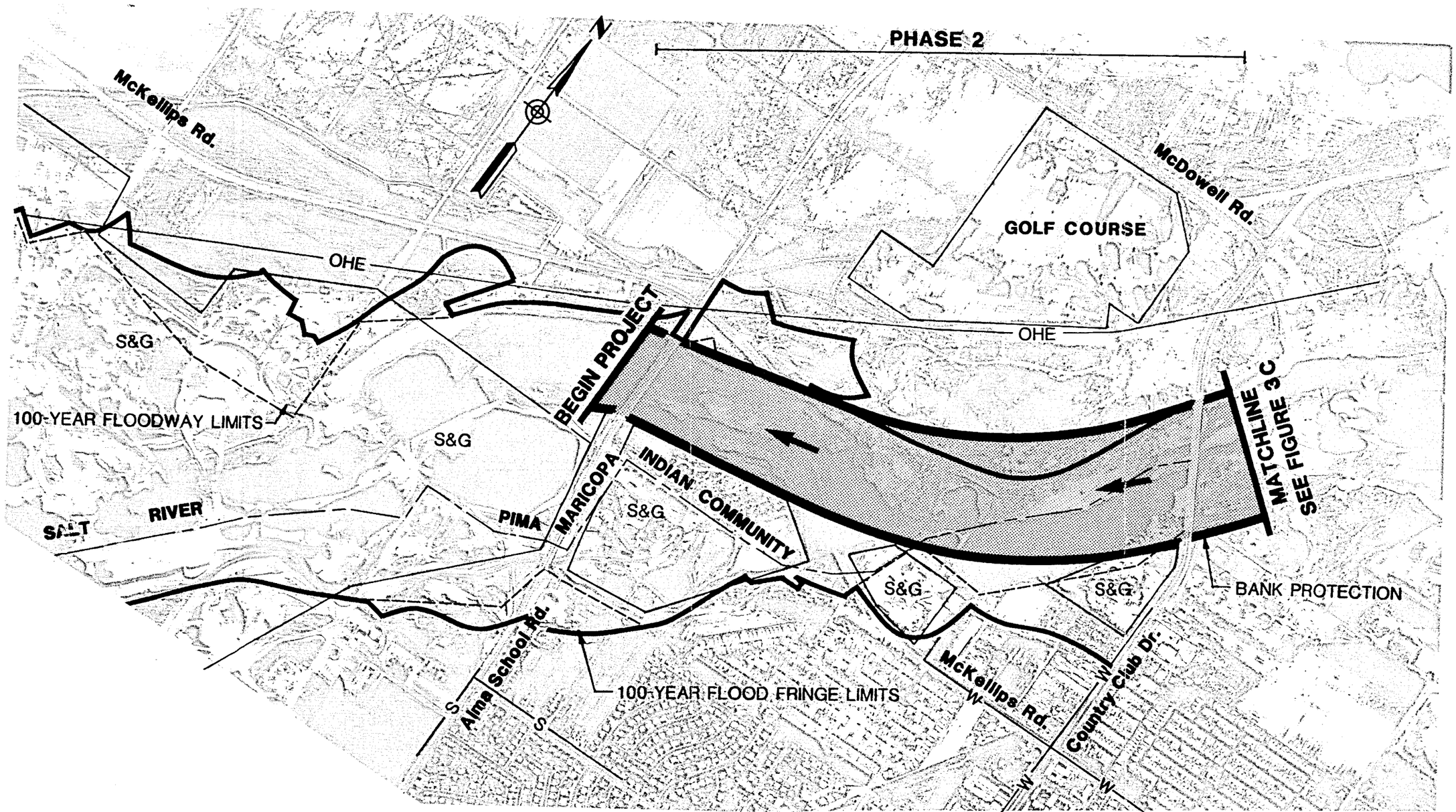
- Alma School Road Bridge with a 940-foot wide opening.
- Country Club Drive Bridge with a 1,350-foot wide opening.
- Existing north bank adjacent to the sand and gravel mining operation and landfill located just upstream of Country Club Drive.
- Small landfill area located south of the Salt River and east of Center Street.
- The naturally occurring river constriction located just downstream of the at-grade Horne Road crossing of the river.
- The cemetery located adjacent to the existing south bank and in the northeast quadrant of the Thomas Road/Horne Road intersection.
- Gilbert Road Bridge with a 1,300-foot wide opening.

The width of the corridor was conceptually set at 1,300 feet, narrowed to 1,000 feet just downstream of Horne Road, and widened to 2,600 feet at the upstream limits of the project at Greenfield Road.

A short length of the south bank of the proposed channelization is outside of the Salt River Pima-Maricopa Indian Community boundaries at two locations, Country Club Drive for 1,200 feet, and Gilbert Road for 6,500 feet. Both of these areas are in the City of Mesa and are in the existing Salt River floodway/floodplain. Temporary construction easements for this project are only needed in these two locations. Coordination with the City of Mesa and the property owners is required.

3.2 Proposed Channelization Cross Section

The proposed channelization cross section is based on design studies completed by the Arizona Department of Transportation (ADOT) for channelization of seven miles of the Salt River as previously discussed in Subsection 2.6. The proposed channel section is shown as a perspective view in Figure 4. A trapezoidal channel shape has been selected for this project because its shape has proved to be cost effective on several other Arizona river channelization projects including ADOT's recent channelization of the Salt River adjacent to the East Papago Freeway and Hohokam Freeway in Tempe.



DATE OF PHOTOGRAPH: JANUARY 23,1992
DISCHARGE IN SALT RIVER: 1085 cubic feet/second

0 500 1000 2000

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CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

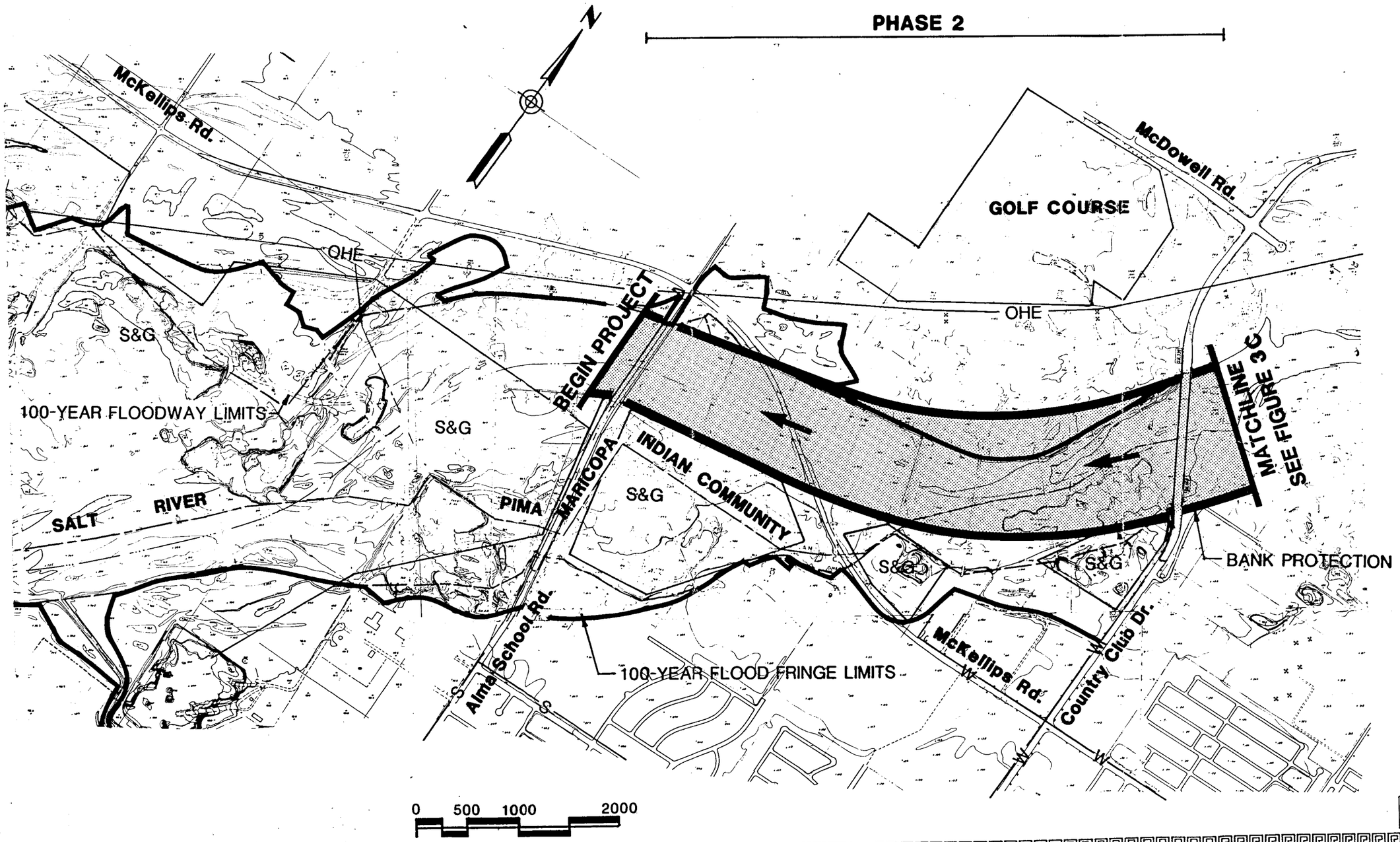
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Aerial Photograph
Alma School Road to Country Club Drive

Figure 3A-1



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DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

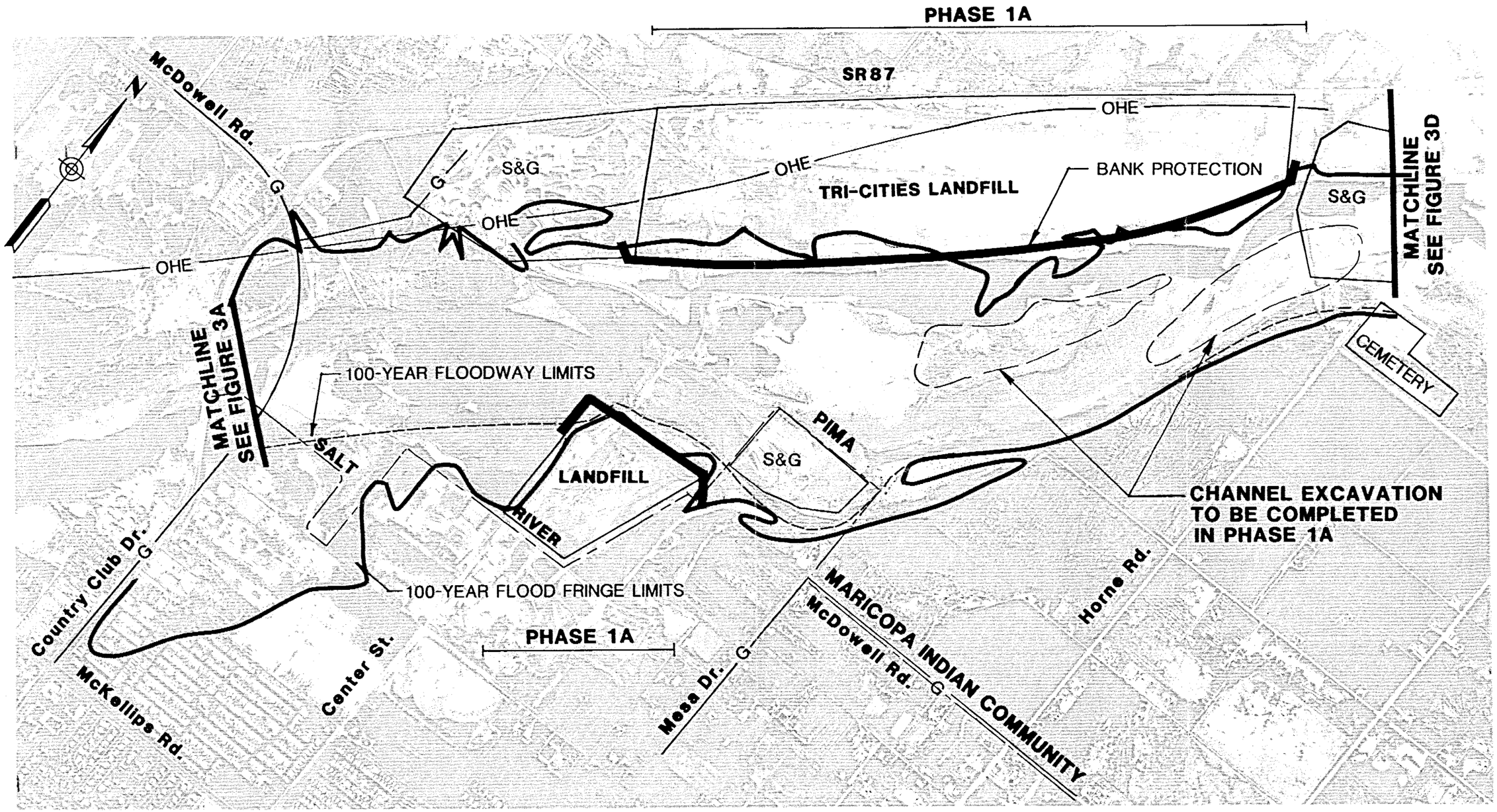
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Topography
Alma School Road to Country Club Drive

Figure 3A-2



DATE OF PHOTOGRAPH: JANUARY 23,1992
DISCHARGE IN SALT RIVER: 1085 cubic feet/second

0 500 1000 2000

BRW

DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

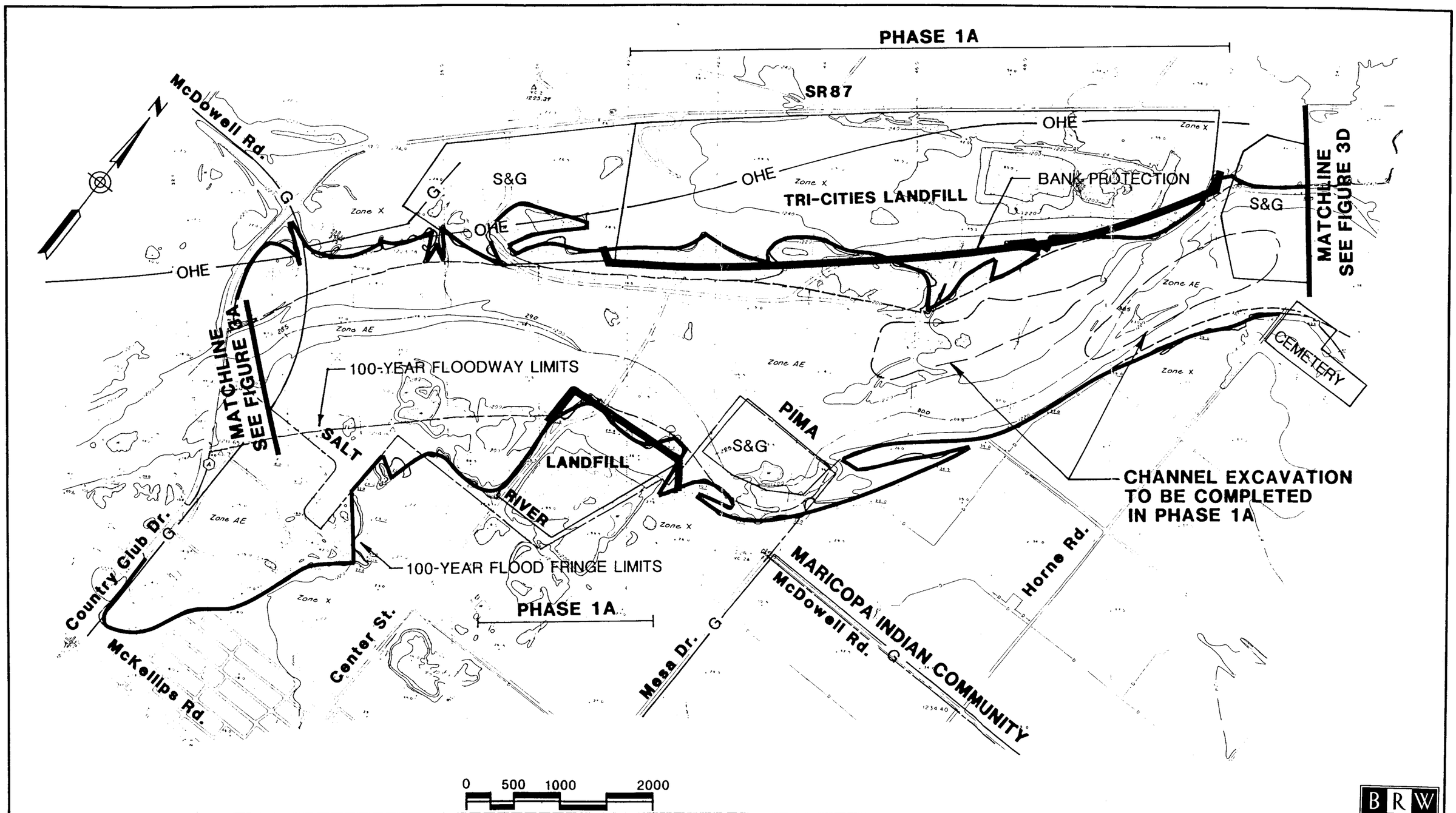
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Aerial Photograph
Country Club Drive to Horne Road - Phase 1A

Figure 3B-1



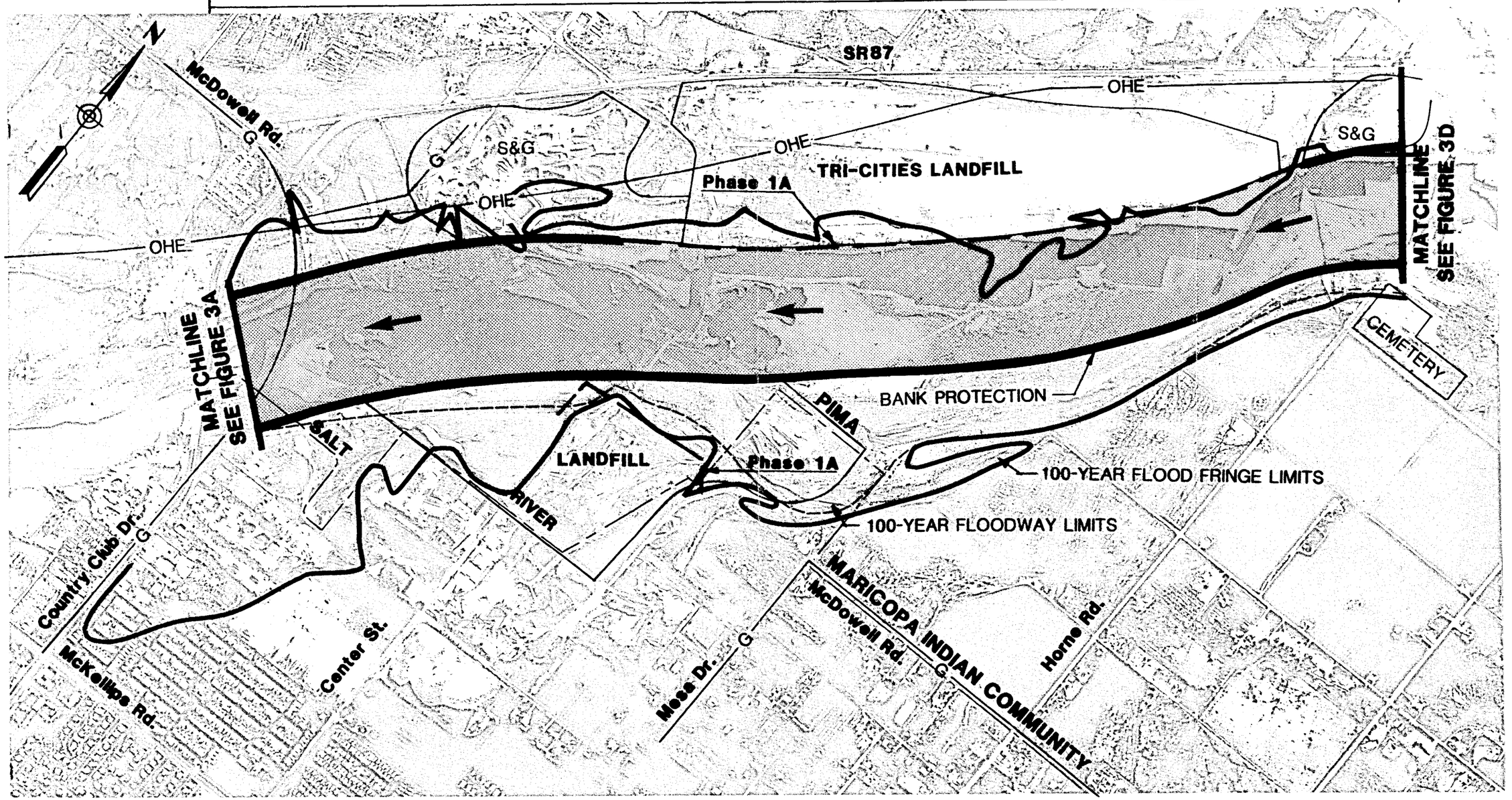
DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

LEGEND :

OHE	Overhead Electric
W	Water
S	Sewer
	100-Year Floodway Limits
G	Gas
	Channel
S&G	Sand & Gravel Mining
	100-Year Flood Fringe Limits

Channelization Alignment
Topography
Country Club Drive to Horne Road - Phase 1A

Figure 3B-2



DATE OF PHOTOGRAPH: JANUARY 23,1992
DISCHARGE IN SALT RIVER: 1085 cubic feet/second

0 500 1000 2000

BRW

DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

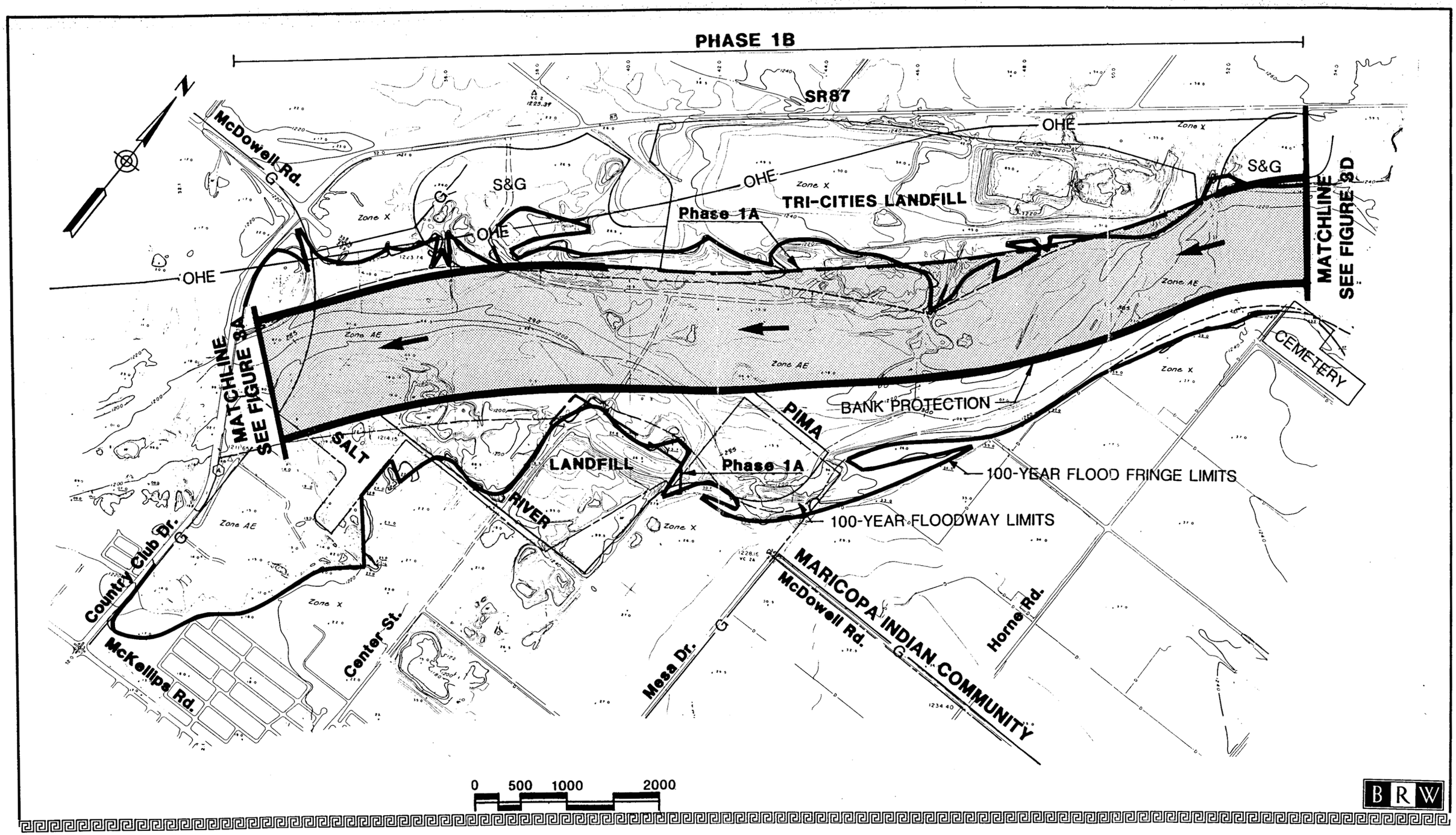
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Aerial Photograph
Country Club Drive to Horne Road - Phase 1B

Figure 3C-1



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

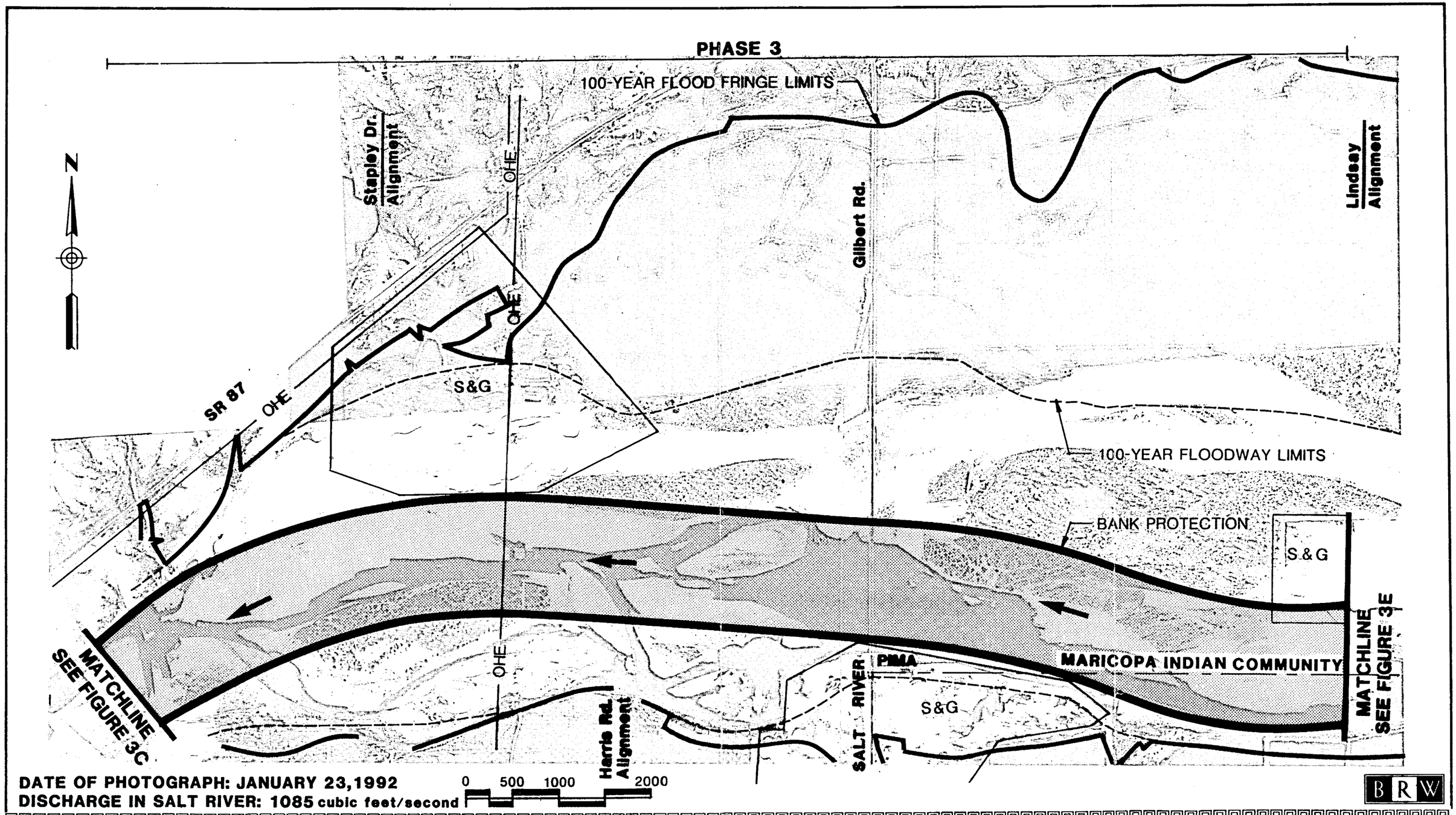
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Topography
Country Club Drive to Horne Road - Phase 1B

Figure 3C-2



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

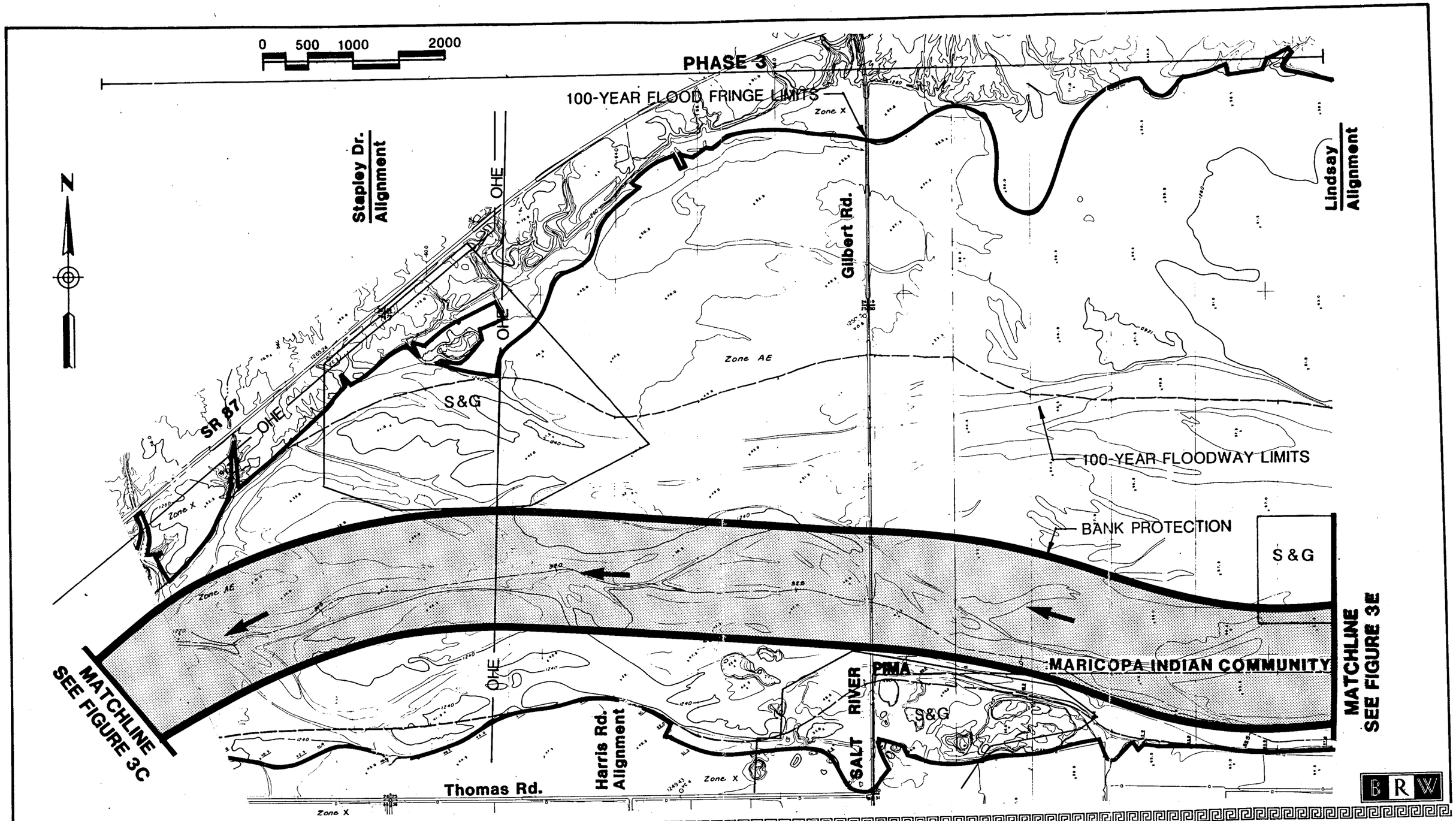
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Aerial Photograph
Horne Road to Lindsay Road

Figure 3D-1



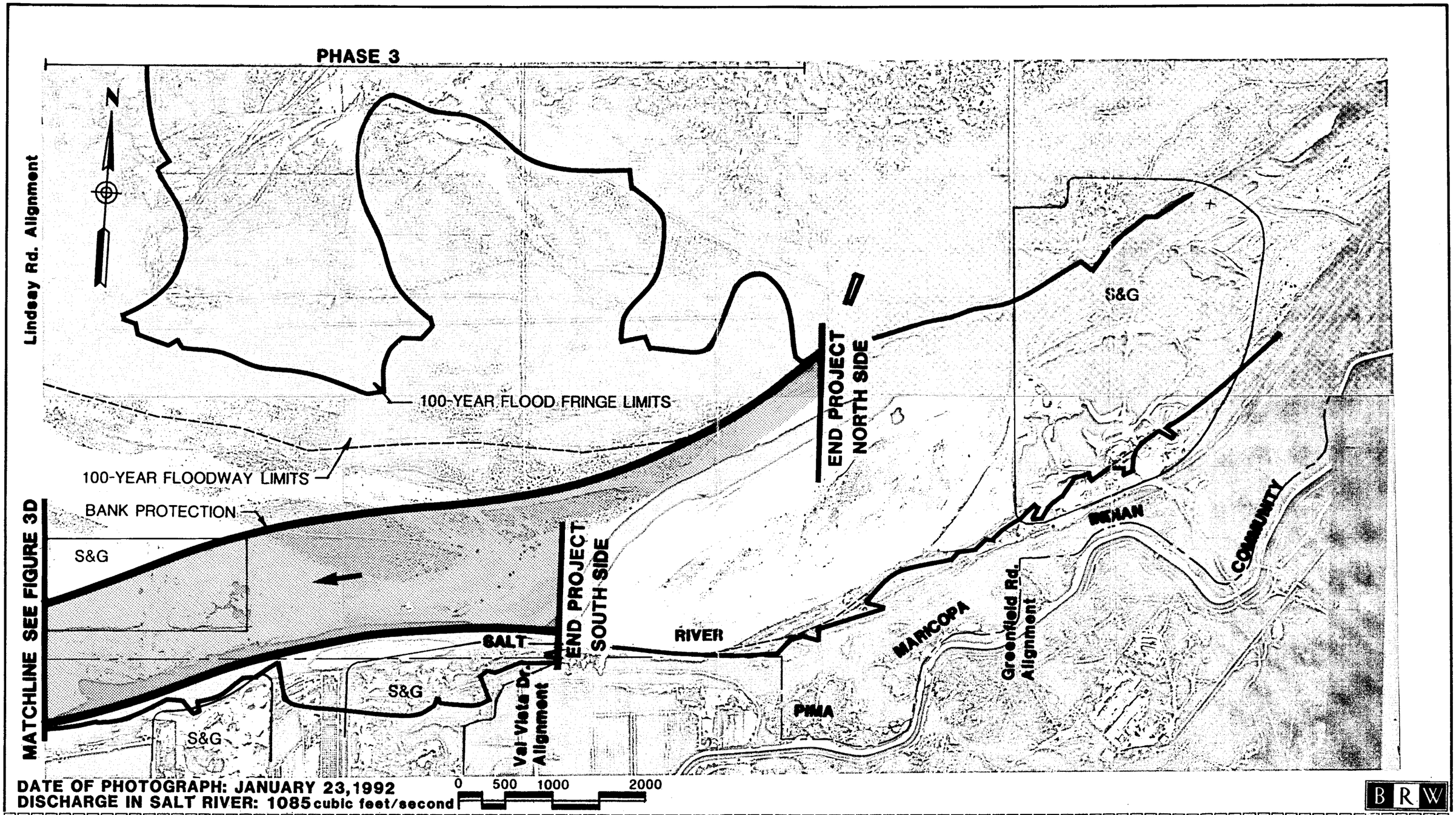
DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100 Year Floodway Limits		100 Year Flood Fringe Limits

Channelization Alignment
Topography
Horne Road to Lindsay Road

Figure 3D-2



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

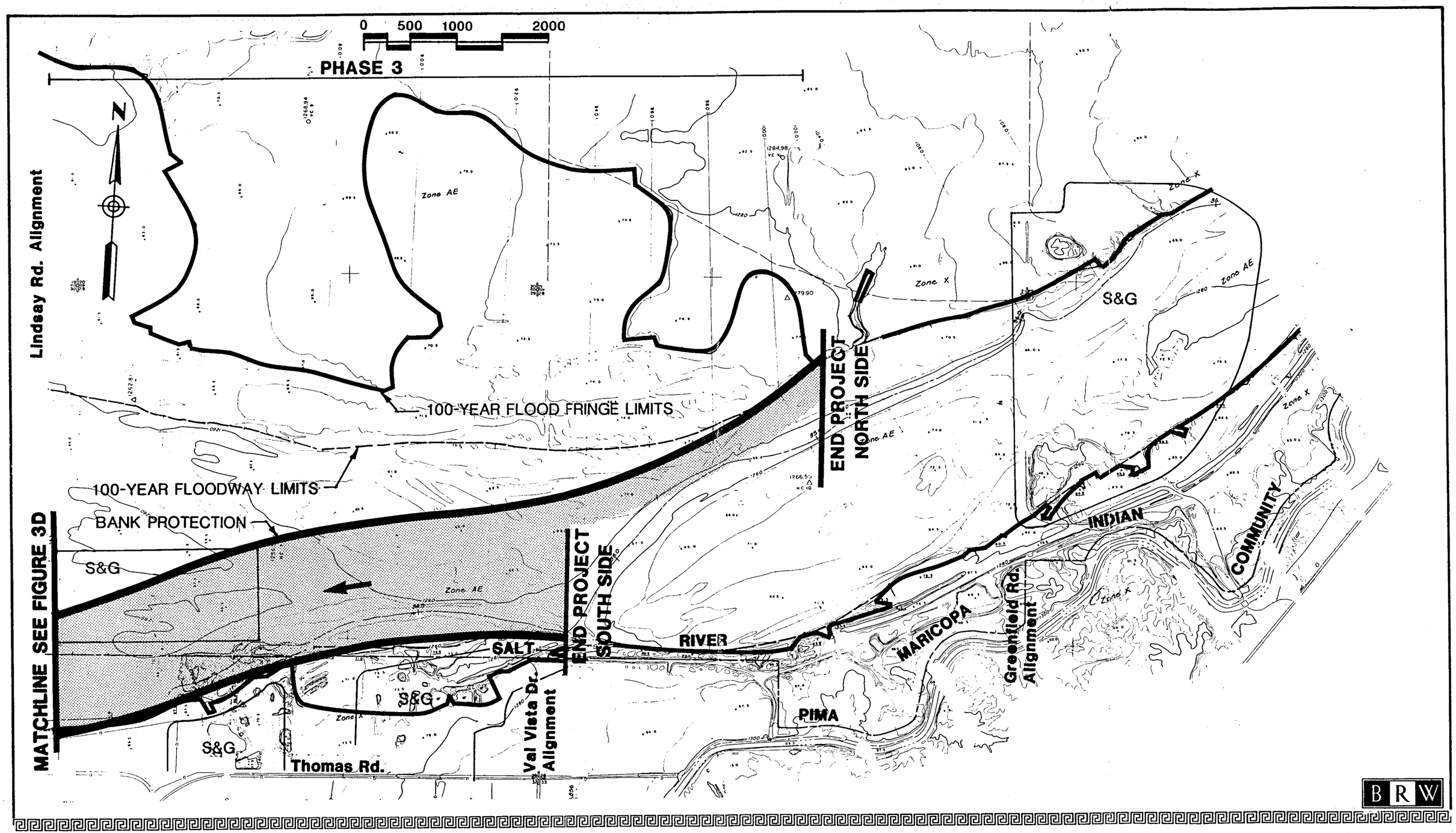
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Aerial Photograph
Lindsay Road to Greenfield Road

Figure 3E-1



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

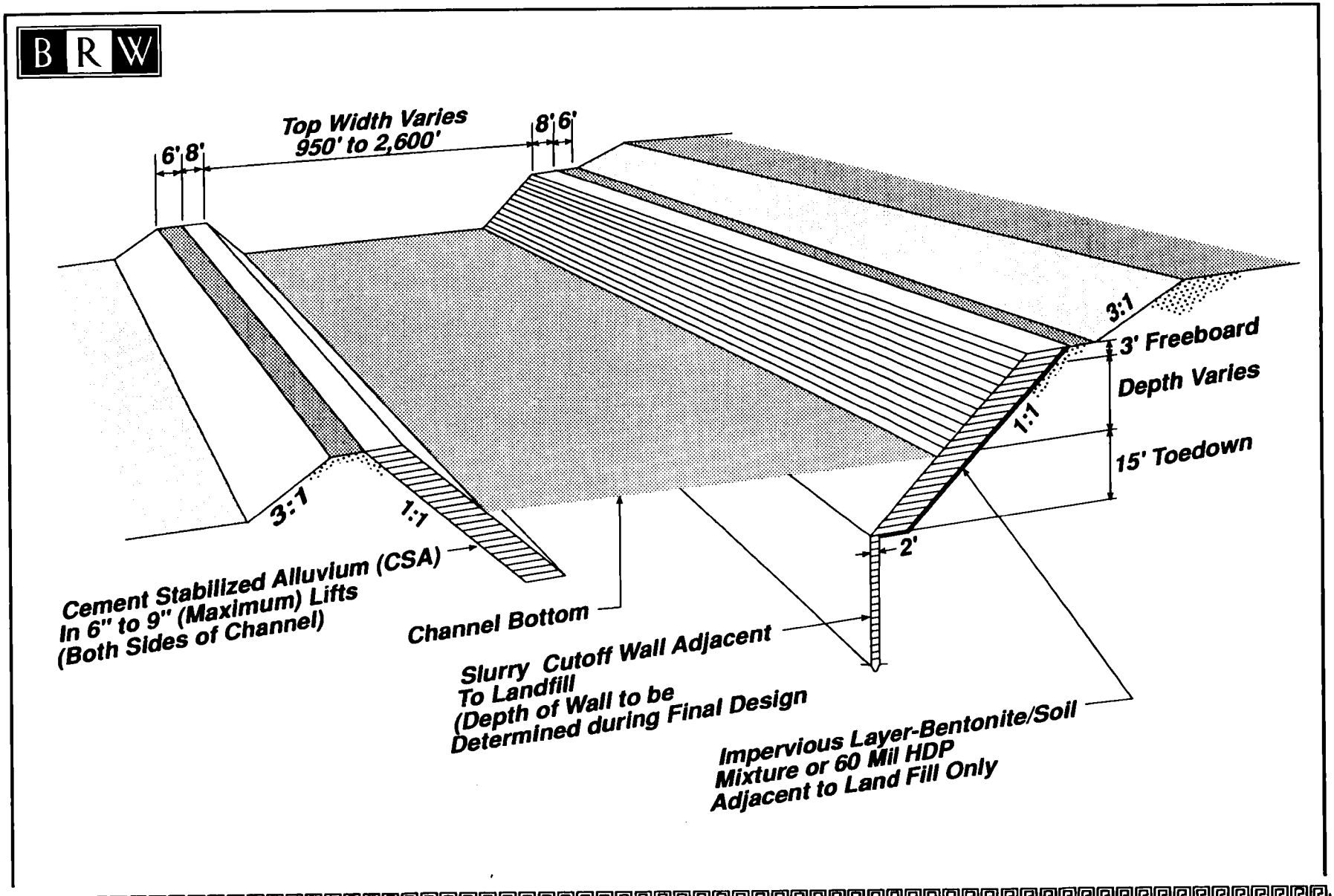
LEGEND :

OHE	Overhead Electric	G	Gas
W	Water		Channel
S	Sewer	S&G	Sand & Gravel Mining
	100-Year Floodway Limits		100-Year Flood Fringe Limits

Channelization Alignment

Topography
Lindsay Road to Greenfield Road

Figure 3E-2



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Channelization Typical Cross-Section

Figure 4

The trapezoidal channel will have one foot horizontal to one foot vertical (1:1) side slopes constructed of erosion resistent cement stabilized alluvium (CSA), 14-foot wide maintenance roads along both bank tops, and three foot horizontal to one foot vertical (3:1) fill or cut slopes from the edge of the maintenance road to the natural ground. The channel top width will vary from 950 to 2,600 feet based on constraints, hydraulic designs and depth of flow. The top of bank will be set a minimum of 3 feet above the 100-year water surface elevation (3 feet of freeboard) to provide protection from wave action. The proposed channel top widths at select locations along the river are as follows:

Location	Proposed Channel Top Width in Feet
Alma School Road	1,300
McKellips Road	950
Country Club Road	1,300
Tri-Cities Landfill	950
Horne Road	950
Gilbert Road	1,300
Lindsay Road	950
Val Vista Road	1,700
Greenfield Road	2,600

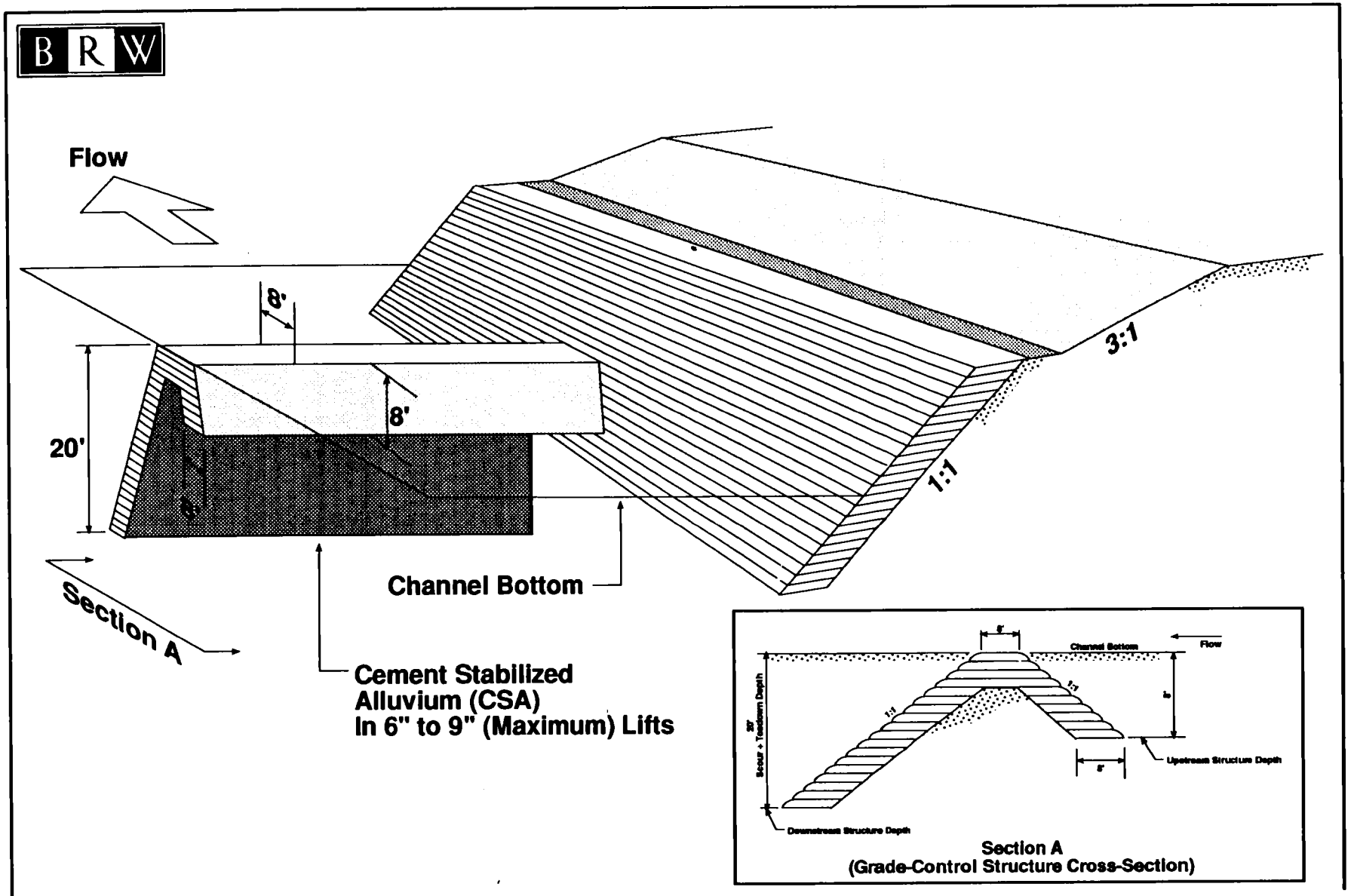
The Alma School Road crossing of the Salt River has two bridges. The north bridge, which is 940 feet long, is located on the main channel and carries the low flow as well as the majority of the larger flows. The south bridge, which is 410 feet long, is located in the floodplain and carries the overflow from the larger flow events. These bridges are separated by 1,280 feet of roadway fill. This large separation along with hydraulic and economic reasons, requires that only the larger bridge be included in the proposed channelization project. To maintain the same bridge capacity and acceptable flow velocities, the north bridge will need to be extended to the south approximately 410 feet. The extended bridge will accommodate the proposed 1,300 foot channel top width.

3.3 Grade Control Structures

Grade control structures need to be constructed across the bottom of the river channelization in order to prevent long-term degradation of the channel bottom because of the instable nature of the alluvium material in the river. These grade control structures are illustrated in Figure 5. The grade control structures will be constructed out of the same material as the bank protection as described in Section 4 of this Design Concept Report.

This concept design provides for three grade control structures at the following approximate locations:

- Downstream of the Alma School Road Bridge
- Downstream of the Horne Road at-grade crossing of the river
- Downstream of the Gilbert Road Bridge



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Grade Control Structure

Figure 5

3.4 Water Surface Profiles

A preliminary water surface profile for the 100-year flood event has been computed for this segment of the Salt River based on the proposed channel cross section with an assumed bottom width of approximately 900 feet. At the bridges the channel bottom would widen to 1250 feet to match the existing bridge opening width and to maintain acceptable velocities through the bridge openings. This profile and the natural water surface profile established by the October 1988 Salt River Flood Delineation Study by the Flood Control District of Maricopa County are shown on Figures 6A, 6B, 6C and 6D.

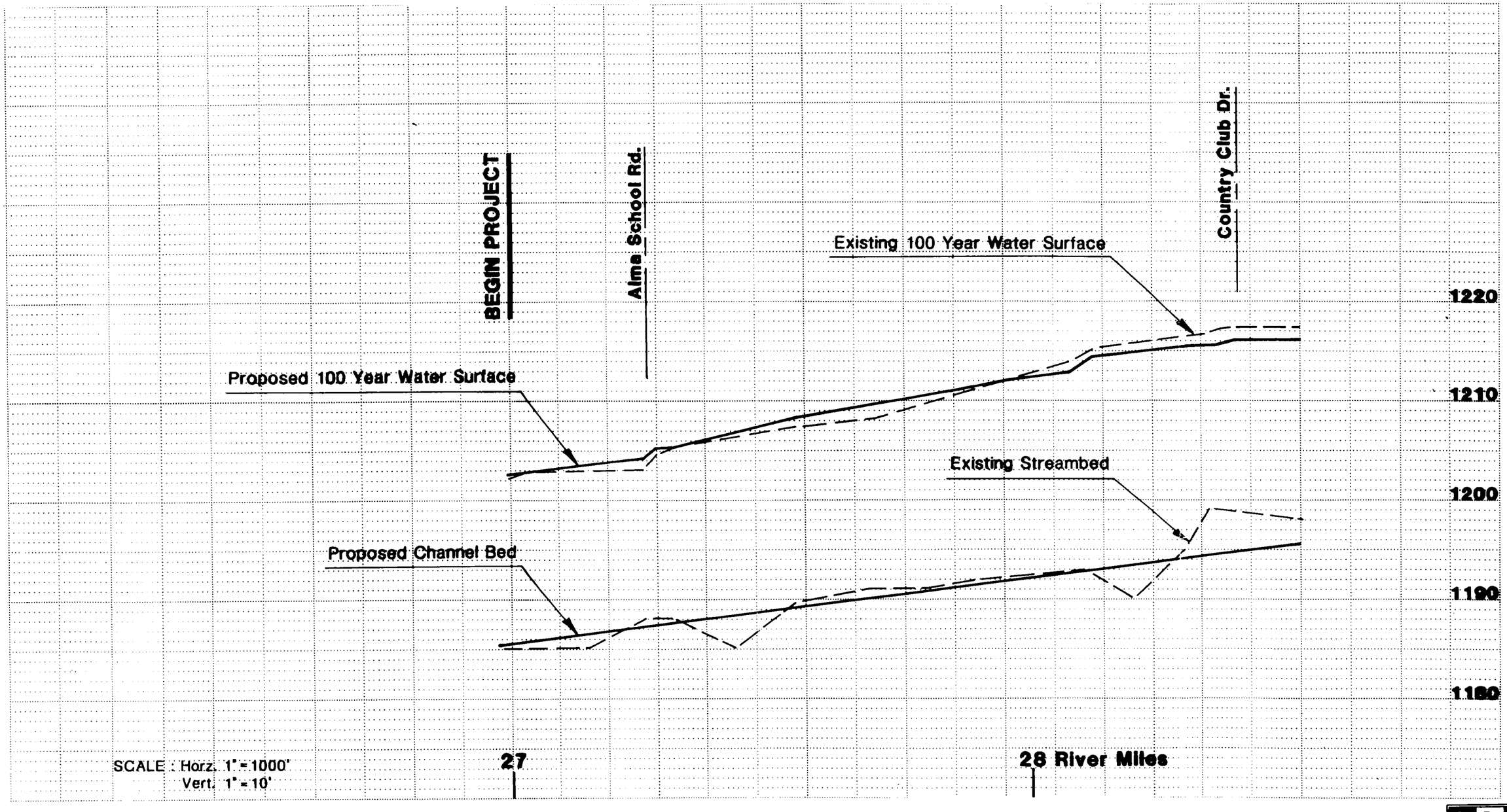
At the upstream end of the project at Greenfield Road the new water surface elevation will drop 0.2 feet. Changes in water surface elevations within the limits of the channelized segment vary from a drop of 10.4 feet to a rise of 1.6 feet. The elevation of the top of the new bank protection will be set during final design such that the rise in water surface elevation of 1.6 feet will be contained within the new channel. The large 10.4 foot drop in water surface elevation will occur through the Horne Road river segment. Channelization of this river segment will remove the currently constricted existing river channel. During the 100-year flood event the existing natural channel and the proposed channel will produce velocities ranging from 7 to 20 feet per second and from 9 to 14 feet per second, respectively.

The calculations for the preliminary water surface profile were made with the U.S. Corps of Engineers' Version 4.6 of HEC-2, Water Surface Profiles, released February 1991. Two HEC-2 Models used to develop the current flood delineation maps were obtained from the Flood Control District of Maricopa County for these calculations. One model was developed by the U.S. Army Corps of Engineers for the segment of the Salt River from its confluence with the Agua Fria River to Country Club Road and the other model was developed by the Flood Control District for the Salt River segment from Country Club Road to the Granite Reef Dam. Both models were modified to determine the effects of the proposed channelization.

During final design of the proposed channelization, these HEC-2 models will be refined to accurately reflect the final configuration of the channel and control structures, such as bridges and grade control structures. FEMA Rules and Regulations state that the water surface profile should not increase more than 1-foot due to any proposed improvements along the river. Since these preliminary calculations indicate a 1.6-foot rise in water surface elevation at one location, some modification of the channel and the HEC- 2 models may be necessary in final design.

3.5 Impact on Sand and Gravel Mining Operations

This design concept for the channelization of the Salt River is based on not allowing sand and gravel mining operation within the channelized river. The reason for this decision is primarily based on the instability of the natural river bed materials and the associated headcutting, lateral migration and long term degradation of the channel. The sand and



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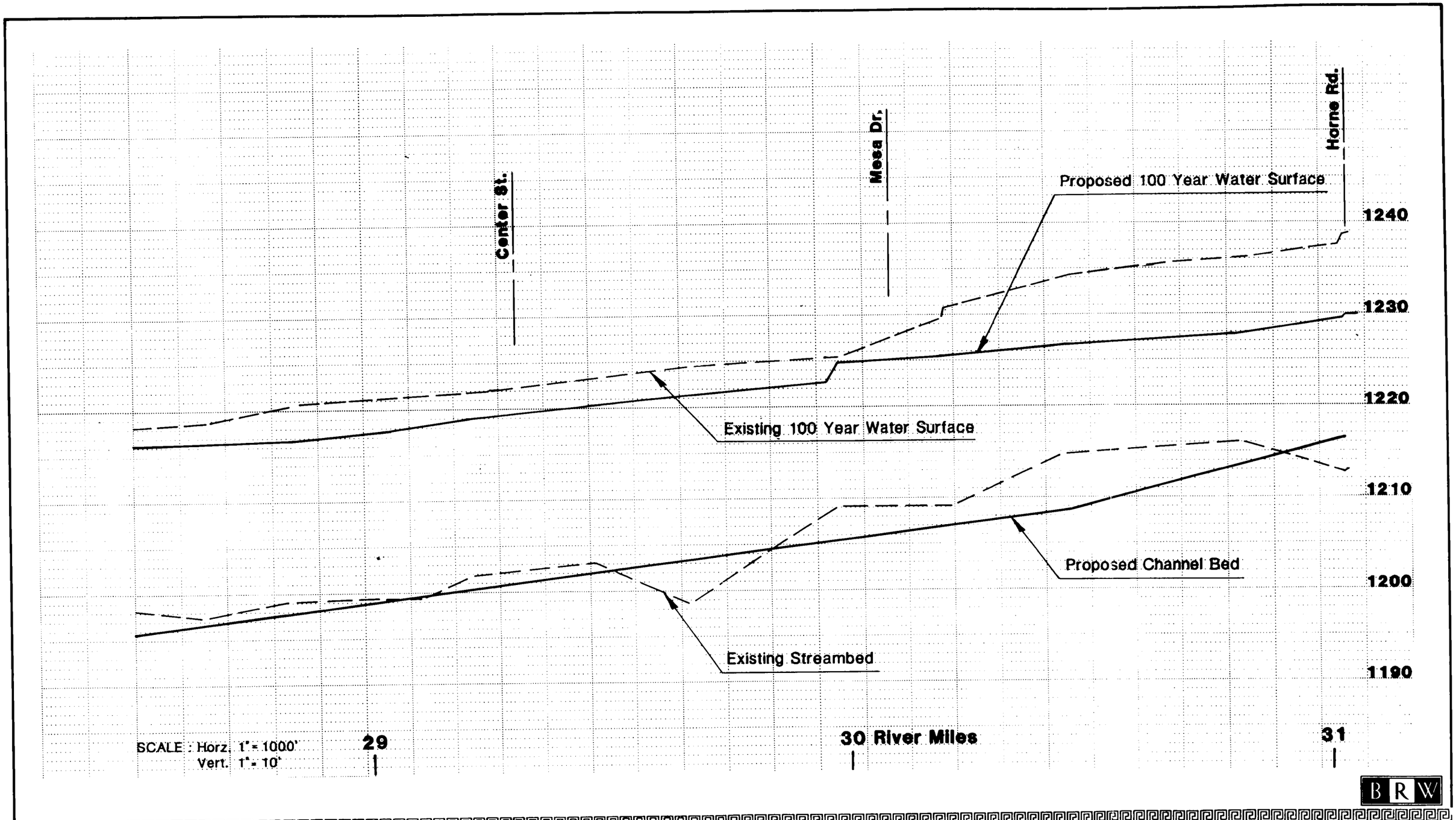
DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Water Surface Profiles
Alma School Road to Country Club Drive

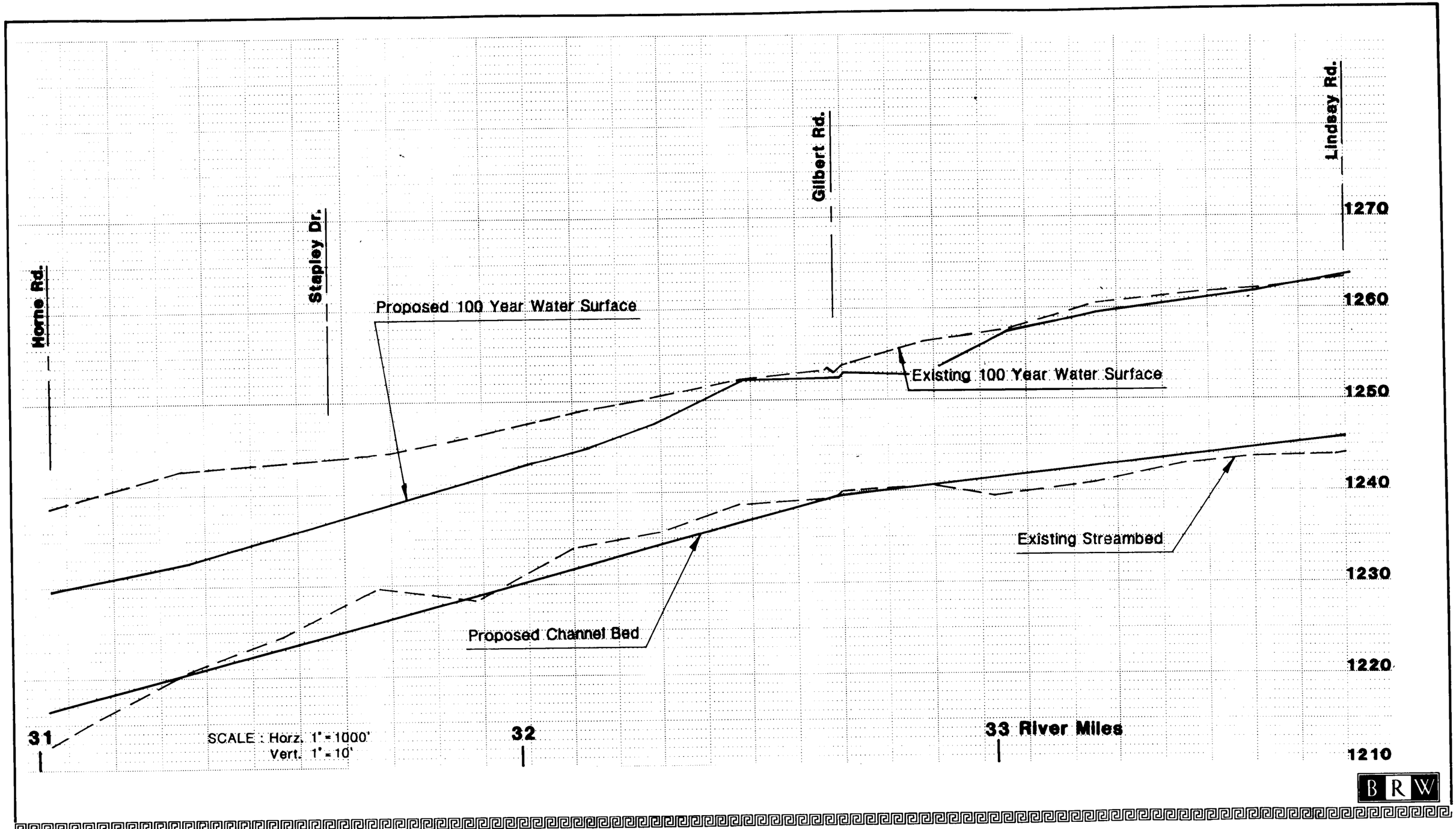
Figure 6A



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Water Surface Profiles
Country Club Drive to Horne Road

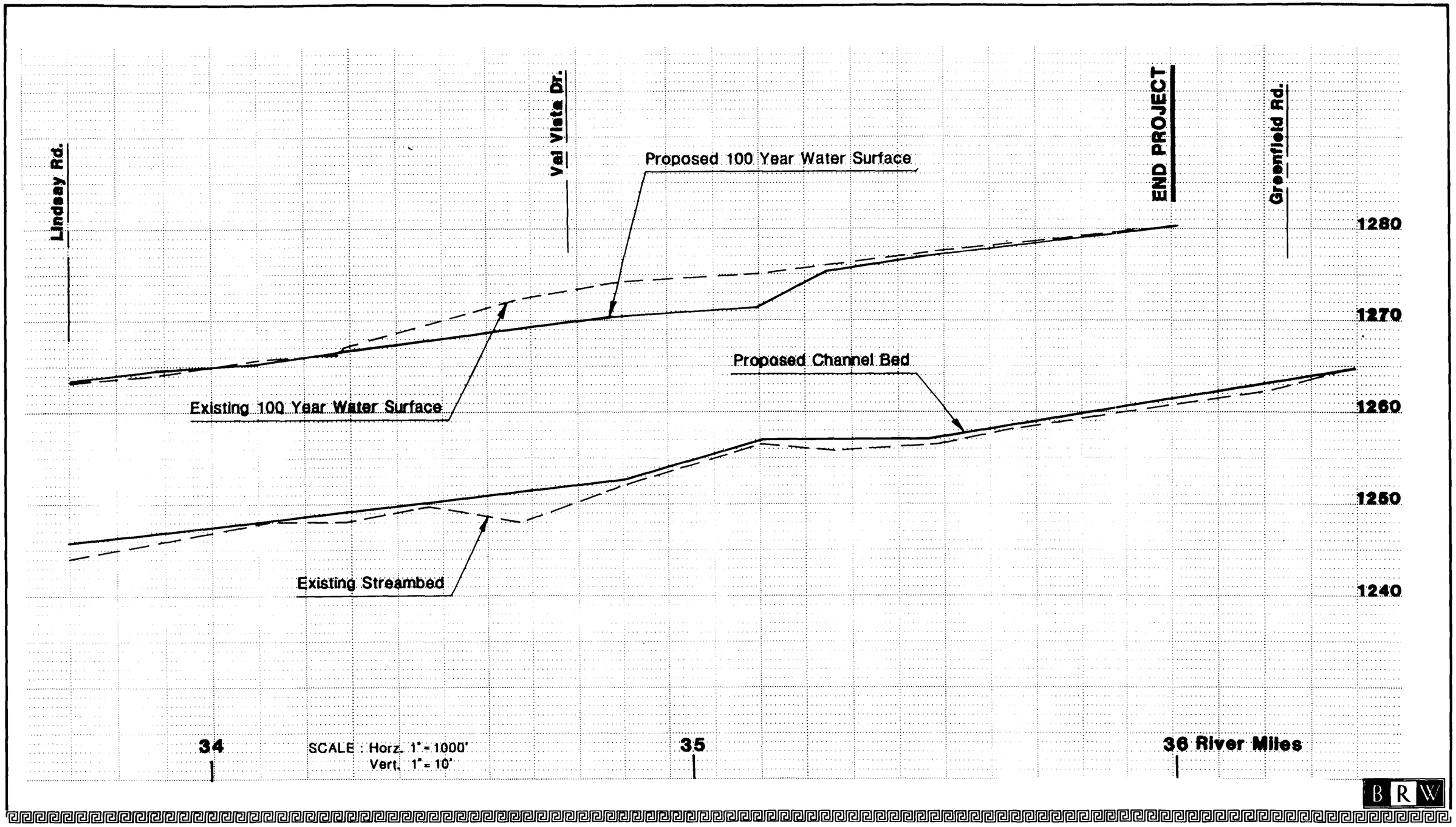
Figure 6B



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Water Surface Profiles
Horne Road to Lindsay Road

Figure 6C



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Water Surface Profiles
Lindsay Road to Greenfied Road

Figure 6D

gravel mining operations will be allowed outside a setback or buffer zone from the new channelized river and protected river banks. This concept offers several advantages to the sand and gravel mining operators. The mining operations will not be limited on how deep they can mine because of flooding considerations; however, limitations may result from the buffer zone requirements. In addition, there will no longer be a need for in-stream permitting when mining occurs outside the floodplain and equipment will not be lost or damaged during flooding. Further evaluation of in-stream mining needs to be studied to determine the economics benefits of flood protection versus sand and gravel mining.

Figure 7 illustrates the buffer zone between the new channelized river and the sand and gravel mining operations. The buffer zone will be comprised of a 50 foot setback from the top outside edge of the adjacent bank protection and an additional setback to the bottom of the pit of 2.5 feet horizontally for each one foot of vertical depth from the top of the bank protection. There will be no limit on the depth of the mining operation. The sand and gravel mining operator will be required to construct concrete slurry cutoff walls to prevent seepage and/or piping of water from the river through the bank into the open mining pit. The number and position of the slurry cutoff wall should be determined from a slope stability and seepage analysis performed by a registered civil or geotechnical engineer.

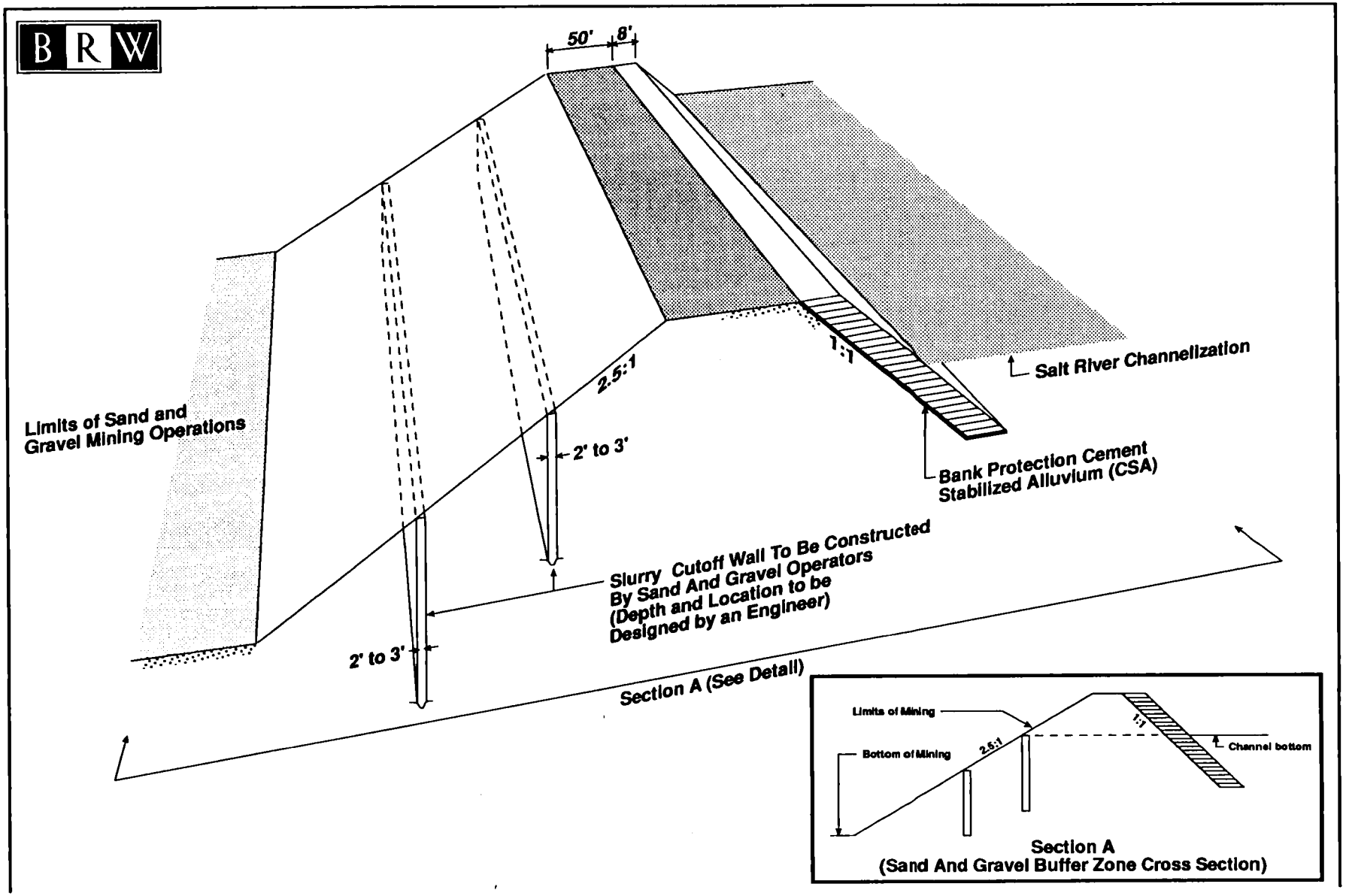
3.6 Roadway Crossings of the Channelization

Within the limits of this project the Salt River has two at-grade roadway crossings through the river channel bottom, which is dry most of the time. These two roadway crossings are McKellips Road and Horne Road. During unusually wet years these crossings may be closed for an extended period of time due to water releases from the upstream Granite Reef dam. McKellips Road is a 4-lane east-west arterial street located just upstream of the Alma School Road Bridge. Horne Road is a local 2-lane rural road located approximately two miles upstream of Country Club Road.

These two roadway crossings will need to be rebuilt as part of the channelization project. Construction of the channelization will change the bottom width and elevation of the Salt River channel, which will result in the removal of the existing roadways. The new roadways will be reconstructed to meet current design standards for their classification and design speed. Cement stabilized alluvium toe downs will be constructed on both sides of the roadway through the new channel. Gaps will be constructed in the bank protection to provide openings for these roadways. The bank protection will need to be wrapped around the bank corners created by these gaps and extended parallel to the roadways an appropriate distance from the channel bank.

3.7 Volume Attenuation Characteristics

During runoff events volumes of water are stored in the river channel and floodplain, which results in a decrease (attenuation) of the flood peak. Channelization will remove a portion of the existing floodplain storage, especially between Horne Road and Green-



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Sand and Gravel
Mining Operation Buffer Zone

Figure 7

field Road. Removal of this storage volume could increase the peak discharge downstream of this channelization project.

Further design will need to evaluate the significance of any increases in the peak discharge and the effects these increases may have on the downstream river system. The HEC-2 hydraulic computer model used in this study can be used to determine storage volume loss, but it cannot determine increases in peak discharge. A HEC-1 hydrologic computer model will be developed during subsequent design to determine any increase in peak discharge. Mitigation of any peak discharge increase may require constructing a wider channel. The proposed channel bottom width is 900 feet, but a 1,300 foot wide corridor has been established which will allow the construction of a channel with a 1,250 foot bottom width. Impacts of increased discharges will need to be considered in the environmental review.

3.8 Design Standards

The Federal Emergency Management Agency (FEMA) has established rules and regulations for encroachments into floodplains The Flood Control District of Maricopa County has stormwater and floodplain management responsibilities within Maricopa County and has established design standards and criteria for the design and construction of flood control projects. This channelization project will be designed in accordance with current design standards to ensure the safety of the public and the economic investment in hydraulic features (bridges, channelization, etc.) along the Salt River.

4.0 PROPOSED BANK PROTECTION

4.1 Alternate Bank Protection Types and Costs

There are three general types of bank protection that are feasible from an economic, social and environmental standpoint. These three alternate types of bank protection are the following:

- Cement Stabilized Alluvium (CSA)
- Rock Riprap and its variations
- Roller Compacted Concrete (RCC)

From a water quality perspective the impacts associated with the installation of any one of these three bank protection alternatives are identical. Any excess fill materials that may be discharged into the Salt River as a result of the project will not result in a chemical or biological contamination of the waters of the United States. From a social and environmental perspective each of these three alternatives have a high level of social acceptability, each provide for adjoining multi-purpose uses, each minimize the potential for hazard and public nuisance, and each have beneficial impacts in restoring areas with riparian vegetation and area used for wildlife habitat and movement.

From an economic perspective the CSA and RCC have similar right-of-way needs and costs, and generally have equivalent operation and maintenance costs. Each of these three alternatives have relatively high construction costs, although RCC and rock riprap are more expensive than CSA. The relative costs for each of the three alternatives is as follows:

Bank Protection Type	In-Place Cost $ Per Cubic Yard	In-Place Cost $ Per Linear Foot
Cement Stabilized Alluvium (CSA)	$17	$180
Roller Compacted Concrete (RCC)	$33	$325
Rock Riprap	$20	$350

In summary, this Design Concept Report is recommending the use of Cement Stabilized Alluvium for the bank protection. This recommendation is based on the social and environmental acceptability and the low cost of the CSA.

4.2 Bank Protection Cross Section

Figure 4 illustrates the recommended bank protection cross section to be used for this project. The cross section consists of a cement stabilized alluvium (CSA) that has a horizontal thickness of eight feet. The CSA bank protection is constructed in six inch to nine inch lifts for its entire height. The CSA bank protection will have a height that equals the depth of flow in the channelized river plus three feet of freeboard plus an average toe down depth of 15 feet. Final detailed design will establish the exact height of the bank protection and the toe down depth. For the purpose of preparing a cost estimate for this project the bank protection was assumed to have a height of 36 feet; 15 feet toe down, 18 feet depth of flow and three feet of freeboard.

The CSA bank protection should be constructed against undisturbed existing ground or against a fill embankment that is compacted to 95 percent of standard proctor.

4.3 Bank Protection Toe Down Depth

The bank protection toe down depths are established based on the total scour depth (general scour, long-term aggradation/degradation, bedforms, bend scour, etc.), with scour measured below the low point in the channel, or in the case of channelization, the channel bed. Long-term aggradation/degradation must consider armoring as well as the use of grade control structures.

For the purposes of this Design Concept Report a bank protection toe down average depth was assumed to be fifteen (15) feet. In critical areas and in areas where the flow velocities are high the toe down depth will be deeper than fifteen feet. During final design a detailed sediment transport and scour analysis will be performed to determine the bank protection toe down depth to be constructed along the length of this project.

4.4 Bank Protection Adjacent to Landfill

The CSA bank protection adjacent to the two landfill areas will be similar to that described above in Subsection 4.2, however, an impervious layer behind the CSA and a concrete slurry cutoff wall below the CSA, are included in the construction. The impervious layer will be either a bentonite and soil mixture, or a 60 mill thickness high density polyethylene layer. The purpose of the impervious layer is to provide additional protection against flood waters seeping into the body of the landfill through any small cracks in the CSA that may develop over time. The impervious layer will extend the full height of the CSA bank protection.

The concrete slurry cutoff wall under the CSA bank protection is intended to cutoff the seepage of water through the channel bottom, under the CSA bank protection and into the body of the landfill. The depth of the cutoff wall will be determined during final design. For the purposes of this Design Concept Report it was assumed that the depth of the cutoff wall is to the approximate depth of the body of the landfill. The Tri-Cities landfill is estimated to be 40 feet below the channel bottom elevation. Therefore, with a 15 foot

toe down depth, the depth of the cutoff wall is estimated to be 25 feet below the bottom of the CSA bank protection. A concrete slurry cutoff wall can be economically constructed to depths of 25 feet below the foundation working platform.

5.0 APPROVALS, PERMITS AND COORDINATION

5.1 U.S. Army Corps of Engineers

Section 404 of the Clean Water Act requires that a permit be obtained for any filling or alteration of waters of the United States. The U.S. Army Corps of Engineers (COE) is the federal agency responsible for review and issuance of 404 permits.

Portions of the Phase 1A work may not require a 404 permit because the Phase 1A construction is necessary remediation for resolution of a prior unauthorized activity. Other portions of the Phase 1A construction may require a 404 permit. Phases 1B, 2 and 3 of this project will require a 404 permit because the construction is altering the waters of the United States. The COE will review and comment on the project plans and specifications to ensure the best interest of the public is achieved.

5.2 Environmental Review

Depending on the source of funding for the construction of this project, an environmental review of the project in accordance with federal environmental assessment criteria may be necessary. The need for and extent of an environmental assessment will be determined after the source of funding for the project is identified.

5.3 Archaeological Clearance

A Phase 1 archaeological survey will be completed for this project for compliance with the State Historic Preservation Act. The results of the archaeological survey will be reviewed by the State Historic Preservation Officer to determine if any additional testing is necessary. The necessary archaeological clearances must be received prior to construction of any portion or phase of the project.

5.4 Flood Control District of Maricopa County

The Flood Control District of Maricopa County (FCDMC) is the local agency that has jurisdiction over regional flood control improvements within Maricopa County. The FCDMC will be involved as a review and approval agency during final design.

5.5 City of Mesa

Coordination with the City of Mesa is necessary because a small portion of the proposed channelization alignment lies within the City of Mesa. This work should be coordinated with the City Public Works Manager. A permit to construct the channelization is necessary only if work is to be performed within the City right-of-way.

6.0 PROJECT COST ESTIMATES

The project cost estimates for the phased design and construction of the river channelization and bank protection on the Salt River has been prepared for this project. The cost estimate for construction includes the main items of work for the channelization and bank protection and also includes a twenty percent contingency for miscellaneous items of work that cannot practically be examined at the level of detail of this report. The six main items of work include:

- Bank protection as shown in Figure 4;
- Impervious barrier between the bank protection and the landfill;
- Slurry cutoff wall under the base of the bank protection that is adjacent to the landfill;
- Grade control structures transverse across the channelization;
- Bridge extension at Alma School Road;
- Earthwork; and
- Any necessary reconstruction of existing roadways crossing the river.

The fifteen percent contingency includes miscellaneous items of work such as clearing and grubbing, disposal of unsuitable material, removal of buried structures, construction of storm drain outlets through the bank protection into the channelized river, construction of miscellaneous structures, traffic control, water supply and other appurtenant items necessary for an approved project. This contingency is also used to offset any possible variances in the estimated quantities that can occur at this concept level of detail.

The estimates include costs for the following design related services:

- Five percent for field surveys to establish horizontal and vertical control and to provide specific topography, aerial mapping, geotechnical investigations, slope stability analysis, detailed hydrologic and hydraulic analysis, final engineering design, and the preparation of final plans and specifications;
- Two percent for phase one and limited phase two archaeological investigations for compliance with the State Historic Preservation Act;
- Two percent for preparation of the necessary federal Environmental Reviews; and
- Seven percent for construction staking, observation, quality control and project administration.

Tables 1, 2, 3 and 4 illustrate the detailed cost estimate analysis for each of the three phases of the entire project. The total project cost for all phases of the project is estimated to be $40,859,000.00 and is summarized in Table 5. This table illustrates the project cost estimate by phase assuming that the surveying and engineering design, archaeological investigations and environmental assessments for the entire project are all completed in the first phase project.

TABLE 1

PHASE 1A PROJECT COST ESTIMATE
COUNTRY CLUB DRIVE TO HORNE ROAD
BANK PROTECTION ADJACENT TO LANDFILL

Description	Units	Unit Price	Amount
1. Bank Protection	9,000 LF	$ 180.00	$1,620,000.00
2. Impervious Barrier Adjacent to Landfill	9,000 LF	$ 75.00	$ 675,000.00
3. Slurry Cutoff Wall	9,000 LF	$ 40.00	$ 360,000.00
4. Earthwork	350,000 CY	$ 1.20	$ 420,000.00
		Subtotal	$3,075,000.00
		15% Contingency	$ 461,000.00
		Subtotal	$3,536,000.00
Construction Staking and Administration, Phase 1A			$ 240,000.00
		Construction Subtotal	**$3,776,000.00**
Surveying and Engineering Design, Phase 1A			$ 215,000.00
		Design Costs Subtotal	**$215,000.00**
		PHASE 1A TOTAL	**$3,991,000.00**

TABLE 2

PHASE 1B PROJECT COST ESTIMATE
COUNTRY CLUB DRIVE TO HORNE ROAD
CHANNELIZATION AND BANK PROTECTION

Description		Units	Unit Price	Amount
1.	Bank Protection	16,000 LF	$ 180.00	$ 2,880,000.00
2.	Grade Control Structure	800 LF	$ 350.00	$ 280,000.00
3.	Earthwork	4,300,000 CY	$ 0.90	$ 3,870,000.00
4.	Re-construct Horne Road	2,000 LF	$ 110.00	$ 220,000.00
			Subtotal	$ 7,250,000.00
			15% Contingency	$ 1,088,000.00
			Subtotal	$ 8,338,000.00
	Construction Staking and Administration, Phase 1B			$ 575,000.00
			Construction Subtotal	**$8,913,000.00**
	Surveying and Engineering Design, Phases 1B, 2 and 3			$ 1,560,000.00
	Archaeological Investigations, Phases 1B, 2 and 3			$ 950,000.00
	Environmental Review, Phases 1B, 2 and 3			$ 500,000.00
			Design Costs Subtotal	**$ 3,010,000.00**
			PHASE 1B TOTAL	**$11,923,000.00**

TABLE 3

PHASE 2 PROJECT COST ESTIMATE
ALMA SCHOOL ROAD TO COUNTRY CLUB DRIVE
CHANNELIZATION AND BANK PROTECTION

Description		Units	Unit Price	Amount
1.	Bank Protection	14,000 LF	$ 180.00	$2,520,000.00
2.	Grade Control Structure	800 LF	$ 350.00	$ 280,000.00
3.	Earthwork	2,100,000 CY	$ 0.90	$1,890,000.00
4.	Extend Alma School Road Bridge	22,960 SF	$ 50.00	$1,148,000.00
4.	Re-construct McKellips Road	3,000 LF	$ 110.00	$ 330,000.00
			Subtotal	$6,168,000.00
			15% Contingency	$ 925,000.00
			Subtotal	$7,093,000.00
	Construction Staking and Administration, Phase 2			$ 495,000.00
			PHASE 2 TOTAL	**$7,588,000.00**

TABLE 4

PHASE 3 PROJECT COST ESTIMATE
HORNE ROAD TO GREENFIELD ROAD
CHANNELIZATION AND BANK PROTECTION

Description		Units	Unit Price	Amount
1.	Bank Protection	43,000 LF	$ 180.00	$ 7,740,000.00
2.	Grade Control Structure	800 LF	$ 350.00	$ 280,000.00
3.	Earthwork	6,200,000 CY	$ 0.90	$ 5,580,000.00
4.	Re-construct Gilbert Road	4,600 LF	$ 110.00	$ 506,000.00
			Subtotal	$14,106,000.00
			15% Contingency	$ 2,116,000.00
			Subtotal	$16,222,000.00
	Construction Staking and Administration, Phase 3			$ 1,135,000.00
			PHASE 3 TOTAL	**$17,357,000.00**

TABLE 5

SUMMARY PROJECT COST ESTIMATE

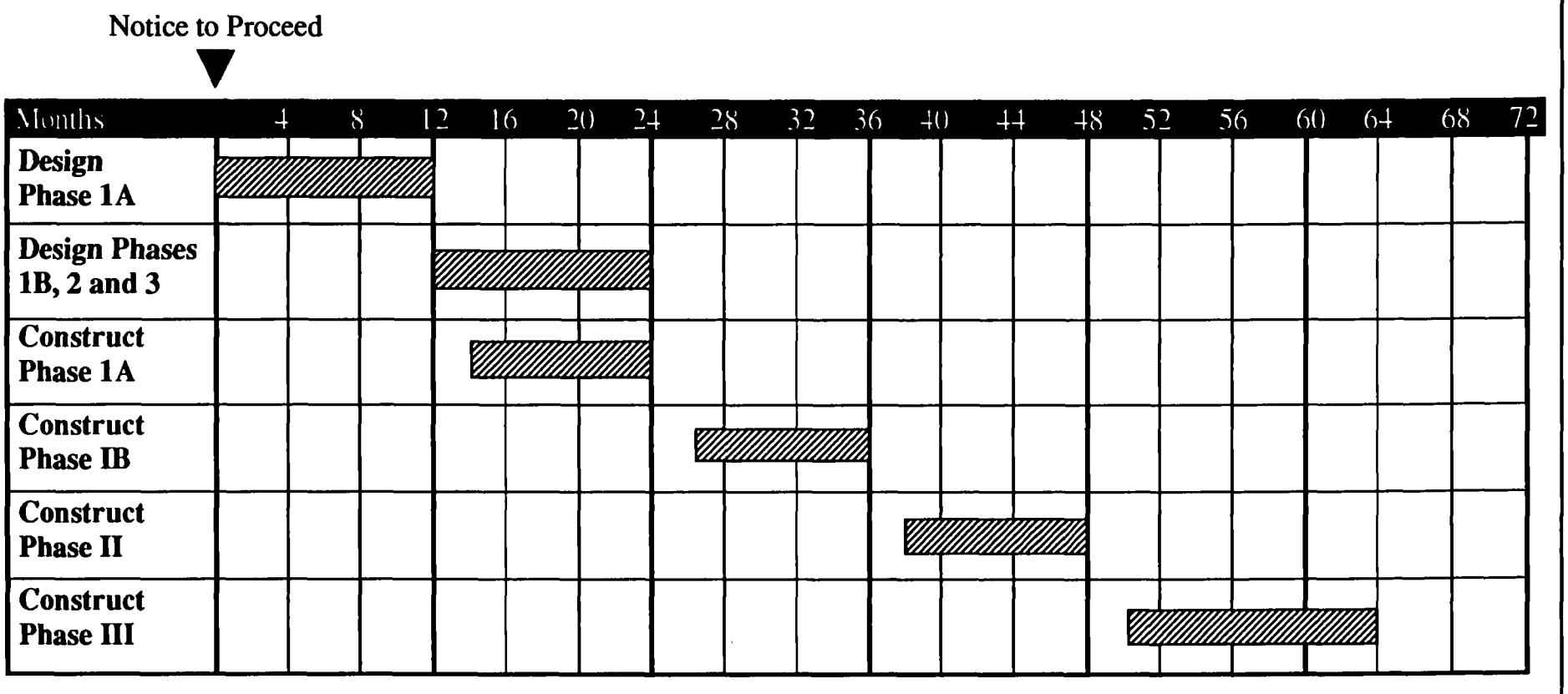
Phase 1A Country Club Drive to Horne Road Bank Protection Adjacent to Landfills	$ 3,991,000.00
Phase 1B Country Club Drive to Horne Road Country Club Drive to Horne Road	$11,923,000.00
Phase 2 Alma School Road to Country Club Drive Alma School Road to Country Club Drive	$ 7,588,000.00
Phase 3 Horne Road to Greenfield Road Horne Road to Greenfield Road	$17,357,000.00
TOTAL	**$40,859,000.00**

7.0 PROJECT SCHEDULE

The project schedule for the completion of the design and construction of all phases of this project is shown in Figure 8. The schedule depicts the completion of the surveying, geotechnical investigations, engineering design, archaeological investigations and environmental reviews for Phase 1A of the project, including the necessary agency reviews and approvals, within twelve months. The design activities for Phases 1B, 2 and 3, including the necessary reviews and approvals, can be conducted concurrently with construction of Phase 1A, within twelve months. The construction activities will take approximately one year for each phase. The schedule assumes that each phase will be constructed separately.

The entire project can logically be completed in five fiscal years as shown in Figure 8.

BRW



DESIGN CONCEPT REPORT
CHANNELIZATION AND BANK PROTECTION
ON THE SALT RIVER

Project Schedule

Figure 8

APPENDIX A

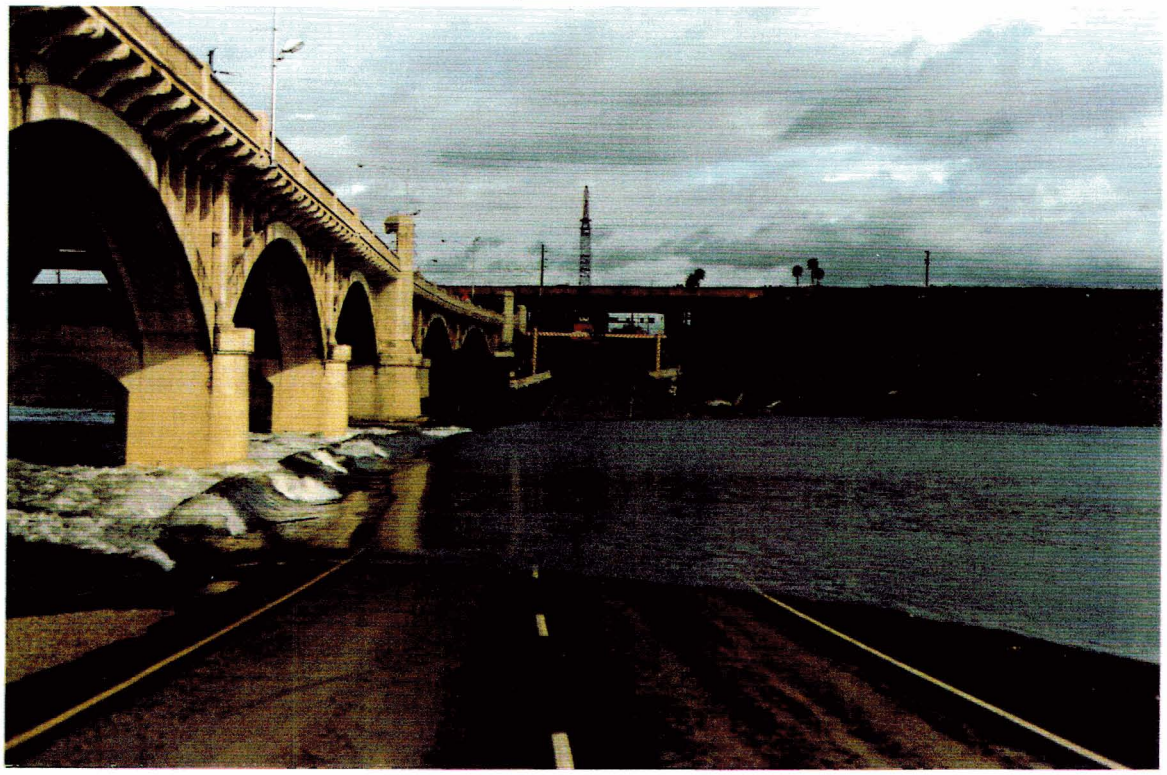
PHOTOGRAPHS OF EXISTING SALT RIVER

Arizona Department of Transportation channelization project on the Salt River west of Mill Avenue in Tempe, Arizona.

Stabilized channel bank on Arizona Department of Transportation project; riprap gabions over cement stabilized alluvium (CSA).

PL\K-T03\SALTRIVR.PHO

Typical storm drain outfall through the CSA bank protection on Arizona Department of Transportation project.



Mill Avenue at-grade crossing of the Salt River in Tempe, Arizona.

PLK-T03\SALTRIVR.PHO

Looking west, downstream on the Salt River from Alma School Bridge.

PLK-T03\SALTRIVR.PHO

Gravel operation in the southeast quadrant of Alma School Road and the Salt River.

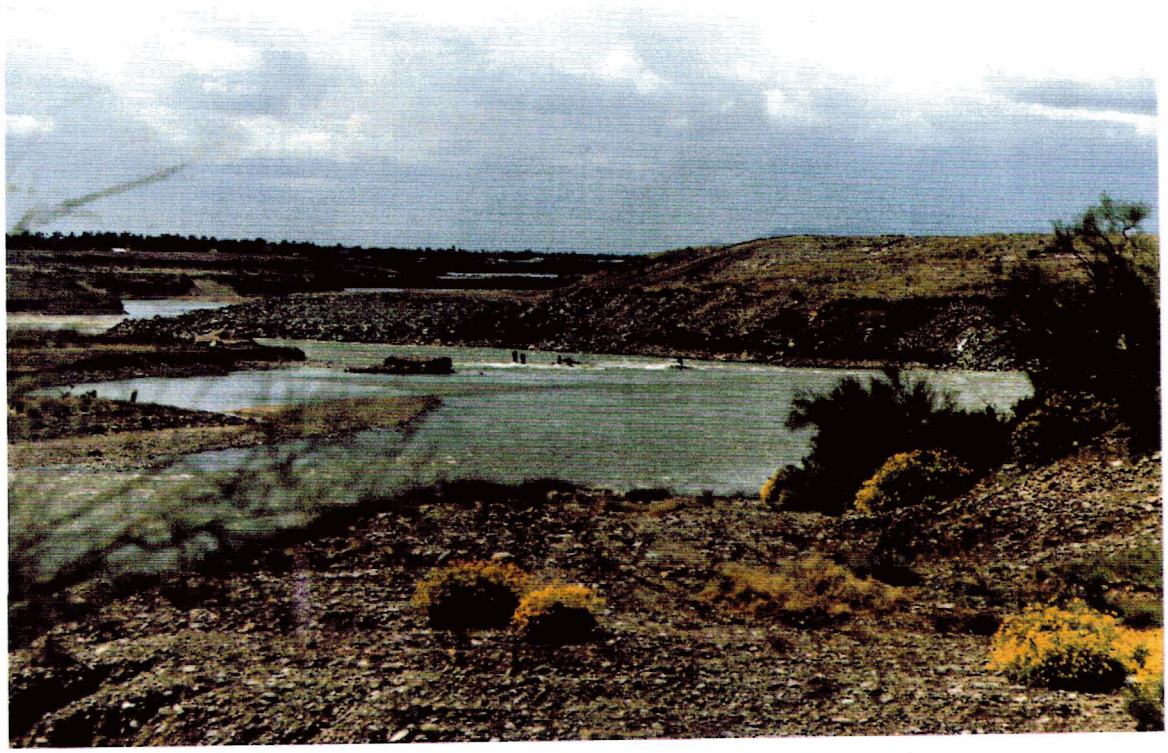
Alma School Road Bridge looking downstream.

PLK-T03\SALTRIVR.PHO

Horne Road at-grade crossing of the Salt River.

Horne Road closure.

PLK-T03\SALTRIVR.PHO



Spur dike located upstream from the Tri-Cities Landfill.

Major side channel drainageway into the Salt River.

PLK-T03\SALTRIVR.PHO

Gilbert Road Bridge.

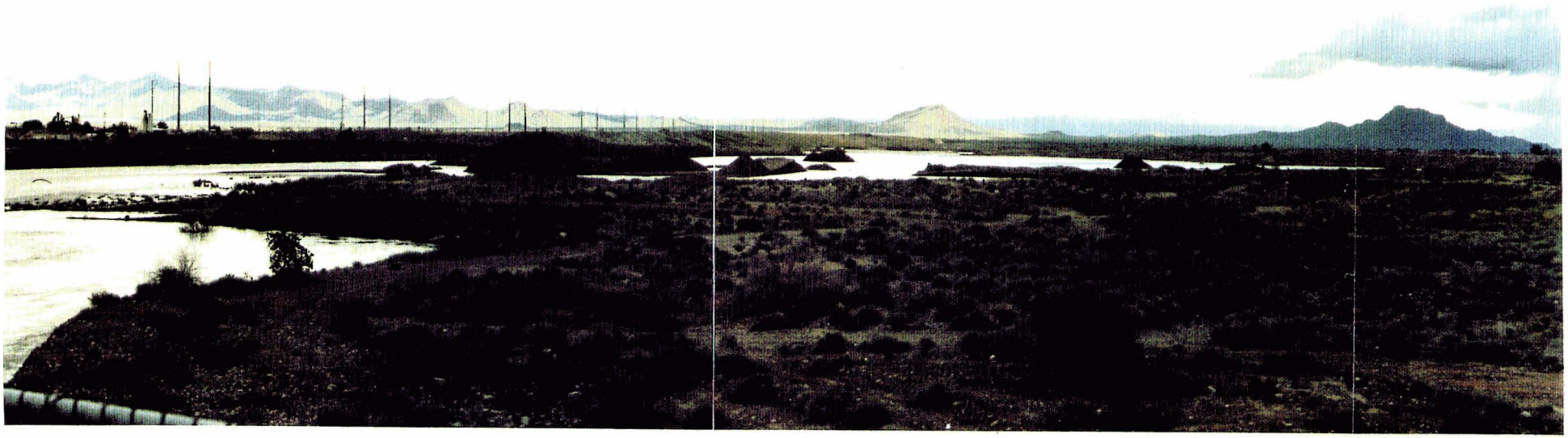
Northeast spur dike at Gilbert Road Bridge, looking upstream.

PLK-T03\SALTRIVR.PHO

Country Club Drive Bridge.

Tri-Cities Landfill northeast of Country Club Drive.

PL\K-T03\SALTRIVR.PHO



Tri-Cities Landfill looking upstream from Country Club Drive.

PL\K-T03\SALTRIVR.PHO

Looking upstream from Gilbert Road Bridge.

PLK-T03\SALTRIVR.PHO

Overflow section north of Gilbert Road Bridge.

McKellips Road at-grade crossing of the Salt River.

PLK-T03\SALTRIVR.PHO

APPENDIX B

FEMA EXISTING CONDITIONS HEC-2 WATER SURFACE PROFILE

Appendix B

FEMA Existing Conditions HEC-2 Water Surface Profile

This Appendix contains the computer model input data and output summary tables for the 100-year water surface profile under existing conditions with and without a floodway. The Hydrologic Engineering Circular Number 2 (HEC-2) Computer Model, Version 4.6, Revised February 1991, developed by the U.S. Army Corps of Engineers was used to perform the hydraulic calculations.

Two HEC-2 models used to develop the current flood delineation maps were obtained from the Flood Control District of Maricopa County. One model was developed by the U.S. Army Corps of Engineers for the Segment of the Salt River from its confluence with the Agua Fria River to Country Club Drive and the other model was developed by the Flood Control District for the Salt River Segment from Country Club Drive to the Granite Reef Dam. The first model was modified by deleting the river sections from the Agua Fria River to the new proposed Hohokam Freeway at Section 19.363. The 100-year starting elevation at the next upstream section, Section 19.381, was set at 1131.30, as determined from the original HEC-2 model.

Summary Table 1 contains two lines of output for each river section. The top line is for the river in its natural condition and the bottom line is with floodway lines established. Summary Table 2 has two columns listing water surface elevations; the first column is with floodway lines established and the second column is for the river in its natural condition.

Items included in this appendix are presented in the following order:

1. *100-Year HEC-2 Model - Proposed Hohokam Freeway to Country Club Drive*
   a. Comment Cards
   b. Input Data
   c. Summary Table 1 - Customized
   d. Summary Table 2 - Floodway Data

2. *100-Year HEC-2 Model - Country Club Drive to Granite Reef Dam*
   a. Comment Cards
   b. Input Data
   c. Summary Table 1 - Customized
   d. Summary Table 2 - Floodway Data

HEC-2 MODEL
PROPOSED HOHOKAM FREEWAY
TO
COUNTRY CLUB DRIVE

COMMENT CARDS

```
C
C     62
C         Modified by Dave Schaub, BRW, march 15, 1992
C         This is the Corps of Engineers HEC-2 model with the x-sections between
C         0. and 19.363 inclusive deleted.  The 100-year starting elevation at
C         station 19.381 was set at 1131.30 as determined from the original
C         HEC-2 model.  All of the Corps of Engineers comment cards have been
C         retained, even those for the deleted x-sections.
C    0.0  DIGITIZED CROSS SECTIONS FROM CENTRAL AVE TO 115 TH AVE
C    0.0  FROM COOPER AERIAL CO
C    0.0  TOPO DATA FROM ADOT, FROM CENTRAL AVE TO COUNTRY CLUB DR
C    0.0  FROM 115 TH AVE TO CENTRAL AVE, THE POINT OF CROSS SECTION
C    0.0  CROSSING THE STREAM LINE IS SET AT 20,000 FEET
C    0.0  FROM CENTRAL AVE TO COUNTRY CLUB DR THE POINT OF CROSS SECTION
C    0.0  CROSSING THE STREAM LINE IS SET AT 10,000 FEET
C   .104  115 TH AVENUE EXTENSION
C  1.085  107 TH AVENUE EXTENSION
C  1.985  99  TH AVENUE EXTENSION
C  3.944  83  RD AVENUE EXTENSION
C  4.960  75  TH AVENUE EXTENSION
C  6.035  67  TH AVENUE EXTENSION
C  6.863  59  TH AVENUE EXTENSION
C  8.051  51  ST AVENUE BRIDGE
C  9.098  43  RD AVENUE EXTENSION
C 10.055  GR POINTS FROM DESIGN PLANS
C 10.062  35  TH AVENUE BRIDGE, GR STATIONS FROM DESIGN PLANS
C 11.036  27 TH  AVENUE EXTENSION,APPROXIMATE CONFL. OF CAVE CREEK
C 11.933  GR STATIONS FROM DESIGN PLANS
C 11.948  19 TH AVENUE BRIDGE, GR STATIONS FROM DESIGN PLANS
C 12.376  15 TH AVENUE EXTENSION
C 13.093 7TH AVENUE BRIDGE, GR STATIONS FROM PLANS AND FIELD MEASUREMENTS
C 13.617  CENTRAL AVENUE BRIDGE
C 13.627  FROM STA 13.627 TO STA 28.487 THE POINT OF CROSS SECTION
C 13.627  CROSSING THE STREAM LINE IS SET AT 10,000 FEET
C 14.128  GR POINTS MATCH 7 TH ST BRIDGE DESIGN PLANS
C 14.137  7 TH STREET BRIDGE, GR POINTS FROM DESIGN PLANS
C 15.145  GR POINTS FROM 16 TH ST. BRIDGE DESIGN PLANS
C 15.162  16TH STREET BRIDGE GR POINTS FROM DESIGN PLANS
C 16.188  GR POINTS FROM 24 TH STREET DESIGN PLANS
C 16.202  24TH STREET BRIDGE, GR POINTS FROM DESIGN PLANS
C 16.904  I-10 NORMAL BRIDGE, GR STATIONS FROM DESIGN PLANS
C 17.053  FROM STATION 17.053 TO STATION 21.102, ALL HYDRAULIC
C 17.053  DATA WAS OBTAINED FROM HNTB ENGINEERING FIRM
C 17.053  HNTB IS THE DESIGN CONTRACTOR OF AIRPORT CHANNELIZATION
C 17.053  PROJECT.  IN PHOENIX CALL MR. BOB MILLER, (602) 957-1931,
C 17.053  IN KANSAS CITY, MR. DICK SHWAB (816) 333-4800
C 17.394  BEGINNING OF AIRPORT MORTH DIKE
C 17.871  BEGINNING OF AIRPORT SOUTH DIKE
C 19.363  THE NEW PROPSED HOHOKAM EXPWAY 3339 FT BRIDGE BY ADOT
C 19.381  BEGINNING OF PROPOSED SOUTH DIKE FOR PROTECTION OF
C 19.381  72 INCH WATER LINE, DESIGN INCLUDES PROPOSED CUT IN
C 19.381  THE RIVER BED
C 20.875  PRIEST ROAD EXTENSION, END OF PROPOSED SOUTH DIKE
C 20.875  PROJECT FOR THE PROTECTION OF 72 INCH WATER LINE
C 21.667  RAILROAD BRIDGE ON SALT RIVER BELOW TEMPE BRIDGE
C 21.733  ROADWAY BRIDGE BELOW TEMPE BRIDGE
C 21.809  TEMPE BRIDGE
C 22.681  SCOTTSDALE AVE BRIDGE
C 22.799  INDIAN BEND WASH CONFLUENCE
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C 23.658 HAYDEN ROAD BRIDGE, GR STATIONS FROM DESIGN PLANS
C 24.595 PRICE ROAD EXTENSION
C 27.277  ALMA SCHOOL ROAD BRIDGE
C 27.277  BOTH BRIDGE OPENINGS ARE COMBINED FOR THIS HYDRAULIC MODEL
C 28.383  COUNTRY CLUB DRIVE BRIDGE
T1   SALT RIVER FLOOD INSURANCE STUDY 1983-1984
T2  AUGUST 1982  ADOT TOPO BASE MAP, AGUA FRIA RIVER TO COUNTRY CLUB ROAD 38ML
T3      100-YEAR FLOODPLAIN     STREAMLINE AT STATION  10000
J1            2                                                1131.40
J2     1      0      -1       0       0       0       0       0       0      15
J3    38     43      53      21      55      26      56      22      54       4
J3    42      1      50     200
ET                  9.1                                             8980   12145
QT     2 210000. 210000.
NC 0.040   0.040   0.035      .1      .3
ET                  9.1                                             8924   12330
X119.381      52   11188   11741       0       0       0
CI 10300  1123.6            0.01    0.01    2000
X3                          8924
GR1119.7    8666  1119.9    9021  1118.6    9140  1124.0    9329  1125.3    9411
GR1125.7    9520  1127.5    9592  1128.5    9705  1128.7    9749  1123.8    9771
GR1125.3    9855  1126.4    9929  1127.1   10000  1126.9   10113  1126.1   10160
GR1128.1   10188  1128.9   10224  1126.7   10347  1124.6   10410  1126.1   10472
GR1128.4   10487  1125.5   10507  1127.1   10645  1124.7   10660  1125.7   10702
GR1125.3   10772  1125.2   10831  1124.3   10877  1123.6   10930  1127.2   11010
GR1127.1   11063  1125.4   11108  1128.3   11188  1125.1   11202  1122.4   11262
GR1122.6   11333  1120.3   11372  1115.6   11415  1113.2   11476  1113.2   11543
GR1115.6   11605  1119.1   11669  1122.8   11741  1122.0   11774  1120.9   11825
GR1122.8   11894  1123.9   11904  1123.9   11982  1123.9   12136  1125.6   12230
GR1125.6   12310  1134.8   12330
ET                  9.1                                             8860   12460
X119.446      59   11140   11807     170     280     265
CI 10275  1124.3                         2250
X3                          8860
GR1133.8    8600  1133.8    8734  1132.5    8898  1131.6    8958  1127.8    9017
GR1125.3    9124  1124.0    9146  1125.1    9223  1125.2    9320  1128.6    9463
GR1128.7    9610  1137.9    9743  1127.3    9754  1125.7    9787  1123.3    9828
GR1124.8    9849  1126.4    9918  1128.8   10000  1127.1   10045  1126.6   10091
GR1128.0   10150  1130.3   10205  1127.8   10230  1126.0   10260  1125.8   10302
GR1127.0   10387  1127.7   10480  1126.6   10568  1125.6   10674  1124.9   10784
GR1124.2   10856  1126.0   10907  1124.5   10927  1125.4   10947  1131.0   11019
GR1129.7   11041  1130.1   11140  1129.0   11145  1126.9   11165  1127.8   11260
GR1126.4   11271  1124.2   11312  1124.7   11336  1121.8   11367  1120.0   11419
GR1118.6   11484  1116.3   11506  1114.4   11568  1115.1   11644  1121.4   11754
GR1122.0   11807  1120.3   11842  1121.0   11895  1122.8   11964  1123.5   11994
GR1124.6   12090  1126.7   12214  1125.4   12430  1135.3   12460
ET                  9.1                                             8757   12577
X119.537      90 11180.8 12262.9     400     500     480
CI 10325  1125.6                         2150
X3                          8757
GR1132.2 7728.7  1132.2   7761.3 1135.0   7814.9 1135.7   7878.5 1134.5   7979.7
GR1135.1 8041.6  1135.4   8114.6 1133.5   8137.0 1118.7   8161.4 1117.9   8204.5
GR1121.5 8263.3  1121.9   8335.3 1124.5   8353.1 1123.7   8415.4 1135.3   8466.9
GR1137.1 8491.5  1137.2   8546.3 1138.6   8584.7 1137.4   8599.7 1137.4   8642.8
GR1136.0 8733.9  1136.0   8766.2 1136.7   8808.9 1135.3   8856.4 1135.3   8900.3
GR1133.8 8929.0  1126.2   8948.2 1129.6   9009.3 1129.2   9065.0 1125.7   9193.7
GR1123.7 9244.5  1127.6   9284.3 1128.6   9309.0 1132.5   9333.7 1133.7   9370.3
GR1133.0 9408.7  1133.9   9487.9 1137.2   9536.7 1135.2   9587.7 1134.2   9637.3
GR1134.9 9699.3  1134.2   9731.0 1132.4   9806.2 1130.8   9895.3 1128.2   9919.4
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 *  HYDROLOGIC ENGINEERING CENTER
 *  609 SECOND STREET, SUITE D
 *  DAVIS, CALIFORNIA 95616-4687
 *         (916) 756-1104
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INPUT DATA

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X     X  XXXXXXX   XXXXX            XXXXX
X     X  X        X     X          X     X
X     X  X        X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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  Version   4.6.0;  February 1991
 ************************************


 T1   SALT RIVER FLOOD INSURANCE STUDY 1983-1984
 T2  AUGUST 1982  ADOT TOPO BASE MAP, AGUA FRIA RIVER TO COUNTRY CLUB ROAD 38ML
 T3      100-YEAR FLOODPLAIN     STREAMLINE AT STATION  10000

 J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

                2                                                          1131.40

 J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

      1         0        -1         0         0         0         0         0         0         15


 J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38        43        53        21        55        26        56        22        54         4
     42         1        50       200

 ET                        9.1                                                                   8980      12145
 QT        2    210000.   210000.
 NC    0.040     0.040     0.035        .1        .3
 ET                        9.1                                                                   8924      12330
 X1   19.381        52     11188     11741         0         0         0
 CI    10300    1123.6                0.01      0.01      2000
```

```
X3                                  8924
GR   1119.7      8666     1119.9     9021     1118.6      9140     1124.0      9329     1125.3      9411
GR   1125.7      9520     1127.5     9592     1128.5      9705     1128.7      9749     1123.8      9771
GR   1125.3      9855     1126.4     9929     1127.1     10000     1126.9     10113     1126.1     10160
GR   1128.1     10188     1128.9    10224     1126.7     10347     1124.6     10410     1126.1     10472
GR   1128.4     10487     1125.5    10507     1127.1     10645     1124.7     10660     1125.7     10702
GR   1125.3     10772     1125.2    10831     1124.3     10877     1123.6     10930     1127.2     11010
GR   1127.1     11063     1125.4    11108     1128.3     11188     1125.1     11202     1122.4     11262
GR   1122.6     11333     1120.3    11372     1115.6     11415     1113.2     11476     1113.2     11543
GR   1115.6     11605     1119.1    11669     1122.8     11741     1122.0     11774     1120.9     11825
GR   1122.8     11894     1123.9    11904     1123.9     11982     1123.9     12136     1125.6     12230
GR   1125.6     12310     1134.8    12330

ET                           9.1                                                   8860     12460
X1   19.446        59     11140    11807       170       280       265
CI    10275    1124.3                                   2250
X3                                  8860
GR   1133.8      8600     1133.8     8734     1132.5      8898     1131.6      8958     1127.8      9017
GR   1125.3      9124     1124.0     9146     1125.1      9223     1125.2      9320     1128.6      9463
GR   1128.7      9610     1137.9     9743     1127.3      9754     1125.7      9787     1123.3      9828
GR   1124.8      9849     1126.4     9918     1128.8     10000     1127.1     10045     1126.6     10091
1
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GR   1128.0     10150     1130.3    10205     1127.8     10230     1126.0     10260     1125.8     10302
GR   1127.0     10387     1127.7    10480     1126.6     10568     1125.6     10674     1124.9     10784
GR   1124.2     10856     1126.0    10907     1124.5     10927     1125.4     10947     1131.0     11019
GR   1129.7     11041     1130.1    11140     1129.0     11145     1126.9     11165     1127.8     11260
GR   1126.4     11271     1124.2    11312     1124.7     11336     1121.8     11367     1120.0     11419
GR   1118.6     11484     1116.3    11506     1114.4     11568     1115.1     11644     1121.4     11754
GR   1122.0     11807     1120.3    11842     1121.0     11895     1122.8     11964     1123.5     11994
GR   1124.6     12090     1126.7    12214     1125.4     12430     1135.3     12460

ET                           9.1                                                   8757     12577
X1   19.537        90     11180.8  12262.9       400       500       480
CI    10325    1125.6                                   2150
X3                                  8757
GR   1132.2     7728.7     1132.2     7761.3     1135.0     7814.9     1135.7     7878.5     1134.5     7979.7
GR   1135.1     8041.6     1135.4     8114.6     1133.5     8137.0     1118.7     8161.4     1117.9     8204.5
GR   1121.5     8263.3     1121.9     8335.3     1124.5     8353.1     1123.7     8415.4     1135.3     8466.9
GR   1137.1     8491.5     1137.2     8546.3     1138.6     8584.7     1137.4     8599.7     1137.4     8642.8
GR   1136.0     8733.9     1136.0     8766.2     1136.7     8808.9     1135.3     8856.4     1135.3     8900.3
GR   1133.8     8929.0     1126.2     8948.2     1129.6     9009.3     1129.2     9065.0     1125.7     9193.7
GR   1123.7     9244.5     1127.6     9284.3     1128.6     9309.0     1132.5     9333.7     1133.7     9370.3
GR   1133.0     9408.7     1133.9     9487.9     1137.2     9536.7     1135.2     9587.7     1134.2     9637.3
GR   1134.9     9699.3     1134.2     9731.0     1132.4     9806.2     1130.8     9895.3     1128.2     9919.4
GR   1127.5     9954.3     1128.5    10000.0     1126.8    10033.2     1128.4    10073.6     1127.7    10081.4
GR   1127.9    10249.6     1126.7    10363.7     1124.7    10460.4     1129.8    10500.1     1130.1    10549.0
GR   1128.1    10668.1     1126.9    10686.7     1129.3    10730.6     1130.3    10784.5     1126.9    10944.5
GR   1132.2    10983.9     1135.0    11105.7     1136.9    11121.7     1135.4    11180.8     1129.1    11184.8
GR   1127.1    11201.7     1125.6    11263.5     1125.2    11399.5     1125.2    11509.3     1121.3    11526.3
GR   1119.3    11635.9     1117.0    11662.0     1118.8    11740.8     1121.9    11887.5     1120.7    11920.7
GR   1122.1    12011.4     1121.8    12154.2     1123.3    12193.7     1127.6    12262.9     1125.9    12330.9
GR   1129.0    12363.2     1129.8    12400.7     1132.7    12410.9     1132.7    12421.8     1126.4    12440.5
GR   1126.5    12471.9     1133.2    12490.5     1132.7    12500.5     1130.0    12510.1     1129.8    12577.0

ET                           9.1                                                   8736     12577
X1   19.563        90     11374.6  12250.4       130       150       140
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CI    10400     1126.0                                  2400
X3                                  8736
GR   1132.9     7696.8     1132.3     7730.8     1132.3     7769.3     1138.8     7851.2     1138.8     7971.8
GR   1136.4     8018.5     1136.0     8051.5     1132.3     8098.4     1120.7     8116.1     1118.7     8135.5
GR   1119.1     8160.5     1122.1     8203.4     1122.8     8295.9     1124.9     8308.8     1125.5     8373.7
GR   1136.1     8422.3     1136.6     8544.8     1138.2     8590.8     1137.7     8678.9     1136.2     8699.9
GR   1136.9     8766.1     1134.6     8870.4     1133.7     8923.1     1125.9     8942.6     1128.4     8958.6
GR   1129.3     9017.1     1125.0     9187.2     1125.2     9205.6     1126.7     9234.9     1126.5     9279.1
GR   1133.4     9316.1     1134.1     9340.4     1133.0     9372.6     1134.2     9416.5     1136.6     9427.4
GR   1134.9     9457.7     1136.2     9496.6     1135.6     9614.8     1133.5     9668.0     1132.1     9712.9
GR   1131.2     9727.3     1132.6     9748.5     1130.4     9774.8     1135.0     9817.9     1130.1     9851.6
GR   1129.3     9905.3     1129.5    10000.0     1128.8    10034.6     1127.6    10075.8     1127.1    10185.3
GR   1127.7    10273.7     1128.7    10305.1     1128.5    10375.6     1130.4    10394.8     1129.9    10435.6
GR   1127.5    10450.3     1127.5    10486.6     1129.5    10531.3     1130.2    10602.0     1128.3    10670.7
GR   1126.3    10688.0     1128.1    10703.0     1129.3    10752.5     1128.7    10905.6     1131.0    10955.1
GR   1130.5    11018.6     1126.2    11084.8     1126.8    11241.9     1127.7    11290.6     1129.1    11374.6
GR   1127.2    11421.8     1124.4    11541.2     1122.0    11561.2     1120.4    11613.1     1121.9    11640.9
GR   1119.9    11777.5     1121.6    11886.2     1120.3    11920.6     1120.9    12078.3     1121.0    12162.8
GR   1122.2    12195.1     1127.3    12250.4     1127.5    12274.3     1129.9    12320.8     1132.2    12330.0
GR   1131.9    12340.0     1127.4    12359.6     1127.0    12387.4     1132.2    12407.9     1132.2    12417.7
1
   17MAR92      10:49:39                                                                                  PAGE    3


ET                                 9.1                                                                  8726      12594
X1   19.579          83    11389.0    12250.3          70          90          80
CI    10377     1126.3                                  2325
X3                                  8726
GR   1133.6     7678.3     1133.9     7712.4     1132.7     7732.2     1132.7     7771.2     1138.7     7845.2
GR   1138.7     7964.1     1135.9     8058.2     1134.0     8074.6     1118.2     8099.6     1121.8     8165.5
GR   1124.5     8299.5     1127.0     8312.7     1127.3     8351.6     1136.1     8394.2     1138.0     8570.7
GR   1138.0     8635.2     1135.7     8692.3     1136.6     8744.7     1135.4     8812.7     1134.6     8884.1
GR   1130.0     8929.9     1126.1     8942.7     1128.7     8971.2     1128.6     9037.7     1124.9     9173.1
GR   1128.5     9200.3     1128.0     9225.5     1125.8     9257.9     1127.0     9273.3     1133.9     9302.5
GR   1134.6     9418.8     1136.8     9427.4     1136.3     9590.0     1134.4     9610.8     1133.1     9736.6
GR   1130.7     9835.2     1129.2     9888.4     1131.3     9896.2     1127.0     9915.0     1128.6     9933.7
GR   1128.1     9983.0     1128.4    10000.0     1128.4    10014.9     1127.0    10095.8     1129.0    10154.1
GR   1129.2    10229.5     1129.2    10343.8     1131.0    10378.4     1130.5    10495.6     1128.1    10530.8
GR   1127.2    10580.7     1129.7    10626.1     1127.6    10686.6     1129.0    10751.3     1129.8    10921.0
GR   1127.3    10974.1     1126.1    11112.9     1129.0    11230.2     1129.2    11320.8     1130.3    11389.0
GR   1126.8    11459.4     1124.7    11539.1     1122.8    11562.2     1122.8    11582.3     1121.1    11603.6
GR   1122.5    11620.3     1121.9    11708.1     1120.9    11808.5     1121.7    11892.3     1120.7    11963.7
GR   1120.0    12134.9     1121.5    12179.2     1122.9    12205.4     1130.0    12250.3     1129.7    12269.1
GR   1132.5    12282.9     1132.5    12292.3     1128.1    12307.9     1127.5    12332.7     1132.3    12360.5
GR   1131.3    12407.9     1131.5    12507.0     1132.0    12594.8

ET                                 9.1                                                                  8697      12470
X1   19.618          79    11427.3    12188.5         200         220         210
CI     9945     1126.9                                  2        1690
X3                                  8697
GR   1134.8     7640.1     1135.3     7666.4     1135.2     7707.4     1132.7     7725.7     1132.7     7764.2
GR   1138.7     7835.8     1138.7     7958.0     1135.4     8039.3     1121.5     8061.0     1123.3     8092.3
GR   1124.0     8226.0     1132.3     8261.0     1130.9     8284.3     1135.1     8323.7     1136.4     8361.4
GR   1136.8     8590.0     1134.9     8749.7     1133.5     8779.3     1133.5     8834.6     1129.8     8864.3
GR   1131.3     8910.8     1131.3     8944.1     1126.9     8968.8     1127.5     8992.1     1124.8     9119.2
GR   1132.0     9173.3     1132.0     9192.3     1127.6     9227.9     1127.6     9254.5     1134.6     9291.4
GR   1135.1     9357.0     1135.3     9459.2     1135.3     9515.1     1133.2     9662.8     1130.7     9712.1
GR   1132.5     9741.1     1132.4     9791.7     1128.0     9804.6     1128.9     9832.3     1132.1     9842.9
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GR   1128.6    9852.7    1130.6    9936.7    1128.7   10000.0    1127.5   10028.8    1126.1   10170.0
GR   1128.1   10203.1    1128.2   10312.8    1131.6   10359.1    1130.5   10593.5    1128.4   10651.6
GR   1130.1   10752.5    1129.2   10840.1    1127.2   10907.9    1128.7   10951.9    1128.6   11001.9
GR   1132.0   11031.4    1131.5   11151.6    1132.3   11279.2    1132.6   11357.9    1130.2   11427.3
GR   1125.6   11451.9    1125.5   11515.6    1123.7   11592.9    1121.5   11617.1    1123.7   11681.4
GR   1122.2   11818.1    1119.9   11947.7    1118.6   11962.1    1118.2   12049.4    1117.1   12133.9
GR   1118.2   12150.9    1122.8   12176.2    1131.5   12188.5    1128.8   12199.9    1128.7   12231.0
GR   1133.1   12262.3    1132.1   12292.6    1133.9   12411.3    1133.8   12550.9

ET                          9.1                                                      8670     12419
X1   19.659       88    11270.3   12163.7     200      230       215
CI    9900     1127.6                          1600
X3                                 8670
GR   1134.5    7601.9    1135.6    7630.7    1136.0    7670.2    1133.3    7688.2    1133.5    7729.5
GR   1135.6    7747.4    1136.3    7793.6    1134.7    7825.6    1136.0    7852.1    1137.0    7927.9
GR   1136.4    7957.7    1125.6    7993.9    1122.7    8017.6    1123.0    8115.0    1124.8    8145.7
GR   1124.4    8162.7    1134.5    8217.6    1131.5    8240.7    1136.6    8277.5    1135.2    8287.8
GR   1135.2    8311.6    1137.3    8331.3    1137.4    8369.2    1136.4    8487.4    1136.5    8535.2
GR   1135.1    8593.6    1135.9    8643.0    1134.2    8713.5    1135.9    8729.8    1130.9    8763.1
1
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GR   1130.4    8793.2    1131.4    8943.6    1132.5    8958.4    1125.6    8993.3    1126.7    9055.8
GR   1125.6    9109.3    1129.2    9134.4    1129.2    9157.9    1130.4    9220.6    1129.4    9230.0
GR   1128.8    9292.9    1134.7    9324.5    1135.9    9442.5    1134.9    9552.1    1132.2    9682.9
GR   1129.5    9705.9    1129.3    9740.3    1135.3    9761.7    1129.2    9785.0    1128.9    9908.9
GR   1130.5    9932.3    1126.6    9964.5    1127.5   10000.0    1128.0   10039.8    1126.4   10133.9
GR   1129.3   10157.1    1129.6   10264.8    1131.6   10293.4    1131.6   10351.3    1127.6   10409.1
GR   1127.7   10472.7    1128.6   10501.2    1127.3   10637.8    1128.4   10765.7    1133.6   10786.3
GR   1133.7   10874.8    1133.7   10967.9    1132.3   11139.8    1133.7   11210.9    1133.8   11270.3
GR   1126.4   11391.0    1124.5   11503.7    1122.9   11562.2    1120.9   11623.2    1120.3   11779.1
GR   1120.2   11877.3    1122.3   11912.2    1122.7   11949.5    1125.0   11996.9    1124.7   12013.2
GR   1115.3   12054.3    1113.6   12092.1    1117.9   12117.0    1133.3   12163.7    1133.5   12212.0
GR   1133.4   12302.0    1134.1   12435.6    1134.7   12526.3

ET                          9.1                                                      8677     12514
X1   19.716       89    11265.1   12085.6     200      330       300
CI    9845     1128.2                          1490
X3                                 8677
GR   1134.2    7570.3    1134.6    7614.9    1135.6    7631.9    1133.4    7649.6    1133.7    7690.0
GR   1136.6    7709.0    1135.9    7775.4    1136.2    7809.8    1126.4    7829.1    1122.0    7870.7
GR   1123.7    7976.8    1122.1    8031.4    1125.5    8117.6    1130.4    8153.0    1130.4    8167.6
GR   1134.0    8186.7    1130.5    8209.7    1138.9    8247.6    1135.7    8279.1    1138.2    8342.6
GR   1138.1    8363.1    1136.0    8397.2    1135.4    8508.4    1132.9    8529.5    1133.5    8606.8
GR   1130.8    8655.0    1130.8    8713.6    1133.9    8849.6    1137.7    8861.1    1137.8    8944.2
GR   1125.3    8971.4    1126.5    9004.6    1126.5    9092.0    1128.3    9110.0    1128.7    9138.7
GR   1131.7    9176.0    1131.2    9276.7    1133.0    9298.6    1132.0    9353.8    1139.4    9375.9
GR   1135.2    9387.3    1135.3    9434.2    1132.6    9479.2    1130.6    9542.1    1132.4    9581.7
GR   1131.3    9643.1    1129.8    9689.5    1136.3    9714.7    1130.7    9730.1    1130.7    9745.8
GR   1127.9    9769.0    1127.3    9837.3    1127.5    9950.1    1130.0    9978.2    1130.2   10000.0
GR   1130.2   10000.1    1128.7   10041.2    1129.3   10224.3    1128.0   10330.2    1128.4   10430.3
GR   1130.4   10477.5    1130.7   10547.8    1129.5   10561.8    1130.7   10590.3    1132.8   10617.1
GR   1134.8   10660.8    1135.0   10712.4    1134.7   10808.7    1134.4   10993.0    1133.6   11092.3
GR   1132.8   11204.4    1130.4   11265.1    1124.1   11294.0    1123.6   11332.1    1127.5   11419.4
GR   1126.8   11534.9    1123.5   11611.6    1122.5   11679.5    1120.3   11693.1    1121.6   11712.6
GR   1121.1   11839.2    1122.6   11900.3    1122.5   11969.0    1123.5   12001.8    1126.3   12066.9
GR   1130.2   12085.6    1132.8   12149.2    1134.9   12325.6    1141.1   12514.4
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ET                          9.1                                                          8655      12513
X1   19.759        86    11188.2    11975.6        200        240        230
CI    9780    1128.9                                           1460
X3                                   8655
GR   1134.6    7542.8    1134.6     7584.5     1135.6     7603.3     1133.7     7618.0    1134.0     7658.8
GR   1136.4    7683.5    1137.2     7769.7     1135.7     7781.2     1125.6     7814.7    1122.0     7852.5
GR   1122.0    7878.1    1123.6     7899.3     1122.0     8003.6     1126.0     8076.4    1130.0     8110.6
GR   1130.0    8145.8    1133.6     8163.4     1132.7     8207.1     1136.6     8221.6    1136.1     8301.1
GR   1133.3    8409.2    1134.3     8466.0     1131.1     8554.6     1131.8     8635.3    1135.0     8689.1
GR   1135.1    8717.1    1134.3     8740.6     1137.1     8760.8     1138.1     8855.4    1140.0     8885.4
GR   1138.9    8918.1    1126.4     8941.7     1126.1     9049.5     1130.6     9120.8    1133.0     9224.6
GR   1131.4    9293.5    1133.7     9350.4     1132.4     9436.0     1132.9     9495.6    1131.6     9542.1
GR   1125.9    9582.0    1125.8     9644.8     1133.7     9670.1     1127.3     9683.9    1131.5     9718.6
GR   1131.4    9819.9    1130.1     9930.5     1130.1    10000.0     1130.0    10027.9    1128.5    10252.9
GR   1129.4   10289.5    1131.8    10307.1     1132.2    10382.4     1131.1    10431.9    1132.6    10450.5
GR   1132.0   10494.6    1129.5    10518.4     1132.5    10532.9     1135.8    10605.0    1135.2    10769.7
GR   1134.8   10908.6    1133.9    11070.8     1131.5    11126.9     1128.7    11188.2    1125.2    11203.4
GR   1125.2   11222.5    1126.9    11244.5     1127.9    11299.8     1128.1    11490.9    1127.0    11574.5
1
   17MAR92      10:49:39                                                                                    PAGE    5


GR   1122.8   11661.3    1119.4    11767.0     1121.5    11791.1     1119.9    11885.7    1121.3    11935.6
GR   1123.4   11959.4    1132.0    11975.6     1133.5    12032.5     1134.2    12066.1    1133.1    12083.5
GR   1135.0   12219.6    1135.4    12281.5     1136.6    12370.3     1142.6    12389.9    1143.1    12426.1
GR   1139.3   12438.5    1139.3    12501.7     1143.1    12513.3

ET                          9.1                                                          8636      12504
X1   19.803        87    11056.3    11909.5        200        240        230
CI   10075    1129.5                                0.01       2050
X3                                   8636
GR   1135.1    7517.4    1136.1     7565.9     1133.9     7589.2     1133.9     7629.6    1135.7     7655.0
GR   1134.5    7677.3    1134.7     7761.3     1133.2     7872.6     1124.2     7894.2    1119.8     7930.9
GR   1121.9    7968.2    1125.5     8016.4     1127.2     8085.0     1131.0     8125.9    1133.5     8140.5
GR   1134.6    8165.3    1135.4     8230.6     1134.4     8321.3     1134.2     8393.7    1132.8     8429.6
GR   1134.2    8465.8    1132.2     8502.2     1136.0     8535.3     1137.2     8573.3    1137.2     8640.0
GR   1134.5    8681.1    1135.0     8703.6     1137.4     8710.7     1138.1     8783.9    1137.5     8833.0
GR   1138.9    8872.4    1137.7     8924.2     1125.4     8949.9     1125.5     9011.9    1131.7     9082.3
GR   1130.8    9150.9    1132.8     9209.8     1132.8     9327.9     1130.0     9397.4    1128.1     9477.9
GR   1129.1    9514.0    1133.4     9544.1     1133.1     9599.5     1138.1     9629.7    1134.2     9650.3
GR   1134.4    9723.7    1133.9     9793.5     1131.0     9874.8     1130.5     9951.9    1130.5    10000.0
GR   1129.4   10000.2    1129.1    10029.5     1129.8    10241.7     1132.2    10352.9    1132.0    10402.8
GR   1133.3   10453.9    1130.6    10478.8     1134.1    10494.1     1135.5    10559.3    1137.7    10611.9
GR   1137.7   10661.6    1135.6    10683.1     1135.8    10787.1     1134.8    10901.2    1136.5    10911.3
GR   1130.3   10933.5    1131.6    11007.6     1131.5    11056.3     1127.6    11097.1    1126.8    11272.0
GR   1127.7   11420.8    1128.0    11605.3     1122.7    11652.1     1119.2    11739.4    1118.4    11770.5
GR   1120.6   11830.6    1121.4    11891.8     1133.3    11909.5     1134.4    12027.6    1135.9    12129.3
GR   1143.0   12152.9    1143.0    12196.6     1139.7    12203.2     1139.7    12266.5    1144.8    12278.2
GR   1144.9   12345.0    1145.6    12504.3

ET                          9.1                                                          8637      12109
X1   19.856        88    10946.9    11848.6        200        310        280
CI   10050    1130.2                                           1900
X3                                   8637
GR   1135.6    7499.2    1135.6     7536.2     1134.4     7567.1     1134.4     7605.4    1141.0     7641.2
GR   1141.0    7810.5    1136.6     7818.4     1135.8     7846.6     1125.9     7869.1    1120.6     7899.2
GR   1119.0    7990.0    1126.0     8013.2     1126.9     8067.7     1130.2     8113.9    1133.3     8133.8
GR   1133.3    8148.2    1130.1     8177.5     1132.6     8196.2     1134.7     8246.9    1135.8     8311.6
GR   1135.7    8359.0    1134.7     8484.0     1136.5     8521.2     1138.1     8633.1    1137.1     8736.9
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GR   1138.3    8866.9    1135.7    8938.8    1125.4    8953.4    1125.3    8987.5    1128.8    9056.1
GR   1132.8    9214.3    1132.1    9322.8    1129.6    9360.0    1129.1    9442.8    1130.2    9466.3
GR   1135.2    9480.3    1135.9    9587.3    1141.2    9601.2    1133.3    9622.0    1133.3    9643.0
GR   1135.3    9671.6    1135.3    9792.1    1132.7    9805.0    1129.8    9871.9    1130.6    9938.5
GR   1129.6   10000.0    1129.6   10000.1    1129.5   10048.3    1129.3   10090.1    1133.0   10141.8
GR   1129.8   10166.6    1131.4   10234.1    1131.6   10284.1    1132.8   10293.6    1132.0   10305.2
GR   1132.8   10337.7    1131.4   10489.1    1132.1   10527.1    1136.4   10542.7    1137.0   10615.6
GR   1136.0   10726.6    1137.0   10739.2    1136.4   10775.5    1132.2   10789.0    1132.6   10946.9
GR   1126.7   10985.3    1126.7   11103.6    1124.7   11139.2    1122.8   11150.8    1122.8   11192.4
GR   1123.7   11245.3    1122.1   11278.1    1122.1   11327.5    1122.7   11363.1    1127.3   11390.3
GR   1128.4   11470.8    1127.6   11532.8    1124.4   11582.8    1124.4   11634.0    1123.9   11692.5
GR   1120.2   11747.2    1115.6   11809.1    1132.3   11848.6    1131.8   11890.1    1133.8   11938.4
GR   1134.5   11995.6    1143.3   12033.7    1143.5   12063.3
1
   17MAR92      10:49:39                                                                          PAGE    6


ET                          9.1                                                          8646      12150
X1   19.902        88    10719.9   11828.6       200       250       240
CI    9950    1130.8                                     1700
X3                                   8646
GR   1136.3    7485.0    1136.1    7524.6    1135.0    7549.1    1135.0    7586.6    1136.4    7636.4
GR   1137.2    7745.5    1136.0    7829.5    1125.7    7853.2    1119.6    7880.2    1119.6    7910.4
GR   1117.2    7939.0    1117.2    7977.2    1121.8    7987.8    1117.7    7998.2    1127.1    8054.9
GR   1129.1    8110.1    1132.5    8141.7    1134.1    8193.8    1131.4    8223.5    1134.4    8239.8
GR   1134.0    8269.5    1136.8    8357.6    1135.9    8456.7    1137.2    8565.4    1138.6    8612.0
GR   1138.3    8735.2    1138.5    8840.5    1136.3    8893.8    1134.8    8908.1    1134.8    8943.3
GR   1128.1    8956.8    1127.3    8969.6    1127.5    9012.8    1130.1    9056.9    1130.5    9130.0
GR   1132.7    9219.2    1132.7    9257.0    1129.2    9361.0    1130.5    9406.8    1138.3    9420.6
GR   1137.8    9470.8    1136.0    9482.0    1136.5    9515.0    1135.0    9542.6    1137.4    9548.4
GR   1137.3    9566.2    1143.0    9582.4    1135.0    9601.1    1137.3    9644.1    1135.7    9759.6
GR   1130.4    9775.6    1130.8    9895.4    1131.2    9940.1    1129.1    9980.5    1129.3   10000.0
GR   1129.6   10016.3    1132.8   10049.5    1134.5   10203.0    1131.3   10263.6    1131.0   10300.4
GR   1132.4   10307.0    1133.2   10366.7    1133.4   10471.2    1132.6   10569.2    1137.0   10592.9
GR   1137.4   10676.7    1136.7   10719.9    1132.4   10750.0    1126.5   10790.0    1126.1   10992.6
GR   1126.2   11069.8    1129.9   11130.9    1131.4   11223.1    1128.1   11290.0    1125.6   11357.9
GR   1124.4   11517.7    1124.3   11593.2    1122.3   11649.5    1122.9   11767.0    1118.3   11789.1
GR   1131.8   11828.6    1135.1   11872.0    1137.0   11955.4    1144.4   12010.2    1145.4   12024.9
GR   1145.8   12063.1    1139.7   12072.9    1139.7   12100.5

NC    0.050     0.050     0.040
ET                          9.1                                                          8659      12259
X1   19.943        86    10531.6   11275.3       200       230       220
CI    10275    1131.5     0.035                              2250
X3                                   8659
GR   1136.7    7475.2    1137.2    7498.8    1135.1    7530.2    1135.1    7569.0    1139.2    7615.0
GR   1139.2    7715.2    1139.8    7750.0    1137.4    7794.8    1127.7    7817.2    1121.6    7843.9
GR   1121.6    7918.1    1125.8    7947.8    1127.3    8080.9    1130.4    8129.7    1130.4    8148.3
GR   1134.3    8211.3    1132.0    8268.3    1134.9    8279.9    1137.7    8402.5    1136.5    8469.7
GR   1137.8    8514.7    1137.2    8559.2    1138.5    8640.1    1139.1    8735.1    1137.7    8826.3
GR   1135.4    8917.5    1129.9    8954.0    1128.9    9022.7    1131.0    9060.8    1130.5    9131.6
GR   1132.2    9225.2    1130.6    9306.6    1132.3    9371.6    1134.2    9389.4    1137.7    9401.0
GR   1137.0    9463.5    1134.9    9470.8    1136.9    9498.2    1136.9    9550.4    1141.1    9571.5
GR   1135.3    9601.5    1137.0    9627.9    1135.8    9639.8    1132.3    9652.0    1132.2    9721.8
GR   1130.0    9734.5    1133.0    9755.9    1131.1    9762.4    1132.4    9842.3    1132.4    9866.8
GR   1130.1    9901.2    1132.5    9945.7    1131.6   10000.0    1131.8   10029.1    1134.2   10123.9
GR   1134.9   10308.8    1133.0   10465.2    1133.9   10531.6    1127.9   10581.5    1125.1   10754.4
GR   1127.4   10846.2    1127.5   10963.0    1125.6   10984.7    1124.5   11079.4    1122.7   11111.7
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GR   1124.6   11190.6    1132.3    11275.3    1131.5    11348.8    1126.8    11406.5    1125.6    11552.1
GR   1125.5   11657.0    1121.8    11710.4    1122.7    11733.3    1120.8    11856.9    1141.5    11889.2
GR   1136.4   11900.8    1137.4    11930.6    1144.2    11946.4    1145.5    11984.7    1142.9    12005.2
GR   1142.8   12045.8    1147.3    12061.3    1147.0    12089.4    1139.8    12102.0    1139.8    12134.7
GR   1145.8   12144.6

ET                          9.1                                                          8680      12182
X1   19.985        88    10349.7    10967.5       200       230       220
CI    10375    1132.1                                     2250
X3                                   8680
GR   1137.3    7469.7    1137.8     7499.6    1135.3     7516.0    1135.3     7556.6    1136.2     7584.5
GR   1136.7    7634.3    1135.0     7697.4    1135.8     7765.0    1127.4     7790.6    1128.4     7799.4
1
   17MAR92      10:49:39                                                                                PAGE    7


GR   1121.9    7841.7    1122.0     7906.1    1125.0     7945.3    1125.2     7992.5    1127.4     8117.4
GR   1130.5    8159.9    1130.9     8205.0    1133.4     8238.3    1132.5     8288.5    1135.4     8304.3
GR   1135.0    8329.9    1137.1     8351.7    1137.8     8540.8    1139.2     8622.4    1138.3     8676.5
GR   1138.5    8780.3    1136.7     8845.8    1134.6     8875.4    1134.6     8930.6    1130.0     8953.2
GR   1130.3    8997.3    1129.7     9032.0    1130.4     9053.6    1130.6     9240.3    1134.1     9356.5
GR   1134.4    9435.6    1137.2     9446.8    1137.2     9471.0    1136.4     9544.2    1143.4     9564.5
GR   1137.6    9575.9    1138.3     9600.9    1132.2     9627.3    1134.8     9679.0    1135.4     9741.9
GR   1131.7    9763.4    1132.4     9787.4    1131.4     9836.8    1134.4     9930.6    1133.7    10000.0
GR   1133.7   10000.1    1133.8    10020.0    1135.0    10213.9    1134.0    10349.7    1128.7    10391.8
GR   1126.0   10514.0    1125.2    10603.9    1126.1    10652.3    1129.8    10740.8    1128.0    10842.2
GR   1129.0   10910.4    1132.6    10941.3    1134.3    10967.5    1133.4    10987.3    1135.7    11011.4
GR   1133.9   11109.3    1136.3    11121.8    1137.1    11162.4    1138.4    11189.6    1138.0    11243.8
GR   1133.3   11269.8    1132.6    11422.8    1128.4    11484.4    1127.7    11554.5    1124.5    11657.2
GR   1125.8   11727.2    1127.2    11774.5    1127.2    11815.2    1129.7    11845.0    1128.9    11905.2
GR   1127.2   11933.8    1139.3    11963.1    1142.7    12058.8    1146.6    12075.5    1146.2    12097.9
GR   1140.2   12108.4    1140.2    12142.0    1145.8    12156.6

ET                          9.1                                                          8704      12194
X1   20.028        87    10186.5    10810.4       190       260       230
CI    10325    1132.8                                     2150
X3                                   8704
GR   1137.3    7467.6    1137.7     7495.1    1135.3     7517.9    1135.7     7559.0    1137.4     7588.3
GR   1136.3    7654.8    1135.5     7684.4    1135.9     7778.7    1138.4     7791.0    1123.3     7838.6
GR   1122.9    7860.2    1125.8     7909.7    1124.1     7931.1    1124.1     7958.0    1125.6     8028.6
GR   1128.7    8114.4    1128.1     8166.3    1130.7     8194.0    1131.7     8233.6    1131.7     8276.1
GR   1135.4    8344.4    1135.0     8354.6    1137.6     8400.1    1138.2     8503.7    1137.2     8536.0
GR   1138.6    8585.6    1138.2     8689.9    1137.7     8746.8    1135.3     8776.8    1136.3     8817.2
GR   1135.9    8847.4    1138.2     8871.7    1138.7     8915.5    1131.0     8949.8    1132.1     8956.5
GR   1130.0    9076.4    1131.1     9126.1    1129.7     9215.0    1133.6     9269.4    1136.7     9387.2
GR   1136.2    9425.9    1139.4     9455.2    1137.6     9532.8    1147.6     9566.6    1139.7     9586.3
GR   1139.7    9633.3    1134.7     9650.7    1134.7     9699.0    1133.9     9736.7    1131.2     9752.8
GR   1130.6    9791.6    1133.8     9808.4    1135.3     9931.7    1135.3    10000.0    1135.3    10018.3
GR   1134.5   10146.0    1135.7    10186.5    1129.5    10216.5    1126.5    10317.3    1126.0    10493.0
GR   1131.5   10580.8    1130.4    10708.3    1131.4    10771.3    1136.8    10810.4    1136.0    10924.7
GR   1136.7   11018.5    1138.0    11066.8    1136.9    11134.8    1134.1    11205.8    1133.7    11335.3
GR   1132.2   11388.5    1128.7    11472.3    1127.8    11626.1    1127.2    11771.6    1128.7    11818.1
GR   1127.8   11859.6    1129.3    11913.2    1129.2    11940.1    1142.1    11964.8    1143.7    12002.7
GR   1143.0   12041.8    1145.6    12095.6    1145.6    12114.3    1140.3    12119.8    1140.3    12153.8
GR   1146.2   12165.2    1146.6    12194.9

ET                          9.1                                                          8739      12212
X1   20.072        88    10049.5    10683.8       190       260       230
CI    10225    1133.4                                     2050
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X3                                  8739
GR   1138.0    7664.4    1136.6    7677.8    1135.9    7777.2    1142.1    7792.3    1142.1    7805.4
GR   1128.9    7826.2    1125.1    7844.3    1123.6    7878.4    1123.7    7934.2    1124.7    8081.4
GR   1127.6    8128.9    1128.3    8175.4    1127.5    8214.0    1132.7    8317.8    1132.6    8344.5
GR   1133.8    8380.4    1136.5    8399.7    1136.3    8486.7    1138.2    8606.9    1137.2    8714.7
GR   1135.7    8733.9    1136.9    8764.9    1139.7    8812.7    1139.5    8917.3    1132.9    8933.2
GR   1131.2    8958.0    1131.8    9039.3    1129.9    9105.5    1128.4    9126.6    1128.4    9178.7
GR   1132.7    9233.2    1135.4    9295.4    1136.4    9351.1    1136.4    9408.1    1139.4    9436.4
GR   1139.6    9504.0    1137.0    9548.2    1145.0    9577.5    1138.4    9599.9    1140.4    9632.3
GR   1139.9    9690.1    1132.3    9721.8    1131.4    9772.3    1135.4    9834.0    1135.4    9948.8
GR   1135.9   10000.0    1136.0   10049.5    1129.7   10069.6    1127.9   10086.6    1126.5   10194.7
1
   17MAR92      10:49:39                                                                          PAGE    8


GR   1126.8   10261.0    1127.6   10344.5    1127.6   10376.4    1130.1   10433.4    1131.5   10461.7
GR   1132.7   10479.7    1132.4   10604.9    1134.4   10660.1    1136.9   10683.8    1137.1   10705.3
GR   1136.3   10738.7    1137.8   10779.0    1136.7   10835.8    1137.2   10962.0    1135.6   11125.3
GR   1131.6   11272.7    1131.9   11371.8    1131.4   11398.9    1128.7   11434.1    1129.0   11488.6
GR   1128.1   11586.0    1129.2   11625.8    1128.0   11655.1    1128.0   11744.5    1129.7   11764.7
GR   1128.9   11789.2    1123.8   11824.2    1123.8   11844.7    1125.0   11884.8    1141.8   11915.0
GR   1142.6   11996.7    1144.5   12074.4    1145.2   12106.7    1146.3   12123.0    1140.0   12131.7
GR   1140.0   12170.5    1145.5   12180.3    1146.7   12212.3

ET                          9.1                                                          8770     12445
X1   20.112       90     9962.4   10638.1     190      260       210
CI    10050    1134.1                                 1700
X3                                  8770
GR   1138.0    7680.2    1136.8    7691.8    1137.3    7766.4    1136.3    7778.7    1142.6    7794.3
GR   1142.7    7808.3    1135.6    7822.9    1133.9    7852.4    1130.2    7862.6    1130.2    7874.5
GR   1126.1    7893.4    1125.7    7930.9    1128.5    7954.9    1123.5    7985.9    1124.6    8000.4
GR   1123.8    8063.2    1124.5    8142.1    1128.2    8218.8    1128.2    8287.9    1130.2    8334.3
GR   1132.3    8447.6    1137.6    8475.2    1137.2    8572.9    1136.6    8680.9    1134.6    8705.1
GR   1136.6    8734.1    1136.5    8782.3    1139.5    8815.3    1139.5    8869.3    1131.3    8922.4
GR   1132.1    8955.6    1131.7    9075.7    1128.3    9113.7    1129.5    9199.5    1132.9    9215.4
GR   1137.5    9348.4    1137.5    9393.6    1139.9    9410.4    1138.7    9471.3    1140.1    9515.8
GR   1140.1    9548.3    1137.4    9570.8    1145.9    9590.7    1138.3    9609.2    1140.3    9638.5
GR   1138.8    9753.8    1132.1    9791.0    1132.1    9859.6    1136.7    9927.3    1137.1    9962.4
GR   1130.2    9978.4    1126.5    9995.9    1126.5   10000.0    1126.6   10065.2    1126.9   10141.9
GR   1129.0   10265.2    1132.2   10317.7    1134.3   10542.5    1136.5   10608.4    1137.6   10638.1
GR   1138.3   10709.6    1134.2   10845.3    1133.3   10922.7    1131.6   10984.0    1132.4   11091.7
GR   1130.9   11235.1    1130.1   11312.0    1128.3   11342.8    1127.6   11387.9    1129.8   11446.9
GR   1131.8   11470.0    1132.2   11542.7    1127.4   11573.6    1129.2   11590.4    1127.1   11752.4
GR   1129.0   11763.7    1131.2   11868.7    1125.0   11905.1    1128.2   11977.4    1143.7   12003.7
GR   1147.6   12122.6    1147.4   12142.2    1140.3   12152.7    1140.3   12194.1    1145.4   12200.4
GR   1146.2   12260.1    1149.2   12335.9    1149.2   12368.1    1150.9   12391.3    1151.3   12445.3

ET                          9.1                                                          8819     12505
X1   20.152       90     9923.6   10540.3     190      230       210
CI     9600    1134.7                                  700
X3                                  8819
GR   1138.5    7693.7    1138.5    7758.3    1137.6    7782.1    1143.2    7796.1    1143.3    7809.0
GR   1135.7    7825.0    1135.6    7863.9    1137.8    7897.9    1128.9    7925.7    1126.5    7971.5
GR   1126.0    8008.3    1129.5    8046.0    1129.5    8081.7    1124.7    8109.5    1123.0    8168.4
GR   1131.0    8449.0    1137.3    8601.8    1137.4    8789.4    1140.3    8794.7    1140.3    8811.7
GR   1137.1    8824.2    1131.1    8877.2    1131.1    8900.2    1135.2    8915.2    1133.6    8957.1
GR   1131.3    9053.5    1132.7    9076.3    1127.8    9134.6    1128.8    9203.1    1133.9    9217.0
GR   1134.6    9263.8    1137.2    9295.3    1137.6    9388.2    1140.8    9411.3    1139.7    9557.3
GR   1139.7    9584.1    1137.9    9594.2    1145.8    9612.1    1138.8    9633.4    1140.1    9664.3
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GR	1140.5	9756.5	1142.1	9855.8	1141.1	9871.7	1134.8	9891.9	1134.8	9923.6
GR	1128.1	9953.0	1126.0	9981.2	1126.0	10000.0	1126.0	10080.2	1126.8	10104.7
GR	1130.3	10192.7	1133.9	10243.0	1134.9	10363.4	1133.9	10414.0	1134.9	10540.3
GR	1132.4	10686.7	1134.4	10853.5	1133.1	10922.7	1130.4	10948.8	1133.2	10982.8
GR	1130.9	11032.3	1136.6	11056.7	1136.3	11136.0	1133.3	11158.0	1134.8	11199.4
GR	1134.4	11267.8	1135.8	11310.5	1133.9	11354.8	1133.1	11503.7	1130.1	11606.0
GR	1128.1	11628.2	1127.6	11739.1	1128.8	11758.3	1129.2	11877.2	1131.1	11959.8
GR	1130.0	12084.4	1126.6	12133.8	1137.9	12158.5	1146.1	12184.6	1142.4	12202.0
GR	1142.0	12222.4	1149.5	12239.6	1149.3	12299.0	1140.4	12319.3	1140.4	12349.7
GR	1149.4	12361.4	1148.5	12425.5	1147.5	12448.2	1147.0	12464.0	1147.5	12505.2

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ET			9.1						8877	12490
X1	20.189	89	9917.3	10638.9	200	200	200			
CI	10200	1135.4				1800				
X3				8877						
GR	1136.8	7693.6	1138.4	7789.0	1144.5	7808.2	1144.5	7818.5	1135.5	7839.6
GR	1135.5	7869.1	1138.5	7927.6	1137.6	7970.3	1127.4	8013.9	1127.2	8051.5
GR	1131.7	8172.7	1125.2	8234.9	1124.5	8376.4	1136.7	8666.1	1135.8	8727.3
GR	1137.1	8752.8	1141.3	8767.3	1141.3	8782.2	1131.6	8817.1	1130.5	8840.2
GR	1130.5	8866.4	1135.4	8887.0	1133.8	9024.2	1128.1	9194.6	1128.1	9194.6
GR	1128.8	9234.5	1134.2	9251.5	1135.2	9312.2	1137.9	9337.3	1138.9	9393.9
GR	1145.1	9407.3	1146.0	9439.3	1146.0	9481.6	1141.1	9516.3	1140.9	9607.6
GR	1139.1	9629.7	1146.1	9645.7	1140.1	9666.0	1142.3	9684.1	1141.3	9770.4
GR	1140.1	9837.7	1141.3	9917.3	1127.6	9939.2	1125.5	9980.9	1125.8	10000.0
GR	1126.6	10043.0	1127.0	10068.7	1133.0	10196.2	1133.0	10258.9	1135.1	10360.9
GR	1134.2	10442.5	1132.1	10575.1	1137.3	10638.9	1136.8	10708.6	1137.8	10804.3
GR	1138.5	11020.5	1135.2	11074.9	1134.6	11121.7	1129.8	11304.9	1129.7	11341.2
GR	1128.3	11376.9	1127.5	11474.0	1134.6	11519.0	1134.5	11565.6	1131.6	11741.7
GR	1133.8	11779.4	1133.0	11800.1	1127.1	11864.5	1120.9	11897.4	1121.6	11923.6
GR	1121.2	11937.2	1121.2	11972.0	1127.2	12012.3	1133.0	12117.5	1133.1	12158.3
GR	1143.4	12193.3	1146.7	12222.1	1146.7	12233.6	1141.1	12254.2	1141.1	12275.1
GR	1151.7	12297.5	1149.4	12310.0	1149.4	12352.0	1140.6	12366.6	1140.6	12395.6
GR	1149.3	12406.9	1148.0	12463.7	1146.1	12481.2	1145.7	12490.4		

ET			9.1						8927	12361
X1	20.231	90	9884.9	10651.1	190	260	220			
CI	10375	1136.0				2050				
X3				8927						
GR	1139.8	7540.9	1139.2	7910.7	1141.6	7947.9	1138.7	8038.2	1130.9	8061.1
GR	1129.7	8149.3	1130.7	8242.8	1131.8	8289.8	1130.7	8310.8	1126.2	8355.5
GR	1124.5	8440.8	1124.8	8487.0	1126.2	8585.1	1130.2	8639.2	1130.9	8676.0
GR	1135.4	8714.1	1140.5	8729.1	1140.5	8743.1	1132.2	8771.6	1130.5	8796.2
GR	1130.2	8814.1	1132.2	8846.2	1136.6	8858.6	1136.6	8896.2	1135.2	8927.8
GR	1136.0	8946.3	1134.2	8989.2	1133.8	9051.1	1133.0	9066.9	1132.5	9157.4
GR	1129.0	9253.6	1129.0	9283.0	1134.6	9309.6	1133.9	9334.6	1134.9	9359.8
GR	1137.6	9374.1	1139.9	9417.0	1139.9	9444.6	1142.5	9471.1	1142.6	9575.2
GR	1141.1	9606.3	1141.5	9649.1	1140.4	9695.4	1145.1	9706.6	1140.9	9721.9
GR	1141.6	9849.7	1143.0	9884.9	1141.5	9914.6	1130.9	9929.3	1126.7	9953.7
GR	1126.2	9980.8	1126.2	10000.0	1127.7	10034.5	1131.1	10086.5	1133.1	10206.7
GR	1133.1	10277.6	1134.2	10394.4	1133.4	10503.3	1137.1	10574.5	1138.7	10651.1
GR	1136.8	10814.9	1133.6	10842.4	1129.7	10853.4	1130.1	10915.9	1128.2	11097.5
GR	1129.9	11141.8	1137.6	11197.8	1135.0	11411.6	1135.1	11473.1	1133.7	11623.7
GR	1131.1	11668.2	1135.7	11735.3	1135.4	11754.7	1133.3	11790.6	1137.0	11811.6
GR	1136.6	11839.7	1133.3	11857.1	1133.5	11883.7	1127.8	11957.1	1126.7	12023.9
GR	1120.8	12075.2	1120.8	12113.0	1124.7	12132.4	1152.3	12186.2	1151.6	12197.6

GR	1144.1	12219.1	1142.9	12249.4	1145.0	12287.4	1150.2	12299.3	1151.8	12361.9
ET			9.1						8989	12337
X1	20.269	90	9884.5	10713.7	190	220	200			
CI	10400	1136.4				2000				
X3				8989						
GR	1140.8	7604.0	1139.1	7968.7	1143.3	8029.4	1140.7	8089.4	1140.9	8163.2
GR	1131.8	8193.8	1131.8	8241.0	1129.5	8266.1	1128.2	8381.2	1129.3	8437.8
GR	1125.3	8469.8	1125.3	8561.3	1126.5	8583.1	1125.8	8628.1	1127.8	8633.1

GR	1135.2	8673.6	1139.1	8680.4	1139.1	8692.7	1135.9	8699.3	1128.7	8737.3
GR	1128.7	8756.1	1131.4	8779.6	1130.9	8792.1	1133.1	8800.3	1131.4	8810.9
GR	1134.3	8948.5	1135.2	9016.9	1132.6	9185.4	1130.8	9250.2	1128.4	9295.0
GR	1129.6	9317.1	1133.6	9327.3	1136.0	9428.9	1136.8	9485.4	1141.1	9496.2
GR	1142.8	9524.6	1141.7	9605.7	1143.5	9631.3	1143.5	9705.2	1140.7	9741.9
GR	1147.5	9759.0	1141.2	9780.4	1143.4	9884.5	1142.2	9899.7	1130.3	9928.8
GR	1128.4	9942.3	1127.0	9974.1	1129.0	10000.0	1129.2	10049.6	1129.4	10079.9
GR	1132.9	10127.8	1133.7	10185.6	1132.0	10315.6	1133.9	10447.6	1130.7	10602.1
GR	1129.1	10631.5	1134.4	10658.1	1136.2	10713.7	1136.2	10835.0	1133.9	10945.4
GR	1139.8	10966.2	1140.4	11002.7	1138.9	11030.5	1139.2	11077.0	1137.3	11157.2
GR	1138.8	11209.4	1136.3	11345.4	1135.1	11464.7	1135.3	11512.0	1133.2	11536.0
GR	1135.8	11558.8	1133.0	11602.4	1132.8	11632.0	1134.4	11670.9	1133.9	11742.6
GR	1132.8	11772.7	1136.6	11807.3	1135.7	11838.3	1136.7	11860.3	1131.5	11884.5
GR	1132.7	11903.7	1130.9	11929.2	1124.7	12130.9	1125.6	12160.5	1133.9	12188.2
GR	1141.4	12196.1	1140.5	12250.9	1151.1	12268.3	1150.4	12285.3	1152.0	12337.8
ET			9.1						9067	12386
X1	20.307	90	9790.3	10569.9	200	200	200			
CI	10550	1136.7				1700				
X3				9067						
GR	1141.4	7668.1	1138.6	8174.3	1140.3	8276.8	1137.4	8374.8	1136.3	8383.5
GR	1130.7	8399.7	1130.9	8410.4	1128.7	8490.1	1123.9	8513.2	1124.4	8559.8
GR	1129.5	8575.9	1135.8	8617.1	1140.1	8625.6	1140.0	8637.5	1132.6	8657.1
GR	1125.9	8688.8	1125.9	8731.5	1129.6	8817.2	1130.9	8899.4	1130.9	8950.4
GR	1131.5	8994.3	1131.5	9040.4	1131.3	9209.7	1129.5	9276.2	1134.3	9347.8
GR	1135.2	9471.6	1136.9	9518.1	1136.4	9670.6	1134.1	9701.8	1140.1	9722.9
GR	1139.0	9777.6	1145.0	9790.3	1138.0	9808.2	1139.1	9824.6	1138.7	9842.6
GR	1136.0	9871.3	1132.8	9901.0	1130.9	9949.9	1129.2	9971.7	1129.2	9998.9
GR	1129.2	10000.0	1126.3	10024.9	1129.9	10057.2	1129.9	10085.0	1132.7	10113.9
GR	1133.6	10149.2	1133.0	10210.1	1131.1	10259.9	1131.7	10318.4	1136.6	10547.3
GR	1138.6	10569.9	1138.9	10656.2	1137.8	10731.1	1136.3	10782.8	1137.7	10797.9
GR	1137.6	10810.9	1140.2	10852.3	1140.2	10951.1	1138.5	11028.5	1139.7	11146.5
GR	1137.4	11254.0	1137.9	11322.1	1136.0	11377.7	1135.9	11408.5	1136.0	11459.3
GR	1134.6	11518.2	1135.0	11562.4	1133.1	11661.2	1135.0	11675.2	1134.5	11732.2
GR	1136.6	11769.3	1135.3	11784.4	1132.6	11846.4	1132.4	11881.7	1130.4	11906.7
GR	1130.4	11931.7	1128.1	11955.1	1126.2	12066.8	1131.3	12127.5	1129.6	12155.7
GR	1140.5	12183.9	1139.9	12209.6	1151.2	12235.4	1152.1	12259.9	1152.1	12290.8
GR	1141.6	12307.3	1141.6	12337.6	1152.0	12349.5	1152.0	12371.1	1160.6	12386.1
ET			9.1						9147	12345
X1	20.345	90	9790.7	10573.2	200	200	200			
CI	10975	1137.1				950				
X3				9147						
GR	1140.8	7732.1	1141.5	7773.8	1140.2	7825.6	1140.3	7902.1	1138.2	7907.4
GR	1141.9	7916.1	1139.5	7922.2	1140.9	7946.1	1139.3	8007.8	1140.2	8053.8
GR	1139.5	8101.9	1137.1	8162.0	1139.0	8179.0	1138.0	8293.8	1138.3	8360.8

GR	1136.7	8391.4	1139.2	8443.1	1137.6	8562.6	1139.8	8575.7	1139.8	8587.5
GR	1128.4	8666.0	1128.1	8715.2	1130.3	8752.1	1127.4	8819.2	1127.0	8859.6
GR	1128.5	8892.8	1129.9	8973.8	1128.2	8997.8	1130.0	9077.9	1128.7	9133.8
GR	1129.3	9180.6	1129.0	9293.4	1130.3	9306.2	1129.6	9387.5	1131.8	9436.7
GR	1134.9	9540.1	1135.1	9589.9	1130.8	9612.9	1130.8	9698.3	1132.5	9712.7
GR	1129.9	9739.2	1129.9	9765.3	1138.4	9783.3	1138.2	9790.7	1141.3	9800.9
GR	1136.5	9814.0	1135.8	9849.6	1132.3	9905.3	1132.5	9985.3	1131.6	10000.0
GR	1132.4	10031.8	1131.9	10111.4	1129.0	10132.7	1132.2	10153.2	1130.8	10182.8

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GR	1131.2	10289.7	1134.5	10432.5	1136.9	10530.6	1139.1	10573.2	1139.5	10721.0
GR	1138.6	10804.8	1138.7	10866.9	1140.0	10915.4	1140.0	11059.1	1138.2	11150.0
GR	1136.8	11193.4	1137.4	11231.7	1135.9	11250.0	1137.1	11272.3	1136.9	11306.8
GR	1138.2	11371.7	1136.1	11434.2	1133.8	11459.5	1133.8	11491.8	1135.7	11549.3
GR	1134.7	11603.7	1134.0	11742.5	1132.3	11826.6	1130.5	11868.9	1127.2	11891.6
GR	1127.3	11995.7	1131.3	12042.3	1131.0	12107.9	1151.1	12161.1	1151.9	12177.6
GR	1150.9	12244.8	1141.3	12259.6	1141.3	12293.2	1150.8	12304.3	1150.8	12345.0
ET			9.1						9216	12402
X1	20.383	90	9806.2	10612.3	200	200	200			
CI	10937	1137.4				825				
X3				9216						
GR	1140.9	7793.3	1140.4	7927.4	1138.8	7931.5	1143.8	7942.0	1140.4	7950.5
GR	1143.7	7978.4	1141.8	8030.0	1144.4	8042.1	1144.4	8101.7	1139.3	8118.6
GR	1137.1	8159.3	1137.5	8195.5	1137.2	8233.2	1138.3	8330.8	1137.9	8444.6
GR	1139.3	8470.8	1138.2	8527.9	1139.0	8598.7	1138.5	8703.0	1137.7	8736.7
GR	1135.9	8755.3	1134.4	8795.7	1130.1	8822.5	1129.3	8848.9	1130.2	8885.6
GR	1127.6	8951.8	1128.7	8967.0	1128.9	9071.1	1129.1	9188.7	1129.9	9276.0
GR	1128.2	9308.0	1129.8	9353.1	1127.4	9392.5	1127.4	9432.7	1129.3	9498.2
GR	1131.7	9559.9	1132.2	9622.0	1129.3	9664.1	1129.9	9706.1	1129.2	9766.2
GR	1135.2	9792.7	1141.1	9806.2	1134.5	9822.3	1133.3	9878.4	1133.8	10000.0
GR	1134.4	10039.5	1134.0	10065.0	1131.6	10094.4	1131.3	10180.7	1132.2	10249.9
GR	1130.5	10278.9	1133.7	10366.4	1133.7	10391.1	1136.4	10499.4	1139.3	10612.3
GR	1140.1	10679.7	1139.6	10742.3	1140.7	10804.6	1140.2	10895.6	1137.1	11032.1
GR	1137.5	11127.6	1136.6	11171.7	1138.4	11201.5	1138.4	11307.6	1136.5	11343.6
GR	1133.3	11378.8	1133.3	11406.0	1136.1	11497.3	1136.0	11556.5	1132.5	11681.3
GR	1133.1	11748.7	1127.6	11812.8	1127.2	11851.7	1131.1	11950.2	1131.7	12012.2
GR	1127.6	12034.4	1140.5	12065.9	1140.6	12099.3	1150.6	12152.6	1151.2	12190.7
GR	1141.9	12206.1	1141.9	12244.6	1150.0	12254.9	1150.3	12289.9	1147.8	12313.5
GR	1149.1	12335.9	1153.6	12348.3	1153.8	12359.2	1152.8	12376.9	1148.8	12402.3
ET			9.1						9280	12502
X1	20.420	88	9797.7	10637.9	200	200	200			
CI	10912	1137.8				675				
X3				9280						
GR	1141.6	7859.0	1139.1	7878.7	1141.7	7954.3	1140.0	7958.8	1144.4	7969.2
GR	1140.7	7978.2	1142.1	8004.8	1141.6	8114.4	1138.3	8179.9	1138.3	8203.6
GR	1139.6	8230.0	1139.3	8272.0	1140.3	8326.1	1139.1	8388.1	1139.8	8499.4
GR	1140.1	8589.0	1139.3	8618.2	1140.5	8715.8	1138.8	8930.2	1140.3	8941.4
GR	1135.9	8948.7	1135.0	8972.7	1129.8	8985.8	1128.8	9059.3	1130.0	9108.1
GR	1128.4	9218.9	1128.8	9367.0	1130.0	9469.4	1128.9	9503.1	1130.8	9530.0
GR	1130.8	9616.3	1131	9768	1131	9768	1131	9768	1131	9768
GR	1134.7	9775.6	1134.5	9788.3	1139.8	9797.7	1134.6	9810.1	1131.6	9904.9
GR	1132.8	10000.0	1132.1	10053.7	1134.4	10068.3	1133.9	10105.1	1131.8	10143.0
GR	1132.1	10173.0	1130.0	10237.7	1132.7	10275.9	1132.4	10336.0	1134.2	10390.5
GR	1132.8	10401.0	1135.2	10411.4	1135.2	10467.4	1138.0	10598.2	1140.1	10637.9
GR	1140.5	10755.9	1137.9	10950.5	1138.8	11048.1	1137.0	11090.5	1138.6	11122.1

GR	1138.8	11165.0	1137.2	11237.3	1132.8	11277.5	1133.8	11335.1	1135.8	11391.4
GR	1135.5	11481.4	1132.3	11661.4	1128.1	11736.1	1128.1	11751.5	1130.0	11796.8
GR	1131.6	11919.3	1132.1	11954.0	1141.1	11980.1	1146.4	12036.8	1144.2	12051.7
GR	1151.5	12102.4	1151.6	12146.6	1142.2	12161.2	1142.2	12198.4	1149.6	12213.6
GR	1149.6	12249.8	1148.4	12308.5	1153.5	12319.9	1154.0	12332.0	1153.1	12344.3
GR	1148.8	12358.7	1148.4	12409.1	1150.1	12502.8				

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ET			9.1						9356	12500
X1	20.458	85	9784.9	10661.8	200	200	200			
CI	10837	1138.1				525				
X3				9356						
GR	1140.4	7922.3	1142.1	7974.8	1140.4	7979.6	1145.9	7990.2	1139.8	8002.3
GR	1142.6	8047.4	1141.3	8117.6	1139.4	8184.3	1139.1	8250.5	1139.9	8275.1
GR	1139.4	8322.4	1140.4	8443.0	1140.2	8555.5	1141.7	8604.0	1141.6	8644.3
GR	1151.3	8681.5	1141.8	8712.9	1140.9	8778.3	1140.5	8893.6	1140.5	9022.3
GR	1128	9042	1128	9042	1128.3	9204.4	1127.9	9236.5	1130.2	9246.9
GR	1130.3	9268.8	1128.7	9284.2	1128.7	9284.2	1128.3	9327.3	1128.9	9446.5
GR	1128.9	9607.7	1128.9	9607.7	1128.9	9750	1128.9	9750	1130.7	9752.2
GR	1131.2	9763.8	1137.5	9784.9	1131.0	9803.7	1130.8	9859.5	1132.0	9901.4
GR	1132.1	10000.0	1131.3	10092.5	1131.2	10125.2	1132.7	10131.8	1130.7	10237.3
GR	1134.2	10416.6	1134.0	10460.7	1140.2	10661.8	1139.1	10817.8	1138.8	10969.0
GR	1139.2	11037.3	1138.0	11081.7	1131.7	11117.8	1131.3	11169.2	1132.5	11230.8
GR	1134.2	11257.9	1134.5	11300.7	1132.0	11395.5	1134.5	11439.6	1134.5	11537.4
GR	1129.7	11565.4	1130.4	11600.0	1129.3	11708.1	1131.0	11766.8	1130.5	11804.8
GR	1134.5	11835.6	1143.9	11840.4	1143.4	11881.7	1145.1	11909.3	1150.9	11955.3
GR	1150.1	12013.0	1141.6	12048.3	1141.6	12110.6	1149.8	12132.9	1149.8	12160.9
GR	1151.3	12200.8	1149.6	12236.1	1150.1	12278.1	1153.1	12286.3	1154.0	12299.7
GR	1153.1	12319.6	1150.8	12346.5	1148.5	12354.9	1149.7	12434.8	1151.1	12500.6

ET			9.1						9423	12500
X1	20.496	88	9786.9	10647.8	200	200	200			
CI	10762	1138.5				325				
X3				9423						
GR	1142.2	7985.1	1142.3	7998.8	1140.5	8003.6	1145.2	8012.7	1140.8	8020.7
GR	1142.3	8046.5	1140.7	8187.1	1141.1	8246.5	1140.5	8313.1	1140.2	8441.2
GR	1138.5	8456.8	1138.5	8514.2	1141.2	8546.5	1141.8	8586.5	1140.6	8614.7
GR	1142.1	8719.9	1142.1	8767.2	1140.9	8824.6	1140.9	8910.4	1150.3	8926.9
GR	1156.0	8949.6	1156.5	8960.7	1149.2	8980.6	1140.6	8999.3	1140.7	9034.4
GR	1137.6	9075.0	1129	9088	1129	9088	1129	9088	1129	9088
GR	1129	9765	1129	9765	1138.2	9786.9	1131.6	9803.9	1130.5	9839.3
GR	1131.4	9921.1	1131.2	10000.0	1131.2	10000.1	1131.5	10047.1	1132.9	10120.7
GR	1130.9	10206.8	1131.1	10264.6	1133.7	10440.0	1133.4	10473.4	1134.9	10482.6
GR	1139.2	10647.8	1139.6	10725.6	1138.9	10810.0	1140.6	10869.9	1137.3	10911.5
GR	1137.9	10948.4	1131.3	10971.7	1129.7	11014.8	1130.9	11063.7	1134.3	11089.3
GR	1136.7	11179.3	1137.4	11291.2	1135.9	11434.8	1130.5	11465.4	1131.1	11495.6
GR	1130.0	11618.1	1130.5	11698.8	1136.1	11707.8	1137.2	11791.5	1147.7	11814.6
GR	1140.0	11837.7	1139.8	11864.4	1155.0	11903.3	1153.4	11913.9	1153.4	11933.4
GR	1142.2	11945.6	1142.2	11978.9	1151.1	11993.3	1151.1	12030.4	1151.9	12039.1
GR	1149.7	12062.9	1153.1	12085.0	1149.4	12131.4	1153.1	12154.0	1151.6	12201.3
GR	1155.3	12213.3	1151.0	12226.9	1153.8	12251.8	1154.8	12267.5	1153.5	12283.7
GR	1149.3	12305.9	1150.4	12404.6	1151.6	12500.1				

ET			9.1						9482	12503
X1	20.534	78	9794.0	10631.7	200	200	200			
CI						0.01				

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X3                                  9482
GR   1141.9    8048.7    1142.5    8076.6    1142.3    8175.1    1140.2    8268.5    1140.4    8316.7
GR   1139.8    8343.8    1140.9    8371.0    1139.9    8491.6    1140.4    8546.4    1139.1    8672.3
GR   1141.5    8706.5    1142.0    8765.9    1141.7    8838.0    1140.7    8888.4    1139.6    8960.9
GR   1141.6    9014.2    1135.7    9015.5    1134.4    9034.2      1132      9037      1132      9085
1
   17MAR92      10:49:39                                                                          PAGE   13


GR   1142.9    9101.7      1132      9115    1132.0    9396.3    1131.7    9476.5    1130.8    9522.2
GR   1131.6    9585.7    1130.6    9627.9    1131.3    9679.8    1131.3    9679.8    1131.3    9679.8
GR   1131.3      9787    1137.5    9794.0    1131.8    9813.7    1131.8    9891.5    1130.7    9968.5
GR   1130.8   10000.0    1130.8   10052.0    1130.8   10165.4    1131.0   10334.5    1134.0   10486.6
GR   1134.0   10508.8    1135.1   10513.7    1134.7   10531.6    1138.7   10631.7    1138.9   10679.3
GR   1138.9   10731.3    1136.2   10810.8    1132.6   10842.2    1130.6   10906.1    1132.2   10926.6
GR   1137.3   10952.7    1137.8   11200.2    1134.9   11349.0    1130.5   11412.3    1129.8   11502.2
GR   1130.4   11555.7    1132.0   11587.0    1140.9   11610.5    1141.8   11666.1    1137.9   11694.3
GR   1137.2   11735.6    1140.9   11828.0    1154.0   11861.2    1153.6   11932.5    1142.8   11946.6
GR   1142.8   11978.2    1154.0   11987.4    1154.0   12008.8    1151.1   12031.2    1154.2   12079.6
GR   1154.0   12153.1    1150.2   12213.1    1154.4   12224.3    1155.4   12239.5    1154.3   12250.4
GR   1150.2   12273.3    1151.9   12396.9    1152.1   12503.9

NC      .05       .05      .035       .1       .3
ET                          9.1                                                     9552     12503
X1   20.572        79    9738.8   10594.0      200       200       200
X3                                  9552
GR   1142.1    8112.3    1141.5    8179.6    1142.3    8249.6    1142.5    8312.6    1141.7    8355.5
GR   1142.0    8390.9    1141.3    8435.8    1142.4    8478.0    1141.6    8550.4    1142.7    8571.7
GR   1141.9    8591.1    1142.7    8705.4    1142.0    8754.2    1140.2    8792.6    1142.2    8838.5
GR   1141.4    8905.9    1141.2    9015.6    1142.2    9038.2      1132      9052      1132      9052
GR     1132      9728      1132      9728      1132      9728    1137.9    9738.8    1132.1    9754.9
GR   1130.8    9803.3    1132.6    9842.5    1130.7    9971.9    1131.0   10000.0    1130.1   10044.2
GR   1129.0   10142.8    1131.1   10340.0    1133.6   10497.9    1134.6   10507.6    1134.6   10533.0
GR   1136.9   10594.0    1134.0   10655.1    1135.4   10702.1    1134.3   10718.2    1136.4   10754.1
GR   1134.4   10807.1    1138.1   10828.6    1138.3   10854.4    1136.9   10891.0    1136.9   10972.3
GR   1137.1   11077.2    1135.9   11172.2    1132.8   11308.0    1129.2   11336.4    1129.0   11375.7
GR   1132.0   11406.1    1131.1   11458.1    1136.5   11534.2    1142.7   11547.1    1141.8   11603.7
GR   1139.4   11648.3    1140.4   11698.7    1139.8   11750.9    1138.0   11771.9    1138.4   11813.3
GR   1136.8   11858.9    1144.2   11872.6    1153.1   11898.1    1152.8   11928.7    1142.7   11944.2
GR   1142.7   11976.3    1151.2   11987.7    1150.8   12049.1    1147.2   12081.3    1154.4   12103.1
GR   1154.7   12143.2    1152.9   12162.8    1153.3   12188.7    1155.5   12196.9    1156.2   12209.2
GR   1154.5   12227.3    1151.6   12244.8    1153.0   12381.1    1153.6   12503.8

ET                          9.1                                                     9605     12503
X1   20.610        85    9704.9   10595.3      200       200       200
X3                                  9605
GR   1142.4    8176.2    1141.5    8223.8    1142.3    8303.6    1142.1    8381.5    1143.2    8438.0
GR   1142.0    8483.4    1143.1    8573.1    1141.1    8595.3    1143.7    8607.5    1142.9    8643.9
GR   1143.5    8737.7    1142.4    8799.9    1142.7    8818.6    1141.1    8957.7    1141.9    9078.9
GR   1139.9    9115.9    1140.9    9121.4    1137.5    9133.3    1137.3    9166.9    1138.9    9253.4
GR   1139.3    9332.2    1138.4    9448.4    1140.3    9587.3    1140.2    9620.7    1131.4    9645.4
GR   1130.0    9690.8    1137.3    9704.9    1129.7    9722.3    1129.3    9769.2    1132.6    9801.5
GR   1131.2    9938.8    1130.7   10000.0    1129.8   10062.6    1128.9   10170.6    1131.6   10394.1
GR   1133.7   10502.5    1134.4   10513.0    1133.8   10534.4    1135.2   10540.4    1135.2   10576.1
GR   1136.6   10595.3    1136.6   10702.9    1133.8   10740.2    1135.6   10763.8    1136.6   10873.7
GR   1136.0   10930.4    1134.1   11015.5    1132.0   11075.6    1132.9   11132.1    1131.8   11167.8
GR   1136.7   11192.1    1136.7   11214.8    1131.5   11289.4    1132.1   11334.3    1132.0   11389.9
GR   1134.3   11423.8    1134.3   11440.1    1141.2   11451.6    1140.2   11500.8    1141.5   11540.6
GR   1140.6   11649.6    1141.1   11723.9    1141.0   11844.6    1145.9   11881.9    1154.0   11897.6
```

GR	1154.0	11924.0	1143.0	11940.4	1143.0	11969.4	1152.9	11979.2	1153.3	12017.2
GR	1149.5	12041.7	1147.9	12077.0	1154.1	12103.7	1154.8	12177.3	1156.8	12203.1
GR	1155.2	12218.0	1156.9	12279.5	1155.3	12312.0	1156.4	12369.4	1158.2	12387.2
GR	1157.2	12410.7	1157.4	12437.8	1160.9	12466.9	1156.2	12490.6	1155.8	12503.5

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ET			9.1						9658	12501
X1	20.648	80	9643.2	10621.9	200	200	200			
X3				9685						
GR	1142.4	8239.2	1141.1	8329.8	1144.4	8519.8	1142.9	8545.4	1144.3	8654.2
GR	1142.9	8772.7	1143.6	8796.7	1142.0	8874.3	1141.3	8936.0	1142.1	8962.6
GR	1141.8	9008.1	1142.3	9089.4	1141.2	9147.5	1144.0	9160.9	1141.2	9172.0
GR	1140.9	9315.2	1142.4	9367.5	1141.2	9442.5	1142.1	9594.8	1141.9	9632.6
GR	1144.3	9643.2	1133.2	9669.2	1131.5	9686.5	1133.2	9763.9	1131.4	9849.1
GR	1130.3	9980.3	1130.4	9999.1	1131.4	10000.0	1129.3	10078.2	1128.8	10157.7
GR	1130.3	10229.6	1130.8	10386.1	1133.9	10518.5	1133.3	10538.9	1134.8	10550.4
GR	1134.8	10612.5	1138.6	10621.9	1138.4	10657.6	1133.6	10674.8	1133.3	10735.7
GR	1136.7	10798.4	1134.7	10966.7	1132.4	11021.3	1133.2	11119.7	1131.3	11183.6
GR	1133.1	11225.1	1131.5	11277.5	1134.1	11303.8	1132.8	11322.0	1142.2	11334.1
GR	1140.8	11481.9	1141.6	11543.6	1140.4	11818.2	1141.2	11857.2	1144.6	11863.7
GR	1143.8	11870.5	1153.6	11893.3	1153.1	11916.9	1143.1	11933.1	1143.1	11964.1
GR	1150.5	11975.2	1150.5	12001.8	1152.2	12006.2	1147.0	12035.0	1146.5	12080.0
GR	1151.2	12097.3	1152.2	12120.8	1148.3	12151.1	1149.2	12191.7	1156.1	12213.6
GR	1157.0	12225.0	1155.9	12239.4	1153.4	12249.3	1150.3	12296.4	1151.9	12323.8
GR	1150.7	12390.9	1152.3	12422.9	1148.0	12452.0	1150.2	12481.1	1146.5	12501.2

ET			9.1						9754	12501
X1	20.686	72	9677.7	10623.4	200	200	200			
X3				9754						
GR	1142.0	8304.6	1143.5	8455.5	1144.3	8483.5	1140.7	8520.7	1145.9	8567.1
GR	1144.1	8628.8	1143.8	8708.7	1144.4	8781.5	1143.8	8786.8	1144.3	8906.5
GR	1143.4	9075.5	1143.9	9087.4	1143.4	9149.1	1144.0	9246.4	1142.4	9313.2
GR	1142.0	9396.2	1143.3	9489.0	1143.1	9524.0	1143.2	9620.0	1142.1	9677.7
GR	1136.9	9716.8	1133.3	9731.0	1133.8	9754.6	1132.3	9794.2	1129.7	9918.6
GR	1129.0	10000.0	1128.7	10070.3	1129.4	10145.8	1130.4	10376.3	1132.9	10529.4
GR	1133.7	10543.5	1133.6	10563.6	1134.4	10573.7	1134.9	10613.8	1139.4	10623.4
GR	1139.3	10658.8	1134.2	10674.7	1133.6	10703.1	1136.5	10761.3	1135.9	10923.7
GR	1135.1	10971.2	1133.2	11008.7	1133.6	11035.0	1131.5	11067.9	1132.5	11086.5
GR	1140.8	11117.6	1142.0	11171.4	1141.7	11267.5	1142.6	11324.9	1141.4	11541.8
GR	1140.6	11806.2	1140.4	11848.1	1152.3	11883.6	1152.3	11904.5	1143.1	11918.4
GR	1143.1	11973.1	1147.0	11984.3	1145.9	12043.5	1146.6	12174.9	1151.0	12203.6
GR	1149.2	12244.3	1156.0	12263.5	1156.2	12274.8	1155.5	12293.0	1148.2	12322.6
GR	1148.8	12367.9	1153.6	12392.2	1153.6	12412.9	1151.6	12428.0	1153.7	12442.3
GR	1152.9	12468.0	1154.6	12501.3						

ET			9.1						9797	12501
X1	20.723	86	9747.2	10613.9	200	200	200			
X3				9797						
GR	1143.9	8368.3	1143.6	8432.4	1145.3	8444.3	1145.7	8586.2	1146.4	8611.9
GR	1145.3	8647.8	1146.9	8708.1	1146.9	8742.3	1145.5	8771.9	1145.2	8865.3
GR	1146.1	8924.5	1145.3	8958.3	1145.5	9077.7	1143.4	9148.5	1142.0	9163.1
GR	1136.7	9175.7	1136.7	9188.1	1132.5	9215.3	1128.2	9218.3	1126.3	9250.6
GR	1126.8	9351.6	1130.2	9365.5	1129.4	9387.9	1131.3	9433.1	1138.4	9448.6
GR	1140.3	9495.2	1139.9	9533.0	1140.4	9557.6	1143.2	9594.9	1144.8	9631.7
GR	1145.1	9650.6	1143.6	9674.9	1143.1	9712.3	1144.6	9747.2	1143.3	9755.9
GR	1134.8	9764.6	1131.0	9783.4	1132.1	9815.8	1131.0	9866.0	1128.3	9905.7

GR	1127.5	9966.2	1128.0	10000.0	1128.8	10065.6	1128.5	10165.3	1130.4	10387.0
GR	1135.0	10579.0	1135.0	10605.7	1138.9	10613.9	1139.1	10645.4	1135.1	10663.4
GR	1135.0	10701.0	1138.3	10796.6	1136.1	10875.9	1134.4	10889.2	1134.2	10923.9

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GR	1135.3	10942.4	1142.4	10972.1	1142.5	11094.2	1141.4	11196.3	1143.1	11275.7
GR	1142.7	11409.9	1142.0	11604.4	1141.0	11776.5	1141.6	11812.3	1141.6	11845.7
GR	1152.5	11873.0	1152.5	11900.1	1143.7	11913.4	1143.7	11967.5	1149.6	11975.2
GR	1149.5	11998.6	1152.9	12010.7	1153.1	12075.9	1146.3	12124.5	1148.5	12168.5
GR	1148.1	12204.6	1153.1	12235.6	1152.1	12259.2	1154.3	12306.7	1156.0	12318.4
GR	1156.6	12332.4	1155.7	12348.4	1149.6	12374.9	1152.3	12395.0	1155.1	12438.3
GR	1155.1	12501.7								

ET	0	4.1	9.1	9831	0	0	0	0	9831	11700
X1	20.761	81	9778.2	10651.4	200	200	200			
GR	1143.9	8433.1	1142.1	8549.3	1142.5	8563.7	1146.9	8584.1	1145.9	8622.4
GR	1146.6	8671.3	1145.4	8713.1	1145.8	8758.0	1144.2	8820.5	1146.2	8919.3
GR	1146.6	8954.5	1146.6	9056.0	1146.1	9090.9	1143.2	9181.3	1142.0	9194.9
GR	1135.8	9220.6	1125.3	9254.0	1124.8	9307.0	1125.2	9337.7	1124.4	9406.8
GR	1142.6	9438.9	1141.2	9451.7	1146.1	9490.5	1146.5	9516.4	1145.0	9587.1
GR	1148.0	9609.4	1147.8	9640.7	1144.9	9672.9	1144.9	9718.5	1142.3	9751.0
GR	1142.3	9778.2	1133.6	9797.1	1130.1	9833.9	1129.1	9856.4	1126.8	9877.5
GR	1126.4	9979.2	1127.5	10000.0	1129.1	10093.4	1130.3	10286.5	1131.2	10344.0
GR	1130.9	10399.7	1133.6	10476.9	1135.7	10588.2	1136.4	10630.1	1137.4	10651.4
GR	1135.9	10710.7	1138.1	10736.2	1136.0	10782.8	1136.3	10828.4	1141.9	10851.6
GR	1141.3	10885.3	1143.1	11030.3	1140.8	11044.9	1142.3	11052.4	1143.1	11105.1
GR	1142.6	11199.4	1143.7	11301.1	1143.3	11415.4	1142.7	11518.9	1142.4	11739.7
GR	1141.9	11751.5	1142.7	11776.3	1142.7	11824.3	1150.5	11851.6	1150.5	11869.3
GR	1143.4	11883.5	1143.4	11937.1	1146.5	11944.5	1145.2	12019.7	1146.3	12144.3
GR	1146.9	12270.5	1148.3	12303.5	1151.8	12314.2	1151.6	12334.8	1146.2	12354.7
GR	1155.3	12377.3	1156.6	12389.5	1156.2	12437.2	1149.6	12454.5	1150.2	12492.8
GR	1153.4	12503.5								

ET	0	4.1	9.1	9844	0	0	0	0	9844	11550
X1	20.799	72	9795.8	10538.9	200	200	200			
GR	1144.9	8494.9	1144.0	8554.6	1145.2	8636.9	1144.8	8740.5	1144.0	8850.2
GR	1147.2	8955.5	1145.5	9050.0	1141.7	9288.3	1138.4	9314.4	1137.6	9342.2
GR	1139.9	9360.2	1132.8	9381.5	1132.8	9401.1	1146.7	9430.7	1146.5	9474.9
GR	1147.3	9516.8	1146.7	9557.0	1150.0	9577.2	1149.5	9605.7	1147.4	9632.6
GR	1142.9	9795.8	1135.6	9802.2	1127.1	9823.6	1125.6	9839.4	1125.6	9896.5
GR	1126.7	9925.2	1127.6	10000.0	1128.3	10063.3	1130.3	10230.4	1132.9	10391.7
GR	1132.9	10446.8	1132.4	10515.1	1136.2	10538.9	1136.1	10581.5	1140.1	10630.3
GR	1141.7	10721.2	1141.2	10758.5	1143.6	10775.6	1143.5	10877.0	1142.0	10913.5
GR	1143.3	10948.0	1142.0	11006.5	1143.0	11029.6	1143.8	11237.6	1143.1	11269.5
GR	1144.5	11278.3	1144.1	11354.3	1144.1	11407.6	1143.0	11419.7	1143.9	11455.9
GR	1143.0	11603.8	1143.0	11741.2	1143.7	11787.6	1150.2	11803.8	1150.4	11835.9
GR	1143.5	11847.2	1143.5	11905.8	1146.8	11911.7	1146.3	11951.1	1146.1	12099.2
GR	1147.3	12319.9	1147.3	12353.5	1148.3	12357.9	1147.5	12362.2	1152.7	12384.4
GR	1152.6	12395.9	1146.8	12412.4	1156.3	12433.1	1157.2	12444.1	1155.8	12455.0
GR	1146.8	12475.1	1146.8	12501.6						

ET	0	4.1	9.1	9802	0	0	0	0	9802	11450
X1	20.837	63	9779.6	10534.5	200	200	200			
GR	1146.6	8559.6	1144.4	8781.1	1144.3	8862.1	1144.0	8927.4	1142.9	9019.1
GR	1142.3	9121.2	1149.4	9280.7	1150.8	9325.4	1149.8	9378.6	1151.2	9426.2
GR	1149.4	9513.5	1151.4	9531.1	1151.2	9562.4	1146.5	9603.3	1147.7	9635.2
GR	1145.1	9685.9	1145.9	9718.3	1143.9	9760.3	1143.9	9779.6	1130.6	9793.7

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GR   1126.5    9805.3     1127.4     9874.6     1126.4     9950.6     1126.5    10000.0    1128.8    10080.5
GR   1130.9   10212.2     1130.4    10256.6     1131.9    10328.6     1131.9    10422.1    1133.9    10487.0
1
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GR   1138.5   10498.1     1141.4    10534.5     1140.8    10664.6     1143.6    10788.7    1142.8    10850.4
GR   1142.4   10941.4     1143.7    10962.3     1143.9    11213.6     1145.1    11219.6    1143.9    11228.7
GR   1144.9   11261.6     1144.9    11400.0     1143.6    11546.9     1143.4    11699.9    1144.2    11716.6
GR   1144.2   11755.3     1150.0    11773.5     1150.4    11804.9     1143.4    11813.8    1143.4    11870.9
GR   1148.0   11876.6     1146.2    11929.8     1147.6    12203.3     1147.9    12397.4    1148.4    12401.2
GR   1147.7   12404.6     1153.3    12423.9     1152.7    12441.0     1147.1    12454.1    1147.1    12461.2
GR   1156.4   12476.3     1157.7    12488.0     1157.0    12502.5

ET        0       4.1       9.1       9770          0          0          0          0      9770     11400
X1   20.875        71    9772.8     10431.0        200        200        200
GR   1146.5    8622.9     1144.7     8822.3     1146.6     8897.6     1144.7     8922.9    1142.2     8950.7
GR   1141.4    9000.4     1147.8     9031.7     1150.2     9158.3     1150.2     9254.4    1151.7     9409.6
GR   1151.2    9463.7     1153.6     9481.4     1153.5     9512.0     1151.1     9544.8    1151.1     9590.4
GR   1149.3    9676.1     1145.4     9772.8     1132.0     9786.2     1129.1     9801.5    1126.8     9848.9
GR   1126.8    9922.9     1128.7     9949.1     1127.7     9986.3     1127.7    10000.0    1128.3    10000.7
GR   1129.6   10098.2     1130.7    10220.1     1132.1    10338.2     1131.7    10387.2    1132.8    10408.4
GR   1137.5   10431.0     1137.0    10454.0     1140.7    10567.4     1140.7    10610.0    1143.4    10662.7
GR   1142.6   10752.1     1140.2    10770.9     1142.2    10798.2     1141.9    10903.6    1144.3    10932.5
GR   1143.4   10962.3     1144.6    11109.4     1144.6    11198.3     1145.5    11207.0    1144.6    11211.7
GR   1145.5   11216.4     1144.9    11243.8     1146.3    11275.9     1145.5    11320.9    1146.2    11326.7
GR   1145.4   11337.2     1144.5    11526.2     1143.8    11715.9     1144.6    11733.5    1150.7    11743.7
GR   1150.7   11769.8     1143.8    11781.2     1143.8    11839.6     1147.8    11845.6    1147.8    11882.9
GR   1146.9   11893.1     1147.7    12149.3     1148.5    12399.3     1149.2    12414.0    1148.3    12418.3
GR   1153.9   12438.1     1153.8    12452.2     1147.7    12466.7     1147.7    12477.6    1156.5    12490.8
GR   1158.1   12502.6

ET        0       4.1       9.1       9760          0          0          0          0      9760     11500
X1   20.913        67    9764.9     10606.2        200        200        200
GR   1147.2    8686.1     1144.9     8890.9     1140.2     8969.4     1140.0     8993.5    1148.5     9032.9
GR   1149.9    9108.1     1149.9     9186.1     1149.5     9264.8     1151.0     9320.8    1150.7     9355.3
GR   1151.7    9387.7     1152.0     9420.2     1153.6     9434.8     1153.8     9463.0    1150.9     9485.4
GR   1150.7    9536.8     1152.6     9575.0     1152.9     9609.1     1150.3     9721.7    1148.6     9764.9
GR   1133.8    9771.7     1127.3     9792.9     1127.7     9922.7     1129.4     9949.1    1129.2    10000.0
GR   1128.6   10043.5     1129.1    10104.2     1131.4    10170.3     1131.4    10202.9    1136.8    10240.3
GR   1139.1   10444.0     1135.8    10458.9     1138.5    10577.5     1144.4    10606.2    1142.8    10660.8
GR   1144.4   10767.8     1141.0    10853.1     1141.0    10880.4     1144.6    10972.4    1144.0    11081.5
GR   1144.8   11171.8     1146.4    11235.8     1146.4    11265.9     1145.2    11271.9    1146.6    11279.4
GR   1145.9   11285.8     1145.4    11450.9     1143.8    11638.7     1144.6    11664.4    1144.0    11696.5
GR   1149.8   11711.3     1149.8    11734.6     1143.7    11743.0     1143.7    11802.2    1148.9    11812.7
GR   1146.9   11856.0     1147.5    12086.4     1149.0    12282.5     1148.9    12395.6    1149.7    12401.3
GR   1148.9   12406.3     1153.9    12424.6     1153.9    12437.9     1145.4    12457.4    1157.8    12483.5
GR   1157.5   12496.7     1156.1    12501.6

ET        0       4.1       9.1       9393          0          0          0          0      9393     11500
X1   20.951        67    9749.9     10243.3        200        200        200
X3       10
GR   1148.9    8750.0     1146.5     8892.0     1142.2     8916.1     1141.4     8989.8    1145.8     9009.2
GR   1147.9    9045.3     1148.1     9078.3     1149.0     9166.2     1146.1     9193.6    1149.5     9213.5
GR   1150.5    9246.5     1150.9     9332.3     1151.1     9377.1     1154.3     9393.1    1154.3     9422.4
GR   1152.5    9447.7     1152.8     9479.9     1151.2     9523.8     1153.3     9610.0    1153.3     9681.5
GR   1150.7    9749.9     1148.8     9757.6     1135.6     9766.4     1125.7     9788.0    1127.2     9921.2
GR   1129.8    9944.4     1130.2    10000.0     1129.8    10066.8     1128.9    10166.7    1129.7    10212.6
GR   1136.6   10243.3     1136.7    10333.4     1140.0    10509.7     1142.1    10637.2    1144.3    10783.9
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GR   1143.8   10814.9    1141.1    10835.6    1140.6    10888.4    1145.1    10906.7    1145.5    11015.4
1
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GR   1144.4   11060.9    1145.4    11111.7    1145.7    11178.2    1146.6    11213.9    1146.6    11302.5
GR   1145.1   11513.9    1144.3    11619.4    1144.8    11650.1    1143.9    11657.0    1151.1    11681.1
GR   1150.9   11700.0    1143.9    11708.8    1143.9    11768.7    1148.7    11776.4    1146.9    11827.0
GR   1148.9   12076.1    1150.0    12333.0    1149.2    12376.5    1150.2    12380.1    1149.4    12383.6
GR   1153.5   12405.1    1153.5    12416.9    1147.6    12436.2    1156.9    12460.3    1157.7    12471.8
GR   1156.7   12484.3    1147.8    12501.0

ET        0       4.1       9.1      9354         0         0         0         0      9354     11400
X1   20.989        67    9734.9   10337.6       200       200       200
X3       10
GR   1149.8    8814.4    1147.2    8883.2    1143.5    8908.5    1142.1    8976.6    1148.1    9005.4
GR   1152.0    9058.2    1152.7    9107.4    1152.9    9151.7    1151.5    9203.9    1153.6    9237.2
GR   1151.9    9273.3    1153.3    9285.0    1153.6    9315.7    1152.7    9333.8    1155.6    9354.8
GR   1155.6    9381.9    1153.7    9403.2    1154.2    9447.7    1151.6    9459.5    1151.8    9575.7
GR   1151.8    9674.9    1148.7    9734.9    1137.0    9744.5    1127.2    9771.2    1127.2    9920.8
GR   1130.6    9950.3    1131.5    9977.3    1131.8   10000.0    1130.0   10128.2    1129.1   10221.1
GR   1132.0   10315.5    1137.5   10337.6    1137.2   10380.4    1139.5   10439.9    1146.1   10665.1
GR   1144.7   10762.5    1142.6   10850.3    1140.2   10902.3    1143.4   10912.6    1146.1   10934.6
GR   1146.3   11014.5    1145.6   11068.6    1147.1   11212.4    1146.2   11236.0    1146.2   11276.1
GR   1146.5   11327.3    1145.6   11451.0    1144.7   11623.1    1150.3   11640.5    1150.9   11664.7
GR   1144.0   11674.8    1144.0   11733.1    1149.5   11742.0    1148.1   11797.1    1149.7   12090.4
GR   1149.9   12352.2    1150.9   12356.8    1149.4   12362.3    1155.1   12387.3    1155.1   12399.1
GR   1147.9   12413.4    1147.9   12423.8    1157.5   12439.9    1158.6   12450.9    1157.2   12463.7
GR   1146.9   12480.3    1148.1   12500.5

ET        0       4.1       9.1      9315.7         0         0         0         0      9315     11350
X1   21.027        63    9717.5   10300.1       200       200       200
X3       10
GR   1146.1    8879.1    1145.3    8963.1    1146.4    8984.3    1153.1    9024.4    1154.8    9072.7
GR   1154.5    9135.3    1152.9    9180.2    1154.2    9220.8    1154.2    9259.6    1153.3    9265.5
GR   1153.3    9295.5    1156.0    9315.7    1156.0    9344.4    1153.7    9375.2    1154.3    9457.4
GR   1154.2    9524.1    1152.2    9544.7    1154.5    9623.5    1153.0    9717.5    1127.8    9748.4
GR   1129.2    9791.7    1128.2    9897.6    1132.2    9936.9    1132.1   10000.0    1132.1   10000.1
GR   1131.8   10092.4    1129.4   10123.8    1133.6   10277.9    1140.5   10300.1    1140.5   10325.4
GR   1142.4   10384.6    1144.9   10532.9    1146.7   10555.7    1147.2   10636.6    1143.2   10690.8
GR   1142.5   10722.1    1140.6   10740.6    1145.2   10763.6    1141.0   10782.4    1142.4   10813.4
GR   1146.1   10866.5    1146.2   10918.2    1146.1   11013.0    1147.1   11111.2    1145.7   11144.3
GR   1146.2   11195.6    1145.7   11229.0    1145.3   11488.2    1150.7   11507.0    1150.7   11533.4
GR   1144.2   11541.9    1144.2   11603.4    1149.7   11614.1    1148.8   11662.6    1150.1   12042.3
GR   1150.5   12238.0    1149.8   12243.6    1155.4   12268.1    1155.6   12310.7    1159.7   12326.5
GR   1158.3   12367.9    1169.5   12384.3    1163.8   12402.5

ET        0       4.1       9.1      9273.9         0         0         0         0      9273     11300
X1   21.064        56    9713.4   10376.9       200       200       200
X3       10
GR   1149.5    8941.3    1150.9    8980.3    1154.6    9023.2    1154.2    9154.7    1154.5    9211.0
GR   1153.2    9257.4    1155.2    9273.9    1155.2    9302.4    1152.3    9329.8    1152.9    9472.9
GR   1154.8    9526.0    1155.2    9575.9    1154.6    9679.4    1151.8    9713.4    1128.1    9737.9
GR   1129.4    9796.9    1130.1    9867.4    1131.7    9927.9    1130.6    9965.6    1131.9    9999.8
GR   1131.9   10000.0    1129.3   10150.8    1129.7   10342.8    1139.2   10376.9    1142.5   10543.8
GR   1144.6   10744.0    1145.7   10868.8    1145.1   10897.2    1146.6   10964.1    1146.4   11072.8
GR   1147.1   11129.9    1146.0   11157.1    1147.3   11196.2    1146.7   11273.0    1147.3   11333.2
GR   1146.4   11364.9    1145.9   11468.9    1146.0   11548.0    1151.1   11570.9    1151.2   11601.7
GR   1144.8   11609.3    1144.8   11668.9    1150.5   11680.3    1149.2   11741.4    1149.7   11980.8
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GR   1150.6   12301.9    1151.0    12306.2    1150.5    12310.8    1156.8    12342.9    1157.0    12364.7
GR   1160.9   12374.0    1159.5    12393.4    1160.8    12411.0    1160.6    12422.1    1166.7    12430.7
GR   1166.9   12500.2

ET       0       4.1       9.1     9234.3         0         0         0         0       9234     11200
X1  21.102        71    9698.6    10411.0       200       200       200
X3      10                                                                  1149.4
GR   1152.9    9000.0    1152.4     9018.8    1149.0     9054.8    1150.6     9088.0    1152.6     9099.4
GR   1152.3    9138.7    1153.5     9160.8    1152.8     9216.4    1155.2     9234.3    1155.2     9261.8
GR   1153.5    9290.4    1152.4     9367.0    1142.2     9461.1    1141.1     9531.8    1142.5     9567.4
GR   1149.2    9596.6    1149.4     9608.8    1148.7     9631.2    1146.8     9637.7    1143.8     9698.6
GR   1140.1    9716.3    1128.0     9730.8    1129.1     9779.4    1130.1     9860.8    1132.3     9870.1
GR   1131.8   10000.0    1131.0    10080.5    1127.0    10126.4    1130.3    10142.5    1131.6    10316.7
GR   1129.0   10374.0    1140.3    10411.0    1143.2    10677.3    1145.6    10902.7    1146.9    11016.7
GR   1146.1   11100.1    1147.7    11139.7    1146.5    11247.4    1146.7    11303.8    1146.0    11382.6
GR   1146.9   11478.5    1148.2    11509.9    1147.5    11515.5    1154.8    11532.9    1153.0    11541.4
GR   1152.5   11564.0    1145.0    11577.5    1145.0    11636.9    1150.2    11646.4    1149.9    11690.1
GR   1150.9   11979.8    1152.6    12000.4    1149.5    12012.1    1149.5    12029.3    1151.5    12035.0
GR   1151.0   12083.1    1150.7    12269.4    1151.7    12286.3    1150.5    12289.9    1151.5    12294.1
GR   1151.5   12308.9    1156.9    12329.5    1157.4    12350.4    1156.7    12372.3    1160.7    12379.5
GR   1162.1   12395.5    1161.0    12409.9    1158.4    12422.9    1157.6    12446.1    1154.0    12467.6
GR   1155.7   12500.5

NC    .045      .045      .027        .1        .3
ET       0       4.1       9.1      9460         0         0         0         0       9700     11100
X1  21.202        18      9700     10750       560       450       528
X3      10
GR    1155      8280    1152.5      8705      1150      9040      1150      9140      1156      9190
GR    1155      9220      1155      9400      1156      9460      1155      9540      1150      9700
GR    1135      9730      1132      9750      1132     10360      1135     10420      1140     10500
GR    1145     10750      1150     11370      1157     11420

ET       0       4.1       9.1      9270         0         0         0         0       9590     11000
X1  21.302        16      9600     10820       600       440       528
X3      10
GR    1155      8340      1150      8930      1150      9110      1154      9170      1155      9270
GR    1151      9490      1150      9600      1135      9630      1133      9700      1133     10420
GR    1135     10450      1140     10520      1140     10780      1145     10820      1150     11300
GR    1157     11335

ET       0       4.1       9.1      9210         0         0         0         0       9590     11050
X1  21.402        15      9600     11050       540       500       528
X3      10
GR    1156      8410      1155      8480      1152      8840      1150      9020      1154      9210
GR    1150      9600      1135      9680      1134      9770      1134     10430      1135     10490
GR    1140     10510      1140     10790      1145     10820      1150     11000    1159.5     11050

ET       0       4.1       9.1      9100         0         0         0         0       9310     11020
X1  21.502        18      9320     11020       550       500       528
X3      10
GR   1156.5      8440    1155.1      8710      1155      8820    1153.5      8910      1155      9100
GR    1150      9220      1151      9260      1150      9320      1145      9350      1140      9370
GR    1140      9610      1135      9780      1135     10570      1140     10650      1145     10700
GR    1145     10880      1150     10920      1158     11020
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NC      0       0       0      .3      .5
ET      0     4.1     9.1    9200       0       0       0       0    9360   10830
X1 21.602      14    9370   10820     520     535     528
X3     10
GR   1157    8480  1155.5    8810    1155    9200    1150    9370    1145    9470
GR   1140    9500    1135    9890    1135   10450    1140   10530    1145   10790
GR   1150   10820  1150.5   11000    1155   11110    1165   11170

QT      5  215000  215000   93000  160000  330000
NC    .05     .05    .035      .1      .3
ET                    9.1                                             9230   10950
X1 21.659      13    9230   10950     350     240     300
X3     10                                                     1160    1160
GR   1164    9230    1160    9240    1150    9380    1145    9500    1140    9610
GR   1139    9790  1135.4   10300  1135.4   10400    1140   10570    1145   10770
GR   1150   10780    1155   10900    1166   10950

ET                    9.1                                             9230   10950
SB    .95   1.153    2.60    1377    1320      64   31000          1135.8  1135.7
X1 21.667                            40      40      40
X2                     1    1160    1164
X3     10                    9250                                   1164    1164

ET                    9.1                                             9290   10830
X1 21.725      13    9290   10830     310     310     310
X3     10                                                     1163    1163
GR   1167    9290    1150    9370    1145    9500    1140    9620    1140    9820
GR  1137.7   9960  1135.6   10120  1135.6   10360    1140   10550    1145   10680
GR   1150   10750    1170   10830    1175   10850

ET                    9.1                                             9290   10830
SB   1.75   1.570     2.7    1377    1720      90   44000          1135.8  1135.7
X1 21.733                            40      40      40
X2                     1    1163    1171
X3     10                                                     1171    1171

ET                    9.1                                             9300   11090
X1 21.795      14    9300   11090     520      70     330
X3     10                                                     1169    1169
GR   1174    9300    1155    9370    1150    9400    1145    9480    1140    9580
GR  1135.7   9860  1135.7   10300    1140   10550    1145   10650    1150   10750
GR   1155   10830    1160   10880    1170   11000    1175   11090

ET                    9.1                                             9300   11090
SB   1.05    1.18     2.5            1460      63   44704          1137.0  1136.8
X1 21.809                            70      70      70
X2                     1    1169    1175
X3     10                                                     1175    1175
BT      2    9300    1175       0   11090    1175       0
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NC    .04     .04     .03      .1      .3
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ET                          9.1                                                   9400      10910
X1   21.837        15      9400     10900       100       200       150
X3       10         0         0      9400
GR     1165      8850      1160      9000      1155      9070      1150      9400      1145      9520
GR   1142.5      9660      1136      9810      1136     10380      1140     10530      1150     10600
GR     1155     10710      1155     10900      1151     11150      1160     11200      1175     11250

NC        0         0         0        .1        .3
ET                          9.1                                                   9345      10600
X1   21.937        18      9350     10480       330       860       528
X3       10
GR     1175      8560      1170      8720      1165      8770      1160      8950    1159.5      9020
GR     1155      9040      1150      9350      1145      9570      1140      9650      1138      9670
GR     1138      9740      1145      9800      1138      9870      1138     10470      1155     10480
GR     1156     11130      1162     11160      1175     11220

ET                          9.1                                                   9200      10545
X1   22.037        19      9210     10540       470       565       528
X3       10
GR     1175      8570      1165      8800      1155      9100      1152      9150      1155      9210
GR     1150      9330      1145      9460      1140      9550      1145      9720      1150      9770
GR     1139      9850      1139     10270      1140     10290      1140     10480      1145     10520
GR     1155     10540      1155     10920      1162     10930      1175     11050

ET                          9.1                                                   9140      10560
X1   22.137        17      9150     10550       510       540       528
X3       10
GR     1165      8820      1161      9150      1150      9210      1145      9270      1141      9400
GR     1145      9520      1145      9680      1155      9730      1145      9790      1140      9830
GR     1140     10230      1143     10400      1145     10520      1155     10550      1155     11000
GR     1160     11020      1175     11150

ET                          9.1                                                   8870      10600
X1   22.237        15      8880     10550       520       535       528
X3       10
GR     1165      8770      1161      8880      1150      8990      1145      9030      1145      9500
GR     1150      9590      1157      9630      1141      9750      1141     10350      1141     10370
GR     1155     10550      1150     10970      1155     11300      1160     11340      1175     11520

ET                          9.1                                                   8940      10550
X1   22.337        18      8950     10520       520       540       528
X3       10
GR     1165      8530      1160      8790      1155      8950      1150      9020      1147      9300
GR     1145      9480      1150      9530      1157      9590      1150      9640      1145      9690
GR     1142      9720      1142     10350      1150     10410      1155     10520    1156.5     10890
GR     1157     11250      1160     11320      1175     11520
1
   17MAR92      10:49:39                                                                          PAGE   21


ET                          9.1                                                   8960      10375
X1   22.437        14      8970     10370       550       500       528
X3       10
GR     1165      8290      1160      8700      1155      8970      1150      9000      1149      9370
GR     1150      9520      1157      9590      1145      9670      1143      9710      1143     10320
GR     1160     10370    1161.5     10630      1160     11520      1165     11670

ET        0       4.1       9.1      8700         0         0         0         0      8870     10425
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X1	22.537	25	8880	10420	540	510	528			
X3	10	0	0							
GR	1165	7050	1160	7150	1159	7380	1160	7600	1160	7900
GR	1159	8110	1160	8430	1161	8700	1160	8880	1155	9000
GR	1150	9020	1150	9270	1149	9350	1150	9430	1155	9580
GR	1158	9650	1150	9760	1144	9800	1144	10360	1160	10420
GR	1156.5	10800	1158	11370	1158.5	11930	1160	12300	1165	12350
NC	0	0	0	.3	.5					
ET	0	4.1	9.1	8980	0	0	0	0	8980	10510
X1	22.637	20	8990	10500	510	540	528			
X3	10	0	0							
GR	1165	6300	1161	6870	1161.5	7280	1160	8450	1161.5	8720
GR	1160	8850	1155	8990	1150	9100	1146	9250	1150	9340
GR	1150	9650	1145	9850	1145	10370	1155	10430	1158	10500
GR	1162	11450	1160	11620	1160	12230	1165	12480	1170	12570
ET			9.1						9050	10480
X1	22.662	16	9050	10480	130	130	130			
X3	10							1165	1165	
GR	1165	6770	1164	6930	1163.5	7490	1162.5	8000	1160.9	8560
GR	1165	8850	1172	9050	1145.5	9145	1145.5	10398	1172	10480
GR	1165	10690	1160	10950	1160	11340	1162	11590	1162	12300
GR	1165	12640								
ET			9.1						9050	10480
SB	1.2	1.6	2.5	0	1253	100	24000	0.45	1145.5	1145.4
X1	22.681				100	100	100			
X2			1	1165	1163					
X3	10							1160.9	1160.9	
BT	16	6770	1165	0	6930	1164	0	7490	1163.5	0
BT	8000	1162.5	0	8560	1160.9	0	8850	1165	0	9050
BT	1172	0	9051	1172	1165	10480	1172	1165	10481	1172
BT	0	10690	1165	0	10950	1160	0	11340	1160	0
BT	11590	1162	0	12300	1162	0	12640	1165	0	
ET			9.1						9045	10660
X1	22.799	27	9050	10655	640	590	625			
GR	1165	6760	1161.5	7440	1161.5	7441	1161.5	7442	1161.5	7443
GR	1162.5	8755	1160	8880	1160.5	8930	1160	9000	1160	9050
GR	1155	9065	1152.5	9330	1150	9500	1146	9620	1146	10430
GR	1150	10470	1160	10500	1162.5	10655	1160	10900	1157	10930
GR	1160	10950	1163	11450	1165	11750	1168	12200	1168	12650
GR	1170	12690	1173.5	12950						

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NC	.05	.05	.035	.1	.3					
ET			9.1						8725	10920
X1	23.000	27	8725	10920	1040	1065	1060			
X3	10									
GR	1167	8500	1167	8501	1167	8502	1167	8503	1167	8504
GR	1165	8725	1164	8780	1160	8850	1160	9050	1155	9060
GR	1150	9110	1150	9295	1150	9490	1155	9940	1150	10045
GR	1147	10330	1150	10355	1155	10445	1155	10765	1160	10795
GR	1165	10820	1167	10920	1167	11260	1165	11500	1168	12040
GR	1170	12350	1174	12820						

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ET                          9.1                                                   9260      10810
X1   23.199        22      9270     10810      1040      1060      1050
X3       10
GR     1167      8660      1165      8810      1164      8975      1165      9040      1165      9270
GR     1160      9320      1155      9340      1150      9380      1150      9480      1155      9660
GR     1155      9965      1153     10265      1155     10580      1160     10660      1165     10690
GR     1170     10810      1170     12000      1173     12250      1170     12460      1170     12550
GR     1175     12620      1178     12705

ET                          9.1                                                   9315      10775
X1   23.398        27      9315     10770      1175       915      1052
X3       10
GR     1171      8500      1170      8600      1170      9315      1165      9400      1160      9470
GR     1151      9610      1151      9810      1155      9925      1155     10130      1157     10290
GR     1155     10470      1155     10690      1160     10750      1165     10770      1165     10860
GR     1160     10920      1165     10955    1166.5     11050      1165     11130      1165     11190
GR     1170     11270      1173     11300      1170     11330      1171     11660      1173     11955
GR     1175     12235      1177     12410

ET                          9.1                                                   8920      11050
X1   23.597        26      8920     11050      1047      1052      1050
X3       10
GR     1172      8245      1170      8580      1170      8775    1174.5      8920      1170      9005
GR     1165      9025      1165      9180      1166      9360      1165      9550      1160      9620
GR     1155      9640      1152      9710      1152     10135      1155     10260      1160     10390
GR     1162     10595    1164.5     10800      1165     10950      1170     11040      1173     11050
GR     1170     11060      1170     11450      1173     11790      1175     12050      1175     12310
GR     1176     12365

ET                          9.1                                                   9320      10510
X1   23.649         8      9320     10510       200       340       270
X3       10         0         0         0         0         0         0      1175      1175
GR     1173      8200      1170      8640      1182      9320      1150      9410      1150     10420
GR     1182     10510      1170     11370      1175     11970

ET                          9.1                                                   9320      10510
SB     1.05       1.6       2.5         0      1044        90     25600       2.5    1150.1      1150
X1   23.658         0      9320     10510        45        45        45
X2        0         0         1      1175      1170
X3       10         0         0         0         0         0         0      1182      1182
BT       -7      8200      1173         0      8640      1170         0      9320      1182         0
BT               9320      1182      1175     10510      1182      1175     11370      1170         0
1
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BT              11970      1175         0

ET                          9.1                                                   9320      10510
X1   23.667         6      9320     10510        45        45        45
X3       10         0         0         0         0         0         0      1175      1175
GR     1173      8200      1170      8640      1182      9320    1150.1      9410    1150.1     10420
GR     1182     10510

NC        0         0         0        .1        .3
ET                          9.1                                                   9185      10790
X1   23.797        21      9190     10790      1105      1008      1055
X3       10
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GR    1175      8295    1171.5     8760      1173      9190      1170      9450      1165      9470
GR    1160      9590      1155     9620      1154      9980      1152     10210      1155     10370
GR    1160     10520      1165    10640      1170     10715      1174     10790      1170     10850
GR    1170     11320      1171    11390      1170     11450      1170     11590      1171     11770
GR    1174     11880

ET       0       4.1       9.1        0     11600         0         0         0      9070     10900
X1  23.997        25      9760    10610      1085      1040      1060
GR    1180      8380      1181     8430      1180      8560      1179      8720      1180      9000
GR    1181      9070      1180     9130      1180      9430      1185      9455      1180      9490
GR    1175      9760      1170     9815      1155      9955      1154     10005      1154     10475
GR    1155     10475      1175    10525      1175     10610      1171     11230      1170     11460
GR    1168     11525      1170    11590      1175     11620    1173.5     11950      1175     12250

NC     .05       .05       .03
ET       0       4.1       9.1     8530         0         0         0         0      9700     11000
X1  24.196        18      9675    10910       815      1045      1050
X3      10         0         0
GR    1180      8155      1180     8340    1183.5      8530      1175      8580      1175      9545
GR  1178.5      9675      1175     9790      1155      9835      1155     10030      1160     10270
GR    1165     10350      1170    10440      1170     10600      1174     10910      1175     11140
GR    1177     11360      1178    11640      1180     12170

NC     .05       .05      .035
ET                        9.1                                                      9010     10750
X1  24.396        13      9010    10665      1090      1040      1055
X3      10
GR    1184      9010      1180     9150      1175      9270      1158      9430      1158     10200
GR    1165     10275      1165    10340      1170     10400      1175     10640      1179     10665
GR    1175     10710      1180    11050    1181.5     11470

QT       5    220000    220000    95300    163300    335000
ET                        9.1                                                      8985     11010
X1  24.595        16      8985    11005      1025      1070      1052
X3      10
GR    1185      8790      1180     8855      1180      8985      1175      9090      1175      9170
GR    1170      9245      1165     9300      1161      9340      1161      9970      1163     10030
GR    1161     10110      1161    10630      1170     10660      1175     11005      1180     11155
GR    1183     11300
1
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ET                        9.1                                                      9765     11535
X1  24.795        16      9770    11530      1060       630      1055
X3      10
GR    1184      8890      1180     9095      1180      9740      1183      9755      1180      9770
GR    1165      9810      1165     9900    1171.6      9910      1165      9970      1164     10000
GR    1164     11045      1165    11105      1170     11120      1175     11510      1180     11530
GR    1184     11840

ET                        9.1                                                      9600     11855
X1  24.995        28      9605    11850      1065      1135      1055
X3      10
GR    1186      8250      1184     8570      1184      8571      1184      8572      1184      8573
GR    1180      8705      1179     9605      1175      9630      1167      9650      1167      9745
GR    1170      9755      1170     9945      1167      9980      1167     10260      1170     10280
GR    1173     10350      1170    10385      1167     10395      1167     11060      1170     11070
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GR     1170      11380      1171      11430      1169      11580      1170      11640      1175      11665
GR     1180      11850      1185      11860      1186      11940

ET                          9.1                                                            8900      12245
NH        4        .05      9355       .035     11095        .05     11475       .035     12245
X1   25.194         25      9330      12245      1070        870      1050
GR     1185       8895      1175       8910      1175       9270      1180       9300      1184       9330
GR     1180       9355      1175       9370      1175       9460      1178       9640      1175       9820
GR     1170       9890      1170      10250      1175      10385      1180      10400      1184      10435
GR     1180      10500      1175      10670      1177      10890      1180      11095      1180      11475
GR     1177      11650      1175      11920    1176.8      12115      1175      12215      1185      12245

ET                          9.1                                                            9082      12795
NH        4        .05      9520       .035     10380        .05     11115       .035     12900
X1   25.392         28      9520      12870       920       1230      1045
X3       10
GR     1190       8800      1185       8830      1185       8831      1185       8832      1185       8833
GR     1185       9030      1175       9060      1175       9460      1185       9520      1180       9540
GR     1175       9868    1172.5       9925    1172.5      10240      1175      10255      1180      10300
GR     1185      10320      1188      10380      1188      10950      1185      11115      1180      11725
GR     1180      11790      1175      11990      1175      12080      1180      12365    1182.5      12470
GR     1180      12615      1180      12870      1190      12900

ET                          9.1                                                            9300      13680
NH        5        .05      9635       .035     10020        .05     12305       .035     13105        .05
NH    13780
X1   25.591         30      9670      13740      1015       1105      1050
GR   1191.5       8900    1191.5       8901    1191.5       8902    1191.5       8903    1191.5       8904
GR     1190       9280      1185       9330      1175       9350      1175       9635      1185       9670
GR     1175       9695      1175      10020      1180      10170      1180      10240      1185      10275
GR     1190      10410      1190      10865      1189      11040      1191      11380      1190      11530
GR     1190      12030      1185      12305      1175      12435      1175      13090      1185      13105
GR     1190      13250      1185      13320      1185      13590      1190      13740      1195      13780
1
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ET                          9.1                                                            9770      13800
NH        4       .035     10280        .05     11955       .035     13220        .05     13800
X1   25.792         23      9775      13800      1170        410      1065
X3       10
GR     1195       9180      1195       9181      1195       9182      1195       9183      1195       9184
GR     1190       9775      1177       9805      1177      10060      1180      10135      1185      10280
GR     1190      10540      1190      10640      1189      10885      1190      11390      1191      11550
GR     1190      11695      1185      11955      1177      11980      1177      12320      1175      13220
GR     1196      13260      1190      13740      1195      13800

ET                          9.1                                                            9670   13341.73
NH        4       .035     10620        .05     12150       .035     13100        .05     13620
X1   25.992         23      9670      13620      1100        660      1055
X3       10
GR     1195       9670      1180       9690      1175       9780      1175      10105    1178.5      10280
GR   1178.5      10530      1180      10540      1185      10620      1190      10980      1191      11105
GR     1190      11240      1187      11390      1188      11710      1185      11920      1185      12060
GR     1190      12150      1180      12175      1180      12375      1185      12410      1180      12475
GR     1185      12760      1190      13100      1195      13620

ET        0        4.1       9.1       9615         0          0         0          0      9615   13302.12
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NH       5      .035      9440      .05      9615      .035     10790      .05     12080      .035
NH   13360
X1   26.191       25      9615    13360      1090       830      1050
GR    1195     8715      1190     8890      1183      8920      1190     8950      1195      9440
GR    1195     9615      1190     9695      1185      9720      1185     9840      1188      9950
GR    1185    10080      1180    10195      1180     10300      1181    10390      1180     10500
GR    1180    10740      1185    10790    1188.5     11105      1189    11395      1188     11770
GR    1185    12080      1180    12190      1180     13060      1190    13080      1195     13360

ET                        9.1                                                     9616     11780
NH       3       .05      9535      .035     11780       .05     13000
X1   26.391       23      9535    11780      1080       960      1055
X3      10
GR    1200     9230      1195     9430      1197      9535      1195     9640      1190      9750
GR    1185     9850      1183    10025      1185     10190      1189    10330      1185     10425
GR  1182.5    10435    1182.5    11030      1185     11095      1185    11355    1182.5     11365
GR  1182.5    11685      1190    11710      1195     11780      1195    12395      1196     12460
GR    1195    12600      1199    12895      1200     13000

ET                        9.1                                                     8950     10850
NC     .05      .05      .035       .1        .5
X1   26.591       21      8950    10840      1140       820      1060
X3      10
GR    1200     8900      1195     8950      1190      8970      1190     9005      1192      9160
GR    1190     9310      1185     9350      1185      9490      1186     9570      1185      9640
GR    1185    10100      1190    10235      1190     10305      1185    10355      1185     10710
GR    1195    10740    1197.5    10840      1196     11075      1197    11650      1196     11995
GR    1200    12680
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ET                        9.1                                                     8300     11200
X1   26.790       22      9450    11200       980       930      1050
GR    1200     8080      1195     8090      1190      8100      1190     8160      1190      9420
GR    1200     9450      1195     9530      1195      9560      1193     9790      1190      9950
GR    1190    10000      1185    10030      1185     10170      1190    10200      1190     10390
GR    1185    10590      1185    10820      1190     10860      1195    10940      1195     11100
GR    1200    11130      1203    11200

ET                        9.1                                                     7834     10780
X1   26.991       26      9720    10780       410      1370      1060
X3      10
GR    1200     7580      1185     7590      1185      8370      1190     8390      1190      8450
GR    1185     8690      1195     9020    1196.8      9230      1195     9450      1195      9630
GR  1195.3     9720      1195    10160      1195     10200      1190    10270      1185     10320
GR    1185    10370      1185    10500      1185     10535      1185    10725      1190     10740
GR    1195    10750      1200    10765      1205     10780      1210    10870      1205     10960
GR    1203    11410

NC       0        0         0       .3        .5
ET                        9.1                                                     7800     10640
X1   27.156       48      9680    10640       570       910       870
GR    1205     7320      1200     7445      1200      7565      1195     7660      1195      7720
GR    1195     7790      1195     7885      1190      8015      1185     8180      1185      8320
GR    1190     8480      1190     8520      1190      8610      1195     8640      1200      8650
GR    1200     8710      1200     8760      1199      8790      1200     8815      1200      8880
GR    1198     9015      1200     9180    1204.5      9250      1200     9325      1200      9360
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GR	1200	9415	1200	9460	1205	9485	1210	9500	1215	9525
GR	1215	9660	1210	9670	1205	9680	1200	9700	1195	9715
GR	1190	9740	1186.5	10120	1186.8	10475	1190	10590	1195	10605
GR	1200	10620	1205	10625	1210	10640	1215	10650	1215	10780
GR	1210	10795	1206	10935	1207	11110				
ET			9.1						7852.28	10521.97
X1	27.260	9	9590	10526	120	550	550			
X3		0	0	0	0	0	0	1203.5	1203.5	0
GR	1206.8	7835	1188	7920	1188	8300	1206.8	8350	1203.5	8760
GR	1206	9590	1188	9614	1188	10502	1206	10526		

ALMA SCHOOL ROAD

SB	1.2	1.6	2.5	0	1273	105	18958	1.6	1188.1	1188
ET			9.1						7845.91	10524.06
X1	27.277	0	0	0	100	100	100			
X2	0	0	1	1203.5	1203.5					
X3		0	0	0	0	0	0	1207	1207	0
BT	6.000	7900	1206.8	0	8760	1203.5	0	9590	1207	0
BT	9591.0	1207	1203.5	10526	1206	1203.5	10526	1206	0	
ET			9.1						7900	10715
X1	27.322	37	9560	10715	200	200	225			
GR	1205	7325	1202	7550	1200.5	7785	1200	7900	1195	7910
GR	1190	7920	1190	8210	1195	8290	1200	8320	1205	8465
GR	1207	8655	1205	8830	1204.5	8985	1205	9180	1205	9330
GR	1210	9345	1215	9365	1220	9380	1220	9440	1215	9540
GR	1210	9545	1205	9560	1200	9575	1195	9585	1190	9610

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GR	1188	9650	1188.8	10255	1190	10510	1195	10535	1200	10570
GR	1205	10715	1205	10815	1205	10910	1205	10995	1205	11175
GR	1210	11205	1210	11305						
NC	0	0	0	.1	.3					
ET	0	4.1	9.1	0	10560	0	0	0	8000	10560
X1	27.428	45	9550	10555	900	420	560			
GR	1210	7955	1205	8025	1200	8055	1195	8095	1190	8150
GR	1185	8165	1185	8165	1185	8190	1185	8490	1190	8500
GR	1195	8515	1200	8525	1205	8530	1209	8725	1205	8985
GR	1205	9045	1210	9160	1210	9330	1210	9425	1210	9500
GR	1210	9550	1205	9560	1200	9570	1195	9580	1190	9615
GR	1189.5	9945	1190	10215	1190	10270	1190	10305	1190	10375
GR	1190	10495	1195	10510	1200	10525	1205	10535	1210	10555
GR	1210	10595	1205	10610	1205	10745	1210	10825	1205	10935
GR	1205	10995	1205	11305	1210	11360	1210	11450	1210	11530
ET	0	4.1	9.1	0	10540	0	0	0	8672	10540
X1	27.555	42	9505	10540	900	690	670			
GR	1211.5	8025	1211.5	8325	1210	8665	1205	8680	1200	8685
GR	1195	8700	1195	8755	1195	9075	1191	9300	1195	9385
GR	1200	9410	1205	9415	1207	9505	1205	9555	1195	9585
GR	1191	9725	1191	9935	1195	10115	1195	10210	1189.5	10385
GR	1195	10495	1200	10510	1205	10520	1210	10540	1210	10560
GR	1205	10575	1200	10780	1195	10950	1195	11000	1200	11010
GR	1205	11025	1207.5	11145	1205	11305	1201.5	11365	1205	11400
GR	1210	11410	1210	11440	1210	11490	1212	11575	1210	11665
GR	1210	11790	1210	11900						

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ET                          9.1                                                    8816      10540
X1   27.698        32      9535      10540       640       730       760
X3       10
GR   1213.2      8645      1210       8815      1200      8825      1200      8925      1200      8985
GR    1205       9045      1207       9125      1205      9245      1205      9330      1205      9535
GR    1200       9560      1195       9585    1192.5      9915      1191     10335      1195     10390
GR    1195      10435      1195      10470      1200     10490      1205     10505      1210     10520
GR    1215      10540      1215      10750      1211     10925      1210     11375      1210     11510
GR    1210      11550      1210      11570    1212.7     12030      1210     12275      1210     12340
GR    1210      12405      1211      12685

ET                          9.1                                                    9460      10515
X1   27.840        28      9460      10515       470       640       640
X3       10
GR   1212.5      8585      1210       8750      1210      8845      1210      8880      1210      9050
GR    1211       9270      1210       9460      1205      9475      1200      9480      1195      9495
GR    1191       9510      1191       9695      1194      9950      1195     10370      1200     10475
GR    1205      10485      1210      10500      1215     10515      1215     10580      1215     10880
GR    1215      11345      1215      11440    1212.5     12175      1210     12290      1210     12425
GR    1210      12555      1210      12605    1211.5     12895
1
   17MAR92     10:49:39                                                                          PAGE   28


ET                          9.1                                                    9220      10465
X1   27.945        26      9220      10465       830       520       660
X3       10
GR    1213       8840    1212.5       9045      1210      9220      1205      9280      1200      9285
GR    1195       9300      1192       9305      1192      9570      1198      9645      1196      9845
GR    1197      10000      1200      10105      1205     10375      1210     10395      1215     10405
GR    1220      10465      1220      10635      1215     10690      1215     11010    1210.5     11350
GR   1212.5      11800      1214      12100      1211     12615      1215     12825      1215     12920
GR    1215      13130

ET                          9.1                                                    9220      10410
X1   28.075        30      9220      10410       920       410       690
X3       10
GR    1220       9220      1215       9235      1210      9245      1205      9255      1200      9270
GR    1200       9310      1195       9390      1193      9400      1193      9800      1193      9805
GR    1199      10000      1200      10245      1205     10275      1210     10285      1215     10305
GR    1220      10410      1220      10455      1215     10540    1214.2     10860    1212.5     11180
GR   1210.5      11375      1210      11670      1210     11700      1213     11980      1215     12175
GR    1215      12220      1215      12305      1215     12365      1212     12565      1215     13130

ET                          9.1                                                    9200      10404
X1   28.191        38      9320      10405       650       400       610
X3       10         0         0       9200         0     10635
GR    1216       8660      1215       8730      1210      8995      1210      9018      1215      9040
GR    1220       9062      1230       9120      1230      9160      1225      9175      1220      9200
GR    1215       9210      1210       9320      1205      9420      1200      9435      1195      9595
GR    1190       9635      1190       9905      1195      9930      1200     10190      1200     10290
GR    1200      10325      1205      10340      1210     10360      1215     10405      1220     10635
GR    1220      10720      1215      10765    1213.5     10940      1210     11030    1210.5     11220
GR    1210      11300      1215      11665      1215     11725      1215     11800      1215     11925
GR    1215      12000      1215      12035      1214     12355

NC       0          0         0         .3        .5
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ET                          9.1                                                                  9350      10495
X1   28.291        29       9350      10495       550       450       529
X3      10
GR    1214      8330       1213       8640      1215      8880      1220      8925       1225       9190
GR    1225      9350       1220       9360      1215      9375      1210      9383       1205       9400
GR    1200      9420       1195       9445      1195      9475      1195     10140       1195      10290
GR    1200     10378       1205      10390      1210     10400      1215     10430       1218      10495
GR    1215     10610       1212      10890      1215     11210    1216.5     11550       1215      12360
GR  1214.5     12685       1215      12832      1217     13115      1218     13320

QT       5    225000     225000      97600    166600    340000
ET                          9.1                                                                 29012      30360
X1   28.339         6      29012      30360       255       255       255
X3      10                                                                   1220       1220
GR  1227.5     29012       1218      29013    1199.5     29053    1199.5     30319       1218      30359
GR  1227.5     30360
1
   17MAR92      10:49:39                                                                                    PAGE   29


ET                          9.1                                                                 29012      30360
SB     1.2        1.6        2.5          0      1267        90     25313         2       1200     1199.5
X1   28.358          0          0          0       100       100       100
X2                          1       1220     1227.5
X3      10                                                                1227.5     1227.5
BT       4     29012     1227.5          0     29013    1227.5      1220     30359     1227.5       1220
BT   30360    1227.5          0

ET                          9.1                                                                  9310      10590
X1   28.383        23       9310      10590       330       100       130
X3      10
GR    1217      9310       1215       9330      1210      9344      1205      9380       1205       9765
GR    1200      9955       1195       9990      1190     10070      1190     10120       1195      10440
GR    1200     10512       1205      10530      1210     10545      1215     10555       1220      10565
GR    1225     10590       1225      10880      1220     11310      1220     11660      12220      12220
GR    1220     12240       1220      12330    1220.5     12380
```

COUNTRY CLUB DR.

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ET                          9.1                                                                  8810      10630
X1   28.487        32       8810      10630       550       560       550
X3      10
GR    1216      8250     1215.5       8630    1215.5      8810      1215      8860       1210       8880
GR  1208.5      8900       1210       8945      1210      9314      1205      9820       1205      10000
GR    1205     10015       1200      10035      1200     10120      1200     10175       1195      10210
GR    1195     10255       1200      10550      1205     10570      1210     10588       1215      10600
GR    1218     10630       1215      10855      1215     11070      1218     11190       1220      11400
GR    1220     11480       1220      11540      1220     11680      1220     11850       1220      11980
GR    1220     12200       1220      12313
1
   17MAR92      10:49:39                                                                                    PAGE   30


    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*PROF 1
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```
3470 ENCROACHMENT STATIONS=     9310.0   10590.0  TYPE=      1  TARGET=     1280.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1267.00 ELREA=    100000.00

    28.383     27.40   1217.40       .00   1217.38   1219.02      1.63       .16       .09   1267.00
  225000.0       .0  225000.0       .0       .0   21985.4       .0   27314.3    2336.4 100000.00
      1.51       .00     10.23       .00      .000      .035      .000      .000   1190.00   9310.00
   .001278      330.      130.      100.         2         0         0       .00   1249.79  10559.79


FLOW DISTRIBUTION FOR SECNO=     28.38         CWSEL=   1217.40

STA=    9310.   10590.
  PER Q=    100.0
   AREA=  21985.4
    VEL=     10.2
  DEPTH=     17.6

*SECNO 28.487

3470 ENCROACHMENT STATIONS=     8810.0   10630.0  TYPE=      1  TARGET=     1820.000

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA=      1215.50 ELREA=    100000.00

    28.487     23.49   1218.49       .00   1218.65   1219.88      1.39       .79       .07   1215.50
  225000.0       .0  225000.0       .0       .0   23755.4       .0   27603.1    2355.8 100000.00
      1.53       .00      9.47       .00      .000      .035      .000      .000   1195.00   8810.00
   .001628      550.      550.      560.         2         0         0       .00   1820.00  10630.00


FLOW DISTRIBUTION FOR SECNO=     28.49         CWSEL=   1218.49

STA=    8810.   10630.
  PER Q=    100.0
   AREA=  23755.4
    VEL=      9.5
  DEPTH=     13.1

1
   17MAR92      10:49:39                                                                                PAGE  144
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SUMMARY TABLE 1

```
                                                                                THIS RUN EXECUTED 17MAR92    10:59:50
************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.0;  February 1991
************************************


NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST


100-YEAR FLOODPLAIN

SUMMARY PRINTOUT
```

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
19.381	210000.00	8924.00	9315.00	7.06	7.09	5.66	11741.00	12322.61	3398.61	1113.20	1131.40	.0
19.381	210000.00	8924.00	9315.00	7.14	7.16	5.71	11741.00	12322.41	3398.41	1113.20	1131.31	-.0
19.446	210000.00	8948.10	9167.00	5.03	7.79	6.42	11807.00	12449.24	3501.14	1114.40	1131.74	.0
19.446	210000.00	8953.26	9167.00	5.08	7.87	6.48	11807.00	12449.00	3495.75	1114.40	1131.66	-.0
19.537	210000.00	8931.84	9263.89	5.39	7.89	4.71	12262.90	12577.00	3622.53	1117.00	1132.67	.0
19.537	210000.00	8931.97	9263.89	5.42	7.94	4.73	12262.90	12577.00	3621.80	1117.00	1132.63	-.0
19.563	210000.00	8924.98	9221.23	5.60	8.08	4.75	12250.40	12417.70	3492.72	1118.70	1132.94	.0
19.563	210000.00	8925.08	9221.23	5.63	8.12	4.77	12250.40	12417.70	3492.62	1118.70	1132.90	-.0
19.579	210000.00	8899.01	9214.48	5.77	8.25	3.38	12250.30	12594.80	3695.79	1118.20	1133.09	.0
19.579	210000.00	8899.39	9214.48	5.79	8.29	3.38	12250.30	12594.80	3695.41	1118.20	1133.06	-.0
19.618	210000.00	8779.19	9134.98	6.91	8.32	9.70	10795.52	12499.42	3720.22	1117.10	1133.50	.0
19.618	210000.00	8834.81	9134.98	6.94	8.35	9.76	10795.52	12494.05	3659.24	1117.10	1133.47	-.0
19.659	210000.00	8741.63	9123.24	6.59	8.20	10.27	10700.48	12439.14	3697.51	1113.60	1134.12	.0
19.659	210000.00	8741.78	9123.24	6.61	8.22	10.32	10700.48	12435.78	3694.00	1113.60	1134.10	-.0
19.716	210000.00	8677.00	9109.00	7.57	9.00	10.02	10595.87	12331.19	3557.26	1120.30	1135.08	.0
19.716	210000.00	8677.00	9109.00	7.58	9.01	10.04	10595.87	12330.86	3556.87	1120.30	1135.07	-.0
19.759	210000.00	8655.00	9093.87	8.71	9.05	9.93	10512.45	12315.00	3487.94	1119.40	1135.85	.0
19.759	210000.00	8655.00	9093.87	8.72	9.06	9.94	10512.45	12314.46	3487.35	1119.40	1135.85	-.0
19.803	210000.00	8644.73	9057.32	7.36	8.03	3.14	11909.50	12132.59	3271.16	1118.40	1136.89	.0
19.803	210000.00	8644.76	9057.32	7.36	8.04	3.14	11909.50	12132.58	3271.10	1118.40	1136.89	.0
19.856	210000.00	8696.92	9111.47	6.91	7.75	4.16	11848.60	12008.52	3200.79	1115.60	1137.48	.0
19.856	210000.00	8697.15	9111.47	6.91	7.76	4.16	11848.60	12008.51	3200.25	1115.60	1137.48	.0

1

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
19.902	210000.00	8855.87	9142.17	6.56	8.09	3.50	11828.60	11961.81	3105.94	1117.20	1137.87	.0
19.902	210000.00	8855.91	9142.17	6.56	8.09	3.50	11828.60	11961.80	3105.89	1117.20	1137.86	.0
19.943	210000.00	8780.63	9186.66	4.87	7.80	7.35	11348.80	11932.93	3140.41	1120.80	1138.40	.0
19.943	210000.00	8780.72	9186.66	4.87	7.80	7.35	11348.80	11932.92	3140.31	1120.80	1138.40	.0
19.985	210000.00	8680.00	9290.10	5.81	8.63	7.71	11430.13	11961.84	3281.84	1121.90	1138.78	.0
19.985	210000.00	8680.00	9290.10	5.81	8.63	7.71	11430.13	11961.84	3281.84	1121.90	1138.78	.0
20.028	210000.00	8704.00	9258.24	5.88	8.71	7.60	11367.22	11959.63	3255.63	1122.90	1139.40	.0
20.028	210000.00	8704.00	9258.24	5.88	8.71	7.60	11367.22	11959.63	3255.63	1122.90	1139.40	.0
20.072	210000.00	8739.00	9249.33	6.34	8.48	7.47	11206.37	12170.63	3211.93	1123.60	1140.07	.0
20.072	210000.00	8739.00	9249.33	6.35	8.49	7.47	11206.37	12170.63	3211.92	1123.60	1140.07	.0
20.112	210000.00	8770.00	9250.09	6.00	8.06	6.75	10853.90	12194.68	3271.40	1123.50	1140.77	.0
20.112	210000.00	8770.00	9250.09	6.00	8.06	6.75	10853.90	12194.68	3271.40	1123.50	1140.77	.0

20.152	210000.00	8819.00	9265.01	6.48	8.37	6.47	10540.30	12350.82	3383.68	1123.00	1141.27	.0
20.152	210000.00	8819.00	9265.01	6.48	8.37	6.47	10540.30	12350.82	3383.67	1123.00	1141.27	.0
20.189	210000.00	8877.00	9314.06	5.83	7.29	6.81	11071.60	12397.13	3368.11	1120.90	1141.78	.0
20.189	210000.00	8877.00	9314.06	5.83	7.29	6.81	11071.60	12397.13	3368.11	1120.90	1141.78	.0
20.231	210000.00	8927.00	9365.63	5.86	7.71	6.62	11329.37	12166.45	3239.45	1120.80	1142.17	.0
20.231	210000.00	8927.00	9365.63	5.86	7.71	6.62	11329.37	12166.45	3239.45	1120.80	1142.17	.0
20.269	210000.00	8989.00	9457.15	6.25	8.06	6.83	11339.96	12254.26	3265.26	1124.70	1142.54	.0
20.269	210000.00	8989.00	9457.15	6.25	8.06	6.83	11339.96	12254.26	3265.26	1124.70	1142.54	.0
20.307	210000.00	9067.00	9710.94	6.48	8.35	7.09	11357.22	12339.17	3183.63	1123.90	1142.97	.0
20.307	210000.00	9067.00	9710.94	6.48	8.35	7.10	11357.22	12339.17	3183.63	1123.90	1142.97	.0
20.345	210000.00	9147.00	9790.70	6.89	7.60	6.61	11404.44	12295.80	3033.68	1127.00	1143.53	.0
20.345	210000.00	9147.00	9790.70	6.89	7.60	6.61	11404.44	12295.80	3033.68	1127.00	1143.53	.0
20.383	210000.00	9216.00	9806.20	7.25	7.43	6.37	11326.55	12247.15	2945.32	1127.20	1143.91	.0
20.383	210000.00	9216.00	9806.20	7.25	7.43	6.37	11326.55	12247.15	2945.32	1127.20	1143.91	.0
20.420	210000.00	9280.00	9797.70	7.37	7.93	6.55	11210.19	12202.56	2778.41	1128.10	1144.23	.0
20.420	210000.00	9280.00	9797.70	7.38	7.93	6.55	11210.19	12202.56	2778.40	1128.10	1144.23	.0
20.458	210000.00	9356.00	9784.90	7.30	7.90	6.35	11078.00	12118.74	2627.96	1127.90	1144.60	.0
20.458	210000.00	9356.00	9784.90	7.30	7.90	6.35	11078.00	12118.74	2627.95	1127.90	1144.60	.0
20.496	210000.00	9423.00	9786.90	7.64	8.74	6.26	10896.37	11983.21	2480.10	1129.00	1144.86	.0
20.496	210000.00	9423.00	9786.90	7.64	8.74	6.26	10896.37	11983.21	2480.11	1129.00	1144.86	.0
20.534	210000.00	9482.00	9794.00	7.41	10.31	6.11	10631.70	11980.07	2393.03	1129.80	1145.08	.0
20.534	210000.00	9482.00	9794.00	7.41	10.31	6.11	10631.70	11980.07	2393.03	1129.80	1145.08	.0

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
20.572	210000.00	9552.00	9738.80	6.75	10.43	5.85	10594.00	11979.95	2364.04	1129.00	1145.42	.0
20.572	210000.00	9552.00	9738.80	6.75	10.43	5.85	10594.00	11979.95	2364.04	1129.00	1145.42	.0
20.610	210000.00	9605.00	9704.90	6.59	10.50	5.76	10595.30	11972.11	2311.44	1128.90	1145.74	.0
20.610	210000.00	9605.00	9704.90	6.59	10.50	5.76	10595.30	11972.11	2311.44	1128.90	1145.74	.0
20.648	210000.00	9685.00	9643.20	.00	10.54	5.83	10621.90	11968.51	2230.89	1128.80	1146.04	.0
20.648	210000.00	9685.00	9643.20	.00	10.54	5.83	10621.90	11968.51	2230.89	1128.80	1146.04	.0
20.686	210000.00	9754.00	9677.70	.00	12.08	5.57	10623.40	12078.70	2224.15	1128.70	1146.09	.0
20.686	210000.00	9754.00	9677.70	.00	12.08	5.57	10623.40	12078.70	2224.15	1128.70	1146.09	.0
20.723	210000.00	9797.00	9747.20	.00	13.28	5.21	10613.90	11970.79	2121.46	1126.30	1146.22	.0
20.723	210000.00	9797.00	9747.20	.00	13.28	5.21	10613.90	11970.79	2121.46	1126.30	1146.22	.0
20.761	210000.00	9831.00	9778.20	.00	13.91	4.77	10651.40	12355.50	2322.01	1124.40	1146.52	.0
20.761	210000.00	9831.00	9778.20	.00	14.23	5.11	10651.40	11700.00	1869.00	1124.40	1146.42	-.1
20.799	210000.00	9844.00	9795.80	.00	16.22	4.70	10538.90	12159.68	2237.76	1125.60	1146.43	.0

	20.799	210000.00	9844.00	9795.80	.00	16.79	5.05	10538.90	11550.00	1706.00	1125.60	1146.24	-.1
	20.837	210000.00	9802.00	9779.60	.00	13.99	3.98	10534.50	12462.78	2570.35	1126.40	1148.08	.0
	20.837	210000.00	9802.00	9779.60	.00	14.61	4.43	10534.50	11450.00	1648.00	1126.40	1147.95	-.1
	20.875	210000.00	9770.00	9772.80	1.87	14.37	4.48	10431.00	12478.85	2612.74	1126.80	1148.53	.0
	20.875	210000.00	9770.00	9772.80	1.94	14.96	5.15	10431.00	11400.00	1630.00	1126.80	1148.46	-.0
	20.913	210000.00	9760.00	9764.90	1.03	13.39	4.17	10606.20	12465.69	2635.32	1127.30	1149.33	.0
	20.913	210000.00	9760.00	9764.90	1.10	13.87	4.68	10606.20	11500.00	1740.00	1127.30	1149.36	.0
	20.951	210000.00	9754.81	9749.90	.00	15.71	5.54	10243.30	12501.00	2464.22	1125.70	1149.48	.0
	20.951	210000.00	9754.43	9749.90	.00	16.06	6.10	10243.30	11500.00	1745.57	1125.70	1149.58	.1
	20.989	210000.00	9699.48	9734.90	1.22	13.68	4.38	10337.60	12500.50	2695.35	1127.20	1150.53	.0
	20.989	210000.00	9697.85	9734.90	1.29	14.14	5.01	10337.60	11400.00	1702.15	1127.20	1150.60	.0
	21.027	210000.00	9720.71	9717.50	.00	15.76	4.87	10300.10	12246.15	2438.88	1127.80	1150.38	.0
	21.027	210000.00	9720.54	9717.50	.00	16.05	5.30	10300.10	11350.00	1629.46	1127.80	1150.51	.1
*	21.064	210000.00	9328.74	9713.40	.34	11.65	3.82	10376.90	12320.55	2642.52	1128.10	1152.42	.0
*	21.064	210000.00	9327.92	9713.40	.35	12.22	4.54	10376.90	11300.00	1644.30	1128.10	1152.50	.0
	21.102	210000.00	9316.70	9698.60	3.86	10.26	3.51	10411.00	12315.09	2986.47	1127.00	1153.12	.0
	21.102	210000.00	9303.47	9698.60	4.05	10.72	4.25	10411.00	11200.00	1896.53	1127.00	1153.31	.1
	21.202	210000.00	9593.45	9700.00	1.29	10.53	2.97	10750.00	11393.78	1800.34	1132.00	1153.33	.0
	21.202	210000.00	9700.00	9700.00	.00	10.47	3.36	10750.00	11100.00	1400.00	1132.00	1153.66	.3
	21.302	210000.00	9313.46	9600.00	1.46	8.72	2.62	10820.00	11321.05	2007.59	1133.00	1154.21	.0
	21.302	210000.00	9590.00	9600.00	1.57	8.80	3.01	10820.00	11000.00	1410.00	1133.00	1154.49	.2

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	21.402	210000.00	9210.00	9600.00	1.49	8.88	.00	11050.00	11023.39	1813.39	1134.00	1154.44	.0
	21.402	210000.00	9590.00	9600.00	1.75	8.77	.00	11050.00	11025.09	1435.09	1134.00	1154.77	.3
	21.502	210000.00	9100.00	9320.00	1.71	7.66	.00	11020.00	10983.38	1883.38	1135.00	1155.07	.0
	21.502	210000.00	9310.00	9320.00	1.60	7.56	.00	11020.00	10987.17	1677.17	1135.00	1155.37	.3
	21.602	210000.00	9200.00	9370.00	1.52	8.49	2.07	10820.00	11111.43	1911.43	1135.00	1155.24	.0
	21.602	210000.00	9360.00	9370.00	1.78	8.47	1.78	10820.00	10830.00	1470.00	1135.00	1155.52	.2
*	21.659	215000.00	9306.11	9230.00	.00	9.54	.00	10950.00	10901.26	1595.16	1135.40	1155.28	.0
*	21.659	215000.00	9301.63	9230.00	.00	9.33	.00	10950.00	10902.72	1601.08	1135.40	1155.60	.3
	21.667	215000.00	9304.15	9230.00	.00	9.45	.00	10950.00	10901.90	1597.75	1135.40	1155.42	.0
	21.667	215000.00	9299.84	9230.00	.00	9.25	.00	10950.00	10903.30	1603.46	1135.40	1155.73	.3
	21.725	215000.00	9342.77	9290.00	.00	9.78	.00	10830.00	10773.14	1430.37	1135.60	1155.79	.0
	21.725	215000.00	9341.47	9290.00	.00	9.61	.00	10830.00	10774.25	1432.79	1135.60	1156.06	.2
	21.733	215000.00	9340.35	9290.00	.00	9.47	.00	10830.00	10775.20	1434.86	1135.60	1156.30	.0
	21.733	215000.00	9339.17	9290.00	.00	9.32	.00	10830.00	10776.20	1437.03	1135.60	1156.55	.2

21.795	215000.00	9363.05	9300.00	.00	8.78	.00	11090.00	10848.87	1485.82	1135.70	1156.89	.0
21.795	215000.00	9362.24	9300.00	.00	8.66	.00	11090.00	10851.08	1488.84	1135.70	1157.11	.2
21.809	215000.00	9362.63	9300.00	.00	8.72	.00	11090.00	10850.00	1487.37	1135.70	1157.00	.0
21.809	215000.00	9361.84	9300.00	.00	8.61	.00	11090.00	10852.16	1490.32	1135.70	1157.22	.2
21.837	215000.00	9400.00	9400.00	.00	9.54	2.95	10900.00	11183.36	1783.36	1136.00	1157.00	.0
21.837	215000.00	9400.00	9400.00	.00	9.39	2.98	10900.00	11184.57	1784.57	1136.00	1157.22	.2
21.937	215000.00	9029.86	9350.00	3.62	11.05	1.88	10480.00	11136.40	2106.54	1138.00	1157.28	.0
21.937	215000.00	9345.00	9350.00	2.72	11.36	2.24	10480.00	10600.00	1255.00	1138.00	1157.35	.0
22.037	215000.00	9005.61	9210.00	3.08	10.28	2.68	10540.00	10924.50	1918.89	1139.00	1158.15	.0
22.037	215000.00	9200.00	9210.00	2.37	10.40	1.99	10540.00	10545.00	1345.00	1139.00	1158.33	.1
22.137	215000.00	9161.69	9150.00	.00	9.87	2.94	10550.00	11015.43	1853.74	1140.00	1158.86	.0
22.137	215000.00	9160.58	9150.00	.00	9.98	2.45	10550.00	10560.00	1399.42	1140.00	1159.06	.2
22.237	215000.00	8890.44	8880.00	.00	7.88	3.70	10550.00	11339.65	2449.21	1141.00	1159.95	.0
22.237	215000.00	8890.26	8880.00	.00	8.69	3.05	10550.00	10600.00	1709.74	1141.00	1159.97	.0
22.337	215000.00	8784.19	8950.00	2.30	9.37	2.97	10520.00	11321.49	2537.31	1142.00	1160.11	.0
22.337	215000.00	8940.00	8950.00	2.82	9.66	3.36	10520.00	10550.00	1610.00	1142.00	1160.29	.1
22.437	215000.00	8672.27	8970.00	3.01	11.33	.46	10370.00	11530.14	1967.11	1143.00	1160.34	.0
22.437	215000.00	8960.00	8970.00	3.44	11.20	.99	10370.00	10375.00	1415.00	1143.00	1160.63	.2
22.537	215000.00	8700.00	8880.00	1.62	9.91	3.32	10420.00	12317.83	3617.83	1144.00	1161.78	.0
22.537	215000.00	8870.00	8880.00	1.89	11.36	1.77	10420.00	10425.00	1555.00	1144.00	1161.49	-.2

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SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
22.637	215000.00	8980.00	8990.00	3.17	9.49	2.13	10500.00	12353.26	3373.26	1145.00	1162.46	.0
22.637	215000.00	8980.00	8990.00	3.20	9.57	2.64	10500.00	10510.00	1530.00	1145.00	1162.96	.5
22.662	215000.00	9083.90	9050.00	.00	9.63	.00	10480.00	10450.74	1366.83	1145.50	1162.54	.0
22.662	215000.00	9081.56	9050.00	.00	9.26	.00	10480.00	10452.76	1371.20	1145.50	1163.20	.6
22.681	215000.00	7811.36	9050.00	1.12	9.22	1.66	10480.00	12398.59	3854.80	1145.50	1162.86	.0
22.681	215000.00	9081.56	9050.00	.00	9.26	.00	10480.00	10452.76	1371.20	1145.50	1163.20	.3
22.799	215000.00	7062.88	9050.00	1.78	9.38	2.18	10655.00	11516.16	4453.27	1146.00	1163.44	.0
22.799	215000.00	9045.00	9050.00	2.06	9.60	1.25	10655.00	10660.00	1615.00	1146.00	1163.74	.3
23.000	215000.00	8727.86	8725.00	.00	8.89	.00	10920.00	10819.74	2091.88	1147.00	1164.96	.0
23.000	215000.00	8725.00	8725.00	.00	8.53	.00	10920.00	10841.72	2116.72	1147.00	1165.43	.4
23.199	215000.00	8695.50	9270.00	2.37	12.37	.00	10810.00	10726.64	2031.13	1150.00	1166.53	.0
* 23.199	215000.00	9260.00	9270.00	2.14	12.26	.00	10810.00	10731.94	1471.94	1150.00	1166.75	.2
23.398	215000.00	9318.56	9315.00	.00	10.20	3.62	10770.00	11266.65	1948.09	1151.00	1169.79	.0
23.398	215000.00	9317.42	9315.00	.00	10.56	2.32	10770.00	10775.00	1457.58	1151.00	1169.86	.3
23.597	215000.00	8968.41	8920.00	.00	8.96	.00	11050.00	11046.46	2078.05	1152.00	1171.94	.0
23.597	215000.00	8962.68	8920.00	.00	8.73	.00	11050.00	11047.47	2084.79	1152.00	1172.24	.3

*	23.649	215000.00	9347.49	9320.00	.00	9.02	.00	10510.00	10482.51	1135.01	1150.00	1172.23	.0
*	23.649	215000.00	9346.74	9320.00	.00	8.91	.00	10510.00	10483.26	1136.52	1150.00	1172.49	.2
	23.658	215000.00	9346.70	9320.00	.00	8.90	.00	10510.00	10483.30	1136.60	1150.00	1172.50	.0
	23.658	215000.00	9346.07	9320.00	.00	8.81	.00	10510.00	10483.93	1137.87	1150.00	1172.73	.2
	23.667	215000.00	9346.71	9320.00	.00	8.93	.00	10510.00	10483.29	1136.59	1150.10	1172.53	.0
	23.667	215000.00	9346.07	9320.00	.00	8.83	.00	10510.00	10483.93	1137.86	1150.10	1172.75	.2
*	23.797	215000.00	8497.25	9190.00	1.35	9.98	.00	10790.00	10780.21	2282.95	1152.00	1173.48	.0
*	23.797	215000.00	9185.00	9190.00	.85	9.89	.00	10790.00	10783.63	1598.63	1152.00	1173.66	.1
	23.997	215000.00	9767.35	9760.00	.00	16.10	3.84	10610.00	11590.00	1632.47	1154.00	1174.33	.0
*	23.997	215000.00	9769.49	9760.00	.00	17.02	1.15	10610.00	10900.00	909.66	1154.00	1174.13	-.2
	24.196	215000.00	8557.28	9675.00	3.05	11.92	2.69	10910.00	11868.61	3311.33	1155.00	1178.86	.2
	24.196	215000.00	9700.00	9675.00	.00	12.67	3.70	10910.00	11000.00	1300.00	1155.00	1179.14	.2
*	24.396	215000.00	9105.85	9010.00	.00	8.04	1.90	10665.00	11403.18	2297.33	1158.00	1181.26	.2
*	24.396	215000.00	9078.41	9010.00	.00	7.76	2.51	10665.00	10750.00	1671.59	1158.00	1182.05	.7
	24.595	220000.00	8824.54	8985.00	1.12	6.28	1.71	11005.00	11268.25	2443.71	1161.00	1182.34	.0
	24.595	220000.00	8985.00	8985.00	.00	6.09	1.33	11005.00	11010.00	2025.00	1161.00	1183.03	.6
	24.795	220000.00	8951.49	9770.00	1.57	7.55	1.03	11530.00	11747.02	2793.54	1164.00	1182.80	.0
	24.795	220000.00	9765.00	9770.00	1.22	7.39	1.26	11530.00	11535.00	1770.00	1164.00	1183.41	.6

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	24.995	220000.00	8579.11	9605.00	1.99	6.52	1.10	11850.00	11857.63	3278.52	1167.00	1183.81	.0
	24.995	220000.00	9600.00	9605.00	1.42	6.54	1.23	11850.00	11855.00	2255.00	1167.00	1184.33	.5
*	25.194	220000.00	8895.39	9330.00	5.92	7.99	.00	12245.00	12244.21	3348.82	1170.00	1184.74	.0
*	25.194	220000.00	8900.00	9330.00	5.90	7.46	.00	12245.00	12245.00	3345.00	1170.00	1185.29	.5
	25.392	220000.00	8818.65	9520.00	6.84	8.50	4.50	12870.00	12890.68	3418.95	1172.50	1186.89	.0
	25.392	220000.00	9082.00	9520.00	7.47	8.33	.00	12870.00	12795.00	3092.14	1172.50	1187.32	.4
	25.591	220000.00	9289.42	9670.00	7.72	9.10	.00	13740.00	13711.74	2704.63	1175.00	1189.06	.0
	25.591	220000.00	9300.00	9670.00	10.95	6.74	.00	13740.00	13680.00	4205.78	1175.00	1190.46	1.4
	25.792	220000.00	9648.34	9775.00	.99	7.79	.00	13800.00	13752.86	3700.85	1175.00	1191.07	.0
*	25.792	220000.00	9770.00	9775.00	2.61	6.01	.00	13800.00	13780.13	3792.63	1175.00	1193.34	2.2
	25.992	220000.00	9673.19	9670.00	.00	7.19	.00	13620.00	13371.45	3698.26	1175.00	1192.61	.0
	25.992	220000.00	9670.28	9670.00	.00	5.70	.00	13620.00	13341.73	3671.45	1175.00	1194.79	2.1
	26.191	220000.00	9628.96	9615.00	.00	6.23	.00	13360.00	13311.13	3682.17	1180.00	1194.13	.0
	26.191	220000.00	9615.00	9615.00	.00	5.26	.00	13360.00	13302.12	3687.12	1180.00	1195.89	1.7
*	26.391	220000.00	9632.54	9535.00	.00	9.85	.39	11780.00	12610.48	2802.07	1182.50	1195.14	.0
	26.391	220000.00	9616.00	9535.00	.00	8.68	.00	11780.00	11780.00	2164.00	1182.50	1196.53	1.3
	26.591	220000.00	8922.38	8950.00	2.00	11.01	1.79	10840.00	12296.67	3374.29	1185.00	1197.76	.0

26.591	220000.00	8950.00	8950.00	.00	10.58	1.29	10840.00	10850.00	1900.00	1185.00	1198.34	.5
* 26.790	220000.00	8080.00	9450.00	5.50	7.68	.00	11200.00	11153.95	3073.95	1185.00	1201.03	.0
26.790	220000.00	8300.00	9450.00	5.67	7.95	.00	11200.00	11160.70	2860.70	1185.00	1201.32	.0
26.991	220000.00	7580.00	9720.00	5.26	6.64	.00	10780.00	10771.36	3191.36	1185.00	1202.12	.0
26.991	220000.00	7834.00	9720.00	5.58	7.35	.00	10780.00	10772.49	2938.49	1185.00	1202.50	.0
27.156	220000.00	7377.87	9680.00	5.74	9.73	.00	10640.00	10622.69	2970.51	1185.00	1202.68	.0
27.156	220000.00	7800.00	9680.00	5.95	9.68	.00	10640.00	10623.17	2569.05	1185.00	1203.17	.4
27.260	220000.00	7852.27	9590.00	8.31	12.20	.00	10526.00	10521.98	1415.53	1188.00	1202.98	.0
27.260	220000.00	7852.28	9590.00	8.02	11.78	.00	10526.00	10521.97	1417.57	1188.00	1203.50	.5

ALMA SCHOOL RD.

27.277	220000.00	7845.18	9590.00	7.24	10.99	.00	10526.00	10524.07	1909.48	1188.00	1204.55	.0
27.277	220000.00	7845.91	9590.00	6.74	10.59	.00	10526.00	10524.06	2171.00	1188.00	1205.12	.5
27.322	220000.00	7325.00	9560.00	6.08	10.52	.33	10715.00	11175.80	3280.81	1188.00	1205.13	.0
27.322	220000.00	7900.00	9560.00	6.79	10.53	.00	10715.00	10715.00	2306.17	1188.00	1205.46	.3
27.428	220000.00	8006.31	9550.00	7.60	9.69	.00	10555.00	10540.34	1749.25	1185.00	1206.33	.0
27.428	220000.00	8000.69	9550.00	7.33	9.46	.00	10555.00	10541.95	1812.17	1185.00	1206.74	.4
27.555	220000.00	8672.85	9505.00	7.22	10.70	.00	10540.00	10529.54	1856.69	1189.50	1207.38	.0
27.555	220000.00	8672.00	9505.00	7.05	10.44	.00	10540.00	10530.80	1858.80	1189.50	1207.70	.3

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SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
27.698	220000.00	8816.87	9535.00	5.10	14.39	.00	10540.00	10514.38	1697.51	1191.00	1208.12	.0
27.698	220000.00	8816.64	9535.00	5.06	14.12	.00	10540.00	10515.07	1698.43	1191.00	1208.35	.0
27.840	220000.00	8733.69	9460.00	.54	13.18	.00	10515.00	10500.74	1458.41	1191.00	1210.24	.0
27.840	220000.00	9460.00	9460.00	.00	13.14	.00	10515.00	10500.91	1040.91	1191.00	1210.30	.0
27.945	220000.00	9083.09	9220.00	1.57	13.22	.00	10465.00	10398.91	1315.82	1192.00	1211.96	.0
27.945	220000.00	9220.00	9220.00	.00	13.19	.00	10465.00	10398.99	1178.99	1192.00	1212.00	.0
28.075	220000.00	9236.93	9220.00	.00	11.97	.00	10410.00	10301.15	1064.22	1193.00	1214.04	.0
28.075	220000.00	9236.87	9220.00	.00	11.95	.00	10410.00	10301.25	1064.38	1193.00	1214.06	.0
28.191	220000.00	9209.40	9320.00	2.32	11.36	.33	10405.00	10418.75	1209.35	1190.00	1215.30	.0
28.191	220000.00	9209.36	9320.00	2.33	11.35	.34	10405.00	10419.69	1210.33	1190.00	1215.32	.0
28.291	220000.00	9370.77	9350.00	.00	10.43	.00	10495.00	10460.54	1089.76	1195.00	1216.41	.0
28.291	220000.00	9370.73	9350.00	.00	10.43	.00	10495.00	10460.86	1090.14	1195.00	1216.42	.0
28.339	225000.00	29015.29	29012.00	.00	9.90	.00	30360.00	30356.71	1341.41	1199.50	1216.94	.0
28.339	225000.00	29015.26	29012.00	.00	9.89	.00	30360.00	30356.74	1341.47	1199.50	1216.95	.0
28.358	225000.00	29014.49	29012.00	.00	9.68	.00	30360.00	30357.51	1343.02	1199.50	1217.31	.0
28.358	225000.00	29014.46	29012.00	.00	9.68	.00	30360.00	30357.54	1343.08	1199.50	1217.32	.0
28.383	225000.00	9310.00	9310.00	.00	10.24	.00	10590.00	10559.77	1249.77	1190.00	1217.38	.0
28.383	225000.00	9310.00	9310.00	.00	10.23	.00	10590.00	10559.79	1249.79	1190.00	1217.40	.0

COUNTRY CLUB DR.

28.487	225000.00	8250.00	8810.00	2.35	9.04	2.28	10630.00	11259.43	3009.43	1195.00	1218.65	.0
28.487	225000.00	8810.00	8810.00	.00	9.47	.00	10630.00	10630.00	1820.00	1195.00	1218.49	-.1

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SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 21.064 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 21.064 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 21.659 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 21.659 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 23.199 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 23.649 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 23.649 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 23.797 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 23.797 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 23.997 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 24.396 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 24.396 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 25.194 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 25.194 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 25.792 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 26.391 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 26.790 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

1

SUMMARY TABLE 2
FLOODWAY DATA

FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
19.381	3398.	30233.	6.9	1131.3	1131.4	-.1
19.446	3496.	27857.	7.5	1131.6	1131.7	-.1
19.537	3645.	27478.	7.6	1132.7	1132.7	.0
19.563	3493.	26623.	7.9	1132.9	1132.9	.0
19.579	3695.	26244.	8.0	1133.1	1133.1	.0

19.618	3659.	23557.	8.9	1133.5	1133.5	.0
19.659	3694.	23120.	9.1	1134.1	1134.1	.0
19.716	3654.	22421.	9.4	1135.1	1135.1	.0
19.759	3659.	22215.	9.5	1135.9	1135.9	.0
19.803	3488.	26575.	7.9	1136.9	1136.9	.0
19.856	3311.	27572.	7.6	1137.5	1137.5	.0
19.902	3106.	26502.	7.9	1137.9	1137.9	.0
19.943	3152.	28184.	7.5	1138.4	1138.4	.0
19.985	3282.	26066.	8.1	1138.8	1138.8	.0
20.028	3256.	25985.	8.1	1139.4	1139.4	.0
20.072	3432.	26487.	7.9	1140.1	1140.1	.0
20.112	3425.	28956.	7.3	1140.8	1140.8	.0
20.152	3532.	29355.	7.2	1141.3	1141.3	.0
20.189	3520.	30444.	6.9	1141.8	1141.8	.0
20.231	3239.	29437.	7.1	1142.2	1142.2	.0
20.269	3265.	28361.	7.4	1142.5	1142.5	.0
20.307	3272.	27751.	7.6	1143.0	1143.0	.0
20.345	3149.	29428.	7.1	1143.5	1143.5	.0
20.383	3031.	29687.	7.1	1143.9	1143.9	.0
20.420	2923.	28505.	7.4	1144.2	1144.2	.0
20.458	2763.	28977.	7.2	1144.6	1144.6	.0
20.496	2560.	27589.	7.6	1144.9	1144.9	.0
20.534	2498.	26069.	8.1	1145.1	1145.1	.0
20.572	2428.	26215.	8.0	1145.4	1145.4	.0
20.610	2367.	25694.	8.2	1145.7	1145.7	.0
20.648	2284.	24917.	8.4	1146.0	1146.0	.0
20.686	2325.	22153.	9.5	1146.1	1146.1	.0
20.723	2174.	20161.	10.4	1146.2	1146.2	.0
20.761	1869.	17974.	11.7	1146.4	1146.5	-.1
20.799	1706.	15109.	13.9	1146.2	1146.4	-.2
20.837	1648.	17353.	12.1	1148.0	1148.1	-.1
20.875	1630.	17589.	11.9	1148.4	1148.5	-.1
20.913	1740.	18163.	11.6	1149.3	1149.3	.0
20.951	1746.	18268.	11.5	1149.6	1149.5	.1
20.989	1702.	19336.	10.9	1150.6	1150.5	.1
21.027	1629.	17079.	12.3	1150.5	1150.4	.1
21.064	1972.	21741.	9.7	1152.5	1152.4	.1

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FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
21.102	1897.	25553.	8.2	1153.3	1153.1	.2
21.202	1400.	21786.	9.6	1153.6	1153.3	.3
21.302	1410.	24903.	8.4	1154.5	1154.2	.3
21.402	1435.	23992.	8.8	1154.7	1154.4	.3
21.502	1677.	27806.	7.6	1155.4	1155.1	.3
21.602	1470.	24886.	8.4	1155.5	1155.2	.3
21.659	1601.	23047.	9.3	1155.6	1155.3	.3
21.667	1603.	23253.	9.2	1155.7	1155.4	.3

21.725	1433.	22373.	9.6	1156.1	1155.8	.3
21.733	1437.	23073.	9.3	1156.6	1156.3	.3
21.795	1489.	24814.	8.7	1157.1	1156.9	.2
21.809	1490.	24975.	8.6	1157.2	1157.0	.2
21.837	1785.	23689.	9.1	1157.2	1157.0	.2
21.937	1255.	19168.	11.2	1157.4	1157.3	.1
22.037	1345.	20709.	10.4	1158.3	1158.1	.2
22.137	1399.	21570.	10.0	1159.1	1158.9	.2
22.237	1710.	24915.	8.6	1160.0	1160.0	.0
22.337	1610.	22392.	9.6	1160.3	1160.1	.2
22.437	1415.	19238.	11.2	1160.6	1160.3	.3
22.537	1555.	18938.	11.4	1161.5	1161.8	-.3
22.637	1530.	22560.	9.5	1163.0	1162.5	.5
22.662	1371.	23219.	9.3	1163.2	1162.5	.7
22.681	1371.	23220.	9.3	1163.2	1162.9	.3
22.799	1615.	22421.	9.6	1163.7	1163.4	.3
23.000	2117.	25217.	8.5	1165.5	1165.0	.5
23.199	1472.	17550.	12.3	1166.7	1166.5	.2
23.398	1458.	20375.	10.6	1169.9	1169.8	.1
23.597	2085.	24614.	8.7	1172.2	1171.9	.3
23.649	1137.	24140.	8.9	1172.5	1172.2	.3
23.658	1138.	24413.	8.8	1172.7	1172.5	.2
23.667	1138.	24335.	8.8	1172.7	1172.5	.2
23.797	1599.	21738.	9.9	1173.7	1173.5	.2
23.997	1131.	12706.	16.9	1174.1	1174.3	-.2
24.196	1300.	17284.	12.4	1179.2	1178.9	.3
24.396	1672.	28057.	7.7	1182.1	1181.3	.8
24.595	2025.	36135.	6.1	1183.0	1182.3	.7
24.795	1770.	29788.	7.4	1183.4	1182.8	.6
24.995	2255.	33655.	6.5	1184.3	1183.8	.5
25.194	3345.	30360.	7.2	1185.3	1184.7	.6
25.392	3713.	26927.	8.2	1187.3	1186.9	.4
25.591	4380.	29450.	7.5	1190.5	1189.1	1.4
25.792	4010.	36601.	6.0	1193.4	1191.1	2.3

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FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
25.992	3671.	38577.	5.7	1194.8	1192.6	2.2
26.191	3687.	41818.	5.3	1195.9	1194.1	1.8
26.391	2164.	25339.	8.7	1196.5	1195.1	1.4
26.591	1900.	20807.	10.6	1198.4	1197.8	.6
26.790	2861.	31359.	7.0	1201.3	1201.0	.3
26.991	2938.	35480.	6.2	1202.5	1202.1	.4
27.156	2823.	28297.	7.8	1203.2	1202.7	.5
27.260	2670.	20834.	10.6	1203.5	1203.0	.5
27.277	2678.	23746.	9.3	1205.1	1204.5	.6
27.322	2815.	23283.	9.4	1205.4	1205.1	.3
27.428	2541.	25398.	8.7	1206.7	1206.3	.4

ALMA SCHOOL DR.

27.555	1859.	24299.	9.1	1207.7	1207.4	.3
27.698	1698.	17617.	12.5	1208.3	1208.1	.2
27.840	1041.	16747.	13.1	1210.3	1210.2	.1
27.945	1179.	16678.	13.2	1212.0	1212.0	.0
28.075	1064.	18410.	11.9	1214.0	1214.0	.0
28.191	1210.	19634.	11.2	1215.3	1215.3	.0
28.291	1090.	21103.	10.4	1216.4	1216.4	.0
28.339	1341.	22754.	9.9	1216.9	1216.9	.0
28.358	1343.	23253.	9.7	1217.3	1217.3	.0
28.383	1250.	21985.	10.2	1217.4	1217.4	.0
28.487	1820.	23755.	9.5	1218.5	1218.7	-.2

COUNTRY CLUB DR.

HEC-2 MODEL
COUNTRY CLUB DRIVE
TO
GRANITE REEF DAM

COMMENT CARDS

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C
C    1.
C 32.663GILBERT RD. BRIDGE - NORMAL BRIDGE METHOD BASED ON PLANS DATED JAN 82
T1 SALT RIVER FLOOD INSURANCE STUDY, COUNTRY CLUB TO GRANITE REEF
T2 FOR FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  1986
T3      SALT RIVER NATURAL 100 YEAR     BY J.MISCHLER, BURGESS AND NIPLE
J1          2.                                                  1217.31
J2  1.          -1.
J3 38.  42.      1.     53.     54.     4.      8.      43.     10.      51.
J3 46.  40.     41.            110.            200.
NC .025 .025    .025    0.3     0.5
QT   3. 225000. 225000.  225000.
NE   2.    0.035  9007.6   0.025 10695.
X128.358     6.   5000.   6340.
CI 9970.   1195.   0.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1218.   5000.   1200.   5050.   1200.   5450.   1199.   5800.   1200.   6270.0
GR1220.   6340.
NC 0.025   0.025   0.025     0.1     0.3
NE   2.    0.035  9300.0   0.025 11999.2
ET                  4.1  9300.  10900.
X128.646    17.   9945.6 10770.2  1300.   1450.   1380.
CI10050.  1197.11550.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1220.5  9080.6  1220.   9300.   1212.7  9369.1  1208.9  9502.0  1207.5  9637.0
GR1211.8  9692.5  1213.7  9945.6  1213.0 10000.0  1208.8 10083.0  1197.4 10329.4
GR1197.2 10519.9  1202.7 10659.8  1213.0 10770.2  1211.1 11085.4  1221.6 11153.5
GR1221.2 11569.9  1222.5 11999.2
ET                  4.1  9200.  10900.
X128.831    17.  10185.7 10495.8   950.   1010.   1000.
CI10050.  1198.51010.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1223.9  8570.2  1221.   8772.9  1221.   8851.3  1221.   9200.   1199.0  9280.0
GR1199.0  9450.0  1210.5  9515.9  1205.0  9859.9  1205.4 10000.0  1204.7 10185.7
GR1199.4 10253.0  1199.4 10404.0  1207.1 10495.8  1207.6 10651.4  1217.4 10992.5
GR1212.9 11123.0  1224.2 11306.9
ET                  4.1  9100.  10750.
X129.017    16.   9861.5 10619.8  1000.   1020.   1020.
CI10050.  1199.91000.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1222.   8929.3  1222.   8967.9  1222.0  9100.0  1206.3  9178.9  1211.5  9444.8
GR1209.4  9861.5  1199.8 10000.0  1199.4 10060.9  1204.1 10185.6  1204.7 10522.0
GR1199.1 10576.7  1215.3 10619.8  1213.3 10637.1  1211.5 10693.3  1210.0 10750.0
GR1230.2 11800.0
ET                  4.1  9400.  10900.
X129.221    27.0  9684.7 10402.6   950.    970.   1020.
CI10270.  1201.2 960.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1227.5  6376.0  1227.7  6959.7  1225.0  7824.9  1225.0  8100.9  1225.2  8132.2
GR1225.0  8235.3  1225.0  8413.8  1225.0  8430.5  1225.0  8470.7  1225.0  8660.4
GR1234.9  8945.9  1231.4  9076.7  1225.0  9117.7  1221.9  9185.8  1206.7  9233.8
GR1207.7  9409.0  1208.0  9684.7  1204.3  9906.7  1202.2 10000.0  1201.5 10093.0
GR1209.2 10231.1  1213.5 10402.6  1214.2 10756.2  1212.5 10900.0  1230.0 10950.0
GR1230.8 11296.5  1234.7 11741.7
ET                  4.1  9150.  11300.
X129.473    21.   9369.6 10096.7  1030.    970.   1300.
CI10670.  1202.5 970.035     1.5     1.5     .01    800.    900.
X2                                                                      15.
GR1229.1  6815.6  1230.2  7351.9  1228.3  8005.1  1225.9  8828.5  1219.0  8886.7
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1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.0;  February 1991       *
 *                                        *
 *  RUN DATE    17MAR92    TIME   09:38:49 *
 *****************************************
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************************************
 *  U.S. ARMY CORPS OF ENGINEERS
 *  HYDROLOGIC ENGINEERING CENTER
 *  609 SECOND STREET, SUITE D
 *  DAVIS, CALIFORNIA 95616-4687
 *          (916) 756-1104
************************************
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INPUT DATA

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X     X  XXXXXXX  XXXXX            XXXXX
X     X  X       X     X          X     X
X     X  X       X                      X
XXXXXXX  XXXX    X         XXXXX   XXXXX
X     X  X       X                X
X     X  X       X     X          X
X     X  XXXXXXX  XXXXX            XXXXXXX
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1
   17MAR92      09:38:49                                                                                PAGE    1


                                                                THIS RUN EXECUTED 17MAR92    09:38:49
 ************************************
  HEC-2 WATER SURFACE PROFILES

  Version   4.6.0;  February 1991
 ************************************


T1 SALT RIVER FLOOD INSURANCE STUDY, COUNTRY CLUB TO GRANITE REEF
T2 FOR FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  1986
T3      SALT RIVER NATURAL 100 YEAR     BY J.MISCHLER, BURGESS AND NIPLE

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

              2.                                                          1217.31

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

   1.             -1.


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

  38.     43.       53.       21.       55.       26.       56.       22.       54.       4.
  42.      1.       50.       200.

NC    .025    .025      .025      0.3       0.5
QT      2.    225000.   225000.
NH      2.      0.035    9007.6     0.025    10695.
X1   28.358      6.      5000.     6340.
X2                                                                                                15.
GR   1218.     5000.     1200.     5050.     1200.     5450.     1199.     5800.     1200.     6270.0
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GR   1220.      6340.
COUNTRY CLUB DR.
NC    0.025     0.025     0.025      0.1       0.3
NH     2.       0.035    9300.0     0.025    11999.2
ET                         4.1     9300.     10900.
X1   28.646      17.      9945.6   10770.2     1300.      1450.      1380.
X2                                                                                                  15.
GR   1220.5    9080.6    1220.     9300.      1212.7     9369.1     1208.9     9502.0     1207.5    9637.0
GR   1211.8    9692.5    1213.7    9945.6     1213.0    10000.0     1208.8    10083.0     1197.4   10329.4
GR   1197.2   10519.9    1202.7   10659.8     1213.0    10770.2     1211.1    11085.4     1221.6   11153.5
GR   1221.2   11569.9    1222.5   11999.2

ET                         4.1     9200.     10900.
X1   28.831      17.     10185.7   10495.8      950.      1010.      1000.
X2                                                                                                  15.
GR   1223.9    8570.2    1221.     8772.9     1221.      8851.3     1221.      9200.      1199.0    9280.0
GR   1199.0    9450.0    1210.5    9515.9     1205.0     9859.9     1205.4    10000.0     1204.7   10185.7
GR   1199.4   10253.0    1199.4   10404.0     1207.1    10495.8     1207.6    10651.4     1217.4   10992.5
GR   1212.9   11123.0    1224.2   11306.9
1
   17MAR92      09:38:49                                                                                PAGE    2

ET                         4.1     9100.     10750.
X1   29.017      16.      9861.5   10619.8     1000.      1020.      1020.
X2                                                                                                  15.
GR   1222.     8929.3    1222.     8967.9     1222.0     9100.0     1206.3     9178.9     1211.5    9444.8
GR   1209.4    9861.5    1199.8   10000.0     1199.4    10060.9     1204.1    10185.6     1204.7   10522.0
GR   1199.1   10576.7    1215.3   10619.8     1213.3    10637.1     1211.5    10693.3     1210.0   10750.0
GR   1230.2   11800.0

ET                         4.1     9400.     10900.
X1   29.221      27.0     9684.7   10402.6      950.       970.      1020.
X2                                                                                                  15.
GR   1227.5    6376.0    1227.7    6959.7     1225.0     7824.9     1225.0     8100.9     1225.2    8132.2
GR   1225.0    8235.3    1225.0    8413.8     1225.0     8430.5     1225.0     8470.7     1225.0    8660.4
GR   1234.9    8945.9    1231.4    9076.7     1225.0     9117.7     1221.9     9185.8     1206.7    9233.8
GR   1207.7    9409.0    1208.0    9684.7     1204.3     9906.7     1202.2    10000.0     1201.5   10003.0
GR   1209.2   10231.1    1213.5   10402.6     1214.2    10756.2     1212.5    10900.0     1230.0   10950.0
GR   1230.8   11296.5    1234.7   11741.7

ET                         4.1     9150.     11300.
X1   29.473      21.      9369.6   10096.7     1030.       970.      1300.
X2                                                                                                  15.
GR   1229.1    6815.6    1230.2    7351.9     1228.3     8005.1     1225.9     8828.5     1219.0    8886.7
GR   1230.8    9018.3    1231.0    9106.1     1207.5     9150.7     1206.7     9369.6     1203.0    9530.4
GR   1209.2    9819.0    1207.0   10000.0     1216.0    10096.7     1216.0    11008.4     1211.2   11300.0
GR   1233.5   11530.0    1233.5   11613.6     1233.5    11784.9     1235.6    11990.4     1247.0   12122.2
GR   1247.8   12470.9

ET                         4.1     8850.     11270.
X1   29.676      30.      9012.5    9284.3      920.0      1020.      1060.
X2                                                                                                  15.
GR   1230.7    6855.2    1231.0    7462.3     1231.2     8005.6     1231.1     8295.4     1226.0    8707.1
GR   1224.9    8819.8    1204.1    8831.4     1202.9     8958.2     1214.9     9012.5     1198.9    9086.0
GR   1198.4    9186.0    1210.8    9284.3     1211.9     9616.0     1211.2     9868.7     1215.5    9994.3
GR   1215.4   10000.0    1220.1   10119.5     1216.0    10882.9     1214.6    11120.7     1215.0   11167.5
GR   1215.0   11446.0    1215.0   11509.7     1215.4    11543.9     1208.7    11591.7     1206.0   11668.7
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GR   1200.1    11690.0     1239.3    11929.0     1240.2     12104.6     1248.5     12214.9     1251.4     12565.9

ET                          4.1      9400.      10820.
X1   29.981       35.      9163.4    10000.0     1530.      1180.       1600.
X2                                                                                                          15.
GR   1234.8     6562.9     1234.3     7160.9     1236.1      7184.1     1236.1      7211.3     1234.3      7224.5
GR   1235.1     7403.4     1235.9     7425.7     1235.2      7711.5     1230.1      8141.1     1230.4      8269.8
GR   1231.9     8312.8     1233.1     8557.7     1234.7      8573.5     1233.5      8831.2     1233.1      8899.0
GR   1221.4     8943.9     1219.3     9054.8     1222.9      9163.4     1222.3      9449.2     1210.5      9490.8
GR   1209.5     9555.9     1209.1     9752.5     1215.3      9796.3     1215.3      9868.3     1217.8      9886.9
GR   1218.3     9987.2     1225.0    10000.0     1216.9     10040.6     1218.6     10104.0     1215.4     10377.6
GR   1210.5    10459.3     1220.7    10590.3     1216.3     10773.7     1216.0     10787.7     1228.0     10850.
1
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ET                          4.1      9400.      10820.
X1   29.982                                       5.          5.          5.
X2                                                                                                          15.

ET                          4.1      9054.      10800.
X1   30.194       59.      9032.1    10000.0     1120.      1170.       1120.
X2                                                                                                          15.
GR   1235.5     6087.7     1236.0     6154.7     1237.0      6189.2     1237.0      6233.7     1235.8      6275.7
GR   1236.9     6471.7     1237.0     6860.3     1237.7      7227.5     1238.5      7244.9     1238.9      7269.5
GR   1237.2     7303.6     1236.4     7464.4     1234.3      7532.9     1234.9      8218.2     1236.4      8761.0
GR   1237.6     8782.4     1237.7     8812.2     1236.3      9032.1     1225.2      9076.6     1218.1      9121.1
GR   1218.0     9208.7     1208.8     9299.8     1210.9      9411.5     1212.5      9480.4     1216.9      9559.5
GR   1220.7     9694.1     1221.6     9927.4     1228.5     10000.0     1224.3     10023.6     1224.6     10274.2
GR   1226.8    10494.9     1225.0    10640.1     1225.5     10736.0     1229.5     10875.7     1232.3     10921.8
GR   1232.3    11145.7     1249.9    11243.8     1250.8     11300.6     1245.0     11422.5     1245.0     11464.0
GR   1245.0    11545.6     1245.0    11573.6     1245.0     11632.3     1245.0     11650.0     1245.0     11791.1
GR   1245.0    11883.8     1245.0    12045.1     1245.0     12106.8     1245.0     12140.8     1245.0     12173.3
GR   1252.3    12290.1     1253.7    12480.3     1250.8     12512.2     1253.3     12528.1     1253.4     12554.3
GR   1250.8    12577.2     1252.2    12590.1     1253.9     12664.4     1254.1     12925.7

ET                          4.1      9054.      10800.
X1   30.195                                       5.          5.          5.
X2                                                                                                          15.

ET                          4.1      9350.      10775.
X1   30.458       43.0     9333.5    10777.3     1280.      1030.       1370.
X2                                                                                                          15.
GR   1237.1     5616.2     1238.1     6079.4     1239.6      6123.2     1238.1      6776.5     1235.9      7337.6
GR   1236.6     7375.6     1237.0     7420.8     1235.8      7472.3     1235.7      7635.3     1238.2      7650.3
GR   1238.7     7680.0     1236.3     7696.1     1236.3      8062.8     1238.4      9178.0     1237.9      9283.7
GR   1239.1     9333.5     1231.7     9354.5     1230.0      9385.1     1222.3      9414.0     1216.9      9523.2
GR   1214.7     9624.5     1214.9     9860.2     1217.4     10000.0     1222.2     10122.5     1220.9     10270.0
GR   1220.2    10554.0     1227.7    10652.7     1227.9     10719.5     1233.7     10777.3     1251.4     10855.5
GR   1250.3    10944.6     1242.0    11057.5     1242.0     11086.9     1242.0     11212.4     1242.0     11257.9
GR   1242.0    11296.7     1242.0    11320.7     1242.0     11402.9     1242.0     11460.0     1242.0     11526.2
GR   1242.0    11574.8     1242.0    11629.5     1254.9     11653.5

ET                          4.1      9310.      10800.
X1   30.815       36.0     9568.2    11136.3     1350.      1390.       1830.
X2                                                                                                          15.
GR   1238.9     5271.2     1239.5     5796.2     1241.1      5856.4     1238.2      6357.4     1239.3      6383.9
GR   1239.3     6408.9     1238.3     6442.0     1238.3      6633.6     1238.3      7017.6     1237.7      7620.1
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GR   1237.7    7892.2    1239.0    7912.9    1238.5    8404.2    1240.3    8448.4    1240.3    8499.0
GR   1239.3    8870.1    1240.1    9221.8    1236.1    9406.9    1232.9    9470.5    1231.9    9514.0
GR   1236.5    9568.2    1226.2    9665.1    1226.5    9727.5    1218.1    9769.7    1217.5    9954.0
GR   1220.8   10000.0    1221.3   10346.2    1222.3   10487.0    1216.0   10770.6    1230.3   10871.6
GR   1251.6   11136.3    1255.5   11229.9    1256.5   11511.6    1259.2   11740.2    1257.6   11773.3
GR   1257.6   12053.0
1
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ET                          4.1     9410.     10845.
X1   31.028      36.0    10322.8   10772.2     1060.      1100.      1100.
X2                                                                                                15.
GR   1243.5    8747.2    1240.6    8765.6    1241.2    8912.5    1239.8    9071.8    1236.0    9121.6
GR   1238.1    9144.1    1234.9    9199.2    1236.9    9326.4    1245.0    9349.8    1246.2    9382.5
GR   1235.7    9425.8    1233.8    9518.2    1230.9    9534.2    1227.8    9659.8    1232.6    9682.6
GR   1233.1    9756.8    1231.2    9882.1    1235.6    9931.1    1232.7   10000.0    1228.4   10127.1
GR   1226.1   10279.7    1228.0   10322.8    1224.4   10490.1    1218.0   10679.0    1212.7   10772.2
GR   1253.0   10884.9    1256.6   11057.2    1254.9   11307.2    1259.5   11350.4    1260.9   11645.1
GR   1258.3   11670.6    1260.4   11683.5    1260.7   11712.3    1258.3   11726.9    1260.9   11751.2
GR   1261.5   11994.8

ET                          4.1     9410.     10845.
X1   31.029                                      5.         5.         5.
X2                                                                                                15.

ET                          4.1     8770.     10890.
X1   31.301      43.      9689.6   10867.5     1190.      1380.      1310.
X2                                                                                                15.
GR   1245.2    7959.2    1245.3    7989.0    1242.4    8027.1    1242.7    8306.3    1240.3    8705.8
GR   1236.7    8867.3    1235.7    9104.0    1237.6    9154.8    1235.7    9275.7    1231.4    9384.2
GR   1225.6    9689.6    1220.2    9713.8    1220.1    9786.3    1222.4    9835.9    1222.4    9877.3
GR   1224.8    9942.0    1228.0   10000.0    1229.7   10036.2    1228.4   10184.4    1232.2   10225.8
GR   1232.7   10375.2    1232.2   10437.4    1226.8   10547.4    1231.4   10585.6    1229.5   10626.7
GR   1221.6   10665.2    1220.7   10867.5    1263.0   10911.9    1262.8   11065.2    1261.2   11234.1
GR   1263.9   11423.0    1259.8   11596.1    1258.0   11611.9    1260.0   11647.0    1260.0   11685.5
GR   1257.3   11702.1    1258.4   11720.4    1258.8   11752.7    1255.6   11766.8    1258.3   11815.4
GR   1259.7   11936.5    1259.0   12047.1    1259.8   12118.1

ET                          4.1     8250.     11450.
X1   31.522      58.      9428.6   11538.9     1120.      1650.      1230.
X2                                                                                                15.
GR   1247.0    7461.1    1244.4    7497.3    1244.8    7703.3    1245.2    8039.0    1235.1    8081.4
GR   1234.8    8179.1    1229.2    8272.7    1229.5    8334.7    1234.3    8401.8    1236.7    8483.9
GR   1240.0    8603.0    1237.2    8654.0    1236.7    8775.2    1242.2    8808.8    1242.9    8880.8
GR   1241.5    8924.6    1241.5    9026.1    1242.3    9062.8    1240.4    9162.3    1240.4    9235.3
GR   1244.5    9428.6    1233.4    9442.1    1229.6    9469.8    1228.6    9533.1    1229.1    9585.4
GR   1227.2    9685.4    1234.4    9740.4    1235.8    9872.4    1233.1    9957.4    1232.2   10000.0
GR   1233.1   10066.6    1234.9   10099.0    1238.0   10207.4    1238.4   10311.3    1236.8   10652.8
GR   1231.2   10706.7    1234.2   10790.5    1233.1   10902.8    1229.2   11141.2    1226.1   11281.2
GR   1224.4   11418.7    1230.0   11446.2    1230.6   11501.5    1264.3   11538.9    1264.4   11590.6
GR   1266.8   11671.0    1267.2   11759.9    1268.5   11785.7    1266.2   11831.4    1268.0   11873.6
GR   1270.5   12030.3    1264.4   12065.0    1265.7   12074.8    1265.7   12101.5    1264.5   12113.3
GR   1271.5   12160.8    1272.7   12335.1    1272.7   12497.9

ET                          4.1     8230.     11950.
X1   31.725      77.      9544.    11019.8      870.      1530.      1150.
X2                                                                                                15.
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GR   1248.3     6763.8     1248.3     7039.5     1248.3     7384.7     1248.3     7411.4     1248.3     7433.1
GR   1243.6     7472.9     1244.8     7647.8     1245.9     7951.3     1237.3     7962.8     1234.9     8020.3
GR   1240.0     8056.5     1241.5     8168.9     1241.4     8355.0     1240.2     8460.3     1234.8     8503.5
GR   1234.8     8561.4     1229.5     8697.9     1236.4     8740.3     1240.4     8808.8     1241.0     8910.7
GR   1236.9     8953.3     1246.4     8985.4     1245.3     9028.7     1242.1     9063.6     1243.8     9153.5
1
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GR   1244.1     9233.1     1241.0     9294.2     1245.0     9343.4     1246.4     9431.2     1246.2     9544.0
GR   1242.4     9629.8     1242.9     9673.0     1229.8     9724.4     1231.2     9822.0     1233.2     9969.9
GR   1236.9     9988.3     1236.9    10000.0     1239.4    10067.6     1234.7    10123.0     1237.6    10231.6
GR   1238.2    10342.0     1235.3    10482.6     1229.8    10536.8     1231.4    10639.0     1233.3    10688.2
GR   1229.7    10809.9     1230.9    10874.7     1234.0    10908.8     1237.1    11019.8     1238.5    11202.2
GR   1239.9    11420.1     1240.0    11625.0     1236.2    11738.6     1237.1    11826.4     1233.3    11894.9
GR   1237.1    11976.0     1238.5    12089.3     1235.7    12107.6     1234.7    12218.9     1243.6    12240.4
GR   1239.4    12252.8     1239.4    12335.9     1241.0    12378.1     1245.9    12443.9     1244.5    12544.8
GR   1270.7    12606.9     1271.8    12718.3     1273.9    12834.1     1275.1    12926.7     1270.0    13027.7
GR   1273.4    13221.0     1270.5    13241.9     1274.0    13260.2     1274.8    13294.6     1271.9    13326.1
GR   1276.1    13359.1     1276.1    13410.9

ET                            4.1     8300.    12000.
X1   31.896       68.      9650.2    12145.5     920.      1000.      980.
X2                                                                                                    15.
GR   1248.0     6420.3     1248.0     6924.6     1248.0     7330.2     1248.0     7361.0     1248.2     7380.8
GR   1247.0     7406.8     1246.4     7515.0     1246.0     7777.3     1247.2     8043.0     1247.8     8220.6
GR   1245.7     8296.0     1239.8     8349.1     1238.0     8440.7     1235.7     8591.9     1239.7     8604.2
GR   1236.2     8648.5     1236.4     8751.8     1241.2     8785.4     1241.9     8849.3     1236.8     8906.2
GR   1234.3     9014.1     1236.4     9150.7     1243.6     9176.6     1246.3     9344.7     1246.9     9414.8
GR   1245.5     9524.7     1246.5     9547.1     1246.1     9650.2     1237.5     9675.8     1232.1     9689.8
GR   1232.3     9803.6     1228.1     9854.3     1232.1     9912.3     1232.5    10000.3     1231.0    10064.8
GR   1235.5    10138.5     1238.8    10226.1     1239.4    10386.7     1239.9    10487.9     1238.6    10731.6
GR   1235.2    10797.0     1237.5    10819.3     1241.7    10904.8     1242.9    10973.1     1243.1    11126.9
GR   1239.7    11307.6     1241.1    11625.6     1237.9    11682.6     1237.7    11737.0     1243.1    11777.0
GR   1245.2    11905.0     1244.2    12112.7     1246.3    12145.5     1243.9    12382.4     1245.5    12454.4
GR   1245.7    12629.5     1242.8    12748.8     1243.0    12939.8     1244.0    13046.1     1245.3    13119.2
GR   1250.5    13210.1     1252.6    13266.7     1256.1    13391.3     1261.5    13442.8     1273.6    13485.9
GR   1278.1    13526.8     1276.6    13596.7     1278.7    13815.3

ET                            4.1     8500.    11600.
X1   32.126       57.      8480.8    11726.6     1150.      1100.      1130.
X2                                                                                                    15.
GR   1250.1     7405.9     1248.1     7434.9     1248.9     7750.0     1247.8     8108.9     1248.8     8336.8
GR   1248.4     8480.8     1236.8     8523.8     1238.7     8632.6     1239.9     8764.1     1241.0     8802.7
GR   1237.1     8892.3     1239.4     8932.9     1242.2     9052.2     1241.0     9201.4     1240.1     9356.1
GR   1239.4     9451.1     1237.1     9495.0     1236.1     9575.5     1244.5     9595.3     1243.9     9677.5
GR   1235.7     9713.8     1236.4     9842.5     1233.9     9921.4     1236.2    10000.0     1242.5    10155.1
GR   1242.8    10324.6     1240.3    10404.6     1251.2    10447.9     1251.4    10719.8     1253.5    10773.6
GR   1241.1    10899.3     1239.2    10986.8     1242.4    11110.2     1241.7    11195.4     1238.5    11317.8
GR   1247.0    11406.9     1247.9    11455.9     1245.4    11678.6     1248.5    11726.6     1248.5    11887.1
GR   1247.6    12258.4     1246.9    12517.3     1246.6    12763.6     1244.7    13080.5     1249.9    13144.1
GR   1249.9    13321.4     1250.9    13403.4     1249.9    13729.2     1245.8    13790.2     1245.3    13943.3
GR   1242.7    14010.8     1275.3    14132.6     1272.4    14155.7     1274.8    14225.9     1280.7    14255.2
GR   1282.0    14360.7     1280.5    14411.7

ET                            4.1     8500.    11600.
X1   32.127                                       5.         5.         5.
X2                                                                                                    15.
1
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ET                          4.1     7900.     11400.
X1   32.296      54.     9694.3    11211.1     940.      890.      900.
X2                                                                                                  15.
GR   1253.2    6830.1    1253.2    7202.9    1253.2    7230.7    1253.2    7249.4    1250.5    7273.8
GR   1249.9    7493.0    1250.6    7751.4    1246.6    7780.9    1247.8    7829.6    1243.9    7849.4
GR   1246.6    7937.0    1239.9    7983.7    1241.3    8199.8    1238.9    8257.9    1240.7    8289.1
GR   1244.7    8430.1    1243.1    8465.5    1240.4    8492.0    1241.0    8637.2    1247.5    8662.1
GR   1248.9    8748.4    1244.8    8818.2    1243.6    9085.6    1245.9    9180.3    1246.0    9343.1
GR   1242.1    9437.9    1241.2    9518.6    1246.9    9588.6    1245.9    9694.3    1242.4    9804.9
GR   1235.6    9854.6    1238.1   10000.0    1236.9   10142.9    1239.8   10200.6    1249.1   10238.0
GR   1249.9   10398.2    1248.4   10605.7    1249.9   10724.9    1241.7   10796.6    1243.0   10999.7
GR   1242.4   11180.6    1248.8   11211.1    1249.4   11404.0    1249.5   11597.2    1247.9   11925.9
GR   1247.8   12171.6    1246.7   12434.9    1248.1   12483.2    1248.1   12733.8    1246.9   12959.5
GR   1245.3   13160.2    1247.2   13259.6    1252.6   13327.8    1253.8   13383.2

X1   32.297                                     5.        5.        5.
X2                                                                                                  15.

NH      2.      0.025   11161.4      0.040   15106.1
ET                          4.1     7875.     11500.
X1   32.465      77.     9925.9    11161.4     910.      890.      900.
X2                                                                                                  15.
GR   1255.7    7164.4    1255.7    7181.6    1255.7    7203.8    1253.2    7234.0    1254.5    7432.9
GR   1253.2    7687.2    1245.1    7780.1    1241.8    7822.3    1242.7    7867.6    1240.0    7934.0
GR   1240.0    7983.0    1240.0    8055.4    1244.8    8238.3    1245.8    8393.0    1242.2    8412.7
GR   1240.6    8451.8    1244.1    8476.1    1242.3    8634.9    1240.0    8758.9    1246.5    8785.6
GR   1246.9    8895.9    1244.6    8976.0    1246.6    9000.3    1248.1    9056.4    1247.0    9248.8
GR   1246.9    9405.4    1243.0    9427.6    1246.6    9515.2    1248.5    9654.3    1247.2    9718.2
GR   1244.8    9754.5    1246.5    9805.6    1247.9    9925.9    1246.4    9994.0    1244.5   10000.0
GR   1242.3   10014.9    1240.6   10120.6    1238.3   10196.4    1240.0   10246.2    1239.9   10329.5
GR   1248.1   10371.1    1252.5   10485.3    1251.2   10670.1    1249.4   10803.9    1242.2   10829.8
GR   1242.2   11126.8    1251.4   11161.4    1251.1   11382.6    1249.4   11551.6    1250.8   11576.6
GR   1249.9   11868.2    1247.8   12061.8    1249.8   12095.1    1249.4   12366.4    1247.3   12681.9
GR   1248.0   12817.0    1247.0   12962.4    1249.3   12994.4    1248.7   13071.0    1247.5   13237.4
GR   1254.9   13297.8    1255.9   13343.6    1254.2   13380.8    1254.7   13459.1    1255.4   13518.1
GR   1255.4   13695.8    1255.3   13935.4    1256.3   14100.0    1254.0   14155.0    1248.9   14436.9
GR   1251.1   14478.4    1251.6   14547.8    1251.0   14767.4    1259.1   14803.4    1287.6   14863.0
GR   1289.5   14986.0    1289.0   15106.1

NH      4.      0.025   10041.6      0.035   10618.9      0.025   11392.0      0.040   15586.9
ET                          4.1     8500.     11600.
X1   32.641      78.0    8951.3    11280.7     940.      920.      920.
X2                                                                                                  15.
GR   1256.2    6395.8    1256.2    6800.0    1256.2    7108.0    1256.2    7137.3    1256.2    7176.1
GR   1252.9    7198.2    1253.0    7345.6    1253.5    7626.8    1248.5    7650.3    1243.1    7790.6
GR   1240.7    7871.5    1243.5    7994.2    1248.4    8073.9    1249.4    8272.2    1245.7    8307.6
GR   1249.4    8357.4    1251.2    8414.4    1250.5    8559.1    1242.7    8603.7    1241.1    8760.1
GR   1247.1    8810.3    1249.1    8951.3    1248.5    8956.0    1239.0    8975.0    1239.0    9585.0
GR   1245.0    9597.0    1239.9    9878.9    1246.6   10000.0    1251.5   10041.6    1253.1   10269.7
GR   1253.1   10407.7    1252.0   10561.8    1248.5   10618.9    1247.9   10765.1    1245.8   10947.2
GR   1241.7   11065.3    1242.7   11179.2    1245.3   11233.2    1250.5   11280.7    1251.2   11351.2
GR   1253.3   11392.0    1250.9   11633.8    1252.2   11666.0    1251.9   11905.7    1250.6   12215.6
GR   1248.9   12357.4    1251.6   12389.3    1251.8   12480.6    1250.4   12667.9    1248.6   12749.2
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GR   1251.6    12826.9    1249.3    12907.0    1250.3    13001.2    1257.2    13050.0    1257.9    13097.4
GR   1257.9    13297.9    1257.9    13427.8    1257.0    13759.4    1258.4    13817.1    1258.4    13858.1
GR   1256.0    13913.3    1253.1    14160.4    1253.5    14447.0    1255.2    14498.3    1253.6    14749.1
GR   1254.1    14886.2    1256.0    14998.6    1261.2    15042.7    1257.7    15065.3    1260.6    15107.9
GR   1257.0    15127.7    1257.3    15187.1    1262.7    15270.8    1257.6    15335.9    1258.2    15425.3
GR   1259.7    15494.4    1276.5    15550.9    1280.9    15586.9
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GILBERT RD.

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NC                                   0.3        0.5
NH     4.      0.025    10041.6     0.035    10618.9     0.025    11392.0     0.040    15586.9
ET                        4.11      8500.    11600.
X1   32.653     78.0     8636.      9866.       63.        63.        63.
X2                                                                                          15.
X3    10.                                                                  1253.     1246.5
GR   1256.2    6395.8   1256.2     6800.0    1256.2     7108.0    1256.2    7137.3    1256.2    7176.1
GR   1252.9    7198.2   1253.0     7345.6    1253.5     7626.8    1248.5    7650.3    1243.1    7790.6
GR   1240.7    7871.5   1243.5     7994.2    1248.4     8073.9    1249.4    8272.2    1245.7    8307.6
GR   1249.4    8357.4   1251.2     8414.4    1250.5     8559.1    1242.7    8603.7    1242.5    8636.0
GR   1239.0    8643.0   1239.0     8951.3    1239.0     9053.1    1239.0    9255.4    1239.0    9864.0
GR   1240.0    9866.0   1239.9     9878.9    1246.6    10000.0    1251.5   10041.6    1253.1   10269.7
GR   1253.1   10407.7   1252.0    10561.8    1248.5    10618.9    1247.9   10765.1    1245.8   10947.2
GR   1241.7   11065.3   1242.7    11179.2    1245.3    11233.2    1250.5   11280.7    1251.2   11351.2
GR   1253.3   11392.0   1250.9    11633.8    1252.2    11666.0    1251.9   11905.7    1250.6   12215.6
GR   1248.9   12357.4   1251.6    12389.3    1251.8    12480.6    1250.4   12667.9    1248.6   12749.2
GR   1251.6   12826.9   1249.3    12907.0    1250.3    13001.2    1257.2   13050.0    1257.9   13097.4
GR   1257.9   13297.9   1257.9    13427.8    1257.0    13759.4    1258.4   13817.1    1258.4   13858.1
GR   1256.0   13913.3   1253.1    14160.4    1253.5    14447.0    1255.2   14498.3    1253.6   14749.1
GR   1254.1   14886.2   1256.0    14998.6    1261.2    15042.7    1257.7   15065.3    1260.6   15107.9
GR   1257.0   15127.7   1257.3    15187.1    1262.7    15270.8    1257.6   15335.9    1258.2   15425.3
GR   1259.7   15494.4   1276.5    15550.9    1280.9    15586.9

NH     2.      0.025    11405.     0.04      15063.
ET                        4.11      8500.    11600.
X1   32.655     83.      8606.      9904.       10.        10.        10.
X2                                                                                          15.
X3    10.                                                                  1254.1    1247.6
BT     37.      800.     1300.      1300.     1300.      1256.      1256.    5578.     1255.4    1255.4
BT   5830.    1255.9    1255.9     6138.     1254.9     1254.9     6517.    1255.3    1255.3    6800.
BT   1254.7   1254.7    7092.      1254.9    1254.9     7164.      1255.1   1255.1    7417.     1254.8
BT   1254.8   7538.     1254.5     1254.5    8072.      1254.5     1254.5   8360.     1255.5    1255.5
BT   8606.    1259.5    1257.0     9904.     1259.5     1257.0    10000.    1256.5    1256.5   10175.
BT   1250.7   1250.7   10205.      1249.7    1249.7    10380.      1248.0   1248.0   11305.     1248.0
BT   1248.0  11405.     1248.6     1248.6   11505.      1250.3     1250.3  11705.     1253.4    1253.4
BT   11905.   1253.4    1253.4    12393.     1251.8     1251.8    12671.    1252.3    1252.3   12861.
BT   1255.2   1255.2   13067.      1257.3    1257.3    13254.      1259.5   1259.5   13470.     1259.6
BT   1259.6  13814.     1257.1     1257.1   14088.      1254.1     1254.1  14321.     1253.9    1253.9
BT   14526.   1253.9    1253.9    14777.     1255.3     1255.3    14923.    1259.0    1259.0   15063.
BT   1263.1   1263.1
GR   1300.0    800.     1256.0     1300.     1255.4     5578.      1255.9    5830.     1254.9    6138.
GR   1255.3   6517.     1254.7     6800.     1254.9     7092.      1255.1   7164.     1254.8    7417.
GR   1252.9   7538.     1246.3     7727.     1244.3     7883.      1244.3   8072.     1246.4    8204.
GR   1249.0   8360.     1249.6     8441.     1246.3     8552.      1242.5   8605.     1257.0    8606.
GR   1239.0   8640.     1239.0     8732.     1257.      8732.1     1257.    8738.     1239.     8738.1
GR   1239.    8862.     1257.      8862.1    1257.      8868.      1239.    8868.1    1239.     8992.
GR   1257.    8992.1    1257.      8998.     1239.      8998.1     1239.    9122.     1257.     9122.1
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GR   1257.     9128.     1239.     9128.1    1239.     9252.     1257.     9252.1    1257.     9258.
GR   1239.     9258.1    1239.     9382.     1257.     9382.1    1257.     9388.     1239.     9388.1
GR   1239.     9512.     1257.     9512.1    1257.     9518.     1239.     9518.1    1239.     9642.
GR   1257.     9642.1    1257.     9648.     1239.     9648.1    1239.     9772.     1257.     9772.1
GR   1257.     9778.     1239.     9778.1    1239.     9861.     1257.     9904.     1245.     9905.
GR   1249.1    10000.    1253.     10075.    1250.     10175.    1249.7    10205.    1248.     10380.
GR   1248.     11305.    1248.6    11405.    1250.3    11505.    1253.4    11705.    1253.4    11905.
GR   1251.8    12393.    1252.3    12671.    1255.2    12861.    1257.3    13067.    1259.5    13254.
GR   1259.6    13470.    1257.1    13814.    1254.1    14088.    1253.9    14321.    1253.9    14526.
GR   1255.3    14777.    1259.0    14923.    1263.1    15063.

NH     2.      0.025     11405.    0.04      11905.
ET                       4.11      8500.     11600.
X1   32.661                                   44.       44.       44.
X2                                                                                                15.
X3    10.                                                                   1254.6    1248.1

NH     4.      0.025     10041.6   0.035     10618.9   0.025     11392.0   0.040     15586.9
ET                       4.11      8500.     11600.
       GILBERT RD. BRIDGE - NORMAL BRIDGE METHOD BASED ON PLANS DATED JAN 82
X1   32.663     78.0      8636.     9866.     10.       10.       10.
X2                                                                                                15.
X3    10.                                                                   1253.     1246.5
GR   1256.2    6395.8    1256.2    6800.0    1256.2    7108.0    1256.2    7137.3    1256.2    7176.1
GR   1252.9    7198.2    1253.0    7345.6    1253.5    7626.8    1248.5    7650.3    1243.1    7790.6
GR   1240.7    7871.5    1243.5    7994.2    1248.4    8073.9    1249.4    8272.2    1245.7    8307.6
GR   1249.4    8357.4    1251.2    8414.4    1250.5    8559.1    1242.7    8603.7    1242.5    8636.0
GR   1239.0    8643.0    1239.0    8951.3    1239.0    9053.1    1239.0    9255.4    1239.0    9864.0
GR   1240.0    9866.0    1239.9    9878.9    1246.6    10000.0   1251.5    10041.6   1253.1    10269.7
GR   1253.1    10407.7   1252.0    10561.8   1248.5    10618.9   1247.9    10765.1   1245.8    10947.2
GR   1241.7    11065.3   1242.7    11179.2   1245.3    11233.2   1250.5    11280.7   1251.2    11351.2
GR   1253.3    11392.0   1250.9    11633.8   1252.2    11666.0   1251.9    11905.7   1250.6    12215.6
GR   1248.9    12357.4   1251.6    12389.3   1251.8    12480.6   1250.4    12667.9   1248.6    12749.2
GR   1251.6    12826.9   1249.3    12907.0   1250.3    13001.2   1257.2    13050.0   1257.9    13097.4
GR   1257.9    13297.9   1257.9    13427.8   1257.0    13759.4   1258.4    13817.1   1258.4    13858.1
GR   1256.0    13913.3   1253.1    14160.4   1253.5    14447.0   1255.2    14498.3   1253.6    14749.1
GR   1254.1    14886.2   1256.0    14998.6   1261.2    15042.7   1257.7    15065.3   1260.6    15107.9
GR   1257.0    15127.7   1257.3    15187.1   1262.7    15270.8   1257.6    15335.9   1258.2    15425.3
GR   1259.7    15494.4   1276.5    15550.9   1280.9    15586.9

QT     2.      230000.   230000.
NH     4.      0.025     10000.0   0.035     10622.1   0.025     11507.8   0.040     15318.6
ET                       4.1       8500.     11600.
X1   32.676     60.       8469.7    11507.8   63.       63.       63.
X2                                                                                                15.
X3    10.
GR   1257.7    8148.6    1257.7    8469.7    1249.0    8488.3    1248.3    8594.0    1242.1    8620.1
GR   1240.0    8738.8    1242.0    8815.6    1242.0    8851.7    1242.0    9074.3    1242.0    9245.4
GR   1242.0    9424.4    1242.0    9530.9    1242.0    9633.1    1241.1    9749.0    1241.7    9829.2
GR   1246.4    9890.1    1251.2    9934.4    1253.1    10000.0   1253.6    10241.8   1254.7    10473.2
GR   1252.0    10622.1   1248.6    10642.2   1246.2    10848.0   1243.1    11093.0   1244.4    11223.3
GR   1248.5    11287.1   1249.7    11383.3   1250.3    11473.5   1252.9    11507.8   1251.9    11549.1
GR   1252.9    11656.8   1251.7    11981.5   1252.4    12095.8   1252.1    12382.7   1249.7    12486.7
GR   1251.5    12597.8   1251.7    12691.7   1251.9    12794.9   1249.7    12841.7   1250.1    12925.1
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GR   1257.0    13004.1     1257.6    13055.1     1256.3    13112.3     1257.9    13146.0     1257.7    13311.1
GR   1257.7    13596.9     1258.7    13763.8     1255.5    13817.6     1253.9    14053.2     1253.1    14329.5
GR   1256.4    14406.1     1255.3    14553.3     1254.6    14725.5     1254.1    14964.9     1255.7    15011.5
GR   1269.2    15068.3     1262.4    15107.0     1268.7    15149.1     1272.2    15222.6     1272.5    15318.6

NC                                      0.1         0.3
NH      6.       0.040     7156.5     0.075     7521.6       0.025    10310.4       0.035    10869.7       0.025
NH   11597.      0.040    15810.1
ET                            4.1     8490.    12200.
X1   32.862       89.0     8493.6    11352.7      890.       910.       880.
X2                                                                                                          15.
X3     10.0
GR   1257.3     5673.0     1256.9     5885.8     1255.9     5897.5     1256.1     6458.3     1257.0     6469.0
GR   1257.0     6567.0     1255.3     6596.5     1253.9     6767.5     1255.2     6801.0     1255.3     7156.5
GR   1255.0     7511.5     1257.3     7521.6     1251.0     7552.4     1251.0     7587.9     1251.0     7600.3
GR   1251.0     7619.5     1251.0     7657.3     1251.0     7714.1     1251.0     7775.4     1251.0     7863.0
GR   1251.0     7960.0     1251.0     8122.2     1247.6     8240.3     1244.3     8370.2     1250.4     8404.2
GR   1249.1     8435.3     1255.8     8454.2     1255.8     8493.6     1246.4     8515.5     1244.7     8597.9
GR   1240.4     8646.4     1242.8     8764.9     1246.4     9019.4     1242.9     9074.0     1246.7     9099.6
GR   1248.3     9173.8     1243.5     9219.8     1242.1     9270.3     1250.0     9302.4     1253.9     9369.8
GR   1254.7     9497.1     1256.1     9553.9     1256.4     9672.1     1253.4     9732.9     1252.2     9873.5
GR   1253.4     9905.7     1253.5    10000.1     1252.5    10130.0     1254.3    10161.7     1250.7    10255.9
GR   1252.8    10310.4     1253.4    10421.7     1254.0    10549.1     1255.3    10741.5     1253.3    10815.0
GR   1253.3    10869.7     1245.6    11004.6     1244.7    11206.5     1248.6    11294.3     1248.1    11352.7
GR   1251.0    11438.2     1249.7    11544.6     1255.4    11597.0     1253.9    11818.5     1255.5    11842.8
GR   1255.5    12099.6     1254.9    12438.8     1254.6    12753.2     1252.7    12930.9     1259.9    13002.8
GR   1259.1    13215.7     1255.7    13289.1     1255.7    13582.4     1256.1    13817.8     1257.1    14118.9
GR   1256.5    14454.7     1255.5    14780.6     1269.8    14816.2     1272.1    14851.9     1269.8    14924.7
GR   1266.1    14959.5     1264.5    14993.0     1267.9    15019.8     1264.8    15133.6     1270.2    15209.1
GR   1273.7    15321.3     1277.5    15510.2     1275.1    15699.6     1277.9    15810.1

NH      6.       0.040     7156.5     0.075     7521.6       0.025    10310.4       0.035    10869.7       0.025
NH   11597.      0.040    15810.1
ET                            4.1     8490.    12200.
X1   32.863                                       5.         5.         5.
X2                                                                                                          15.

NH      2.       0.025    11602.4     0.035    15441.4
ET                            4.1     8280.    11600.
X1   33.023       75.      8281.2    11327.7      870.       880.       850.
X2                                                                                                          15.
X3     10.
GR   1258.8     5930.0     1258.6     6404.9     1258.5     6676.1     1257.3     6705.0     1257.9     6794.0
GR   1257.0     7213.2     1257.5     7609.3     1258.9     7620.5     1249.0     7673.7     1249.0     7729.4
GR   1249.0     7761.5     1249.0     7836.0     1249.0     7923.2     1249.0     7941.5     1249.0     8013.3
GR   1249.0     8130.8     1249.0     8172.3     1249.0     8205.3     1258.3     8259.4     1258.3     8281.2
GR   1248.7     8304.0     1249.3     8410.8     1248.2     8487.8     1240.1     8525.6     1241.4     8662.2
GR   1239.5     8805.4     1254.8     8887.7     1253.1     9147.5     1254.2     9205.2     1252.1     9362.9
GR   1247.4     9404.2     1253.5     9469.2     1254.9     9616.1     1255.5     9731.6     1253.7     9944.8
GR   1255.2    10000.1     1256.4    10060.1     1256.3    10325.7     1256.0    10493.4     1254.5    10682.1
GR   1255.9    10821.3     1255.9    10916.1     1250.9    10943.6     1246.8    11168.7     1248.2    11248.3
GR   1245.9    11327.7     1247.4    11418.9     1246.2    11469.8     1249.4    11522.8     1250.0    11602.4
GR   1255.7    11702.8     1256.5    11875.9     1257.8    12015.3     1256.6    12279.3     1256.6    12414.2
GR   1259.7    12496.7     1259.4    12585.4     1260.6    12654.6     1258.9    12742.9     1260.0    12912.4
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GR   1257.8    12985.6     1256.9    13257.1     1257.9    13441.2     1256.5    13537.8     1258.4    13594.8
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GR   1258.4    13827.5    1257.8    14130.1    1257.6    14391.6    1259.6    14658.4    1259.7    14830.4
GR   1260.7    14890.8    1259.9    15007.4    1263.4    15151.3    1262.2    15330.4    1268.0    15441.4

NH     2.       0.025    11821.5     0.035    16213.3
ET                         4.1      7862.     11562.
X1   33.205      71.      8080.8    11345.8     950.       920.       890.
X2                                                                                                   15.
GR   1262.9     6050.0    1262.9     6481.1    1262.9     6948.6    1262.9     7258.2    1262.9     7286.3
GR   1261.5     7395.1    1260.7     7552.4    1259.2     7583.0    1259.3     7668.1    1257.1     7694.4
GR   1261.0     7743.9    1259.5     7771.0    1250.3     7839.8    1249.0     8080.8    1246.1     8206.0
GR   1242.3     8266.0    1245.7     8435.0    1243.6     8518.2    1240.9     8625.3    1253.3     8677.7
GR   1254.5     8728.3    1254.4     8933.7    1255.1     9150.0    1256.4     9561.0    1254.8     9579.5
GR   1254.8     9613.6    1256.5     9652.3    1258.2     9890.5    1256.6     9933.9    1257.5    10000.5
GR   1258.1    10047.9    1257.8    10281.3    1256.4    10400.7    1257.2    10564.3    1257.2    10774.7
GR   1254.7    10850.9    1249.4    10910.3    1251.0    10989.4    1249.1    11012.6    1251.6    11070.8
GR   1250.9    11172.0    1254.8    11195.4    1256.9    11277.1    1255.8    11332.6    1251.6    11345.8
GR   1249.8    11467.9    1248.7    11673.0    1250.6    11821.5    1260.8    11861.9    1261.2    12146.6
GR   1260.3    12509.5    1257.8    12711.3    1259.0    13001.7    1259.9    13096.4    1257.5    13402.7
GR   1259.6    13478.0    1259.9    13684.9    1258.0    13930.7    1258.7    14333.2    1259.0    14836.6
GR   1259.9    15000.7    1268.3    15095.0    1269.0    15155.2    1269.0    15255.2    1270.1    15403.4
GR   1270.2    15587.0    1272.6    15727.5    1271.0    15784.5    1274.9    15928.1    1275.0    16094.8
GR   1274.5    16213.3

NH     2.       0.025    11953.6     0.035    16255.4
ET                         4.1      7749.     11599.
X1   33.385      60.      7749.3    11448.0     960.       940.       920.
X2                                                                                                   15.
X3    10.
GR   1265.7     7670.0    1265.7     7706.7    1265.1     7749.3    1250.9     7771.9    1247.4     7902.4
GR   1242.9     8030.8    1244.8     8178.3    1250.9     8259.7    1249.7     8297.4    1254.5     8332.6
GR   1254.7     8389.5    1252.8     8471.2    1247.7     8706.7    1252.6     8732.4    1255.2     8795.1
GR   1257.1     8816.9    1256.3     8975.0    1255.2     9130.6    1252.6     9152.0    1253.2     9283.8
GR   1256.7     9307.0    1257.3     9437.1    1257.3     9600.0    1257.6     9826.4    1256.9    10000.0
GR   1257.6    10043.5    1257.6    10236.0    1258.7    10418.1    1256.6    10495.4    1257.6    10640.3
GR   1254.1    10662.4    1251.9    10816.0    1255.4    10836.6    1255.4    10907.9    1253.7    11121.8
GR   1255.2    11146.7    1257.3    11448.0    1251.9    11468.2    1249.4    11622.6    1251.6    11863.4
GR   1249.8    11953.6    1256.0    11997.2    1256.0    12047.4    1260.3    12068.7    1260.3    12233.3
GR   1258.8    12406.6    1259.0    12653.5    1258.2    13092.7    1259.4    13482.6    1259.4    13898.7
GR   1258.9    14389.5    1258.9    14733.2    1259.3    15155.4    1270.0    15196.3    1271.4    15366.4
GR   1271.3    15481.6    1267.0    15498.0    1268.2    15771.9    1272.5    16117.2    1274.4    16255.4

NH     2.       0.025    11776.1     0.035    16082.5
ET                         4.1      7730.     11600.
X1   33.557      48.      7752.4    11413.9     880.       920.       890.
X2                                                                                                   15.
GR   1265.2     7725.8    1244.5     7752.4    1243.5     7838.6    1245.1     7948.3    1254.7     8128.4
GR   1253.7     8222.5    1255.9     8300.4    1256.1     8412.7    1254.9     8593.7    1252.1     8732.2
GR   1254.0     8778.9    1254.6     8853.1    1252.8     9059.6    1254.3     9139.5    1256.8     9190.8
GR   1256.5     9291.2    1255.6     9325.0    1255.9     9484.0    1258.8     9510.2    1258.8     9684.1
GR   1259.1     9926.2    1258.2    10000.1    1258.3    10439.7    1258.4    10684.7    1253.4    10731.4
GR   1256.4    10961.3    1257.6    11231.8    1252.0    11413.9    1249.0    11654.6    1252.3    11776.1
GR   1262.6    11842.6    1261.4    12295.6    1261.1    12667.7    1260.8    12731.0    1262.6    12833.0
GR   1261.8    13229.9    1260.5    13721.6    1260.0    14164.8    1259.5    14611.5    1258.8    15023.3
1
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GR   1260.7    15244.4    1262.6    15363.4    1262.6    15484.1    1271.0    15548.2    1273.2    15723.1
GR   1276.1    15881.8    1276.7    15991.4    1277.5    16082.5
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NH      2.       0.025   11232.5     0.035    15964.1
ET                          4.1     7794.     11450.
X1   33.726        54.    7794.3   11232.5      890.       940.       930.
X2                                                                                                   15.
GR   1265.0     6694.0   1264.8    7285.9    1265.5     7305.9    1264.4     7756.9    1265.9    7794.3
GR   1258.2     7813.9   1243.9    7837.4    1243.9     7878.4    1246.3     7923.9    1249.1    8032.2
GR   1248.1     8091.2   1251.7    8213.6    1253.6     8297.3    1257.9     8497.4    1256.4    8688.5
GR   1251.6     8876.7   1258.2    8965.4    1258.2     9067.9    1255.7     9092.5    1254.7    9257.3
GR   1257.6     9398.2   1258.4    9620.2    1260.7     9643.8    1259.4     9847.2    1260.6   10000.0
GR   1259.1    10197.2   1260.2   10373.8    1259.4    10494.3    1254.3    10584.1    1253.5   10988.6
GR   1248.9    11187.1   1249.5   11232.5    1259.7    11308.6    1257.6    11394.5    1260.1   11446.8
GR   1260.8    11508.8   1263.2   11536.1    1262.4    11772.5    1262.3    11843.1    1264.8   11906.8
GR   1264.4    12055.8   1261.3   12127.4    1262.5    12193.3    1262.9    12313.7    1262.6   12571.8
GR   1263.1    13080.0   1260.8   13542.2    1260.7    14150.7    1258.8    14609.0    1258.9   15051.4
GR   1278.0    15122.2   1275.8   15418.1    1275.2    15660.4    1276.8    15964.1

NH      2.       0.025   11337.6     0.035    15858.8
ET                          4.1     8030.     11300.
X1   33.892        65.    8069.2   11130.4      870.       910.       880.
X2                                                                                                   15.
GR   1268.1     6914.0   1270.3    6981.2    1268.5     7013.3    1268.0     7180.4    1266.2    7303.0
GR   1266.6     7903.3   1267.1    8020.8    1247.6     8069.2    1251.3     8209.1    1249.2    8341.7
GR   1245.7     8574.2   1247.4    8605.9    1259.1     8659.6    1262.0     8698.0    1260.7    8894.2
GR   1259.3     9002.6   1261.3    9094.4    1259.7     9179.5    1262.3     9230.9    1259.1    9263.6
GR   1255.5     9326.8   1257.8    9469.8    1257.5     9562.9    1260.5     9581.8    1262.9    9628.7
GR   1262.7     9857.7   1262.1   10000.3    1262.3    10130.1    1259.1    10143.7    1258.3   10274.4
GR   1254.0    10489.7   1252.5   10582.0    1254.6    10643.0    1255.4    10854.7    1254.0   10971.9
GR   1256.6    11018.6   1255.5   11130.4    1260.6    11154.2    1260.8    11266.0    1264.9   11337.6
GR   1263.3    11464.2   1265.3   11617.8    1266.1    11665.4    1265.3    11866.3    1262.3   11970.9
GR   1263.6    12134.4   1265.4   12201.8    1264.4    12450.3    1264.1    12673.4    1263.7   12972.5
GR   1263.8    13551.0   1264.2   13992.6    1264.2    14270.8    1267.7    14373.6    1268.0   14586.0
GR   1271.3    14772.7   1272.0   14870.4    1268.9    14875.7    1272.8    14949.8    1274.5   15131.4
GR   1276.0    15299.2   1281.1   15356.8    1278.1    15548.7    1279.6    15732.9    1280.3   15858.8

NH      2.       0.025   11315.7     0.035    15690.1
ET                          4.1     8450.     11220.
X1   34.091        79.0   8453.8   10924.9      900.       910.       890.
X2                                                                                                   15.
X3      10.      1248.
GR   1270.7     7200.4   1271.3    7380.6    1272.7     7436.2    1270.3     7446.1    1268.7    7632.6
GR   1258.9     7640.6   1258.9    7944.7    1260.6     7970.1    1277.7     7997.3    1270.8    8017.0
GR   1271.1     8057.9   1276.7    8128.7    1267.4     8146.2    1259.9     8153.0    1257.7    8175.0
GR   1270.1     8202.0   1267.8    8218.5    1269.9     8272.8    1241.0     8326.5    1211.1    8379.5
GR   1212.9     8453.8   1214.3    8464.9    1208.6     8483.3    1208.3     8569.8    1204.9    8615.9
GR   1202.4     8632.1   1202.0    8657.6    1229.6     8707.0    1231.4     8775.7    1249.3    8827.1
GR   1253.1     8977.9   1258.2    9034.4    1261.8     9132.8    1263.5     9246.2    1263.5    9333.9
GR   1260.7     9428.9   1258.8    9620.8    1260.1     9670.9    1259.6     9779.4    1257.6   10000.1
GR   1259.3    10035.6   1260.0   10121.8    1257.1    10145.4    1255.1    10231.5    1256.0   10372.7
GR   1259.9    10399.3   1261.1   10454.6    1259.6    10583.4    1261.4    10620.6    1260.3   10696.7
GR   1264.3    10724.7   1264.3   10790.8    1261.5    10803.5    1260.5    10924.9    1259.5   11100.1
GR   1262.9    11123.2   1261.8   11164.1    1263.1    11193.0    1263.2    11260.1    1268.1   11315.7
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GR   1266.8    11477.3   1267.5   11558.3    1266.5    11831.2    1263.9    11870.1    1263.9   12024.1
GR   1266.3    12123.4   1267.4   12205.1    1267.3    12458.8    1267.5    12707.7    1267.3   13019.6
GR   1266.5    13408.7   1266.8   13578.7    1266.4    14033.1    1267.7    14452.2    1269.4   14847.8
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GR   1270.9    15233.9    1273.4    15503.5    1281.6    15547.5    1282.6    15690.1

NH     2.       0.025    10095.7     0.035    15323.9
ET                          4.1     8740.     11110.
X1   34.271      53.      8723.0    11198.5     910.       870.       880.
X2                                                                                      15.
GR   1273.4    7220.0     1273.4     7405.8    1273.9     7430.8    1273.9     7453.2    1272.9     7470.2
GR   1272.9    7933.7     1271.0     7986.6    1270.3     8334.8    1279.9     8371.4    1271.0     8412.5
GR   1271.0    8448.2     1278.9     8480.6    1271.4     8537.5    1271.5     8592.1    1271.3     8608.8
GR   1271.5    8627.2     1270.9     8671.3    1275.9     8695.3    1275.5     8723.0    1255.1     8768.6
GR   1250.3    8814.9     1248.0     8859.6    1250.6     8880.7    1250.0     8972.6    1251.8     9111.9
GR   1257.8    9333.6     1258.3     9528.6    1260.0     9813.2    1259.7    10000.2    1260.0    10065.7
GR   1264.7   10095.7     1265.3    10395.5    1263.9    10582.1    1265.4    10664.1    1262.1    10702.8
GR   1260.8   10860.0     1262.1    10913.9    1261.9    10994.0    1265.1    11016.6    1266.0    11150.1
GR   1270.3   11198.5     1268.6    11242.8    1269.6    11429.3    1265.5    11670.4    1268.6    11822.1
GR   1269.0   12061.3     1269.0    12399.8    1268.5    12874.6    1268.5    13584.5    1268.0    14027.7
GR   1268.6   14464.2     1270.0    15029.6    1270.3    15323.9

NH     2.       0.025    10095.7     0.035    15323.9
ET                          4.1     8740.     11110.
X1   34.272                                       5.         5.         5.
X2                                                                                      15.

NH     3.       0.025    10955.6     0.035    11869.4     0.050    15240.5
ET                          4.1     8870.     11140.
X1   34.453      51.      8920.6    11281.7     900.       900.       900.
X2                                                                                      15.
GR   1278.8    7200.0     1279.2     7447.8    1279.5     7474.3    1279.5     7486.7    1277.5     7505.4
GR   1276.3    7586.1     1276.3     7623.9    1276.2     7717.6    1276.1     7739.1    1275.8     7861.4
GR   1276.2    8075.3     1275.1     8258.2    1273.2     8479.0    1270.1     8596.3    1274.1     8630.0
GR   1272.3    8724.8     1275.5     8765.6    1276.5     8863.2    1254.8     8920.6    1252.9     9139.4
GR   1249.5    9201.9     1250.5     9302.2    1254.6     9352.1    1261.7     9453.3    1262.1     9591.1
GR   1261.4    9763.7     1260.0     9798.4    1266.8     9835.8    1266.7    10000.1    1265.4    10473.4
GR   1262.3   10586.9     1261.4    10926.3    1268.0    10955.6    1268.6    11066.9    1262.5    11194.8
GR   1267.8   11222.0     1271.5    11281.7    1271.1    11442.9    1264.7    11583.6    1268.0    11660.6
GR   1267.3   11747.5     1269.7    11869.4    1269.5    12096.5    1271.3    12461.3    1269.6    13103.6
GR   1269.2   13441.4     1269.8    14006.0    1270.0    14535.0    1271.6    14903.5    1275.7    14991.1
GR   1274.4   15240.5

NH     3.       0.025    10756.5     0.035    11685.4     0.050    14912.0
ET                          4.1     9060.     11170.
X1   34.642      63.0     9095.1    11178.9     1000.      1070.      1020.
X2                                                                                      15.
GR   1285.3    7237.0     1286.1     7477.4    1286.5     7508.6    1286.5     7523.0    1285.9     7734.4
GR   1285.1    7810.8     1282.5     7870.3    1280.1     8076.1    1280.1     8302.4    1274.0     8327.9
GR   1274.0    8525.8     1274.0     8538.0    1274.0     8552.7    1276.2     8564.5    1275.7     8584.3
GR   1274.0    8614.1     1284.8     8649.2    1284.9     8666.6    1276.4     8700.1    1277.1     8735.4
GR   1284.0    8812.7     1281.8     8946.5    1278.2     8983.4    1274.4     9056.5    1252.9     9095.1
GR   1251.1    9244.8     1247.9     9342.9    1254.9     9372.4    1260.2     9441.7    1260.2     9563.9
GR   1262.5    9736.8     1262.0     9836.1    1264.8     9904.5    1264.7    10000.1    1267.9    10148.1
GR   1268.1   10156.8     1266.3    10168.5    1266.1    10341.3    1262.5    10614.2    1261.8    10719.1
1
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GR   1267.5   10756.5     1268.9    10900.9    1271.5    10985.7    1268.6    11022.7    1268.5    11060.7
GR   1272.8   11178.9     1268.7    11241.4    1270.7    11299.9    1264.7    11448.3    1271.3    11518.4
GR   1268.4   11599.2     1273.2    11685.4    1272.9    11907.2    1269.8    11988.1    1273.3    12075.3
GR   1271.5   12237.3     1272.2    12413.3    1272.3    12609.8    1272.7    12867.2    1271.9    13389.1
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GR   1272.6    13865.1    1271.8    14326.9    1272.4    14912.0

NH     4.       0.040    9126.9     0.025    10878.9     0.035    12257.9     0.050    14460.1
ET                         4.1     9100.     11180.
X1   34.856      59.     9126.9    11496.6    1160.     1000.     1060.
X2                                                                                          15.
GR   1292.0    7381.0    1291.5    7565.8    1289.6    7626.2    1290.3    7951.4    1287.6    8165.0
GR   1285.4    8506.6    1282.3    8799.2    1286.5    8816.1    1281.6    8843.9    1271.1    8862.0
GR   1271.1    8871.8    1281.0    8898.8    1278.8    8949.9    1276.9    9020.7    1256.4    9050.9
GR   1261.4    9073.7    1261.4    9092.2    1255.4    9126.9    1251.9    9290.4    1255.9    9406.5
GR   1257.6    9695.0    1262.0    9914.9    1263.1   10000.1    1266.1   10125.0    1263.8   10355.2
GR   1269.0   10442.4    1267.1   10518.7    1269.6   10679.5    1268.3   10735.3    1263.7   10756.5
GR   1264.1   10855.0    1271.5   10878.9    1272.2   11023.1    1270.4   11099.0    1272.8   11130.9
GR   1272.3   11183.2    1269.0   11202.0    1270.1   11255.1    1273.3   11330.4    1272.5   11457.9
GR   1274.4   11496.6    1269.1   11672.0    1273.7   11701.6    1275.2   11791.1    1274.0   11966.6
GR   1274.7   12038.8    1273.5   12128.1    1271.0   12149.6    1270.8   12201.7    1274.6   12257.9
GR   1275.1   12471.5    1275.8   12725.3    1275.3   12993.4    1275.5   13318.6    1274.0   13857.7
GR   1272.0   14166.8    1273.1   14248.8    1281.6   14335.2    1282.1   14460.1

NH     4.       0.040    8857.5     0.025    11551.1     0.035    12538.1     0.050    14721.0
ET                         4.1     8850.     11160.
X1   35.136      68.     9646.3    10892.1    1250.      690.      840.
X2                                                                                          15.
GR   1303.1    7384.0    1301.1    7652.2    1304.3    7671.1    1299.2    7682.3    1304.7    7699.6
GR   1304.7    7710.2    1299.0    7718.5    1299.3    7772.7    1306.1    7788.0    1306.3    7810.3
GR   1298.9    7842.9    1296.5    8041.2    1296.1    8365.9    1295.1    8435.0    1291.5    8439.7
GR   1287.6    8603.6    1289.7    8640.9    1285.4    8694.1    1284.0    8712.0    1284.0    8735.4
GR   1288.4    8770.3    1291.8    8796.7    1290.0    8830.8    1260.7    8857.5    1263.8    8955.7
GR   1263.3    9087.6    1263.0    9238.4    1266.5    9330.6    1268.1    9469.6    1269.5    9646.3
GR   1263.7    9681.2    1262.4    9728.5    1265.1    9778.6    1264.3   10000.2    1258.4   10273.7
GR   1256.6   10383.7    1256.3   10549.3    1270.2   10594.1    1269.9   10776.7    1266.3   10815.5
GR   1265.4   10874.2    1273.9   10892.1    1273.9   10955.9    1273.1   11115.0    1274.3   11150.3
GR   1272.0   11192.3    1272.3   11288.4    1275.2   11342.3    1274.7   11551.1    1269.6   11739.9
GR   1275.0   11783.4    1275.7   11835.4    1274.7   11917.6    1276.3   11992.6    1277.0   12172.8
GR   1272.2   12225.8    1274.7   12268.4    1276.3   12538.1    1276.7   12841.1    1276.0   13085.0
GR   1275.0   13460.3    1273.7   13913.9    1277.8   13987.9    1275.7   14178.0    1276.8   14309.8
GR   1279.3   14344.1    1282.3   14531.7    1277.6   14721.0

NH     4.       0.040    8745.8     0.025    11573.0     0.035    12068.2     0.050    14676.8
ET                         4.1     8720.     11250.
X1   35.297      77.    10436.3    10969.6    1200.      670.      800.
X2                                                                                          15.
GR   1305.5    7009.0    1303.9    7198.4    1311.8    7231.7    1312.4    7258.8    1304.1    7276.0
GR   1304.1    7293.3    1299.3    7301.0    1299.3    7369.4    1307.0    7387.0    1308.3    7457.1
GR   1303.4    7485.4    1303.1    7532.1    1305.8    7546.9    1302.3    7579.6    1302.9    7640.6
GR   1305.8    7685.9    1303.5    7811.9    1295.6    7845.2    1302.5    7876.0    1298.7    8112.7
GR   1293.9    8290.2    1298.4    8326.6    1296.6    8372.8    1284.0    8408.9    1284.0    8439.1
GR   1292.7    8476.7    1298.5    8516.8    1295.0    8535.0    1298.0    8572.4    1286.9    8685.1
GR   1266.2    8745.8    1264.4    8784.1    1268.9    8917.9    1272.3    8940.4    1264.4    8986.0
GR   1266.3    9119.8    1265.4    9434.5    1269.9    9508.6    1269.9    9651.5    1271.9    9751.4
1
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GR   1269.2   10000.2    1268.6   10038.6    1266.7   10081.8    1265.5   10292.1    1267.4   10321.0
GR   1266.8   10436.3    1263.7   10495.5    1258.4   10523.5    1258.5   10679.9    1255.9   10803.8
GR   1261.9   10835.2    1264.8   10936.4    1274.0   10969.6    1275.9   11001.3    1276.3   11052.6
GR   1274.5   11218.9    1277.3   11267.6    1274.9   11310.1    1276.4   11453.7    1275.9   11573.0
GR   1273.2   11643.7    1274.5   11856.8    1276.3   11941.4    1274.9   12015.6    1278.2   12068.2
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GR   1276.7    12207.5    1277.3    12557.2    1276.6    13020.9    1276.6    13425.7    1277.0    13519.0
GR   1283.8    13573.2    1285.0    13685.1    1285.4    13814.2    1282.2    14001.5    1281.0    14185.6
GR   1282.2    14398.8    1280.5    14676.8

NH     3.       0.040    8882.2      0.025   11424.4      0.050   14062.6
ET                          4.1     8850.    11350.
X1   35.480      58.0   10498.8    11026.9    1060.       720.      950.
X2                                                                                                   15.
GR   1296.3     7087.0    1299.0     7264.6    1299.0     7532.5    1306.3     7590.5    1305.7     7642.7
GR   1296.6     7657.2    1296.6     7730.6    1306.1     7750.7    1306.2     7781.7    1304.9     7856.1
GR   1297.3     7879.2    1297.1     8044.2    1297.5     8232.1    1288.3     8269.1    1298.1     8304.8
GR   1290.8     8448.0    1284.0     8491.2    1284.0     8534.0    1289.4     8583.6    1276.3     8639.5
GR   1279.9     8670.0    1280.0     8848.8    1269.5     8882.2    1265.6     8971.2    1265.7     9321.9
GR   1269.2     9357.7    1271.3     9548.9    1268.0     9691.2    1272.5     9717.1    1273.4     9911.5
GR   1269.8    10000.3    1267.9    10090.5    1270.9    10355.4    1269.0    10498.8    1262.3    10579.4
GR   1256.4    10599.9    1256.3    10670.0    1259.0    10824.7    1263.8    10882.7    1265.9    11026.9
GR   1265.3    11168.5    1263.1    11209.4    1267.4    11304.1    1273.0    11342.8    1278.2    11424.4
GR   1279.3    11562.6    1277.0    11668.9    1279.9    11715.0    1278.2    11798.3    1279.0    12057.6
GR   1278.1    12327.0    1277.8    12726.1    1280.2    12798.7    1279.4    13012.1    1280.9    13256.0
GR   1282.8    13466.0    1284.6    13723.8    1283.0    14062.6
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GREENFIELD RD.

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NH     2.       0.025   11393.7      0.040   13726.0
QT     2.     235000.   235000.
ET                          4.1     8790.    11400.
X1   35.661      59.0   10209.2    11055.    1020.       900.      950.
X2                                                                                                   15.
GR   1317.2     7051.0    1315.9     7188.1    1308.7     7250.4    1307.4     7300.5    1311.6     7316.3
GR   1311.6     7333.9    1307.2     7347.0    1303.9     7436.6    1303.3     7555.7    1310.3     7581.2
GR   1309.0     7604.9    1297.8     7619.5    1297.8     7670.5    1306.9     7685.4    1305.8     7727.6
GR   1298.8     7755.6    1295.9     7818.2    1296.1     7886.5    1293.4     7929.0    1287.8     8176.7
GR   1292.8     8211.3    1285.6     8270.5    1284.8     8456.8    1287.1     8494.5    1276.7     8531.5
GR   1278.7     8637.2    1282.1     8664.6    1281.1     8797.6    1271.8     8836.5    1272.7     9032.8
GR   1262.8     9103.9    1265.3     9261.9    1267.7     9278.4    1271.2     9438.4    1273.2     9670.9
GR   1273.6     9802.8    1271.9     9883.0    1274.3    10000.3    1274.5    10112.9    1275.5    10209.2
GR   1270.0    10374.8    1263.5    10587.4    1258.2    10628.8    1258.0    10780.4    1266.1    10811.4
GR   1269.6    11055.0    1266.0    11239.4    1267.6    11393.7    1280.6    11412.8    1281.8    11523.2
GR   1281.6    11782.9    1280.4    12036.2    1283.9    12275.3    1286.0    12322.4    1285.6    12568.4
GR   1286.4    12799.3    1287.1    13083.7    1285.9    13392.5    1284.0    13726.0

NH     2.       0.025   10682.4      0.040   10862.5
ET                          4.1     8750.    10850.
X1   36.011      48.0    9618.6    10862.5    1810.      1840.      1820.
X2                                                                                                   15.
X3    10.
GR   1301.9     6653.0    1300.7     6843.6    1314.2     6932.1    1316.5     7001.3    1309.0     7021.3
GR   1323.5     7111.7    1320.0     7219.7    1307.4     7288.2    1307.9     7317.7    1297.8     7350.4
GR   1297.8     7489.1    1308.0     7539.1    1307.2     7706.3    1302.5     7799.7    1304.8     7843.4
GR   1297.7     7946.5    1284.7     7987.5    1284.0     8043.6    1288.1     8097.6    1287.7     8130.1
GR   1297.9     8203.2    1278.2     8241.4    1278.5     8288.2    1294.7     8323.3    1295.5     8347.6
1
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GR   1287.5     8376.7    1285.0     8513.2    1286.9     8686.9    1272.0     8725.7    1272.0     8810.4
GR   1272.0     8859.8    1272.0     8918.6    1275.5     9023.0    1276.9     9206.3    1271.5     9225.7
GR   1270.0     9342.2    1273.1     9359.8    1273.8     9580.9    1275.5     9618.6    1273.2     9857.6
GR   1270.8    10000.2    1267.3    10096.9    1267.3    10232.3    1265.3    10476.8    1260.5    10682.4
GR   1267.9    10713.9    1270.2    10817.7    1287.4    10862.5
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NH      2.       0.025    10641.0      0.040     12423.8
ET                           4.1     8730.      10700.
X1   36.203        55.0    9495.8    10769.        920.        930.        920.
X2                                                                                                          15.
GR   1316.9     6566.0     1310.7     6651.4      1308.6      6713.4      1306.7      6794.9      1314.9     6854.9
GR   1305.8     6883.5     1298.9     6909.7      1299.0      6975.0      1306.2      6994.2      1309.2     7130.6
GR   1308.2     7254.7     1303.5     7370.0      1293.5      7427.2      1292.1      7572.0      1295.4     7603.6
GR   1296.2     7685.2     1292.2     7710.5      1299.3      7752.9      1295.7      7837.5      1288.4     7892.9
GR   1288.5     8036.3     1299.0     8115.7      1277.2      8155.5      1276.8      8200.0      1297.0     8247.0
GR   1287.4     8312.0     1284.6     8535.1      1283.2      8732.3      1274.8      8748.6      1276.6     9099.0
GR   1274.6     9323.6     1280.1     9385.0      1281.8      9495.8      1276.2      9536.7      1277.6     9778.8
GR   1270.5    10000.1     1266.2    10041.3      1264.5     10340.0      1262.1     10424.8      1264.0    10569.3
GR   1270.8    10599.4     1263.5    10641.0      1269.4     10722.9      1288.0     10769.0      1288.0    10794.5
GR   1288.0    10852.3     1288.0    10882.1      1288.0     10973.7      1288.0     11015.6      1288.0    11134.4
GR   1288.0    11322.3     1287.2    11590.0      1286.7     11924.0      1286.4     12170.9      1287.0    12423.8

NH      2.       0.025    10719.4      0.040     11318.2
ET                           4.1     8800.      10750.
X1   36.403        40.    9583.8    10761.5       1050.       1030.       1020.
X2                                                                                                          15.
GR   1310.1     6981.4     1307.9     7137.8      1305.2      7253.3      1310.7      7269.3      1300.0     7298.5
GR   1300.0     7349.1     1306.8     7363.8      1307.7      7386.3      1301.4      7439.3      1298.8     7645.7
GR   1296.2     7867.1     1293.0     8158.0      1290.5      8284.9      1292.6      8299.7      1287.8     8319.5
GR   1292.3     8338.7     1290.9     8368.5      1305.5      8419.6      1279.2      8469.9      1277.3     8524.0
GR   1301.4     8576.4     1291.4     8611.9      1288.0      8733.1      1281.5      8836.3      1276.5     8853.7
GR   1277.1     9012.5     1279.8     9325.4      1283.9      9583.8      1280.8      9820.8      1277.1     9835.0
GR   1277.8     9950.8     1273.8     9983.0      1272.8     10000.0      1270.2     10106.9      1266.0    10382.8
GR   1265.3    10719.4     1287.0    10761.5      1292.3     10796.4      1293.6     11045.2      1295.2    11318.2

NH      2.       0.025    10719.4      0.040     11318.2
ET                           4.1     8800.      10750.
X1   36.404                                          5.          5.          5.
X2                                                                                                          15.

NH      3.       0.040     9065.9      0.025     10590.8      0.040     11159.8
ET                           4.1     9030.      10650.
X1   36.595        45.    9914.6    10666.5       1020.        970.        970.
X2                                                                                                          15.
GR   1326.6     7256.4     1321.6     7502.4      1318.7      7570.0      1320.4      7609.0      1320.8     7655.3
GR   1314.9     7810.6     1308.0     7958.0      1317.8      7980.3      1318.5      7998.3      1309.4     8017.2
GR   1302.3     8033.8     1302.3     8080.6      1309.2      8096.8      1309.7      8139.5      1305.8     8154.5
GR   1309.4     8218.2     1308.8     8320.0      1310.7      8405.3      1309.5      8510.8      1297.5     8583.8
GR   1297.6     8632.5     1291.1     8664.9      1299.3      8706.0      1310.6      8738.5      1280.2     8791.4
GR   1278.9     8838.8     1306.0     8893.5      1292.7      8930.7      1290.3      9001.7      1284.0     9048.5
GR   1278.5     9065.9     1280.4     9224.0      1280.3      9429.4      1280.0      9696.2      1280.0     9914.6
GR   1275.5    10000.0     1275.4    10057.3      1270.1     10145.9      1270.6     10395.6      1262.6    10454.4
GR   1266.5    10525.9     1265.7    10590.8      1294.8     10666.5      1298.1     10924.0      1299.2    11159.8
1
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ET                           4.1     9030.      10650.
NH      3.       0.040     9065.9      0.025     10590.8      0.040     11159.8
X1   36.596                                          5.          5.          5.
X2                                                                                                          15.

NH      3.       0.040     9337.0      0.025     10574.6      0.040     10680.3
ET                           4.1     9250.      10650.
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X1   36.775      22.0    10039.    10680.3      980.       940.       940.
X2                                                                                                  15.
GR   1308.3    7824.0    1301.4     8400.0    1301.4     9046.9     1281.4     9098.6     1281.6    9137.4
GR   1300.8    9184.8    1301.2     9223.5    1285.0     9268.0     1286.1     9316.6     1279.0    9337.0
GR   1281.0    9419.6    1280.1     9520.8    1281.8     9799.4     1280.1    10000.0     1280.7   10039.0
GR   1274.1   10060.6    1270.6    10236.0    1268.9    10331.1     1270.2    10369.3     1268.4   10534.4
GR   1265.7   10574.6    1302.3    10680.3

NH      3.      0.040    9438.5      0.025   10743.2       0.040    10831.7
ET                          4.1     9440.    10800.
X1   36.953      33.0    9875.7    10831.7      920.       920.       920.
X2                                                                                                  15.
GR   1312.8    8056.6    1307.4     8195.6    1305.9     8277.2     1309.8     8298.0     1310.2    8314.8
GR   1301.8    8321.7    1301.8     8373.0    1309.4     8381.2     1310.0     8408.5     1300.2    8458.0
GR   1300.7    8504.0    1305.6     8537.0    1300.0     8570.7     1300.2     8662.6     1308.6    8721.4
GR   1309.1    8757.7    1299.3     8805.8    1302.0     8977.3     1304.2     9205.5     1289.9    9308.7
GR   1286.4    9413.8    1278.0     9438.5    1278.9     9462.8     1279.8     9606.0     1278.4    9875.7
GR   1276.2   10000.0    1273.0    10197.6    1269.6    10225.2     1268.4    10390.3     1274.9   10428.8
GR   1275.5   10641.4    1273.6    10743.2    1305.0    10831.7

NH      3.      0.060    9527.2      0.030   10565.5       0.040    12201.5
ET                          4.1     9450.    10800.
X1   37.152      39.0    9429.3    10631.8      930.       910.       990.
X2                                                                                                  15.
X3     10.
GR   1311.2    8124.3    1307.6     8358.3    1312.1     8395.5     1311.9     8421.6     1301.6    8442.3
GR   1301.6    8504.1    1308.4     8520.6    1308.9     8545.5     1303.9     8579.1     1302.9    8635.8
GR   1306.9    8675.1    1303.5     8831.7    1308.5     8921.1     1308.5     9024.6     1306.5    9240.9
GR   1307.2    9429.3    1286.2     9465.9    1285.0     9495.3     1272.9     9527.2     1273.7    9649.9
GR   1274.1    9849.1    1275.8     9942.4    1273.4    10000.0     1278.3    10033.0     1279.5   10188.4
GR   1276.7   10286.8    1274.5    10473.1    1272.5    10565.5     1275.5    10596.1     1288.3   10631.8
GR   1286.8   10718.2    1281.4    10840.3    1280.1    10933.9     1294.3    10999.6     1298.2   11176.6
GR   1299.8   11371.1    1303.4    11666.3    1304.3    11885.9     1303.6    12201.5

NH      3.      0.060    9460.0      0.030   10534.6       0.040    11809.7
ET                          4.1     9351.    10701.
X1   37.328      35.     9388.6    10751.3      930.       910.       940.
X2                                                                                                  15.
X3     10.
GR   1315.1    8386.3    1314.7     8704.0    1302.7     8724.7     1302.7     8783.8     1308.4    8795.8
GR   1309.1    8831.5    1301.2     8885.8    1301.7     9070.6     1304.9     9291.4     1291.0    9354.4
GR   1295.6    9371.2    1290.7     9388.6    1281.2     9443.2     1270.9     9460.0     1270.9    9650.8
GR   1273.1    9669.1    1279.4     9782.8    1280.1     9930.4     1280.7    10000.0     1280.0   10048.6
GR   1278.8   10127.2    1280.2    10237.3    1279.3    10336.6     1277.1    10429.0     1282.6   10534.6
GR   1284.8   10628.8    1285.3    10700.6    1290.2    10751.3     1289.3    10887.5     1291.1   10973.3
GR   1287.3   11027.0    1287.7    11234.9    1305.2    11279.6     1303.6    11537.0     1298.7   11809.7
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NH      3.      0.060    9497.0      0.030   10682.3       0.040    11653.5
ET                          4.1     9450.    10720.
X1   37.523      30.     9368.7    10437.9      910.      1020.       930.
X2                                                                                                  15.
GR   1316.2    8791.3    1310.5     8894.4    1308.2     8972.6     1311.8     8981.7     1312.1    9004.8
GR   1303.9    9016.6    1303.9     9071.4    1309.4     9084.0     1310.0     9116.5     1299.9    9197.8
GR   1300.5    9252.6    1297.4     9368.7    1287.8     9460.8     1273.0     9497.0     1273.3    9578.3
GR   1274.9    9594.5    1279.5    10000.0    1279.4    10367.1     1283.5    10437.9     1284.2   10682.3
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GR   1295.0    10730.7    1296.2    10811.1    1295.8    10984.5    1310.0    11036.5    1311.8    11296.9
GR   1310.1    11383.8    1308.5    11391.1    1309.9    11432.3    1305.9    11611.7    1302.8    11653.5

NH      3.      0.060    9650.1      0.030   10413.4      0.040   11412.5
ET                          4.1     9561.4   10487.3
X1   37.720      31.     9561.4    10487.3     830.       890.       890.
X2                                                                                                    15.
GR   1326.5    9123.3    1311.4    9184.8    1313.0    9230.9    1309.6    9254.0    1303.3    9264.2
GR   1303.3    9324.2    1310.3    9336.3    1311.3    9361.8    1300.3    9400.6    1297.3    9499.9
GR   1292.8    9534.4    1297.9    9561.4    1287.1    9617.1    1274.0    9650.1    1275.4    9708.3
GR   1277.6    9726.4    1278.3    9942.7    1279.0   10000.0    1279.5   10311.3    1275.8   10326.2
GR   1275.8   10413.4    1297.7   10487.3    1298.0   10606.7    1294.0   10652.7    1299.1   10715.2
GR   1298.9   10817.5    1296.5   10882.9    1313.1   10970.4    1313.2   11154.2    1313.5   11364.4
GR   1321.9   11412.5

NH      6.      0.070    9529.5      0.035   10229.6      0.070   10240.0      0.030   10431.6      0.070
NH  10615.      0.040   11385.1
ET                          4.1     9711.2   10615.
X1   37.898      35.0    9711.2    10615.     880.       950.       940.
X2                                                                                                    15.
GR   1376.9    9052.6    1372.7    9118.9    1337.6    9244.1    1309.5    9363.9    1310.9    9384.6
GR   1310.3    9393.8    1310.3    9453.9    1310.3    9464.4    1310.3    9488.9    1301.1    9529.5
GR   1288.5    9711.2    1280.3    9740.8    1281.4    9945.5    1277.7    9966.4    1278.1   10000.0
GR   1278.7   10229.6    1274.5   10240.0    1275.7   10431.6    1279.4   10463.2    1277.2   10526.5
GR   1282.5   10543.9    1283.6   10566.3    1299.2   10615.0    1299.7   10677.1    1293.8   10725.2
GR   1298.6   10757.9    1298.9   10822.8    1302.4   10944.3    1300.7   10982.6    1302.4   10994.8
GR   1303.0   11110.8    1308.3   11151.8    1311.7   11285.3    1312.7   11371.9    1315.1   11385.1

NH      5.      0.035   10000.0      0.060   10210.3      0.030   10438.0      0.070   10753.6      0.040
NH  10972.
ET                          4.1     9700.   10753.6
X1   38.074      32.0    9875.8    10753.6    1020.       970.       980.
X2                                                                                                    15.
GR   1328.1    9136.6    1320.2    9228.4    1319.9    9261.4    1313.6    9294.1    1313.6    9326.8
GR   1311.7    9339.4    1311.7    9397.0    1311.7    9406.0    1311.7    9426.1    1296.8    9460.0
GR   1300.6    9601.9    1296.8    9710.8    1287.4    9744.4    1286.2    9827.2    1287.4    9875.8
GR   1284.9    9946.6    1281.8   10000.0    1278.2   10078.6    1277.0   10101.1    1276.5   10193.5
GR   1276.1   10210.3    1276.1   10438.0    1280.8   10462.3    1277.1   10600.0    1284.1   10626.7
GR   1283.6   10643.2    1301.5   10753.6    1303.3   10825.3    1308.3   10837.9    1308.3   10856.5
GR   1312.3   10876.9    1314.5   10972.0
1
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NH      5.      0.035   10000.0      0.040   10239.1      0.030   10313.5      0.040   10595.5      0.060
NH  10920.
ET                          4.1     9800.   10850.
X1   38.261      30.    10141.9    10880.5     980.       970.       980.
X2                                                                                                    15.
GR   1347.8    9076.3    1339.6    9116.5    1330.7    9227.5    1310.1    9262.3    1310.5    9280.6
GR   1309.6    9285.7    1309.6    9344.2    1309.6    9355.0    1309.6    9385.0    1303.6    9465.4
GR   1294.9    9513.7    1299.9    9548.5    1292.8    9688.3    1286.7    9758.8    1290.2    9834.4
GR   1290.2   10000.0    1291.9   10141.9    1288.4   10180.3    1274.2   10239.1    1274.2   10313.5
GR   1276.3   10330.0    1280.9   10461.7    1276.1   10520.2    1276.0   10595.5    1280.5   10623.4
GR   1284.3   10694.5    1294.7   10768.3    1297.9   10819.9    1311.5   10880.5    1312.3   10920.0

NH      5.      0.035   10000.0      0.050   10319.8      0.030   10534.6      0.040   10808.5      0.030
NH  11539.
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ET                          4.1     9750.     10857.4
X1   38.439      34.     10000.    10857.4      910.       920.       940.
X2                                                                                                  15.
X3    10.
GR   1315.4    8974.6    1309.5    9129.4     1310.6     9182.2     1313.3     9202.3     1310.9    9209.8
GR   1311.1    9224.2    1310.2    9236.2     1310.2     9292.3     1310.2     9308.8     1310.2    9400.0
GR   1306.0    9493.9    1290.4    9579.4     1292.1     9686.2     1292.0    10000.0     1288.6   10275.7
GR   1283.5   10304.8    1276.4   10319.8     1276.4    10534.6     1284.9    10565.2     1285.3   10611.4
GR   1278.5   10629.1    1278.5   10661.8     1281.8    10682.8     1283.3    10808.5     1310.7   10857.4
GR   1310.7   10874.2    1303.0   10884.8     1303.0    10938.5     1314.5    10960.4     1314.5   11022.8
GR   1325.7   11044.4    1325.7   11268.2     1316.5    11371.7     1316.0    11539.0

NH      4.      0.035   10351.8      0.040    10536.7       0.030    10713.8       0.065    10920.3
ET                          4.1     9600.     10802.6
X1   38.636      24.      9635.2   10802.6      930.       980.       970.
X2                                                                                                  15.
GR   1316.8    9011.1    1311.1    9205.1     1308.7     9336.8     1313.3     9355.8     1310.1    9365.4
GR   1311.1    9380.4    1310.1    9390.0     1310.1     9450.6     1310.1     9459.6     1310.1    9488.4
GR   1296.2    9631.6    1294.0    9635.2     1295.8     9825.6     1293.8     9974.8     1290.2   10000.0
GR   1289.9   10027.0    1285.6   10351.8     1283.1    10433.7     1285.3    10476.1     1277.2   10536.7
GR   1277.2   10713.8    1309.6   10802.6     1314.8    10877.4     1315.4    10920.3

NH      4.      0.035   10287.2      0.040    10437.5       0.030    10491.0       0.040    10754.3
X1   38.822      20.      9851.8   10647.4      790.      1020.       970.
X2                                                                                                  15.
GR   1311.5    9445.1    1309.8    9504.8     1301.1     9543.4     1293.0     9692.7     1288.7    9715.2
GR   1292.7    9851.8    1287.3    9922.4     1286.3    10000.0     1284.4    10024.9     1283.4   10194.7
GR   1281.9   10287.2    1279.6   10339.3     1276.6    10437.5     1276.6    10491.0     1278.5   10522.9
GR   1284.1   10595.5    1292.1   10647.4     1292.1    10684.3     1318.8    10733.7     1319.5   10754.3

NH      4.      0.035   10000.0      0.040    10175.3       0.030    10247.5       0.040    10800.2
X1   39.009      25.      9458.7   10672.9      800.      1000.       950.
X2                                                                                                  15.
X3    10.
GR   1319.4    9105.9    1315.2    9244.4     1316.1     9314.2     1310.8     9337.0     1310.9    9394.7
GR   1315.0    9458.7    1309.1    9505.9     1294.6     9597.2     1288.5     9637.7     1284.3    9759.1
GR   1284.7    9923.2    1285.6   10000.0     1282.7    10156.9     1279.5    10175.3     1279.5   10247.5
GR   1283.1   10300.6    1285.7   10433.4     1284.0    10496.1     1287.9    10539.6     1286.9   10569.6
GR   1313.8   10633.0    1314.5   10672.9     1310.3    10681.4     1310.5    10760.5     1340.7   10800.2
1
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NC    0.035      0.035      0.035
X1   39.098      31.      9451.9   10657.4      400.       530.       480.
X2                                                                                                  15.
X3    10.
GR   1323.0    9143.8    1322.3    9317.9     1307.9     9374.8     1307.9     9432.1     1311.9    9451.9
GR   1311.1    9470.5    1288.8    9504.8     1289.1     9545.0     1292.9     9557.5     1289.5    9584.3
GR   1287.3    9645.0    1282.1    9734.3     1285.2    10000.0     1283.5    10129.9     1283.8   10198.8
GR   1291.3   10269.3    1288.8   10329.7     1289.1    10343.3     1294.6    10370.3     1287.7   10422.1
GR   1281.7   10531.0    1286.2   10549.9     1286.1    10614.7     1313.5    10657.4     1312.0   10690.6
GR   1306.6   10723.5    1306.7   10770.7     1312.6    10820.4     1313.5    11032.3     1313.1   11230.9
GR   1311.6   11675.7

X1   39.116      23.      9460.8   10602.0       90.        90.        90.
X2                                                                                                  15.
X3    10.
```

```
GR   1323.0     9135.0     1324.2     9320.5     1307.3     9374.9     1307.7     9436.0     1320.6     9460.8
GR   1296.5     9479.2     1293.5     9589.4     1287.1     9837.6     1286.8    10000.0     1287.3    10067.6
GR   1288.1    10277.3     1298.5    10356.9     1291.5    10408.4     1287.5    10498.0     1303.0    10521.2
GR   1299.0    10527.1     1299.4    10588.1     1318.9    10602.0     1306.8    10659.5     1306.8    10722.8
GR   1312.0    10761.2     1312.0    11160.3     1312.2    11606.2
1
   17MAR92      09:38:49                                                                                    PAGE   20


    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


 *PROF 1
0

 CCHV=     .300 CEHV=     .500
 1490 NH CARD USED
 *SECNO 28.358
    28.358     18.31   1217.31       .00   1217.31   1218.87      1.56       .00       .00   1218.00
  225000.0        .0  225000.0       .0        .0   22468.8        .0        .0        .0   1220.00
       .00       .00     10.01       .00      .000      .035      .000      .000   1199.00   5001.92
   .001288        0.        0.        0.         0         0         0       .00   1328.67   6330.59


 FLOW DISTRIBUTION FOR SECNO=     28.36         CWSEL=   1217.31

 STA=    5002.    6340.
   PER Q=    100.0
    AREA=  22468.8
     VEL=     10.0
   DEPTH=     16.9

 CCHV=     .100 CEHV=     .300
 1490 NH CARD USED
 *SECNO 28.646

 3301 HV CHANGED MORE THAN HVINS

    28.646     21.35   1218.55       .00       .00   1220.94      2.38      1.82       .25   1213.70
  225000.0   39217.2  169160.0  16622.8    4556.4   12563.1    2231.8     660.1      49.6   1213.00
       .03      8.61     13.46      7.45      .025      .025      .025      .000   1197.20   9313.65
   .001360     1300.     1380.     1450.         2         0         0       .00   1820.13  11133.77


 FLOW DISTRIBUTION FOR SECNO=     28.65         CWSEL=   1218.55

 STA=    9314.    9502.    9637.    9946.   10770.   11085.   11134.
   PER Q=      4.3      6.5      6.7     75.2      7.0       .4
    AREA=   1193.5   1398.4   1964.5  12563.1   2051.4    180.4
     VEL=      8.0     10.4      7.7     13.5      7.6      5.2
   DEPTH=      6.3     10.4      6.4     15.2      6.5      3.7

1
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3302 WARNING: CONVEYANCE CHANGE OUTSIDE OF ACCEPTABLE RANGE, KRATIO = .67

3495 OVERBANK AREA ASSUMED NON-EFFECTIVE, ELLEA= 1320.60 ELREA= 1318.90

39.116	23.22	1310.02	.00	1308.87	1311.85	1.83	.08	.22	1320.60
235000.0	.0	235000.0	.0	.0	21635.9	.0	28134.1	2685.8	1318.90
1.45	.00	10.86	.00	.000	.035	.000	.000	1286.80	9468.88
.001302	90.	90.	90.	2	0	0	.00	1126.79	10595.67

FLOW DISTRIBUTION FOR SECNO= 39.12 CWSEL= 1310.02

STA= 9469. 10602.
PER Q= 100.0
AREA= 21635.9
VEL= 10.9
DEPTH= 19.2

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SUMMARY TABLE 1

THIS RUN EXECUTED 17MAR92 09:47:46

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

SALT RIVER NATURAL 100 Y

SUMMARY PRINTOUT

	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	28.358	225000.00	5001.92	5000.00	.00	10.01	.00	6340.00	6330.59	1328.67	1199.00	1217.31	.0
	28.358	225000.00	5000.00	5000.00	.00	9.45	.00	6340.00	6334.08	1334.08	1199.00	1218.31	1.0
	COUNTRY CLUB DR.												
	28.646	225000.00	9313.65	9945.60	8.61	13.46	7.45	10770.20	11133.77	1820.13	1197.20	1218.55	.0
	28.646	225000.00	9307.69	9945.60	8.74	13.42	7.21	10770.20	10900.00	1592.31	1197.20	1219.18	.6
*	28.831	225000.00	9201.04	10185.70	8.50	9.88	5.93	10495.80	11250.19	2049.16	1199.00	1220.71	.9
*	28.831	225000.00	9200.00	10185.70	8.39	9.72	6.77	10495.80	10900.00	1700.00	1199.00	1221.33	.6
	29.017	225000.00	9104.14	9861.50	7.55	10.39	5.39	10619.80	11330.93	2226.79	1199.10	1221.17	.0
	29.017	225000.00	9101.71	9861.50	7.91	10.80	6.78	10619.80	10750.00	1648.29	1199.10	1221.66	.4
	29.221	225000.00	9186.58	9684.70	10.72	11.48	7.48	10402.60	10926.15	1739.56	1201.50	1221.65	.0
	29.221	225000.00	9400.00	9684.70	12.06	12.86	8.47	10402.60	10900.00	1500.00	1201.50	1222.03	.3

	29.473	225000.00	8851.52	9369.60	9.69	10.45	6.40	10096.70	11423.47	2384.21	1203.00	1223.16	.0
*	29.473	225000.00	9150.00	9369.60	9.77	9.82	6.27	10096.70	11300.00	2150.00	1203.00	1224.17	1.0
	29.676	225000.00	8820.00	9012.50	6.60	7.12	6.29	9284.30	11839.01	3019.01	1198.40	1224.54	.0
	29.676	225000.00	8850.00	9012.50	7.52	8.73	7.51	9284.30	11270.00	2420.00	1198.40	1225.16	.6
*	29.981	225000.00	8930.74	9163.40	7.16	16.37	15.88	10000.00	10833.54	1901.62	1209.10	1224.83	.0
*	29.981	225000.00	9400.00	9163.40	.00	18.76	15.47	10000.00	10820.00	1419.43	1209.10	1224.92	.0
	29.982	225000.00	8927.66	9163.40	6.86	14.83	14.37	10000.00	10837.70	1910.04	1209.10	1225.64	.0
	29.982	225000.00	9400.00	9163.40	.00	16.88	14.14	10000.00	10820.00	1420.00	1209.10	1225.89	.2
*	30.194	225000.00	9059.03	9032.10	.00	17.19	9.20	10000.00	10877.07	1818.04	1208.80	1229.58	.0
*	30.194	225000.00	9059.32	9032.10	.00	17.29	9.65	10000.00	10800.00	1740.67	1208.80	1229.51	-.0
	30.195	225000.00	9054.90	9032.10	.00	15.24	8.90	10000.00	10894.03	1839.13	1208.80	1230.62	.0
	30.195	225000.00	9054.99	9032.10	.00	15.26	9.36	10000.00	10800.00	1745.00	1208.80	1230.58	-.1

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
*	30.458	225000.00	9347.77	9333.50	.00	11.33	.63	10777.30	10778.95	1431.18	1214.70	1234.07	.0
*	30.458	225000.00	9350.00	9333.50	.00	11.29	.00	10777.30	10775.00	1425.00	1214.70	1234.12	.0
	30.815	225000.00	9408.13	9568.20	3.74	11.61	.00	11136.30	10942.91	1525.00	1216.00	1236.04	.0
	30.815	225000.00	9409.85	9568.20	3.81	12.30	.00	11136.30	10800.00	1378.52	1216.00	1235.94	-.1
*	31.028	225000.00	9100.02	10322.80	11.48	19.50	16.01	10772.20	10841.96	1640.05	1212.70	1237.65	.0
*	31.028	225000.00	9418.59	10322.80	12.11	20.01	16.48	10772.20	10841.41	1422.81	1212.70	1237.45	-.2
	31.029	225000.00	9085.42	10322.80	10.47	17.37	14.03	10772.20	10845.08	1678.26	1212.70	1238.76	.0
	31.029	225000.00	9414.02	10322.80	11.25	17.92	14.52	10772.20	10844.50	1430.48	1212.70	1238.56	-.2
*	31.301	225000.00	8023.32	9689.60	5.88	9.01	5.66	10867.50	10890.58	2854.27	1220.10	1242.69	.0
*	31.301	225000.00	8770.00	9689.60	6.22	8.94	5.64	10867.50	10890.00	2120.00	1220.10	1242.85	.1
	31.522	225000.00	8045.52	9428.60	4.82	8.31	.00	11538.90	11515.98	3429.15	1224.40	1243.64	.0
	31.522	225000.00	8250.00	9428.60	4.93	8.94	.00	11538.90	11450.00	3159.74	1224.40	1243.67	.0
	31.725	225000.00	7463.56	9544.00	5.03	8.75	6.88	11019.80	12545.28	4366.54	1229.50	1244.71	.0
	31.725	225000.00	8230.00	9544.00	5.89	9.81	7.61	11019.80	11950.00	3433.94	1229.50	1244.86	.1
*	31.896	225000.00	7728.23	9650.20	9.38	8.43	5.20	12145.50	13132.74	4628.49	1228.10	1246.07	.0
	31.896	225000.00	8300.00	9650.20	7.60	9.51	.00	12145.50	12000.00	3507.52	1228.10	1246.25	.1
	32.126	225000.00	7427.79	8480.80	.95	9.52	4.83	11726.60	14032.81	5252.10	1233.90	1248.59	.0
	32.126	225000.00	8500.00	8480.80	.00	10.70	.00	11726.60	11600.00	2710.28	1233.90	1248.31	-.2
	32.127	225000.00	7427.63	8480.80	.95	9.51	4.82	11726.60	14032.85	5267.79	1233.90	1248.61	.0
	32.127	225000.00	8500.00	8480.80	.00	10.69	.00	11726.60	11600.00	2710.42	1233.90	1248.33	-.2
	32.296	225000.00	7271.84	9694.30	7.29	9.02	5.27	11211.10	13304.02	6032.18	1235.60	1250.71	.0
	32.296	225000.00	7900.00	9694.30	8.53	10.27	4.13	11211.10	11400.00	3500.00	1235.60	1250.93	.2
	32.297	225000.00	7271.78	9694.30	7.28	9.01	5.26	11211.10	13304.10	6032.32	1235.60	1250.73	.0
*	32.297	225000.00	7262.66	9694.30	5.94	7.57	4.80	11211.10	13316.84	6054.18	1235.60	1251.73	1.0

	32.465	225000.00	7700.37	9925.90	8.71	8.17	2.88	11161.40	14772.08	6008.22	1238.30	1252.05	.0
	32.465	225000.00	7875.00	9925.90	9.56	8.76	1.90	11161.40	11500.00	3608.60	1238.30	1252.39	.3
	32.641	225000.00	7196.53	8951.30	6.92	8.30	1.97	11280.70	14195.91	5647.72	1239.00	1253.15	.0
	32.641	225000.00	8500.00	8951.30	8.67	9.77	2.48	11280.70	11600.00	3100.00	1239.00	1253.56	.4
	GILBERT RD.												
	32.653	225000.00	7194.65	8636.00	5.29	8.06	4.04	9866.00	14397.41	6054.64	1239.00	1253.43	.0
	32.653	225000.00	8500.00	8636.00	5.92	9.11	5.71	9866.00	11600.00	3100.00	1239.00	1254.05	.6
*	32.655	225000.00	8613.47	8606.00	.00	10.81	5.43	9904.00	12719.82	3711.95	1239.00	1253.04	.3
	32.655	225000.00	8611.71	8606.00	.00	9.73	5.59	9904.00	11600.00	2927.42	1239.00	1253.98	.9
	32.661	225000.00	8613.21	8606.00	.00	10.60	5.40	9904.00	12729.03	3773.75	1239.00	1253.18	.0
	32.661	225000.00	8611.54	8606.00	.00	9.61	5.63	9904.00	11600.00	2927.81	1239.00	1254.07	.8

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	SECNO	Q	SSTA	STCHL	VLOB	VCE	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
*	32.663	225000.00	7188.42	8636.00	4.67	7.20	3.45	9866.00	14901.60	6533.15	1239.00	1254.36	.0
	32.663	225000.00	8500.00	8636.00	5.81	8.90	5.56	9866.00	11600.00	3100.00	1239.00	1254.31	-.0
*	32.676	230000.00	8477.57	8469.70	.00	9.50	2.30	11507.80	14350.83	4626.71	1240.00	1254.02	.0
*	32.676	230000.00	8500.00	8469.70	.00	9.69	2.42	11507.80	11600.00	2956.96	1240.00	1254.16	.1
*	32.862	230000.00	5894.31	8493.60	7.68	9.20	4.39	11352.70	14782.28	7626.48	1240.40	1256.17	.0
*	32.862	230000.00	8494.09	8493.60	.00	13.45	9.78	11352.70	12200.00	3550.45	1240.40	1255.59	-.5
	32.863	230000.00	5894.20	8493.60	7.66	9.19	4.37	11352.70	14782.30	7636.64	1240.40	1256.19	.0
	32.863	230000.00	8490.00	8493.60	1.79	11.98	8.02	11352.70	12200.00	3648.31	1240.40	1256.25	.0
	33.023	230000.00	8282.58	8281.20	.00	10.35	11.10	11327.70	14407.44	4824.23	1239.50	1257.72	.0
	33.023	230000.00	8280.00	8281.20	1.37	8.97	12.11	11327.70	11600.00	3320.00	1239.50	1258.94	1.2
*	33.205	230000.00	7561.07	8080.80	8.48	6.87	6.19	11345.80	15004.91	6769.86	1240.90	1260.27	.0
	33.205	230000.00	7862.00	8080.80	10.47	7.97	10.05	11345.80	11562.00	3700.00	1240.90	1260.61	.3
	33.385	230000.00	7755.25	7749.30	.00	6.38	4.85	11448.00	15163.28	7408.03	1242.90	1261.36	.0
	33.385	230000.00	7754.32	7749.30	.00	7.63	9.04	11448.00	11599.00	3844.68	1242.90	1261.95	.5
	33.557	230000.00	7729.76	7752.40	7.22	7.07	5.90	11413.90	15333.01	7148.68	1243.50	1262.11	.0
	33.557	230000.00	7730.00	7752.40	7.40	7.49	9.80	11413.90	11600.00	3870.00	1243.50	1262.91	.9
	33.726	230000.00	7801.51	7794.30	.00	7.92	3.28	11232.50	15066.85	6961.82	1243.90	1263.07	.0
	33.726	230000.00	7799.38	7794.30	.00	7.71	4.89	11232.50	11450.00	3650.62	1243.90	1263.90	.5
	33.892	230000.00	8028.59	8069.20	10.44	10.08	4.23	11130.40	13729.61	4583.68	1245.70	1263.96	.0
	33.892	230000.00	8030.00	8069.20	9.42	9.16	6.11	11130.40	11300.00	3270.00	1245.70	1264.69	.7
	34.091	230000.00	7635.01	8453.80	10.21	8.18	4.96	10924.90	12100.68	3654.93	1248.00	1265.75	.0
	34.091	230000.00	8450.00	8453.80	5.49	10.56	7.68	10924.90	11220.00	2770.00	1248.00	1265.89	.1
*	34.271	230000.00	8744.07	8723.00	.00	14.95	1.14	11198.50	11698.51	2468.75	1248.00	1266.07	.0
	34.271	230000.00	8740.43	8723.00	.00	11.96	.00	11198.50	11110.00	2369.57	1248.00	1267.70	1.6
	34.272	230000.00	8741.97	8723.00	.00	13.02	1.83	11198.50	11744.47	2582.61	1248.00	1267.02	.0

34.272	230000.00	8740.39	8723.00	.00	11.94	.00	11198.50	11110.00	2369.61	1248.00	1267.73	.7
34.453	230000.00	8880.98	8920.60	10.97	12.17	3.00	11281.70	13986.13	4004.18	1249.50	1269.78	.0
34.453	230000.00	8879.45	8920.60	10.99	11.84	.00	11281.70	11140.00	2260.55	1249.50	1270.35	.5
34.642	230000.00	9060.50	9095.10	10.18	11.52	3.40	11178.90	14689.39	3869.08	1247.90	1272.17	.0
34.642	230000.00	9060.00	9095.10	11.06	11.00	.00	11178.90	11170.00	2110.00	1247.90	1272.86	.6
34.856	230000.00	8856.58	9126.90	6.22	9.30	1.88	11496.60	14260.46	3458.22	1251.90	1274.25	.0
34.856	230000.00	9100.00	9126.90	5.99	9.42	.00	11496.60	11180.00	2080.00	1251.90	1274.90	.6
35.136	230000.00	8844.46	9646.30	9.33	10.34	2.50	10892.10	13937.54	3503.74	1256.30	1275.01	.0
35.136	230000.00	8850.00	9646.30	8.88	9.79	3.01	10892.10	11160.00	2310.00	1256.30	1275.78	.7

1

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
35.297	230000.00	8717.16	10436.30	8.75	12.75	2.04	10969.60	12032.60	3016.95	1255.90	1275.97	.0
35.297	230000.00	8720.00	10436.30	8.36	11.96	2.15	10969.60	11250.00	2530.00	1255.90	1276.60	.6
35.480	230000.00	8634.64	10498.80	7.41	11.20	8.77	11026.90	11675.88	2597.32	1256.30	1277.44	.0
35.480	230000.00	8855.74	10498.80	7.22	10.78	8.69	11026.90	11350.00	2494.25	1256.30	1277.81	.3
GREENFIELD RD.												
35.661	235000.00	8525.86	10209.20	8.49	11.06	10.24	11055.00	11409.40	2689.52	1258.00	1278.29	.0
35.661	235000.00	8808.19	10209.20	8.32	10.74	10.00	11055.00	11400.00	2591.81	1258.00	1278.57	.2
36.011	235000.00	8236.75	9618.60	9.10	11.94	.00	10862.50	10844.79	2197.49	1260.50	1280.60	.0
36.011	235000.00	8750.00	9618.60	9.44	11.82	.00	10862.50	10845.19	2095.19	1260.50	1280.75	.1
36.203	235000.00	8146.91	9495.80	8.22	12.98	.00	10769.00	10753.89	2084.04	1262.10	1281.90	.0
36.203	235000.00	8734.56	9495.80	8.57	13.28	.00	10769.00	10700.00	1965.43	1262.10	1282.03	.1
36.403	235000.00	8461.71	9583.80	8.89	15.31	.00	10761.50	10754.68	1967.51	1265.30	1283.48	.0
36.403	235000.00	8800.55	9583.80	8.93	15.05	.00	10761.50	10750.00	1928.78	1265.30	1283.75	.2
36.404	235000.00	8461.68	9583.80	8.88	15.29	.00	10761.50	10754.71	1969.78	1265.30	1283.51	.0
36.404	235000.00	8800.31	9583.80	8.92	15.03	.00	10761.50	10750.00	1931.15	1265.30	1283.78	.2
36.595	235000.00	8782.03	9914.60	9.44	17.60	.00	10666.50	10642.52	1676.04	1262.60	1285.58	.0
36.595	235000.00	9035.88	9914.60	9.75	17.54	.00	10666.50	10642.82	1606.95	1262.60	1285.70	.1
36.596	235000.00	8781.42	9914.60	9.32	16.94	.00	10666.50	10643.45	1680.93	1262.60	1285.95	.0
36.596	235000.00	9034.27	9914.60	9.68	17.14	.00	10666.50	10643.39	1609.12	1262.60	1285.93	-.0
36.775	235000.00	9081.20	10039.00	10.19	17.35	.00	10680.30	10639.38	1452.29	1265.70	1288.13	.0
36.775	235000.00	9259.25	10039.00	10.58	17.41	.00	10680.30	10639.53	1380.28	1265.70	1288.18	.0
* 36.953	235000.00	9296.08	9875.70	8.91	11.36	.00	10831.70	10794.07	1498.00	1268.40	1291.65	.0
* 36.953	235000.00	9440.00	9875.70	9.47	11.46	.00	10831.70	10794.26	1354.26	1268.40	1291.72	.0
37.152	235000.00	9454.44	9429.30	.00	11.04	6.03	10631.80	10992.53	1538.09	1272.50	1292.77	.0
37.152	235000.00	9454.52	9429.30	.00	11.71	5.00	10631.80	10800.00	1345.48	1272.50	1292.73	-.0
37.328	235000.00	9339.67	9388.60	1.36	10.76	4.66	10751.30	11251.63	1902.25	1270.90	1294.25	.0
37.328	235000.00	9351.00	9388.60	1.46	11.48	.00	10751.30	10701.00	1340.93	1270.90	1294.34	.0

	37.523	235000.00	9388.30	9368.70	.00	12.07	9.03	10437.90	10754.63	1366.33	1273.00	1295.36	.0
	37.523	235000.00	9450.00	9368.70	.00	11.79	9.37	10437.90	10720.00	1270.30	1273.00	1295.80	.4
*	37.720	235000.00	9509.67	9561.40	1.84	15.48	2.04	10487.30	10677.53	1000.51	1274.00	1296.02	.0
	37.720	235000.00	9568.62	9561.40	.00	15.07	.00	10487.30	10483.25	914.63	1274.00	1296.49	.4
	37.898	235000.00	9544.98	9711.20	6.33	12.12	3.21	10615.00	10861.90	1316.92	1274.50	1300.03	.0
	37.898	235000.00	9711.20	9711.20	.00	12.48	.00	10615.00	10615.00	903.80	1274.50	1300.08	.0
	38.074	235000.00	9447.30	9875.80	8.45	10.85	.86	10753.60	10788.69	1341.39	1276.10	1302.38	.0
	38.074	235000.00	9700.00	9875.80	12.25	10.36	.00	10753.60	10753.60	1053.60	1276.10	1303.06	.6

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	38.261	235000.00	9461.38	10141.90	8.30	11.19	.00	10880.50	10846.64	1385.26	1274.20	1303.90	.0
	38.261	235000.00	9800.00	10141.90	10.55	11.40	.00	10880.50	10850.00	1050.00	1274.20	1305.01	1.1
	38.439	235000.00	9496.89	10000.00	8.43	9.97	.00	10857.40	10848.04	1351.14	1276.40	1305.45	.0
	38.439	235000.00	9750.00	10000.00	8.89	10.40	.00	10857.40	10850.58	1100.58	1276.40	1306.88	1.4
	38.636	235000.00	9524.76	9635.20	5.11	10.74	.00	10802.60	10794.30	1269.54	1277.20	1306.57	.0
	38.636	235000.00	9600.00	9635.20	6.04	9.92	.00	10802.60	10798.70	1198.70	1277.20	1308.18	1.6
	38.822	235000.00	9512.82	9851.80	7.14	9.96	5.86	10647.40	10713.70	1200.88	1276.60	1307.99	.0
	38.822	235000.00	9507.04	9851.80	6.84	9.38	5.58	10647.40	10716.11	1209.07	1276.60	1309.29	1.3
	39.009	235000.00	9507.77	9458.70	.00	9.49	.00	10672.90	10621.22	1113.45	1279.50	1308.80	.0
	39.009	235000.00	9499.11	9458.70	.00	9.03	.00	10672.90	10623.92	1124.81	1279.50	1309.95	1.1
	39.098	235000.00	9473.13	9451.90	.00	8.80	.00	10657.40	10650.99	1177.86	1281.70	1309.39	.0
	39.098	235000.00	9471.49	9451.90	.00	8.40	.00	10657.40	10652.66	1181.17	1281.70	1310.46	1.0
*	39.116	235000.00	9469.75	9460.80	.00	11.55	.00	10602.00	10594.85	1125.10	1286.80	1308.87	.0
*	39.116	235000.00	9468.88	9460.80	.00	10.86	.00	10602.00	10595.67	1126.79	1286.80	1310.02	1.1

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     28.831  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     28.831  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     29.473  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     29.981  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     29.981  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     29.981  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     29.981  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     29.981  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     29.981  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL
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CAUTION SECNO=     30.194  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     30.194  PROFILE=  1  MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     30.194  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     30.194  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=     30.458  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     30.458  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     31.028  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     31.028  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     31.028  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=     31.028  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     31.028  PROFILE=  2  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     31.028  PROFILE=  2  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=     31.301  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     31.301  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     31.896  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.297  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.655  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.663  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     32.676  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     32.676  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     32.862  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     32.862  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=     32.862  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO=     32.862  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     33.205  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     34.271  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=     34.271  PROFILE=  1  MINIMUM SPECIFIC ENERGY
1
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WARNING SECNO=     36.953  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     36.953  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     37.720  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     39.116  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     39.116  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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SUMMARY TABLE 2
FLOODWAY DATA

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FLOODWAY DATA,   SALT RIVER NATURAL 100 Y


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PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE	
28.358	1334.	23800.	9.5	1218.3	1217.3	1.0	
28.646	1592.	18892.	11.9	1219.2	1218.6	.6	**COUNTRY CLUB DR.**
28.831	1700.	26735.	8.4	1221.3	1220.7	.6	
29.017	1648.	23622.	9.5	1221.7	1221.2	.5	
29.221	1500.	19159.	11.7	1222.1	1221.7	.4	
29.473	2150.	26741.	8.4	1224.2	1223.2	1.0	
29.676	2420.	28983.	7.8	1225.1	1224.5	.6	
29.981	1420.	13125.	17.1	1224.9	1224.8	.1	
29.982	1420.	14509.	15.5	1225.8	1225.6	.2	
30.194	1741.	14480.	15.5	1229.5	1229.6	-.1	
30.195	1745.	16363.	13.8	1230.6	1230.6	.0	
30.458	1425.	19921.	11.3	1234.1	1234.1	.0	
30.815	1390.	18526.	12.1	1235.9	1236.0	-.1	
31.028	1423.	13697.	16.4	1237.4	1237.6	-.2	
31.029	1430.	15278.	14.7	1238.6	1238.8	-.2	
31.301	2120.	27856.	8.1	1242.9	1242.7	.2	
31.522	3200.	27699.	8.1	1243.6	1243.6	.0	
31.725	3720.	26626.	8.5	1244.8	1244.7	.1	
31.896	3700.	25231.	8.9	1246.3	1246.1	.2	
32.126	3100.	21019.	10.7	1248.3	1248.6	-.3	
32.127	3100.	21046.	10.7	1248.3	1248.6	-.3	
32.296	3500.	24337.	9.2	1250.9	1250.7	.2	
32.297	6054.	36109.	6.2	1251.7	1250.7	1.0	
32.465	3625.	24651.	9.1	1252.4	1252.1	.3	
32.641	3100.	23803.	9.5	1253.5	1253.1	.4	
32.653	3100.	28341.	7.9	1254.0	1253.4	.6	**GILBERT RD.**
32.655	2988.	26940.	8.4	1253.9	1253.0	.9	
32.661	2988.	27203.	8.3	1254.1	1253.2	.9	
32.663	3100.	29117.	7.7	1254.3	1254.4	-.1	
32.676	3100.	23867.	9.6	1254.1	1254.0	.1	
32.862	3706.	17508.	13.1	1255.6	1256.2	-.6	
32.863	3710.	19883.	11.6	1256.3	1256.2	.1	
33.023	3320.	24570.	9.4	1258.9	1257.7	1.2	
33.205	3700.	27505.	8.4	1260.6	1260.3	.3	
33.385	3845.	29857.	7.7	1262.0	1261.4	.6	
33.557	3870.	30025.	7.7	1262.9	1262.1	.8	
33.726	3651.	30343.	7.6	1263.9	1263.1	.8	
33.892	3270.	25343.	9.1	1264.7	1264.0	.7	
34.091	2770.	22204.	10.4	1265.8	1265.7	.1	
34.271	2370.	19229.	12.0	1267.7	1266.1	1.6	
34.272	2370.	19268.	11.9	1267.7	1267.0	.7	
34.453	2261.	19446.	11.8	1270.4	1269.8	.6	

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FLOODWAY DATA, SALT RIVER NATURAL 100 Y
PROFILE NO. 2

FLOODWAY ------- WATER SURFACE ELEVATION

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STATION	WIDTH	SECTION AREA	MEAN VELOCITY	WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
34.642	2110.	20899.	11.0	1272.9	1272.2	.7
34.856	2080.	24587.	9.4	1274.9	1274.2	.7
35.136	2310.	24663.	9.3	1275.8	1275.0	.8
35.297	2530.	24088.	9.5	1276.6	1276.0	.6
35.480	2494.	26742.	8.6	1277.8	1277.4	.4
35.661	2592.	24433.	9.6	1278.6	1278.3	.3
36.011	2095.	21158.	11.1	1280.8	1280.6	.2
36.203	1965.	19162.	12.3	1282.0	1281.9	.1
36.403	1949.	16987.	13.8	1283.8	1283.5	.3
36.404	1950.	17017.	13.8	1283.8	1283.5	.3
36.595	1607.	15573.	15.1	1285.7	1285.6	.1
36.596	1609.	15922.	14.8	1285.9	1285.9	.0
36.775	1380.	15647.	15.0	1288.2	1288.1	.1
36.953	1354.	21455.	11.0	1291.7	1291.6	.1
37.152	1345.	20682.	11.4	1292.8	1292.8	.0
37.328	1350.	20513.	11.5	1294.4	1294.3	.1
37.523	1270.	20592.	11.4	1295.8	1295.4	.4
37.720	915.	15598.	15.1	1296.5	1296.0	.5
37.898	904.	18831.	12.5	1300.1	1300.0	.1
38.074	1054.	22216.	10.6	1303.1	1302.4	.7
38.261	1050.	20988.	11.2	1305.0	1303.9	1.1
38.439	1101.	23131.	10.2	1306.9	1305.5	1.4
38.636	1199.	23832.	9.9	1308.2	1306.6	1.6
38.822	1209.	26766.	8.8	1309.3	1308.0	1.3
39.009	1125.	26038.	9.0	1310.0	1308.8	1.2
39.098	1181.	27969.	8.4	1310.5	1309.4	1.1
39.116	1127.	21636.	10.9	1310.0	1308.9	1.1

GREENFIELD RD.

APPENDIX C

POST CONSTRUCTION HEC-2 WATER SURFACE PROFILE

Appendix C

Post Construction HEC-2 Water Surface Profile

This Appendix contains the computer model input data and output summary tables for the 100-year water surface profile for the proposed channelization. The Hydrologic Engineering Circular Number 2 (HEC-2) Computer Model, Version 4.6, Revised February 1991, developed by the U.S. Army Corps of Engineers was used to perform the hydraulic calculations.

Two HEC-2 models used to develop the current flood delineation maps were obtained from the Flood Control District of Maricopa County. One model was developed by the U.S. Army Corps of Engineers for the segment of the Salt River from its confluence with the Agua Fria River to Country Club Drive and the other model was developed by the Flood Control District for the Salt River Segment from Country Club Drive to the Granite Reef Dam. The first model was modified by deleting the river sections from the Agua Fria River to the new proposed Hohokam Freeway at Section 19.363. The 100-year starting elevation at the next upstream section, Section 19.381 was set at 1131.30, as determined from the original HEC-2 model. Both models were modified by adding the channel improvement option for River Sections 27.156 to 34.856. Furthermore, at Alma School Road the north bridge was lengthened by 410 feet and the south bridge was removed from the model.

Summary Table 1 contains two lines of output for each river section. The top line is for the river in its natural condition and the bottom line is with the proposed channelization. The natural condition elevations are not correct in the vicinity of the Alma School Road Bridge, because the bridge simulation was modified. Summary Table 2 has two columns listing water surface elevations, the first column is with channelization and the second column is for the river in its natural condition, except at Alma School Road.

Items included in this appendix are presented in the following order:

1. *100-Year HEC-2 Model - Proposed Hohokam Freeway to Country Club Drive*
   a. Comment Cards
   b. Input Data
   c. Summary Table 1 - Customized
   d. Summary Table 2 - Channelized Data

2. *100-Year HEC-2 Model - Country Club Drive to Granite Reef Dam*
   a. Comment Cards
   b. Input Data
   c. Summary Table 1 - Customized
   d. Summary Table 2 - Channelized Data

HEC-2 MODEL
PROPOSED HOHOKAM FREEWAY
TO
COUNTRY CLUB DRIVE

COMMENT CARDS

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C                                                                    C
C     62
C         Modified by Dave Schaub, BRW, march 15, 1992
C         This is the Corps of Engineers HEC-2 model with the x-sections between
C         0. and 19.363 inclusive deleted.  The 100-year starting elevation at
C         station 19.381 was set at 1131.30 as determined from the original
C         HEC-2 model.  All of the Corps of Engineers comment cards have been
C         retained, even those for the deleted x-sections.
C    0.0  DIGITIZED CROSS SECTIONS FROM CENTRAL AVE TO 115 TH AVE
C    0.0  FROM COOPER AERIAL CO
C    0.0  TOPO DATA FROM ADOT, FROM CENTRAL AVE TO COUNTRY CLUB DR
C    0.0  FROM 115 TH AVE TO CENTRAL AVE, THE POINT OF CROSS SECTION
C    0.0  CROSSING THE STREAM LINE IS SET AT 20,000 FEET
C    0.0  FROM CENTRAL AVE TO COUNTRY CLUB DR THE POINT OF CROSS SECTION
C    0.0  CROSSING THE STREAM LINE IS SET AT 10,000 FEET
C   .104  115 TH AVENUE EXTENSION
C  1.085  107 TH AVENUE EXTENSION
C  1.985  99  TH AVENUE EXTENSION
C  3.944  83  RD AVENUE EXTENSION
C  4.960  75  TH AVENUE EXTENSION
C  6.035  67  TH AVENUE EXTENSION
C  6.863  59  TH AVENUE EXTENSION
C  8.051  51  ST AVENUE BRIDGE
C  9.098  43  RD AVENUE EXTENSION
C 10.055  GR POINTS FROM DESIGN PLANS
C 10.062  35  TH AVENUE BRIDGE, GR STATIONS FROM DESIGN PLANS
C 11.036  27 TH  AVENUE EXTENSION,APPROXIMATE CONFL. OF CAVE CREEK
C 11.933  GR STATIONS FROM DESIGN PLANS
C 11.948  19 TH AVENUE BRIDGE, GR STATIONS FROM DESIGN PLANS
C 12.376  15 TH AVENUE EXTENSION
C 13.093 7TH AVENUE BRIDGE, GR STATIONS FROM PLANS AND FIELD MEASUREMENTS
C 13.617  CENTRAL AVENUE BRIDGE
C 13.627  FROM STA 13.627 TO STA 28.487 THE POINT OF CROSS SECTION
C 13.627  CROSSING THE STREAM LINE IS SET AT 10,000 FEET
C 14.128  GR POINTS MATCH 7 TH ST BRIDGE DESIGN PLANS
C 14.137  7 TH STREET BRIDGE, GR POINTS FROM DESIGN PLANS
C 15.145  GR POINTS FROM 16 TH ST. BRIDGE DESIGN PLANS
C 15.162  16TH STREET BRIDGE GR POINTS FROM DESIGN PLANS
C 16.188  GR POINTS FROM 24 TH STREET DESIGN PLANS
C 16.202  24TH STREET BRIDGE, GR POINTS FROM DESIGN PLANS
C 16.904  I-10 NORMAL BRIDGE, GR STATIONS FROM DESIGN PLANS
C 17.053  FROM STATION 17.053 TO STATION 21.102, ALL HYDRAULIC
C 17.053  DATA WAS OBTAINED FROM HNTB ENGINEERING FIRM
C 17.053  HNTB IS THE DESIGN CONTRACTOR OF AIRPORT CHANNELIZATION
C 17.053  PROJECT.  IN PHOENIX CALL MR. BOB MILLER, (602) 957-1931,
C 17.053  IN KANSAS CITY, MR. DICK SHWAB (816) 333-4800
C 17.394  BEGINNING OF AIRPORT MORTH DIKE
C 17.871  BEGINNING OF AIRPORT SOUTH DIKE
C 19.363  THE NEW PROPSED HOHOKAM EXPWAY 3339 FT BRIDGE BY ADOT
C 19.381  BEGINNING OF PROPOSED SOUTH DIKE FOR PROTECTION OF
C 19.381  72 INCH WATER LINE, DESIGN INCLUDES PROPOSED CUT IN
C 19.381  THE RIVER BED
C 20.875  PRIEST ROAD EXTENSION, END OF PROPOSED SOUTH DIKE
C 20.875  PROJECT FOR THE PROTECTION OF 72 INCH WATER LINE
C 21.667  RAILROAD BRIDGE ON SALT RIVER BELOW TEMPE BRIDGE
C 21.733  ROADWAY BRIDGE BELOW TEMPE BRIDGE
C 21.809  TEMPE BRIDGE
C 22.681  SCOTTSDALE AVE BRIDGE
C 22.799  INDIAN BEND WASH CONFLUENCE
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C 23.658 HAYDEN ROAD BRIDGE, GR STATIONS FROM DESIGN PLANS
C 24.595 PRICE ROAD EXTENSION
C 27.277  ALMA SCHOOL ROAD BRIDGE
C 27.277  BOTH BRIDGE OPENINGS ARE COMBINED FOR THIS HYDRAULIC MODEL
C 28.383  COUNTRY CLUB DRIVE BRIDGE
T1   SALT RIVER FLOOD INSURANCE STUDY 1983-1984
T2  AUGUST 1982  ADOT TOPO BASE MAP, AGUA FRIA RIVER TO COUNTRY CLUB ROAD 38ML
T3      100-YEAR FLOODPLAIN     STREAMLINE AT STATION  10000
T4        MODIFIED BY DAVE SCHAUB, BRW, MARCH 15, 1992
T5        CHANNEL IMPROVEMENT ADDED FROM SOUTH OF ALMA SCHOOL ROAD TO NORTH
T6        OF COUNTRY CLUB ROAD,  TYPICAL BTM WIDTH = 900 FEET WITH 1:1 SIDESLOPES
T7        ALMA SCHOOL ROAD BRIDGE NORTH (SOUTH BRIDGE NOT MODELED)WAS LENGTHENED
T8        FROM 940 FEET TO 1300 FEET IN A SOUTH DIRECTION AND ROADWAY OVERFLOW WAS
T9        ELIMINATED.  COUNTRY CLUB ROAD BRIDGE WAS MODELED WITH A BTM WIDTH = 1250 FEET
J1            2                                                  1131.30
J2     1      0      -1       0       0       0       0      6.       0      15
J3    38     43      53      21      55      26      56      22      54       4
J3    42      1      50     200
ET                  9.1                                                  8980   12145
QT     2 210000. 210000.
NC 0.040   0.040   0.035      .1      .3
ET                  9.1                                                  8924   12330
X119.381      52   11188   11741       0       0       0
CI 10300  1123.6            0.01    0.01    2000
X3                          8924
GR1119.7    8666  1119.9    9021  1118.6    9140  1124.0    9329  1125.3    9411
GR1125.7    9520  1127.5    9592  1128.5    9705  1128.7    9749  1123.8    9771
GR1125.3    9855  1126.4    9929  1127.1   10000  1126.9   10113  1126.1   10160
GR1128.1   10188  1128.9   10224  1126.7   10347  1124.6   10410  1126.1   10472
GR1128.4   10487  1125.5   10507  1127.1   10645  1124.7   10660  1125.7   10702
GR1125.3   10772  1125.2   10831  1124.3   10877  1123.6   10930  1127.2   11010
GR1127.1   11063  1125.4   11108  1128.3   11188  1125.1   11202  1122.4   11262
GR1122.6   11333  1120.3   11372  1115.6   11415  1113.2   11476  1113.2   11543
GR1115.6   11605  1119.1   11669  1122.8   11741  1122.0   11774  1120.9   11825
GR1122.8   11894  1123.9   11904  1123.9   11982  1123.9   12136  1125.6   12230
GR1125.6   12310  1134.8   12330
ET                  9.1                                                  8860   12460
X119.446      59   11140   11807     170     280     265
CI 10275  1124.3                          2250
X3                          8860
GR1133.8    8600  1133.8    8734  1132.5    8898  1131.6    8958  1127.8    9017
GR1125.3    9124  1124.0    9146  1125.1    9223  1125.2    9320  1128.6    9463
GR1128.7    9610  1137.9    9743  1127.3    9754  1125.7    9787  1123.3    9828
GR1124.8    9849  1126.4    9918  1128.8   10000  1127.1   10045  1126.6   10091
GR1128.0   10150  1130.3   10205  1127.8   10230  1126.0   10260  1125.8   10302
GR1127.0   10387  1127.7   10480  1126.6   10568  1125.6   10674  1124.9   10784
GR1124.2   10856  1126.0   10907  1124.5   10927  1125.4   10947  1131.0   11019
GR1129.7   11041  1130.1   11140  1129.0   11145  1126.9   11165  1127.8   11260
GR1126.4   11271  1124.2   11312  1124.7   11336  1121.8   11367  1120.0   11419
GR1118.6   11484  1116.3   11506  1114.4   11568  1115.1   11644  1121.4   11754
GR1122.0   11807  1120.3   11842  1121.0   11895  1122.8   11964  1123.5   11994
GR1124.6   12090  1126.7   12214  1125.4   12430  1135.3   12460
ET                  9.1                                                  8757   12577
X119.537      90 11180.8 12262.9     400     500     480
CI 10325  1125.6                          2150
X3                          8757
GR1132.2 7728.7  1132.2   7761.3 1135.0   7814.9 1135.7   7878.5 1134.5   7979.7
GR1135.1 8041.6  1135.4   8114.6 1133.5   8137.0 1118.7   8161.4 1117.9   8204.5
GR1121.5 8263.3  1121.9   8335.3 1124.5   8353.1 1123.7   8415.4 1135.3   8466.9
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1*****************************************
 *  HEC-2 WATER SURFACE PROFILES          *
 *                                        *
 *  Version   4.6.0;  February 1991       *
 *                                        *
 *  RUN DATE    17MAR92    TIME   15:27:10 *
 *****************************************
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************************************
 *  U.S. ARMY CORPS OF ENGINEERS
 *  HYDROLOGIC ENGINEERING CENTER
 *  609 SECOND STREET, SUITE D
 *  DAVIS, CALIFORNIA 95616-4687
 *          (916) 756-1104
************************************
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INPUT DATA

```
X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X         XXXXX    XXXXX
X     X  X        X                 X
X     X  X        X     X           X
X     X  XXXXXXX   XXXXX            XXXXXXX
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1

17MAR92 15:27:10 PAGE 1

THIS RUN EXECUTED 17MAR92 15:27:10

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.0;  February 1991
************************************


T1   SALT RIVER FLOOD INSURANCE STUDY 1983-1984
T2  AUGUST 1982  ADOT TOPO BASE MAP, AGUA FRIA RIVER TO COUNTRY CLUB ROAD 38ML
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T8        FROM 940 FEET TO 1300 FEET IN A SOUTH DIRECTION AND ROADWAY OVERFLOW W
T9        ELIMINATED.  COUNTRY CLUB ROAD BRIDGE WAS MODELED WITH A BTM WIDTH = 1

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

              2                                                          1131.30

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

     1        0        -1       0        0        0        0        6.       0        15


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

     38       43       53       21       55       26       56       22       54       4
     42       1        50       200
```

ET			9.1						8980	12145
QT	2	210000.	210000.							
NC	0.040	0.040	0.035	.1	.3					
ET			9.1						8924	12330
X1	19.381	52	11188	11741	0	0	0			
CI	10300	1123.6		0.01	0.01	2000				
X3				8924						
GR	1119.7	8666	1119.9	9021	1118.6	9140	1124.0	9329	1125.3	9411
GR	1125.7	9520	1127.5	9592	1128.5	9705	1128.7	9749	1123.8	9771
GR	1125.3	9855	1126.4	9929	1127.1	10000	1126.9	10113	1126.1	10160
GR	1128.1	10188	1128.9	10224	1126.7	10347	1124.6	10410	1126.1	10472
GR	1128.4	10487	1125.5	10507	1127.1	10645	1124.7	10660	1125.7	10702
GR	1125.3	10772	1125.2	10831	1124.3	10877	1123.6	10930	1127.2	11010
GR	1127.1	11063	1125.4	11108	1128.3	11188	1125.1	11202	1122.4	11262
GR	1122.6	11333	1120.3	11372	1115.6	11415	1113.2	11476	1113.2	11543
GR	1115.6	11605	1119.1	11669	1122.8	11741	1122.0	11774	1120.9	11825
GR	1122.8	11894	1123.9	11904	1123.9	11982	1123.9	12136	1125.6	12230
GR	1125.6	12310	1134.8	12330						

1

ET			9.1						8860	12460
X1	19.446	59	11140	11807	170	280	265			
CI	10275	1124.3				2250				
X3				8860						
GR	1133.8	8600	1133.8	8734	1132.5	8898	1131.6	8958	1127.8	9017
GR	1125.3	9124	1124.0	9146	1125.1	9223	1125.2	9320	1128.6	9463
GR	1128.7	9610	1137.9	9743	1127.3	9754	1125.7	9787	1123.3	9828
GR	1124.8	9849	1126.4	9918	1128.8	10000	1127.1	10045	1126.6	10091
GR	1128.0	10150	1130.3	10205	1127.8	10230	1126.0	10260	1125.8	10302
GR	1127.0	10387	1127.7	10480	1126.6	10568	1125.6	10674	1124.9	10784
GR	1124.2	10856	1126.0	10907	1124.5	10927	1125.4	10947	1131.0	11019
GR	1129.7	11041	1130.1	11140	1129.0	11145	1126.9	11165	1127.8	11260
GR	1126.4	11271	1124.2	11312	1124.7	11336	1121.8	11367	1120.0	11419
GR	1118.6	11484	1116.3	11506	1114.4	11568	1115.1	11644	1121.4	11754
GR	1122.0	11807	1120.3	11842	1121.0	11895	1122.8	11964	1123.5	11994
GR	1124.6	12090	1126.7	12214	1125.4	12430	1135.3	12460		

ET			9.1						8757	12577
X1	19.537	90	11180.8	12262.9	400	500	480			
CI	10325	1125.6				2150				
X3				8757						
GR	1132.2	7728.7	1132.2	7761.3	1135.0	7814.9	1135.7	7878.5	1134.5	7979.7
GR	1135.1	8041.6	1135.4	8114.6	1133.5	8137.0	1118.7	8161.4	1117.9	8204.5
GR	1121.5	8263.3	1121.9	8335.3	1124.5	8353.1	1123.7	8415.4	1135.3	8466.9
GR	1137.1	8491.5	1137.2	8546.3	1138.6	8584.7	1137.4	8599.7	1137.4	8642.8
GR	1136.0	8733.9	1136.0	8766.2	1136.7	8808.9	1135.3	8856.4	1135.3	8900.3
GR	1133.8	8929.0	1126.2	8948.2	1129.6	9009.3	1129.2	9065.0	1125.7	9193.7
GR	1123.7	9244.5	1127.6	9284.3	1128.6	9309.0	1132.5	9333.7	1133.7	9370.3
GR	1133.0	9408.7	1133.9	9487.9	1137.2	9536.7	1135.2	9587.7	1134.2	9637.3
GR	1134.9	9699.3	1134.2	9731.0	1132.4	9806.2	1130.8	9895.3	1128.2	9919.4
GR	1127.5	9954.3	1128.5	10000.0	1126.8	10033.2	1128.4	10073.6	1127.7	10081.4
GR	1127.9	10249.6	1126.7	10363.7	1124.7	10460.4	1129.8	10500.1	1130.1	10549.0
GR	1128.1	10668.1	1126.9	10686.7	1129.3	10730.6	1130.3	10784.5	1126.9	10944.5
GR	1132.2	10983.9	1135.0	11105.7	1136.9	11121.7	1135.4	11180.8	1129.1	11184.8
GR	1127.1	11201.7	1125.6	11263.5	1125.2	11399.5	1125.2	11509.3	1121.3	11526.3
GR	1119.3	11635.9	1117.0	11662.0	1118.8	11740.8	1121.9	11887.5	1120.7	11920.7

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GR   1122.1   12011.4    1121.8    12154.2    1123.3    12193.7    1127.6    12262.9    1125.9    12330.9
GR   1129.0   12363.2    1129.8    12400.7    1132.7    12410.9    1132.7    12421.8    1126.4    12440.5
GR   1126.5   12471.9    1133.2    12490.5    1132.7    12500.5    1130.0    12510.1    1129.8    12577.0

ET                          9.1                                                          8736      12577
X1   19.563        90    11374.6    12250.4       130       150       140
CI    10400    1126.0                                    2400
X3                                   8736
GR   1132.9    7696.8    1132.3     7730.8    1132.3     7769.3    1138.8     7851.2    1138.8     7971.8
GR   1136.4    8018.5    1136.0     8051.5    1132.3     8098.4    1120.7     8116.1    1118.7     8135.5
GR   1119.1    8160.5    1122.1     8203.4    1122.8     8295.9    1124.9     8308.8    1125.5     8373.7
GR   1136.1    8422.3    1136.6     8544.8    1138.2     8590.8    1137.7     8678.9    1136.2     8699.9
GR   1136.9    8766.1    1134.6     8870.4    1133.7     8923.1    1125.9     8942.6    1128.4     8958.6
GR   1129.3    9017.1    1125.0     9187.2    1125.2     9205.6    1126.7     9234.9    1126.5     9279.1
GR   1133.4    9316.1    1134.1     9340.4    1133.0     9372.6    1134.2     9416.5    1136.6     9427.4
GR   1134.9    9457.7    1136.2     9496.6    1135.6     9614.8    1133.5     9668.0    1132.1     9712.9
GR   1131.2    9727.3    1132.6     9748.5    1130.4     9774.8    1135.0     9817.9    1130.1     9851.6
1
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GR   1129.3    9905.3    1129.5    10000.0    1128.8    10034.6    1127.6    10075.8    1127.1    10185.3
GR   1127.7   10273.7    1128.7    10305.1    1128.5    10375.6    1130.4    10394.8    1129.9    10435.6
GR   1127.5   10450.3    1127.5    10486.6    1129.5    10531.3    1130.2    10602.0    1128.3    10670.7
GR   1126.3   10688.0    1128.1    10703.0    1129.3    10752.5    1128.7    10905.6    1131.0    10955.1
GR   1130.5   11018.6    1126.2    11084.8    1126.8    11241.9    1127.7    11290.6    1129.1    11374.6
GR   1127.2   11421.8    1124.4    11541.2    1122.0    11561.2    1120.4    11613.1    1121.9    11640.9
GR   1119.9   11777.5    1121.6    11886.2    1120.3    11920.6    1120.9    12078.3    1121.0    12162.8
GR   1122.2   12195.1    1127.3    12250.4    1127.5    12274.3    1129.9    12320.8    1132.2    12330.0
GR   1131.9   12340.0    1127.4    12359.6    1127.0    12387.4    1132.2    12407.9    1132.2    12417.7

ET                          9.1                                                          8726      12594
X1   19.579        83    11389.0    12250.3        70        90        80
CI    10377    1126.3                                    2325
X3                                   8726
GR   1133.6    7678.3    1133.9     7712.4    1132.7     7732.2    1132.7     7771.2    1138.7     7845.2
GR   1138.7    7964.1    1135.9     8058.2    1134.0     8074.6    1118.2     8099.6    1121.8     8165.5
GR   1124.5    8299.5    1127.0     8312.7    1127.3     8351.6    1136.1     8394.2    1138.0     8570.7
GR   1138.0    8635.2    1135.7     8692.3    1136.6     8744.7    1135.4     8812.7    1134.6     8884.1
GR   1130.0    8929.9    1126.1     8942.7    1128.7     8971.2    1128.6     9037.7    1124.9     9173.1
GR   1128.5    9200.3    1128.0     9225.5    1125.8     9257.9    1127.0     9273.3    1133.9     9302.5
GR   1134.6    9418.8    1136.8     9427.4    1136.3     9590.0    1134.4     9610.8    1133.1     9736.6
GR   1130.7    9835.2    1129.2     9888.4    1131.3     9896.2    1127.0     9915.0    1128.6     9933.7
GR   1128.1    9983.0    1128.4    10000.0    1128.4    10014.9    1127.0    10095.8    1129.0    10154.1
GR   1129.2   10229.5    1129.2    10343.8    1131.0    10378.4    1130.5    10495.6    1128.1    10530.8
GR   1127.2   10580.7    1129.7    10626.1    1127.6    10686.6    1129.0    10751.3    1129.8    10921.0
GR   1127.3   10974.1    1126.1    11112.9    1129.0    11230.2    1129.2    11320.8    1130.3    11389.0
GR   1126.8   11459.4    1124.7    11539.1    1122.8    11562.2    1122.8    11582.3    1121.1    11603.6
GR   1122.5   11620.3    1121.9    11708.1    1120.9    11808.5    1121.7    11892.3    1120.7    11963.7
GR   1120.0   12134.9    1121.5    12179.2    1122.9    12205.4    1130.0    12250.3    1129.7    12269.1
GR   1132.5   12282.9    1132.5    12292.3    1128.1    12307.9    1127.5    12332.7    1132.3    12360.5
GR   1131.3   12407.9    1131.5    12507.0    1132.0    12594.8

ET                          9.1                                                          8697      12470
X1   19.618        79    11427.3    12188.5       200       220       210
CI     9945    1126.9                                       2    1690
X3                                   8697
GR   1134.8    7640.1    1135.3     7666.4    1135.2     7707.4    1132.7     7725.7    1132.7     7764.2
GR   1138.7    7835.8    1138.7     7958.0    1135.4     8039.3    1121.5     8061.0    1123.3     8092.3
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GR	1124.0	8226.0	1132.3	8261.0	1130.9	8284.3	1135.1	8323.7	1136.4	8361.4
GR	1136.8	8590.0	1134.9	8749.7	1133.5	8779.3	1133.5	8834.6	1129.8	8864.3
GR	1131.3	8910.8	1131.3	8944.1	1126.9	8968.8	1127.5	8992.1	1124.8	9119.2
GR	1132.0	9173.3	1132.0	9192.3	1127.6	9227.9	1127.6	9254.5	1134.6	9291.4
GR	1135.1	9357.0	1135.3	9459.2	1135.3	9515.1	1133.2	9662.8	1130.7	9712.1
GR	1132.5	9741.1	1132.4	9791.7	1128.0	9804.6	1128.9	9832.3	1132.1	9842.9
GR	1128.6	9852.7	1130.6	9936.7	1128.7	10000.0	1127.5	10028.8	1126.1	10170.0
GR	1128.1	10203.1	1128.2	10312.8	1131.6	10359.1	1130.5	10593.5	1128.4	10651.6
GR	1130.1	10752.5	1129.2	10840.1	1127.2	10907.9	1128.7	10951.9	1128.6	11001.9
GR	1132.0	11031.4	1131.5	11151.6	1132.3	11279.2	1132.6	11357.9	1130.2	11427.3
GR	1125.6	11451.9	1125.5	11515.6	1123.7	11592.9	1121.5	11617.1	1123.7	11681.4
GR	1122.2	11818.1	1119.9	11947.7	1118.6	11962.1	1118.2	12049.4	1117.1	12133.9
GR	1118.2	12150.9	1122.8	12176.2	1131.5	12188.5	1128.8	12199.9	1128.7	12231.0
GR	1133.1	12262.3	1132.1	12292.6	1133.0	12411.3	1133.8	12550.9		

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ET			9.1						8670	12419
X1	19.659	88	11270.3	12163.7	200	230	215			
CI	9900	1127.6				1600				
X3				8670						
GR	1134.5	7601.9	1135.6	7630.7	1136.0	7670.2	1133.3	7688.2	1133.5	7729.5
GR	1135.6	7747.4	1136.3	7793.6	1134.7	7825.6	1136.0	7852.1	1137.0	7927.9
GR	1136.4	7957.7	1125.6	7993.9	1122.7	8017.6	1123.0	8115.0	1124.8	8145.7
GR	1124.4	8162.7	1134.5	8217.6	1131.5	8240.7	1136.6	8277.5	1135.2	8287.8
GR	1135.2	8311.6	1137.3	8331.3	1137.4	8369.2	1136.4	8487.4	1136.5	8535.2
GR	1135.1	8593.6	1135.9	8643.0	1134.2	8713.5	1135.9	8729.8	1130.9	8763.1
GR	1130.4	8793.2	1131.4	8943.6	1132.5	8958.4	1125.6	8993.3	1126.7	9055.8
GR	1125.6	9109.3	1129.2	9134.4	1129.2	9157.9	1130.4	9220.6	1129.4	9230.0
GR	1128.8	9292.9	1134.7	9324.5	1135.9	9442.5	1134.9	9552.1	1132.2	9682.9
GR	1129.5	9705.9	1129.3	9740.3	1135.3	9761.7	1129.2	9785.0	1128.9	9908.9
GR	1130.5	9932.3	1126.6	9964.5	1127.5	10000.0	1128.0	10039.8	1126.4	10133.9
GR	1129.3	10157.1	1129.6	10264.8	1131.6	10293.4	1131.6	10351.3	1127.6	10409.1
GR	1127.7	10472.7	1128.6	10501.2	1127.3	10637.8	1128.4	10765.7	1133.6	10786.3
GR	1133.7	10874.8	1133.7	10967.9	1132.3	11139.8	1133.7	11210.9	1133.8	11270.3
GR	1126.4	11391.0	1124.5	11503.7	1122.9	11562.2	1120.9	11623.2	1120.3	11779.1
GR	1120.2	11877.3	1122.3	11912.2	1122.7	11949.5	1125.0	11996.9	1124.7	12013.2
GR	1115.3	12054.3	1113.6	12092.1	1117.9	12117.0	1133.3	12163.7	1133.5	12212.0
GR	1133.4	12302.0	1134.1	12435.6	1134.7	12526.3				

ET			9.1						8677	12514
X1	19.716	89	11265.1	12085.6	200	330	300			
CI	9845	1128.2				1490				
X3				8677						
GR	1134.2	7570.3	1134.6	7614.9	1135.6	7631.9	1133.4	7649.6	1133.7	7690.0
GR	1136.6	7709.0	1135.9	7775.4	1136.2	7809.8	1126.4	7829.1	1122.0	7870.7
GR	1123.7	7976.8	1122.1	8031.4	1125.5	8117.6	1130.4	8153.0	1130.4	8167.6
GR	1134.0	8186.7	1130.5	8209.7	1138.9	8247.6	1135.7	8279.1	1138.2	8342.6
GR	1138.1	8363.1	1136.0	8397.2	1135.4	8508.4	1132.9	8529.5	1133.5	8606.8
GR	1130.8	8655.0	1130.8	8713.6	1133.9	8849.6	1137.7	8861.1	1137.8	8944.2
GR	1125.3	8971.4	1126.5	9004.6	1126.5	9092.0	1128.3	9110.0	1128.7	9138.7
GR	1131.7	9176.0	1131.2	9276.7	1133.0	9298.6	1132.0	9353.8	1139.4	9375.9
GR	1135.2	9387.3	1135.3	9434.2	1132.6	9479.2	1130.6	9542.1	1132.4	9581.7
GR	1131.3	9643.1	1129.8	9689.5	1136.3	9714.7	1130.7	9730.1	1130.7	9745.8
GR	1127.9	9769.0	1127.3	9837.3	1127.5	9950.1	1130.0	9978.2	1130.2	10000.0
GR	1130.2	10000.1	1128.7	10041.2	1129.3	10224.3	1128.0	10330.2	1128.4	10430.3
GR	1130.4	10477.5	1130.7	10547.8	1129.5	10561.8	1130.7	10590.3	1132.8	10617.1

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GR   1134.8   10660.8    1135.0    10712.4    1134.7    10808.7    1134.4    10993.0    1133.6    11092.3
GR   1132.8   11204.4    1130.4    11265.1    1124.1    11294.0    1123.6    11332.1    1127.5    11419.4
GR   1126.8   11534.9    1123.5    11611.6    1122.5    11679.5    1120.3    11693.1    1121.6    11712.6
GR   1121.1   11839.2    1122.6    11900.3    1122.5    11969.0    1123.5    12001.8    1126.3    12066.9
GR   1130.2   12085.6    1132.8    12149.2    1134.9    12325.6    1141.1    12514.4

ET                          9.1                                                          8655      12513
X1   19.759        88    11188.2    11975.6     200       240       230
CI    9780    1128.9                            1460
X3                                   8655
GR   1134.6    7542.8    1134.6     7584.5    1135.6     7603.3    1133.7     7618.0    1134.0     7658.8
GR   1136.4    7683.5    1137.2     7769.7    1135.7     7781.2    1125.6     7814.7    1122.0     7852.5
GR   1122.0    7878.1    1123.6     7899.3    1122.0     8003.6    1126.0     8076.4    1130.0     8110.6
1
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GR   1130.0    8145.8    1133.6     8163.4    1132.7     8207.1    1136.6     8221.6    1136.1     8301.1
GR   1133.3    8409.2    1134.3     8466.0    1131.1     8554.6    1131.8     8635.3    1135.0     8689.1
GR   1135.1    8717.1    1134.3     8740.6    1137.1     8760.8    1138.1     8855.4    1140.0     8885.4
GR   1138.9    8918.1    1126.4     8941.7    1126.1     9049.5    1130.6     9120.8    1133.0     9224.6
GR   1131.4    9293.5    1133.7     9350.4    1132.4     9436.0    1132.9     9495.6    1131.6     9542.1
GR   1125.9    9582.0    1125.8     9644.8    1133.7     9670.1    1127.3     9683.9    1131.5     9718.6
GR   1131.4    9819.9    1130.1     9930.5    1130.1    10000.0    1130.0    10027.9    1128.5    10252.9
GR   1129.4   10289.5    1131.8    10307.1    1132.2    10382.4    1131.1    10431.9    1132.6    10450.5
GR   1132.0   10494.6    1129.5    10518.4    1132.5    10532.9    1135.8    10605.0    1135.2    10769.7
GR   1134.8   10908.6    1133.9    11070.8    1131.5    11126.9    1128.7    11188.2    1125.2    11203.4
GR   1125.2   11222.5    1126.9    11244.5    1127.9    11299.8    1128.1    11490.9    1127.0    11574.5
GR   1122.8   11661.3    1119.4    11767.0    1121.5    11791.1    1119.9    11885.7    1121.3    11935.6
GR   1123.4   11959.4    1132.0    11975.6    1133.5    12032.5    1134.2    12066.1    1133.1    12083.5
GR   1135.0   12219.6    1135.4    12281.5    1136.6    12370.3    1142.6    12389.9    1143.1    12426.1
GR   1139.3   12438.5    1139.3    12501.7    1143.1    12513.3

ET                          9.1                                                          8636      12504
X1   19.803        87    11056.3    11909.5     200       240       230
CI    10075    1129.5                             0.01     2050
X3                                   8636
GR   1135.1    7517.4    1136.1     7565.9    1133.9     7589.2    1133.9     7629.6    1135.7     7655.0
GR   1134.5    7677.3    1134.7     7761.3    1133.2     7872.6    1124.2     7894.2    1119.8     7930.9
GR   1121.9    7968.2    1125.5     8016.4    1127.2     8085.0    1131.0     8125.9    1133.5     8140.5
GR   1134.6    8165.3    1135.4     8230.6    1134.4     8321.3    1134.2     8393.7    1132.8     8429.6
GR   1134.2    8465.8    1132.2     8502.2    1136.0     8535.3    1137.2     8573.3    1137.2     8640.0
GR   1134.5    8681.1    1135.0     8703.6    1137.4     8710.7    1138.1     8783.9    1137.5     8833.0
GR   1138.9    8872.4    1137.7     8924.2    1125.4     8949.9    1125.5     9011.9    1131.7     9082.3
GR   1130.8    9150.9    1132.8     9209.8    1132.8     9327.9    1130.0     9397.4    1128.1     9477.9
GR   1129.1    9514.0    1133.4     9544.1    1133.1     9599.5    1138.1     9629.7    1134.2     9650.3
GR   1134.4    9723.7    1133.9     9793.5    1131.0     9874.8    1130.5     9951.9    1130.5    10000.0
GR   1129.4   10000.2    1129.1    10029.5    1129.8    10241.7    1132.2    10352.9    1132.0    10402.8
GR   1133.3   10453.9    1130.6    10478.8    1134.1    10494.1    1135.5    10559.3    1137.7    10611.9
GR   1137.7   10661.6    1135.6    10683.1    1135.8    10787.1    1134.8    10901.2    1136.5    10911.3
GR   1130.3   10933.5    1131.6    11007.6    1131.5    11056.3    1127.6    11097.1    1126.8    11272.0
GR   1127.7   11420.8    1128.0    11605.3    1122.7    11652.1    1119.2    11739.4    1118.4    11770.5
GR   1120.6   11830.6    1121.4    11891.8    1133.3    11909.5    1134.4    12027.6    1135.9    12129.3
GR   1143.0   12152.9    1143.0    12196.6    1139.7    12203.2    1139.7    12266.5    1144.8    12278.2
GR   1144.9   12345.0    1145.6    12504.3

ET                          9.1                                                          8637      12109
X1   19.856        88    10946.9    11848.6     200       310       280
CI    10050    1130.2                            1900
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X3                                  8637
GR   1135.6    7499.2    1135.6    7536.2    1134.4    7567.1    1134.4    7605.4    1141.0    7641.2
GR   1141.0    7810.5    1136.6    7818.4    1135.8    7846.6    1125.9    7869.1    1120.6    7899.2
GR   1119.0    7990.0    1126.0    8013.2    1126.9    8067.7    1130.2    8113.9    1133.3    8133.8
GR   1133.3    8148.2    1130.1    8177.5    1132.6    8196.2    1134.7    8246.9    1135.8    8311.6
GR   1135.7    8359.0    1134.7    8484.0    1136.5    8521.2    1138.1    8633.1    1137.1    8736.9
GR   1138.3    8866.9    1135.7    8938.8    1125.4    8953.4    1125.3    8987.5    1128.8    9056.1
GR   1132.8    9214.3    1132.1    9322.8    1129.6    9360.0    1129.1    9442.8    1130.2    9466.3
GR   1135.2    9480.3    1135.9    9587.3    1141.2    9601.2    1133.3    9622.0    1133.3    9643.0
GR   1135.3    9671.6    1135.3    9792.1    1132.7    9805.0    1129.8    9871.9    1130.6    9938.5
GR   1129.6   10000.0    1129.6   10000.1    1129.5   10048.3    1129.3   10090.1    1133.0   10141.8
GR   1129.8   10166.6    1131.4   10234.1    1131.6   10284.1    1132.8   10293.6    1132.0   10305.2
1
   17MAR92      15:27:10                                                                          PAGE    6


GR   1132.8   10337.7    1131.4   10489.1    1132.1   10527.1    1136.4   10542.7    1137.0   10615.6
GR   1136.0   10726.6    1137.0   10739.2    1136.4   10775.5    1132.2   10789.0    1132.6   10946.9
GR   1126.7   10985.3    1126.7   11103.6    1124.7   11139.2    1122.8   11150.8    1122.8   11192.4
GR   1123.7   11245.3    1122.1   11278.1    1122.1   11327.5    1122.7   11363.1    1127.3   11390.3
GR   1128.4   11470.8    1127.6   11532.8    1124.4   11582.8    1124.4   11634.0    1123.9   11692.5
GR   1120.2   11747.2    1115.6   11809.1    1132.3   11848.6    1131.8   11890.1    1133.8   11938.4
GR   1134.5   11995.6    1143.3   12033.7    1143.5   12063.3

ET                          9.1                                                       8646     12150
X1   19.902       88    10719.9   11828.6     200       250       240
CI    9950     1130.8                          1700
X3                                  8646
GR   1136.3    7485.0    1136.1    7524.6    1135.0    7549.1    1135.0    7586.6    1136.4    7636.4
GR   1137.2    7745.5    1136.0    7829.5    1125.7    7853.2    1119.6    7880.2    1119.6    7910.4
GR   1117.2    7939.0    1117.2    7977.2    1121.8    7987.8    1117.7    7998.2    1127.1    8054.9
GR   1129.1    8110.1    1132.5    8141.7    1134.1    8193.8    1131.4    8223.5    1134.4    8239.8
GR   1134.0    8269.5    1136.8    8357.6    1135.9    8456.7    1137.2    8565.4    1138.6    8612.0
GR   1138.3    8735.2    1138.5    8840.5    1136.3    8893.8    1134.8    8908.1    1134.8    8943.3
GR   1128.1    8956.8    1127.3    8969.6    1127.5    9012.8    1130.1    9056.9    1130.5    9130.0
GR   1132.7    9219.2    1132.7    9257.0    1129.2    9361.0    1130.5    9406.8    1138.3    9420.6
GR   1137.8    9470.8    1136.0    9482.0    1136.5    9515.0    1135.0    9542.6    1137.4    9548.4
GR   1137.3    9566.2    1143.0    9582.4    1135.0    9601.1    1137.3    9644.1    1135.7    9759.6
GR   1130.4    9775.6    1130.8    9895.4    1131.2    9940.1    1129.1    9980.5    1129.3   10000.0
GR   1129.6   10016.3    1132.8   10049.5    1134.5   10203.0    1131.3   10263.6    1131.0   10300.4
GR   1132.4   10307.0    1133.2   10366.7    1133.4   10471.2    1132.6   10569.2    1137.0   10592.9
GR   1137.4   10676.7    1136.7   10719.9    1132.4   10750.0    1126.5   10790.0    1126.1   10992.6
GR   1126.2   11069.8    1129.9   11130.9    1131.4   11223.1    1128.1   11290.0    1125.6   11357.9
GR   1124.4   11517.7    1124.3   11593.2    1122.3   11649.5    1122.9   11767.0    1118.3   11789.1
GR   1131.8   11828.6    1135.1   11872.0    1137.0   11955.4    1144.4   12010.2    1145.4   12024.9
GR   1145.8   12063.1    1139.7   12072.9    1139.7   12100.5

NC    0.050    0.050     0.040
ET                          9.1                                                       8659     12259
X1   19.943       86    10531.6   11275.3     200       230       220
CI    10275    1131.5     0.035                          2250
X3                                  8659
GR   1136.7    7475.2    1137.2    7498.8    1135.1    7530.2    1135.1    7569.0    1139.2    7615.0
GR   1139.2    7715.2    1139.8    7750.0    1137.4    7794.8    1127.7    7817.2    1121.6    7843.9
GR   1121.6    7918.1    1125.8    7947.8    1127.3    8080.9    1130.4    8129.7    1130.4    8148.3
GR   1134.3    8211.3    1132.0    8268.3    1134.9    8279.9    1137.7    8402.5    1136.5    8469.7
GR   1137.8    8514.7    1137.2    8559.2    1138.5    8640.1    1139.1    8735.1    1137.7    8826.3
GR   1135.4    8917.5    1129.9    8954.0    1128.9    9022.7    1131.0    9060.8    1130.5    9131.6
GR   1132.2    9225.2    1130.6    9306.6    1132.3    9371.6    1134.2    9389.4    1137.7    9401.0
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GR	1137.0	9463.5	1134.9	9470.8	1136.9	9498.2	1136.9	9550.4	1141.1	9571.5
GR	1135.3	9601.5	1137.0	9627.9	1135.8	9639.8	1132.3	9652.0	1132.2	9721.8
GR	1130.0	9734.5	1133.0	9755.9	1131.1	9762.4	1132.4	9842.3	1132.4	9866.8
GR	1130.1	9901.2	1132.5	9945.7	1131.6	10000.0	1131.8	10029.1	1134.2	10123.9
GR	1134.9	10308.8	1133.0	10465.2	1133.9	10531.6	1127.9	10581.5	1125.1	10754.4
GR	1127.4	10846.2	1127.5	10963.0	1125.6	10984.7	1124.5	11079.4	1122.7	11111.7
GR	1124.6	11190.6	1132.3	11275.3	1131.5	11348.8	1126.8	11406.5	1125.6	11552.1
GR	1125.5	11657.0	1121.8	11710.4	1122.7	11733.3	1120.8	11856.9	1141.5	11889.2
GR	1136.4	11900.8	1137.4	11930.6	1144.2	11946.4	1145.5	11984.7	1142.9	12005.2
GR	1142.8	12045.8	1147.3	12061.3	1147.0	12089.4	1139.8	12102.0	1139.8	12134.7
GR	1145.8	12144.6								

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ET			9.1						8680	12182
X1	19.985	88	10349.7	10967.5	200	230	220			
CI	10375	1132.1				2250				
X3				8680						
GR	1137.3	7469.7	1137.8	7499.6	1135.3	7516.0	1135.3	7556.6	1136.2	7584.5
GR	1136.7	7634.3	1135.0	7697.4	1135.8	7765.0	1127.4	7790.6	1128.4	7799.4
GR	1121.9	7841.7	1122.0	7906.1	1125.0	7945.3	1125.2	7992.5	1127.4	8117.4
GR	1130.5	8159.9	1130.9	8205.0	1133.4	8238.3	1132.5	8288.5	1135.4	8304.3
GR	1135.0	8329.9	1137.1	8351.7	1137.8	8540.8	1139.2	8622.4	1138.3	8676.5
GR	1138.5	8780.3	1136.7	8845.8	1134.6	8875.4	1134.6	8930.6	1130.0	8953.2
GR	1130.3	8997.3	1129.7	9032.0	1130.4	9053.6	1130.6	9240.3	1134.1	9356.5
GR	1134.4	9435.6	1137.2	9446.8	1137.2	9471.0	1136.4	9544.2	1143.4	9564.5
GR	1137.6	9575.9	1138.3	9600.9	1132.2	9627.3	1134.8	9679.0	1135.4	9741.9
GR	1131.7	9763.4	1132.4	9787.4	1131.4	9836.8	1134.4	9930.6	1133.7	10000.0
GR	1133.7	10000.1	1133.8	10020.0	1135.0	10213.9	1134.0	10349.7	1128.7	10391.8
GR	1126.0	10514.0	1125.2	10603.9	1126.1	10652.3	1129.8	10740.8	1128.0	10842.2
GR	1129.0	10910.4	1132.6	10941.3	1134.3	10967.5	1133.4	10987.3	1135.7	11011.4
GR	1133.9	11109.3	1136.3	11121.8	1137.1	11162.4	1138.4	11189.6	1138.0	11243.8
GR	1133.3	11269.8	1132.6	11422.8	1128.4	11484.4	1127.7	11554.5	1124.5	11657.2
GR	1125.8	11727.2	1127.2	11774.5	1127.2	11815.2	1129.7	11845.0	1128.9	11905.2
GR	1127.2	11933.8	1139.3	11963.1	1142.7	12058.8	1146.6	12075.5	1146.2	12097.9
GR	1140.2	12108.4	1140.2	12142.0	1145.8	12156.6				

ET			9.1						8704	12194
X1	20.028	87	10186.5	10810.4	190	260	230			
CI	10325	1132.8				2150				
X3				8704						
GR	1137.3	7467.6	1137.7	7495.1	1135.3	7517.9	1135.7	7559.0	1137.4	7588.3
GR	1136.3	7654.8	1135.5	7684.4	1135.9	7778.7	1138.4	7791.0	1123.3	7838.6
GR	1122.9	7860.2	1125.8	7909.7	1124.1	7931.1	1124.1	7958.0	1125.6	8028.6
GR	1128.7	8114.4	1128.1	8166.3	1130.7	8194.0	1131.7	8233.6	1131.7	8276.1
GR	1135.4	8344.4	1135.0	8354.6	1137.6	8400.1	1138.2	8503.7	1137.2	8536.0
GR	1138.6	8585.6	1138.2	8689.9	1137.7	8746.8	1135.3	8776.8	1136.3	8817.2
GR	1135.9	8847.4	1138.2	8871.7	1138.7	8915.5	1131.0	8949.8	1132.1	8956.5
GR	1130.0	9076.4	1131.1	9126.1	1129.7	9215.0	1133.6	9269.4	1136.7	9387.2
GR	1136.2	9425.9	1139.4	9455.2	1137.6	9532.8	1147.6	9566.6	1139.7	9586.3
GR	1139.7	9633.3	1134.7	9650.7	1134.7	9699.0	1133.9	9736.7	1131.2	9752.8
GR	1130.6	9791.6	1133.8	9808.4	1135.3	9931.7	1135.3	10000.0	1135.3	10018.3
GR	1134.5	10146.0	1135.7	10186.5	1129.5	10216.5	1126.5	10317.3	1126.0	10493.0
GR	1131.5	10580.8	1130.4	10708.3	1131.4	10771.3	1136.8	10810.4	1136.0	10924.7
GR	1136.7	11018.5	1138.0	11066.8	1136.9	11134.8	1134.1	11205.8	1133.7	11335.3
GR	1132.2	11388.5	1128.7	11472.3	1127.8	11626.1	1127.2	11771.6	1128.7	11818.1
GR	1127.8	11859.6	1129.3	11913.2	1129.2	11940.1	1142.1	11964.8	1143.7	12002.7

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GR   1143.0   12041.8    1145.6    12095.6    1145.6     12114.3    1140.3     12119.8    1140.3     12153.8
GR   1146.2   12165.2    1146.6    12194.9

ET                          9.1                                                          8739       12212
X1   20.072        88    10049.5    10683.8       190         260       230
CI    10225    1133.4                                       2050
X3                                   8739
GR   1138.0    7664.4    1136.6     7677.8    1135.9      7777.2    1142.1      7792.3    1142.1      7805.4
GR   1128.9    7826.2    1125.1     7844.3    1123.6      7878.4    1123.7      7934.2    1124.7      8081.4
GR   1127.6    8128.9    1128.3     8175.4    1127.5      8214.0    1132.7      8317.8    1132.6      8344.5
1
   17MAR92      15:27:10                                                                                  PAGE    8


GR   1133.8    8380.4    1136.5     8399.7    1136.3      8486.7    1138.2      8606.9    1137.2      8714.7
GR   1135.7    8733.9    1136.9     8764.9    1139.7      8812.7    1139.5      8917.3    1132.9      8933.2
GR   1131.2    8958.0    1131.8     9039.3    1129.9      9105.5    1128.4      9126.6    1128.4      9178.7
GR   1132.7    9233.2    1135.4     9295.4    1136.4      9351.1    1136.4      9408.1    1139.4      9436.4
GR   1139.6    9504.0    1137.0     9548.2    1145.0      9577.5    1138.4      9599.9    1140.4      9632.3
GR   1139.9    9690.1    1132.3     9721.8    1131.4      9772.3    1135.4      9834.0    1135.4      9948.8
GR   1135.9   10000.0    1136.0    10049.5    1129.7     10069.6    1127.9     10086.6    1126.5     10194.7
GR   1126.8   10261.0    1127.6    10344.5    1127.6     10376.4    1130.1     10433.4    1131.5     10461.7
GR   1132.7   10479.7    1132.4    10604.9    1134.4     10660.1    1136.9     10683.8    1137.1     10705.3
GR   1136.3   10738.7    1137.8    10779.0    1136.7     10835.8    1137.2     10962.0    1135.6     11125.3
GR   1131.6   11272.7    1131.9    11371.8    1131.4     11398.9    1128.7     11434.1    1129.0     11488.6
GR   1128.1   11586.0    1129.2    11625.8    1128.0     11655.1    1128.0     11744.5    1129.7     11764.7
GR   1128.9   11789.2    1123.8    11824.2    1123.8     11844.7    1125.0     11884.8    1141.8     11915.0
GR   1142.6   11996.7    1144.5    12074.4    1145.2     12106.7    1146.3     12123.0    1140.0     12131.7
GR   1140.0   12170.5    1145.5    12180.3    1146.7     12212.3

ET                          9.1                                                          8770       12445
X1   20.112        90     9962.4    10638.1       190         260       210
CI    10050    1134.1                                       1700
X3                                   8770
GR   1138.0    7680.2    1136.8     7691.8    1137.3      7766.4    1136.3      7778.7    1142.6      7794.3
GR   1142.7    7808.3    1135.6     7822.9    1133.9      7852.4    1130.2      7862.6    1130.2      7874.5
GR   1126.1    7893.4    1125.7     7930.9    1128.5      7954.9    1123.5      7985.9    1124.6      8000.4
GR   1123.8    8063.2    1124.5     8142.1    1128.2      8218.8    1128.2      8287.9    1130.2      8334.3
GR   1132.3    8447.6    1137.6     8475.2    1137.2      8572.9    1136.6      8680.9    1134.6      8705.1
GR   1136.6    8734.1    1136.5     8782.3    1139.5      8815.3    1139.5      8869.3    1131.3      8922.4
GR   1132.1    8955.6    1131.7     9075.7    1128.3      9113.7    1129.5      9199.5    1132.9      9215.4
GR   1137.5    9348.4    1137.5     9393.6    1139.9      9410.4    1138.7      9471.3    1140.1      9515.8
GR   1140.1    9548.3    1137.4     9570.8    1145.9      9590.7    1138.3      9609.2    1140.3      9638.5
GR   1138.8    9753.8    1132.1     9791.0    1132.1      9859.6    1136.7      9927.3    1137.1      9962.4
GR   1130.2    9978.4    1126.5     9995.9    1126.5     10000.0    1126.6     10065.2    1126.9     10141.9
GR   1129.0   10265.2    1132.2    10317.7    1134.3     10542.5    1136.5     10608.4    1137.6     10638.1
GR   1138.3   10709.6    1134.2    10845.3    1133.3     10922.7    1131.6     10984.0    1132.4     11091.7
GR   1130.9   11235.1    1130.1    11312.0    1128.3     11342.8    1127.6     11387.9    1129.8     11446.9
GR   1131.8   11470.0    1132.2    11542.7    1127.4     11573.6    1129.2     11590.4    1127.1     11752.4
GR   1129.0   11763.7    1131.2    11868.7    1125.0     11905.1    1128.2     11977.4    1143.7     12003.7
GR   1147.6   12122.6    1147.4    12142.2    1140.3     12152.7    1140.3     12194.1    1145.4     12200.4
GR   1146.2   12260.1    1149.2    12335.9    1149.2     12368.1    1150.9     12391.3    1151.3     12445.3

ET                          9.1                                                          8819       12505
X1   20.152        90     9923.6    10540.3       190         230       210
CI     9600    1134.7                                        700
X3                                   8819
GR   1138.5    7693.7    1138.5     7758.3    1137.6      7782.1    1143.2      7796.1    1143.3      7809.0
GR   1135.7    7825.0    1135.6     7863.9    1137.8      7897.9    1128.9      7925.7    1126.5      7971.5
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GR	1126.0	8008.3	1129.5	8046.0	1129.5	8081.7	1124.7	8109.5	1123.0	8168.4
GR	1131.0	8449.0	1137.3	8601.8	1137.4	8789.4	1140.3	8794.7	1140.3	8811.7
GR	1137.1	8824.2	1131.1	8877.2	1131.1	8900.2	1135.2	8915.2	1133.6	8957.1
GR	1131.3	9053.5	1132.7	9076.3	1127.8	9134.6	1128.8	9203.1	1133.9	9217.0
GR	1134.6	9263.8	1137.2	9295.3	1137.6	9388.2	1140.8	9411.3	1139.7	9557.3
GR	1139.7	9584.1	1137.9	9594.2	1145.8	9612.1	1138.8	9633.4	1140.1	9664.3
GR	1140.5	9756.5	1142.1	9855.8	1141.1	9871.7	1134.8	9891.9	1134.8	9923.6
GR	1128.1	9953.0	1126.0	9981.2	1126.0	10000.0	1126.0	10080.2	1126.8	10104.7
GR	1130.3	10192.7	1133.9	10243.0	1134.9	10363.4	1133.9	10414.0	1134.9	10540.3

GR	1132.4	10686.7	1134.4	10853.5	1133.1	10922.7	1130.4	10948.8	1133.2	10982.8
GR	1130.9	11032.3	1136.6	11056.7	1136.3	11136.0	1133.3	11158.0	1134.8	11199.4
GR	1134.4	11267.8	1135.8	11310.5	1133.9	11354.8	1133.1	11503.7	1130.1	11606.0
GR	1128.1	11628.2	1127.6	11739.1	1128.8	11758.3	1129.2	11877.2	1131.1	11959.8
GR	1130.0	12084.4	1126.6	12133.8	1137.9	12158.5	1146.1	12184.6	1142.4	12202.0
GR	1142.0	12222.4	1149.5	12239.6	1149.3	12299.0	1140.4	12319.3	1140.4	12349.7
GR	1149.4	12361.4	1148.5	12425.5	1147.5	12448.2	1147.0	12464.0	1147.5	12505.2
ET			9.1						8877	12490
X1	20.189	89	9917.3	10638.9	200	200	200			
CI	10200	1135.4				1800				
X3				8877						
GR	1136.8	7693.6	1138.4	7789.0	1144.5	7808.2	1144.5	7818.5	1135.5	7839.6
GR	1135.5	7869.1	1138.5	7927.6	1137.6	7970.3	1127.4	8013.9	1127.2	8051.5
GR	1131.7	8172.7	1125.2	8234.9	1124.5	8376.4	1136.7	8666.1	1135.8	8727.3
GR	1137.1	8752.8	1141.3	8767.3	1141.3	8782.2	1131.6	8817.1	1130.5	8840.2
GR	1130.5	8866.4	1135.4	8887.0	1133.8	9024.2	1128.1	9194.6	1128.1	9194.6
GR	1128.8	9234.5	1134.2	9251.5	1135.2	9312.2	1137.9	9337.3	1138.9	9393.9
GR	1145.1	9407.3	1146.0	9439.3	1146.0	9481.6	1141.1	9516.3	1140.9	9607.6
GR	1139.1	9629.7	1146.1	9645.7	1140.1	9666.0	1142.3	9684.1	1141.3	9770.4
GR	1140.1	9837.7	1141.3	9917.3	1127.6	9939.2	1125.5	9980.9	1125.8	10000.0
GR	1126.6	10043.0	1127.0	10068.7	1133.0	10196.2	1133.0	10258.9	1135.1	10360.9
GR	1134.2	10442.5	1132.1	10575.1	1137.3	10638.9	1136.8	10708.6	1137.8	10804.3
GR	1138.5	11020.5	1135.2	11074.9	1134.6	11121.7	1129.8	11304.9	1129.7	11341.2
GR	1128.3	11376.9	1127.5	11474.0	1134.6	11519.0	1134.5	11565.6	1131.6	11741.7
GR	1133.8	11779.4	1133.0	11800.1	1127.1	11864.5	1120.9	11897.4	1121.6	11923.6
GR	1121.2	11937.2	1121.2	11972.0	1127.2	12012.3	1133.0	12117.5	1133.1	12158.3
GR	1143.4	12193.3	1146.7	12222.1	1146.7	12233.6	1141.1	12254.2	1141.1	12275.1
GR	1151.7	12297.5	1149.4	12310.0	1149.4	12352.0	1140.6	12366.6	1140.6	12395.6
GR	1149.3	12406.9	1148.0	12463.7	1146.1	12481.2	1145.7	12490.4		
ET			9.1						8927	12361
X1	20.231	90	9884.9	10651.1	190	260	220			
CI	10375	1136.0				2050				
X3				8927						
GR	1139.8	7540.9	1139.2	7910.7	1141.6	7947.9	1138.7	8038.2	1130.9	8061.1
GR	1129.7	8149.3	1130.7	8242.8	1131.8	8289.8	1130.7	8310.8	1126.2	8355.5
GR	1124.5	8440.8	1124.8	8487.0	1126.2	8585.1	1130.2	8639.2	1130.9	8676.0
GR	1135.4	8714.1	1140.5	8729.1	1140.5	8743.1	1132.2	8771.6	1130.5	8796.2
GR	1130.2	8814.1	1132.2	8846.2	1136.6	8858.6	1136.6	8896.2	1135.2	8927.8
GR	1136.0	8946.3	1134.2	8989.2	1133.8	9051.1	1133.0	9066.9	1132.5	9157.4
GR	1129.0	9253.6	1129.0	9283.0	1134.6	9309.6	1133.9	9334.6	1134.9	9359.8
GR	1137.6	9374.1	1139.9	9417.0	1139.9	9444.6	1142.5	9471.1	1142.6	9575.2
GR	1141.1	9606.3	1141.5	9649.1	1140.4	9695.4	1145.1	9706.6	1140.9	9721.9
GR	1141.6	9849.7	1143.0	9884.9	1141.5	9914.6	1130.9	9929.3	1126.7	9953.7
GR	1126.2	9980.8	1126.2	10000.0	1127.7	10034.5	1131.1	10086.5	1133.1	10206.7

GR	1133.1	10277.6	1134.2	10394.4	1133.4	10503.3	1137.1	10574.5	1138.7	10651.1
GR	1136.8	10814.9	1133.6	10842.4	1129.7	10853.4	1130.1	10915.9	1128.2	11097.5
GR	1129.9	11141.8	1137.6	11197.8	1135.0	11411.6	1135.1	11473.1	1133.7	11623.7
GR	1131.1	11668.2	1135.7	11735.3	1135.4	11754.7	1133.3	11790.6	1137.0	11811.6
GR	1136.6	11839.7	1133.3	11857.1	1133.5	11883.7	1127.8	11957.1	1126.7	12023.9
GR	1120.8	12075.2	1120.8	12113.0	1124.7	12132.4	1152.3	12186.2	1151.6	12197.6
GR	1144.1	12219.1	1142.9	12249.4	1145.0	12287.4	1150.2	12299.3	1151.8	12361.9

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ET			9.1						8989	12337
X1	20.269	90	9884.5	10713.7	190	220	200			
CI	10400	1136.4				2000				
X3				8989						
GR	1140.8	7604.0	1139.1	7968.7	1143.3	8029.4	1140.7	8089.4	1140.9	8163.2
GR	1131.8	8193.8	1131.8	8241.0	1129.5	8266.1	1128.2	8381.2	1129.3	8437.8
GR	1125.3	8469.8	1125.3	8561.3	1126.5	8583.1	1125.8	8628.1	1127.8	8633.1
GR	1135.2	8673.6	1139.1	8680.4	1139.1	8692.7	1135.9	8699.3	1128.7	8737.3
GR	1128.7	8756.1	1131.4	8779.6	1130.9	8792.1	1133.1	8800.3	1131.4	8810.9
GR	1134.3	8948.5	1135.2	9016.9	1132.6	9185.4	1130.8	9250.2	1128.4	9295.0
GR	1129.6	9317.1	1133.6	9327.3	1136.0	9428.9	1136.8	9485.4	1141.1	9496.2
GR	1142.8	9524.6	1141.7	9605.7	1143.5	9631.3	1143.5	9705.2	1140.7	9741.9
GR	1147.5	9759.0	1141.2	9780.4	1143.4	9884.5	1142.2	9899.7	1130.3	9928.8
GR	1128.4	9942.3	1127.0	9974.1	1129.0	10000.0	1129.2	10049.6	1129.4	10079.9
GR	1132.9	10127.8	1133.7	10185.6	1132.0	10315.6	1133.9	10447.6	1130.7	10602.1
GR	1129.1	10631.5	1134.4	10658.1	1136.2	10713.7	1136.2	10835.0	1133.9	10945.4
GR	1139.8	10966.2	1140.4	11002.7	1138.9	11030.5	1139.2	11077.0	1137.3	11157.2
GR	1138.8	11209.4	1136.3	11345.4	1135.1	11464.7	1135.3	11512.0	1133.2	11536.0
GR	1135.8	11558.8	1133.0	11602.4	1132.8	11632.0	1134.4	11670.9	1133.9	11742.6
GR	1132.8	11772.7	1136.6	11807.3	1135.7	11838.3	1136.7	11860.3	1131.5	11884.5
GR	1132.7	11903.7	1130.9	11929.2	1124.7	12130.9	1125.6	12160.5	1133.9	12188.2
GR	1141.4	12196.1	1140.5	12250.9	1151.1	12268.3	1150.4	12285.3	1152.0	12337.8

ET			9.1						9067	12386
X1	20.307	90	9790.3	10569.9	200	200	200			
CI	10550	1136.7				1700				
X3				9067						
GR	1141.4	7668.1	1138.6	8174.3	1140.3	8276.8	1137.4	8374.8	1136.3	8383.5
GR	1130.7	8399.7	1130.9	8410.4	1128.7	8490.1	1123.9	8513.2	1124.4	8559.8
GR	1129.5	8575.9	1135.8	8617.1	1140.1	8625.6	1140.0	8637.5	1132.6	8657.1
GR	1125.9	8688.8	1125.9	8731.5	1129.6	8817.2	1130.9	8899.4	1130.9	8950.4
GR	1131.5	8994.3	1131.5	9040.4	1131.3	9209.7	1129.5	9276.2	1134.3	9347.8
GR	1135.2	9471.6	1136.9	9518.1	1136.4	9670.6	1134.1	9701.8	1140.1	9722.9
GR	1139.0	9777.6	1145.0	9790.3	1138.0	9808.2	1139.1	9824.6	1138.7	9842.6
GR	1136.0	9871.3	1132.8	9901.0	1130.9	9949.9	1129.2	9971.7	1129.2	9998.9
GR	1129.2	10000.0	1126.3	10024.9	1129.9	10057.2	1129.9	10085.0	1132.7	10113.9
GR	1133.6	10149.2	1133.0	10210.1	1131.1	10259.9	1131.7	10318.4	1136.6	10547.3
GR	1138.6	10569.9	1138.9	10656.2	1137.8	10731.1	1136.3	10782.8	1137.7	10797.9
GR	1137.6	10810.9	1140.2	10852.3	1140.2	10951.1	1138.5	11028.5	1139.7	11146.5
GR	1137.4	11254.0	1137.9	11322.1	1136.0	11377.7	1135.9	11408.5	1136.0	11459.3
GR	1134.6	11518.2	1135.0	11562.4	1133.1	11661.2	1135.0	11675.2	1134.5	11732.2
GR	1136.6	11769.3	1135.3	11784.4	1132.6	11846.4	1132.4	11881.7	1130.4	11906.7
GR	1130.4	11931.7	1128.1	11955.1	1126.2	12066.8	1131.3	12127.5	1129.6	12155.7
GR	1140.5	12183.9	1139.9	12209.6	1151.2	12235.4	1152.1	12259.9	1152.1	12290.8
GR	1141.6	12307.3	1141.6	12337.6	1152.0	12349.5	1152.0	12371.1	1160.6	12386.1

X1	20.345	90	9790.7	10573.2	200	200	200			
CI	10975	1137.1				950				
X3				9147						
GR	1140.8	7732.1	1141.5	7773.8	1140.2	7825.6	1140.3	7902.1	1138.2	7907.4
GR	1141.9	7916.1	1139.5	7922.2	1140.9	7946.1	1139.3	8007.8	1140.2	8053.8
GR	1139.5	8101.9	1137.1	8162.0	1139.0	8179.0	1138.0	8293.8	1138.3	8360.8

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GR	1136.7	8391.4	1139.2	8443.1	1137.6	8562.6	1139.8	8575.7	1139.8	8587.5
GR	1128.4	8666.0	1128.1	8715.2	1130.3	8752.1	1127.4	8819.2	1127.0	8859.6
GR	1128.5	8892.8	1129.9	8973.8	1128.2	8997.8	1130.0	9077.9	1128.7	9133.8
GR	1129.3	9180.6	1129.0	9293.4	1130.3	9306.2	1129.6	9387.5	1131.8	9436.7
GR	1134.9	9540.1	1135.1	9589.9	1130.8	9612.9	1130.8	9698.3	1132.5	9712.7
GR	1129.9	9739.2	1129.9	9765.3	1138.4	9783.3	1138.2	9790.7	1141.3	9800.9
GR	1136.5	9814.0	1135.8	9849.6	1132.3	9905.3	1132.5	9985.3	1131.6	10000.0
GR	1132.4	10031.8	1131.9	10111.4	1129.0	10132.7	1132.2	10153.2	1130.8	10182.8
GR	1131.2	10289.7	1134.5	10432.5	1136.9	10530.6	1139.1	10573.2	1139.5	10721.0
GR	1138.6	10804.8	1138.7	10866.9	1140.0	10915.4	1140.0	11059.1	1138.2	11150.0
GR	1136.8	11193.4	1137.4	11231.7	1135.9	11250.0	1137.1	11272.3	1136.9	11306.8
GR	1138.2	11371.7	1136.1	11434.2	1133.8	11459.5	1133.8	11491.8	1135.7	11549.3
GR	1134.7	11603.7	1134.0	11742.5	1132.3	11826.6	1130.5	11868.9	1127.2	11891.6
GR	1127.3	11995.7	1131.3	12042.3	1131.0	12107.9	1151.1	12161.1	1151.9	12177.6
GR	1150.9	12244.8	1141.3	12259.6	1141.3	12293.2	1150.8	12304.3	1150.8	12345.0

ET			9.1						9216	12402
X1	20.383	90	9806.2	10612.3	200	200	200			
CI	10937	1137.4				825				
X3				9216						
GR	1140.9	7793.3	1140.4	7927.4	1138.8	7931.5	1143.8	7942.0	1140.4	7950.5
GR	1143.7	7978.4	1141.8	8030.0	1144.4	8042.1	1144.4	8101.7	1139.3	8118.6
GR	1137.1	8159.3	1137.5	8195.5	1137.2	8233.2	1138.3	8330.8	1137.9	8444.6
GR	1139.3	8470.8	1138.2	8527.9	1139.0	8598.7	1138.5	8703.0	1137.7	8736.7
GR	1135.9	8755.3	1134.4	8795.7	1130.1	8822.5	1129.3	8848.9	1130.2	8885.6
GR	1127.6	8951.8	1128.7	8967.0	1128.9	9071.1	1129.1	9188.7	1129.9	9276.0
GR	1128.2	9308.0	1129.8	9353.1	1127.4	9392.5	1127.4	9432.7	1129.3	9498.2
GR	1131.7	9559.9	1132.2	9622.0	1129.3	9664.1	1129.9	9706.1	1129.2	9766.2
GR	1135.2	9792.7	1141.1	9806.2	1134.5	9822.3	1133.3	9878.4	1133.8	10000.0
GR	1134.4	10039.5	1134.0	10065.0	1131.6	10094.4	1131.3	10180.7	1132.2	10249.9
GR	1130.5	10278.9	1133.7	10366.4	1133.7	10391.1	1136.4	10499.4	1139.3	10612.3
GR	1140.1	10679.7	1139.6	10742.3	1140.7	10804.6	1140.2	10895.6	1137.1	11032.1
GR	1137.5	11127.6	1136.6	11171.7	1138.4	11201.5	1138.4	11307.6	1136.5	11343.6
GR	1133.3	11378.8	1133.3	11406.0	1136.1	11497.3	1136.0	11556.5	1132.5	11681.3
GR	1133.1	11748.7	1127.6	11812.8	1127.2	11851.7	1131.1	11950.2	1131.7	12012.2
GR	1127.6	12034.4	1140.5	12065.9	1140.6	12099.3	1150.6	12152.6	1151.2	12190.7
GR	1141.9	12206.1	1141.9	12244.6	1150.0	12254.9	1150.3	12289.9	1147.8	12313.5
GR	1149.1	12335.9	1153.6	12348.3	1153.8	12359.2	1152.8	12376.9	1148.8	12402.3

ET			9.1						9280	12502
X1	20.420	88	9797.7	10637.9	200	200	200			
CI	10912	1137.8				675				
X3				9280						
GR	1141.6	7859.0	1139.1	7878.7	1141.7	7954.3	1140.0	7958.8	1144.4	7969.2
GR	1140.7	7978.2	1142.1	8004.8	1141.6	8114.4	1138.3	8179.9	1138.3	8203.6
GR	1139.6	8230.0	1139.3	8272.0	1140.3	8326.1	1139.1	8388.1	1139.8	8499.4
GR	1140.1	8589.0	1139.3	8618.2	1140.5	8715.8	1138.8	8930.2	1140.3	8941.4
GR	1135.9	8948.7	1135.0	8972.7	1129.8	8985.8	1128.8	9059.3	1130.0	9108.1
GR	1128.4	9218.9	1128.8	9367.0	1130.0	9469.4	1128.9	9503.1	1130.8	9530.0

GR	1130.8	9616.3	1131	9768	1131	9768	1131	9768	1131	9768
GR	1134.7	9775.6	1134.5	9788.3	1139.8	9797.7	1134.6	9810.1	1131.6	9904.9
GR	1132.8	10000.0	1132.1	10053.7	1134.4	10068.3	1133.9	10105.1	1131.8	10143.0
GR	1132.1	10173.0	1130.0	10237.7	1132.7	10275.9	1132.4	10336.0	1134.2	10390.5
GR	1132.8	10401.0	1135.2	10411.4	1135.2	10467.4	1138.0	10598.2	1140.1	10637.9

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GR	1140.5	10755.9	1137.9	10950.5	1138.8	11048.1	1137.0	11090.5	1138.6	11122.1
GR	1138.8	11165.0	1137.2	11237.3	1132.8	11277.5	1133.8	11335.1	1135.8	11391.4
GR	1135.5	11481.4	1132.3	11661.4	1128.1	11736.1	1128.1	11751.5	1130.0	11796.8
GR	1131.6	11919.3	1132.1	11954.0	1141.1	11980.1	1146.4	12036.8	1144.2	12051.7
GR	1151.5	12102.4	1151.6	12146.6	1142.2	12161.2	1142.2	12198.4	1149.6	12213.6
GR	1149.6	12249.8	1148.4	12308.5	1153.5	12319.9	1154.0	12332.0	1153.1	12344.3
GR	1148.8	12358.7	1148.4	12409.1	1150.1	12502.8				

ET			9.1						9356	12500
X1	20.458	85	9784.9	10661.8	200	200	200			
CI	10837	1138.1				525				
X3				9356						
GR	1140.4	7922.3	1142.1	7974.8	1140.4	7979.6	1145.9	7990.2	1139.8	8002.3
GR	1142.6	8047.4	1141.3	8117.6	1139.4	8184.3	1139.1	8250.5	1139.9	8275.1
GR	1139.4	8322.4	1140.4	8443.0	1140.2	8555.5	1141.7	8604.0	1141.6	8644.3
GR	1151.3	8681.5	1141.8	8712.9	1140.9	8778.3	1140.5	8893.6	1140.5	9022.3
GR	1128	9042	1128	9042	1128.3	9204.4	1127.9	9236.5	1130.2	9246.9
GR	1130.3	9268.8	1128.7	9284.2	1128.7	9284.2	1128.3	9327.3	1128.9	9446.5
GR	1128.9	9607.7	1128.9	9607.7	1128.9	9750	1128.9	9750	1130.7	9752.2
GR	1131.2	9763.8	1137.5	9784.9	1131.0	9803.7	1130.8	9859.5	1132.0	9901.4
GR	1132.1	10000.0	1131.3	10092.5	1131.2	10125.2	1132.7	10131.8	1130.7	10237.3
GR	1134.2	10416.6	1134.0	10460.7	1140.2	10661.8	1139.1	10817.8	1138.8	10969.0
GR	1139.2	11037.3	1138.0	11081.7	1131.7	11117.8	1131.3	11169.2	1132.5	11230.8
GR	1134.2	11257.9	1134.5	11300.7	1132.0	11395.5	1134.5	11439.6	1134.5	11537.4
GR	1129.7	11565.4	1130.4	11600.0	1129.3	11708.1	1131.0	11766.8	1130.5	11804.8
GR	1134.5	11835.6	1143.9	11840.4	1143.4	11881.7	1145.1	11909.3	1150.9	11955.3
GR	1150.1	12013.0	1141.6	12048.3	1141.6	12110.6	1149.8	12132.9	1149.8	12160.9
GR	1151.3	12200.8	1149.6	12236.1	1150.1	12278.1	1153.1	12286.3	1154.0	12299.7
GR	1153.1	12319.6	1150.8	12346.5	1148.5	12354.9	1149.7	12434.8	1151.1	12500.6

ET			9.1						9423	12500
X1	20.496	88	9786.9	10647.8	200	200	200			
CI	10762	1138.5				325				
X3				9423						
GR	1142.2	7985.1	1142.3	7998.8	1140.5	8003.6	1145.2	8012.7	1140.8	8020.7
GR	1142.3	8046.5	1140.7	8187.1	1141.1	8246.5	1140.5	8313.1	1140.2	8441.2
GR	1138.5	8456.8	1138.5	8514.2	1141.2	8546.5	1141.8	8586.5	1140.6	8614.7
GR	1142.1	8719.9	1142.1	8767.2	1140.9	8824.6	1140.9	8910.4	1150.3	8926.9
GR	1156.0	8949.6	1156.5	8960.7	1149.2	8980.6	1140.6	8999.3	1140.7	9034.4
GR	1137.6	9075.0	1129	9088	1129	9088	1129	9088	1129	9088
GR	1129	9765	1129	9765	1138.2	9786.9	1131.6	9803.9	1130.5	9839.3
GR	1131.4	9921.1	1131.2	10000.0	1131.2	10000.1	1131.5	10047.1	1132.9	10120.7
GR	1130.9	10206.8	1131.1	10264.6	1133.7	10440.0	1133.4	10473.4	1134.9	10482.6
GR	1139.2	10647.8	1139.6	10725.6	1138.9	10810.0	1140.6	10869.9	1137.3	10911.5
GR	1137.9	10948.4	1131.3	10971.7	1129.7	11014.8	1130.9	11063.7	1134.3	11089.3
GR	1136.7	11179.3	1137.4	11291.2	1135.9	11434.8	1130.5	11465.4	1131.1	11495.6
GR	1130.0	11618.1	1130.5	11698.8	1136.1	11707.8	1137.2	11791.5	1147.7	11814.6
GR	1140.0	11837.7	1139.8	11864.4	1155.0	11903.3	1153.4	11913.9	1153.4	11933.4
GR	1142.2	11945.6	1142.2	11978.9	1151.1	11993.3	1151.1	12030.4	1151.9	12039.1
GR	1149.7	12062.9	1153.1	12085.0	1149.4	12131.4	1153.1	12154.0	1151.6	12201.3

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GR   1155.3   12213.3    1151.0    12226.9    1153.8    12251.8    1154.8    12267.5    1153.5    12283.7
GR   1149.3   12305.9    1150.4    12404.6    1151.6    12500.1
1
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ET                          9.1                                                                  9482      12503
X1   20.534        78     9794.0    10631.7       200       200       200
CI                                                          0.01
X3                                   9482
GR   1141.9    8048.7    1142.5     8076.6    1142.3     8175.1    1140.2     8268.5    1140.4     8316.7
GR   1139.8    8343.8    1140.9     8371.0    1139.9     8491.6    1140.4     8546.4    1139.1     8672.3
GR   1141.5    8706.5    1142.0     8765.9    1141.7     8838.0    1140.7     8888.4    1139.6     8960.9
GR   1141.6    9014.2    1135.7     9015.5    1134.4     9034.2      1132       9037      1132       9085
GR   1142.9    9101.7      1132       9115    1132.0     9396.3    1131.7     9476.5    1130.8     9522.2
GR   1131.6    9585.7    1130.6     9627.9    1131.3     9679.8    1131.3     9679.8    1131.3     9679.8
GR   1131.3      9787    1137.5     9794.0    1131.8     9813.7    1131.8     9891.5    1130.7     9968.5
GR   1130.8   10000.0    1130.8    10052.0    1130.8    10165.4    1131.0    10334.5    1134.0    10486.6
GR   1134.0   10508.8    1135.1    10513.7    1134.7    10531.6    1138.7    10631.7    1138.9    10679.3
GR   1138.9   10731.3    1136.2    10810.8    1132.6    10842.2    1130.6    10906.1    1132.2    10926.6
GR   1137.3   10952.7    1137.8    11200.2    1134.9    11349.0    1130.5    11412.3    1129.8    11502.2
GR   1130.4   11555.7    1132.0    11587.0    1140.9    11610.5    1141.8    11666.1    1137.9    11694.3
GR   1137.2   11735.6    1140.9    11828.0    1154.0    11861.2    1153.6    11932.5    1142.8    11946.6
GR   1142.8   11978.2    1154.0    11987.4    1154.0    12008.8    1151.1    12031.2    1154.2    12079.6
GR   1154.0   12153.1    1150.2    12213.1    1154.4    12224.3    1155.4    12239.5    1154.3    12250.4
GR   1150.2   12273.3    1151.9    12396.9    1152.1    12503.9

NC      .05       .05      .035        .1        .3
ET                          9.1                                                                  9552      12503
X1   20.572        79     9738.8    10594.0       200       200       200
X3                                   9552
GR   1142.1    8112.3    1141.5     8179.6    1142.3     8249.6    1142.5     8312.6    1141.7     8355.5
GR   1142.0    8390.9    1141.3     8435.8    1142.4     8478.0    1141.6     8550.4    1142.7     8571.7
GR   1141.9    8591.1    1142.7     8705.4    1142.0     8754.2    1140.2     8792.6    1142.2     8838.5
GR   1141.4    8905.9    1141.2     9015.6    1142.2     9038.2      1132       9052      1132       9052
GR     1132      9728      1132       9728      1132       9728    1137.9     9738.8    1132.1     9754.9
GR   1130.8    9803.3    1132.6     9842.5    1130.7     9971.9    1131.0    10000.0    1130.1    10044.2
GR   1129.0   10142.8    1131.1    10340.0    1133.6    10497.9    1134.6    10507.6    1134.6    10533.0
GR   1136.9   10594.0    1134.0    10655.1    1135.4    10702.1    1134.3    10718.2    1136.4    10754.1
GR   1134.4   10807.1    1138.1    10828.6    1138.3    10854.4    1136.9    10891.0    1136.9    10972.3
GR   1137.1   11077.2    1135.9    11172.2    1132.8    11308.0    1129.2    11336.4    1129.0    11375.7
GR   1132.0   11406.1    1131.1    11458.1    1136.5    11534.2    1142.7    11547.1    1141.8    11603.7
GR   1139.4   11648.3    1140.4    11698.7    1139.8    11750.9    1138.0    11771.9    1138.4    11813.3
GR   1136.8   11858.9    1144.2    11872.6    1153.1    11898.1    1152.8    11928.7    1142.7    11944.2
GR   1142.7   11976.3    1151.2    11987.7    1150.8    12049.1    1147.2    12081.3    1154.4    12103.1
GR   1154.7   12143.2    1152.9    12162.8    1153.3    12188.7    1155.5    12196.9    1156.2    12209.2
GR   1154.5   12227.3    1151.6    12244.8    1153.0    12381.1    1153.6    12503.8

ET                          9.1                                                                  9605      12503
X1   20.610        85     9704.9    10595.3       200       200       200
X3                                   9605
GR   1142.4    8176.2    1141.5     8223.8    1142.3     8303.6    1142.1     8381.5    1143.2     8438.0
GR   1142.0    8483.4    1143.1     8573.1    1141.1     8595.3    1143.7     8607.5    1142.9     8643.9
GR   1143.5    8737.7    1142.4     8799.9    1142.7     8818.6    1141.1     8957.7    1141.9     9078.9
GR   1139.9    9115.9    1140.9     9121.4    1137.5     9133.3    1137.3     9166.9    1138.9     9253.4
GR   1139.3    9332.2    1138.4     9448.4    1140.3     9587.3    1140.2     9620.7    1131.4     9645.4
GR   1130.0    9690.8    1137.3     9704.9    1129.7     9722.3    1129.3     9769.2    1132.6     9801.5
GR   1131.2    9938.8    1130.7    10000.0    1129.8    10062.6    1128.9    10170.6    1131.6    10394.1
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GR   1133.7   10502.5    1134.4    10513.0    1133.8    10534.4    1135.2    10540.4    1135.2    10576.1
1
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GR   1136.6   10595.3    1136.6    10702.9    1133.8    10740.2    1135.6    10763.8    1136.6    10873.7
GR   1136.0   10930.4    1134.1    11015.5    1132.0    11075.6    1132.9    11132.1    1131.8    11167.8
GR   1136.7   11192.1    1136.7    11214.8    1131.5    11289.4    1132.1    11334.3    1132.0    11389.9
GR   1134.3   11423.8    1134.3    11440.1    1141.2    11451.6    1140.2    11500.8    1141.5    11540.6
GR   1140.6   11649.6    1141.1    11723.9    1141.0    11844.6    1145.9    11881.9    1154.0    11897.6
GR   1154.0   11924.0    1143.0    11940.4    1143.0    11969.4    1152.9    11979.2    1153.3    12017.2
GR   1149.5   12041.7    1147.9    12077.0    1154.1    12103.7    1154.8    12177.3    1156.8    12203.1
GR   1155.2   12218.0    1156.9    12279.5    1155.3    12312.0    1156.4    12369.4    1158.2    12387.2
GR   1157.2   12410.7    1157.4    12437.8    1160.9    12466.9    1156.2    12490.6    1155.8    12503.5

ET                          9.1                                                          9658      12501
X1   20.648        80    9643.2    10621.9       200       200       200
X3                                   9685
GR   1142.4    8239.2    1141.1     8329.8    1144.4     8519.8    1142.9     8545.4    1144.3     8654.2
GR   1142.9    8772.7    1143.6     8796.7    1142.0     8874.3    1141.3     8936.0    1142.1     8962.6
GR   1141.8    9008.1    1142.3     9089.4    1141.2     9147.5    1144.0     9160.9    1141.2     9172.0
GR   1140.9    9315.2    1142.4     9367.5    1141.2     9442.5    1142.1     9594.8    1141.9     9632.6
GR   1144.3    9643.2    1133.2     9669.2    1131.5     9686.5    1133.2     9763.9    1131.4     9849.1
GR   1130.3    9980.3    1130.4     9999.1    1131.4    10000.0    1129.3    10078.2    1128.8    10157.7
GR   1130.3   10229.6    1130.8    10386.1    1133.9    10518.5    1133.3    10538.9    1134.8    10550.4
GR   1134.8   10612.5    1138.6    10621.9    1138.4    10657.6    1133.6    10674.8    1133.3    10735.7
GR   1136.7   10798.4    1134.7    10966.7    1132.4    11021.3    1133.2    11119.7    1131.3    11183.6
GR   1133.1   11225.1    1131.5    11277.5    1134.1    11303.8    1132.8    11322.0    1142.2    11334.1
GR   1140.8   11481.9    1141.6    11543.6    1140.4    11818.2    1141.2    11857.2    1144.6    11863.7
GR   1143.8   11870.5    1153.6    11893.3    1153.1    11916.9    1143.1    11933.1    1143.1    11964.1
GR   1150.5   11975.2    1150.5    12001.8    1152.2    12006.2    1147.0    12035.0    1146.5    12080.0
GR   1151.2   12097.3    1152.2    12120.8    1148.3    12151.1    1149.2    12191.7    1156.1    12213.6
GR   1157.0   12225.0    1155.9    12239.4    1153.4    12249.3    1150.3    12296.4    1151.9    12323.8
GR   1150.7   12390.9    1152.3    12422.9    1148.0    12452.0    1150.2    12481.1    1146.5    12501.2

ET                          9.1                                                          9754      12501
X1   20.686        72    9677.7    10623.4       200       200       200
X3                                   9754
GR   1142.0    8304.6    1143.5     8455.5    1144.3     8483.5    1140.7     8520.7    1145.9     8567.1
GR   1144.1    8628.8    1143.8     8708.7    1144.4     8781.5    1143.8     8786.8    1144.3     8906.5
GR   1143.4    9075.5    1143.9     9087.4    1143.4     9149.1    1144.0     9246.4    1142.4     9313.2
GR   1142.0    9396.2    1143.3     9489.0    1143.1     9524.0    1143.2     9620.0    1142.1     9677.7
GR   1136.9    9716.8    1133.3     9731.0    1133.8     9754.6    1132.3     9794.2    1129.7     9918.6
GR   1129.0   10000.0    1128.7    10070.3    1129.4    10145.8    1130.4    10376.3    1132.9    10529.4
GR   1133.7   10543.5    1133.6    10563.6    1134.4    10573.7    1134.9    10613.8    1139.4    10623.4
GR   1139.3   10658.8    1134.2    10674.7    1133.6    10703.1    1136.5    10761.3    1135.9    10923.7
GR   1135.1   10971.2    1133.2    11008.7    1133.6    11035.0    1131.5    11067.9    1132.5    11086.5
GR   1140.8   11117.6    1142.0    11171.4    1141.7    11267.5    1142.6    11324.9    1141.4    11541.8
GR   1140.6   11806.2    1140.4    11848.1    1152.3    11883.6    1152.3    11904.5    1143.1    11918.4
GR   1143.1   11973.1    1147.0    11984.3    1145.9    12043.5    1146.6    12174.9    1151.0    12203.6
GR   1149.2   12244.3    1156.0    12263.5    1156.2    12274.8    1155.5    12293.0    1148.2    12322.6
GR   1148.8   12367.9    1153.6    12392.2    1153.6    12412.9    1151.6    12428.0    1153.7    12442.3
GR   1152.9   12468.0    1154.6    12501.3
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ET                          9.1                                                          9797      12501
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X1	20.723	86	9747.2	10613.9	200	200	200			
X3				9797						
GR	1143.9	8368.3	1143.6	8432.4	1145.3	8444.3	1145.7	8586.2	1146.4	8611.9
GR	1145.3	8647.8	1146.9	8708.1	1146.9	8742.3	1145.5	8771.9	1145.2	8865.3
GR	1146.1	8924.5	1145.3	8958.3	1145.5	9077.7	1143.4	9148.5	1142.0	9163.1
GR	1136.7	9175.7	1136.7	9188.1	1132.5	9215.3	1128.2	9218.3	1126.3	9250.6
GR	1126.8	9351.6	1130.2	9365.5	1129.4	9387.9	1131.3	9433.1	1138.4	9448.6
GR	1140.3	9495.2	1139.9	9533.0	1140.4	9557.6	1143.2	9594.9	1144.8	9631.7
GR	1145.1	9650.6	1143.6	9674.9	1143.1	9712.3	1144.6	9747.2	1143.3	9755.9
GR	1134.8	9764.6	1131.0	9783.4	1132.1	9815.8	1131.0	9866.0	1128.3	9905.7
GR	1127.5	9966.2	1128.0	10000.0	1128.8	10065.6	1128.5	10165.3	1130.4	10387.0
GR	1135.0	10579.0	1135.0	10605.7	1138.9	10613.9	1139.1	10645.4	1135.1	10663.4
GR	1135.0	10701.0	1138.3	10796.6	1136.1	10875.9	1134.4	10889.2	1134.2	10923.9
GR	1135.3	10942.4	1142.4	10972.1	1142.5	11094.2	1141.4	11196.3	1143.1	11275.7
GR	1142.7	11409.9	1142.0	11604.4	1141.0	11776.5	1141.6	11812.3	1141.6	11845.7
GR	1152.5	11873.0	1152.5	11900.1	1143.7	11913.4	1143.7	11967.5	1149.6	11975.2
GR	1149.5	11998.6	1152.9	12010.7	1153.1	12075.9	1146.3	12124.5	1148.5	12168.5
GR	1148.1	12204.6	1153.1	12235.6	1152.1	12259.2	1154.3	12306.7	1156.0	12318.4
GR	1156.6	12332.4	1155.7	12348.4	1149.6	12374.9	1152.3	12395.0	1155.1	12438.3
GR	1155.1	12501.7								

ET	0	4.1	9.1	9831	0	0	0	0	9831	11700
X1	20.761	81	9778.2	10651.4	200	200	200			
GR	1143.9	8433.1	1142.1	8549.3	1142.5	8563.7	1146.9	8584.1	1145.9	8622.4
GR	1146.6	8671.3	1145.4	8713.1	1145.8	8758.0	1144.2	8820.5	1146.2	8919.3
GR	1146.6	8954.5	1146.6	9056.0	1146.1	9090.9	1143.2	9181.3	1142.0	9194.9
GR	1135.8	9220.6	1125.3	9254.0	1124.8	9307.0	1125.2	9337.7	1124.4	9406.8
GR	1142.6	9438.9	1141.2	9451.7	1146.1	9490.5	1146.5	9516.4	1145.0	9587.1
GR	1148.0	9609.4	1147.8	9640.7	1144.9	9672.9	1144.9	9718.5	1142.3	9751.0
GR	1142.3	9778.2	1133.6	9797.1	1130.1	9833.9	1129.1	9856.4	1126.8	9877.5
GR	1126.4	9979.2	1127.5	10000.0	1129.1	10093.4	1130.3	10286.5	1131.2	10344.0
GR	1130.9	10399.7	1133.6	10476.9	1135.7	10588.2	1136.4	10630.1	1137.4	10651.4
GR	1135.9	10710.7	1138.1	10736.2	1136.0	10782.8	1136.3	10828.4	1141.9	10851.6
GR	1141.3	10885.3	1143.1	11030.3	1140.8	11044.9	1142.3	11052.4	1143.1	11105.1
GR	1142.6	11199.4	1143.7	11301.1	1143.3	11415.4	1142.7	11518.9	1142.4	11739.7
GR	1141.9	11751.5	1142.7	11776.3	1142.7	11824.3	1150.5	11851.6	1150.5	11869.3
GR	1143.4	11883.5	1143.4	11937.1	1146.5	11944.5	1145.2	12019.7	1146.3	12144.3
GR	1146.9	12270.5	1148.3	12303.5	1151.8	12314.2	1151.6	12334.8	1146.2	12354.7
GR	1155.3	12377.3	1156.6	12389.5	1156.2	12437.2	1149.6	12454.5	1150.2	12492.8
GR	1153.4	12503.5								

ET	0	4.1	9.1	9844	0	0	0	0	9844	11550
X1	20.799	72	9795.8	10538.9	200	200	200			
GR	1144.9	8494.9	1144.0	8554.6	1145.2	8636.9	1144.8	8740.5	1144.0	8850.2
GR	1147.2	8955.5	1145.5	9050.0	1141.7	9288.3	1138.4	9314.4	1137.6	9342.2
GR	1139.9	9360.2	1132.8	9381.5	1132.8	9401.1	1146.7	9430.7	1146.5	9474.9
GR	1147.3	9516.8	1146.7	9557.0	1150.0	9577.2	1149.5	9605.7	1147.4	9632.6
GR	1142.9	9795.8	1135.6	9802.2	1127.1	9823.6	1125.6	9839.4	1125.6	9896.5
GR	1126.7	9925.2	1127.6	10000.0	1128.3	10063.3	1130.3	10230.4	1132.9	10391.7
GR	1132.9	10446.8	1132.4	10515.1	1136.2	10538.9	1136.1	10581.5	1140.1	10630.3
GR	1141.7	10721.2	1141.2	10758.5	1143.6	10775.6	1143.5	10877.0	1142.0	10913.5
GR	1143.3	10948.0	1142.0	11006.5	1143.0	11029.6	1143.8	11237.6	1143.1	11269.5

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GR	1144.5	11278.3	1144.1	11354.3	1144.1	11407.6	1143.0	11419.7	1143.9	11455.9
GR	1143.0	11603.8	1143.0	11741.2	1143.7	11787.6	1150.2	11803.8	1150.4	11835.9
GR	1143.5	11847.2	1143.5	11905.8	1146.8	11911.7	1146.3	11951.1	1146.1	12099.2

GR	1147.3	12319.9	1147.3	12353.5	1148.3	12357.9	1147.5	12362.2	1152.7	12384.4
GR	1152.6	12395.9	1146.8	12412.4	1156.3	12433.1	1157.2	12444.1	1155.8	12455.0
GR	1146.8	12475.1	1146.8	12501.6						

ET	0	4.1	9.1	9802	0	0	0	0	9802	11450
X1	20.837	63	9779.6	10534.5	200	200	200			
GR	1146.6	8559.6	1144.4	8781.1	1144.3	8862.1	1144.0	8927.4	1142.9	9019.1
GR	1142.3	9121.2	1149.4	9280.7	1150.8	9325.4	1149.8	9378.6	1151.2	9426.2
GR	1149.4	9513.5	1151.4	9531.1	1151.2	9562.4	1146.5	9603.3	1147.7	9635.2
GR	1145.1	9685.9	1145.9	9718.3	1143.9	9760.3	1143.9	9779.6	1130.6	9793.7
GR	1126.5	9805.3	1127.4	9874.6	1126.4	9950.6	1126.5	10000.0	1128.8	10080.5
GR	1130.9	10212.2	1130.4	10256.6	1131.9	10328.6	1131.9	10422.1	1133.9	10487.0
GR	1138.5	10498.1	1141.4	10534.5	1140.8	10664.6	1143.6	10788.7	1142.8	10850.4
GR	1142.4	10941.4	1143.7	10962.3	1143.9	11213.6	1145.1	11219.6	1143.9	11228.7
GR	1144.9	11261.6	1144.9	11400.0	1143.6	11546.9	1143.4	11699.9	1144.2	11716.6
GR	1144.2	11755.3	1150.0	11773.5	1150.4	11804.9	1143.4	11813.8	1143.4	11870.9
GR	1148.0	11876.6	1146.2	11929.8	1147.6	12203.3	1147.9	12397.4	1148.4	12401.2
GR	1147.7	12404.6	1153.3	12423.9	1152.7	12441.0	1147.1	12454.1	1147.1	12461.2
GR	1156.4	12476.3	1157.7	12488.0	1157.0	12502.5				

ET	0	4.1	9.1	9770	0	0	0	0	9770	11400
X1	20.875	71	9772.8	10431.0	200	200	200			
GR	1146.5	8622.9	1144.7	8822.3	1146.6	8897.6	1144.7	8922.9	1142.2	8950.7
GR	1141.4	9000.4	1147.8	9031.7	1150.2	9158.3	1150.2	9254.4	1151.7	9409.6
GR	1151.2	9463.7	1153.6	9481.4	1153.5	9512.0	1151.1	9544.8	1151.1	9590.4
GR	1149.3	9676.1	1145.4	9772.8	1132.0	9786.2	1129.1	9801.5	1126.8	9848.9
GR	1126.8	9922.9	1128.7	9949.1	1127.7	9986.3	1127.7	10000.0	1128.3	10000.7
GR	1129.6	10098.2	1130.7	10220.1	1132.1	10338.2	1131.7	10387.2	1132.8	10408.4
GR	1137.5	10431.0	1137.0	10454.0	1140.7	10567.4	1140.7	10610.0	1143.4	10662.7
GR	1142.6	10752.1	1140.2	10770.9	1142.2	10798.2	1141.9	10903.6	1144.3	10932.5
GR	1143.4	10962.3	1144.6	11109.4	1144.6	11198.3	1145.5	11207.0	1144.6	11211.7
GR	1145.5	11216.4	1144.9	11243.8	1146.3	11275.9	1145.5	11320.9	1146.2	11326.7
GR	1145.4	11337.2	1144.5	11526.2	1143.8	11715.9	1144.6	11733.5	1150.7	11743.7
GR	1150.7	11769.8	1143.8	11781.2	1143.8	11839.6	1147.8	11845.6	1147.8	11882.9
GR	1146.9	11893.1	1147.7	12149.3	1148.5	12399.3	1149.2	12414.0	1148.3	12418.3
GR	1153.9	12438.1	1153.8	12452.2	1147.7	12466.7	1147.7	12477.6	1156.5	12490.8
GR	1158.1	12502.6								

ET	0	4.1	9.1	9760	0	0	0	0	9760	11500
X1	20.913	67	9764.9	10606.2	200	200	200			
GR	1147.2	8686.1	1144.9	8890.9	1140.2	8969.4	1140.0	8993.5	1148.5	9032.9
GR	1149.9	9108.1	1149.9	9186.1	1149.5	9264.8	1151.0	9320.8	1150.7	9355.3
GR	1151.7	9387.7	1152.0	9420.2	1153.6	9434.8	1153.8	9463.0	1150.9	9485.4
GR	1150.7	9536.8	1152.6	9575.0	1152.9	9609.1	1150.3	9721.7	1148.6	9764.9
GR	1133.8	9771.7	1127.3	9792.9	1127.7	9922.7	1129.4	9949.1	1129.2	10000.0
GR	1128.6	10043.5	1129.1	10104.2	1131.4	10170.3	1131.4	10202.9	1136.8	10240.3
GR	1139.1	10444.0	1135.8	10458.9	1138.5	10577.5	1144.4	10606.2	1142.8	10660.8
GR	1144.4	10767.8	1141.0	10853.1	1141.0	10880.4	1144.6	10972.4	1144.0	11081.5
GR	1144.8	11171.8	1146.4	11235.8	1146.4	11265.9	1145.2	11271.9	1146.6	11279.4
GR	1145.9	11285.8	1145.4	11450.9	1143.8	11638.7	1144.6	11664.4	1144.0	11696.5
GR	1149.8	11711.3	1149.8	11734.6	1143.7	11743.0	1143.7	11802.2	1148.9	11812.7

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GR	1146.9	11856.0	1147.5	12086.4	1149.0	12282.5	1148.9	12395.6	1149.7	12401.3
GR	1148.9	12406.3	1153.9	12424.6	1153.9	12437.9	1145.4	12457.4	1157.8	12483.5
GR	1157.5	12496.7	1156.1	12501.6						

ET	0	4.1	9.1	9393	0	0	0	0	9393	11500
X1	20.951	67	9749.9	10243.3	200	200	200			
X3	10									
GR	1148.9	8750.0	1146.5	8892.0	1142.2	8916.1	1141.4	8989.8	1145.8	9009.2
GR	1147.9	9045.3	1148.1	9078.3	1149.0	9166.2	1146.1	9193.6	1149.5	9213.5
GR	1150.5	9246.5	1150.9	9332.3	1151.1	9377.1	1154.3	9393.1	1154.3	9422.4
GR	1152.5	9447.7	1152.8	9479.9	1151.2	9523.8	1153.3	9610.0	1153.3	9681.5
GR	1150.7	9749.9	1148.8	9757.6	1135.6	9766.4	1125.7	9788.0	1127.2	9921.2
GR	1129.8	9944.4	1130.2	10000.0	1129.8	10066.8	1128.9	10166.7	1129.7	10212.6
GR	1136.6	10243.3	1136.7	10333.4	1140.0	10509.7	1142.1	10637.2	1144.3	10783.9
GR	1143.8	10814.9	1141.1	10835.6	1140.6	10888.4	1145.1	10906.7	1145.5	11015.4
GR	1144.4	11060.9	1145.4	11111.7	1145.7	11178.2	1146.6	11213.9	1146.6	11302.5
GR	1145.1	11513.9	1144.3	11619.4	1144.8	11650.1	1143.9	11657.0	1151.1	11681.1
GR	1150.9	11700.0	1143.9	11708.8	1143.9	11768.7	1148.7	11776.4	1146.9	11827.0
GR	1148.9	12076.1	1150.0	12333.0	1149.2	12376.5	1150.2	12380.1	1149.4	12383.6
GR	1153.5	12405.1	1153.5	12416.9	1147.6	12436.2	1156.9	12460.3	1157.7	12471.8
GR	1156.7	12484.3	1147.8	12501.0						

ET	0	4.1	9.1	9354	0	0	0	0	9354	11400
X1	20.989	67	9734.9	10337.6	200	200	200			
X3	10									
GR	1149.8	8814.4	1147.2	8883.2	1143.5	8908.5	1142.1	8976.6	1148.1	9005.4
GR	1152.0	9058.2	1152.7	9107.4	1152.9	9151.7	1151.5	9203.9	1153.6	9237.2
GR	1151.9	9273.3	1153.3	9285.0	1153.6	9315.7	1152.7	9333.8	1155.6	9354.8
GR	1155.6	9381.9	1153.7	9403.2	1154.2	9447.7	1151.6	9459.5	1151.8	9575.7
GR	1151.8	9674.9	1148.7	9734.9	1137.0	9744.5	1127.2	9771.2	1127.2	9920.8
GR	1130.6	9950.3	1131.5	9977.3	1131.8	10000.0	1130.0	10128.2	1129.1	10221.1
GR	1132.0	10315.5	1137.5	10337.6	1137.2	10380.4	1139.5	10439.9	1146.1	10665.1
GR	1144.7	10762.5	1142.6	10850.3	1140.2	10902.3	1143.4	10912.6	1146.1	10934.6
GR	1146.3	11014.5	1145.6	11068.6	1147.1	11212.4	1146.2	11236.0	1146.2	11276.1
GR	1146.5	11327.3	1145.6	11451.0	1144.7	11623.1	1150.3	11640.5	1150.9	11664.7
GR	1144.0	11674.8	1144.0	11733.1	1149.5	11742.0	1148.1	11797.1	1149.7	12090.4
GR	1149.9	12352.2	1150.9	12356.8	1149.4	12362.3	1155.1	12387.3	1155.1	12399.1
GR	1147.9	12413.4	1147.9	12423.8	1157.5	12439.9	1158.6	12450.9	1157.2	12463.7
GR	1146.9	12480.3	1148.1	12500.5						

ET	0	4.1	9.1	9315.7	0	0	0	0	9315	11350
X1	21.027	63	9717.5	10300.1	200	200	200			
X3	10									
GR	1146.1	8879.1	1145.3	8963.1	1146.4	8984.3	1153.1	9024.4	1154.8	9072.7
GR	1154.5	9135.3	1152.9	9180.2	1154.2	9220.8	1154.2	9259.6	1153.3	9265.5
GR	1153.3	9295.5	1156.0	9315.7	1156.0	9344.4	1153.7	9375.2	1154.3	9457.4
GR	1154.2	9524.1	1152.2	9544.7	1154.5	9623.5	1153.0	9717.5	1127.8	9748.4
GR	1129.2	9791.7	1128.2	9897.6	1132.2	9936.9	1132.1	10000.0	1132.1	10000.1
GR	1131.8	10092.4	1129.4	10123.8	1133.6	10277.9	1140.5	10300.1	1140.5	10325.4
GR	1142.4	10384.6	1144.9	10532.9	1146.7	10555.7	1147.2	10636.6	1143.2	10690.8
GR	1142.5	10722.1	1140.6	10740.6	1145.2	10763.6	1141.0	10782.4	1142.4	10813.4
GR	1146.1	10866.5	1146.2	10918.2	1146.1	11013.0	1147.1	11111.2	1145.7	11144.3
GR	1146.2	11195.6	1145.7	11229.0	1145.3	11488.2	1150.7	11507.0	1150.7	11533.4
GR	1144.2	11541.9	1144.2	11603.4	1149.7	11614.1	1148.8	11662.6	1150.1	12042.3

1

GR	1150.5	12238.0	1149.8	12243.6	1155.4	12268.1	1155.6	12310.7	1159.7	12326.5
GR	1158.3	12367.9	1169.5	12384.3	1163.8	12402.5				

ET	0	4.1	9.1	9273.9	0	0	0	0	9273	11300
X1	21.064	56	9713.4	10376.9	200	200	200			

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X3      10
GR   1149.5    8941.3    1150.9    8980.3    1154.6    9023.2    1154.2    9154.7    1154.5    9211.0
GR   1153.2    9257.4    1155.2    9273.9    1155.2    9302.4    1152.3    9329.8    1152.9    9472.9
GR   1154.8    9526.0    1155.2    9575.9    1154.6    9679.4    1151.8    9713.4    1128.1    9737.9
GR   1129.4    9796.9    1130.1    9867.4    1131.7    9927.9    1130.6    9965.6    1131.9    9999.8
GR   1131.9   10000.0    1129.3   10150.8    1129.7   10342.8    1139.2   10376.9    1142.5   10543.8
GR   1144.6   10744.0    1145.7   10868.8    1145.1   10897.2    1146.6   10964.1    1146.4   11072.8
GR   1147.1   11129.9    1146.0   11157.1    1147.3   11196.2    1146.7   11273.0    1147.3   11333.2
GR   1146.4   11364.9    1145.9   11468.9    1146.0   11548.0    1151.1   11570.9    1151.2   11601.7
GR   1144.8   11609.3    1144.8   11668.9    1150.5   11680.3    1149.2   11741.4    1149.7   11980.8
GR   1150.6   12301.9    1151.0   12306.2    1150.5   12310.8    1156.8   12342.9    1157.0   12364.7
GR   1160.9   12374.0    1159.5   12393.4    1160.8   12411.0    1160.6   12422.1    1166.7   12430.7
GR   1166.9   12500.2

ET       0        4.1       9.1    9234.3         0         0         0         0      9234     11200
X1  21.102         71    9698.6   10411.0       200       200       200
X3      10                                                                 1149.4
GR   1152.9    9000.0    1152.4    9018.8    1149.0    9054.8    1150.6    9088.0    1152.6    9099.4
GR   1152.3    9138.7    1153.5    9160.8    1152.8    9216.4    1155.2    9234.3    1155.2    9261.8
GR   1153.5    9290.4    1152.4    9367.0    1142.2    9461.1    1141.1    9531.8    1142.5    9567.4
GR   1149.2    9596.6    1149.4    9608.8    1148.7    9631.2    1146.8    9637.7    1143.8    9698.6
GR   1140.1    9716.3    1128.0    9730.8    1129.1    9779.4    1130.1    9860.8    1132.3    9870.1
GR   1131.8   10000.0    1131.0   10080.5    1127.0   10126.4    1130.3   10142.5    1131.6   10316.7
GR   1129.0   10374.0    1140.3   10411.0    1143.2   10677.3    1145.6   10902.7    1146.9   11016.7
GR   1146.1   11100.1    1147.7   11139.7    1146.5   11247.4    1146.7   11303.8    1146.0   11382.6
GR   1146.9   11478.5    1148.2   11509.9    1147.5   11515.5    1154.8   11532.9    1153.0   11541.4
GR   1152.5   11564.0    1145.0   11577.5    1145.0   11636.9    1150.2   11646.4    1149.9   11690.1
GR   1150.9   11979.8    1152.6   12000.4    1149.5   12012.1    1149.5   12029.3    1151.5   12035.0
GR   1151.0   12083.1    1150.7   12269.4    1151.7   12286.3    1150.5   12289.9    1151.5   12294.1
GR   1151.5   12308.9    1156.9   12329.5    1157.4   12350.4    1156.7   12372.3    1160.7   12379.5
GR   1162.1   12395.5    1161.0   12409.9    1158.4   12422.9    1157.6   12446.1    1154.0   12467.6
GR   1155.7   12500.5

NC     .045      .045      .027        .1        .3
ET       0        4.1       9.1      9460         0         0         0         0      9700     11100
X1  21.202         18      9700     10750       560       450       528
X3      10
GR    1155      8280    1152.5      8705      1150      9040      1150      9140      1156      9190
GR    1155      9220      1155      9400      1156      9460      1155      9540      1150      9700
GR    1135      9730      1132      9750      1132     10360      1135     10420      1140     10500
GR    1145     10750      1150     11370      1157     11420

ET       0        4.1       9.1      9270         0         0         0         0      9590     11000
X1  21.302         16      9600     10820       600       440       528
X3      10
GR    1155      8340      1150      8930      1150      9110      1154      9170      1155      9270
GR    1151      9490      1150      9600      1135      9630      1133      9700      1133     10420
GR    1135     10450      1140     10520      1140     10780      1145     10820      1150     11300
GR    1157     11335
1
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ET       0        4.1       9.1      9210         0         0         0         0      9590     11050
X1  21.402         15      9600     11050       540       500       528
X3      10
GR    1156      8410      1155      8480      1152      8840      1150      9020      1154      9210
GR    1150      9600      1135      9680      1134      9770      1134     10430      1135     10490
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GR    1140     10510     1140     10790     1145     10820     1150     11000     1159.5     11050

ET       0       4.1      9.1      9100        0         0        0         0       9310      11020
X1  21.502        18     9320     11020      550       500      528
X3      10
GR  1156.5      8440   1155.1      8710     1155      8820   1153.5      8910       1155       9100
GR    1150      9220     1151      9260     1150      9320     1145      9350       1140       9370
GR    1140      9610     1135      9780     1135     10570     1140     10650       1145      10700
GR    1145     10880     1150     10920     1158     11020

NC       0         0        0        .3       .5
ET       0       4.1      9.1      9200        0         0        0         0       9360      10830
X1  21.602        14     9370     10820      520       535      528
X3      10
GR    1157      8480   1155.5      8810     1155      9200     1150      9370       1145       9470
GR    1140      9500     1135      9890     1135     10450     1140     10530       1145      10790
GR    1150     10820   1150.5     11000     1155     11110     1165     11170

QT       5    215000   215000     93000   160000    330000
NC     .05       .05     .035        .1       .3
ET                        9.1                                                       9230      10950
X1  21.659        13     9230     10950      350       240      300
X3      10                                                            1160       1160
GR    1164      9230     1160      9240     1150      9380     1145      9500       1140       9610
GR    1139      9790   1135.4     10300   1135.4     10400     1140     10570       1145      10770
GR    1150     10780     1155     10900     1166     10950

ET                        9.1                                                       9230      10950
SB     .95     1.153     2.60      1377     1320        64    31000               1135.8     1135.7
X1  21.667                                   40        40       40
X2                         1      1160     1164
X3      10                        9250                                  1164       1164

ET                        9.1                                                       9290      10830
X1  21.725        13     9290     10830      310       310      310
X3      10                                                            1163       1163
GR    1167      9290     1150      9370     1145      9500     1140      9620       1140       9820
GR  1137.7      9960   1135.6     10120   1135.6     10360     1140     10550       1145      10680
GR    1150     10750     1170     10830     1175     10850

ET                        9.1                                                       9290      10830
SB    1.75     1.570      2.7      1377     1720        90    44000               1135.8     1135.7
X1  21.733                                   40        40       40
X2                         1      1163     1171
X3      10                                                            1171       1171
1
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ET                        9.1                                                       9300      11090
X1  21.795        14     9300     11090      520        70      330
X3      10                                                            1169       1169
GR    1174      9300     1155      9370     1150      9400     1145      9480       1140       9580
GR  1135.7      9860   1135.7     10300     1140     10550     1145     10650       1150      10750
GR    1155     10830     1160     10880     1170     11000     1175     11090

ET                        9.1                                                       9300      11090
SB    1.05      1.18      2.5                1460        63    44704               1137.0     1136.8
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X1   21.809                                  70        70        70
X2                          1      1169      1175
X3      10                                                                1175      1175
BT       2      9300      1175         0     11090      1175         0

NC     .04       .04       .03        .1        .3
ET                          9.1                                                    9400     10910
X1   21.837        15      9400     10900       100       200       150
X3      10         0         0      9400
GR    1165      8850      1160      9000      1155      9070      1150      9400      1145      9520
GR  1142.5      9660      1136      9810      1136     10380      1140     10530      1150     10600
GR    1155     10710      1155     10900      1151     11150      1160     11200      1175     11250

NC       0         0         0        .1        .3
ET                          9.1                                                    9345     10600
X1   21.937        18      9350     10480       330       860       528
X3      10
GR    1175      8560      1170      8720      1165      8770      1160      8950    1159.5      9020
GR    1155      9040      1150      9350      1145      9570      1140      9650      1138      9670
GR    1138      9740      1145      9800      1138      9870      1138     10470      1155     10480
GR    1156     11130      1162     11160      1175     11220

ET                          9.1                                                    9200     10545
X1   22.037        19      9210     10540       470       565       528
X3      10
GR    1175      8570      1165      8800      1155      9100      1152      9150      1155      9210
GR    1150      9330      1145      9460      1140      9550      1145      9720      1150      9770
GR    1139      9850      1139     10270      1140     10290      1140     10480      1145     10520
GR    1155     10540      1155     10920      1162     10930      1175     11050

ET                          9.1                                                    9140     10560
X1   22.137        17      9150     10550       510       540       528
X3      10
GR    1165      8820      1161      9150      1150      9210      1145      9270      1141      9400
GR    1145      9520      1145      9680      1155      9730      1145      9790      1140      9830
GR    1140     10230      1143     10400      1145     10520      1155     10550      1155     11000
GR    1160     11020      1175     11150

ET                          9.1                                                    8870     10600
X1   22.237        15      8880     10550       520       535       528
X3      10
GR    1165      8770      1161      8880      1150      8990      1145      9030      1145      9500
GR    1150      9590      1157      9630      1141      9750      1141     10350      1141     10370
GR    1155     10550      1150     10970      1155     11300      1160     11340      1175     11520
1
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ET                          9.1                                                    8940     10550
X1   22.337        18      8950     10520       520       540       528
X3      10
GR    1165      8530      1160      8790      1155      8950      1150      9020      1147      9300
GR    1145      9480      1150      9530      1157      9590      1150      9640      1145      9690
GR    1142      9720      1142     10350      1150     10410      1155     10520    1156.5     10890
GR    1157     11250      1160     11320      1175     11520

ET                          9.1                                                    8960     10375
X1   22.437        14      8970     10370       550       500       528
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X3      10
GR    1165      8290      1160      8700      1155      8970      1150      9000      1149      9370
GR    1150      9520      1157      9590      1145      9670      1143      9710      1143     10320
GR    1160     10370    1161.5     10630      1160     11520      1165     11670

ET       0       4.1       9.1      8700         0         0         0         0      8870     10425
X1  22.537        25      8880     10420       540       510       528
X3      10         0         0
GR    1165      7050      1160      7150      1159      7380      1160      7600      1160      7900
GR    1159      8110      1160      8430      1161      8700      1160      8880      1155      9000
GR    1150      9020      1150      9270      1149      9350      1150      9430      1155      9580
GR    1158      9650      1150      9760      1144      9800      1144     10360      1160     10420
GR  1156.5     10800      1158     11370    1158.5     11930      1160     12300      1165     12350

NC       0         0         0        .3        .5
ET       0       4.1       9.1      8980         0         0         0         0      8980     10510
X1  22.637        20      8990     10500       510       540       528
X3      10         0         0
GR    1165      6300      1161      6870    1161.5      7280      1160      8450    1161.5      8720
GR    1160      8850      1155      8990      1150      9100      1146      9250      1150      9340
GR    1150      9650      1145      9850      1145     10370      1155     10430      1158     10500
GR    1162     11450      1160     11620      1160     12230      1165     12480      1170     12570

ET                          9.1                                                     9050     10480
X1  22.662        16      9050     10480       130       130       130
X3      10                                                            1165      1165
GR    1165      6770      1164      6930    1163.5      7490    1162.5      8000    1160.9      8560
GR    1165      8850      1172      9050    1145.5      9145    1145.5     10398      1172     10480
GR    1165     10690      1160     10950      1160     11340      1162     11590      1162     12300
GR    1165     12640

ET                          9.1                                                     9050     10480
SB     1.2       1.6       2.5         0      1253       100     24000      0.45    1145.5    1145.4
X1  22.681                                     100       100       100
X2                          1      1165      1163
X3      10                                                         1160.9    1160.9
BT      16      6770      1165         0      6930      1164         0      7490    1163.5         0
BT    8000    1162.5         0      8560    1160.9         0      8850      1165         0      9050
BT    1172         0      9051      1172      1165     10480      1172      1165     10481      1172
BT       0     10690      1165         0     10950      1160         0     11340      1160         0
BT   11590      1162         0     12300      1162         0     12640      1165         0
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ET                          9.1                                                     9045     10660
X1  22.799        27      9050     10655       640       590       625
GR    1165      6760    1161.5      7440    1161.5      7441    1161.5      7442    1161.5      7443
GR  1162.5      8755      1160      8880    1160.5      8930      1160      9000      1160      9050
GR    1155      9065    1152.5      9330      1150      9500      1146      9620      1146     10430
GR    1150     10470      1160     10500    1162.5     10655      1160     10900      1157     10930
GR    1160     10950      1163     11450      1165     11750      1168     12200      1168     12650
GR    1170     12690    1173.5     12950

NC     .05       .05      .035        .1        .3
ET                          9.1                                                     8725     10920
X1  23.000        27      8725     10920      1040      1065      1060
X3      10
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GR    1167      8500      1167      8501      1167      8502      1167      8503      1167      8504
GR    1165      8725      1164      8780      1160      8850      1160      9050      1155      9060
GR    1150      9110      1150      9295      1150      9490      1155      9940      1150     10045
GR    1147     10330      1150     10355      1155     10445      1155     10765      1160     10795
GR    1165     10820      1167     10920      1167     11260      1165     11500      1168     12040
GR    1170     12350      1174     12820

ET                         9.1                                                          9260     10810
X1   23.199        22      9270     10810      1040      1060      1050
X3      10
GR    1167      8660      1165      8810      1164      8975      1165      9040      1165      9270
GR    1160      9320      1155      9340      1150      9380      1150      9480      1155      9660
GR    1155      9965      1153     10265      1155     10580      1160     10660      1165     10690
GR    1170     10810      1170     12000      1173     12250      1170     12460      1170     12550
GR    1175     12620      1178     12705

ET                         9.1                                                          9315     10775
X1   23.398        27      9315     10770      1175       915      1052
X3      10
GR    1171      8500      1170      8600      1170      9315      1165      9400      1160      9470
GR    1151      9610      1151      9810      1155      9925      1155     10130      1157     10290
GR    1155     10470      1155     10690      1160     10750      1165     10770      1165     10860
GR    1160     10920      1165     10955    1166.5     11050      1165     11130      1165     11190
GR    1170     11270      1173     11300      1170     11330      1171     11660      1173     11955
GR    1175     12235      1177     12410

ET                         9.1                                                          8920     11050
X1   23.597        26      8920     11050      1047      1052      1050
X3      10
GR    1172      8245      1170      8580      1170      8775    1174.5      8920      1170      9005
GR    1165      9025      1165      9180      1166      9360      1165      9550      1160      9620
GR    1155      9640      1152      9710      1152     10135      1155     10260      1160     10390
GR    1162     10595    1164.5     10800      1165     10950      1170     11040      1173     11050
GR    1170     11060      1170     11450      1173     11790      1175     12050      1175     12310
GR    1176     12365
1
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ET                         9.1                                                          9320     10510
X1   23.649         8      9320     10510       200       340       270
X3      10         0         0         0         0         0         0      1175      1175
GR    1173      8200      1170      8640      1182      9320      1150      9410      1150     10420
GR    1182     10510      1170     11370      1175     11970

ET                         9.1                                                          9320     10510
SB    1.05       1.6       2.5         0      1044        90     25600       2.5    1150.1      1150
X1   23.658         0      9320     10510        45        45        45
X2       0         0         1      1175      1170
X3      10         0         0         0         0         0         0      1182      1182
BT      -7      8200      1173         0      8640      1170         0      9320      1182         0
BT              9320      1182      1175     10510      1182      1175     11370      1170         0
BT             11970      1175         0

ET                         9.1                                                          9320     10510
X1   23.667         6      9320     10510        45        45        45
X3      10         0         0         0         0         0         0      1175      1175
GR    1173      8200      1170      8640      1182      9320    1150.1      9410    1150.1     10420
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GR     1182      10510

NC        0          0          0        .1        .3
ET                            9.1                                                          9185      10790
X1   23.797         21       9190     10790      1105      1008      1055
X3       10
GR     1175       8295     1171.5      8760      1173      9190      1170      9450      1165      9470
GR     1160       9590       1155      9620      1154      9980      1152     10210      1155     10370
GR     1160      10520       1165     10640      1170     10715      1174     10790      1170     10850
GR     1170      11320       1171     11390      1170     11450      1170     11590      1171     11770
GR     1174      11880

ET        0        4.1        9.1         0     11600         0         0         0      9070     10900
X1   23.997         25       9760     10610      1085      1040      1060
GR     1180       8380       1181      8430      1180      8560      1179      8720      1180      9000
GR     1181       9070       1180      9130      1180      9430      1185      9455      1180      9490
GR     1175       9760       1170      9815      1155      9955      1154     10005      1154     10475
GR     1155      10475       1175     10525      1175     10610      1171     11230      1170     11460
GR     1168      11525       1170     11590      1175     11620    1173.5     11950      1175     12250

NC      .05        .05        .03
ET        0        4.1        9.1      8530         0         0         0         0      9700     11000
X1   24.196         18       9675     10910       815      1045      1050
X3       10          0          0
GR     1180       8155       1180      8340    1183.5      8530      1175      8580      1175      9545
GR   1178.5       9675       1175      9790      1155      9835      1155     10030      1160     10270
GR     1165      10350       1170     10440      1170     10600      1174     10910      1175     11140
GR     1177      11360       1178     11640      1180     12170
1
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NC      .05        .05       .035
ET                            9.1                                                          9010      10750
X1   24.396         13       9010     10665      1090      1040      1055
X3       10
GR     1184       9010       1180      9150      1175      9270      1158      9430      1158     10200
GR     1165      10275       1165     10340      1170     10400      1175     10640      1179     10665
GR     1175      10710       1180     11050    1181.5     11470

QT        5     220000     220000     95300    163300    335000
ET                            9.1                                                          8985      11010
X1   24.595         16       8985     11005      1025      1070      1052
X3       10
GR     1185       8790       1180      8855      1180      8985      1175      9090      1175      9170
GR     1170       9245       1165      9300      1161      9340      1161      9970      1163     10030
GR     1161      10110       1161     10630      1170     10660      1175     11005      1180     11155
GR     1183      11300

ET                            9.1                                                          9765      11535
X1   24.795         16       9770     11530      1060       630      1055
X3       10
GR     1184       8890       1180      9095      1180      9740      1183      9755      1180      9770
GR     1165       9810       1165      9900    1171.6      9910      1165      9970      1164     10000
GR     1164      11045       1165     11105      1170     11120      1175     11510      1180     11530
GR     1184      11840

ET                            9.1                                                          9600      11855
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X1   24.995      28      9605     11850      1065      1135      1055
X3      10
GR    1186    8250      1184      8570      1184      8571      1184      8572      1184      8573
GR    1180    8705      1179      9605      1175      9630      1167      9650      1167      9745
GR    1170    9755      1170      9945      1167      9980      1167     10260      1170     10280
GR    1173   10350      1170     10385      1167     10395      1167     11060      1170     11070
GR    1170   11380      1171     11430      1169     11580      1170     11640      1175     11665
GR    1180   11850      1185     11860      1186     11940

ET                       9.1                                                         8900     12245
NH       4     .05      9355      .035     11095       .05     11475      .035     12245
X1   25.194      25      9330     12245      1070       870      1050
GR    1185    8895      1175      8910      1175      9270      1180      9300      1184      9330
GR    1180    9355      1175      9370      1175      9460      1178      9640      1175      9820
GR    1170    9890      1170     10250      1175     10385      1180     10400      1184     10435
GR    1180   10500      1175     10670      1177     10890      1180     11095      1180     11475
GR    1177   11650      1175     11920    1176.8     12115      1175     12215      1185     12245

ET                       9.1                                                         9082     12795
NH       4     .05      9520      .035     10380       .05     11115      .035     12900
X1   25.392      28      9520     12870       920      1230      1045
X3      10
GR    1190    8800      1185      8830      1185      8831      1185      8832      1185      8833
GR    1185    9030      1175      9060      1175      9460      1185      9520      1180      9540
GR    1175    9868    1172.5      9925    1172.5     10240      1175     10255      1180     10300
GR    1185   10320      1188     10380      1188     10950      1185     11115      1180     11725
GR    1180   11790      1175     11990      1175     12080      1180     12365    1182.5     12470
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GR    1180   12615      1180     12870      1190     12900

ET                       9.1                                                         9300     13680
NH       5     .05      9635      .035     10020       .05     12305      .035     13105       .05
NH   13780
X1   25.591      30      9670     13740      1015      1105      1050
GR  1191.5    8900    1191.5      8901    1191.5      8902    1191.5      8903    1191.5      8904
GR    1190    9280      1185      9330      1175      9350      1175      9635      1185      9670
GR    1175    9695      1175     10020      1180     10170      1180     10240      1185     10275
GR    1190   10410      1190     10865      1189     11040      1191     11380      1190     11530
GR    1190   12030      1185     12305      1175     12435      1175     13090      1185     13105
GR    1190   13250      1185     13320      1185     13590      1190     13740      1195     13780

ET                       9.1                                                         9770     13800
NH       4    .035     10280       .05     11955      .035     13220       .05     13800
X1   25.792      23      9775     13800      1170       410      1065
X3      10
GR    1195    9180      1195      9181      1195      9182      1195      9183      1195      9184
GR    1190    9775      1177      9805      1177     10060      1180     10135      1185     10280
GR    1190   10540      1190     10640      1189     10885      1190     11390      1191     11550
GR    1190   11695      1185     11955      1177     11980      1177     12320      1175     13220
GR    1196   13260      1190     13740      1195     13800

ET                       9.1                                                         9670   13341.73
NH       4    .035     10620       .05     12150      .035     13100       .05     13620
X1   25.992      23      9670     13620      1100       660      1055
X3      10
GR    1195    9670      1180      9690      1175      9780      1175     10105    1178.5     10280
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GR   1178.5     10530      1180     10540      1185     10620      1190     10980      1191     11105
GR     1190     11240      1187     11390      1188     11710      1185     11920      1185     12060
GR     1190     12150      1180     12175      1180     12375      1185     12410      1180     12475
GR     1185     12760      1190     13100      1195     13620

ET        0       4.1       9.1      9615         0         0         0         0      9615  13302.12
NH        5      .035      9440       .05      9615      .035     10790       .05     12080      .035
NH    13360
X1   26.191        25      9615     13360      1090       830      1050
GR     1195      8715      1190      8890      1183      8920      1190      8950      1195      9440
GR     1195      9615      1190      9695      1185      9720      1185      9840      1188      9950
GR     1185     10080      1180     10195      1180     10300      1181     10390      1180     10500
GR     1180     10740      1185     10790    1188.5     11105      1189     11395      1188     11770
GR     1185     12080      1180     12190      1180     13060      1190     13080      1195     13360

ET                          9.1                                                         9616     11780
NH        3       .05      9535      .035     11780       .05     13000
X1   26.391        23      9535     11780      1080       960      1055
X3       10
GR     1200      9230      1195      9430      1197      9535      1195      9640      1190      9750
GR     1185      9850      1183     10025      1185     10190      1189     10330      1185     10425
GR   1182.5     10435    1182.5     11030      1185     11095      1185     11355    1182.5     11365
GR   1182.5     11685      1190     11710      1195     11780      1195     12395      1196     12460
GR     1195     12600      1199     12895      1200     13000
1
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ET                          9.1                                                         8950     10850
NC      .05       .05      .035        .1        .5
X1   26.591        21      8950     10840      1140       820      1060
X3       10
GR     1200      8900      1195      8950      1190      8970      1190      9005      1192      9160
GR     1190      9310      1185      9350      1185      9490      1186      9570      1185      9640
GR     1185     10100      1190     10235      1190     10305      1185     10355      1185     10710
GR     1195     10740    1197.5     10840      1196     11075      1197     11650      1196     11995
GR     1200     12680

ET                          9.1                                                         8300     11200
X1   26.790        22      9450     11200       980       930      1050
GR     1200      8080      1195      8090      1190      8100      1190      8160      1190      9420
GR     1200      9450      1195      9530      1195      9560      1193      9790      1190      9950
GR     1190     10000      1185     10030      1185     10170      1190     10200      1190     10390
GR     1185     10590      1185     10820      1190     10860      1195     10940      1195     11100
GR     1200     11130      1203     11200

ET                          9.1                                                         7834     10780
X1   26.991        26      9720     10780       410      1370      1060
X3       10
GR     1200      7580      1185      7590      1185      8370      1190      8390      1190      8450
GR     1185      8690      1195      9020    1196.8      9230      1195      9450      1195      9630
GR   1195.3      9720      1195     10160      1195     10200      1190     10270      1185     10320
GR     1185     10370      1185     10500      1185     10535      1185     10725      1190     10740
GR     1195     10750      1200     10765      1205     10780      1210     10870      1205     10960
GR     1203     11410

NC        0         0         0        .3        .5
ET                          9.1                                                        9320.     10620.
```

X1	27.156	48	9680	10640	570	910	870			
CI	10160	1186.5	870.035	1.0	1.0	.01	1250.			
GR	1205	7320	1200	7445	1200	7565	1195	7660	1195	7720
GR	1195	7790	1195	7885	1190	8015	1185	8180	1185	8320
GR	1190	8480	1190	8520	1190	8610	1195	8640	1200	8650
GR	1200	8710	1200	8760	1199	8790	1200	8815	1200	8880
GR	1198	9015	1200	9180	1204.5	9250	1200	9325	1200	9360
GR	1200	9415	1200	9460	1205	9485	1210	9500	1215	9525
GR	1215	9660	1210	9670	1205	9680	1200	9700	1195	9715
GR	1190	9740	1186.5	10120	1186.8	10475	1190	10590	1195	10605
GR	1200	10620	1205	10625	1210	10640	1215	10650	1215	10780
GR	1210	10795	1206	10935	1207	11110				
ET			9.1						9230.	10530.
X1	27.260	9	9590	10526	120	550	550			
CI	10070	1187.3	580.035	1.0	1.0	.01	1250.			
X3		0	0	0	0	0	0	1206.0	1206.0	0
GR	1206.8	7835	1188	7920	1188	8300	1206.8	8350	1203.5	8760
GR	1206	9590	1188	9614	1188	10502	1206	10526		

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ALMA SCHOOL RD.

SB	1.2	1.6	2.5	0	1250	105	18838	1.0	1187.4	1187.3
ET			9.1						9210.	10510.
X1	27.277	0	0	0	100	100	100			
CI	10050	1187.4	120.035	1.0	1.0	.01	1250			
X2	0	0	1	1203.5	1206.0					
X3		0	0	0	0	0	0	1207	1207	0
BT	6.000	7900	1206.8	0	8760	1203.5	0	9590	1207	0
BT	9591.0	1207	1203.5	10526	1206	1203.5	10526	1206	0	
ET			9.1						9630.	10550.
X1	27.322	37	9560	10715	200	200	225			
CI	10090	1187.7	230.035	1.0	1.0	.01	870			
GR	1205	7325	1202	7550	1200.5	7785	1200	7900	1195	7910
GR	1190	7920	1190	8210	1195	8290	1200	8320	1205	8465
GR	1207	8655	1205	8830	1204.5	8985	1205	9180	1205	9330
GR	1210	9345	1215	9365	1220	9380	1220	9440	1215	9540
GR	1210	9545	1205	9560	1200	9575	1195	9585	1190	9610
GR	1188	9650	1188.8	10255	1190	10510	1195	10535	1200	10570
GR	1205	10715	1205	10815	1205	10910	1205	10995	1205	11175
GR	1210	11205	1210	11305						
NC	0	0	0	.1	.3					
ET	0	4.1	9.1	0	10560				9640.	10580.
X1	27.428	45	9550	10555	900	420	560			
CI	10110	1188.5	540.035	1.0	1.0	.01	890			
GR	1210	7955	1205	8025	1200	8055	1195	8095	1190	8150
GR	1185	8165	1185	8165	1185	8190	1185	8490	1190	8500
GR	1195	8515	1200	8525	1205	8530	1209	8725	1205	8985
GR	1205	9045	1210	9160	1210	9330	1210	9425	1210	9500
GR	1210	9550	1205	9560	1200	9570	1195	9580	1190	9615
GR	1189.5	9945	1190	10215	1190	10270	1190	10305	1190	10375
GR	1190	10495	1195	10510	1200	10525	1205	10535	1210	10555
GR	1210	10595	1205	10610	1205	10745	1210	10825	1205	10935
GR	1205	10995	1205	11305	1210	11360	1210	11450	1210	11530

ET	0	4.1	9.1	0	10540				9580.	10530.
X1	27.555	42	9505	10540	900	690	670			
CI	10050	1189.4	690.035	1.0	1.0	.01	900			
GR	1211.5	8025	1211.5	8325	1210	8665	1205	8680	1200	8685
GR	1195	8700	1195	8755	1195	9075	1191	9300	1195	9385
GR	1200	9410	1205	9415	1207	9505	1205	9555	1195	9585
GR	1191	9725	1191	9935	1195	10115	1195	10210	1189.5	10385
GR	1195	10495	1200	10510	1205	10520	1210	10540	1210	10560
GR	1205	10575	1200	10780	1195	10950	1195	11000	1200	11010
GR	1205	11025	1207.5	11145	1205	11305	1201.5	11365	1205	11400
GR	1210	11410	1210	11440	1210	11490	1212	11575	1210	11665
GR	1210	11790	1210	11900						

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ET			9.1						9585.	10535.
X1	27.698	32	9535	10540	640	730	760			
CI	10060	1190.4	760.035	1.0	1.0	.01	900			
X3	10									
GR	1213.2	8645	1210	8815	1200	8825	1200	8925	1200	8985
GR	1205	9045	1207	9125	1205	9245	1205	9330	1205	9535
GR	1200	9560	1195	9585	1192.5	9915	1191	10335	1195	10390
GR	1195	10435	1195	10470	1200	10490	1205	10505	1210	10520
GR	1215	10540	1215	10750	1211	10925	1210	11375	1210	11510
GR	1210	11550	1210	11570	1212.7	12030	1210	12275	1210	12340
GR	1210	12405	1211	12685						

ET			9.1						9655.	10605.
X1	27.840	28	9460	10515	470	640	640			
CI	10130	1191.3	640.035	1.0	1.0	.01	900			
X3	10									
GR	1212.5	8585	1210	8750	1210	8845	1210	8880	1210	9050
GR	1211	9270	1210	9460	1205	9475	1200	9480	1195	9495
GR	1191	9510	1191	9695	1194	9950	1195	10370	1200	10475
GR	1205	10485	1210	10500	1215	10515	1215	10580	1215	10880
GR	1215	11345	1215	11440	1212.5	12175	1210	12290	1210	12425
GR	1210	12555	1210	12605	1211.5	12895				

ET			9.1						9735.	10685.
X1	27.945	26	9220	10465	830	520	660			
CI	10210	1192.1	650.035	1.0	1.0	.01	900			
X3	10									
GR	1213	8840	1212.5	9045	1210	9220	1205	9280	1200	9285
GR	1195	9300	1192	9305	1192	9570	1198	9645	1196	9845
GR	1197	10000	1200	10105	1205	10375	1210	10395	1215	10405
GR	1220	10465	1220	10635	1215	10690	1215	11010	1210.5	11350
GR	1212.5	11800	1214	12100	1211	12615	1215	12825	1215	12920
GR	1215	13130								

ET			9.1						9585.	10535.
X1	28.075	30	9220	10410	920	410	690			
CI	10060	1193.0	650.035	1.0	1.0	.01	900			
X3	10									
GR	1220	9220	1215	9235	1210	9245	1205	9255	1200	9270
GR	1200	9310	1195	9390	1193	9400	1193	9800	1193	9805
GR	1199	10000	1200	10245	1205	10275	1210	10285	1215	10305
GR	1220	10410	1220	10455	1215	10540	1214.2	10860	1212.5	11180

GR	1210.5	11375	1210	11670	1210	11700	1213	11980	1215	12175
GR	1215	12220	1215	12305	1215	12365	1212	12565	1215	13130
ET			9.1							
X1	28.191	38	9320	10405	650	400	610		9575.	10525.
CI	10050	1193.8	600.035	1.0	1.0	.01	900			
X3	10			9200		10635				
GR	1216	8660	1215	8730	1210	8995	1210	9018	1215	9040
GR	1220	9062	1230	9120	1230	9160	1225	9175	1220	9200
GR	1215	9210	1210	9320	1205	9420	1200	9435	1195	9595
GR	1190	9635	1190	9905	1195	9930	1200	10190	1200	10290

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GR	1200	10325	1205	10340	1210	10360	1215	10405	1220	10635
GR	1220	10720	1215	10765	1213.5	10940	1210	11030	1210.5	11220
GR	1210	11300	1215	11665	1215	11725	1215	11800	1215	11925
GR	1215	12000	1215	12035	1214	12355				
NC	0	0	0	.3	.5					
ET			9.1						9350.	10650.
X1	28.291	29	9350	10495	550	450	529			
CI	10000	1194.5	530.035	1.0	1.0	.01	1250			
X3	10									
GR	1214	8330	1213	8640	1215	8880	1220	8925	1225	9190
GR	1225	9350	1220	9360	1215	9375	1210	9383	1205	9400
GR	1200	9420	1195	9445	1195	9475	1195	10140	1195	10290
GR	1200	10378	1205	10390	1210	10400	1215	10430	1218	10495
GR	1215	10610	1212	10890	1215	11210	1216.5	11550	1215	12360
GR	1214.5	12685	1215	12832	1217	13115	1218	13320		
QT	5	225000	225000	97600	166600	340000				
ET			9.1						29020.	30320.
X1	28.339	6	29012	30360	255	255	255			
CI	29670	1194.9	240.035	1.0	1.0	.01	1250			
X3	10							1220	1220	
GR	1227.5	29012	1218	29013	1199.5	29053	1199.5	30319	1218	30359
GR	1227.5	30360								
ET			9.1						29040.	30340.
SB	1.2	1.6	2.5	0	1267	90	25313	2	1200	1199.5
X1	28.358	0	0	0	100	100	100			
CI	29690	1195.0	110.035	1.0	1.0	.01	1250			
X2			1	1220	1227.5					
X3	10							1227.5	1227.5	
BT	4	29012	1227.5	0	29013	1227.5	1220	30359	1227.5	1220
BT	30360	1227.5	0							
ET			9.1						9280.	10580.
X1	28.383	23	9310	10590	330	100	130			
CI	9930	1195.3	210.035	1.0	1.0	.01	1250			
X3	10									
GR	1217	9280	1215	9330	1210	9344	1205	9380	1205	9765
GR	1200	9955	1195	9990	1190	10070	1190	10120	1195	10440
GR	1200	10512	1205	10530	1210	10545	1215	10555	1220	10565
GR	1225	10590	1225	10880	1220	11310	1220	11660	12220	12220
GR	1220	12240	1220	12330	1220.5	12380				

COUNTRY CLUB DR.

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ET                          9.1                                                                    9395.      10695.
X1   28.487        32      8810     10630       550       560       550
CI    9870    1196.0   550.035       1.0       1.0       .01       900
X3      10
GR    1216      8250    1215.5      8630    1215.5      8810      1215      8860      1210      8880
GR  1208.5      8900      1210      8945      1210      9314      1205      9820      1205     10000
GR    1205     10015      1200     10035      1200     10120      1200     10175      1195     10210
GR    1195     10255      1200     10550      1205     10570      1210     10588      1215     10600
GR    1218     10630      1215     10855      1215     11070      1218     11190      1220     11400
GR    1220     11480      1220     11540      1220     11680      1220     11850      1220     11980
1
   17MAR92      15:27:10                                                                          PAGE   30


GR    1220     12200      1220     12313
1
   17MAR92      15:27:10                                                                          PAGE   31


    SECNO     DEPTH     CWSEL     CRIWS     WSELK     EG        HV        HL        OLOSS     L-BANK ELEV
    Q         QLOB      QCH       QROB      ALOB      ACH       AROB      VOL       TWA       R-BANK ELEV
    TIME      VLOB      VCH       VROB      XNL       XNCH      XNR       WTN       ELMIN     SSTA
    SLOPE     XLOBL     XLCH      XLOBR     ITRIAL    IDC       ICONT     CORAR     TOPWID    ENDST


*PROF 1
0

CCHV=     .100 CEHV=     .300
*SECNO 19.381
CHIMP CLSTA=   10300.00 CELCH=    1123.60 BW=    2000.00 STCHL=    9315.00 STCHR=   11741.00
EXCAVATION DATA
AEX=    4984.3SQ-FT     VEXR=        .0K*CU-YD     VEXT=        .0K*CU-YD


3470 ENCROACHMENT STATIONS=     8924.0   12330.0  TYPE=      1  TARGET=    -8924.000
    19.381     18.10   1131.30       .00   1131.30   1132.06       .76       .00       .00   1123.60
  210000.0   30947.1  154186.5   24866.4    4327.4   21520.5    4351.4        .0        .0   1122.80
       .00      7.15      7.16      5.71      .040      .035      .040      .000   1113.20   8924.00
   .001551        0.        0.        0.         0         0         0       .00   3398.39  12322.39


FLOW DISTRIBUTION FOR SECNO=     19.38         CWSEL=   1131.30

STA=    8924.    9021.    9140.    9315.   11741.   11894.   12136.   12322.
  PER Q=      3.6      5.3      5.8     73.4      4.5      4.8      2.6
   AREA=   1108.5   1434.0   1785.0  21520.5   1448.1   1796.3   1107.0
    VEL=      6.9      7.7      6.9      7.2      6.6      5.6      4.9
  DEPTH=     11.4     12.1     10.2      8.9      9.5      7.4      5.9

*SECNO 19.446
CHIMP CLSTA=   10275.00 CELCH=    1124.30 BW=    2250.00 STCHL=    9167.00 STCHR=   11807.00
EXCAVATION DATA
AEX=    6378.6SQ-FT     VEXR=      55.8K*CU-YD     VEXT=      55.8K*CU-YD


3470 ENCROACHMENT STATIONS=     8860.0   12460.0  TYPE=      1  TARGET=    -8860.000
    19.446     17.25   1131.65       .00       .00   1132.56       .91       .46       .04   1124.30
  210000.0    4953.1  175006.5   30040.4     975.0   22223.6    4628.7     172.3      20.5   1122.00
```

28.487	21.20	1216.20	.00	1218.66	1217.66	1.46	.44	.22	100000.00	
225000.0	.0	225000.0	.0	.0	23175.9	.0	27392.0	2250.7	1218.00	
1.51	.00	9.71	.00	.000	.035	.000	.000	1195.00	9395.00	
.001043	550.	550.	560.	2	0	0	.00	1216.99	10611.99	

FLOW DISTRIBUTION FOR SECNO= 28.49 CWSEL= 1216.20

STA= 9395. 10630.
PER Q= 100.0
AREA= 23175.9
VEL= 9.7
DEPTH= 19.0

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SUMMARY TABLE 1

THIS RUN EXECUTED 17MAR92 15:37:09

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

100-YEAR FLOODPLAIN

SUMMARY PRINTOUT

SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
19.381	210000.00	8924.00	9315.00	7.15	7.16	5.71	11741.00	12322.39	3398.39	1113.20	1131.30	.0
19.381	210000.00	8924.00	11188.00	6.85	11.78	7.40	11741.00	12322.41	3398.41	1113.20	1131.31	.0
19.446	210000.00	8953.83	9167.00	5.08	7.87	6.49	11807.00	12448.98	3495.15	1114.40	1131.65	.0
19.446	210000.00	8949.36	11140.00	7.13	13.15	9.18	11807.00	12449.18	3404.22	1114.40	1131.73	.0
19.537	210000.00	8931.98	9263.89	5.42	7.95	4.74	12262.90	12577.00	3621.72	1117.00	1132.62	.0
19.537	210000.00	8930.05	11180.80	6.83	12.24	6.55	12262.90	12577.00	3150.65	1117.00	1133.38	.7
19.563	210000.00	8925.09	9221.23	5.63	8.13	4.77	12250.40	12417.70	3492.61	1118.70	1132.89	.0
19.563	210000.00	8915.05	11374.60	6.89	12.75	6.55	12250.40	12417.70	3210.74	1118.70	1133.84	.9
19.579	210000.00	8899.43	9214.48	5.80	8.29	3.39	12250.30	12594.80	3695.37	1118.20	1133.05	.0
19.579	210000.00	8888.82	11389.00	6.97	12.76	4.93	12250.30	12594.80	3408.71	1118.20	1134.13	1.0
19.618	210000.00	8834.83	9134.98	6.94	8.35	9.77	10795.52	12493.43	3658.60	1117.10	1133.47	.0
19.618	210000.00	8753.76	11427.30	6.65	13.42	4.46	12188.50	12550.90	3545.92	1117.10	1134.71	1.2
19.659	210000.00	8741.79	9123.24	6.61	8.22	10.32	10700.48	12435.41	3693.62	1113.60	1134.10	.0
19.659	210000.00	8670.00	11270.30	5.97	10.80	2.96	12163.70	12526.30	3856.30	1113.60	1136.02	1.9

19.716	210000.00	8677.00	9109.00	7.58	9.01	10.04	10595.87	12330.83	3556.84	1120.30	1135.07	.0
19.716	210000.00	8677.00	11265.10	6.55	11.59	4.27	12085.60	12374.98	3592.12	1120.30	1136.52	1.4
19.759	210000.00	8655.00	9093.87	8.72	9.06	9.95	10512.45	12314.43	3487.30	1119.40	1135.84	.0
19.759	210000.00	8655.00	11188.20	6.93	12.16	4.13	11975.60	12371.66	3555.21	1119.40	1137.02	1.1
19.803	210000.00	8644.77	9057.32	7.36	8.04	3.14	11909.50	12132.58	3271.09	1118.40	1136.88	.0
19.803	210000.00	8636.00	11056.30	6.93	11.95	4.36	11909.50	12135.05	3266.63	1118.40	1137.64	.7
19.856	210000.00	8697.20	9111.47	6.91	7.76	4.16	11848.60	12008.51	3200.13	1115.60	1137.48	.0
19.856	210000.00	8637.00	10946.90	5.77	10.34	4.83	11848.60	12013.43	3362.86	1115.60	1138.62	1.1

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SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
19.902	210000.00	8855.93	9142.17	6.57	8.09	3.50	11828.60	11961.79	3105.87	1117.20	1137.86	.0
19.902	210000.00	8646.00	10719.90	5.91	10.12	4.15	11828.60	11970.33	3303.69	1117.20	1139.02	1.1
19.943	210000.00	8780.74	9186.66	4.87	7.80	7.35	11348.80	11932.92	3140.29	1120.80	1138.40	.0
19.943	210000.00	8659.00	10531.60	4.81	9.13	7.66	11275.30	11936.14	3257.13	1120.80	1139.78	1.3
19.985	210000.00	8680.00	9290.10	5.81	8.63	7.71	11430.13	11961.84	3281.84	1121.90	1138.78	.0
19.985	210000.00	8680.00	10349.70	5.90	10.60	7.82	10967.50	11987.24	3291.46	1121.90	1140.16	1.3
20.028	210000.00	8704.00	9258.24	5.88	8.71	7.60	11367.22	11959.63	3255.63	1122.90	1139.40	.0
20.028	210000.00	8704.00	10186.50	6.13	10.68	7.73	10810.40	12154.84	3254.27	1122.90	1140.84	1.4
20.072	210000.00	8739.00	9249.33	6.34	8.49	7.47	11206.37	12170.63	3211.92	1123.60	1140.07	.0
20.072	210000.00	8739.00	10049.50	6.06	9.96	7.43	10683.80	12173.41	3195.92	1123.60	1141.63	1.5
20.112	210000.00	8770.00	9250.09	6.00	8.06	6.75	10853.90	12194.68	3271.40	1123.50	1140.77	.0
20.112	210000.00	8770.00	9962.40	5.36	8.24	6.69	10638.10	12196.76	3262.35	1123.50	1142.45	1.6
20.152	210000.00	8819.00	9265.01	6.48	8.37	6.47	10540.30	12350.82	3383.67	1123.00	1141.27	.0
20.152	210000.00	8819.00	9923.60	5.46	8.28	6.40	10540.30	12352.94	3403.99	1123.00	1142.89	1.6
20.189	210000.00	8877.00	9314.06	5.83	7.29	6.81	11071.60	12397.13	3368.11	1120.90	1141.78	.0
20.189	210000.00	8877.00	9917.30	5.48	7.98	6.67	10638.90	12399.03	3271.85	1120.90	1143.24	1.4
20.231	210000.00	8927.00	9365.63	5.86	7.71	6.62	11329.37	12166.45	3239.45	1120.80	1142.17	.0
20.231	210000.00	8927.00	9884.90	5.62	7.68	6.82	10651.10	12263.60	3267.89	1120.80	1143.68	1.5
20.269	210000.00	8989.00	9457.15	6.25	8.06	6.83	11339.96	12254.26	3265.26	1124.70	1142.54	.0
20.269	210000.00	8989.00	9884.50	6.01	8.59	6.39	10713.70	12256.69	3247.17	1124.70	1144.03	1.4
20.307	210000.00	9067.00	9710.94	6.48	8.35	7.10	11357.22	12339.17	3183.63	1123.90	1142.97	.0
20.307	210000.00	9067.00	9790.30	6.37	8.40	6.18	10569.90	12340.90	3188.76	1123.90	1144.48	1.5
20.345	210000.00	9147.00	9790.70	6.89	7.60	6.61	11404.44	12295.80	3033.68	1127.00	1143.53	.0
20.345	210000.00	9147.00	9790.70	6.77	7.62	5.63	10573.20	12297.45	3041.25	1127.00	1144.94	1.4
20.383	210000.00	9216.00	9806.20	7.25	7.43	6.37	11326.55	12247.15	2945.32	1127.20	1143.91	.0
20.383	210000.00	9216.00	9806.20	7.06	7.28	5.54	10612.30	12248.87	2956.49	1127.20	1145.26	1.3
20.420	210000.00	9280.00	9797.70	7.38	7.93	6.55	11210.19	12202.56	2778.40	1128.10	1144.23	.0
20.420	210000.00	9280.00	9797.70	7.12	7.63	5.75	10637.90	12205.25	2815.06	1128.10	1145.53	1.3

20.458	210000.00	9356.00	9784.90	7.30	7.90	6.35	11078.00	12118.74	2627.95	1127.90	1144.60	.0
20.458	210000.00	9356.00	9784.90	7.04	7.47	5.69	10661.80	12122.13	2650.63	1127.90	1145.85	1.2
20.496	210000.00	9423.00	9786.90	7.64	8.74	6.26	10896.37	11983.21	2480.11	1129.00	1144.86	.0
20.496	210000.00	9423.00	9786.90	7.29	7.99	5.79	10647.80	11985.18	2492.84	1129.00	1146.08	1.2
20.534	210000.00	9482.00	9794.00	7.41	10.31	6.11	10631.70	11980.07	2393.03	1129.80	1145.08	.0
20.534	210000.00	9482.00	9794.00	7.08	8.68	5.92	10631.70	11981.09	2398.82	1129.80	1146.32	1.2

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SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
20.572	210000.00	9552.00	9738.80	6.75	10.43	5.85	10594.00	11979.95	2364.04	1129.00	1145.42	.0
20.572	210000.00	9552.00	9738.80	6.14	9.50	5.39	10594.00	11981.43	2370.37	1129.00	1146.53	1.1
20.610	210000.00	9605.00	9704.90	6.59	10.50	5.76	10595.30	11972.11	2311.44	1128.90	1145.74	.0
20.610	210000.00	9605.00	9704.90	6.05	9.64	5.35	10595.30	11973.11	2316.84	1128.90	1146.75	1.0
20.648	210000.00	9685.00	9643.20	.00	10.54	5.83	10621.90	11968.51	2230.89	1128.80	1146.04	.0
20.648	210000.00	9685.00	9643.20	.00	9.76	5.44	10621.90	12501.20	2282.67	1128.80	1146.97	.9
20.686	210000.00	9754.00	9677.70	.00	12.08	5.57	10623.40	12078.70	2224.15	1128.70	1146.09	.0
20.686	210000.00	9754.00	9677.70	.00	11.15	5.19	10623.40	12177.53	2378.82	1128.70	1147.00	.9
20.723	210000.00	9797.00	9747.20	.00	13.28	5.21	10613.90	11970.79	2121.46	1126.30	1146.22	.0
20.723	210000.00	9797.00	9747.20	.00	12.30	4.99	10613.90	12140.18	2147.36	1126.30	1147.08	.8
20.761	210000.00	9831.00	9778.20	.00	13.91	4.77	10651.40	12355.50	2322.01	1124.40	1146.52	.0
20.761	210000.00	9831.00	9778.20	.00	13.31	4.97	10651.40	11700.00	1869.00	1124.40	1147.20	.6
20.799	210000.00	9844.00	9795.80	.00	16.22	4.70	10538.90	12159.68	2237.76	1125.60	1146.43	.0
20.799	210000.00	9844.00	9795.80	.00	15.71	5.01	10538.90	11550.00	1706.00	1125.60	1147.02	.5
20.837	210000.00	9802.00	9779.60	.00	13.99	3.98	10534.50	12462.78	2570.35	1126.40	1148.08	.0
20.837	210000.00	9802.00	9779.60	.00	14.34	4.44	10534.50	11450.00	1648.00	1126.40	1148.18	.1
20.875	210000.00	9770.00	9772.80	1.87	14.37	4.48	10431.00	12478.85	2612.74	1126.80	1148.53	.0
20.875	210000.00	9770.00	9772.80	1.94	14.75	5.13	10431.00	11400.00	1630.00	1126.80	1148.64	.1
20.913	210000.00	9760.00	9764.90	1.03	13.39	4.17	10606.20	12465.69	2635.32	1127.30	1149.33	.0
20.913	210000.00	9760.00	9764.90	1.20	13.71	4.68	10606.20	11500.00	1740.00	1127.30	1149.50	.1
20.951	210000.00	9754.81	9749.90	.00	15.71	5.54	10243.30	12501.00	2464.22	1125.70	1149.48	.0
20.951	210000.00	9753.92	9749.90	.00	15.89	6.07	10243.30	11500.00	1746.08	1125.70	1149.71	.2
20.989	210000.00	9699.48	9734.90	1.22	13.68	4.38	10337.60	12500.50	2695.35	1127.20	1150.53	.0
20.989	210000.00	9696.64	9734.90	1.31	14.08	5.01	10337.60	11400.00	1703.36	1127.20	1150.67	.1
21.027	210000.00	9720.71	9717.50	.00	15.76	4.87	10300.10	12246.15	2438.88	1127.80	1150.38	.0
21.027	210000.00	9720.45	9717.50	.00	15.96	5.30	10300.10	11350.00	1629.55	1127.80	1150.58	.2
* 21.064	210000.00	9328.74	9713.40	.34	11.65	3.82	10376.90	12320.55	2642.52	1128.10	1152.42	.0
* 21.064	210000.00	9327.67	9713.40	.36	12.20	4.54	10376.90	11300.00	1651.25	1128.10	1152.53	.1
21.102	210000.00	9316.70	9698.60	3.86	10.26	3.51	10411.00	12315.09	2986.47	1127.00	1153.12	.0

21.102	210000.00	9301.93	9698.60	4.04	10.70	4.25	10411.00	11200.00	1898.07	1127.00	1153.33	.2
21.202	210000.00	9593.45	9700.00	1.29	10.53	2.97	10750.00	11393.78	1800.34	1132.00	1153.33	.0
21.202	210000.00	9700.00	9700.00	.00	10.45	3.36	10750.00	11100.00	1400.00	1132.00	1153.68	.3
21.302	210000.00	9313.46	9600.00	1.46	8.72	2.62	10820.00	11321.05	2007.59	1133.00	1154.21	.0
21.302	210000.00	9590.00	9600.00	1.57	8.80	3.01	10820.00	11000.00	1410.00	1133.00	1154.51	.3

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	21.402	210000.00	9210.00	9600.00	1.49	8.88	.00	11050.00	11023.39	1813.39	1134.00	1154.44	.0
	21.402	210000.00	9590.00	9600.00	1.75	8.76	.00	11050.00	11025.18	1435.18	1134.00	1154.78	.3
	21.502	210000.00	9100.00	9320.00	1.71	7.66	.00	11020.00	10983.38	1883.38	1135.00	1155.07	.0
	21.502	210000.00	9310.00	9320.00	1.60	7.56	.00	11020.00	10987.34	1677.34	1135.00	1155.39	.3
	21.602	210000.00	9200.00	9370.00	1.52	8.49	2.07	10820.00	11111.43	1911.43	1135.00	1155.24	.0
	21.602	210000.00	9360.00	9370.00	1.78	8.46	1.78	10820.00	10830.00	1470.00	1135.00	1155.53	.2
*	21.659	215000.00	9306.11	9230.00	.00	9.54	.00	10950.00	10901.26	1595.16	1135.40	1155.28	.0
*	21.659	215000.00	9301.45	9230.00	.00	9.32	.00	10950.00	10902.78	1601.33	1135.40	1155.61	.3
	21.667	215000.00	9304.15	9230.00	.00	9.45	.00	10950.00	10901.90	1597.75	1135.40	1155.42	.0
	21.667	215000.00	9299.66	9230.00	.00	9.24	.00	10950.00	10903.36	1603.70	1135.40	1155.74	.3
	21.725	215000.00	9342.77	9290.00	.00	9.78	.00	10830.00	10773.14	1430.37	1135.60	1155.79	.0
	21.725	215000.00	9341.41	9290.00	.00	9.60	.00	10830.00	10774.30	1432.89	1135.60	1156.07	.2
	21.733	215000.00	9340.35	9290.00	.00	9.47	.00	10830.00	10775.20	1434.86	1135.60	1156.30	.0
	21.733	215000.00	9339.12	9290.00	.00	9.31	.00	10830.00	10776.25	1437.13	1135.60	1156.56	.2
	21.795	215000.00	9363.05	9300.00	.00	8.78	.00	11090.00	10848.87	1485.82	1135.70	1156.89	.0
	21.795	215000.00	9362.20	9300.00	.00	8.66	.00	11090.00	10851.17	1488.97	1135.70	1157.12	.2
	21.809	215000.00	9362.63	9300.00	.00	8.72	.00	11090.00	10850.00	1487.37	1135.70	1157.00	.0
	21.809	215000.00	9361.80	9300.00	.00	8.60	.00	11090.00	10852.25	1490.45	1135.70	1157.22	.2
	21.837	215000.00	9400.00	9400.00	.00	9.54	2.95	10900.00	11183.36	1783.36	1136.00	1157.00	.0
	21.837	215000.00	9400.00	9400.00	.00	9.38	2.98	10900.00	11184.62	1784.62	1136.00	1157.23	.2
	21.937	215000.00	9029.86	9350.00	3.62	11.05	1.88	10480.00	11136.40	2106.54	1138.00	1157.28	.0
	21.937	215000.00	9345.00	9350.00	2.72	11.36	2.24	10480.00	10600.00	1255.00	1138.00	1157.36	.0
	22.037	215000.00	9005.61	9210.00	3.08	10.28	2.68	10540.00	10924.50	1918.89	1139.00	1158.15	.0
	22.037	215000.00	9200.00	9210.00	2.37	10.40	1.99	10540.00	10545.00	1345.00	1139.00	1158.34	.2
	22.137	215000.00	9161.69	9150.00	.00	9.87	2.94	10550.00	11015.43	1853.74	1140.00	1158.86	.0
	22.137	215000.00	9160.55	9150.00	.00	9.98	2.45	10550.00	10560.00	1399.45	1140.00	1159.07	.2
	22.237	215000.00	8890.44	8880.00	.00	7.88	3.70	10550.00	11339.65	2449.21	1141.00	1159.95	.0
	22.237	215000.00	8890.22	8880.00	.00	8.69	3.05	10550.00	10600.00	1709.78	1141.00	1159.98	.0
	22.337	215000.00	8784.19	8950.00	2.30	9.37	2.97	10520.00	11321.49	2537.31	1142.00	1160.11	.0
	22.337	215000.00	8940.00	8950.00	2.82	9.66	3.36	10520.00	10550.00	1610.00	1142.00	1160.29	.1

	22.437	215000.00	8672.27	8970.00	3.01	11.33	.46	10370.00	11530.14	1967.11	1143.00	1160.34	.0
	22.437	215000.00	8960.00	8970.00	3.44	11.20	.99	10370.00	10375.00	1415.00	1143.00	1160.64	.3
	22.537	215000.00	8700.00	8880.00	1.62	9.91	3.32	10420.00	12317.83	3617.83	1144.00	1161.78	.0
	22.537	215000.00	8870.00	8880.00	1.89	11.36	1.77	10420.00	10425.00	1555.00	1144.00	1161.49	-.2

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	22.637	215000.00	8980.00	8990.00	3.17	9.49	2.13	10500.00	12353.26	3373.26	1145.00	1162.46	.0
	22.637	215000.00	8980.00	8990.00	3.20	9.57	2.64	10500.00	10510.00	1530.00	1145.00	1162.97	.5
	22.662	215000.00	9083.90	9050.00	.00	9.63	.00	10480.00	10450.74	1366.83	1145.50	1162.54	.0
	22.662	215000.00	9081.55	9050.00	.00	9.26	.00	10480.00	10452.76	1371.21	1145.50	1163.20	.6
	22.681	215000.00	7811.36	9050.00	1.12	9.22	1.66	10480.00	12398.59	3854.80	1145.50	1162.86	.0
	22.681	215000.00	9081.55	9050.00	.00	9.26	.00	10480.00	10452.76	1371.21	1145.50	1163.20	.3
	22.799	215000.00	7062.88	9050.00	1.78	9.38	2.18	10655.00	11516.16	4453.27	1146.00	1163.44	.0
	22.799	215000.00	9045.00	9050.00	2.06	9.60	1.25	10655.00	10660.00	1615.00	1146.00	1163.74	.3
	23.000	215000.00	8727.86	8725.00	.00	8.89	.00	10920.00	10819.74	2091.88	1147.00	1164.96	.0
	23.000	215000.00	8725.00	8725.00	.00	8.52	.00	10920.00	10841.78	2116.78	1147.00	1165.43	.4
	23.199	215000.00	8695.50	9270.00	2.37	12.37	.00	10810.00	10726.64	2031.13	1150.00	1166.53	.0
*	23.199	215000.00	9260.00	9270.00	2.14	12.26	.00	10810.00	10731.95	1471.95	1150.00	1166.75	.2
	23.398	215000.00	9318.56	9315.00	.00	10.20	3.62	10770.00	11266.65	1948.09	1151.00	1169.79	.0
	23.398	215000.00	9317.42	9315.00	.00	10.56	2.32	10770.00	10775.00	1457.58	1151.00	1169.86	.0
	23.597	215000.00	8968.41	8920.00	.00	8.96	.00	11050.00	11046.46	2078.05	1152.00	1171.94	.0
	23.597	215000.00	8962.68	8920.00	.00	8.73	.00	11050.00	11047.47	2084.79	1152.00	1172.24	.3
*	23.649	215000.00	9347.49	9320.00	.00	9.02	.00	10510.00	10482.51	1135.01	1150.00	1172.23	.0
*	23.649	215000.00	9346.74	9320.00	.00	8.91	.00	10510.00	10483.26	1136.52	1150.00	1172.49	.2
	23.658	215000.00	9346.70	9320.00	.00	8.90	.00	10510.00	10483.30	1136.60	1150.00	1172.50	.0
	23.658	215000.00	9346.07	9320.00	.00	8.81	.00	10510.00	10483.93	1137.87	1150.00	1172.73	.2
	23.667	215000.00	9346.71	9320.00	.00	8.93	.00	10510.00	10483.29	1136.59	1150.10	1172.53	.0
	23.667	215000.00	9346.07	9320.00	.00	8.83	.00	10510.00	10483.93	1137.86	1150.10	1172.75	.2
*	23.797	215000.00	8497.25	9190.00	1.35	9.98	.00	10790.00	10780.21	2282.95	1152.00	1173.48	.0
*	23.797	215000.00	9185.00	9190.00	.85	9.89	.00	10790.00	10783.64	1598.64	1152.00	1173.66	.1
	23.997	215000.00	9767.35	9760.00	.00	16.10	3.84	10610.00	11590.00	1632.47	1154.00	1174.33	.0
*	23.997	215000.00	9769.49	9760.00	.00	17.02	1.15	10610.00	10900.00	909.60	1154.00	1174.13	-.2
	24.196	215000.00	8557.28	9675.00	3.05	11.92	2.69	10910.00	11868.61	3311.33	1155.00	1178.86	.0
	24.196	215000.00	9700.00	9675.00	.00	12.67	3.70	10910.00	11000.00	1300.00	1155.00	1179.14	.2
*	24.396	215000.00	9105.85	9010.00	.00	8.04	1.90	10665.00	11403.18	2297.33	1158.00	1181.26	.0
*	24.396	215000.00	9078.40	9010.00	.00	7.76	2.51	10665.00	10750.00	1671.60	1158.00	1182.05	.7
	24.595	220000.00	8824.54	8985.00	1.12	6.28	1.71	11005.00	11268.25	2443.71	1161.00	1182.34	.0
	24.595	220000.00	8985.00	8985.00	.00	6.09	1.33	11005.00	11010.00	2025.00	1161.00	1183.03	.6

	24.795	220000.00	8951.49	9770.00	1.57	7.55	1.03	11530.00	11747.02	2793.54	1164.00	1182.80	.0
	24.795	220000.00	9765.00	9770.00	1.22	7.39	1.26	11530.00	11535.00	1770.00	1164.00	1183.41	.6

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	24.995	220000.00	8579.11	9605.00	1.99	6.52	1.10	11850.00	11857.63	3278.52	1167.00	1183.81	.0
	24.995	220000.00	9600.00	9605.00	1.42	6.54	1.23	11850.00	11855.00	2255.00	1167.00	1184.33	.5
*	25.194	220000.00	8895.39	9330.00	5.92	7.99	.00	12245.00	12244.21	3348.82	1170.00	1184.74	.0
*	25.194	220000.00	8900.00	9330.00	5.90	7.46	.00	12245.00	12245.00	3345.00	1170.00	1185.29	.5
	25.392	220000.00	8818.65	9520.00	6.84	8.50	4.50	12870.00	12890.68	3418.95	1172.50	1186.89	.0
	25.392	220000.00	9082.00	9520.00	7.47	8.33	.00	12870.00	12795.00	3092.13	1172.50	1187.32	.4
	25.591	220000.00	9289.42	9670.00	7.72	9.10	.00	13740.00	13711.74	2704.63	1175.00	1189.06	.0
	25.591	220000.00	9300.00	9670.00	10.95	6.74	.00	13740.00	13680.00	4205.82	1175.00	1190.46	1.4
	25.792	220000.00	9648.34	9775.00	.99	7.79	.00	13800.00	13752.86	3700.85	1175.00	1191.07	.0
*	25.792	220000.00	9770.00	9775.00	2.61	6.01	.00	13800.00	13780.13	3792.63	1175.00	1193.34	2.2
	25.992	220000.00	9673.19	9670.00	.00	7.19	.00	13620.00	13371.45	3698.26	1175.00	1192.61	.0
	25.992	220000.00	9670.28	9670.00	.00	5.70	.00	13620.00	13341.73	3671.45	1175.00	1194.79	2.1
	26.191	220000.00	9628.96	9615.00	.00	6.23	.00	13360.00	13311.13	3682.17	1180.00	1194.13	.0
	26.191	220000.00	9615.00	9615.00	.00	5.26	.00	13360.00	13302.12	3687.12	1180.00	1195.89	1.7
*	26.391	220000.00	9632.54	9535.00	.00	9.85	.39	11780.00	12610.48	2802.07	1182.50	1195.14	.0
	26.391	220000.00	9616.00	9535.00	.00	8.68	.00	11780.00	11780.00	2164.00	1182.50	1196.53	1.3
	26.591	220000.00	8922.38	8950.00	2.00	11.01	1.79	10840.00	12296.67	3374.29	1185.00	1197.76	.0
	26.591	220000.00	8950.00	8950.00	.00	10.58	1.29	10840.00	10850.00	1900.00	1185.00	1198.34	.5
*	26.790	220000.00	8080.00	9450.00	5.50	7.68	.00	11200.00	11153.95	3073.95	1185.00	1201.03	.0
	26.790	220000.00	8300.00	9450.00	5.67	7.95	.00	11200.00	11160.70	2860.70	1185.00	1201.32	.2
	26.991	220000.00	7580.00	9720.00	5.26	6.64	.00	10780.00	10771.36	3191.36	1185.00	1202.12	.0
	26.991	220000.00	7834.00	9720.00	5.58	7.35	.00	10780.00	10772.49	2938.49	1185.00	1202.50	.3
	27.156	220000.00	7377.87	9680.00	5.74	9.73	.00	10640.00	10622.69	2970.51	1185.00	1202.68	.0
	27.156	220000.00	9320.00	9509.58	2.64	12.27	.00	10808.13	10620.00	1255.39	1185.00	1202.81	.1
	27.260	220000.00	7852.27	9590.00	8.31	12.20	.00	10526.00	10521.98	1415.53	1188.00	1202.98	.0
	27.260	220000.00	9428.22	9426.79	.00	12.03	.00	10526.00	10526.00	1097.78	1187.30	1204.08	1.1
	27.277	220000.00	7845.04	9590.00	7.22	10.97	.00	10526.00	10524.11	1923.99	1188.00	1204.58	.0
	27.277	220000.00	9210.00	9406.95	.29	11.36	.00	10526.00	10510.00	1183.22	1187.40	1205.10	.5
	27.322	220000.00	7325.00	9560.00	6.05	10.49	.37	10715.00	11175.97	3286.43	1188.00	1205.16	.0
	27.322	220000.00	9630.00	9560.00	.00	13.95	.00	10715.00	10550.00	920.00	1187.70	1205.05	-.1
	27.428	220000.00	8006.05	9550.00	7.59	9.68	.00	10555.00	10540.41	1752.16	1185.00	1206.35	.0
	27.428	220000.00	9640.00	9550.00	.00	13.13	.00	10576.50	10573.17	933.17	1185.00	1206.67	.3
	27.555	220000.00	8672.80	9505.00	7.21	10.69	.00	10540.00	10529.60	1856.79	1189.50	1207.40	.0

ALMA SCHOOL RD.

27.555	220000.00	9580.00	9505.00	.00	12.58	.00	10540.00	10530.00	950.00	1189.40	1208.27	.8

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SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
27.698	220000.00	8816.86	9535.00	5.10	14.38	.00	10540.00	10514.41	1697.55	1191.00	1208.13	.0
27.698	220000.00	9585.00	9535.00	.00	12.22	.00	10540.00	10529.37	944.37	1190.40	1209.77	1.6
27.840	220000.00	8733.54	9460.00	.54	13.18	.00	10515.00	10500.75	1459.46	1191.00	1210.24	.0
27.840	220000.00	9655.00	9460.00	.00	11.99	.00	10603.70	10599.61	944.61	1191.00	1210.91	.6
27.945	220000.00	9082.98	9220.00	1.57	13.22	.00	10465.00	10398.92	1315.93	1192.00	1211.96	.0
27.945	220000.00	9735.00	9220.00	.00	11.92	.00	10683.49	10679.86	944.86	1192.10	1211.96	-.0
28.075	220000.00	9236.93	9220.00	.00	11.97	.00	10410.00	10301.15	1064.22	1193.00	1214.04	.0
28.075	220000.00	9585.00	9220.00	.00	11.77	.00	10532.44	10530.00	945.00	1193.00	1213.01	-1.0
28.191	220000.00	9209.40	9320.00	2.32	11.36	.33	10405.00	10418.79	1209.38	1190.00	1215.30	.0
28.191	220000.00	9218.79	9320.00	1.55	9.23	.00	10523.78	10520.80	1302.00	1190.00	1214.60	-.7
28.291	220000.00	9370.77	9350.00	.00	10.43	.00	10495.00	10460.55	1089.78	1195.00	1216.41	.0
28.291	220000.00	9354.16	9344.50	.00	8.31	.58	10645.12	10650.00	1295.84	1194.50	1215.34	-1.0
28.339	225000.00	29015.29	29012.00	.00	9.90	.00	30360.00	30356.71	1341.41	1199.50	1216.94	.0
28.339	225000.00	29020.00	29012.00	.00	8.53	.00	30360.00	30320.00	1300.00	1194.90	1215.48	-1.4
28.358	225000.00	29014.49	29012.00	.00	9.68	.00	30360.00	30357.51	1343.03	1199.50	1217.31	.0
28.358	225000.00	29040.00	29012.00	.00	8.46	.00	30360.00	30340.00	1300.00	1195.00	1215.73	-1.5
28.383	225000.00	9280.00	9280.00	.00	10.22	.00	10590.00	10559.78	1279.78	1190.00	1217.39	.0
28.383	225000.00	9284.32	9280.00	.00	8.13	.00	12236.99	10575.68	1291.36	1190.00	1215.98	-1.4
COUNTRY CLUB DR.												
28.487	225000.00	8250.00	8810.00	2.35	9.04	2.28	10630.00	11260.07	3010.07	1195.00	1218.66	.0
28.487	225000.00	9395.00	8810.00	.00	9.71	.00	10630.00	10611.99	1216.99	1195.00	1216.20	-2.4

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     21.064  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     21.064  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     21.659  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     21.659  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     23.199  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     23.649  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     23.649  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     23.797  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO= 23.797 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 23.997 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 24.396 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 24.396 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 25.194 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 25.194 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 25.792 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 26.391 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 26.790 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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SUMMARY TABLE 2
CHANNELIZED DATA

FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
19.381	3398.	25249.	8.3	1131.3	1131.3	.0
19.446	3500.	21978.	9.6	1131.8	1131.7	.1
19.537	3647.	21496.	9.8	1133.4	1132.6	.8
19.563	3503.	21879.	9.6	1133.9	1132.9	1.0
19.579	3706.	22187.	9.5	1134.2	1133.1	1.1
19.618	3797.	21880.	9.6	1134.7	1133.5	1.2
19.659	3856.	26130.	8.0	1136.0	1134.1	1.9
19.716	3698.	24475.	8.6	1136.5	1135.1	1.4
19.759	3717.	23428.	9.0	1137.0	1135.8	1.2
19.803	3499.	23031.	9.1	1137.7	1136.9	.8
19.856	3376.	26534.	7.9	1138.6	1137.5	1.1
19.902	3324.	25648.	8.2	1139.1	1137.9	1.2
19.943	3277.	29730.	7.1	1139.8	1138.4	1.4
19.985	3307.	26734.	7.9	1140.2	1138.8	1.4
20.028	3451.	26207.	8.0	1140.8	1139.4	1.4
20.072	3434.	27194.	7.7	1141.7	1140.1	1.6
20.112	3427.	31203.	6.7	1142.5	1140.8	1.7
20.152	3534.	31752.	6.6	1142.9	1141.3	1.6
20.189	3522.	30947.	6.8	1143.3	1141.8	1.5
20.231	3337.	30839.	6.8	1143.7	1142.2	1.5
20.269	3268.	29868.	7.0	1144.0	1142.5	1.5
20.307	3274.	30581.	6.9	1144.5	1143.0	1.5
20.345	3150.	32316.	6.5	1144.9	1143.5	1.4
20.383	3033.	32553.	6.5	1145.3	1143.9	1.4
20.420	2925.	31412.	6.7	1145.5	1144.2	1.3
20.458	2766.	31746.	6.6	1145.8	1144.6	1.2
20.496	2562.	30369.	6.9	1146.1	1144.9	1.2
20.534	2499.	29047.	7.2	1146.3	1145.1	1.2
20.572	2429.	28826.	7.3	1146.5	1145.4	1.1

20.610	2368.	28037.	7.5	1146.7	1145.7	1.0
20.648	2816.	27005.	7.8	1146.9	1146.0	.9
20.686	2424.	24277.	8.7	1147.0	1146.1	.9
20.723	2343.	22009.	9.5	1147.1	1146.2	.9
20.761	1869.	19426.	10.8	1147.2	1146.5	.7
20.799	1706.	16442.	12.8	1147.0	1146.4	.6
20.837	1648.	17748.	11.8	1148.2	1148.1	.1
20.875	1630.	17883.	11.7	1148.6	1148.5	.1
20.913	1740.	18398.	11.4	1149.5	1149.3	.2
20.951	1746.	18489.	11.4	1149.7	1149.5	.2
20.989	1703.	19442.	10.8	1150.6	1150.5	.1
21.027	1630.	17191.	12.2	1150.6	1150.4	.2
21.064	1972.	21785.	9.6	1152.5	1152.4	.1

1

FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE
21.102	1898.	25595.	8.2	1153.3	1153.1	.2
21.202	1400.	21814.	9.6	1153.7	1153.3	.4
21.302	1410.	24926.	8.4	1154.5	1154.2	.3
21.402	1435.	24015.	8.7	1154.7	1154.4	.3
21.502	1677.	27829.	7.5	1155.4	1155.1	.3
21.602	1470.	24905.	8.4	1155.5	1155.2	.3
21.659	1601.	23069.	9.3	1155.6	1155.3	.3
21.667	1604.	23273.	9.2	1155.7	1155.4	.3
21.725	1433.	22390.	9.6	1156.1	1155.8	.3
21.733	1437.	23089.	9.3	1156.6	1156.3	.3
21.795	1489.	24828.	8.7	1157.1	1156.9	.2
21.809	1490.	24989.	8.6	1157.2	1157.0	.2
21.837	1785.	23706.	9.1	1157.2	1157.0	.2
21.937	1255.	19178.	11.2	1157.4	1157.3	.1
22.037	1345.	20719.	10.4	1158.3	1158.1	.2
22.137	1399.	21578.	10.0	1159.1	1158.9	.2
22.237	1710.	24923.	8.6	1160.0	1160.0	.0
22.337	1610.	22400.	9.6	1160.3	1160.1	.2
22.437	1415.	19243.	11.2	1160.6	1160.3	.3
22.537	1555.	18943.	11.4	1161.5	1161.8	-.3
22.637	1530.	22562.	9.5	1163.0	1162.5	.5
22.662	1371.	23222.	9.3	1163.2	1162.5	.7
22.681	1371.	23222.	9.3	1163.2	1162.9	.3
22.799	1615.	22423.	9.6	1163.7	1163.4	.3
23.000	2117.	25220.	8.5	1165.5	1165.0	.5
23.199	1472.	17551.	12.3	1166.7	1166.5	.2
23.398	1458.	20375.	10.6	1169.9	1169.8	.1
23.597	2085.	24614.	8.7	1172.2	1171.9	.3
23.649	1137.	24140.	8.9	1172.5	1172.2	.3
23.658	1138.	24413.	8.8	1172.7	1172.5	.2
23.667	1138.	24336.	8.8	1172.7	1172.5	.2
23.797	1599.	21739.	9.9	1173.7	1173.5	.2

23.997	1131.	12706.	16.9	1174.1	1174.3	-.2
24.196	1300.	17284.	12.4	1179.2	1178.9	.3
24.396	1672.	28057.	7.7	1182.1	1181.3	.8
24.595	2025.	36136.	6.1	1183.0	1182.3	.7
24.795	1770.	29788.	7.4	1183.4	1182.8	.6
24.995	2255.	33655.	6.5	1184.3	1183.8	.5
25.194	3345.	30361.	7.2	1185.3	1184.7	.6
25.392	3713.	26927.	8.2	1187.3	1186.9	.4
25.591	4380.	29451.	7.5	1190.5	1189.1	1.4
25.792	4010.	36601.	6.0	1193.4	1191.1	2.3

1

FLOODWAY DATA, 100-YEAR FLOODPLAIN
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE	
25.992	3671.	38577.	5.7	1194.8	1192.6	2.2	
26.191	3687.	41818.	5.3	1195.9	1194.1	1.8	
26.391	2164.	25339.	8.7	1196.5	1195.1	1.4	
26.591	1900.	20807.	10.6	1198.4	1197.8	.6	
26.790	2861.	31359.	7.0	1201.3	1201.0	.3	
26.991	2938.	35480.	6.2	1202.5	1202.1	.4	
27.156	1300.	18248.	12.1	1202.8	1202.7	.1	
27.260	1098.	18280.	12.0	1204.1	1203.0	1.1	**ALMA SCHOOL RD.**
27.277	1300.	19369.	11.4	1205.1	1204.6	.5	
27.322	920.	15775.	13.9	1205.1	1205.2	-.1	
27.428	933.	16760.	13.1	1206.7	1206.4	.3	
27.555	950.	17482.	12.6	1208.3	1207.4	.9	
27.698	944.	18002.	12.2	1209.7	1208.1	1.6	
27.840	945.	18347.	12.0	1210.9	1210.2	.7	
27.945	945.	18454.	11.9	1212.0	1212.0	.0	
28.075	945.	18699.	11.8	1213.0	1214.0	-1.0	
28.191	1302.	24016.	9.2	1214.6	1215.3	-.7	
28.291	1296.	26486.	8.3	1215.3	1216.4	-1.1	
28.339	1300.	26363.	8.5	1215.4	1216.9	-1.5	
28.358	1300.	26601.	8.5	1215.7	1217.3	-1.6	
28.383	1291.	27662.	8.1	1216.0	1217.4	-1.4	**COUNTRY CLUB DR.**
28.487	1217.	23176.	9.7	1216.2	1218.7	-2.5	

HEC-2 MODEL
COUNTRY CLUB DRIVE
TO
GRANITE REEF DAM

COMMENT CARDS

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C
C    1.
C 32.663GILBERT RD. BRIDGE - NORMAL BRIDGE METHOD BASED ON PLANS DATED JAN 82
T1 SALT RIVER FLOOD INSURANCE STUDY, COUNTRY CLUB TO GRANITE REEF
T2 FOR FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  1986
T3      SALT RIVER NATURAL 100 YEAR     BY J.MISCHLER, BURGESS AND NIPLE
T4      MODIFIED BY DAVE SCHAUB, BRW, MARCH 15, 1992
T5      CHANNEL IMPROVEMENT ADDED FROM COUNTRY CLUB ROAD TO VAL VISTA ROAD
T6      TYPICAL BOTTOM WIDTH = 900 FEET WITH 1:1 SIDESLOPES
T7      BOTTOM WIDTH = 1250 FEET AT COUNTRY CLUB ROAD & GILBERT ROAD
T8      OVERFLOW ELIMINATED AT GILBERT ROAD
T9      BOTTOM WIDTH = 1000 FEET AT LINDSEY ROAD, LAST EXC. SECTION
J1          2.                                                  1217.31
J2  1.         -1.                                        6.
J3 38.  43.      53.    21.     55.     26.      56.      22.     54.      4.
J3 42.   1.     50.      200.
NC .025 .025    .025    0.3     0.5
QT   5. 225000. 225000.  225000. 225000. 225000.
NH   2.    0.035  9007.6   0.025 10695.
ET                 4.1    5000.   6340.     7.1   5020.   6320.
X128.358     6.   5000.   6340.
CI 5670.   1195.   0.035     1.0     1.0     .01   1250.
X2                                                                          15.
GR1218.   5000.   1200.   5050.   1200.   5450.   1199.   5800.   1200.   6270.0
GR1220.   6340.
NC 0.025   0.025   0.025     0.1     0.3
NH   2.    0.035  9300.0   0.025 11999.2
ET                 4.1   9300.  10900.     7.1   9550.  10525.
X128.646    17.   9945.6 10770.2  1300.   1450.   1380.
CI10050.  1197.11550.035     1.0     1.0     .01    900.
X2                                                                          15.
GR1220.5  9080.6  1220.   9300.   1212.7  9369.1  1208.9  9502.0  1207.5  9637.0
GR1211.8  9692.5  1213.7  9945.6  1213.0 10000.0  1208.8 10083.0  1197.4 10329.4
GR1197.2 10519.9  1202.7 10659.8  1213.0 10770.2  1211.1 11085.4  1221.6 11153.5
GR1221.2 11569.9  1222.5 11999.2
ET                 4.1   9200.  10900.     7.1   9575.  10525.
X128.831    17.  10185.7 10495.8   950.   1010.   1000.
CI10050.  1198.51010.035     1.0     1.0     .01    900.
X2                                                                          15.
GR1223.9  8570.2  1221.   8772.9  1221.   8851.3  1221.   9200.   1199.0  9280.0
GR1199.0  9450.0  1210.5  9515.9  1205.0  9859.9  1205.4 10000.0  1204.7 10185.7
GR1199.4 10253.0  1199.4 10404.0  1207.1 10495.8  1207.6 10651.4  1217.4 10992.5
GR1212.9 11123.0  1224.2 11306.9
ET                 4.1   9100.  10750.     7.1   9575.  10525.
X129.017    16.   9861.5 10619.8  1000.   1020.   1020.
CI10050.  1199.91000.035     1.0     1.0     .01    900.
X2                                                                          15.
GR1222.   8929.3  1222.   8967.9  1222.0  9100.0  1206.3  9178.9  1211.5  9444.8
GR1209.4  9861.5  1199.8 10000.0  1199.4 10060.9  1204.1 10185.6  1204.7 10522.0
GR1199.1 10576.7  1215.3 10619.8  1213.3 10637.1  1211.5 10693.3  1210.0 10750.0
GR1230.2 11800.0
ET                 4.1  9400.  10900.     7.1   9795.  10745.
X129.221    27.0  9684.7 10402.6   950.    970.   1020.
CI10270.  1201.2 960.035     1.0     1.0     .01    900.
X2                                                                          15.
GR1227.5  6376.0  1227.7  6959.7  1225.0  7824.9  1225.0  8100.9  1225.2  8132.2
GR1225.0  8235.3  1225.0  8413.8  1225.0  8430.5  1225.0  8470.7  1225.0  8660.4
GR1234.9  8945.9  1231.4  9076.7  1225.0  9117.7  1221.9  9185.8  1206.7  9233.8
GR1207.7  9409.0  1208.0  9684.7  1204.3  9906.7  1202.2 10000.0  1201.5 10003.0
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1*****************************************
 * HEC-2 WATER SURFACE PROFILES          *
 *                                       *
 * Version   4.6.0;  February 1991       *
 *                                       *
 * RUN DATE    17MAR92    TIME   09:11:03 *
 *****************************************
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************************************
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET, SUITE D
* DAVIS, CALIFORNIA 95616-4687
*          (916) 756-1104
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INPUT DATA

```
X     X  XXXXXXX   XXXXX            XXXXX
X     X  X        X     X          X     X
X     X  X        X                      X
XXXXXXX  XXXX     X         XXXXX   XXXXX
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXXXXXX
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1
   17MAR92      09:11:04                                                                    PAGE    1


                                                                THIS RUN EXECUTED 17MAR92    09:11:04
 ************************************
  HEC-2 WATER SURFACE PROFILES

  Version   4.6.0;  February 1991
 ************************************


T1 SALT RIVER FLOOD INSURANCE STUDY, COUNTRY CLUB TO GRANITE REEF
T2 FOR FLOOD CONTROL DISTRICT OF MARICOPA COUNTY  1986
T3      SALT RIVER NATURAL 100 YEAR     BY J.MISCHLER, BURGESS AND NIPLE
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T9      BOTTOM WIDTH = 1000 FEET AT LINDSEY ROAD, LAST EXC. SECTION

J1  ICHECK    INQ      NINV     IDIR     STRT     METRIC   HVINS    Q        WSEL     FQ

             2.                                                            1217.31

J2  NPROF     IPLOT    PRFVS    XSECV    XSECH    FN       ALLDC    IBW      CHNIM    ITRACE

   1.            -1.                                                 6.


J3  VARIABLE CODES FOR SUMMARY PRINTOUT

  38.     43.        53.       21.       55.       26.        56.        22.       54.        4.
  42.      1.       50.        200.
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```
NC    .025    .025      .025      0.3       0.5
QT     5.   225000.   225000.   225000.   225000.   225000.
NE     2.      0.035    9007.6     0.025   10695.
ET                        4.1     5000.     6340.       7.1     5020.     6320.
X1   28.358      6.     5000.     6340.
CI    5670.    1195.     0.035      1.0       1.0       .01     1250.
X2                                                                                                  15.
GR   1218.    5000.     1200.     5050.     1200.     5450.     1199.     5800.     1200.     6270.0
GR   1220.    6340.
```

COUNTRY CLUB DR.

```
NC    0.025    0.025     0.025      0.1       0.3
NE     2.      0.035    9300.0     0.025   11999.2
ET                        4.1     9300.    10900.       7.1     9550.    10525.
X1   28.646     17.     9945.6   10770.2    1300.     1450.     1380.
CI   10050.   1197.1  1550.035      1.0       1.0       .01      900.
X2                                                                                                  15.
GR   1220.5   9080.6   1220.     9300.     1212.7    9369.1    1208.9    9502.0    1207.5    9637.0
GR   1211.8   9692.5   1213.7    9945.6    1213.0   10000.0    1208.8   10083.0    1197.4   10329.4
GR   1197.2  10519.9   1202.7   10659.8    1213.0   10770.2    1211.1   11085.4    1221.6   11153.5
GR   1221.2  11569.9   1222.5   11999.2
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1


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ET                        4.1     9200.    10900.       7.1     9575.    10525.
X1   28.831     17.    10185.7   10495.8     950.     1010.     1000.
CI   10050.   1198.5  1010.035      1.0       1.0       .01      900.
X2                                                                                                  15.
GR   1223.9   8570.2   1221.     8772.9    1221.     8851.3    1221.     9200.     1199.0    9280.0
GR   1199.0   9450.0   1210.5    9515.9    1205.0    9859.9    1205.4   10000.0    1204.7   10185.7
GR   1199.4  10253.0   1199.4   10404.0    1207.1   10495.8    1207.6   10651.4    1217.4   10992.5
GR   1212.9  11123.0   1224.2   11306.9

ET                        4.1     9100.    10750.       7.1     9575.    10525.
X1   29.017     16.     9861.5   10619.8    1000.     1020.     1020.
CI   10050.   1199.9  1000.035      1.0       1.0       .01      900.
X2                                                                                                  15.
GR   1222.    8929.3   1222.     8967.9    1222.0    9100.0    1206.3    9178.9    1211.5    9444.8
GR   1209.4   9861.5   1199.8   10000.0    1199.4   10060.9    1204.1   10185.6    1204.7   10522.0
GR   1199.1  10576.7   1215.3   10619.8    1213.3   10637.1    1211.5   10693.3    1210.0   10750.0
GR   1230.2  11800.0

ET                        4.1     9400.    10900.       7.1     9795.    10745.
X1   29.221     27.0    9684.7   10402.6     950.      970.     1020.
CI   10270.   1201.2   960.035      1.0       1.0       .01      900.
X2                                                                                                  15.
GR   1227.5   6376.0   1227.7    6959.7    1225.0    7824.9    1225.0    8100.9    1225.2    8132.2
GR   1225.0   8235.3   1225.0    8413.8    1225.0    8430.5    1225.0    8470.7    1225.0    8660.4
GR   1234.9   8945.9   1231.4    9076.7    1225.0    9117.7    1221.9    9185.8    1206.7    9233.8
GR   1207.7   9409.0   1208.0    9684.7    1204.3    9906.7    1202.2   10000.0    1201.5   10003.0
GR   1209.2  10231.1   1213.5   10402.6    1214.2   10756.2    1212.5   10900.0    1230.0   10950.0
GR   1230.8  11296.5   1234.7   11741.7

ET                        4.1     9150.    11300.       7.1    10195     11145.
X1   29.473     21.     9369.6   10096.7    1030.      970.     1300.
CI   10670.   1202.5   970.035      1.0       1.0       .01      900.
X2                                                                                                  15.
GR   1229.1   6815.6   1230.2    7351.9    1228.3    8005.1    1225.9    8828.5    1219.0    8886.7
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2

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GR   1230.8    9018.3    1231.0    9106.1    1207.5    9150.7    1206.7    9369.6    1203.0    9530.4
GR   1209.2    9819.0    1207.0   10000.0    1216.0   10096.7    1216.0   11008.4    1211.2   11300.0
GR   1233.5   11530.0    1233.5   11613.6    1233.5   11784.9    1235.6   11990.4    1247.0   12122.2
GR   1247.8   12470.9

ET                          4.1     8850.    11270.       7.1    10305.    11255.
X1   29.676      30.     9012.5    9284.3     920.     1020.     1060.
CI   10780.    1203.9   1000.035       1.0       1.0       .01      900.
X2                                                                                                15.
GR   1230.7    6855.2    1231.0    7462.3    1231.2    8005.6    1231.1    8295.4    1226.0    8707.1
GR   1224.9    8819.8    1204.1    8831.4    1202.9    8958.2    1214.9    9012.5    1198.9    9086.0
GR   1198.4    9186.0    1210.8    9284.3    1211.9    9616.0    1211.2    9868.7    1215.5    9994.3
GR   1215.4   10000.0    1220.1   10119.5    1216.0   10882.9    1214.6   11120.7    1215.0   11167.5
GR   1215.0   11446.0    1215.0   11509.7    1215.4   11543.9    1208.7   11591.7    1206.0   11668.7
GR   1200.1   11690.0    1239.3   11929.0    1240.2   12104.6    1248.5   12214.9    1251.4   12565.9
1
   17MAR92      09:11:04                                                                          PAGE    3


ET                          4.1     9400.    10820.       7.1    10155.    11105.
X1   29.981      36.     9163.4   10000.0     1530.     1180.     1600.
CI   10630.    1205.5   1200.035       1.0       1.0       .01      900.
X2                                                                                                15.
GR   1234.8    6562.9    1234.3    7160.9    1236.1    7184.1    1236.1    7211.3    1234.3    7224.5
GR   1235.1    7403.4    1235.9    7425.7    1235.2    7711.5    1230.1    8141.1    1230.4    8269.8
GR   1231.9    8312.8    1233.1    8557.7    1234.7    8573.5    1233.5    8831.2    1233.1    8899.0
GR   1221.4    8943.9    1219.3    9054.8    1222.9    9163.4    1222.3    9449.2    1210.5    9490.8
GR   1209.5    9555.9    1209.1    9752.5    1215.3    9796.3    1215.3    9868.3    1217.8    9886.9
GR   1218.3    9987.2    1225.0   10000.0    1216.9   10040.6    1218.6   10104.0    1215.4   10377.6
GR   1210.5   10459.3    1220.7   10590.3    1216.3   10773.7    1216.0   10787.7    1228.0   10850.
GR   1228.0   11200.0

ET                          4.1     9400.    10820.       7.1    10155.    11105.
X1   29.982                                     5.        5.        5.
CI   10630.    1202.5    970.035       1.0       1.0       .01      900.
X2                                                                                                15.

ET                          4.1     9054.    10800.       7.1     9765.    10715.
X1   30.194      59.     9032.1   10000.0     1120.     1170.     1120.
CI   10240.    1207.1   1155.035       1.0       1.0       .01      900.
X2                                                                                                15.
GR   1235.5    6087.7    1236.0    6154.7    1237.0    6189.2    1237.0    6233.7    1235.8    6275.7
GR   1236.9    6471.7    1237.0    6860.3    1237.7    7227.5    1238.5    7244.9    1238.9    7269.5
GR   1237.2    7303.6    1236.4    7464.4    1234.3    7532.9    1234.9    8218.2    1236.4    8761.0
GR   1237.6    8782.4    1237.7    8812.2    1236.3    9032.1    1225.2    9076.6    1218.1    9121.1
GR   1218.0    9208.7    1208.8    9299.8    1210.9    9411.5    1212.5    9480.4    1216.9    9559.5
GR   1220.7    9694.1    1221.6    9927.4    1228.5   10000.0    1224.3   10023.6    1224.6   10274.2
GR   1226.8   10494.9    1225.0   10640.1    1225.5   10736.0    1229.5   10875.7    1232.3   10921.8
GR   1232.3   11145.7    1249.9   11243.8    1250.8   11300.6    1245.0   11422.5    1245.0   11464.0
GR   1245.0   11545.6    1245.0   11573.6    1245.0   11632.3    1245.0   11650.0    1245.0   11791.1
GR   1245.0   11883.8    1245.0   12045.1    1245.0   12106.8    1245.0   12140.8    1245.0   12173.3
GR   1252.3   12290.1    1253.7   12480.3    1250.8   12512.2    1253.3   12528.1    1253.4   12554.3
GR   1250.8   12577.2    1252.2   12590.1    1253.9   12664.4    1254.1   12925.7

ET                          4.1     9054.    10800.       7.1     9765.    10715.
X1   30.195                                     5.        5.        5.
CI   10240.    1207.1      5.035       1.0       1.0       .01      900.
X2                                                                                                15.
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ET                          4.1     9350.    10775.       7.1     9605.    10555.
X1   30.458      43.0    9333.5   10777.3    1280.     1030.     1370.
CI   10080.    1208.5  1015.035       1.0       1.0       .01      900.
X2                                                                                15.
GR   1237.1    5616.2    1238.1    6079.4    1239.6    6123.2    1238.1    6776.5    1235.9    7337.6
GR   1236.6    7375.6    1237.0    7420.8    1235.8    7472.3    1235.7    7635.3    1238.2    7650.3
GR   1238.7    7680.0    1236.3    7696.1    1236.3    8062.8    1238.4    9178.0    1237.9    9283.7
GR   1239.1    9333.5    1231.7    9354.5    1230.0    9385.1    1222.3    9414.0    1216.9    9523.2
GR   1214.7    9624.5    1214.9    9860.2    1217.4   10000.0    1222.2   10122.5    1220.9   10270.0
GR   1220.2   10554.0    1227.7   10652.7    1227.9   10719.5    1233.7   10777.3    1251.4   10855.5
GR   1250.3   10944.6    1242.0   11057.5    1242.0   11086.9    1242.0   11212.4    1242.0   11257.9
GR   1242.0   11296.7    1242.0   11320.7    1242.0   11402.9    1242.0   11460.0    1242.0   11526.2
GR   1242.0   11574.8    1242.0   11629.5    1254.9   11653.5
1
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ET                          4.1     9310.    10800.       7.1     9525.    10475.
X1   30.815      36.0    9568.2   11136.3    1350.     1390.     1830.
CI   10000.    1212.0  1210.035       1.0       1.0       .01      900.
X2                                                                                15.
GR   1238.9    5271.2    1239.5    5796.2    1241.1    5856.4    1238.2    6357.4    1239.3    6383.9
GR   1239.3    6408.9    1238.3    6442.0    1238.3    6633.6    1238.3    7017.6    1237.7    7620.1
GR   1237.7    7892.2    1239.0    7912.9    1238.5    8404.2    1240.3    8448.4    1240.3    8499.0
GR   1239.3    8870.1    1240.1    9221.8    1236.1    9406.9    1232.9    9470.5    1231.9    9514.0
GR   1236.5    9568.2    1226.2    9665.1    1226.5    9727.5    1218.1    9769.7    1217.5    9954.0
GR   1220.8   10000.0    1221.3   10346.2    1222.3   10487.0    1216.0   10770.6    1230.3   10871.6
GR   1251.6   11136.3    1255.5   11229.9    1256.5   11511.6    1259.2   11740.2    1257.6   11773.3
GR   1257.6   12053.0

ET                          4.1     9410.    10845.       7.1     9625.    10575.
X1   31.028      36.0   10322.8   10772.2    1060.     1100.     1100.
CI   10100.    1215.1  1080.035       1.0       1.0       .01      900.
X2                                                                                15.
GR   1243.5    8747.2    1240.6    8765.6    1241.2    8912.5    1239.8    9071.8    1236.0    9121.6
GR   1238.1    9144.1    1234.9    9199.2    1236.9    9326.4    1245.0    9349.8    1246.2    9382.5
GR   1235.7    9425.8    1233.8    9518.2    1230.9    9534.2    1227.8    9659.8    1232.6    9682.6
GR   1233.1    9756.8    1231.2    9882.1    1235.6    9931.1    1232.7   10000.0    1228.4   10127.1
GR   1226.1   10279.7    1228.0   10322.8    1224.4   10490.1    1218.0   10679.0    1212.7   10772.2
GR   1253.0   10884.9    1256.6   11057.2    1254.9   11307.2    1259.5   11350.4    1260.9   11645.1
GR   1258.3   11670.6    1260.4   11683.5    1260.7   11712.3    1258.3   11726.9    1260.9   11751.2
GR   1261.5   11994.8

ET                          4.1     9410.    10845.       7.1     9625.    10575.
X1   31.029                                     5.        5.        5.
CI   10100.    1215.1     5.035       1.0       1.0       .01      900.
X2                                                                                15.

ET                          4.1     8770.    10890.       7.1     9335.    10285.
X1   31.301      43.     9689.6   10867.5    1190.     1380.     1310.
CI    9810.    1218.7  1225.035       1.0       1.0       .01      900.
X2                                                                                15.
GR   1245.2    7959.2    1245.3    7989.0    1242.4    8027.1    1242.7    8306.3    1240.3    8705.8
GR   1236.7    8867.3    1235.7    9104.0    1237.6    9154.8    1235.7    9275.7    1231.4    9384.2
GR   1225.6    9689.6    1220.2    9713.8    1220.1    9786.3    1222.4    9835.9    1222.4    9877.3
GR   1224.8    9942.0    1228.0   10000.0    1229.7   10036.2    1228.4   10184.4    1232.2   10225.8
GR   1232.7   10375.2    1232.2   10437.4    1226.8   10547.4    1231.4   10585.6    1229.5   10626.7
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GR   1221.6    10665.2    1220.7    10867.5    1263.0    10911.9    1262.8    11065.2    1261.2    11234.1
GR   1263.9    11423.0    1259.8    11596.1    1258.0    11611.9    1260.0    11647.0    1260.0    11685.5
GR   1257.3    11702.1    1258.4    11720.4    1258.8    11752.7    1255.6    11766.8    1258.3    11815.4
GR   1259.7    11936.5    1259.0    12047.1    1259.8    12118.1

ET                          4.1     8250.     11450.       7.1     9125.     10075.
X1   31.522       58.     9428.6    11538.9    1120.     1650.     1230.
CI    9600.     1221.9   1130.035     1.0        1.0       .01      900.
X2                                                                                          15.
GR   1247.0     7461.1    1244.4     7497.3    1244.8     7703.3    1245.2     8039.0    1235.1     8081.4
GR   1234.8     8179.1    1229.2     8272.7    1229.5     8334.7    1234.3     8401.8    1236.7     8483.9
GR   1240.0     8603.0    1237.2     8654.0    1236.7     8775.2    1242.2     8808.8    1242.9     8880.8
GR   1241.5     8924.6    1241.5     9026.1    1242.3     9062.8    1240.4     9162.3    1240.4     9235.3
1
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GR   1244.5     9428.6    1233.4     9442.1    1229.6     9469.8    1228.6     9533.1    1229.1     9585.4
GR   1227.2     9685.4    1234.4     9740.4    1235.8     9872.4    1233.1     9957.4    1232.2    10000.0
GR   1233.1    10066.6    1234.9    10099.0    1238.0    10207.4    1238.4    10311.3    1236.8    10652.8
GR   1231.2    10706.7    1234.2    10790.5    1233.1    10902.8    1229.2    11141.2    1226.1    11281.2
GR   1224.4    11418.7    1230.0    11446.2    1230.6    11501.5    1264.3    11538.9    1264.4    11590.6
GR   1266.8    11671.0    1267.2    11759.9    1268.5    11785.7    1266.2    11831.4    1268.0    11873.6
GR   1270.5    12030.3    1264.4    12065.0    1265.7    12074.8    1265.7    12101.5    1264.5    12113.3
GR   1271.5    12160.8    1272.7    12335.1    1272.7    12497.9

ET                          4.1     8230.     11950.       7.1     9285.     10235.
X1   31.725       77.     9544.     11019.8     870.     1530.     1150.
CI    9760.     1225.0   1080.035     1.0        1.0       .01      900.
X2                                                                                          15.
GR   1248.3     6763.8    1248.3     7039.5    1248.3     7384.7    1248.3     7411.4    1248.3     7433.1
GR   1243.6     7472.9    1244.8     7647.8    1245.9     7951.3    1237.3     7962.8    1234.9     8020.3
GR   1240.0     8056.5    1241.5     8168.9    1241.4     8355.0    1240.2     8460.3    1234.8     8503.5
GR   1234.8     8561.4    1229.5     8697.9    1236.4     8740.3    1240.4     8808.8    1241.0     8910.7
GR   1236.9     8953.3    1246.4     8985.4    1245.3     9028.7    1242.1     9063.6    1243.8     9153.5
GR   1244.1     9233.1    1241.0     9294.2    1245.0     9343.4    1246.4     9431.2    1246.2     9544.0
GR   1242.4     9629.8    1242.9     9673.0    1229.8     9724.4    1231.2     9822.0    1233.2     9969.9
GR   1236.9     9988.3    1236.9    10000.0    1239.4    10067.6    1234.7    10123.0    1237.6    10231.6
GR   1238.2    10342.0    1235.3    10482.6    1229.8    10536.8    1231.4    10639.0    1233.3    10688.2
GR   1229.7    10809.9    1230.9    10874.7    1234.0    10908.8    1237.1    11019.8    1238.5    11202.2
GR   1239.9    11420.1    1240.0    11625.0    1236.2    11738.6    1237.1    11826.4    1233.3    11894.9
GR   1237.1    11976.0    1238.5    12089.3    1235.7    12107.6    1234.7    12218.9    1243.6    12240.4
GR   1239.4    12252.8    1239.4    12335.9    1241.0    12378.1    1245.9    12443.9    1244.5    12544.8
GR   1270.7    12606.9    1271.8    12718.3    1273.9    12834.1    1275.1    12926.7    1270.0    13027.7
GR   1273.4    13221.0    1270.5    13241.9    1274.0    13260.2    1274.8    13294.6    1271.9    13326.1
GR   1276.1    13359.1    1276.1    13410.9

ET                          4.1     8300.     12000.       7.1     9345.     10295.
X1   31.896       68.     9650.2    12145.5     920.     1000.     980.
CI    9820.     1227.8   960.035      1.0        1.0       .01      900.
X2                                                                                          15.
GR   1248.0     6420.3    1248.0     6924.6    1248.0     7330.2    1248.0     7361.0    1248.2     7380.8
GR   1247.0     7406.8    1246.4     7515.0    1246.0     7777.3    1247.2     8043.0    1247.8     8220.6
GR   1245.7     8296.0    1239.8     8349.1    1238.0     8440.7    1235.7     8591.9    1239.7     8604.2
GR   1236.2     8648.5    1236.4     8751.8    1241.2     8785.4    1241.9     8849.3    1236.8     8906.2
GR   1234.3     9014.1    1236.4     9150.7    1243.6     9176.6    1246.3     9344.7    1246.9     9414.8
GR   1245.5     9524.7    1246.5     9547.1    1246.1     9650.2    1237.5     9675.8    1232.1     9689.8
GR   1232.3     9803.6    1228.1     9854.3    1232.1     9912.3    1232.5    10000.3    1231.0    10064.8
GR   1235.5    10138.5    1238.8    10226.1    1239.4    10386.7    1239.9    10487.9    1238.6    10731.6
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GR   1235.2   10797.0    1237.5   10819.3    1241.7   10904.8    1242.9   10973.1    1243.1   11126.9
GR   1239.7   11307.6    1241.1   11625.6    1237.9   11682.6    1237.7   11737.0    1243.1   11777.0
GR   1245.2   11905.0    1244.2   12112.7    1246.3   12145.5    1243.9   12382.4    1245.5   12454.4
GR   1245.7   12629.5    1242.8   12748.8    1243.0   12939.8    1244.0   13046.1    1245.3   13119.2
GR   1250.5   13210.1    1252.6   13266.7    1256.1   13391.3    1261.5   13442.8    1273.6   13485.9
GR   1278.1   13526.8    1276.6   13596.7    1278.7   13815.3
1
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ET                          4.1     8500.    11600.       7.1     9315.    10265.
X1   32.126       57.    8480.8   11726.6    1150.    1100.     1130.
CI    9790.    1231.1  1130.035      1.0       1.0      .01      900.
X2                                                                                                15.
GR   1250.1    7405.9    1248.1    7434.9    1248.9    7750.0    1247.8    8108.9    1248.8    8336.8
GR   1248.4    8480.8    1236.8    8523.8    1238.7    8632.6    1239.9    8764.1    1241.0    8802.7
GR   1237.1    8892.3    1239.4    8932.9    1242.2    9052.2    1241.0    9201.4    1240.1    9356.1
GR   1239.4    9451.1    1237.1    9495.0    1236.1    9575.5    1244.5    9595.3    1243.9    9677.5
GR   1235.7    9713.8    1236.4    9842.5    1233.9    9921.4    1236.2   10000.0    1242.5   10155.1
GR   1242.8   10324.6    1240.3   10404.6    1251.2   10447.9    1251.4   10719.8    1253.5   10773.6
GR   1241.1   10899.3    1239.2   10986.8    1242.4   11110.2    1241.7   11195.4    1238.5   11317.8
GR   1247.0   11406.9    1247.9   11455.9    1245.4   11678.6    1248.5   11726.6    1248.5   11887.1
GR   1247.6   12258.4    1246.9   12517.3    1246.6   12763.6    1244.7   13080.5    1249.9   13144.1
GR   1249.9   13321.4    1250.9   13403.4    1249.9   13729.2    1245.8   13790.2    1245.3   13943.3
GR   1242.7   14010.8    1275.3   14132.6    1272.4   14155.7    1274.8   14225.9    1280.7   14255.2
GR   1282.0   14360.7    1280.5   14411.7

ET                          4.1     8500.    11600.       7.1     9315.    10265.
X1   32.127                                     5.        5.        5.
CI    9790.    1231.1     5.035      1.0       1.0      .01      900.
X2                                                                                                15.

ET                          4.1     7900.    11400.       7.1     9065.    10015.
X1   32.296       54.    9694.3   11211.1     940.     890.      900.
CI    9540.    1233.7  905.035      1.0       1.0      .01      900.
X2                                                                                                15.
GR   1253.2    6830.1    1253.2    7202.9    1253.2    7230.7    1253.2    7249.4    1250.5    7273.8
GR   1249.9    7493.0    1250.6    7751.4    1246.6    7780.9    1247.8    7829.6    1243.9    7849.4
GR   1246.6    7937.0    1239.9    7983.7    1241.3    8199.8    1238.9    8257.9    1240.7    8289.1
GR   1244.7    8430.1    1243.1    8465.5    1240.4    8492.0    1241.0    8637.2    1247.5    8662.1
GR   1248.9    8748.4    1244.8    8818.2    1243.6    9085.6    1245.9    9180.3    1246.0    9343.1
GR   1242.1    9437.9    1241.2    9518.6    1246.9    9588.6    1245.9    9694.3    1242.4    9804.9
GR   1235.6    9854.6    1238.1   10000.0    1236.9   10142.9    1239.8   10200.6    1249.1   10238.0
GR   1249.9   10398.2    1248.4   10605.7    1249.9   10724.9    1241.7   10796.6    1243.0   10999.7
GR   1242.4   11180.6    1248.8   11211.1    1249.4   11404.0    1249.5   11597.2    1247.9   11925.9
GR   1247.8   12171.6    1246.7   12434.9    1248.1   12483.2    1248.1   12733.8    1246.9   12959.5
GR   1245.3   13160.2    1247.2   13259.6    1252.6   13327.8    1253.8   13383.2

ET                                                       7.1     9065.    10015.
X1   32.297                                     5.        5.        5.
CI     9540    1233.7     5.035      1.0       1.0      .01      900.
X2                                                                                                15.

NH      2.      0.025   11161.4     0.040   15106.1
ET                          4.1     7875.    11500.       7.1     8750.    10050.
X1   32.465       77.    9925.9   11161.4     910.     890.      900.
CI    9400.    1236.3  895.035      1.0       1.0      .01     1250.
X2                                                                                                15.
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GR   1255.7    7164.4    1255.7    7181.6    1255.7    7203.8    1253.2    7234.0    1254.5    7432.9
GR   1253.2    7687.2    1245.1    7780.1    1241.8    7822.3    1242.7    7867.6    1240.0    7934.0
GR   1240.0    7983.0    1240.0    8055.4    1244.8    8238.3    1245.8    8393.0    1242.2    8412.7
GR   1240.6    8451.8    1244.1    8476.1    1242.3    8634.9    1240.0    8758.9    1246.5    8785.6
GR   1246.9    8895.9    1244.6    8976.0    1246.6    9000.3    1248.1    9056.4    1247.0    9248.8
1
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GR   1246.9    9405.4    1243.0    9427.6    1246.6    9515.2    1248.5    9654.3    1247.2    9718.2
GR   1244.8    9754.5    1246.5    9805.6    1247.9    9925.9    1246.4    9994.0    1244.5   10000.0
GR   1242.3   10014.9    1240.6   10120.6    1238.3   10196.4    1240.0   10246.2    1239.9   10329.5
GR   1248.1   10371.1    1252.5   10485.3    1251.2   10670.1    1249.4   10803.9    1242.2   10829.8
GR   1242.2   11126.8    1251.4   11161.4    1251.1   11382.6    1249.4   11551.6    1250.8   11576.6
GR   1249.9   11868.2    1247.8   12061.8    1249.8   12095.1    1249.4   12366.4    1247.3   12681.9
GR   1248.0   12817.0    1247.0   12962.4    1249.3   12994.4    1248.7   13071.0    1247.5   13237.4
GR   1254.9   13297.8    1255.9   13343.6    1254.2   13380.8    1254.7   13459.1    1255.4   13518.1
GR   1255.4   13695.8    1255.3   13935.4    1256.3   14100.0    1254.0   14155.0    1248.9   14436.9
GR   1251.1   14478.4    1251.6   14547.8    1251.0   14767.4    1259.1   14803.4    1287.6   14863.0
GR   1289.5   14986.0    1289.0   15106.1

NH      4.      0.025   10041.6      0.035   10618.9      0.025   11392.0      0.040   15586.9
ET                         4.1      8500.    11600.        7.1      8620.      9920.
X1   32.641     78.0    8951.3   11280.7     940.       920.       920.
CI    9270.   1239.0   920.035       1.0       1.0        .01      1250.
X2                                                                                          15.
GR   1256.2    6395.8    1256.2    6800.0    1256.2    7108.0    1256.2    7137.3    1256.2    7176.1
GR   1252.9    7198.2    1253.0    7345.6    1253.5    7626.8    1248.5    7650.3    1243.1    7790.6
GR   1240.7    7871.5    1243.5    7994.2    1248.4    8073.9    1249.4    8272.2    1245.7    8307.6
GR   1249.4    8357.4    1251.2    8414.4    1250.5    8559.1    1242.7    8603.7    1241.1    8760.1
GR   1247.1    8810.3    1249.1    8951.3    1248.5    8956.0    1239.0    8975.0    1239.0    9585.0
GR   1245.0    9597.0    1239.9    9878.9    1246.6   10000.0    1251.5   10041.6    1253.1   10269.7
GR   1253.1   10407.7    1252.0   10561.8    1248.5   10618.9    1247.9   10765.1    1245.8   10947.2
GR   1241.7   11065.3    1242.7   11179.2    1245.3   11233.2    1250.5   11280.7    1251.2   11351.2
GR   1253.3   11392.0    1250.9   11633.8    1252.2   11666.0    1251.9   11905.7    1250.6   12215.6
GR   1248.9   12357.4    1251.6   12389.3    1251.8   12480.6    1250.4   12667.9    1248.6   12749.2
GR   1251.6   12826.9    1249.3   12907.0    1250.3   13001.2    1257.2   13050.0    1257.9   13097.4
GR   1257.9   13297.9    1257.9   13427.8    1257.0   13759.4    1258.4   13817.1    1258.4   13858.1
GR   1256.0   13913.3    1253.1   14160.4    1253.5   14447.0    1255.2   14498.3    1253.6   14749.1
GR   1254.1   14886.2    1256.0   14998.6    1261.2   15042.7    1257.7   15065.3    1260.6   15107.9
GR   1257.0   15127.7    1257.3   15187.1    1262.7   15270.8    1257.6   15335.9    1258.2   15425.3
GR   1259.7   15494.4    1276.5   15550.9    1280.9   15586.9
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GILBERT RD.

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NC                                   0.3       0.5
NH      4.      0.025   10041.6      0.035   10618.9      0.025   11392.0      0.040   15586.9
ET                         4.11     8500.    11600.       7.11      8620.      9920.
X1   32.653     78.0    8636.     9866.       63.        63.       63.
CI    9270.   1239.1   63.035       1.0       1.0        .01      1250.
X2                                                                                          15.
X3     10.                                                                   1253.     1246.5
GR   1256.2    6395.8    1256.2    6800.0    1256.2    7108.0    1256.2    7137.3    1256.2    7176.1
GR   1252.9    7198.2    1253.0    7345.6    1253.5    7626.8    1248.5    7650.3    1243.1    7790.6
GR   1240.7    7871.5    1243.5    7994.2    1248.4    8073.9    1249.4    8272.2    1245.7    8307.6
GR   1249.4    8357.4    1251.2    8414.4    1250.5    8559.1    1242.7    8603.7    1242.5    8636.0
GR   1239.0    8643.0    1239.0    8951.3    1239.0    9053.1    1239.0    9255.4    1239.0    9864.0
GR   1240.0    9866.0    1239.9    9878.9    1246.6   10000.0    1251.5   10041.6    1253.1   10269.7
GR   1253.1   10407.7    1252.0   10561.8    1248.5   10618.9    1247.9   10765.1    1245.8   10947.2
GR   1241.7   11065.3    1242.7   11179.2    1245.3   11233.2    1250.5   11280.7    1251.2   11351.2
GR   1253.3   11392.0    1250.9   11633.8    1252.2   11666.0    1251.9   11905.7    1250.6   12215.6
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GR   1248.9    12357.4    1251.6    12389.3    1251.8    12480.6    1250.4    12667.9    1248.6    12749.2
GR   1251.6    12826.9    1249.3    12907.0    1250.3    13001.2    1257.2    13050.0    1257.9    13097.4
GR   1257.9    13297.9    1257.9    13427.8    1257.0    13759.4    1258.4    13817.1    1258.4    13858.1
GR   1256.0    13913.3    1253.1    14160.4    1253.5    14447.0    1255.2    14498.3    1253.6    14749.1
1
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GR   1254.1    14886.2    1256.0    14998.6    1261.2    15042.7    1257.7    15065.3    1260.6    15107.9
GR   1257.0    15127.7    1257.3    15187.1    1262.7    15270.8    1257.6    15335.9    1258.2    15425.3
GR   1259.7    15494.4    1276.5    15550.9    1280.9    15586.9

NH     2.      0.025     11405.     0.04      15063.
ET                         4.11     8500.     11600.       7.11      8620.      9920.
X1   32.655     76.      8606.     9904.        10.        10.        10.
CI    9270.    1239.2    10.035      1.5        1.5        .01      1250.
X2                                                                                                  15.
X3    10.                                                                   1254.1    1247.6
BT    30.      800.      1300.     1300.      1300.      1256.      1256.     5578.     1255.4    1255.4
BT   5830.    1255.9    1255.9     6138.      1254.9     1254.9     6517.     1255.3    1255.3    6800.
BT   1254.7   1254.7    7092.      1254.9     1254.9     7164.      1255.1    1255.1    7417.     1254.8
BT   1254.8   7538.     1254.5     1254.5     8072.      1254.5     1254.5    8360.     1255.5    1255.5
BT   8606.    1259.5    1257.0     9904.      1259.5     1257.0    10000.     1256.5    1256.5   10175.
BT   1250.7   1250.7   10205.      1249.7     1249.7    10380.      1248.0    1248.0   11305.     1248.0
BT   1248.0  11405.     1248.6     1248.6    11505.      1250.3     1250.3   11705.     1253.4    1253.4
BT   11905.   1253.4    1253.4    12393.      1251.8     1251.8    12671.     1252.3    1252.3    12861.
BT   1255.2   1255.2   13067.      1257.3     1257.3    13254.      1259.5    1259.5   13470.     1259.6
BT   1259.6
GR   1300.0    800.     1256.0     1300.      1255.4     5578.      1255.9     5830.    1254.9    6138.
GR   1255.3   6517.     1254.7     6800.      1254.9     7092.      1255.1    7164.     1254.8    7417.
GR   1252.9   7538.     1246.3     7727.      1244.3     7883.      1244.3    8072.     1246.4    8204.
GR   1249.0   8360.     1249.6     8441.      1246.3     8552.      1242.5    8605.     1257.0    8606.
GR   1239.0   8640.     1239.0     8732.      1257.      8732.1     1257.     8738.     1239.     8738.1
GR   1239.    8862.     1257.      8862.1     1257.      8868.      1239.     8868.1    1239.     8992.
GR   1257.    8992.1    1257.      8998.      1239.      8998.1     1239.     9122.     1257.     9122.1
GR   1257.    9128.     1239.      9128.1     1239.      9252.      1257.     9252.1    1257.     9258.
GR   1239.    9258.1    1239.      9382.      1257.      9382.1     1257.     9388.     1239.     9388.1
GR   1239.    9512.     1257.      9512.1     1257.      9518.      1239.     9518.1    1239.     9642.
GR   1257.    9642.1    1257.      9648.      1239.      9648.1     1239.     9772.     1257.     9772.1
GR   1257.    9778.     1239.      9778.1     1239.      9861.      1257.     9904.     1245.     9905.
GR   1249.1  10000.     1253.     10075.      1250.     10175.      1249.7   10205.     1248.    10380.
GR   1248.   11305.     1248.6    11405.      1250.3    11505.      1253.4   11705.     1253.4   11905.
GR   1251.8  12393.     1252.3    12671.      1255.2    12861.      1257.3   13067.     1259.5   13254.
GR   1259.6  13470.

NH     2.      0.025     11405.     0.04      11905.
ET                         4.11     8500.     11600.       7.11      8620.      9920.
X1   32.661                                     44.        44.        44.
CI    9270.    1239.3    44.035      1.0        1.0        .01      1250.
X2                                                                                                  15.
X3    10.                                                                   1254.6    1248.1

NH     4.      0.025     10041.6    0.035     10618.9     0.025     11392.0    0.040    15586.9
ET                         4.11     8500.     11600.       7.11      8620.      9920.
        GILBERT RD. BRIDGE - NORMAL BRIDGE METHOD BASED ON PLANS DATED JAN 82
X1   32.663    78.0      8636.     9866.        10.        10.        10.
CI    9270.    1239.3    10.035      1.0        1.0        .01      1250.
X2                                                                                                  15.
X3    10.                                                                   1253.     1246.5
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GR   1256.2     6395.8     1256.2     6800.0     1256.2     7108.0     1256.2     7137.3     1256.2     7176.1
GR   1252.9     7198.2     1253.0     7345.6     1253.5     7626.8     1248.5     7650.3     1243.1     7790.6
GR   1240.7     7871.5     1243.5     7994.2     1248.4     8073.9     1249.4     8272.2     1245.7     8307.6
1
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GR   1249.4     8357.4     1251.2     8414.4     1250.5     8559.1     1242.7     8603.7     1242.5     8636.0
GR   1239.0     8643.0     1239.0     8951.3     1239.0     9053.1     1239.0     9255.4     1239.0     9864.0
GR   1240.0     9866.0     1239.9     9878.9     1246.6    10000.0     1251.5    10041.6     1253.1    10269.7
GR   1253.1    10407.7     1252.0    10561.8     1248.5    10618.9     1247.9    10765.1     1245.8    10947.2
GR   1241.7    11065.3     1242.7    11179.2     1245.3    11233.2     1250.5    11280.7     1251.2    11351.2
GR   1253.3    11392.0     1250.9    11633.8     1252.2    11666.0     1251.9    11905.7     1250.6    12215.6
GR   1248.9    12357.4     1251.6    12389.3     1251.8    12480.6     1250.4    12667.9     1248.6    12749.2
GR   1251.6    12826.9     1249.3    12907.0     1250.3    13001.2     1257.2    13050.0     1257.9    13097.4
GR   1257.9    13297.9     1257.9    13427.8     1257.0    13759.4     1258.4    13817.1     1258.4    13858.1
GR   1256.0    13913.3     1253.1    14160.4     1253.5    14447.0     1255.2    14498.3     1253.6    14749.1
GR   1254.1    14886.2     1256.0    14998.6     1261.2    15042.7     1257.7    15065.3     1260.6    15107.9
GR   1257.0    15127.7     1257.3    15187.1     1262.7    15270.8     1257.6    15335.9     1258.2    15425.3
GR   1259.7    15494.4     1276.5    15550.9     1280.9    15586.9                                .

QT      5.    230000.     230000.     230000.     230000.     230000.
NH      4.      0.025    10000.0       0.035    10622.1       0.025    11507.8       0.040    15318.6
ET                          4.1       8500.     11600.        7.1       8620.       9920.
X1   32.676      60.      8469.7    11507.8        63.         63.        63.
CI    9270.    1239.5     63.035       1.0        1.0        .01       1250.
X2                                                                                                15.
X3     10.
GR   1257.7     8148.6     1257.7     8469.7     1249.0     8488.3     1248.3     8594.0     1242.1     8620.1
GR   1240.0     8738.8     1242.0     8815.6     1242.0     8851.7     1242.0     9074.3     1242.0     9245.4
GR   1242.0     9424.4     1242.0     9530.9     1242.0     9633.1     1241.1     9749.0     1241.7     9829.2
GR   1246.4     9890.1     1251.2     9934.4     1253.1    10000.0     1253.6    10241.8     1254.7    10473.2
GR   1252.0    10622.1     1248.6    10642.2     1246.2    10848.0     1243.1    11093.0     1244.4    11223.3
GR   1248.5    11287.1     1249.7    11383.3     1250.3    11473.5     1252.9    11507.8     1251.9    11549.1
GR   1252.9    11656.8     1251.7    11981.5     1252.4    12095.8     1252.1    12382.7     1249.7    12486.7
GR   1251.5    12597.8     1251.7    12691.7     1251.9    12794.9     1249.7    12841.7     1250.1    12925.1
GR   1257.0    13004.1     1257.6    13055.1     1256.3    13112.3     1257.9    13146.0     1257.7    13311.1
GR   1257.7    13596.9     1258.7    13763.8     1255.5    13817.6     1253.9    14053.2     1253.1    14329.5
GR   1256.4    14406.1     1255.3    14553.3     1254.6    14725.5     1254.1    14964.9     1255.7    15011.5
GR   1269.2    15068.3     1262.4    15107.0     1268.7    15149.1     1272.2    15222.6     1272.5    15318.6

NC                                       0.1       0.3
NH      6.      0.040     7156.5       0.075     7521.6       0.025    10310.4       0.035    10869.7       0.025
NH  11597.      0.040    15810.1
ET                          4.1       8490.     12200.        7.1       8745.       9695.
X1   32.862      89.0     8493.6    11352.7       890.        910.       880.
CI    9220.    1240.3    705.035       1.0        1.0        .01        900.
X2                                                                                                15.
X3     10.0
GR   1257.3     5673.0     1256.9     5885.8     1255.9     5897.5     1256.1     6458.3     1257.0     6469.0
GR   1257.0     6567.0     1255.3     6596.5     1253.9     6767.5     1255.2     6801.0     1255.3     7156.5
GR   1255.0     7511.5     1257.3     7521.6     1251.0     7552.4     1251.0     7587.9     1251.0     7600.3
GR   1251.0     7619.5     1251.0     7657.3     1251.0     7714.1     1251.0     7775.4     1251.0     7863.0
GR   1251.0     7960.0     1251.0     8122.2     1247.6     8240.3     1244.3     8370.2     1250.4     8404.2
GR   1249.1     8435.3     1255.8     8454.2     1255.8     8493.6     1246.4     8515.5     1244.7     8597.9
GR   1240.4     8646.4     1242.8     8764.9     1246.4     9019.4     1242.9     9074.0     1246.7     9099.6
GR   1248.3     9173.8     1243.5     9219.8     1242.1     9270.3     1250.0     9302.4     1253.9     9369.8
GR   1254.7     9497.1     1256.1     9553.9     1256.4     9672.1     1253.4     9732.9     1252.2     9873.5
GR   1253.4     9905.7     1253.5    10000.1     1252.5    10130.0     1254.3    10161.7     1250.7    10255.9
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GR   1252.8    10310.4    1253.4    10421.7    1254.0    10549.1    1255.3    10741.5    1253.3    10815.0
GR   1253.3    10869.7    1245.6    11004.6    1244.7    11206.5    1248.6    11294.3    1248.1    11352.7
1
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GR   1251.0    11438.2    1249.7    11544.6    1255.4    11597.0    1253.9    11818.5    1255.5    11842.8
GR   1255.5    12099.6    1254.9    12438.8    1254.6    12753.2    1252.7    12930.9    1259.9    13002.8
GR   1259.1    13215.7    1255.7    13289.1    1255.7    13582.4    1256.1    13817.8    1257.1    14118.9
GR   1256.5    14454.7    1255.5    14780.6    1269.8    14816.2    1272.1    14851.9    1269.8    14924.7
GR   1266.1    14959.5    1264.5    14993.0    1267.9    15019.8    1264.8    15133.6    1270.2    15209.1
GR   1273.7    15321.3    1277.5    15510.2    1275.1    15699.6    1277.9    15810.1

NH     6.       0.040    7156.5      0.075    7521.6       0.025    10310.4      0.035    10869.7      0.025
NH   11597.     0.040   15810.1
ET                          4.1      8490.    12200.        7.1      8745.       9695.
X1   32.863                                     5.          5.        5.
CI    9220.    1240.3      5.035       1.0       1.0        .01       900.
X2                                                                                              15.

NH     2.       0.025   11602.4      0.035   15441.4
ET                          4.1      8280.    11600.        7.1      8625.       9575.
X1   33.023      75.     8281.2   11327.7      870.       880.       850.
CI    9100.    1241.3    810.035       1.0       1.0        .01       900.
X2                                                                                              15.
X3     10.
GR   1258.8    5930.0    1258.6     6404.9    1258.5     6676.1    1257.3     6705.0    1257.9     6794.0
GR   1257.0    7213.2    1257.5     7609.3    1258.9     7620.5    1249.0     7673.7    1249.0     7729.4
GR   1249.0    7761.5    1249.0     7836.0    1249.0     7923.2    1249.0     7941.5    1249.0     8013.3
GR   1249.0    8130.8    1249.0     8172.3    1249.0     8205.3    1258.3     8259.4    1258.3     8281.2
GR   1248.7    8304.0    1249.3     8410.8    1248.2     8487.8    1240.1     8525.6    1241.4     8662.2
GR   1239.5    8805.4    1254.8     8887.7    1253.1     9147.5    1254.2     9205.2    1252.1     9362.9
GR   1247.4    9404.2    1253.5     9469.2    1254.9     9616.1    1255.5     9731.6    1253.7     9944.8
GR   1255.2   10000.1    1256.4    10060.1    1256.3    10325.7    1256.0    10493.4    1254.5    10682.1
GR   1255.9   10821.3    1255.9    10916.1    1250.9    10943.6    1246.8    11168.7    1248.2    11248.3
GR   1245.9   11327.7    1247.4    11418.9    1246.2    11469.8    1249.4    11522.8    1250.0    11602.4
GR   1255.7   11702.8    1256.5    11875.9    1257.8    12015.3    1256.6    12279.3    1256.6    12414.2
GR   1259.7   12496.7    1259.4    12585.4    1260.6    12654.6    1258.9    12742.9    1260.0    12912.4
GR   1257.8   12985.6    1256.9    13257.1    1257.9    13441.2    1256.5    13537.8    1258.4    13594.8
GR   1258.4   13827.5    1257.8    14130.1    1257.6    14391.6    1259.6    14658.4    1259.7    14830.4
GR   1260.7   14890.8    1259.9    15007.4    1263.4    15151.3    1262.2    15330.4    1268.0    15441.4

NH     2.       0.025   11821.5      0.035   16213.3
ET                          4.1      7862.    11562.        7.1      8205.       9155.
X1   33.205      71.     8080.8   11345.8      950.       920.       890.
CI    8680.    1242.4    950.035       1.0       1.0        .01       900.
X2                                                                                              15.
GR   1262.9    6050.0    1262.9     6481.1    1262.9     6948.6    1262.9     7258.2    1262.9     7286.3
GR   1261.5    7395.1    1260.7     7552.4    1259.2     7583.0    1259.3     7668.1    1257.1     7694.4
GR   1261.0    7743.9    1259.5     7771.0    1250.3     7839.8    1249.0     8080.8    1246.1     8206.0
GR   1242.3    8266.0    1245.7     8435.0    1243.6     8518.2    1240.9     8625.3    1253.3     8677.7
GR   1254.5    8728.3    1254.4     8933.7    1255.1     9150.0    1256.4     9561.0    1254.8     9579.5
GR   1254.8    9613.6    1256.5     9652.3    1258.2     9890.5    1256.6     9933.9    1257.5    10000.5
GR   1258.1   10047.9    1257.8    10281.3    1256.4    10400.7    1257.2    10564.3    1257.2    10774.7
GR   1254.7   10850.9    1249.4    10910.3    1251.0    10989.4    1249.1    11012.6    1251.6    11070.8
GR   1250.9   11172.0    1254.8    11195.4    1256.9    11277.1    1255.8    11332.6    1251.6    11345.8
GR   1249.8   11467.9    1248.7    11673.0    1250.6    11821.5    1260.8    11861.9    1261.2    12146.6
GR   1260.3   12509.5    1257.8    12711.3    1259.0    13001.7    1259.9    13096.4    1257.5    13402.7
GR   1259.6   13478.0    1259.9    13684.9    1258.0    13930.7    1258.7    14333.2    1259.0    14836.6
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GR   1259.9    15000.7    1268.3    15095.0    1269.0    15155.2    1269.0    15255.2    1270.1    15403.4
1
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GR   1270.2    15587.0    1272.6    15727.5    1271.0    15784.5    1274.9    15928.1    1275.0    16094.8
GR   1274.5    16213.3

NH     2.       0.025    11953.6     0.035    16255.4
ET                         4.1      7749.     11599.       7.1      7985.      8935.
X1   33.385      60.      7749.3    11448.0     960.      940.      920.
CI    8460.    1243.6    950.035      1.0        1.0      .01       900.
X2                                                                                                15.
X3    10.
GR   1265.7    7670.0     1265.7    7706.7     1265.1    7749.3    1250.9    7771.9    1247.4    7902.4
GR   1242.9    8030.8     1244.8    8178.3     1250.9    8259.7    1249.7    8297.4    1254.5    8332.6
GR   1254.7    8389.5     1252.8    8471.2     1247.7    8706.7    1252.6    8732.4    1255.2    8795.1
GR   1257.1    8816.9     1256.3    8975.0     1255.2    9130.6    1252.6    9152.0    1253.2    9283.8
GR   1256.7    9307.0     1257.3    9437.1     1257.3    9600.0    1257.6    9826.4    1256.9   10000.0
GR   1257.6   10043.5     1257.6   10236.0     1258.7   10418.1    1256.6   10495.4    1257.6   10640.3
GR   1254.1   10662.4     1251.9   10816.0     1255.4   10836.6    1255.4   10907.9    1253.7   11121.8
GR   1255.2   11146.7     1257.3   11448.0     1251.9   11468.2    1249.4   11622.6    1251.6   11863.4
GR   1249.8   11953.6     1256.0   11997.2     1256.0   12047.4    1260.3   12068.7    1260.3   12233.3
GR   1258.8   12406.6     1259.0   12653.5     1258.2   13092.7    1259.4   13482.6    1259.4   13898.7
GR   1258.9   14389.5     1258.9   14733.2     1259.3   15155.4    1270.0   15196.3    1271.4   15366.4
GR   1271.3   15481.6     1267.0   15498.0     1268.2   15771.9    1272.5   16117.2    1274.4   16255.4

NH     2.       0.025    11776.1     0.035    16082.5
ET                         4.1      7730.     11600.       7.1      7975.      8925.
X1   33.557      48.      7752.4    11413.9     880.      920.      890.
CI    8460.    1244.6    880.035      1.0        1.0      .01       900.
X2                                                                                                15.
GR   1265.2    7725.8     1244.5    7752.4     1243.5    7838.6    1245.1    7948.3    1254.7    8128.4
GR   1253.7    8222.5     1255.9    8300.4     1256.1    8412.7    1254.9    8593.7    1252.1    8732.2
GR   1254.0    8778.9     1254.6    8853.1     1252.8    9059.6    1254.3    9139.5    1256.8    9190.8
GR   1256.5    9291.2     1255.6    9325.0     1255.9    9484.0    1258.8    9510.2    1258.8    9684.1
GR   1259.1    9926.2     1258.2   10000.1     1258.3   10439.7    1258.4   10684.7    1253.4   10731.4
GR   1256.4   10961.3     1257.6   11231.8     1252.0   11413.9    1249.0   11654.6    1252.3   11776.1
GR   1262.6   11842.6     1261.4   12295.6     1261.1   12667.7    1260.8   12731.0    1262.6   12833.0
GR   1261.8   13229.9     1260.5   13721.6     1260.0   14164.8    1259.5   14611.5    1258.8   15023.3
GR   1260.7   15244.4     1262.6   15363.4     1262.6   15484.1    1271.0   15548.2    1273.2   15723.1
GR   1276.1   15881.8     1276.7   15991.4     1277.5   16082.5

NH     2.       0.025    11232.5     0.035    15964.1
ET                         4.1      7794.     11450.       7.1      8035.      8985.
X1   33.726      54.      7794.3    11232.5     890.      940.      930.
CI    8510.    1245.7    910.035      1.0        1.0      .01       900.
X2                                                                                                15.
GR   1265.0    6694.0     1264.8    7285.9     1265.5    7305.9    1264.4    7756.9    1265.9    7794.3
GR   1258.2    7813.9     1243.9    7837.4     1243.9    7878.4    1246.3    7923.9    1249.1    8032.2
GR   1248.1    8091.2     1251.7    8213.6     1253.6    8297.3    1257.9    8497.4    1256.4    8688.5
GR   1251.6    8876.7     1258.2    8965.4     1258.2    9067.9    1255.7    9092.5    1254.7    9257.3
GR   1257.6    9398.2     1258.4    9620.2     1260.7    9643.8    1259.4    9847.2    1260.6   10000.0
GR   1259.1   10197.2     1260.2   10373.8     1259.4   10494.3    1254.3   10584.1    1253.5   10988.6
GR   1248.9   11187.1     1249.5   11232.5     1259.7   11308.6    1257.6   11394.5    1260.1   11446.8
GR   1260.8   11508.8     1263.2   11536.1     1262.4   11772.5    1262.3   11843.1    1264.8   11906.8
GR   1264.4   12055.8     1261.3   12127.4     1262.5   12193.3    1262.9   12313.7    1262.6   12571.8
GR   1263.1   13080.0     1260.8   13542.2     1260.7   14150.7    1258.8   14609.0    1258.9   15051.4
GR   1278.0   15122.2     1275.8   15418.1     1275.2   15660.4    1276.8   15964.1
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NH      2.      0.025   11337.6     0.035   15858.8
ET                          4.1     8030.    11300.       7.1      8315.      9265.
X1   33.892       65.    8069.2   11130.4     870.      910.      880.
CI    8790.    1246.7   900.035       1.0       1.0       .01      900.
X2                                                                                          15.
GR   1268.1    6914.0    1270.3    6981.2    1268.5    7013.3    1268.0    7180.4    1266.2    7303.0
GR   1266.6    7903.3    1267.1    8020.8    1247.6    8069.2    1251.3    8209.1    1249.2    8341.7
GR   1245.7    8574.2    1247.4    8605.9    1259.1    8659.6    1262.0    8698.0    1260.7    8894.2
GR   1259.3    9002.6    1261.3    9094.4    1259.7    9179.5    1262.3    9230.9    1259.1    9263.6
GR   1255.5    9326.8    1257.8    9469.8    1257.5    9562.9    1260.5    9581.8    1262.9    9628.7
GR   1262.7    9857.7    1262.1   10000.3    1262.3   10130.1    1259.1   10143.7    1258.3   10274.4
GR   1254.0   10489.7    1252.5   10582.0    1254.6   10643.0    1255.4   10854.7    1254.0   10971.9
GR   1256.6   11018.6    1255.5   11130.4    1260.6   11154.2    1260.8   11266.0    1264.9   11337.6
GR   1263.3   11464.2    1265.3   11617.8    1266.1   11665.4    1265.3   11866.3    1262.3   11970.9
GR   1263.6   12134.4    1265.4   12201.8    1264.4   12450.3    1264.1   12673.4    1263.7   12972.5
GR   1263.8   13551.0    1264.2   13992.6    1264.2   14270.8    1267.7   14373.6    1268.0   14586.0
GR   1271.3   14772.7    1272.0   14870.4    1268.9   14875.7    1272.8   14949.8    1274.5   15131.4
GR   1276.0   15299.2    1281.1   15356.8    1278.1   15548.7    1279.6   15732.9    1280.3   15858.8

NH      2.      0.025   11315.7     0.035   15690.1
ET                          4.1     8450.    11220.       7.1      8705.      9655.
X1   34.091       79.0    8453.8   10924.9     900.      910.      890.
CI    9180.    1247.9   960.035       1.0       1.0       .01      900.
X2                                                                                          15.
X3      10.    1248.
GR   1270.7    7200.4    1271.3    7380.6    1272.7    7436.2    1270.3    7446.1    1268.7    7632.6
GR   1258.9    7640.6    1258.9    7944.7    1260.6    7970.1    1277.7    7997.3    1270.8    8017.0
GR   1271.1    8057.9    1276.7    8128.7    1267.4    8146.2    1259.9    8153.0    1257.7    8175.0
GR   1270.1    8202.0    1267.8    8218.5    1269.9    8272.8    1241.0    8326.5    1211.1    8379.5
GR   1212.9    8453.8    1214.3    8464.9    1208.6    8483.3    1208.3    8569.8    1204.9    8615.9
GR   1202.4    8632.1    1202.0    8657.6    1229.6    8707.0    1231.4    8775.7    1249.3    8827.1
GR   1253.1    8977.9    1258.2    9034.4    1261.8    9132.8    1263.5    9246.2    1263.5    9333.9
GR   1260.7    9428.9    1258.8    9620.8    1260.1    9670.9    1259.6    9779.4    1257.6   10000.1
GR   1259.3   10035.6    1260.0   10121.8    1257.1   10145.4    1255.1   10231.5    1256.0   10372.7
GR   1259.9   10399.3    1261.1   10454.6    1259.6   10583.4    1261.4   10620.6    1260.3   10696.7
GR   1264.3   10724.7    1264.3   10790.8    1261.5   10803.5    1260.5   10924.9    1259.5   11100.1
GR   1262.9   11123.2    1261.8   11164.1    1263.1   11193.0    1263.2   11260.1    1268.1   11315.7
GR   1266.8   11477.3    1267.5   11558.3    1266.5   11831.2    1263.9   11870.1    1263.9   12024.1
GR   1266.3   12123.4    1267.4   12205.1    1267.3   12458.8    1267.5   12707.7    1267.3   13019.6
GR   1266.5   13408.7    1266.8   13578.7    1266.4   14033.1    1267.7   14452.2    1269.4   14847.8
GR   1270.9   15233.9    1273.4   15503.5    1281.6   15547.5    1282.6   15690.1

NH      2.      0.025   10095.7     0.035   15323.9
ET                          4.1     8740.    11110.       7.1      8985.      9935.
X1   34.271       53.    8723.0   11198.5     910.      870.      880.
CI    9460.    1249.0   905.035       1.0       1.0       .01      900.
X2                                                                                          15.
GR   1273.4    7220.0    1273.4    7405.8    1273.9    7430.8    1273.9    7453.2    1272.9    7470.2
GR   1272.9    7933.7    1271.0    7986.6    1270.3    8334.8    1279.9    8371.4    1271.0    8412.5
GR   1271.0    8448.2    1278.9    8480.6    1271.4    8537.5    1271.5    8592.1    1271.0    8608.8
GR   1271.5    8627.2    1270.9    8671.3    1275.9    8695.3    1275.5    8723.0    1255.1    8768.6
GR   1250.3    8814.9    1248.0    8859.6    1250.6    8880.7    1250.0    8972.6    1251.8    9111.9
GR   1257.8    9333.6    1258.3    9528.6    1260.0    9813.2    1259.7   10000.2    1260.0   10065.7
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GR   1264.7   10095.7    1265.3   10395.5    1263.9   10582.1    1265.4   10664.1    1262.1   10702.8
GR   1260.8   10860.0    1262.1   10913.9    1261.9   10994.0    1265.1   11016.6    1266.0   11150.1
GR   1270.3   11198.5    1268.6   11242.8    1269.6   11429.3    1265.5   11670.4    1268.6   11822.1
GR   1269.0   12061.3    1269.0   12399.8    1268.5   12874.6    1268.5   13584.5    1268.0   14027.7
GR   1268.6   14464.2    1270.0   15029.6    1270.3   15323.9

NH      2.      0.025   10095.7      0.035   15323.9
ET                          4.1     8740.    11110.       7.1     8985.     9935.
X1   34.272                                     5.        5.        5.
CI    9460.    1249.0     5.035       1.0       1.0       .01      900.
X2                                                                                          15.

NH      3.      0.025   10955.6      0.035   11869.4     0.050   15240.5
ET                          4.1     8870.    11140.       7.1     9175.    10125    .
X1   34.453      51.     8920.6   11281.7     900.      900.      900.
CI    9650.    1250.0   920.035       1.0       1.0       .01      900.
X2                                                                                          15.
GR   1278.8    7200.0    1279.2    7447.8    1279.5    7474.3    1279.5    7486.7    1277.5    7505.4
GR   1276.3    7586.1    1276.3    7623.9    1276.2    7717.6    1276.1    7739.1    1275.8    7861.4
GR   1276.2    8075.3    1275.1    8258.2    1273.2    8479.0    1270.1    8596.3    1274.1    8630.0
GR   1272.3    8724.8    1275.5    8765.6    1276.5    8863.2    1254.8    8920.6    1252.9    9139.4
GR   1249.5    9201.9    1250.5    9302.2    1254.6    9352.1    1261.7    9453.3    1262.1    9591.1
GR   1261.4    9763.7    1260.0    9798.4    1266.8    9835.8    1266.7   10000.1    1265.4   10473.4
GR   1262.3   10586.9    1261.4   10926.3    1268.0   10955.6    1268.6   11066.9    1262.5   11194.8
GR   1267.8   11222.0    1271.5   11281.7    1271.1   11442.9    1264.7   11583.6    1268.0   11660.6
GR   1267.3   11747.5    1269.7   11869.4    1269.5   12096.5    1271.3   12461.3    1269.6   13103.6
GR   1269.2   13441.4    1269.8   14006.0    1270.0   14535.0    1271.6   14903.5    1275.7   14991.1
GR   1274.4   15240.5

NH      3.      0.025   10756.5      0.035   11685.4     0.050   14912.0
ET                          4.1     9060.    11170.       7.1     9325.    10275.
X1   34.642      63.     9095.1   11178.9     1000.     1070.     1020.
CI    9800.    1251.2  1000.035       1.0       1.0       .01      900.
X2                                                                                          15.
GR   1285.3    7237.0    1286.1    7477.4    1286.5    7508.6    1286.5    7523.0    1285.9    7734.4
GR   1285.1    7810.8    1282.5    7870.3    1280.1    8076.1    1280.1    8302.4    1274.0    8327.9
GR   1274.0    8525.8    1274.0    8538.0    1274.0    8552.7    1276.2    8564.5    1275.7    8584.3
GR   1274.0    8614.1    1284.8    8649.2    1284.9    8666.6    1276.4    8700.1    1277.1    8735.4
GR   1284.0    8812.7    1281.8    8946.5    1278.2    8983.4    1274.4    9056.5    1252.9    9095.1
GR   1251.1    9244.8    1247.9    9342.9    1254.9    9372.4    1260.2    9441.7    1260.2    9563.9
GR   1262.5    9736.8    1262.0    9836.1    1264.8    9904.5    1264.7   10000.1    1267.9   10148.1
GR   1268.1   10156.8    1266.3   10168.5    1266.1   10341.3    1262.5   10614.2    1261.8   10719.1
GR   1267.5   10756.5    1268.9   10900.9    1271.5   10985.7    1268.6   11022.7    1268.5   11060.7
GR   1272.8   11178.9    1268.7   11241.4    1270.7   11299.9    1264.7   11448.3    1271.3   11518.4
GR   1268.4   11599.2    1273.2   11685.4    1272.9   11907.2    1269.8   11988.1    1273.3   12075.3
GR   1271.5   12237.3    1272.2   12413.3    1272.3   12609.8    1272.7   12867.2    1271.9   13389.1
GR   1272.6   13865.1    1271.8   14326.9    1272.4   14912.0

NH      4.      0.040    9126.9      0.025   10878.9     0.035   12257.9     0.050   14460.1
ET                          4.1     9100.    11180.       7.1     9435.    10485.
1
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X1   34.856      59.     9126.9   11496.6     1160.     1000.     1060.
CI    9960.    1252.5  1070.035       1.0       1.0       .01      1000.
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X2                                                                                                                  15.
GR   1292.0     7381.0     1291.5     7565.8     1289.6     7626.2     1290.3     7951.4     1287.6     8165.0
GR   1285.4     8506.6     1282.3     8799.2     1286.5     8816.1     1281.6     8843.9     1271.1     8862.0
GR   1271.1     8871.8     1281.0     8898.8     1278.8     8949.9     1276.9     9020.7     1256.4     9050.9
GR   1261.4     9073.7     1261.4     9092.2     1255.4     9126.9     1251.9     9290.4     1255.9     9406.5
GR   1257.6     9695.0     1262.0     9914.9     1263.1    10000.1     1266.1    10125.0     1263.8    10355.2
GR   1269.0    10442.4     1267.1    10518.7     1269.6    10679.5     1268.3    10735.3     1263.7    10756.5
GR   1264.1    10855.0     1271.5    10878.9     1272.2    11023.1     1270.4    11099.0     1272.8    11130.9
GR   1272.3    11183.2     1269.0    11202.0     1270.1    11255.1     1273.3    11330.4     1272.5    11457.9
GR   1274.4    11496.6     1269.1    11672.0     1273.7    11701.6     1275.2    11791.1     1274.0    11966.6
GR   1274.7    12038.8     1273.5    12128.1     1271.0    12149.6     1270.8    12201.7     1274.6    12257.9
GR   1275.1    12471.5     1275.8    12725.3     1275.3    12993.4     1275.5    13318.6     1274.0    13857.7
GR   1272.0    14166.8     1273.1    14248.8     1281.6    14335.2     1282.1    14460.1

NH      4.       0.040     8857.5       0.025    11551.1       0.035    12538.1       0.050    14721.0
ET                          4.1        8850       11160         4.1
X1   35.136       68.      9646.3    10892.1      1250.       690.       840.
CI                                                              .01        .01
X2                                                                                                                  15.
GR   1303.1     7384.0     1301.1     7652.2     1304.3     7671.1     1299.2     7682.3     1304.7     7699.6
GR   1304.7     7710.2     1299.0     7718.5     1299.3     7772.7     1306.1     7788.0     1306.3     7810.3
GR   1298.9     7842.9     1296.5     8041.2     1296.1     8365.9     1295.1     8435.0     1291.5     8439.7
GR   1287.6     8603.6     1289.7     8640.9     1285.4     8694.1     1284.0     8712.0     1284.0     8735.4
GR   1288.4     8770.3     1291.8     8796.7     1290.0     8830.8     1260.7     8857.5     1263.8     8955.7
GR   1263.3     9087.6     1263.0     9238.4     1266.5     9330.6     1268.1     9469.6     1269.5     9646.3
GR   1263.7     9681.2     1262.4     9728.5     1265.1     9778.6     1264.3    10000.2     1258.4    10273.7
GR   1256.6    10383.7     1256.3    10549.3     1270.2    10594.1     1269.9    10776.7     1266.3    10815.5
GR   1265.4    10874.2     1273.9    10892.1     1273.9    10955.9     1273.1    11115.0     1274.3    11150.3
GR   1272.0    11192.3     1272.3    11288.4     1275.2    11342.3     1274.7    11551.1     1269.6    11739.9
GR   1275.0    11783.4     1275.7    11835.4     1274.7    11917.6     1276.3    11992.6     1277.0    12172.8
GR   1272.2    12225.8     1274.7    12268.4     1276.3    12538.1     1276.7    12841.1     1276.0    13085.0
GR   1275.0    13460.3     1273.7    13913.9     1277.8    13987.9     1275.7    14178.0     1276.8    14309.8
GR   1279.3    14344.1     1282.3    14531.7     1277.6    14721.0

NH      4.       0.040     8745.8       0.025    11573.0       0.035    12068.2       0.050    14676.8
ET                          4.1       8720.       11250.         4.1      8720.      11250.
X1   35.297       77.     10436.3    10969.6      1200.       670.       800.
X2                                                                                                                  15.
GR   1305.5     7009.0     1303.9     7198.4     1311.8     7231.7     1312.4     7258.8     1304.1     7276.0
GR   1304.1     7293.3     1299.3     7301.0     1299.3     7369.4     1307.0     7387.0     1308.3     7457.1
GR   1303.4     7485.4     1303.1     7532.1     1305.8     7546.9     1302.3     7579.6     1302.9     7640.6
GR   1305.8     7685.9     1303.5     7811.9     1295.6     7845.2     1302.5     7876.0     1298.7     8112.7
GR   1293.9     8290.2     1298.4     8326.6     1296.6     8372.8     1284.0     8408.9     1284.0     8439.1
GR   1292.7     8476.7     1298.5     8516.8     1295.0     8535.0     1298.0     8572.4     1286.9     8685.1
GR   1266.2     8745.8     1264.4     8784.1     1268.9     8917.9     1272.3     8940.4     1264.4     8986.0
GR   1266.3     9119.8     1265.4     9434.5     1269.9     9508.6     1269.9     9651.5     1271.9     9751.4
GR   1269.2    10000.2     1268.6    10038.6     1266.7    10081.8     1265.5    10292.1     1267.4    10321.0
GR   1266.8    10436.3     1263.7    10495.5     1258.4    10523.5     1258.5    10679.9     1255.9    10803.8
GR   1261.9    10835.2     1264.8    10936.4     1274.0    10969.6     1275.9    11001.3     1276.3    11052.6
GR   1274.5    11218.9     1277.3    11267.6     1274.9    11310.1     1276.4    11453.7     1275.9    11573.0
GR   1273.2    11643.7     1274.5    11856.8     1276.3    11941.4     1274.9    12015.6     1278.2    12068.2
GR   1276.7    12207.5     1277.3    12557.2     1276.6    13020.9     1276.6    13425.7     1277.0    13519.0
1
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GR   1283.8    13573.2     1285.0    13685.1     1285.4    13814.2     1282.2    14001.5     1281.0    14185.6
GR   1282.2    14398.8     1280.5    14676.8
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NH     3.       0.040    8882.2     0.025    11424.4     0.050    14062.6
ET                         4.1     8850.     11350.       4.1     8850.     11350
X1   35.480       58.0   10498.8   11026.9     1060.      720.      950.
X2                                                                                  15.
GR   1296.3     7087.0    1299.0     7264.6    1299.0    7532.5    1306.3    7590.5    1305.7    7642.7
GR   1296.6     7657.2    1296.6     7730.6    1306.1    7750.7    1306.2    7781.7    1304.9    7856.1
GR   1297.3     7879.2    1297.1     8044.2    1297.5    8232.1    1288.3    8269.1    1298.1    8304.8
GR   1290.8     8448.0    1284.0     8491.2    1284.0    8534.0    1289.4    8583.6    1276.3    8639.5
GR   1279.9     8670.0    1280.0     8848.8    1269.5    8882.2    1265.6    8971.2    1265.7    9321.9
GR   1269.2     9357.7    1271.3     9548.9    1268.0    9691.2    1272.5    9717.1    1273.4    9911.5
GR   1269.8    10000.3    1267.9    10090.5    1270.9   10355.4    1269.0   10498.8    1262.3   10579.4
GR   1256.4    10599.9    1256.3    10670.0    1259.0   10824.7    1263.8   10882.7    1265.9   11026.9
GR   1265.3    11168.5    1263.1    11209.4    1267.4   11304.1    1273.0   11342.8    1278.2   11424.4
GR   1279.3    11562.6    1277.0    11668.9    1279.9   11715.0    1278.2   11798.3    1279.0   12057.6
GR   1278.1    12327.0    1277.8    12726.1    1280.2   12798.7    1279.4   13012.1    1280.9   13256.0
GR   1282.8    13466.0    1284.6    13723.8    1283.0   14062.6
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GREENFIELD RD.

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NH     2.       0.025   11393.7     0.040    13726.0
QT     5.     235000.    235000.   235000.    235000.   235000.
ET                         4.1     8790.     11400.       4.1     8790.     11400.
X1   35.661       59.0   10209.2   11055.     1020.      900.      950.
X2                                                                                  15.
GR   1317.2     7051.0    1315.9     7188.1    1308.7    7250.4    1307.4    7300.5    1311.6    7316.3
GR   1311.6     7333.9    1307.2     7347.0    1303.9    7436.6    1303.3    7555.7    1310.3    7581.2
GR   1309.0     7604.9    1297.8     7619.5    1297.8    7670.5    1306.9    7685.4    1305.8    7727.6
GR   1298.8     7755.6    1295.9     7818.2    1296.1    7886.5    1293.4    7929.0    1287.8    8176.7
GR   1292.8     8211.3    1285.6     8270.5    1284.8    8456.8    1287.1    8494.5    1276.7    8531.5
GR   1278.7     8637.2    1282.1     8664.6    1281.1    8797.6    1271.8    8836.5    1272.7    9032.8
GR   1262.8     9103.9    1265.3     9261.9    1267.7    9278.4    1271.2    9438.4    1273.2    9670.9
GR   1273.6     9802.8    1271.9     9883.0    1274.3   10000.3    1274.5   10112.9    1275.5   10209.2
GR   1270.0    10374.8    1263.5    10587.4    1258.2   10628.8    1258.0   10780.4    1266.1   10811.4
GR   1269.6    11055.0    1266.0    11239.4    1267.6   11393.7    1280.6   11412.8    1281.8   11523.2
GR   1281.6    11782.9    1280.4    12036.2    1283.9   12275.3    1286.0   12322.4    1285.6   12568.4
GR   1286.4    12799.3    1287.1    13083.7    1285.9   13392.5    1284.0   13726.0

NH     2.       0.025   10682.4     0.040    10862.5
ET                         4.1     8750.     10850.       4.1     8750.     10850.
X1   36.011       48.0    9618.6   10862.5     1810.     1840.     1820.
X2                                                                                  15.
X3    10.
GR   1301.9     6653.0    1300.7     6843.6    1314.2    6932.1    1316.5    7001.3    1309.0    7021.3
GR   1323.5     7111.7    1320.0     7219.7    1307.4    7288.2    1307.9    7317.7    1297.8    7350.4
GR   1297.8     7489.1    1308.0     7539.1    1307.2    7706.3    1302.5    7799.7    1304.8    7843.4
GR   1297.7     7946.5    1284.7     7987.5    1284.0    8043.6    1288.1    8097.6    1287.7    8130.1
GR   1297.9     8203.2    1278.2     8241.4    1278.5    8288.2    1294.7    8323.3    1295.5    8347.6
GR   1287.5     8376.7    1285.0     8513.2    1286.9    8686.9    1272.0    8725.7    1272.0    8810.4
GR   1272.0     8859.8    1272.0     8918.6    1275.5    9023.0    1276.9    9206.3    1271.5    9225.7
GR   1270.0     9342.2    1273.1     9359.8    1273.8    9580.9    1275.5    9618.6    1273.2    9857.6
GR   1270.8    10000.2    1267.3    10096.9    1267.3   10232.3    1265.3   10476.8    1260.5   10682.4
GR   1267.9    10713.9    1270.2    10817.7    1287.4   10862.5
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NH     2.       0.025   10641.0     0.040    12423.8
ET                         4.1     8730.     10700.       4.1     8730.     10700.
X1   36.203       55.0    9495.8   10769.      920.      930.      920.
X2                                                                                  15.
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GR   1316.9     6566.0     1310.7     6651.4     1308.6     6713.4     1306.7     6794.9     1314.9     6854.9
GR   1305.8     6883.5     1298.9     6909.7     1299.0     6975.0     1306.2     6994.2     1309.2     7130.6
GR   1308.2     7254.7     1303.5     7370.0     1293.5     7427.2     1292.1     7572.0     1295.4     7603.6
GR   1296.2     7685.2     1292.2     7710.5     1299.3     7752.9     1295.7     7837.5     1288.4     7892.9
GR   1288.5     8036.3     1299.0     8115.7     1277.2     8155.5     1276.8     8200.0     1297.0     8247.0
GR   1287.4     8312.0     1284.6     8535.1     1283.2     8732.3     1274.8     8748.6     1276.6     9099.0
GR   1274.6     9323.6     1280.1     9385.0     1281.8     9495.8     1276.2     9536.7     1277.6     9778.8
GR   1270.5    10000.1     1266.2    10041.3     1264.5    10340.0     1262.1    10424.8     1264.0    10569.3
GR   1270.8    10599.4     1263.5    10641.0     1269.4    10722.9     1288.0    10769.0     1288.0    10794.5
GR   1288.0    10852.3     1288.0    10882.1     1288.0    10973.7     1288.0    11015.6     1288.0    11134.4
GR   1288.0    11322.3     1287.2    11590.0     1286.7    11924.0     1286.4    12170.9     1287.0    12423.8

NH      2.       0.025    10719.4      0.040    11318.2
ET                          4.1       8800.     10750.        4.1       8800.     10750.
X1   36.403       40.      9583.8    10761.5     1050.      1030.       1020.
X2                                                                                                      15.
GR   1310.1     6981.4     1307.9     7137.8     1305.2     7253.3     1310.7     7269.3     1300.0     7298.5
GR   1300.0     7349.1     1306.8     7363.8     1307.7     7386.3     1301.4     7439.3     1298.8     7645.7
GR   1296.2     7867.1     1293.0     8158.0     1290.5     8284.9     1292.6     8299.7     1287.8     8319.5
GR   1292.3     8338.7     1290.9     8368.5     1305.5     8419.6     1279.2     8469.9     1277.3     8524.0
GR   1301.4     8576.4     1291.4     8611.9     1288.0     8733.1     1281.5     8836.3     1276.5     8853.7
GR   1277.1     9012.5     1279.8     9325.4     1283.9     9583.8     1280.8     9820.8     1277.1     9835.0
GR   1277.8     9950.8     1273.8     9983.0     1272.8    10000.0     1270.2    10106.9     1266.0    10382.8
GR   1265.3    10719.4     1287.0    10761.5     1292.3    10796.4     1293.6    11045.2     1295.2    11318.2

NH      2.       0.025    10719.4      0.040    11318.2
ET                          4.1       8800.     10750.        4.1       8800.     10750.
X1   36.404                                        5.         5.          5.
X2                                                                                                      15.

NH      3.       0.040     9065.9      0.025    10590.8      0.040    11159.8
ET                          4.1       9030.     10650.        4.1       9030.     10650.
X1   36.595       45.      9914.6    10666.5     1020.       970.        970.
X2                                                                                                      15.
GR   1326.6     7256.4     1321.6     7502.4     1318.7     7570.0     1320.4     7609.0     1320.8     7655.3
GR   1314.9     7810.6     1308.0     7958.0     1317.8     7980.3     1318.5     7998.3     1309.4     8017.2
GR   1302.3     8033.8     1302.3     8080.6     1309.2     8096.8     1309.7     8139.5     1305.8     8154.5
GR   1309.4     8218.2     1308.8     8320.0     1310.7     8405.3     1309.5     8510.8     1297.5     8583.8
GR   1297.6     8632.5     1291.1     8664.9     1299.3     8706.0     1310.6     8738.5     1280.2     8791.4
GR   1278.9     8838.8     1306.0     8893.5     1292.7     8930.7     1290.3     9001.7     1284.0     9048.5
GR   1278.5     9065.9     1280.4     9224.0     1280.3     9429.4     1280.0     9696.2     1280.0     9914.6
GR   1275.5    10000.0     1275.4    10057.3     1270.1    10145.9     1270.6    10395.6     1262.6    10454.4
GR   1266.5    10525.9     1265.7    10590.8     1294.8    10666.5     1298.1    10924.0     1299.2    11159.8
1
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ET                          4.1       9030.     10650.        4.1       9030.     10650.
NH      3.       0.040     9065.9      0.025    10590.8      0.040    11159.8
X1   36.596                                        5.         5.          5.
X2                                                                                                      15.

NH      3.       0.040     9337.0      0.025    10574.6      0.040    10680.3
ET                          4.1       9250.     10650.        4.1       9250.     10650.
X1   36.775       22.0     10039.    10680.3      980.       940.        940.
X2                                                                                                      15.
GR   1308.3     7824.0     1301.4     8400.0     1301.4     9046.9     1281.4     9098.6     1281.6     9137.4
GR   1300.8     9184.8     1301.2     9223.5     1285.0     9268.0     1286.1     9316.6     1279.0     9337.0
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GR   1281.0    9419.6    1280.1    9520.8    1281.8    9799.4    1280.1   10000.0    1280.7   10039.0
GR   1274.1   10060.6    1270.6   10236.0    1268.9   10331.1    1270.2   10369.3    1268.4   10534.4
GR   1265.7   10574.6    1302.3   10680.3

NH      3.      0.040    9438.5      0.025   10743.2      0.040   10831.7
ET                          4.1    9440.     10800.        4.1    9440.     10800.
X1   36.953      33.0    9875.7   10831.7     920.       920.      920.
X2                                                                                          15.
GR   1312.8    8056.6    1307.4    8195.6    1305.9    8277.2    1309.8    8298.0    1310.2    8314.8
GR   1301.8    8321.7    1301.8    8373.0    1309.4    8381.2    1310.0    8408.5    1300.2    8458.0
GR   1300.7    8504.0    1305.6    8537.0    1300.0    8570.7    1300.2    8662.6    1308.6    8721.4
GR   1309.1    8757.7    1299.3    8805.8    1302.0    8977.3    1304.2    9205.5    1289.9    9308.7
GR   1286.4    9413.8    1278.0    9438.5    1278.9    9462.8    1279.8    9606.0    1278.4    9875.7
GR   1276.2   10000.0    1273.0   10197.6    1269.6   10225.2    1268.4   10390.3    1274.9   10428.8
GR   1275.5   10641.4    1273.6   10743.2    1305.0   10831.7

NH      3.      0.060    9527.2      0.030   10565.5      0.040   12201.5
ET                          4.1    9450.     10800.        4.1    9450.     10800.
X1   37.152      39.0    9429.3   10631.8     930.       910.      990.
X2                                                                                          15.
X3     10.
GR   1311.2    8124.3    1307.6    8358.3    1312.1    8395.5    1311.9    8421.6    1301.6    8442.3
GR   1301.6    8504.1    1308.4    8520.6    1308.9    8545.5    1303.9    8579.1    1302.9    8635.8
GR   1306.9    8675.1    1303.5    8831.7    1308.5    8921.1    1308.5    9024.6    1306.5    9240.9
GR   1307.2    9429.3    1286.2    9465.9    1285.0    9495.3    1272.9    9527.2    1273.7    9649.9
GR   1274.1    9849.1    1275.8    9942.4    1273.4   10000.0    1278.3   10033.0    1279.5   10188.4
GR   1276.7   10286.8    1274.5   10473.1    1272.5   10565.5    1275.5   10596.1    1288.3   10631.8
GR   1286.8   10718.2    1281.4   10840.3    1280.1   10933.9    1294.3   10999.6    1298.2   11176.6
GR   1299.8   11371.1    1303.4   11666.3    1304.3   11885.9    1303.6   12201.5

NH      3.      0.060    9460.0      0.030   10534.6      0.040   11809.7
ET                          4.1    9351.     10701.        4.1    9351.     10701.
X1   37.328      35.     9388.6   10751.3     930.       910.      940.
X2                                                                                          15.
X3     10.
GR   1315.1    8386.3    1314.7    8704.0    1302.7    8724.7    1302.7    8783.8    1308.4    8795.8
GR   1309.1    8831.5    1301.2    8885.8    1301.7    9070.6    1304.9    9291.4    1291.0    9354.4
GR   1295.6    9371.2    1290.7    9388.6    1281.2    9443.2    1270.9    9460.0    1270.9    9650.8
GR   1273.1    9669.1    1279.4    9782.8    1280.1    9930.4    1280.7   10000.0    1280.0   10048.6
GR   1278.8   10127.2    1280.2   10237.3    1279.3   10336.6    1277.1   10429.0    1282.6   10534.6
GR   1284.8   10628.8    1285.3   10700.6    1290.2   10751.3    1289.3   10887.5    1291.1   10973.3
GR   1287.3   11027.0    1287.7   11234.9    1305.2   11279.6    1303.6   11537.0    1298.7   11809.7
1
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NH      3.      0.060    9497.0      0.030   10682.3      0.040   11653.5
ET                          4.1    9450.     10720.        4.1    9450.     10720.
X1   37.523      30.     9368.7   10437.9     910.      1020.      930.
X2                                                                                          15.
GR   1316.2    8791.3    1310.5    8894.4    1308.2    8972.6    1311.8    8981.7    1312.1    9004.8
GR   1303.9    9016.6    1303.9    9071.4    1309.4    9084.0    1310.0    9116.5    1299.9    9197.8
GR   1300.5    9252.6    1297.4    9368.7    1287.8    9460.8    1273.0    9497.0    1273.3    9578.3
GR   1274.9    9594.5    1279.5   10000.0    1279.4   10367.1    1283.5   10437.9    1284.2   10682.3
GR   1295.0   10730.7    1296.2   10811.1    1295.8   10984.5    1310.0   11036.5    1311.8   11296.9
GR   1310.1   11383.8    1308.5   11391.1    1309.9   11432.3    1305.9   11611.7    1302.8   11653.5

NH      3.      0.060    9650.1      0.030   10413.4      0.040   11412.5
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ET                          4.1     9561.4    10487.3       4.1     9561.4    10487.3
X1   37.720      31.      9561.4    10487.3      830.      890.      890.
X2                                                                                      15.
GR   1326.5    9123.3    1311.4     9184.8    1313.0    9230.9    1309.6    9254.0    1303.3    9264.2
GR   1303.3    9324.2    1310.3     9336.3    1311.3    9361.8    1300.3    9400.6    1297.3    9499.9
GR   1292.8    9534.4    1297.9     9561.4    1287.1    9617.1    1274.0    9650.1    1275.4    9708.3
GR   1277.6    9726.4    1278.3     9942.7    1279.0   10000.0    1279.5   10311.3    1275.8   10326.2
GR   1275.8   10413.4    1297.7    10487.3    1298.0   10606.7    1294.0   10652.7    1299.1   10715.2
GR   1298.9   10817.5    1296.5    10882.9    1313.1   10970.4    1313.2   11154.2    1313.5   11364.4
GR   1321.9   11412.5

NH      6.      0.070    9529.5      0.035   10229.6      0.070   10240.0      0.030   10431.6      0.070
NH  10615.      0.040   11385.1
ET                          4.1     9711.2    10615.       4.1     9711.2    10615.
X1   37.898      35.0     9711.2    10615.      880.      950.      940.
X2                                                                                      15.
GR   1376.9    9052.6    1372.7     9118.9    1337.6    9244.1    1309.5    9363.9    1310.9    9384.6
GR   1310.3    9393.8    1310.3     9453.9    1310.3    9464.4    1310.3    9488.9    1301.1    9529.5
GR   1288.5    9711.2    1280.3     9740.8    1281.4    9945.5    1277.7    9966.4    1278.1   10000.0
GR   1278.7   10229.6    1274.5    10240.0    1275.7   10431.6    1279.4   10463.2    1277.2   10526.5
GR   1282.5   10543.9    1283.6    10566.3    1299.2   10615.0    1299.7   10677.1    1293.8   10725.2
GR   1298.6   10757.9    1298.9    10822.8    1302.4   10944.3    1300.7   10982.6    1302.4   10994.8
GR   1303.0   11110.8    1308.3    11151.8    1311.7   11285.3    1312.7   11371.9    1315.1   11385.1

NH      5.      0.035   10000.0      0.060   10210.3      0.030   10438.0      0.070   10753.6      0.040
NH  10972.
ET                          4.1     9700.    10753.6       4.1     9700.    10753.6
X1   38.074      32.0     9875.8    10753.6     1020.      970.      980.
X2                                                                                      15.
GR   1328.1    9136.6    1320.2     9228.4    1319.9    9261.4    1313.6    9294.1    1313.6    9326.8
GR   1311.7    9339.4    1311.7     9397.0    1311.7    9406.0    1311.7    9426.1    1296.8    9460.0
GR   1300.6    9601.9    1296.8     9710.8    1287.4    9744.4    1286.2    9827.2    1287.4    9875.8
GR   1284.9    9946.6    1281.8    10000.0    1278.2   10078.6    1277.0   10101.1    1276.5   10193.5
GR   1276.1   10210.3    1276.1    10438.0    1280.8   10462.3    1277.1   10600.0    1284.1   10626.7
GR   1283.6   10643.2    1301.5    10753.6    1303.3   10825.3    1308.3   10837.9    1308.3   10856.5
GR   1312.3   10876.9    1314.5    10972.0
1
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NH      5.      0.035   10000.0      0.040   10239.1      0.030   10313.5      0.040   10595.5      0.060
NH  10920.
ET                          4.1     9800.    10850.       4.1     9800.    10850.
X1   38.261      30.     10141.9    10880.5     980.      970.      980.
X2                                                                                      15.
GR   1347.8    9076.3    1339.6     9116.5    1330.7    9227.5    1310.1    9262.3    1310.5    9280.6
GR   1309.6    9285.7    1309.6     9344.2    1309.6    9355.0    1309.6    9385.0    1303.6    9465.4
GR   1294.9    9513.7    1299.9     9548.5    1292.8    9688.3    1286.7    9758.8    1290.2    9834.4
GR   1290.2   10000.0    1291.9    10141.9    1288.4   10180.3    1274.2   10239.1    1274.2   10313.5
GR   1276.3   10330.0    1280.9    10461.7    1276.1   10520.2    1276.0   10595.5    1280.5   10623.4
GR   1284.3   10694.5    1294.7    10768.3    1297.9   10819.9    1311.5   10880.5    1312.3   10920.0

NH      5.      0.035   10000.0      0.050   10319.8      0.030   10534.6      0.040   10808.5      0.030
NH  11539.
ET                          4.1     9750.    10857.4       4.1     9750.    10857.4
X1   38.439      34.     10000.    10857.4     910.      920.      940.
X2                                                                                      15.
X3     10.
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GR   1315.4    8974.6    1309.5    9129.4    1310.6    9182.2    1313.3    9202.3    1310.9    9209.8
GR   1311.1    9224.2    1310.2    9236.2    1310.2    9292.3    1310.2    9308.8    1310.2    9400.0
GR   1306.0    9493.9    1290.4    9579.4    1292.1    9686.2    1292.0   10000.0    1288.6   10275.7
GR   1283.5   10304.8    1276.4   10319.8    1276.4   10534.6    1284.9   10565.2    1285.3   10611.4
GR   1278.5   10629.1    1278.5   10661.8    1281.8   10682.8    1283.3   10808.5    1310.7   10857.4
GR   1310.7   10874.2    1303.0   10884.8    1303.0   10938.5    1314.5   10960.4    1314.5   11022.8
GR   1325.7   11044.4    1325.7   11268.2    1316.5   11371.7    1316.0   11539.0

NH      4.      0.035   10351.8      0.040   10536.7      0.030   10713.8      0.065   10920.3
ET                          4.1     9600.   10802.6        4.1     9600.   10802.6
X1   38.636      24.     9635.2   10802.6     930.       980.      970.
X2                                                                                        15.
GR   1316.8    9011.1    1311.1    9205.1    1308.7    9336.8    1313.3    9355.8    1310.1    9365.4
GR   1311.1    9380.4    1310.1    9390.0    1310.1    9450.6    1310.1    9459.6    1310.1    9488.4
GR   1296.2    9631.6    1294.0    9635.2    1295.8    9825.6    1293.8    9974.8    1290.2   10000.0
GR   1289.9   10027.0    1285.6   10351.8    1283.1   10433.7    1285.3   10476.1    1277.2   10536.7
GR   1277.2   10713.8    1309.6   10802.6    1314.8   10877.4    1315.4   10920.3

NH      4.      0.035   10287.2      0.040   10437.5      0.030   10491.0      0.040   10754.3
X1   38.822      20.     9851.8   10647.4     790.      1020.      970.
X2                                                                                        15.
GR   1311.5    9445.1    1309.8    9504.8    1301.1    9543.4    1293.0    9692.7    1288.7    9715.2
GR   1292.7    9851.8    1287.3    9922.4    1286.3   10000.0    1284.4   10024.9    1283.4   10194.7
GR   1281.9   10287.2    1279.6   10339.3    1276.6   10437.5    1276.6   10491.0    1278.5   10522.9
GR   1284.1   10595.5    1292.1   10647.4    1292.1   10684.3    1318.8   10733.7    1319.5   10754.3

NH      4.      0.035   10000.0      0.040   10175.3      0.030   10247.5      0.040   10800.2
X1   39.009      25.     9458.7   10672.9     800.      1000.      950.
X2                                                                                        15.
X3      10.
GR   1319.4    9105.9    1315.2    9244.4    1316.1    9314.2    1310.8    9337.0    1310.9    9394.7
GR   1315.0    9458.7    1309.1    9505.9    1294.6    9597.2    1288.5    9637.7    1284.3    9759.1
GR   1284.7    9923.2    1285.6   10000.0    1282.7   10156.9    1279.5   10175.3    1279.5   10247.5
GR   1283.1   10300.6    1285.7   10433.4    1284.0   10496.1    1287.9   10539.6    1286.9   10569.6
GR   1313.8   10633.0    1314.5   10672.9    1310.3   10681.4    1310.5   10760.5    1340.7   10800.2
1
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NC    0.035      0.035     0.035
X1   39.098      31.     9451.9   10657.4     400.       530.      480.
X2                                                                                        15.
X3      10.
GR   1323.0    9143.8    1322.3    9317.9    1307.9    9374.8    1307.9    9432.1    1311.9    9451.9
GR   1311.1    9470.5    1288.8    9504.8    1289.1    9545.0    1292.9    9557.5    1289.5    9584.3
GR   1287.3    9645.0    1282.1    9734.3    1285.2   10000.0    1283.5   10129.9    1283.8   10198.8
GR   1291.3   10269.3    1288.8   10329.7    1289.1   10343.3    1294.6   10370.3    1287.7   10422.1
GR   1281.7   10531.0    1286.2   10549.9    1286.1   10614.7    1313.5   10657.4    1312.0   10690.6
GR   1306.6   10723.5    1306.7   10770.7    1312.6   10820.4    1313.5   11032.3    1313.1   11230.9
GR   1311.6   11675.7

X1   39.116      23.     9460.8   10602.0      90.        90.       90.
X2                                                                                        15.
X3      10.
GR   1323.0    9135.0    1324.2    9320.5    1307.3    9374.9    1307.7    9436.0    1320.6    9460.8
GR   1296.5    9479.2    1293.5    9589.4    1287.1    9837.6    1286.8   10000.0    1287.3   10067.6
GR   1288.1   10277.3    1298.5   10356.9    1291.5   10408.4    1287.5   10498.0    1303.0   10521.2
GR   1299.0   10527.1    1299.4   10588.1    1318.9   10602.0    1306.8   10659.5    1306.8   10722.8
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HEC-2 WATER SURFACE PROFILES

Version 4.6.0; February 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

SALT RIVER NATURAL 100 Y

SUMMARY PRINTOUT

TABLE 1

	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	28.358	225000.00	5001.92	5000.00	.00	10.01	.00	6340.00	6330.59	1328.67	1199.00	1217.31	.0
	28.358	225000.00	5020.00	5000.00	.00	8.53	.00	6340.00	6320.00	1300.00	1195.00	1215.70	-1.6
	COUNTRY CLUB DR.												
	28.646	225000.00	9313.65	9945.60	8.61	13.46	7.45	10770.20	11133.77	1820.13	1197.20	1218.55	.0
	28.646	225000.00	9550.00	9589.10	6.34	12.62	.00	10770.20	10525.00	975.00	1197.10	1216.05	-2.5
*	28.831	225000.00	9201.04	10185.70	8.50	9.88	5.93	10495.80	11250.19	2049.16	1199.00	1220.71	.0
	28.831	225000.00	9575.00	9589.17	5.57	13.31	6.44	10508.64	10525.00	950.00	1198.50	1216.85	-3.8
	29.017	225000.00	9104.14	9861.50	7.55	10.39	5.39	10619.80	11330.93	2226.79	1199.10	1221.17	.0
	29.017	225000.00	9575.00	9589.13	5.62	13.44	.00	10619.80	10525.00	950.00	1199.10	1217.90	-3.2
	29.221	225000.00	9186.58	9684.70	10.72	11.48	7.48	10402.60	10926.15	1739.56	1201.50	1221.65	.0
	29.221	225000.00	9795.00	9684.70	.00	13.66	4.66	10732.95	10745.00	950.00	1201.20	1218.95	-2.7
	29.473	225000.00	8851.52	9369.60	9.69	10.45	6.40	10096.70	11423.47	2384.21	1203.00	1223.16	.0
	29.473	225000.00	10195.00	10206.50	4.35	13.96	5.47	11131.47	11145.00	950.00	1202.50	1220.04	-3.1
	29.676	225000.00	8820.00	9012.50	6.60	7.12	6.29	9284.30	11839.01	3019.01	1198.40	1224.54	.0
	29.676	225000.00	10305.00	10314.85	3.15	14.11	5.66	11241.10	11255.00	950.00	1198.40	1221.26	-3.2
*	29.981	225000.00	8930.74	9163.40	7.16	16.37	15.88	10000.00	10833.54	1901.62	1209.10	1224.83	.0
	29.981	225000.00	10155.00	10167.64	5.00	14.17	.00	11102.50	11097.30	942.30	1205.50	1222.81	-2.0
	29.982	225000.00	8927.66	9163.40	6.86	14.83	14.37	10000.00	10837.70	1910.04	1209.10	1225.64	.0
*	29.982	225000.00	10155.00	10164.61	3.55	10.84	.00	11105.50	11102.51	947.51	1202.50	1225.01	-.6
*	30.194	225000.00	9059.03	9032.10	.00	17.19	9.20	10000.00	10877.07	1818.04	1208.80	1229.58	.0
*	30.194	225000.00	9765.00	9032.10	.00	13.51	.00	10708.26	10708.10	943.10	1207.10	1225.19	-4.3
	30.195	225000.00	9054.90	9032.10	.00	15.24	8.90	10000.00	10894.03	1839.13	1208.80	1230.62	.0
	30.195	225000.00	9765.00	9032.10	.00	13.51	.00	10708.26	10708.09	943.09	1207.10	1225.19	-5.4

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
*	30.458	225000.00	9347.77	9333.50	.00	11.33	.63	10777.30	10778.95	1431.18	1214.70	1234.07	.0
	30.458	225000.00	9605.00	9333.50	.00	13.55	.00	10777.30	10555.00	950.00	1208.50	1226.37	-7.7
	30.815	225000.00	9408.13	9568.20	3.74	11.61	.00	11136.30	10942.91	1525.00	1216.00	1236.04	.0

	30.815	225000.00	9534.55	9528.84	.00	15.83	.00	11136.30	10475.00	940.45	1212.00	1227.45	-8.5
*	31.028	225000.00	9100.02	10322.80	11.48	19.50	16.01	10772.20	10841.96	1640.05	1212.70	1237.65	.0
	31.028	225000.00	9625.00	9636.73	2.58	17.10	.00	10772.20	10575.00	950.00	1212.70	1229.37	-8.2
	31.029	225000.00	9085.42	10322.80	10.47	17.37	14.03	10772.20	10845.08	1678.26	1212.70	1238.76	.0
	31.029	225000.00	9625.00	9636.73	2.59	17.09	.00	10772.20	10575.00	950.00	1212.70	1229.39	-9.3
*	31.301	225000.00	8023.32	9689.60	5.88	9.01	5.66	10867.50	10890.58	2854.27	1220.10	1242.69	.0
	31.301	225000.00	9346.38	9345.78	.00	18.08	.00	10867.50	10273.62	927.24	1218.70	1232.33	-10.3
	31.522	225000.00	8045.52	9428.60	4.82	8.31	.00	11538.90	11515.98	3429.15	1224.40	1243.64	.0
	31.522	225000.00	9135.83	9130.90	.00	17.32	.00	11538.90	10075.00	939.17	1221.90	1236.07	-7.5
	31.725	225000.00	7463.56	9544.00	5.03	8.75	6.88	11019.80	12545.28	4366.54	1229.50	1244.71	.0
	31.725	225000.00	9296.00	9293.99	.00	17.56	.00	11019.80	10235.00	939.00	1225.00	1238.99	-5.7
*	31.896	225000.00	7728.23	9650.20	9.38	8.43	5.20	12145.50	13132.74	4628.49	1228.10	1246.07	.0
	31.896	225000.00	9356.23	9351.44	.00	17.83	.00	12145.50	10295.00	938.77	1227.80	1241.57	-4.5
	32.126	225000.00	7427.79	8480.80	.95	9.52	4.83	11726.60	14032.81	5252.10	1233.90	1248.59	.0
	32.126	225000.00	9315.00	8480.80	.00	17.77	.00	11726.60	10265.00	950.00	1231.10	1244.86	-3.7
	32.127	225000.00	7427.63	8480.80	.95	9.51	4.82	11726.60	14032.85	5267.79	1233.90	1248.61	.0
	32.127	225000.00	9315.00	8480.80	.00	17.66	.00	11726.60	10265.00	950.00	1231.10	1244.95	-3.6
	32.296	225000.00	7271.84	9694.30	7.29	9.02	5.27	11211.10	13304.02	6032.18	1235.60	1250.71	.0
	32.296	225000.00	9065.00	9080.08	4.94	17.34	.00	11211.10	10015.00	950.00	1233.70	1247.72	-3.0
	32.297	225000.00	7271.78	9694.30	7.28	9.01	5.26	11211.10	13304.10	6032.32	1235.60	1250.73	.0
	32.297	225000.00	9065.00	9080.08	4.94	17.32	.00	11211.10	10015.00	950.00	1233.70	1247.74	-2.9
	32.465	225000.00	7700.37	9925.90	8.71	8.17	2.88	11161.40	14772.08	6008.22	1238.30	1252.05	.0
*	32.465	225000.00	8750.00	8768.87	6.99	11.13	.00	11161.40	10050.00	1300.00	1236.30	1252.08	.0
	32.641	225000.00	7196.53	8951.30	6.92	8.30	1.97	11280.70	14195.91	5647.72	1239.00	1253.15	.0
	32.641	225000.00	8620.00	8641.69	8.25	12.80	.00	11280.70	9920.00	1300.00	1239.00	1252.69	-.4

GILBERT RD.

	32.653	225000.00	7194.65	8636.00	5.29	8.06	4.04	9866.00	14397.41	6054.64	1239.00	1253.43	.0
	32.653	225000.00	8636.00	8636.00	.00	12.85	8.74	9896.79	9920.00	1284.00	1239.00	1252.77	-.6
*	32.655	225000.00	8613.47	8606.00	.00	10.81	5.43	9904.00	12719.82	3711.95	1239.00	1253.04	.0
	32.655	225000.00	8620.00	8606.00	.00	12.72	6.42	9904.93	9920.00	1300.00	1239.00	1252.84	-.2
	32.661	225000.00	8613.21	8606.00	.00	10.60	5.40	9904.00	12729.03	3773.75	1239.00	1253.18	.0
	32.661	225000.00	8620.00	8606.00	.00	12.66	5.83	9904.67	9920.00	1300.00	1239.00	1252.93	-.2

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
*	32.663	225000.00	7188.42	8636.00	4.67	7.20	3.45	9866.00	14901.60	6533.15	1239.00	1254.36	.0
	32.663	225000.00	8636.00	8636.00	.00	12.68	8.63	9896.58	9920.00	1284.00	1239.00	1252.95	-1.4
*	32.676	230000.00	8477.57	8469.70	.00	9.50	2.30	11507.80	14350.83	4626.71	1240.00	1254.02	.0
	32.676	230000.00	8620.00	8469.70	.00	13.40	.00	11507.80	9920.00	1300.00	1239.50	1252.89	-1.1

*	32.862	230000.00	5894.31	8493.60	7.68	9.20	4.39	11352.70	14782.28	7626.48	1240.40	1256.17	.0
*	32.862	230000.00	8745.00	8493.60	.00	19.99	.00	11352.70	9682.42	937.42	1240.30	1252.72	-3.4
	32.863	230000.00	5894.20	8493.60	7.66	9.19	4.37	11352.70	14782.30	7636.64	1240.40	1256.19	.0
	32.863	230000.00	8745.00	8493.60	.00	18.40	.00	11352.70	9683.47	938.47	1240.30	1253.77	-2.4
	33.023	230000.00	8282.58	8281.20	.00	10.35	11.10	11327.70	14407.44	4824.23	1239.50	1257.72	.0
	33.023	230000.00	8625.00	8281.20	.00	15.08	.00	11327.70	9575.00	950.00	1239.50	1257.46	-.0
*	33.205	230000.00	7561.07	8080.80	8.48	6.87	6.19	11345.80	15004.91	6769.86	1240.90	1260.27	.0
	33.205	230000.00	8205.00	8080.80	.00	14.68	.00	11345.80	9155.00	950.00	1240.90	1259.15	-1.1
	33.385	230000.00	7755.25	7749.30	.00	6.38	4.85	11448.00	15163.28	7408.03	1242.90	1261.36	.0
	33.385	230000.00	7985.00	7749.30	.00	14.37	.00	11448.00	8935.00	950.00	1242.90	1260.69	-.6
	33.557	230000.00	7729.76	7752.40	7.22	7.07	5.90	11413.90	15333.01	7148.68	1243.50	1262.11	.0
	33.557	230000.00	7975.00	7752.40	.00	14.05	.00	11413.90	8925.00	950.00	1243.50	1262.03	-.0
	33.726	230000.00	7801.51	7794.30	.00	7.92	3.28	11232.50	15066.85	6961.82	1243.90	1263.07	.0
	33.726	230000.00	8035.00	7794.30	.00	14.09	.00	11232.50	8985.00	950.00	1243.90	1263.21	.1
	33.892	230000.00	8028.59	8069.20	10.44	10.08	4.23	11130.40	13729.61	4583.68	1245.70	1263.96	.0
	33.892	230000.00	8315.00	8069.20	.00	13.83	.00	11130.40	9265.00	950.00	1245.70	1264.48	.5
	34.091	230000.00	7635.01	8453.80	10.21	8.18	4.96	10924.90	12100.68	3654.93	1248.00	1265.75	.0
	34.091	230000.00	8705.00	8453.80	.00	13.89	.00	10924.90	9655.00	950.00	1248.00	1265.66	-.0
*	34.271	230000.00	8744.07	8723.00	.00	14.95	1.14	11198.50	11698.51	2468.75	1248.00	1266.07	.0
	34.271	230000.00	8985.00	8723.00	.00	13.77	.00	11198.50	9935.00	950.00	1248.00	1266.84	.7
	34.272	230000.00	8741.97	8723.00	.00	13.02	1.83	11198.50	11744.47	2582.61	1248.00	1267.02	.0
	34.272	230000.00	8985.00	8723.00	.00	13.76	.00	11198.50	9935.00	950.00	1248.00	1266.85	-.1
	34.453	230000.00	8880.98	8920.60	10.97	12.17	3.00	11281.70	13986.13	4004.18	1249.50	1269.78	.0
	34.453	230000.00	9175.00	8920.60	.00	13.66	.00	11281.70	10125.00	950.00	1249.50	1268.00	-1.7
	34.642	230000.00	9060.50	9095.10	10.18	11.52	3.40	11178.90	14689.39	3869.08	1247.90	1272.17	.0
	34.642	230000.00	9325.00	9095.10	.00	13.58	.00	11178.90	10275.00	950.00	1247.90	1269.22	-2.9
	34.856	230000.00	8856.58	9126.90	6.22	9.30	1.88	11496.60	14260.46	3458.22	1251.90	1274.25	.0
	34.856	230000.00	9435.00	9126.90	.00	12.08	.00	11496.60	10485.00	1050.00	1251.90	1270.96	-3.2
	35.136	230000.00	8844.46	9646.30	9.33	10.34	2.50	10892.10	13937.54	3503.74	1256.30	1275.01	.0
*	35.136	230000.00	8850.00	9646.30	13.52	15.23	.00	10892.10	10887.37	2037.37	1256.30	1271.65	-3.3

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	35.297	230000.00	8717.16	10436.30	8.75	12.75	2.04	10969.60	12032.60	3016.95	1255.90	1275.97	.0
*	35.297	230000.00	8720.00	10436.30	9.39	13.98	1.35	10969.60	11231.56	2349.98	1255.90	1275.23	-.7
	35.480	230000.00	8634.64	10498.80	7.41	11.20	8.77	11026.90	11675.88	2597.32	1256.30	1277.44	.0
	35.480	230000.00	8857.77	10498.80	7.58	11.53	9.21	11026.90	11350.00	2492.23	1256.30	1277.18	-.2
	35.661	235000.00	8525.86	10209.20	8.49	11.06	10.24	11055.00	11409.40	2689.52	1258.00	1278.29	.0
	35.661	235000.00	8810.10	10209.20	8.70	11.29	10.50	11055.00	11400.00	2589.90	1258.00	1278.11	-.1

GREENFIELD RD.

	36.011	235000.00	8236.75	9618.60	9.10	11.94	.00	10862.50	10844.79	2197.49	1260.50	1280.60	.0
	36.011	235000.00	8750.00	9618.60	9.53	11.97	.00	10862.50	10844.88	2094.88	1260.50	1280.63	.0
	36.203	235000.00	8146.91	9495.80	8.22	12.98	.00	10769.00	10753.89	2084.04	1262.10	1281.90	.0
	36.203	235000.00	8734.68	9495.80	8.60	13.36	.00	10769.00	10700.00	1965.32	1262.10	1281.97	.0
	36.403	235000.00	8461.71	9583.80	8.89	15.31	.00	10761.50	10754.68	1967.51	1265.30	1283.48	.0
	36.403	235000.00	8800.88	9583.80	8.93	15.09	.00	10761.50	10750.00	1925.58	1265.30	1283.73	.2
	36.404	235000.00	8461.68	9583.80	8.88	15.29	.00	10761.50	10754.71	1969.78	1265.30	1283.51	.0
	36.404	235000.00	8800.64	9583.80	8.93	15.06	.00	10761.50	10750.00	1927.91	1265.30	1283.76	.2
	36.595	235000.00	8782.03	9914.60	9.44	17.60	.00	10666.50	10642.52	1676.04	1262.60	1285.58	.0
	36.595	235000.00	9035.91	9914.60	9.75	17.55	.00	10666.50	10642.81	1606.90	1262.60	1285.69	.1
	36.596	235000.00	8781.42	9914.60	9.32	16.94	.00	10666.50	10643.45	1680.93	1262.60	1285.95	.0
	36.596	235000.00	9034.25	9914.60	9.68	17.14	.00	10666.50	10643.40	1609.15	1262.60	1285.93	-.0
	36.775	235000.00	9081.20	10039.00	10.19	17.35	.00	10680.30	10639.38	1452.29	1265.70	1288.13	.0
	36.775	235000.00	9259.25	10039.00	10.58	17.41	.00	10680.30	10639.53	1380.28	1265.70	1288.18	.0
*	36.953	235000.00	9296.08	9875.70	8.91	11.36	.00	10831.70	10794.07	1498.00	1268.40	1291.65	.0
*	36.953	235000.00	9440.00	9875.70	9.47	11.46	.00	10831.70	10794.26	1354.26	1268.40	1291.72	.0
	37.152	235000.00	9454.44	9429.30	.00	11.04	6.03	10631.80	10992.53	1538.09	1272.50	1292.77	.0
	37.152	235000.00	9454.52	9429.30	.00	11.71	5.00	10631.80	10800.00	1345.48	1272.50	1292.73	-.0
	37.328	235000.00	9339.67	9388.60	1.36	10.76	4.66	10751.30	11251.63	1902.25	1270.90	1294.25	.0
	37.328	235000.00	9351.00	9388.60	1.46	11.48	.00	10751.30	10701.00	1340.93	1270.90	1294.34	.0
	37.523	235000.00	9388.30	9368.70	.00	12.07	9.03	10437.90	10754.63	1366.33	1273.00	1295.36	.0
	37.523	235000.00	9450.00	9368.70	.00	11.79	9.37	10437.90	10720.00	1270.00	1273.00	1295.80	.4
*	37.720	235000.00	9509.67	9561.40	1.84	15.48	2.04	10487.30	10677.53	1000.51	1274.00	1296.02	.0
	37.720	235000.00	9568.62	9561.40	.00	15.07	.00	10487.30	10483.25	914.63	1274.00	1296.49	.4
	37.898	235000.00	9544.98	9711.20	6.33	12.12	3.21	10615.00	10861.90	1316.92	1274.50	1300.03	.0
	37.898	235000.00	9711.20	9711.20	.00	12.48	.00	10615.00	10615.00	903.80	1274.50	1300.08	.0
	38.074	235000.00	9447.30	9875.80	8.45	10.85	.86	10753.60	10788.69	1341.39	1276.10	1302.38	.0
	38.074	235000.00	9700.00	9875.80	12.25	10.36	.00	10753.60	10753.60	1053.60	1276.10	1303.06	.6

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	SECNO	Q	SSTA	STCHL	VLOB	VCH	VROB	STCHR	ENDST	TOPWID	ELMIN	CWSEL	DIFWS
	38.261	235000.00	9461.38	10141.90	8.30	11.19	.00	10880.50	10846.64	1385.26	1274.20	1303.90	.0
	38.261	235000.00	9800.00	10141.90	10.55	11.40	.00	10880.50	10850.00	1050.00	1274.20	1305.01	1.1
	38.439	235000.00	9496.89	10000.00	8.43	9.97	.00	10857.40	10848.04	1351.14	1276.40	1305.45	.0
	38.439	235000.00	9750.00	10000.00	8.89	10.40	.00	10857.40	10850.58	1100.58	1276.40	1306.88	1.4
	38.636	235000.00	9524.76	9635.20	5.11	10.74	.00	10802.60	10794.30	1269.54	1277.20	1306.57	.0
	38.636	235000.00	9600.00	9635.20	6.04	9.92	.00	10802.60	10798.70	1198.70	1277.20	1308.18	1.6
	38.822	235000.00	9512.82	9851.80	7.14	9.96	5.86	10647.40	10713.70	1200.88	1276.60	1307.99	.0

	38.822	235000.00	9507.04	9851.80	6.84	9.38	5.58	10647.40	10716.11	1209.07	1276.60	1309.29	1.3
	39.009	235000.00	9507.77	9458.70	.00	9.49	.00	10672.90	10621.22	1113.45	1279.50	1308.80	.0
	39.009	235000.00	9499.11	9458.70	.00	9.03	.00	10672.90	10623.92	1124.81	1279.50	1309.95	1.1
	39.098	235000.00	9473.13	9451.90	.00	8.80	.00	10657.40	10650.99	1177.86	1281.70	1309.39	.0
	39.098	235000.00	9471.49	9451.90	.00	8.40	.00	10657.40	10652.66	1181.17	1281.70	1310.46	1.0
*	39.116	235000.00	9469.75	9460.80	.00	11.55	.00	10602.00	10594.85	1125.10	1286.80	1308.87	.0
*	39.116	235000.00	9468.88	9460.80	.00	10.86	.00	10602.00	10595.67	1126.79	1286.80	1310.02	1.1

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SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=    28.831  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    29.981  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    29.981  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    29.981  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    29.982  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    30.194  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    30.194  PROFILE=  1  MINIMUM SPECIFIC ENERGY
WARNING SECNO=    30.194  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    30.458  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    31.028  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    31.028  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    31.028  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL

WARNING SECNO=    31.301  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    31.896  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    32.465  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    32.655  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    32.663  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    32.676  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    32.862  PROFILE=  1  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    32.862  PROFILE=  1  PROBABLE MINIMUM SPECIFIC ENERGY
CAUTION SECNO=    32.862  PROFILE=  1  20 TRIALS ATTEMPTED TO BALANCE WSEL
CAUTION SECNO=    32.862  PROFILE=  2  CRITICAL DEPTH ASSUMED
CAUTION SECNO=    32.862  PROFILE=  2  MINIMUM SPECIFIC ENERGY

WARNING SECNO=    33.205  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    34.271  PROFILE=  1  CRITICAL DEPTH ASSUMED
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CAUTION SECNO= 34.271 PROFILE= 1 MINIMUM SPECIFIC ENERGY

WARNING SECNO= 35.136 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 35.297 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 36.953 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 36.953 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 37.720 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 39.116 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 39.116 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

TABLE 2
CHANNELIZED DATA

FLOODWAY DATA, SALT RIVER NATURAL 100 Y
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WATER SURFACE ELEVATION WITHOUT FLOODWAY	DIFFERENCE	
28.358	1300.	26374.	8.5	1215.7	1217.3	-1.6	COUNTRY CLUB DR.
28.646	975.	17985.	12.5	1216.1	1218.6	-2.5	
28.831	950.	17043.	13.2	1216.8	1220.7	-3.9	
29.017	950.	16802.	13.4	1217.9	1221.2	-3.3	
29.221	950.	16513.	13.6	1219.0	1221.7	-2.7	
29.473	950.	16196.	13.9	1220.1	1223.2	-3.1	
29.676	950.	16013.	14.1	1221.2	1224.5	-3.3	
29.981	942.	15917.	14.1	1222.8	1224.8	-2.0	
29.982	948.	20811.	10.8	1225.0	1225.6	-.6	
30.194	943.	16652.	13.5	1225.2	1229.6	-4.4	
30.195	943.	16650.	13.5	1225.2	1230.6	-5.4	
30.458	950.	16608.	13.5	1226.4	1234.1	-7.7	
30.815	940.	14209.	15.8	1227.4	1236.0	-8.6	
31.028	950.	13164.	17.1	1229.3	1237.6	-8.3	
31.029	950.	13173.	17.1	1229.4	1238.8	-9.4	
31.301	927.	12442.	18.1	1232.3	1242.7	-10.4	
31.522	939.	12990.	17.3	1236.0	1243.6	-7.6	
31.725	939.	12811.	17.6	1239.0	1244.7	-5.7	
31.896	939.	12616.	17.8	1241.6	1246.1	-4.5	
32.126	950.	12665.	17.8	1244.9	1248.6	-3.7	
32.127	950.	12743.	17.7	1244.9	1248.6	-3.7	
32.296	950.	13020.	17.3	1247.7	1250.7	-3.0	
32.297	950.	13032.	17.3	1247.7	1250.7	-3.0	
32.465	1300.	20292.	11.1	1252.1	1252.1	.0	
32.641	1300.	17660.	12.7	1252.6	1253.1	-.5	GILBERT RD.
32.653	1284.	17599.	12.8	1252.7	1253.4	-.7	
32.655	1300.	17741.	12.7	1252.8	1253.0	-.2	

32.661	1300.	17835.	12.6	1252.9	1253.2	-.3
32.663	1284.	17827.	12.6	1253.0	1254.4	-1.4
32.676	1300.	17160.	13.4	1252.9	1254.0	-1.1
32.862	937.	11507.	20.0	1252.7	1256.2	-3.5
32.863	938.	12498.	18.4	1253.8	1256.2	-2.4
33.023	950.	15254.	15.1	1257.4	1257.7	-.3
33.205	950.	15663.	14.7	1259.2	1260.3	-1.1
33.385	950.	16010.	14.4	1260.7	1261.4	-.7
33.557	950.	16373.	14.0	1262.0	1262.1	-.1
33.726	950.	16327.	14.1	1263.2	1263.1	.1
33.892	950.	16633.	13.8	1264.5	1264.0	.5
34.091	950.	16555.	13.9	1265.6	1265.7	-.1
34.271	950.	16703.	13.8	1266.9	1266.1	.8
34.272	950.	16709.	13.8	1266.8	1267.0	-.2
34.453	950.	16832.	13.7	1268.0	1269.8	-1.8

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FLOODWAY DATA, SALT RIVER NATURAL 100 Y
PROFILE NO. 2

STATION	FLOODWAY WIDTH	FLOODWAY SECTION AREA	FLOODWAY MEAN VELOCITY	WATER SURFACE ELEVATION WITH FLOODWAY	WITHOUT FLOODWAY	DIFFERENCE
34.642	950.	16938.	13.6	1269.2	1272.2	-3.0
34.856	1050.	19037.	12.1	1270.9	1274.2	-3.3
35.136	2037.	15674.	14.7	1271.6	1275.0	-3.4
35.297	2512.	20733.	11.1	1275.3	1276.0	-.7
35.480	2492.	25153.	9.1	1277.1	1277.4	-.3
35.661	2590.	23252.	10.1	1278.1	1278.3	-.2
36.011	2095.	20908.	11.2	1280.6	1280.6	.0
36.203	1965.	19044.	12.3	1282.0	1281.9	.1
36.403	1949.	16947.	13.9	1283.7	1283.5	.2
36.404	1949.	16976.	13.8	1283.7	1283.5	.2
36.595	1607.	15566.	15.1	1285.7	1285.6	.1
36.596	1609.	15926.	14.8	1285.9	1285.9	.0
36.775	1380.	15648.	15.0	1288.2	1288.1	.1
36.953	1354.	21456.	11.0	1291.7	1291.6	.1
37.152	1345.	20682.	11.4	1292.8	1292.8	.0
37.328	1350.	20513.	11.5	1294.4	1294.3	.1
37.523	1270.	20592.	11.4	1295.8	1295.4	.4
37.720	915.	15598.	15.1	1296.5	1296.0	.5
37.898	904.	18831.	12.5	1300.1	1300.0	.1
38.074	1054.	22216.	10.6	1303.1	1302.4	.7
38.261	1050.	20988.	11.2	1305.0	1303.9	1.1
38.439	1101.	23131.	10.2	1306.9	1305.5	1.4
38.636	1199.	23832.	9.9	1308.2	1306.6	1.6
38.822	1209.	26766.	8.8	1309.3	1308.0	1.3
39.009	1125.	26038.	9.0	1310.0	1308.8	1.2
39.098	1181.	27969.	8.4	1310.5	1309.4	1.1
39.116	1127.	21636.	10.9	1310.0	1308.9	1.1

GREENFIELD RD.

APPENDIX D

LETTERS OF PROJECT SUPPORT

FLOOD CONTROL DISTRICT
of
Maricopa County

2801 West Durango Street • Phoenix, Arizona 85009
Telephone (602) 506-1501
Fax (602) 506-4601

D. E. Sagramoso, P.E., Chief Engineer and General Manager

BOARD OF DIRECTORS

P. Ben Arredondo
Betsey Bayless
James D. Bruner
Carole Carpenter
Tom Freestone

March 18, 1992

Mr. Ivan Makil
President
Salt River Pima-Maricopa Indian Community
Route 1, Box 216
Scottsdale, AZ 85256-9722

Dear Mr. Makil:

The District commends and strongly supports the Salt River Pima-Maricopa Indian Community in its efforts to channelize the Salt River and protect the Tri-City Landfill and a second smaller landfill by stabilizing the river banks. We appreciate the opportunity to assist you, and being invited to review the preliminary development of the channelization plan. As you know, our staff has been actively coordinating with representatives of your Water Resources Office, the US Army Corps of Engineers and your engineering consultant, BRW.

As the agency in Maricopa County having stormwater and floodplain management responsibility, we recognize the need to stabilize portions of the Salt River, and offer our assistance in the development of regulatory measures to oversee implementation of the plan and other activities within the floodplain. Properly designed and implemented in a timely manner, the proposed stabilization will be a very positive component of the Salt-Gila Master Plan.

We have reviewed BRW's Design Concept Report, and although we have made some comments that further study and detail will be needed, we agree with their overall approach. We are in complete agreement that the stabilization of the river banks adjacent to the two landfills is the top priority.

Again, we would emphasize that the District is available to assist the Community in its efforts by reviewing and commenting on any plans concerning the project, by providing technical criteria for further refinement of the concept plans, and by providing topographic or aerial mapping and hydrologic information we have produced for other projects on the river.

The Flood Control District looks forward to working with the Community in this vital channelization and bank stabilization project.

Sincerely,

Stanley L. Smith, Jr., P.E.
Acting Chief Engineer and General Manager

cc: Ed Fox, Arizona Dept. of Environmental Quality
Lou A. Schmitt, ACM, County Dept. of Transportation
Roy Pederson, County Manager
Joe Dixon, Corps of Engineers, Phoenix
Ron Fowler, Corps of Engineers, Phoenix