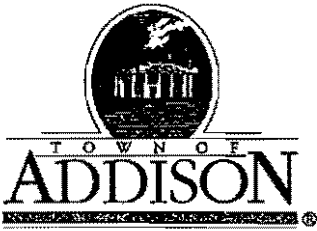


ARIZONA II/III PRELIM ENG'G MARK II



PUBLIC WORKS DEPARTMENT

(972) 450-2871

Post Office Box 9010 Addison, Texas 75001-9010

16801 Westgrove

March 9, 1999

Mr. Steve Martchenke
101 S. Watson
Arlington, Texas 76010

Re: Railroad Crossing Study for Two Proposed Railroad Crossings

Dear Mr. Martchenke:

Please find attached two copies of the Town of Addison's Railroad Crossing Study prepared January 1999. This plan details the Town's need to obtain the right to cross the Galleria Spur at-grade in two locations.

The Town respectfully requests authorization to cross the Galleria Spur at-grade in the proposed locations. Prior to receiving your answer, I would like to schedule time in March to meet with you so you can understand the constraints that we are working with.

Your consideration of our request is appreciated. Please call me at 972/450-2871 if you have any questions or need any additional information.

Sincerely,

John R. Baumgartner, P.E.
Director of Public Works

cc: Jim Pierce, Assistant City Engineer
Ron Whitehead, City Manager

3-1-99

DWU -

Hamid Baha / Proj Mgr.

Circulating thru city -

Opns Section -
Under review

March 22 review should
be complete -

*Aesthetic Bridge Options
Crossing the RR from memo. of Mayor*

1. Memo from Randy Moravec
2. Comparison of Franchise Terms
3. Proposed Ordinance
4. TCI New Channel Listings

Administrative Comment:

This the first reading of the Ordinance. A second reading is required on March 9, 1999. The Ordinance may be considered for approval no earlier than the April 13, 1999 regular meeting of the City Council.

Item #R7 -

Discussion and consideration of a Resolution approving the "technically preferred alignment" for Arapaho Road Phase II/III alignment.

Attachment:

1. Memo from Jim Pierce
2. Arapaho Road Phase II/III Alignment Study Report
3. Letter from Joseph W. Dingman, Orion Realty Advisors, Inc.
4. Letter from Mike Crepeau, Charter Furniture

Administrative Recommendation:

Administration recommends approval.

*MNBA \$8/ft rent
would drop to \$4/ft.*

*Picture representation
may not be accurate
more roadway more
to the north
Prefer on grade
@ Midway
Increases retail value*

Item #R8 -

Discussion and consideration of a Resolution authorizing the City Manager to enter into a joint election agreement in the amount \$5,000 with Dallas County to conduct the May 1, 1999, Addison municipal election.

Attachment:

1. Memo from Carmen Moran
2. Proposed joint election agreement

Administrative Recommendation:

Administration recommends approval.



Engineers, Inc.

MEMO

1919 S. Shiloh Rd., Suite 530, LB 27, Garland, TX 75042

Date: March 2, 1999
To: Jim Pierce, P.E.
Town of Addison
From: Bruce Grantham
Re: Arapaho Road Project Schedule

I have enclosed a copy of the updated project schedule for the Arapaho Road extension. If you have any questions or comments regarding this schedule, please call me.

Regards,

A handwritten signature in cursive script that reads "Bruce".

SCALE : 1" = 2000'



ST. LOUIS & SOUTHWEST RAIL ROAD

VOLUME 87111, PAGE 281
DEED RECORDS DALLAS COUNTY, TEXAS

N 80°49'50" E
392.38'

454.32' FND. 1" LP. IN CONC.

S 69°58'30" E
233.03' FND. 1" LP. IN CONC.

S 48°23'44" E
258.85' FND. METAL FENCE POST IN CONC.

S 26°22'30" E
304.94' FND. 1" LP. IN CONC.

ROADWAY EASEMENT TO BE DEDICATED TO THE TOWN OF ADDISON FOR EXTENSION OF ARAPAHO ROAD.
Δ = 14°43'39"
R = 1270.00'
L = 326.44'

838.29'

LOT 1

BLOCK A

CARRIE GALLERYWAY

ADDISON ROAD

OWEN LABORATORY INC.
VOLUME 69052, PAGE 444
DEED RECORDS DALLAS COUNTY, TEXAS

2761
JUNTY, TX.

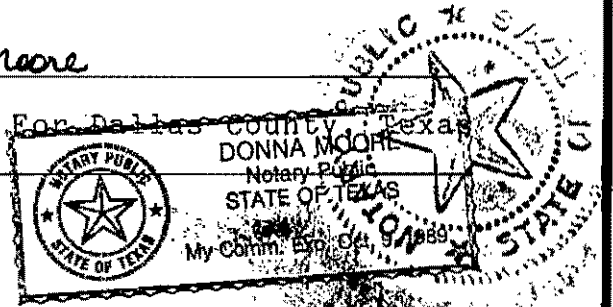
)(STATE OF TEXAS
)(COUNTY OF DALLAS

BEFORE ME, the undersigned authority, a Notary Public, in and for said County and State on this day personally appeared Clifford Kehelen, Asst. City Manager, known to me to be the person(s) whose name(s) is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 4th day of August, 1989.

Donna Moore

Notary Public In and For Dallas County, Texas
Commission Expires

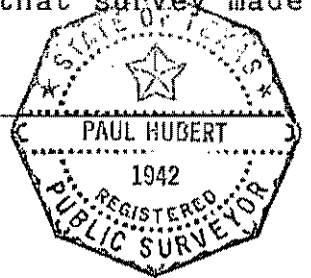


SURVEYOR'S CERTIFICATE

I, Paul Hubert, Registered Public Surveyor for SURVCON, INC., do hereby certify that this plat was prepared from an actual survey on the ground and that all angle points and points of curve shall be properly marked on the ground, and that this plat correctly represents that survey made under my supervision.

Paul Hubert

Paul Hubert
Registered Public Surveyor
Texas Registration Number 1942



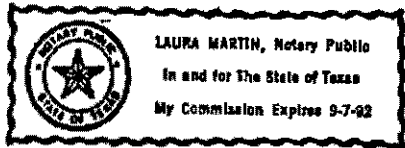
)(STATE OF TEXAS
)(COUNTY OF DALLAS

BEFORE ME, the undersigned authority, a Notary Public, in and for said County and State on this day personally appeared Paul Hubert, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 2nd day of August, 1989.

Laura Martin - LAURA MARTIN

Notary Public in and for Dallas County, Texas
Commission Expires 9-7-92



FINAL PLAT

BELTWOOD RESERVOIR
an Addition of the Town of Addison
E. COOK SURVEY A-326
E. FIKE SURVEY A-478

ADDISON, DALLAS COUNTY, TEXAS

JULY, 1989

County Clerk, Dallas County, Texas
Earl Baird

JAN 18 1990

Notarization books which require the sale, rental or use of the land of this county, because of color or race is prohibited and void under Federal Law.
COUNTY OF DALLAS
STATE OF TEXAS
I hereby certify that instrument was filed on the date and time stamped herein by me and my deputy recorded in the volume and page of the record books of Dallas County, Texas as stamped herein by me.

FILED
Earl Baird
COUNTY CLERK
DALLAS COUNTY
90 JAN 18 PM 3:07

TOWN OF ADDISON
P.O. BOX 144
ADDISON, TX. 75001
ATTN: CARMEN MORAN

OWNER:
City of Dallas
1500 Marilla
Dallas, Texas 75201
(214)

SURVEYOR:
Survcon, Inc.
5710 LBJ Freeway
Suite 180
Dallas, Texas 75240
(214) 458-2173

GLAST, PHILLIPS & MURRAY

A PROFESSIONAL CORPORATION

LAWRENCE FISCHMAN

ATTORNEYS AND COUNSELORS

2200 ONE GALLERIA TOWER
13355 NOEL ROAD, L.B. 48
DALLAS, TEXAS 75240-6657

DIRECT DIAL NUMBER:
(972) 419-8318
fischman@gpm-law.com

TELEPHONE: (972) 419-8300
FAX: (972) 419-8329

February 23, 1999

Honorable Mayor and
Town Council Members
Town of Addison
5300 Beltline Road
Addison, Texas 75240

Re: February 23, 1999 Town Council Meeting; Agenda item #R7
(Resolution regarding "technically preferred alignment" for
Arapaho Road "Phase II/III")

Dear Mr. Mayor and Honorable Council Members:

We represent and present this letter on behalf of Mr. and Mrs. J. H. Crouch, the owners of Lot 6, Surveyor Addition. The address of the property is 4139 Centurion Way. The property is a 2.52 acre tract of land improved by a 30,000 square foot office building, drive-ways and paved parking. The property is currently leased to MBNA Information Services, Inc. and is referred to in the January 1999 "Alignment Study Report" (agenda attachment item #2) as the "MBNA Building."

Our purpose in writing is to bring to your attention several matters which are not addressed in the engineers' report which we believe suggest that "Option 5" may not in fact be the "Preferred Option."

Under Option 5, the City will need to acquire (according to the Report) some 26,000 square feet of land out of Lot 6. The proposed elevated roadway will run within ten feet of the rear of the Crouches' building. The roadway will most likely deprive the property of more than 30 existing parking spaces.

The property is currently leased for office use. It is highly desirable because it has more parking than the minimum required by code. The Crouches bought this property over two years ago, intending it to be a long-term investment. Prior to purchasing, they were given to understand that the proposed Arapaho Road extension would utilize the existing Centurion Way right-of-way,

Honorable Mayor and
Town Council Members
February 23, 1999
Page 2

taking all or the eastern-most part of the Charter Furniture Building. With this in mind, they purchased, intending to improve the building to take advantage of its desirability as a high-density, single-user facility. Indeed their plans contemplated adding an additional 20,000 square feet of leasable space within the existing footprint.

These plans are no longer feasible. Even if the number of parking spaces is not substantially reduced, it will no longer be practical to attempt to improve the property on the north side, and it will not be as desirable for the high-density, single-user tenant that the Crouches were hoping to attract. The existence of a busy elevated roadway within ten feet of the building creates a noise and safety hazard. The fact that much of the parking will be under the roadway creates an additional safety risk, or at least the perception of one.

As a consequence, the market value of the property not taken will be adversely impacted to a significant degree. This will of course substantially increase the cost of acquiring the right-of-way, and will have other long-term indirect costs that must also be considered. If "Option 5" is implemented, it will not be feasible to develop the property to its highest and best use. Given the impact of "Option 5" on the property, its only practical use would be some type of industrial or warehouse-type use. Even this would be limited to a degree because of the inability to provide ingress/egress for large trucks.

Implementation of "Option 5" will necessarily result in a substantial decrease in the value of the property for ad valorem tax purposes, so that not only will the Town have a much greater acquisition cost, its ability to recoup those costs through property taxes will be greatly diminished.

Low density industrial/warehouse-type uses will also mean fewer employees who will be likely to patronize Addison's merchants and food-service establishments. In addition to the harm to these interests, the end result will be a material lessening of the Town's sales tax revenues.

Since the traffic on Arapaho Road is by design calculated to be commuter as opposed to local traffic, the burden on "local" streets, such as Belt Line and Midway Roads will be increased. If Centurion Way is going to be primarily industrial/warehouse, this will mean more large trucks using local streets. This will result in higher maintenance costs and may substantially offset any lessening of congestion resulting from the Arapaho extension.

None of these considerations appears to have been taken into account by the engineers' report. The report also considers options assuming that the right-of-way must be south of the Dart right-of-way. No consideration seems to have been given to building over the Dart right-of-way,

Honorable Mayor and
Town Council Members
February 23, 1999
Page 3

or to locating the roadway on the north side of the Dart right-of-way, where the property is already industrial.

For these reasons, we respectfully urge you to postpone a final decision and direct the engineers to study the feasibility of either or both of the alternatives suggested herein. Thank you for your consideration.

Very truly yours,

A handwritten signature in black ink, appearing to read "L. Fischman", with a long horizontal flourish extending to the right.

Lawrence Fischman,
Attorney for Mr. and Mrs. J. H. Crouch

LF/slc

February 17, 1999

MEMORANDUM

To: Ron Whitehead, City Manager
From: Jim Pierce, Assistant City Engineer
Subject: Arapaho Road, Phase II/III, Alignment Study Report

Copies of the Arapaho Road Phase II/III Alignment Study Report are enclosed for Town Council. Staff, and the Arapaho Road Phase II/III consulting engineers, would like to make a presentation to Council regarding the report and answer any questions Council may have.

A brief outline of the presentation follows:

- Introductory Remarks
- Brief History of Alignments Studied
- Technically Preferred Alignment
- Right-of Way Issues
- Opinion of Probable Cost
- Project Funding
- Council Discussion and Questions
- Next Steps

Staff recommends that the City Council adopt a resolution approving the Technically Preferred Alignment for Arapaho Road Phase II/III.

Cc: John Baumgartner, Director of Public Works

Arapaho II/III

2/22/99

Meeting with Sissy, Dan, Ron, Bill Shipp
John & J.P.

@ Grade increases traffic Midway
Need Turn lanes @ Midway

Needs another signal

Overpass negates impact of DART if
passenger rail ever starts.

Arapaho competes with the tunnel. Overpass
competes less

Arapaho II/III

2-19-99

Dan, Sissy, Bruce, John, Jeff

"Dry Run" for council -

Noise got taken out of the report

2-Phases - Understand Costs

Widen Realty Now instead of
waiting for Traffic to build,
then widen.

Cost Comparison Bridge vs Fill Section

20' high is the break point
of earth fill vs bridge structure

February 17, 1999

MEMORANDUM

To: Ron Whitehead, City Manager
From: Jim Pierce, Assistant City Engineer
Subject: Arapaho Road, Phase II/III, Alignment Study Report

Copies of the Arapaho Road Phase II/III Alignment Study Report are enclosed for Town Council. Staff, and the Arapaho Road Phase II/III consulting engineers, would like to make a presentation to Council regarding the report and answer any questions Council may have.

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- Council Discussion and Questions
- Next Steps

Staff recommends that the City Council adopt a resolution approving the Technically Preferred Alignment for Arapaho Road Phase II/III.

Cc: John Baumgartner, Director of Public Works

TOWN OF

ADDISON

BRUCE GRANTHAM

PUBLIC WORKS

To: DAN BECKER

From: James C. Pierce, Jr., P.E., DEE

Company: GBW/HNTB

Assistant City Engineer

Phone: 972/450-2879

FAX #: 972-840-2156
972-661-5614

FAX: 972/450-2837

Date: 2-15-99

16801 Westgrove

P.O. Box 9010

Addison, TX 75001-9010

of pages (including cover): 16

Re: Arapaho Rd II/III

Original in mail

Per your request

FYI

Call me

Comments: Comments on report draft

I do not have John's comments
yet - will check with him
first thing this AM

Jim

Job
copy

DRAFT
2-12-99

ALIGNMENT STUDY REPORT

ARAPAHO ROAD EXTENSION

for the

TOWN OF ADDISON

DRAFT

Prepared by:

**HNTB Corporation
GBW Engineers, Inc.
Jack Hatchell & Associates**

January, 1999

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Exhibit B	Divided Roadway Alignment
Exhibit C	DART Railroad Alignment
Exhibit D	Technically Preferred Alignment (map pocket)
Exhibit E	Right-of-way Map (map pocket)

Executive Summary

In February of 1998, the Town of Addison retained a team of consultants, lead by HNTB Corporation, to study an extension of Arapaho Road as a four lane roadway from Addison Road west to Marsh Lane. The purpose of the Arapaho Road extension is to relieve traffic congestion on roadways in the project vicinity, particularly on Belt Line Road, the primary east-west thoroughfare.

The project team conducted a traffic study which showed that an Arapaho Road extension would reduce traffic volumes on Belt Line Road and Midway Road. The traffic study also indicated that the section of Arapaho Road east of Midway Road should be constructed as a four-lane divided facility based on projected traffic volumes. West of Midway Road, Arapaho Road can be constructed as a four-lane undivided roadway if no entry or exit ramps are installed.

The proposed extension, which is approximately 7,800 feet in length will include intersections at Addison Road, Midway Road, Surveyor Boulevard, Commerce Street and Marsh Lane. Presently, the section of Arapaho Road from just west of the North Dallas Tollway to Addison Road is under construction.

From Addison Road to Marsh Lane, the project corridor must fit between Belt Line Road to the south and the Dallas Area Rapid Transit (DART) owned railroad to the north. At the east end, the roadway must be a continuation of the portion of Arapaho Road which is presently under construction, and at the west end it must align with existing Realty Road on the Farmers Branch side of Marsh Lane.

Within this corridor, the project team analyzed the following three general alignments for the Arapaho Road extension.

- Centurion Way alignment
- Divided Roadway alignment
- DART Railroad alignment

*future alignment
of a portion
combined
split?
?*

Exhibits A, B and C within Section 2 of the report show these alignments. Due to the constraints presented by the intersections at either end of the project, an electrical substation on the west side of Surveyor Boulevard, existing buildings in the project corridor and the DART railroad, there is no viable alternative to the alignment sections east of Midway Road and west of Surveyor Boulevard.

Although the Centurion Way alignment benefits from the use of an existing right-of-way, it requires the purchase of the Charter Furniture property. In addition, at the west end of Centurion Way where the street turns 90 degrees to the south and becomes Runyon Road, this alignment divides the Mini Warehouse facility in two and requires the removal of a significant portion of the buildings on this property. *that*

on/off
If ramps are included
at Midway Road, on the south side
of Arapaho Road, then traffic
on Midway Road and Beltline Road
is increased.

Insert ①

 Southwestern Bell

472-840-1916

roadway

as part of this alignment,

Executive Summary (cont'd)

The divided railroad alignment requires the purchase of Charter Furniture and a smaller portion of the Mini Warehouse property than the Centurion Way alignment. This alignment also results in less convenient access for vehicles entering or exiting the buildings along Centurion Way, which currently carries two-way traffic. If an underpass or overpass were constructed at Midway Road, access to the buildings closest to Midway would be more severely impacted.

The DART railroad alignment allows Centurion Way to remain in place as a service road for the adjacent buildings. Furthermore, no purchase of the Charter Furniture building is required, and only a corner of the Mini Warehouse property is impacted. Given the potential access and cost benefits associated with the DART railroad alignment, a more in-depth evaluation of its viability was conducted.

The analysis of the DART railroad alignment primarily focuses on the intersection at Midway Road. Traffic already backs up on Midway Road from Belt Line Road to north of the DART railroad; consequently, an at-grade crossing of Arapaho Road at Midway Road is not feasible. The grade separated options, with or without ramps, all reduce traffic on Belt Line and Midway Roads with the exception of the section of Midway Road between proposed Arapaho Road and Belt Line Road with ~~ramps on the south side~~ *one*. As a result, the following six horizontal and vertical alignment options at the Midway Road intersection were evaluated.

Insert ①

- Option 1 – Overpass at Midway Road with Entry/Exit Ramps on the North Side of Proposed Arapaho Road
- Option 2 – Underpass at Midway Road with Entry/Exit Ramps on the North Side of Proposed Arapaho Road
- Option 3 – Overpass at Midway Road Without Ramps (*similar alignment to Option 2*)
- Option 4 – Underpass at Midway Road Without Ramps (*similar alignment to Option 2*)
- Option 5 – Overpass Without Ramps, No Taking of Charter Furniture Warehouse
- Option 6 – Underpass Without Ramps, No Taking of Charter Furniture Warehouse

Due to extensive utility relocations in a tight construction corridor, the viability of Option 6 is questionable at this point. If the Town wanted to pursue this option, further coordination would be necessary with DART and DWU prior to developing an Opinion of Probable Cost.

Three overpass and three underpass options were evaluated, and in each case the corresponding underpass option was more expensive. An underpass may be more visually appealing than an overpass, however, the narrowing of Midway Road to facilitate construction would increase traffic delays during the 12 months of construction. Given the increased project cost and the impact on Midway Road traffic during construction associated with the underpass options, an overpass is preferred.

Overpass Option 5 places the edge of the overpass structure 10 feet from the MNBA building and 15 feet from the Charter Furniture building, with a two-and-a-half-foot sidewalk for emergency

this sounds like something we would do later. wouldn't it be too late then?

Executive Summary (cont'd)

access on both sides of the overpass. Option 3, like Option 5, has no ramps, however, it would require the purchase of the Charter Furniture building. Option 1 requires the purchase of the Charter Furniture and MNBA buildings in order to make the entry ramp onto Arapaho Road safe at the merge point. Of the three overpass options, Option 5 is the only one which does not require the purchase of either the Charter Furniture or MNBA buildings.

Given the escalating cost of real estate, neither the additional construction area associated with Option 3 nor the ramps associated with Option 1 appear to justify the required property purchases. Therefore, it is our recommendation that Option 5, an overpass without ramps at Midway Road and no building takes at this location, be selected as the Technically Preferred Alternative.

The following issues will need to be resolved to facilitate construction of the Technically Preferred Alignment.

- Use the southern 10 feet of a 30-foot DWU easement which is contiguous with the DART railroad right-of-way and contains a 60-inch transmission main.
- Gain permission from Union Pacific to cross the railroad wye spur.
- Design construction sequencing plans for the affected intersections at Addison Road, Midway Road, Surveyor Boulevard, Commerce Street and Marsh Lane.
- *Consider* Take measures to improve the aesthetics of the Midway Road overpass, ~~including surface treatments of the columns and retaining walls~~, in order to integrate the structure with the neighborhood.
- Evaluate extending the column supports from Midway Road to the west end of the MNBA building in order to maintain visibility of Charter Furniture for southbound motorists on Midway Road and to facilitate ~~covered~~ parking under the roadway deck for both properties.
- Evaluate measures to mitigate noise, ~~if it represents a source of complaint from neighboring business owners.~~
- Proceed with the acquisition of right-of-way and the property remainders which are deemed unusable.

The Town of Addison may wish to consider phasing the construction of the Technically Preferred Alignment. This section describes three separate phases of construction.

- Phase 1 - Realty Road Extension to Surveyor Boulevard

The extension of Realty Road from the 90° bend at Commerce Street east to Surveyor Boulevard could be constructed separately from the balance of the project. This would provide a direct connection from Marsh Lane to Surveyor Boulevard for east- and west-bound traffic. Realty Road would remain a two-lane thoroughfare within its existing limits from Marsh Lane east to the Commerce Street bend. The estimated construction cost for this phase, including right-of-way, is \$ _____.

Executive Summary (cont'd)

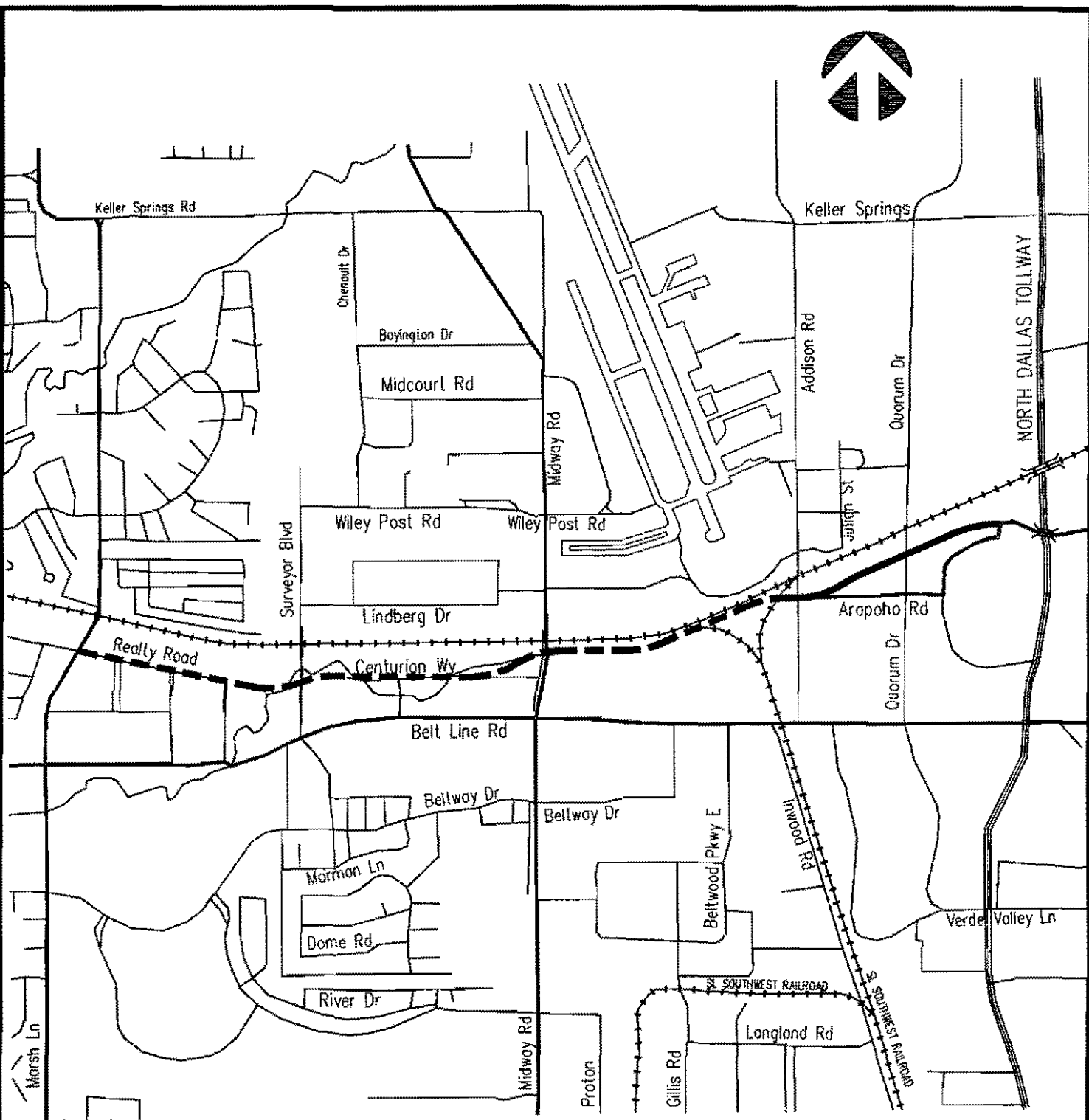
- Phase 2 - Addison Road to Surveyor Boulevard

The overpass at Midway Road dictates that the roadway be constructed from Addison Road to Surveyor Boulevard as one phase. This is by far the most costly and time-consuming phase to complete. It includes coordination with Union Pacific to obtain a crossing of the wye spur and Dallas Water Utilities to obtain use of 10 feet of their 30-foot easement. The estimated construction cost for this phase, including right-of-way, is \$_____.

- Phase 3 - Realty Road Widening

Upon completion of the first two phases, Arapaho Road will connect from Addison Road to Marsh Lane. This direct connection will generate traffic immediately and the Town will have the opportunity to monitor traffic volumes on all sections of this roadway. In time, if traffic volumes dictate, the Realty Road section from Marsh Lane to the Commerce Street bend could be widened from two to four lanes to provide a continuous four-lane thoroughfare all the way from Marsh Lane to Addison Road. The estimated construction cost for this phase, including right-of-way, is \$_____.

The combined estimated construction cost for all three phases of this project is \$_____.



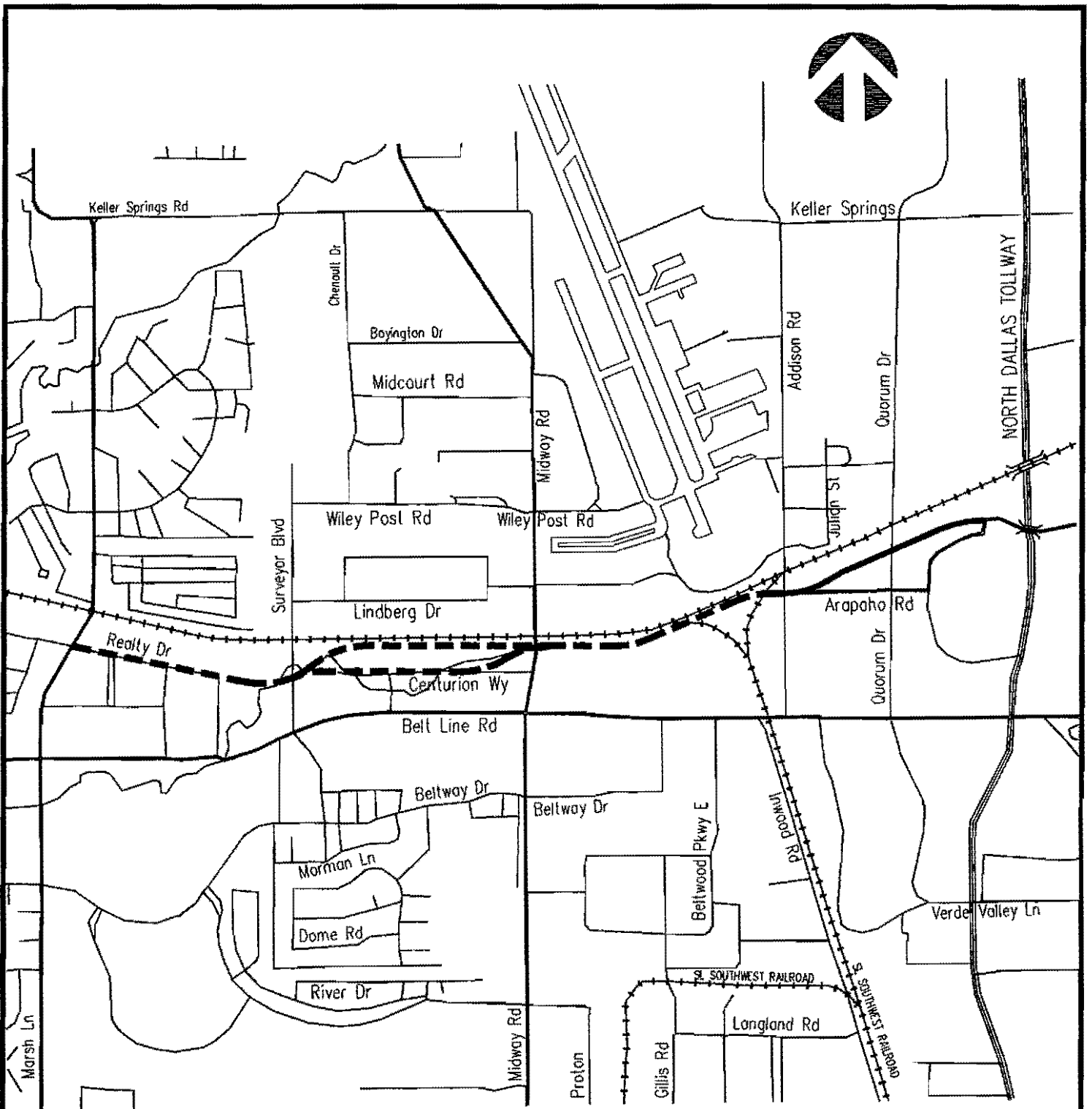
PROPOSED ARAPAHO ROAD
EXTENSION



ARAPAHO ROAD PHASE I
(UNDER CONSTRUCTION)

**PROPOSED
ARAPAHO ROAD EXTENSION
EXHIBIT 'A'**

CENTURION WAY ALIGNMENT



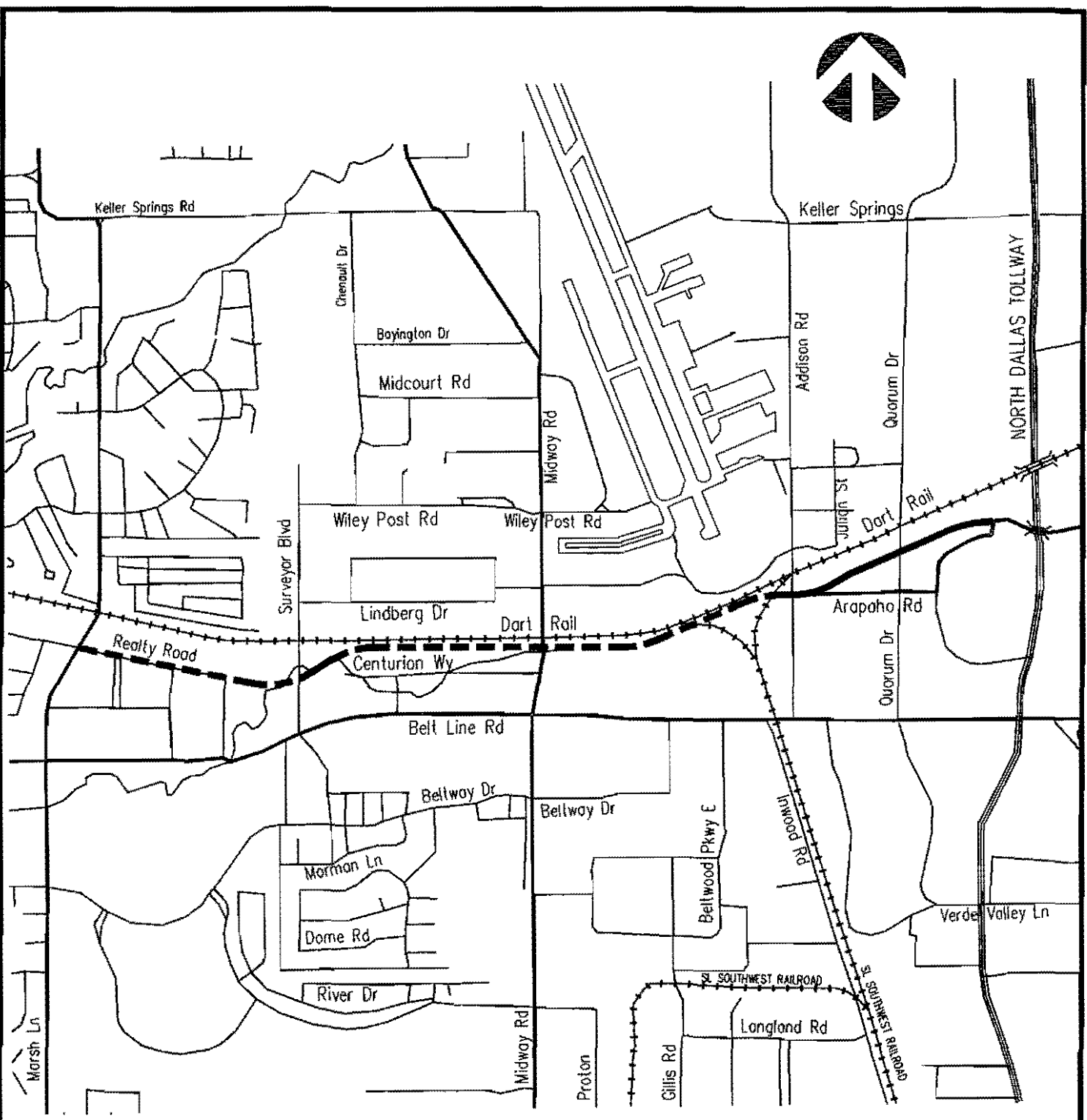
PROPOSED ARAPAHO ROAD
EXTENSION



ARAPAHO ROAD PHASE I
(UNDER CONSTRUCTION)

**PROPOSED
ARAPAHO ROAD EXTENSION
EXHIBIT 'B'**

DIVIDED ROADWAY ALIGNMENT



PROPOSED ARAPAHO ROAD EXTENSION



ARAPAHO ROAD PHASE I (UNDER CONSTRUCTION)

PROPOSED ARAPAHO ROAD EXTENSION EXHIBIT 'C'

DART RAILROAD ALIGNMENT

through the Town of Addison

Section 1

Introduction

In February of 1998, the Town of Addison retained a team of consultants, lead by HNTB Corporation, to study an extension of Arapaho Road as a four lane roadway from Addison Road west to Marsh Lane. The purpose of the Arapaho Road extension is to relieve traffic congestion on roadways in the project vicinity, particularly on Belt Line Road, the primary east-west thoroughfare.

The proposed extension, which is approximately 7,800 feet in length, will include intersections at Addison Road, Midway Road, Surveyor Boulevard, Commerce Street and Marsh Lane. Presently, the section of Arapaho Road from just west of the North Dallas Tollway to Addison Road is under construction.

HNTB's scope of services includes alignment studies, determination of right-of-way needs, meetings with property owners, and the preparation of right-of-way documents for the extension of Arapaho Road. The scope of services is divided into two phases, Data Acquisition and Conceptual Design (Phase 1), and Preliminary Design (Phase 2).

This report, which is the culmination of Phase 1, describes the consulting team's process of evaluating alignments with the Town's engineering staff in order to select a Technically Preferred Alternative for presentation to the City Council. In addition to explaining the reasons why the Technically Preferred Alternative was selected, this report describes the agency coordination, property purchase, construction phasing, traffic and cost issues associated with it. Both undivided and divided pavement sections have been evaluated for the four lane roadway.

Once the City Council has approved an alignment, HNTB will proceed with Phase 2 which includes sufficient preliminary engineering to identify all major utility relocations, right-of-way and easement requirements, and constructibility issues. Coordination with affected utility companies and property owners is included in this phase. Upon completion of Phase 2, a final presentation of the Technically Preferred Alignment will be made to the City Council.

City Council or Town Council ?

From Addison Road to Marsh Lane, the project corridor must fit between Belt Line Road to the south and the Dallas Area Rapid Transit (DART) owned railroad to the north. At the east end, the roadway must be a continuation of the portion of Arapaho Road which is presently under construction, and at the west end it must align with existing Realty Road on the Farmers Branch side of Marsh Lane.

Within this corridor, the project team analyzed three general alignments for the Arapaho Road extension.

2.1 Centurion Way Alignment

The Centurion Way alignment, which had been identified at a conceptual level in a previous study, makes two at-grade crossings of a Union Pacific railroad wye spur just west of Addison Road. It then extends easterly between the DART railroad on the north side and several buildings on the south side, including Iceoplex, Motel 6, Homewood Suites and Super 6. After this alignment crosses Midway Road, it angles toward the southeast as it passes through the Charter Furniture Building before bending back to the east along the existing Centurion Way right-of-way. At the end of Centurion Way, this alignment passes through a Mini Warehouse facility on the east side of Surveyor Boulevard. On the west side of Surveyor Boulevard, it passes through a light commercial building before crossing a concrete lined channel behind Addison Bank and an open field east of Realty Road. The alignment then follows Realty Road to the Marsh Lane intersection. (See Exhibit A).

Due to the constraints presented by the intersections at either end of the project, an electrical substation on the west side of Surveyor Boulevard, existing buildings in the project corridor and the DART railroad, there ^{are} ~~is~~ no viable alternatives to the alignment sections east of Midway Road and west of Surveyor Boulevard. Between Midway Road and Surveyor Boulevard, this alignment uses the existing 60-foot wide Centurion Way right-of-way which currently contains a 41-foot wide pavement section measured from the back of curb.

Although this alignment benefits from the use of an existing right-of-way, it requires the purchase of the Charter Furniture property. In addition, at the west end of Centurion Way where the street turns 90 degrees to the south and becomes Runyon Road, this alignment divides the Mini Warehouse facility in two and requires the removal of a significant portion of the buildings on this property.

Both the north and ^{South} ~~(side)~~ sides of Centurion Way are fully developed with building and parking improvements which extend out close to the existing right-of-way. The narrowest portion of this alignment is between the MNBA building on the north side and the ATC building on the south side where only 103 feet exists between these two buildings. There is not room for a four-lane divided roadway between these buildings. In addition, there is a 35-foot wide driveway between the MNBA building and the Centurion Way right-of-way.

eliminate last sentence? *significance* February 1999

?

Alternative Alignments (cont'd)

The minimum pavement width for a four lane divided roadway is 45 feet measured to the back of curb. The extra four feet of pavement widening would add to the impact on the businesses along Centurion Way which would have to gain access to and from a much busier thoroughfare ~~in proposed Arapaho Road.~~

2.2 Divided Roadway Alignment

The divided roadway varies significantly from the Centurion Way alignment between Midway Road and Surveyor Boulevard. With this alignment, the roadway splits immediately west of Midway Road into two lanes of traffic in each direction. See Exhibit B.

The two eastbound lanes follow the Centurion Way alignment described in Section 2.1. The two westbound lanes are located next to the DART railroad from Midway Road to the Mini Warehouse facility. The westbound lanes then curve toward the southeast as they cut through a corner of the Mini Warehouses before merging with the eastbound lanes just east of Surveyor Boulevard.

The divided ~~railroad~~ ^{roadway} alignment requires the purchase of Charter Furniture and a smaller portion of the Mini Warehouse property than the Centurion Way alignment. This alignment also provides less convenient access for vehicles entering or exiting the buildings along Centurion Way, which currently carries two-way traffic. If an underpass or overpass were constructed at Midway Road, access to the buildings closest to Midway would be ~~more~~ severely impacted. *(one way traffic)*

After an evaluation of the negative impacts to the developments along Centurion Way, it was determined that this alignment was not desirable.

2.3 DART Railroad Alignment

The DART railroad alignment varies significantly from the Centurion Way alignment between Midway Road and Surveyor Boulevard. This alignment, which generally follows the westbound lanes of the divided roadway, is located next to the DART railroad from Midway Road to the Mini Warehouses where it curves toward the southeast across a corner of the Mini Warehouse property. It then crosses Surveyor Boulevard at an angle before curving back toward the east in order to match existing Realty Road. See Exhibit C.

The roadway can be configured such that

This alignment allows Centurion Way to remain in place as a service road for the adjacent buildings. Furthermore, no purchase of the Charter Furniture building is required, and only a corner of the Mini Warehouse property is impacted.

The narrowest portion of the alignment is between the MNBA building and the DART right-of-way where 81 feet is available. Although there are no franchise utilities to contend with,

Alternative Alignments (cont'd)

a 60-inch Dallas Water Utility (DWU) transmission main is located in a 30-foot easement adjacent to the railroad. A concrete-lined channel is also located along this alignment between Midway Road and the Town of Addison water tower.

Given the potential access and cost benefits associated with the DART railroad alignment, a more in-depth evaluation of its viability was conducted.

2.4 Traffic Analysis

At this point in the study, the project team reviewed traffic assignments for the year 2020 which were prepared by the North Central Texas Council (NCTCOG) of Governments for five alternatives for the Arapaho Road Extension. Two of these alternatives included entry and exit ramps at Midway Road, ~~with one on the north side and a second with ramps on the south side.~~ These alternatives are described below. *with on/off ramps* *on/off ramps*
only,

- xx) "No Build" Alternative – what is the impact on adjacent streets if Arapaho Road is not extended?
- ii) "At-Grade" Alternative – Arapaho Road extended with the Midway Road intersection at grade.
- iii) "Grade-Separated" Alternative – Arapaho Road extended with a grade separation at Midway Road without entry/exit ramps.
- iv) "Ramps on the North Side" Alternative – Arapaho Road extended with a grade separation at Midway Road and entry/exit ramps on the north side of Arapaho Road.
- v) "Ramps on the South Side" Alternative – Arapaho Road extended with a grade separation at Midway Road and entry/exit ramps on the south side of Arapaho Road.

2.4.1 Projected Traffic Volumes

The following table presents a summary of projected traffic impacts for the extension of Arapaho Road on Belt Line Road and Midway Road.

Don't make sense
 #5 should be the same between
 Addison & Surveyor. once you
 on, you can't get
 off.
Alternative Alignments (cont'd)

No Ramps

TRAFFIC VOLUME COMPARISON
 (PROJECTED DAILY TRAFFIC VOLUMES BY YEAR 2020)

	NO BUILD	Intersection AT GRADE	GRADE SEPARATED	GRADE SEPARATED WITH RAMP ON NORTH SIDE	GRADE SEPARATED WITH RAMP ON SOUTH SIDE
ARAPAHO ROAD					
Addison to Midway	-	24,000	17,000	18,000	28,000
Midway to Surveyor	-	6,000	13,000	17,000	17,000
BELT LINE ROAD					
Addison to Midway	58,000	53,000	54,000	46,000	50,000
Midway to Surveyor	47,000	46,000	42,000	42,000	45,000
MIDWAY ROAD					
North of Arapaho	52,000	36,000	44,000	44,000	32,000
South of Arapaho	58,000	57,000	-	50,000	60,000
South of Belt Line	-	52,000	46,000	47,000	52,000

should be more than 44,000

why no # here? should be 44,000

2.4.2 Evaluation of Traffic Volumes

The existing congestion on Belt Line Road and Midway Road supports an extension of Arapaho Road. Traffic already backs up on Midway Road from Belt Line Road to north of the DART railroad; consequently, an at-grade crossing of Arapaho Road at Midway Road is not feasible. The grade separated scenarios, with or without ramps, all reduce traffic on Belt Line and Midway Roads with the exception of the section of Midway Road between proposed Arapaho Road and Belt Line Road with ramps on the south side.

For the grade separated scenario without ramps, year 2020 volumes on Belt Line Road are projected to be approximately 5,000 vehicles per day (vpd) less with Arapaho Road extended. Volumes on Midway Road are projected to be reduced by 8,000 to 12,000 vpd. Arapaho Road is projected to carry 17,000 vpd east of Midway Road and 13,000 vpd west of Midway Road if no entry or exit ramps are installed.

Should this be Surveyor?
Q? this logic

The section of Arapaho Road east of Midway Road should be constructed as a four-lane divided facility based on projected traffic volumes. West of Midway Road, Arapaho Road can be constructed as a four-lane undivided roadway if no entry or exit ramps are installed.

Surveyor?

Studies contain a large margin of error but serve to indicate grade separated

2.5 Options Studied for DART Railroad Alignment

After the project team selected the DART Railroad alignment for a more detailed analysis, the following six horizontal and vertical alignment options were considered.

with no ramps is the preferred configuration @ Midway Rd

Alternative Alignments (cont'd)

2.5.1 Option 1 – Overpass at Midway Road with Entry/Exit Ramps on the North Side of Proposed Arapaho Road

Option 1 requires the purchase of the Charter Furniture and MNBA buildings in order to construct a four-lane undivided roadway and provide a safe merge length for the westbound entry ramp on the north side of proposed Arapaho Road. Permission would be required with this option to construct the entry and exit ramps within the DWU easement.

2.5.2 Option 2 – Underpass at Midway Road with Entry/Exit Ramps on the North Side of Proposed Arapaho Road

Like Option 1, Option 2 requires the purchase of the Charter Furniture and MNBA buildings, and the use of the DWU easement for the entry and exit ramps. In addition, the probable construction sequence for an underpass would require the removal of one half of Midway Road at a time. As a result, Midway Road would have to be realigned and narrowed to four lanes through the construction zone. The underpass construction could affect Midway Road in this manner for up to a year.

2.5.3 Option 3 – Overpass at Midway Road Without Ramps

Option 3 follows an alignment similar to Option 1 through the Charter Furniture building, however, without ramps, no taking of the MNBA is required. This option provides working space between proposed Arapaho Road and the DART railroad on both sides of Midway Road.

2.5.4 Option 4 – Underpass at Midway Road Without Ramps

Option 4 follows the same alignment as the overpass without ramps (Option 3) through the Charter Furniture building. It also presents the same construction sequencing challenges as the underpass option with ramps (Option 2) at Midway Road.

2.5.5 Option 5 – Overpass Without Ramps, No Taking of Charter Furniture Warehouse

Option 5 places the north right-of-way line 20-feet off the DART right-of-way from Midway Road to the Mini Warehouse property. This requires the use of the southern 10 feet of the 30-foot DWU easement but does not require taking either the Charter Furniture or the MNBA buildings. Furthermore, this option places the edge of the overpass structure approximately 10 feet from the MNBA building. The existing concrete-lined channel next to the DWU water main would need to be replaced with double 9'x5' box culverts under the overpass structure.

How do these options impact DWU?

Alternative Alignments (cont'd)

2.5.6 Option 6 – Underpass Without Ramps, No Taking of Charter Furniture Warehouse

Option 6 follows the same alignment as the overpass without taking the Charter Furniture building, however, it presents the same construction sequencing challenges as the other underpass options. In addition, this option would require the installation of box culverts on the north side of the railroad to replace the concrete-lined channel presently on the south side. If a minimal separation were to be provided from the box culverts to an existing 12-inch sanitary sewer line, the edge of the boxes would be approximately five feet from several existing buildings. In addition, multiple drainage and utility relocations would be required under the railroad tracks at Midway Road, and the box culverts would need to cross back under the railroad further to the west.

2.6 Evaluation of DART Railroad Alignment Options

Horizontal and vertical alignments, along with Opinions of Probable Cost, were prepared for Options 1 through 5. These costs are included in a matrix of issues related to these options, in addition to Option 6, at the ^{end} back of this section.

Due to extensive utility relocations in a tight construction corridor, the viability of Option 6 is questionable at this point. If the Town wanted to pursue this option, further coordination would be necessary with DART and DWU prior to developing an Opinion of Probable Cost.

The primary goal expressed by Town of Addison staff for this project is to relieve congestion on Belt Line Road. All the options will provide some relief to Belt Line Road.

Three overpass and three underpass options were evaluated, and in each case the corresponding underpass option was more expensive. Although no cost was prepared for Option 6, it is certain that the extensive utility relocations required would result in its cost exceeding that of Option 5. An underpass may be more visually appealing than an overpass, however, the narrowing of Midway Road would increase traffic delays during the 12 months of construction. Although an underpass would create less noise impact, only five commercial buildings are located within the overpass limits on both sides of the railroad, including Charter Furniture.

If Town of Addison staff are comfortable with an overpass at this location, we would recommend that one of the overpass options be selected.

Of the three overpass options analyzed, Option 5 pushes the south overpass wall within approximately 10 feet of the MNBA building, and 15 feet of the Charter Furniture building, with a two-and-a-half-foot sidewalk for emergency access on both sides of the overpass. In addition, it would require DWU to accept 20 feet for maintenance of their 60-inch water line.

from here let's discuss the options in numerical order leaving out # 6

we are aren't we?

does not require purchase of charter & MNBA but it

Alternative Alignments (cont'd)

Option 3, like Option 5, has no ramps, however, it would require the purchase of the Charter Furniture building. Option 1 requires the purchase of the Charter Furniture and MNBA buildings in order to make the entry ramp onto Arapaho Road safe at the merge point. Of the three overpass options, Option 5 is the only one which does not require the purchase of either the Charter Furniture or MNBA buildings.

Given the escalating cost of real estate, ^{and traffic impacts,} neither the additional construction area associated with Option 3 nor the ramps associated with Option 1 appear to justify the required property purchases. Therefore, it is our recommendation that Option 5, an overpass without ramps at Midway Road and no building takes at this location, be selected ^{as the}

technically preferred alternate.

ARAPAHO ROAD ALIGNMENT OPTIONS
Midway Road Section — Matrix of Issues

DESCRIPTION OF ISSUE	OPTION 1 Overpass with ramps on north side	OPTION 2 Underpass with ramps on north side	OPTION 3 Overpass without ramps	OPTION 4 Underpass without ramps	OPTION 5 Overpass without ramps; without building take	OPTION 6 Underpass without ramps; without building take
Alignment Description	Separated from railroad right-of-way	Same as 1	Same as 1	Same as 1	Adjacent to railroad right-of-way	Same as 5
Charter furniture building take	Yes	Yes	Yes	Yes	No	No
MBNA building take (for ramp safety)	Yes	Yes	No	No	No	No
Relocate DWU water line	No	No	No	No	No	Yes
Noise	Yes	No	Yes	No	Yes	No
Realign Midway for construction sequence (4 lanes)	No	Yes	No	Yes	No	Yes
Sump storm sewer	No	Yes	No	Yes	No	Yes
Move box culvert to north side of R/R; other utility relocations	No	No	No	No	No	Yes
Opinion of Probable Cost (with 20% contingency)						N/A

Section 3

Technically Preferred Alternative

The Technically Preferred Alternative (TPA), as shown in the Exhibit D map pocket, follows the DART railroad alignment and Option 5 between Midway Road and Surveyor Boulevard which avoids taking either the Charter Furniture or the MNBA buildings. This section discusses some of the issues and costs associated with the TPA.

3.1 Coordination Issues

3.1.1 DWU Easement

The TPA will require the use of the southern 10 feet of a 30-foot DWU easement which is contiguous with the DART railroad right-of-way. The DWU easement contains a 60-inch transmission main which is located approximately six feet off the DART right-of-way to the center of the pipe. A written request has been made to DWU regarding the use of a portion of their easement, and negotiations are pending.

water

3.1.2 Railroad Crossing

A report has been prepared and submitted to Union Pacific requesting permission to cross the wye spur. This report includes a commitment to place a fully signalized gate at the crossing. ~~No response has been received to date from Union Pacific.~~

that will be

check with John

3.1.3 Realty Road Section

The traffic volumes indicate that a four-lane undivided roadway would be adequate along the existing Realty Road alignment. Omitting a median from most of this section of the project would minimize the impact on adjacent parking lots and driveways. The roadway could still be widened for turn lanes at Midway Road and Surveyor Boulevard.

3.1.4 Construction Sequencing

Construction sequencing plans will still be necessary at the intersections along the TPA, although far less extensive measures will be necessary than those required for an underpass at Midway Road. For example, some drainage and utility relocations will be necessary, particularly at Midway Road and Surveyor Boulevard.

3.1.5 Overpass Aesthetics

Measures can be taken to improve the aesthetics of the Midway Road overpass, including surface treatments of the columns and retaining walls, to integrate the structure with the neighborhood. Discussions with the owners of Charter Furniture and the MNBA buildings have also resulted in an evaluation of extending the column supports from Midway Road to the west end of the MNBA building in order to

How much do we want to "commit" to?

Surface treatment of columns?

Technically Preferred Alternative (cont'd)

maintain visibility of Charter Furniture for southbound motorists on Midway Road and to facilitate ~~covered~~ parking under the roadway deck for both properties.

3.1.6 Noise

Although truck traffic is likely to be low on the Arapaho Road extensions, noise may still be a source of complaint from affected business owners if an overpass is constructed. If automobile traffic is the predominate source of noise, it is primarily due to tire noise at pavement level. Asphalt surfacing has been known to reduce tire noise and might be considered if automobile noise is an issue. Additionally, the normal height traffic barrier could be increased to provide some insertion loss, or a full height noise barrier may be considered.

3.1.7 Right-of-way and Building Acquisition

Building acquisitions will include the Metro Brick Company building at Addison Road, a portion of the Mini Warehouse facility on the east side of Surveyor Boulevard, and eight commercial buildings in the Addison West Industrial Park on the west side of Surveyor.

A right-of-way strip map has been included as Exhibit E in a map pocket at the back of this report. It gives estimated right-of-way takes from the properties affected by this project along with remainders of these properties which will be unusable as a result of the roadway construction.

3.2 Project Phasing

The Town of Addison may wish to consider phasing the construction of the Technically Preferred Alignment. This section describes three separate phases of construction *that could be considered.*

3.2.1 Phase 1 - Realty Road Extension to Surveyor Boulevard

The extension of Realty Road from the ^{existing} 90° bend at Commerce Street east to Surveyor Boulevard could be constructed separately from the balance of the project. This would provide a direct connection from Marsh Lane to Surveyor Boulevard for east- and west-bound traffic. Part of the right-of-way for this phase has already been dedicated. Realty Road would remain a two-lane thoroughfare within its existing limits from Marsh Lane east to the Commerce Street bend.

3.2.2 Phase 2 - Addison Road to Surveyor Boulevard

The overpass at Midway Road dictates that the roadway be constructed from Addison Road to Surveyor Boulevard as one phase. This is ~~is the~~ the most costly and

Are we addressing noise only because of the overpass and @ the overpass only? What about noise all along the surface route - for example Super 8 & motel 6?

The text in phase 2 "puts down" Phase 2.
 Phase 2 is the most important phase to relieve traffic on Belt Line Rd.

Technically Preferred Alternative (cont'd)

time-consuming phase to complete. It includes coordination with Union Pacific to obtain a crossing of the wye spur and Dallas Water Utilities to obtain use of 10 feet of their 30-foot easement. ~~In addition, the overpass of Midway Road is the most costly portion of this project.~~

3.2.3 Phase 3 - Realty Road Widening

Upon completion of the first two phases, Arapaho Road will connect from Addison Road to Marsh Lane. This direct connection will generate traffic immediately and the town will have the opportunity to monitor traffic volumes on all sections of this roadway. In time, if traffic volumes dictate, the Realty Road section from Marsh Lane to the Commerce Street bend could be widened from two to four lanes to provide a continuous four-lane thoroughfare all the way from Marsh Lane to Addison Road.

3.3 Cost Estimates

This section provides cost estimates for each of the three phases identified previously along with a project cost for the entire project. Estimates have also been included for the right-of-way and other property takes along the project alignment.

Let's "turn this around" and talk about cost estimates of the entire project as "primary" and with the phasing as "secondary"

This is problematic as now Realty road must be widened under a heavy traffic load. It would be best to widen Realty now, under a lighter load.

MAYOR, TOWN OF ADDISON

C. MORAN

CITY SECRETARY

VOLUME _____ PAGE _____

Post-it® Fax Note	7671	Date	2-15-99	# of pages	4
To	Bruce Grantham	From	Jim Pierce		
Co./Dept.	GBW	Co.	Addison		
Phone #		Phone #			
Fax #	972-840-2156	Fax #			

Faxed

FILED
 95 OCT 27 AM 10:58
 EARL BULLOCK
 COUNTY CLERK
 DALLAS COUNTY

Volume 95210
 Page 3012

FINAL PLAT
ICEOPLEX ADDITION

SITUATED IN THE
 W.H. WITT SURVEY & THE EDWARD COOK SURVEY
 DALLAS COUNTY, TEXAS
 AN ADDITION TO THE
 TOWN OF ADDISON, DALLAS COUNTY, TEXAS

OWNER
 ADDISON R.E.
 16380 ROSCOE BLVD.
 SUITE 115
 VAN NUYS, CALIFORNIA 91406
 (818) 830-8696

SURVEYOR
 BROCKETTE, DAVIS, DRAKE, INC.
 4144 N. CENTRAL EXPRESSWAY
 SUITE 1100
 DALLAS, TEXAS 75204
 (214)-824-7064

SEPTEMBER, 1995

$\Delta=12^{\circ}14'20''$
 $R=1004.93$
 $L=214.66$
 $T=107.74$
 $LC=214.25$
 $CB=N\ 05^{\circ}25'10''\ E$

W. H. MITT SURVEY ABST.
EDWARD COOK SURVEY A.

$N\ 00^{\circ}42'00''\ W$
12.01

Point of Beginn

72.01'

50'

50'

15' City Of Dallas
Water Easement
Vol. 5122, Pg 181

10' Sanitary
Sewer Easement
Vol. 80179 Pg. 2453

$S\ 89^{\circ}41'00''\ E - 195.00$

Proposed 84' R.O.W.
Dedication

273.33'

(100' R.O.W.)

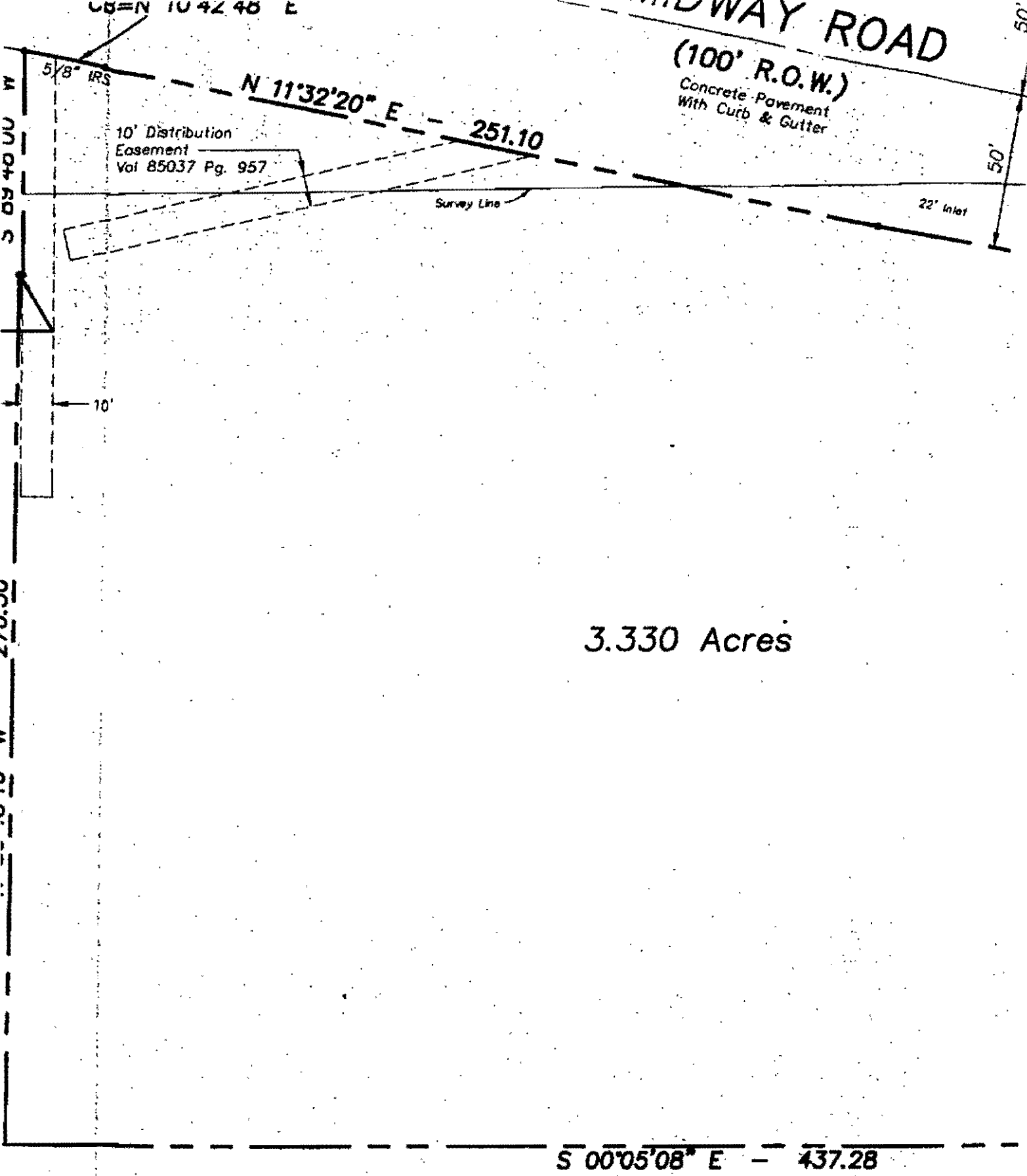
$S\ 00^{\circ}42'00''\ E$
60.00

$S\ 89^{\circ}41'00''\ E$
76.00

24.01'

296.92

ST. LOUIS & SOUTHWESTERN RAILROAD



3.330 Acres

ROADWAY INN ADDITION
VOL. 81052, PG. 775

The easements shown on this plat are hereby reserved for the purposes as indicated including, but not limited to, the installation and maintenance of water, sanitary sewer, storm sewer,

BELT LINE ROAD
(VARIABLE WIDTH R.O.W.)

332.45'

42.56'

22.15'

155.48'

W. H. WITT SURVEY ABST. NO. 1609
EDWARD COOK SURVEY ABST. NO. 326

71.24'

S 89°48'00" W

5/8" IR

N 00°42'00" W
1.12

10' x 140' R.O.W. Easement
to Texas Power Light & S.W.B.T.
Vol. 7719 Pg. 0040

CHILI'S CENTER
JOINT VENTURE
VOL. 81005, PG. 2859

N 89°48'16" W - 276.30'

209.98'

ROADWAY
VOL. 810

PROPERTY DESCRIPTION

Being a tract of land located in the City of Addison, being part of the EDWARD COOK SURVEY, ABSTRACT NO. 326, and part of the W.H. WITT SURVEY,

NO.	OWNER	AREA (SQ. FT.)	REMAINDER	VALUE	VALUE	AREA	VALUE	VALUE
			AREA (SQ. FT.)	AREA TAKEN	REMAINDER TAKEN	BUILDING TAKEN	REMAINDER TAKEN	BUILDING TAKEN
				\$/SQ FT	\$/SQ FT	SQ FT	\$/SQ FT	DOLLARS
1	METRO BRICK COMPANY INC.	3,200.08						
1A	15211 ADDISON ROAD JOINT VENTURE	1,255.40		#12				
2	DART <i>Union Pacific Railroad</i>	83,520.40		#6				
3	BELTWOOD RESERVOIR <i>City of Dallas</i>	469.70		#6				
4	HERITAGE INN NUMBER XXII, L.P.	20,857.50		#6				
5	MOTEL 6 OPERATIONS L.P.	21,911.97	6,177.96	#6				
6	ADDISON R.E.	13,828.03	3,174.58	#12				
7	EPINA PROPERTIES LTD. ET. AL.	32,680.32	9,617.88	#5	#3			
8	J.H. CROUCH JR. ET. AL.	23,350.43	6,870.53	#3	#3		125,000	
9	INTERVEST COMPANIES	16,487.29	4,851.15	#3	#3			
10	5425 CENTURION WAY, L.P.	12,755.02	3,753.03	#3	#3		70'x16' shed	
11	BULLOUGH / LYKOW OFFICE BLDG. NO.1, L.P.	10,276.70	3,023.91	#3	#3			
12	PUBLIC STORAGE OF DALLAS, LTD.	32,504.04	16,046.64	#3	#3		400 #5	
13	PUBLIC STORAGE OF DALLAS, LTD.	17,350.90	30,513.43	#5	#3		400 #5	
14	NILE PROPERTIES, LTD.	28,344.37	42,078.66					
15	TEXAS POWER & LIGHT	8,604.30						
16	LINCOLN TRUST COMPANY CUSTODIAN	5,618.00		N/C				

Damages

Total
 Entire Parcel \$150,000
 500K
~~Entire~~

Notes
 Entire Parcel
 Possible Additional Damages
 from building take-off?
 Crossing Rights/Relocating
 Expenses - Metro Brick
 Can we realign?
 should be dedicated
 should be dedicated

Entire taking

416
 70
 1120

Mini Storage Warehouses Building Square Footages			
Area #	Dimensions (ft)		Area (sq ft)
1	18	193	3,474
2	400	28	11,200
3	258	14	3,612
4	99	14	1,386
5	89	14	1,246
6	64	20	1,280
7	54	20	1,080
8	56	14	784
9	50	14	700
		Total	24,762

Council Presentations

For Agenda:

- Each Council person to get a copy of the report along with a cover memo from John explaining what our objective is.
- Due

Objective:

Provide a project status report

Brief history of alignments studied

Midway Road

Selected alignment

RR Xings

60" Water Line

Costs

Council Discussion & Questions

Council approval of selected alignment

John
Brill

At Council Meeting:

→ At Grade
→ ~~Overpass~~
→ Underpass

Introductory Remarks - John

Brief History of alignments studied - HNTB

* Boards displaying various alignments

Ramps/No Ramps

Traffic Implications

technically preferred

Selected Alignment

HNTB

sq



ROW Required
ROW we have



Board Displaying Selected Alignment (for "public" to see)

Buildings to be taken

Estimated Project Costs

HNTB



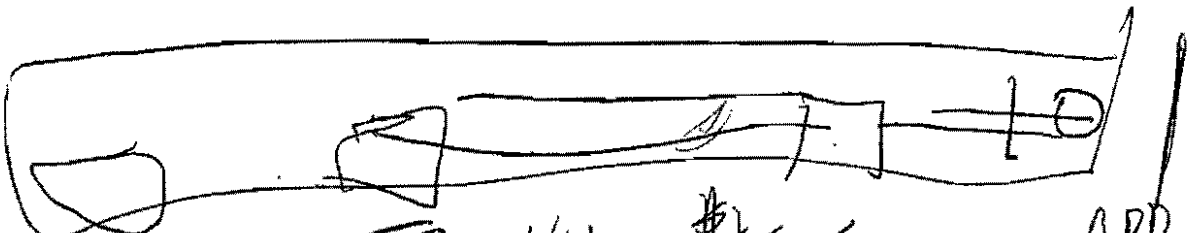
↑ ROW Element
↑ Project Funding



John

Council Approval ↑

John



TECHNICALLY ~~Pre~~

APP

Arapahoe II/III

2-5-99

Meeting with B. Grantham & Dan Becker

1. 200 Scale is report scale
2. Road narrowed down @ Commercial. What is width of perty. That alternate is being worked on.
3. Cost out section between Surveys & Commerce - a full rd section would be proposed

* 4. ~~Do we want~~ ^{Can't put} a sidewalk on both sides of the bridge. Use 2.5' Safety curb both sides

5. What about a fire line behind MBNA & Charter -

* 6. Need to seal blow up of Mini Warehouses - Tues -
Photo Enhancement due to HNTB Monday -
We will see it Tuesday

5. Stripmap has been prepared. Prop rows are listed. Need map showing Prop owners & ROW shown on strip map - will see Tuesday

7. Shoot for Feb 23rd Council Meeting
all ready by 15th

8. Rework the report & prepare boards for council.

Dallas Central Appraisal District

Business Personal Property

Account Number: 99922160000223800

BUSINESS LOCATION DATA

DBA: VIDEO ADVANTAGE
Street Address: 15109 SURVEYOR BLVD
Mapsc0: 14A



VALUATION DATA

Tax Year: '98 Certified Tax Agent: n/a
Certified 98 Total Market Value \$615,360.00

OWNERSHIP DATA

Owner Name: VIDEO ADVANTAGE INC
MailingAddress: %WILLIAM S JASPERSEN PRES
15109 SURVEYOR BLVD
City: DALLAS State: TX Zip: 752442216

TAXING JURISDICTIONS

City: City Of Addison
County: Dallas County
College: Dallas Co. Community College
Hospital: Parkland Hospital
School: Dallas ISD
Special District:

EXEMPTION DATA

Taxing Jurisdiction	Disabled Vet	Taxable Value
City		\$615,360.00
County		\$615,360.00
College		\$615,360.00
Hospital		\$615,360.00
School		\$615,360.00
Special District 1		\$0.00

Totally Exempt:

PROPERTY HISTORY

Market Values	1998	1997	1996	1995	1994
Improvement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Land	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Market	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00
Cap-Hmstd	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Spec. Asmt.	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Taxable Values	1998	1997	1996	1995	1994
County Taxable	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00
City Taxable	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00
School Taxable	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00
Spec Dist - Taxable	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Hosp - Taxable	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00
College - Taxable	\$615,360.00	\$188,790.00	\$188,790.00	\$188,790.00	\$164,160.00

Dallas Central Appraisal District

Business Personal Property

There were 2 matches:

Address	City	Owner	98 Certified Value
15115 SURVEYOR BLVD	City Of Addison	METROPLEX OFFICE SYSTEMS INC	\$87,260.00
15115 SURVEYOR BLVD	City Of Addison	VOLLMERING MICROFILMINMG	\$68,170.00
If Certified Value is zero, listing may represent a subaccount.			

Pat
Haggerty
Mobile

972-248-8888
214-957-3329

Lease on Charter
expires in 2 or 3 years
If the lease is renewed
long term, then we must
also pay to relocate the
tenant.

MEMO

TO: Jim Pierce
Town of Addison

FROM: Pat Haggerty
16475 Dallas Pkwy., #500
Addison, Texas 75001

The following is a summary of the conversations and meetings which I have had with the four (4) property owners who are located along the Arapaho Road right of way.

CHARTER FURNITURE BUILDING:

\$ 60/ft²

Includes land
53,400 ft²

Joe Dingman was concerned about the effect of the overpass on the visibility of his property from the North. While he would prefer the crossing at grade, he wants to study the visual impact of the design and the ability to park under any overpass.

MBNA BUILDING:

\$ 50/ft²

Includes Land
32,000 ft²

Gary Crouch also wanted to preserve his parking North of the building. He feels the two-story office potential within the existing structure would also be harmed by the presence of a road twenty feet away.

Originally, he thought the Charter Building was to be demolished and he would have frontage on Midway Road.

WATSON & TAYLOR MINI WAREHOUSES:

Need

Bldg Setback
Fire Lane

Ralph DeFeo was pleased the new design did not take as much property as the original plan. He will calculate the effect on his property and have a price based upon the loss of revenue.

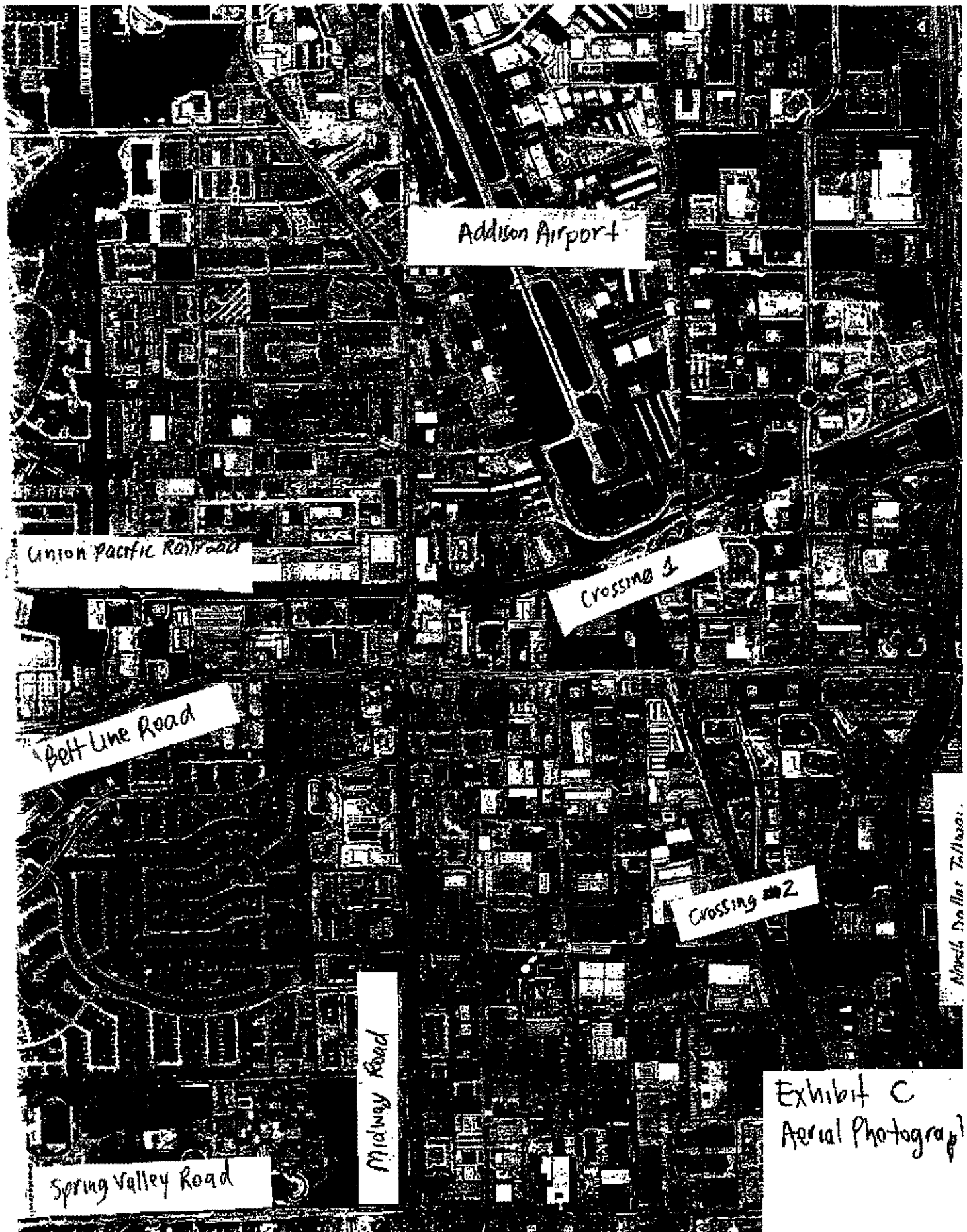
SURVEYOR BUILDING:

\$ 50/ft² Includes land

Ola Assem was concerned about the impact of the building to be taken as well as the effect on the remaining property to the South.

Call Elaine for ft² 230' x 130' (scaled) = 29,900 ft²
29,900 x \$50 = 1,495,000

All of the owners asked about the timing for the taking as well as on the remaining structures. It will take them some time to determine the price they expect for their loss, but none are opposed to the extension of Arapaho. They want to mitigate the damage to their remaining real estate.



Addison Airport

Union Pacific Railroad

Crossing #1

Belt Line Road

Crossing #2

Spring Valley Road

Midway Road

Exhibit C
Aerial Photograph

North Dallas Tollway

TOWN OF
ADDISON

PUBLIC WORKS

To: Dan Becker

From: James C. Pierce, Jr., P.E., DEE
Assistant City Engineer
Phone: 972/450-2879
FAX: 972/450-2837

Company: HNTB

FAX #: 972-661-5614

Date: 1-28-99

16801 Westgrove
P.O. Box 9010
Addison, TX 75001-9010

of pages (including cover): 4

Re: Arapaho Rd Phase II/III

Original in mail Per your request FYI Call me

Comments: Copies of letters from ADR
Realty & Orion Realty Advisors for
your info only.

I should have some costs for
the buildings we may take ~~over~~ next week.

Jim

ADR Realty Partners

January 12, 1999

Mr. John Baumgartner
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001-9010

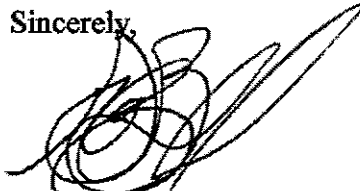
RE: Arapaho Extension

Dear Mr. Baumgartner:

I spoke with James Pierce in your office today and he showed me the latest design for the Arapaho extension which included an overpass over Midway road. Mr. Pierce indicated that the overpass design was an earth-in fill built-up type with a retaining wall. In reviewing the impact on our property at 4139 Centurion Way, I noticed that the design does not remove the building at the north west corner of Centurion Way and Midway as in the previous alignments. I also noticed that it covers our parking lot and without the removal of the other building there does not appear to be a way for us to regain the parking spaces we lose with the new alignment. It did appear that a slight modification of the slope to increase the proposed height of the overpass behind our property and use of a pier overpass structure might allow us to retain our parking. I would ask that you consider this as an alternative.

Please give me a call so that we can discuss the feasibility of this approach.

Sincerely,



Gary B. Crouch

Orion Realty Advisors, Inc.
13223 Glad Acres Drive
Dallas, Texas 75234
972-241-1202/1214 FAX
email: jwd@orionrealty.com

January 22, 1999

Mayor Rich Beckert
and
Town Councilmembers
Town of Addison
Addison Town Hall
5300 Belt Line 75240

Re: Arapaho Road at Midway Road

Dear Mayor Beckert and Councilmembers:

On January 26, Town staff plans to present to Council a recommendation for the alignment and configuration of the extension of Arapaho Road from Addison Road to Marsh Lane. Staff has been kind enough to brief us about this thoroughfare. The recommended alignment uses a 80' wide drainage easement bounded on the south by the rear of properties facing either Belt Line or Centurion, and on the north by the railroad ROW. We believe this is a good choice, both cost effective and appropriate for the objective of taking east-west traffic off of Belt Line Road and we fully support this part of staff's recommendation.

However, the configuration recommended is an overpass rising approximately 25' above the elevation of the Midway roadway, supported by an embankment. With all respect to Ron Whitehead and John Baumgartner, the tenants, manager and owners of 15101 Midway object to an Arapaho Road overpass at Midway Road.

We believe the overpass presents the following disadvantages to our businesses and the Town:

- The bridge and embankment will eliminate visibility of 15101 Midway from the north. The east half of the property is the flagship store of Charter Furniture, a retailer with most of its trade area and business north of this location, heavily relying on visibility from the north.
- The bridge and embankment will loom over 15101 Midway, casting it in an inferior perspective to visitors. This and other properties west of Midway have floor elevations well below the Midway roadbed.
- The overpass scenario costs approximately \$4 million more than an at-grade intersection.
- The lack of interchange with Midway Road lessens the tendency of travelers to choose to stop at merchants, restaurants and hotels in the immediate vicinity, favoring communities on either side of Addison.

Two other scenarios were considered, an at grade intersection or an underpass without intersection. We believe either of these scenarios will provide more overall benefit to the business community adjacent to Midway Road. Our rationale for this conclusion follows.

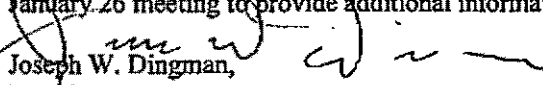
- An at-grade intersection is the most cost effective and offers maximum benefit to businesses in the area. It is least desirable to through traffic, which ought to be of less concern than traffic which generates economic activity for the Town. It will cause inconvenience during construction, a small cost relative to the other benefits. It will place a traffic light two blocks from Belt Line's; while this is technically undesirable, it is often found where it is the least undesirable way to deal with a problem.

- We believe an at-grade intersection is the best overall scenario for the community and works satisfactorily for 15101 Midway. The tenants of the property will reaffirm their commitment to the Town by making improvements which will increase trade and thereby enhance their value to the community.
- An underpass without intersection is better than an overpass from a visibility standpoint, however it is second choice from the standpoint of trade. Drivers will be able to see businesses in the area but not get to them absent a significant detour. An underpass is even more expensive than an overpass. In addition it presents a logistical problem of rerouting the existing drainage conduits.

In the past, the Town Council has rejected overpass configurations at major intersections for visibility and access concerns, even when alternative configurations have cost more. We believe the same criteria used in your previous decisions should apply here. We ask that you approve an at-grade Arapaho/Midway intersection. We view an at-grade intersection as best for all concerned. An underpass would be our distant second choice.

If, after reviewing the facts, the Council decides to use an overpass, we respectfully request an opportunity to work with the staff during the planning stage to arrive at a minimally intrusive, architecturally pleasing design. This may mitigate our concerns. We would also want to live up our signage and building image to enhance visibility, of course within the framework of the Town's ordinances.

Thank you for this opportunity to present our view. As manager of 15101 Midway, I will be present at the January 26 meeting to provide additional information, or you can contact me at your convenience.


Joseph W. Dingman,
President

cc: Ron Whitehead, Town Manager
John Baumgartner, Town Engineer
Bill Crepeau, Charter Furniture
Marilyn Y. Acheson, Keystone Strategies



Engineers, Inc.

Grantham, Burge & Waldbauer

January 21, 1999

Mr. Jim Milstead, P.E.
 City of Dallas
 Water Utilities Department
 320 East Jefferson, Room 218
 Dallas, Texas 75203

Re: Proposed Arapaho Road Extension
 Adjacent to DWU 60-inch Water Line

Dear Mr. Milstead:

The Town of Addison is in the planning stages for the extension of Arapaho Road from Addison Road west to Marsh Lane. Traffic congestion on the major thoroughfares in this part of Addison, particularly Belt Line Road, is the driving force behind the proposed extension.

For the past year, a team of consultants lead by HNTB Corporation has worked with the Town of Addison's engineering staff to evaluate alignment alternatives in the design corridor. At the east end of the project, the alignment is fixed by an extension of Arapaho Road which is presently under construction from just west of the North Dallas Tollway to Addison Road. At the west end of the project, the alignment is fixed by the current intersection of Realty Road with Marsh Lane. The design team is preparing to present the preferred alignment shown on the attached exhibits to the City Council in the near future. For most of the preferred alignment, the roadway roughly parallels the Dallas Area Rapid Transit (DART) owned railroad on the north side.

Along with providing a general notification regarding this proposed project, the purpose of this letter is to begin a coordination effort related to the section of roadway from just east of Midway Road to just east of Surveyor Boulevard. Through this section, the preferred alignment is adjacent to a 60-inch DWU R.C. water main on the north side. As-built plans for this water main show it to be 7.5 feet off the DART right-of-way in a 30-foot wide easement.

The narrowest corridor for the proposed roadway is adjacent to the Charter Furniture and MNBA buildings on the west side of Midway Road. There is less than 90 feet between the face of these buildings and the DART right-of-way.

It is currently proposed to elevate Arapaho Road over Midway Road. This elevated section is likely to be extended past the two aforementioned buildings. The desired separation from the roadway structure to the face of these buildings is 10 to 15 feet. It is anticipated that the roadway

DRAFT
 gave these
 comments to
 Bruce
 1-26-99

Scale?
 100 Scale

Cross
 Section
 shown
 water
 main

Mr. Jim Milstead
January 21, 1999
Page 2

structure, including the 46-foot wide pavement section, would be approximately 60 feet wide, although a final structure width is still under review. This would leave 15 to 20 feet from the north side of the structure, where the water main is located, to the DART right-of-way.

The Town of Addison requests your consideration of the use of the 10 to 15 feet of the existing 30-foot water main easement for the purpose of constructing and maintaining the proposed roadway. We would appreciate the opportunity to meet with your staff to discuss this request in more detail.

Please contact me if you need any additional information.

Sincerely,

Bruce R. Grantham, P.E.
Assistant Project Manager

cc: John Baumgartner, Town of Addison
Jim Pierce, Town of Addison
Dan Becker, HNTB

BG/gg
C:\WPDOCS\PROJECTS\ADDISON\98-094\milstead.ltr

Arapaho II/III

Meeting with Pat Haggerty: 1-19-99
Need costs to take:

Charter Furniture

MBNA

Mini Storage (partial)

Light Commercial Bldg W. side of Suwayn

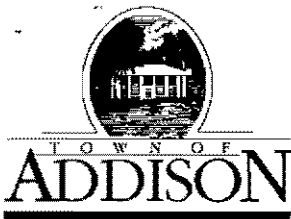
I have the following to Pat:

21 Oct alt 1 & alt 2

17 Nov alt 5 ^{Overpass} w/o ramps (preferred)

Larger Scale map w
water main -

Pat should have costs back by end of the
week.



LETTER OF TRANSMITTAL

Public Works / Engineering
 16801 Westgrove • P.O. Box 144
 Addison, Texas 75001
 Telephone: (214) 450-2871 • Fax: (214) 931-6643

DATE	1-18-99	JOB NO.	
ATTENTION			
RE:	Arapaho Rd, Phase II/III		
	Inwood / S. Quorum Connection		

TO Carmen Moran

GENTLEMAN:

- WE ARE SENDING YOU**
- Attached
 - Under separate cover via _____ the following items:
 - Shop Drawings
 - Prints
 - Plans
 - Samples
 - Specifications
 - Copy of letter
 - Change order
 - _____

COPIES	DATE	NO.	DESCRIPTION
1			Agreement for Update of Study for Two Proposed Union Pacific Railroad Crossings GBW Engineers, Inc

THESE ARE TRANSMITTED as checked below:

- For approval
- For your use
- As requested
- For review and comment
- FOR BIDS DUE _____ 19____
- Approved as submitted
- Approved as noted
- Returned for corrections
- _____
- Resubmit _____ copies for approval
- Submit _____ copies for distribution
- Return _____ corrected prints
- PRINTS RETURNED AFTER LOAN TO US

REMARKS For your file. This agreement updates a report that can be used for both of the above projects

COPY TO _____

SIGNED: Jim Lucini

If enclosures are not as noted, please notify us at once.



January 13, 1999

John Baumgartner, P.E.
City Engineer
Town of Addison
16801 Westgrove Drive
Addison, Texas 75001

Ref: Agreement for Update of Study for
Two Proposed Union Pacific Railroad Crossings

Dear Mr. Baumgartner:

GBW Engineers, Inc. (GBW) is pleased to provide this agreement to update a study for two proposed Union Pacific railroad crossings in the Town of Addison.


GBW has prepared the following Scope of Services for this project:

- Edit the existing report to incorporate comments from the Town of Addison including more recent traffic numbers.
- Review the report and make any other appropriate revisions.
- Incorporate color graphics in the report exhibits.
- Prepare ten final copies of the final report including any City comments on a draft submittal.

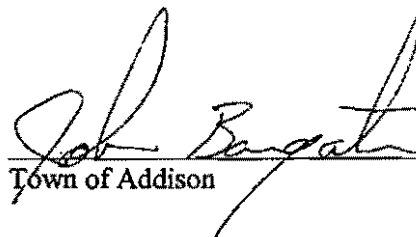
GBW proposes to complete the aforementioned Scope of Services for a fixed fee of \$900.

If you have any questions or would like to discuss this proposal further, please do not hesitate to call.

Very truly yours,


Bruce Grantham, P.E.
President

APPROVED BY:


Town of Addison 1-18-99
Date

BG/gg
C:\WPDOCS\PROPOSAL\ADDISON\RR-RPT.LTR

Facsimile Transmittal

Date: 1/18/99
Fax To: Jim Pierce
Of: Addison
Fax# (972) 450 2834

From: **GBW Engineers, Inc.**
1919 S. Shiloh Rd.
Suite 530, L.B. 27
Garland, Texas 75042
Tel. (972) 840-1916
Fax (972) 840-2156

Ref: _____
of Pages (including this sheet): 17

Fax From: Bruce Grantham

Comments:

Sub ^{structure} Bridge for full section - cost comparison
cat est for Charter Firm
MBNA Bldg

Need a Strip Map
See photograph

Get Pat started
on the 4 Buildings

972-248-8888
Pat Haggerty

Need Executive Summary
cats reflected in redrawing

6011
Runyon Section?

This message is intended only for the use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone, and return the original message to us at the above address via the U.S. Postal Service. Thank you.

Pat's cell phone 214-957-3329

ALIGNMENT STUDY REPORT

ARAPAHO ROAD EXTENSION

for the

TOWN OF ADDISON

Prepared by:

**HNTB Corporation
GBW Engineers, Inc.
Jack Hatchell & Associates**

January, 1999

Section 1***Project Description***

The subject project consists of alignment studies, determination of right-of-way (ROW) needs, meetings with property owners, and the preparation of ROW documents for the extension of Arapaho Road from Addison Road to Marsh Lane.

Section 2

History of Studied Alignments

The Town of Addison and the HNTB project team defined a design corridor earlier this year for the Arapaho Road extension as shown in Exhibit A. This corridor generally runs near or adjacent to the railroad track from Addison Road to just east of Surveyor Boulevard. The corridor angles toward the southwest as it crosses Surveyor Boulevard, then bends back to the west to follow Realty Road to the Marsh Lane intersection.

Within the design corridor, a preferred horizontal alignment was soon established, with the exception of a 2,500± foot section of roadway centered around the Midway Road intersection.

2.1 Alternatives Considered for the Midway Road Section

In recent months, the following alternatives have been evaluated for the Midway Road section:

1. Overpass with ramps on the north side requiring building acquisition(s) in this section.
2. Tunnel with ramps on the north side (same horizontal alignment as Alternative 1).
3. Overpass without ramps (same horizontal alignment as Alternative 1).
4. Tunnel without ramps (same horizontal alignment as Alternative 1).
5. Overpass without ramps requiring no building acquisition in this section.
6. Tunnel without ramps (same horizontal alignment as Alternative 5).
7. Overpass with ramps on the south side (same horizontal alignment as Alternative 1).
8. Tunnel with ramps on the south side (same horizontal alignment as Alternative 1).
9. Intersection at-grade.

Too much for Council

Rejected & why

copies of all these alternatives to Council?

Section 3**Corridor Descriptions**

The previous list of nine alternatives was narrowed to six Alternatives for more in-depth evaluation. These six Alternatives are described in detail below with a brief list of major issues associated with each Alternative.

for
Council
?

Alternative names in the following section only correspond to the roll plot drawings that were submitted to the Town of Addison, Texas.

3.1 Alternative 1 – Overpass at Midway Road With Ramps on the North Side of Proposed Arapaho Road

Alternative 1 has the same beginning and ending points as all of the alternatives. The corridor begins at the Marsh Lane and Realty Road intersection on the west end. From this intersection, the corridor remains on the existing alignment of Realty Road to a point of curve south of the existing substation west of Surveyor Boulevard. From there the alignment follows an angle south of the existing pump station and storage tank to a point of curve on the southwest side of the storage tank. The alignment then parallels the DART railroad ROW to a point behind the MBNA building fronting on Centurion Way. The corridor then make a curve to the right and proceeds east perpendicular with Midway Road approximately 200' south of the existing at-grade crossing with the railroad. Past Midway Road, the corridor makes a curve to the left and parallels the railroad ROW. The corridor then makes two at-grade crossings with the wye spur tracks just west of Addison Road. The corridor ties into the future intersection of Arapaho Road and Addison Road on the east end.

The proposed roadway would be close to existing grade for most of its length, except for the section at Midway Road. The overpass at Midway Road would be a three span precast prestressed I-beam bridge. The ramps associated with this alternative would be on the north side of future Arapaho Road between the proposed roadway and the railroad ROW. The ramps would be at-grade and would tie into the proposed roadway once its gets back to existing grade line.

This alternative has the following major issues of importance.

- **Geometry** – Geometrically the only issue is the ramp geometry. In order to tie-in with the proposed roadway the ramp speed is controlled by the vertical alignment to a design speed of 25mph. Resulting in a differential of more than ten mph between the ramp and the main roadway.
- **Safety** – A major safety concern relates to the merge area for the westbound on-ramp from Midway Road. Without the purchase of both the Charter Furniture and MBNA buildings, there is not sufficient ROW available to provide for the taper recommended in the *Manual on Uniform Traffic Control Devices*. In addition, the

Corridor Descriptions (cont'd)

retaining wall required between the ramp and the main lanes does not allow the merge to meet AASHTO guidelines for stopping sight distance and intersection sight distance. The concerns can be somewhat mitigated by creating a stop or signaled condition at the on ramp terminal.

- **Right-of-Way** – Impacts include the purchase of the Charter Furniture building, and probably the MNBA building near Midway Road. The corridor also requires the purchase of a building at Addison Road as well as a portion of the mini storage facility at Surveyor Boulevard.
- **Constructibility** – The issues include construction sequencing for the overpass erection and relocation of the concrete surface ditch. This alternative does not affect the 60" Dallas Water Utilities transmission main. There are no significant impacts to the underground franchise utilities at Midway Road.
- **Cost** – This corridor is predicted to be the most costly alternative excluding the cost of ROW acquisition and any indirect cost related to traffic congestion during the overpass construction of Midway Road.

3.2 Alternative 2 – Underpass at Midway Road With Ramps on the North Side of Proposed Arapaho Road

The underpass corridor follows the same horizontal path as its overpass counterpart. Vertically the corridor will underpass existing Midway Road. The corridor will require that Midway Road traffic is placed on a precast prestressed structure running north – south over the proposed roadway.

This alternative has the following major issues of importance.

- **Geometry** – The issues are the same as the Alternative 1.
- **Safety** – The issues are the same as the previous alternative. Adequate underpass lighting and storm drainage facilities in the sag will be required.
- **Right-of-Way** – The issues are the same as Alternative 1.
- **Constructibility** – The issues include construction sequencing for the underpass tunnel construction, including the removal of half of Midway Road at a time and the narrowing of Midway Road to four lanes during construction. This alternative does not affect the 60" Dallas Water Utilities transmission main, but its location will be close to the retaining walls along the depressed section of roadway. Some underground utility relocations will be necessary at Midway Road, including the replacement of the concrete channel with a double box culvert.

Corridor Descriptions (cont'd)

- **Cost** – This corridor is predicted to be one the most economic alternatives excluding the cost of ROW acquisition and any lane-hour charges for reducing the number of lanes on Midway Road while the underpass is being constructed.

3.3 Alternative 3 – Overpass at Midway Road Without Ramps on the North Side of Proposed Arapaho Road

The overpass corridor follows the same horizontal and vertical path as its counterpart with ramps.

This alternative has the following major issues of importance.

- **Geometry** – There are no negative geometric issues with this corridor.
- **Safety** – There are no negative safety issues with this corridor.
- **Right-of-Way** – It may not be necessary to purchase the MNBA building with this alternative.
- **Constructibility** – The issues are the same as Alternative 2 with ramps.
- **Cost** – This corridor is predicted to be one the most economic alternatives, excluding the cost of ROW acquisition and any indirect cost related to traffic congestion during the overpass construction at Midway Road.

3.4 Alternative 4 – Underpass at Midway Road Without Ramps

The underpass corridor follows the same horizontal and vertical path as its counterpart with ramps.

This alternative has the following major issues of importance.

- **Geometry** – The issues are the same as Alternative 2 with ramps.
- **Safety** – The safety concern with Alternative 2 at the ramp merge with the main lanes is not a factor with Alternative 4.
- **Right-of-way** – It may not be necessary to purchase the MNBA building with this alternative.
- **Constructibility** – The issues are the same as Alternative 2 with ramps.

Corridor Descriptions (cont'd)

- **Cost** – This corridor is predicted to be the most economic alternative excluding the cost of ROW acquisition and any lane-hour charges for reducing the number of lanes on Midway Road while the underpass is being constructed.

3.5 Alternative 5 – Overpass Without Ramps, No Taking of Charter Furniture Warehouse

The alignment of Arapaho Road for this alternative would parallel the railroad tracks at project crossing of Midway Road.

This alternative has the following major issues of importance.

- **Geometry** – The alignment would be on straight tangent, parallel to tracks.
- **Safety** – No significant safety issues are foreseen.
- **ROW** – This alternative would not require the acquisition of the Charter Furniture or MNBA buildings if roadway clearance of 13 feet would be acceptable to the Town of Addison and the property owners.
- **Constructibility** – The issues are the same as Alternative 3 assuming Dallas Water Utilities would accept a 15 foot easement for their 60-inch water line.
- **Cost** – The cost of this alternative is essentially the same as Alternative 3.

3.6 Alternative 6 – Underpass Without Ramps, No Taking of Charter Furniture Warehouse

The alignment for Alternative 6 is the same as for Alternative 5.

This alternative has the following major issues of importance.

- **Geometry** – The issues are the same as Alternative 5.
- **Safety** – No significant safety issues are foreseen.
- **ROW** – The issues are the same as Alternative 5.
- **Constructibility** – The same issues outlined with Alternative 2 apply to Alternative 6. However, significant utility relocations would be necessary at Midway Road with this alternative, including replacing the concrete-lined channel on the south side of the railroad with double box culverts on the north side of the railroad. Additional

Corridor Descriptions (cont'd)

utility relocations under the railroad itself would require more in-depth evaluation before the constructibility of this alternative could be confirmed.

- **Cost** -- It is not practical to predict the cost of this alternative until the constructibility issues have been better defined.

Section 4**Traffic Analysis**

Traffic assignments for the year 2020 were prepared by the North Central Texas Council (NTCOG) of Governments for the five alternatives for the Arapaho Road Extension. These alternatives are described below.

- "No Build" Alternative – what is the impact on adjacent streets if Arapaho Road is not extended?
- "At-Grade" Alternative – Arapaho Road extended with its intersection with Midway Road at-grade.
- "Grade-Separated" Alternative – Arapaho Road Extended with a grade separation at Midway Road without ramps.
- "Ramps on the North Side" Alternative – Arapaho Road extended with a grade separation at Midway Road and ramps on the north side of Arapaho Road.
- "Ramps on the South Side" Alternative – Arapaho Road extended with a grade separation at Midway Road and ramps on the south side of Arapaho Road.

4.1 Projected Traffic Volumes

The table below presents a summary of projected traffic impacts for the extension of Arapaho Road with its intersection with Midway Road grade separated without ramps.

Roadway Section	Projected Daily Traffic Volumes by Year 2020	
	"No Build"	"Grade Separated"
Arapaho Road		
Addison Road to Midway Road	-	17,000
Midway Road to Marsh Lane	-	13,000
Belt Line Road		
Addison Road to Midway Road	58,000	54,000
Midway Road to Surveyor	47,000	42,000
Midway Road		
North of Arapaho Road	52,000	44,000
South of Arapaho Road	58,000	46,000

Traffic Analysis (cont'd)

As shown in the above table, the extension of Arapaho Road from its current terminus to Marsh Lane reduces projected traffic on Belt Line and Midway Roads. Year 2020 volumes on Belt Line Road are projected to be approximately 5,000 vehicles per day (vpd) less with Arapaho Road extended. Volumes on Midway Road are projected to be reduced by 8,000 to 12,000 vpd. Arapaho Road is projected to carry 17,000 vpd east of Midway Road and 13,000 vpd west of Midway Road.

The section of Arapaho Road east of Midway road should be constructed as a four-lane divided facility based on projected traffic volumes. West of Midway Road, Arapaho Road can be constructed as a four-lane undivided roadway.

In summary, traffic projections prepared by NTCOG indicate that the extension of Arapaho Road to Marsh Lane will significantly reduce the projected future traffic on Belt Line and Midway Roads.

Section 5

Evaluation of Final Alternatives

The alignment alternative numbers used in this section are the same as those listed in Section 2 of this report. Horizontal and vertical alignments, along with Opinions of Probable Cost, were prepared for Alternatives 1 through 5. These costs are included in a matrix of issues related to these alternatives, in addition to Alternative 6.

Due to extensive utility relocations in a tight construction corridor, the viability of Alternative 6 is questionable at this point. If the Town wanted to pursue this alternative, further coordination would be necessary with DART and DWU prior to developing an Opinion of Probable Cost.

A discussion of the issues described in the attached matrix are provided below:

- Charter Furniture Building Take - Moving the alignment south of the railroad provides additional working space between Arapaho Road and the ROW for the existing 60-inch DWU water line and the proposed double 9'x5' box culverts.
- MNBA Building Take - Without taking the MNBA building, there is insufficient room to create a safe merge condition for the westbound entry ramp onto Arapaho Road. The lack of sight distance at the merge is more severe with the overpass due to the additional distance for merging the vertical alignment. Unless the MNBA building is purchased, ramps are not recommended without a stop condition on the ramp traffic.
- Relocate DWU Water Line - There are 38 feet from the railroad ROW to the face of the Charter Furniture building. Using a four-lane undivided roadway with 11-foot lanes for Alternative 5 (overpass), and providing a 15-foot easement for DWU, the south overpass wall would be located approximately 16 feet from the Charter Furniture building. If a three-foot sidewalk were provided across one side of the overpass for emergency access, the separation from the wall to the furniture building would be reduced to 13 feet.
- Noise - Although truck traffic is likely to be low on the Arapaho Road extensions, noise may still be a source of complaint from affected business owners if an overpass is constructed. If automobile traffic is the predominate source of noise, such noise is primarily due to tire noise at pavement level. Asphalt surfacing has been known to reduce tire noise and might be considered if automobile noise is an issue. Additionally, the normal height traffic barrier could be increased to provide some insertion loss, or a full height noise barrier may be considered.
- Realign Midway for Construction Sequence - If the underpass was selected, a probable construction sequence would require the removal of one half of Midway

Evaluation of Final Alternatives (cont'd)

Road at a time. In conjunction, Midway Road would have to be realigned and narrowed to four lanes through the construction zone on two occasions. The tunnel construction could affect Midway Road in this manner for up to a year.

- **Sump Storm Sewer** - All the tunnel options would require the draining of the sump under Midway Road. There appears to be sufficient grade to install a storm sewer from inlets in the sump to the concrete channel west of Surveyor.
- **Move Box Culvert to North Side of Railroad ROW** - Alternative 6 (underpass) would require the installation of double 9'x5' box culverts on the north side of the railroad. If a minimal separation were to be provided from the box culverts to an existing 12 inch sanitary sewer line, the edge of the boxes would be approximately five feet from several existing buildings. In addition, multiple drainage and utility relocations would be required under the railroad tracks at Midway Road, and the box culverts would need to cross back under the railroad further to the west.

Section 6**Other Project Issues**

Two other issues of note have been discussed, outside the limits of the Midway Road section.

1. **Railroad Spur Crossings**

The two railroad spur crossings just west of Addison Road could prove difficult and time-consuming to obtain. We recommend that coordination begin with Union Pacific as soon as a final alignment has been selected.

2. **Realty Road Section**

The traffic volumes indicate that a four lane undivided roadway would be adequate along the existing Realty Road alignment. Omitting a median from most of this section of the project would minimize the impact on adjacent parking lots and driveways. The roadway could still be widened for turn lanes at Midway Road and Surveyor Boulevard.

Section 7

Conclusions and Recommendations

The primary goal which has been expressed by Town of Addison staff for this project is to relieve congestion on Belt Line Road. All the alternatives will provide some relief to Belt Line Road. The attached matrix summarizes the major drawbacks associated with each alternative.

Three overpass and three tunnel alternatives were evaluated, and in each case, the corresponding tunnel alternative was more expensive given that the extensive utility relocations required for Alternative 6 would result in its cost exceeding that of Alternative 5. A tunnel would be more visually appealing than an overpass, however, the narrowing of Midway Road would increase traffic delays during the 12 months of construction. Although a tunnel would create less noise impact, only five commercial buildings are located within the overpass limits on both sides of the railroad, including Charter Furniture.

If Town of Addison staff are comfortable with an overpass at this location, we would recommend that one of the overpass alternatives be selected.

Of the three overpass alternatives analyzed, Alternative 5 pushes the south overpass wall within 13 feet of the Charter Furniture building with a three-foot sidewalk for emergency access on the overpass. In addition, it would require DWU to accept 15 feet for maintenance of their 60-inch water line. This is their normal easement width for a much smaller service line.

Alternative 3, like Alternative 5, has no ramps, however, it would require the purchase of the Charter Furniture building. The purchase of this property would make for less constricted construction in this area.

Alternative 1 requires the purchase of the Charter Furniture and MNBA buildings in order to make the entry ramp onto Arapaho Road safe at the merge point. Alternative 3 could be constructed with an exit ramp only, and no entry ramp. Therefore, the benefit of the entry ramp may be compared with the cost of the MNBA building to determine its justification.

Of the three overpass alternatives, alternative 5 is the only one which does not require the purchase of either the Charter Furniture or MNBA buildings. Given the escalating cost of real estate, neither the additional construction area associated with Alternative 3 nor the ramps associated with Alternative 1 appear to justify the required property purchases. Therefore, it is our recommendation that Alternative 5, an overpass without ramps at Midway Road and no building takes at this location, be selected.

ADDISON ALIGNMENT ALTERNATIVES

Midway Road Section — Matrix of Issues

	ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3	ALTERNATIVE 4	ALTERNATIVE 5	ALTERNATIVE 6
DESCRIPTION OF ISSUE	Overpass with ramps on north side	Tunnel with ramps on north side	Overpass without ramps	Tunnel without ramps	Overpass without ramps; without building take	Tunnel without ramps; without building take
Alignment Description	Separated from railroad right-of-way	Same as 1	Same as 1	Same as 1	Adjacent to railroad right-of-way	Same as 5
Charter furniture building take	Yes	Yes	Yes	Yes	No	No
MBNA building take (for ramp safety)	Yes	Probably	No	No	No	No
Relocate DWU water line	No	No	No	No	Possibly	Yes
Noise	Yes	No	Yes	No	Yes	No
Realign Midway for construction sequence (4 lanes)	No	Yes	No	Yes	No	Yes
Sump storm sewer	No	Yes	No	Yes	No	Yes
Move box culvert to north side of R/R; other utility relocations	No	No	No	No	No	Yes
Opinion of Probable Cost (with 20% contingency)	\$18,709,085 (+buildings)	\$21,920,110 (+buildings)	\$18,669,786 (+building)	\$21,881,830 (+building)	\$21,809,772	N/A

Fence

PVC coated vinyl

Street lights

Gate & Driveway as agreeable
with design scope.

Sub-Tenant to cover
rent / explore other options

call Herring & see if he
has contacted his Tenant