

Addison Urban District Plan Review
1995

Sasaki Associates, Inc.

M e m o r a n d u m

Date

6/12/95

Project

Addison Urban District (SA# 41532)

Subject

Concept Plan Review

From

Jim Maloney

To

Carmen Moran

cc: Terry Morgan, Dan Kenney

DRAFT COPY
NOT FOR PUBLIC RELEASE

As requested, Sasaki Associates, Inc. has reviewed the Urban District Concept Plan submittal by Columbus Development. Following are our comments.

- ***Variations and Alterations***

It is the intent of the Sections 7.B.1(h), that any variation or alteration include modifications to the standards and guidelines established in the district and that the exact nature of the variation and alteration be identified at the submission stage.

The implication of the variations submitted allows the applicant to modify uses, total floor areas and phasing for any parcel until such time that a development plan has been approved by the City for that parcel. We do not feel that this is acceptable and if the applicant anticipates any variations to these items, the exact nature of these variations should be identified in sufficient detail to enable the City to evaluate whether such variations/alternates should be authorized.

- ***Context Plan***

Context Plan is unreadable and should be modified.

- ***Total Floor Area***

Total floor area for the residential sub-district is not provided. Submittal plans establish a maximum floor area per tract, which if each parcel was developed to it's maximum, would result in 4,589,850 square feet of development, a gross F.A.R. over 2.0. (assuming 52.5 acres). This level of development exceeds the 1.78 F.A.R. established in the zoning ordinance.

While the applicant may not intend to develop each parcel to it's maximum, Sasaki recommends that the total allowable floor area for the district be stated on the plan and that the plan note that the total gross F.A.R. allowed for the district is 1.78.

- ***Concept Plan***

The concept plan designates a Commercial sub-district, but no information, either as to total square footage or phasing is provided. The commercial sub-district can be re-zoned to a "UC" district classification without submittal of a concept plan. Therefore, Sasaki recommends that the Commercial sub-district be deleted from the concept plan.

- ***Off-site R.O.W.***

The concept plan shows several roadway extensions which are on property owned by others. It is not clear who is obtaining the R.O.W. and when. The

1925 San Jacinto Street
Dallas, Texas
75201

Telephone 214 922 9380
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applicant should be aware that the concept plan as presented offers ~~the~~ the possibility of several "dead-end" streets. The applicant should either be prepared to acquire R.O.W. and construct the streets through, or provide a turn around for vehicles. A note shall be shown on the concept plan stating that any street designation that are not within the boundaries of the district have no effect, and do not commit the city to obtain R.O.W. or participate in the construction of such streets.

• **R.O.W. Dedication**

R.O.W. dedication for roadways serving an individual phase of development shall include the entire R.O.W. necessary to complete construction of the entire roadway improvement.

• **Intersection Design**

Intersections, particularly "T" intersections shall have sufficient radii for emergency vehicles.

• **Spectrum Drive**

If there has not been a resolution of the crossing of Spectrum with the DART Rail R.O.W. at the time that Parcel 2-P is submitted for Development Plan approval, the applicant shall be required to dedicate sufficient R.O.W. and design the site to accomadate a future grade separated crossing

• **Residential Streets**

Residential streets have been design^{ed} and approved based on the assumption that their primary function would be to serve residential uses. Alternate cross section for streets which will serve non-residential uses should be provided. The applicant should be aware that construction of a residential street adjacent to parcel 1-C could preclude non-residential development on parcel to the north.

Applicant shall provide street designation for the street which run^s adjacent to the southern boundary of the district. ROW appears insufficient. Applicant shall also verify sight distance from rail ROW

Street Framework Diagram on Street Sections sheet show, in the southwestern portion of the site, a number of streets which are either off-site, and are therefore not subject to this Concept Plan, or streets which are not shown on the Concept Plan, including an undesignated street along the south line. Applicant shall clarify and revise diagram as necessary.

• **Proposed Street Sections**

Sasaki has reviewed the proposed street sections and ^{has} have found them, with the exceptions noted below, to be generally consistent with the design intent of the cross sections in the zoning ordinance.

- Section A, B, and C should have an 1.5' concrete band adjacent to parallel parking so that people exiting parked cars will have solid surface to step onto.
- Depth of diagonal parking on Section F: Retail Street has been increased from 16' to 20'. Sasaki has no objection to this change.

DESIGNATE
R-STREETS
AND MENS AS
R-1, R-2, M-1
ETC.

- Zoning ordinance indicates four travel lanes (44' excluding parking) for the Mildrid Street section west of the Rotary. The applicant has reduced the section to 45' including parking which reduces the roadway to two travel lanes. Sasaki has no objections to this change as long as the applicant can verify that two travel lanes would be sufficient for anticipated traffic volumes, including off-site traffic, (i.e. Addison Theatre/Conference), and an acceptable transition between the existing Mildrid and the new cross section can be developed
- Neckdowns" on Sections G and H should be increased to 9'.

- **Office Uses**

A detailed facilities study, including a traffic impact assessment which demonstrates that the project can be adequately supported by utilities and transportation facilities shall be provided prior to development plan approval of any parcel with a building which has "office" as a predominant use.

- **Open Space**

ALL SPACES SHOWN AS PUBLIC

Open space shall be labeled as O-1, O-2, etc.

Applicant shall confirm that this parcel 2-R is dedicated open space similar to other open space. (Symbol is different.)

Rotary and Mildrid Street Park should not be dedicated as park land to provide future flexibility. However, the Rotary and Mildrid Street Park has been counted as part of the open space dedication.

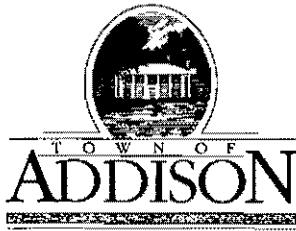
A total of 10.95 acres of open space has been shown on Concept Plan, sufficient for 6550 residents or 4336 units. If additional units are built, additional open space will be required.

- **Utility Easement**

It has always been the intent of the City that a pedestrian/bike path be constructed along the utility easement along the southern district boundary. Construction of a roadway over the easement precludes this option. The proposed roadway should be shifted off of the utility easement to allow construction of a pedestrian bike path.

Carmen, we have not addressed utility issues in this review since they are beyond our scope of expertise and John Baumgartner is better suited to make these comments. However as we discussed Thursday, a phasing plan for infrastructure improvements and design reports and calculations supporting the sizing of facilities should be required. Utility sizing should also accommodate any off-site users which may tie into the project system.

Please call if you have any questions or need any additional information.



FIRE DEPARTMENT

(214) 450-7200 FAX (214) 450-7208

Post Office Box 144 Addison, Texas 75001

4798 Airport Parkway

MEMORANDUM

12 September, 1995

TO: John Baumgartner, Director of Public Works
FROM: Gordon C. Robbins, Fire Prevention Chief
SUBJECT: Addison Circle - preliminary plan review

Thank you for the opportunity to review this submittal. I have the following comments:

- No "neck down" or other traffic restrictor shall be narrower than 24-feet in width.
- All radii on turns and neck downs shall be a minimum of 24' inside and 50' outside.
- Fire hydrants shall be on 300-foot centers along all fire lanes, streets and other access ways.
- Dead end streets and fire lanes may be no longer than 150-feet.
- All buildings shall be within 150-feet of a dedicated street or fire lane.

If you have any questions, please contact me at ext. 7220

Thank you.

HUITT-ZOLLARS

Huitt-Zollars, Inc. / Engineering / Architecture / 3131 McKinney Avenue / Suite 600 / LB 105 / Dallas, Texas 75204-2416 / 214-871-3311 / FAX 214-871-0757

November 13, 1995

Mr. John Baumgartner, P.E., Director
Town of Addison Public Works
16801 Westgrove
P.O. Box 144
Addison, TX 75001

Re: Addison Circle
HZI Project No. 01-1822-04

Dear John:

Attached for your review are three sets of plans for the Addison Circle project. This submittal includes horizontal control plans, demolition plan, paving typical sections, utility sections, paving plans & profiles, drainage area maps, stormwater calculations, stormwater plans & profiles, water plans & profiles, wastewater plans & profiles, pollution control plans, and standard details. There are a few items I wanted to call to your attention as you review the plans. The items are:

1. Street names have not been selected by Columbus at this time.
2. The quantity sheets will be added to the final submittal as we determine the final construction quantities.
3. Normally we would include the sidewalk paving patterns on the streetscape plans. However, there is too much information needed on these plans to clearly show everything so we are going to prepare separate sidewalk plans. These detailed sidewalk plans indicating the types of materials to be used, the sidewalk patterns, and the limits of the public contract are currently being drafted based on the conceptual streetscape plans prepared by Newman, Jackson & Bierberstein, a copy of which are enclosed for your use in reviewing these plans. Also, the edge restraint for the brick sidewalk will be modified to show a soldier course, brick turned on end, constructed at the back edge of the concrete sidewalk base.
4. Details of the brick pavement in vehicular areas indicating the types of materials to be used, the brick patterns, and the limits of the brick pavers are also still being drafted. The jointing plan for the roundabout will be revised to reflect the brick patterns based on the conceptual plans.
5. Additional detail will be added to the roundabout; geometry, grades, cross-section, striping, signage, etc.; upon approval of the roundabout study (submitted under separate cover).

Mr. John Baumgartner, P.E.
November 13, 1995

6. A sidewalk easement will need to be added at the southwest corner of the roundabout or the abandonment of the Mildred Street right-of-way will need to be revised to accommodate the sidewalk.
7. Grading at the water tower and the grading of temporary swales draining existing offsite runoff into temporary "Y" inlets is currently being worked on and will be submitted when complete.
8. Roadway cross-sections and earthwork quantities will be included in the final submittal.
9. We are currently developing a detail of the residential street / mews intersection depicting the limits of street paving, sidewalk paving, curb limits, barrier free ramp provisions, and no parking areas. We will submit the detail as soon as it is finished.
10. We will be meeting with the Town Special Events Committee this week to discuss the construction of the project and the scheduling and coordination between the Town and the contractor. After the meeting we will be preparing a detailed sequence of construction including narrative and plans. We will submit the construction sequencing as soon as it is finished.
11. We are currently putting the bid documents together and will submit them for review when the construction sequencing and bid schedules are complete.
12. The design of the T.U.E. electric duct bank will be complete within a week and submitted to the Town and T.U.E. for review.
13. Planting and irrigation plans are currently being prepared by Newman, Jackson & Bieberstein and will be submitted within 2 weeks.

Please give me a call if you have any questions.

Sincerely,

HUITT-ZOLLARS, INC.



Kenneth A. Roberts, P.E.
Associate

HUITT-ZOLLARS

Engineering Architecture

Dallas • Fort Worth • Houston

• Phoenix • Orange County

FACSIMILE TRANSMITTAL

Date: 9/13/95

Fax No.: 931-66643

H-Z Proj. No. 01102204

No. of Pages: 2
(Including Cover Sheet)

To: John P. BARNHARTNER

From: JOE ARDIANT

URGENT For Your Review Please Call Upon Receipt Orig. To Follow By Mail

JOHN,

We understand that the Addison Center closed to the NE corner of Addison Road and have made the necessary changes to the drawings. In our design, the driveway is clear from the driveway area proposed in the Design, obtained from the Town of Addison, that the proposed Fronting Addison Road are not ultimately intended to be included in Addison Design. This is the reason the design assumes that driveway will be cutback to the Addison Road System. Please call and advise on how you want this driveway handled.

FROM:

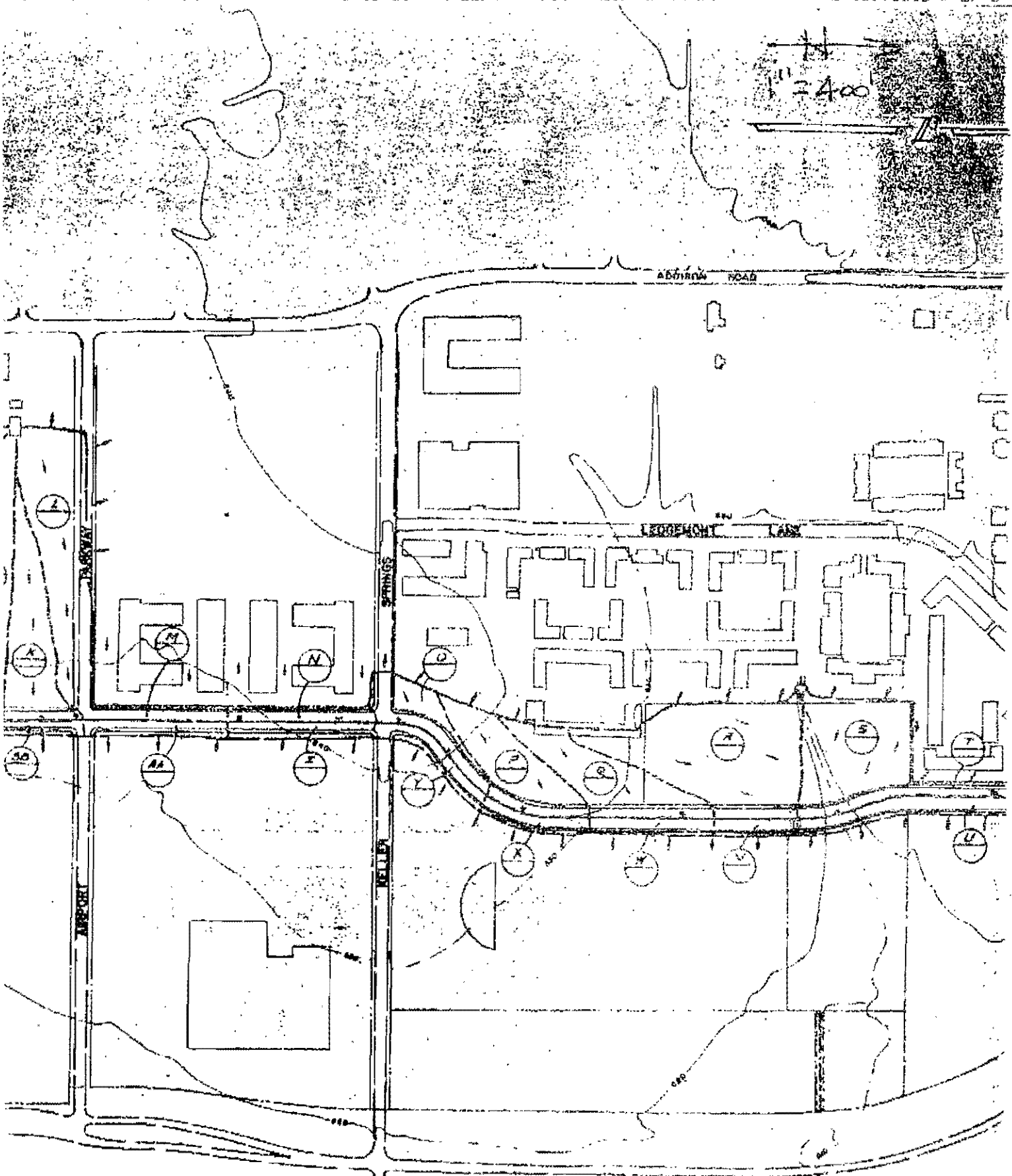
David Meyer

SENT BY:

1

DATE:

If you had any problems receiving the Facsimile Transmittal, please contact Ms. Janet Wilks at the individual listed above at (214) 871-3311. Thank you.



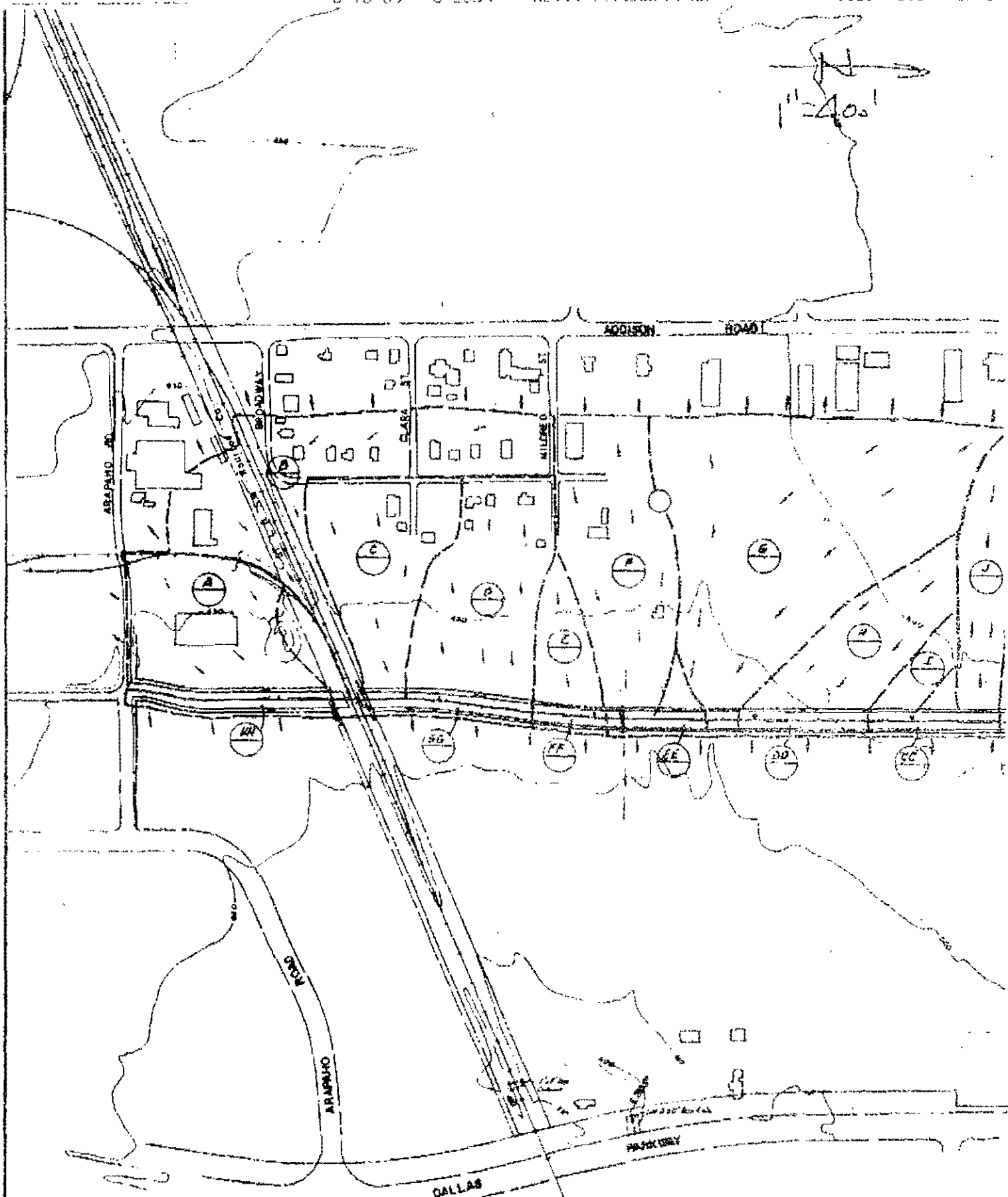
1" = 400'

LEGEND
 --- Drainage Basin
 --- Storm Drainage
 --- Contours
 --- General Drains

GE BASIN TABLE

K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH
188	308	095	082	084	177	190	804	194	012	059	437	037	290	037	032	234	023	337	037	037	037	037	045
139	190	16	16	8.1	4.1	4.6	185	112	2.0	40	86	86	28	28	73	84	17	78	16	26	16	37	47
187	186	30	30	24	4.8	3.8	727	646	2.5	47	3.1	3.1	25	37	27	50	20	33	3.1	30	19	4.8	8.5
76	319	27	37	30	6.0	6.6	287	107	27	58	38	38	3.1	4.1	34	27	24	4.1	38	37	23	67	68

CITY OF ADDO
 DALLAS COUNTY,
 QUORUM OF



GENERAL NOTES

1. Drainage basin limits are approximate. Actual limits for drainage calculations were delineated on larger scale topo maps. Limits shown this map are indication of general area only.

DRAINAGE										
Designation	A	B	C	D	E	F	G	H	I	J
* AREA	6.66	6.75	8.20	5.00	1.50	2.67	14.81	1.57	1.71	3.01
** Q ₁₀	2.07	2.9	28.1	4.87	1.1	22.0	106.8	31.1	9.1	21.7
Q ₂₅	70.6	85.8	164	46.7	15.5	32.8	182	34.2	10.6	25.7
Q ₅₀	98.1	123	255	67.6	19.1	48.6	254.7	48.1	13.8	31.8
Run CA	1.97	1.11	1.77	1.1	1.67	5.00	13.95	3.01	1.74	2.71

Planning
Architecture
Landscape Architecture
Urban Design
Transportation Planning
Civil Engineering
Environmental Services
Interior Design
Graphic Design

6/14/95
Date

Addison Urban District (SA# 41532)
Project name/number

Carmen Moran
To

Town of Addison
Company

960-7684
Facsimile number

450-7000
Voice number

Jim Maloney
From

4
Number of pages transmitted (including transmittal)

4:01 PM
Time

Transmitted by
Extension

Comments

Carmen,

Attached are draft of the revised sections. Major differences between our sections and those submitted by Columbus are.

- **Section H:** We have made the sidewalk the same size on both sides of Mildred.
- **Section G & H:** Increased parking and "neckdown" from 7.5' to 9'.

In addition, we have changed the setback on Residential Streets from 10' to 5' - 8' to be consistent with the zoning ordinance text.

Please review and get back to us with any comments. We will forward originals as soon as we have received your approval.

Thanks

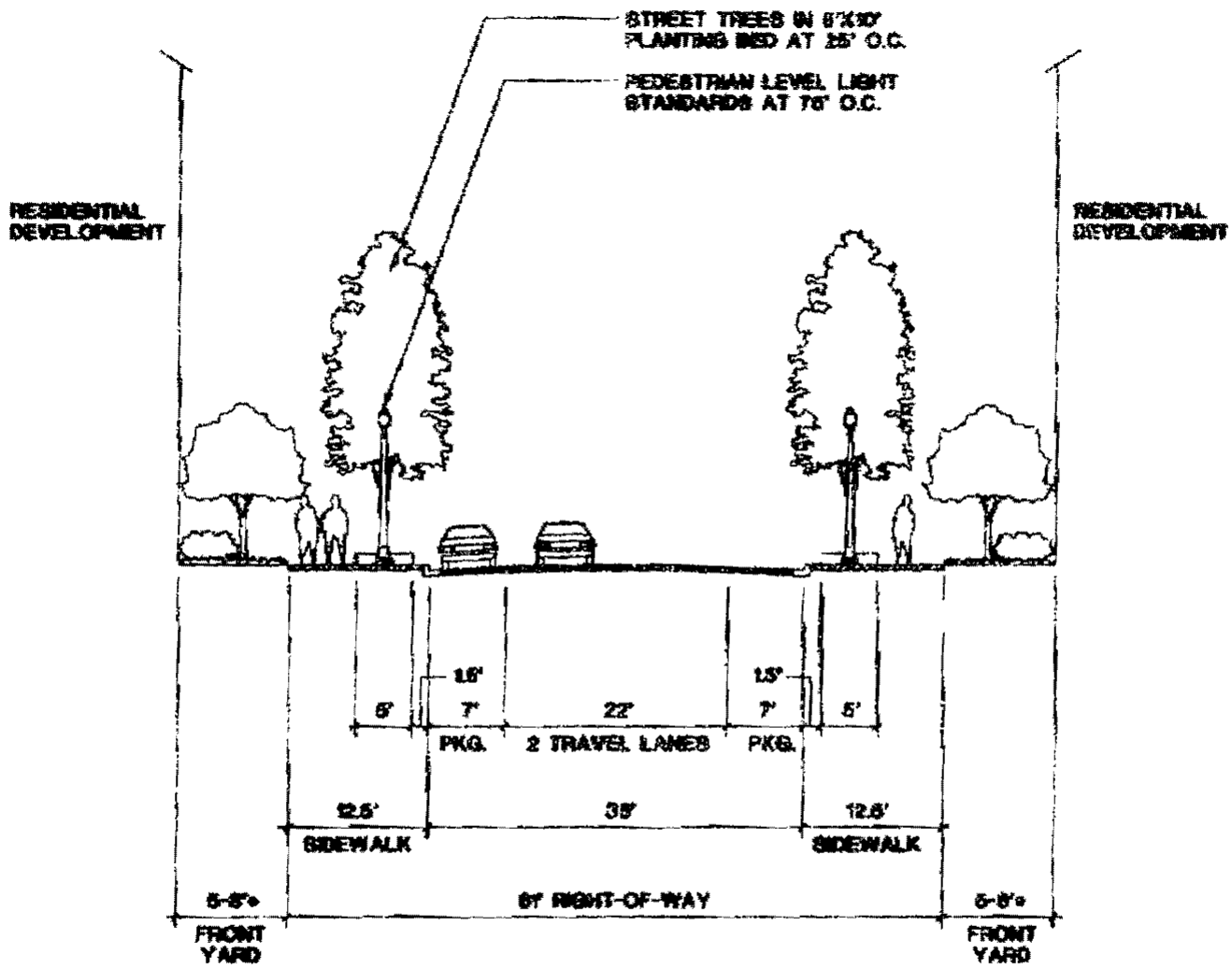
cc:

John
Please review
CM

Post-It [®] Fax Note 7671		Date 6/15/95	# of pages 4
To J. LEWINGBARNER	From C. MORAN		
Cc/Dept C.C.	Co.		
Phone #	Phone # 450-7013		
Fax # 06	Fax #		

1925 San Jacinto Street
Dallas, Texas
752

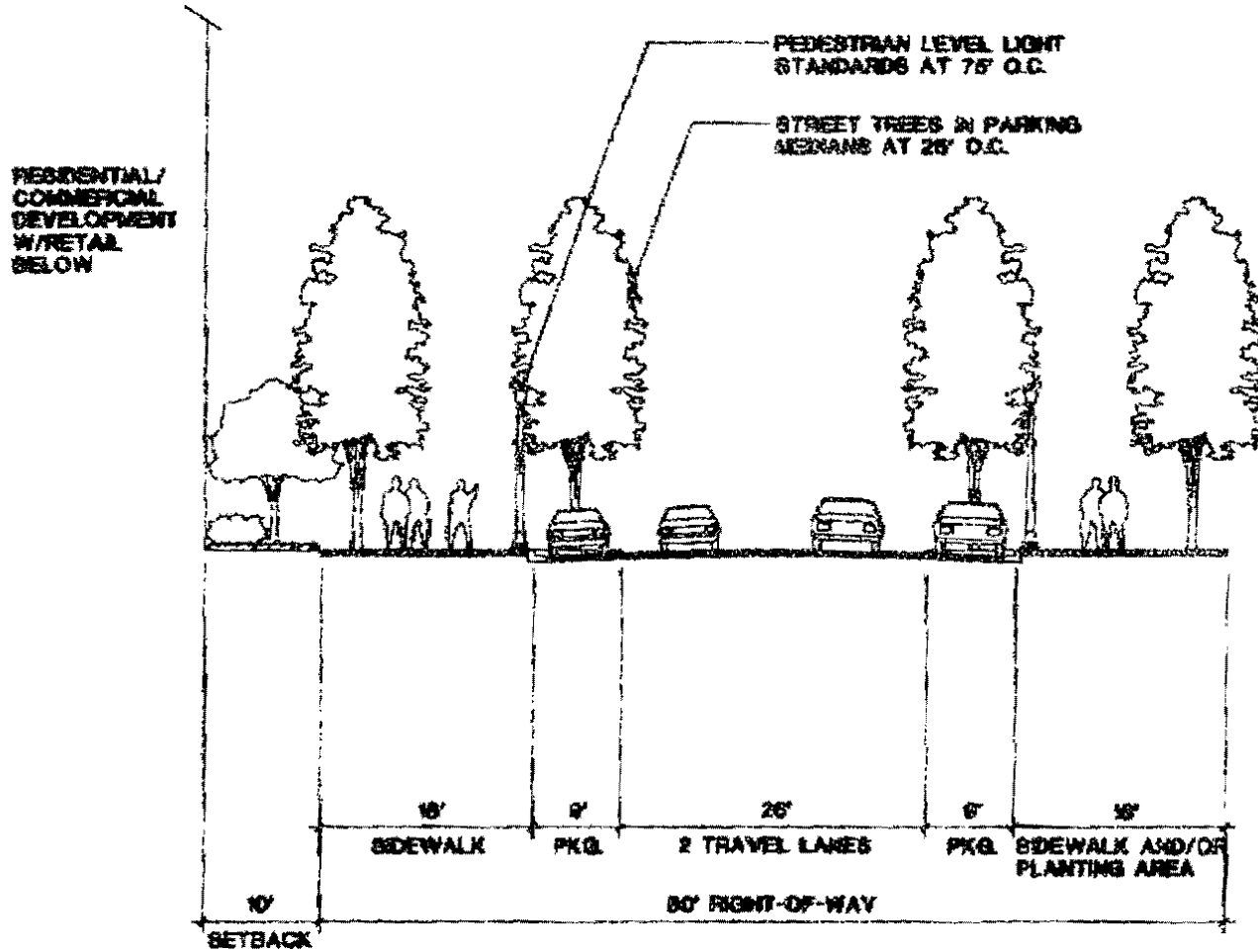
Telephone 214 922 9380
Facsimile 214 954 0087



• 5' WHERE BUILDINGS OR STRUCTURES FRONT ON PUBLIC OPEN SPACE. IN ALL OTHER CASES, A MAXIMUM OF 75% OF THE BLOCK FRONT MAY BE CONSTRUCTED TO THE BUILD-TO-LINE WITH THE REMAINDER OF THE BLOCK FACE CONSTRUCTED NO CLOSER THAN 8' NOR MORE THAN 25'.

Category C - Residential Street

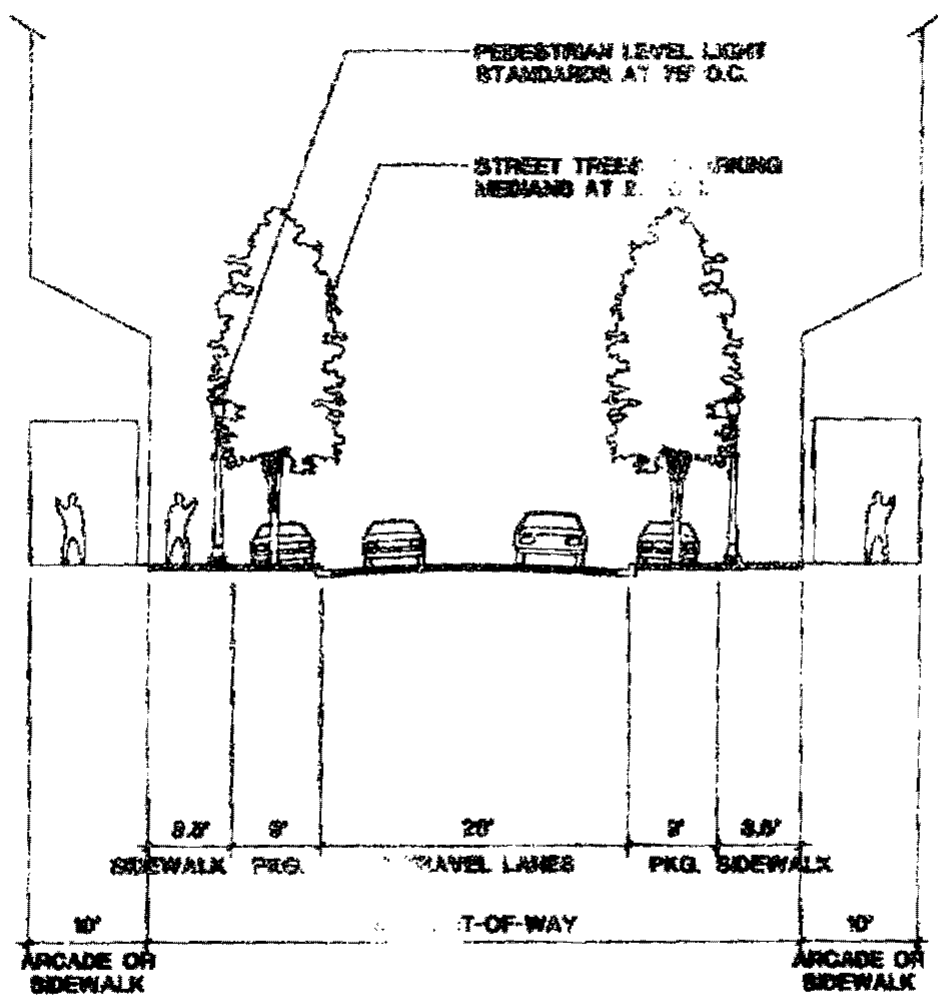
Scale: 1/16"=1'-0"



NOTE: 10' SETBACK CAN BE PAVED ADJACENT TO COMMERCIAL USES.

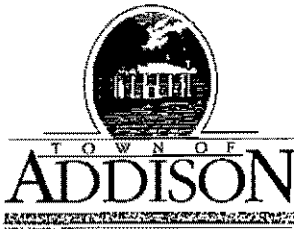
Category H - Mildred Street West of Rotary

Scale: 1/8" = 1'-0"



Category G - Retail Street @ Neckdown (Mildred)

Scale: 1/16"=1'-0"



PUBLIC WORKS DEPARTMENT

Post Office Box 144 Addison, Texas 75001

(214) 450-2871

16901 Westgrove

MEMORANDUM

To: Carmen Moran
Director of Developmental Services

From: John R. Baumgartner, P.E. *JR B*
Director of Public Works

Re: Addison Circle - Preliminary Plat/Construction Plans

The Public Works Department has reviewed the referenced plan. There are several outstanding issues remaining from the concept plan that have not been addressed. Our comments are as follows:

1. Utility and Drainage:

- A. A water and sanitary sewer study prepared by a professional engineer is necessary to verify the adequacy of the proposed system. This study shall include all property included in the approved concept plan and its respective drainage basin.
- B. A storm-water study prepared by a professional engineer is necessary to verify the adequacy of the system. As a minimum this study shall include all property included in the approved concept plan and its respective drainage basins.
- C. Storm drainage system shall be extended to provide for the properties north and west of the proposed development. The design engineers shall demonstrate that the downstream system has sufficient capacity for the 100-year storm event or provide storm water detention.
- D. The sanitary sewer shall be extended to provide service to the properties north and west of the proposed development.
- E. No residential water, irrigation, or fire sprinkler service is available from the transmission mains in Quorum and Mildred.
- F. A sewer line extension is necessary to provide service to the properties on the northwest and southwest corners of Mildred and Quorum.
- G. The actual location within the road right-of-way of the various utilities will be determined at the time of development. These locations must provide for the

installation of private utilities (electric, gas, telephone, fiber, television, etc...) with franchise or license agreements.

- H. Additional utility and storm drainage easements are required.
 - I. What happens with the storm drainage east of the rotary? Does it affect the existing residence on the northwest corner of the tollway and railroad?
2. Quorum Drive:
- A. A design report should be provided that details the appropriate roadway geometrics, traffic control, markings, signage and parking for the proposed rotary prior to finalizing the lot layout. See the attached review provided by Barton Aschman.
 - B. The street section should be revised to reflect the minimum roadway dimensions indicated in the ordinance which provides for two 11 foot lanes and an 8 foot parking lane from face of curb to face of curb.
 - C. Quorum Drive is currently identified as a major arterial on the thoroughfare plan. The developer should provide evidence from his traffic consultants to verify the proposed revision to the plan.
 - D. The additional right-of-way required for Quorum Drive corridor should be dedicated with Phase I from the railroad to the northern district boundary. Because this development is the first phase of a multi-phase project, this corridor is necessary for utilities and possible roadway expansion.
 - E. Ingress, egress, and parking shall be situated so they do not interfere with the operation of the rotary. Additional design information is required to determine the appropriate location.
3. Residential:
- A. All streets shall be designated by a name or number.
 - B. If some of the property accessing the proposed streets is not residential alternative cross sections are required.

- C. With the exception of the double parking where people were moving into apartments and the parking in the neck-down areas, we were comfortable with the residential street widths of 37 feet from back of curb to back of curb with neck-down areas at intersections being 23 feet (back to back). However, this assumes the appropriate radius is provided for emergency/service vehicles and street lights, furniture, trees, etc., are set back sufficiently to avoid any conflicts with turning vehicles and visibility at the intersections.
 - D. Where the residential streets dead-end, provisions should be made to provide a vehicular turnaround until the roadway are continued.
4. Mew's:
- A. If the mew's are going to be dedicated as public streets then a standard curb and gutter section is recommended to control traffic and drainage. As a compromise, a section with a roll up curb may be acceptable.
 - B. The current cross-section proposed in the preliminary construction plans does not match the concept plan cross-section. Has this changed? Please revise as necessary.
5. Mildred:
- A. The approved concept plan does not reflect a reduction in Mildred's cross-section to approximately 60 feet. This reduction appears inconsistent with the current use of the street and will limit our ability to add additional parking or lanes if the demand warrants at the approach to the rotary.
 - B. If the reduced cross-section is approved, the relocation of the existing 24" waterline is required.
 - C. Ingress, egress and parking adjacent to the rotary shall be located so that they do not interfere with the operation of the rotary. Additional design information is required to determine the appropriate location.
6. Alternate material for brick accents bands, crosswalks, sidewalks, streets, etc..., should be considered. In the past, the Town has successfully used patterned concrete or pave stone (placed on a concrete base) to give an appearance of brick with more durability, serviceability, and less susceptibility to settlement.
7. Vehicular visibility should be provided for all streets, mews, and driveway approaches/intersections.

8. Miscellaneous Plat:

- A. Lot 1 Block "B" does not meet the minimum lot width of 200 feet required in the concept plan ordinance.
- B. Additional right-of-way is required to provide sufficient sidewalk width at the street - street and street-mew intersections.

9. Private Utilities:

- A. Provide details regarding the location and access to the TU facilities serving the district.
- B. Provide sign-off from private utilities to approval of easements and cross-sections for the district.

10. Preliminary Construction Plans:

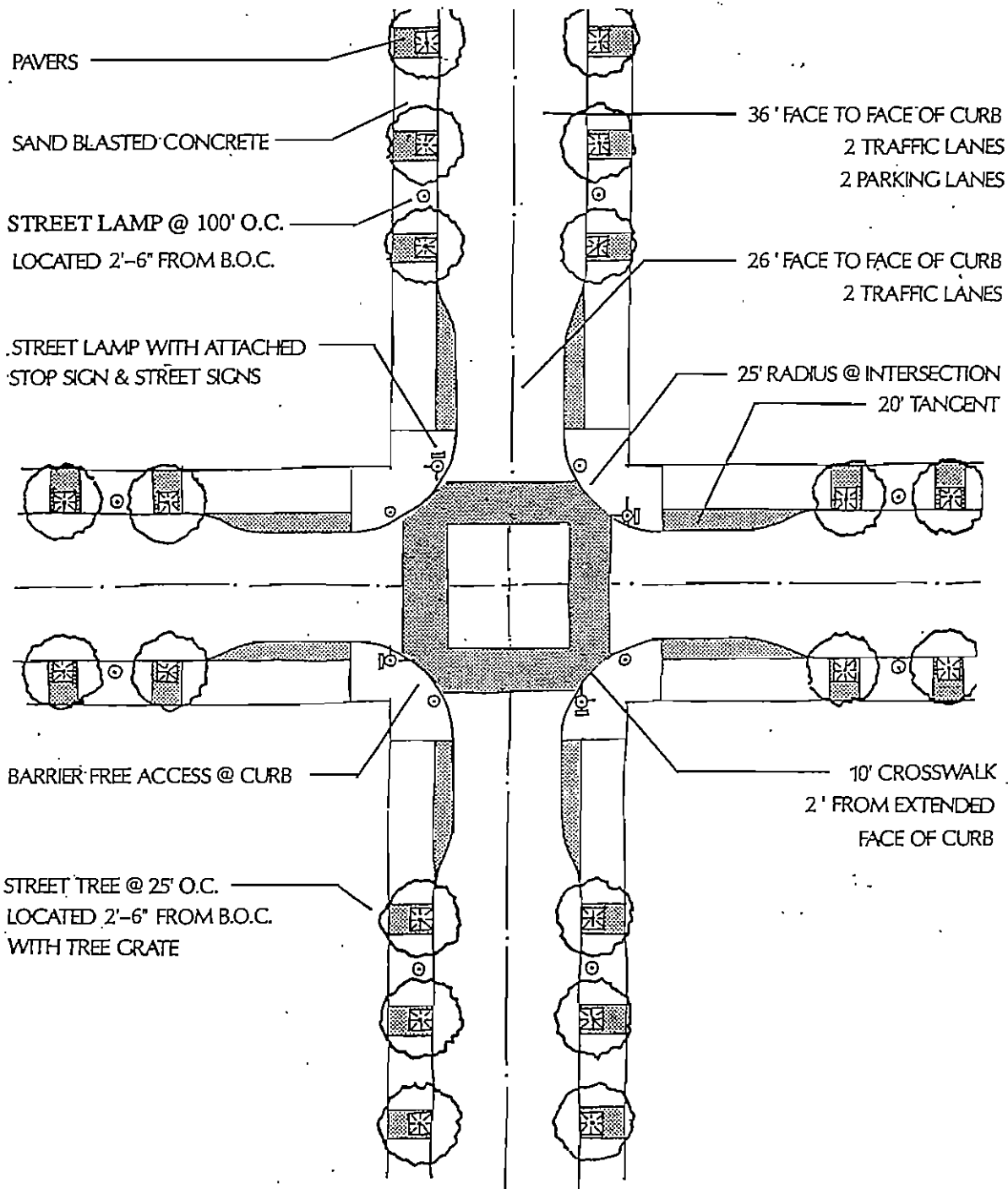
- A. Provide additional information from rotary consultant regarding markings, parking, signage, transitions associated with the Quorum/Mildred intersection.
- B. Provide details and design information regarding bricks/pavers being considered for use in the public open space. Of particular concern is the hardness, durability and friction provided by the proposed material. This report shall be prepared by a professional engineer and submitted to our design consultants for review and recommendation.
- C. Additional material submittals may be required prior to bidding for review of street lights, furniture, etc..
- D. Pavement marking/signage plan is required for the roadway and parking areas.
- E. Sidewalk eyebrows are required at the intersection of the mews with Mildred and the residential streets. This provides protection of the site visibility areas and turning radii for commercial and emergency vehicles.
- F. Site visibility areas shall be protected from encroachment at all intersections and driveways. The minimum requirement calls for a 35' visibility triangle in some cases additional protection maybe necessary. This requires revision to the proposed buildings and the starting location of the parking.

- G. Provide details regarding loading and unloading of deliveries for commercial property, household furnishings, etc.. The current preliminary plans do not seem to provide for these elements.
- H. Our current ordinance requires hydrant spacing of 300 feet in retail/commercial areas and 500 feet in residential areas. Hydrant spacing and location requires the approval of both the Fire Department and Public Works Department.
- I. The proposed plans seem to encumber property owned by others to provide service to this district. Particularly Building "B" and the provisions for TU Electric and drainage.
- J. Are the plans for the public space enhancement within the rotary consistent with the existing and proposed utilities?
- K. What are the plans for trash collection?
- L. Drainage from the buildings and mews shall be collected prior to entering the streets.
- M. A more detailed utility plan is required.
- N. The minimum curb return radii for fire vehicles is 30 feet. Variances to this requirement are approved by the Fire Department.
- O. It is necessary to recess the inlets in the parking areas to prevent encroachment of the parking in the traffic lanes.
- P. The minimum throat width for the residential streets shall be 23 feet back to back.
- Q. It was our understanding that significant portions of the mews is going to have a brick overlay. In addition some areas of the residential streets, Mildred and Quorum were going to be brick enhancements. Has this changed?
- R. The cross-sections do not seem to provide for all licensed utilities and any additional private utilities (ie: private electric, cable, and communications between buildings "A" and "B"). What is the status of additional private utilities?
- S. Turn lane on Quorum requires 150 feet of storage, 150 feet of transition, and a width of 11 feet.

- T. What is the status of the landscaping, irrigation and street treatment plans?
 - U. Additional drainage information is required to verify inlet/line locations and sizes.
 - V. Inlets are required uphill from the intersection of Quorum and Mildred to eliminate stormwater runoff in the rotary.
 - W. What are the plans for Mildred east of Quorum? Would it be advisable to add to the rotary during the next phase rather than installing barricades today?
 - X. Fire hydrants and gate valves are required at the end of all water lines.
 - Y. Insufficient vehicular visibility is provided at all garage motor court entrances and several street intersections.
 - Z. Retail use and driveway access may not be consistent with the existing or proposed use of Mildred Street. This is an issue that will be addressed on the development plan.
 - AA. The boiler plate construction contract requires the review of our City Attorney. Of particular concern are issues regarding the assignment of the agreement to Columbus insurance coverage, additional insured's, etc..
 - BB. The sidewalk pavers/bricks shall have a concrete base. This is not provided for in the current cross-sections.
 - CC. Additional water valves are necessary to provide for proper isolation in the event of a line break.
 - DD. Provide street lighting plans. Show the proposed location of lights, transformers and switch gear.
11. Additional review is necessary upon submittal of the required information.

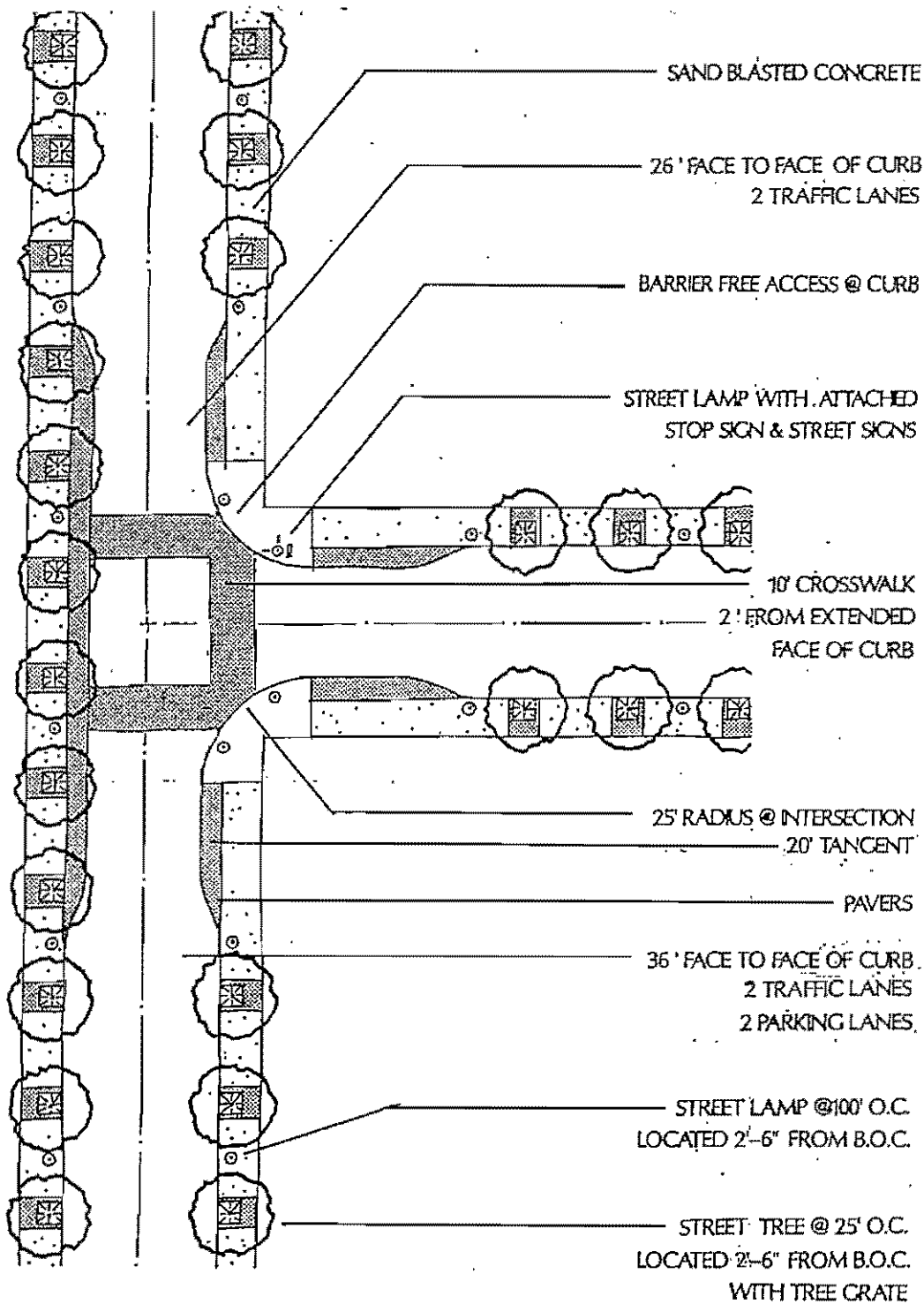
Design Guidelines for the Street Framework

INTERSECTION DESIGN STANDARDS: MINOR FOUR-WAY INTERSECTION



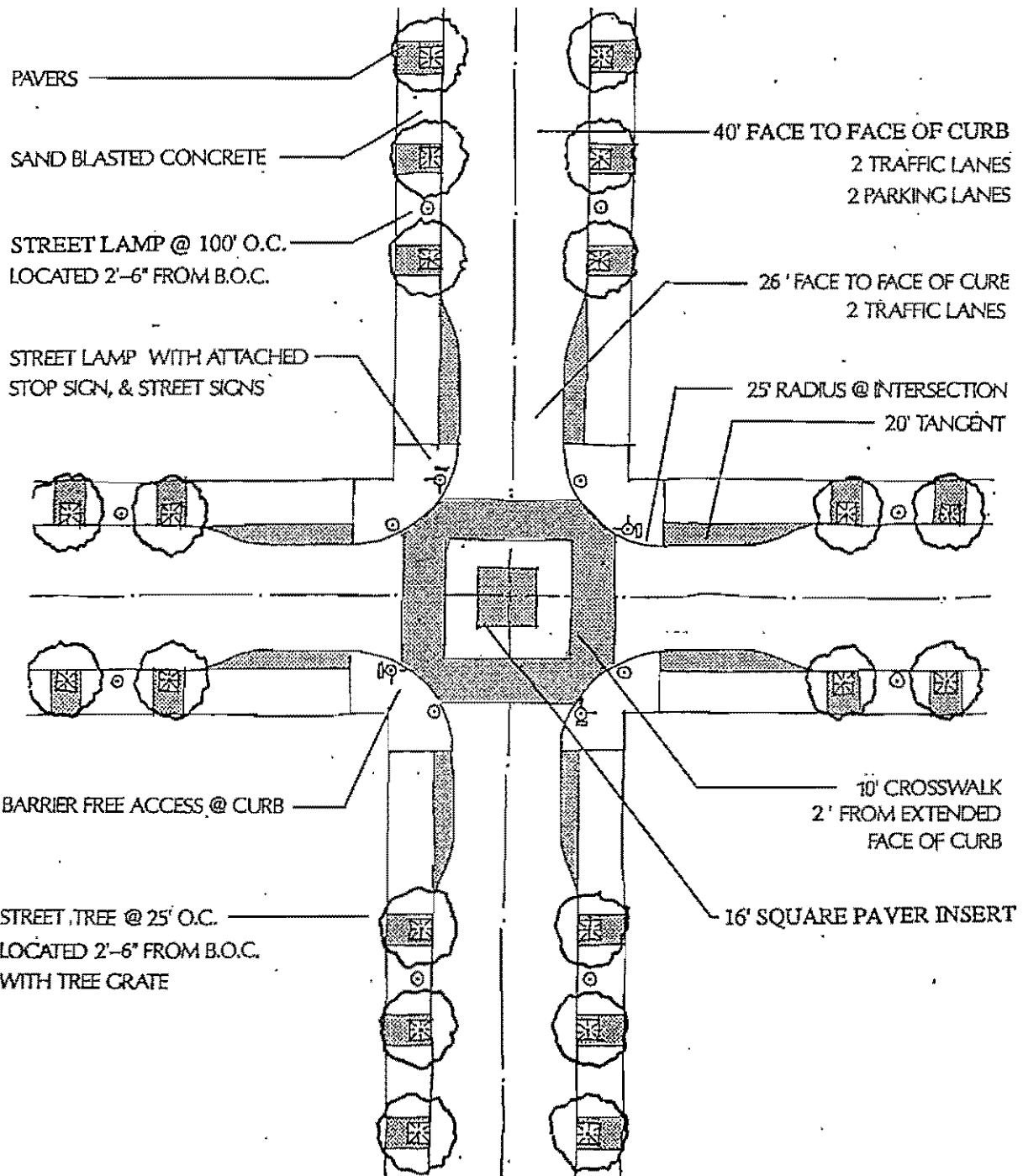
Design Guidelines for the Street Framework

INTERSECTION DESIGN STANDARDS: THREE-WAY INTERSECTION WITH NECKDOWN



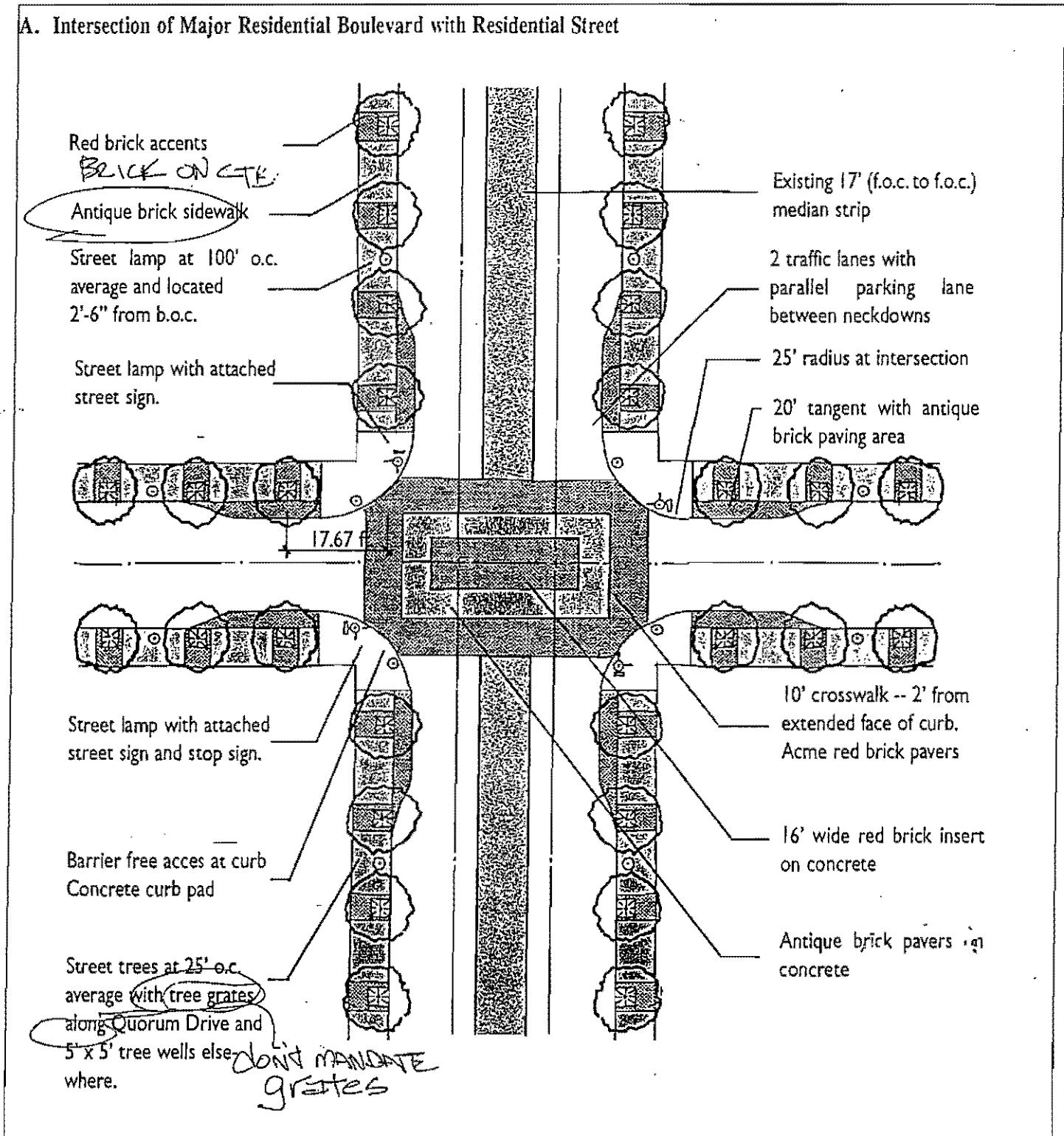
Design Guidelines for the Street Framework

INTERSECTION DESIGN STANDARDS: MAJOR FOUR-WAY INTERSECTION



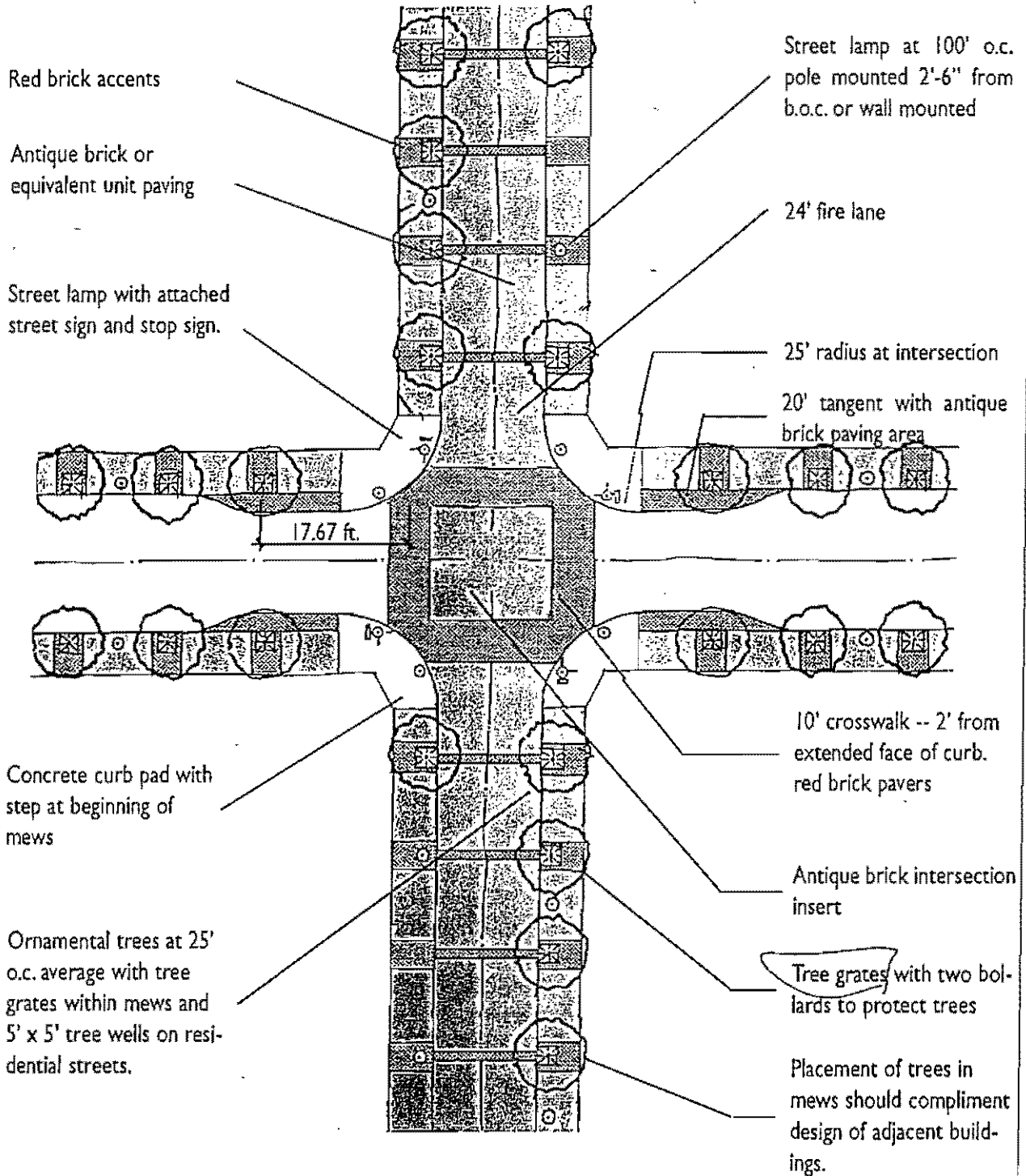
3.3 INTERSECTION DESIGN STANDARDS:

A. Intersection of Major Residential Boulevard with Residential Street




Not antique brick

B. Intersection of Residential Street with Mews



MEMORANDUM

TO: John Baumgartner
Town of Addison

FROM: Gary Jost 

DATE: December 1, 1994

SUBJECT: Quorum Drive Roundabout

A modern roundabout has been proposed, as part of the Addison Town Center development, for the intersection of Quorum Drive and Mildred Drive in the Town of Addison. The development includes mid-rise apartments and retail and would be located on both side of Quorum Drive between the railroad and Airport Boulevard. The proposed roundabout would serve as the focal point of the development.

This memorandum presents the findings and conclusions an evaluation of the impact of the proposed roundabout on the transportation system serving the area.

BACKGROUND

Transportation has long been a high priority in the Town of Addison. The town has initiated several efforts over the recent years to create an effective transportation system. These efforts include the following:

- The development of a comprehensive program of intersection improvements to increase capacity and efficiency of the existing roadway system.
- Implementation of transportation management actions to preserve roadway capacity
- Ongoing traffic signal timing optimization to improve operational efficiency.
- The development of the Addison Thoroughfare Plan.
- The funding and design of the Arapaho Road extension.

- The development of alternative access routes for the South Quorum area.
- Traffic management actions to protect neighborhoods from "cut-through" traffic.

These actions have been initiated in the ongoing effort to create and maintain an effective transportation system to serve the citizens of the Town.

Quorum Drive

Quorum Drive is currently a north/south four lane divided arterial located approximately one-quarter mile west of the Dallas North Tollway. The Town of Addison Thoroughfare plan designates Quorum Drive as a minor arterial. The roadway provides access to Belt Line Road, a six lane, east/west regional arterial, and the Dallas North Tollway, a six lane, controlled access toll facility serving north/south travel needs for the area.

Quorum Drive will provide access for adjacent properties along its route. Currently, the majority of this property is undeveloped, but medium and high density land uses are proposed for the area. These type uses are projected to generate traffic that will utilize all of the available capacity of Quorum Drive.

PROPOSED DEVELOPMENT

The proposed development includes approximately 40 acres of residential development containing approximately 3,500 multi-family dwelling units and 300,000 square feet of retail/office development. As part of the master planning efforts of the development, the construction of a modern roundabout at the intersection of Quorum Drive and Mildred Drive has been proposed.

Trip Generation

Based on trip generation rates for these type land uses, the development would generate approximately 33,000 vehicle trips per day. Of the daily trips, approximately ten percent would occur during the P.M. peak hour. Based on the preliminary site plan furnished by the developer, it is assumed that the majority of the trips generated by the development would use Quorum Drive to access the area.

The capacity of Quorum Drive is approximately 30,000 vehicles per day. The proposed development and additional development potential in the area will generate demand to completely utilize this capacity. Therefore, all analysis concerning the roundabout should utilize the capacity of Quorum as the projected traffic volume.

Mildred Drive will remain a minor collector with relatively low volumes, especially west of Quorum Drive.

MODERN ROUNDABOUTS

There has been much written lately about modern roundabouts. Most of these articles have focused on "modern roundabouts" rather than traffic circles. Modern roundabouts differ from traffic circles in their design and operational characteristics. The primary advantage presented for modern roundabouts is their ability to replace signalized intersections while achieving a reduction in delay and accidents.

The disadvantages of modern roundabouts and are also presented in many of the articles. Several are specifically related to the proposed roundabout at Quorum Drive and Mildred Drive. These include operational characteristics when the Minor Street (Mildred Drive) has significantly less volume than the Major Street (Quorum Drive). In this case, the roundabout essentially operates as a "T" intersection. Modern roundabouts also present a less friendly pedestrian environment, require more land, and are less familiar to U.S. drivers.

CONCLUSIONS AND RECOMMENDATIONS

Based on our analysis, the following conclusions have been drawn:

- It appears from the literature presented that modern roundabouts can function effectively both for low volume and high volume locations provided that they are designed to accommodate the projected volumes and traffic characteristics are conducive to this type of control.
- The proposed roundabout, if approved should be considered a high volume roundabout, designed accordingly, and its design analytically developed and documented. Roundabout diameters in the range of 300 feet would be expected.
- The success of the modern roundabout hinges on slower speeds and yield at entry. These will be an unexpected roadway characteristic to many drivers and may initially result in driver confusion and increased conflicts between vehicles. Other segments of Quorum Drive do not have similar characteristics.
- The roundabout is proposed to replace signalization of this intersection. The need to signalize the Quorum Drive/ Mildred Drive intersection is yet undetermined.
- The roundabout will negatively impact the ability to provide progression for vehicles along Quorum Drive.

- The projected volumes on Quorum Drive and Mildred Drive will effectively cause the roundabout to function as a "T" intersection, requiring Mildred Drive traffic to yield to the much higher volumes on Quorum Drive.
- The operation of the modern roundabout will force traffic on Quorum Drive to yield to vehicles turning left onto Mildred Drive.
- The predominant movements within the proposed roundabout would be "straight through" movements northbound and southbound on Quorum Drive. These movements can be most effectively accommodated without a roundabout.
- There are currently very few operating modern roundabouts in the United States. Most of the documentation of operating conditions comes from overseas (England, Europe < Australia) where driving characteristics are significantly different than those found in the United States.
- Roundabouts present an unfriendly environment to pedestrians and are counterproductive to creating a pedestrian friendly environment.

Recommendations

Based on these conclusions, we offer the following recommendations:

- The construction of a modern roundabout on Quorum Drive in Addison will ultimately be the Decision of Town officials after the consideration of many factors. These recommendations address only the transportation related issues of the proposal.
- It appears from available data that a modern roundabout could be constructed on Quorum Drive to accommodate the projected volumes, However, due to the limited experience with modern roundabouts in North America, and little or no experience with roundabouts with similar traffic characteristics as projected on Quorum Drive, we do not recommend a roundabout at this location. The introduction of significantly different roadway characteristics in this segment of the roadway is not consistent with the goal of providing consistent design standards along a particular roadway or roadway type. It would seem that a more appropriate place for roundabouts would be at the intersection of residential streets within the development (similar design characteristics) rather than on the arterial. The limited experience of roundabouts in the US would make the construction of a roundabout on Quorum Drive an experiment, rather than a design decision based on creating desirable operational characteristics.

- In lieu of eliminating the opportunity for a modern roundabout at this location, ROW could be reserved to provide the necessary land for future construction. It is recommended that future approval of a roundabout be provided only after additional documentation on operating characteristics is available from other locations. ROW should be reserved based on existing analysis of design requirements. Actual design would be based on design criteria available at the time of approval.

TOWN OF
ADDISON

PUBLIC WORKS

To: Ken Roberts

From: John Baumgartner, P.E.
Director

Company: Huitt Zollars

Phone: 214/450-2886

FAX #: 871-0757

FAX: 214/931-6643

Date: 9/7/95

16801 Westgrove

P.O. Box 144

Addison, TX 75001

of pages (including cover): 17

Original in mail Per your request FYI Call me

Comments:

*Ken - please call me if you have
any questions -*

John / alysa hernandez

REC'D JAN 25 1996

Architecture
Planning-Urban Design
Engineering
Interior Architecture
Landscape Architecture
Graphic Design

January 17, 1996

RTKL

Mr. John Baumgartner, P. E.
Director
Public Works Department
Town Of Addison
16801 Westgrove
Addison, TX 75001

RE: Addison Urban Center
RTKL Project No. 10-95509.00

Dear Mr. Baumgartner:

I have reviewed your comments and have provided the solutions explained below. The responses are located as per your comments. If you have any further comments please let me know, as we are looking forward to obtaining a building permit.

Item 4 Letter A

All balconnettes from the East elevation of building B have been changed to flush metal balconnettes.

Baltimore

Dallas

Washington

Los Angeles

London

Tokyo

Hong Kong

Guadalajara

Item 4 Letter B

Section 06/32.06 REF 07/31.01- Metal canopy occurs within the set back of the east elevation of building "A".

Section 06/32.06 REF 12/31.02-Metal canopy occurs within the right of way and will be removed.

Item 4 Letter B

Section 02/32.05 REF 03/31.11-Metal balconnette is within the right of way and will be changed to flush balconnette.

Section 02/32.05 REF 12/31.12. This section drawing occurs at the north elevation of "B" building and within a 5'-0" setback.

Section 05/32.05 REF 03/31.01 -This section occurs at the north elevation of "A" building and within the various setback condition. RTKL would like to discuss this condition.

RTKL Associates Inc.
2828 Routh Street
Dallas, TX 75201
214 871 8877
FAX 214 871 7023

Letter C

Trash Collection: There have been misunderstandings over the proposed trash collection process at Addison Circle. The following is a general description of this process:

Compacted trash is loaded in 2-yard containers with rubber wheels and rolled out to curb across a reinforced section of sidewalk. Through the use of signage, two parallel parking spaces are reserved during set times each week for collection by a one-ton pick-up truck. Once at the curb, these carts roll down a portable ramp carried by the truck and lifted by the truck's back lift gate. Once lifted, these carts are carried to the 40-yard container and emptied.

The following responds to City Staff's comments over trash collection:

Letter C Number 1

Carts from this trash room will be rolled from the garage to the curb at Mildred Street. This process is described above.

Letter C Number 2

Carts from this trash room will be rolled to the curb at Mildred Street. As discussed in the meeting on Fri. 1/19/96, two parking spaces will be reserved in this location as well. This full process is described above.

Letter C Number 3

See above. Carts are loaded by truck parallel parked in reserved spaces. The truck does not block traffic during this process.

Letter C Number 4

The opening provided for servicing of the 40-yard dumpster is 18 feet high, by 12 feet wide. This has been verified as being sufficient for the service vehicle based on the following process: The dumpster is angled within the building. The service vehicle approaches the dumpster at this same angle (± 30 degrees) and lifts the dumpster while angling it onto the flatbed with its wench assemblies. Based on the vehicles turning radius and length, we have eliminated any trees and street elements in this mews that conflict with this process.

Letter D

The door swing for the meter rooms by code have to swing out. RTKL will change the door swing at the trash rooms if the program allows the change.

Letter E

Owner will provide mirrors or indication lights at the deck entries. A walking surface warming device was denied by the city during past discussions.

Letter F

Bollards at the Porte Cochere will be removed and the height clearance of the Porto Cochere has been increased to 16'-0".

Letter G Number 2

Details will be provided and meters and devices will conform.

Letter G Number 3

Installation details will be furnished.

Letter G Number 4

All meter shall be placed within a traffic safe box/vault.

Letter G Number 5

All backflow presentation devices shall be working properly prior to the issuance of Certificate of Occupancy.

Mr. John Baumgartner, P. E.
January 17, 1996
Page 4

Letter G Number 6

This item is addressed in the reservation agreement between the Town of Addison and Columbus Realty Trust.

Letter G Number 7

Detail will be provided for cleanouts in all sidewalks.

Letter G Number 8

All cleanouts will be located on property lines.

Letter G Number 9

More grease traps will be shown on the drawings at each retail location.

Letter I

Sheet 90.00 indicates the following:

1. Sleeving requirements to future phases for communication and wiring.
2. Telephone, cable and fire alarm routing.
3. Power distribution from transformers to electric rooms.

Sincerely,

RTKL ASSOCIATES INC.


Jeffrey M. Nigh, AIA

JMN:js

cc: John Gosling
File 10-95509.00