PROJECT CHARTER

Broadway Boulevard--Euclid to Country Club
TIP ID 22.05 (RTA-17)

January 28, 2012

Approval of the Project Charter indicates an understanding of and commitment to the Scope, Budget and Schedule described in this document. By signing this document, each individual agrees work should be initiated on this project and necessary resources should be committed as described herein.

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Project Overview

This Charter sets forth a framework and expectations for the planning and design of Broadway Boulevard--Euclid to Country Club, RTA Project #17. Planning and construction documents will be developed in accordance with the policies of the Region and the City of Tucson. This charter addresses primarily the development of the Design Concept Report (DCR) and will be amended or replaced for final design, once the overall concept for the corridor development has been established. Commencement of project activities may begin upon approval of this Project Charter and all required Intergovernmental Agreements and identification of the sources of all needed financial resources necessary to execute it by the Project Sponsor. Included in this Project Charter are a scope statement; schedule; cost estimate; budget for planning and design; and provisions for public involvement, communications and stakeholder management as required by established regional and Lead Agency policies.

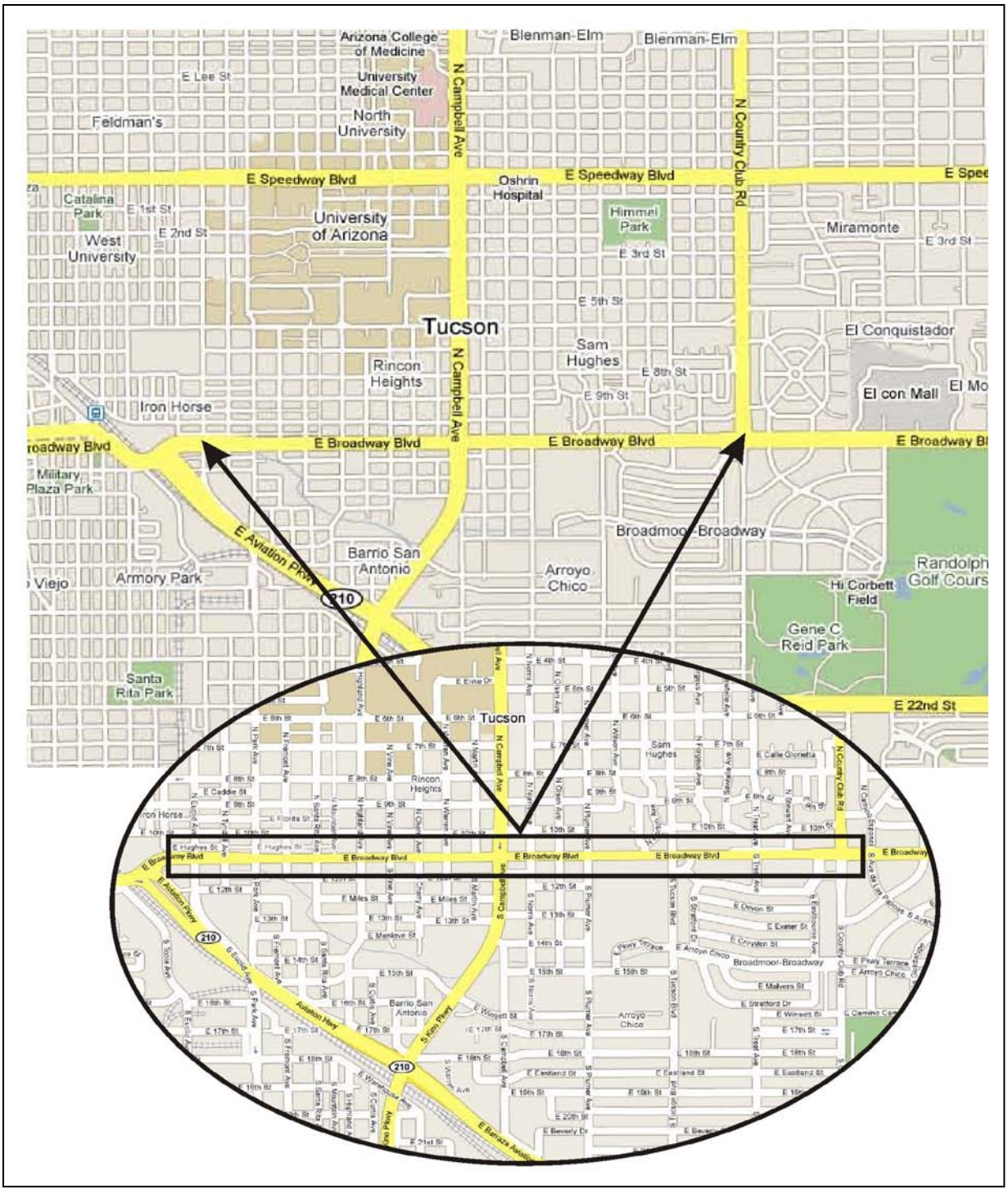
Key elements of the planning effort include the following:

- A Context Sensitive Solutions (CSS) approach for integration of the following planning and design elements associated with development of the Broadway Boulevard Corridor project. This work should be done following the recommended practices and suggestions outlined in the document "Context Sensitive Solutions in Designing Major Urban thoroughfares for Walkable Communities" published by the Institute of Transportation Engineers (ITE) in 2006.
- An updated Traffic Engineering Report that considers the effect of 2040 traffic volume forecasts on the proposed cross-section, and integrates forecasted traffic volumes with the PAG High Capacity Transit Study. Specifically for the Broadway Corridor, that plan calls for Bus Rapid transit (BRT) in the near term (0-10 years) and Light Rail Transit (LRT) long term (more that 20 years in the future). The transit mode to be considered under this project will be Bus Rapid Transit. The question of how the current corridor improvements can be adapted to LRT in the future will be addressed, but no actual planning for LRT will be made here.
- Development of an Urban Design and Land Use Plan to ensure future land uses are compatible with the proposed roadway and alternate mode improvements. This includes an evaluation and assessment of current land uses and structures. An inventory of existing and eligible historic structures potentially affected by this project will be conducted, and impacts to structures that are historically or architecturally significant will be addressed.
- An alternative alignment study that evaluates various cross-section widths within the 1989 Mayor and Council-adopted right-of-way for the Broadway Corridor. That right-of-way is referred to here as the "permissible right-of-way envelope" and is considered here to be the new right-of-way identified in City of Tucson Plan No. R-89-05. It generally entails partial or total takes of parcels along the north side of Broadway.
- Preparation of a Right-of-Way Acquisition Management Plan. This effort will be undertaken separate from the Consultant Team, via use of a City of Tucson on-call contractor.
- Topographic and culture surveys for the purpose of preparing base mapping.
- Public outreach as discussed below.

This project is to commence construction in RTA Implementation Period 2 (2012-2016).

Map of the Area

The location of this project is shown here:



Project Scope

The DCR and attendant studies are intended to identify and establish the direction regarding the major project issues. The scope-of-work leading to the DCR is presently envisioned as follows:

A. Project Kickoff

An initial set of meetings and events will be held to allow project team members, CTF members, and the general public to become acquainted with each other, to become knowledgeable of project issues, and to understand and become engaged in the DCR study process, and to provide initial input into the process. The specific activities are envisioned as follows:

1. Initial Project Team Meeting. An afternoon kickoff project team meeting will be held with City staff, RTA staff, and consultant team members. The work to date will be reviewed and introductory discussions about the remaining work will be held. The purpose of this will be (1) for team members to become personally acquainted, and (2) to ensure that all team members are familiar with all aspects of project, and (3) all elements of the project receive full advantage of the range and varied expertise the project team presents.

2. Initial CTF Meeting. That evening, a kickoff CTF meeting will be held to (1) introduce CTF and project team members, (2) to review the work findings to date, and (3) discuss the project issues and the proposed approaches for dealing with them. A question and answer session will be held followed by an opportunity for project team members, CTF members, and members of the public to mingle informally to discuss the project on a one-on-one basis.

3. Follow-up Project Team Meeting. Hold a project team meeting the following morning to discuss the results of the meetings of the previous day and determine any changes in project approach.

4. Initial Public Meeting. Approximately one month later, an initial public meeting will be held to (1) introduce project team members, (2) introduce CTF members, (3) provide an overview and the findings of the work that has been accomplished to date, and (4) present the issues and questions that remain and how they will be addressed. Completed reports will have been posted on line along with shorter synopses which will also be available as handouts at the meeting. An overview slide presentation will be prepared and presented. Stations will be set up for each of the upcoming tasks with displays to help illustrate the problems and options. Individuals will be provided to man each station.

5. Initial Public Input. Feedback from the public will be obtained through discussions held with project team and CTF members, and by means of questionnaires collected at the meeting or by mail. Results will be tabulated, documented, distributed to team and CTF members, and ultimately included in the public involvement section of the DCR.

Task B. Northward vs. Southward Widening Evaluation (Study 1)

Evaluate and compare the costs and impacts associated with north and south widenings. Nominal eight-lane cross sections, consisting of six travel and two diamond lanes, will be used for this analysis. A detailed analysis of right-of-way acquisition costs will be made. Impacts to historically and architecturally significant structures will be considered. Construction costs will be similar and not considered for this analysis. Since the relative right-of-way acquisitions will be similar if not the same, it will be assumed that the preferred widening approach found in that case will hold for a six-lane section as well.

The result of this task will be a decision either to (1) continue the project based on northward widening following the scope outline herein, or (2) to restart the project considering southward widenings as well. The second option would require significant changes in this scope of work.

Task C. Value Engineering Analysis of Six vs. Eight-Lane Alternatives (Study 2)

The RTA ordinance stipulates that Broadway is to be an eight-lane roadway-- six travel lanes for general use and two "diamond" lanes for transit, bikes, and right-turning vehicles. The viability of constructing only the six travel lanes with the current project and adding the diamond lanes under a future project will be examined.

A value engineering analysis will be performed to determine the cost savings and operational implications of delaying the implementation of the diamond lanes. This study will quantify the effect on traffic operation as well as any cost savings and reduced impacts associated with eliminating the diamond lanes.

The choice to delay the diamond lanes requires examining what provisions for the future lanes should be made, the topic examined in Task D (Study 2a). Since the issue of how to widen in the future may influence decisions made here, these studies need to be performed concurrently.

It will also be necessary to determine how bikes will be handled with the future diamond lanes. Bikes could share the diamond lanes with buses and right turning vehicles, or a separate bike lane could be provided. A separate bike lane would lead to a wider roadway section and potentially greater right-of-way (and cost) impacts. Task E (Study 2b) will address this issue. Since those results may also influence decisions made here, it will also be performed concurrently.

The result of this study will be the selection of one of these three approaches regarding diamond lanes: (1) to include them in current design and construction, (2) to not include them with the current project but to make construction and right-of-way provisions with the current project to facilitate their addition in the future, or (3) make no special provisions for the future lanes at this time.

This element of the value engineering analysis will be performed at this time since so much of the remaining work depends on the outcome. An RTA formal value engineering analysis will be performed once the DCR is completed.

Task D. Placement of Future Diamond Lanes (Study 2a)

If the decision is made to delay constructing the diamond lanes but to configure the current project to be readily widened for them in the future, the determination of whether the future widening should be inward (into the median) or outward (the curb side) needs to be made.

Accommodating future widening to the inside would require extra width in the median. The added cost and right-of-way impact of doing this might appear extravagant, particularly given that the widening could occur well in the future.

Future widening to the outside would require reconstructing the outside curb, pavement drainage system, and roadside development. That would increase the cost of the future construction, and it would be more disruptive to traffic and businesses. Whether to acquire or otherwise reserve the necessary right-of-way at this time would also need to be determined.

The implications of this issue may affect the choices made in Study 2 and needs to be considered concurrently.

Task E. Accommodation of Bike Lanes Evaluation (Study 2b)

A decision regarding how to configure bike lanes is needed whether the diamond lanes are to be provided at this time or as future construction. If diamond lanes are not included now, a separate bike lane will be provided adjacent to the outer travel lane. Regardless of when diamond lanes are provided, the decision of whether to construct a separate bike lane or to place bikes in the diamond lane will have to be made. Providing a separate bike lane would be safer for bicyclists but would increase the width of the typical section, adding to the cost and potentially the right-of-way impact of the project.

Task F. General Corridor Development Alternatives Evaluation (Study 3)

Three alternative corridor development schemes will be considered initially. Corresponding roadway geometrics will be developed for each alternative. A fourth "hybrid" scheme will be added should a more promising approach emerge during the process. The alternatives initially considered will be the following:

Alternative 1--Maximize Corridor Redevelopment Potential. Under this scenario, the roadway would be placed along south edge of permissible right-of-way envelope. Remnants of acquired parcels would be combined to create viable lots where depths are sufficient for redevelopment (assume 80'). Shallower remnants would be used for landscaped open areas and buffering residential areas. A plan will be prepared that includes the roadway, concepts for redevelopment of remnant parcels that have sufficient depth, and open space landscaping and buffering for those that do not.

Alternative 2--Enhance Existing Commercial Development. The roadway would be placed along north edge of permissible right-of-way envelope, though leaving adequate room for landscaping and buffering residential areas. Excess land along south side for roadside would be used for development that enhances the existing commercial area. Such development could include--for example--a raised median for separation from the higher-speed arterial traffic; frontage roads that could be used for on-street parking; customer access and deliveries; wide shaded sidewalks to promote casual shopping and allow for outdoor café-type seating; and other similar uses. The plan considered here would include the roadway and several roadside development concepts to demonstrate the range of possibilities that exists.

Alternative 3-- Provide Greenway Corridor. The roadway would be placed along the south edge of permissible right-of-way envelope as with Alternative 1. Remnant parcels would be used to create a continuous corridor between major streets--say at quarter-mile intervals. Other residential street connections to Broadway would be closed. This would create a greenway corridor in which relatively continuous bike and pedestrian paths could be placed. This corridor could also accommodate future rail though the loss of open space would need to be considered.

Except for the Country Club Road intersection as discussed next, the overall roadway configuration as well as the corridor development approach will be established upon completion of this task.

Task G. Country Club Road Intersection Evaluation (Study 4)

The existing south curb line will be held to avoid demolishing portions of Broadway Village. Widening to the north at this location will cause loss of parking for Chase Bank but not physically impact the actual structure. Buildings to the west may or may not be impacted depending on the number of lanes. Similarly the west curb line for Country Club south of Broadway will be held.

Two alternative lane configurations will be considered for Broadway at the Country Club intersection:

-- The ultimate configuration called for by the traffic study which includes double left turn lanes and exclusive right turn lanes in both directions.

-- An interim configuration that includes only single left turn lanes and an exclusive right turn lane only in the westbound direction.

Kittelson's traffic study will be used to evaluate the impact on traffic performance of the lesser alternative. Tierra Right of Way will estimate the severance and other acquisition-related costs associated with the two alternatives.

The full configuration of the new roadway is expected to be established upon completion of this task.

Task H. Initial Roadway Plans

Initial profiles for Broadway and major cross streets will be developed for the adopted horizontal geometric configuration. Initial geometrics plans consisting of typical section and plan-profile sheets will be prepared. These plans will be used for the initial drainage design, the utility relocation plan, cost estimating, and other subsequent activities. They will also serve as the base for the Initial (15%) Plans described in Task O.

Task I. Detailed Corridor Development Evaluation (Study 5)

The general corridor development approach--maximizing corridor redevelopment potential, enhancing existing commercial development, and providing a greenway corridor--will have been established at this point (under Task F). This task involves a more detailed look at the corridor development options within the selected approach.

Community Design and Architecture (CD+A) and Swaim Associates will collaborate to develop a range of possible approaches. Diagrams and narrative descriptions of each will be prepared including benefits and drawbacks. This information will be presented initially to the City and RTA, and revised per any comments and feedback. The proposals will be presented to the Citizen Task Force (CTF) for comments and discussion and refined accordingly. The options considered and the recommended approach will be presented in a public meeting. Comments from the discussion and written questionnaires will be used to finalize the Corridor Development Plan. This plan will provide general direction and approach to be incorporated in the DCR.

Task J. Initial Drainage Plan

Once the roadway geometrics and corridor development plan are established, an initial drainage plan will be prepared. That plan will identify major features such as discharge points and outfall storm drains. It will also provide the basis for the initial cost estimate later.

Task K. Initial Utility Relocation Plan

Initial utility information will be developed from publicly-available plans and maps, and from information provided by utility companies. It will be documents as a set of existing utility plans, and will help identify utility issues likely to be encountered as well as prepare the initial cost estimate.

Task L. Initial Access Management Plan

An initial access management plan will be developed. Midblock access points will be combined to the extent possible, and driveways placed as far from major intersections and possible. Median breaks and turn lane lengths will be based on Kittelson's traffic report. The likely cost and other impacts as far as right-of-way acquisition is concerned will be determined by Tierra Right of Way. Direct contact with property owners will be a necessary part of this effort.

Task M. Initial Signalization and Lighting Plans

An initial signalization plan will be prepared that incorporates the key assumptions described in the traffic report such as coordinating the HAWK crossing with the overall signal phasing. This plan will document the phasing and other requirements as well as provide a basis for the initial cost estimate.

Task N. Right-of-Way Acquisition Plan

A plan depicting graphically the right-of-way and easements needed for the project will be prepared. Actual right-of-way plans, S-drawings, and legal descriptions will be provided during final design. This will allow the City to begin acquiring parcels identified as total takes. The City could also begin planning for partial takes, determining for example a schedule of acquisitions that would determine when S-drawings and other detailed documents for each take would be needed.

Task O. Initial (15%) Plans

Initial plans will be prepared to document the results of the various studies. These plans will include roadway geometrics, corridor development, and initial drainage, utility, access management and right-of-way acquisition plans. The purpose of the initial plans is to show as fully as possible the approaches that have been developed, and to provide a basis for determining the initial cost estimate.

Task P. Initial Cost Estimate

A detailed initial cost estimate will be derived from the initial plans. This estimate will be maintained and updated during the final design process. This will provide a more accurate estimate of cost than previously available, both because it will be more detailed and because it will reflect the chosen design approach.

Task Q. Design Concept Report

The various reports, plans and findings will be compiled into a single document as the Design Concept Report.

Task R. Public Meetings

Public meetings will be held at critical decision points in the process to explain the issue(s) at hand and receive public feedback via discussion, comment sheets, and/or questionnaires. The following public meetings are envisioned:

Public Meeting #1: A kickoff meeting early in the project to explain the scope of the study, work to date, issues to be addressed and how, anticipated schedule, and so forth. Scoping report will be distributed. Displays and handouts illustrating the various studies and steps of the DCR process will be provided.

Public Meeting #2: Held upon completion of the Northward vs. Southward Widening Evaluation (Study 1) to present results and solicit public input before finalizing report. A slide presentation along with displays and handouts will be prepared.

Public Meeting #3: Held upon completion of the Value Engineering Analysis of Six vs. Eight-Lane Alternatives (Study 2) to present results and solicit public input before finalizing report. The placement of future diamond lanes and accommodation of bike lanes will be included. A slide presentation and/or displays and handouts will be provided.

Public Meeting #4: Held upon completion of the General Corridor Development Alternatives Evaluation (Study 3) to present results and solicit public input before finalizing report. This will be a question of corridor development approach as well as roadway alignment and cross section.

Public Meeting #5: Held upon completion of the Detailed Corridor Development Alternatives Evaluation (Study 5) to present results and solicit public input regarding land use and its interaction with the roadway before finalizing report.

Task S. CTF Meetings

Meetings with the Citizen Task Force will be held at monthly intervals as needed. Typically specific design questions will be presented along with options and recommended courses of action. The sentiment of the committee will be determined through discussion and if necessary voting. Prior to each meeting an agenda and handout material if necessary will be distributed to committee members.

Task T. Other Meetings and Communication

Meetings, correspondence, and conversations will be held as necessary with individual and groups with specific concerns and needs such as neighborhood associations, property and business owners, and elected officials.

Task U. QA/QC Reviews

HDR's standard QA/QC reviews will be performed on all in-house reports and plans prior to submittal to the City. Subconsultant reports will be reviewed for completeness and consistency with other project elements.

Task V. Project Coordination and Management

Monthly team meetings will be held. Attendees will include HDR and City personnel. Subconsultants will attend as needed. Progress reports and invoices will also be prepared monthly.

Project Background

Broadway Boulevard is a major east-west arterial roadway connecting downtown with central and eastern portions of the greater Tucson area. Except for the project reach (Euclid to Country Club), Broadway has six travel lanes for arterial traffic. Beginning at Columbus, it also has "diamond" lanes serve transit, bicycles, and right-turning vehicles.

Broadway has long been recognized as a major transportation corridor. A plan adopted by the City of Tucson in 1989 called for widening Broadway through the project reach to six travel and two diamond lanes, and that this widening occur to the north.

Other than placing requirements on adjacent development and sporadic property acquisitions, little has been done toward fulfilling that plan until the adoption by Pima County voters of a regional transportation plan and half-cent sales tax for funding it. The reach of Broadway was specifically identified in the plan as Project #17. That plan is being administered by the Regional Transportation Authority (RTA) in conjunction with the City of Tucson and other local agencies.

Project Justification

This reach of Broadway has become steadily more congested over the years. In 2008, average daily traffic (ADT) through the project area ranged from 30,000 to 37,300 vehicles per day (vpd). The three major intersections within the limits of this project--Euclid Avenue, Campbell Avenue, and Country Club Road--had one or more peak hour traffic movements operating at Level of Service (LOS) F. By the 2040 design year, traffic volumes will increase to as much as 55,900 vpd. This project is needed to maintain congestion at acceptable levels.

Project Elements

The items checked below apply to this project. Whether to include multi-use paths or bike racks will be determined during the DCR process.

Check all that apply

Rubberized Asphalt	X	Sound walls		Bus pullouts	X
Turn Lanes	X	Striping	X	Bridge	
Culverts	X*	Signing	X	Drainage Improvements	X
Overpass		Underpass		Wildlife Crossing	
Signals	X	Detection Cameras	X	Median	X
Purchase of Property	X	Pedestrian Lighting	X	Street Lighting	X
Sidewalks	X	Curbs	X	Bike Lanes	X
Multi-Use Paths	X*	Art	X	Bike Racks	X*
Landscaping	X	ADA Enhancements	X	Pavement Preservation	X
Utility Relocation	X	Guardrail		Other:	

*Depending on outcome of planning studies

Number of Travel Lanes: 6 Other Walls: None anticipated

Project Budget

The budget for the Broadway Boulevard, Euclid to Country Club project is $71,945,000. It is to be funded through the following:

RTA:	$42,125,000
Pima County Bonds:	25,000,000
City of Tucson:	3,000,000
Development Impact Fees (DIFO):	1,222,000

The initial estimate of project cost is presented in the following table:

	Percent of Construction Cost	Construction Cost ($1,000s)
Administrative[1]	6.0%	1,200
Planning[2]	7.0%	1,400
Design[1]	10.0%	2,000
Right-of-Way[3]		35,000
Utilities[4]		3,500
Environmental Mitigation([5]		645
Construction[6]		20,000
Art Work	1.0%	200
Const Admin[7]	15.0%	3,000
Contingency	25.0%	5,000
Estimated Total Project Cost:		71,945
Project Budget:		71,347

(1) Based on percent of construction cost used for Tangerine

(2) Tangerine percent of 5.2% increased to 7% due to greater complexity and level of public involvement

(3) Tierra Right of Way estimate for northward widening

(4) Based on URS estimate prepared for RTA including 15% contingency

(5) URS estimate. This item added to RTA template

(6) URS estimate rounded to nearest $million

(7) Added to RTA template

It is acknowledged that it shall be the responsibility of the City of Tucson to identify the source of any additional funds which may be required to fund any enhancements which are beyond the scope, or for costs which exceed the project budget. More detailed funding information is contained in the Financial Assessment section.

Project Team

The Project Manager for the Lead Agency, City of Tucson, is hereby authorized to negotiate for resources, delegate responsibilities within the framework of the project, and to communicate with all consultants, outside agencies, permitting authorities, utilities, contractors and management, as required, to ensure successful and timely completion of the project. The Project Manager is responsible for monitoring the schedule, cost and scope of the project during planning, design, implementation and maintaining control over the project by measuring/reporting performance and taking corrective action.

Pima County is a Cooperating Agency on this project, and has responsibility for ensuring that county bond funds are utilized appropriately. The Agency will be represented by Rick Ellis on this project.

The Project Consultant Team is led by Michael Johnson of HDR Engineering, and is responsible for directing and coordinating the efforts of the Consultant Team. The Consultant Team commits to adherence to the minimum requirements of the regionally approved Scope of Work and delivery of the most cost effective project it can develop. The Consultant Team further commits to awareness of and adherence to the project schedule and budget.

The Consultant Team consists of:

Member's Name: Phil Erickson	Community Design + Architecture
Role: Context Sensitive Boulevard Planning	
Responsibility: Evaluate alternative corridor development approaches including both the configuration of the roadway and the use of adjacent property.	

Member's Name: Joan Beckim	Kaneen Advertizing and Public Relations
Role: Public Involvement	
Responsibility: Assist with creating the Citizen Task Force (CTF) as well as the various meetings with the CTF and various concerned groups and individuals.	

Member's Name: Jim Schoen	Kittelson & Associates, Inc
Role: Traffic Engineer	
Responsibility: Lead traffic studies including microscopic modeling of alternative lane configurations.	

Member's Name: Phil Swaim	Swain Associates, LTD
Role: Architecture and historical assessment.	
Responsibility: Direct the architectural and historic assessment evaluation. Provide architectural and land use input regarding roadside development.	

Member's Name: Mack Dickerson	Tierra Right of Way Services
Role: Estimating cost associations with right-of-way acquisition.	
Responsibility: Provide right-of-way cost information for various cross-sections and alignment alternatives.	

Define Project Assumptions

The assumptions listed here generally apply to the planning process and the preparation of the DCR. That process is expected to identify further assumptions and implications that apply directly to the final design, and will be appended to this document as appropriate.

Assumption:	Broadway and its cross streets will be designed to function at Level of Service (LOS) D or better under projected 2040 traffic volumes.
Implication:	Regardless of the general corridor development scheme, the arterial traffic function will be addressed.

Assumption:	Widening will be to the north per the plan adopted by Mayor and Council in 1988.
Implication:	A value engineering analysis will be performed to determine if a northward widening is in fact the best choice. If a southward widening is found preferable, this scope will need to be revised. See **Project Scope Task B** above for further discussion.

Define Project Constraints

As with Project Assumptions, constraints affecting this project are not at this point well understood but are expected to emerge during the planning process and the preparation of the DCR. This section should also be modified at the start of final design. Several constraints that are apparent or likely to arise are noted here however.

Constraint:	Significant structures
Impact:	A number of structures are located along the project reach that are significant either historically or architecturally. While not all of these can be avoided, minimizing impacts to them will be important. A case in point is the Country Club Road intersection where operational considerations call for double left and exclusive right turn lanes, but acquiring the necessary right-of-way would jeopardize the function of adjacent buildings if not the structures themselves.

Constraint:	Funding
Impact:	As noted above, the funding identified for this project covers the estimated cost. It is not clear though when all of the identified funding will be forthcoming. It may be necessary to phase the construction in accordance with the availability of funding.

Assessment of Risks

1. Local Funds Availability							
Probability:	High ☒	Med ☐	Low ☐	Impact:	High ☒	Med ☐	Low ☐
Action:	Control ☒	Absorb ☐	Avoid ☐				
Mitigation Strategy: Develop a construction phasing program if certainty about funding availability can be achieved. Maintain project cost estimate during the evaluation of alternatives.							

2. Environmental Permitting							
Probability:	High ☐	Med ☒	Low ☐	Impact:	High ☐	Med ☐	Low ☒
Action:	Control ☒	Absorb ☐	Avoid ☐				
Mitigation Strategy: No jurisdictional washes affect this project. State and City historic preservation ordinances will need to be observed which will require a cultural resources survey. Though not an environmental permitting issue, hazardous materials surveys will need to be performed for any right-of-way acquisitions as part of the normal acquisition process.							

3. Unforeseen Environmental Restrictions							
Probability:	High ☐	Med ☐	Low ☒	Impact:	High ☐	Med ☐	Low ☒
Action:	Control ☐	Absorb ☐	Avoid ☐				
Mitigation Strategy: None anticipated to be needed.							

4. Utility Conflicts							
Probability:	High ☐	Med ☒	Low ☐	Impact:	High ☐	Med ☒	Low ☐
Action:	Control ☒	Absorb ☐	Avoid ☐				
Mitigation Strategy: Extent of conflicts will be determined during the DCR process.							

5. Other Permits							
Probability:	High ☐	Med ☐	Low ☒	Impact:	High ☐	Med ☐	Low ☒
Action:	Control ☒	Absorb ☐	Avoid ☐				
Mitigation Strategy: To be identified during DCR process. Few if any anticipated.							

6. [RISK – name or description]							
Probability:	High ☐	Med ☐	Low ☐	Impact:	High ☐	Med ☐	Low ☐
Action:	Control ☐	Absorb ☐	Avoid ☐				
Mitigation Strategy: To be determined.							

Approved Scope

From RTA Resolution No 2006-04, Page 34:

> "Widen Broadway Boulevard between Euclid Avenue and Country Club Road, with 6 travel lanes and 2 dedicated bus lanes; bike lanes in each direction; raised, landscaped median; ADA accessible sidewalks; and continuous street lighting."

Optional Scope Items

Optional items are at this point unknown and will be identified in the DCR process.

Construction Delivery Method

A conventional design-bid-build approach is anticipated at this time. Should an alternative delivery method later be found more advantageous, this charter will be amended accordingly.

Major Tasks and Milestones

Major milestones are termed "Phases" here to avoid confusion with the **Project Scope**.

Phase 1. Design Concept Development
Approach: Identify the primary design issues and evaluate plausible options to determine the most suitable. The issues and approaches anticipated at this point are discussed above under **Project Scope**. Additional issues are likely to be encountered during the DCR process and will be handled in a similar manner.
Deliverables: The Design Concept Report and Initial (15%) Plans plus a number of supplementary reports and plans as described earlier. Final deliverables are anticipated at the end of 2013.

Phase 2. Final Design. Prepare construction plans and other documents based on the concepts spelled out in the adopted DCR.
Approach: Apply typical arterial roadway and landscape design procedures commonly practiced by the City of Tucson and other jurisdictions in the region.
Deliverable: Construction plans, special provisions, and formal cost estimate for inclusion in the bid package.

Phase 3. Right-of-way Acquisition.
Approach: Provide the City of Tucson with right-of-way and easement requirements as soon as reliably known (probably upon approval of a 60% to 75% plan submittal).
Deliverables: Right-of-way plans, legal descriptions, S-drawings, and other material required by the City to undertake the right-of-way acquisition. Expect to have complete package the first quarter of 2015. Note that much of the right-of-way acquisition will involve total takes. Acquisition of those parcels can commence upon acceptance of the DCR, beginning as early as the first quarter of 2014.

Phase 4. Utility Clearance.
Approach: Design any relocation of Tucson Water and PCWWMD facilities needed. Coordinate with franchise utilities throughout the planning and particularly the final design phase. Utilities will be invited to progress meetings though it normally is necessary to schedule separate meetings for them.
Deliverables: Approved plans and agreements.

Phase 5. Bidding Process.
Approach: Assemble bid documents. Assist City Engineering and procurement with the advertising process as needed.
Deliverables:

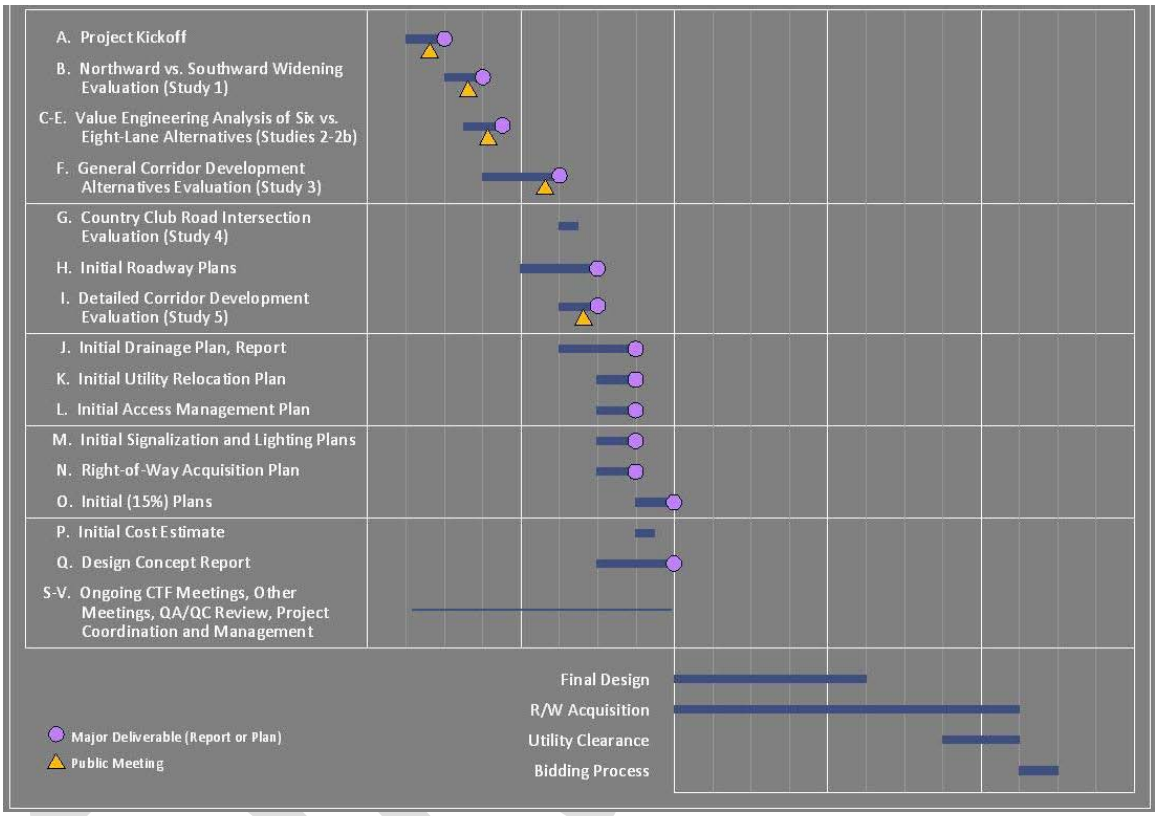
Public Participation

The public participation process to be used for the planning effort of this project begins with development of Mayor & Council-appointed Task Force that will serve an advisory role, and will meet regularly to review development of planning concepts and designs. Information will be shared with the public and input collected at task force meetings, corridor workshops, open houses, through attendance at neighborhood association meetings, and one-on-one meetings as required. The first open house is scheduled for June 2012 or thereabouts. The purposes of the first open house will be (1) to introduce the project and the team to the public, (2) present the results of data collection efforts to date, and (3) solicit initial questions and comments from the public.

The Task Force will consist of 13 members, with applications being sought between approximately January 1 and February 15, 2012. The Task Force will be selected in consultation with the Wards 5 and 6 Council Offices. Task Force meetings will be facilitated by a member of the consultant team. Specific issues to be addressed by the Task Force have not yet been developed, but the goal of this committee is to advise the planning team, the Department of Transportation and Mayor and Council on (1) cross section widths and features, and (2) land use and urban design plans for properties within and near the project boundaries.

Schedule

The chart below shows a tentative schedule for activities leading up to start of construction. Assuming an April 1, 2012 notice to proceed, the planning process is expected to be complete by the end of 2013. Fifteen months is allocated for both final design and right-of-way acquisition with some overlap possible. This schedule allows construction to be started by the middle of 2016. Some of these processes, particularly final design and right-of-way acquisition, can be probably be shortened if necessary.



Quality Control/Interdisciplinary Review

HDR's formal Quality Assurance/Quality Control (QA/QC) process is applied to each deliverable prior to submittal. It operates at two levels—(1) technical overview of overall strategies and design approach by firm principals and other experienced personnel, and (2) a system of checking, correcting, and back-checking that is applied to all plan sheets and design calculations. This plan has been successfully used on past PCDOT, City of Tucson, and ADOT projects.

Peer Review/Value Engineering Process

It is anticipated that RTA's standard week-long review will be applied to the DCR prior to its finalization. One area with the potential to save significant cost and plausibly implementable, is to not construct or to defer the construction of diamond lanes. Because this is a complicated issue that could not be well-addressed in a one-week period, this particular investigation is being included as a task in the DCR process.

Financial Assessment

A detailed cost analysis will be performed as part of the DCR process. A benefit cost analysis will not be performed unless specifically requested since this project is stipulated by the RTA ordinance.

Financial Schedule

Fiscal year: / Phase	2012 Year 1	2013 Year 2	2014 Year 3	2015 Year 4	2016 Year 5	Total
Administrative	240	240	240	240	240	$ 1,200
Planning	700	700	0	0	0	1,400
Design	0	0	1,000	1,000	0	2,000
Right-of-Way	0	0	11,667	11,667	11,667	35,000
Utilities*	0	0	0	0	3,500	3,500
Environmental Mitigation*	0	0	0	0	645	645
Construction*	0	0	0	0	20,000	20,000
Art Work*	0	0	0	0	200	200
Construction Admin*	0	0	0	0	3,000	3,000
Contingency**	0	0	1,000	1,000	3,000	5,000
Total	940	940	13,907	13,907	42,252	$71,945

*Construction-related expenditures are shown as a lump sum in Year 5 but are likely to extend into subsequent years.

** Contingency expenditure spread over five year period beginning in 2014 to cover design, right-of-way acquisition and construction. Final two years of contingency lumped in 2016.

Funding Sources

Funding Summary			
Funding Sources		*Amount*	*Source*
A. RTA	59.0%	$ 42,125,000	*Roadway Element*
B. City of Tucson	4.2%	3,000,000	
C Pima County	35.0%	25,000,000	
D. DIFO	1.7%	1,222,000	
		$ 71,347,000	

Acknowledgement and Acceptance

By signing this Project Charter each individual indicates an understanding of and commitment to the Scope, Budget and Schedule described in this document, agrees work should be initiated on this project and to commit the necessary resources described herein.

Name	Signature	Organization

Citizen's Committee Acknowledgement and Acceptance

By signing this Project Charter each individual indicates an understanding of and commitment to the Scope, Budget and Schedule described in this document, and agrees to work productively to develop the highest quality project for the public.

Name	Signature	Organization