DOWNTOWN INTERMODAL CENTER (DIMC)
PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS

Plan No. I-2012-009
Final Design Concept Report
APPENDIX C – 30% CONCEPT PLANS

May 2013
Submitted to

Submitted by
DOWNTOWN INTERMODAL CENTER (DIMC)
PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS

6TH AVENUE FROM 7TH STREET TO BROADWAY BOULEVARD
PENNINGTON STREET FROM 6TH AVENUE TO TOOLE AVENUE
TOOLE AVENUE FROM 6TH AVENUE TO PENNINGTON STREET

COT PLAN NO. I-2012-009

FINAL
DESIGN CONCEPT REPORT

APPENDIX C – 30% CONCEPT PLANS

Prepared for:
CITY OF TUCSON DEPARTMENT OF TRANSPORTATION

Prepared by:
Parsons Brinckerhoff
177 North Church Avenue, Suite 610
Tucson, Arizona 85701
(520) 882-6424

May 2013
CITY OF TUCSON

DOWNTOWN INTERMODAL CENTER
PEDESTRIAN SAFETY AND
BUS ACCESS IMPROVEMENTS

PLAN NO I-2012-009

Project Begins Approximately 100 Feet North
of 7th Street and Extends Approx.
2100 Feet to the South Limits of Work.
Begin Approx. 100 Feet West of 6th Avenue on Toole Avenue
and Extend Approx. 950 Feet to East.

Improvements include Signing, Pavement Markings,
and Traffic Signal Upgrades on 6th Avenue and
Roadway Reconstruction of 6th Avenue from Toole Avenue
and Congress Street and the Toole Avenue/
Pennington Street Intersection

Project Map

Sheet Index

No.  Description
1  Master Cover Sheet
2  General Notes
3  Design Sheet
4-5  Typical Sections
6  Survey Control Sheet
7  Geometric Control Sheet
8-11  Demolition Plan
12-15  Roadway Plan
16-19  Pavement Marking Plans
20-22  Signing Plans
23-33  Traffic Signal Plans
34  Planting Plan
35  Hardscape Plan
36  Water Modification Plan
37  Right-of-Way Plan

Vicinity Map
Sections 12, 13
T14S, R13E
Vicinity Map
Edition 1

Pima County, Arizona

SPEEDWAY BLVD
DRACHMAN ST
MAYNARD AVE
EUCLID AVE
ST MARYS ROAD
UPRR
ALAMEDA ST
TOOLE AVE
W 7TH ST
6TH AVENUE
9TH ST
5TH ST
3RD ST
BROADWAY BLVD
S speedway ave
3"=1 Mile

As Noted

Two working days before you dig,
CALL FOR THE BLUE STAKES
CALL COLLECT
Blue Stake Center
1-800-782-5348

PARSONS KUNZELMANN
DEPARTMENT OF TRANSPORTATION/ENGINEERING DIVISION

DOWNTOWN INTERMODAL CENTER
PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS

PRELIMINARY
NOT FOR CONSTRUCTION OR RECORDING

TRANSPORTATION DIRECTOR
ENGINEERING ADMINISTRATOR

LANDSCAPE ARCHITECT
DESIGN ADMINISTRATOR
TRAFFIC PLANNING &

DEPARTMENT OF TRANSPORTATION/ENGINEERING DIVISION

1-800-782-5348

37
13
19-22
16-18
8-11
6
4-5
2
1

20
J. Koesters

20
J Vaskovic

30% Plans

30% Plans

13
13

T:\11536c_DIMC\DCR\Data\gface.dgn
Mon 20 May 2013, 16:37:21
NOTES:
1. See Survey Control Sheet for Coordinates and Descriptions.

COORDINATES AND DESCRIPTIONS:

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<th>MONUMENT LINE CONTROL</th>
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<tr>
<td>303</td>
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<tr>
<td>304</td>
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</table>

Two working days before you dig, CALL FOR THE BLUE STAKES.
Blue Stake Center
1-800-782-5348
(520-882-6424)
Tucson, Arizona 85701
177 N Church Suite 610
Notes


2. Existing lighting circuit shall be maintained. Disconnect conductors to existing street light at pullout and protect for applying to new conductors to new street light at new *3 pullouts. See Lighting Plans.
1. All pavement markings shall conform to Pima County/City of Tucson Standards and Specifications.

2. The permanent pavement markings may be modified as directed by the Traffic Engineer.

3. Design Speeds - 5th Avenue - 30 MPH, Toulouse Avenue - 30 MPH, Pennington Street - 30 MPH

4. All lane dimensions are from center of lane line, center of double lane line, face of curb, or edge of pavement unless otherwise noted.

5. The pavement marking drawings are schematic only. The Contractor shall follow all dimensions, details, and standards when installing pavement striping, markings, and markers.

6. The final longitudinal striping shall be 60 MiH 10.00g1 thick hot-sprayed thermoplastic reflectorized striping placed over the temporary striping within 14 to 30 calendar days after completion of the final pavement surface, or as directed by the Engineer. All other markings shall be applied at the same time. Temporary striping shall be painted.

7. All final transverse markings shall be 50 MiH 0.090g1 thermoplastic striping (0.090g1). All pavement arrows and legends shall be hot-sprayed 90 Mil thermoplastic pavement marking (0.090g1). Extruded thermoplastic or preformed applications may be used if approved by the Traffic Engineer.

8. The Contractor shall be responsible for the layout and installation of pavement marking on final pavement surface. The layout and inspection of all pavement markings shall be approved by the Engineer prior to the application of materials.

9. It is the Contractor’s responsibility to ensure that the final pavement surface is placed so that the striping is offset no more than one foot clear of the construction joint, unless otherwise directed by the Engineer.

10. The Contractor shall clean the roadway surface to the satisfaction of the Engineer by sweeping and air jet blowing immediately prior to the placement of all pavement markings. The temperature shall not be less than 50°F for the placement of hot-sprayed thermoplastic striping, and 40°F for the placement of RPMs.

11. All raised pavement markers shall be installed so that the reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow. Type C markers shall be installed so that the clear reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow. Type C markers shall be installed so that the clear reflective face of each marker is facing the direction of traffic and is perpendicular to the direction of traffic flow.

12. All removal of existing pavement markings shall be accomplished in accordance with Section 701 of The PC/COT Standard Specifications. painting over existing striping does not constitute approved striping obliteration.

13. The engineer of record shall be required to produce As-Built striping plans within 90 days of striping completion.

14. Blue raised pavement markers shall be placed adjacent to fire hydrants as shown on Sheet 7-1 of the PC/COT Pavement Marking Design Manual.

15. For all construction, all pavement markings shall be installed by the Contractor.

16. Final inspection/acceptance of pavement markings shall be performed by the Traffic Engineer.

**Pavement Markings Quantity Summary**

<table>
<thead>
<tr>
<th>Line Item Name and Number</th>
<th>Material</th>
<th>Description</th>
<th># Units</th>
<th>Total Quantities</th>
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<tr>
<td>Permanent Pavement Markings, Thermoplastic (Thickness = 0.090g1)</td>
<td>White</td>
<td>L.F.</td>
<td>7040020</td>
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<tr>
<td>Permanent Pavement Markings, Thermoplastic (Thickness = 0.090g1)</td>
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<td>L.F.</td>
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<tr>
<td>Permanent Pavement Markings, Preformed Type 1</td>
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<td>EA.</td>
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<td>Raised Pavement Markers</td>
<td>Type C</td>
<td>EA.</td>
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<tr>
<td>Raised Pavement Markers</td>
<td>Type D</td>
<td>EA.</td>
<td>7040055</td>
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<tr>
<td>Raised Pavement Markers</td>
<td>Type F</td>
<td>EA.</td>
<td>7040060</td>
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<td>L.F.</td>
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<tr>
<td>Temporary Plate</td>
<td>Yellow</td>
<td>L.F.</td>
<td>7060025</td>
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<tr>
<td>Temporary Plate</td>
<td>Symbol or Legend</td>
<td>EA.</td>
<td>7060030</td>
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*Quantities that are in linear feet are based on 4" Equivalent Per Linear Foot of Stripes.*
General Notes - Signing


   Posted Speeds: 25 MPH

   Sign placement shall be based on the posted speed limit.


3. Signs may be modified and locations adjusted to fit conditions as directed by the Traffic Engineer.

4. Post lengths indicated on sign summary sheets are approximate. The contractor shall verify actual post lengths.

5. All perforated posts shall be installed in a concrete foundation, unless otherwise directed by the Jurisdiction Traffic Engineer.

6(a) All sign station locations are approximate. The contractor shall verify actual sign locations with the Traffic Engineer prior to the installation of signs.

6(b) The contractor shall be responsible for coordinating all work with Blue Stake and for installing all traffic signs in the field.

7. All warning sign panels shall be fluorescent yellow diamond grade (DG3 or equivalent) sheeting. All school zone signs shall be fluorescent yellow-green diamond grade (DG3 or equivalent) sheeting. All other sign panels shall have High Intensity Prismatic Type IV sheeting.

8. All new signs shall have aluminum backing, unless otherwise specified.

9. All new signs shall have 0.080 gauge aluminum backing and radius cut corners, except street-name sign panels fewer than 6 inches which shall have 0.125 gauge aluminum backing unless otherwise noted.

10. Block numbers for all street-name signs shall be approved by Traffic Engineering before sign fabrication.

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIGN PANEL SHEETING TYPE</td>
<td>TYPE II</td>
</tr>
<tr>
<td>SIGN POSTS</td>
<td>25 PERFORATED SIGN POST</td>
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<tr>
<td></td>
<td>25 FOUNDATION</td>
</tr>
</tbody>
</table>

Estimated Quantities

UNIT   | QUANTITY
---    | ---
SQ FT  | 1
LIN FT | 1
NOTES:

1. Existing signs such as Parking Signs, SunTran Signs, Loading Zones, or other signs not shown on these plans are to be retained.

NOTES:
1. Existing Signs such as Parking Signs, SunTran Signs, Loading Zones, or Other Signs not shown on these Plans are to be Retained.
Responsibilities:

1. The Contractor shall supply and install the following equipment and materials: steel poles, anchor bolts (with nuts and washers), concrete pole foundations with reinforcement (where specified), control cabinet concrete foundation, concrete pull boxes, electrical conduit, ground rods and connectors, bare wire and all other conductors, traffic signals and mounting assemblies, poles, mastarms, pedestrian signals, mounting assemblies, push button stations with signs, luminaires, photocells, internally illuminated street name signs, electric service pedestals and concrete foundations (where specified) and all other appurtenances necessary for the operation of the traffic signal installation(s), except as modified in the plans.

2. TDOT shall supply the traffic signal controller and video detection system.

3. The Contractor shall install the traffic controller cabinet on its foundation and route all of the conductors in to the control cabinet. The TDOT staff shall terminate the signal installation(s), except as modified in the plans.

General Notes - Traffic Signals

1. All equipment shall be placed within the right of way, including all conduit runs.
2. Conduit runs are shown for schematic purposes, and shall be placed in common trench where possible.
3. All equipment, materials, and construction shall meet or exceed the current City of Tucson/Pima County "Standard Specifications for Public Improvements" and "Standards Details for Public Improvements," 2003 Edition.
4. The Contractor shall have the site blue staked prior to beginning any excavation work. The location of utility facilities are approximate. All involved utilities may not be shown on the plans. The Contractor shall be responsible for contacting all utilities for exact location prior to any construction activity.
5. Contact Tucson Electric Power Co., XXXXX XXXXX 918-8364, to coordinate disconnection/reconnection of existing electrical service.
6. The Contractor shall verify Street Name Sign legends with City of Tucson prior to ordering.
7. The Contractor shall utilize the existing telephone connections. Contact CenturyLink at 884-2952 to coordinate changes to the telephone connection.
8. All equipment locations shall be confirmed by the engineer in the field prior to construction.
9. All intersection lighting luminaires shall conform to the following: 120 V, 400 W HPS, Type III distribution, full cut-off and flat lens. LED fixtures shall have comparable criteria.
10. Contractor shall hand dig as required, where utilities are in potential conflict with the installation of equipment.
11. All 1 1/2" conductor IMSA shall run from controller to pole unspliced.
12. \_\_\_ Designates City approved (Strobe com II) Emergency Vehicle Pre-Empt Sensor supplied and installed by the contractor.
13. \_\_\_ Designates City approved Emergency Vehicle Beacon supplied and installed by the contractor.
14. Remove & Salvage Existing Poles, Masts Arms, and other Existing Unused Equipment to COT Electric Shop. Call Ernie Encinas (791-3191) for Instructions, 48 Hours in Advance.

Legend:

- New traffic signal mast arm with signal heads and luminaire
- Load center
- New controller
- UPS (Uninterrupted Power Source)
- New #7 pull box
- New #7 pull box w/extension
- Video Camera

General Notes - Traffic Signals

15. Remove & Salvage Existing Poles, Masts Arms, and other Existing Unused Equipment to COT Electric Shop. Call Ernie Encinas (791-3191) for Instructions, 48 Hours in Advance.

16. All (16) conductor IMSA shall run from controller to pole unspliced.

17. All intersection lighting luminaires shall conform to the following: 120 V, 400 W HPS, Type III distribution, full cut-off and flat lens. LED fixtures shall have comparable criteria.

18. Contractor shall hand dig as required, where utilities are in potential conflict with the installation of equipment.

19. All 1 1/2" conductor IMSA shall run from controller to pole unspliced.

20. \_\_\_ Designates City approved (Strobe com II) Emergency Vehicle Pre-Empt Sensor supplied and installed by the contractor.

21. \_\_\_ Designates City approved Emergency Vehicle Beacon supplied and installed by the contractor.

22. The Contractor shall verify Street Name Sign legends with City of Tucson prior to ordering. Contact CenturyLink at 884-2952 to coordinate changes to the telephone connection.

23. All equipment locations shall be confirmed by the engineer in the field prior to construction.

24. All intersection lighting luminaires shall conform to the following: 120 V, 400 W HPS, Type III distribution, full cut-off and flat lens. LED fixtures shall have comparable criteria.

25. Contractor shall hand dig as required, where utilities are in potential conflict with the installation of equipment.

26. All 1 1/2" conductor IMSA shall run from controller to pole unspliced.

27. \_\_\_ Designates City approved (Strobe com II) Emergency Vehicle Pre-Empt Sensor supplied and installed by the contractor.

28. \_\_\_ Designates City approved Emergency Vehicle Beacon supplied and installed by the contractor.

29. Remove & Salvage Existing Poles, Masts Arms, and other Existing Unused Equipment to COT Electric Shop. Call Ernie Encinas (791-3191) for Instructions, 48 Hours in Advance.

30. All (16) conductor IMSA shall run from controller to pole unspliced.

31. All intersection lighting luminaires shall conform to the following: 120 V, 400 W HPS, Type III distribution, full cut-off and flat lens. LED fixtures shall have comparable criteria.

32. Contractor shall hand dig as required, where utilities are in potential conflict with the installation of equipment.

33. All 1 1/2" conductor IMSA shall run from controller to pole unspliced.

34. \_\_\_ Designates City approved (Strobe com II) Emergency Vehicle Pre-Empt Sensor supplied and installed by the contractor.

35. \_\_\_ Designates City approved Emergency Vehicle Beacon supplied and installed by the contractor.

36. Remove & Salvage Existing Poles, Masts Arms, and other Existing Unused Equipment to COT Electric Shop. Call Ernie Encinas (791-3191) for Instructions, 48 Hours in Advance.
Notes:

1. All equipment locations shall be confirmed by the engineer In the field prior to construction.

2. Potage to verify clearance to waterline prior to placing conduit. Clearance requirement is 1 vertical separation for conduit. 2 horizontal offset from existing 6" to 8" conduits to new traffic signal poles, unless otherwise noted on the plans.

3. Contractor shall use caution in installing traffic signal foundations for poles with regards to the existing sanitary sewer line. An approved Flow Management Plan shall be in place prior to construction. See Special Provisions.
CABINET AND POLE SCHEDULE

<table>
<thead>
<tr>
<th>CABINET</th>
<th>TRAFFIC SIGNAL CENTER</th>
<th>LIGHTING CONTROLLER</th>
<th>R/L CONTROLLER</th>
<th>FOUNDATION</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
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</table>

**TRAFFIC SIGNAL planner**

**Max. Elevation:** 120' Maximum

Two working days before you dig.

30' REMARKS

**Note:** UPS (Uninterrupted Power Source)

**Data:**

- DUT 24VDC, Aluminum BBS Enclosure w/ 180 lbs x 38V-CDI supplied
- DUT 401, 1000W, 40V-CDI supplied

**PLAN No.**

- CHK'D. BY
- APPR.
- CHK'D. 2013

**SIGNALS**

1. **Flood Control Pre-Empt**
   - **Type:** II
   - **Location:** STA 103+52.70, 41.7' Lt, 6th Ave E

2. **Street Name Sign**
   - **Type:** V
   - **Location:** STA 103+57.90, 41.7' Lt, 6th Ave E

**STREET NAME SIGN LEGEND**

<table>
<thead>
<tr>
<th>CARDINAL</th>
<th>STREET</th>
<th>SUFFIX</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>Ave</td>
<td>200</td>
</tr>
</tbody>
</table>

**STREET NAME SIGN NOTES**

1. Street name signs shall be 18’ deep aluminum panels, 0.125 gauge.
2. Letters shall be initial uppercase (12") followed by lower case letters (10”). Secondary letters (e.g., cardinal direction, suffix) shall be 6”.
3. Street name signs shall use diamond grade sheathing.
4. Mount street name signs flagpole style. See Special Provision for flagpole style mount details.

**EQUIPMENT NOTES**

1. Fire pre-emption system (TOMAR) shall include 4-STROBECOM II 2090-SD detectors with 2140 optical sensor and beacon on mast arm. (Special Provisions).
3. All cables from devices or terminal to controller shall be unshielded.
4. Separate power from signal cables in conduit runs.
5. Mast arms for all poles shall be furnished with welded tenons only.
6. The video detection system shall be furnished by the ISD and installed by the contractor. Provide a dedicated power circuit for video system.
8. For Wi-Fi installation contact Francisco Leyva at 791-4259 for details.
9. Sign panels shall be straight and true with no bowing prior to and after applying the sheeting material.
10. All mast arm signals shall be Aluminum.
11. Reinstall salvaged Flood Control Pre-Empt on pole A instead of Type F Assembly. Use Type VI Mounting Assembly.
12. Reinstall salvaged Flood Control Pre-Empt on poles Q and T on mast arm, 5’ from signal pole using “Multi-Armed” type of mounting hardware.
1. Pot holes to verify clearances to watertight prior to placing conduit. Direction requirement is 1 vertical separation for conduit & 0 horizontal offset from existing 6" DI watertight to new traffic signal poles.

2. Contractor shall maintain existing lighting circuits at the intersections. Existing lighting pull boxes are to be replaced. Modification to existing lighting conduits and conduit shall be carried out under Miscellaneous Electrical Work.
CABINET AND POLE SCHEDULE

<table>
<thead>
<tr>
<th>NUMBER</th>
<th>NAME</th>
<th>MAST ASSG</th>
<th>MAST</th>
<th>FOUNDATION</th>
<th>REMARKS</th>
<th>LOCATION</th>
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<tr>
<td>1</td>
<td>G</td>
<td>30'</td>
<td>20'</td>
<td></td>
<td></td>
<td>Existing Service</td>
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<tr>
<td>2</td>
<td>A</td>
<td>30'</td>
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<td>STA 105+14.90, 37.60' Lt</td>
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<td>STA 106+22.0, 32.0' Rt</td>
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<td>STA 106+22.0, 32.0' Rt</td>
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<td>20'</td>
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<td>STA 106+22.0, 32.0' Rt</td>
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<td>14</td>
<td>S</td>
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<td>20'</td>
<td></td>
<td></td>
<td>STA 106+22.0, 32.0' Rt</td>
</tr>
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STREET NAME SIGN LEGEND

NTS: Street name signs shall be 18" deep aluminum panels, 0.125 gauge.
2. Lettering shall be initial uppercase (12") followed by lower case letters (10"). Secondary letters (e.g., cardinal direction, suffix) shall be 6".
3. Street name signs shall use diamond grade sheeting.

EQUIPMENT NOTES
1. Fire pre-emption system (TOMAR) shall include 4-3 STROBECOM II 2090-SD detectors with 2140 optical signal processor card with 4-2200 SPM (modular) and 1891 cage and harness or equivalent.
2. Install street name signs on poles D, F, H, and J with approved new mounting hardware. See Special Provisions.
3. All cables from device or termination to controller shall be unspliced.
4. Separate power from signal cables in conduit runs.
5. Mast arms for all poles shall be furnished with welded tenons only.
6. The video detection system shall be furnished by the DOT and installed by the contractor. Provide a dedicated power circuit for video system.
7. Install video detection system on poles D, F, H, and J. Install cameras at luminaire.
8. For Wi-Fi installation contact Francisco Leyva at 791-4259 for details.
9. Sign panels shall be straight and true with no bowing prior to and after applying the sheeting material.
10. All mast arms signs shall be Aluminum.
Two working days before you dig,
CALL FOR THE BLUE STAKES
Blue Stake Center
1-800-782-5348
(520-882-6424)
Tucson, Arizona 85701
177 N Church Suite 610

6TH AVE / CONGRESS ST
TRAFFIC SIGNAL PLAN

DEPARTMENT OF TRANSPORTATION/ENGINEERING DIVISION
DOWNTOWN INTERMODAL CENTER
PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS

6 OF 11

6TH AVE / CONGRESS ST

Install Video Detection System - 1 Camera (Dept Furn)
Install Cable to Existing Controller
Mount Video Camera at Luminaire

Modern Street Car Type 'G' Pole
Install Video Detection System - 1 Camera (Dept Furn)
Install Cable to Existing Controller
Mount Video Camera at Luminaire

Modern Street Car Arizona Type 'I' Pole

Connect New Signal to Existing 16 Conductor Cable
Install 'F' Signal with Type V Mounting

Remove and Salvage Pole & Light w/ Mast Arm
Remove and Salvage Ped Faces & Mounting
Install 'F' Pole with 20' Mast Arm and 'F' Signal
with Type II Mounting Reinstall Light with Mast Arm
Reinstall Ped Faces & Mounting Hardware
Install Street Name Sign
Connect New Signals to Existing 16 Conductor Cable
Install 'F' Signal with Type VII Mounting
Install Pre-Empt Sensor (Tomar M913) & Beacon

Modern Street Car Arizona Type 'G' Pole
Remove and Salvage Pole & Light w/ Mast Arm
Remove and Salvage Ped Faces & Mounting
Install 'F' Pole with 20' Mast Arm and 'F' Signal
with Type II Mounting Reinstall Light with Mast Arm
Reinstall Ped Faces & Mounting Hardware
Install Street Name Sign
Connect New Signals to Existing 16 Conductor Cable
Install 'F' Signal with Type VII Mounting
Install Pre-Empt Sensor (Tomar M913) & Beacon

6" DE

Modern Street Car Arizona Type 'G' Pole
Remove and Salvage Pole & Light w/ Mast Arm
Remove and Salvage Ped Faces & Mounting
Install 'F' Pole with 20' Mast Arm and 'F' Signal
with Type II Mounting Reinstall Light with Mast Arm
Reinstall Ped Faces & Mounting Hardware
Install Street Name Sign
Connect New Signals to Existing 16 Conductor Cable
Install 'F' Signal with Type VII Mounting
Install Pre-Empt Sensor (Tomar M913) & Beacon

Modern Street Car Type 'G' Pole
Install Video Detection System - 1 Camera (Dept Furn)
Install Cable to Existing Controller
Mount Video Camera at Luminaire

Modern Street Car Arizona Type 'I' Pole
Connect New Signal to Existing 16 Conductor Cable
Install 'F' Signal with Type V Mounting

110-00

111-00

111-00

111-00

110-00

6TH AVENUE

CONGRESS STREET

Exist R/W

Modern Street Car Arizona Type 'G' Pole
Remove and Salvage Pole & Light w/ Mast Arm
Remove and Salvage Ped Faces & Mounting
Install 'F' Pole with 20' Mast Arm and 'F' Signal
with Type II Mounting Reinstall Light with Mast Arm
Reinstall Ped Faces & Mounting Hardware
Install Street Name Sign
Connect New Signals to Existing 16 Conductor Cable
Install 'F' Signal with Type VII Mounting
Install Pre-Empt Sensor (Tomar M913) & Beacon

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Install Street Name Sign
Connect New Signals to Existing 16 Conductor Cable
Install 'F' Signal with Type VII Mounting
Install Pre-Empt Sensor (Tomar M913) & Beacon
### Cabinet and Pole Schedule

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<thead>
<tr>
<th>Cabinet</th>
<th>Type</th>
<th>Controller</th>
<th>Rail Controller</th>
<th>Foundation</th>
<th>Remarks</th>
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<td>NEMA TS-2</td>
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#### Street Name Sign Legend

- **NTS**

#### Street Name Sign Details

- **NTS**

**Street Name Sign Notes**

1. Street name signs shall be 18" deep aluminum panels, 0.125 gauge.
2. Lettering shall be initial uppercase (12") followed by lower case letters (10"). Secondary letters (e.g. cardinal direction, suffix) shall be 6".
3. Street name signs shall use diamond grade sheeting.

**Equipment Notes**

1. Fire pre-emption system (TOMAR) shall include 4-STROBECOM II 2090-SD detectors with 2140 optical signal processor card with 4-2080 SPM (programmed) and 1881 cage and harness or equivalent.
2. Install street name sign on pole E with approved new mounting hardware. See Special Provisions.
3. All cables from device or termination to controller shall be unspliced.
4. Mast arms for all poles shall be furnished with welded tenons only.
5. Sign base shall be straight and true with no bowing prior to and after applying the sheeting material.
6. All mast arms shall be Aluminum.
Modern Street Car Arizona Type 'G' Pole

- Remove and Salvage Pole & Light w/ Mast Arm
- Remove and Salvage Ped Faces & Mounting Hardware
- Retain Existing Pole Foundation
- Install 'F' Pole with 20' Mast Arm and 'F' Signal with Type II Mounting
- Reinstall Ped Faces & Mounting Hardware
- Reinstall Street Name Sign
- Connect New Signals to Existing 16 Conductor Cable
- Install Pre-Empt Sensor (Term W913) & Beacon
- Install Video Detection System - 1 Camera (Dept Furn)
- Mount Video Camera at Luminaire

Modern Street Car Type 'G' Pole

- Remove and Salvage Pole & Light w/ Mast Arm
- Remove and Salvage Ped Faces & Mounting Hardware
- Retain Existing Pole Foundation
- Install 'F' Pole with 20' Mast Arm and 'F' Signal with Type II Mounting
- Reinstall Ped Faces & Mounting Hardware
- Reinstall Street Name Sign
- Connect New Signals to Existing 16 Conductor Cable
- Install 'F' Signal with Type V Mounting
- Install Pre-Empt Sensor (Term W913) & Beacon
- Install Video Detection System - 1 Camera (Dept Furn)
- Mount Video Camera at Luminaire

Two working days before you dig, CALL FOR THE BLUE STAKES
Blue Stake Center
1-800-782-5348
(520-882-6424)
Tucson, Arizona 85701
177 N Church Suite 610
### CABINET AND POLE SCHEDULE

<table>
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<th>CABINET</th>
<th>TYPE</th>
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<th>ALL CONTROLLER</th>
<th>FOUNDATION</th>
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### POLE SCHEDULE

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### EQUIPMENT NOTES

1. Fire pre-emption system (TOMAR) Shall include 4-STROBECOM II 2090-50 detectors with 240 optical signal processor card with 4-2080 SFM (modules) and 1881 cage and harness or equivalent.
2. Mast arms for all poles shall be furnished with welded tenons only.
3. Sign panels shall be straight and true with no bowing prior to and after applying the sheeting material.
4. All mast arms signals shall be Aluminum.

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**Traffic Signal Plans - Pole Schedule 9 of 11**

**6th Ave / Broadway Blvd**

**Department of Transportation/Engineering Division**

**Parsons Brinckerhoff**

**Tucson, Arizona 85701**

**U.S. Code of Federal Regulations**

**City of Tucson**

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Two working days before you dig, CALL FOR THE BLUE STAKES
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Tucson, Arizona 85701
177 N Church Suite 610

PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS
DOWNTOWN INTERMODAL CENTER
30% Plans

PROPOSED PHASING DIAGRAM

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<tr>
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<th>84 &amp; 96</th>
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<tbody>
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<tr>
<td>P 5</td>
<td>P 6</td>
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<td>P 6</td>
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TOOLE AVE / PENNINGTON ST
TRAFFIC SIGNAL PLAN

DEPARTMENT OF TRANSPORTATION/ENGINEERING DIVISION
DOWNTOWN INTERMODAL CENTER
PEDESTRIAN SAFETY AND BUS ACCESS IMPROVEMENTS
30% Plans
NOT FOR CONSTRUCTION OR RECORDING

SCALE: 1"=10'
H: 1"=10'
NOTES:
1. Remove existing concrete In Pennington Street Medians, excavate existing soil to a depth of 3’ min. and replace with new planting soil per CDP standard.
2. Contractor shall verify all plant quantities. Plant quantities shall be derived from plans. No plant substitutions shall be made without consent of Landscape Architect.
3. Planting areas shall be regraded from adjacent pavement, unless otherwise noted.
4. All planting areas shall receive 1/2" Screened Rock.
5. Plants shall be located as shown on plan. Trees shall be aligned in all cases. Place tree and shrub locations, adjust locations when requested, and obtain Landscape Architect’s acceptance of layout before planting. Planting setbacks SFWA’s 20’ GBB’s 8’.
6. Electrics 3-5’ Fire Hydrants 3-5’.
7. Location of plant materials shall be approved prior to Installation of 1/2” Screened Rock.
8. Refer to CFD Drawings for additional information.
NOTES:
1. Irrigation to rear plantings shall tie into existing irrigation system at Rochester Transit Center (RTC). Maintenance to be performed by Sun Tran.
2. Site under all roadway and sidewalks where necessary.
   Irrigation sleeves are shown schematically.
3. 1/2" Screened Rock shall be applied 2" minimum depth. Color TBD.
4. Boulders (2' x 2') shall match color of 1/2" Screened Rock.
   Boulders to have flat surface for sitting purposes.
5. Exact locations for bike racks and benches to be determined during Final Design. Color TBD.