Date: December 27, 2021

From: Joseph Samaha, PE
      Stantec

To: Anis Ghobril
    City of Sacramento Community Development
    300 Richards Blvd, 3rd Floor
    Sacramento, CA 95811

Re: Innovation Park – Subdivision Modification Request Memo

This submittal intends to provide the necessary justification for subdivision roadway and intersection design standard exceptions as they pertain to the Tentative Subdivision Map for Innovation Park, formerly known as Sleep Train Arena.

The modifications requested are for non-standard centerline radii for 2-lane roadways, in two (2) locations on the proposed project.

1. Local Commercial: Non-Standard Roadway Centerline Radius at Northwest Corner of Site (C Street, near Lot 12)
2. Major Collector: Non-Standard Roadway Centerline Radius at Northeast Corner of Site (C Street, near Lot 17)

For reference, we have included the Tentative Subdivision Map indicating the locations of these modifications and enlargement exhibits at these two locations.

Thank you for your continued assistance on this project.

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Attachments:
   1.) Narrative Justification
   2.) Location Map
   3.) Enlargement Exhibits
ATTACHMENT 1
Innovation Park – Tentative Subdivision Map
Proposed Subdivision Modification No. 1
Non-Standard Roadway Centerline Radius at Northwest Corner of Site

Description of the Modification:

This modification request is to modify the minimum radius of Local Commercial Street from 400’ to 355.50’, to follow the existing project boundary at the northwest corner of C Street (near Lot 12).

The existing shape of the site and fixed join points at existing constructed roadways results in limited ability to meet all City standards regarding intersection geometry, including radius, tangent and skew.

Justification for the Modification:

• Roadway Classification and Geometry:
  o We are requesting a 44.5’ centerline radius deviation from standard. The City Local Commercial Street standards require a 400’ centerline radius. Due to geometry constraints, the proposed design will provide a 355.50’ centerline radius.
  o Our design seeks a minimum 100’ tangent into the intersection, and this design provides approximately 120’ before the intersection.

• Traffic Volumes
  o This segment of C Street at the northwest corner will have limited traffic as shown in the preliminary traffic study, including:
    ▪ Only 30 cars in each direction for this roadway segment during the AM and PM peak hours for the Cumulative Plus Project Peak Hour Traffic Volumes condition.
    ▪ The lot adjacent to this segment is proposed as a SMUD Substation. This land use would not be a large generator of traffic volumes.
    ▪ Preliminary ADT volumes on this segment were calculated as less than 1,000/day.

• Design Elements:
  o Per the tentative map section notes, as discussed and coordinated with Public Works, this section will be Local Commercial Standard City Plate 15-3, modified with no on-street parking adjacent to the proposed SMUD substation on Lot 12 with 2’ access control median. See Attachment 3 for the pertinent roadway section (Section E on the Tentative Subdivision Map).
  o The exact median geometry, striping and signage will be finalized at final design to the satisfaction of Public Works and the Fire Department.

Conclusion:

Given the low traffic volumes, limited access around the curve, and the geometry constraints of the framework roadway intersections, this radius modification is justified. The final design elements, widths, locations of medians and lanes, and appropriate signage and striping will be designed to the satisfaction of Public Works.
Innovation Park – Tentative Subdivision Map
Proposed Subdivision Modification No. 2
Non-Standard Roadway Centerline Radius at Northeast Corner of Site

Description of the Modification:
This modification request is to modify the minimum radius of Major Collector Street from 600’ to 555.50’, to follow the existing project boundary at the northeast corner of C Street (near Lot 17).

The existing shape of the site and fixed join points at existing constructed roadways results in limited ability to meet all City standards regarding intersection geometry, including radius, tangent and skew.

Justification for the Modification:

- Roadway Classification and Geometry:
  - We are requesting a 44.5’ centerline radius deviation from standard. The City Major Collector Street standards require a 600’ centerline radius. Due to geometry constraints, the proposed design will provide a 555.50’ centerline radius, which is a direct offset of the northeastern property line. Maintaining this direct offset will result in the centerline curvature extending slightly into the intersection with existing Five Star Way – a function of the existing site geometry that is unavoidable.

- Traffic Volumes
  - This segment of C Street at the northeast corner will have limited traffic.
    - In the latest Traffic Study (intersections 102 and 103), there are only 30 cars in the southbound direction of this roadway segment for the AM and PM peak hours for the Cumulative (2040) Plus Project Peak Hour Traffic Volumes condition. There are only 45 and 53 cars in the northbound direction for this roadway segment during the AM and PM peak hours, respectively.
    - Preliminary ADT volumes on this segment were calculated as approximately 1,200 per the preliminary City traffic study

- Design Elements:
  - Per the tentative map section notes, as discussed and coordinated with Public Works, this section will have a two way left turn lane, 2’ access control median, or left turn pocket with no on-street parking. See Attachment 3 for the pertinent roadway section (Section F on the Tentative Subdivision Map).
  - The exact median geometry, striping and signage will be finalized at final design to the satisfaction of Public Works and the Fire Department.

Conclusion:
Given the low traffic volumes, limited access around the curve, minimal reduction of the standard centerline radius, and the geometry constraints of the framework roadway intersections, this radius modification is justified. The final design elements, widths, locations of medians and lanes, and appropriate signage and striping will be designed to the satisfaction of Public Works.
NOTES:
1. ROADWAYS ARE DRAWN PER TYPICAL STREET SECTIONS. FINAL GEOMETRY AND LANE CONFIGURATIONS OF EXPANDED INTERSECTIONS TO BE DETERMINED IN TRAFFIC SIGNAL DESIGN CONCEPT REPORT.
2. SECTION DESIGNATIONS SHOWN REFER TO TYPICAL SECTIONS DEPICTED ON TENTATIVE SUBDIVISION MAP.

-CENTERLINE RADIUS = 555.50' MAJOR COLLECTOR
-PROJECT BOUNDARY
-STANDARD CENTERLINE RADIUS = 600'
-END CENTERLINE CURVE
-BEGAN CENTERLINE CURVE

LOT 17

NOTE: TWO WAY LEFT TURN LANE, 2' ACCESS CONTROL MEDIAN, OR LEFT TURN POCKET WITH NO ON-STREET PARKING.
SECTION E

NOTE: ROADWAY TO BE LOCAL COMMERCIAL PER CITY PLATE 15-3.
AND PARKING ADJACENT TO PROPOSED SMUD FACILITY LOT 12 WITH 2' ACCESS CONTROL MEDIAN

SECTION F

+NOTE: TWO WAY LEFT TURN LANE, 2' ACCESS CONTROL MEDIAN, OR LEFT TURN POCKET WITH NO ON-STREET PARKING
++CLEARANCE SHALL BE PROVIDED TO EXISTING SMUD POWER POLES TO THE SATISFACTION OF SMUD AND PUBLIC WORKS.