

# MEMORANDUM



**To:** Mathew Moore  
Associate Project Manager  
David J Powers & Associates, Inc.

**Date:** 07/06/2022

**From:** Peter Smith, PE

**Job No.:** 5154.06

**Subject:** Flood & Stormwater Treatment Design  
Criteria for Advanced Manufacturing  
and R&D Building at 350 W. Trimble

The proposed Advanced Manufacturing and R&D building project is located at the southwestern corner of W. Trimble Road and Orchard Parkway. The property is owned and managed by LBA Realty. The project consists of the development of 10.22 acres on a site that previously contained surface parking lots. The new building provides approximately 208,000 GSF of core & shell space. The remaining site area is approximately five acres, and will consist of surface parking, loading dock access, manufacturing equipment areas, pedestrian walkways, and landscaping. Refer to Site Development Permit (SDP) plans dated April 28, 2022, and submitted to San Jose Planning on this same date.

The project is located within a FEMA Flood Hazard area, the Updated 2006 North San Jose Floodplain Management Study (NSJFMS) area and is subject to Provision C.3 Stormwater Treatment as administered by the Santa Clara Valley Urban Runoff Pollution Prevention Program and enforced by City of San Jose regulations and requirements.

Based upon coordination with San Jose Planning and Public Works for previous development proposals, the lowest floor of the building needs to be elevated above the FEMA Flood Hazard Area or be above the minimum NSJFMS design elevation, whichever is higher. Alternatively, since this is a non-residential structure, it may also be floodproofed to this elevation. For insurance rating purposes, the building's floodproofed design elevation must be at least one foot above the base flood elevation to receive rating credit.

The project intends to comply with FEMA, NSJFMS, and Provision C.3 Stormwater Treatment requirements. The project is also subject to San Jose Public Works review for compliance and must comply with conditions of project approval.

## FEMA

The building is partially located within FEMA Flood Hazard Zone AH, Elevation 27.0-ft North American Vertical Datum of 1988 (NAVD 88) and Flood Hazard Zone X. The proposed building finished floor is elevation 28.0 and this is higher than the flood hazard elevation, and meets the National Flood Insurance Program requirements for elevating a structure above special flood hazard zone. Refer to Grading and Drainage Plan sheet C-001, dated April 28, 2022 and submitted to San Jose Planning as a part of the SDP package.



## NSJFMS

The project site is located within the Updated 2006 North San Jose Floodplain Management Study (NSJFMS) policy area which allows up to a 75% blockage in an east-west direction with 25% of the area reserved for shallow flood water conveyance. Attached to this memo are revised Flood Conveyance Plan (sheet C-003) and Flood Conveyance Sections (sheet C-004), revised on May 31, 2022. The project intends to comply with the Updated 2006 NSJFMS and this is achieved by expanding the flood conveyance to the back of the public sidewalk and by providing a concrete cap over the existing PG&E 12kv electrical line so that the grade in the electrical easement can be lowered.

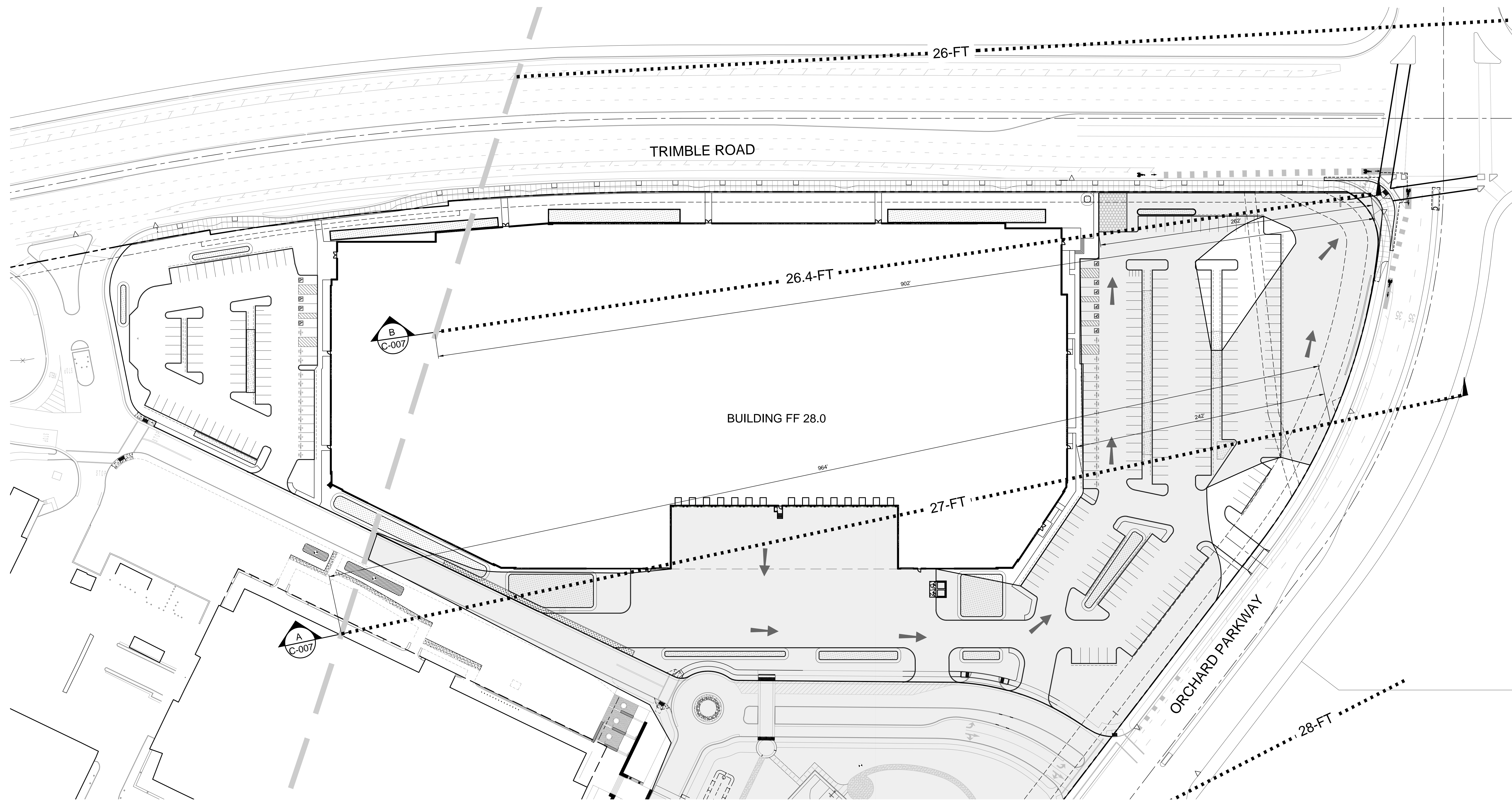
Flood Conveyance Plan C-003 shows Boundary and Water Surface Elevation contours that are interpolated from the figures in the Updated 2006 NSJFMS. The locations for Sections A and B were selected because they represent the critical points of shallow stormwater blockage. These sections are shown on sheet C-004 and depict that the site is graded to provide the minimum 25% conveyance can be achieved in those areas.

## Provision C.3 Stormwater Treatment

This is a redevelopment project that will create and/or replace more than 10,000 square feet of impervious surface and therefore is subjected to provision C.3. Additionally, the project proposes to alter more than 50% of the impervious surface of a previously existing development that was not subject to Provision C.3. Because of this, treatment systems need to be designed for all existing impervious surfaces as well as the new and /or replaced impervious surfaces.

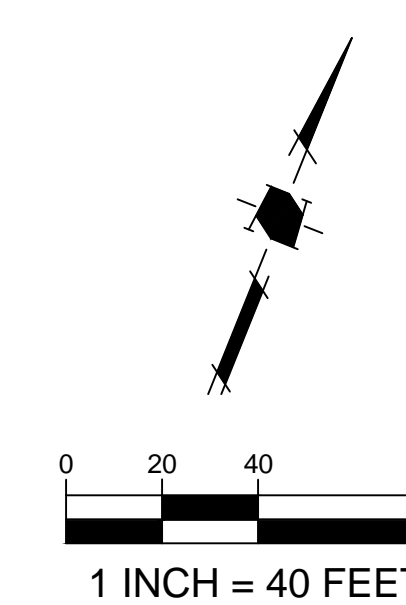
The project incorporates flow-through planters and biotreatment basins for the treatment of runoff from impervious surfaces such as roofs, walkways, loading dock areas, and surface parking lots. These treatment devices filter pollutants as the runoff percolates downward through the surface plant material and subsurface sandy loam soil layer in the cell. The filtered runoff is collected at the bottom of the cell in a perforated PVC under drainpipe, which conveys the water to the storm drain system. Additionally, self-treating landscape areas are incorporated into the design. Refer to Stormwater Control Plan (sheet C-005), Stormwater Control Notes & Details (sheet C-006), Stormwater Control Calculations (sheet C-007) and Bioretention Basin Details (sheets C-008 and C-009), dated April 28, 2022 and submitted to San Jose Planning as a part of the SDP package.

Additionally, pollutant source controls are to be implemented with the project that include beneficial landscaping, water efficient irrigation, storm drain labeling, and maintenance activities (parking lot sweeping and catch basin cleaning). The covered area of the loading dock will drain to the sanitary sewer as well as the trash enclosure.



**LEGEND**

- PROJECT BOUNDARY
- LOT LINE
- NSJFMP BOUNDARY
- NSJFMP CONTOUR LINE
- FLOOD CONVEYANCE PATH
- OVERLAND RELEASE



**FLOOD CONVEYANCE CALCS**

\*ULTIMATE BLOCKAGE SHALL NOT EXCEED 75% OF THE SITE PERPENDICULAR TO THE FLOW OF FLOOD WATERS

**SECTION A**  
 LENGTH OF SECTION = 964'  
 PERCENT OPEN SPACE =  $\frac{722}{964} = 74.9\%$   
 PERCENT BLOCKAGE =  $\frac{242}{964} = 25.1\%$

**SECTION B**  
 LENGTH OF SECTION = 902'  
 PERCENT OPEN SPACE =  $\frac{640}{902} = 71.0\%$   
 PERCENT BLOCKAGE =  $\frac{262}{902} = 29.0\%$

**FLOOD CONVEYANCE PLAN**

DATE: 04/28/2022  
 SITE DEVELOPMENT PERMIT: 1ST SUBMITTAL

PA/PM: PBS  
 DRAWN BY: CS  
 JOB NO.: 515406

SCALE: AS SHOWN  
 GENERAL ID: **021-C**  
 SHEET ID: **C-003**

350 W. TRIMBLE ROAD  
 ADVANCED MANUFACTURING BUILDING

San Jose, CA 95131





350 W. TRIMBLE ROAD  
ADVANCED MANUFACTURING BUILDING

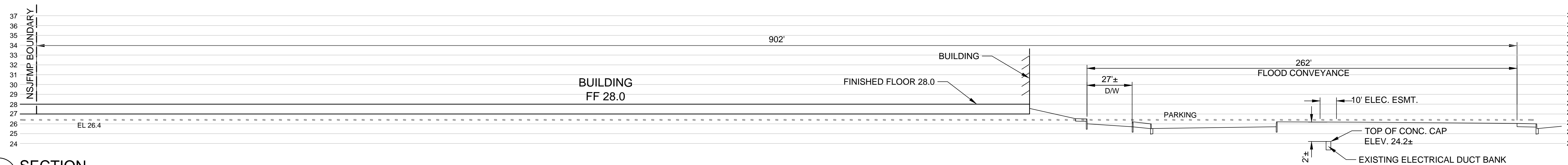
San Jose, CA 95131

**FLOOD CONVEYANCE SECTIONS**

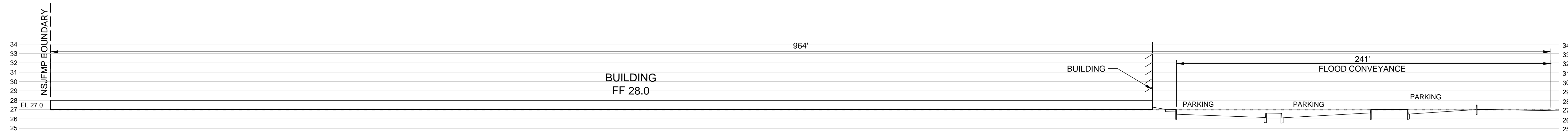
DATE: 04/28/2022  
REMARKS: SITE DEVELOPMENT PERMIT, 1ST SUBMITTAL

PA/PM:	PBS
DRAWN BY.:	CS
JOB NO.:	515406

SCALE:	AS SHOWN
GENERAL ID:	<b>022-C</b>
SHEET ID:	<b>C-004</b>



**B SECTION**  
SCALE: HOR. 1" = 30' / VER. 1" = 5'



**A SECTION**  
SCALE: HOR. 1" = 30' / VER. 1" = 5'