PRELIMINARY DRAINAGE STUDY

The Bishop's School

7607 La Jolla Boulevard, La Jolla, CA 92037
PRJ-
PMT-
DWG. # -D

CUP SUBMITTAL
August 16, 2022

Prepared by:
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JN 182696

Michael Baker
INTERNATIONAL

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1 PROJECT DESCRIPTION

1.1 PROJECT DATA

Project Owner:	The Bishop's School 7607 La Jolla Blvd. La Jolla, CA 92037
Project Site Address:	7607 La Jolla Blvd., La Jolla, CA 92037
Project Location:	Latitude: 32.841289 Longitude: -117.279040
Adjacent Areas:	North: Ex. Development/Prospect St. West: Prospect St./ La Jolla Blvd. South: Ex. Development/Alley East: Draper Ave.
Adjacent Land Uses:	Residential/Commercial
Legal Description:	Parcel 1 of Parcel Map 19523
APN:	350-420-05

1.2 SCOPE OF REPORT

This study develops 100-year, 6-hour peak flow runoff for the existing and proposed conditions to identify the hydrologic impacts of the proposed improvements. This study includes the preliminary design and capacity of proposed stormwater infrastructure, through the implementation of proposed stormwater Best Management Practices (BMPs).

This report does not discuss required water quality measures to be taken on an interim level during construction, nor those necessary to be implemented permanently. Those discussions can be found under separate cover in the project "Storm Water Pollution Prevent Plan" (SWPPP) and the "Storm Water Quality Management Plan" (SWQMP), respectively. Additionally, this report does not discuss hydromodification mitigation requirements and/or exemptions. That discussion can be found in Attachment 2 of the SWQMP.

1.3 LOCATION

The Bishop's School project site comprises approximately 2.41 acres and is located along the west side of Draper Street at the intersection of Draper St. and Silver St., in the City of San Diego, California. The project site is roughly 0.2 miles from the Pacific Ocean, the approximate location can be seen on Figure1 – Vicinity Map.

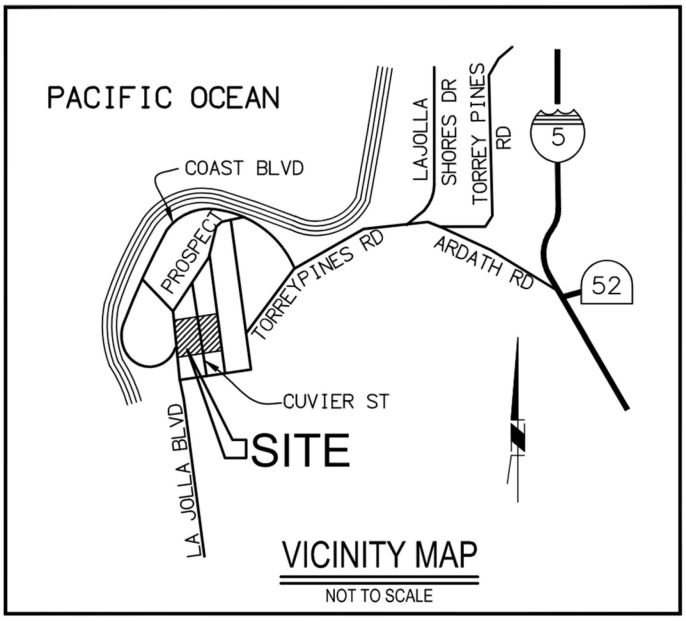

FIGURE 1 - VICINITY MAP (NTS)

The Federal Emergency Management Agency (FEMA) has not mapped any Special Flood Hazard Areas (SFHAs) for the project site. The entire project site lies within un-shaded Zone X, which correlates with areas determined to be outside the 500-year floodplain. A copy of the Flood Insurance Rate Map (FIRM) included in Attachment A.

The NRCS Web Soil Survey was referenced, and most of the project site is hydrologic soil Group "D". Group "D" soils have very slow to infiltration rate when thoroughly wet. Soils in Group "D" are characterized by having a layer impeding the downward movement of water or soils of moderately fine texture making for a slow rate of water transmission. A copy of the NRCS map is included in Attachment A.

1.4 EXISTING CONDITION

The project site is entirely built out in the existing condition and has been hydrologically analyzed as two drainage basins, a northern and southern basin. The site generally drains westerly via a combination of surface flow and pipe flow via existing area drains. The project site does not receive surface run-on from the neighboring properties; project site runoff is ultimately discharges into an existing public 4'x6' RCB culvert located on-site within an easement dedicated to the City of San Diego.

Impervious area is comprised of the concrete walkways, tennis courts, drive isles and roofing. Pervious area is comprised of landscape located within adjacent to walkways and the existing building.

The existing site topography, drainage patterns, and stormwater conveyance systems are shown on the Existing Condition Hydrologic Work Map included in Attachment B.

1.5 PROPOSED CONDITION

The proposed structures will be located close to the property lines on all sides of the project site. Roof leaders, area drains, and new on-site private storm drain will direct project site runoff to an existing public storm drain (4'x6' RCB) on-site, said public storm drain is within an easement to the City of San Diego. The project site is entirely built out in the proposed condition and has been hydrologically analyzed as two drainage basins, similar to the existing condition analysis.

Discharge from the project area will outlet into modular wetlands systems and will connect to the City's Municipal Separate Storm Sewer System (MS4) via a public storm drain (4'x6' RCB) on-site.

Refer to Appendix C for an exhibit detailing the proposed condition.

2 STUDY OBJECTIVES

The specific objectives of this study are as follows:

- Quantify the pre- and post-development 100-year peak flow rates for each respective project area;
- Demonstrate the proposed improvements will not increase the potential for erosion on the project site or downstream areas;
- Document the hydraulic capacities of preliminary on-site, private pipes and inlets using methodology outlined in the City's DDM;
- Document compliance with CEQA thresholds of significance.

3 METHODOLOGY

3.1 HYDROLOGY

The Rational Method has been utilized to perform the hydrologic analyses. The following formula conforms to the hydrologic methodologies outlined in the City of San Diego Drainage Design Manual (January 2017).

$$Q = C * I * A$$

Where, Q = Peak Discharge - (cfs)

C = Runoff Coefficient

I = Average Rainfall Intensity - (in/hr)

A = Drainage Area - (acres)

A runoff coefficient has been determined for the existing and proposed conditions per Section A.1.2 of the City of San Diego Drainage Design Manual. The tabulated impervious area chosen for the project site is 85% (commercial use) for the existing and proposed condition.

Intensity has been calculated per the IDF Curve in Figure A-1 of the City of San Diego Drainage Design Manual.

3.2 HYDRAULICS

The on-site, private storm water inlet capture capacity has been determined in accordance with the City of San Diego Drainage Design Manual (DDM, Jan. 2017) using AutoDesk's Hydraflow Express. This software uses standard weir and orifice equations and follows the methodology outlined in Section 3.2.2 of the City's DDM (Jan. 2017).

The on-site, private storm water pipe capacity has been determined in accordance with the City of San Diego Drainage Design Manual (DDM, Jan. 2017) using AutoDesk's Hydraflow Express. This software assumes uniform flow and normal depth and follows the methodology outlined in Section 4.0 of the City's DDM (Jan. 2017).

4 RESULTS

4.1 HYDROLOGY

The summary of peak flow rates for the 100-year event are summarized in Table 4-1 below. Refer to Attachments B, C, and D for the existing, proposed, and mitigated peak flow calculations; respectively.

TABLE 4-1- SUMMARY OF PRE VS. POST DEVELOPMENT PEAK FLOW RATES

Node	Tc (min)	C -	I (in/hr)	A (ac)	Q100 (cfs)	V100 (ft/s)
Pre-Development						
150	6.71	0.80	4.00	2.10	6.75	7.03*
250	5.00	0.95	4.40	0.19	0.79	2.82*
Total	-	-	-	**2.29**	**7.54**	-
Post-Development						
150	5.00	0.89	4.40	2.10	8.23	7.62*
250	5.00	0.95	4.40	0.19	0.79	2.82*
Total	-	-	-	**2.29**	**9.02**	-

**Velocities are obtained from using the 4'x6' RCB that passes through the site.*

4.2 HYDRAULICS

Surface runoff is directed to proposed inlets via curb and gutter, ribbon gutters, and roof leaders; then directed to the proposed storage facilities via new private storm drain. The tables below summarize the respective inlet and pipe capacities for the site. Refer to Appendix D for hydraulic calculations.

TABLE 4-2- STORM DRAIN CAPACITY SUMMARY

Pipe Diameter (in)	Slope	Material	Capacity (cfs)	Velocity (ft/sec)
8	1.0	PVC	1.3	3.90
12	1.0	PVC	3.8	5.06
18	1.0	PVC	11.2	6.64
24	1.0	PVC	24.3	8.00
4'x6'	3.3	RCB	600.0	26.14
60*	3.3	RCP		27.02
**Assumed pressure flow.*				

TABLE 4-3- INLET SUMMARY

Type	Size	Condition	Capture (cfs)	Bypass (cfs)	Ponding Depth (in)
Grate	12"x12"	Sag	1.0	0.0	2.9
Grate	18"x18"	Sag	1.0	0.0	1.7

5 CEQA THRESHOLDS OF SIGNIFICANCE

1. **Will the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?**

   The project will not alter the existing overall drainage pattern across the site. Grading is proposed for three new buildings, re-paving of an existing parking lot, and a proposed pavilion.

2. **Will the project increase water surface elevation in a watercourse within a watershed equal to or greater than 1 square mile, by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River and Otay River, 2/10 of a foot or more?**

   The project will not increase water surface elevations across the site or downstream. Proposed improvements will not alter the existing hydrologic and hydraulic properties of the site. Increase in peak flow discharge is anticipated to be minimal as a result of the proposed project.

3. **Will the project result in increased velocities and peak flow rates exiting the project site that could cause flooding downstream or exceed the storm water drainage system capacity serving the site?**

The project will minimally increase runoff velocities or peak flow rates leaving the site. Runoff will continue to flow as it does under existing conditions. The project will not cause flooding downstream, nor will it hydraulically impact downstream storm water infrastructure.

4. **Will the project result in placing housing, habitable structures, or unanchored impediments to flow in a 100-year floodplain area or other special flood hazard area, as shown on a FIRM, a County Flood Plain Map or County Alluvial Fan Map, which would subsequently endanger health, safety and property due to flooding?**

   There are no proposed habitable structures located within a 100-year flood plain. The project site is located in a FEMA Zone X, correlating with being outside the 500-year floodplain.

5. **Will the project place structures within a 100-year flood hazard or alter the floodway in a manner that would redirect or impede flow resulting in any of the following:**

   a) **Alter the line of inundation resulting in the placement of other housing in a 100 year flood hazard**

   b) **Increase water surface elevation in a watercourse with a watershed equal to or greater than 1 square mile by 1 foot or more in height and in the case of the San Luis Rey River, San Dieguito River, San Diego River, Sweetwater River and Otay River, 2/10 of a foot or more?**

   Proposed improvements will not impact 100-year limits of inundation.

The project will not increase water surface elevations across the site or downstream. Proposed improvements will not alter the existing hydrologic and hydraulic properties of the site. Increase in peak flow discharge, as compared to pre-development conditions, is anticipated to be minimal as a result of the proposed project.

6 CONCLUSIONS AND RECOMMENDATIONS

Proposed improvements will result in a minor increase to 100-year peak flow discharge from the site, as compared to the existing condition. Increases in peak flow associated with new impervious area don't require mitigation due to the outflow draining into a lined conveyance system that then outlets into the Pacific Ocean located 2 miles from the project site. The downstream storm drain infrastructure has capacity to handle the minor increase in flow, which is less than 0.3% of total capacity.

Furthermore, the project is located towards the downstream portion of total storm drain system with a very minimal time of concentration and thus will peak much sooner than the time it takes total peak flow in the system to reach the site and downstream infrastructure. As such, the minor increase is insignificant.

The project will not discharge, dredge, or fill material into any Water of the United States, thus the project is not required to obtain a Section 401 certification or Section 404 permit from the State of California or U.S. Army Corps of Engineers.

7 DECLERATION OF RESPONSIBLE CHARGES

I, hereby declare that I am the Civil Engineer of work for this project, that I have exercised responsible charge over the design of the project as defined in Section 6703 of the Business and Professions Code, and that the design is consistent with current design.

I understand that the check of project drawings and specifications by the City of San Diego is confined to a review only and does not relieve me, as Engineer of Work, of my responsibilities for the project design.

8/16/2022

Jay Sullivan, PE, CFM, QSD RCE 77445 Date

8 REFERENCES

City of San Diego Drainage Design Manual (June 2017).

FEMA. (1997). *Flood Insurance Rate Map.* San Diego.

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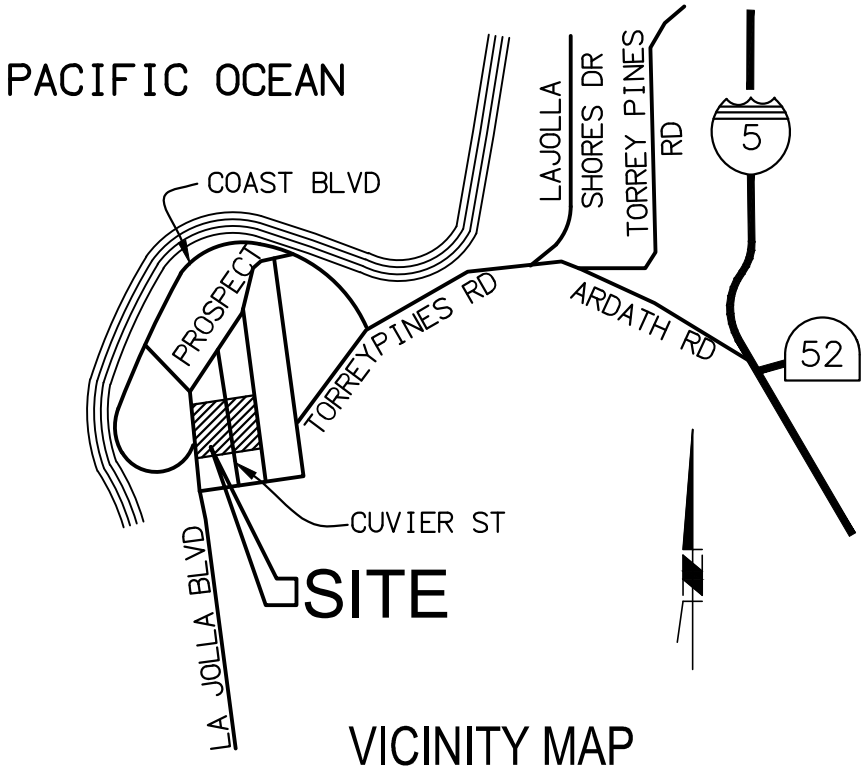
Attachment A.
Site Information

Rainfall Isopluvials
FEMA FIRM
NRCS WebSoil Survey



VICINITY MAP

NOT TO SCALE

County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 6 Hours

Isopluvial (inches)

Orange County

Riverside County

Imperial County

Pacific Ocean

Mexico

SITE
P6=2.00

OCEANSIDE
VISTA
CARLSBAD
ESCONDIDO
ENCINITAS
SOLANA BEACH
DEL MAR
POWAY
S.D. COUNTY
SANTEE
SAN DIEGO
EL CAJON
LA MESA
LEMON GROVE
CORONADO
SD
CHULA VISTA
IMPERIAL BEACH

117°30' 117°15' 117°00' 116°45' 116°30' 116°15'
33°30' 33°15' 33°00' 32°45' 32°30'

DPW GIS
Department of Public Works
Geographic Information Services

SanGIS
We Have San Diego Covered!

N W E S

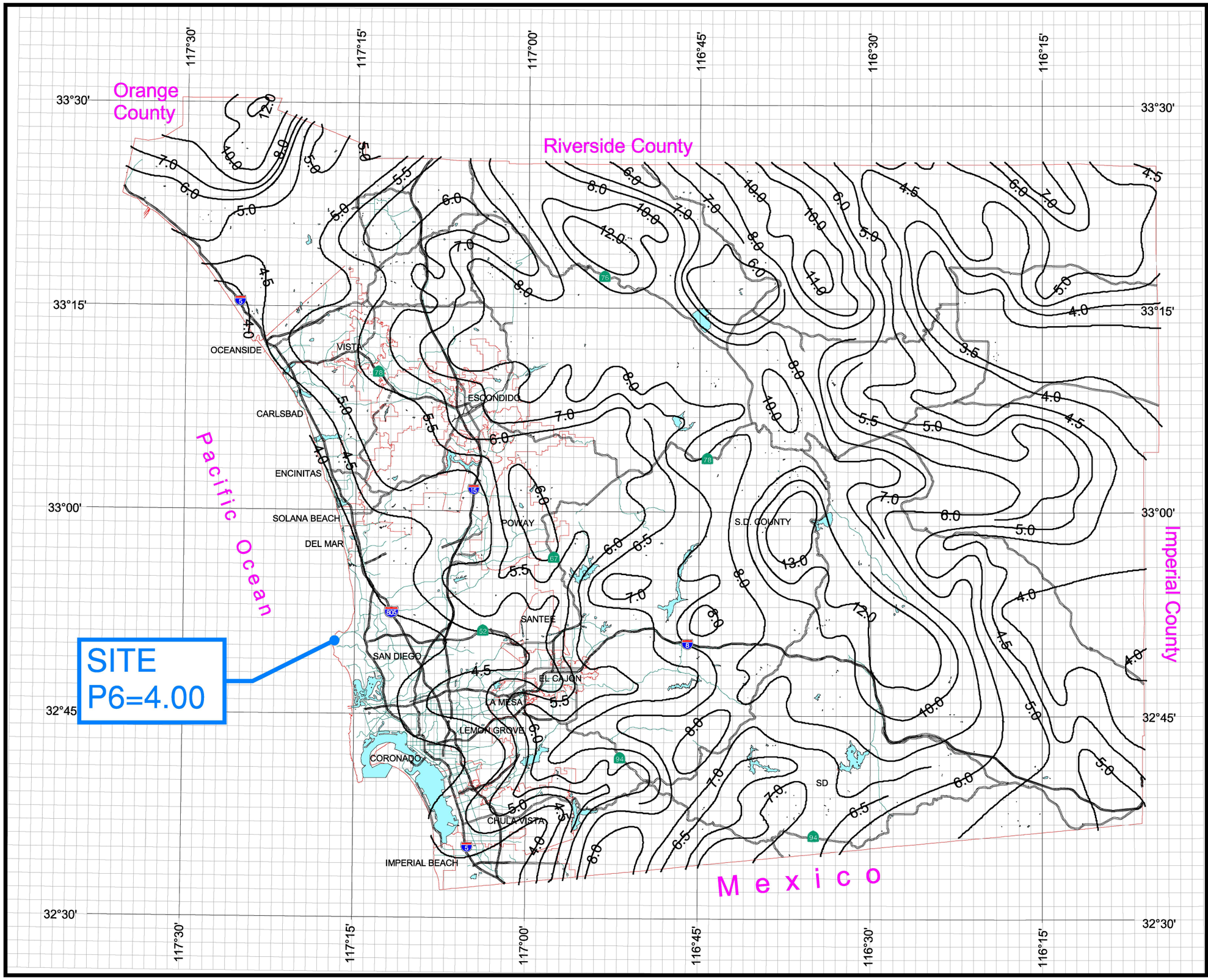
3 0 3 Miles

County of San Diego Hydrology Manual

Rainfall Isopluvials

100 Year Rainfall Event - 24 Hours

Isopluvial (inches)



DPW GIS
Department of Public Works
Geographic Information Services

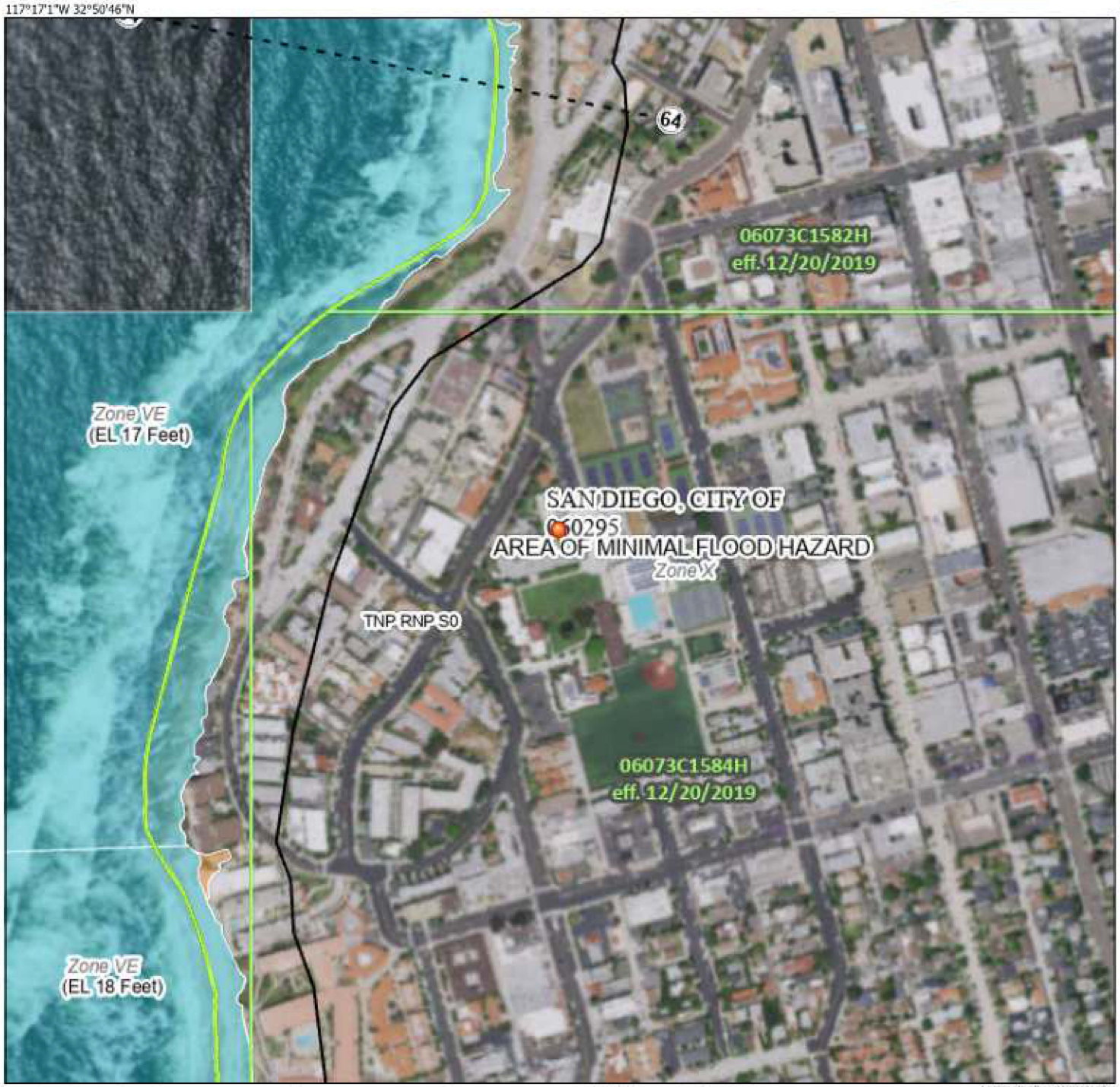
SanGIS
We Have San Diego Covered!

N W E S

3 0 3 Miles

National Flood Hazard Layer FIRMette

FEMA



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 7/25/2022 at 5:18 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,920 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Diego County Area, California
Survey Area Data: Version 16, Sep 13, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 22, 2018—Aug 31, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ur	Urban land	11.3	100.0%
Totals for Area of Interest		**11.3**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

San Diego County Area, California

Ur—Urban land

Map Unit Composition

Urban land: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Typical profile

H1 - 0 to 6 inches: variable

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydric soil rating: No

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Attachment B.
Existing Hydrology

Existing Hydrologic Work Map
Existing Hydrology Calculations
Offsite Drainage Map

Table A-1. Runoff Coefficients for Rational Method

Land Use	Runoff Coefficient (C)
	Soil Type [1]
Residential:	
Single Family	0.55
Multi-Units	0.70
Mobile Homes	0.65
Rural (lots greater than ½ acre)	0.45
Commercial [2]	
80% Impervious	0.85
Industrial [2]	
90% Impervious	0.95

Note:
[1] Type D soil to be used for all areas.
[2] Where actual conditions deviate significantly from the tabulated imperviousness values of 80% or 90%, the values given for coefficient C, may be revised by multiplying 80% or 90% by the ratio of actual imperviousness to the tabulated imperviousness. However, in case shall the final coefficient be less than 0.50. For example: Consider commercial property on D soil.

Actual imperviousness = 50%
Tabulated imperviousness = 80%
Revised C = (50/80) x 0.85 = 0.53

The values in Table A–1 are typical for urban areas. However, if the basin contains rural or agricultural land use, parks, golf courses, or other types of nonurban land use that are expected to be permanent, the appropriate value should be selected based upon the soil and cover and approved by the City.

A.1.3. Rainfall Intensity

The rainfall intensity (I) is the rainfall in inches per hour (in/hr.) for a duration equal to the T_c for a selected storm frequency. Once a particular storm frequency has been selected for design and a T_c calculated for the drainage area, the rainfall intensity can be determined from the Intensity-Duration-Frequency Design Chart (Figure A-1).

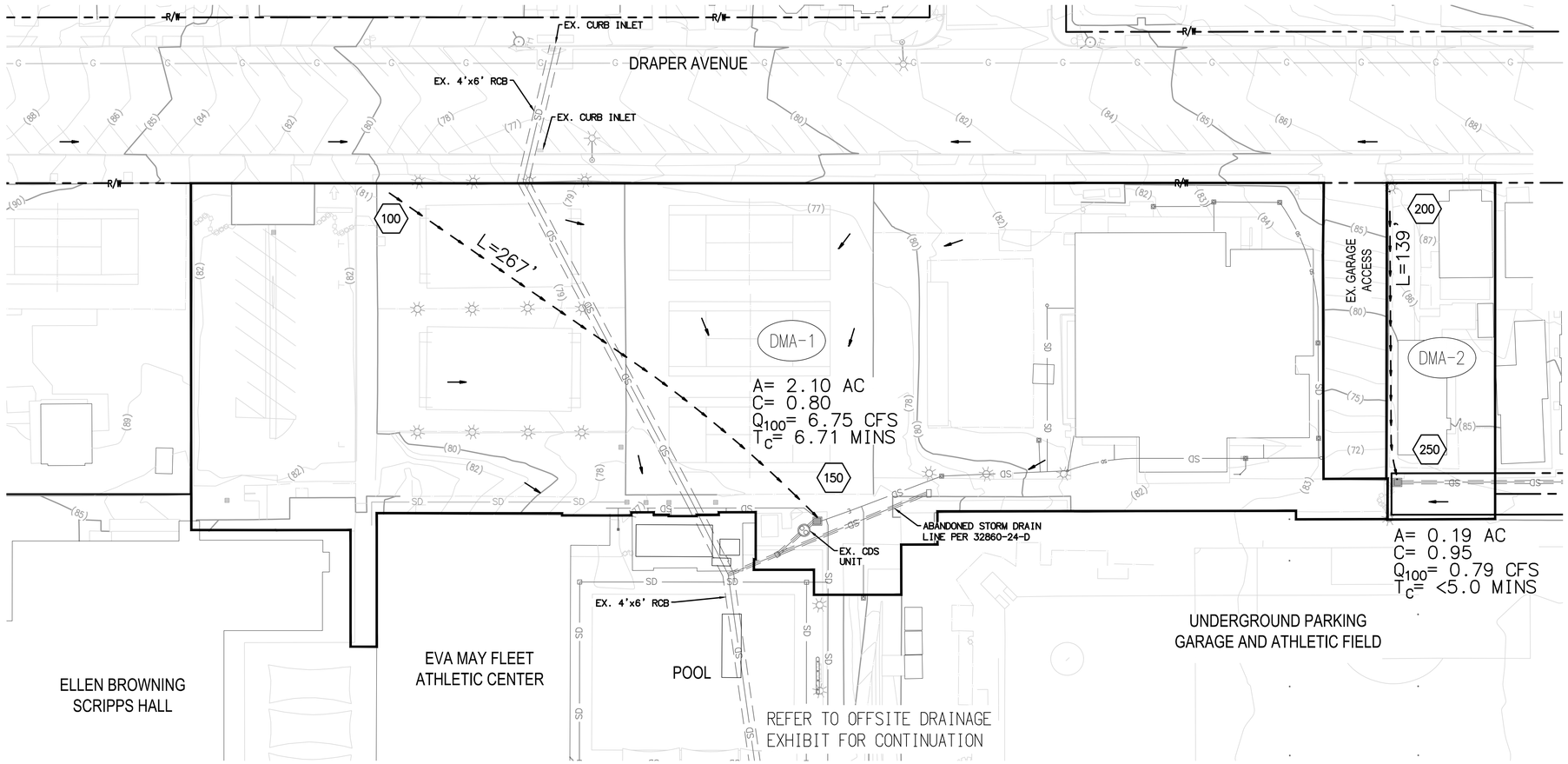
LEGEND

DRAINAGE MANAGEMENT AREA (DMA) — DMA-X

SITE BOUNDARY/DRAINAGE BOUNDARY

FLOW DIRECTION

CALCULATION NODE — 100



SCALE 1"=30'

30 15 0 30 60 90

SCALE: 1"=30'

THE BISHOP'S SCHOOL
EXISTING DRAINAGE EXHIBIT

PROJECT PERMIT NO: ——

Michael Baker INTERNATIONAL
9755 Clairemont Mesa Blvd
Suite 100
San Diego, CA 92124
Phone: (858) 614-5000
MBAKERINTL.COM

ELEV.	FACTOR
0-1500	1.00
1500-3000	1.25
3000-4000	1.42
4000-5000	1.60
5000-6000	1.7
DESERT	1.25

TO OBTAIN CORRECT INTENSITY, MULTIPLY INTENSITY ON CHART BY FACTOR FOR DESIGN ELEVATION.

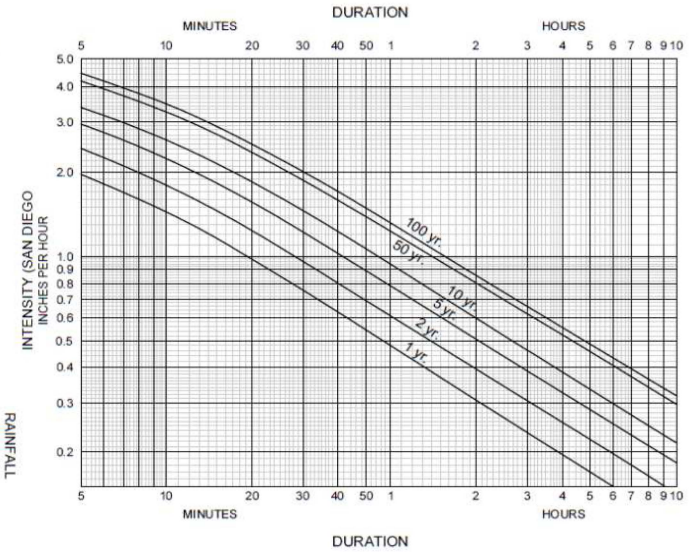


Figure A-1. Intensity-Duration-Frequency Design Chart

COUNTY OF SAN DIEGO
FOR
INTENSITY - DURATION - FREQUENCY CURVES
RAINFALL

The Bishop's School

Existing Conditions

Time of Concentration Calculations

Natural Areas

Land Use = Commercial

C = 0.80

Dist. = 267.00 ft.

slope = 2.25 %

T_c = 6.71 min.

$$T_C = \frac{1.8(1.1 - C)\sqrt{D}}{\sqrt[3]{s}}$$

* Minimum T_c = 5 Minutes

Weighted C Value Calculation

	Area (acres)
Pervious	0.42
Impervious	1.69
Total	2.10

Actual Impervious	0.80
Tabulated Impervious	0.85
Coefficient	0.85
Revised 'C'	0.80
Use 'C'	0.80

***C value cannot exeed 1 or be less than 0.50**

Basin Intensity Calculations

Selected Frequency, **100** year

I = 4.00 in/hr

Basin Flow Calculations

Q = **6.75** **cfs**

C = 0.80

I = 4.00 in/hr

A = 2.10 ac.

$$Q = C * I * A$$

Job No. 182696

ELEV.	FACTOR
0-1500	1.00
1500-3000	1.25
3000-4000	1.42
4000-5000	1.60
5000-6000	1.7
DESERT	1.25

TO OBTAIN CORRECT INTENSITY, MULTIPLY INTENSITY ON CHART BY FACTOR FOR DESIGN ELEVATION.

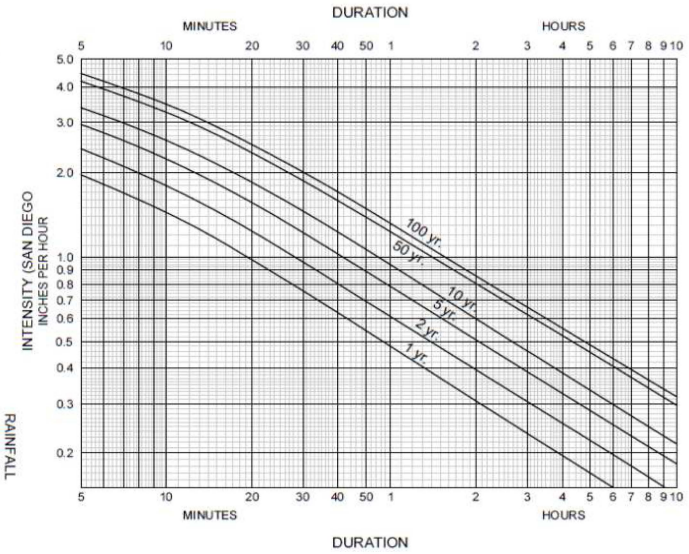


Figure A-1. Intensity-Duration-Frequency Design Chart

INTENSITY - DURATION - FREQUENCY CURVES FOR COUNTY OF SAN DIEGO RAINFALL

The Bishop's School

Existing Conditions

Time of Concentration Calculations

Natural Areas

Land Use = Commercial

$$T_C = \frac{1.8(1.1 - C)\sqrt{D}}{\sqrt[3]{s}}$$

C =	0.95	
Dist. =	139.00	ft.
slope =	2.66	%
T_c =	2.35	min.

* Minimum T_c = 5 Minutes

Weighted C Value Calculation

	Area (acres)
Pervious	0.01
Impervious	0.18
Total	0.19

Actual Impervious	0.95
Tabulated Impervious	0.85
Coefecient	0.85
Revised 'C'	0.95
Use 'C'	0.95

***C value cannot exeed 1 or be less than 0.50**

Basin Intensity Calculations

Selected Frequency, **100** year

I = 4.40 in/hr

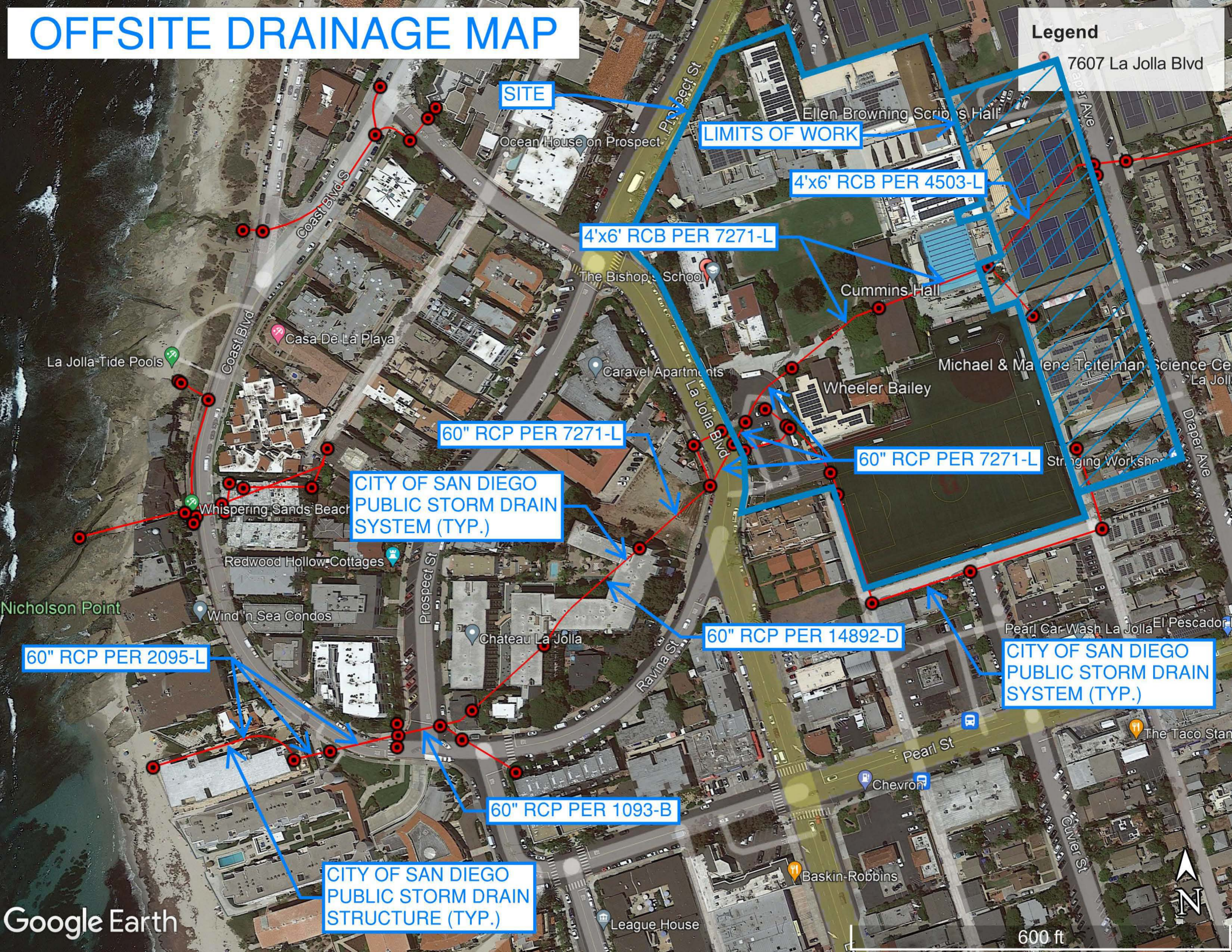
Basin Flow Calculations

$$Q = C * I * A$$

Q =	**0.79**	**cfs**
C =	0.95	
I =	4.40	in/hr
A =	0.19	ac.

Job No. 182696

OFFSITE DRAINAGE MAP

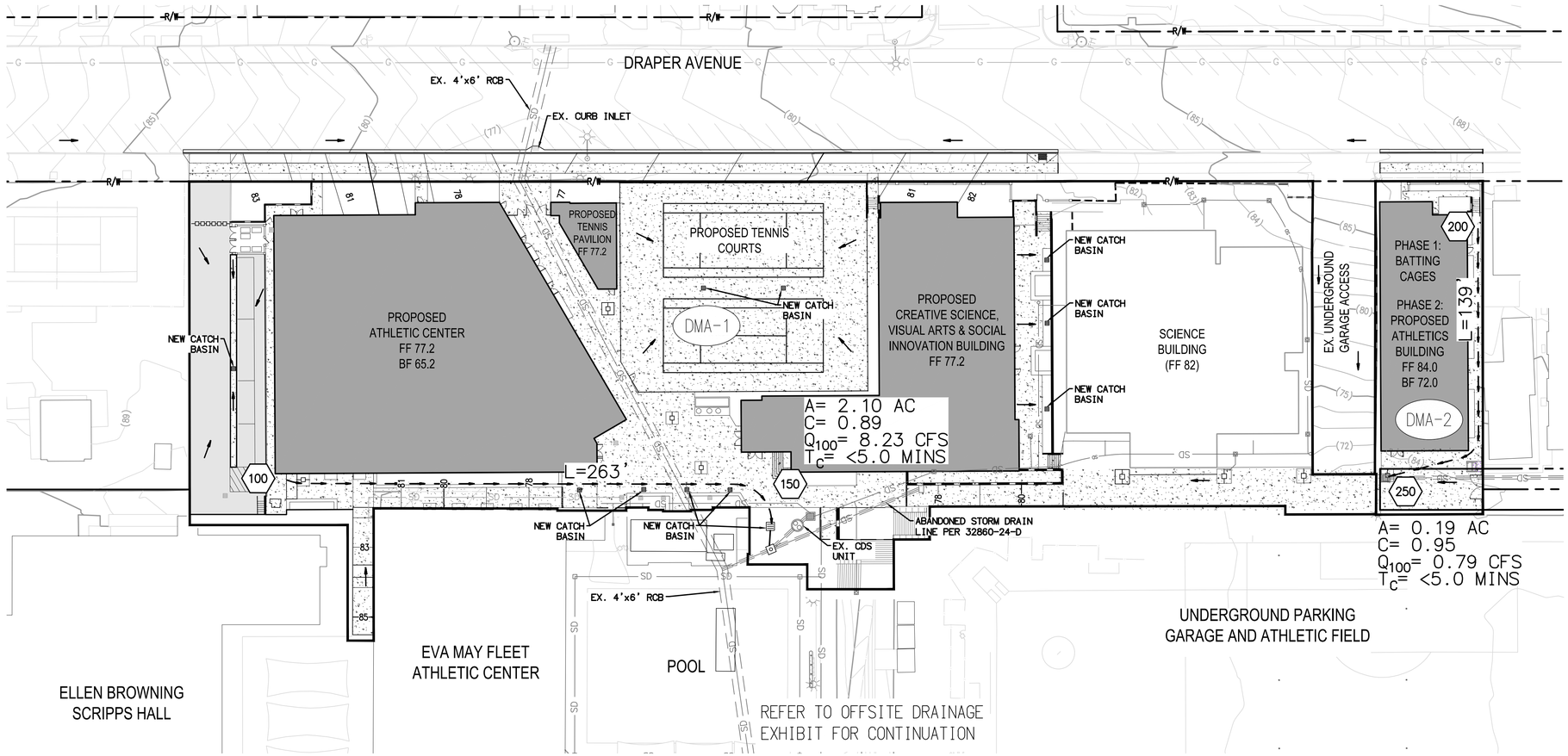



UPSTREAM OFFSITE DRAINAGE MAP
Legend
School
The Bishop?s School
60" RCP
21" RCP
18" RCP
4'X6' RCB
24" RCP
EARTHEN SWALE
45" RCP
30" RCP
CITY OF SAN DIEGO PUBLIC STORM DRAIN SYSTEM (TYP.)
45" RCP
48" RCP
Museum of Contemporary Art San...
Cuvier Park
VILLAGE OF LA JOLLA
La Jolla Natural Park
Fay Ave
Diana Ave
Vons
The Bishop's School
La Jolla Tide Pools
CVS
Pearl St
Rhoda Dr
Country Club Dr
Romero Dr
COUNTRY
Prospect St
Point
Carrizo Dr
Fairway Rd
La Jolla Blvd
The Taco Stand
Girard Ave
La Jolla Open Aire Farmers Market
Darlington House
Marine Street Beach
Playa Vista Ocean Front
Fern Glen
La Jolla High School
LA JOLLA
7-Eleven
Nautilus St
Muirlands Jr High School
Google Earth
N
2000 ft

Michael Baker
INTERNATIONAL

Attachment C.
Proposed Hydrology

Proposed Hydrologic Work Map
Proposed Hydrology Calculations



LEGEND

DRAINAGE MANAGEMENT AREA (DMA)	DMA-X
SITE BOUNDARY/DRAINAGE BOUNDARY	
FLOW DIRECTION	
CALCULATION NODE	100

NOTE:

REFER TO PLUMBING DESIGN FOR THE INTERNAL ROUTING OF ROOFTOP RUNOFF DIRECTLY TO THE VAULTS.

SCALE 1"=30'

30 15 0 30 60 90

SCALE: 1"=30'

THE BISHOP'S SCHOOL
PROPOSED DRAINAGE EXHIBIT

PROJECT PERMIT NO: ——

Michael Baker INTERNATIONAL
9755 Clairemont Mesa Blvd
Suite 100
San Diego, CA 92124
Phone: (858) 614-5000
MBAKERINTL.COM

ELEV.	FACTOR
0-1500	1.00
1500-3000	1.25
3000-4000	1.42
4000-5000	1.60
5000-6000	1.7
DESERT	1.25

TO OBTAIN CORRECT INTENSITY, MULTIPLY INTENSITY ON CHART BY FACTOR FOR DESIGN ELEVATION.

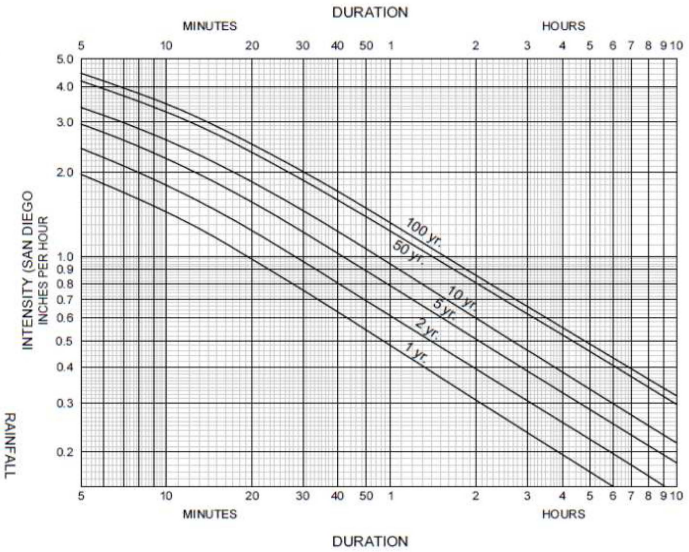


Figure A-1. Intensity-Duration-Frequency Design Chart

COUNTY OF SAN DIEGO
FOR
INTENSITY - DURATION - FREQUENCY CURVES
RAINFALL

The Bishop's School

Proposed Conditions

Time of Concentration Calculations

Natural Areas

Land Use = Commercial

C =	0.89	
Dist. =	263.00	ft.
slope =	3.19	%
T_c =	4.21	min.

$$T_C = \frac{1.8(1.1 - C)\sqrt{D}}{\sqrt[3]{s}}$$

* Minimum T_c = 5 Minutes

Weighted C Value Calculation

	Area (acres)
Pervious	0.23
Impervious	1.87
Total	2.10

Actual Impervious	0.89
Tabulated Impervious	0.85
Coefecient	0.85
Revised 'C'	0.89
Use 'C'	0.89

***C value cannot exeed 1 or be less than 0.50**

Basin Intensity Calculations

Selected Frequency, **100** year

I = 4.40 in/hr

Basin Flow Calculations

Q =	**8.23**	**cfs**
C =	0.89	
I =	4.40	in/hr
A =	2.10	ac.

$$Q = C * I * A$$

Job No. 182696

ELEV.	FACTOR
0-1500	1.00
1500-3000	1.25
3000-4000	1.42
4000-5000	1.60
5000-6000	1.7
DESERT	1.25

TO OBTAIN CORRECT INTENSITY, MULTIPLY INTENSITY ON CHART BY FACTOR FOR DESIGN ELEVATION.

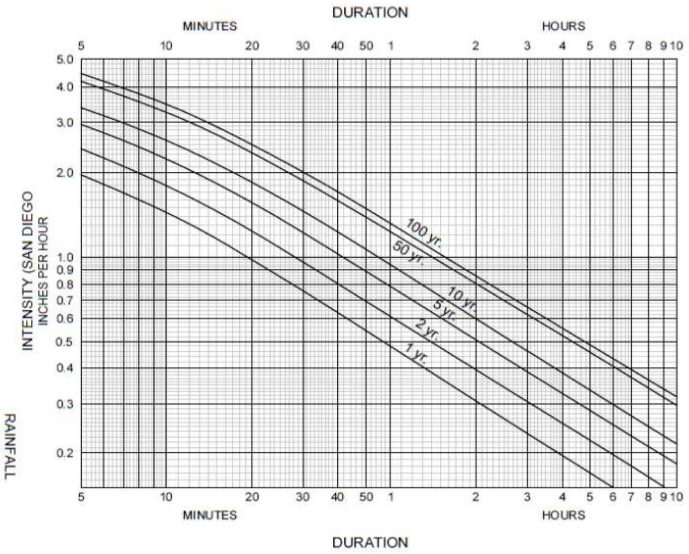


Figure A-1. Intensity-Duration-Frequency Design Chart

INTENSITY - DURATION - FREQUENCY CURVES FOR COUNTY OF SAN DIEGO RAINFALL

The Bishop's School

Proposed Conditions

Time of Concentration Calculations

Natural Areas

Land Use = Commercial

$$T_C = \frac{1.8(1.1 - C)\sqrt{D}}{\sqrt[3]{s}}$$

C =	0.95	
Dist. =	139.00	ft.
slope =	2.66	%
T_c =	2.35	min.

* Minimum T_c = 5 Minutes

Weighted C Value Calculation

	Area (acres)
Pervious	0.01
Impervious	0.18
Total	0.19

Actual Impervious	0.95
Tabulated Impervious	0.85
Coefecient	0.85
Revised 'C'	0.95
Use 'C'	0.95

***C value cannot exeed 1 or be less than 0.50**

Basin Intensity Calculations

Selected Frequency, **100** year

I = 4.40 in/hr

Basin Flow Calculations

$$Q = C * I * A$$

Q =	**0.79**	**cfs**
C =	0.95	
I =	4.40	in/hr
A =	0.19	ac.

Job No. 182696

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INTERNATIONAL

Attachment D.
Hydraulics

Inlet Capacity
Pipe Capacity

Inlet Report

12x12in Area Drain

Drop Grate Inlet

Location	= Sag
Curb Length (ft)	= -0-
Throat Height (in)	= -0-
Grate Area (sqft)	= 0.50
Grate Width (ft)	= 1.00
Grate Length (ft)	= 1.00

Gutter

Slope, Sw (ft/ft)	= 0.020
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= -0-
Gutter Width (ft)	= 1.00
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

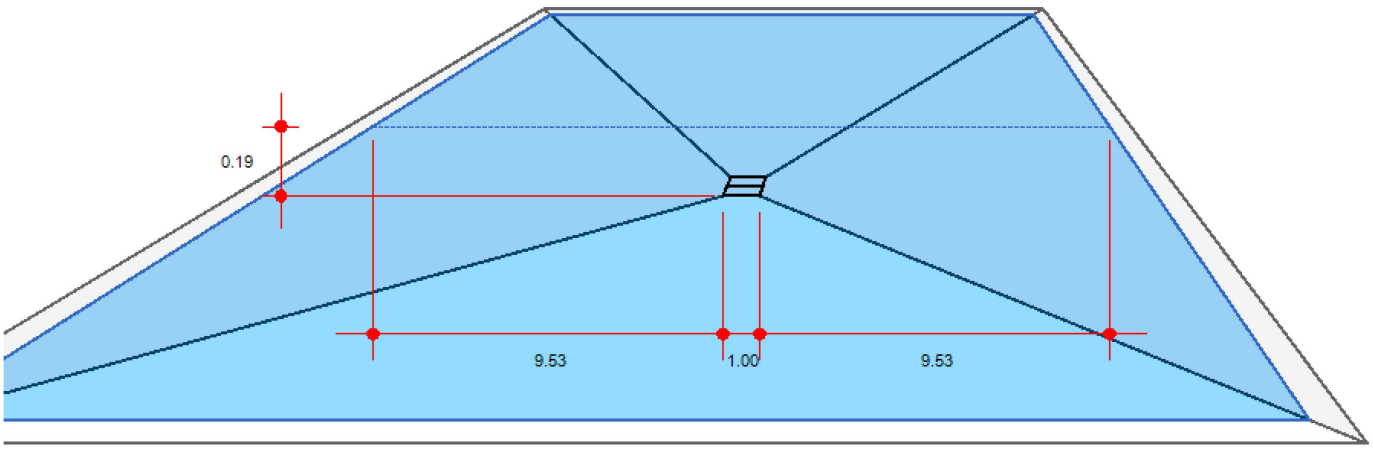
Calculations

Compute by:	Known Q
Q (cfs)	= 1.00

Highlighted

Q Total (cfs)	= 1.00
Q Capt (cfs)	= 1.00
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 2.29
Efficiency (%)	= 100
Gutter Spread (ft)	= 20.06
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-

All dimensions in feet



Inlet Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 27 2022

18x18in Area Drain

Drop Grate Inlet

Location	= Sag
Curb Length (ft)	= -0-
Throat Height (in)	= -0-
Grate Area (sqft)	= 1.13
Grate Width (ft)	= 1.50
Grate Length (ft)	= 1.50

Gutter

Slope, Sw (ft/ft)	= 0.020
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= -0-
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

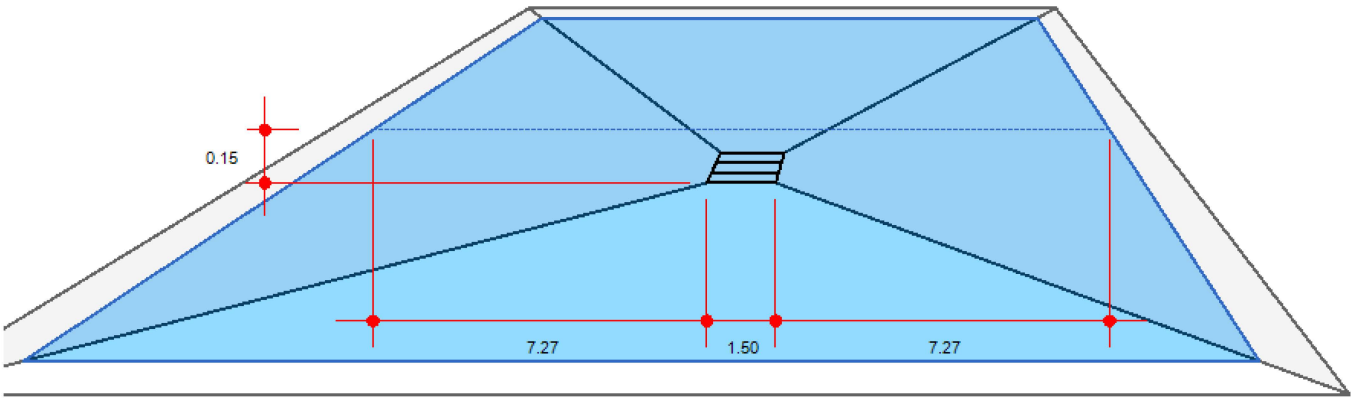
Calculations

Compute by:	Known Q
Q (cfs)	= 1.00

Highlighted

Q Total (cfs)	= 1.00
Q Capt (cfs)	= 1.00
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 1.75
Efficiency (%)	= 100
Gutter Spread (ft)	= 16.05
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-

All dimensions in feet



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Apr 12 2022

8in Storm Drain S=1percent

Circular

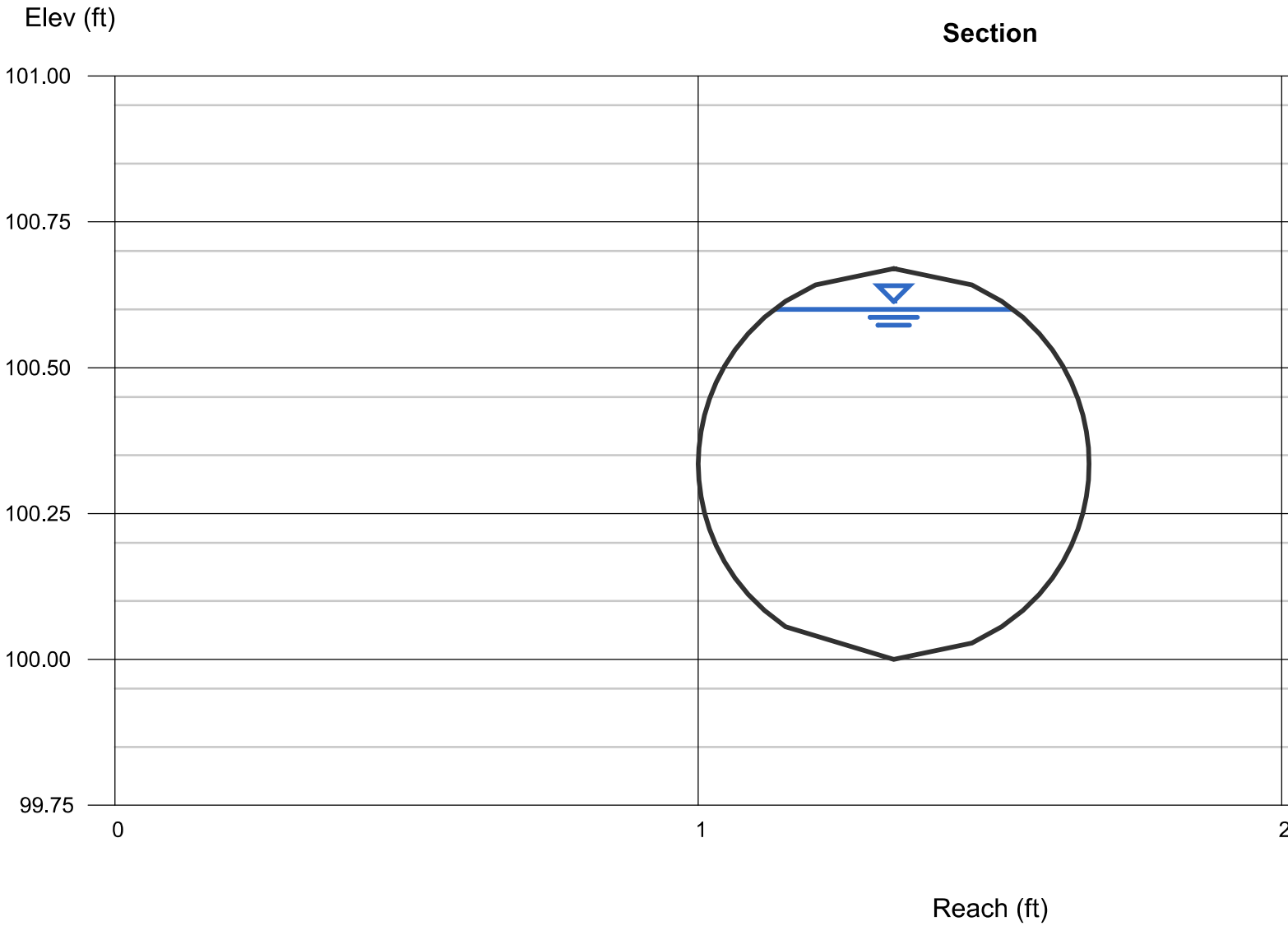
Diameter (ft)	= 0.67
Invert Elev (ft)	= 100.00
Slope (%)	= 1.00
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.30

Highlighted

Depth (ft)	= 0.60
Q (cfs)	= 1.300
Area (sqft)	= 0.33
Velocity (ft/s)	= 3.90
Wetted Perim (ft)	= 1.66
Crit Depth, Yc (ft)	= 0.54
Top Width (ft)	= 0.41
EGL (ft)	= 0.84



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Apr 12 2022

12in Storm Drain S=1percent

Circular

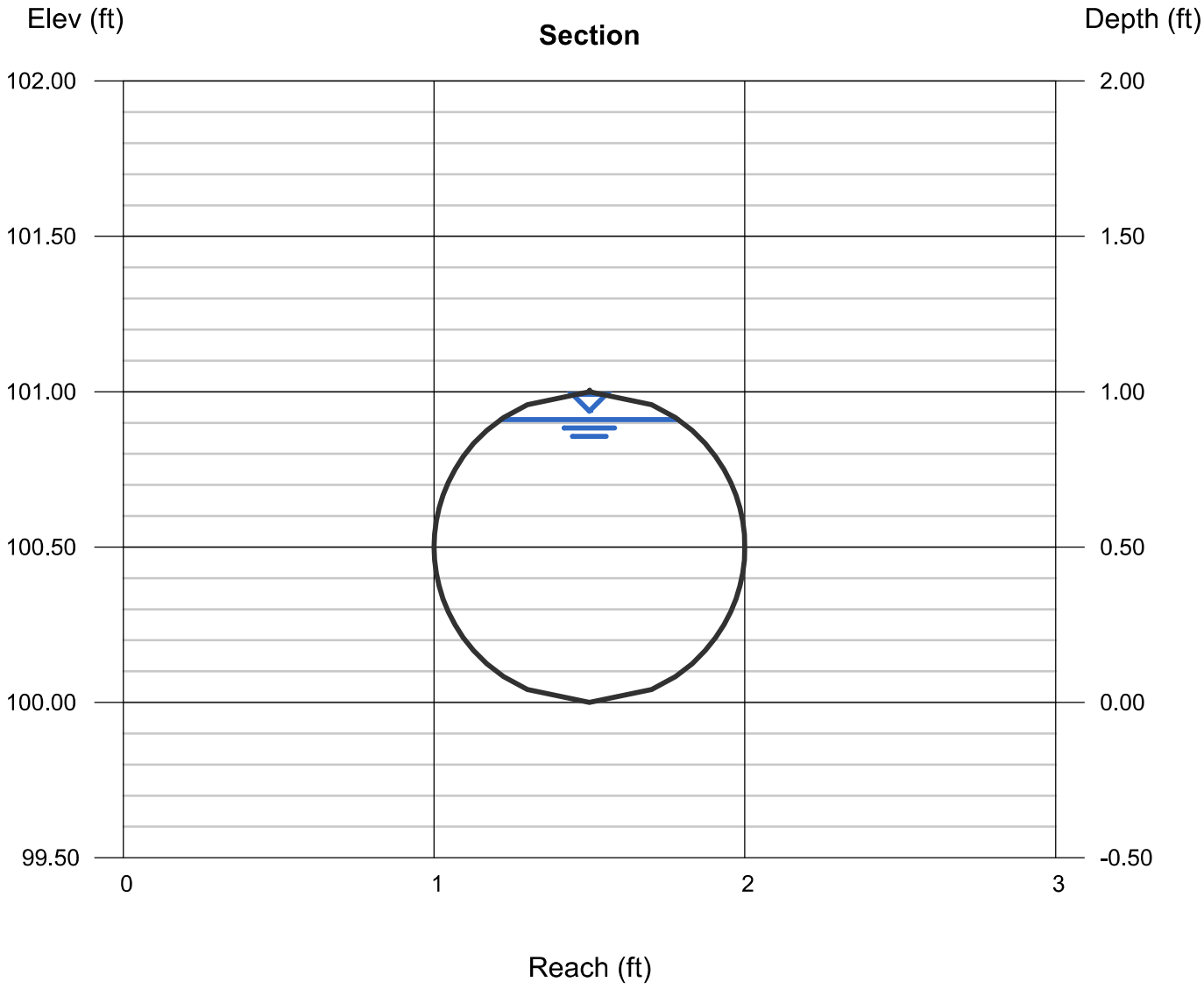
Diameter (ft)	= 1.00
Invert Elev (ft)	= 100.00
Slope (%)	= 1.00
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 3.80

Highlighted

Depth (ft)	= 0.91
Q (cfs)	= 3.800
Area (sqft)	= 0.75
Velocity (ft/s)	= 5.06
Wetted Perim (ft)	= 2.54
Crit Depth, Yc (ft)	= 0.83
Top Width (ft)	= 0.57
EGL (ft)	= 1.31



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Jul 21 2022

8 in Storm Drain S=0.5percent

Circular

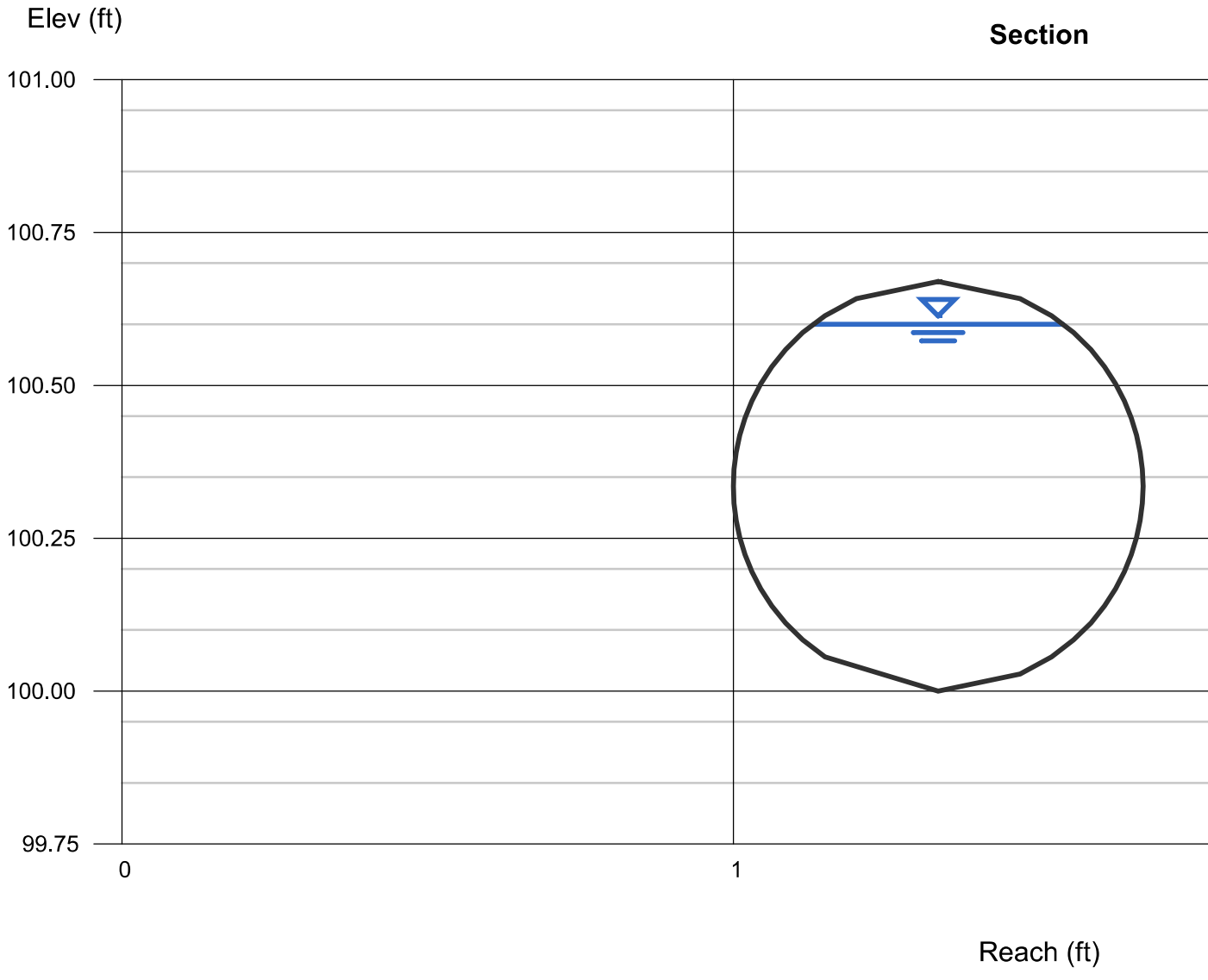
Diameter (ft)	= 0.67
Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 0.92

Highlighted

Depth (ft)	= 0.60
Q (cfs)	= 0.920
Area (sqft)	= 0.33
Velocity (ft/s)	= 2.76
Wetted Perim (ft)	= 1.66
Crit Depth, Yc (ft)	= 0.46
Top Width (ft)	= 0.41
EGL (ft)	= 0.72



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Thursday, Jul 21 2022

12 in Storm Drain S=0.5percent

Circular

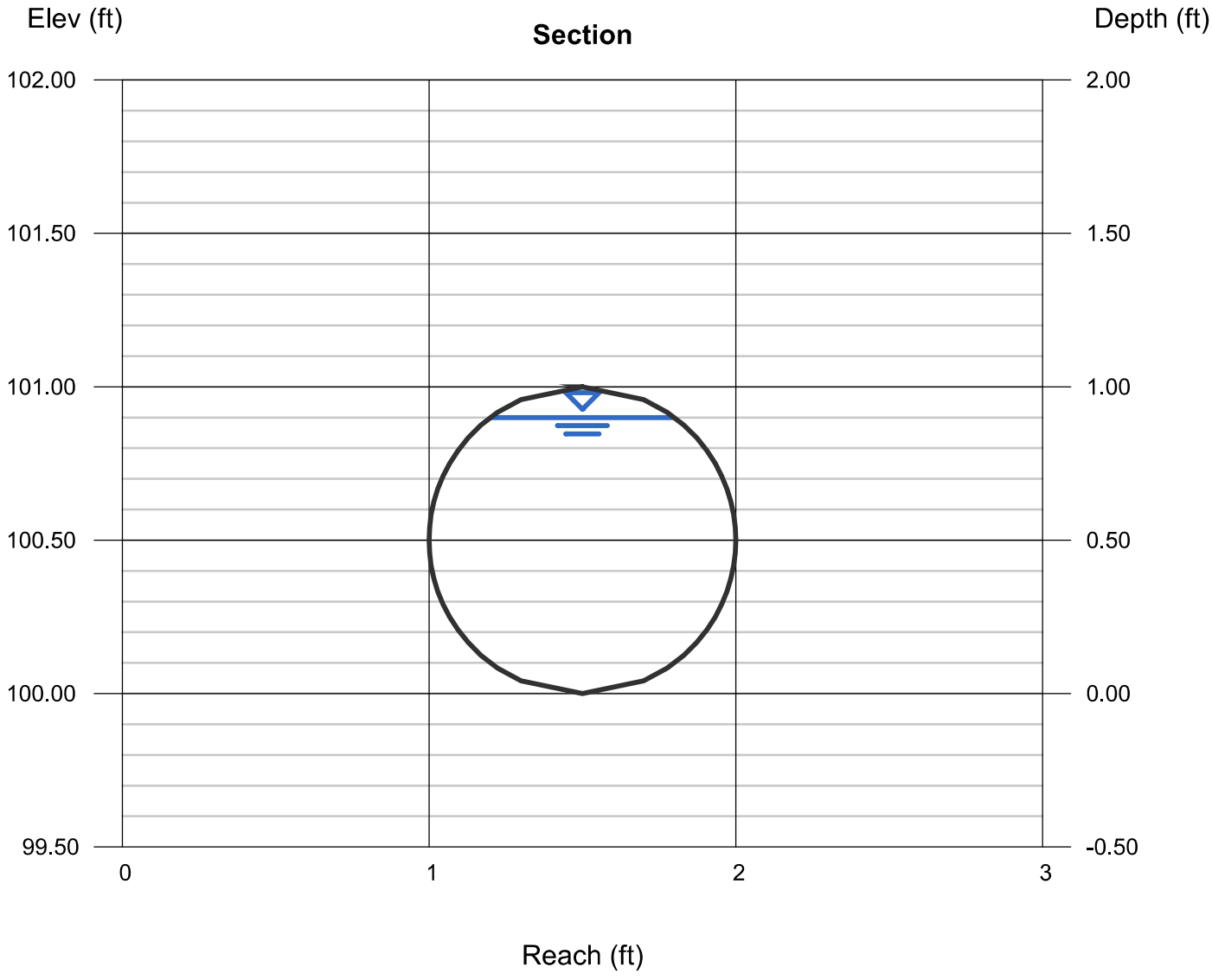
Diameter (ft)	= 1.00
Invert Elev (ft)	= 100.00
Slope (%)	= 0.50
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 2.68

Highlighted

Depth (ft)	= 0.90
Q (cfs)	= 2.680
Area (sqft)	= 0.74
Velocity (ft/s)	= 3.60
Wetted Perim (ft)	= 2.50
Crit Depth, Yc (ft)	= 0.71
Top Width (ft)	= 0.60
EGL (ft)	= 1.10



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Aug 15 2022

EX. DMA 1

Rectangular

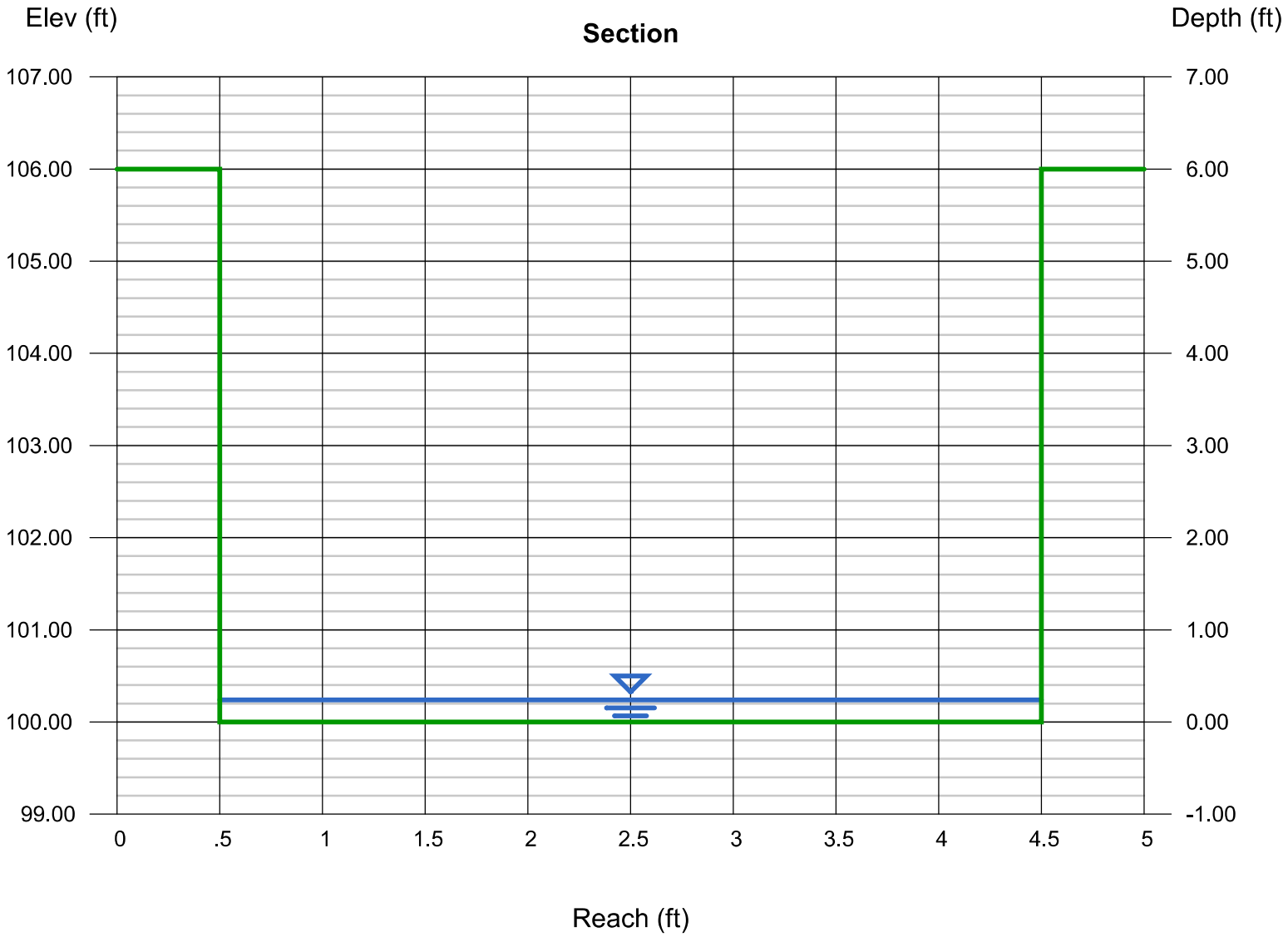
Bottom Width (ft)	= 4.00
Total Depth (ft)	= 6.00
Invert Elev (ft)	= 100.00
Slope (%)	= 3.30
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 6.75

Highlighted

Depth (ft)	= 0.24
Q (cfs)	= 6.750
Area (sqft)	= 0.96
Velocity (ft/s)	= 7.03
Wetted Perim (ft)	= 4.48
Crit Depth, Yc (ft)	= 0.45
Top Width (ft)	= 4.00
EGL (ft)	= 1.01



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Aug 15 2022

PR. DMA 1

Rectangular

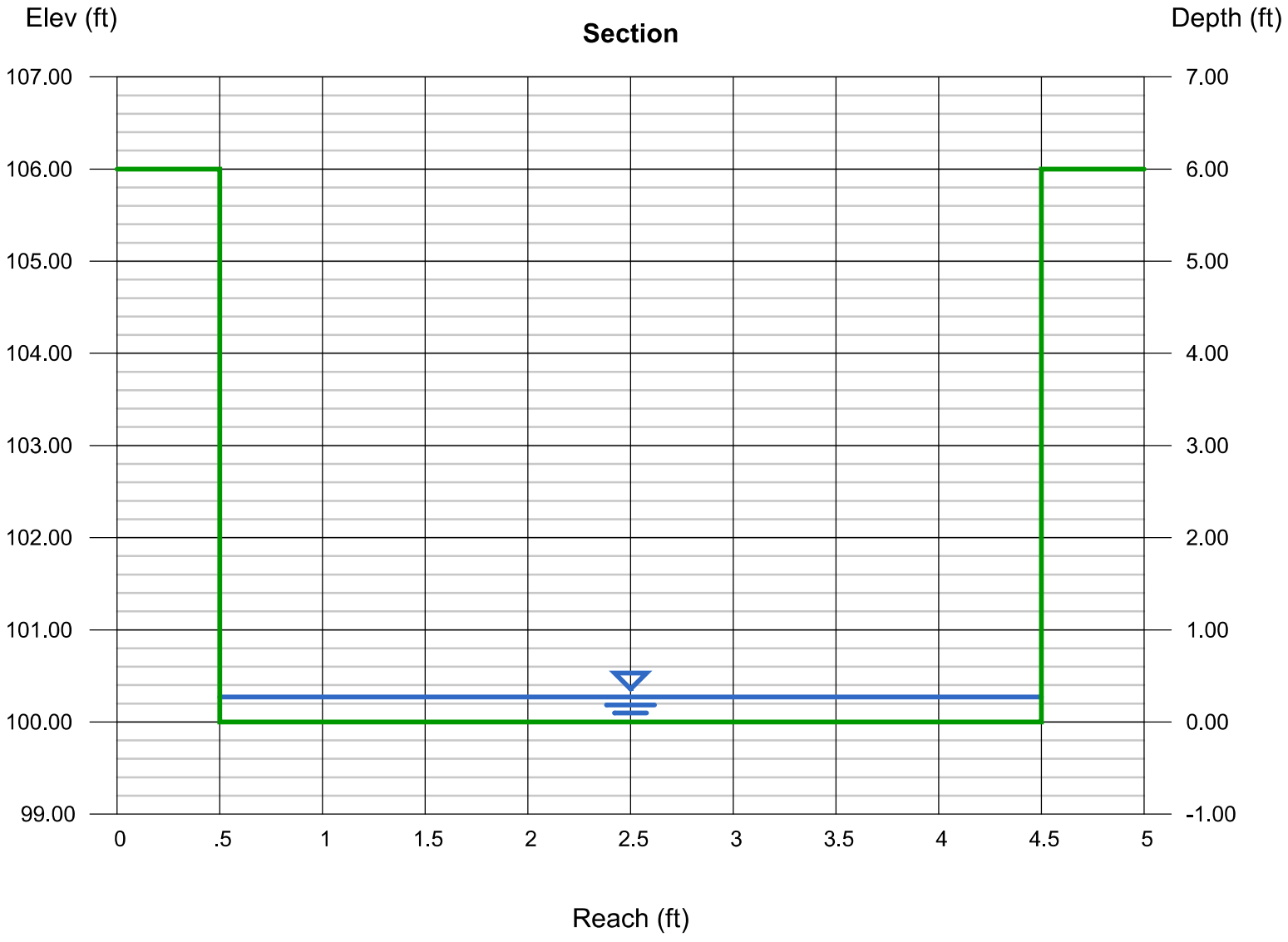
Bottom Width (ft)	= 4.00
Total Depth (ft)	= 6.00
Invert Elev (ft)	= 100.00
Slope (%)	= 3.30
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 8.23

Highlighted

Depth (ft)	= 0.27
Q (cfs)	= 8.230
Area (sqft)	= 1.08
Velocity (ft/s)	= 7.62
Wetted Perim (ft)	= 4.54
Crit Depth, Yc (ft)	= 0.51
Top Width (ft)	= 4.00
EGL (ft)	= 1.17



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Aug 15 2022

EX./PR. DMA 2

Rectangular

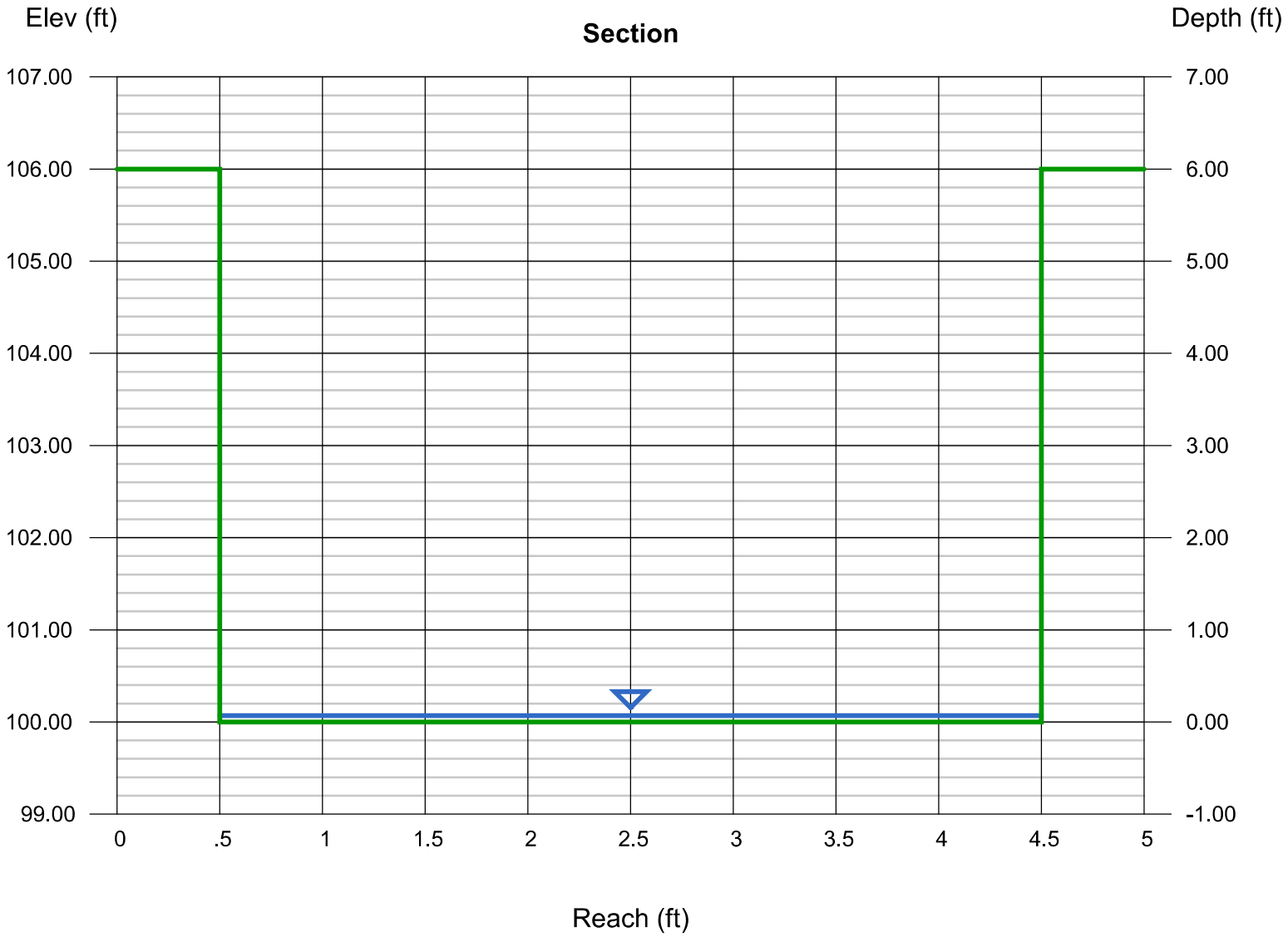
Bottom Width (ft)	= 4.00
Total Depth (ft)	= 6.00
Invert Elev (ft)	= 100.00
Slope (%)	= 3.30
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 0.79

Highlighted

Depth (ft)	= 0.07
Q (cfs)	= 0.790
Area (sqft)	= 0.28
Velocity (ft/s)	= 2.82
Wetted Perim (ft)	= 4.14
Crit Depth, Yc (ft)	= 0.11
Top Width (ft)	= 4.00
EGL (ft)	= 0.19



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, Aug 16 2022

4'x6' RCB

Rectangular

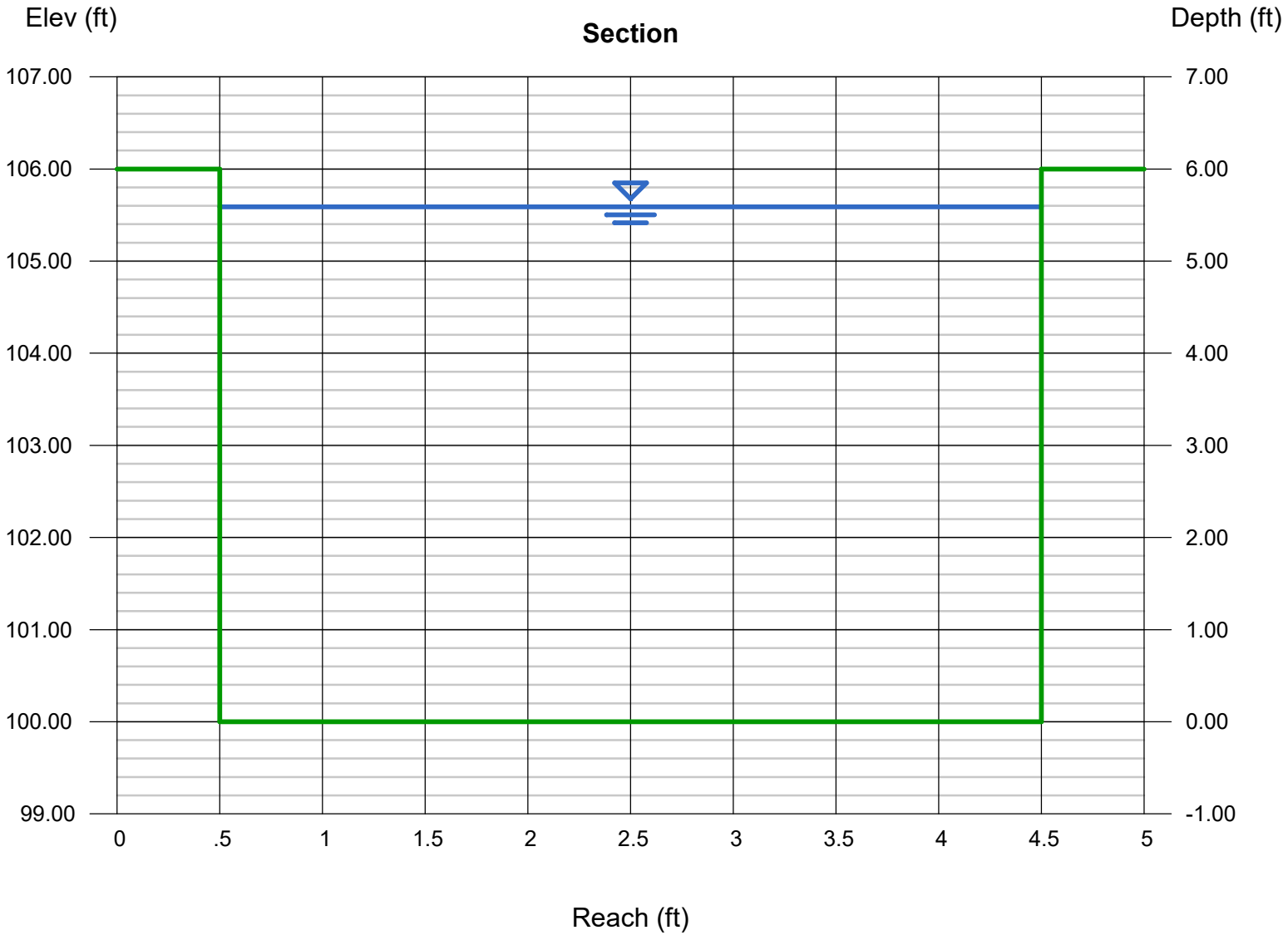
Bottom Width (ft)	= 4.00
Total Depth (ft)	= 6.00
Invert Elev (ft)	= 100.00
Slope (%)	= 3.30
N-Value	= 0.013

Calculations

Compute by:	Known Q
Known Q (cfs)	= 600.00

Highlighted

Depth (ft)	= 5.59
Q (cfs)	= 600.00
Area (sqft)	= 22.36
Velocity (ft/s)	= 26.83
Wetted Perim (ft)	= 15.18
Crit Depth, Yc (ft)	= 6.00
Top Width (ft)	= 4.00
EGL (ft)	= 16.78

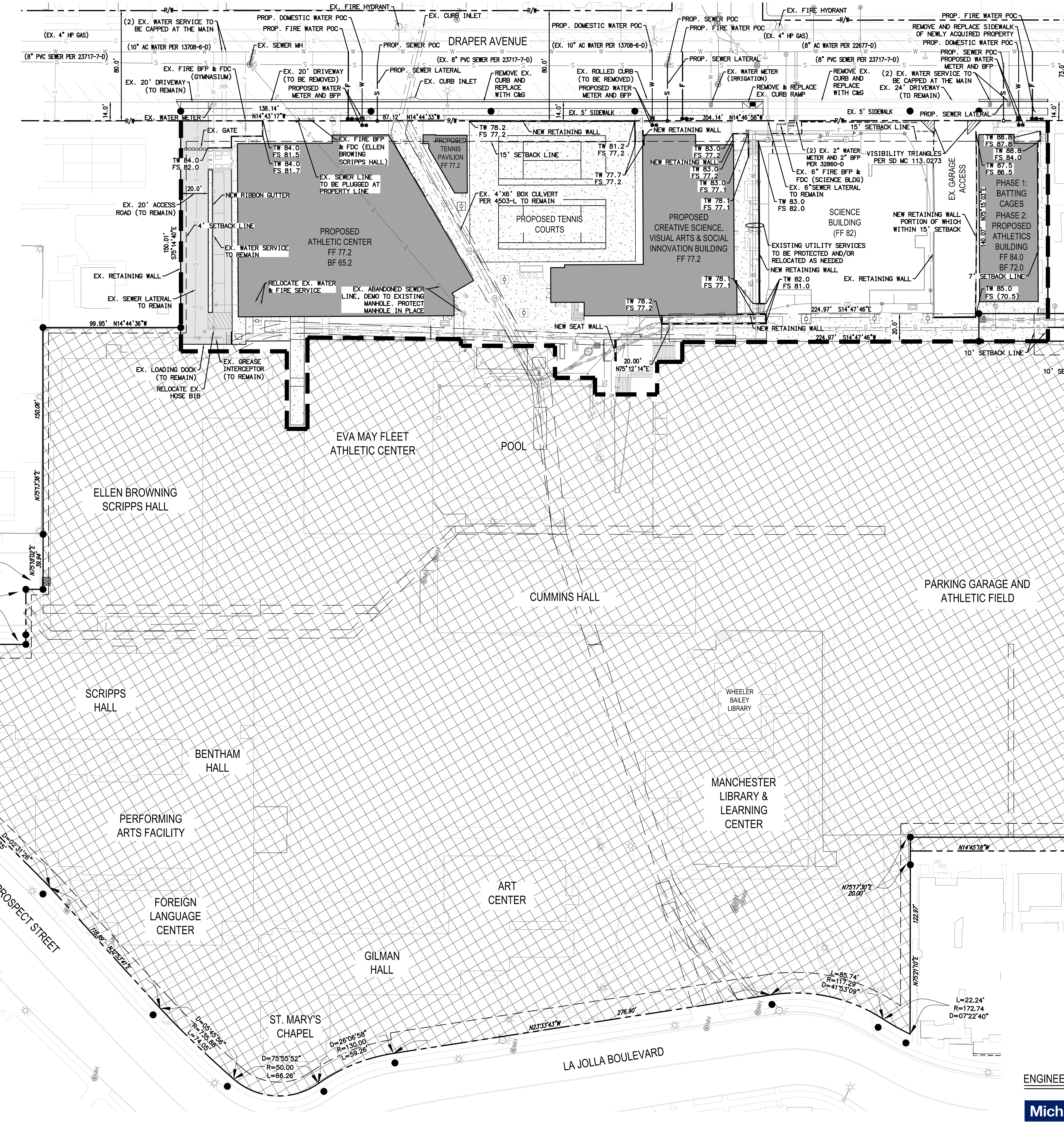


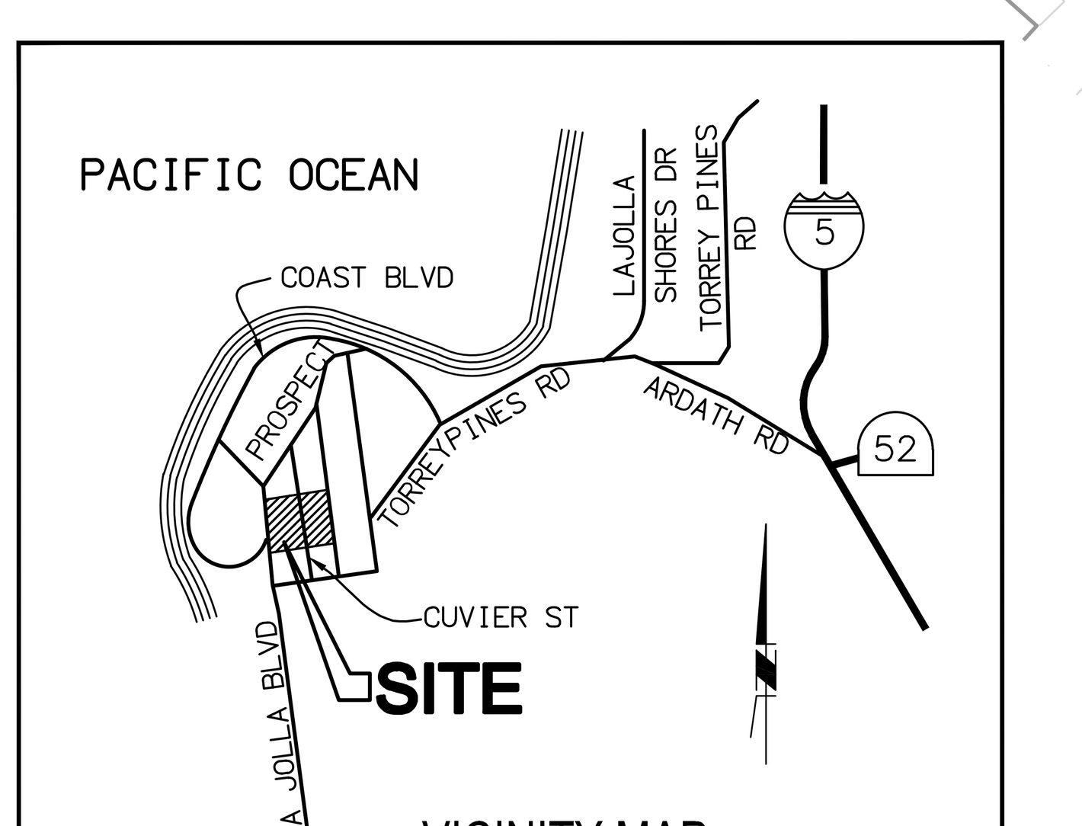
Michael Baker
INTERNATIONAL

Attachment E.
Plan Sheets

LEGEND

ITEM	SYMBOL
EXISTING IMPROVEMENTS	
PROPERTY LINE	
RIGHT OF WAY	
BUILDING SETBACK	
EASEMENT	
PORTION OF EXISTING CUP WITHOUT MODIFICATIONS	
LIMITS OF CONSTRUCTION	
SURVEY MONUMENT	
EX. CONTOUR	(300)
EX. CURB & GUTTER	
EX. TREE	
EX. LIGHT	
EX. STORM DRAIN	SD
EX. SEWER LINE	S
EX. WATER LINE	W
EX. ELECTRICAL LINE	E
EX. PERFORATED DRAIN	
EX. STORM DRAIN CO	
EX. CATCH BASIN	
EX. WATER METER	
EX. FIRE HYDRANT	
EX. GATE VALVE	
IMPROVEMENTS	
PROPOSED WATER	W
PROPOSED FIRE	F
PROPOSED SEWER	S
PROPOSED BUILDING	
PROPOSED A.C. PAVEMENT	
PROPOSED HARDSCAPE	





VICINITY MAP
NOT TO SCALE

BENCHMARK

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) PER THE CITY OF SAN DIEGO VERTICAL CONTROL NETWORK. BENCHMARK DESIGNATION: NORTHEAST BRASS PLUG LOCATED AT PROSPECT STREET & SILVERADO STREET.
ELEVATION: 90.572 (NGVD29)

REFERENCE DOCUMENTS

COASTAL DEVELOPMENT PERMIT NO. 518943
CONDITIONAL USE PERMIT NO. 518944
THE BISHOP'S SCHOOL PROJECT NO. 147307
AMENDMENT TO COASTAL DEVELOPMENT PERMIT NO. 10728
SPECIAL USE PERMIT NO. 10729

SCALE: 1"=30'

domusstudio architecture

The Bishop's School
7607 La Jolla Blvd.
La Jolla, CA 92037

Civil Site Plan

Revision Schedule

No.	Revision	Issue Date

Drawing Set Issue Schedule

Description	Issue Date
Amendment	29 Oct 2021
Submittal 01	

ENGINEER OF WORK

Michael Baker INTERNATIONAL
9755 Clairemont Mesa Blvd., San Diego, CA 92124
Phone: (858) 614-5000 · MBAKERINTL.COM

SCOTT A. DAVIS RCE 72281 EXP. 6/30/24 DATE: 08/15/2022

REGISTERED PROFESSIONAL ENGINEER SCOTT A. DAVIS No. 72281 Exp. 6/30/24 CIVIL STATE OF CALIFORNIA

THE BISHOP'S SCHOOL
CIVIL SITE PLAN

C1.1
Sheet 2 of 16

domusstudio architecture

LEGEND

ITEM	SYMBOL
EXISTING IMPROVEMENTS	
PROPERTY LINE	
RIGHT OF WAY	
BUILDING SETBACK	
EASEMENT	
PORTION OF EXISTING CUP WITHOUT MODIFICATIONS	
LIMITS OF CONSTRUCTION	
SURVEY MONUMENT	
EX. CONTOUR	(300)
EX. CURB & GUTTER	
EX. TREE	
EX. LIGHT	
EX. STORM DRAIN	SD
EX. SEWER LINE	S
EX. WATER LINE	
EX. ELECTRICAL LINE	E
EX. PERFORATED DRAIN	
EX. STORM DRAIN CO	
EX. CATCH BASIN	
EX. WATER METER	M
EX. FIRE HYDRANT	
EX. GATE VALVE	

GRADING TABULATIONS

TOTAL AMOUNT OF SITE TO BE GRADED: AREA 1.6 AC, PERCENT OF TOTAL SITE 15.0%

AMOUNT OF CUT: 10,700 CUBIC YARDS AND MAXIMUM DEPTH OF CUT: 10 FEET.

AMOUNT OF FILL: 300 CUBIC YARDS AND MAXIMUM DEPTH OF FILL: 1 FEET

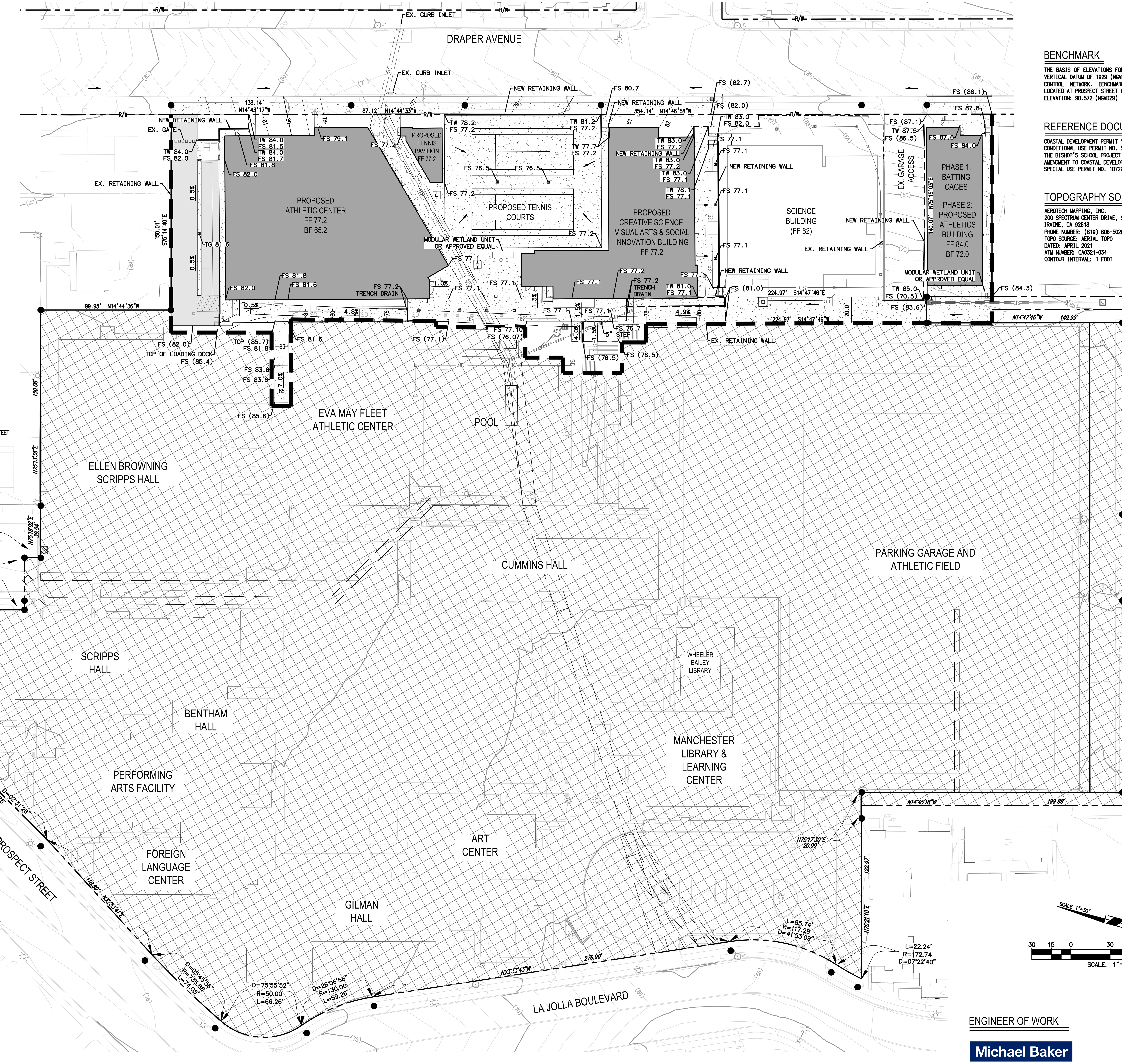
MAXIMUM HEIGHT OF FILL SLOPE(S): 0 FEET 2:1 SLOPE RATIO.

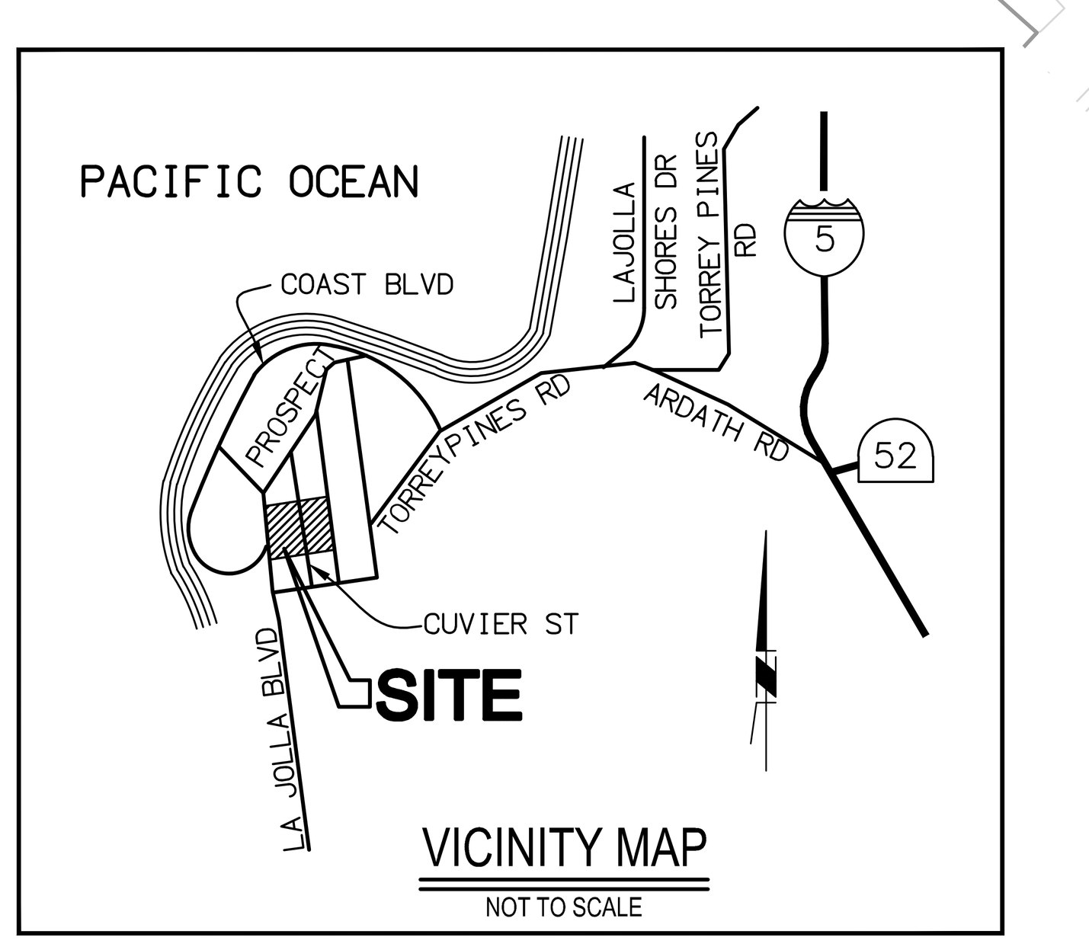
MAXIMUM HEIGHT OF CUT SLOPE(S): 5 FEET 2:1 SLOPE RATIO.

AMOUNT OF EXPORT SOIL: 10,000 CUBIC YARDS.

RETAINING/CRIB WALLS: LENGTH 200 FEET; MAXIMUM HEIGHT 4 FEET.

MAXIMUM EXCAVATION DEPTH: 20 FEET, MAXIMUM UTILITY TRENCH EXCAVATION: 25 FEET





VICINITY MAP
NOT TO SCALE

BENCHMARK

THE BASIS OF ELEVATIONS FOR THIS SURVEY IS THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29) PER THE CITY OF SAN DIEGO VERTICAL CONTROL NETWORK. BENCHMARK DESIGNATION: NORTHEAST BRASS PLUG LOCATED AT PROSPECT STREET & SILVERADO STREET.
ELEVATION: 90.572 (NGVD29)

REFERENCE DOCUMENTS

COASTAL DEVELOPMENT PERMIT NO. 518943
CONDITIONAL USE PERMIT NO. 518944
THE BISHOP'S SCHOOL PROJECT NO. 147307
AMENDMENT TO COASTAL DEVELOPMENT PERMIT NO. 10728
SPECIAL USE PERMIT NO. 10729

TOPOGRAPHY SOURCE

AEROTECH MAPPING, INC.
200 SPECTRUM CENTER DRIVE, SUITE 300
IRVINE, CA 92618
PHONE NUMBER: (619) 606-5020
TOPO SOURCE: AERIAL TOPO
DATED: APRIL 2021
ATM NUMBER: CA0321-034
CONTOUR INTERVAL: 1 FOOT

The Bishop's School
7607 La Jolla Blvd.
La Jolla, CA 92037

Grading and Drainage Plan

Revision Schedule

No. Revision	Issue Date

Drawing Set Issue Schedule

Description	Issue Date
Amendment Submittal 01	29 Oct 2021

THE BISHOP'S SCHOOL
GRADING AND DRAINAGE PLAN

ENGINEER OF WORK

Michael Baker INTERNATIONAL
9755 Clairemont Mesa Blvd., San Diego, CA 92124
Phone: (858) 614-5000 · MBAKERINTL.COM

SCOTT A. DAVIS RCE 72281 EXP. 6/30/24

DATE: 08/15/2022

REGISTERED PROFESSIONAL ENGINEER · SCOTT A. DAVIS · No. 72281 · Exp. 6/30/24 · CIVIL · STATE OF CALIFORNIA

C2.1

LEGEND

ITEM	SYMBOL
EXISTING IMPROVEMENTS	
PROPERTY LINE	
RIGHT OF WAY	
BUILDING SETBACK	
EASEMENT	
PORTION OF EXISTING CUP WITHOUT MODIFICATIONS	
R/W ABANDONMENT	
LIMITS OF CONSTRUCTION	
SURVEY MONUMENT	●

EXISTING EASEMENTS

(A) 10' WIDE EASEMENT FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF A STORM DRAIN, DRAIN PIPES, CULVERTS, WATER PIPES, SEWERS AND INCIDENTAL PURPOSES, RECORDED NOVEMBER 21, 1929 IN BOOK 1713, PAGE 184. IN FAVOR OF : THE CITY OF SAN DIEGO

(B) DRAINAGE EASEMENT GRANTED PER PARCEL MAP 19523

(C) 8' WIDE EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED FEBRUARY 26, 1968 AS INSTRUMENT NO. 32187. IN FAVOR OF: SAN DIEGO GAS AND ELECTRIC COMPANY

(D) 8' WIDE EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, RECORDED JANUARY 12, 1968 AS INSTRUMENT NO. 6991. IN FAVOR OF: SAN DIEGO GAS AND ELECTRIC COMPANY

(E) 20' WIDE "ENCROACHMENT MAINTENANCE AND REMOVAL AGREEMENT" RECORDED MAY 29, 2007 AS INSTRUMENT NO. 2007-0360427

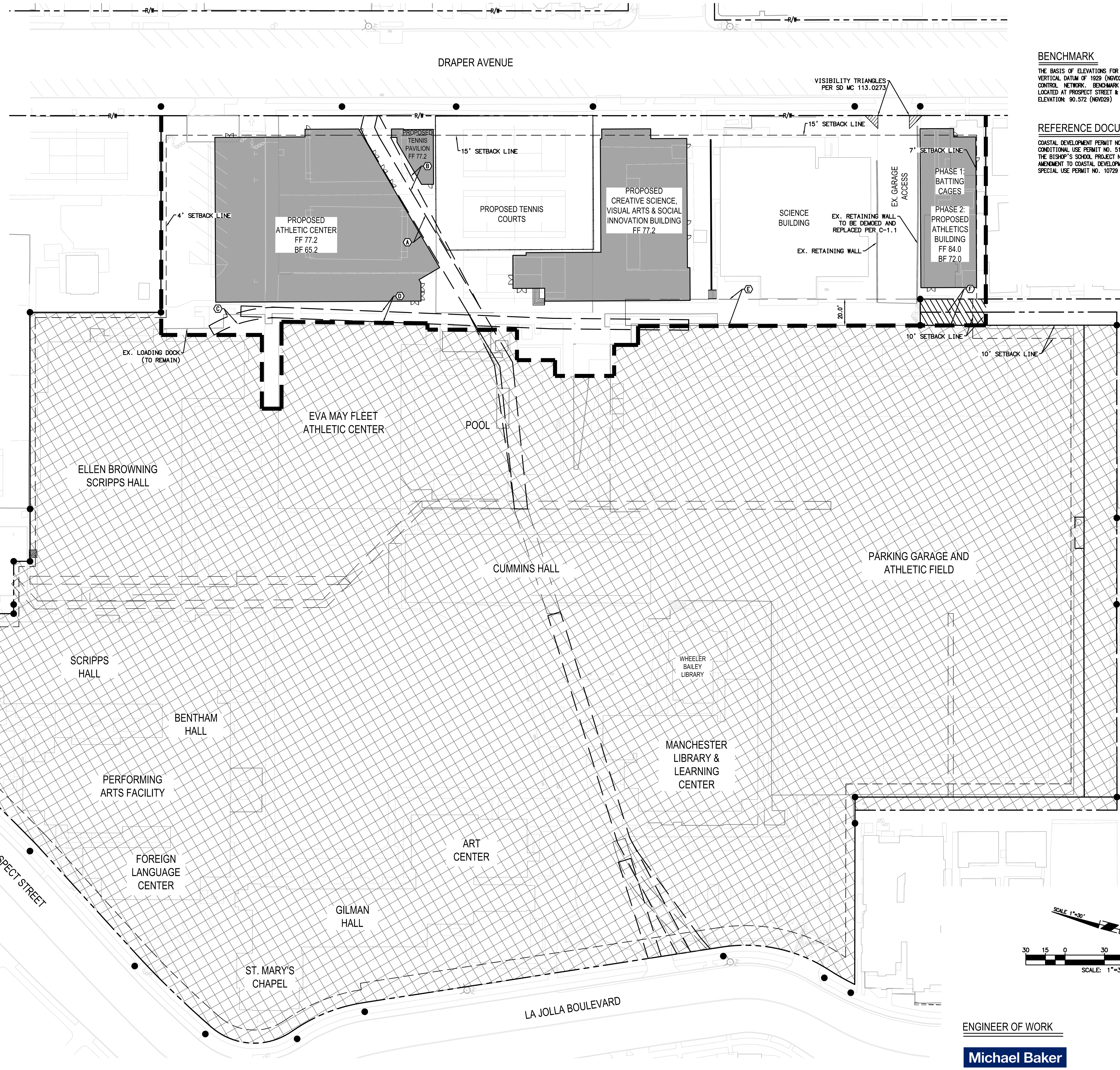
(F) PORTION OF ALLEY (REVERSIONARY RIGHTS)

MAPPING SOURCE

ALTA SURVEY
ACCULINE SURVEY, INC.
1919 GRAND AVENUE, SUITE 1G
FILE NUMBER: 1284-09
DATED: MARCH 24, 2010
SAN DIEGO, CA 92019
(858) 483-6665

PRELIMINARY REPORT

FIRST AMERICAN TITLE COMPANY
1250 CORONA POINTE COURT, SUITE 200
CORONA, CA 92879
ORDER NUMBER: NHSC-6533939 (DG)
DATED: JULY 28, 2021
TITLE OFFICER: DEREK GRAY
PHONE: (951) 256-5880
EMAIL: DEGRAY@FIRSTAM.COM



BENCHMARK

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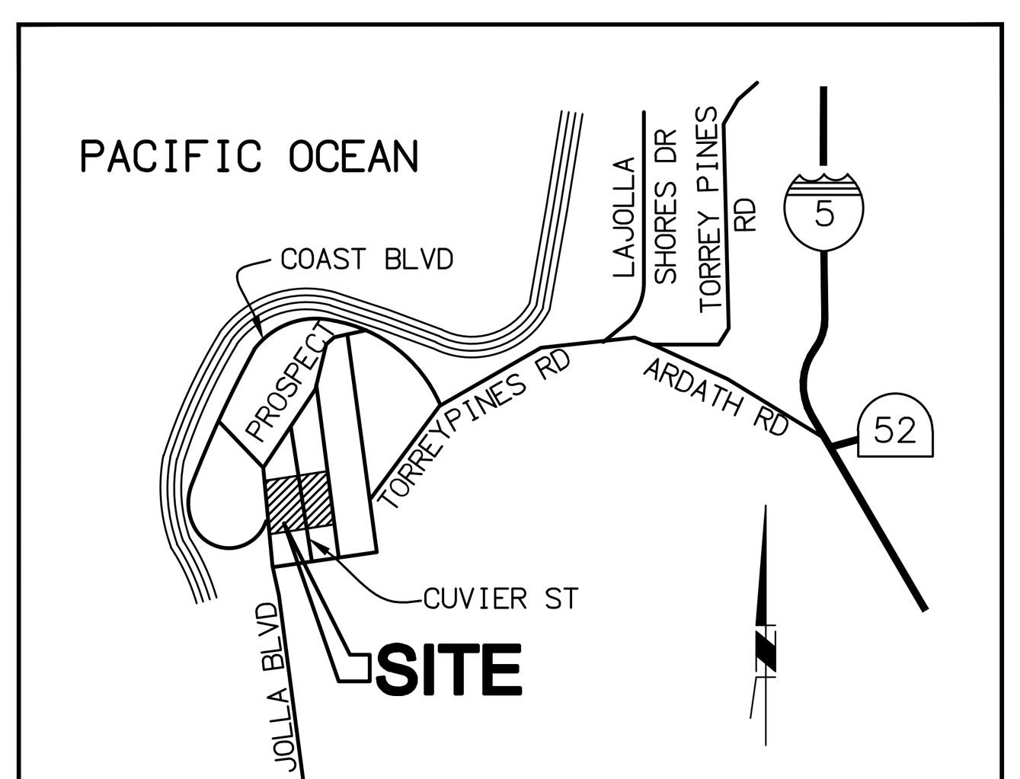

VICINITY MAP
NOT TO SCALE

SCALE: 1"=30'

THE BISHOP'S SCHOOL ENCUMBRANCE EXHIBIT

ENGINEER OF WORK

Michael Baker INTERNATIONAL
9755 Clairemont Mesa Blvd, San Diego, CA 92124
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domusstudio architecture

The Bishop's School
7607 La Jolla Blvd.
La Jolla, CA 92037

Encumbrance Exhibit

Revision Schedule

No.	Revision	Issue Date

Drawing Set Issue Schedule

Description	Issue Date
Amendment Submittal 01	29 Oct 2021

C3.1
Sheet 4 of 16

Project No. 2033

LEGEND

ITEM	SYMBOL
EXISTING IMPROVEMENTS	
PROPERTY LINE	
RIGHT OF WAY	
BUILDING SETBACK	
EASEMENT	
PORTION OF EXISTING CUP WITHOUT MODIFICATIONS	
LIMITS OF CONSTRUCTION	
SURVEY MONUMENT	
EX. CONTOUR	(300)
EX. CURB & GUTTER	
EX. TREE	
EX. LIGHT	
EX. STORM DRAIN	SD
EX. SEWER LINE	S
EX. WATER LINE	W
EX. ELECTRICAL LINE	E
EX. PERFORATED DRAIN	
EX. STORM DRAIN CO	
EX. CATCH BASIN	
EX. WATER METER	M
EX. FIRE HYDRANT	
EX. GATE VALVE	

TOPOGRAPHY SOURCE

AEROTECH MAPPING, INC.
200 SPECTRUM CENTER DRIVE, SUITE 300
IRVINE, CA 92618
PHONE NUMBER: (619) 606-5020
TOPO SOURCE: AERIAL TOPO
DATED: APRIL 2021
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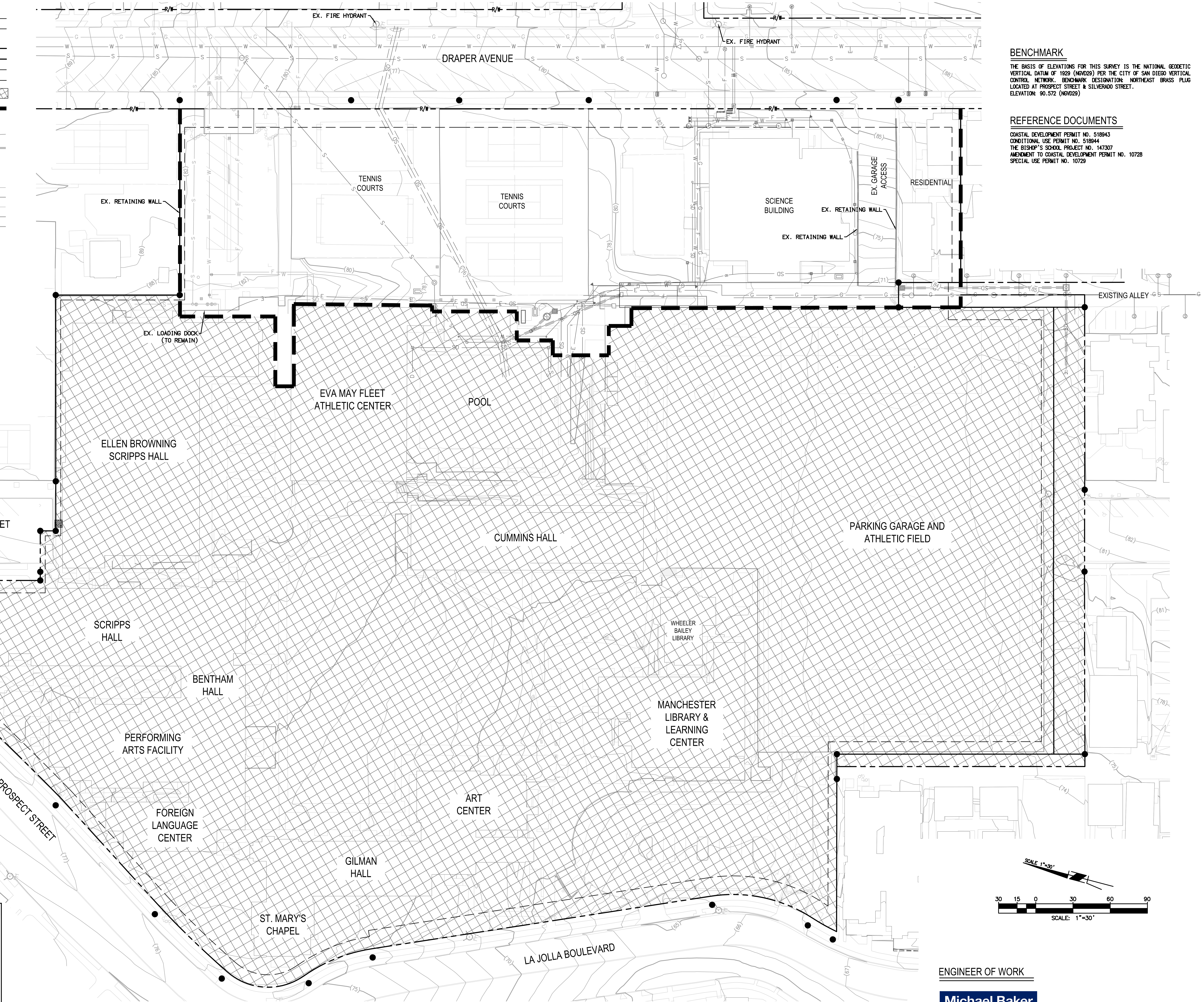
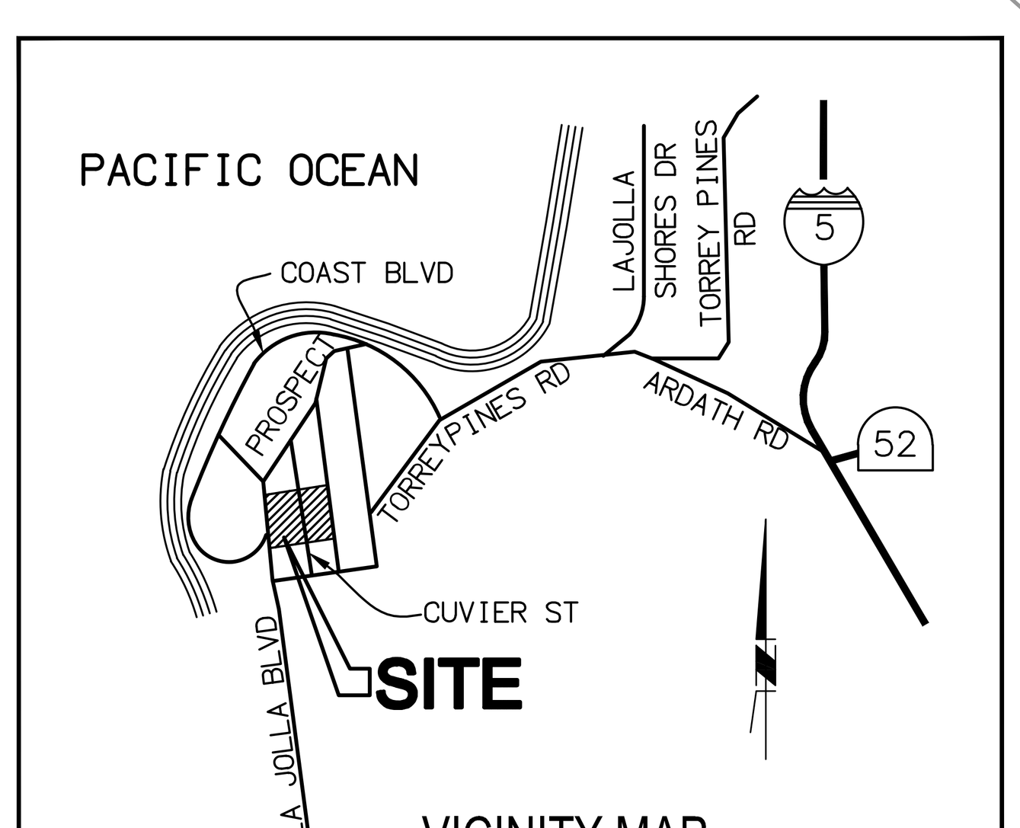
CONTOUR INTERVAL: 1 FOOT





VICINITY MAP
NOT TO SCALE

BENCHMARK

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domusstudio architecture

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La Jolla, CA 92037

Existing Topography Exhibit

Revision Schedule

No.	Revision	Issue Date

Drawing Set Issue Schedule

Description	Issue Date
Amendment Submittal 01	29 Oct 2021

THE BISHOP'S SCHOOL
EXISTING TOPOGRAPHY EXHIBIT

ENGINEER OF WORK

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REGISTERED PROFESSIONAL ENGINEER SCOTT A. DAVIS No. 72281 Exp. 6/30/24 CIVIL STATE OF CALIFORNIA

C4.1
Sheet 5 of 16