



**Thienes Engineering, Inc.**

CIVIL ENGINEERING | LAND SURVEYING



**PRELIMINARY HYDROLOGY  
STUDY**

**FOR**

**8<sup>TH</sup> STREET W INDUSTRIAL BUILDING**

8<sup>TH</sup> STREET W  
LANCASTER, CA

-

PREPARED FOR

**GM PROPERTIES 8<sup>TH</sup> STREET LANCASTER, LLC**

13305 PENN STREET, STE 200  
WHITTIER, CA 90602  
PHONE: (562) 762-3152

JULY 28, 2023

JOB NO. 4177

PREPARED BY

THEINES ENGINEERING  
14349 FIRESTONE BLVD.  
LA MIRADA, CALIFORNIA 90638  
TEL. (714) 521-4811

# **PRELIMINARY HYDROLOGY STUDY**

**FOR**

**8<sup>TH</sup> STREET INDUSTRIAL BUILDING**

PREPARED UNDER  
THE SUPERVISION OF



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REINHARD STENZEL , PE  
R.C.E. 56155  
EXP. 12/31/24

## INTRODUCTION

### A: PROJECT LOCATION

The project site is located North of W Ave L-6 between 8<sup>th</sup> Street and 7<sup>th</sup> Street in the City of Lancaster California. Refer to vicinity map.

### B: STUDY PURPOSE

The purpose of this study is to determine the proposed condition 50-year peak flow rate from the site that will ultimately ~~sheet~~ flow to 8<sup>th</sup> Street.

### C: PROJECT STAFF:

Thienes Engineering staff involved in this study include:

Reinhard Stenzel, PE  
David Landrus





## VICINITY MAP

FOR

**8TH STREET INDUSTRIAL BUILDING  
LANCASTER, CA**

**Thienes Engineering, Inc.**  
CIVIL ENGINEERING • LAND SURVEYING  
14349 FIRESTONE BOULEVARD  
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## DISCUSSION

The proposed commercial site encompasses approximately 4.35 acres. Proposed improvements to the site consist of a single commercial type building with a floor area of approximately 92,932 square feet. Paved truck yard will be located at the southerly side of the proposed building. Paved vehicle parking areas will be located north and south of the building. The remaining areas of the site will be landscaped adjacent to 8th Street.

### **Existing Condition**

The site is currently undeveloped with little vegetation. Runoff from the site generally sheet flows from east to west toward 8<sup>th</sup> Street. The 50-year peak flow rate from the site is approximately 1.7 cfs. Once runoff is offsite, it continues to flow northerly to discharge into an existing curb opening catch basin along the east curb line of 8<sup>th</sup> street near the intersection at Avenue L.

Along the eastern property line of the project site, adjacent to the future extension of 7th Street, there is potential for offsite run-on that appears to drain north and into an earthen channel. Potential offsite run-on will be further minimized through the development of 7th Street.

### **Proposed Condition**

Runoff from the site will be collected and conveyed through two main conveyance lines, Line "A" and Line "B". Line "A" captures areas 1A-5A and confluences them at the southwest corner of the building. This storm drain conveys approximately 4.6 cfs, under the 50-yr storm event, to 8<sup>th</sup> Street through a parkway culvert.

Line "B" collects water from the northwesterly portion of the site, area 6A. A proposed storm drain conveys runoff to a parkway culvert discharging flow to 8<sup>th</sup> Street. The 50-year peak flow rate at this location is approximately 0.7 cfs. Additional flow from the landscaping adjacent to the street, Area 7A, adds 0.4 cfs.

Runoff from both proposed storm drains must "burp out" to the street via the parkway culverts. The runoff then continues northerly in 8<sup>th</sup> street, ultimately to a storm drain system in West Avenue L. The total 50-year peak flow rate tributary to the site at proposed condition is approximately 5.7 cfs.

See Appendix "B" for proposed condition hydrology calculations and Appendix "C" for Hydrology map.

## **Methodology**

Hydrology calculations were computed using Los Angeles County Department of Public Works Hydro-Calc Excel spreadsheet. The soil classification area is “134” and 50- year 24-hour Isohyet is 2.95” per L.A.C.D.P.W. Hydrology Manual.

## APPENDIX

## DESCRIPTION

A

REFERENCE MATERIALS

B

HYDROLOGY CALCULATIONS

C

HYDROLOGY MAP



# **APPENDIX A**

## **REFERENCE MATERIALS**

**ROSAMOND 1-H1.77**



**34° 37' 30"**



**25-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.878**  
**10-YEAR 24-HOUR ISOHYET REDUCTION FACTOR: 0.714**

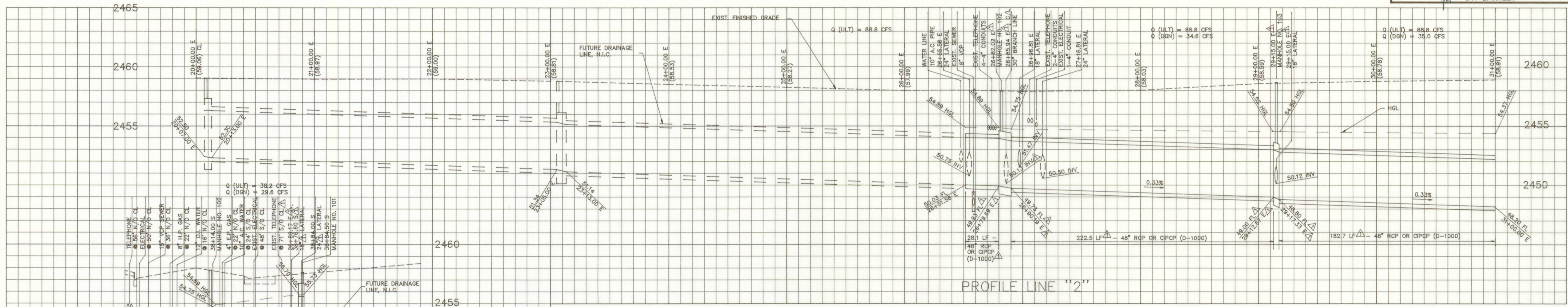
# LANCASTER WEST

## 50-YEAR 24-HOUR ISOHYET

**1-H1.67**

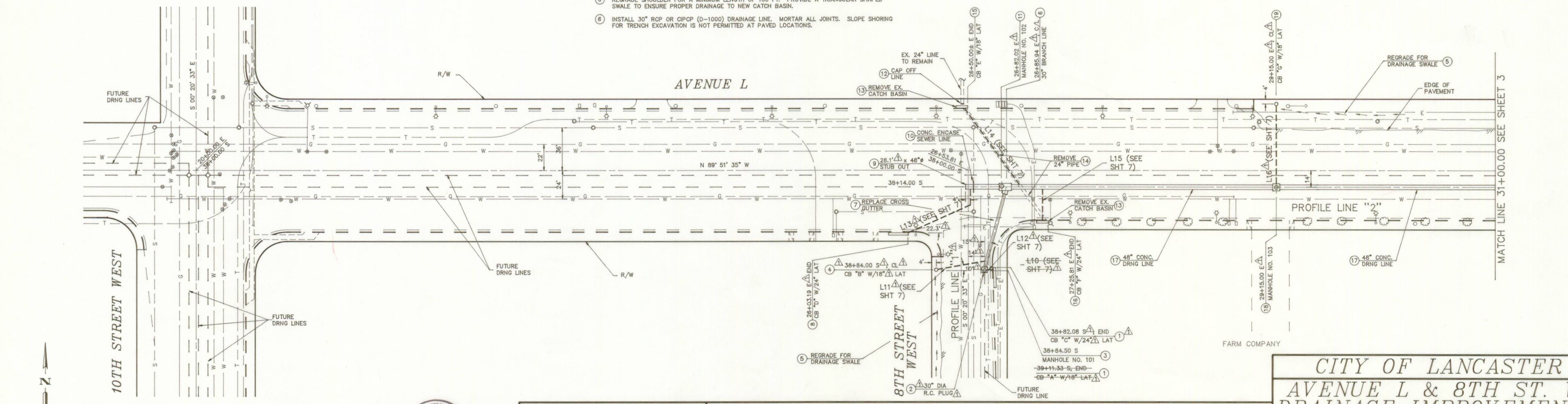






CONSTRUCTION NOTES:

- CATCH BASIN "A": CONSTRUCT CATCH BASIN NO. 3 PER L.A.C.F.C.D. STD DWG NO. 2-163; V = 5' 9", W = 17' 6". MODIFY REINFORCING NOTE IN STD DWG NO. 2-D172 TO INCLUDE REINFORCING FOR TOP, ALL WALLS, AND BOTTOM OF THIS CATCH BASIN. PROVIDE REMOVABLE PROTECTION BARS PER L.A.C.F.C.D. STD DWG NO. 2-D232. MODIFY LOCAL DEPRESSION PER L.A.C.F.C.D. STD DWG NO. 2-D248 AS SHOWN PER DETAIL (A). SEE SHT 7. INSTALL 18" RCP (D-2000) & 24" RCP (D-1350) LATERAL TYING INTO MAIN WITH JUNCTION STRUCTURE NO. 2 PER L.A.C.F.C.D. STD DWG NO. 2-D112; A = 90°, B = 24", C = 2' 6", D = 48". THE PROLONGATION OF AXIS OF LATERAL DOES NOT INTERSECT THE AXIS OF THE MAIN. CONSTRUCT LATERAL R.C. COLLARS PER L.A.C.F.C.D. STD DWG NO. 2-D393.
- PROVIDE 16 LF OF 30" RCP OR CIPCP (D-1000) STUB OUT FOR FUTURE EXTENSION OF DRAINAGE LINE. S = 0.75% PROVIDE REINFORCED CONCRETE PLUG PER L.A.C.E.D.D. STD DWG NO. Dd-52 TO TERMINATE LINE. ENSURE PLUG IS REMOVABLE.
- MANHOLE NO. 101: CONSTRUCT MANHOLE NO. 1 PER L.A.C.F.C.D. STD DWG NO. 2-D102; H = 5' 3".
- CATCH BASIN "B": CONSTRUCT CATCH BASIN NO. 4 PER L.A.C.F.C.D. STD DWG NO. 2-D101. DELETE CURB AND GRATE REQUIREMENTS. MODIFY BASIN DIMENSIONS AND END OF WALLS FOR OFF-ROADWAY GRATE INSTALLATION. INSTALL PRE-MANUFACTURED SQUARE BECHIVE CAST IRON DRAINAGE GRATE (NEENAH R-4347 OR SIMILAR) WITH ANCHORAGE. NO REINFORCEMENT REQUIRED. INSTALL 18" RCP OR CIPCP (D-1500) LATERAL TYING INTO MANHOLE NO. 101 AT A 90° ANGLE. MAIN WITH JUNCTION STRUCTURE NO. 2 PER L.A.C.F.C.D. STD DWG NO. 2-D112; A = 85°, B = 18", C = 5' 4". CONSTRUCT R.C. COLLAR PER L.A.C.F.C.D. STD DWG NO. 2-D393.
- REGRADE SHOULDER FOR A MINIMUM LENGTH OF 100 FT. PROVIDE A TRIANGULAR SHAPED SWALE TO ENSURE PROPER DRAINAGE TO NEW CATCH BASIN.
- INSTALL 30" RCP OR CIPCP (D-1000) DRAINAGE LINE. MORTAR ALL JOINTS. SLOPE SHORING FOR TRENCH EXCAVATION IS NOT PERMITTED AT PAVED LOCATIONS.
- REPLACE CONCRETE CROSS GUTTER AS REQUIRED. RECONSTRUCT CROSS GUTTER TO MATCH EXISTING STANDARD AND ELEVATIONS.
- CATCH BASIN "D": CONSTRUCT CATCH BASIN NO. 3 PER L.A.C.F.C.D. STD DWG NO. 2-D163; V = 3' 10", W = 17'. MODIFY REINFORCING NOTE IN STD DWG NO. 2-D172 TO INCLUDE REINFORCING FOR TOP, ALL WALLS, AND BOTTOM OF THIS CATCH BASIN. MODIFY LOCAL DEPRESSION PER L.A.C.F.C.D. STD DWG NO. 2-D88 AS SHOWN PER DETAIL (B). SEE SHT 7. INSTALL 24" RCP OR CIPCP (D-2250) LATERAL TYING INTO MAIN WITH JUNCTION STRUCTURE NO. 2 PER L.A.C.F.C.D. STD DWG NO. 2-D112; A = 90°, B = 24", C = 2' 6", D = 48". THE PROLONGATION OF AXIS OF LATERAL DOES NOT INTERSECT THE AXIS OF THE MAIN. CONSTRUCT LATERAL R.C. COLLARS PER L.A.C.F.C.D. STD DWG NO. 2-D393.
- PROVIDE 28.1 LF OF 48" RCP OR CIPCP (D-1000) STUB OUT FOR FUTURE EXTENSION OF DRAINAGE LINE. S = 0.33% PROVIDE REINFORCED CONCRETE PLUG PER L.A.C.E.D.D. STD DWG NO. Dd-52 TO TERMINATE LINE. ENSURE PLUG IS REMOVABLE.
- CONSTRUCT CONCRETE ENCASUREMENT AROUND EXISTING 8" DIA. VCP SEWER LINE PER L.A.C.D.P.W. STD DWG NO. S-22; CASE I.
- MANHOLE NO. 102: CONSTRUCT MANHOLE NO. 4 PER L.A.C.F.C.D. STD DWG NO. 2-D113; A = 75°, B = 30", C = 3', D1 = 48", D2 = 48", ELEV S = 50.20.
- CAP OFF EXISTING 24" DIA RCP DRAINAGE LINE. TERMINATE NEAR WALL OF NEW CATCH BASIN. PROVIDE PLUG CONSISTING OF A WALL OF CONCRETE NOT LESS THAN 6 INCHES IN THICKNESS OR AN 8-INCH WALL OF BRICK AND MORTAR PER SPECIFICATIONS.
- REMOVE EXISTING CATCH BASIN AND ASSOCIATED SIDEWALK, CURB, AND GUTTER TO FACILITATE THE INSTALLATION OF THE NEW CATCH BASIN.
- REMOVE EXISTING 24" RCP DRAINAGE LINE. WORK INCLUDES BACKFILLING, COMPACTING, AND REPAVING SECTION.
- CATCH BASIN "E": CONSTRUCT CATCH BASIN NO. 3 PER L.A.C.F.C.D. STD DWG NO. 2-D163; V = 3' 0", W = 10'. MODIFY REINFORCING NOTE IN STD DWG NO. 2-D172 TO INCLUDE REINFORCING FOR TOP, ALL WALLS, AND BOTTOM OF THIS CATCH BASIN. MODIFY LOCAL DEPRESSION CASE C PER L.A.C.F.C.D. STD DWG NO. 2-D88 AS SHOWN PER DETAIL (B). SEE SHT 7. INSTALL 18" RCP (D-2500) LATERAL TYING INTO MAIN WITH JUNCTION STRUCTURE NO. 4 PER L.A.C.F.C.D. STD DWG NO. 2-D193; VALUE FOR 'A' MUST BE DETERMINED IN FIELD, B = 15', D = 18". CONSTRUCT LATERAL R.C. COLLAR PER L.A.C.F.C.D. STD DWG NO. 2-D393.
- CATCH BASIN "F": SAME AS NOTE B; V = 5' 0", W = 10', LOCAL DEPRESSION IS CASE C, INSTALL 24" RCP OR CIPCP (D-1500).
- INSTALL 48" DIA RCP OR CIPCP (D-1000) DRAINAGE LINE. MORTAR ALL JOINTS. SLOPE SHORING FOR TRENCH EXCAVATION IS NOT PERMITTED AT PAVED LOCATIONS.
- MANHOLE NO. 103: CONSTRUCT MANHOLE NO. 2 PER L.A.C.F.C.D. STD DWG NO. 2-D184; D1 = 48", D2 = 48".
- CATCH BASIN "G": SAME AS NOTE 4; V = 5' 6", INSTALL 18" RCP (D-2000).



PLANS PREPARED UNDER THE SUPERVISION OF LARRY J. ALEXANDER FOR THE CITY OF LANCASTER.

SIGNATURE *Larry J. Alexander* R.E. NO. 41692  
CIVIL ENGINEER

RELOCATED 30" RCP BRANCH LINE DUE TO GAS UTILITY CONFLICT ON 8TH STREET WEST. CATCH BASINS MODIFIED FOR VARYING SITE CONDITIONS.

REVISED BY *Gregory L. Wong* DATE 07/04/92  
APPROVED BY *Gregory L. Wong* DATE 10/19/92

REVISED BY R.E. NO.  
APPROVED BY DATE

REVISED BY R.E. NO.  
APPROVED BY DATE

CITY OF LANCASTER  
AVENUE L & 8TH ST. W.  
DRAINAGE IMPROVEMENTS

PLAN & PROFILE FOR LINES "1" & "2"  
STA 38+14.00 S TO 38+86.33 S  
STA 26+51.56 E TO 31+00.00 E



## **APPENDIX B**

### **HYDROLOGY CALCULATIONS**

EXISTING CONDITION

## Peak Flow Hydrologic Analysis

File location: O:/4100-4199/4177/HYDROLOGY/APPENDIX B HYDROLOGY CALCULATIONS/4177 EXIST - 1A.pdf  
Version: HydroCalc 1.0.3

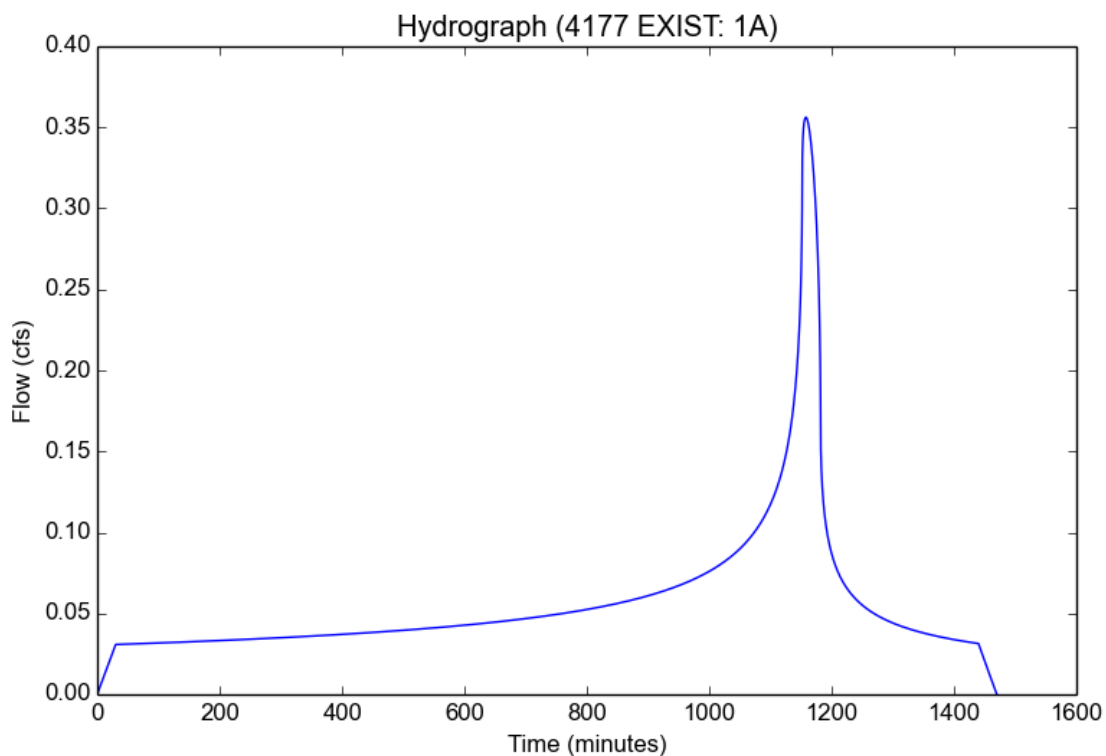
### Input Parameters

Project Name	4177 EXIST
Subarea ID	1A
Area (ac)	4.35
Flow Path Length (ft)	607.0
Flow Path Slope (vft/hft)	0.01145
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.01
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	0.7582
Undeveloped Runoff Coefficient (Cu)	0.1
Developed Runoff Coefficient (Cd)	0.108
Time of Concentration (min)	30.0
Clear Peak Flow Rate (cfs)	0.3562
Burned Peak Flow Rate (cfs)	0.3562
24-Hr Clear Runoff Volume (ac-ft)	0.1145
24-Hr Clear Runoff Volume (cu-ft)	4989.3333

discussion says 1.7cfs





## PROPOSED CONDITION

## Peak Flow Hydrologic Analysis

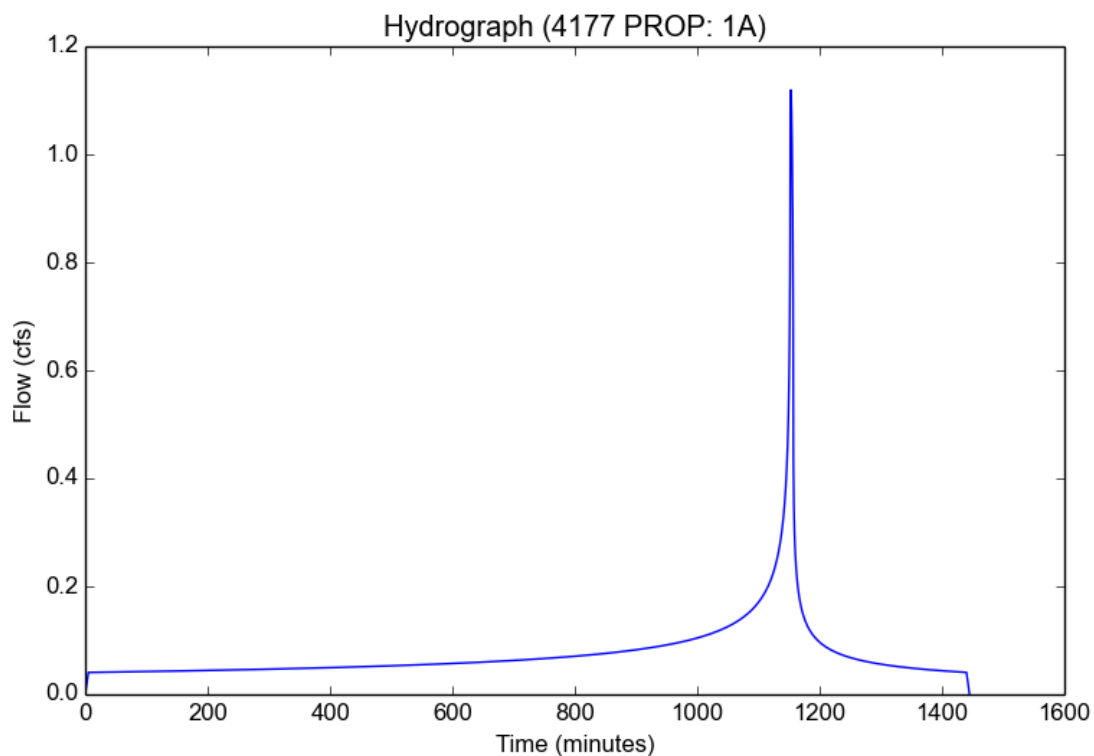
File location: O:/4100-4199/4177/HYDROLOGY/APPENDIX B HYDROLOGY CALCULATIONS/4177 PROP Report.pdf  
Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	1A
Area (ac)	0.76
Flow Path Length (ft)	147.0
Flow Path Slope (vft/hft)	0.0106
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.7601
Undeveloped Runoff Coefficient (Cu)	0.2666
Developed Runoff Coefficient (Cd)	0.8367
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	1.1191
Burned Peak Flow Rate (cfs)	1.1191
24-Hr Clear Runoff Volume (ac-ft)	0.152
24-Hr Clear Runoff Volume (cu-ft)	6622.9104



## Peak Flow Hydrologic Analysis

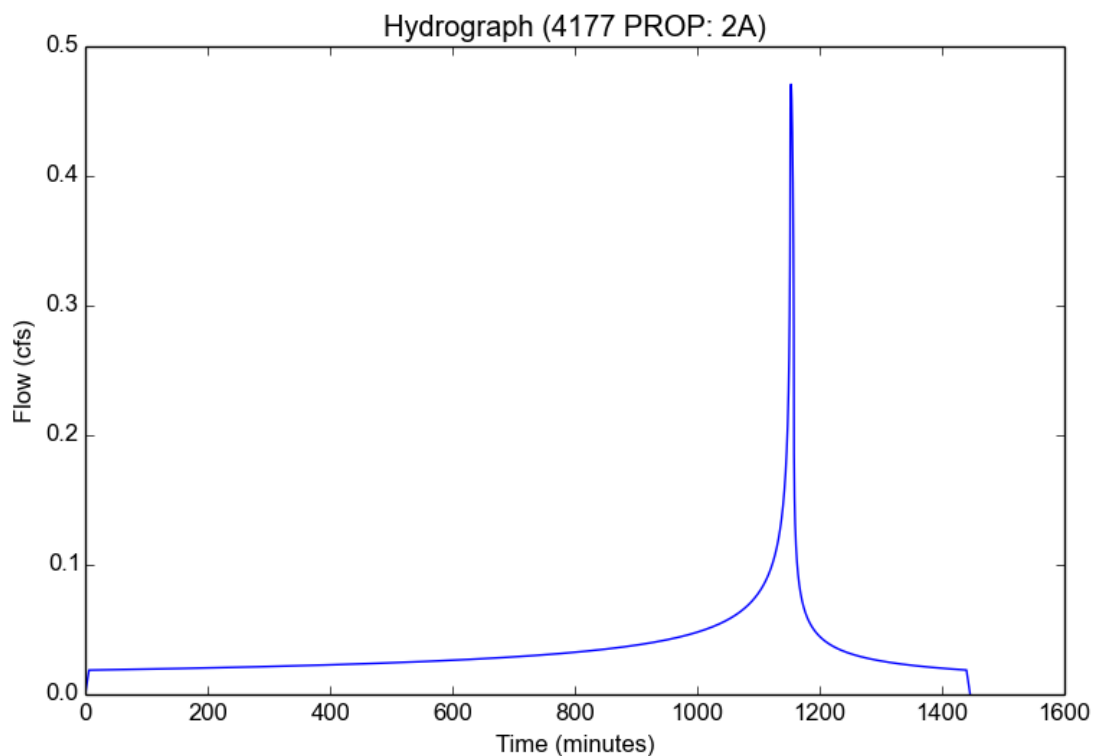
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Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	2A
Area (ac)	0.35
Flow Path Length (ft)	178.0
Flow Path Slope (vft/hft)	0.0156
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.6155
Undeveloped Runoff Coefficient (Cu)	0.2245
Developed Runoff Coefficient (Cd)	0.8325
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	0.4707
Burned Peak Flow Rate (cfs)	0.4707
24-Hr Clear Runoff Volume (ac-ft)	0.07
24-Hr Clear Runoff Volume (cu-ft)	3049.517





## Peak Flow Hydrologic Analysis

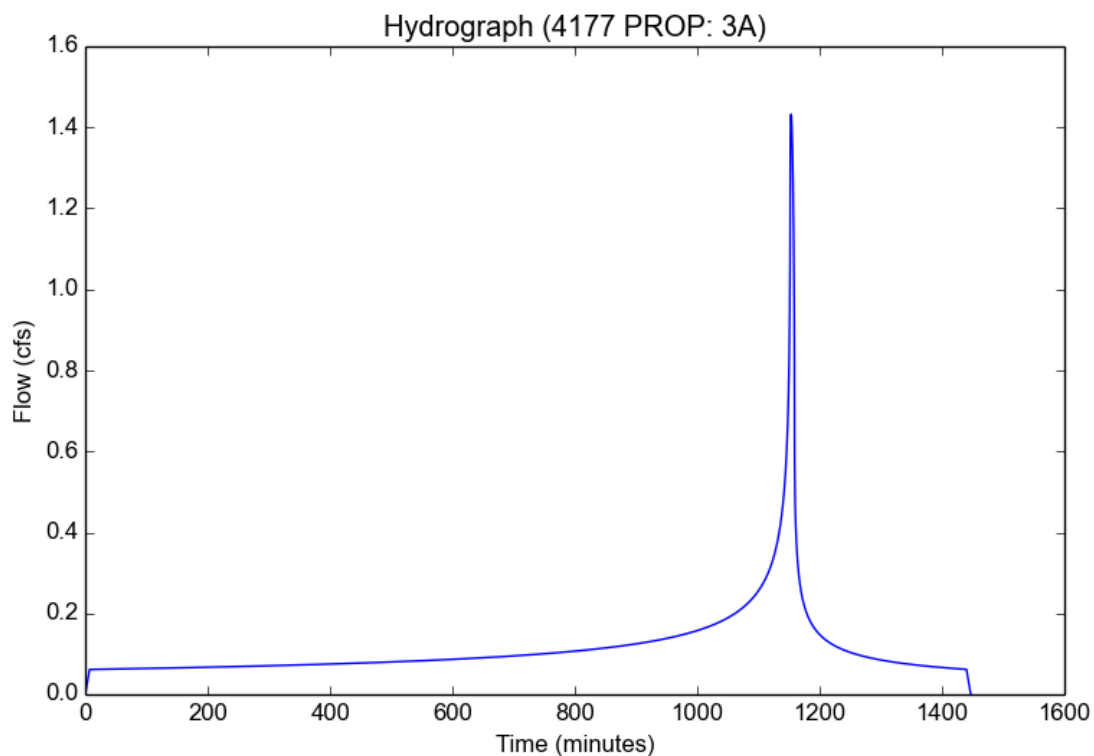
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Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	3A
Area (ac)	1.15
Flow Path Length (ft)	241.0
Flow Path Slope (vft/hft)	0.0162
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.5026
Undeveloped Runoff Coefficient (Cu)	0.1907
Developed Runoff Coefficient (Cd)	0.8291
Time of Concentration (min)	7.0
Clear Peak Flow Rate (cfs)	1.4326
Burned Peak Flow Rate (cfs)	1.4326
24-Hr Clear Runoff Volume (ac-ft)	0.23
24-Hr Clear Runoff Volume (cu-ft)	10018.4079



## Peak Flow Hydrologic Analysis

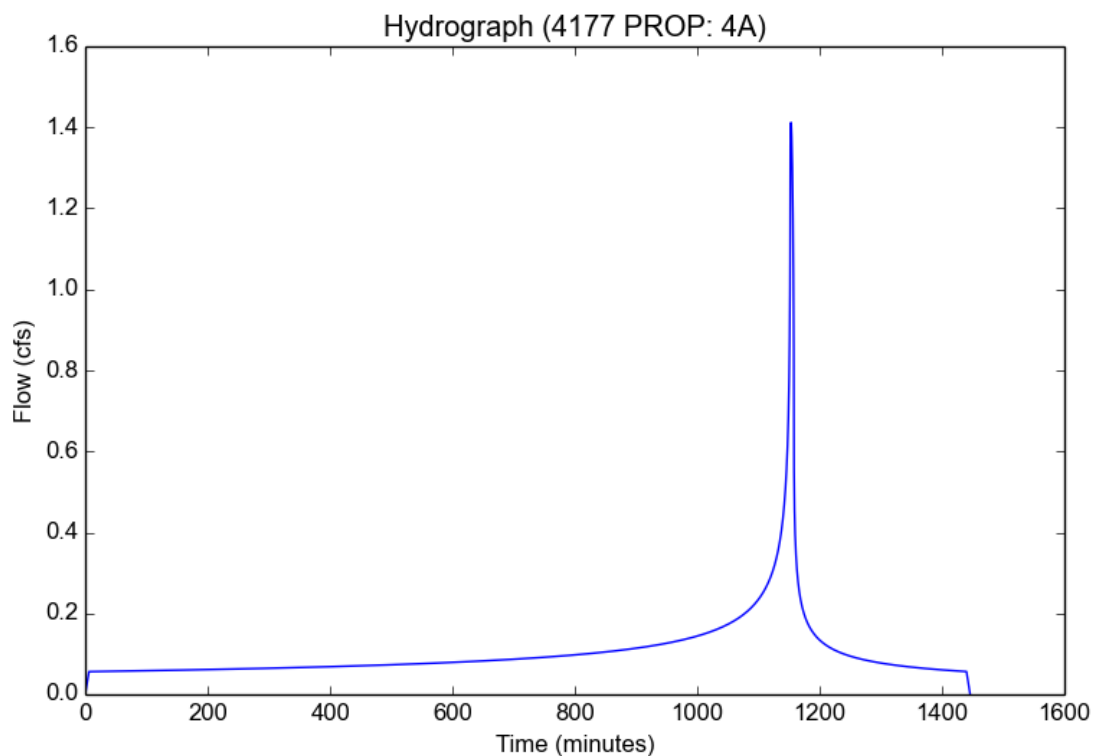
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Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	4A
Area (ac)	1.05
Flow Path Length (ft)	204.0
Flow Path Slope (vft/hft)	0.0138
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.6155
Undeveloped Runoff Coefficient (Cu)	0.2245
Developed Runoff Coefficient (Cd)	0.8325
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	1.4121
Burned Peak Flow Rate (cfs)	1.4121
24-Hr Clear Runoff Volume (ac-ft)	0.21
24-Hr Clear Runoff Volume (cu-ft)	9148.5509



## Peak Flow Hydrologic Analysis

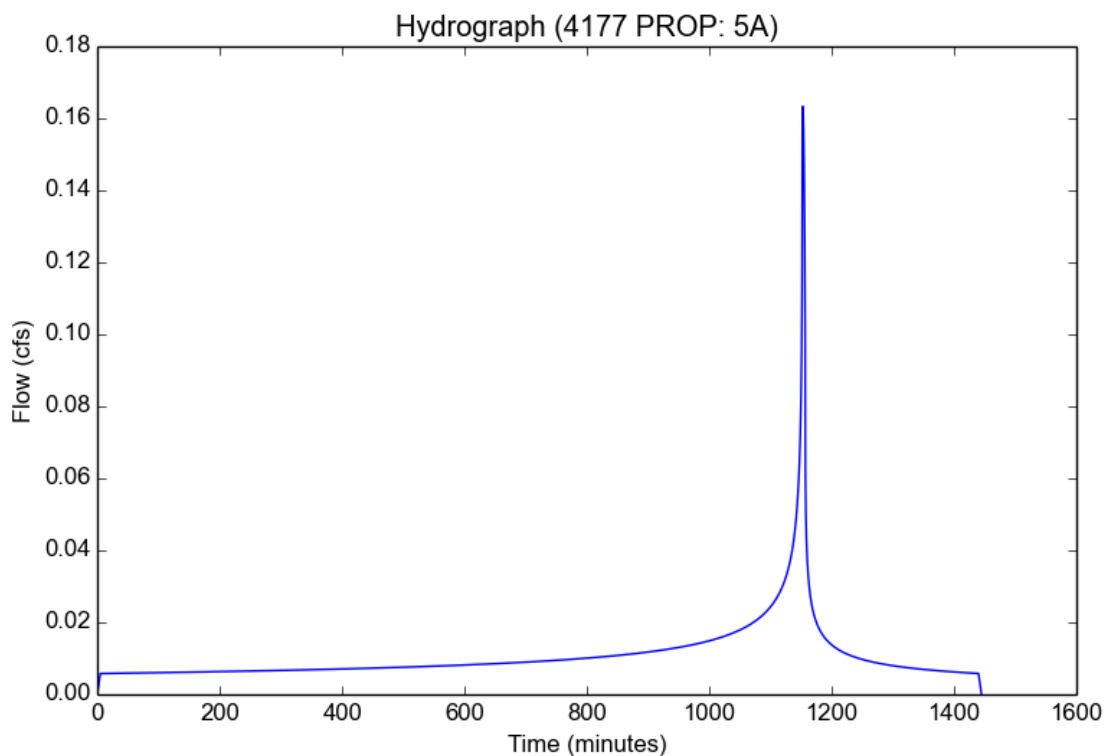
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Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	5A
Area (ac)	0.12
Flow Path Length (ft)	92.0
Flow Path Slope (vft/hft)	0.0329
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.8
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.7601
Undeveloped Runoff Coefficient (Cu)	0.2666
Developed Runoff Coefficient (Cd)	0.7733
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.1633
Burned Peak Flow Rate (cfs)	0.1633
24-Hr Clear Runoff Volume (ac-ft)	0.0217
24-Hr Clear Runoff Volume (cu-ft)	944.485



## Peak Flow Hydrologic Analysis

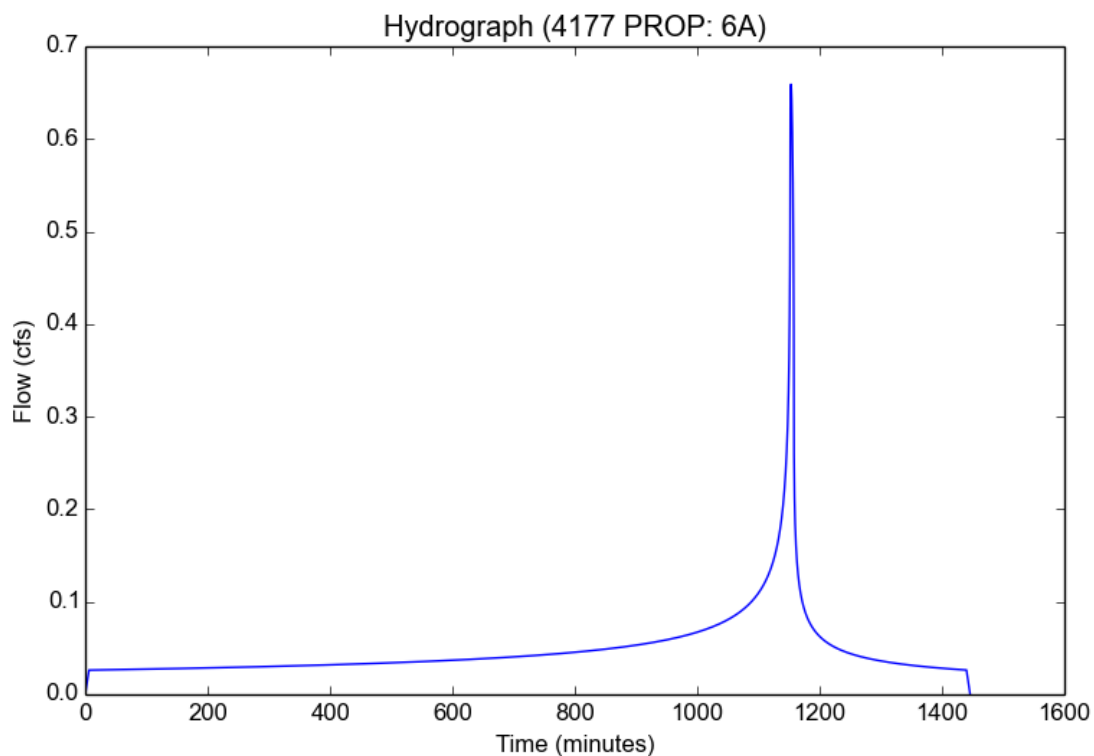
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### Input Parameters

Project Name	4177 PROP
Subarea ID	6A
Area (ac)	0.49
Flow Path Length (ft)	221.0
Flow Path Slope (vft/hft)	0.02597
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.9
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.6155
Undeveloped Runoff Coefficient (Cu)	0.2245
Developed Runoff Coefficient (Cd)	0.8325
Time of Concentration (min)	6.0
Clear Peak Flow Rate (cfs)	0.659
Burned Peak Flow Rate (cfs)	0.659
24-Hr Clear Runoff Volume (ac-ft)	0.098
24-Hr Clear Runoff Volume (cu-ft)	4269.3238



## Peak Flow Hydrologic Analysis

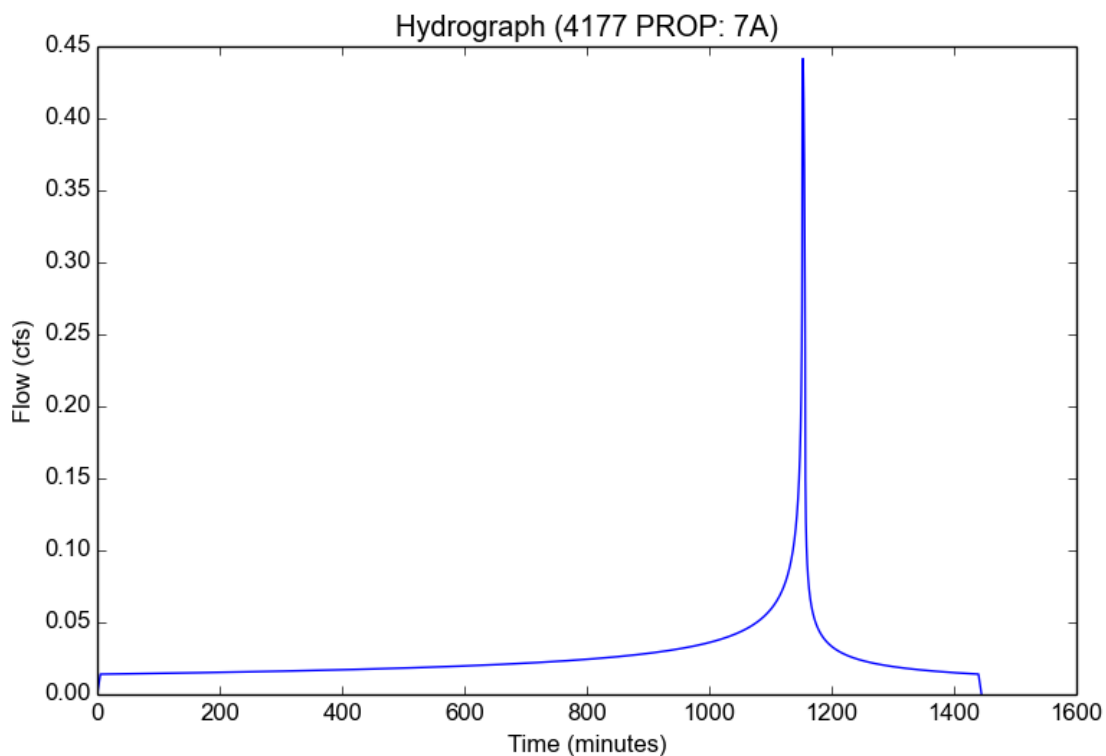
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Version: HydroCalc 1.0.3

### Input Parameters

Project Name	4177 PROP
Subarea ID	7A
Area (ac)	0.43
Flow Path Length (ft)	135.0
Flow Path Slope (vft/hft)	0.03037
50-yr Rainfall Depth (in)	2.95
Percent Impervious	0.5
Soil Type	134
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

### Output Results

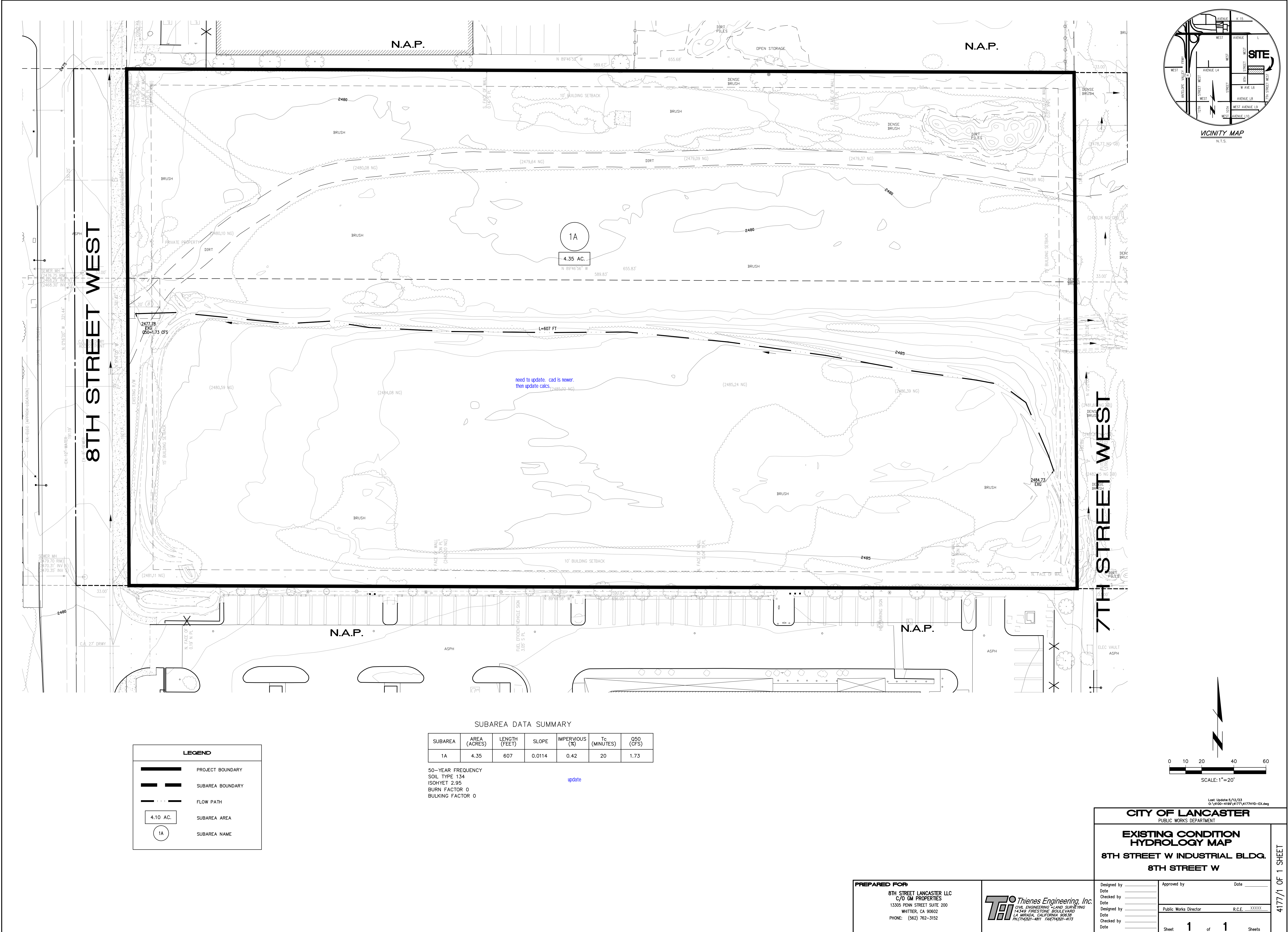
Modeled (50-yr) Rainfall Depth (in)	2.95
Peak Intensity (in/hr)	1.7601
Undeveloped Runoff Coefficient (Cu)	0.2666
Developed Runoff Coefficient (Cd)	0.5833
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	0.4415
Burned Peak Flow Rate (cfs)	0.4415
24-Hr Clear Runoff Volume (ac-ft)	0.0527
24-Hr Clear Runoff Volume (cu-ft)	2296.0998



# **APPENDIX C**

## **HYDROLOGY MAP**





8TH STREET WEST

7TH STREET WEST

1A

4.35 AC.

need to update. cad is newer.  
then update calcs.

L=607 FT

2477.78  
250=1.73 CFS

PROJECT BOUNDARY

SUBAREA BOUNDARY

FLOW PATH

4.10 AC.

1A

SUBAREA AREA

SUBAREA NAME

SUBAREA DATA SUMMARY

SUBAREA	AREA (ACRES)	LENGTH (FEET)	SLOPE	IMPERVIOUS (%)	Tc (MINUTES)	Q50 (CFS)
1A	4.35	607	0.0114	0.42	20	1.73

50-YEAR FREQUENCY  
SOIL TYPE 134  
ISOHYET 2.95  
BURN FACTOR 0  
BULKING FACTOR 0

update

PREPARED FOR:  
8TH STREET LANCASTER LLC  
C/O IGM PROPERTIES  
13305 PEW STREET SUITE 200  
WHITTIER, CA 90602  
PHONE: (562) 762-3152

**T*e*i** Thienes Engineering, Inc.  
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14340 FIRESTONE BOULEVARD  
LA BREA, CALIFORNIA 90639  
PH: (714) 521-4011 FAX: (714) 521-4173

CITY OF LANCASTER  
PUBLIC WORKS DEPARTMENT

EXISTING CONDITION  
HYDROLOGY MAP

8TH STREET W INDUSTRIAL BLDG.

8TH STREET W

Designed by  
Date  
Checked by  
Date  
Designed by  
Date  
Checked by  
Date

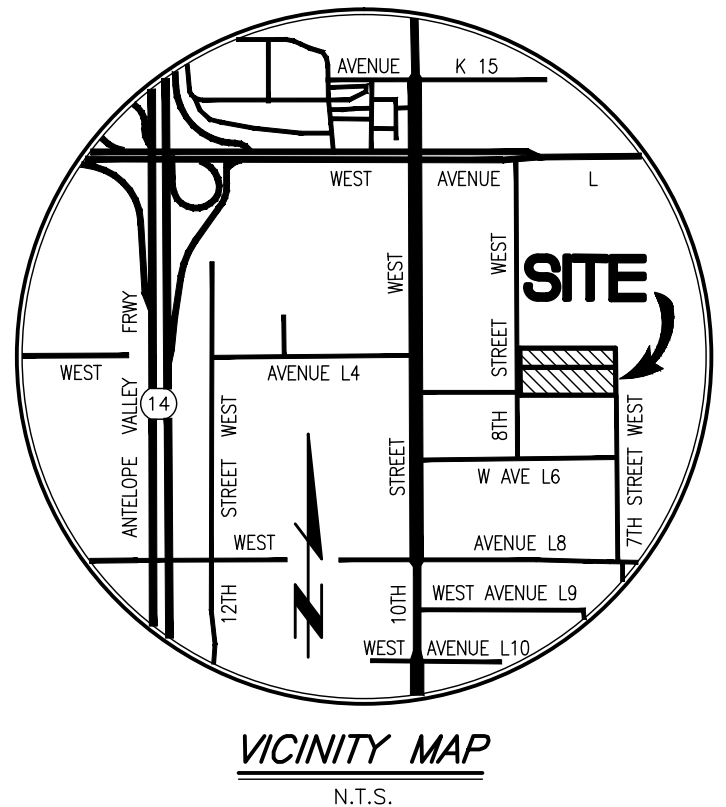
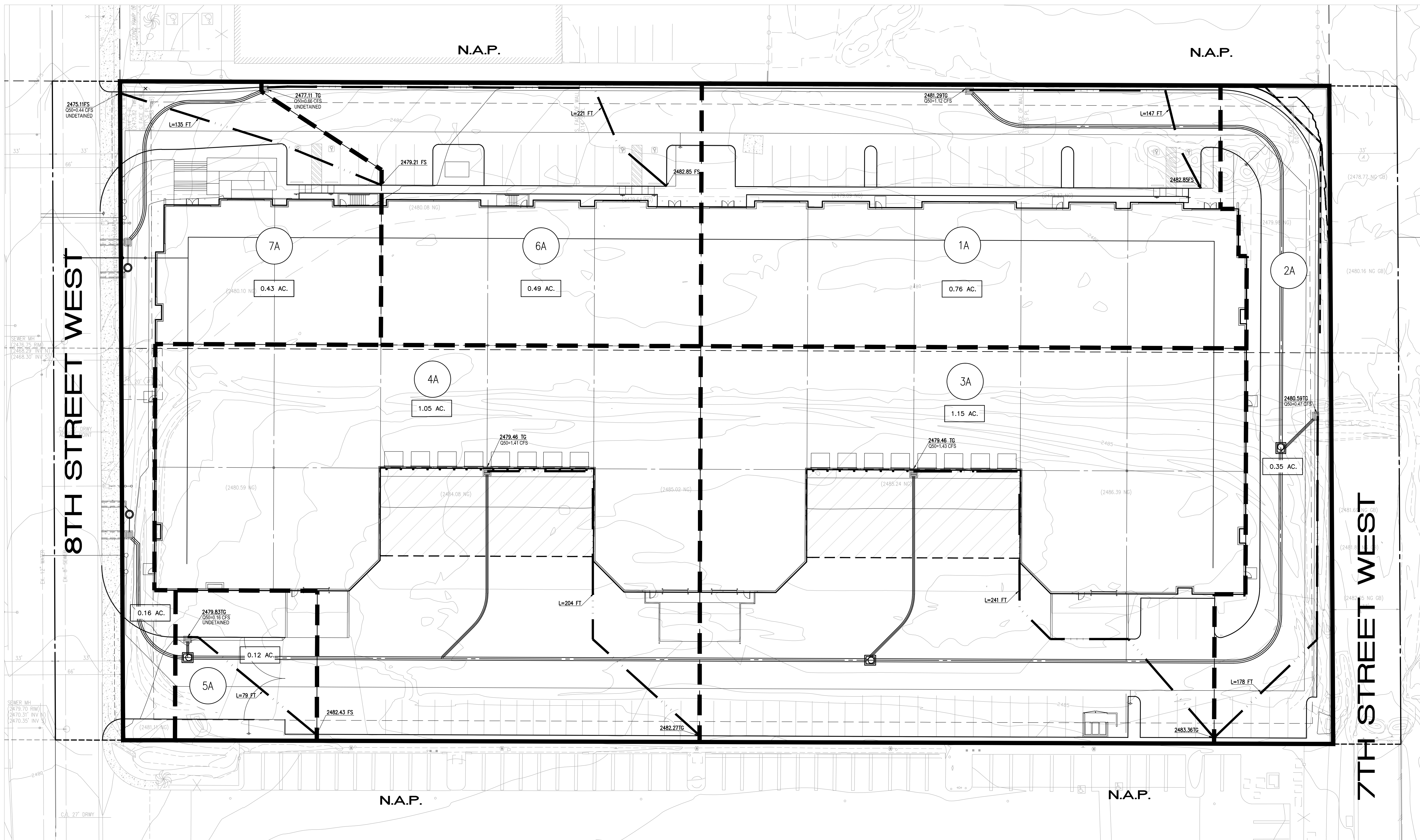
Approved by  
Date

Public Works Director  
R.C.E. XXXXX

Sheet 1 of 1 Sheets

4177/1 OF 1 SHEET

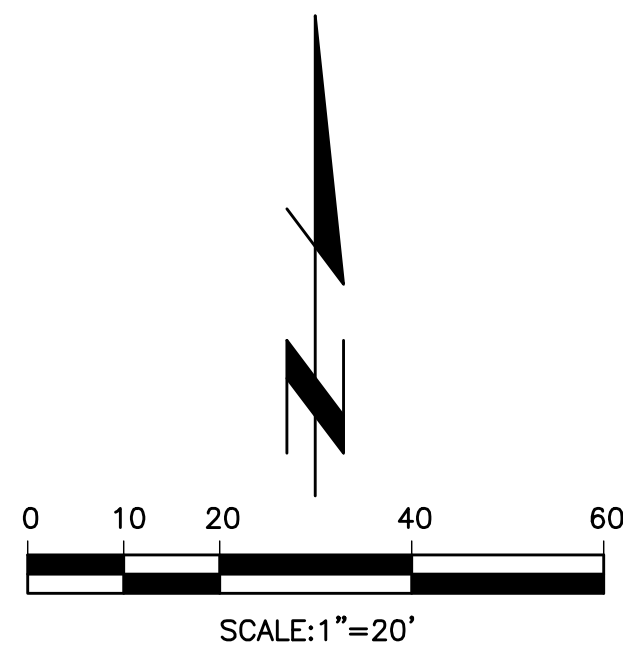




LEGEND	
	PROJECT BOUNDARY
	SUBAREA BOUNDARY
	FLOW PATH
	SUBAREA AREA
	SUBAREA NAME
	PONDING AREA

SUBAREA DATA SUMMARY						
SUBAREA	AREA (ACRES)	LENGTH (FEET)	SLOPE	IMPERVIOUS (%)	Tc (MINUTES)	Q50 (CFS)
1A	0.76	147	0.0106	0.9	5.0	1.12
2A	0.35	178	0.0156	0.9	6.0	0.47
3A	1.15	241	0.0162	0.9	7.0	1.43
4A	1.05	204	0.0138	0.9	6.0	1.41
5A	0.12	92	0.0329	0.8	5.0	0.16
6A	0.49	221	0.0259	0.9	6.0	0.66
7A	0.42	135	0.0304	0.5	5.0	0.44
TOTAL	4.35 AC					5.69 CFS

50-YEAR FREQUENCY  
SOIL TYPE 134  
ISOHYET 2.95  
BURN FACTOR 0  
BULKING FACTOR 0



PREPARED FOR:  
8TH STREET LANCASTER, LLC  
C/O GM PROPERTIES  
13305 PENN STREET SUITE 200  
WHITTIER, CA 90602  
PHONE: (562) 762-3152

**Thienes Engineering, Inc.**  
CIVIL ENGINEERING • LAND SURVEYING  
14349 FIRESTONE BOULEVARD  
LA MIRADA, CALIFORNIA 90638  
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<b>CITY OF LANCASTER</b> PUBLIC WORKS DEPARTMENT	
<b>PROPOSED CONDITION HYDROLOGY MAP</b>	
<b>8TH STREET W INDUSTRIAL BLDG.</b>	
<b>8TH STREET W</b>	
Designed by _____ Date _____ Checked by _____ Date _____ Designed by _____ Date _____ Checked by _____ Date _____	Approved by _____ Date _____ Public Works Director R.C.E. _____ Sheet <b>1</b> of <b>1</b> Sheets