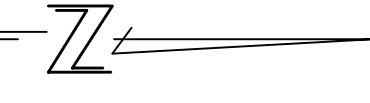
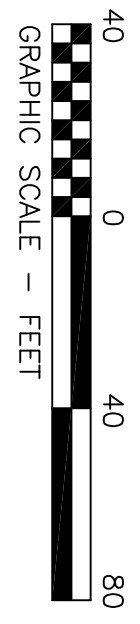


EXISTING DRAINAGE PLAN
SCALE 1" = 40'



DRAINAGE LEGEND

- SURFACE FLOW DIRECTION (CONCENTRATED FLOW)
- SURFACE FLOW DIRECTION (SHEET FLOW)
- DESIGN POINT DESIGNATION
- A=SUB-BASIN DESIGNATION
B=AREA IN ACRES
C=100 YEAR COMPOSITE RUNOFF COEFFICIENT

GENERAL NOTES:

1. THIS SITE IS NOT WITHIN ANY ESTABLISHED FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP
2. EXISTING CONTOURS ARE SHOWN AT ONE FOOT INTERVALS

LEGEND

- DRAINAGE BASIN BOUNDARY LINE
- SITE BOUNDARY/PROPERTY LINE
- ADJACENT PROPERTY LINES
- UTILITY EASMENT
- ROAD CENTERLINE
- EXISTING EDGE OF ASPHALT
- PROPOSED EDGE OF ASPHALT
- EXISTING EDGE OF CONCRETE
- PROPOSED EDGE OF CONCRETE
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING BUILDING WALLS
- PROPOSED BUILDING WALLS
- FENCES
- CENTERLINE OF SWALE
- EXISTING COUNTOURS
- PROPOSED COUNTOURS
- CONTOUR MATCH POINT
- EXISTING SPOT ELEVATIONS
- PROPOSED SPOT ELEVATIONS

ABBREVIATIONS

- FF FINISHED FLOOR
- EOA EDGE OF ASPHALT
- FS FINISHED SURFACE
- FL FLOW LINE
- CL CENTERLINE
- RL RIDGE LINE
- ROW RIGHT OF WAY
- FG FINISHED GRADE
- EG EXISTING GRADE
- PL PROPERTY LINE
- TOE TOE OF SLOPE
- LP LOW POINT
- HP HIGH POINT
- EOC EDGE OF CONC

BENCH MARKS:

BENCH MARKS: FORT COLLINS VERTICAL CONTROL
PROJECT DATUM: NAVD88
LARIMER COUNTY BM "CRABILL"
3/4" LARIMER COUNTY ENGINEERING CAP STAMPED "CRABILL", ON THE NORTHEAST WINGWALL OF THE BRIDGE OVER ARTHUR DITCH, 540 FEET NORTH OF VINE AND SHIELDS STREET ON THE EAST SIDE OF SHIELDS STREET.
ELEVATION: NAVD88 = 5009.19
FC ACBM #37-97
ON TOP OF A CONCRETE TRAFFIC SIGNAL BASE AT THE EAST ENTRANCE TO LINCOLN DR. HIGH SCHOOL, ON THE SOUTH SIDE OF VINE DRIVE.
ELEVATION: NAVD88 = 5027.21

PLEASE NOTE: THIS PLAN SET IS USING NAVD88 FOR A VERTICAL DATUM. SURROUNDING DEVELOPMENTS HAVE USED NGVD29 UNADJUSTED DATUM (PRIOR CITY OF FORT COLLINS DATUM) FOR THEIR VERTICAL DATUMS.
IF NGVD29 UNADJUSTED DATUM (PRIOR CITY OF FORT COLLINS DATUM) IS REQUIRED FOR ANY PURPOSE, THE FOLLOWING EQUATION SHOULD BE USED: NGVD29 UNADJUSTED (PRIOR CITY OF FORT COLLINS DATUM) = NAVD88 - 3.17

DRAINAGE SUMMARY

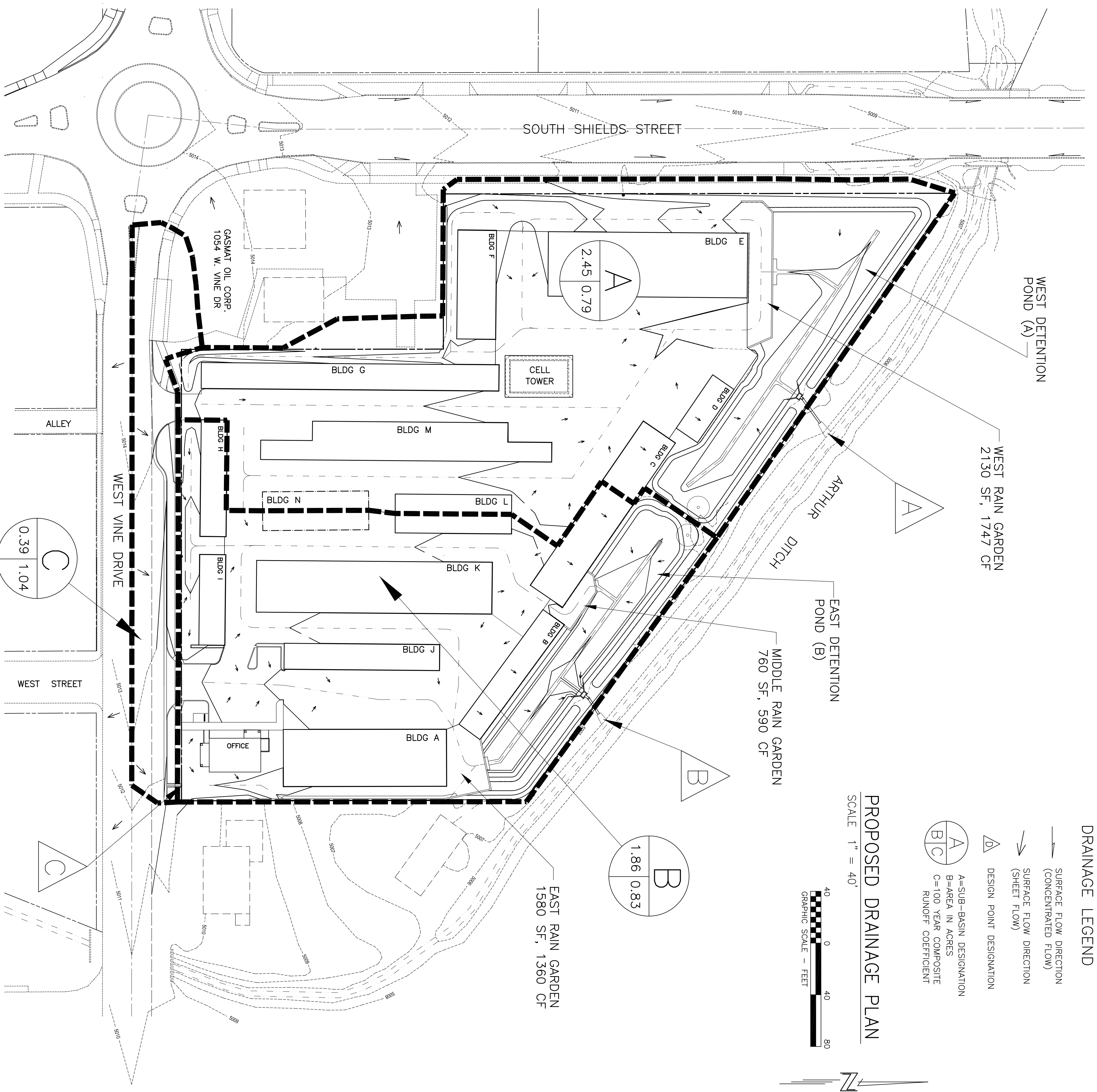
		HISTORIC CONDITIONS			
BASIN	AREA, SF	AREA, AC	C(100)	Q(2).cfs	Q(100).cfs
A	125,230	2.87	0.30	0.97	4.39
B	79,410	1.82	0.38	0.79	3.60
TOTAL	204,640	4.69		1.76	7.99

FORBES ENGINEERING
2908 CHERLY STREET, FORT COLLINS, CO 80524
OFFICE NUMBER (970) 295-4874
FULL SERVICE ENGINEERING AND DESIGN
CIVIL / STRUCTURAL, GEOTECHNICAL AND FOUNDATIONS,
LAND AND MUNICIPAL PLANNING, LAND AND CONSTRUCTION SURVEYS

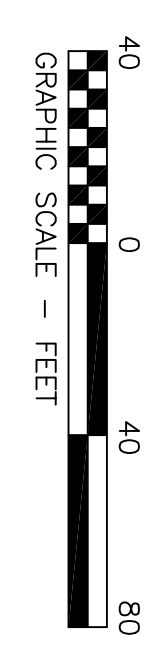
CLIENT: HATTMAN ASSOCIATES
PROJECT: WEST VINE STORAGE
PROJECT ADDRESS: WEST VINE DRIVE
FORT COLLINS, COLORADO

DATE	BY	CHK.	RECORD OF ISSUE

Date: 2-19-19
Scale: AS NOTED
Drawn: KEF
Verified: KEF
Drawing Size: 24"x36"
Drawing Name: EXISTING DRAINAGE PLAN
Drawing No: D1



PROPOSED DRAINAGE PLAN
SCALE 1" = 40'



- DRAINAGE LEGEND**
- SURFACE FLOW DIRECTION (CONCENTRATED FLOW)
 - ↘ SURFACE FLOW DIRECTION (SHEET FLOW)
 - △ DESIGN POINT DESIGNATION
 - A/B/C A=SUB-BASIN DESIGNATION
B=AREA IN ACRES
C=100 YEAR COMPOSITE RUNOFF COEFFICIENT

LEGEND

- DRAINAGE BASIN BOUNDARY LINE
- SITE BOUNDARY/PROPERTY LINE
- ADJACENT PROPERTY LINES
- UTILITY EASMENT
- ROAD CENTERLINE
- EXISTING EDGE OF ASPHALT
- PROPOSED EDGE OF ASPHALT
- EXISTING EDGE OF CONCRETE
- PROPOSED EDGE OF CONCRETE
- EXISTING EDGE OF GRAVEL
- PROPOSED EDGE OF GRAVEL
- EXISTING BUILDING WALLS
- PROPOSED BUILDING WALLS
- FENCES
- CENTERLINE OF SWALE
- EXISTING COUNTOURS
- PROPOSED COUNTOURS
- CONTOUR MATCH POINT
- EXISTING SPOT ELEVATIONS +500±.62
- PROPOSED SPOT ELEVATIONS 500±.62

ABBREVIATIONS

- | | | | |
|-----|------------------|-----|----------------|
| FF | FINISHED FLOOR | FG | FINISHED GRADE |
| EOA | EDGE OF ASPHALT | EG | EXISTING GRADE |
| FS | FINISHED SURFACE | PL | PROPERTY LINE |
| FL | FLOW LINE | LP | LOW POINT |
| Q | CENTERLINE | HP | HIGH POINT |
| RL | RIDGE LINE | EOC | EDGE OF CONC |
| ROW | RIGHT OF WAY | | |

GENERAL NOTES:

- THIS SITE IS NOT WITHIN ANY ESTABLISHED FLOODPLAIN, ACCORDING TO FLOOD INSURANCE RATE MAP
- EXISTING AND PROPOSED CONTOURS ARE SHOWN AT ONE FOOT INTERVALS
- BENCH MARKS, FORT COLLINS VERTICAL CONTROL PROJECT DATUM: NAVD88

LARIMER COUNTY BM "CRABILL"
3/4" LARIMER COUNTY ENGINEERING CAP STAMPED "CRABILL," ON THE NORTHEAST WINGWALL OF THE BRIDGE OVER ARTHUR DITCH, 540 FEET NORTH OF VINE AND SHIELDS STREET ON THE EAST SIDE OF SHIELDS STREET.
ELEVATION: NAVD88 = 5009.19

FC ACBM #37-97
ON TOP OF A CONCRETE TRAFFIC SIGNAL BASE AT THE EAST ENTRANCE TO LINCOLN JR. HIGH SCHOOL, ON THE SOUTH SIDE OF VINE DRIVE.
ELEVATION: NAVD88 = 5027.21

PLEASE NOTE: THIS PLAN SET IS USING NAVD88 FOR A VERTICAL DATUM. SURROUNDING DEVELOPMENTS HAVE USED NGVD29 UNADJUSTED DATUM (PRIOR CITY OF FORT COLLINS DATUM) FOR THEIR VERTICAL DATUMS.
IF NGVD29 UNADJUSTED DATUM (PRIOR CITY OF FORT COLLINS DATUM) IS REQUIRED FOR ANY PURPOSE, THE FOLLOWING EQUATION SHOULD BE USED: NGVD29 UNADJUSTED (PRIOR CITY OF FORT COLLINS DATUM) = NAVD88 - 3.17

DRAINAGE SUMMARY

BASIN	AREA, SF	AREA, AC	C(100)	Q(2),cfs	Q(100),cfs
A	106,932	2.45	0.79	2.47	11.85
B	80,811	1.86	0.83	2.46	10.88
C	16,897	0.39	1.00	0.91	4.06
TOTAL	204,640	4.70		5.84	26.79

FORBES ENGINEERING
2908 CHERLY STREET, FORT COLLINS, CO 80524
OFFICE NUMBER (970) 295-4874
FULL SERVICE ENGINEERING AND DESIGN
CIVIL / STRUCTURAL, GEOTECHNICAL AND FOUNDATIONS,
LAND AND MUNICIPAL PLANNING, LAND AND CONSTRUCTION SURVEYS

CLIENT: HATTMAN ASSOCIATES
PROJECT: WEST VINE STORAGE
PROJECT ADDRESS: WEST VINE DRIVE
FORT COLLINS, COLORADO

DATE	BY	CHK.	RECORD OF ISSUE

Date: 2-19-19
Scale: AS NOTED
Drawn: KEF
Verified: KEF
Drawing Size: 24"x36"
Drawing Name: PROPOSED DRAINAGE PLAN
Drawing No: D2