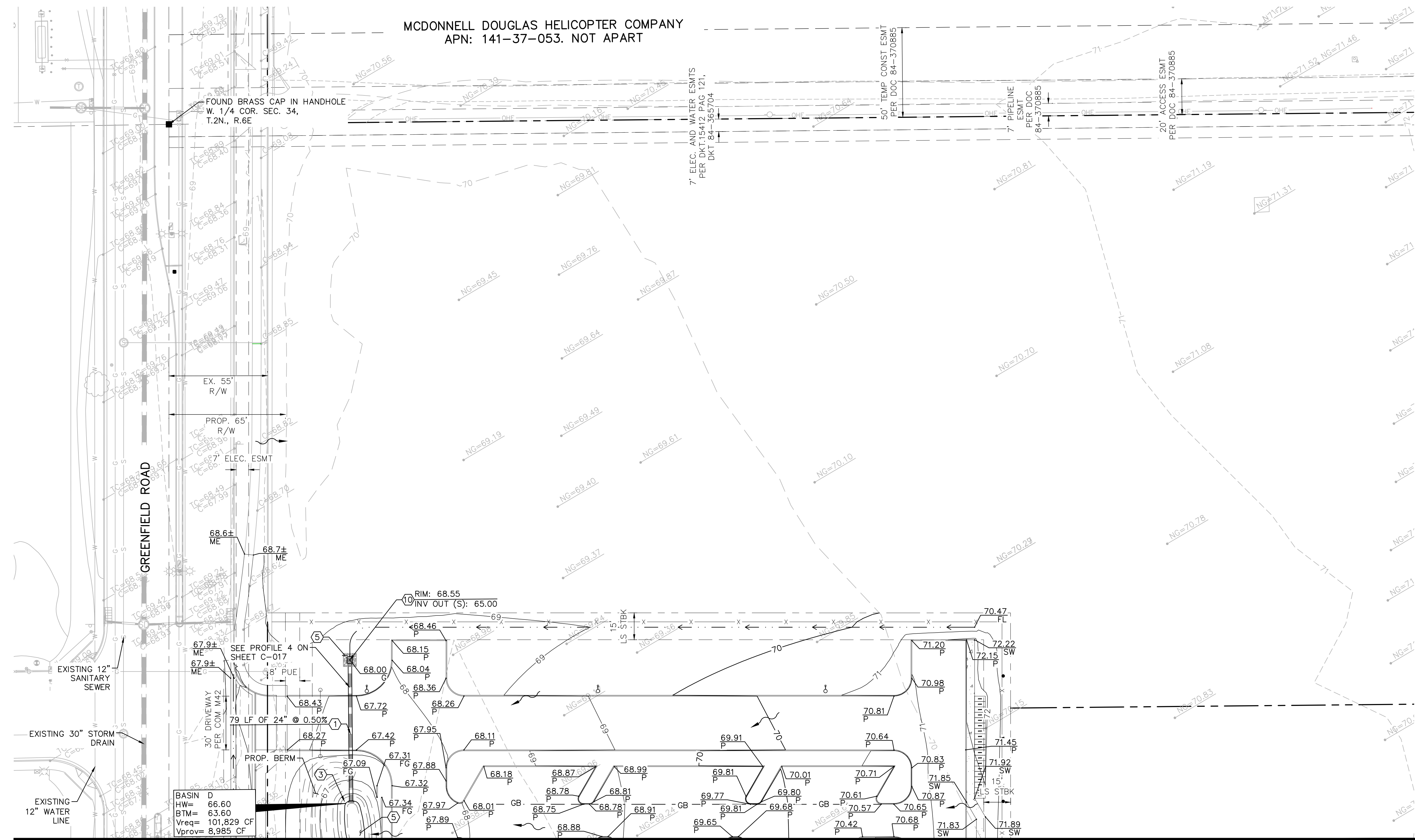
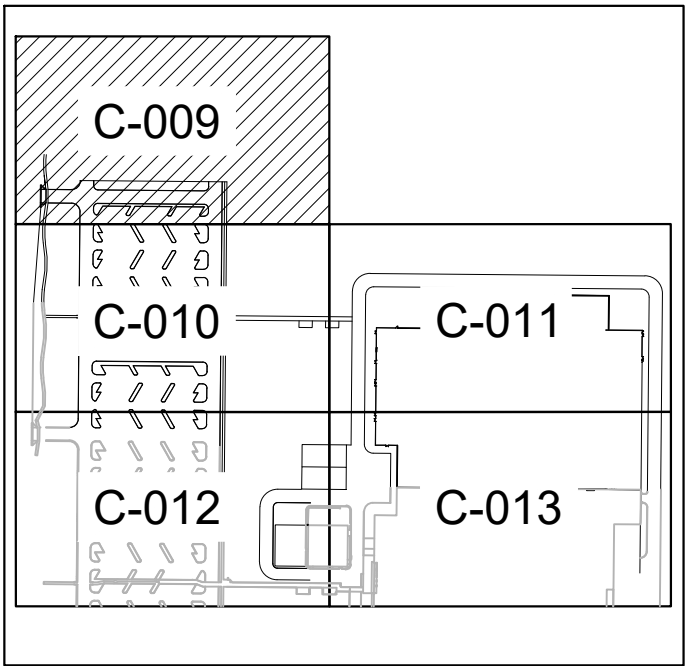




- GRADING LEGEND**
- PROPERTY LINE
 - EXISTING EASEMENT LINE
 - PROPOSED SAW CUT
 - HP - PROPOSED HIGH POINT
 - LP - PROPOSED LOW POINT
 - GB - PROPOSED GRADE BREAK
 - PROPOSED STORM DRAIN PIPE
 - EXISTING CONTOUR
 - PROPOSED CATCH BASIN PER M.A.G. STANDARD DETAIL 534
 - PROPOSED FLOW ARROW
 - PROPOSED PAVEMENT SPOT ELEVATION
 - PROPOSED CATCH BASIN GRATE ELEVATION
 - EXISTING ELEVATION

- GRADING AND DRAINAGE NOTES**
- INSTALL HDPE STORM DRAIN EQUALIZER PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
 - INSTALL HEADWALL WITH SAFTY RAIL PER MAG STD DET 501 AND PER COM STD DET M-65.
 - INSTALL RIP RAP SPILLWAY/APRON D50= 6", DEPTH=12".
 - INSTALL TYPE 'G' CATCH BASIN PER MAG STD DET 537. GRATE SHALL BE SECURED WITH CHAIN.



KEY MAP

GRAPHIC SCALE IN FEET
0 15 30 60

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2046 RIVERVIEW AUTO DRIVE, Suite 400
Mesa, Arizona 85201 (480) 207-2666

Standard Arizona 011 at least two full working days before final execution
ARIZONA
Call 011 or visit Arizona011.com

North

RETENTION REQUIRED (DISTURBED AREA ONLY)

ENTIRE SITE CLASSIFICATION	AREA	C-VALUE	VOLUME REQUIRED
PAVEMENT/BUILDING	9.11 AC± (396,655 SF)	0.95	1.82 AC FT± (69,084 CF)
LANDSCAPE	7.63 AC± (332,478 SF)	0.50	0.79 AC FT± (30,477 CF)
TOTAL	16.74 AC± (729,133 SF)		2.61 AC FT± (99,561 CF)

- ALL RETENTION CALCULATIONS ARE BASED ON A 100-YEAR 2-HOUR RAINFALL RUNOFF OF 2.20 INCHES FROM CITY OF MESA ENGINEERING STANDARDS.
- RETENTION CALCULATIONS DO NOT INCLUDE RUNOFF FROM HALF-STREET RIGHT OF WAY ALONG GREENFIELD ROAD DUE TO EXISTING PUBLIC STORM DRAINS IN THE STREET.
- BASIN A, B, C, AND D SHALL BE COMBINED THROUGH THE USE OF AN EQUALIZER PIPE SYSTEM.

RETENTION PROVIDED (DISTURBED AREA ONLY)

	VOLUME REQUIRED	VOLUME PROVIDED
BASIN A+B		1.96 AC FT± (85,369 CF)
BASIN C+D		0.41 AC FT± (18,098 CF)
TOTAL	2.29 AC FT± (99,561 CF)	2.37 AC FT± (103,467 CF)

DRAINAGE STATEMENT

THE PROPOSED BOEING FABRICATION BUILDING WILL RETAIN THE 100-YEAR 2-HOUR STORM IN SURFACE RETENTION BASINS LOCATED ALONG THE PERIMETER OF THE DEVELOPMENT AND BEHIND THE SECURITY FENCE. ALL FOUR SURFACE RETENTION BASINS ARE EQUALIZED. NO RETENTION IS PROPOSED FOR THE HALF-STREETS OF GREENFIELD ROAD.

THE BASINS LOCATED ALONG GREENFIELD ROAD AND BEHIND THE FENCE WILL DISPOSED OF THE STORM WATER THROUGH THE USE OF BLEED OFF PIPE INTO THE CITY OF MESA PUBLIC STORM DRAIN SYSTEM.

BENCHMARK

FOUND BRASS TAG ON THE TOP OF CURB AT THE SOUTHWEST CURB RETURN AT THE INTERSECTION OF GREENFIELD AND MCDOWELL. CITY OF MESA DATA NAVD88 ELEVATION = 1365.04

BASIS OF BEARING

THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 34, TOWNSHIP 2 NORTH, RANGE 6 EAST, AS MEASURED BETWEEN FOUND MONUMENTS. SAID LINE BEARS NORTH 0 DEGREES 30 MINUTES 0 SECONDS EAST.

DISPOSAL CALCULATIONS

	VOLUME TO DRAIN	DISPOSAL METHOD	DISPOSAL RATE	DISPOSAL TIME
ENTIRE SITE	2.37 AC FT± (103,467 CF)	ORIFICE PLATE	VARIES (0.38 CFS TO 0.69 CFS)	36 HOURS

- NOTES**
- ADD 1300 TO ALL ELEVATIONS.
 - ADD 0.5' TO PAVEMENT (P) ELEVATIONS FOR TOP OF CURB ELEVATIONS FOR VERTICAL CURBS.
 - ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRATE (G), TOP OF CURB (TC), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL USE SPOT ELEVATIONS, PROPOSED CONTOURS, AND SLOPES TO ESTABLISH GRADES.
 - SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
 - REFER TO LANDSCAPE PLANS FOR SLOPE TREATMENT.
 - ALL FILL SLOPES SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
 - REFER TO BUILDING ARCHITECTURE AND STRUCTURAL PLANS FOR EXACT BUILDING FOUNDATION THICKNESS CHANGES.
 - ALL STATIONS AND OFFSETS PER GREENFIELD ROAD C.

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DESIGN BY:

DATE:



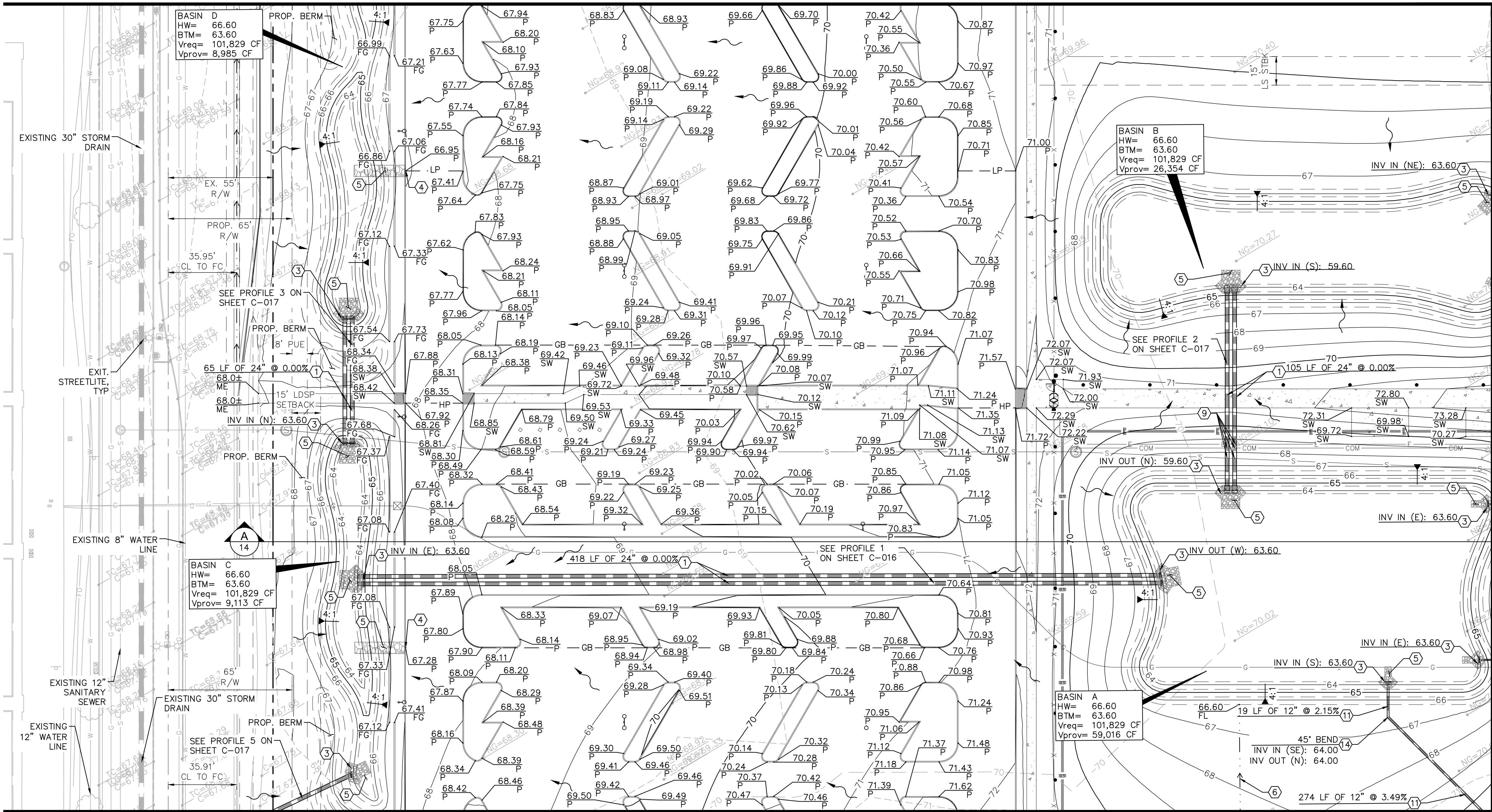
ACCEPTABILITY		
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APPROVED BY	DEPT.	DATE

DRAWN	DATE
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CHECKED	07/06/26
STM	
ENGINEER	
STM	
CHECKED	07/06/26
STM	
APPROVED	
APPROVED	

SUBTITLE	PRELIMINARY GRADING AND DRAINAGE PLAN
TITLE	BOEING OPERATION SHEETS
	BUILDING 50-570A
	MESA, AZ
	ADV. COMPOSITE FABRICATION CENTER
CIVIL MASTER	

CURRENT REVISION	SYMBOL	DATE
SHEET	C-009	07/06/26
JOB NO.	C08117.001	COMP NO.
DWG NO.	50-570A-C-009	

MATCHLINE SEE SHEET C-009



MATCHLINE SEE SHEET C-012

GRADING LEGEND

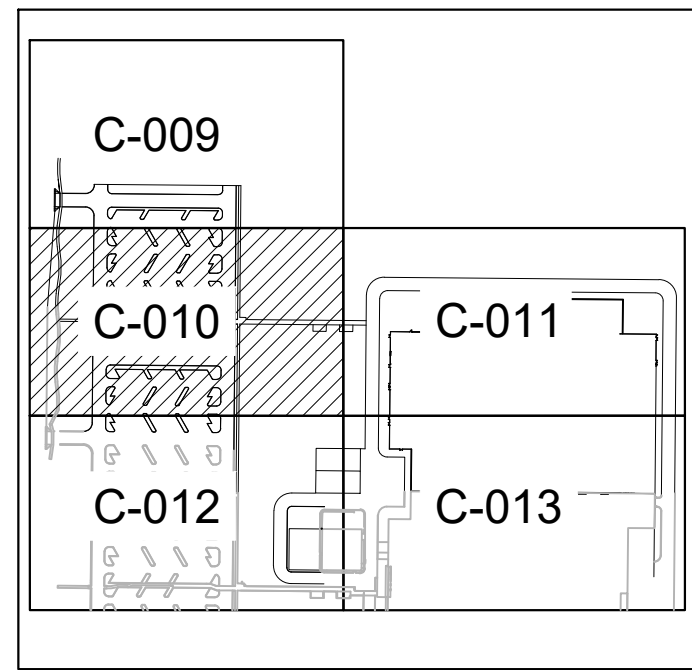
- PROPERTY LINE
- EXISTING EASEMENT LINE
- PROPOSED SAW CUT
- HP PROPOSED HIGH POINT
- LP PROPOSED LOW POINT
- GB PROPOSED GRADE BREAK
- PROPOSED STORM DRAIN PIPE
- EXISTING CONTOUR
- PROPOSED CATCH BASIN PER M.A.G. STANDARD DETAIL 534
- PROPOSED FLOW ARROW
- PROPOSED SPOT ELEVATION
- PROPOSED CATCH BASIN GRATE ELEVATION
- EXISTING ELEVATION

GRADING AND DRAINAGE NOTES

- INSTALL HDPE STORM DRAIN EQUALIZER PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
- INSTALL HEADWALL WITH SAFTY RAIL PER MAG STD DET 501 AND PER COM STD DET M-65.
- INSTALL 2' WIDE DRAINAGE CURB OPENING.
- INSTALL RIP RAP SPILLWAY/APRON D50= 6", DEPTH=12".
- CONSTRUCT SWALE, 4:1 MAX SIDE SLOPES. MAINTAIN POSITIVE FLOW. 2' WIDE BOTTOM.
- UTILITY CROSSING SEE UTILITY PLANS.
- INSTALL HDPE STORM DRAIN PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
- INSTALL HDPE STORM DRAIN BEND, SIZE TO MATCH ADJACENT PIPES. ANGLE PER PLAN.

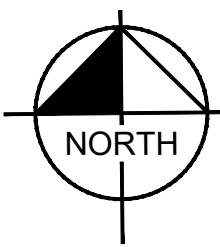
NOTES

- ADD 1300 TO ALL ELEVATIONS.
- ADD 0.5' TO PAVEMENT (P) ELEVATIONS FOR TOP OF CURB ELEVATIONS FOR VERTICAL CURBS.
- ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRATE (G), TOP OF CURB (TC), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED.
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- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
- REFER TO LANDSCAPE PLANS FOR SLOPE TREATMENT.
- ALL FILL SLOPES SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
- REFER TO BUILDING ARCHITECTURE AND STRUCTURAL PLANS FOR EXACT BUILDING FOUNDATION THICKNESS CHANGES.



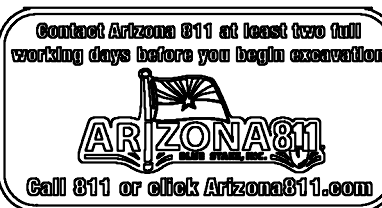
KEY MAP

GRAPHIC SCALE IN FEET
0 15 30 60



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STM	07/06/26	
CHECKED		APPROVED
STM		
APPROVED		APPROVED

CIVIL MASTER

PRELIMINARY GRADING AND DRAINAGE PLAN
BOEING OPERATION SHEETS
BUILDING 50-570A
MESA, AZ
ADV. COMPOSITE FABRICATION CENTER

CURRENT REVISION	SYMBOL	DATE
		07/06/26
SHEET	C-010	
JOB NO.	C08117.001	COMP NO.
DWG NO.	50-570A-C-010	

MATCHLINE SEE SHEET C-010

MATCHLINE SEE SHEET C-013

GRADING LEGEND

- PROPERTY LINE
- EXISTING EASEMENT LINE
- PROPOSED SAW CUT
- HP PROPOSED HIGH POINT
- LP PROPOSED LOW POINT
- GB PROPOSED GRADE BREAK
- PROPOSED STORM DRAIN PIPE
- EXISTING CONTOUR
- PROPOSED CATCH BASIN PER M.A.G. STANDARD DETAIL 534
- PROPOSED FLOW ARROW
- PROPOSED PAVEMENT SPOT ELEVATION
- PROPOSED CATCH BASIN GRATE ELEVATION
- EXISTING ELEVATION

GRADING AND DRAINAGE NOTES

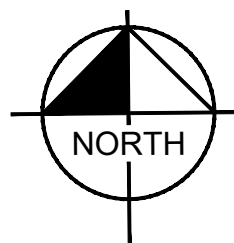
- INSTALL HEADWALL WITH SAFTY RAIL PER MAG STD DET 501 AND PER COM STD DET M-65.
- INSTALL RIP RAP SPILLWAY/APRON D50= 6", DEPTH=12".
- CONSTRUCT SWALE, 4:1 MAX SIDE SLOPES. MAINTAIN POSITIVE FLOW. 2' WIDE BOTTOM.
- UTILITY CROSSING SEE UTILITY PLANS.
- INSTALL TYPE 'G' CATCH BASIN PER MAG STD DET 537. GRATE SHALL BE SECURED WITH CHAIN.
- INSTALL HDPE STORM DRAIN PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
- INSTALL BUILDING ROOD DRAIN AIR BREAK CONNECTION SEE DETAIL ON SHEET 46.
- INSTALL HDPE TEE, SIZE TO MATCH ADJOINING PIPES.
- INSTALL HDPE STORM DRAIN BEND, SIZE TO MATCH ADJACENT PIPES. ANGLE PER PLAN.

NOTES

- ADD 1300 TO ALL ELEVATIONS.
- ADD 0.5' TO PAVEMENT (P) ELEVATIONS FOR TOP OF CURB ELEVATIONS FOR VERTICAL CURBS.
- ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRATE (G), TOP OF CURB (TC), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL USE SPOT ELEVATIONS, PROPOSED CONTOURS, AND SLOPES TO ESTABLISH GRADES.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
- REFER TO LANDSCAPE PLANS FOR SLOPE TREATMENT.
- ALL FILL SLOPES SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
- REFER TO BUILDING ARCHITECTURE AND STRUCTURAL PLANS FOR EXACT BUILDING FOUNDATION THICKNESS CHANGES.
- SEE SHEET C-XXX FOR CROSS SECTIONS.

KEY MAP

GRAPHIC SCALE IN FEET
0 15 30 60



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CURRENT REVISION	SYMBOL	DATE
SHEET	C-011	07/06/26
JOB NO.	C08117.001	COMP NO.
DWG NO.	50-570A-C-011	



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STM	07/06/26	
CHECKED	07/06/26	
STM	07/06/26	
APPROVED		

CIVIL MASTER

PRELIMINARY GRADING AND DRAINAGE PLAN
BOEING OPERATION SHEETS
BUILDING 50-570A
MESA, AZ
ADV. COMPOSITE FABRICATION CENTER

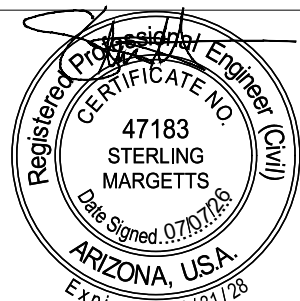
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DATE:

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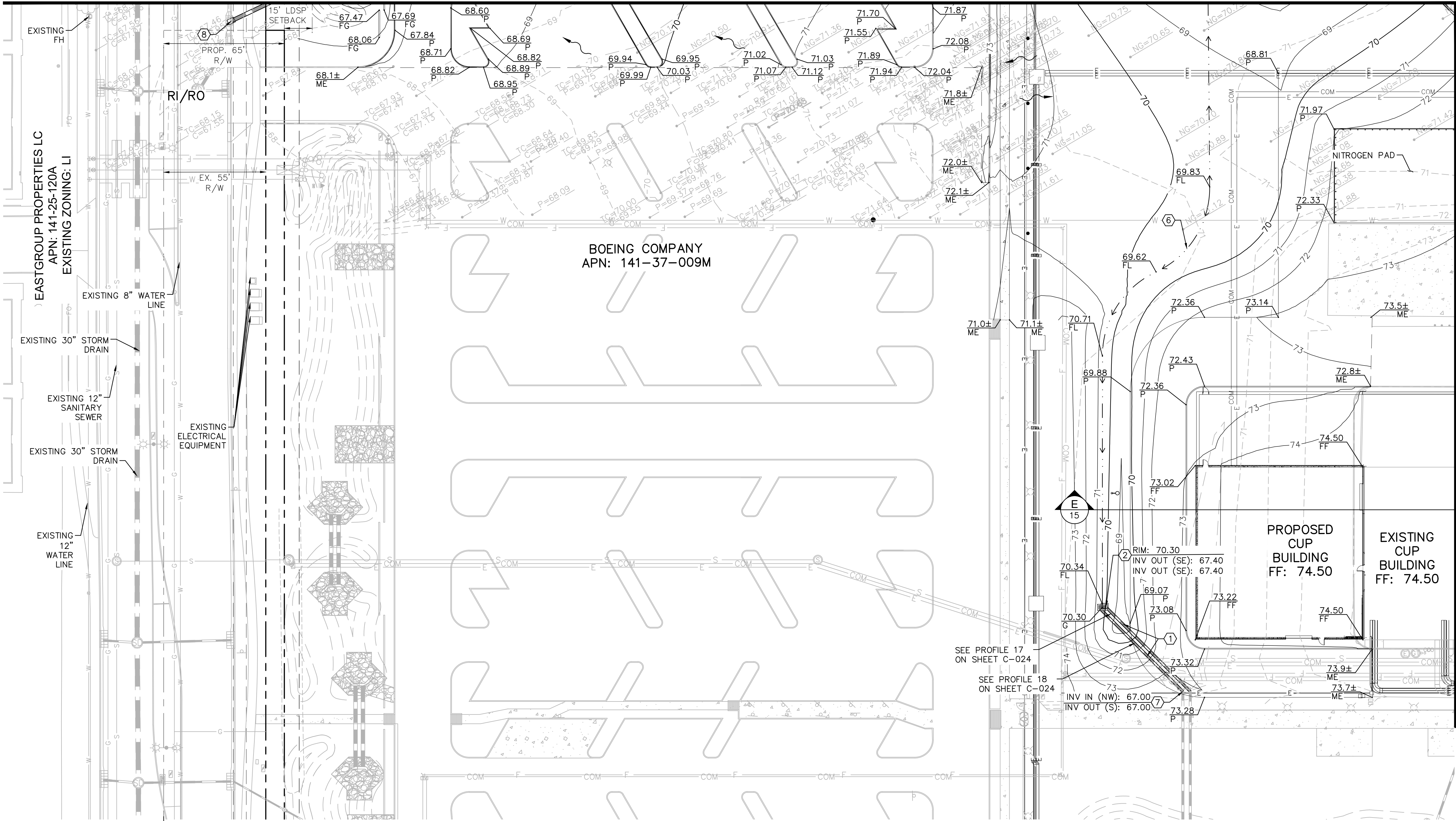
BOEING



Autodesk Doc/008117.001 - Boeing Mesa ACPC Expansion/50-572 BOEING-ZZ-M3-A-57011.rvt

Author: 2/11/2026 10:43:34 AM

MATCHLINE SEE SHEET C-010



MATCHLINE SEE SHEET C-013

GRADING LEGEND

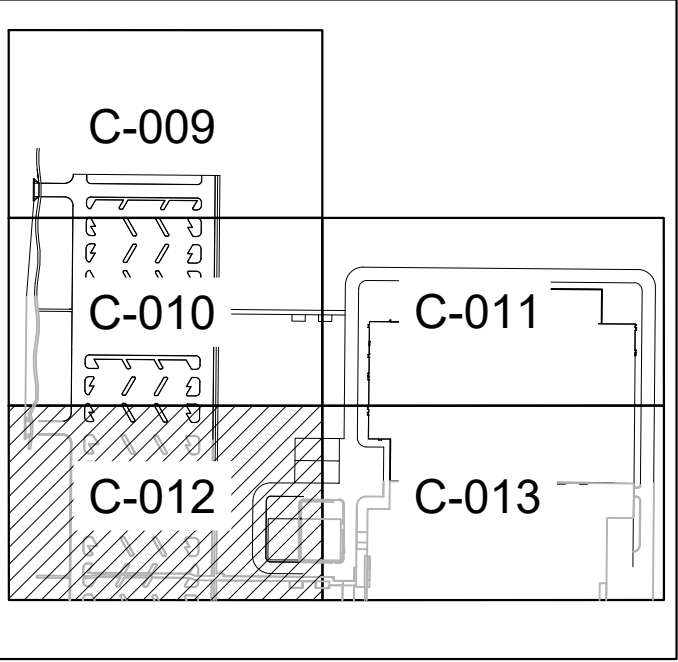
- PROPERTY LINE
- EXISTING EASEMENT LINE
- PROPOSED SAW CUT
- HP - PROPOSED HIGH POINT
- LP - PROPOSED LOW POINT
- GB - PROPOSED GRADE BREAK
- PROPOSED STORM DRAIN PIPE
- EXISTING CONTOUR
- PROPOSED CATCH BASIN PER M.A.G. STANDARD DETAIL 534
- PROPOSED FLOW ARROW
- PROPOSED PAVEMENT SPOT ELEVATION
- PROPOSED CATCH BASIN GRATE ELEVATION
- EXISTING ELEVATION

GRADING AND DRAINAGE NOTES

- INSTALL HDPE STORM DRAIN EQUALIZER PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
- INSTALL TYPE 'G' CATCH BASIN PER MAG STD DET 537 DOUBLE GRATE. GRATE SHALL BE SECURED WITH CHAIN.
- CONSTRUCT SWALE, 4:1 MAX SIDE SLOPES. MAINTAIN POSITIVE FLOW. 2' WIDE BOTTOM.
- CONNECT TO EXISTING STORM DRAIN PIPE. INSTALL WITH 45° BEND. SIZE TO MATCH ADJOINING PIPES.
- CORE AND CONNECT TO EXISTING STORM DRAIN CATCH BASIN.

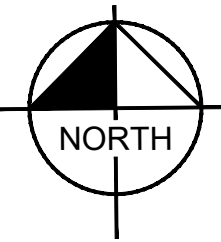
NOTES

- ADD 1300 TO ALL ELEVATIONS.
- ADD 0.5' TO PAVEMENT (P) ELEVATIONS FOR TOP OF CURB ELEVATIONS FOR VERTICAL CURBS.
- ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRATE (G), TOP OF CURB (TC), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL USE SPOT ELEVATIONS, PROPOSED CONTOURS, AND SLOPES TO ESTABLISH GRADES.
- SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
- REFER TO LANDSCAPE PLANS FOR SLOPE TREATMENT.
- ALL FILL SLOPES SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
- REFER TO BUILDING ARCHITECTURE AND STRUCTURAL PLANS FOR EXACT BUILDING FOUNDATION THICKNESS CHANGES.



KEY MAP

GRAPHIC SCALE IN FEET
0 15 30 60



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BOEING



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APPROVED BY	DEPT.	DATE

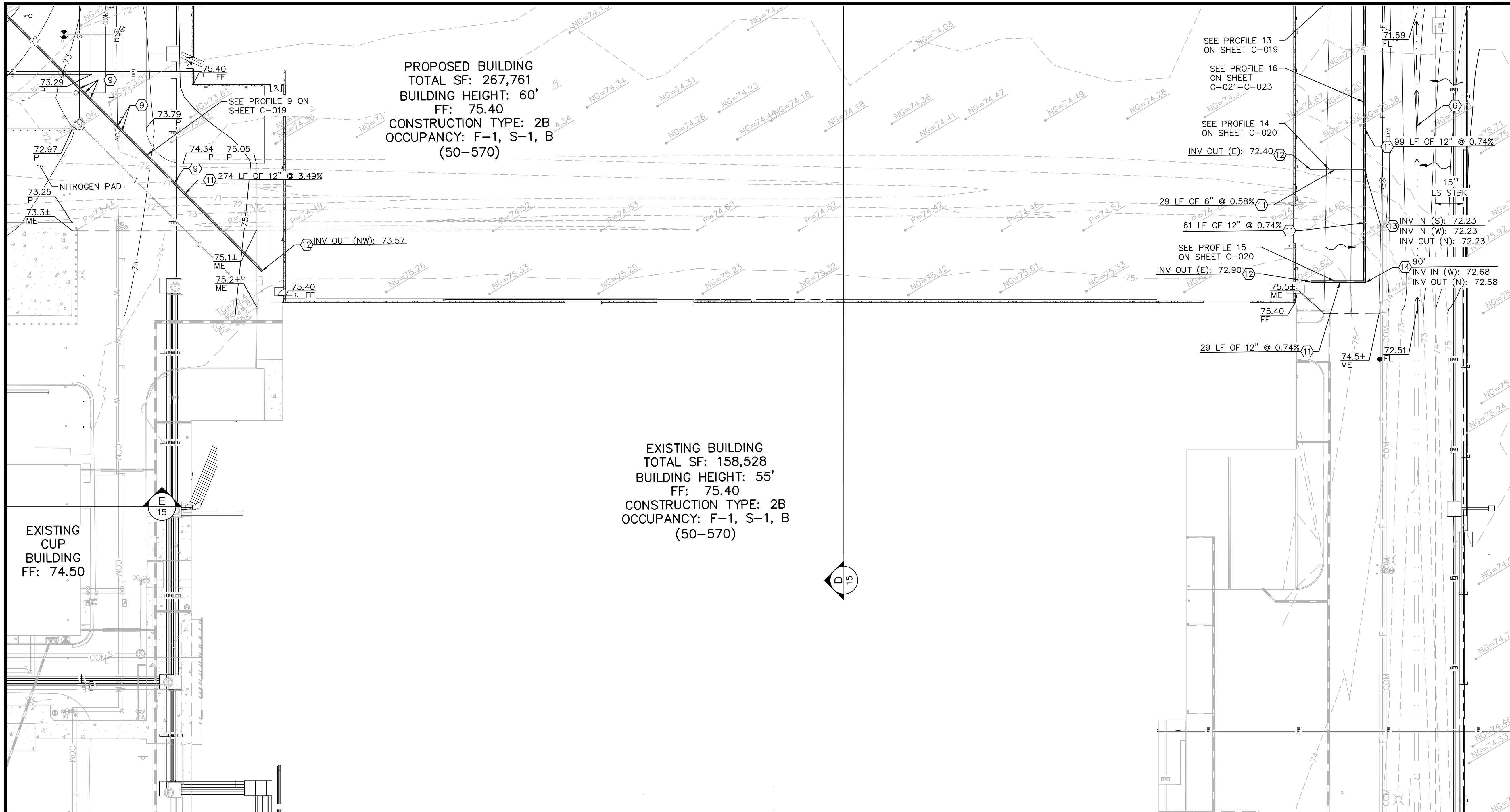
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STM		
ENGINEER		
STM	07/06/26	
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STM		
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CIVIL MASTER

PRELIMINARY GRADING AND DRAINAGE PLAN
BOEING OPERATION SHEETS
BUILDING 50-570A
MESA, AZ
ADV. COMPOSITE FABRICATION CENTER

CURRENT REVISION	SYMBOL	DATE
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SHEET	C-012	
JOB NO.	C08117.001	COMP NO.
DWG NO.	50-570A-C-012	

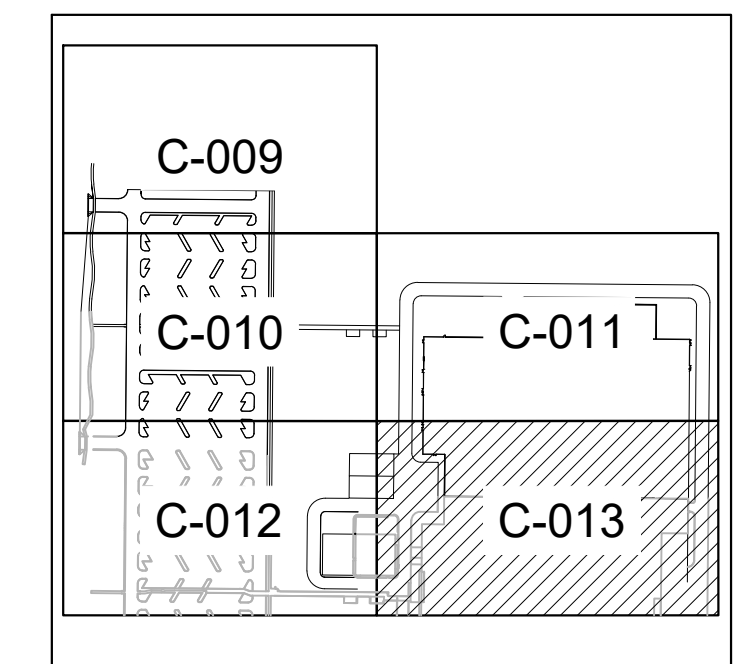
MATCHLINE SEE SHEET C-012



PROPERTY LINE
 EXISTING EASEMENT LINE
 PROPOSED SAW CUT
 HP PROPOSED HIGH POINT
 LP PROPOSED LOW POINT
 GB PROPOSED GRADE BREAK
 PROPOSED STORM DRAIN PIPE
 81 EXISTING CONTOUR
 PROPOSED CATCH BASIN PER M.A.G. STANDARD DETAIL 534
 PROPOSED FLOW ARROW
 PROPOSED PAVEMENT SPOT ELEVATION
 PROPOSED CATCH BASIN GRATE ELEVATION
 EXISTING ELEVATION

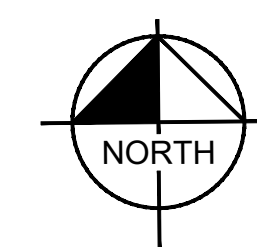
- ⑥ CONSTRUCT SWALE, 4:1 MAX SIDE SLOPES. MAINTAIN POSITIVE FLOW. 2' WIDE BOTTOM.
- ⑨ UTILITY CROSSING SEE UTILITY PLANS.
- ⑪ INSTALL HDPE STORM DRAIN PIPE, BEDDING AND BACKFILL PER MAG SPEC 601. SIZE AND LENGTH PER PLAN.
- ⑫ INSTALL BUILDING ROOD DRAIN AIR BREAK CONNECTION SEE DETAIL ON SHEET 46.
- ⑬ INSTALL HDPE TEE, SIZE TO MATCH ADJOINING PIPES.
- ⑭ INSTALL HDPE STORM DRAIN BEND, SIZE TO MATCH ADJACENT PIPES. ANGLE PER PLAN.

1. ADD 1300 TO ALL ELEVATIONS.
2. ADD 0.5' TO PAVEMENT (P) ELEVATIONS FOR TOP OF CURB ELEVATIONS FOR VERTICAL CURBS.
3. ALL SPOT ELEVATIONS ARE FINISHED GRADE PAVEMENT (P), GUTTER/GRADE (G), TOP OF CURB (TC), OR SIDEWALK (SW) ELEVATIONS UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL USE SPOT ELEVATIONS, PROPOSED CONTOURS, AND SLOPES TO ESTABLISH GRADES.
5. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% AND LONGITUDINAL SLOPE SHALL NOT EXCEED 5%.
6. REFER TO LANDSCAPE PLANS FOR SLOPE TREATMENT.
7. ALL FILL SLOPES SHALL BE COMPACTED TO 95% RELATIVE DENSITY.
8. REFER TO BUILDING ARCHITECTURE AND STRUCTURAL PLANS FOR EXACT BUILDING FOUNDATION THICKNESS CHANGES.



GRAPHIC SCALE IN FEET

0 15 30 60

A horizontal scale bar with tick marks at 0, 15, 30, and 60 feet. The segments between 0-15, 15-30, and 30-60 are white, while the segment between 0-30 is shaded black.

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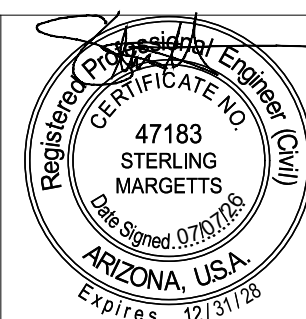
CURRENT REVISION	SYMBOL	DATE
SHEET	C-013	07/06/26
JOB NO.	C08117.001	COMP NO.
DWG NO.	50-570A-C-013	

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			CHECKED STM	07/06/2016
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			APPROVED	

6	SUBTITLE
6	
6	TITLE
6	
	CIVIL MASTER

PRELIMINARY GRADING AND DRAINAGE PLAN
BOEING OPERATION SHEETS
BUILDING 50-570A
MESA, AZ
ADV. COMPOSITE FABRICATION CENTER