

# MONTANA STATE UNIVERSITY

### PPA# 22-0012 PARKING IMPROVEMENTS 2023

### MONTANA STATE UNIVERSITY BOZEMAN, MT

### PREPARED FOR:

STATE OF MONTANA - MONTANA STATE UNIVERSITY UNIVERSITY FACILITIES MANAGEMENT, PLANNING, **DESIGN & CONSTRUCTION** PLEW BUILDING 6TH & GRANT PO BOX 172760 BOZEMAN, MT 59717-2760 PHONE: 406-994-5413 FAX: 406-994-5665



### PREPARED BY:

DJ&A 220 WEST LAMME STREET, SUITE 1D BOZEMAN, MT 59715 406-721-4320



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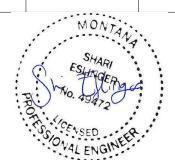
C5-5



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PPA#22-0012

**COVER** 

SHEET **GIO-1** 

### **GENERAL NOTES**

- 1. CONDUIT WILL BE INSTALLED IN A JOINT UTILITY TRENCH WHEN FEASIBLE. TRENCH TO BE EXCAVATED BY THE CONTRACTOR AND SHALL CONFORM TO NORTHWESTERN ENERGY (NWE) AND MSU SPECIFICATIONS. THE WORKING CONTRACTOR WILL BE RESPONSIBLE FOR BACKFILLING & COMPACTING THE TRENCH.
- 2. <u>UTILITIES</u>: UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. NOT ALL UTILITIES ARE SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATIONS OF ALL UTILITIES THAT MAY BE IMPACTED BY THIS PROJECT.
- 3. WHERE CONDITIONS ENCOUNTERED WHICH APPEAR DIFFERENT FROM THOSE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO THE PERFORMANCE OF WORK.
- 4. <u>SPECIFICATIONS</u>: ALL WORK SHALL CONFORM TO THE 7TH EDITION OF THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS (MPWSS) & MODIFICATIONS THERETO. IN CASE OF A CONFLICT BETWEEN REGULATORY OR STANDARD SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT WILL PREVAIL.
- 5. <u>PERMITS & FEES:</u> ALL PERMITS AND FEES REQUIRED FOR THIS PROJECT SHALL BE OBTAINED & PURCHASED BY THE CONTRACTOR. *PERMITS REQUIRED:* MONTANA DEQ SWPPP. OTHER PERMITS MAY BE REQUIRED AND SHALL BE DISCUSSED WITH THE ENGINEER.
- 6. EROSION CONTROL PLAN & STATE OF MONTANA SWPPP: THE CONTRACTOR WILL BE RESPONSIBLE FOR CREATING AND FILING A STATE OF MONTANA NOTICE OF INTENT (NOI) FORM AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) WITH THE MONTANA WATER QUALITY DIVISION FOR STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES. ALL CONTRACTORS, INCLUDING THOSE SUBCONTRACTED BY THE GENERAL CONTRACTOR, SHALL COMPLY WITH THE APPROVED SWPPP.
- 7. <u>DISPOSAL:</u> ALL MATERIALS DESIGNATED FOR REMOVAL BECOME THE PROPERTY OF THE CONTRACTOR UPON REMOVAL AND ARE TO BE DISPOSED OF IN AN ENVIRONMENTALLY SAFE MANNER IN ACCORDANCE WITH ALL LOCAL, STATE & FEDERAL REQUIREMENTS.
- 8. <u>EXISTING CONDITIONS</u> AT THE SITE ARE THE RESPONSIBILITY OF THE CONTRACTOR & MUST BE FIELD VERIFIED BY THE CONTRACTOR.
- 9. NO STORAGE OF <u>CONSTRUCTION MATERIALS</u> AND/OR EQUIPMENT HAS BEEN DESIGNATED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN MATERIAL & EQUIPMENT STORAGE AREA.
- 10. THE CONTRACTOR SHALL PROTECT ADJACENT SITES FROM DAMAGE DURING CONSTRUCTION.
- 11. LOTS & STREET CLOSURES SHALL BE COORDINATED WITH & APPROVED BY MSU PARKING, MSU PLANNING, DESIGN, & CONSTRUCTION (PDC), & MSU FAMILY GRADUATE HOUSING STAFF 72 HOURS PRIOR TO CLOSURE.
- 12. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE.
- 13. THE CONTRACTOR SHALL MAINTAIN & PROVIDE A CLEAN & CLEARLY REDLINED SET OF AS-BUILT DRAWINGS TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE.
- 14. CONTRACTOR SHALL REMOVE & DISPOSE OF ALL ABANDONED FACILITIES THAT ARE A RESULT OF THESE IMPROVEMENTS AS DESCRIBED HERE & IN SPECIFICATIONS.
- 15. REFER TO THE FOLLOWING DEFINITIONS FOR THE PLANS & SPECIFICATIONS:
- 15.1. REMOVE: DETACH ITEMS FROM EXISTING CONSTRUCTION & LEGALLY DISPOSE OF THEM OFF-SITE UNLESS INDICATED TO BE REMOVED & SALVAGED OR REMOVED & REINSTALLED.
- 15.2. REMOVE & SALVAGE: CAREFULLY DETACH FROM EXISTING CONSTRUCTION, IN A MANNER TO PREVENT DAMAGE, & DELIVER TO MSU.
- 15.3. REMOVE & REINSTALL: DETACH ITEMS FROM EXISTING CONSTRUCTION, PREPARE FOR REUSE, & REINSTALL WHERE INDICATED.

AASHTO	AMERICAN ASSOCIATION OF STATE
	HIGHWAY AND TRANSPORTATION
ADA	AMERICAN DISABILITY ACT
ASTM	AMERICAN SOCIETY FOR TESTING AND
	MATERIALS
AVE.	AVENUE
cf	CUBIC FEET
CL	CENTERLINE
СР	CONTROL POINT
DESC.	DESCRIPTION
EG	EXISTING GRADE
EL/ELEV	ELEVATION
EOA	EDGE OF ASPHALT
E	EXISTING
FETS	FLARED END TREATMENT SECTIONS
FG	FINISH GRADE
FH	FAMILY HOUSING
FL	FLOW LINE
FT	FEET/FOOT
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FOOT
MAX	MAXIMUM
MIN	MINIMUM
MPDES	MONTANA POLLUTANT DISCHARGE
	ELIMINATION SYSTEM
MPWSS	MONTANA PUBLIC WORKS STANDARD
	SPECIFICATIONS
MSU	MONTANA STATE UNIVERSITY
MT	MONTANA
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NE	NORTHEAST
NTS	NOT TO SCALE
NWE	NORTHWESTERN ENERGY
PED	PEDESTRIAN
PPA	PHYSICAL PLANT ACCOUNT
R	RADIUS
ROW	RIGHT-OF-WAY

RPC

S =

SF

SD

SPC

SW

TC

TYP.

SWPPP

RED PLASTIC CAP

STORM DRAIN

STORM WATER

SQUARE FEET (FOOT)

STATE PLANE COORDINATE

TIME TO CONCENTRATION

TOP BACK OF CURB

STORM WATER POLLUTION PREVENTION

SLOPE

PLAN

TYPICAL

### **LEGEND**

E	EXISTING ELECTRIC PEDESTAL OR JUNCTION BOX
	EXISTING OVERHEAD UTILITY POLE
	EXISTING LIGHT POLE
T	EXISTING TELEPHONE PEDESTAL
S	EXISTING MANHOLE COVERS
	EXISTING WATER HYDRANT
$\otimes$	EXISTING WATER VALVE
	EXISTING STORM SUMP OR CATCH BASIN
	EXISTING VEHICLE HEATER BLOCK PLUGINS
· Sandara Contraction of the con	EXISTING TREE
· · · · · · · · · · · · · · · · · · ·	EXISTING CURB STOPS
	EXISTING MAILBOX LOCATION
	EXISTING PLAYGROUND
	EXISTING PARK BENCH
	EXISTING STORM ROOF DROP INLET/OUTLET - POINT
	EXISTING BIKE RACK
	EXISTING WATER WELL OR PUMPING STATION
ICV	EXISTING IRRIGATION WATER VALVE
	EXISTING DUMPSTER LOCATION
— ОНР - — — ОНР - — — ОНР —	EXISTING - OVERHEAD POWER
	EXISTING - CONCRETE HATCH & CONCRETE EDGE
	EXISTING - ASPHALT HATCH & ASPHALT EDGE
	PROPOSED - CONCRETE HATCH & CONCRETE EDGE
	PROPOSED - ASPHALT HATCH & ASPHALT EDGE

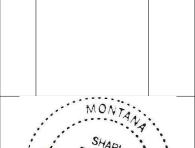


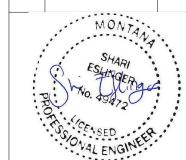
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# PARKING PROVEMENTS







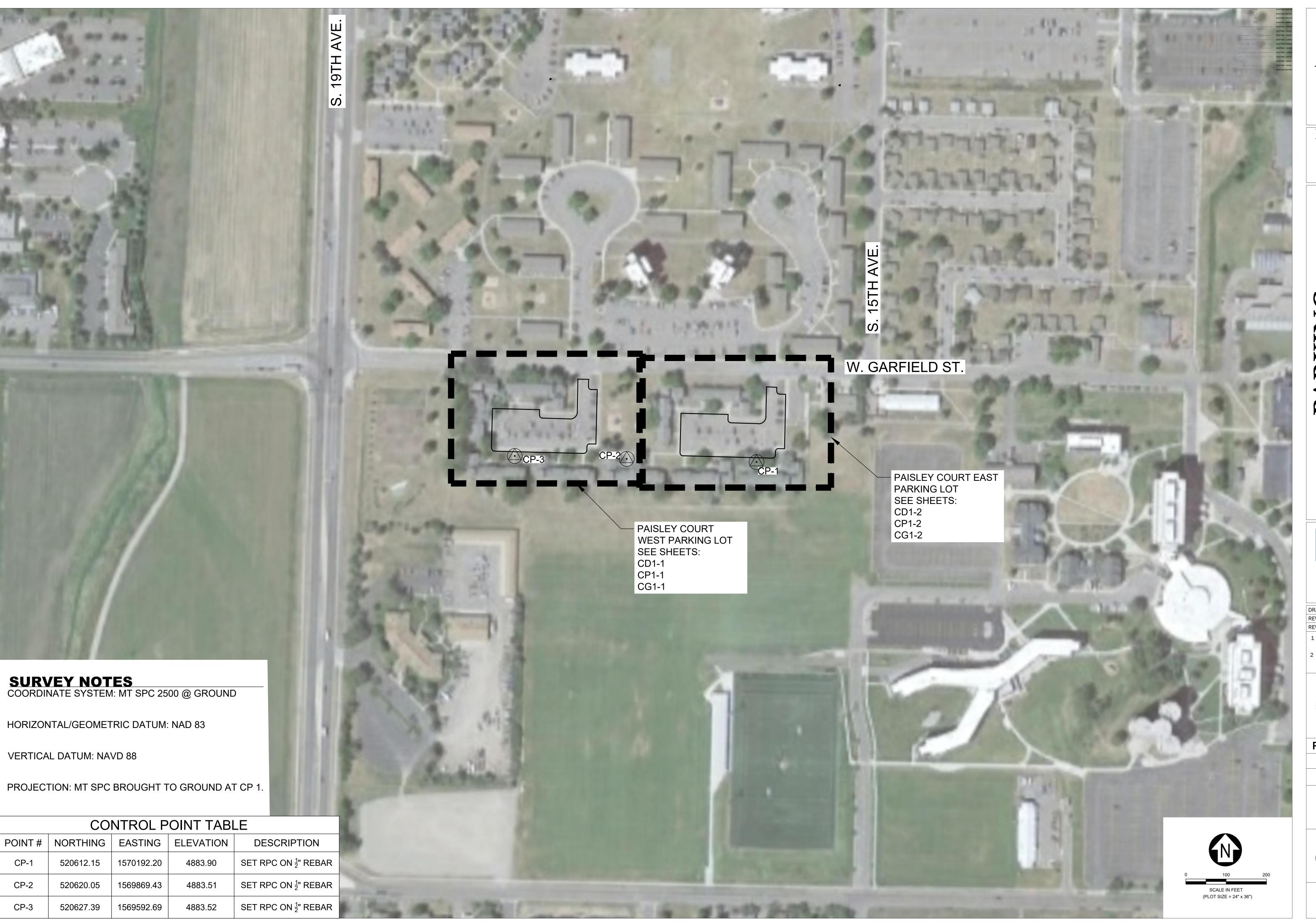
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NOTES, LEGEND, & ABBREVIATIONS

GI0-2

**SHEET** 

DATE 05-09-23





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# KING EMENTS

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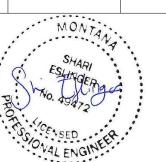
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GC ADDENDUM 05/09/23

ADDITION

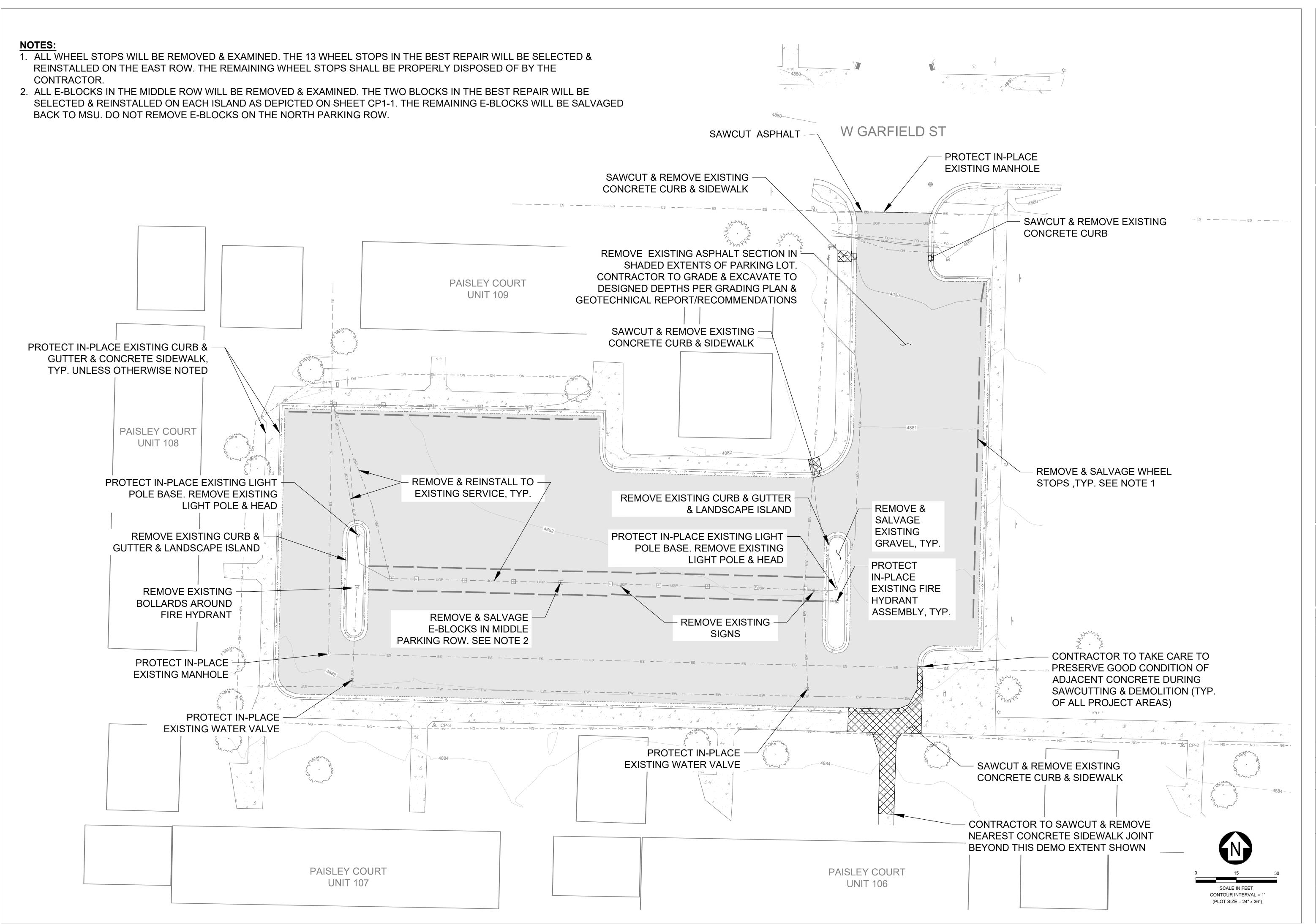
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KEY MAP & SURVEY CONTROL

SHEET GIO-3





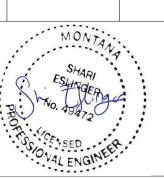
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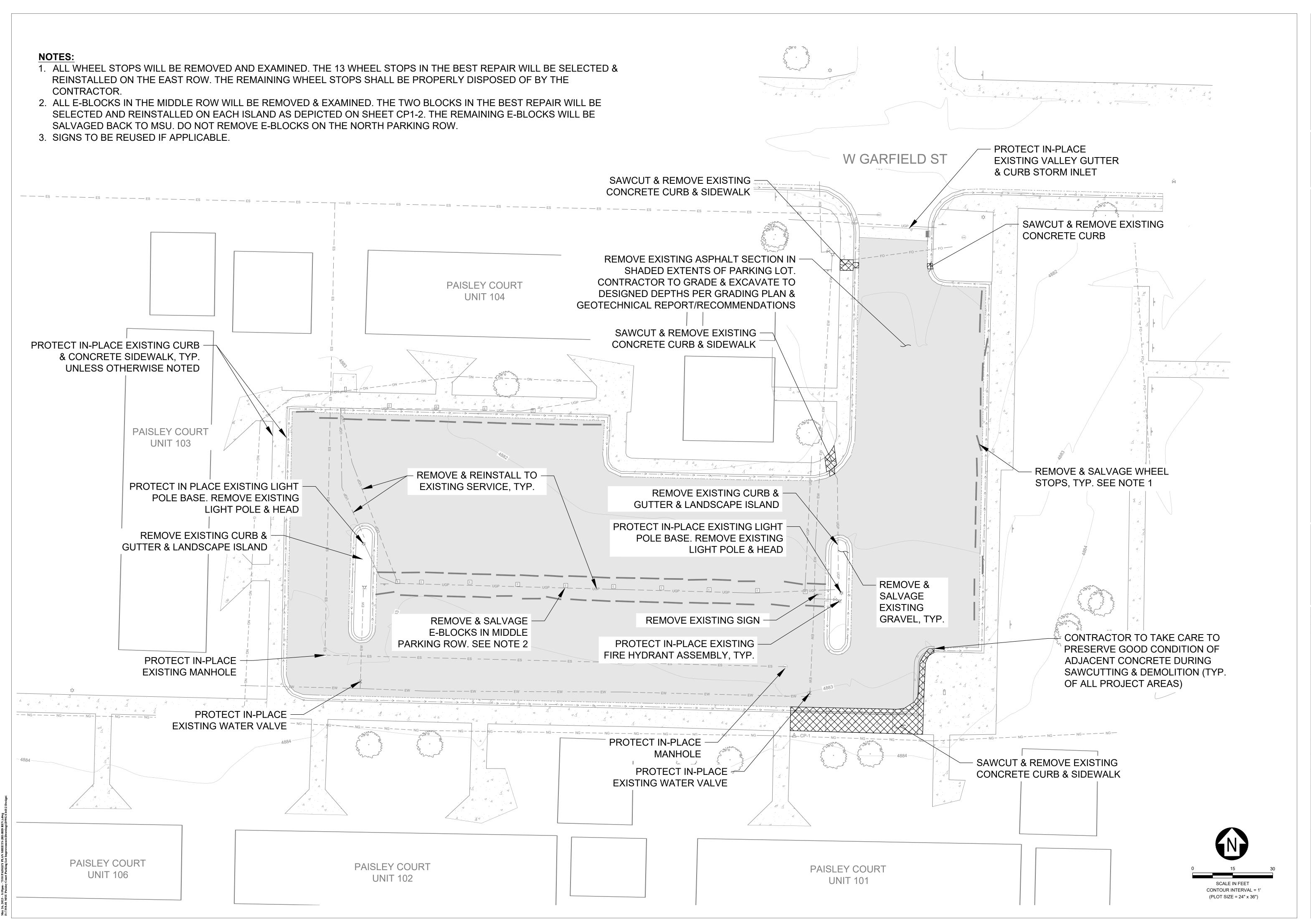
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PAISLEY COURT WEST - DEMO PLAN

SHEET CD1-1





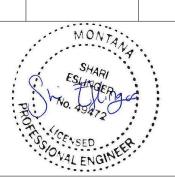
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PARKING ROVEMENTS



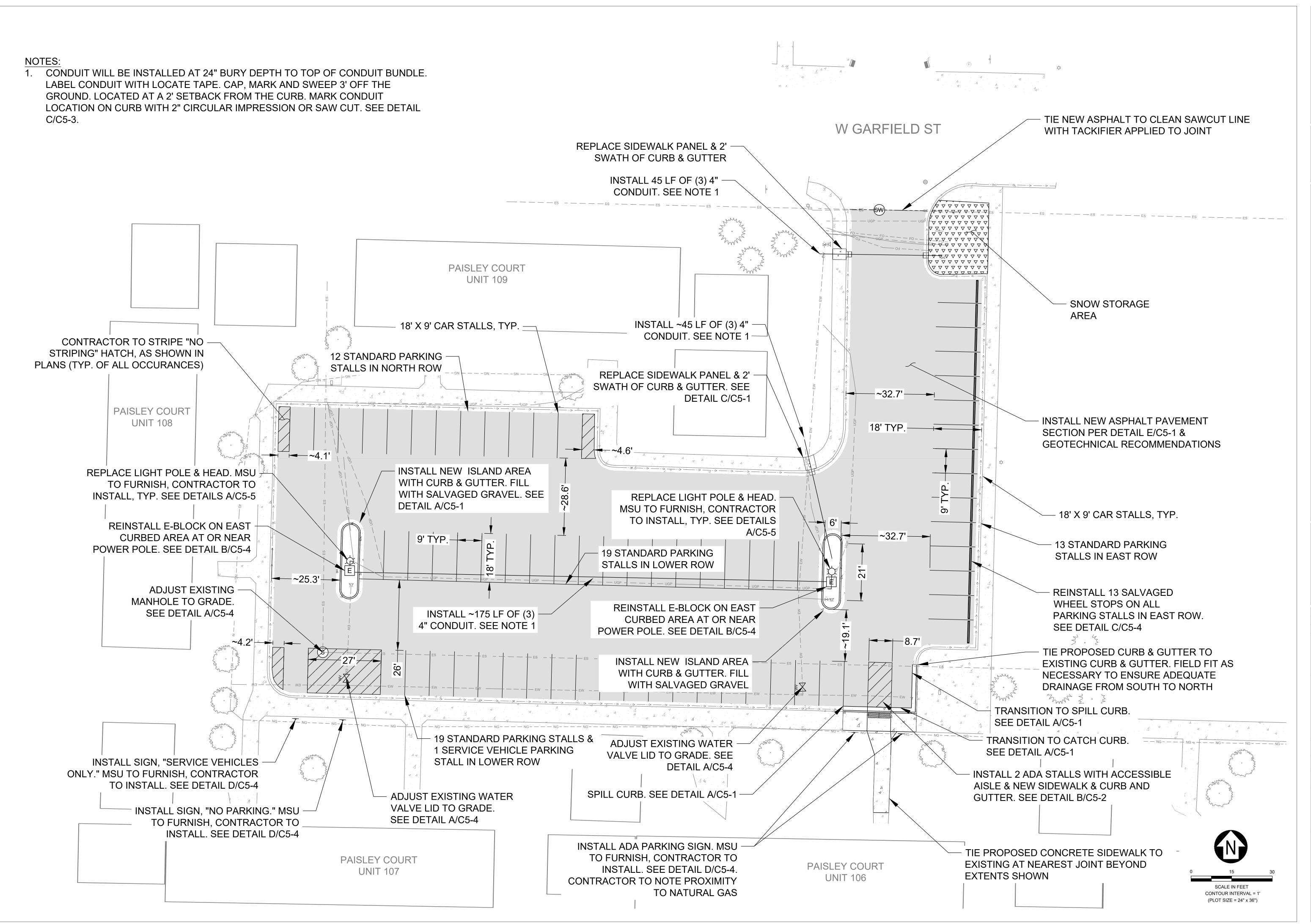
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PAISLEY COURT EAST - DEMO PLAN

SHEET CD1-2





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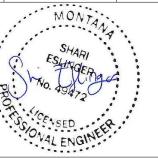
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WEST PAISLEY
COURT- SITE PLAN

SHEET

CP1-1



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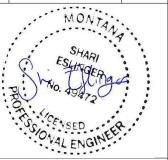
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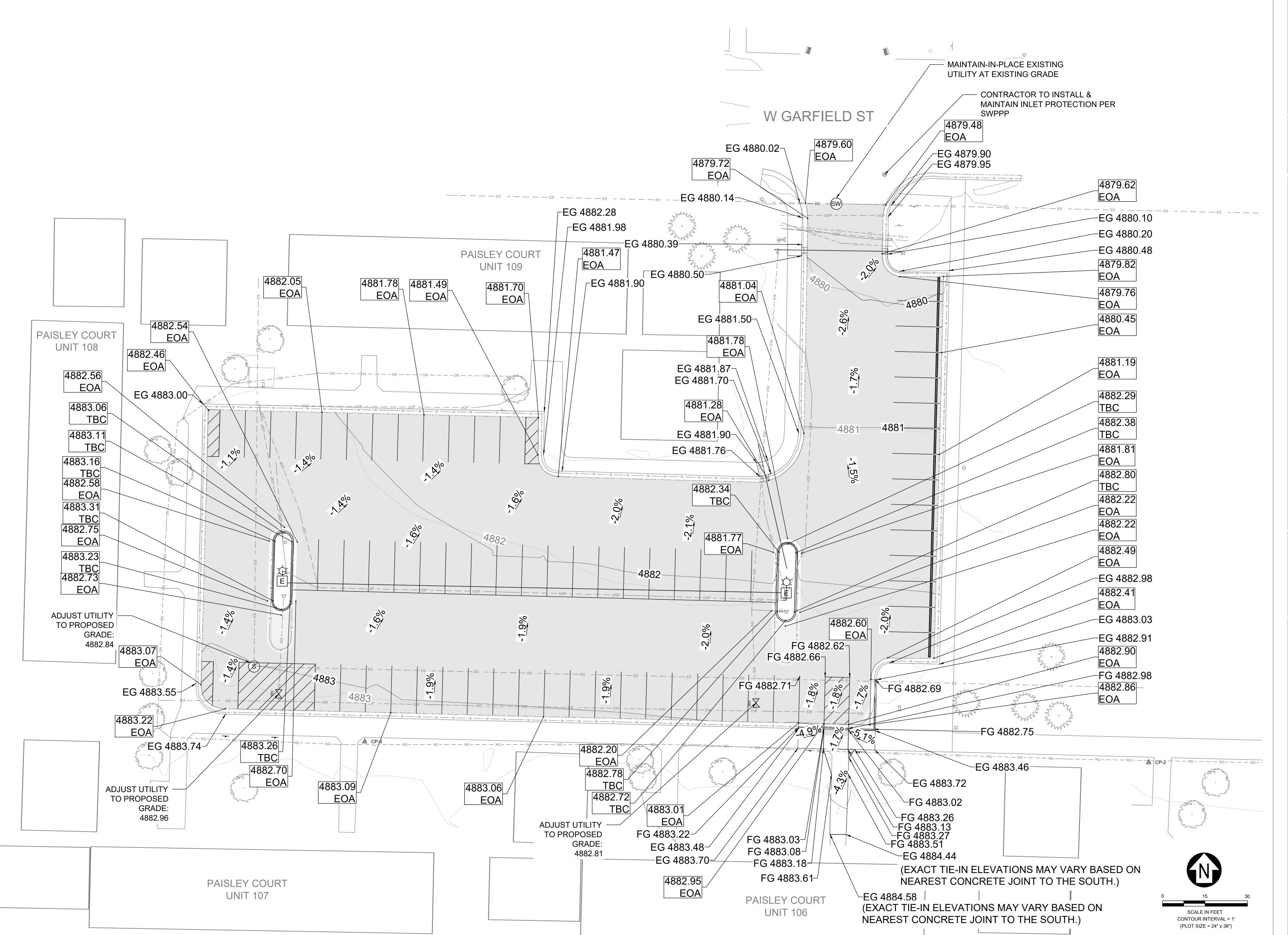


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PAISLEY COURT EAST - SITE PLAN

SHEET

CP1-2





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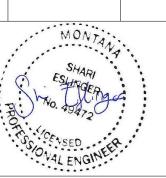
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# VG VENTS

PARKI IMPROVE



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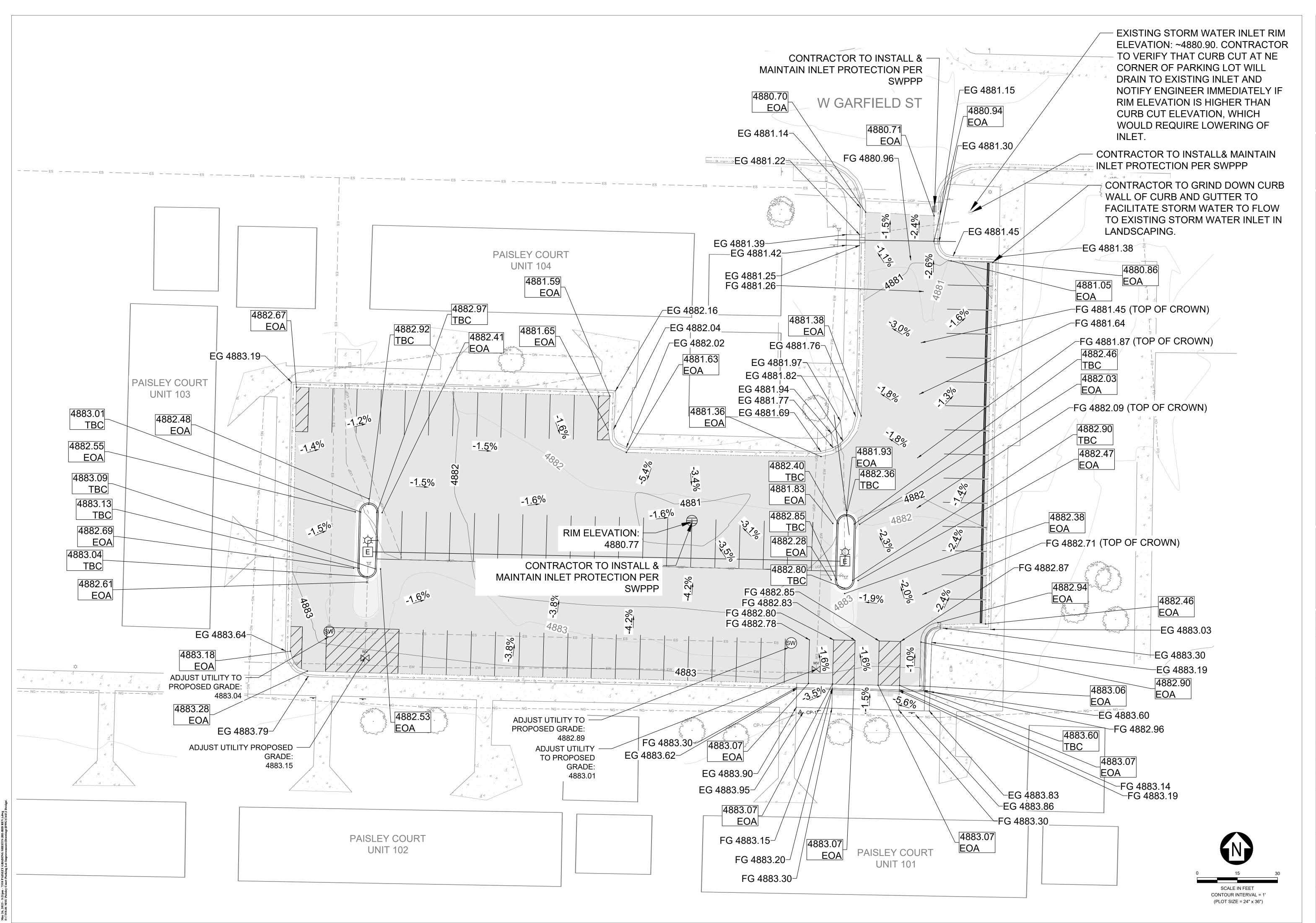


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PAISLEY COURT WEST - GRADING PLAN

SHEET

CG1-1





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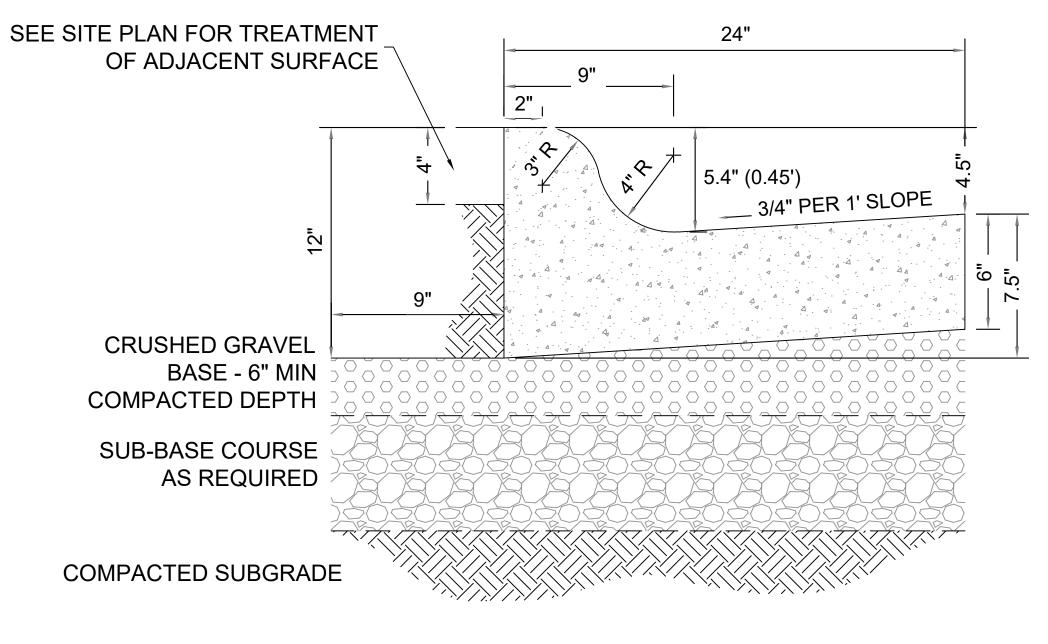


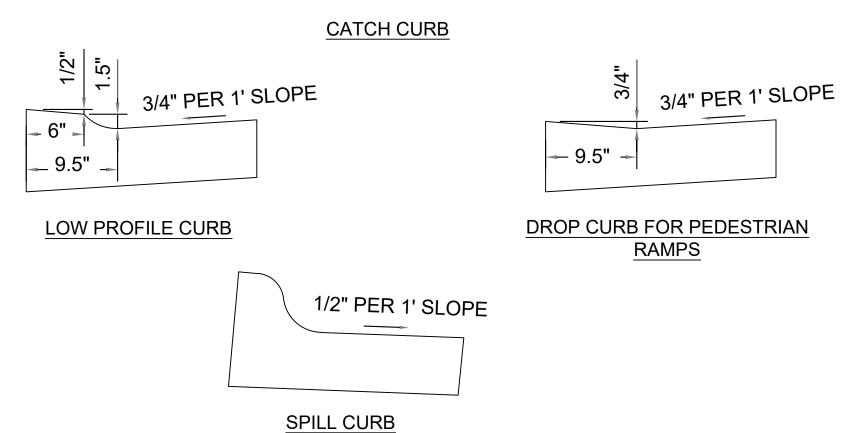
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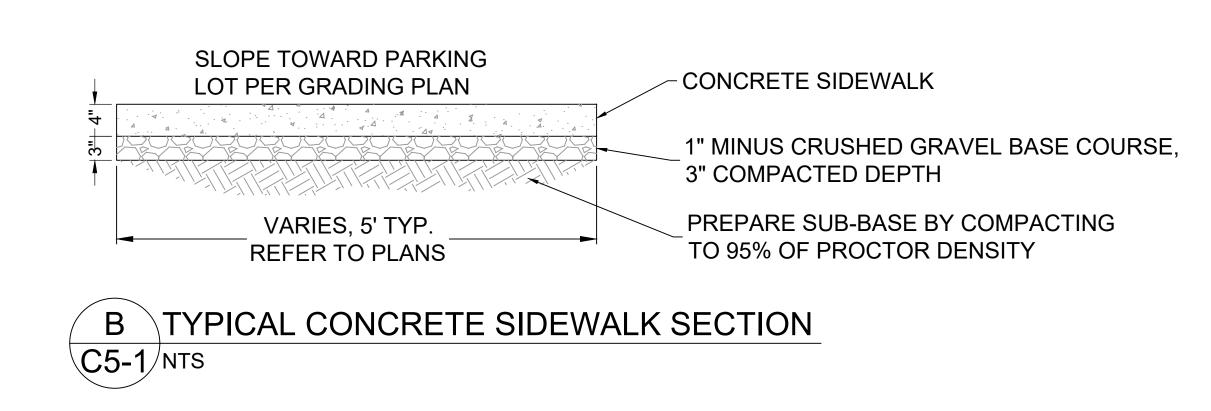
PAISLEY COURT EAST - GRADING PLAN

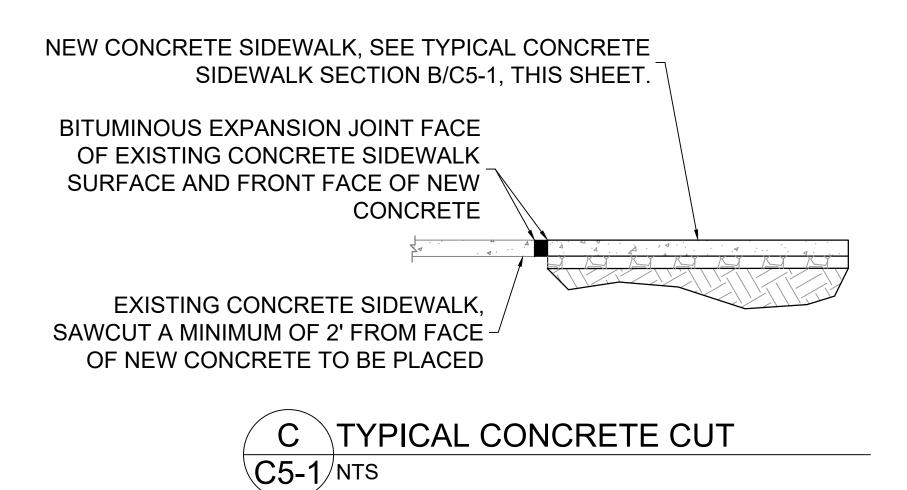
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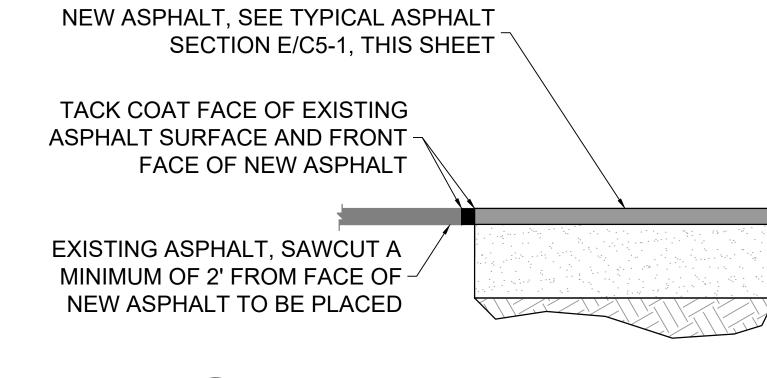
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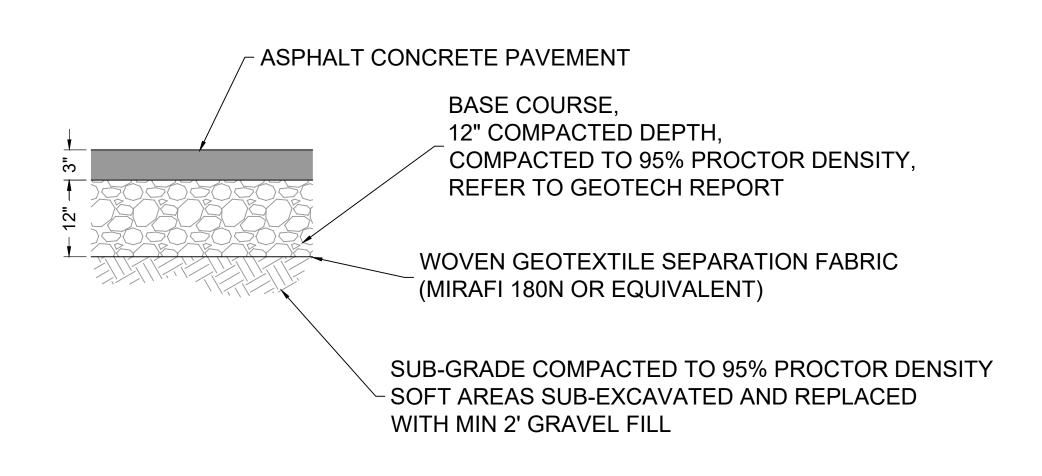




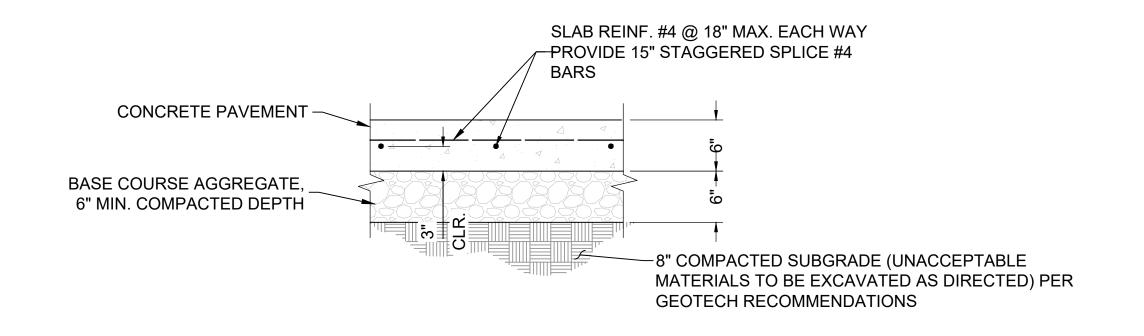




A INTEGRAL CURB & GUTTER
C5-1 NTS







NOTE: REINFORCE AND PLACE JOINTS PER SPECIFICATION & JOINT DETAIL. PLACE CROSS JOINTS ON DRIVE-THRU CONCRETE APPROX. EVERY 10' AS TO MAKE THE CONCRETE PANELS AS SQUARE AS POSSIBLE. SEE GEOTECH REPORT FOR SECTION DETAILS.





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MPROVEME

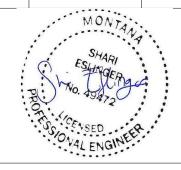


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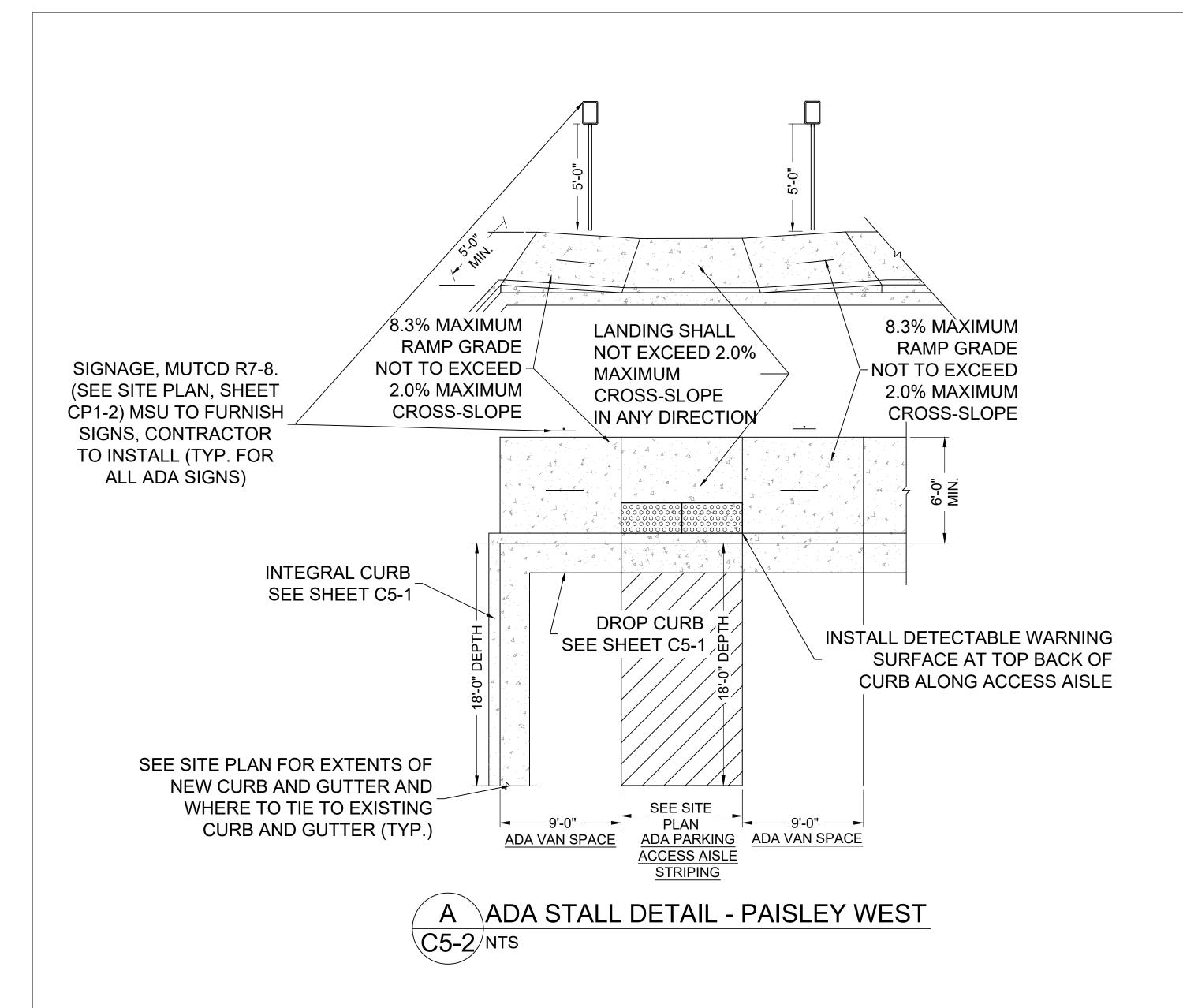


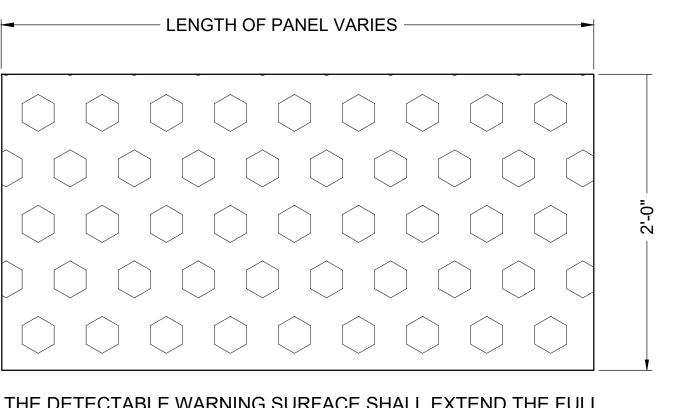
PPA#22-0012

**DETAILS 1** 

SHEET

C5-1





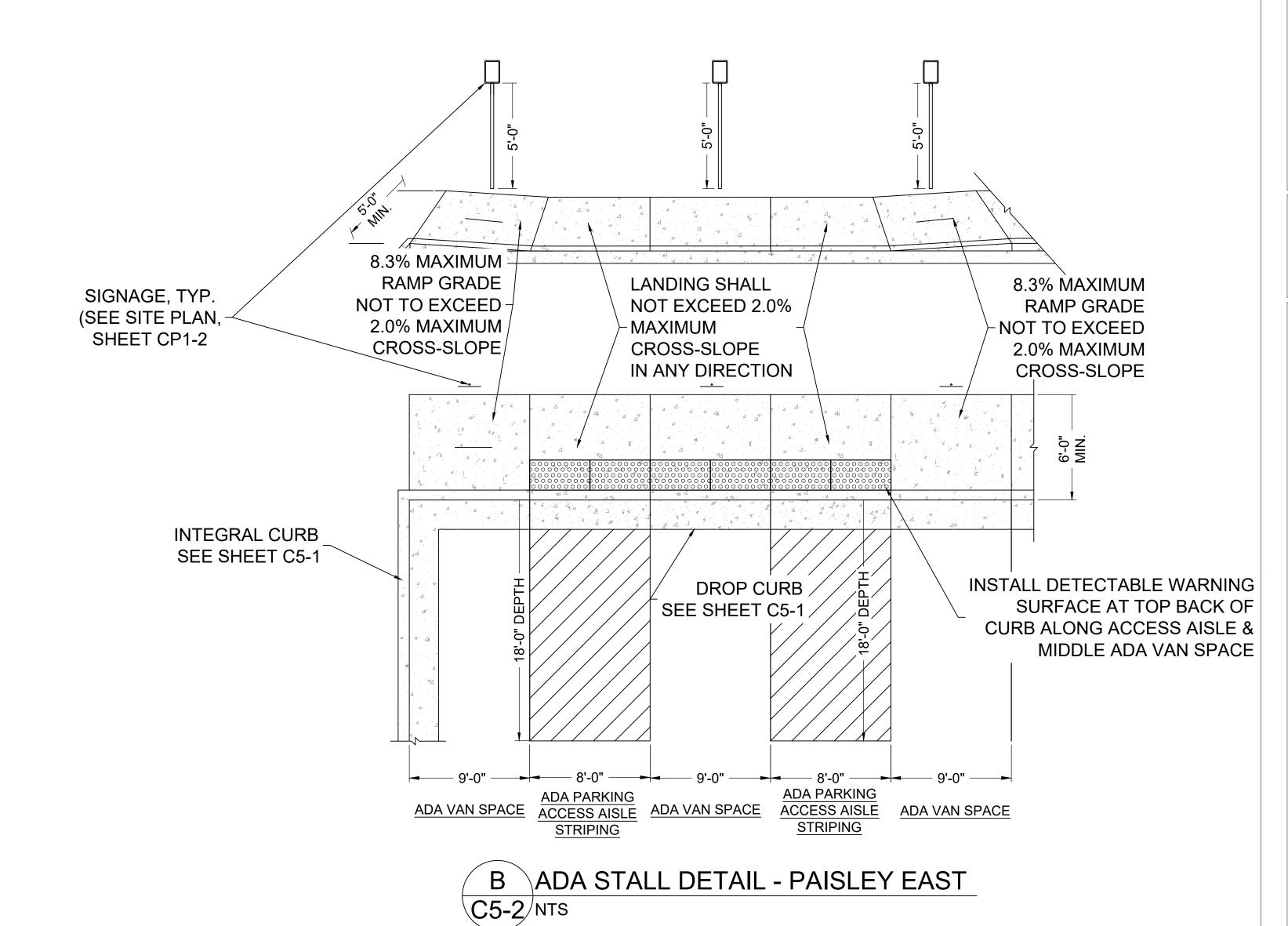
THE DETECTABLE WARNING SURFACE SHALL EXTEND THE FULL LENGTH OF THE CURB PER PLANS. IT SHALL BE A CONTRASTING COLOR AND MEET THE DIMENSIONS SHOWN OF THE TRUNCATED DOME

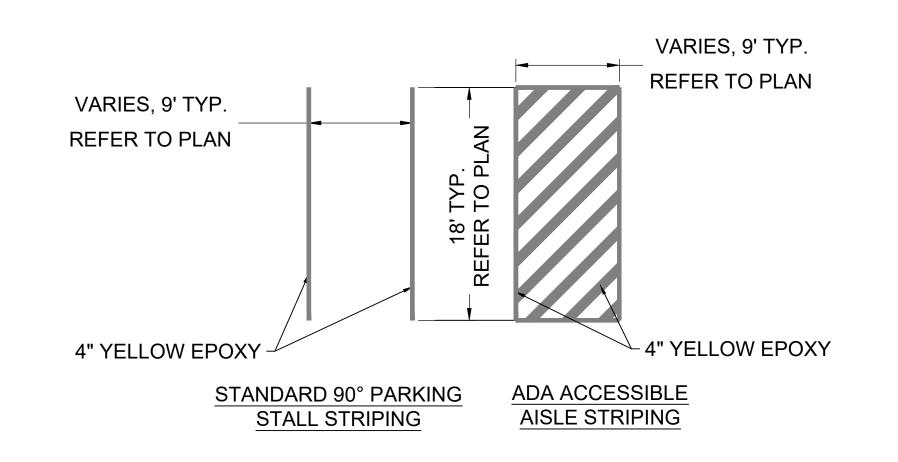
0.9"

**DETECTABLE WARNING SURFACE** 

TRUNCATED DOME

C DETECTABLE WARNING DETAIL
C5-2 NTS





D TYPICAL PAVEMENT MARKINGS
C5-2 NTS



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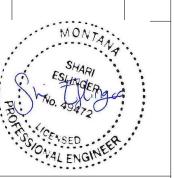
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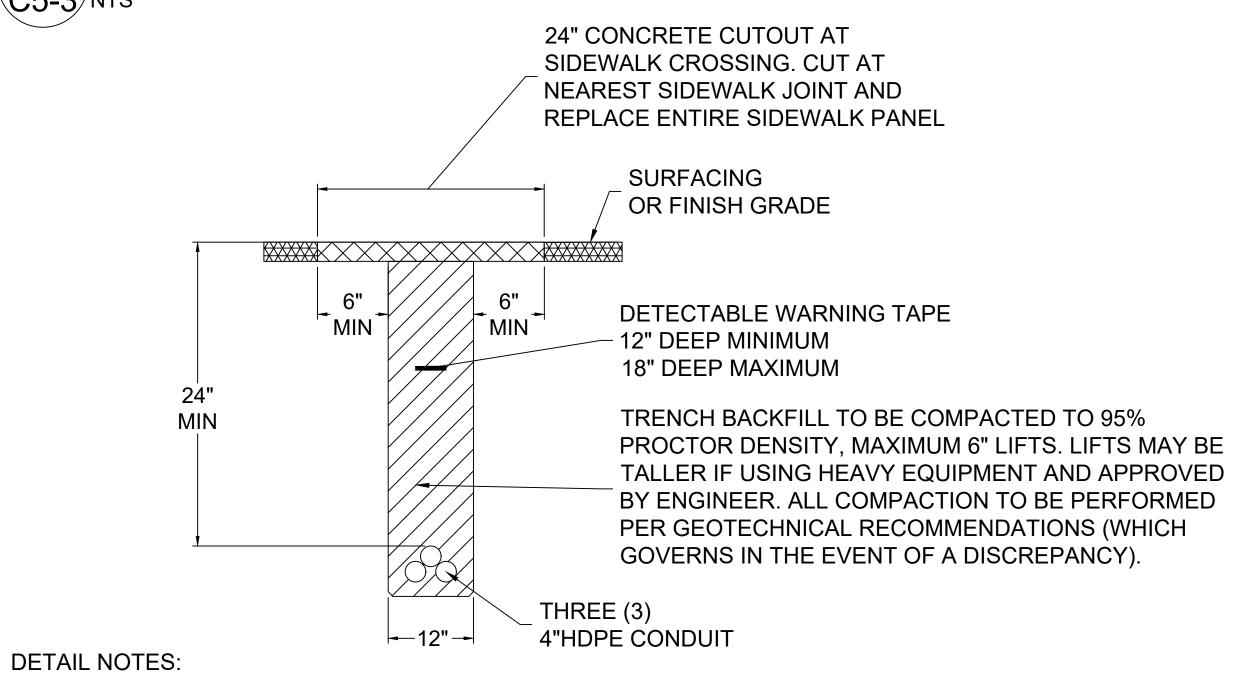
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**DETAILS 2** 

SHEET

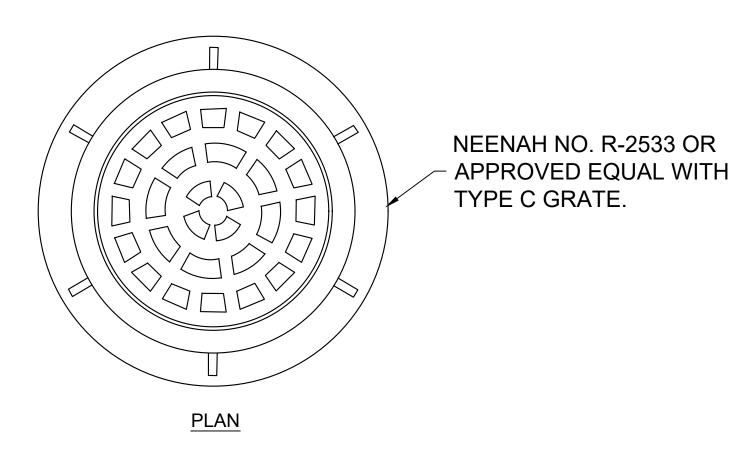
C5-2

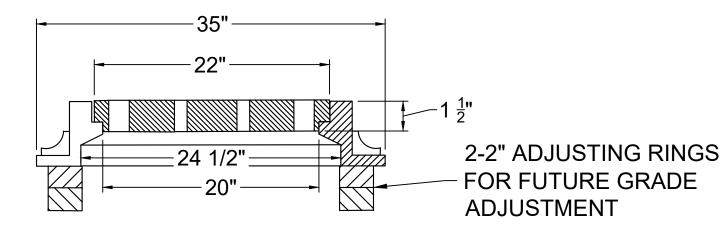
A PRECAST DRY WELL (W/ AREA DRAIN OR CURB INLET) DETAIL C5-3 NTS



- CONTRACTOR SHALL COORDINATE TRENCHING WITH OTHER UNDERGROUND UTILITIES. CONTRACTOR SHALL USE COMMON TRENCHES AT ALL CROSSING WHENEVER POSSIBLE.
- 2. 1-#12 AWG LOCATE WIRE AND A NYLON OR POLYESTER PULL TAPE WITH 1,250 LBS TEST STRENGTH AND FOOTAGE MARKINGS IN ALL EMPTY CONDUITS.
- CUT WIDTH VARIES OUTSIDE OF SIDEWALK. REFER TO SITE PLAN AND GRADING PLAN FOR CUT WIDTH AND PROPOSED FINISH SURFACE GRADE







NOTE: CONTRACTOR MAY USE APPROVED EQUIVALENT, TRAFFIC-RATED GRATED MANHOLE THROUGH SUBMITTAL PROCESS.

B STORM DRAIN GRATE
C5-3 NTS



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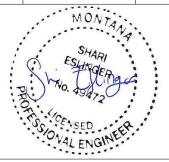
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VEMENTS
2023

4



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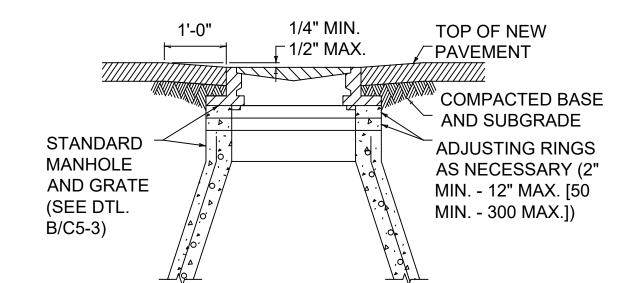
**DETAILS 3** 

SHEET

C5-3

DATE 05-26-23

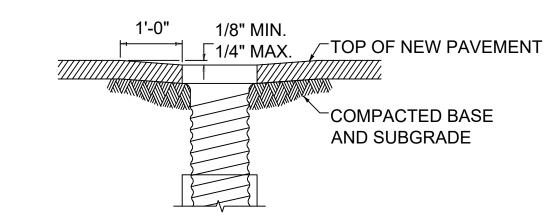
May 26, 2023 - 5:22pm - 7358 PAISLEY DETAILS SHEETS (RE-BID REV.).



- NOTES:

  1. ADJUST MANHOLES UPWARD WITH ADJUSTING RINGS UNDER FRAME.
- 2. ADJUST MANHOLES DOWNWARD BY REMOVING CONE AND BARREL SECTIONS AS NECESSARY AND REPLACING WITH
- SECTIONS OF LENGTH REQUIRED TO MATCH GRADE.
- 3. SLOPE MANHOLE FRAME AS REQUIRED TO MATCH SLOPE OF STREET
- 4. MAKE FINAL MANHOLE ADJUSTMENTS BEFORE PAVING.

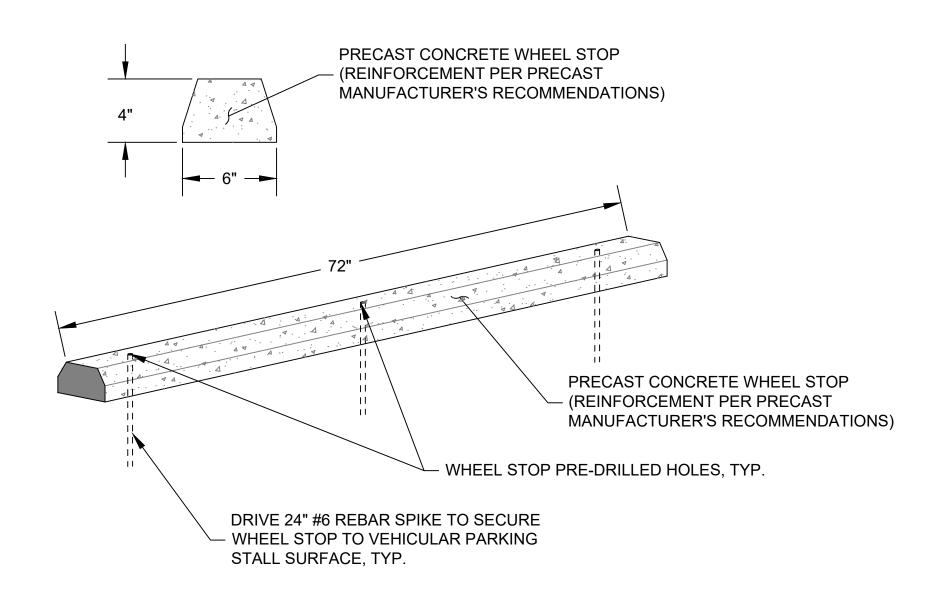
### MANHOLE ADJUSTMENT DETAIL



NOTES: 1. ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED. 2. MAKE FINAL ADJUSTMENTS BEFORE PAVING.

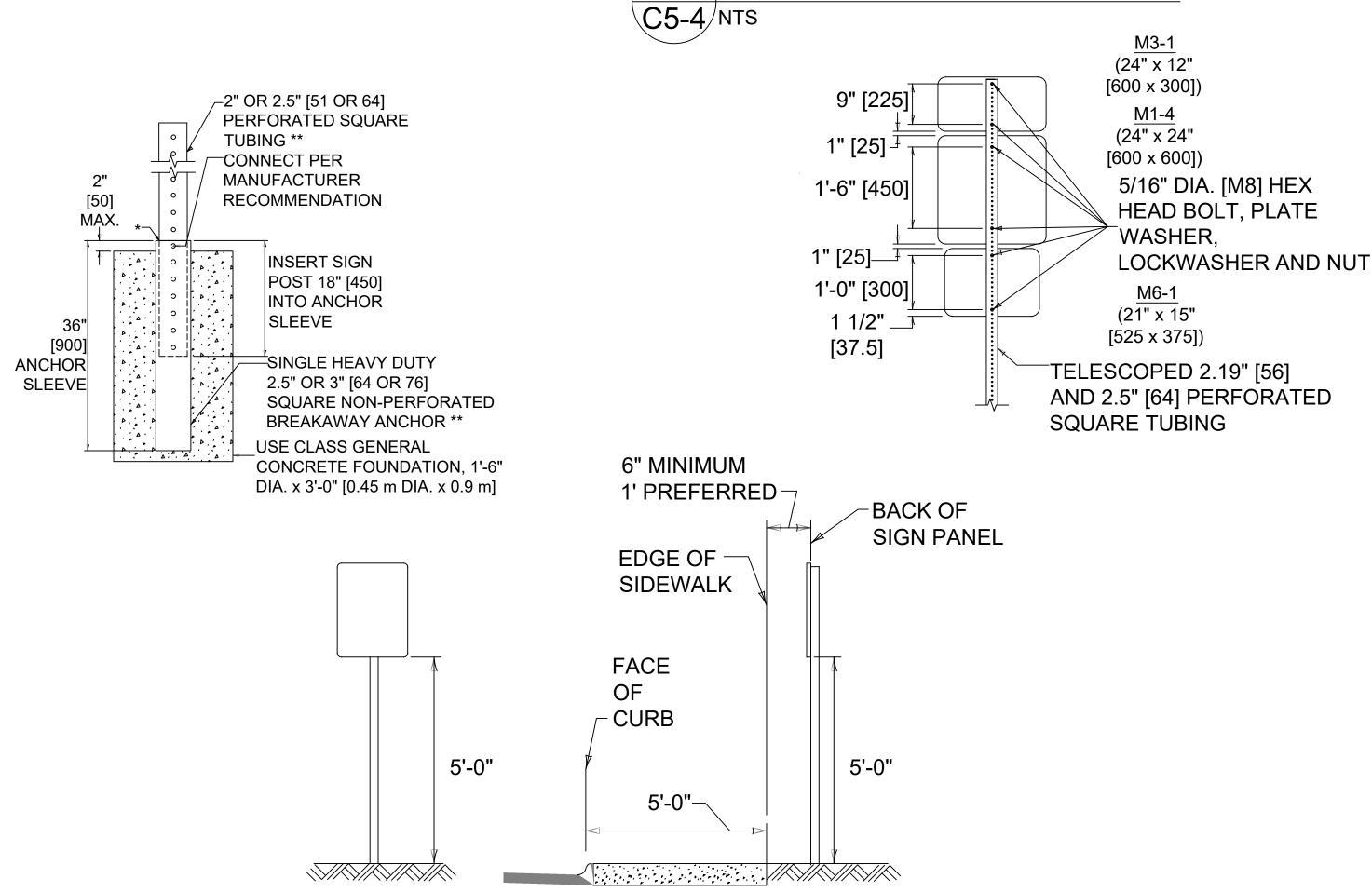
### VALVE BOX ADJUSTMENT DETAIL

### A MANHOLE AND VALVE BOX ADJUSTMENT DETAILS **C5-4**/NTS



C CONCRETE WHEEL STOP DETAIL C5-4 NTS





C5-4 NTS

D SIGN INSTALATION DETAIL



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4



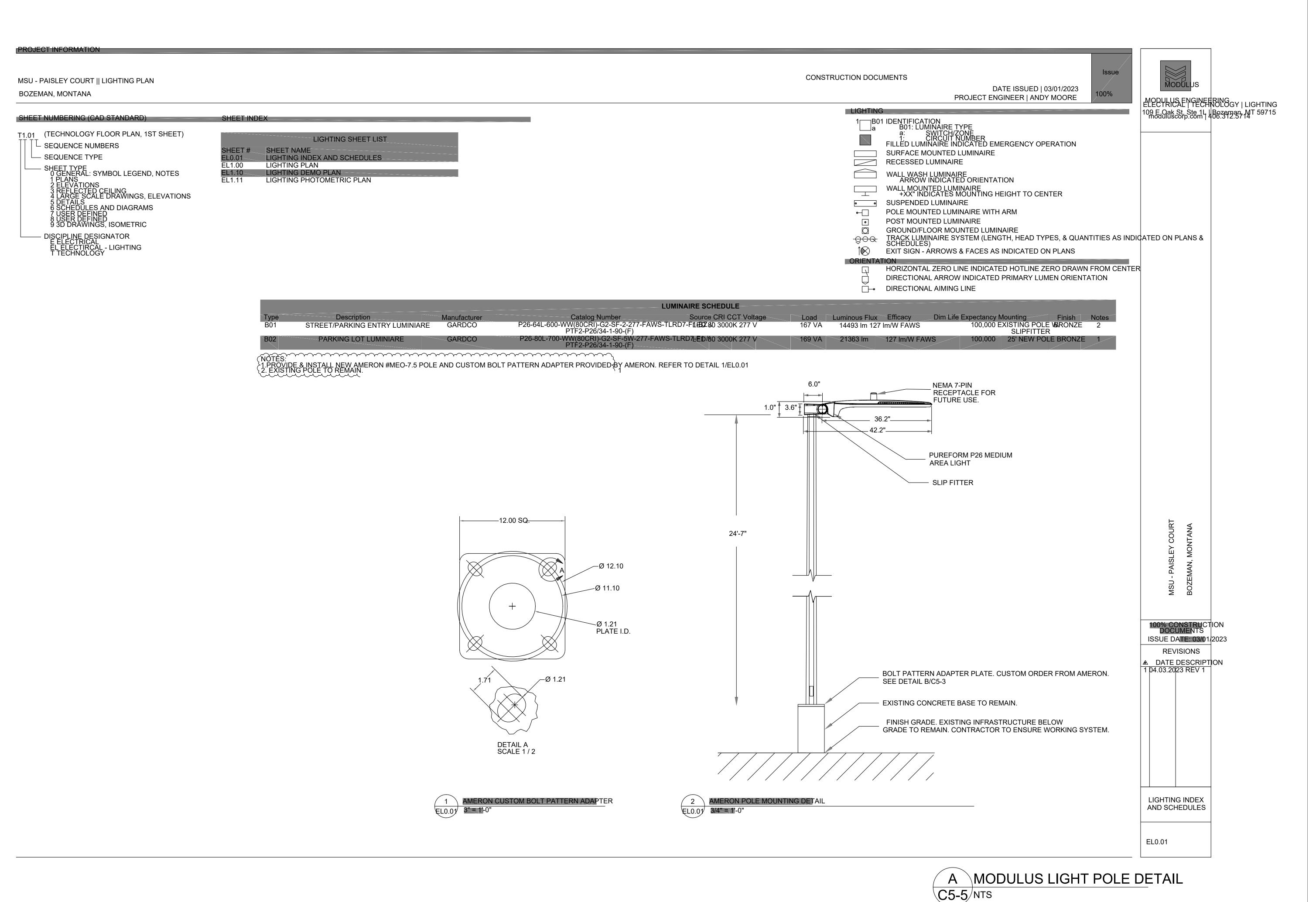
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**DETAILS 4** 

**SHEET** 

C5-4



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ARKING OVEMENTS

4



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**DETAILS 5** 

SHEET

C5-5