

FIGURE 4.1 STANDARD WATER MAIN LOCATION AT CUL-DE-SAC

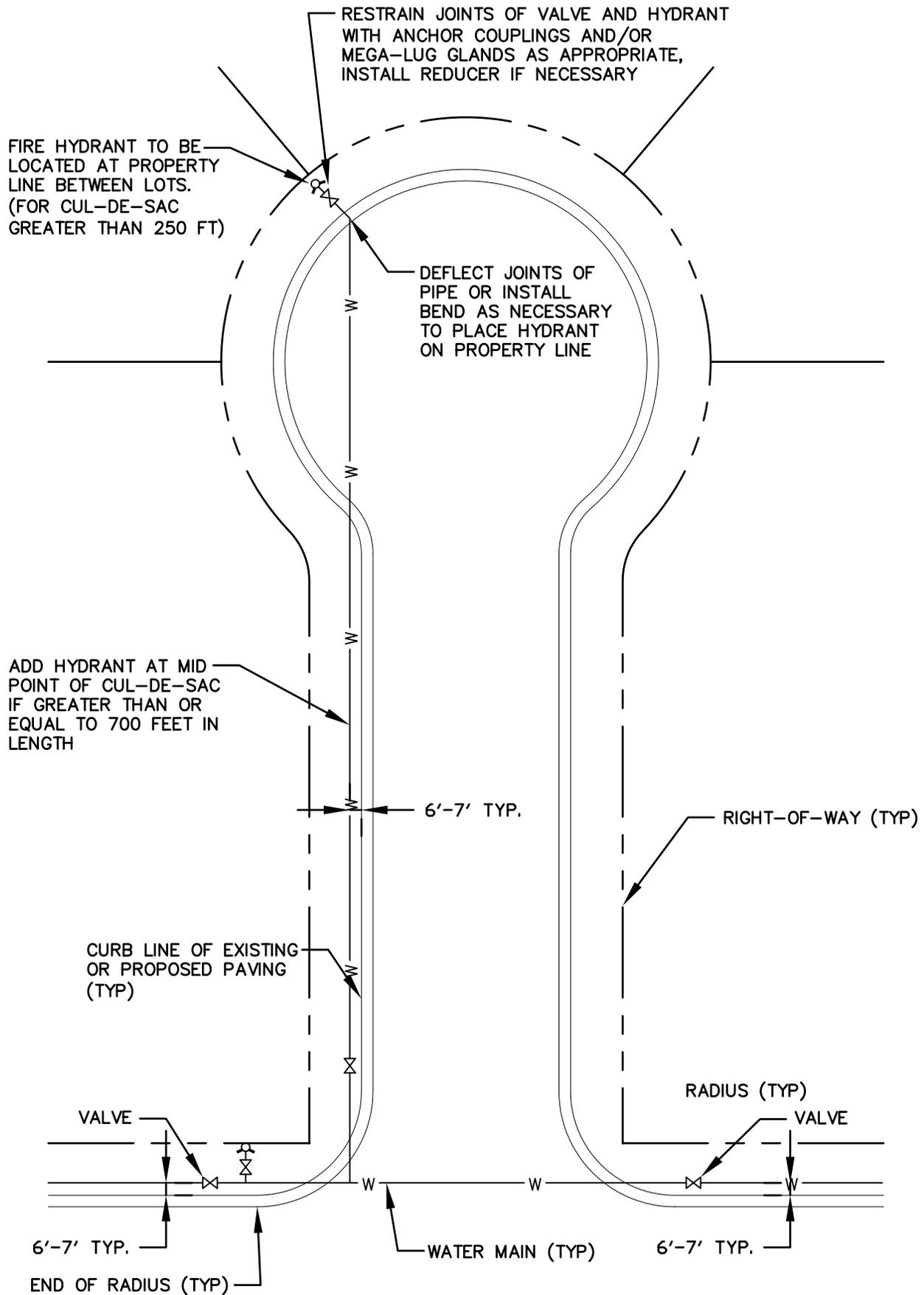
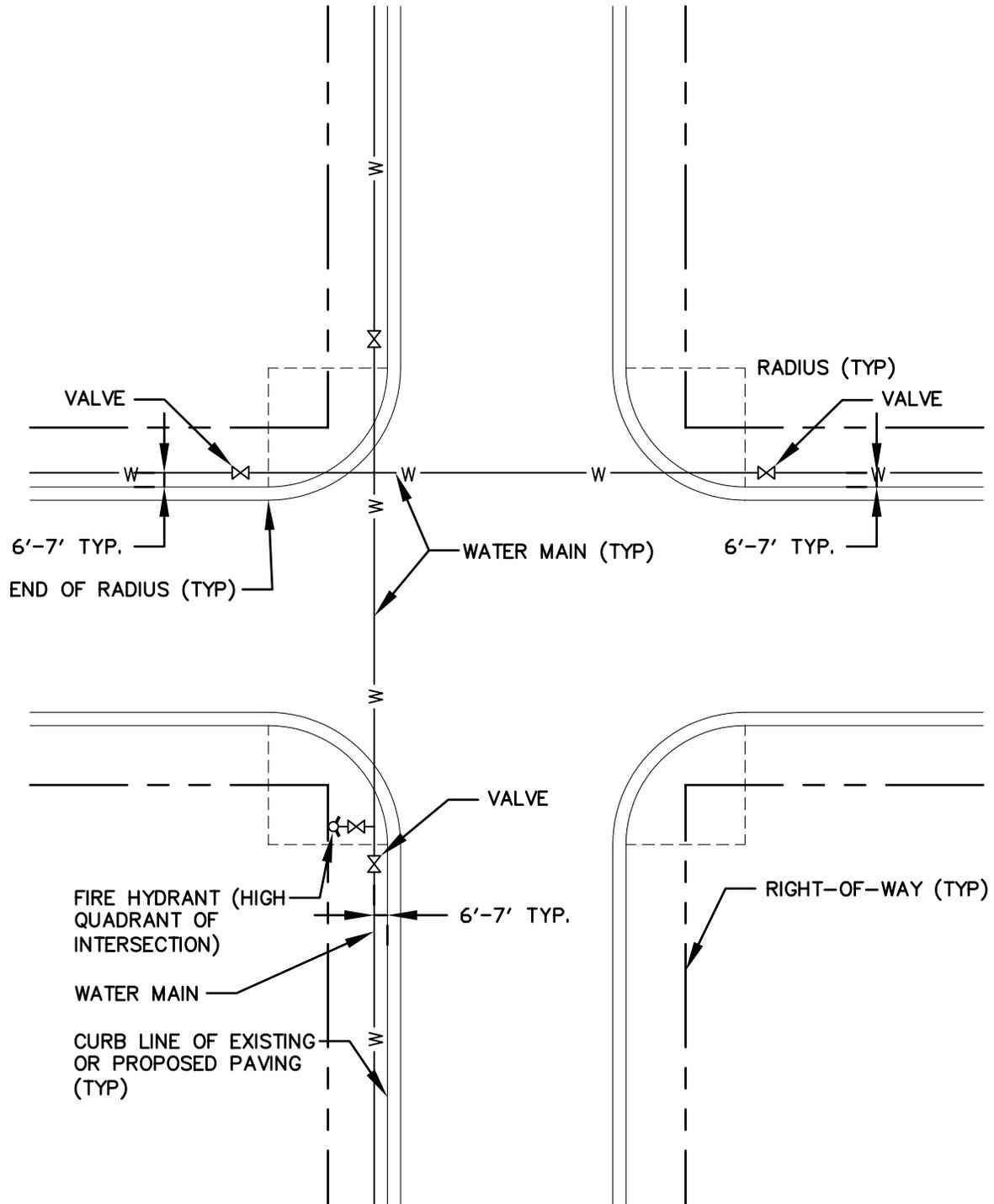


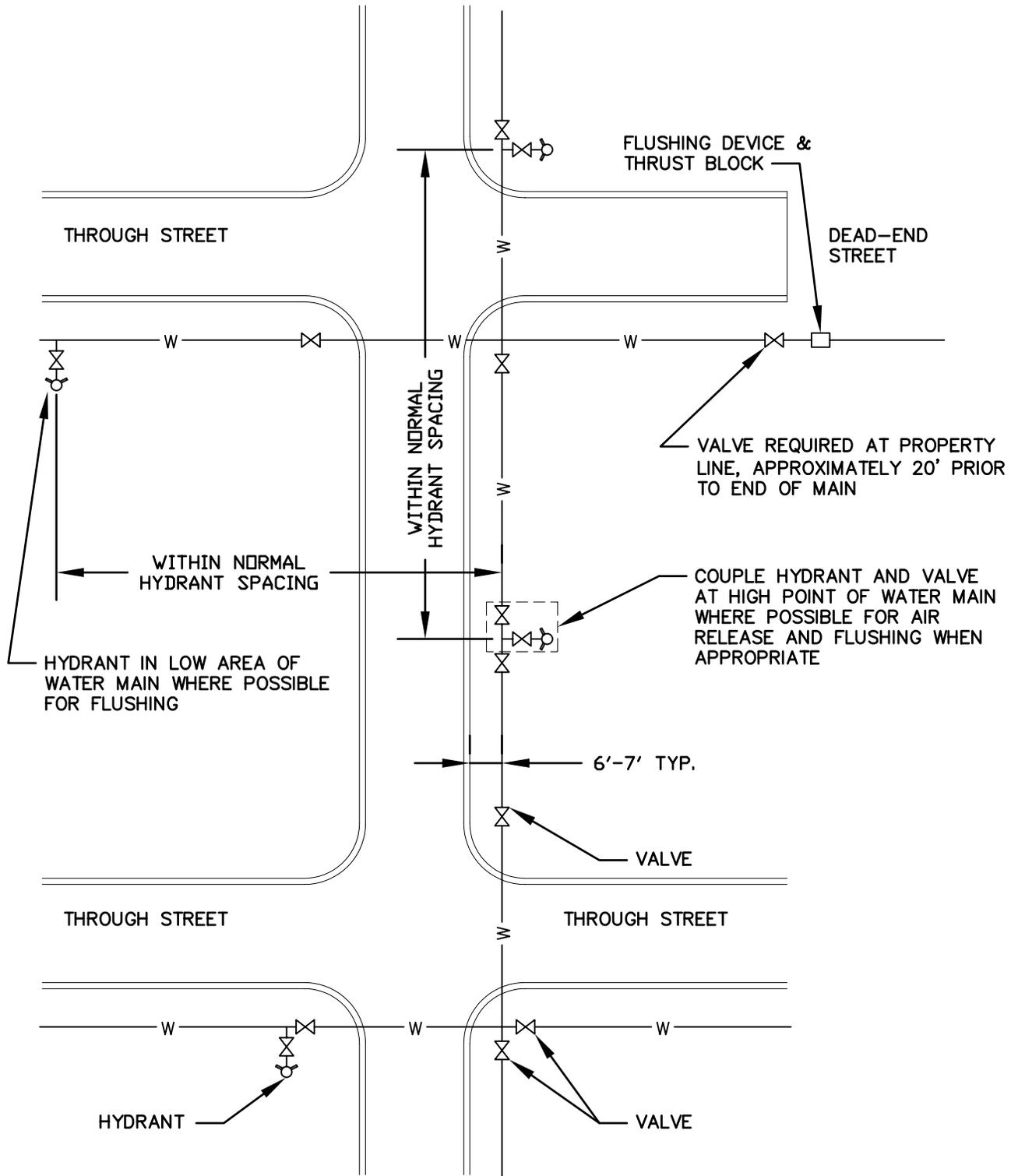
FIGURE 4.2 STANDARD WATER MAIN LOCATION



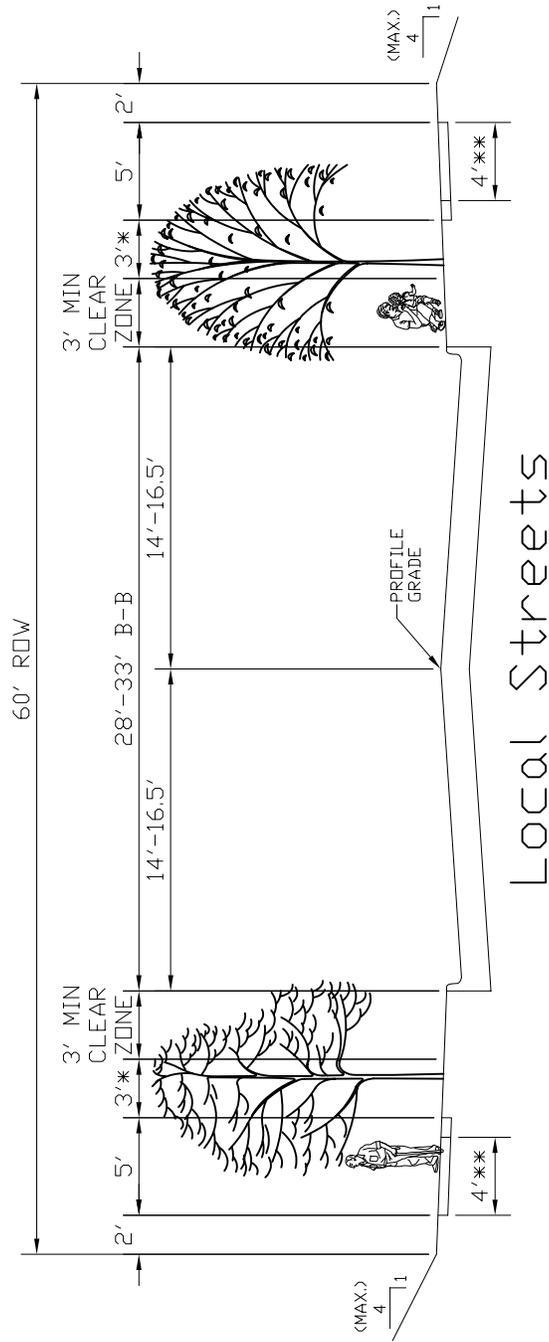
NOTES:

1. INSTALL FOUR VALVES AND ONE HYDRANT AT EACH INTERSECTION.
2. WHEN POSSIBLE LOCATE FIRE HYDRANT NEAR HIGH POINT.
3. FIRE HYDRANTS AND VALVES SHOULD BE PLACED OUTSIDE OF INTERSECTION RETURN RADIUS SO AS NOT TO BE IN CONFLICT WITH STORM SEWERS AND INTAKES.
4. MAJOR ARTERIAL STREETS MAY REQUIRE ADDITIONAL HYDRANTS.
5. DEPENDING UPON THE NUMBER OF SERVICE CONNECTIONS IN BETWEEN A VALVE AT AN INTERSECTION MAY BE OMITTED IF THERE IS AN IN-LINE VALVE LESS THAN 400 FT AWAY.

FIGURE 4.3 STANDARD WATER MAIN LOCATION



WHERE POSSIBLE LOCATE HYDRANTS ON THE DOWNHILL SIDE OF AN ON-LINE VALVE FOR AIR RELEASE AND FLUSHING PURPOSES. HYDRANTS SHALL BE LOCATED ON SIDE LOT PROPERTY LINES WHENEVER POSSIBLE.



Local Streets

* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk
 ** 5' Sidewalk in Commercial/Industrial Areas, 4' in Residential Areas

FILE NO.: 4902038

DRAWN BY: JLR

APPROVED BY:

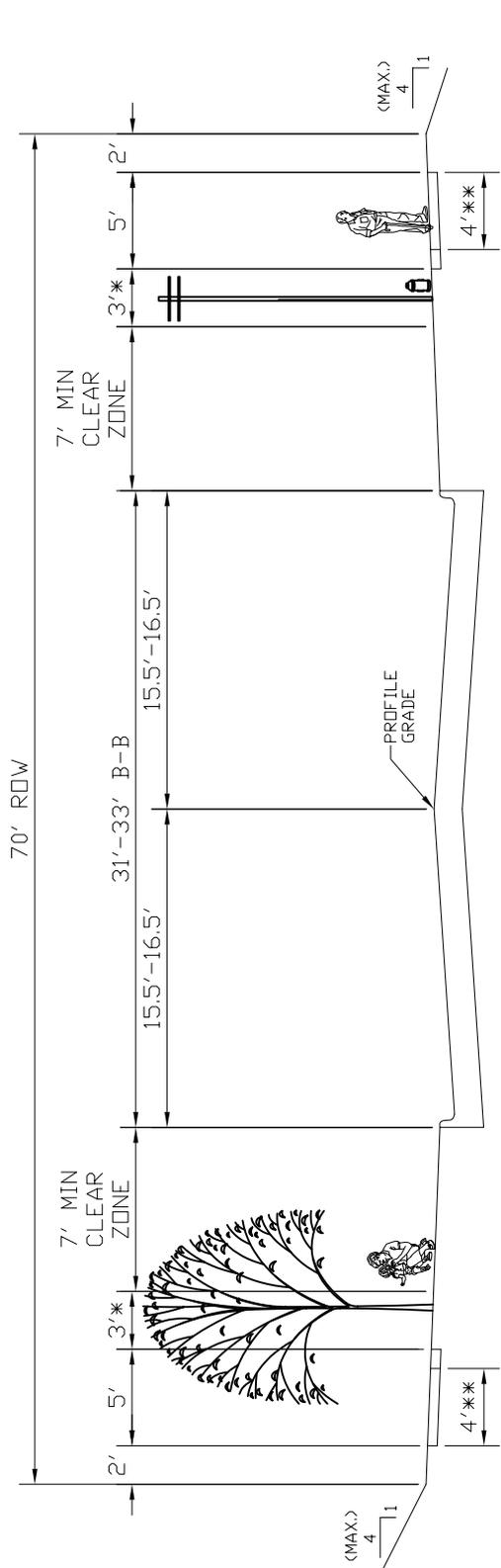
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SCALE: NONE

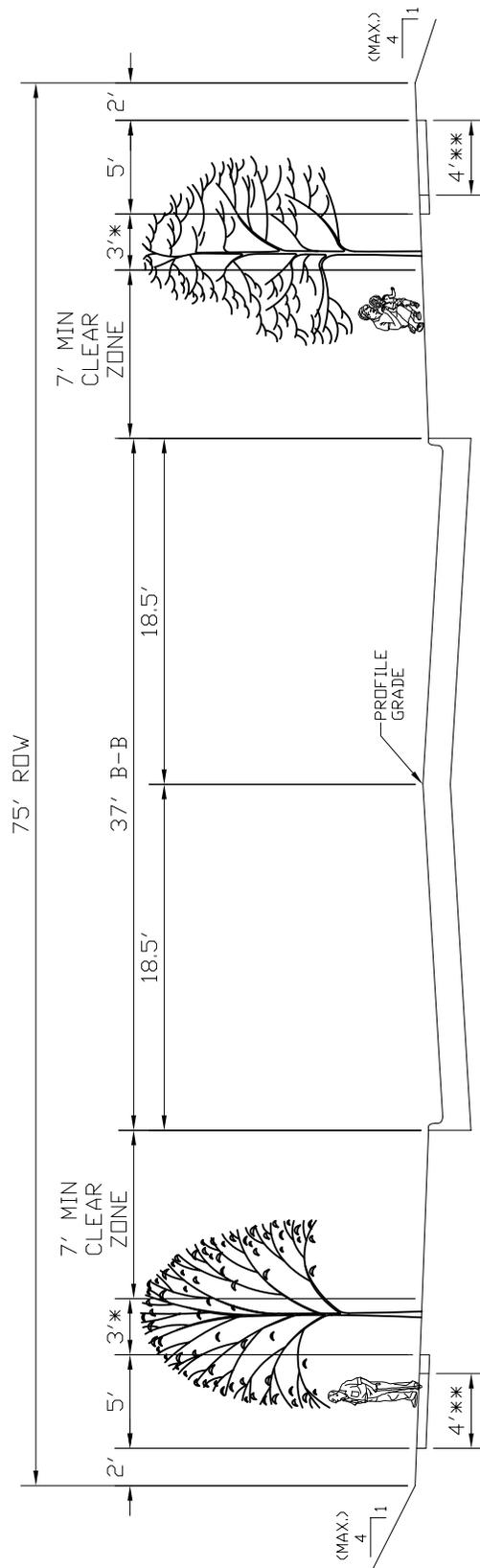
ROW STANDARD Local Streets



CEDAR RAPIDS
City Of Five Seasons



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk
 ** 5' Sidewalk in Commercial/Industrial Areas, 4' in Residential Areas



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk
 ** 5' Sidewalk in Commercial/Industrial Areas, 4' in Residential Areas

Collector Streets

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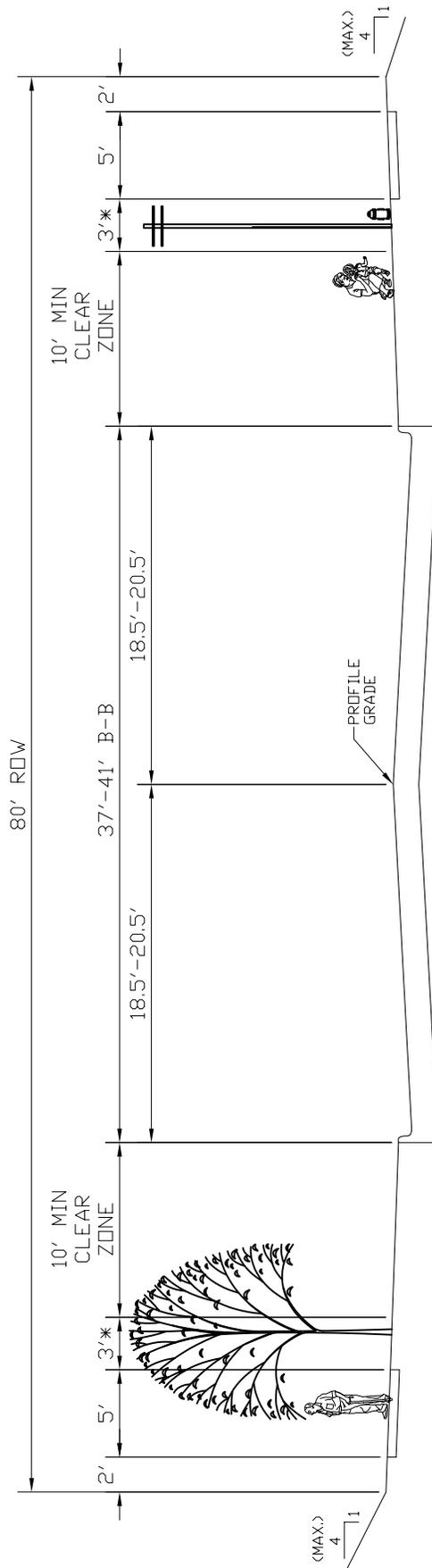
DATE: 06/20/02

SCALE: NONE

ROW STANDARD Collector Streets



CEDAR RAPIDS
City Of Five Seasons



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk

Minor Arterial Streets

FILE NO.: 4902038

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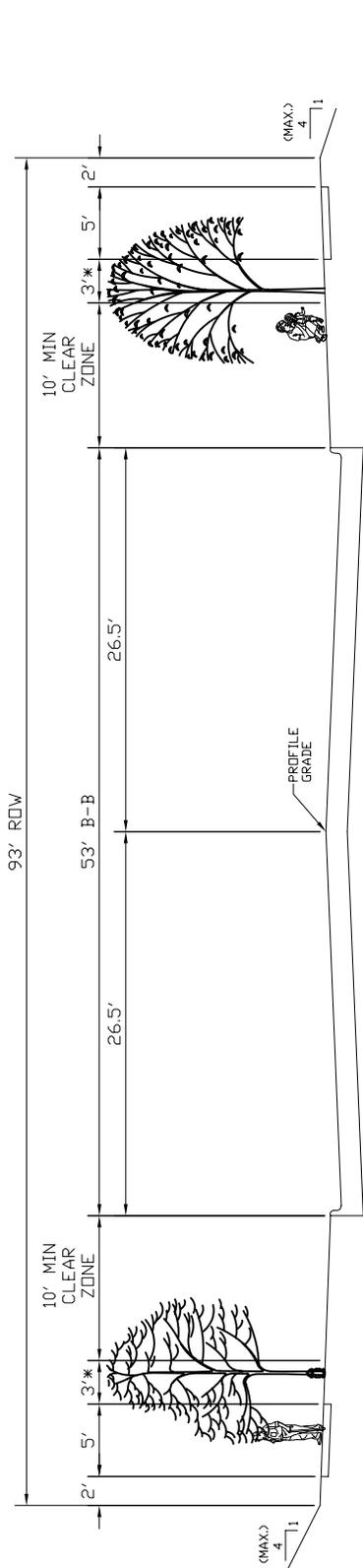
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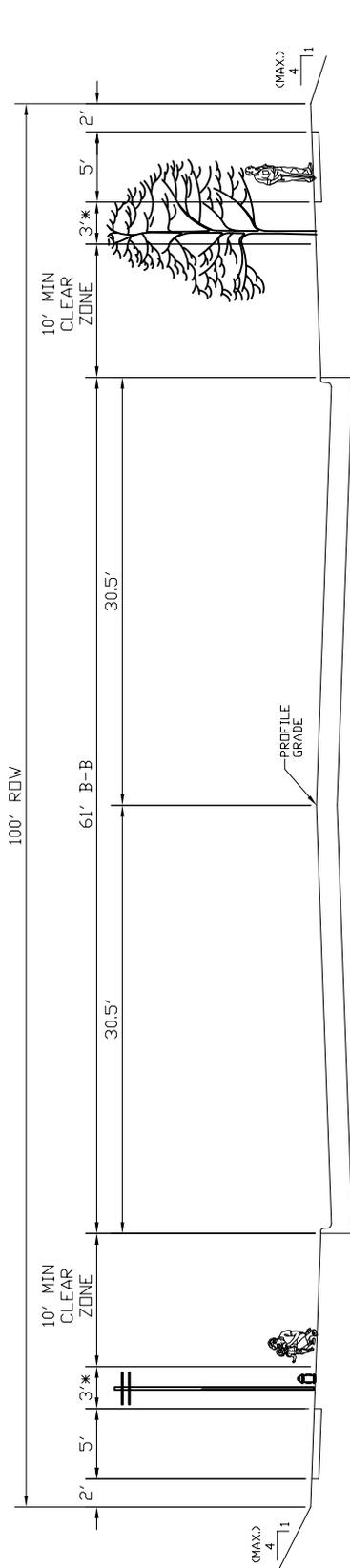
ROW STANDARD Minor Arterial Streets



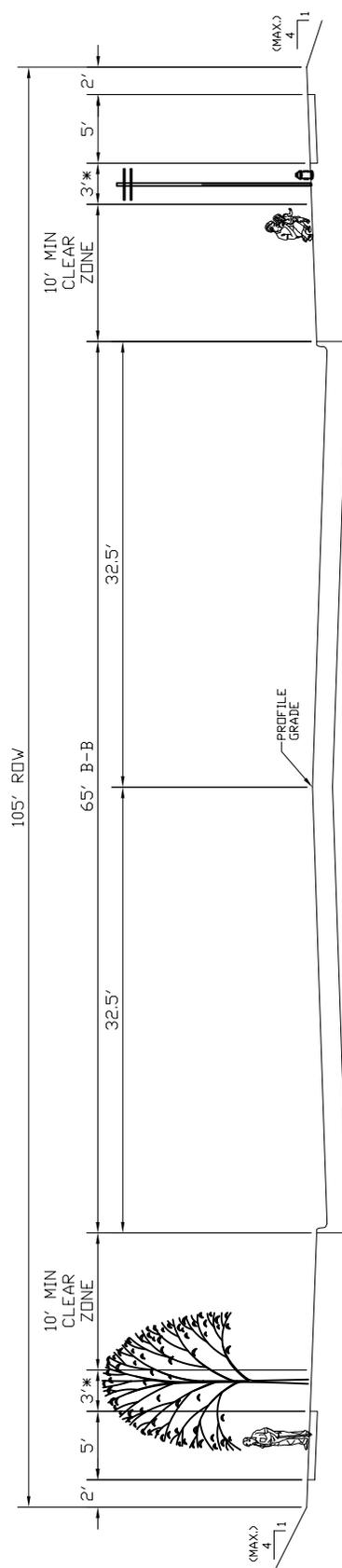
CEDAR RAPIDS
City Of Five Seasons



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk



* Above Ground Utility/Tree Corridor, 2' min from edge of Sidewalk

Arterial Streets

FILE NO.: 4902038

DRAWN BY: JLR

APPROVED BY:

DATE: 06/20/02

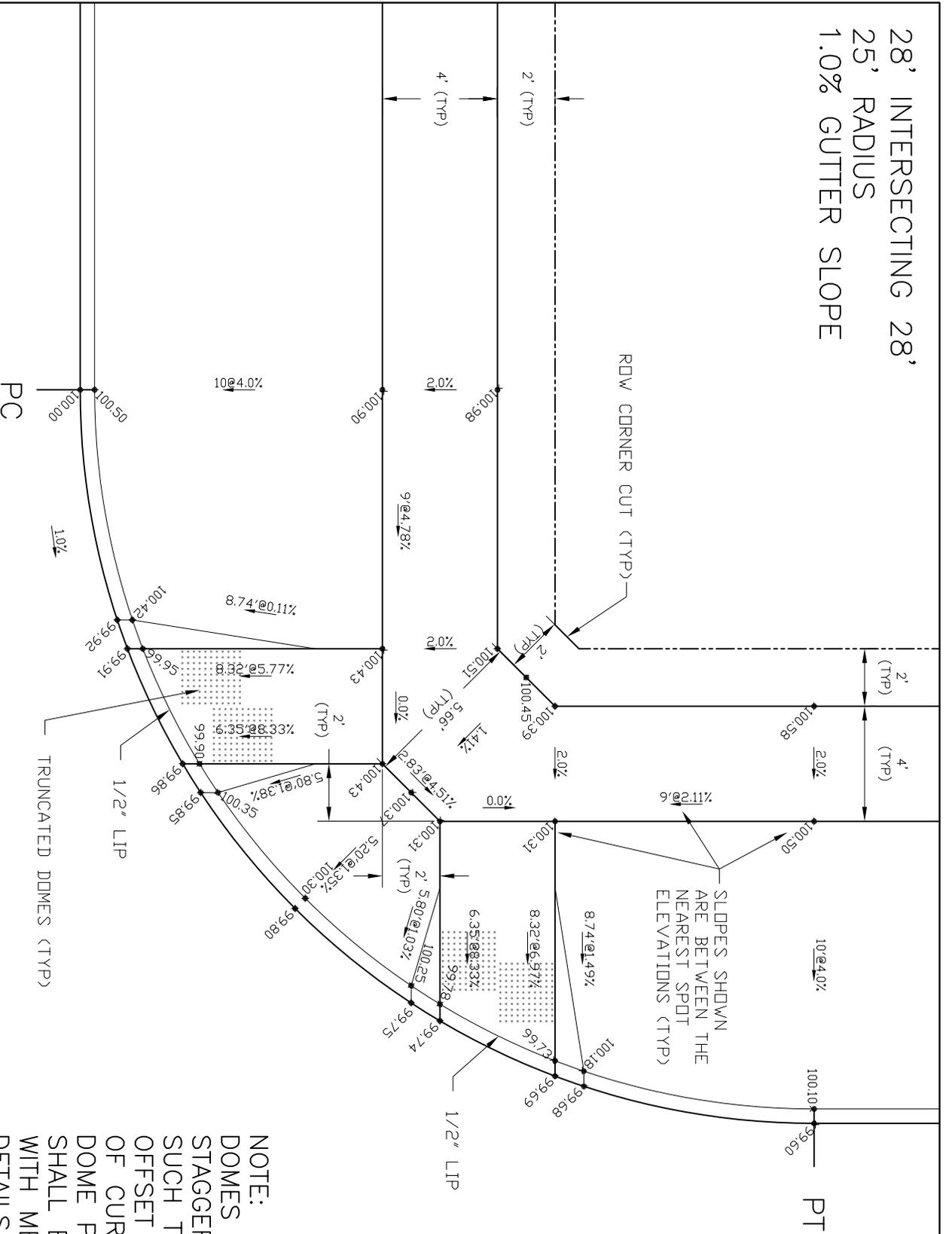
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ROW STANDARD Arterial Streets



CEDAR RAPIDS
City Of Five Seasons

28' INTERSECTING 28'
 25' RADIUS
 1.0% GUTTER SLOPE

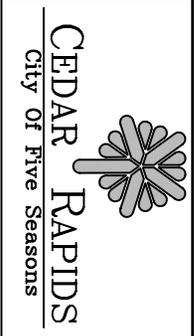


SLOPES SHOWN
 ARE BETWEEN THE
 NEAREST SPOT
 ELEVATIONS (TYP)

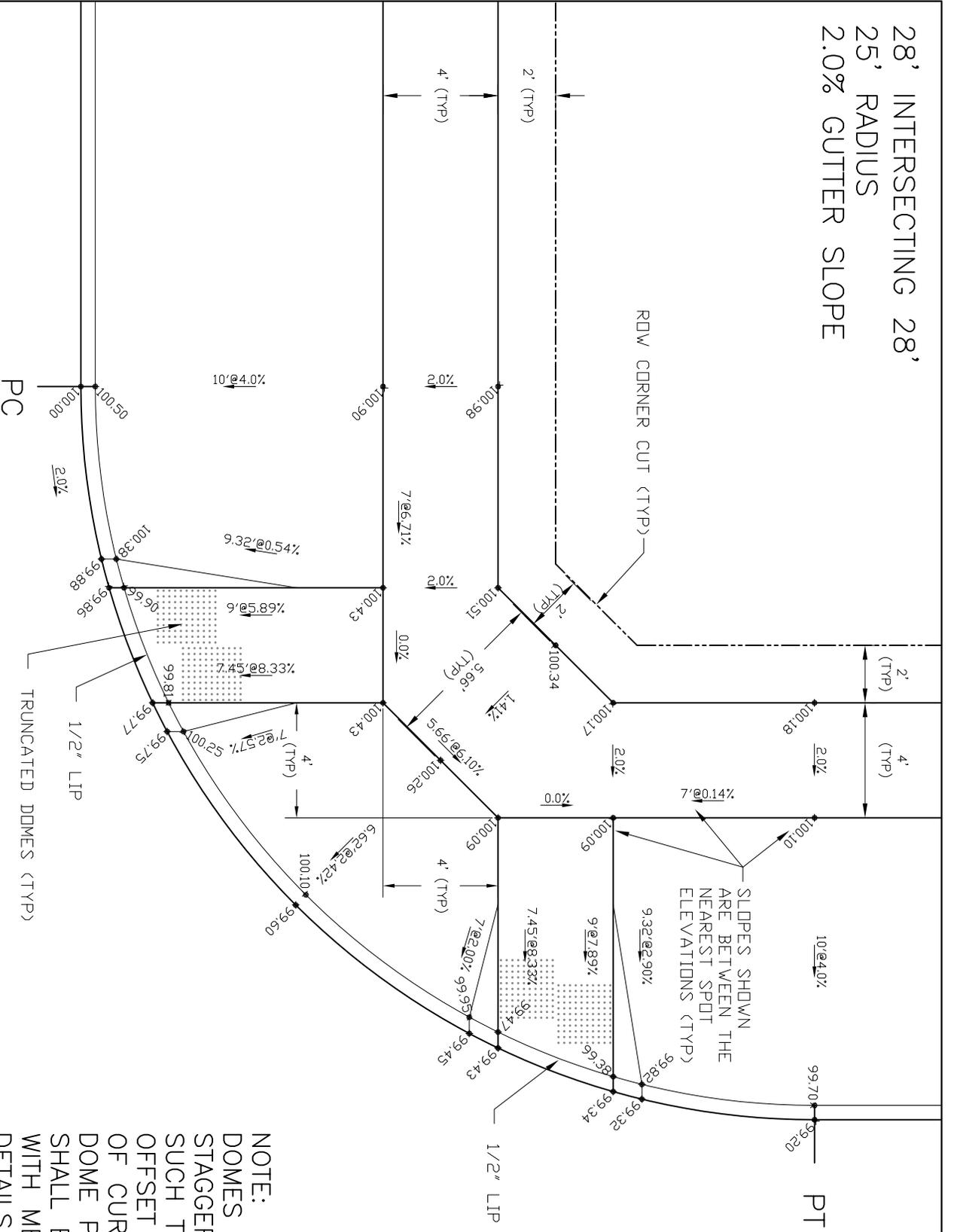
NOTE: THE TRUNCATED
 DOMES SHALL BE
 STAGGERED AS SHOWN,
 SUCH THAT THE MAXIMUM
 OFFSET FROM THE BACK
 OF CURB IS 6" TO 8".
 DOME PATTERN AND SIZE
 SHALL BE IN ACCORDANCE
 WITH METRO STANDARD
 DETAILS 2700-113 AND
 2700-115.

FILE NO.: SIDEWALK.DWG
 DRAWN BY: JH/JLR
 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

28' INTERSECTION 28'
 60' ROW, 25' RADIUS
 1.0% GUTTER SLOPE



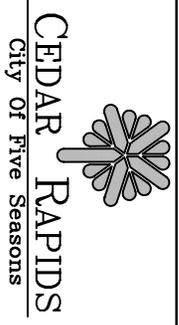
28' INTERSECTING 28'
 25' RADIUS
 2.0% GUTTER SLOPE



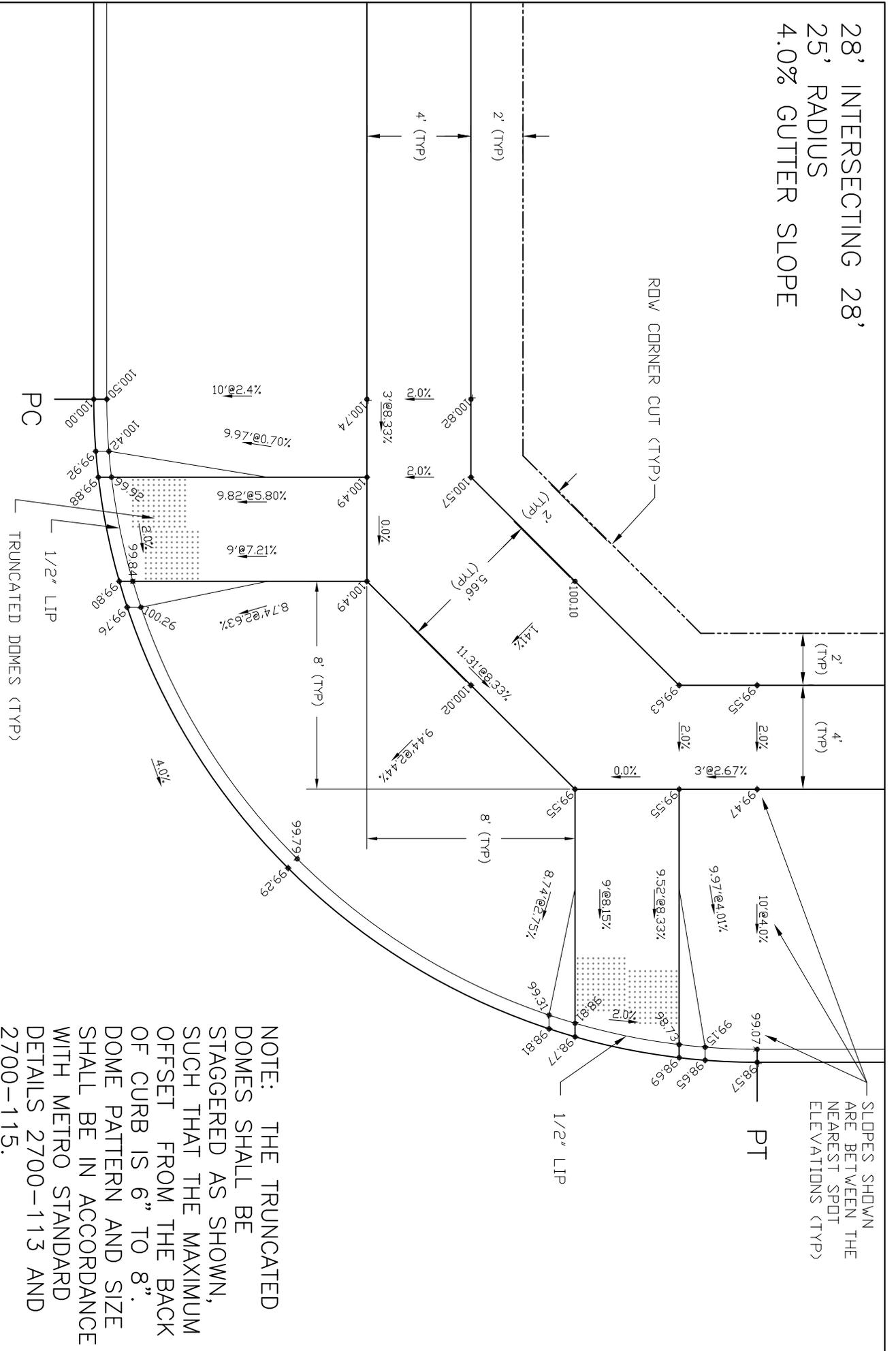
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 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

28' INTERSECTION 28'
 60' ROW, 25' RADIUS
 2.0% GUTTER SLOPE



28' INTERSECTING 28'
 25' RADIUS
 4.0% GUTTER SLOPE



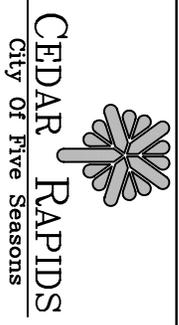
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PT

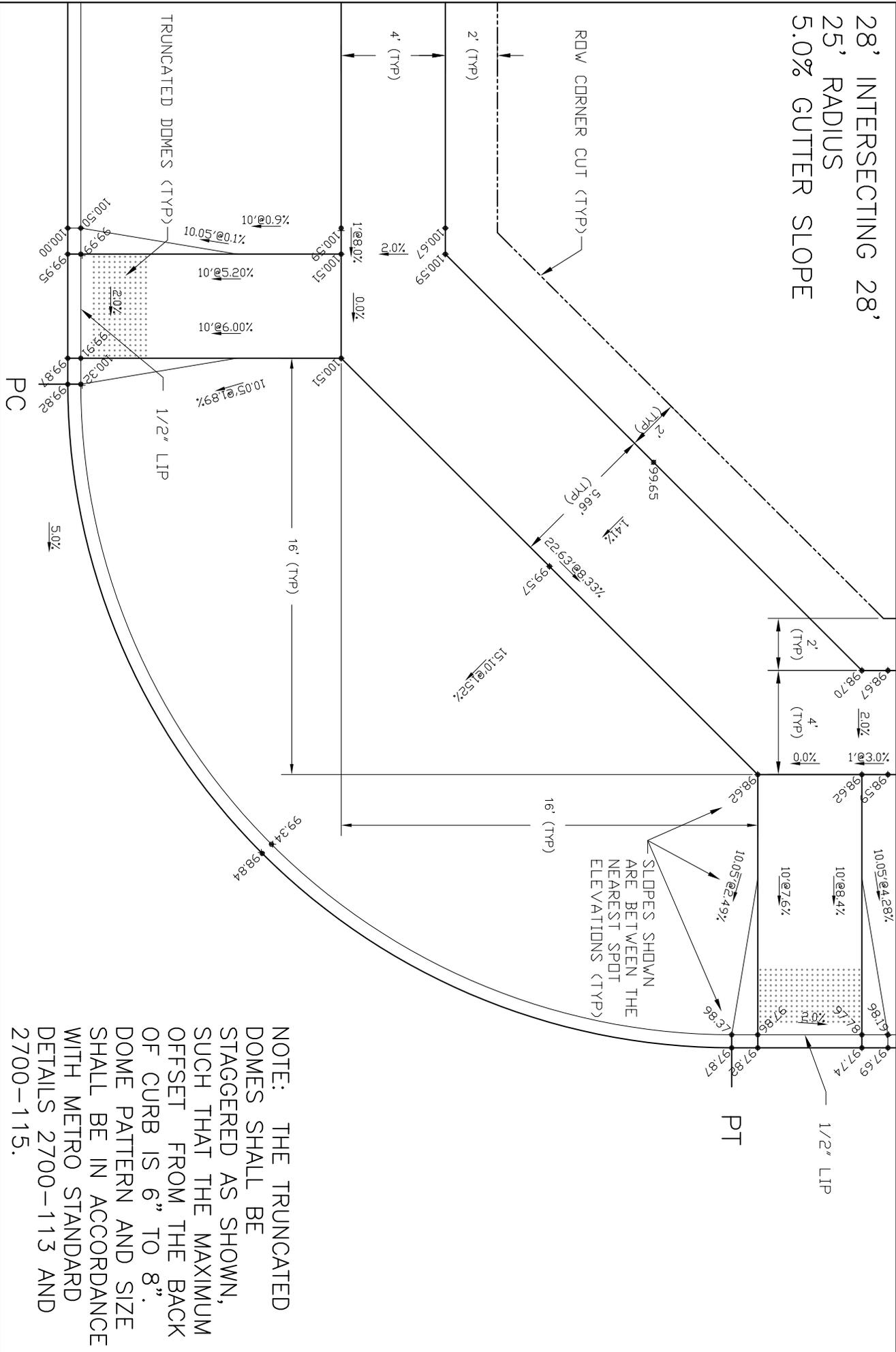
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28' INTERSECTION 28'
 60' ROW, 25' RADIUS
 4.0% GUTTER SLOPE



28' INTERSECTING 28'
 25' RADIUS
 5.0% GUTTER SLOPE



SLOPES SHOWN
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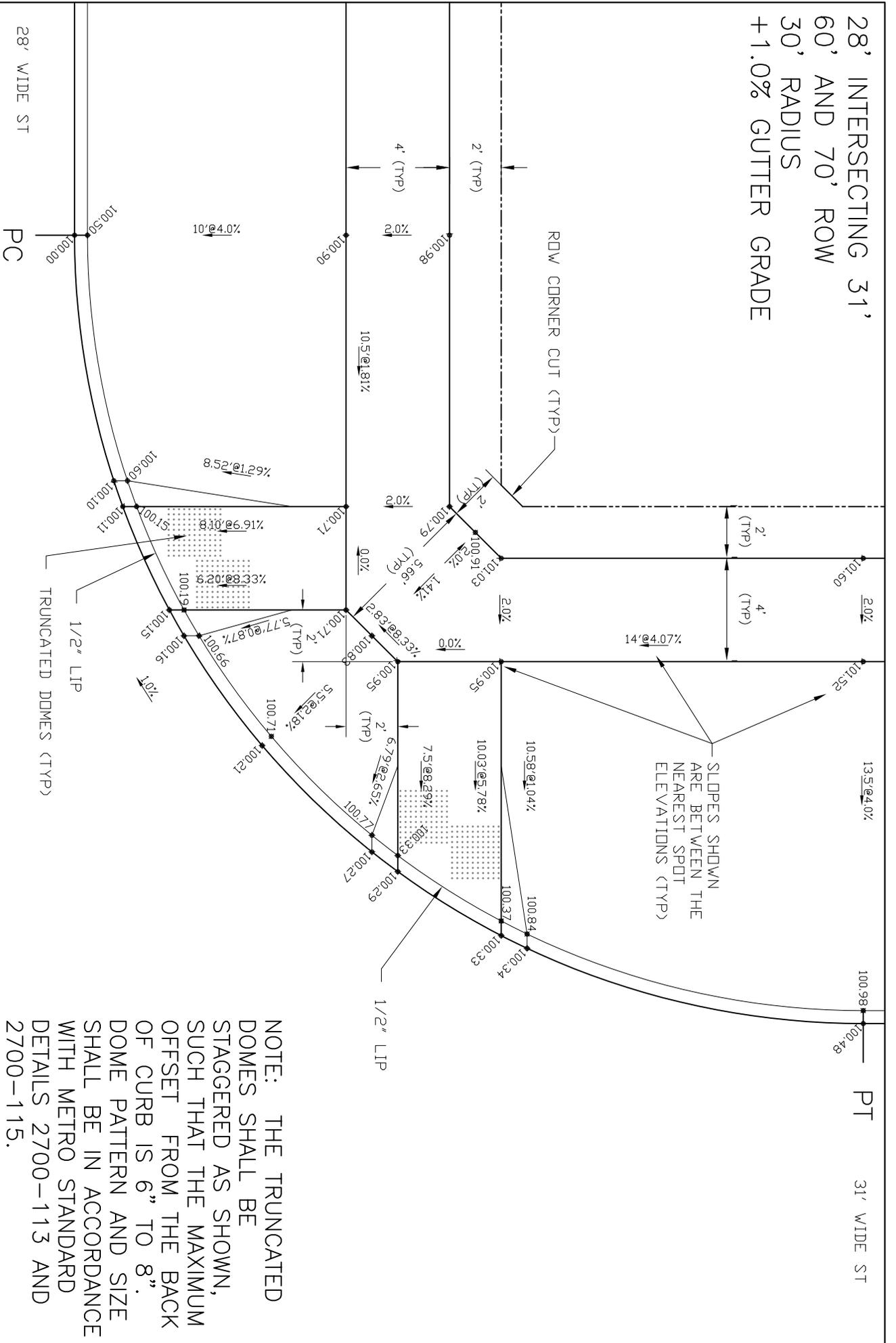
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 SCALE: 1" = 5'

28' INTERSECTION 28'
 60' ROW, 25' RADIUS
 5.0% GUTTER SLOPE



28' INTERSECTING 31'
 60' AND 70' ROW
 30' RADIUS
 +1.0% GUTTER GRADE



SLOPES SHOWN
 ARE BETWEEN THE
 NEAREST SPOT
 ELEVATIONS (TYP)

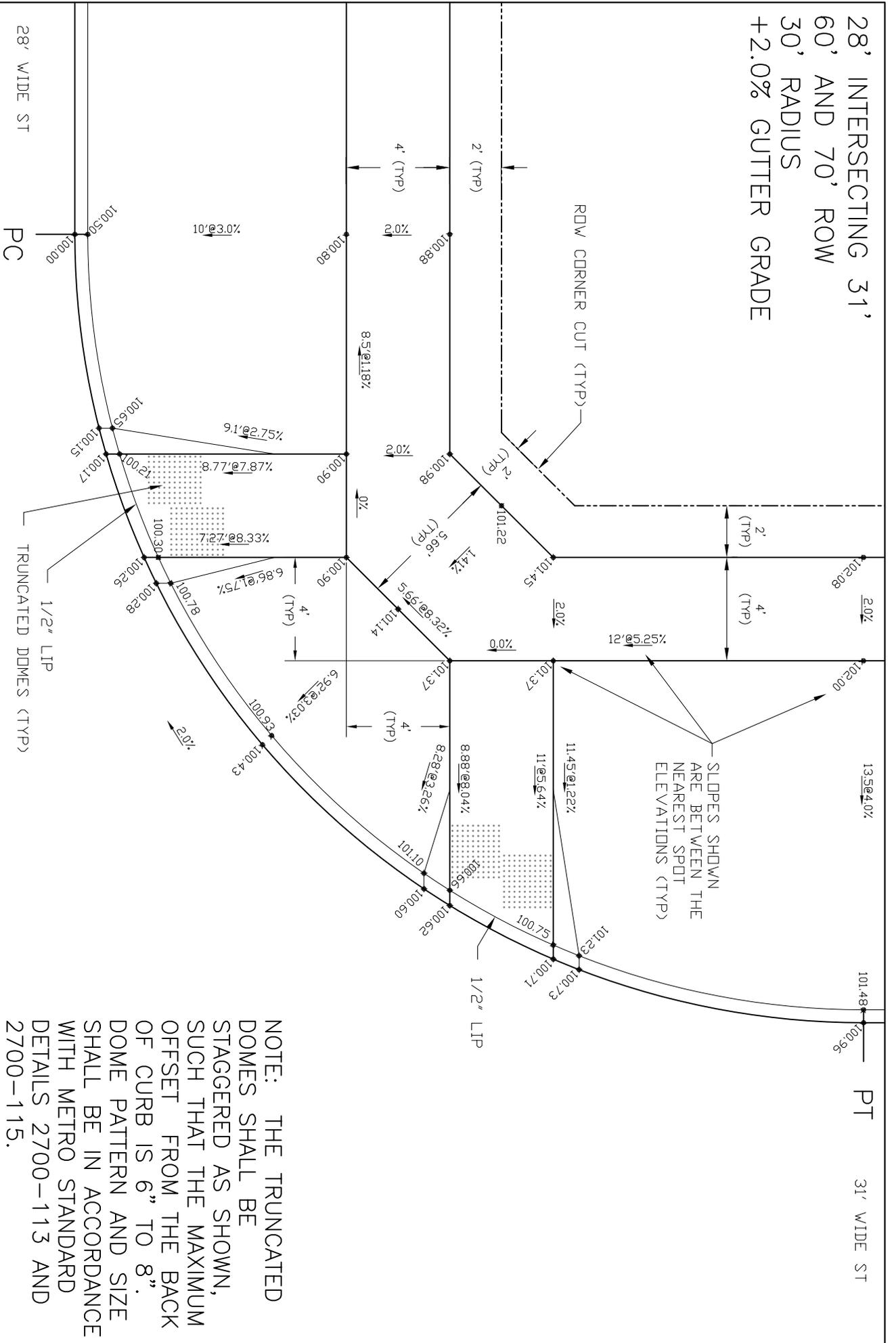
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 DRAWN BY: JH/JLR
 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

28' INTERSECTION 31'
 60' AND 70' ROW,
 30' RADIUS
 +1.0% GUTTER SLOPE



28' INTERSECTING 31'
 60' AND 70' ROW
 30' RADIUS
 +2.0% GUTTER GRADE



SLOPES SHOWN
 ARE BETWEEN THE
 NEAREST SPOT
 ELEVATIONS (TYP)

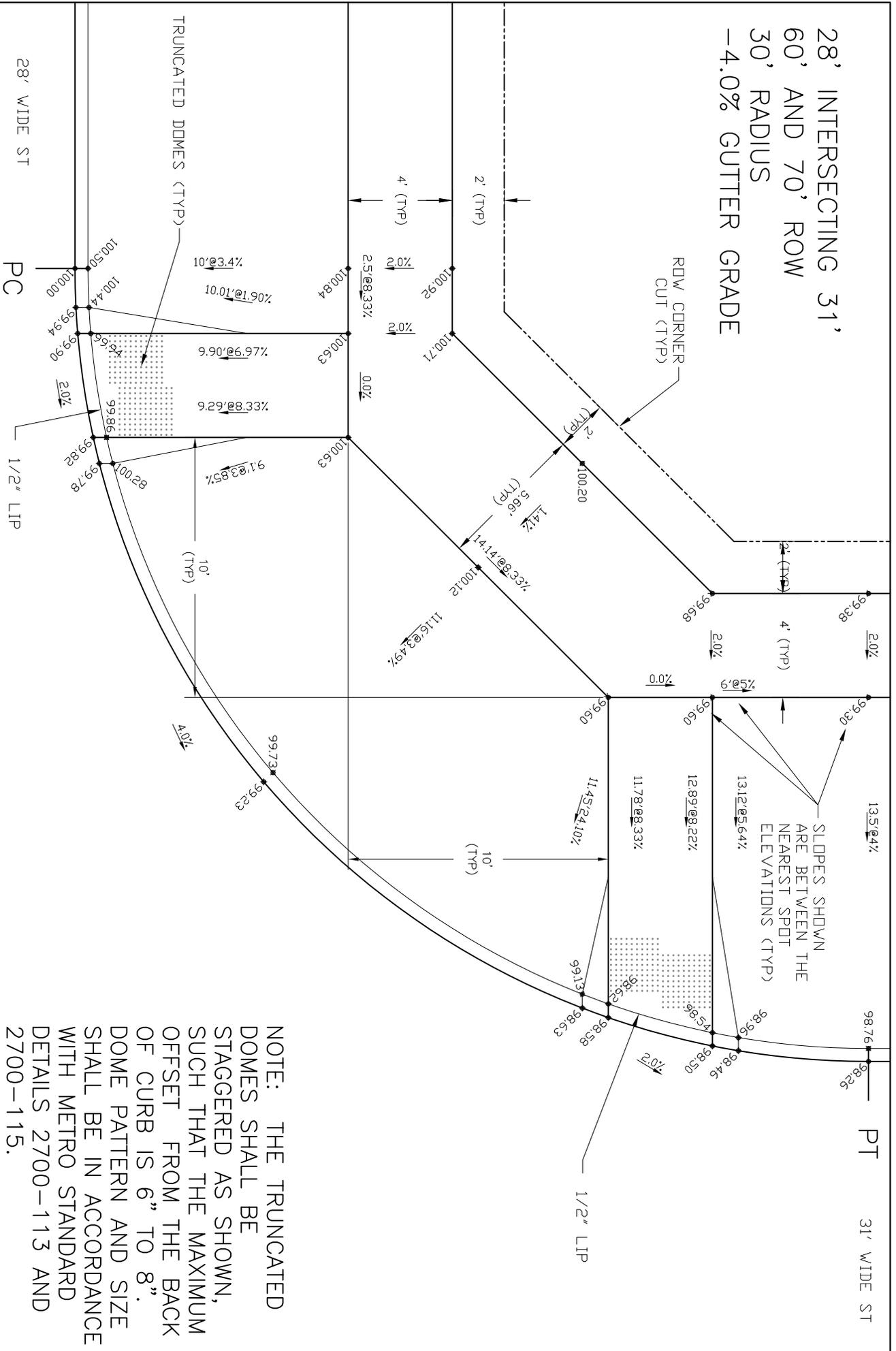
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 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

28' INTERSECTION 31'
 60' AND 70' ROW, 30' RADIUS
 +2.0% GUTTER SLOPE



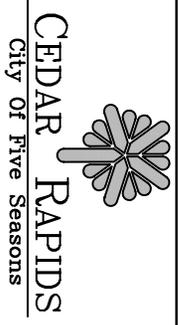
28' INTERSECTING 31'
 60' AND 70' ROW
 30' RADIUS
 -4.0% GUTTER GRADE



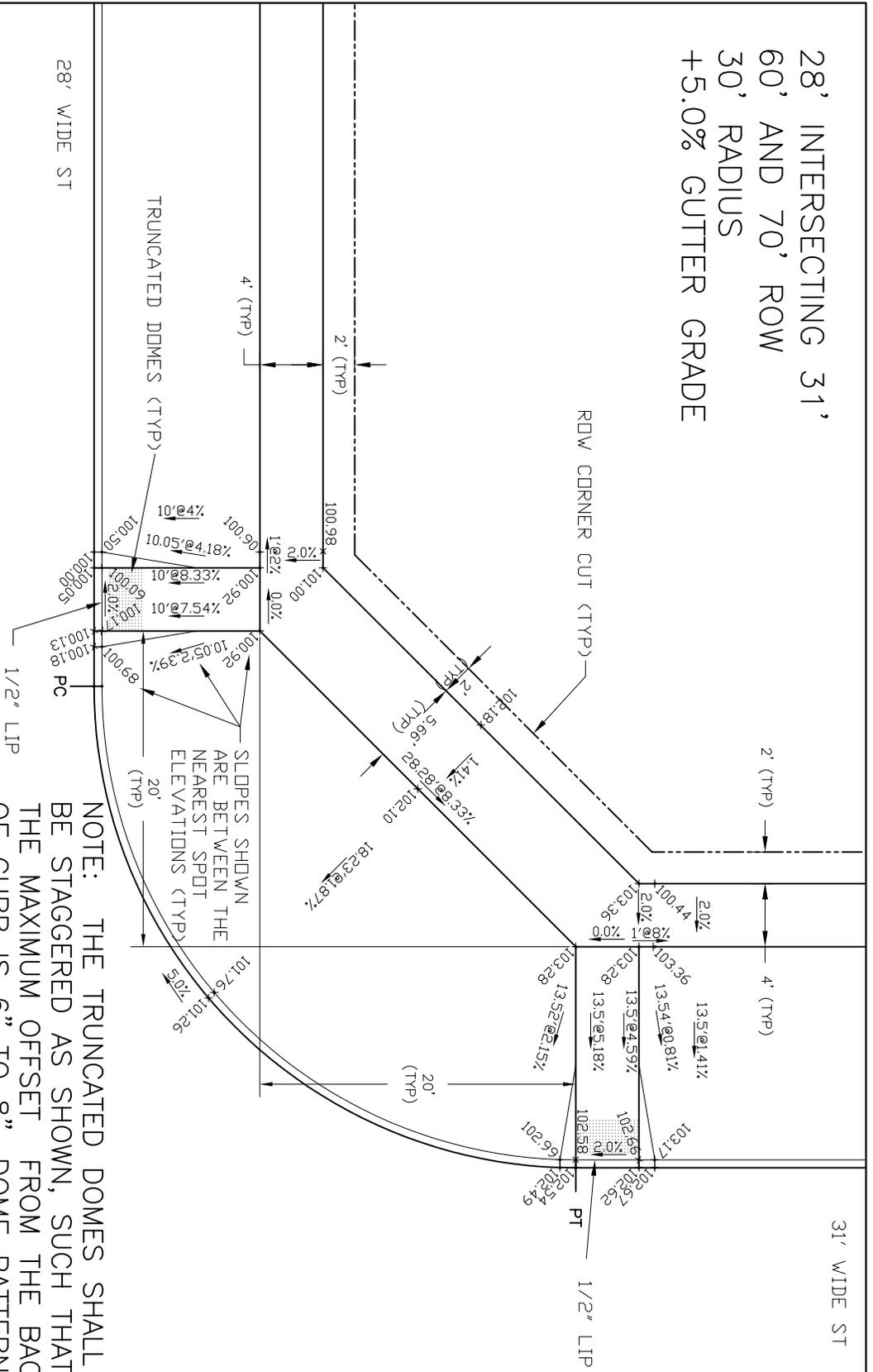
FILE NO.: SIDEWALK.DWG
 DRAWN BY: JH/JLR
 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

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 60' & 70' ROW, 30' RADIUS
 -4.0% GUTTER SLOPE

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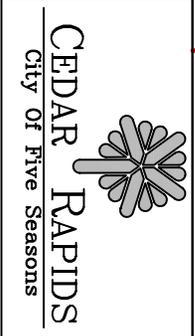
28' INTERSECTING 31'
 60' AND 70' ROW
 30' RADIUS
 +5.0% GUTTER GRADE



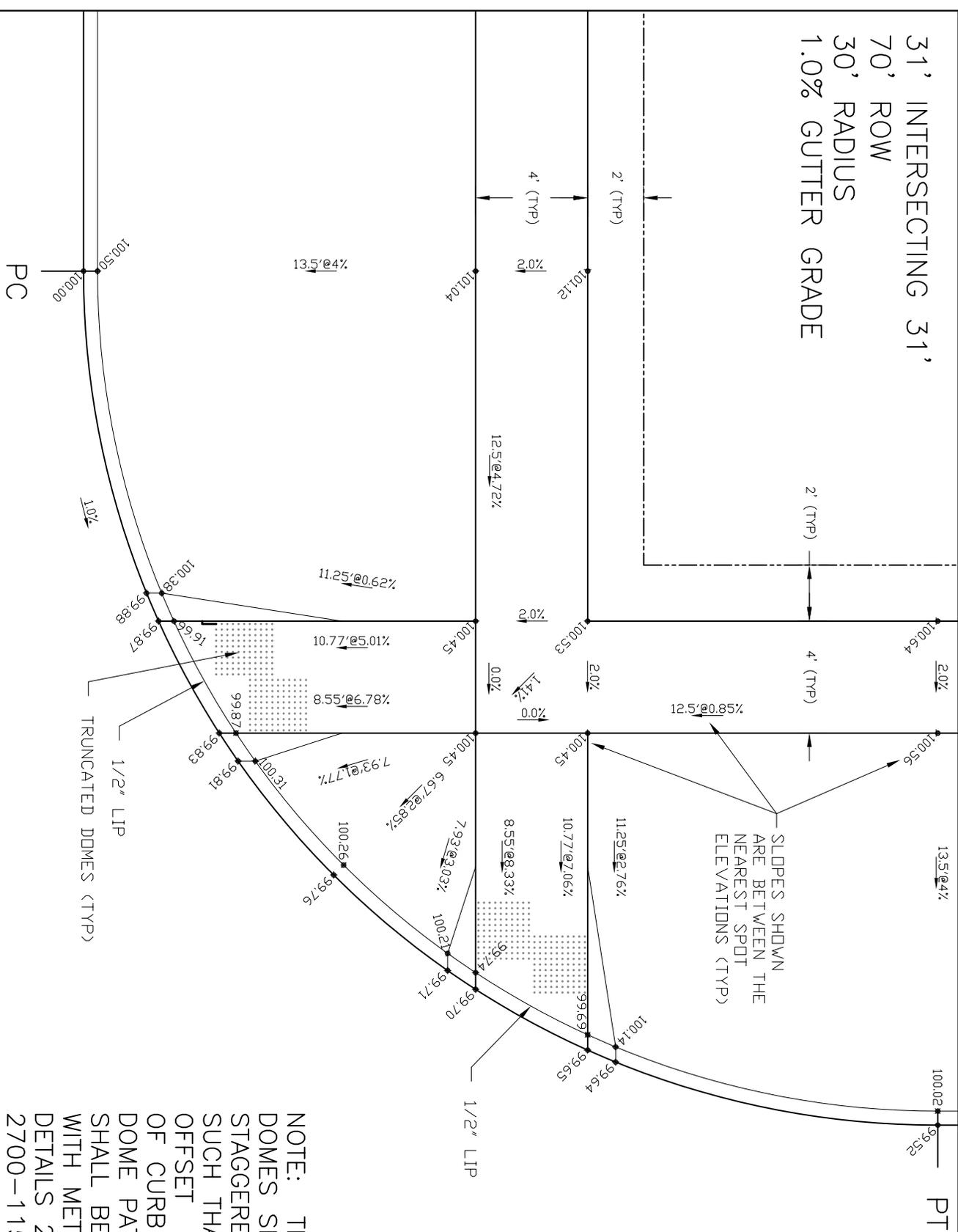
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DRAWN BY:	JH/JLR
APPROVED BY:	KWD
DATE:	12/01/04
SCALE:	1" = 10'

28' INTERSECTION 31'
 60' & 70' ROW, 30' RADIUS
 +5.0% GUTTER SLOPE



31' INTERSECTING 31'
 70' ROW
 30' RADIUS
 1.0% GUTTER GRADE



SLOPES SHOWN
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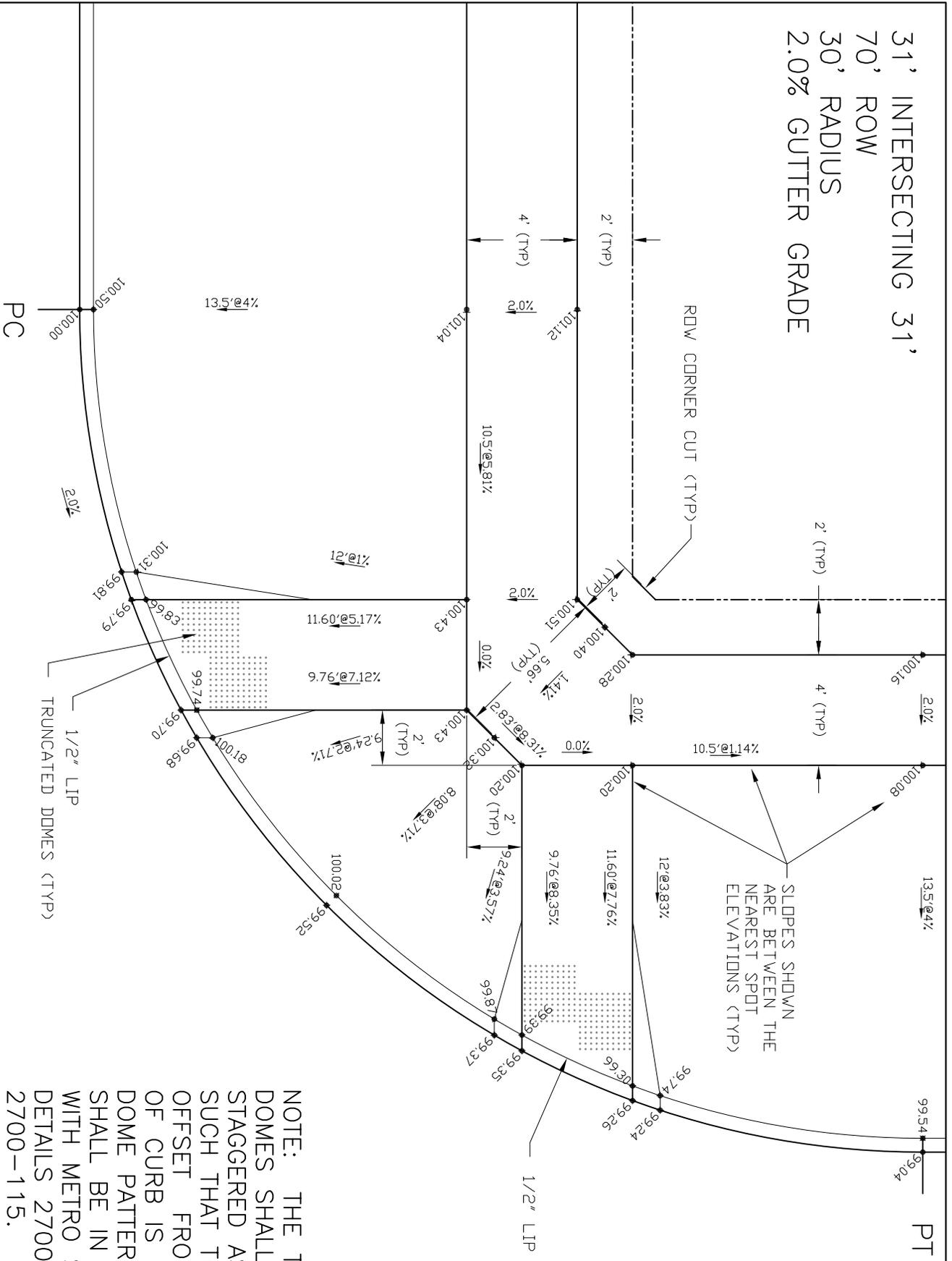
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FILE NO.: SIDEWALK.DWG
 DRAWN BY: JH/JLR
 APPROVED BY: KWD
 DATE: 12/01/04
 SCALE: 1" = 5'

31' INTERSECTION 31'
 70' ROW, 30' RADIUS
 1.0% GUTTER SLOPE



31' INTERSECTING 31'
 70' ROW
 30' RADIUS
 2.0% GUTTER GRADE

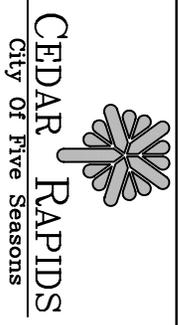


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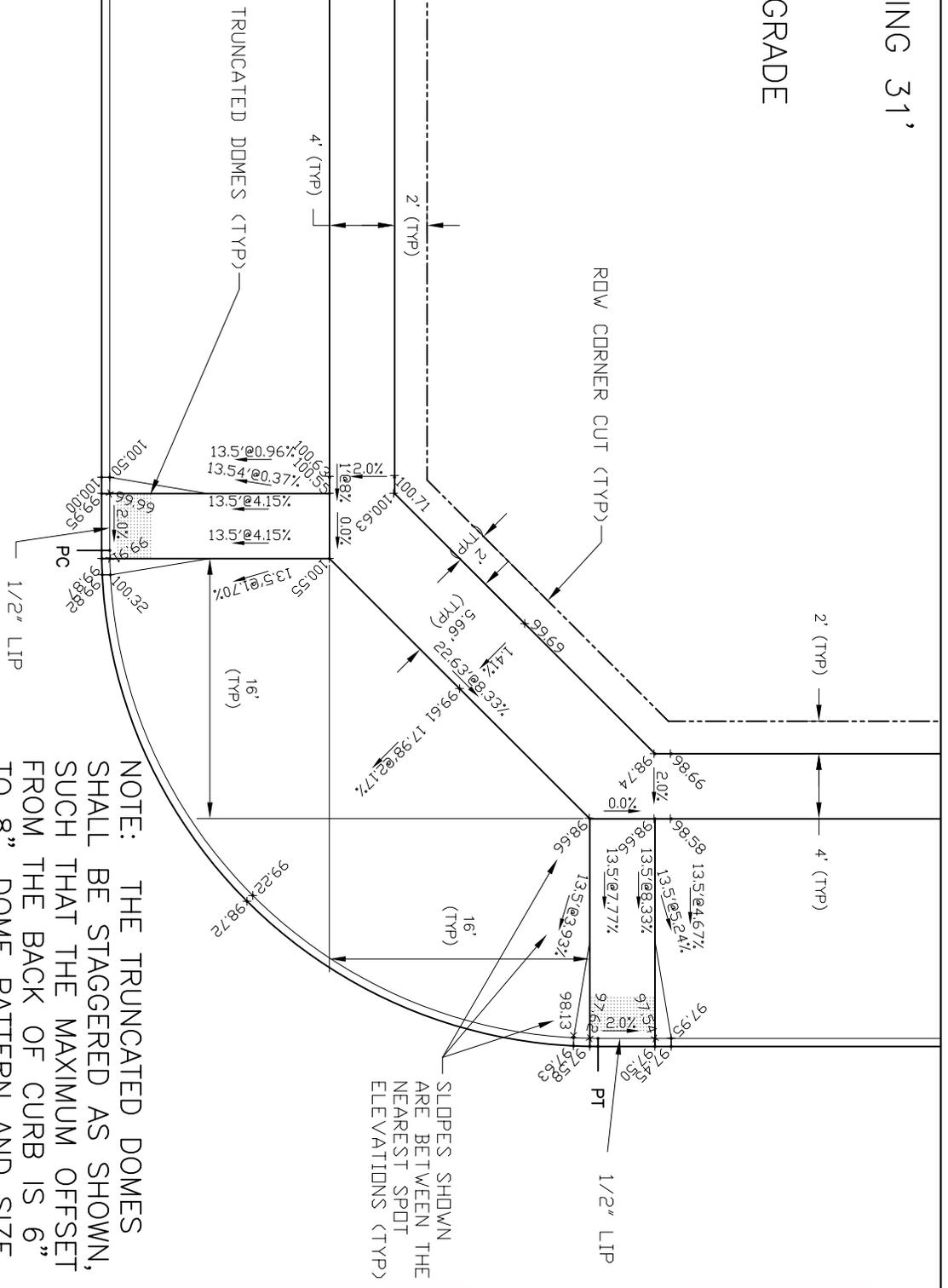
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 DATE: 12/01/04
 SCALE: 1" = 5'

31' INTERSECTION 31'
 70' ROW, 30' RADIUS
 2.0% GUTTER SLOPE



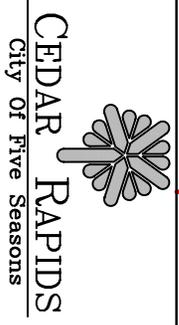
31' INTERSECTING 31'
 70' ROW
 30' RADIUS
 5.0% GUTTER GRADE



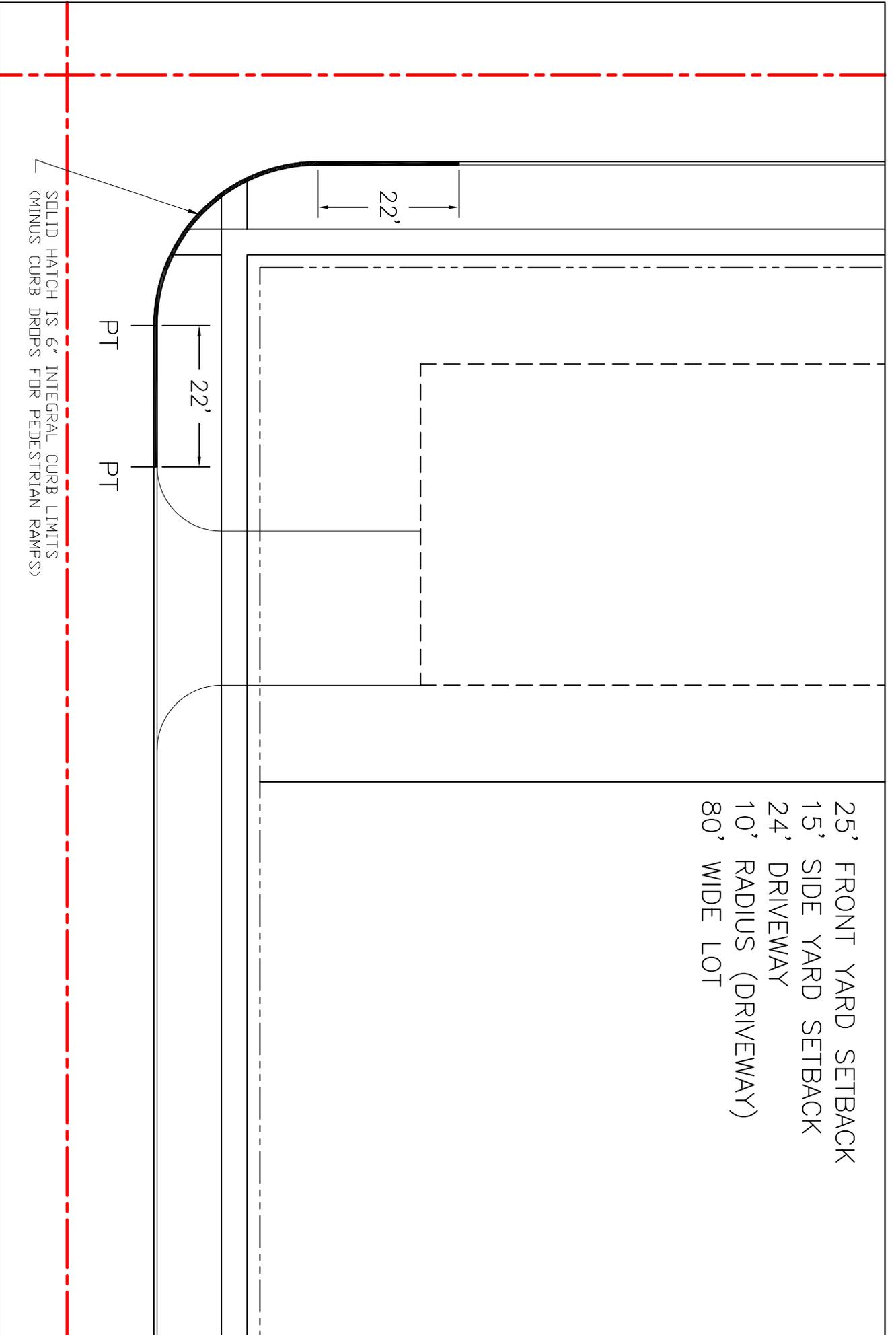
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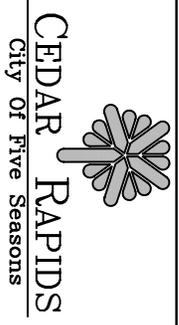


25' FRONT YARD SETBACK
15' SIDE YARD SETBACK
24' DRIVEWAY
10' RADIUS (DRIVEWAY)
80' WIDE LOT

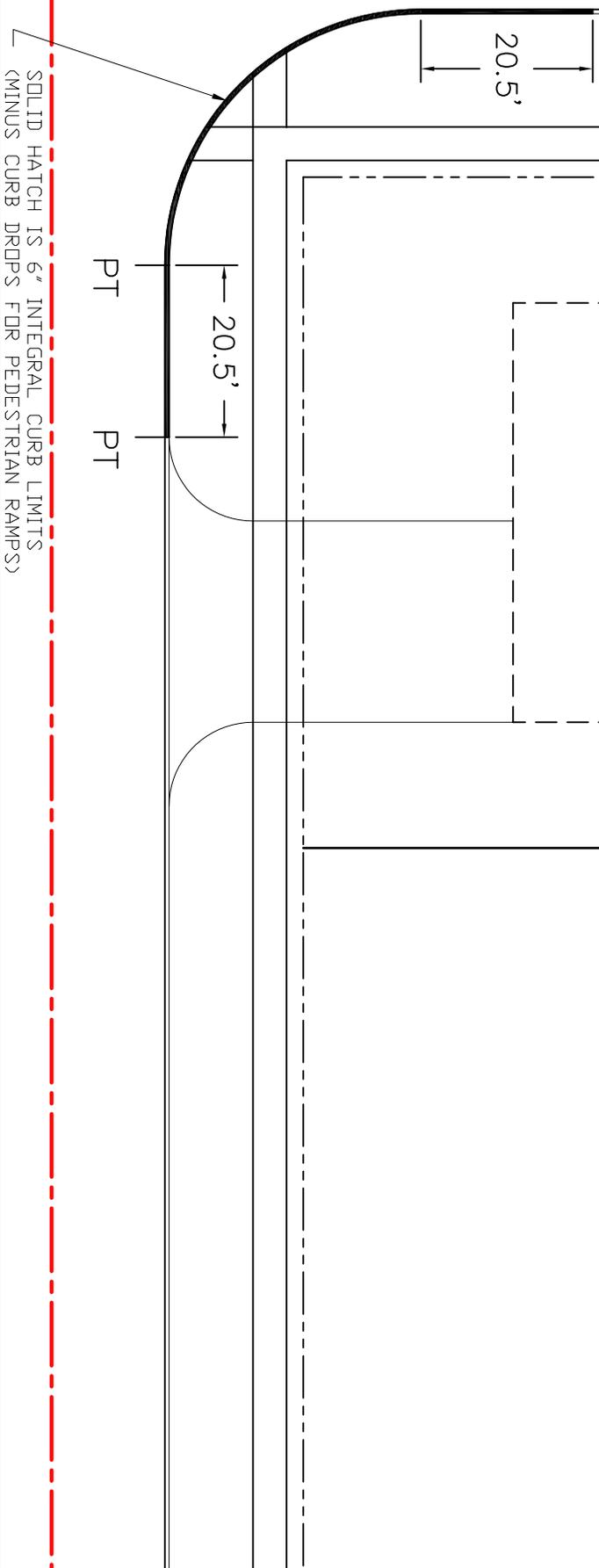


FILE NO.: SIDEWALK.DWG
DRAWN BY: JH/JLR
APPROVED BY: KWD
DATE: 12/01/04
SCALE: 1" = 20'

28' X 28' B-B
60' RDW, 25' RADIUS
DRIVEWAY



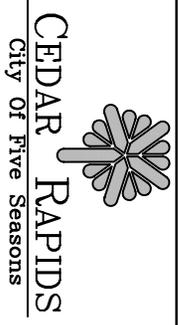
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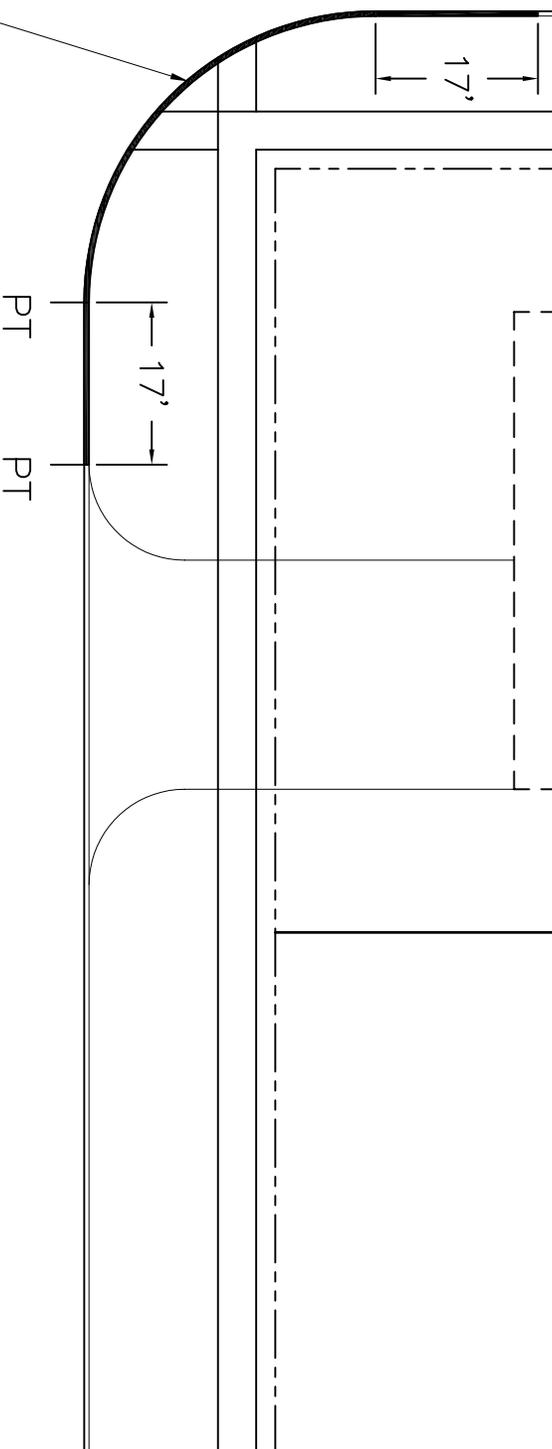
SOLID HATCH IS 6" INTEGRAL CURB LIMITS
(MINUS CURB DROPS FOR PEDESTRIAN RAMPS)

FILE NO.: SIDEWALK.DWG
DRAWN BY: JH/JLR
APPROVED BY: KWD
DATE: 12/01/04
SCALE: 1" = 5'

28' X 31' B-B
60' & 70' ROW, 25' RADIUS
DRIVEWAY



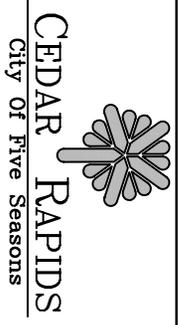
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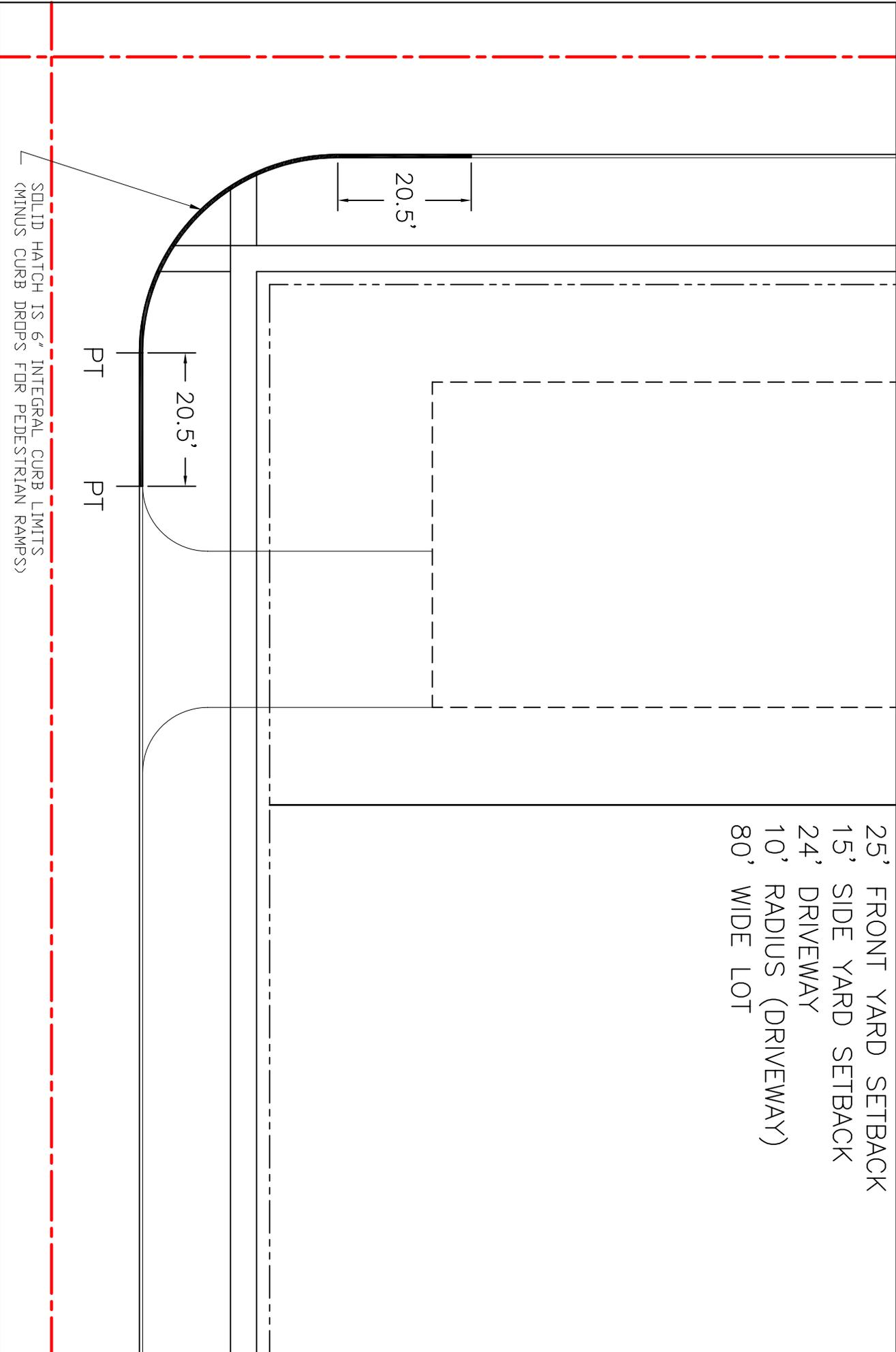
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31' X 28' B-B
70' & 60' ROW, 30' RADIUS
DRIVEWAY



25' FRONT YARD SETBACK
 15' SIDE YARD SETBACK
 24' DRIVEWAY
 10' RADIUS (DRIVEWAY)
 80' WIDE LOT



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31' X 31' B-B
 70' ROW, 30' RADIUS
 DRIVEWAY



**FIGURE 9.1 TYPICAL PAVEMENT/UTILITY SECTION
LOCAL RESIDENTIAL STREET**

