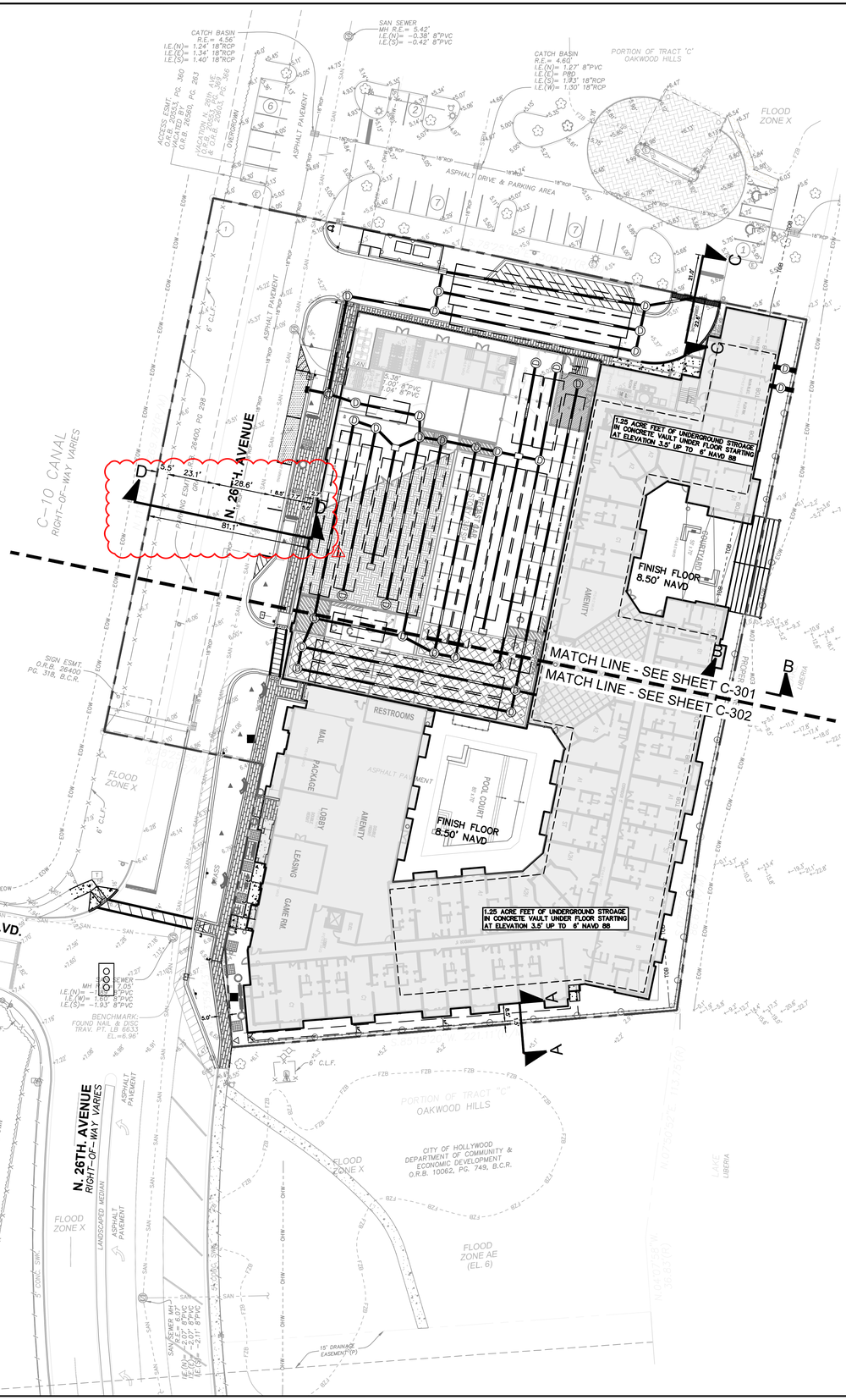

LEGEND

- PROPERTY LINE
- 9.02' — EXISTING SPOT GRADE
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- PROPOSED ±1,506 LF OF EXFILTRATION TRENCH
  380 LF DRY EXFIL
  1126 LF EXFIL
- X.XX% — SLOPES
- X.XX' — SPOT GRADE (NAVD)
- TG X.XX' — TOP OF GRATE (NAVD)
- TOB — LAKE TOP OF BANK
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- A A — CROSS-SECTIONS SEE SHEETS C-301 AND C-302 AND C-351

MATERIAL NOTES:

CONCRETE:
CONCRETE DRIVEWAYS ON PRIVATE PROPERTY WILL BE 5-INCH THICK, 3,000 PSI WITH FIBER MESH WHILE THE PORTION OF THE DRIVEWAY LOCATED WITHIN THE ROW (OUTSIDE OF THE PROPERTY LINES) WILL BE A MINIMUM OF 6 INCHES THICK, 3,000 PSI, WITH NO METAL OR FIBER MESH AND WILL BE CONSTRUCTED FLUSH WITH THE EXISTING ROADWAY AND SIDEWALK. THE ENTIRE DRIVEWAY WILL MAINTAIN CONTROL JOINTS LOCATED EVERY 250 SQ.FT AND THE EXISTING ASPHALT IN THE CITY ROW WILL BE SAWCUT FOR A CLEAN STRAIGHT EDGE.

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PAVER DRIVEWAYS REQUIRE A MINIMUM 2 3/8TH INCH PAVERS PLACED OVER A 1-1/2 INCH SAND BASE AND COMPACTED SUBBASE. IN ADDITION TO A MINIMUM 6-INCH EDGE RESTRAINT (CONCRETE BORDER) IS REQUIRED AROUND PERIMETER TO INTERLOCK PAVERS. THE DRIVEWAY IS TO BE CONSTRUCTED FLUSH WITH THE EXISTING ROADWAY AND THE EXISTING ASPHALT IN THE CITY ROW WILL BE SAWCUT FOR A CLEAN STRAIGHT EDGE.

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THE EXACT SYSTEM DRAINAGE UNDERNEATH THE BUILDING WILL BE DESIGNED AS PART OF THE STRUCTURAL FOUNDATION SYSTEM BUT WILL HAVE A MINIMUM OF 1.25 ACRE-FEET OF STORAGE BASED ON THE CALCULATIONS.

HISTORICAL DRAINAGE PATTERNS ARE BEING PRESERVED ALONG N. 26TH AVE. ANY ADDITIONAL RUNOFF FROM N 26 AVE WILL BE COLLECTED AND TREATED THROUGH A CURB INLET IN THE GUTTER LINE AT THE NORTH WEST CORNER OF THE BUILDING.

NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

ADA NOTE

ANY LIP FROM 1/4" BUT NOT GREATER THAN ½" WILL BE BEVELED TO MEET ADA REQUIREMENTS ALONG ALL SIDEWALKS AND ADA PATHS

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No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG
LICENSE No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

OVERALL PAVING, GRADING AND DRAINAGE PLAN

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-300

Plotted By:Tyron, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-300 August 25, 2025 02:05:17pm K:\VRB_LDEV\147507129 - Oakwood Rest Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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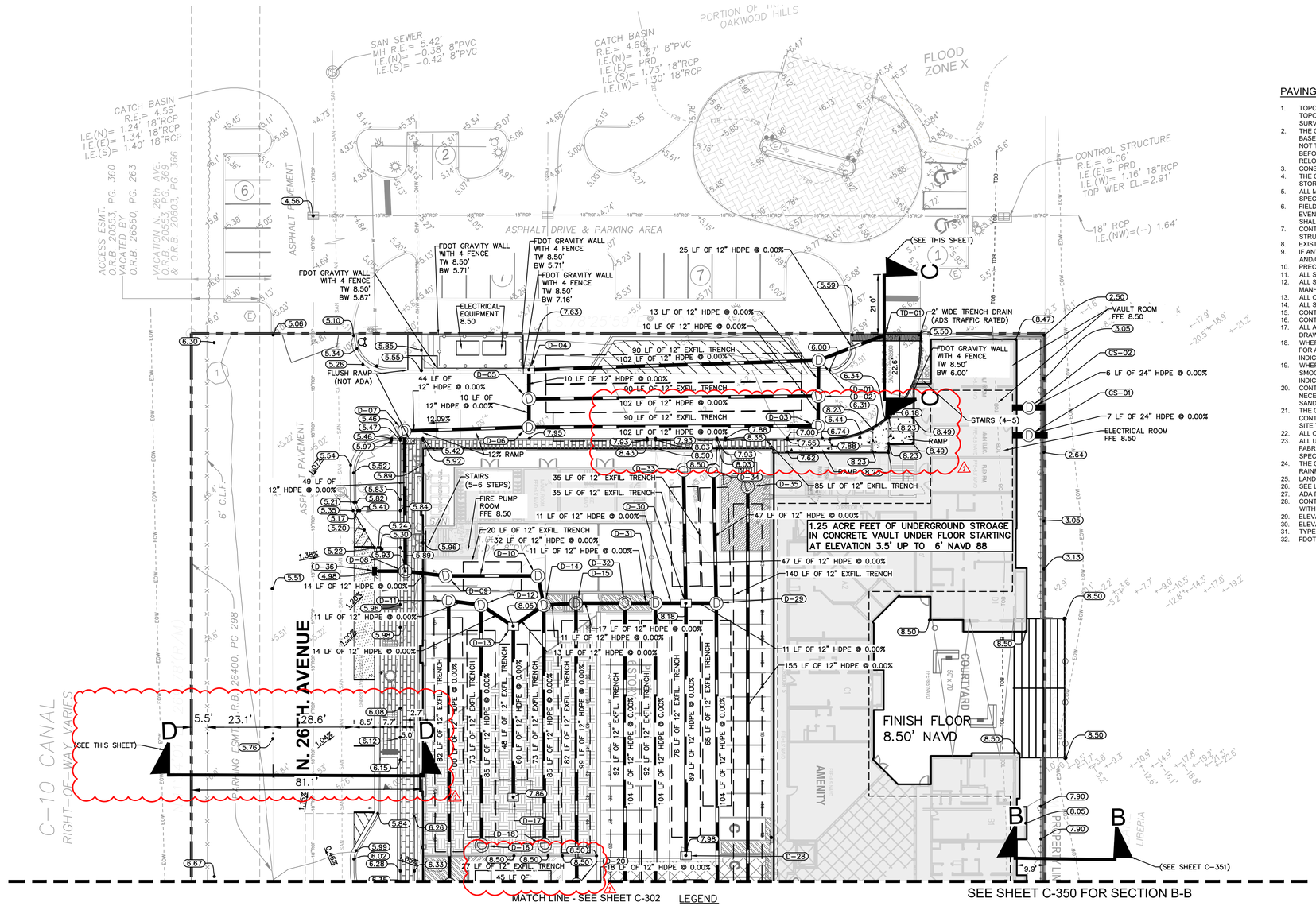

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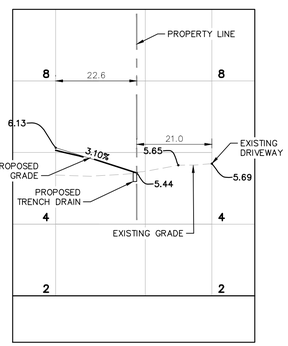
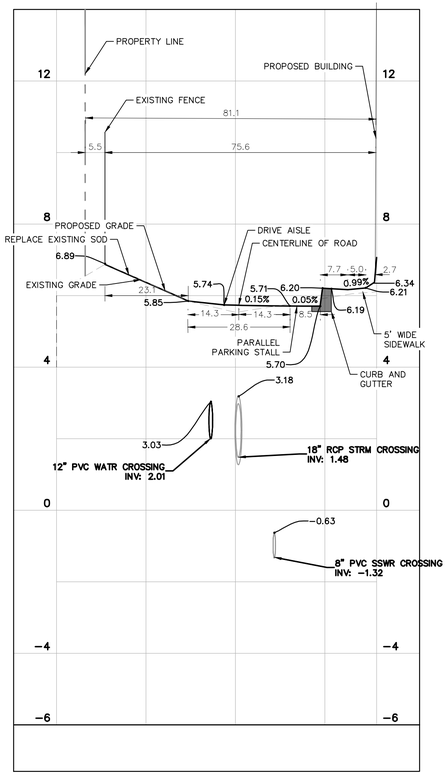


SECTION C-C
1" = 20' HORIZONTAL
1" = 2' VERTICAL



SECTION D-D
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No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
© 2024 KIMLEY-HORN AND ASSOCIATES, INC.
445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

PAVING GRADING AND DRAINAGE ENLARGEMENT

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-301

Plotted By: Tyron, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-301 August 25, 2025 02:05:23pm K:\VRB_LDE\147507129 - Oakwood Rest Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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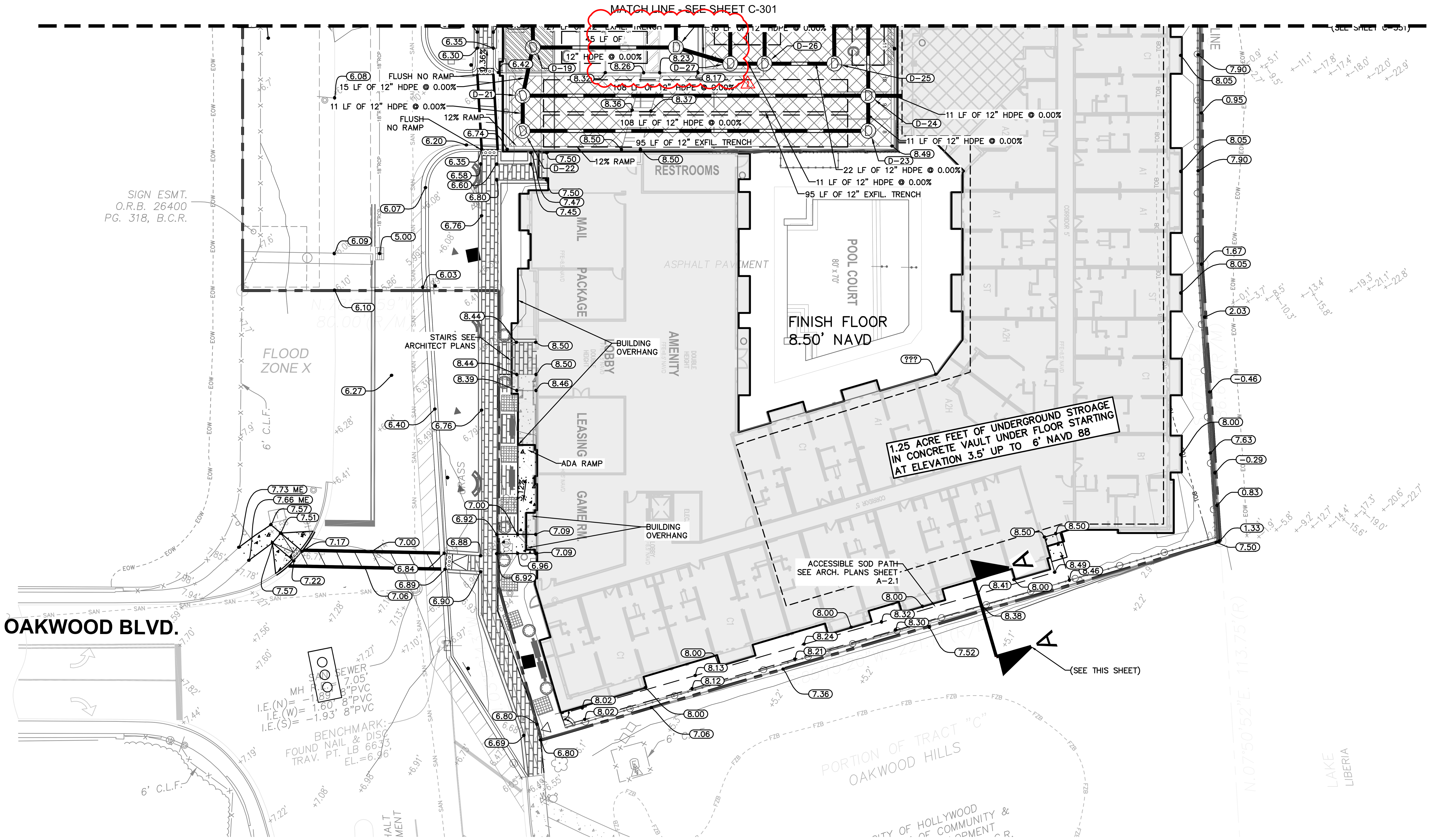

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7. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
8. EXISTING DRAINAGE PIPES AND INLETS TO BE JET CLEANED AND VACUUMED TO REMOVE ALL SILT AND DEBRIS.
9. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
10. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION, IF APPLICABLE.
11. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT, IF APPLICABLE.
12. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER", IF APPLICABLE.
13. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES, IF APPLICABLE.
14. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT, IF APPLICABLE.
15. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
16. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
17. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
18. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
19. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW-CUT THE FULL DEPTH OF EXISTING PAVEMENT FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
20. CONTRACTOR SHALL EXCAVATE EXISTING PAVEMENT/SIDEWALK AREAS THAT ARE TO BE LANDSCAPED A MINIMUM OF 30" OR AS DEEP AS NECESSARY TO ENSURE ALL STONE BASE / PAVEMENT MATERIAL IS REMOVED (WHICHEVER IS GREATER) AND BACKFILL WITH CLEAN / DRAINING SAND TO WITHIN 4" OF TOP OF CURB TO ENSURE PROPER SOIL FOR PLANT MATERIALS.
21. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT OVER-COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
22. ALL CUT OR FILL SLOPES SHALL BE 4H:1V OR FLATTER UNLESS OTHERWISE NOTED.
23. ALL UN-SURFACED AREAS DISTURBED BY GRADING OPERATION SHALL RECEIVE 4 INCHES OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
24. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL RE-GRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
25. LANDSCAPE ISLANDS IN PARKING AREA TO BE BERMED MINIMUM OF 6" ABOVE BACK OF CURB ELEVATION.
26. SEE LANDSCAPE PLAN FOR TREE REMOVAL AND PLANTING.
27. ADA RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 6" IN RISE (8.33% SLOPE MAX).
28. CONTRACTOR TO FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES AND IMMEDIATELY NOTIFY ENGINEER OF RECORD OF ANY CONFLICTS WITH SIGNAGE FOUNDATIONS
29. ELEVATIONS SHOWN AT CURB LINE ARE EDGE OF PAVEMENT UNLESS SPECIFIED OTHERWISE.
30. ELEVATIONS ARE BASED ON NAVD88 DATUM DETERMINED BY GPS OBSERVATIONS, PROVIDED BY SURVEYOR.
31. TYPE C INLETS TO BE MODIFIED FOR H-20 TRAFFIC RATING.
32. FDOT DITCH BOTTOM INLETS TO BE MODIFIED FOR H20 TRAFFIC RATING.

DRAINAGE INFORMATION:

THE PROPOSED DRAINAGE SYSTEM FOR THE BUILDING IS AS FOLLOWS:

ROOF DRAINS WILL TIE DIRECTLY INTO THE UNDERGROUND CONCRETE STORAGE VAULT UNDER THE BUILDING FLOOR.

THE EXFILTRATION TRENCH WILL TREAT THE WATER THEN IT WILL GO BACK THROUGH THE BUILDING AND DISCHARGE INTO THE EXISTING LAKE.

THE EXACT SYSTEM DRAINAGE UNDERNEATH THE BUILDING WILL BE DESIGNED AS PART OF THE STRUCTURAL FOUNDATION SYSTEM BUT WILL HAVE A MINIMUM OF 1.25 ACRE-FEET OF STORAGE BASED ON THE CALCULATIONS.

HISTORICAL DRAINAGE PATTERNS ARE BEING PRESERVED ALONG N. 26TH AVE. ANY ADDITIONAL RUNOFF FROM N 26 AVE WILL BE COLLECTED AND TREATED THROUGH A CURB INLET IN THE GUTTER LINE AT THE NORTH WEST CORNER OF THE BUILDING.

MATERIAL NOTES:

CONCRETE:

CONCRETE DRIVEWAYS ON PRIVATE PROPERTY WILL BE 5-INCH THICK, 3,000 PSI WITH FIBER MESH WHILE THE PORTION OF THE DRIVEWAY LOCATED WITHIN THE ROW (OUTSIDE OF THE PROPERTY LINES) WILL BE A MINIMUM OF 6 INCHES THICK, 3,000 PSI, WITH NO METAL OR FIBER MESH AND WILL BE CONSTRUCTED FLUSH WITH THE EXISTING ROADWAY AND SIDEWALK. THE ENTIRE DRIVEWAY WILL MAINTAIN CONTROL JOINTS LOCATED EVERY 250 SQ.FT AND THE EXISTING ASPHALT IN THE CITY ROW WILL BE SAWCUT FOR A CLEAN STRAIGHT EDGE.

PAVERS:

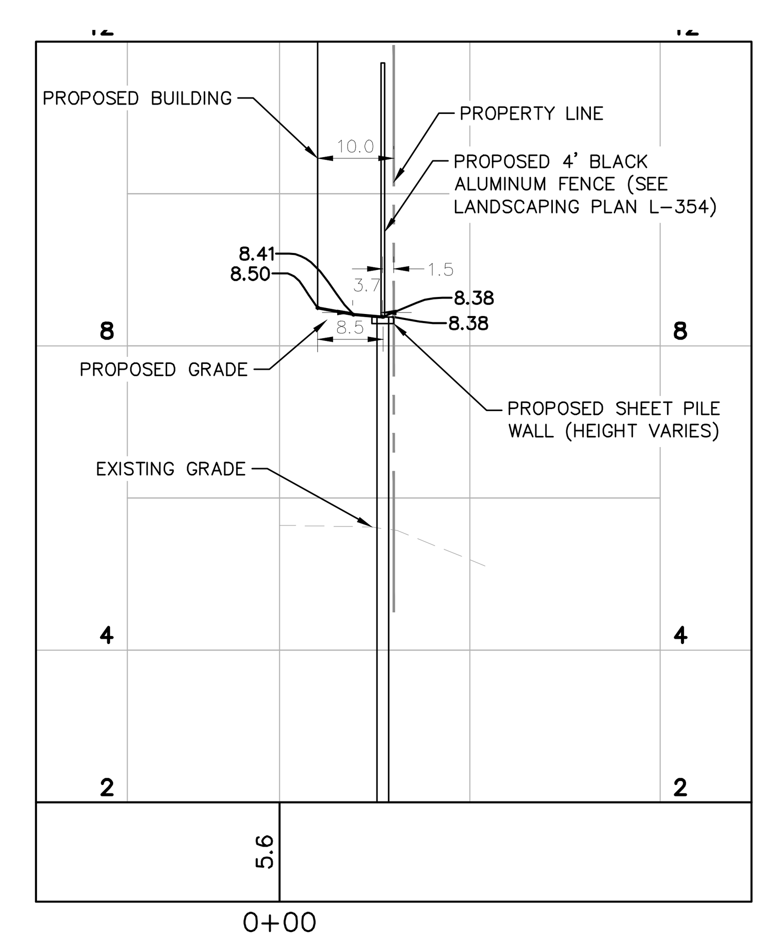
PAVER DRIVEWAYS REQUIRE A MINIMUM 2 3/8TH INCH PAVERS PLACED OVER A 1-1/2 INCH SAND BASE AND COMPACTED SUBBASE. IN ADDITION TO A MINIMUM 6-INCH EDGE RESTRAINT (CONCRETE BORDER) IS REQUIRED AROUND PERIMETER TO INTERLOCK PAVERS. THE DRIVEWAY IS TO BE CONSTRUCTED FLUSH WITH THE EXISTING ROADWAY AND THE EXISTING ASPHALT IN THE CITY ROW WILL BE SAWCUT FOR A CLEAN STRAIGHT EDGE.

ASPHALT:

ASPHALT DRIVEWAY IS REQUIRED TO BE A MINIMUM 6-INCH LIMEROCK BASE, TACK COAT, AND 1-INCH LAYER OF S-III ASPHALT. THE DRIVEWAY IS TO BE CONSTRUCTED FLUSH WITH THE EXISTING ROADWAY AND THE EXISTING ASPHALT IN THE CITY ROW WILL BE SAWCUT FOR A CLEAN STRAIGHT EDGE.

LEGEND

- PROPERTY LINE
- EXISTING SPOT GRADE (9.02')
- PROPOSED STORM PIPE
- PROPOSED STORM INLET
- PROPOSED STORM MANHOLE
- PROPOSED ±1,506 LF OF EXFILTRATION TRENCH 380 LF DRY EXFIL 1126 LF EXFIL
- X.XX% SLOPES
- X.XX' SPOT GRADE (NAVD)
- TG X.XX' TOP OF GRATE (NAVD)
- TOB LAKE TOP OF BANK
- EXISTING SIDEWALK
- PROPOSED SIDEWALK
- A — A CROSS-SECTIONS SEE SHEETS C-301 AND C-302 AND C-351



SECTION A-A

1" = 20' HORIZONTAL
1" = 2' VERTICAL

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

PAVING GRADING AND DRAINAGE ENLARGEMENT

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-302

Plotted By: Tyras, Danny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-302 August 25, 2025 03:50:55pm K:\VRB_LDEV\147507129 - Oakwood Resi Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
CS-01	CS-01 RIM: 8.33 INV IN: 3.50 INV OUT: 1.00	FROM 48, 24" HDPE INV IN: 3.50 @ 0.00%	TO 50, 24" HDPE INV OUT: 1.00 @ 0.00%
CS-02	CS-02 RIM: 9.11 INV IN: 3.50 INV OUT: 1.00	FROM 60, 24" HDPE INV IN: 3.50 @ 0.00%	TO 62, 24" HDPE INV OUT: 1.00 @ 0.00%
D-01	MANHOLE RIM: 6.60 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-04, 12" HDPE INV IN: 3.50 @ 0.00% FROM TD-01, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-02, 12" HDPE INV OUT: 3.50 @ 0.00%
D-02	MH RIM: 6.48 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-01, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-03, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-05, 12" HDPE INV OUT: 3.50 @ 0.00%
D-03	MANHOLE RIM: 6.87 INV IN: 3.50 INV OUT: 3.50	FROM D-02, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-06, 12" HDPE INV OUT: 3.50 @ 0.00%
D-04	CB RIM: 7.63 INV IN: 3.50 INV OUT: 3.50	FROM D-05, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-01, 12" HDPE INV OUT: 3.50 @ 0.00%
D-05	MH RIM: 8.03 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-06, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-02, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-04, 12" HDPE INV OUT: 3.50 @ 0.00%
D-06	MANHOLE RIM: 8.33 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-03, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-07, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-05, 12" HDPE INV OUT: 3.50 @ 0.00%
D-07	MH RIM: 5.74 INV IN: 3.50 INV OUT: 3.50	FROM D-08, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-06, 12" HDPE INV OUT: 3.50 @ 0.00%
D-08	MH RIM: 5.93 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-09, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-07, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-36, 12" HDPE INV OUT: 3.50 @ 0.00%
D-09	MH RIM: 8.40 INV OUT: 3.50 INV OUT: 3.50		TO D-10, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-08, 12" HDPE INV OUT: 3.50 @ 0.00%
D-10	MH RIM: 8.29 INV IN: 3.50 INV OUT: 3.50	FROM D-09, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-14, 12" HDPE INV OUT: 3.50 @ 0.00%
D-11	MANHOLE RIM: 8.38 INV IN: 3.50 INV OUT: 3.50	FROM D-19, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-12, 12" HDPE INV OUT: 3.50 @ 0.00%
D-12	MH RIM: 8.21 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-11, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-13, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-16, 12" HDPE INV OUT: 3.50 @ 0.00%
D-13	CATCH BASIN RIM: 8.05 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-12, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-17, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-14, 12" HDPE INV OUT: 3.50 @ 0.00%
D-14	MH RIM: 8.20 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-13, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-10, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-15, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-18, 12" HDPE INV OUT: 3.50 @ 0.00%
D-15	MANHOLE RIM: 8.28 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-14, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-20, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-32, 12" HDPE INV OUT: 3.50 @ 0.00%
D-16	MH RIM: 8.41 INV IN: 3.50	FROM D-12, 12" HDPE INV IN: 3.50 @ 0.00%	
D-17	CATCH BASIN RIM: 7.86 INV IN: 3.50	FROM D-13, 12" HDPE INV IN: 3.50 @ 0.00%	
D-18	MH RIM: 8.40 INV IN: 3.50	FROM D-14, 12" HDPE INV IN: 3.50 @ 0.00%	

STRUCTURE TABLE

STRUCTURE NAME:	DETAILS:	PIPES IN:	PIPES OUT
D-19	MANHOLE RIM: 7.42 INV OUT: 3.50 INV OUT: 3.50 INV OUT: 3.50		TO D-11, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-20, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-21, 12" HDPE INV OUT: 3.50 @ 0.00%
D-20	MANHOLE RIM: 8.23 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-15, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-19, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-27, 12" HDPE INV OUT: 3.50 @ 0.00%
D-21	MANHOLE RIM: 7.37 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-22, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-19, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-24, 12" HDPE INV OUT: 3.50 @ 0.00%
D-22	MANHOLE RIM: 7.35 INV OUT: 3.50 INV OUT: 3.50		TO D-23, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-21, 12" HDPE INV OUT: 3.50 @ 0.00%
D-23	MANHOLE RIM: 8.43 INV IN: 3.50 INV IN: 3.50	FROM D-22, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-24, 12" HDPE INV IN: 3.50 @ 0.00%	
D-24	MANHOLE RIM: 8.33 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-21, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-35, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-23, 12" HDPE INV OUT: 3.50 @ 0.00% TO 47, 12" HDPE INV OUT: 3.50 @ 0.00%
D-25	MH RIM: 8.17 INV IN: 3.50 INV OUT: 3.50	FROM D-29, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-26, 12" HDPE INV OUT: 3.50 @ 0.00%
D-26	MANHOLE RIM: 8.21 INV IN: 3.50 INV IN: 3.50 INV IN: 3.50	FROM D-31, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-27, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-25, 12" HDPE INV IN: 3.50 @ 0.00%	
D-27	MANHOLE RIM: 8.31 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-20, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-32, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-26, 12" HDPE INV OUT: 3.50 @ 0.00%
D-28	CATCH BASIN RIM: 7.98 INV IN: 3.50	FROM D-30, 12" HDPE INV IN: 3.50 @ 0.00%	
D-29	MH RIM: 8.28 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-30, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-25, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-34, 12" HDPE INV OUT: 3.50 @ 0.00%
D-30	CATCH BASIN RIM: 8.18 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-31, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-28, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-29, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-33, 12" HDPE INV OUT: 3.50 @ 0.00%
D-31	MANHOLE RIM: 8.25 INV IN: 3.50 INV OUT: 3.50 INV OUT: 3.50	FROM D-32, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-26, 12" HDPE INV OUT: 3.50 @ 0.00% TO D-30, 12" HDPE INV OUT: 3.50 @ 0.00%
D-32	MANHOLE RIM: 8.29 INV IN: 3.50 INV IN: 3.50 INV OUT: 3.50	FROM D-27, 12" HDPE INV IN: 3.50 @ 0.00% FROM D-15, 12" HDPE INV IN: 3.50 @ 0.00%	TO D-31, 12" HDPE INV OUT: 3.50 @ 0.00%
D-33	MH RIM: 8.22 INV IN: 3.50	FROM D-30, 12" HDPE INV IN: 3.50 @ 0.00%	
D-34	MH RIM: 8.12 INV IN: 3.50	FROM D-29, 12" HDPE INV IN: 3.50 @ 0.00%	
D-35	MH RIM: 8.33 INV OUT: 3.50		TO D-24, 12" HDPE INV OUT: 3.50 @ 0.00%
D-36	CURB INLET RIM: 6.05 INV IN: 3.50	FROM D-08, 12" HDPE INV IN: 3.50 @ 0.00%	
TD-01	TRENCH DRAIN RIM: 4.60 INV OUT: 3.50		TO D-01, 12" HDPE INV OUT: 3.50 @ 0.00%

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

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8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

DRAINAGE STRUCTURE TABLE

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-350

Plotted By: Tyron, Donny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-350 DRAINAGE STRUCTURE TABLE August 25, 2025 02:05:33pm K:\VRB_LDEV\147507129 - Oakwood Resi Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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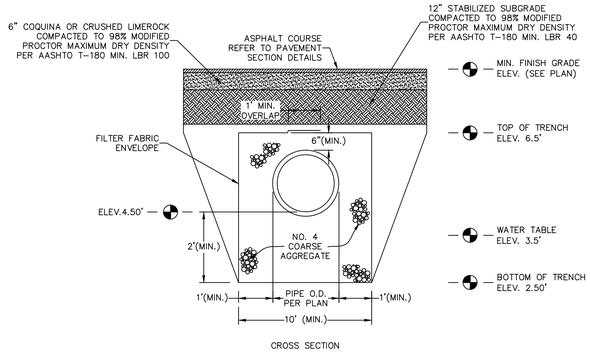
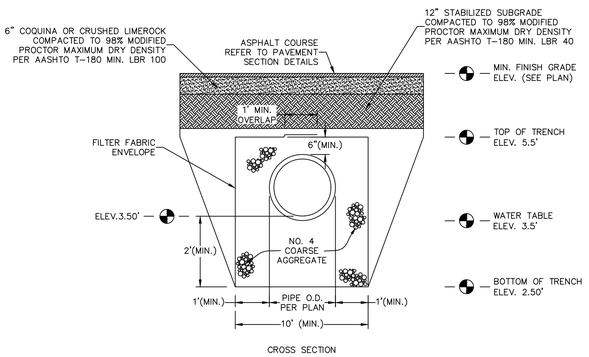


CROSS SECTION

DRY EXFILTRATION TRENCH

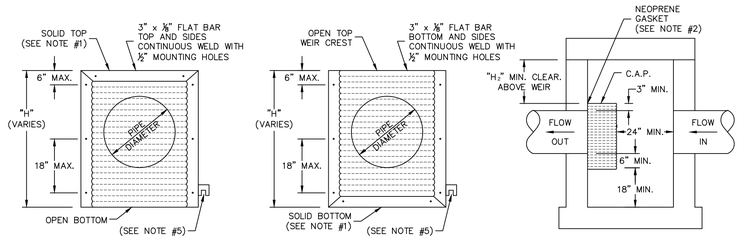
N.T.S



CROSS SECTION

WET EXFILTRATION TRENCH

N.T.S



FRONT VIEW

P.R.B. DETAIL

FRONT VIEW

WEIR DETAIL

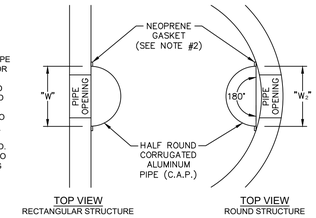
SIDE VIEW

WEIR SIZE PER PLAN

PIPE DIAM.	W (IN)	W_2 (IN)	T (GAUGE)	H_2 (IN)
15"	21"	21"	16	6
18"	24"	24"	16	7
21"	30"	30"	16	8
24"	30"	36"	16	10
30"	36"	42"	14	13
36"	42"	48"	14	16
42"	48"	54"	14	20
48"	54"	60"	14	23
54"	60"	66"	14	26

"W" RECTANGULAR STRUCTURE
"W_2" ROUND STRUCTURE

NOTES:
1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING AT THE TOP FOR THE BAFFLE OR BOTTOM FOR WEIR.
2. NEOPRENE ADHESIVE BACKED GASKET, OR APPROVED EQUAL (1" x 2") SHALL BE INSTALLED ON THE SIDES AND TOP OF ALL BAFFLES OR BOTTOM OF WEIRS.
3. POLLUTION RETARDANT BAFFLE OR HALF PIPE WEIR TO BE FASTENED IN PLACE WITH ½" x 4" STAINLESS STEEL "RED HEADS", OR APPROVED EQUAL.
4. FIBERGLASS BAFFLES AND WEIRS ARE NOT PERMITTED.
5. MOUNTING BRACKETS MAY BE ADDED TO FLAT BARS TO EASE INSTALLATION IN ROUND STRUCTURES. SPACING TO MATCH HOLES IN FLAT BARS.

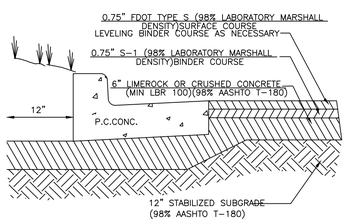


TOP VIEW
RECTANGULAR STRUCTURE

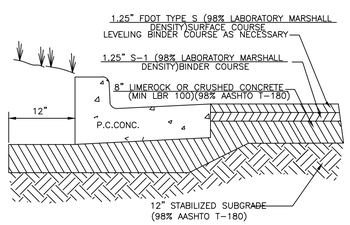
TOP VIEW
ROUND STRUCTURE

POLLUTION RETARDANT BAFFLE (PRB) AND WEIR DETAILS

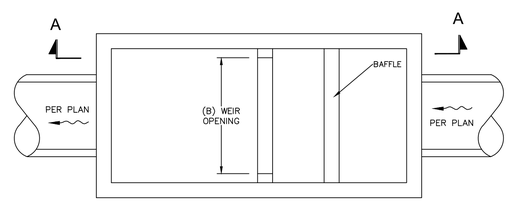
N.T.S



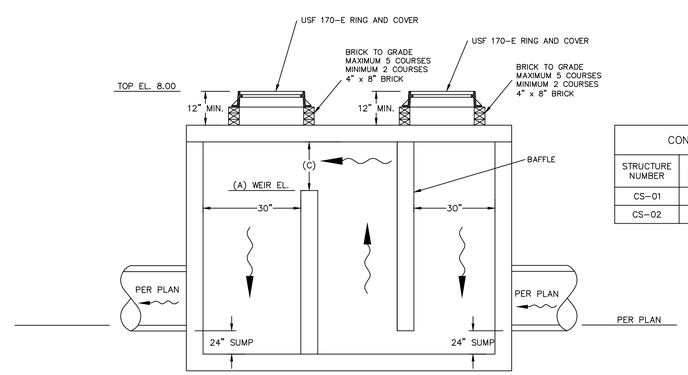
STANDARD DUTY
ASPHALT PAVING



HEAVY DUTY
ASPHALT PAVING



PLAN VIEW



CONTROL STRUCTURE DATA			
STRUCTURE NUMBER	(A) WEIR ELEVATION	(B) WEIR SPAN (INCHES)	(C) WEIR RISE (INCHES)
CS-01	5.5000	48	12
CS-02	5.5000	48	12

SECTION A-A

CONTROL STRUCTURE (CS-01, CS-02)

N.T.S

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

PAVING GRADING AND DRAINAGE PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-351

Plotted By:Tyron, Donny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-350 August 25, 2025 02:05:35pm K:\VRB_LDEV\147507129 - Oakwood Reid Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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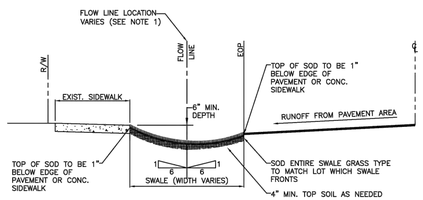
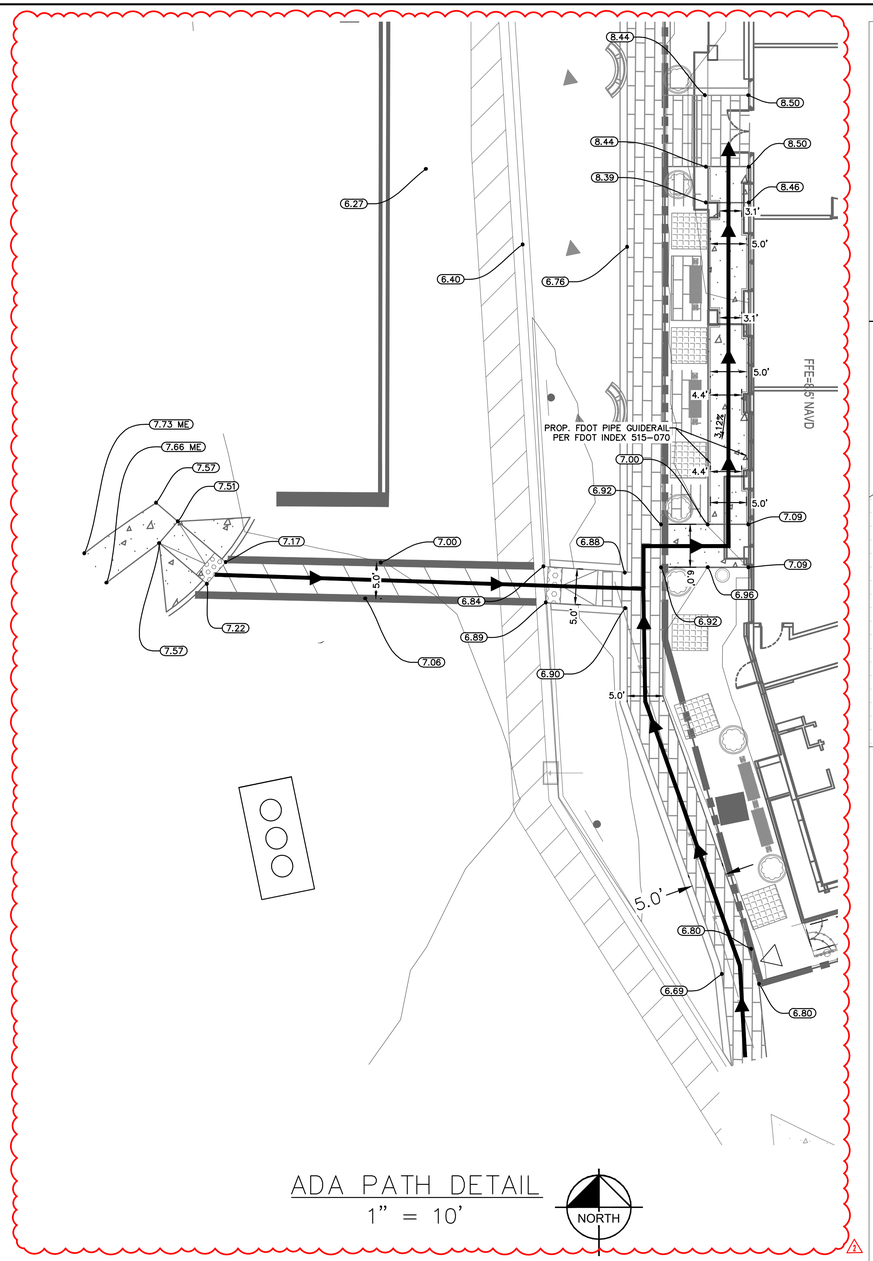


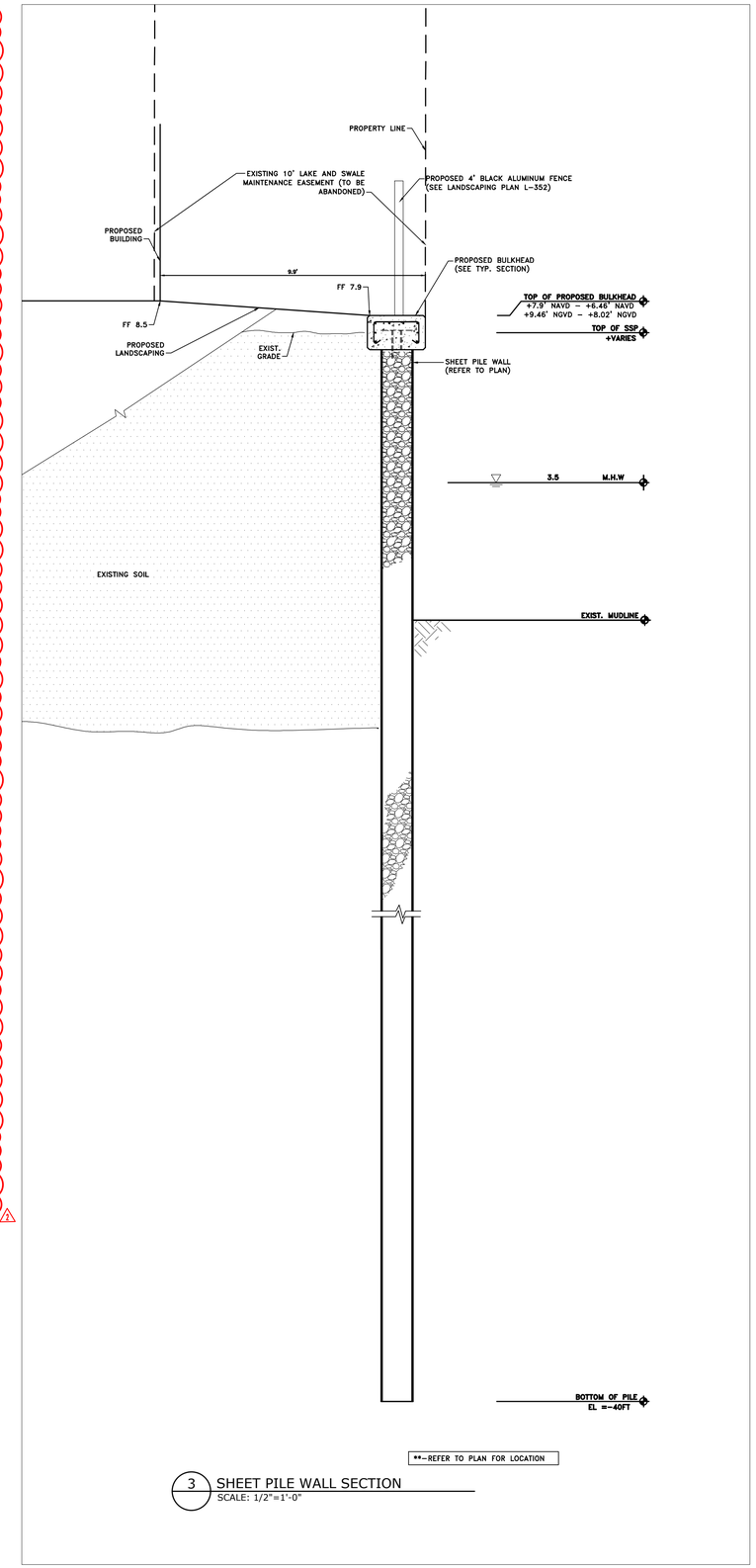
NOTES:

1. HORIZONTAL BOTTOM (FLOW LINE) OF SWALE LOCATION IS TO BE PLACED AT THE POINT WHERE 6:1 SLOPE FROM THE EDGE OF S/W AND 6:1 SLOPE FROM EDGE OF PAVEMENT MEET.
2. TOP OF SOD ELEVATION AS SHOW ABOVE.

ISSUED: MAY 2023	DEPARTMENT OF DEVELOPMENT SERVICES ENGINEERING, TRANSPORTATION & MOBILITY DIVISION	REVISED: –	
DRAWN: EG	TYPICAL SWALE GRADING	DRAWING NO.: C–33	
APPROVED: JG			



ADA PATH DETAIL
1" = 10'



3 SHEET PILE WALL SECTION
SCALE: 1/2"=1'-0"

SECTION B-B

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

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8/25/2025

GREGORY D. WILFONG
LICENSE
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY SHB
CHECKED BY GDW

PAVING GRADING AND DRAINAGE PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT
CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-352

Plotted By:Tyros, Donny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-351 August 25, 2025 02:05:42pm K:\VRB_LDEV\147507129 – Oakwood Resi Towers\CAD\PlanSheets\C-300 PAVING GRADING AND DRAINAGE PLAN.dwg
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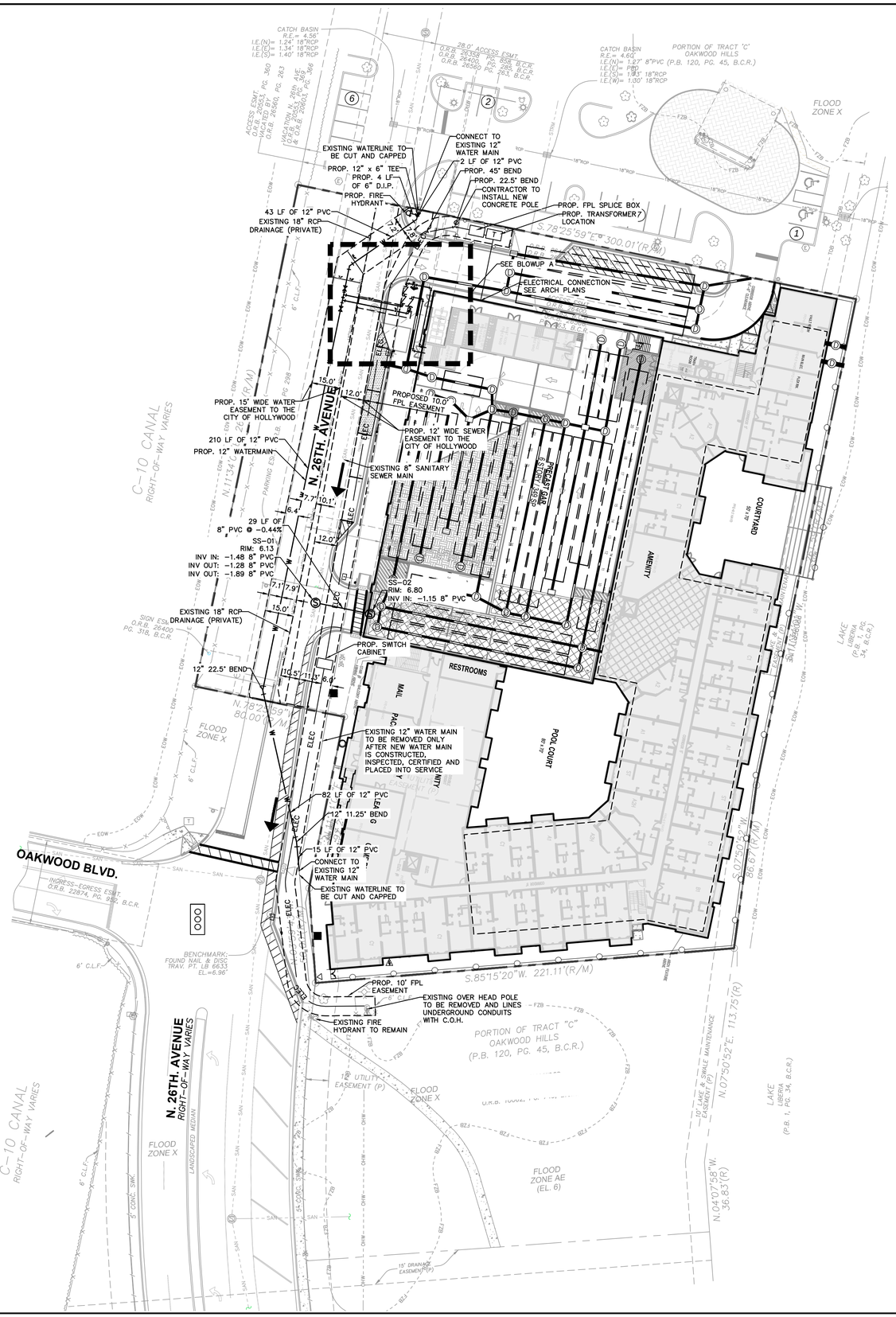


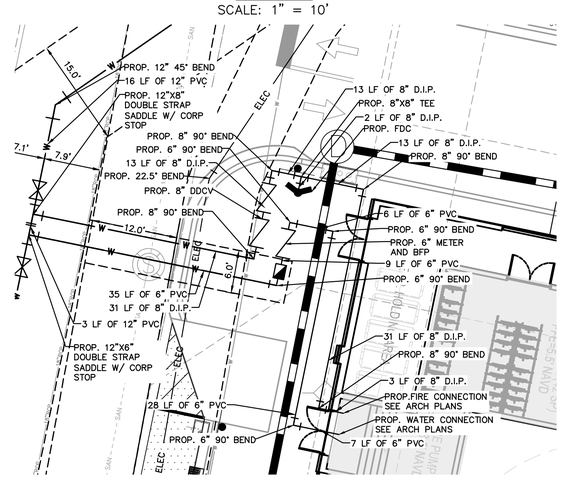
NORTH

GRAPHIC SCALE IN FEET
0 15 30 60

UTILITY LEGEND

- PROPERTY LINE
- UTILITY EASEMENT
- WATER MAIN (WM)
- SANITARY MAIN
- ELECTRIC
- GAS
- STORM PIPE
- FDC
- GATE VALVE
- 90° BEND
- 45° BEND
- 22.5° BEND
- 11.25° BEND
- TEE
- SEWER MANHOLE
- TRANSFORMER
- EXISTING SEWER MANHOLE
- PROP. UPLIGHTS (SEE LANDSCAPIN
- PROP. LIGHTPOLE

BLOW UP A
SCALE: 1" = 10'



UTILITY NOTES

1. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
2. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
3. SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
   8" PVC SDR35 PER ASTM D 3034, FOR PIPES LESS THAT 12' DEEP
   8" PVC SDR26 PER ASTM D 3034, FOR PIPES MORE THAN 12' DEEP
   6" PVC SCHEDULE 40
   DUCTILE IRON PIPE PER AWWA C150
4. WATER LINES SHALL BE AS FOLLOWS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER COUNTY ROADS, OTHERWISE CLASS 150
   6" AND LARGER DUCTILE IRON PIPE PER AWWA C150
   SMALLER THAN 6" EITHER COPPER TUBE TYPE "L" (SOFT) PER ANSI 816.22 OR PVC, 200 P.S.I., PER ASTM D1784 AND D2241.
5. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
6. ALL WATER JOINTS ARE TO BE MECHANICAL JOINTS WITH THRUST BLOCKING AS CALLED OUT IN SPECIFICATIONS.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4'-0" COVER ON ALL WATERLINES.
9. IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATER LINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE. MEETING REQUIREMENTS OF ANSI A21.10 OR ANSI 21.11 (AWWA C-151) (CLASS 50).
10. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS WITHIN PAVED AREAS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATER TIGHT LIDS WITHIN LANDSCAPED AREAS.
12. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH AT 3000 P.S.I.
13. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
14. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
15. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES (ANY CITY) WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
16. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
17. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
18. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
19. REFER TO BUILDING PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
20. UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
21. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING WATER MAINS, FORCE MAINS, SANITARY SEWER AND STORM MAINS AND MAINTAIN MINIMUM CLEARANCES BETWEEN WATER MAINS AND OTHER UTILITIES AT ALL POINTS ALONG THEIR LENGTH AS REQUIRED IN THE PLANS, DETAILS AND SPECIFICATIONS.
23. CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED 30 DAYS PRIOR TO STORE POSSESSION.
24. THE ENTIRE FIRE SERVICE FROM BUILDING TO CONNECTION POINT IS TO BE INSTALLED BY A LICENSED UTILITY CONTRACTOR HOLDING A "CONTRACTOR V" LICENSE IN ACCORDANCE WITH CH. 489 OF THE FLORIDA STATUTES.
25. ALL UTILITY MAIN LENGTHS SHOWN ARE APPROXIMATE.

FIRE UTILITY NOTE

1. ALL UNDERGROUND FIRE MAIN WORK MUST BE COMPLETED BY FIRE PROTECTION CONTRACTOR HOLDING A CLASS I, II, OR V LICENSE PER FS 633.102.
2. WATER SUPPLY AND ANY NEW HYDRANTS SHALL BE IN PLACE PRIOR TO ACCUMULATION OF COMBUSTIBLE MATERIALS PER NFPA 1 (2021 ED.) SECTION 16.5.3.1.1.
3. BE ADVISED THAT NFPA 1 (2021 EDITION) SECTION 11.10.2 REQUIRES THAT MINIMUM RADIO SIGNAL STRENGTH FOR FIRE DEPARTMENT COMMUNICATIONS SHALL BE MAINTAINED AT A LEVEL DETERMINED BY THE AHJ FOR ALL NEW AND EXISTING BUILDINGS. --- IF AT ANY TIME (INCLUDING THE CONSTRUCTION PHASE), FIRE DEPARTMENT PERSONNEL DETERMINE THAT THE MINIMUM RADIO SIGNAL STRENGTH IS NOT BEING MET, A TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEM MAY BE REQUIRED TO BE INSTALLED AS DETERMINED BY THE AHJ.

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

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8/25/2025

GREGORY D. WILFONG
LICENSE
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY SHB
DRAWN BY
CHECKED BY GDW

UTILITY PLAN

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-400

Plotted By:Tyrop, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-400 UTILITY PLAN August 25, 2025 12:39:45pm K:\VRB_LDEV\147507129 - Oakwood East Towers\CAD\PlanSheets\C-400 UTILITY PLAN.dwg
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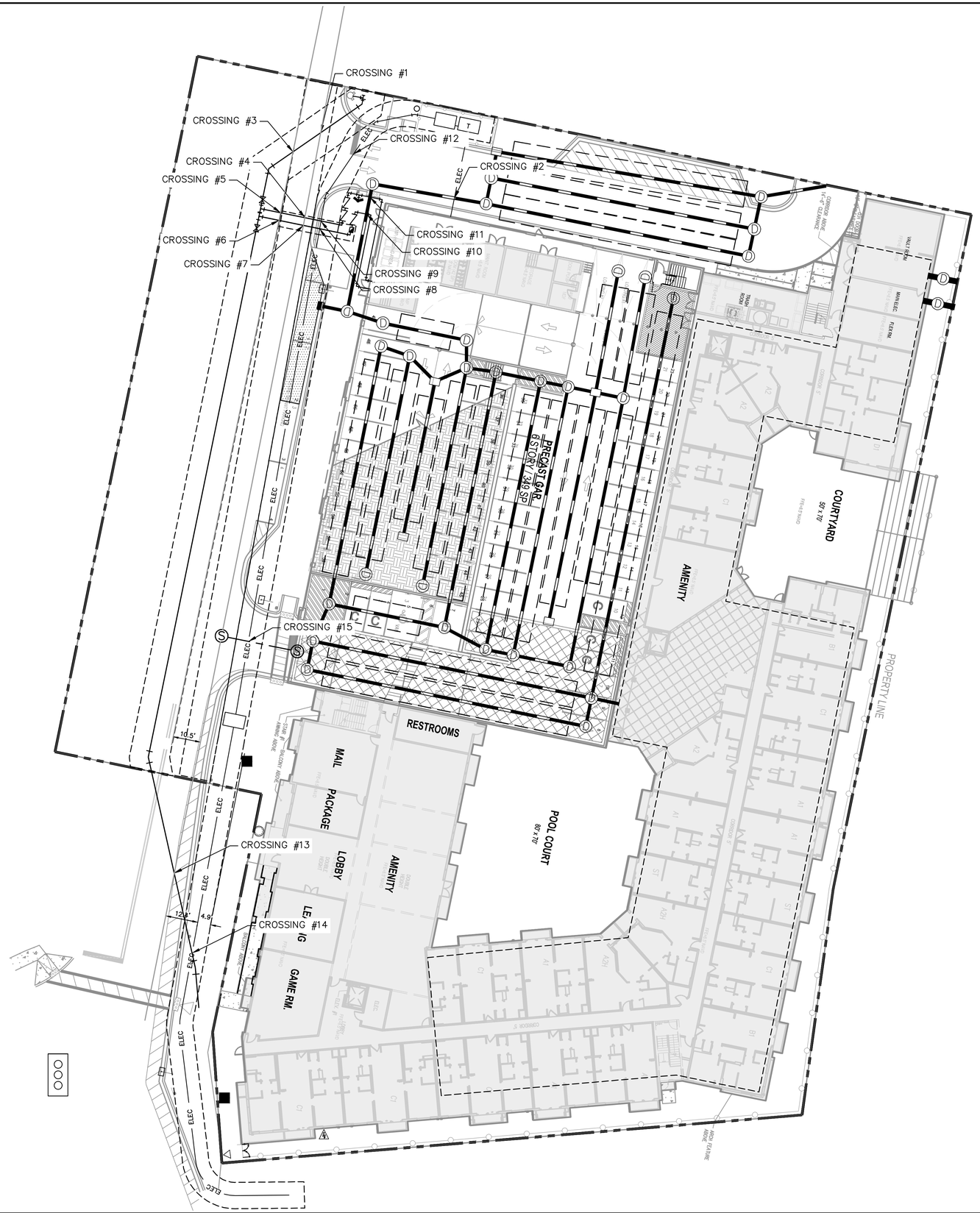

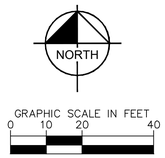

UTILITY CROSSING TABLE		
CROSSING	UTILITIES	BOTTOM AND TOP EL.
1	12" WATER	4.48
	EX. 8" SEWER	−0.17
2	12" STORM	3.48
	ELECTRIC	2.48
3	12" WATER	4.48
	EX. 8" SEWER	3.14
4	EX. 8" SEWER	−1.01
	12" WATER	−2.11
5	EX. 18" STORM	1.23
	6" WATER	−2.11
6	EX. 18" STORM	1.23
	6" WATER	−2.28
7	EX. 8" SEWER	−1.02
	6" WATER	−2.28
8	6" WATER	−2.78
	ELECTRIC	−3.78
9	6" WATER	−2.78
	ELECTRIC	−3.78
10	12" STORM	0.50
	6" WATER	−2.28
11	12" STORM	0.50
	6" WATER	−2.28
12	12" STORM	−3.00
	ELECTRIC	−4.00
13	12" WATER	−1.99
	8" SEWER	−0.95
14	12" WATER	−1.99
	ELECTRIC	−2.99
15	8" SEWER	−1.23
	ELECTRIC	−2.99

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

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8/25/2025

GREGORY D. WILFONG
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KHA PROJECT 147507129
DATE 8/25/2025
SCALE AS SHOWN
DESIGNED BY GDW
DRAWN BY RL
CHECKED BY GDW

UTILITY CROSSINGS

OAKWOOD EAST MULTI FAMILY PROJECT
CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
C-401

Plotted By:Tyras, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-401 UTILITY CROSSINGS August 25, 2025 12:39:58pm K:\WRB_LDEV\147507129 - Oakwood Real Towers\CAD\PlanSheets\C-401 UTILITY CROSSINGS PLAN.dwg
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GENERAL NOTES:

1. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF THE WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

2. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES, ENGINEERING AND CONSTRUCTION SERVICES DIVISION (ECSD), AND ALL OTHER LOCAL, STATE AND NATIONAL CODES, WHERE APPLICABLE.

3. LOCATIONS, ELEVATIONS, SIZES, MATERIALS, ALIGNMENTS, AND DIMENSIONS OF EXISTING FACILITIES, UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS; AND DO NOT PURPORT TO BE ABSOLUTELY CORRECT. ALSO, THERE MAY HAVE BEEN OTHER IMPROVEMENTS, UTILITIES, ETC., WITHIN THE PROJECT AREA WHICH WERE CONSTRUCTED AFTER THE PREPARATION OF THESE PLANS AND/OR THE ORIGINAL SITE SURVEY. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ANY FACILITIES SHOWN OR NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE RESPECTIVE UTILITY OWNER.

4. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES TO ARRANGE FOR THE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.

5. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT, AND TO ENSURE THAT EXISTING UTILITIES ARE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS APPROVED OTHERWISE BY THE UTILITY OWNER.

6. CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY CASTINGS INCLUDING VALVE BOXES, MANHOLES, HAND-HOLES, PULL-BOXES, STORMWATER INLETS, AND SIMILAR STRUCTURES IN CONSTRUCTION AREA TO BE OVERLAID WITH ASPHALT PAVEMENT.

7. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION AND ENVIRONMENTAL PERMITS PRIOR TO THE START OF CONSTRUCTION.

8. THE CONTRACTOR SHALL NOTIFY ECSD AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION.

9. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND INSTALLATION OF THE PROPOSED IMPROVEMENTS, SHOP DRAWINGS SHALL BE SUBMITTED TO ECSD IN ACCORDANCE WITH THE CONTRACT DOCUMENT'S REQUIREMENTS, FOR APPROVAL. IN ADDITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ANY OTHER AGENCY SHOP DRAWING APPROVAL, IF REQUIRED.

10. THE CONTRACTOR SHALL NOTIFY ECSD IMMEDIATELY FOR ANY CONFLICT ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS. THIS WORK BY THE CONTRACTOR SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

11. ELEVATIONS SHOWN ARE IN FEET AND ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	GENERAL NOTES	DRAWING NO.
APPROVED: XXX		G-00

GENERAL NOTES (CONTINUED):

12. CITY OF HOLLYWOOD SHALL NOT PROVIDE STAGING / STORAGE AREA. CONTRACTOR SHALL SECURE STAGING / STORAGE AREA AS NECESSARY FOR CONSTRUCTION WORK.

13. CONTRACTOR SHALL HAUL AWAY EXCESSIVE STOCKPILE OF SOIL FOR DISPOSAL EVERY DAY. NO STOCKPILE SOIL IS ALLOWED TO BE LEFT ON THE CONSTRUCTION SITE OVER NIGHT.

14. CONTRACTOR SHALL CLEAN / SWEEP THE ROAD AT LEAST ONCE DAY OR AS REQUIRED BY THE ENGINEER.

15. CONTRACTOR SHALL PROTECT CATCH BASINS WITHIN / ADJACENT TO THE CONSTRUCTION SITE AS REQUIRED BY NPDES REGULATIONS.

16. THE CITY OF HOLLYWOOD HAS A NOISE ORDINANCE (CHAPTER 100) WHICH PROHIBITS EXCAVATION AND CONSTRUCTION BEFORE 8:00 A.M. AND AFTER 6:00 P.M., MONDAY THROUGH SATURDAY AND ALL DAY SUNDAY.

17. SUITABLE EXCAVATED MATERIAL SHALL BE USED IN FILL AREAS. NO SEPARATE PAY ITEM FOR THIS WORK, INCLUDE COST IN OTHER ITEMS.

18. ALL ROAD CROSSINGS ARE OPEN CUT AS PER THE REQUIREMENTS OF THE ECSD UNLESS OTHERWISE NOTED ON THE DRAWINGS.

19. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS, PARKING LOTS, SIDEWALKS, ETC. TO SATISFY THE INSTALLATION OF THE PROPOSED IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY ECSD FIELD ENGINEER.

20. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT. IN CASE WORK ON PRIVATE PROPERTY IS NEEDED, A CITY OF HOLLYWOOD "RIGHT OF ENTRY" FORM MUST BE SIGNED BY PROPERTY OWNER AND THE DIRECTOR OF PUBLIC UTILITIES. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ACCESS AT ALL TIMES TO PRIVATE HOMES/BUSINESSES.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, CAUSED TO ANY IRRIGATION SYSTEM (PRIVATE OR PUBLIC) ACCIDENTALLY OR PURPOSELY. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES TO MATCH OR EXCEED EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE CITY.

22. MAIL BOXES, FENCES OR OTHER PRIVATE PROPERTY DAMAGED DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS SHALL BE REPLACED TO MATCH OR EXCEED EXISTING CONDITION.

23. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT STANDARDS AND CITY OF HOLLYWOOD DEPARTMENT OF PUBLIC UTILITIES STANDARDS.

24. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE ECSD FIELD ENGINEER.

25. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY TREE REMOVAL OR RELOCATION PERMITS FROM THE CITY OF HOLLYWOOD BUILDING DEPARTMENT FOR TREES LOCATED IN THE PUBLIC RIGHT OF WAY.

26. IT IS THE INTENT OF THESE PLANS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE REGULATORY STANDARDS / REQUIREMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF ECSD.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	GENERAL NOTES (CONTINUED)	DRAWING NO.
APPROVED: XXX		G-00.1

GENERAL NOTES (CONTINUED):

27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS TO EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., PRIOR TO BEGINNING WORK IN ANY AREA.

28. WHERE NEW PAVEMENT MEETS EXISTING, CONNECTION SHALL BE MADE IN A NEAT STRAIGHT LINE AND FLUSH WITH EXISTING PAVEMENT TO MATCH EXISTING CONDITIONS.

29. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR LEAVE EXCAVATED TRENCHES, OR PARTS OF, EXPOSED OR OPENED AT THE END OF THE WORKING DAY, WEEKENDS, HOLIDAYS OR OTHER TIMES, WHEN THE CONTRACTOR IS NOT WORKING, UNLESS OTHERWISE DIRECTED. ALL TRENCHES SHALL BE COVERED, FIRMLY SECURED AND MARKED ACCORDINGLY FOR PEDESTRIAN / VEHICULAR TRAFFIC.

30. ALL EXCAVATED MATERIAL REMOVED FROM THIS PROJECT SHALL BE DISPOSED OF OFF THE PROPERTY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

31. ALL DUCTILE IRON PRODUCTS SHALL BE DOMESTIC MADE HEAVY DUTY CLASSIFICATION SUITABLE FOR HIGHWAY TRAFFIC LOADS, OR 20,000 LB.

32. ALL GRASSED AREAS AFFECTED BY CONSTRUCTION SHALL BE RE-SODDED.

33. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROVISION, INSTALLATION AND MAINTENANCE OF ALL TRAFFIC CONTROL AND SAFETY DEVICES, IN ACCORDANCE WITH SPECIFICATIONS OF THE LATEST REVISION OF FDOT DESIGN STANDARDS. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR THE RESETTING OF ALL TRAFFIC CONTROL AND INFORMATION SIGNAGE REMOVED DURING THE CONSTRUCTION PERIOD.

34. EXCAVATED OR OTHER MATERIAL STORED ADJACENT TO OR PARTIALLY UPON A ROADWAY PAVEMENT SHALL BE ADEQUATELY MARKED FOR TRAFFIC SAFETY AT ALL TIMES.

35. TEMPORARY PATCH MATERIAL MUST BE ON THE JOB SITE WHENEVER PAVEMENT IS CUT, OR THE CITY'S INSPECTOR WILL SHUT THE JOB DOWN.

36. CONTRACTOR MUST PROVIDE FLASHER ARROW SIGNAL FOR ANY LANE THAT IS CLOSED OR DIVERTED.

37. CONTRACTOR SHALL NOTIFY LAW ENFORCEMENT AND FIRE PROTECTION SERVICES TWENTY-FOUR (24) HOURS IN ADVANCE OF TRAFFIC DETOUR IN ACCORDANCE WITH SECTION 336.07 OF FLORIDA STATUTES.

38. CONTRACTOR TO RESTORE PAVEMENT TO ORIGINAL CONDITION AS REQUIRED.

39. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING DEWATERING PER SPECIFICATION SECTION 02140 DEWATERING.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	GENERAL NOTES (CONTINUED)	DRAWING NO.
APPROVED: XXX		G-00.2

GENERAL NOTES (CONTINUED):

40. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 811 OR 1-800-432-4770 (SUNSHINE ONE-CALL OF FLORIDA).

Always call 811 two full business days before you dig

Sunshine811.com

41. WHEN PVC PIPE IS USED, A METALLIZED MARKER TAPE SHALL BE INSTALLED CONTINUOUSLY 18" ABOVE THE PIPE. THE MARKER TAPE SHOULD BE IMPRINTED WITH A WARNING THAT THERE IS BURIED PIPE BELOW. THE TAPE SHALL BE MAGNA TEC, AS MANUFACTURED BY THOR ENTERPRISES INC. OR APPROVED EQUAL.

42. ALL CONNECTIONS TO EXISTING MAINS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. WATER CONNECTIONS SHALL BE METERED, AND THE COST OF WATER AND TEMPORARY METER SHALL BE BORNE BY THE CONTRACTOR.

43. A COMPLETE AS-BUILT SURVEY SHALL BE ACCURATELY RECORDED OF THE UTILITY SYSTEM DURING CONSTRUCTION. AS-BUILT SURVEY SHALL BE SUBMITTED TO ECSD SIGNED AND SEALED BY A FLORIDA REGISTERED SURVEYOR PRIOR TO FINAL INSPECTION AND ACCEPTANCE OF PROJECT. THE COST OF SIGNED AND SEALED AS-BUILTS SHALL BE COVERED IN OVERALL BID. THE AS-BUILT SURVEY SHALL INCLUDE:

   a. PLAN VIEW SHOWING THE HORIZONTAL LOCATIONS OF EACH MANHOLE, INLET, VALVE, FITTING, BEND AND HORIZONTAL PIPE DEFLECTIONS WITH COORDINATES AND IN REFERENCE TO A SURVEY BASELINE OR RIGHT-OF-WAY CENTERLINE.

   b. THE PLAN VIEW SHALL ALSO SHOW SPOT ELEVATIONS OF THE TOP OF THE MAIN (WATER MAIN AND FORCE MAIN) OR PIPE INVERTS (GRAVITY MAINS) AT INTERVALS NOT TO EXCEED 100 FEET AS MEASURED ALONG MAIN. THE PLAN VIEW SHALL ALSO INCLUDE SPOT ELEVATIONS AT EACH MANHOLE, INLET, VALVE, FITTING, BEND AND VERTICAL PIPE DEFLECTION.

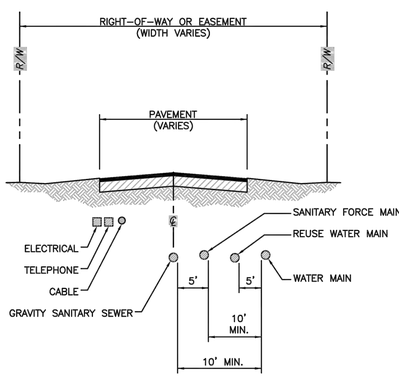
   c. THE PLAN VIEW SHALL ALSO SHOW THE HORIZONTAL SEPARATION FROM UNDERGROUND UTILITIES IMMEDIATELY ADJACENT OR PARALLEL TO THE NEW MAIN.

   d. PROFILE VIEW WITH SPOT ELEVATIONS OF THE TOP OF THE MAIN (WATER MAIN AND FORCE MAIN) OR PIPE INVERT (GRAVITY MAIN) AND OF THE FINISHED GRADE OR MANHOLE RIM DIRECTLY ABOVE THE MAIN AT INTERVALS NOT TO EXCEED 100 FEET AS MEASURED ALONG THE MAIN. THE PROFILE VIEW SHALL ALSO INCLUDE SPOT ELEVATIONS AT EACH MANHOLE, INLET, VALVE, FITTING, BEND AND VERTICAL PIPE DEFLECTION.

   e. THE PROFILE VIEW SHALL SHOW ALL UNDERGROUND UTILITIES CROSSING THE NEW MAIN AND THE VERTICAL SEPARATION PROVIDED BETWEEN THAT UNDERGROUND UTILITY AND THE NEW MAIN.

   f. ALL CADD FILES MUST BE CREATED FOLLOWING THE CITY OF HOLLYWOOD "SURVEY / AS-BUILT CAD DRAWING STANDARDS"

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	GENERAL NOTES (CONTINUED)	DRAWING NO.
APPROVED: XXX		G-00.3



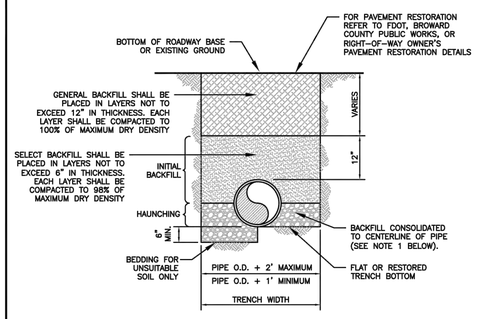
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL UTILITY ACCOMMODATION WITHIN RIGHT-OF-WAY OR EASEMENT	DRAWING NO.
APPROVED: XXX		G-01

WATER MAIN SEPARATION IN ACCORDANCE WITH F.A.C. RULE 62-555.314

OTHER PIPE	HORIZONTAL SEPARATION	CROSSING (1), (4)	JOINT SPACING @ CROSSING (FULL JOINT CENTERED) (8)
STORM SEWER, STORM WATER FORCE MAIN, RECLAIMED WATER (2)	WATER MAIN 3 ft minimum	WATER MAIN 12 inches is the minimum except for storm sewer, then 6 inches is the minimum and 12 inched is preferred	Alternate 3 ft minimum WATER MAIN
GRAVITY SANITARY SEWER, (3) SANITARY SEWER FORCE MAIN, RECLAIMED WATER	WATER MAIN 10 ft prefered 6 ft minimum	WATER MAIN 12 inches is the minimum except for gravity sewer, then 6 inches is the minimum and 12 inched is preferred	Alternate 6 ft minimum WATER MAIN
ON-SITE SEWAGE TREATMENT & DISPOSAL SYSTEM	10 ft minimum	———	———

1. WATER MAIN SHOULD CROSS ABOVE OTHER PIPE, WHEN WATER MAIN MUST BE BELOW OTHER PIPE, THE MINIMUM SEPARATION IS 12 INCHES.
2. RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
3. 3 FT. FOR GRAVITY SANITARY SEWER WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST 6 INCHES ABOVE THE TOP OF THE GRAVITY SANITARY SEWER.
4. 18" VERTICAL MINIMUM SEPARATION REQUIRED BY CITY OF HOLLYWOOD, UNLESS OTHERWISE APPROVED.
5. A MINIMUM 6 FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.
6. IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
7. WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 18 INCHES IN A PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SANITARY SEWER OR FORCE MAIN SHALL BE CONSTRUCTED OF DIP WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).
8. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALY RESTRAINED.

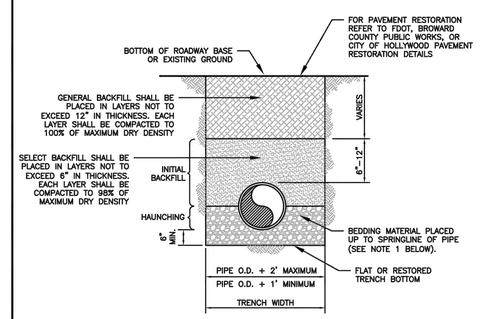
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	SEPARATION REQUIREMENTS OF F.D.E.P.	DRAWING NO.
APPROVED: XXX		G-01.1



NOTES:

1. WHEN PIPE INSTALLATION IS ABOVE THE GROUND WATER TABLE ELEVATION, OR WHENEVER BEDDING COPPER PIPE UNDER ANY CONDITION, BEDDING MATERIAL SHALL BE CLEAN SANDY SOIL IF AVAILABLE WITHIN THE LIMITS OF CONSTRUCTION. IMPORTED BEDDING SHALL BE WELL GRADED, WASHED CRUSHED STONE (OR DRAINFIELD LIMEROCK). CRUSHED STONE SHALL CONSIST OF HARD, DURABLE, SUB-ANGULAR PARTICLES OF PROPER SIZE AND GRADATION, AND SHALL BE FREE FROM ORGANIC MATERIAL, WOOD, TRASH, SAND, LOAM, CLAY, EXCESS FINES, AND OTHER DELETERIOUS MATERIALS.
2. ALL BEDDING MATERIAL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY BEFORE ANY PIPE IS LAID. FOR ADDITIONAL MATERIAL SPECIFICATIONS REFER TO SPECIFICATION SECTION 02222, "EXCAVATION AND BACKFILL FOR UTILITIES".
3. DENSITY TESTING SHALL BE IN ACCORDANCE WITH AASHTO T-180 AND ASTM D-3017.
4. BACKFILL TO COMPLY WITH FDOT DESIGN STANDARDS 125-8.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	PIPE LAYING CONDITION TYPICAL SECTION (D.I.P.)	DRAWING NO.
APPROVED: XXX		G-02



NOTES:

1. WHEN PIPE INSTALLATION IS ABOVE THE GROUND WATER TABLE ELEVATION, OR WHENEVER BEDDING COPPER PIPE UNDER ANY CONDITION, BEDDING MATERIAL SHALL BE CLEAN SANDY SOIL IF AVAILABLE WITHIN THE LIMITS OF CONSTRUCTION. IMPORTED BEDDING SHALL BE WELL GRADED, WASHED CRUSHED STONE (OR DRAINFIELD LIMEROCK). CRUSHED STONE SHALL CONSIST OF HARD, DURABLE, SUB-ANGULAR PARTICLES OF PROPER SIZE AND GRADATION, AND SHALL BE FREE FROM ORGANIC MATERIAL, WOOD, TRASH, SAND, LOAM, CLAY, EXCESS FINES, AND OTHER DELETERIOUS MATERIALS.
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3. DENSITY TESTING SHALL BE IN ACCORDANCE WITH AASHTO T-180 AND ASTM D-3017.
4. BACKFILL TO COMPLY WITH FDOT DESIGN STANDARD 125-8.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	PIPE LAYING CONDITION TYPICAL SECTION (P.V.C.)	DRAWING NO.
APPROVED: XXX		G-03

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG
LICENSE
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT SHALL NOT BE CONSIDERED VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF THE SIGNING PROFESSIONAL ENGINEER. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FL

SHEET NUMBER
C-450

Plotted By: Tyros, Danny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-450 UTILITY PLAN DETAILS August 25, 2025 12:40:15pm K:\VRB_LDEV\147507129 - Oakwood Real Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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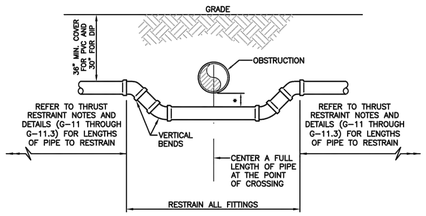
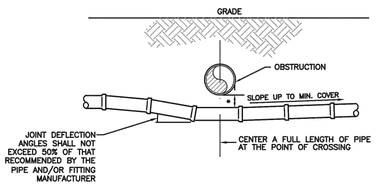


UTILITY CROSSING USING FITTINGS

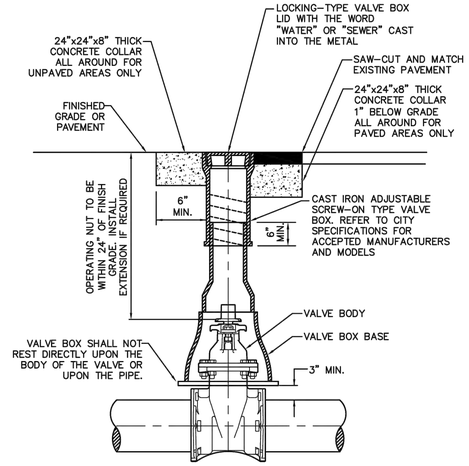
* REFER TO STANDARD DETAIL G-01.1, "SEPARATION REQUIREMENTS", FOR FDEP AND HEALTH DEPARTMENT SEPARATION REQUIREMENTS.



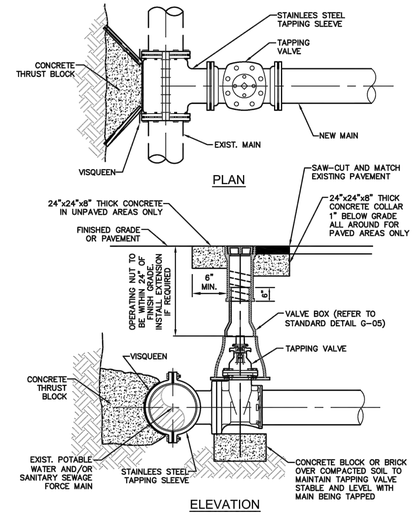
UTILITY CROSSING USING JOINT DEFLECTIONS

* REFER TO STANDARD DETAIL G-01.1, "SEPARATION REQUIREMENTS", FOR FDEP AND HEALTH DEPARTMENT SEPARATION REQUIREMENTS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	UTILITY CROSSING DETAIL	DRAWING NO.
APPROVED: XXX		G-04

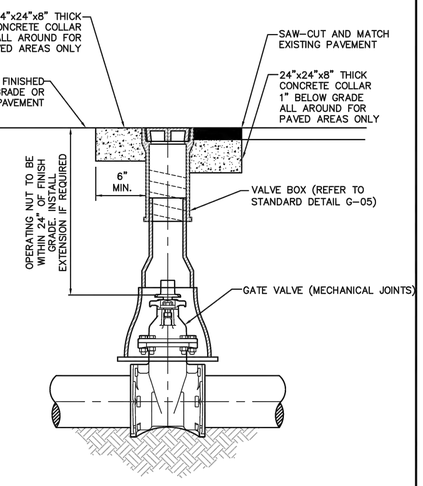


ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL VALVE BOX SETTING	DRAWING NO.
APPROVED: XXX		G-05



NOTES:
1. NOTIFY THE CITY OF HOLLYWOOD 48 HOURS IN ADVANCE OF PROPOSED TAP.
2. TAPPING MUST BE DONE IN THE PRESENCE OF AN AUTHORIZED CITY REPRESENTATIVE.
3. TEMPORARY THRUST BLOCKS TO BE INSTALLED AND REMAIN IN PLACE DURING TAPPING OPERATIONS.
4. FOR SEWAGE FORCE MAINS, REFER TO DETAIL OF PRIVATE FORCE MAIN TIE-IN AT PROPERTY LINE.
5. FOR WATER MAINS, A GATE VALVE OF SAME DIAMETER SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF THE TAPPING VALVE.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL TAPPING SLEEVE AND VALVE SETTING	DRAWING NO.
APPROVED: XXX		G-06



ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL GATE VALVE AND VALVE BOX SETTING	DRAWING NO.
APPROVED: XXX		G-07

RESILIENT SEATED GATE VALVE SPECIFICATIONS:

4" THROUGH 12" SIZE
(WATER AND FORCE MAIN)

1. GATE VALVES SHALL BE RESILIENT SEATED, MANUFACTURED TO MEET OR EXCEED THE REQUIREMENTS OF AWWA C509 (LATEST REVISION) AND IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

1.1. VALVES SHALL HAVE AN UNOBSTRUCTED WATERWAY EQUAL TO OR GREATER THAN THE FULL NOMINAL DIAMETER OF THE VALVE.

1.2. THE VALVES ARE TO BE NON-RISING STEM WITH THE STEM MADE OF CAST, FORGED OR ROLLED BRONZE SHOWN IN AWWA C509, TWO STEM SEALS SHALL BE PROVIDED AND SHALL BE OF THE O-RING TYPE, ONE ABOVE AND ONE BELOW THE THRUST COLLAR WITH LUBRICANT BETWEEN O-RING.

1.3. THE STEM NUT, ALSO MADE OF BRONZE, MAY BE INDEPENDENT OF THE GATE OR CAST INTEGRALLY WITH THE GATE. IF THE STEM NUT IS CAST INTEGRALLY, THE THREADS SHALL BE STRAIGHT AND TRUE WITH THE AXIS OF THE STEM TO AVOID BINDING DURING THE OPENING OR CLOSING CYCLE.

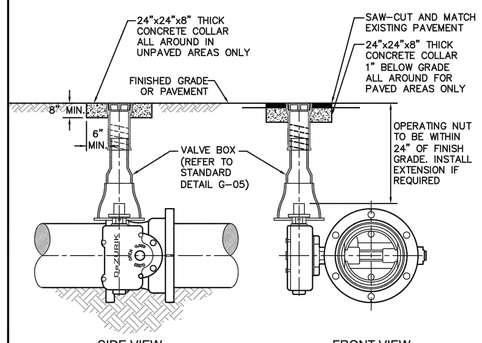
1.4. THE SEALING MECHANISM SHALL CONSISTS OF A CAST IRON GATE HAVING A VULCANIZED SYNTHETIC RUBBER COATING OR A RUBBER SEAT MECHANICALLY RETAINED ON THE GATE, THE RESILIENT SEALING MECHANISM SHALL PROVIDE ZERO LEAKAGE AT THE WATER WORKING PRESSURE WHEN INSTALLED WITH THE LINE FLOW IN EITHER DIRECTION.

1.5. A 2-INCH SQUARE WRENCH NUT SHALL BE PROVIDED FOR OPERATING THE VALVE.

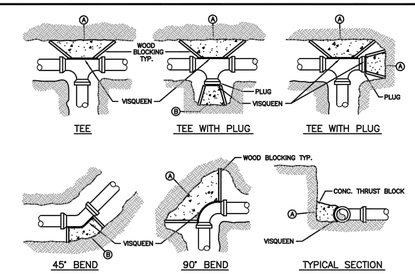
1.6. ALL VALVES ARE TO BE SUPPLIED COMPLETE AND READY FOR INSTALLATION INCLUDING, BUT NOT LIMITED TO ALL NUTS, BOLTS RINGS AND RUBBERS.

1.7. ALL VALVES ARE TO BE TESTED IN STRICT ACCORDANCE WITH AWWA C509 LATEST REVISION).

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	RESILIENT SEATED GATE VALVE SPECIFICATIONS	DRAWING NO.
APPROVED: XXX		G-07.1



ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL BUTTERFLY VALVE SETTING	DRAWING NO.
APPROVED: XXX		G-08



MINIMUM CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL (SQ. FT.)				
MARK	PIPE SIZE			
	4" OR 6"	8"	10"	12"
A				
B				

NOTES:
1. THRUST BLOCKS ARE TO BE USED IN COMBINATION WITH, AND NOT IN LIEU OF, MECHANICAL JOINT RESTRAINTS AS REQUIRED BY THE CITY. REFER TO THRUST RESTRAINT DESIGN TABLE IN STANDARD DETAIL G-10.
2. THE AREAS IN THE TABLE ARE BASED ON _____ POUNDS PER SQUARE FOOT SOIL BEARING AGAINST THE UNDISTURBED TRENCH WALL AND ARE TO REPRESENT THE MINIMUM VERTICAL PROJECTED AREA AT THE THRUST BLOCK IN A PLANE PERPENDICULAR TO THE LINE BISECTING THE INCLUDING ANGLE OF THE FITTING.
3. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EVACUATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL.
4. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
5. DO NOT COVER COUPLING OR JOINTS WITH CONCRETE.
6. CONCRETE TO BE 2500 P.S.I. MINIMUM 28 DAY STRENGTH.
7. TABLE TO BE COMPLETED BY DESIGN ENGINEER.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	THRUST BLOCK DESIGN	DRAWING NO.
APPROVED: XXX		G-10

THRUST RESTRAINT NOTES:

1. ALL JOINTS BETWEEN BENDS AT HORIZONTAL & VERTICAL OFFSETS SHALL BE RESTRAINED.
2. MECHANICAL THRUST RESTRAINTS FOR D.I.P. FITTINGS ON D.I.P. OR P.V.C. PIPE SHALL BE MEGALUG AS MANUFACTURED BY EBAA IRON, INC., OR APPROVED EQUAL.
3. DUCTILE IRON FITTINGS UP TO 20-INCHES IN DIAMETER SHALL BE RESTRAINED BY MECHANICAL MEANS, I.E., MEGALUGS OR APPROVED EQUAL.
4. DUCTILE IRON FITTINGS 24-INCH IN DIAMETER AND ABOVE SHALL BE RESTRAINED BY MECHANICAL MEANS, I.E., MEGALUGS OR APPROVED EQUAL, WITH THE ADDITION OF THRUST BLOCKS AND CONCRETE ANCHORS AT THE DISCRETION OF THE ENGINEER OF RECORD.
5. ANY THRUST BLOCKS AND ANCHORS ARE TO BE DESIGNED BY THE ENGINEER OF RECORD. SIGNED AND SEALED CALCULATIONS SHALL BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO INSTALLATION.
6. THRUST BLOCKS CONSISTING OF POURED-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGH OF 2,500 PSI AFTER 28 DAYS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	JOINT RESTRAINT DESIGN FOR PVC AND DIP THRUST RESTRAINT NOTES	DRAWING NO.
APPROVED: XXX		G-11

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn

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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG
LICENSE
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT
CITY OF HOLLYWOOD FL

SHEET NUMBER
C-451

Plotted By: Tyrus, Danny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-451 UTILITY PLAN DETAILS August 25, 2025 12:40:22pm K:\VRB_LDEV\147507129 — Oakwood Rest Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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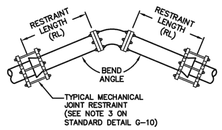
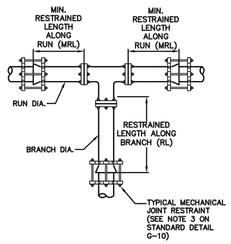
HORIZONTAL BENDS			
PIPE DIA. (INCHES)	BEND (ANGLE)	RESTRAINED LENGTH (RL) (FT)	
		PVC	*DIP
24	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.
16	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.
12	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.
8	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.
6	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.
4	11¼	.	.
	22½	.	.
	45	.	.
	90	.	.

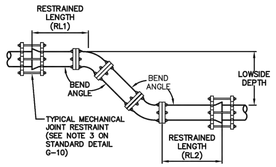




TEES AND TAPPING SLEEVES								
RUN DIA. (INCHES)	BRANCH DIA. (INCHES)	MINIMUM RESTRAINED LENGTH ALONG RUN (FT.)	MINIMUM RESTRAINED LENGTH ALONG BRANCH (FT.)		RUN DIA. (INCHES)	BRANCH DIA. (INCHES)	MINIMUM RESTRAINED LENGTH ALONG RUN (FT.)	MINIMUM RESTRAINED LENGTH ALONG BRANCH (FT.)	
			PVC	*DIP				PVC	*DIP
24"	24"	.	.	.	12"	12"	.	.	.
	16"	.	.	.		8"	.	.	.
	12"	.	.	.		6"	.	.	.
	8"	.	.	.		4"	.	.	.
	6"	.	.	.	8"	8"	.	.	.
	4"	.	.	.		6"	.	.	.
16"	16"	.	.	.		4"	.	.	.
	12"	.	.	.	6"	6"	.	.	.
	8"	.	.	.		4"	.	.	.
	6"	.	.	.	4"	4"	.	.	.
	4"	.	.	.	.	.	.	.	.

*ALL DIP JOINT-RESTRAINT CALCULATIONS ASSUME THE PIPE WILL BE WRAPPED IN POLYETHYLENE ENCASEMENT

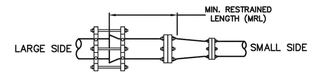
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	JOINT RESTRAINT DESIGN FOR PVC AND DIP HORIZONTAL BENDS AND TEES	DRAWING NO. G-11.1



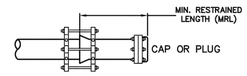
VERTICAL OFFSETS						
			PVC		*DIP	
PIPE DIA. (INCHES)	BEND (ANGLE)	LOWSIDE DEPTH (FT)	RESTRAINED LENGTHS		RESTRAINED LENGTHS	
			RL1 (FT.)	RL2 (FT.)	RL1 (FT.)	RL2 (FT.)
24	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.
16	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.
12	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.
8	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.
6	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.
4	45	4	.	.	.	.
		5	.	.	.	.
		6	.	.	.	.
		7	.	.	.	.

*ALL DIP JOINT-RESTRAINT CALCULATIONS ASSUME THE PIPE WILL BE WRAPPED IN POLYETHYLENE ENCASEMENT

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	JOINT RESTRAINT DESIGN FOR PVC AND DIP VERTICAL OFFSETS	DRAWING NO. G-11.2



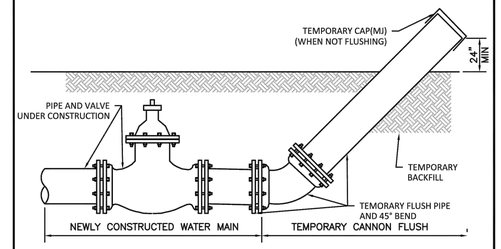
REDUCERS							
LARGE SIDE	SMALL SIDE	MINIMUM LENGTH TO RESTRAIN ON LARGE SIDE (FT)		LARGE SIDE	SMALL SIDE	MINIMUM LENGTH TO RESTRAIN ON LARGE SIDE (FT)	
		PVC	*DIP			PVC	*DIP
24"	16"	.	.	12"	8"	.	.
	12"	.	.		6"	.	.
	8"	.	.		4"	.	.
	6"	.	.	8"	6"	.	.
	4"	.	.		4"	.	.
16"	12"	.	.	6"	2"	.	.
	8"	.	.		4"	.	.
	6"	.	.	4"	2"	.	.
	4"	.	.				



DEAD ENDS	
PIPE DIA. (INCHES)	MIN. RESTRAINED LENGTH (FT)
	PVC / *DIP
24"	.
16"	.
12"	.
8"	.
6"	.
4"	.

*ALL DIP JOINT-RESTRAINT CALCULATIONS ASSUME THE PIPE WILL BE WRAPPED IN POLYETHYLENE ENCASEMENT

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	JOINT RESTRAINT DESIGN FOR PVC AND DIP REDUCERS AND DEAD ENDS	DRAWING NO. G-11.3



GENERAL NOTES:

1. FLUSHING LOCATIONS ARE TO BE PROPOSED BY CONTRACTOR AND APPROVED BY ECSD.
2. UPON COMPLETION OF THE PIPE INSTALLATION FOR ANY SECTION, THE MAIN SHALL BE CANNON FLUSHED TO REMOVE DIRT AND ANY OTHER FOREIGN MATTER.
3. INSTALL A TEMPORARY 45° BEND AND ASSOCIATED TEMPORARY PIPING AS SHOWN TO DIRECT THE FLUSHING WATER AWAY FROM THE IMMEDIATE WORK AREA AND EXERCISE DUE CARE SO AS TO ENSURE THAT THE WATER USED IN FLUSHING DOES NOT CAUSE A NUISANCE OR INFLICT PROPERTY DAMAGE.
4. BENDS AND PIPING SHALL BE THE SAME SIZE OR LARGER AS THE LINE BEING FLUSHED.
5. PRIOR TO THE ACTUAL LINE FLUSHING OPERATION THE CONTRACTOR SHALL PROPERLY NOTIFY ECSD INSPECTOR OF SUCH INTENDED WATER USE.
6. NO EXISTING VALVE SHALL BE OPERATED, EXCEPT BY AUTHORIZED CITY PERSONNEL.
7. FLUSHING SHALL NOT BE ACCOMPLISHED WITHOUT THE ACTUAL PRESENCE OF THE ECSD INSPECTOR.
8. AFTER THE LINE UNDER CONSTRUCTION HAS BEEN SUCCESSFULLY FLUSHED, THE CONTRACTOR SHALL REMOVE THE TEMPORARY PIPING ARRANGEMENT AND PROCEED WITH THE REMAINING CONSTRUCTION AS SPECIFIED.
9. ALL PIPING SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH CITY STANDARDS.
10. IF REQUIRED BY ECSD, WATER SHALL MAINS SHALL BE CLEANED BY PIGGING.
11. CONTRACTOR WILL INSTALL A PRESSURE GAUGE AT OR NEAR THE FILL AND FLUSH LOCATION AND MAINTAIN A MINIMUM PRESSURE OF 40 PSI AT ALL TIMES. THE FILL VALVE WILL BE OPENED AND CLOSED SLOWLY TO AVOID RAPID PRESSURE CHANGES IN THE WATER SYSTEM.
12. CONTRACTOR IS CAUTIONED THAT GOVERNING AGENCIES OR UTILITIES MAY HAVE REGULATIONS LIMITING OR PROHIBITING DISCHARGE INTO SEWERS, SURFACE WATERS, CANALS, DITCHES AND OTHER CONVEYANCES/RETENTION AREA. ALL COMPLIANCE WITH GOVERNING AGENCIES REQUIREMENTS (INCLUDING PERMITTING, IF REQUIRED) IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
13. CANNON FLUSHING TO PROCEED AFTER HEALTH DEPARTMENT CLEARANCE IS RECEIVED.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	CANNON FLUSHING	DRAWING NO. G-13

SEWER NOTES:

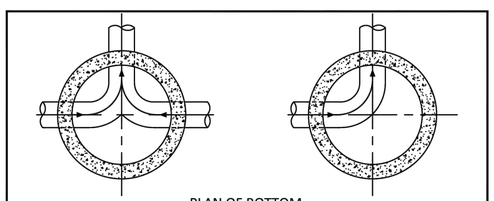
1. THE MINIMUM DEPTH OF COVER OVER D.I.P. SANITARY SEWER GRAVITY OR FORCE MAINS IS 30". THE MINIMUM DEPTH OF COVER OVER PVC SANITARY SEWER OR FORCE MAINS IS 36".
2. ALL CONNECTIONS TO EXISTING MAINS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. LEAKAGE TESTS AND ALIGNMENT (LAMPING) TESTS SHALL BE PERFORMED ON ALL NEW SEWER LINES UP TO THE CONNECTION POINT WITH THE EXISTING SEWER SYSTEM. THESE TESTS SHALL BE REQUESTED AND PAID FOR BY THE CONTRACTOR.
4. LAMPING TESTS SHALL BE PERFORMED ON GRAVITY SEWERS FROM MANHOLE TO MANHOLE UP TO AND INCLUDING THE POINT OF CONNECTION TO THE EXISTING SEWER SYSTEM.
5. LEAKAGE TESTS SHALL BE PERFORMED ON ALL SEGMENTS OF A GRAVITY SEWER SYSTEM, INCLUDING SERVICE LATERALS AND MANHOLES, FOR A CONTINUOUS PERIOD OF NO LESS THAN 2 HOURS. AT THE END OF THE TEST, THE TOTAL MEASURED LEAKAGE SHALL NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM, WITH ZERO ALLOWABLE LEAKAGE FOR LATERALS AND MANHOLES. AN EXFILTRATION OR INFILTRATION TEST SHALL BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET ON THE SECTION BEING TESTED.
6. FORCE MAINS SHALL BE PRESSURE-TESTED IN ACCORDANCE WITH RULE 62-555.330 (FAC). THE PRESSURE TEST SHALL CONSIST OF HOLDING A TEST PRESSURE OF 150 PSI ON THE PIPELINE FOR A CONTINUOUS PERIOD OF 2 HOURS THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE DETERMINED BY THE FOLLOWING FORMULA:

$$L = \frac{S \times D \times \sqrt{P}}{148{,}000}$$

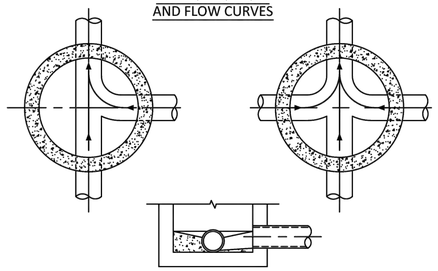
WHERE:
L = ALLOWABLE LEAKAGE FOR SYSTEM IN GALLONS PER HOUR
D = PIPE DIAMETER IN INCHES
S = LENGTH OF LINES IN LINEAL FEET
P = AVERAGE TEST PRESSURE IN PSI

7. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTYFYING CONFLICTS WITH FORCE MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, FORCE MAIN SHALL BE LOWERED TO PASS UNDER CONFLICTS WITH 12" MINIMUM SEPARATION FROM WATER MAINS AND 6" MINIMUM SEPARATION FROM OTHER UTILITIES. NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON.
8. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	SANITARY SEWER MAIN CONSTRUCTION NOTES	DRAWING NO. S-01



PLAN OF BOTTOM AND FLOW CURVES

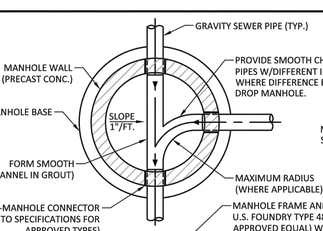


TYPICAL SECTION

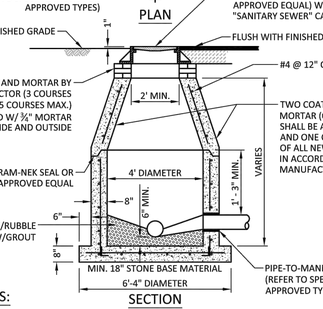
NOTES:

1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING SMOOTH FLOWS.
3. CHANNELS FOR FUTURE CONNECTIONS (STUBS) SHALL BE CONSTRUCTED FILLED WITH SAND & COVERED WITH 1" OF MORTAR.
4. WHEN FLOW LINE DEFLECTS MORE THAN 45°, A DROP OF 0.10' IS REQUIRED.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM / APPROVED: XXX	MANHOLE FLOW PATTERNS	DRAWING NO. S-02



PLAN

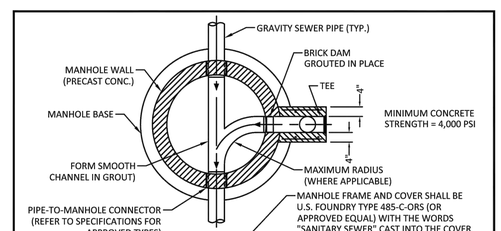


SECTION

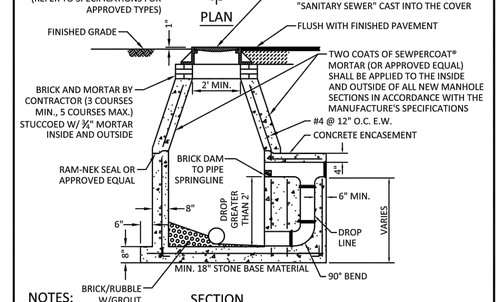
NOTES:

1. SHOP DRAWINGS SHOWING ALL DIMENSIONS, INCLUDING CONCRETE REINFORCEMENT AND BUOYANCY, SHALL BE SUBMITTED TO THE CITY PRIOR TO INSTALLATION.
2. THE BOTTOM SLAB SHALL BE CAST MONOLITHICALLY WITH THE LOWER WALL SECTION TO A MINIMUM OF 3' ABOVE SLAB BASE.
3. NO CONSTRUCTION JOINTS ARE ALLOWED BELOW ELEVATION +2.00 NAVD. ABOVE ELEVATION +2.00 NAVD CONSTRUCTION JOINTS ARE ALLOWED, IF ADEQUATE JOINTS WITH KEY-WAYS AND WATER STOPS ARE PROVIDED. SUBMIT SHOP DRAWINGS OF JOINT DETAILS TO THE ENGINEER FOR APPROVAL.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 07/18/2018
DRAWN: EAM / APPROVED: XXX	STANDARD PRECAST MANHOLE	DRAWING NO. S-03



PLAN



SECTION

NOTES:

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ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 07/18/2018
DRAWN: EAM / APPROVED: XXX	DROP MANHOLE	DRAWING NO. S-04

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FL

SHEET NUMBER
C-452

Plotted By: Fyros, Danny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-452 UTILITY PLAN DETAILS August 25, 2025 12:40:26pm K:\VRB_LDEV\147507129 - Oakwood Real Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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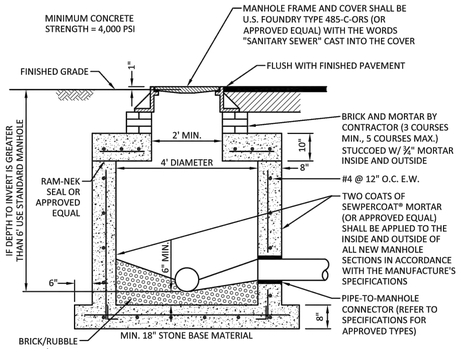

SECTION

NOTES:

1. SHOP DRAWINGS SHOWING ALL DIMENSIONS, INCLUDING CONCRETE REINFORCEMENT AND BUOYANCY, SHALL BE SUBMITTED TO THE CITY PRIOR TO INSTALLATION.
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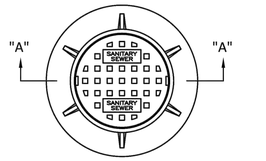
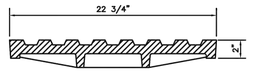
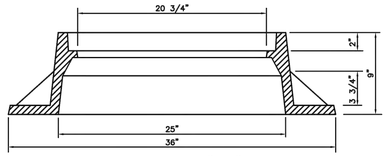
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 07/18/2018
DRAWN: EAM	SHALLOW MANHOLE	DRAWING NO.
APPROVED: XXX		S-05



PLAN



COVER SECTION "A-A"



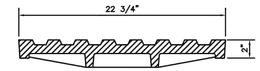
FRAME SECTION "A-A"

NOTES:

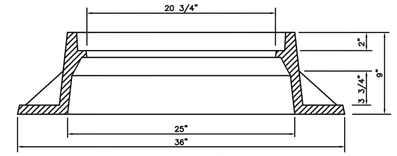
1. LETTERS ON COVER TO BE 3/8" HIGH, 1/4" TO 5/16" THICK AND FLUSH WITH TOP OF COVER.
2. ALL BEARING SURFACES TO BE MACHINED.
3. MINIMUM WEIGHTS: COVER - 160 LBS., TOTAL - 400 LBS.
4. MANHOLE FRAME AND COVER SHALL BE U.S. FOUNDRY 485-C-ORS WITH THE WORDS "SANITARY SEWER" CAST INTO THE COVER.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	MANHOLE FRAME AND COVER	DRAWING NO.
APPROVED: XXX		S-06

PLAN



COVER SECTION "A-A"



FRAME SECTION "A-A"

NOTES:

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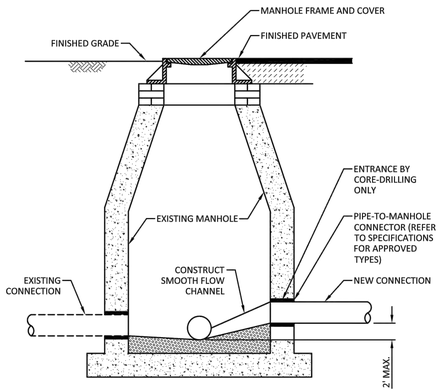
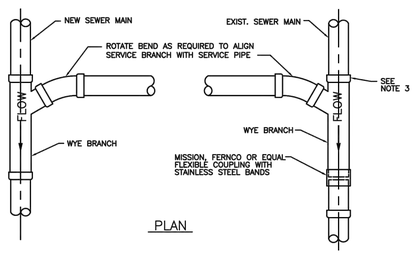
2. ALL BEARING SURFACES TO BE MACHINED.
3. MINIMUM WEIGHTS: COVER - 160 LBS., TOTAL - 400 LBS.
4. MANHOLE FRAME AND COVER SHALL BE U.S. FOUNDRY 485-C-ORS TYPE EL, WITH THE WORDS "SANITARY SEWER" CAST INTO THE COVER.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	MANHOLE FRAME AND COVER CITY OF HOLLYWOOD	DRAWING NO.
APPROVED: XXX		S-06.1

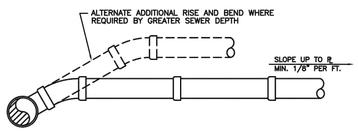


SECTION

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	NEW CONNECTION TO EXISTING MANHOLE	DRAWING NO.
APPROVED: XXX		S-07



PLAN

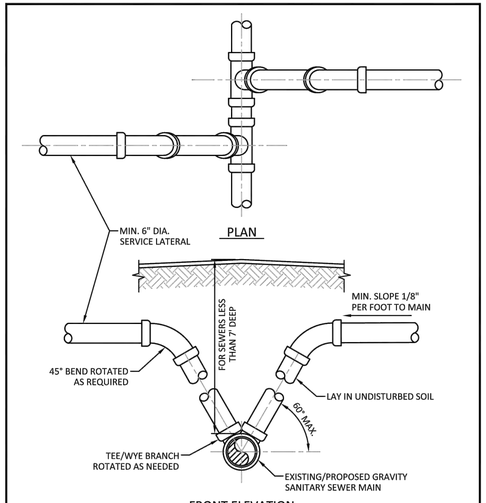


ELEVATION

NOTES:

1. SINGLE SERVICE CONNECTIONS SHALL USE 6" PIPE AND FITTINGS.
2. USE RISER CONNECTIONS WHERE INVERT OF SEWER IS GREATER THAN 7'-0" DEEP.
3. WHERE BELL OF WYE AND SPIGOT OF EXISTING MAIN ARE NOT COMPATIBLE, USE A SECOND FLEXIBLE COUPLING.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	WYE BRANCH CONNECTION	DRAWING NO.
APPROVED: XXX		S-09

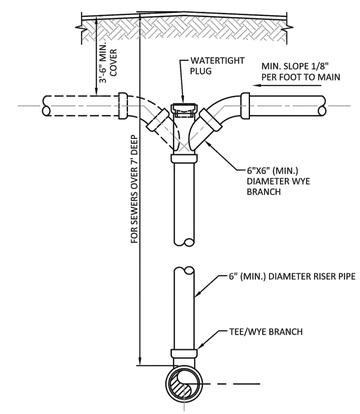


FRONT ELEVATION

NOTES:

1. MODIFIED RISER CONNECTION TO BE USED ONLY WHEN DIRECTED BY THE CITY.
2. NO. 57 ROCK OR ¾" DRAINFIELD LIMEROCK MAY BE USED AS BEDDING OVER UNDISTURBED SOIL WITH PVC PIPE.
3. SINGLE SERVICE CONNECTIONS SHALL USE 6" (MIN.) DIAMETER PIPE AND FITTINGS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	SANITARY SEWER LATERAL MODIFIED RISER	DRAWING NO.
APPROVED: XXX		S-10

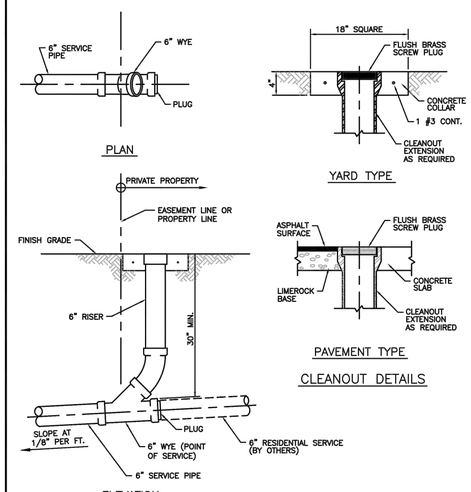


FRONT ELEVATION

NOTES:

1. RISER CONNECTION TO BE USED ONLY WHEN SANITARY SEWER IS MORE THAN 7'-0" DEEP OR WHEN DIRECTED BY THE CITY.
2. NO. 57 ROCK OR ¾" DRAINFIELD LIMEROCK MAY BE USED AS BEDDING OVER UNDISTURBED SOIL WITH PVC PIPE.
3. SINGLE SERVICE CONNECTIONS SHALL USE 6" (MIN.) DIAMETER PIPE AND FITTINGS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	SANITARY SEWER LATERAL VERTICAL RISER	DRAWING NO.
APPROVED: XXX		S-11



SINGLE SERVICE CONNECTION

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	SEWER SERVICE CONNECTION AND CLEANOUT AT PROPERTY LINE	DRAWING NO.
APPROVED: XXX		S-12

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn

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8/25/2025

GREGORY D. WILFONG
LICENSE
No. 63166
STATE OF FLORIDA
PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FL

SHEET NUMBER
C-453

Plotted By:Tyrss, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-453 UTILITY PLAN DETAILS August 25, 2025 12:40:31pm K:\VRB_LDEV\147507129 - Oakwood Rest Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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Plotted By: Tyras, Danny Sheet Set: OAKWOOD EAST MULTI FAMILY PROJECT Layout: C-454 UTILITY PLAN DETAILS August 25, 2025 12:40:37pm K:\VRB_LDEV\147507129 - Oakwood Resi Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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WATER SYSTEM NOTES:

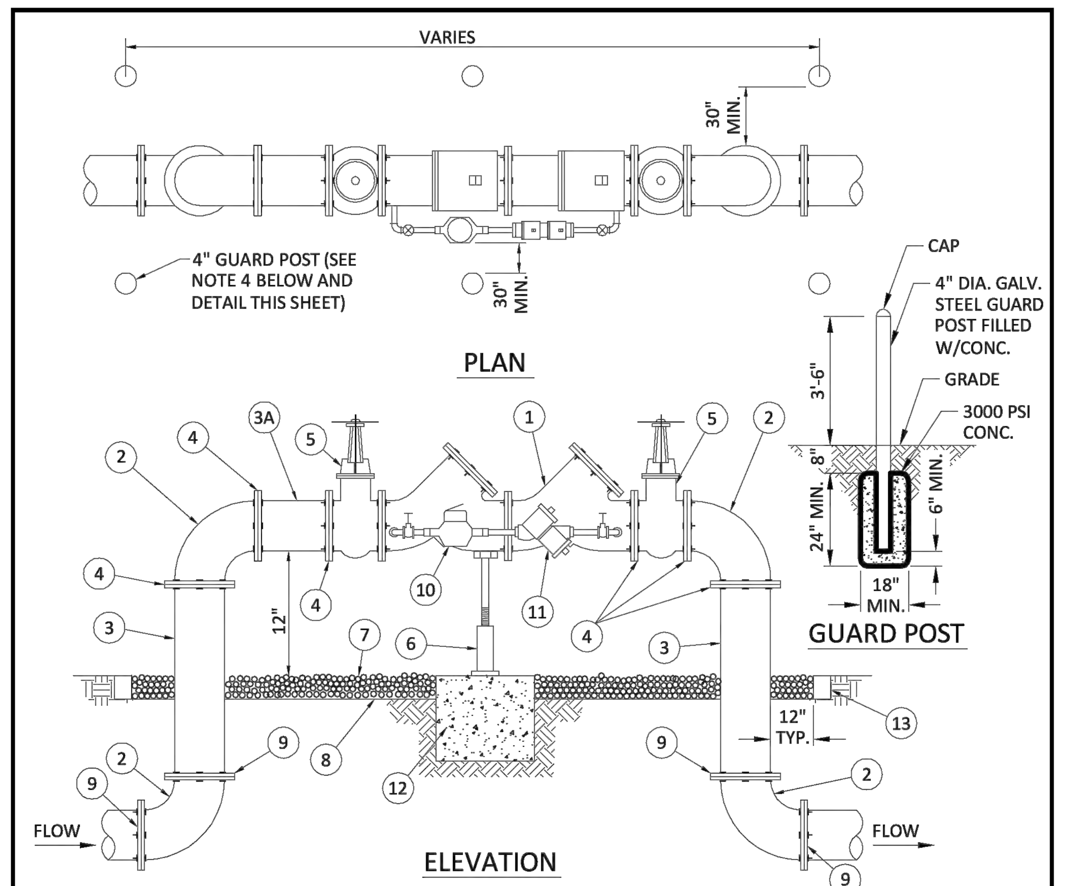
1. NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE.
2. NEW OR RELOCATED UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)].
3. AT ALL UTILITY CROSSINGS DESCRIBED ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE, OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. [FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5)].
4. NEW UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT TO BE DUCTILE IRON PIPE (D.I.P.) WHEN CROSSING BELOW SANITARY SEWER MAINS.
5. POLYETHYLENE ENCASEMENT MATERIAL SHALL BE USED TO ENCASE ALL BURIED DUCTILE IRON PIPE, FITTINGS, VALVES, RODS, AND APPURTENANCES IN ACCORDANCE WITH AWWA C105, METHOD A. THE POLYETHYLENE TUBING SHALL BE CUT TWO FEET LONGER THAN THE PIPE SECTION AND SHALL OVERLAP THE ENDS OF THE PIPE BY ONE FOOT. THE POLYETHYLENE TUBING SHALL BE GATHERED AND LAPPED TO PROVIDE A SNUG FIT AND SHALL BE SECURED AT QUARTER POINTS WITH POLYETHYLENE TAPE. EACH END OF THE POLYETHYLENE TUBING SHALL BE SECURED WITH A WRAP OF POLYETHYLENE TAPE.
6. THE POLYETHYLENE TUBING SHALL PREVENT CONTACT BETWEEN THE PIPE AND BEDDING MATERIAL, BUT IS NOT INTENDED TO BE A COMPLETELY AIRTIGHT AND WATERTIGHT ENCLOSURE. DAMAGED POLYETHYLENE TUBING SHALL BE REPAIRED IN A WORKMANLIKE MANNER USING POLYETHYLENE TAPE, OR THE DAMAGED SECTION SHALL BE REPLACED. POLY WRAP WILL NOT BE PAID FOR AS A SEPARATE BID ITEM. IT SHALL BE CONSIDERED TO BE A PART OF THE PRICE BID FOR WATER MAINS.
7. FIRE HYDRANT BARRELS SHALL BE ENCASED IN POLY WRAP UP TO THE GROUND SURFACE AND THE WEEP HOLES SHALL NOT BE COVERED BY THE POLY WRAP.
8. GATE VALVES FOR USE WITH PIPE LESS THAN THREE INCHES (3") IN DIAMETER SHALL BE RATED FOR TWO HUNDRED (200) PSI WORKING PRESSURE, NON-SHOCK, BLOCK PATTERN, SCREWED BONNET, NON-RISING STEM, BRASS BODY, AND SOLID WEDGE. THEY SHALL BE STANDARD THREADED FOR PVC PIPE AND HAVE A MALLEABLE IRON HANDWHEEL. GATE VALVES 3" THROUGH 16" IN DIAMETER SHALL BE RESILIENT SEAT AND BIDIRECTIONAL FLOW ONLY. VALVES FOR SPECIAL APPLICATIONS WILL REQUIRE CITY UTILITY APPROVAL.
9. VALVE BOXES AND COVERS FOR ALL SIZE VALVES SHALL BE OF CAST IRON CONSTRUCTION AND ADJUSTABLE SCREW-ON TYPE. THE LID SHALL HAVE CAST IN THE METAL THE WORD "WATER" FOR THE WATER LINES. ALL VALVE BOXES SHALL BE SIX INCH (6") NOMINAL DIAMETER AND SHALL BE SUITABLE FOR DEPTHS OF THE PARTICULAR VALVE. THE STEM OF THE BURIED VALVE SHALL BE WITHIN TWENTY-FOUR INCHES (24") OF THE FINISHED GRADE UNLESS OTHERWISE APPROVED BY THE CITY.
10. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 F.A.C.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL		REVISED: 06/08/2014
DRAWN: EAM	WATER SYSTEM NOTES		DRAWING NO. W-01
APPROVED: XXX			

WATER SYSTEM NOTES (CONTINUED):

11. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 F.A.C.
12. ALL PVC PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C900 LATEST REVISION AND CLASS DR 18. ALL DIP WATER MAINS SHALL BE DUCTILE IRON PRESSURE CLASS 350, WITH WALL THICKNESS COMPLYING WITH CLASS 52. ALL DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF ANSI/AWWA C151/A21.51-02 AND BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-03.
13. FITTINGS SHALL BE DUCTILE IRON, MEETING ANSI/AWWA C153/A21.53-00 SPECIFICATIONS, WITH 350 PSI MINIMUM WORKING PRESSURE. FITTINGS MUST BE CEMENT LINED AND SEAL COATED PER ANSI/AWWA C104/A21.4-03. ALL DUCTILE IRON PIPE AND FITTINGS MUST BE MANUFACTURED IN THE UNITED STATES OF AMERICA.
14. ALL DUCTILE IRON PIPE TO BE MECHANICAL JOINTS, WRAPPED IN POLY. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY DESIGN.
15. PAVEMENT RESTORATION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.
16. ALL TRENCHING, PIPE LAYING, BACKFILL, PRESSURE TESTING, AND DISINFECTING MUST COMPLY WITH THE CITY OF HOLLYWOOD SPECIFICATIONS.
17. THE MINIMUM DEPTH OF COVER OVER WATER MAINS IS 30" (DIP) OR 36" (PVC).
18. MINIMUM HORIZONTAL SEPARATION BETWEEN STORM STRUCTURES AND WATER MAINS SHALL BE 3'.
19. MAXIMUM DEFLECTION PER EACH JOINT SHALL BE 50% OF MANUFACTURES RECOMMENDATION (MAXIMUM) WHERE DEFLECTION IS REQUIRED.
20. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING CONFLICTS WITH WATER MAINS PLACED AT MINIMUM COVER. IN CASE OF CONFLICT, WATER MAIN SHALL BE LOWERED TO PASS UNDER CONFLICTS WITH 18" MINIMUM VERTICAL SEPARATION. NO ADDITIONAL PAYMENT SHALL BE DUE TO CONTRACTOR FOR LOWERING THE MAIN OR THE ADDITIONAL FITTINGS USED THEREON.
21. PIPE JOINT RESTRAINT SHALL BE PROVIDED BY THE USE OF DUCTILE IRON FOLLOWER GLANDS MANUFACTURED TO ASTM A 536-80. TWIST-OFF NUTS SHALL BE USED TO ENSURE PROPER ACTUATING OF THE RESTRAINING DEVICES. THE MECHANICAL JOINT RESTRAINING DEVICES SHALL HAVE A WORKING PRESSURE OF 250 PSI MINIMUM, WITH A MINIMUM SAFETY FACTOR OF 2:1, AND SHALL BE EBAA IRON INC., MEGALUG OR APPROVED EQUAL. JOINT RESTRAINTS SHALL BE PROVIDED AT A MINIMUM OF THREE JOINTS (60 FEET) FROM ANY FITTING.
22. WHENEVER IT IS NECESSARY, IN THE INTEREST OF SAFETY, TO BRACE THE SIDES OF A TRENCH, THE CONTRACTOR SHALL FURNISH, PUT IN PLACE AND MAINTAIN SUCH SHEETING OR BRACING AS MAY BE NECESSARY TO SUPPORT THE SIDES OF THE EXCAVATION TO ENSURE PERSONNEL SAFETY, AND TO PREVENT MOVEMENT WHICH CAN IN ANY WAY DAMAGE THE WORK OR ENDANGER ADJACENT STRUCTURES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE SEQUENCE, METHODS AND MEANS OF CONSTRUCTION, AND FOR THE IMPLEMENTATION OF ALL OSHA AND OTHER SAFETY REQUIREMENTS.

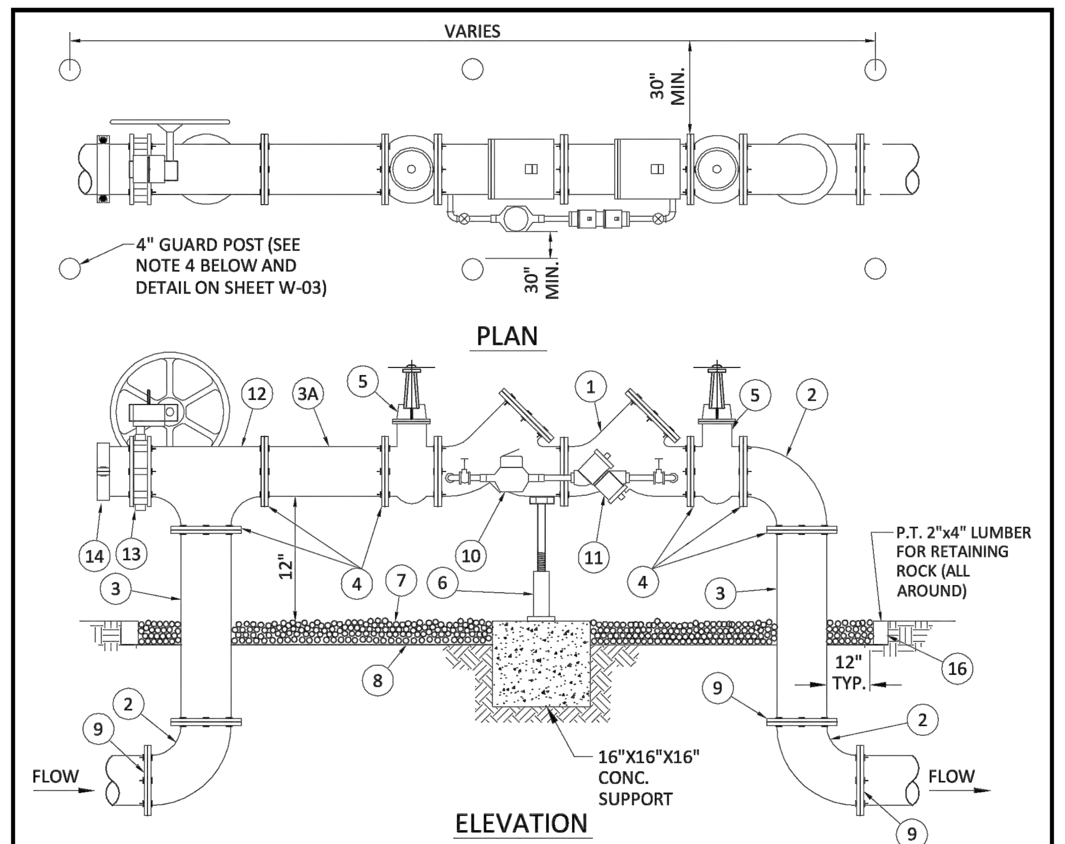
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	WATER SYSTEM NOTES	DRAWING NO. W-02
APPROVED: XXX		



MATERIALS					
ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
1	1	4",6",8" VALVE,DOUBLE CHECK	7	N/A	PEA GRAVEL (4" DEEP)
2	4	4",6",8" BEND-90°	8	N/A	PLASTIC LINER/WEED STOP (5 MILS)
3	2	4",6",8" D.I.P. SPOOL PIECE	9	4	RESTRAINED JOINTS
3A	1	4",6",8" D.I.P. SPOOL PIECE (24" LONG)	10	1	LOW FLOW METER
4	7	4",6",8" FLANGE, D.I.P.	11	1	VALVE, BYPASS DOUBLE CHECK
5	2	4",6",8" GATE VALVE (SEE NOTE 6)	12	1	16"X16"X16" CONC. SUPPORT
6	1	SCREW JACK/ANCHORED	13	1	P.T. 2X4 LUMBER ALL AROUND

NOTES:
1. FIELD ADJUST AND CUT ITEM 3 TO THE PROPER LENGTH.
2. ALL PIPING SHALL BE D.I.P. CL 50/52 AS APPLICABLE TO MINIMUM STANDARDS.
3. ALL LOW FLOW METER PIPING SHALL BE BRASS OR COPPER.
4. PROTECTIVE 4" GALV. GUARD POSTS SHALL BE SPACED EVENLY APART AS SHOWN ABOVE OR IN ACCORDANCE WITH INSPECTOR'S DIRECTIONS.
5. MAY USE 45° BENDS (SEE DETAIL W-07.2) WHEN WORKING AREA IS NOT LIMITED, AS DIRECTED BY CITY.
6. GATE VALVES SHALL BE CHAINED AND LOCKED TOGETHER TO PREVENT TAMPERING.

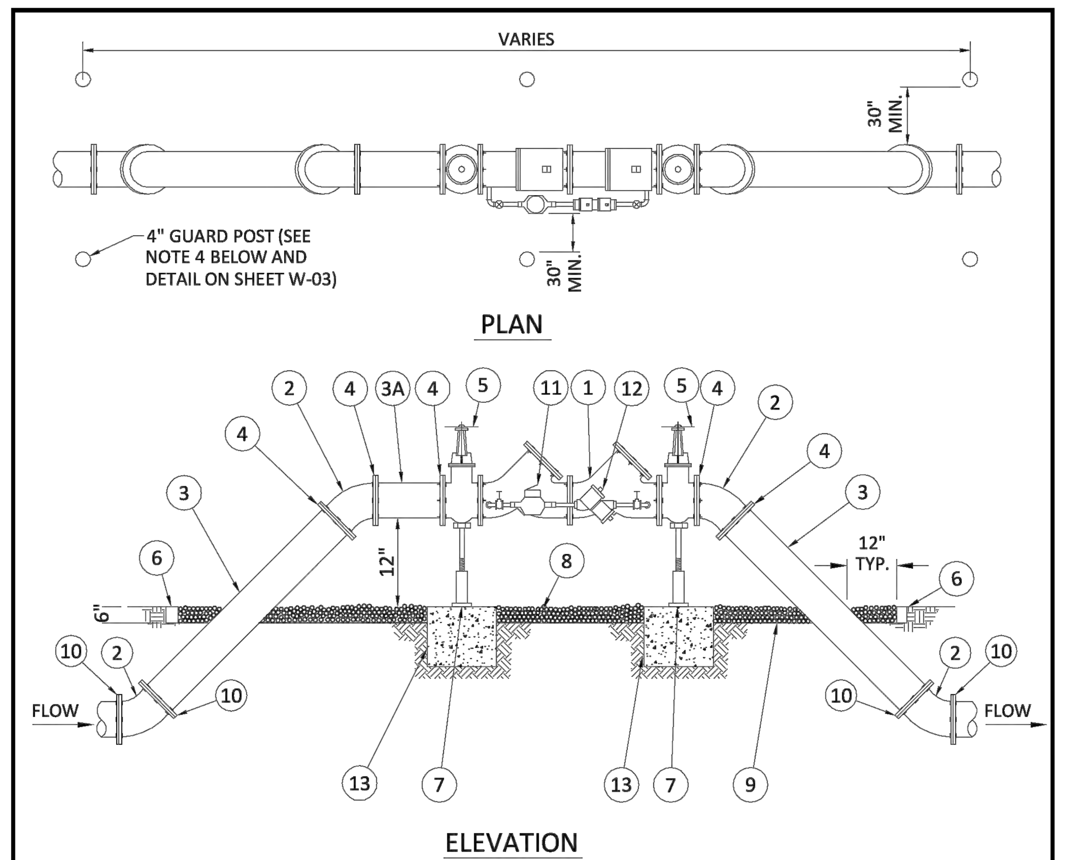
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL 4", 6" AND 8" DOUBLE CHECK DETECTOR ASSEMBLY FOR FIRE SPRINKLER SERVICE (90° BENDS)	DRAWING NO. W-03
APPROVED: XXX		



MATERIALS					
ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
1	1	4",6",8" VALVE,DOUBLE CHECK	8	N/A	PLASTIC LINER/WEED STOP (5 MILS)
2	4	4",6",8" BEND-90°	9	4	RESTRAINED JOINTS
3	2	4",6",8" D.I.P. SPOOL PIECE	10	1	LOW FLOW METER
3A	1	4",6",8" D.I.P. SPOOL PIECE(24" LONG)	11	1	VALVE, BYPASS DOUBLE CHECK
4	10	4",6",8" FLANGE, D.I.P.	12	1	4", 6", 8" TEE
5	2	4",6",8" GATE VALVE (SEE NOTE 6)	13	1	4", 6" 8" BUTTERFLY VALVE (SUPERVISED CLOSED), CHAINED AND LOCKED
6	1	SCREW JACK/ANCHORED			
7	N/A	PEA GRAVEL (4" DEEP)	14	1	4", 6", 8" CAP

NOTES:
1. FIELD ADJUST AND CUT ITEM 3 TO THE PROPER LENGTH.
2. ALL PIPING SHALL BE D.I.P. CL 50/52 AS APPLICABLE TO MINIMUM STANDARDS.
3. ALL LOW FLOW METER PIPING SHALL BE BRASS OR COPPER.
4. PROTECTIVE 4" GALV. GUARD POSTS SHALL BE SPACED EVENLY APART AS SHOWN ABOVE OR IN ACCORDANCE WITH INSPECTOR'S DIRECTIONS.
5. MAY USE 45° BENDS (SEE DETAIL W-05) WHEN WORKING AREA IS NOT LIMITED, AS DIRECTED BY CITY.
6. GATE VALVES SHALL BE CHAINED AND LOCKED TOGETHER TO PREVENT TAMPERING

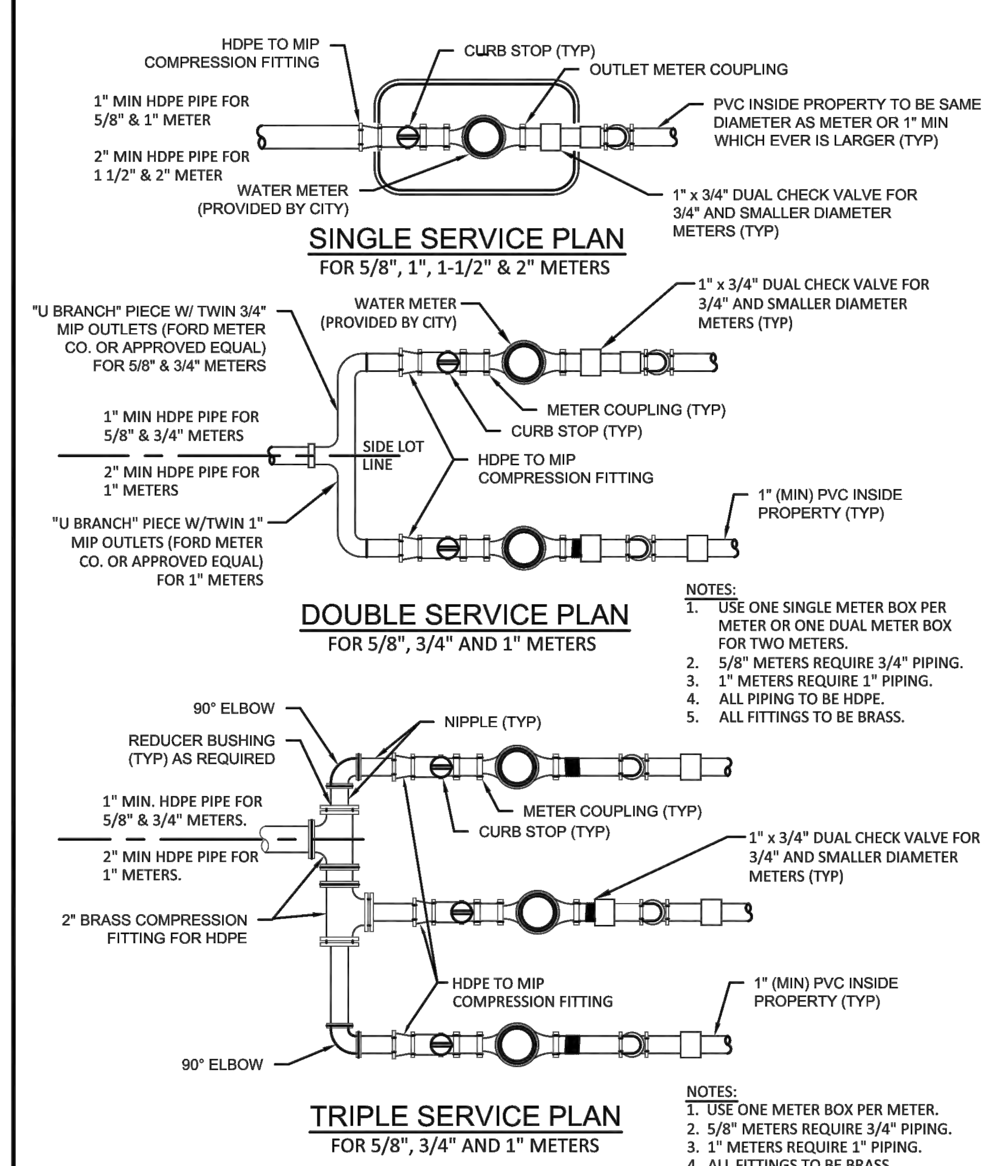
ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL 4", 6" AND 8" DOUBLE CHECK DETECTOR FOR FIRE SPRINKLER SERVICE W/B.V. CONNECTION (90° BENDS)	DRAWING NO. W-04
APPROVED: XXX		



MATERIALS					
ITEM	QTY.	DESCRIPTION	ITEM	QTY.	DESCRIPTION
1	1	4",6",8" VALVE,DOUBLE CHECK	7	2	SCREW JACK/ANCHORED
2	4	4",6",8" BEND-45°	8	N/A	PEA GRAVEL (4" DEEP)
3	2	4",6",8" D.I.P. SPOOL PIECE	9	N/A	PLASTIC LINER/WEED STOP (5 MILS)
3A	1	4",6",8" D.I.P. SPOOL PIECE(24" LONG)	10	4	RESTRAINED JOINTS
4	7	4",6",8" FLANGE, D.I.P.	11	1	LOW FLOW METER
5	2	4",6",8" GATE VALVE (SEE NOTE 6)	12	1	VALVE, BYPASS DOUBLE CHECK
6	2	P.T. 2"x4" LUMBER (ALL AROUND)	13	1	16"x16"x16" CONC. SUPPORT

NOTES:
1. FIELD ADJUST AND CUT ITEM 3 TO THE PROPER LENGTH.
2. ALL PIPING SHALL BE D.I.P. CL 50/52 AS APPLICABLE TO MINIMUM STANDARDS.
3. ALL LOW FLOW METER PIPING SHALL BE BRASS OR COPPER.
4. PROTECTIVE 4" GALV. GUARD POSTS SHALL BE SPACED EVENLY APART AS SHOWN ABOVE OR IN ACCORDANCE WITH INSPECTOR'S DIRECTIONS.
5. MAY USE 90° BENDS (SEE DETAIL W-03) WHEN WORKING AREA IS LIMITED.
6. GATE VALVES SHALL BE CHAINED AND LOCKED TOGETHER TO PREVENT TAMPERING.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL 4", 6" AND 8" DOUBLE CHECK DETECTOR ASSEMBLY FOR FIRE SPRINKLER SERVICE (45° BENDS)	DRAWING NO. W-05
APPROVED: XXX		



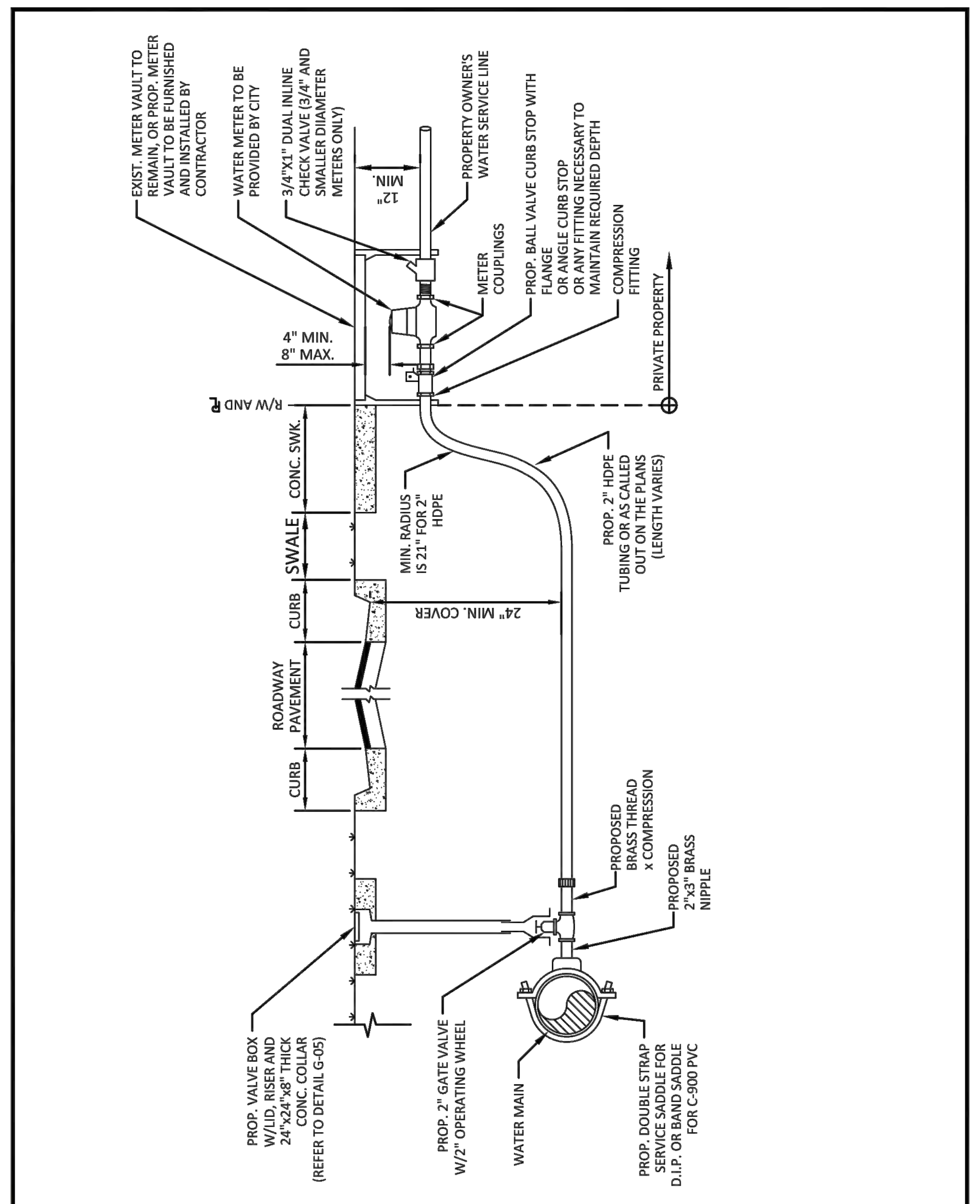
NO GALVANIZED PIPE OR FITTINGS ALLOWED

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	TYPICAL 5/8", 1", 1-1/2" AND 2" METER INSTALLATION	DRAWING NO. W-06
APPROVED: XXX		

WATER METER SERVICE NOTES:

1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED NOT LESS THAN 18" ON CENTER.
2. P.E. TUBING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF AWWA STANDARD C901, "POLYETHYLENE (PE) PRESSURE PIPE AND TUBING, 1/2 IN. (13mm) THROUGH 3 IN. (76 mm), FOR WATER SERVICE".
3. MINIMUM SERVICE PIPE DIAMETER SHALL BE 1" FOR SINGLE OR DUAL ⅝" OR SINGLE 1" DIAMETER METERS.
4. MINIMUM SERVICE PIPE DIAMETER SHALL BE 2" FOR SINGLE OR DUAL 1-½" OR SINGLE 2" DIAMETER METERS.
5. FOR METER DIAMETERS LARGER THAN 2", THE MINIMUM SERVICE PIPE DIAMETER SHALL BE THE SAME AS THE METER DIAMETER.
6. APPROVED COPPER TUBING MAY BE USED AT THE CITY'S DISCRETION.
7. FOR NEW METER INSTALLATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS,CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE WATER METERS WILL BE PROVIDED AND INSTALLED BY THE CITY OF HOLLYWOOD (NEW ACCOUNTS).
8. FOR METER RELOCATIONS, ALL SADDLES, VALVES, PIPING, FITTINGS, CURB STOPS, METER VALVES, METER COUPLINGS, METER VAULTS AND COVERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THE EXISTING WATER METER TO BE RELOCATED AND INSTALLED BY CONTRACTOR.
9. FOR EXISTING METERS ABUTTING THE RIGHT-OF-WAY THAT ARE BEING DISCONNECTED FROM EXISTING MAINS AND RECONNECTED TO NEW MAINS, THE CONTRACTOR SHALL:
   a. CUT AND PLUG THE EXISTING SERVICE LINE AT THE MAIN AND AT THE METER, AND REMOVE THE EXISTING BALL VALVE CURB STOP.
   b. FURNISH AND INSTALL SERVICE SADDLE, CORPORATION STOP OR SERVICE VALVE AND VALVE BOX, PIPING AND FITTINGS UP TO AND INCLUDING THE BALL VALVE CURB STOP.
12. THE ELEVATION AT THE TOP OF THE METER BOX SHALL MATCH THE ELEVATION OF THE BACK OF SIDEWALK, WHENEVER PRACTICAL.
13. AS PART OF THE SERVICE INSTALLATION, THE CONTRACTOR SHALL RESTORE THE RIGHT-OF-WAY TO MATCH EXISTING CONDITIONS, INCLUDING ROADWAY PAVEMENT, PAVEMENT MARKINGS AND RPMs, CONCRETE CURBS, SIDEWALKS, RAMPS (INCLUDING DETECTABLE WARNING SURFACE), SODDING, AND ALL OTHER IMPROVEMENTS REMOVED OR DAMAGED DURING THE SERVICE INSTALLATION.
14. FOR UNPAVED AREAS, THE MINIMUM GROUND COVER ACCEPTED BY THE CITY IS SODDING.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	WATER METER SERVICE NOTES FOR 5/8" THROUGH 2" METERS	DRAWING NO. W-07
APPROVED: XXX		



ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 11/06/2017
DRAWN: EAM	TYPICAL 2-INCH HDPE WATER SERVICE FOR SINGLE/DUAL 5/8" TO 1" METERS, AND ANY SINGLE 1-1/2" TO 2" METERS	DRAWING NO. W-09
APPROVED: XXX		

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn

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PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

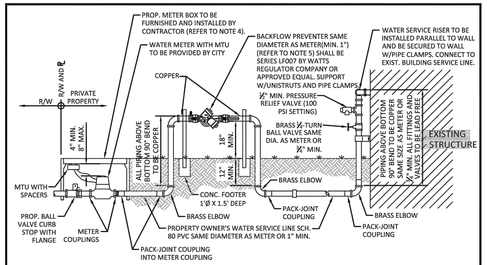
KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

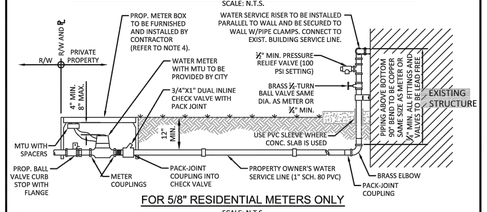
CITY OF HOLLYWOOD FL

SHEET NUMBER
C-454



FOR 1", 1-1/2" & 2" RESIDENTIAL METERS, AND FOR ALL COMMERCIAL PROPERTIES REGARDLESS OF METER DIAMETER

SCALE: N.T.S.



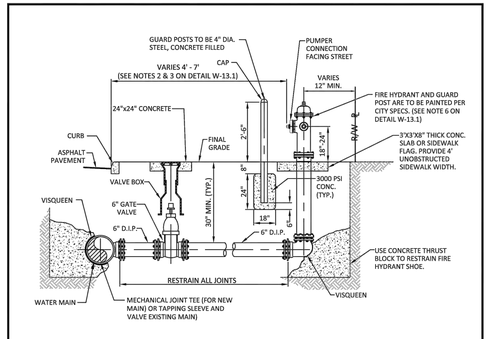
FOR 5/8" RESIDENTIAL METERS ONLY

SCALE: N.T.S.

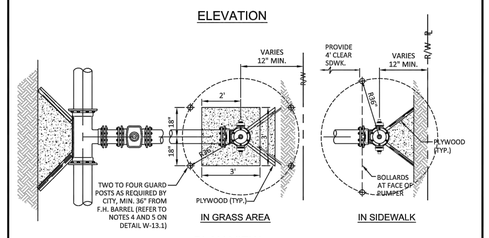
NOTES FOR ALL SERVICES:

1. IF EXISTING HOSE BIB IS REMOVED, DAMAGED, OR NO HOSE BIB EXISTS, ONE MUST BE INSTALLED: A HOSE BIB VACUUM BREAKER MUST BE INSTALLED AS REQUIRED TO COMPLY WITH THE LATEST REVISION OF THE FLORIDA BUILDING CODE.
2. THREADED PVC FITTINGS (MALE OR FEMALE) NOT ALLOWED. ALL TRANSITIONS FROM PVC TO METAL PIPING/FITTINGS SHALL USE COMPRESSION PACK-JOINT COUPLINGS. THIS INCLUDES PVC CONNECTIONS TO INLINE CHECK VALVE AND BACKFLOW PREVENTER.
3. PIPE CLAMPS FOR ATTACHING WATER SERVICE RISER TO WALL SHALL BE HOT-DIPPED GALVANIZED, WITH ISOLATION MATERIAL BETWEEN THE PIPE AND GALVANIZED METAL.
4. IF EXISTING CONCRETE METER BOX IS IN ACCEPTABLE CONDITION (AS DETERMINED BY ECSO) IT MAY BE RE-USED.
5. IF EXISTING BACKFLOW PREVENTER IS DETERMINED TO BE IN ACCEPTABLE CONDITION IT MAY BE RE-USED PROVIDED IT IS RE-CERTIFIED.
6. ALL PRIVATE SERVICE LINE INSTALLATIONS SHALL COMPLY WITH THE LATEST REVISION OF THE FLORIDA BUILDING CODE.
7. ALL FITTINGS TO BE BRASS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 02/14/2018
DRAWN: EAM	TYPICAL WATER SERVICE FROM METER TO STRUCTURE FOR 5/8" THROUGH 2" METERS	DRAWING NO. W-10
APPROVED: XXX		



ELEVATION



PLAN VIEW

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 03/05/2019
DRAWN: EAM	TYPICAL FIRE HYDRANT INSTALLATION	DRAWING NO. W-13
APPROVED: XXX		

NOTES:

1. IN ALL CASES, PROVIDE 4' UNOBSTRUCTED SIDEWALK CLEAR OF THE FIRE HYDRANT AND BOLLARDS.
2. FIRE HYDRANTS SHALL BE LOCATED BETWEEN 4' AND 7' FROM THE FACE OF CURB.
3. FIRE HYDRANTS SHALL NOT BE LOCATED WITHIN A RADIUS OR WITHIN FDOT CLEAR DRIVING ZONE.
4. GUARD POSTS SHALL BE INSTALLED AS REQUIRED FOR SAFETY OR AS APPROVED BY THE DEPT. OF PUBLIC UTILITIES. IN SIDEWALK, LOCATE GUARD POSTS AT THE FACE OF THE PUMPER AND 2'-6' LEFT/RIGHT OF ℄ OF THE FIRE HYDRANT.EXTRA POSTS MAY BE REQUIRED IN INDUSTRIAL AND CONGESTED TRAFFIC AREAS. (4 POSTS MAX.)
5. FIRE HYDRANT CONCRETE SLAB AND CONCRETE GUARD POST FOOTINGS SHALL BE DIFFERENT POURS.
6. THE FIRE HYDRANT BONNET, OPERATING NUT, HOLD-DOWN NUT, PUMPER CAP AND HOSE CAPS SHALL BE PAINTED GREEN, AND THE HYDRANT UPPER BARREL SHALL BE PAINTED SILVER IN ACCORDANCE WITH CITY SPECIFICATIONS.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	TYPICAL FIRE HYDRANT NOTES	DRAWING NO. W-13.1
APPROVED: XXX		

WATER MAIN TESTING AND DISINFECTION NOTES:

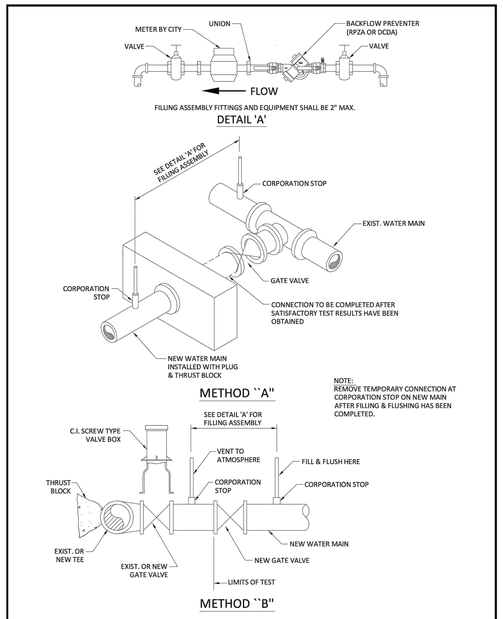
1. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL THE PRESSURE AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED ON THE PROPOSED WATER MAINS AND THE SYSTEM HAS BEEN APPROVED BY THE CITY OF HOLLYWOOD AND THE BROWARD COUNTY HEALTH DEPARTMENT.
2. THE PRESSURE TEST SHALL BE PERFORMED FOR 2 HOURS AT A CONSTANT PRESSURE OF 150 PSI AND IN ACCORDANCE WITH RULE 62-555.330 (FAC) C600 AWWA LATEST REVISION, EXCEPT AS OTHERWISE SPECIFIED HEREIN AND IN SPECIFICATION SECTION 15995, "PIPELINE TESTING AND DISINFECTION". PRESSURE TEST SHALL BE WITNESSED BY THE CITY OF HOLLYWOOD. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

$$L = \frac{S \times D \times \sqrt{P}}{148{,}000}$$

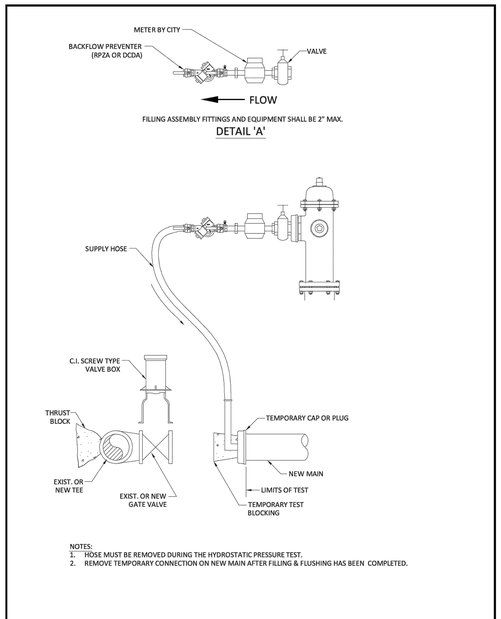
L = THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
S = THE LENGTH OF PIPE BEING TESTED.
D = THE NOMINAL DIAMETER OF THE PIPE BEING TESTED.
P = THE AVERAGE TEST PRESSURE IN POUNDS PER SQUARE INCH.

3. THE COMPLETE LENGTH OF THE PROPOSED WATER MAIN SHALL BE TESTED, IN LENGTHS NOT TO EXCEED 2,000 FEET PER TEST.
4. PROPOSED WATER MAINS SHALL BE DISINFECTED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI/AWWA STANDARD C651 AND BACTERIOLOGICAL TESTED FOR TWO CONSECUTIVE DAYS IN ACCORDANCE WITH SPECIFICATION SECTION 15995, "PIPELINE TESTING AND DISINFECTION".
5. BACTERIOLOGICAL TESTS SHALL BE REQUESTED AND PAID FOR BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL DIRECTLY HIRE A TESTING LABORATORY CERTIFIED BY THE FLORIDA DEPARTMENT OF HEALTH IN ORDER TO COLLECT AND TEST WATER SAMPLES FROM THE WATER DISTRIBUTION SYSTEM TO BE PLACED INTO SERVICE. SAMPLE COLLECTION AND BACTERIOLOGICAL ANALYSES SHALL BE PERFORMED IN ACCORDANCE WITH RULES 62-555.315(6), 62-555.340 AND 62-555.330 (FAC), AS WELL AS ALL REQUIREMENTS OF THE BROWARD COUNTY HEALTH DEPARTMENT PERMIT.
7. THE WATER DISTRIBUTION SYSTEM SHALL NOT BE CONSIDERED COMPLETE AND READY FOR FINAL INSPECTION UNTIL SUCCESSFUL TEST RESULTS ARE OBTAINED FOR ALL TESTS DESCRIBED ABOVE.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	WATER MAIN TESTING AND DISINFECTION NOTES	DRAWING NO. W-14
APPROVED: XXX		

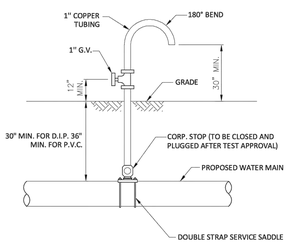


ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	FILLING AND FLUSHING DETAILS	DRAWING NO. W-15
APPROVED: XXX		



NOTES:
1. HOSE MUST BE REMOVED DURING THE HYDROSTATIC PRESSURE TEST.
2. REMOVE TEMPORARY CONNECTION ON NEW MAIN AFTER FILLING & FLUSHING HAS BEEN COMPLETED.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	CROSS CONNECTION FILLING AND FLUSHING DETAILS	DRAWING NO. W-15.1
APPROVED: XXX		



NOTES:
SAMPLING POINT SHALL NOT BE REMOVED UNTIL APPROVAL IS OBTAINED FROM BROWARD COUNTY HEALTH DEPARTMENT.

ISSUED: 03/01/1994	DEPARTMENT OF PUBLIC UTILITIES STANDARD DETAIL	REVISED: 06/08/2014
DRAWN: EAM	SAMPLING POINT DETAIL	DRAWING NO. W-16
APPROVED: XXX		

No.	REVISIONS	DATE	BY
1	CITY OF HOLLYWOOD PLANNING REVISIONS	8/22/2025	SHB

Kimley»Horn
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445 24TH STREET, SUITE 200, VERO BEACH, FL 32960
PHONE: 772-794-4100
WWW.KIMLEY-HORN.COM REGISTRY NO. 35106

8/25/2025

GREGORY D. WILFONG LICENSE No. 63166 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GREGORY D. WILFONG, P.E. ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT WERE NOT DIGITALLY SIGNED AND SEALED.

KHA PROJECT	147507129
DATE	8/25/2025
SCALE	AS SHOWN
DESIGNED BY	SHB
DRAWN BY	SHB
CHECKED BY	GDW

UTILITY PLAN DETAILS

OAKWOOD EAST MULTI FAMILY PROJECT

CITY OF HOLLYWOOD FL

SHEET NUMBER
C-455

Plotted By:Tyrds, Danny Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:C-455 UTILITY PLAN DETAILS August 25, 2025 12:40:42pm K:\VRB_LDEV\147507129 - Oakwood Resi Towers\CAD\PlanSheets\C-450 UTILITY DETAILS.dwg
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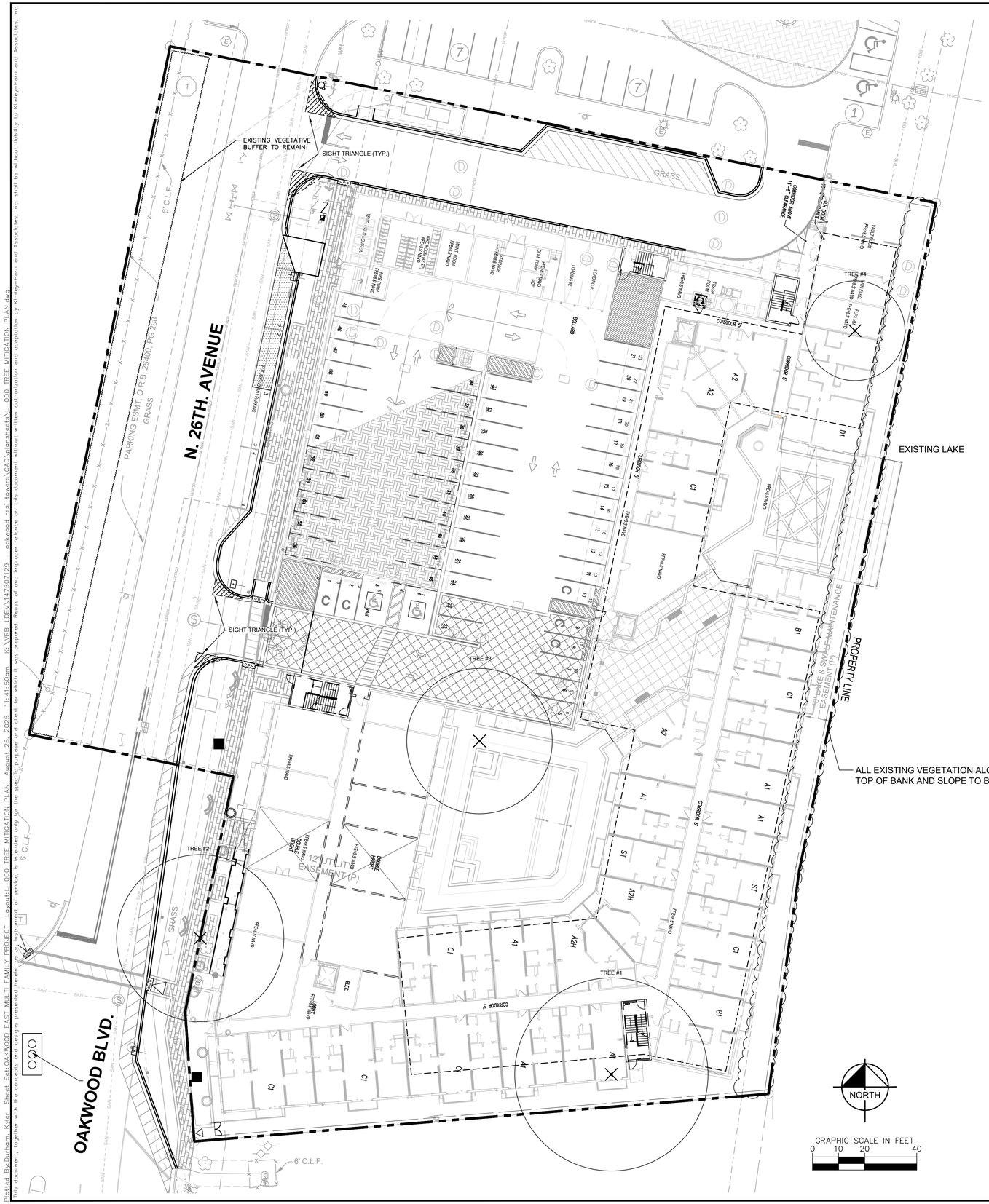

TREE DISPOSITION and MITIGATION LIST

KHA TREE NO.	SCIENTIFIC NAME	COMMON NAME	DBH (In.)	SPREAD(ft)	Height (Ft)	Condition	DISPOSITION	MITIGATION
1	*Casuarina equisetifolia*	Australian Pine* (Multi-Trunk)	70	75	90	N/A	Remove	Invasive
2	*Quercus virginiana*	Live Oak*	34	64	36	N/A	Remove	3216.98816
3	*Casuarina equisetifolia*	Australian Pine*	56	68	90	N/A	Remove	Invasive
4	*Schinus terebinthifolia*	Brazilian Peppertree	**	38	25	N/A	Remove	Invasive
							TOTAL DBH REMOVED (IN.)	3217

N.I.S. = Not in Scope
* Measurements based on Google Earth imagery 09/12/24 & site observations 09/12/24
** Could not access trunk to record measurement

TREE MITIGATION CALCULATIONS

TOTAL CANOPY MITIGATION REQUIRED (SQUARE FEET)	3,217
TOTAL CANOPY PROVIDED	4800
TOTAL CANOPY DELTA	-1,583

TOTAL TREE TRUST FUND CONTRIBUTION (TREE DEIFICIT x $350)	**$ -**

TREE DISPOSITION GRAPHIC LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
TREE #	TREE TO BE REMOVED	PALM #	PALM TO BE REMOVED
TREE #	TREE TO BE RELOCATED	PALM #	PALM TO BE RELOCATED
TREE #	EXISTING TREE NOT IN SCOPE		TREE PROTECTION FENCE
TREE #	TREE TO REMAIN	PALM #	PALM TO REMAIN
TREE #	APPROXIMATE LIMITS OF CRITICAL ROOT ZONE PER ARBORIST REPORT.		

NOTES:

1. INFORMATION UTILIZED IN PREPARATION OF TREE DISPOSITION PLANS ASCERTAINED ARE FROM AND RELIANT UPON SITE OBSERVATIONS (LOCATION AND SPECIES IDENTIFICATION), AND 2024 GOOGLE IMAGERY (+/- CANOPY DIAMETER).
2. REFER TO SHEET L-100 FOR LANDSCAPE PLAN.
3. REFER TO SHEET L-300 FOR HARDSCAPE PLAN.

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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KYLER R. DURHAM ★ No LA6667668 ★ DATE 8/25/2025 ★ STATE OF FLORIDA ★ PROFESSIONAL LANDSCAPE ARCHITECT

KHA PROJECT	147507039
DATE	8/1/2025
SCALE	AS SHOWN
DESIGNED BY	KPD
DRAWN BY	CT
CHECKED BY	KPD

TREE MITIGATION PLAN

OAKWOOD EAST MULTI FAMILY PROJECT
PREPARED FOR
KIMCO

CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
L-000

Plotted By:Durham, Kyler Sheet Set:OAKWOOD EAST MULTI FAMILY PROJECT Layout:L-000 TREE MITIGATION PLAN August 25, 2025 11:41:50am K:\VRB_LDEV\147507\29 - oakwood east towers\CAD\plansets\L-000 TREE MITIGATION PLAN.dwg
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TREE REMOVAL AND TREE TO REMAIN PRUNING SPECIFICATIONS

PART 1 - DEFINITIONS

A. Natural Resource - Existing trees or palms.
B. Critical Root Zone - The minimum volume of roots necessary to have for tree health and stability.
C. DBH - Diameter Breast High - Indicates the location on the trunk, approximately 4.5' above ground, to measure the diameter of a tree.
D. Preserved Trees - Trees that are to be saved/remain in place.
E. Owner's Representative - A representative, hired and paid for by the owner, that supervises the construction of the procedures shown on the tree disposition plans.
F. Tree Protection Zone (TPZ) - The area surrounding a tree defined by a specified distance, which excavation and other construction related activities should be avoided. The TPZ is variable depending on species, factors, age and health of the plant, soil conditions, and proposed construction.
G. Contractor's Certified Arborist - an independent ISA Certified Arborist, hired and paid for by the contractor, that supervises the construction of the procedures shown on the tree disposition plans.

PART 2 - TREE BARRIER

A. Tree Protector Barrier Material.
1. Six (6) foot tall wire mesh construction fence supported by eight (8) foot tall metal T-Bar Posts and Post Caps.
2. The tree protector barrier shall have a two (2) foot by two (2) foot "tree protection zone" sign affixed to the fence every twenty (20) feet placed in such a manner to be clearly visible to the construction workers. The sign must be made up of weather resistant material.
3. The eight (8) foot tall metal T-Bar Post and Post Cap shall be placed a maximum of six (6) foot intervals.

PART 3 - EXECUTION

A. If hazards are determined by qualified certified arborist in an individual tree then those hazards can be mitigated according to the specifications given by the Qualified Certified Arborist.
1. The tree disposition list. This item is to be coordinated by the Qualified Certified Arborist with the Owner's Representative.
2. All pruning shall be done in accordance with ANSI A300 (Part 1) Pruning and best management practices.
3. The Contractor's Certified Arborist shall be present during all pruning operations.

B. Root Pruning - Refer to Arborist Report
1. Trenching locations shall be approved in the field by the Owner's Representative and the Contractor's Certified Arborist.
2. All roots shall be cut by hand.
3. The trench shall be backfilled minus debris and large rocks, as directed by the Contractor's Certified Arborist.
4. Phased root pruning timeframes vary by species. Contractor's certified arborist shall direct pruning schedule.

C. Tree Protector Barrier
1. See detail in this sheet.
2. Tree Protector Barrier shall be placed by the Contractor around each tree to remain as directed by the Contractor's Certified Arborist.

D. Tree Removals
1. Contractor shall remove and discard all trees shown as "Remove" on the Tree Disposition Plan and the Tree Disposition List. Tree stump shall be ground below grade. Care shall be taken to not damage the existing trees marked to remain and their critical root zones shall not be compacted by equipment.
2. If Tree Protector Barrier is damaged, repair shall be performed immediately.
3. Contractor shall remove and haul away from the job site all wood generated from tree removals, including stumps, the same day the removal happens.
4. Burn pits are not allowed.

PART 4 - PENALTIES

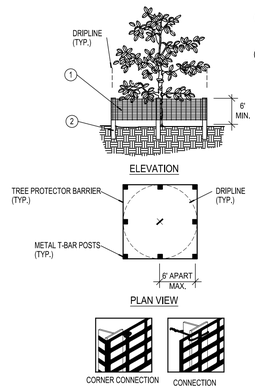
A. Repair of Damaged Trees To Remain
1. If any damage to trees to remain or other natural resources should occur by accident or negligence during the construction period, shall be immediately inspected by Qualified Certified Arborist who shall determine the prescription of care at the Contractor's expense.

PART 5 - TREE PROTECTION

A. Contractor's Certified Arborist to determine the location of the Tree Protector Barrier around each tree to remain based on his/her analysis of each existing tree to remain that is adjacent to construction improvements such as utility installation, pavement addition and/or restoration, etc.
B. Contractor shall maintain and repair the Tree Protector Barrier during site construction operations.
C. Contractor's access to the fenced tree protection areas will be permitted only with approval of Owner's Representative and Contractor's Certified Arborist's written directive.
D. There shall no be change in grade within the critical root zone as per ANSI Standards.
E. Contractor shall clear by hand all vegetation to grade within the critical root zones of trees to remain.
F. Contractor shall not install conduit, sprinklers, or any utility line in any critical root zone areas without the approval of the Contractor's Certified Arborist and Owner's Representative.

PART 6 - IRRIGATION

A. Contractor shall irrigate trees as specified by Landscape Architect and Qualified Certified Arborist.
B. On a monthly basis an irrigation audit shall be conducted by an irrigation specialist for review by Landscape Architect or Qualified Certified Arborist.



1. SIX (6) FOOT TALL WIRE MESH CONSTRUCTION FENCE BY EIGHT (8) FOOT TALL METAL T-BAR POSTS AND POST CAPS. SUBMIT PRODUCT INFORMATION FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

2. WEATHER RESISTANT MATERIAL 2' X 2' "TREE PROTECTION ZONE" SIGN. SUBMIT PRODUCT INFORMATION FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

3. EIGHT (8) FOOT TALL METAL T-BAR POSTS, 24" MINIMUM BURIAL BELOW GRADE OR AS REQUIRED TO CREATE A SAFE CONDITION, WHICHEVER GREATEST. SUBMIT PRODUCT INFORMATION FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

INSTALLATION NOTES:

A. POST SELECTION SHOULD BE BASED ON EXPECTED STRENGTH NEEDS AND THE LENGTH OF TIME FENCE WILL BE IN PLACE. FLEXIBLE FIBERGLASS ROD POSTS ARE RECOMMENDED FOR PARKS, ATHLETIC EVENTS AND CROWD CONTROL INSTALLATIONS. METAL "T" POSTS OR ARE TYPICALLY USED FOR CONSTRUCTION AND OTHER APPLICATIONS.

B. POSTS SHALL BE DRIVEN INTO THE GROUND TO A DEPTH OF TWO (2) FEET MINIMUM OR AS REQUIRED TO ENSURE A SAFE CONDITION. SPACE POSTS 6' MAXIMUM ON CENTER.

C. SECURE FENCING TO POST WITH NYLON CABLE TIES (AVAILABLE FROM CONWED PLASTICS). WOOD STRIPS MAY BE ALSO BE USED TO PROVIDE ADDITIONAL SUPPORT AND PROTECTION BETWEEN TIES AND POSTS.

NOTE: IF WIRE TIES ARE USED, AVOID DIRECT CONTACT WITH PROTECTOR BARRIER, WIRE MAY DAMAGE PROTECTOR BARRIER OVER TIME.

A TREE/SHRUB PROTECTOR
Barrier Detail
NTS

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

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KYLER DURHAM ★ LICENSE No LA6667668 ★ DATE: 8/25/2025 STATE OF FLORIDA PROFESSIONAL LANDSCAPE ARCHITECT

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KHA PROJECT 147507039
DATE 8/1/2025
SCALE AS SHOWN
DESIGNED BY KPD
DRAWN BY CT
CHECKED BY KPD

TREE MITIGATION DETAILS AND NOTES

OAKWOOD EAST MULTI FAMILY PROJECT
PREPARED FOR
KIMCO
CITY OF HOLLYWOOD FLORIDA

SHEET NUMBER
L-050

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