


WATER BASIS OF DESIGN REPORT FOR HUNTINGTON OASIS APARTMENTS

| | |
|---|---|
| PRELIMINARY Basis of Design Report |  |
| <input type="checkbox"/> ACCEPTED | |
| <input checked="" type="checkbox"/> ACCEPTED AS NOTED | |
| <input type="checkbox"/> REVISE AND RESUBMIT | |
| <small>Disclaimer: If accepted; the preliminary approval is granted under the condition that a final basis of design report will also be submitted for city review and approval (typically during the DR or PP case). The final report shall incorporate further water or sewer design and analysis requirements as defined in the city design standards and policy manual and address those items noted in the preliminary review comments (both separate and included herein). The final report shall be submitted and approved prior to the plan review submission. For questions or clarifications contact the Water Resources Planning and Engineering Department at 480-312-5685.</small> | |
| BY Idillon | DATE 12/28/2020 |

15-ZN-2020

Scottsdale, Arizona

20 November 2020

PREPARED FOR

Nelson Partners, Inc

15210 North Scottsdale Road, Suite 300

Scottsdale, Arizona 85254

DEVELOPER

Village Property Management, LLC

PO BOX 88

Beverly Hills, California 90213

SITE ADDRESS

3302 -3388 North Hayden Road

Scottsdale, Arizona 85251

Address comments below and herein within the DR case final BOD:

- 1) **Stipulation:** Provide 20ft combined public water and sewer line easement for new water and sewer lines. Lines to be located only entirely within drive aisles with public line 10ft from any structures. DS&PM 6-1.402
- 2) If water is not separately metered for the restaurant both sewer for the entire building will be billed at the higher commercial rate. Consider financial billing implications. Refer to DS&PM 6-1.416.
- 3) If BFP is not adjacent to meter the line in between must be backfilled with 1 sack CLSM. DS&PM 6-1.417,C,2.
- 4) All new service lines to be type K copper, 1" minimum. DS&PM 6-1.416, B. Call out size on final utility plan.
- 5) To provide required water line looping/redundancy connect new 8" to existing 8" with 8" tee and provide new isolation gate valves on east and south legs of tee. Refer to utility plan notes.

PREPARED BY



4450 north 12th street, #228

phoenix, arizona 85014

CYPRESS # 20.122



15-ZN-2020

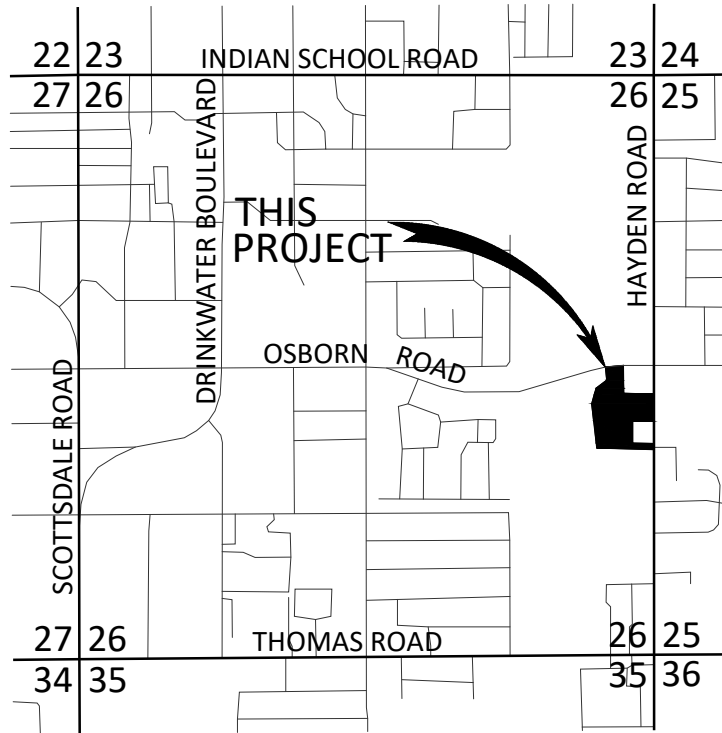
12/04/20

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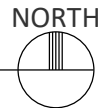
APPENDICES

- A City of Scottsdale Water and Sewer Quarter Section Map
- B Site Plan
- C Preliminary Improvement Plans
- D Fire Flow Test Results



IN THE NE 1/4 OF THE SE 1/4 OF SECTION 26,
 T. 2 N., R. 4 E., G.&S.R.M.,
 CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA

LOCATION MAP



INTRODUCTION: PROJECT DESCRIPTION AND LOCATION

The Project is known as 'Huntington Oasis Apartments' and is located at 3302 through 3388 North Hayden Road in Scottsdale, Arizona. The Project is located on the west side of Hayden Road, south of Osborn Road. The Project consists of the construction of a new multi-story apartment building, a restaurant building, and a retail building with all required grading and drainage, parking, utility and paving improvements.

The utility provider for water facilities is the City of Scottsdale.

EXISTING CONDITIONS

Per available utility maps and as-built records, the site is currently developed with five existing buildings onsite. The existing buildings are served by individual connections to an existing 8" DIP water main, which ties into an existing main in Hayden Road at the southeast and wraps around the site, ending in one existing terminal fire hydrant. All five buildings are connecting to this existing main for fire and domestic services. Refer to Appendix A for City of Scottsdale Water and Sewer Quarter Section Map for stub locations and sizes.

PROPOSED CONDITIONS

The five existing buildings shall be demolished and three new buildings shall be built onsite. Building 1 shall be a restaurant. Building 2 shall be a mixed-use restaurant/retail building and Building 3 an apartment building with portions of mixed-use restaurant/retail. The existing 8" water main shall be cut in the drive aisle at the south. The entire water system, including the existing 8" main and the connections, shall be abandoned west and north of this cut. The main to the east that taps Hayden Road and comes onsite shall remain, along with one service to an existing drive-thru at the southeast corner. A new 8" water main shall connect to the existing 8" water main here and run north, where all three buildings shall tap the new main with a new 2" line, meter, and backflow preventer for domestic service and with a new 6" fire line to serve the new fire suppression systems. Additionally, two new fire hydrants will be installed off of the new main, meeting the coverage requirements for the Project per the International Fire Code, Table C102.1.

Refer to Appendix B for Site Plan and Appendix C for Preliminary Improvement Plans.

REQUIRED COMPUTATIONS

PROPOSED FIRE AND WATER DEMANDS

Building 1

The new building will be approximately 3,309 square feet and is construction type V-B. Per the International Fire Code, Table B105.1, it requires a minimum fire flow of 1,750 GPM for a 2-hour duration. The existing building has automatic sprinklers installed, which will extend to the new addition, resulting in an allowable 75% reduction in fire flow requirements. However, the minimum fire flow cannot be less than 1,500 GPM. Therefore, required fire flow will be 1,500 GPM for a 2-hour duration.

Average Day Demand (Restaurant): $0.00181/\text{SF} \times 3,309 \text{ SF} = 5.99 \text{ GPM}$

Peak Hour Demand: $3.5 \times 5.99 = 20.97 \text{ GPM}$

Maximum Day Demand + Fire Flow Demand: $(2 \times 5.99 \text{ GPM}) + 1,500 \text{ GPM} = 1,511.98 \text{ GPM}$

Meter Calculation: $1.5 \times (2 \times 5.99) = 17.97 \text{ GPM}$

The new building shall have a new 2" meter and service. Per the Scottsdale 2018 DSPM Chapter 6, a 2" meter may serve a maximum demand of 160 GPM. Thus, the new 2" meter is acceptable to serve the maximum GPM.

Building 2

The new building will be approximately 7,200 square feet and is construction type V-B. Per the International Fire Code, Table B105.1, it requires a minimum fire flow of 2,250 GPM for a 2-hour duration. The existing building has automatic sprinklers installed, which will extend to the new addition, resulting in an allowable 75% reduction in fire flow requirements. However, the minimum fire flow cannot be less than 1,500 GPM. Therefore, required fire flow will be 1,500 GPM for a 2-hour duration.

Average Day Demand (Commercial/Retail): $0.00111/\text{SF} \times 3,600 \text{ SF} = 4.0 \text{ GPM}$

(Restaurant): $0.00181/\text{SF} \times 3,600 \text{ SF} = 6.52 \text{ GPM}$

Total: 10.52 GPM

Peak Hour Demand: $3.5 \times 10.52 = 36.82 \text{ GPM}$

Maximum Day Demand + Fire Flow Demand: $(2 \times 10.52 \text{ GPM}) + 1,500 \text{ GPM} = 1,511.04 \text{ GPM}$

Meter Calculation: $1.5 \times (2 \times 10.52) = 31.56 \text{ GPM}$

The new building shall have a new 2" meter and service. Per the Scottsdale 2018 DSPM Chapter 6, a 2" meter may serve a maximum demand of 160 GPM. Thus, the new 2" meter is acceptable to serve the maximum GPM.

Building 3

The new building will be approximately 300,000 square feet and is construction type V-B. Per the International Fire Code, Table B105.1, it requires a minimum fire flow of 8,000 GPM for a 4-

hour duration. The existing building has automatic sprinklers installed, which will extend to the new addition, resulting in an allowable 75% reduction in fire flow requirements. Therefore, required fire flow will be 2,000 GPM for a 4-hour duration.

Average Day Demand (Commercial/Retail): $0.00111/\text{SF} \times 4,353 \text{ SF} = 4.83 \text{ GPM}$

(Restaurant): $0.00181/\text{SF} \times 7,472 \text{ SF} = 13.52 \text{ GPM}$

(Residential): $0.27 \text{ GPM/Unit} \times 300 \text{ Units} = 81 \text{ GPM}$

Total: 99.35 GPM

Peak Hour Demand: $3.5 \times 99.35 = 347.73 \text{ GPM}$

Maximum Day Demand + Fire Flow Demand: $(2 \times 99.35 \text{ GPM}) + 2,000 \text{ GPM} = 2,198.7 \text{ GPM}$

Meter Calculation: $1.5 \times (2 \times 99.35) = 298.05 \text{ GPM}$

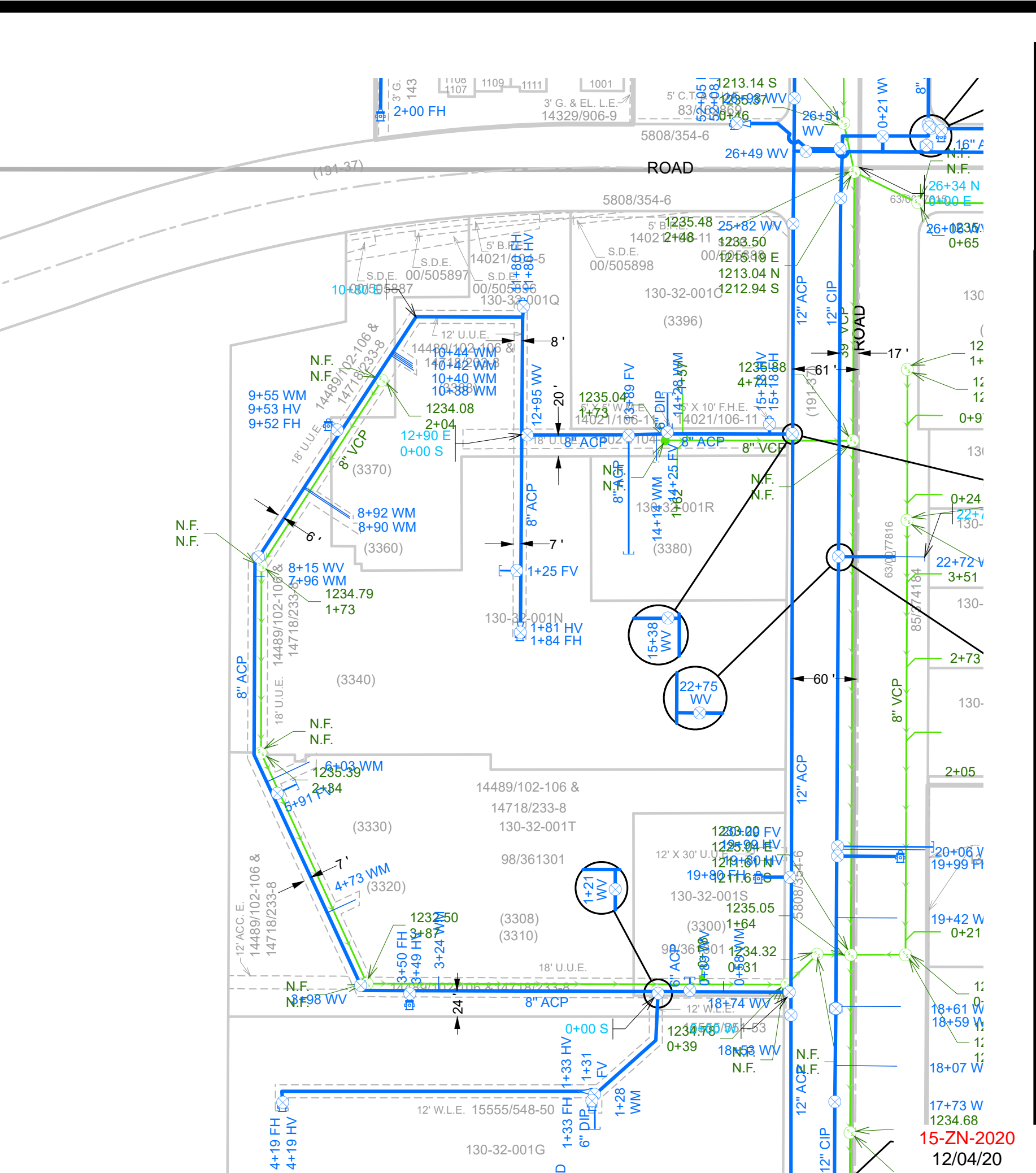
The new building shall have two new 2" meters and services. Per the Scottsdale 2018 DSPM Chapter 6, a 2" meter may serve a maximum demand of 160 GPM. Thus, two new 2" meters can serve a maximum of 320 GPM, which is acceptable to serve the maximum GPM.

The minimum required fire flow shall be 2,000 GPM for the largest building on site. A fire flow test was conducted on September 17, 2020, which shows an available 5,525 GPM at 20 PSI. This is more than sufficient to meet the demand of the largest building on site. Refer to Appendix D for Fire Flow Test Results.

CONCLUSION

CYPRESS respectfully submits this report as the Water Design Report for the proposed Huntington Oasis Apartments Development. The proposed water system shall be designed in accordance with ADEQ, International Building Code, and the City of Scottsdale standards.

Appendix A
City of Scottsdale Water and Sewer Quarter Section Map



Appendix C
Site Plan

PRELIMINARY

NOT FOR
CONSTRUCTION
OR
RECORDING

Huntington Oasis
N Hayden Rd and E Osborn Rd
Scottsdale, AZ 85251

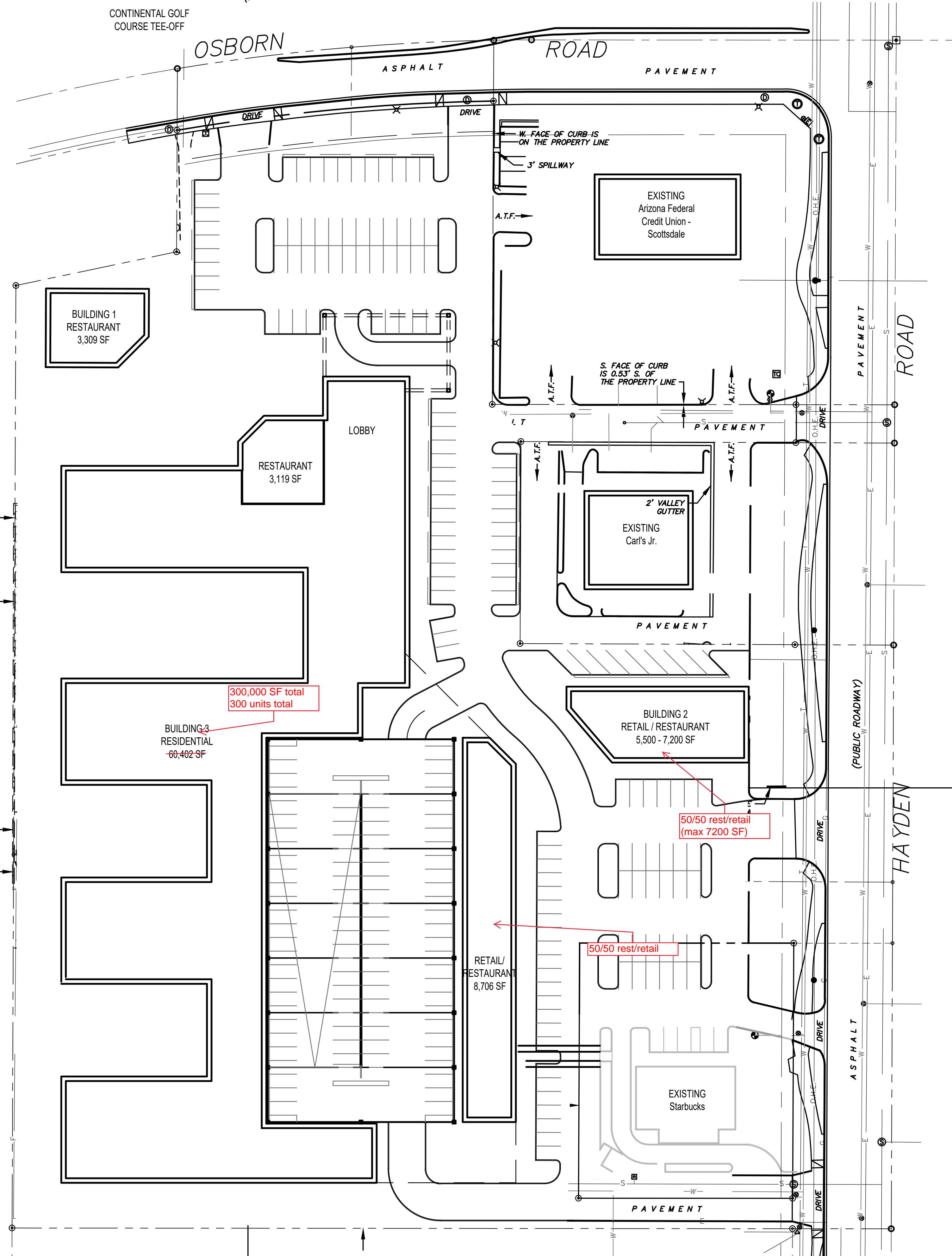
Date
JUNE 24, 2020

PRE-APP # ZONING # DRB #

Drawings and written material appearing herein constitute original and unpublished work of the architect and may not be duplicated, used, or disclosed without written consent of the architect.

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Project No.
319078



PROJECT INFORMATION

| | |
|-----------------------------|---------------------------------|
| CURRENT ZONING: | PNC |
| PROPOSED ZONING: | PUD Planned Unit Development |
| GROSS SITE AREA: | 7.00 ACRES (304,920 SF) |
| NET LOT AREA: | 6.6 ACRES (288,288 SF) |
| PROPOSED GFAR : | 308,000 SF (+/- 1,000 SF) |
| MAX. HEIGHT ALLOWED: | 48 FT |
| PROPOSED HEIGHT: | 48 FT |
| NUMBER OF UNITS: | 300 UNITS |

AREA TABULATIONS

| | |
|---|--------------------------|
| RESTAURANT/RETAIL | 21,000 SF (+/- 1,000 SF) |
| RESIDENTIAL | 286,606 SF |
| 850 AVG (EXCLUDING EFF. UNITS /85% EFF) | 300 UNITS |

PARKING TABULATIONS

| | |
|-----------------|-------------------|
| SURFACE PARKING | 132 STALLS |
| STRUCTURED | |
| LEVEL B1 | 62 CARS |
| LEVEL GRADE | 98 CARS |
| LEVEL 2 | 98 CARS |
| LEVEL 3 | 98 CARS |
| LEVEL 4 | 98 CARS |
| TOTAL | 454 STALLS |
| TOTAL | 586 STALLS |

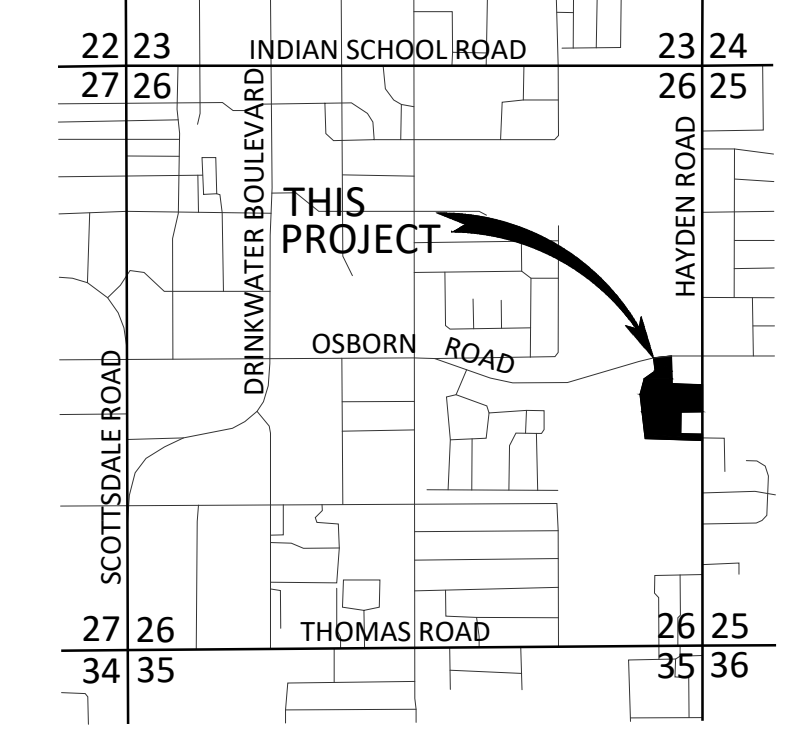
everything is sprinklered, VB construction



Appendix C
Preliminary Improvement Plans

PRELIMINARY IMPROVEMENT PLAN for HUNTINGTON OASIS APARTMENTS

3302 - 3388 NORTH HAYDEN ROAD SCOTTSDALE, ARIZONA
A PORTION SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 2 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA



IN THE NE 1/4 OF THE SE 1/4 OF SECTION 26,
T. 2 N., R. 4 E., G.&S.R.M.,
CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA
LOCATION MAP
NORTH
3" = 1 MILE

PROJECT INFORMATION

PROJECT DESCRIPTION:
THE PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW MULTI-STORY APARTMENT BUILDING, A RESTAURANT BUILDING AND A RETAIL BUILDING WITH ALL REQUIRED GRADING & DRAINAGE, PARKING, UTILITY AND PAVING IMPROVEMENTS.

ADDRESS:
3302-3388 NORTH HAYDEN ROAD
SCOTTSDALE, ARIZONA 85251

APN: 130-32-001T
130-32-001Q
130-32-001N

ZONING: PNC

SITE AREA: 280,609 SF (6.44 AC)

SURVEY NOTES

- THE SURVEY FOR THIS PROJECT WAS PERFORMED BY: SUPERIOR SURVEYING SERVICES, INC. 2122 WEST LONE CACTUS DRIVE, SUITE 111 PHOENIX, ARIZONA 85027 PH: 623-869-0223 CONTACT: DAVID S. KLEIN, R.L.S.
- THE BASIS OF BEARINGS FOR THIS PROJECT IS THE MONUMENT LINE OF HAYDEN ROAD, ALSO BEING THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 26, USING A BEARING OF NORTH 00°14'21" EAST PER THE MAP OF DEDICATION, BOOK 191 OF MAPS, PAGE 37, RECORDS OF MARICOPA COUNTY, ARIZONA.
- THE BASIS OF ELEVATION FOR THIS PROJECT IS THE MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION 3" BRASS CAP IN HANDHOLE (0.50' DEPTH) MARKING THE INTERSECTION OF OSBORN ROAD AND HAYDEN ROAD HAVING AN ELEVATION OF 1235.015 FEET (NAVD88).

BENCHMARK

THE BENCHMARK USED FOR THIS PLAN IS THE MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION 3" BRASS CAP IN HANDHOLE (0.50' DEPTH) MARKING THE INTERSECTION OF OSBORN ROAD AND HAYDEN ROAD HAVING AN ELEVATION OF 1235.015 FEET (NAVD88).

LEGAL DESCRIPTION

PARCEL NO. 1:
A PART OF THE SOUTHEAST QUARTER OF SECTION TWENTY-SIX (26), TOWNSHIP TWO (2) NORTH, RANGE FOUR (4) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SECTION 26;
THENCE SOUTH 00°14'21" WEST ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 26 AND ALONG THE CENTERLINE OF HAYDEN ROAD A DISTANCE OF 554.25 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00°14'21" WEST ALONG THE AFOREMENTIONED LINE A DISTANCE OF 228.23 FEET;
THENCE NORTH 89°56'59" WEST A DISTANCE OF 578.94 FEET;
THENCE NORTH 00°14'00" EAST A DISTANCE OF 245.85 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 35.02 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 2.09 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 25.30 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 6.00 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 10.00 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 6.00 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 170.62 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 133.00 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 338.02 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPT THAT PORTION CONVEYED TO RIGEL CORPORATION, A NEBRASKA CORPORATION, IN DEED RECORDED MARCH 18, 1998 IN DOCUMENT NO. 98-0207776 AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:
THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 26, TOWNSHIP 2 NORTH, RANGE 4 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 26;
THENCE SOUTH 00°14'21" WEST ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 26, A DISTANCE OF 594.48 FEET;
THENCE NORTH 89°58'16" WEST, 65.00 FEET TO THE WEST RIGHT-OF-WAY LINE OF HAYDEN ROAD AND THE POINT OF BEGINNING;
THENCE SOUTH 00°14'21" WEST ALONG SAID WEST RIGHT-OF-WAY LINE, 168.00 FEET;
THENCE NORTH 89°58'16" WEST, 141.00 FEET;
THENCE NORTH 00°14'21" EAST, 168.00 FEET;
THENCE SOUTH 89°58'16" EAST, 141.00 FEET TO THE POINT OF BEGINNING; AND EXCEPT AN UNDIVIDED ONE-HALF (1/2) INTEREST IN AND TO ALL OIL, PETROLEUM, NAPHTHA AND OTHER HYDROCARBON SUBSTANCES AND MINERALS LYING BELOW A DEPTH OF 500 FEET, AS RESERVED IN THE DEED RECORDED IN DOCKET 9943, PAGE 719, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 2:
A PART OF THE SOUTHEAST QUARTER OF SECTION TWENTY-SIX (26), TOWNSHIP TWO (2) NORTH, RANGE FOUR (4) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION TWENTY-SIX (26);
THENCE SOUTH 00°14'21" WEST ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 26 AND ALONG THE CENTERLINE OF HAYDEN ROAD A DISTANCE OF 240.00 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00°14'21" WEST ALONG THE AFOREMENTIONED LINE A DISTANCE OF 158.21 FEET;

LEGAL DESCRIPTION

THENCE NORTH 89°45'39" WEST A DISTANCE OF 246.00 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 133.00 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 120.17 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 104.48 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 92.44 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 6.28 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 6.00 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 16.19 FEET;
THENCE NORTH 89°45'39" WEST, A DISTANCE OF 21.67 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 118.64 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 59.00 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 110.48 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 68.64 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 112.00 FEET TO A POINT ON THE CENTERLINE OF OSBORN ROAD, SAID POINT BEING ON A CURVE CONCAVE SOUTHERLY THE CENTER LINE OF WHICH BEARS SOUTH 04°42'05" EAST A DISTANCE OF 1432.40 FEET;
THENCE EASTERLY ALONG THE ARC OF SAID CURVE AND ALONG THE AFOREMENTIONED CENTERLINE THROUGH A CENTRAL ANGLE OF 03°45'05" AND A DISTANCE OF 93.79 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 239.78 FEET;
THENCE SOUTH 89°56'59" EAST A DISTANCE OF 265.00 FEET TO THE TRUE POINT OF BEGINNING.
EXCEPT THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION TWENTY-SIX (26), TOWNSHIP TWO (2) NORTH, RANGE FOUR (4) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 26;
THENCE SOUTH 00°14'21" WEST ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 26 AND ALONG THE CENTERLINE OF HAYDEN ROAD FOR A DISTANCE OF 265.21 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00°14'21" WEST ALONG THE AFOREMENTIONED LINE FOR A DISTANCE OF 133.00 FEET;
THENCE NORTH 89°45'39" WEST FOR A DISTANCE OF 246.00 FEET;
THENCE NORTH 00°14'21" EAST FOR A DISTANCE OF 133.00 FEET;
THENCE SOUTH 89°45'39" EAST FOR A DISTANCE OF 246.00 FEET TO THE TRUE POINT OF BEGINNING; AND EXCEPT AN UNDIVIDED ONE-HALF (1/2) INTEREST IN AND TO ALL OIL, PETROLEUM, NAPHTHA AND OTHER HYDROCARBON SUBSTANCES AND MINERALS LYING BELOW A DEPTH OF 500 FEET, AS RESERVED IN THE DEED RECORDED IN DOCKET 9943, PAGE 719, RECORDS OF MARICOPA COUNTY, ARIZONA.

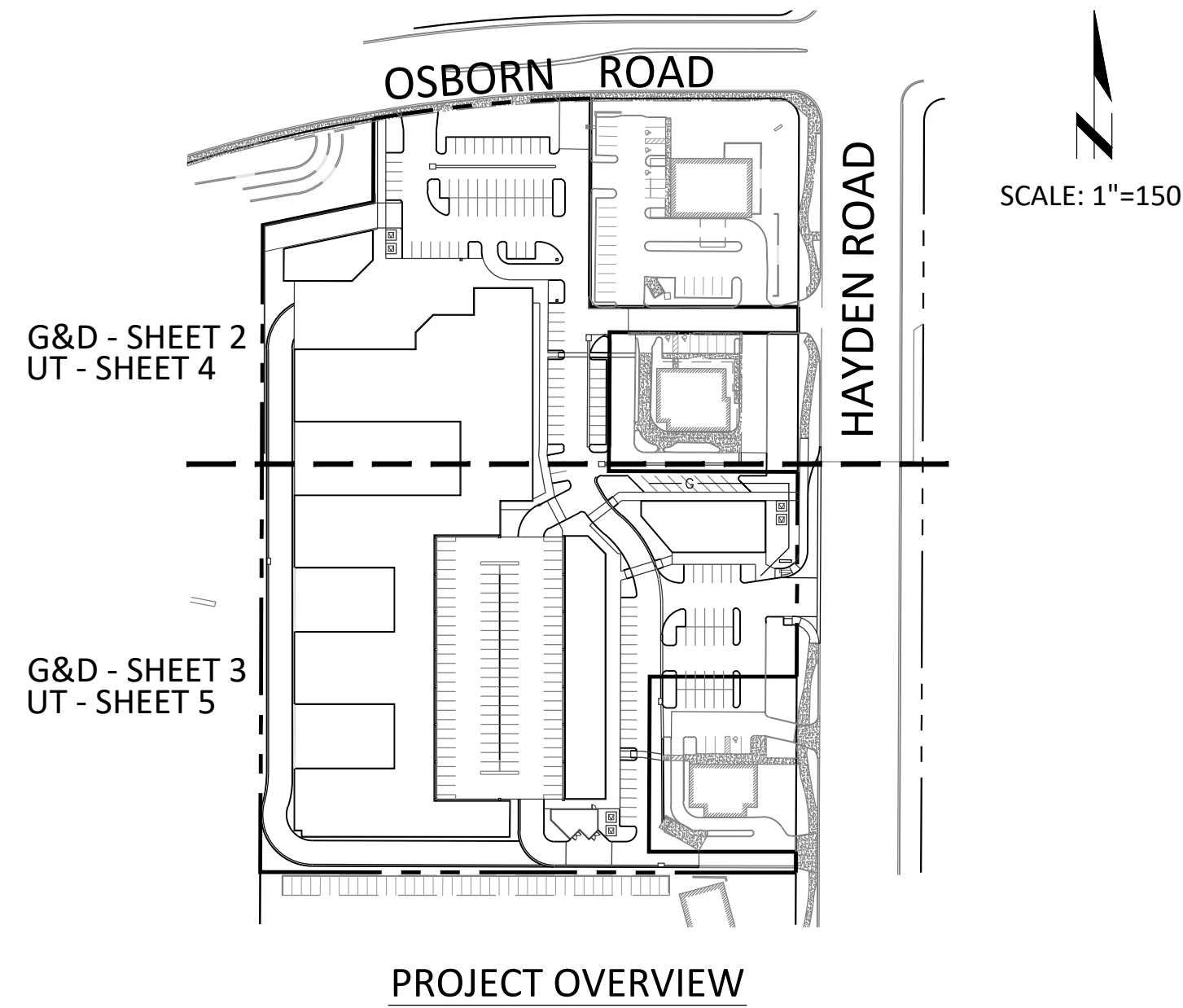
PARCEL NO. 3:
NON-EXCLUSIVE EASEMENTS FOR THE INGRESS AND EGRESS AND FOR THE PASSAGE AND PARKING OF MOTOR VEHICLES INTO, OUT OF, ON, OVER AND ACROSS ALL PARKING AREAS, DRIVEWAYS AND SERVICE AREAS; FOR THE INGRESS AND EGRESS AND PASSAGE FOR PEDESTRIANS INTO, OUT OF, ON, OVER AND ACROSS THE COMMON AREAS; TOGETHER WITH NON-EXCLUSIVE EASEMENTS UNDER, THROUGH AND ACROSS THE COMMON AREA FOR WATER DRAINAGE SYSTEMS OR STRUCTURES, WATER MAINS, SEWERS, WATER SPRINKLER SYSTEM LINES, TELEPHONES OR ELECTRIC CONDUITS OR SYSTEMS, GAS MAINS AND OTHER PUBLIC UTILITIES AND SERVICE EASEMENTS, AS PROVIDED IN DECLARATION RECORDED SEPTEMBER 29, 1980 IN DOCKET 14718, PAGE 242 AND AMENDED IN DOCUMENT NO. 83-150223.

PARCEL NO. 4:
A PART OF THE SOUTHEAST QUARTER OF SECTION TWENTY-SIX (26), TOWNSHIP TWO (2) NORTH, RANGE FOUR (4) EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 26;
THENCE SOUTH 00°14'21" WEST ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 26 AND ALONG THE CENTERLINE OF HAYDEN ROAD A DISTANCE OF 398.21 FEET TO THE TRUE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00°14'21" WEST ALONG THE AFOREMENTIONED LINE A DISTANCE OF 156.04 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 338.02 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 133.62 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 170.62 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 6.00 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 10.00 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 6.00 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 25.30 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 2.09 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 35.02 FEET;
THENCE NORTH 00°14'00" EAST A DISTANCE OF 374.67 FEET;
THENCE NORTH 78°10'21" EAST A DISTANCE OF 108.14 FEET;
THENCE NORTH 00°14'00" EAST A DISTANCE OF 120.58 FEET TO A POINT ON THE CENTERLINE OF OSBORN ROAD, SAID POINT BEING A POINT OF A CURVE CONCAVE SOUTHERLY THE CENTER OF WHICH BEARS SOUTH 09°19'29" EAST A DISTANCE OF 1432.40 FEET;
THENCE EASTERLY ALONG THE ARC OF SAID CURVE AND ALONG THE AFOREMENTIONED CENTERLINE THROUGH A CENTRAL ANGLE OF 04°37'24" AND A DISTANCE OF 115.59 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 112.00 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 68.64 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 110.48 FEET;
THENCE NORTH 89°45'39" WEST A DISTANCE OF 59.00 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 118.64 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 21.67 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 16.19 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 6.00 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 6.28 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 92.44 FEET;
THENCE NORTH 00°14'21" EAST A DISTANCE OF 104.48 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 120.17 FEET;
THENCE SOUTH 00°14'21" WEST A DISTANCE OF 133.00 FEET;
THENCE SOUTH 89°45'39" EAST A DISTANCE OF 246.00 FEET TO THE TRUE POINT OF BEGINNING;

EXCEPTING THEREFROM AN UNDIVIDED ONE-HALF INTEREST IN AND TO ALL OIL, GAS, PETROLEUM, NAPHTHA AND OTHER HYDROCARBON SUBSTANCES AND MINERALS LYING BELOW A DEPTH OF 500 FEET, AS RESERVED IN THE DEED RECORDED IN DOCKET 9943, PAGE 719, RECORDS OF MARICOPA COUNTY, ARIZONA.

PARCEL NO. 5:
NONEXCLUSIVE EASEMENTS FOR INGRESS AND EGRESS AND PASSAGE OF PEDESTRIANS, PARKING AND PASSAGE OF MOTOR VEHICLES INTO, OUT OF, ON, OVER AND ACROSS ALL PARKING AREAS, DRIVEWAYS AND SERVICE AREAS, ALL AS SET FORTH IN INSTRUMENTS RECORDED IN DOCKET 14494, PAGE 634 AND IN DOCKET 14547, PAGE 57.



DRAINAGE STATEMENT

-SITE IS IN A SPECIAL FLOOD HAZARD AREA - NO
-OFFSITE FLOWS AFFECT THIS SITE - NO
-RETENTION PROVIDED IS FIRST FLUSH.
-EXTREME STORM OUTFALLS THE SITE AT THE WEST CURBLINE AT THE ELEVATION OF 1232.00

PROJECT RETENTION

THE REQUIRED RETENTION IS THE GREATER OF THE 100-YEAR, 2-HOUR PRE VS POST VOLUME OR THE FIRST FLUSH VOLUME.

PRE VS POST RETENTION VOLUME:
VOLUME [CF] = C x (P [IN] / 12) x AREA [SF]

EXISTING CONDITION 100-YR, 2-HR:
V = 0.88 x (2.27/12) x 309,416 = 51,508 CF

PROPOSED CONDITION 100-YR, 2-HR:
V = 0.87 x (2.27/12) x 309,416 = 51,508 CF

PRE VS POST RETENTION VOLUME:
51,508 CF - 51,508 CF = 0 CF

FIRST FLUSH VOLUME:
VOLUME [CF] = C x (P [IN] / 12) x AREA [SF]
VOL. REQUIRED = 1.0 x (0.5/12) x 245,640² = 10,235 CF ← GOVERNS

*AREA DOES NOT INCLUDE RESIDENTIAL ROOF

PROVIDED:
TOTAL PROVIDED VOLUME = 10,570 CF VIA 6 SEPARATE UNDERGROUND STORMTECH MC-3500 STORM CHAMBER SYSTEMS.

- (56) STORMTECH MC-3500 CHAMBERS, 178.9 CF PER CHAMBER
- (12) STORMTECH MC-3500 END CAPS, 46.0 CF PER END CAP
- INSTALLED WITH 12" COVER STONE AND 9" BASE STONE (STONE SHALL HAVE 40% VOID RATIO)

161.6 CF/CHAMBER X 56 CHAMBERS = 10,018.4
46.0 CF/END CAP X 12 END CAPS = 552 CF
TOTAL INSTALLED VOLUME OF CHAMBER SYSTEM = 10,570.4 CF

| FLOOD INSURANCE RATE MAP (FIRM) INFORMATION | | | | | |
|---|------------|--------|--------------|-----------|----------------------|
| COMMUNITY NUMBER | PANEL # | SUFFIX | DATE OF FIRM | FIRM ZONE | BASE FLOOD ELEVATION |
| 045012 | 2235 | L | 11/04/2015 | ZONE X | N/A |
| | 10/16/2013 | | | | |

LEGEND

| | | | |
|-----|-----------------------------------|----|---------------------------|
| --- | PROJECT RIGHT-OF-WAY | ● | NEW SEWER MANHOLE |
| --- | EXISTING RIGHT-OF-WAY | ○ | NEW SEWER CLEANOUT |
| --- | PROJECT/NEW PROPERTY LINE | ⊗ | NEW WATER VALVE |
| --- | EXISTING PROPERTY LINE | W | NEW WATER METER |
| --- | ROADWAY CENTERLINE | BF | NEW BACKFLOW PREVENTER |
| --- | FLOW-LINE | ⊕ | NEW FIRE HYDRANT |
| --- | EXISTING EASEMENT | ○ | SURVEY MONUMENT AS NOTED |
| --- | NEW EASEMENT | ○ | SPOT ELEV. (EXIST. GRADE) |
| --- | EXISTING CONTOUR | ○ | SPOT ELEV. (NEW GRADE) |
| --- | NEW CONTOUR | ○ | RIGHT-OF-WAY |
| --- | EXISTING CONCRETE | ○ | BACK OF CURB |
| --- | EXISTING WALL | ○ | SIDEWALK |
| --- | NEW ASPHALT | ○ | RECORDED VALUE |
| --- | NEW CONCRETE | ○ | MEASURED VALUE |
| --- | NEW WALL | ○ | RADIUS |
| --- | EXISTING CURB | ○ | PAVEMENT (ASPHALT) |
| --- | EXISTING PAINT STRIPE | ○ | CONCRETE |
| --- | NEW CURB | ○ | GUTTER |
| --- | NEW PAINT STRIPE | ○ | TOP OF CURB |
| --- | EXISTING STORM DRAIN PIPE | ○ | FINISHED GRADE |
| --- | EXISTING UNDERGROUND ELECTRIC | ○ | TOP OF FOOTING |
| --- | EXISTING COMMUNICATION LINE | ○ | TOP OF WALL |
| --- | EXISTING OVERHEAD ELECTRIC | ○ | LOW POINT |
| --- | EXISTING FIBER OPTIC | ○ | HP |
| --- | EXISTING SEWER LINE | ○ | GB |
| --- | EXISTING WATER LINE | ○ | FEE |
| --- | EXISTING FIRE SERVICE | ○ | FGH |
| --- | EXISTING GAS LINE | ○ | FGL |
| --- | NEW STORM DRAIN PIPE | ○ | PUE |
| --- | NEW SEWER LINE | ○ | ME |
| --- | NEW WATER LINE | ○ | R: |
| --- | NEW FIRE SERVICE | ○ | I: |
| --- | NEW GAS LINE | ○ | L: |
| --- | EXISTING SEWER MANHOLE | ○ | S: |
| --- | EXISTING SEWER CLEANOUT | ○ | SLOPE |
| --- | EXISTING WATER VALVE | ○ | |
| --- | EXISTING WATER METER | ○ | |
| --- | EXISTING BACKFLOW PREVENTER | ○ | |
| --- | EXISTING FIRE HYDRANT | ○ | |
| --- | EXISTING STORM DRAIN MANHOLE | ○ | |
| --- | EXISTING TRANSFORMER | ○ | |
| --- | EXISTING SIGN | ○ | |
| --- | EXISTING SITE LIGHT | ○ | |
| --- | EXISTING STREET LIGHT | ○ | |
| --- | EXISTING TRAFFIC SIGNAL STRUCTURE | ○ | |
| --- | EXISTING COMMUNICATION PEDESTAL | ○ | |
| --- | EXISTING TRAFFIC LIGHT PULL BOX | ○ | |
| --- | EXISTING UTILITY POLE | ○ | |

OWNER/DEVELOPER

VILLAGE PROPERTY MANAGEMENT, LLC
PO BOX 88
BEVERLY HILLS, CALIFORNIA 90213
PH: 310-888-2888
ATTN: TODD SILVER

CIVIL ENGINEER

CYPRESS CIVIL DEVELOPMENT
4450 NORTH 12TH STREET, #228
PHOENIX, ARIZONA 85014
PH: 623-282-2498
ATTN: JEFF HUNT, PE

ARCHITECT

NELSON PARTNERS, INC
15210 NORTH SCOTTSDALE ROAD, STE 300
SCOTTSDALE, ARIZONA 85254
PH: 480-949-6800
ATTN:

UTILITIES

WATER: CITY OF SCOTTSDALE
SEWER: CITY OF SCOTTSDALE
ELECTRIC: SALT RIVER PROJECT
GAS: SOUTHWEST GAS
TELEPHONE: CENTURYLINK
CABLE: COX COMMUNICATIONS

SHEET INDEX

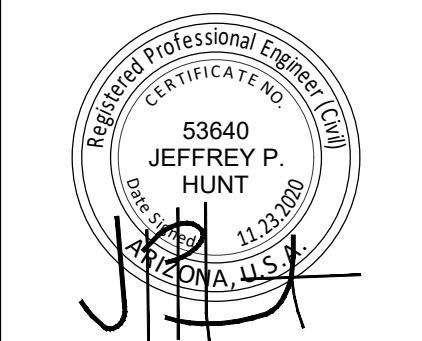
1 COVER SHEET
2-3 GRADING AND DRAINAGE PLAN
4-5 ONSITE UTILITY PLAN

PRELIMINARY IMPROVEMENT PLAN for
HUNTINGTON OASIS APARTMENTS
3302-3388 NORTH HAYDEN ROAD SCOTTSDALE, ARIZONA

cover

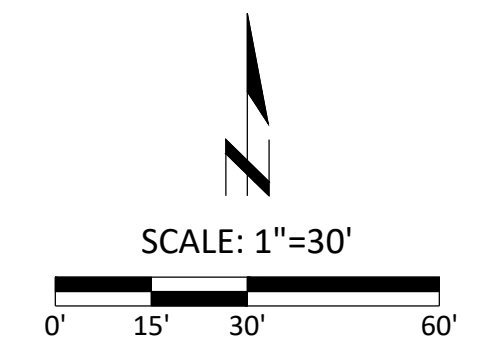
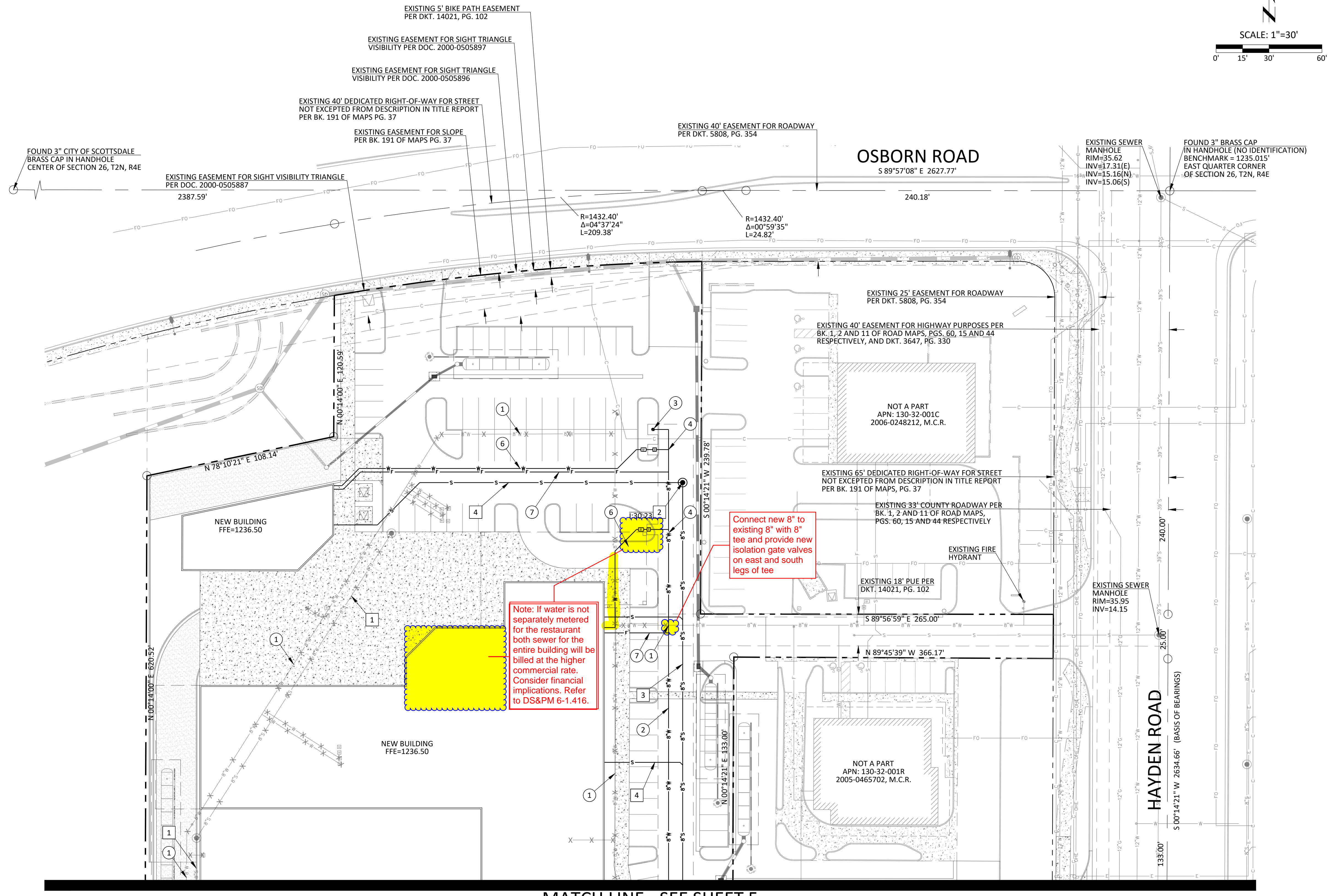
CYPRESS CIVIL
4450 north 12th street
suite 228
phoenix, arizona 85014
p: 623.282.2498
e: jhunt@cypresscivil.com

| NO. | DATE | REVISION |
|-----|------|----------|
| | | |
| | | |
| | | |
| | | |
| | | |



DRAWN: PT
DESIGNED: AS
CHECKED: JH
DATE: 11-23-2020
JOB NO: 20.122
SHEET NUMBER





- WATER KEYNOTES**
- 1 EXISTING PUBLIC WATER LINE TO BE ABANDONED AND REMOVED.
 - 2 NEW 8" PUBLIC WATER MAIN.
 - 3 NEW PUBLIC FIRE HYDRANT.
 - 4 NEW DOMESTIC SERVICE, METER, AND BACKFLOW PREVENTER.
 - 5 NEW LANDSCAPE SERVICE, METER, AND BACKFLOW PREVENTER.
 - 6 NEW PRIVATE DOMESTIC WATER LINE.
 - 7 NEW PRIVATE FIRE LINE.

- SEWER KEYNOTES**
- 1 EXISTING PUBLIC SEWER LINE TO BE ABANDONED AND REMOVED.
 - 2 NEW PUBLIC SEWER MANHOLE.
 - 3 NEW 8" PUBLIC SEWER MAIN.
 - 4 NEW PRIVATE SEWER LINE.

Note: If water is not separately metered for the restaurant both sewer for the entire building will be billed at the higher commercial rate. Consider financial implications. Refer to DS&PM 6-1.416.

Connect new 8" to existing 8" with 8" tee and provide new isolation gate valves on east and south legs of tee

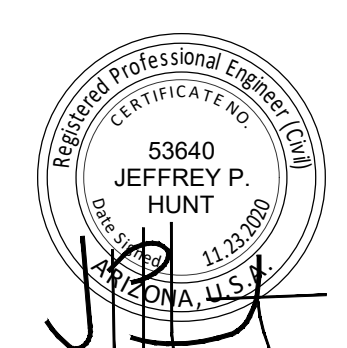
MATCH LINE - SEE SHEET 5

CYPRESS CIVIL
 4450 north 12th street
 suite 228
 phoenix, arizona 85014
 p: 623.282.2498
 e: jphunt@cypresscivil.com

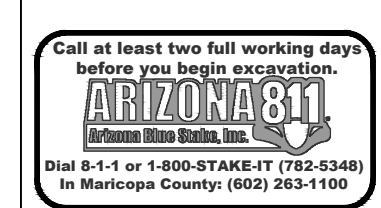
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|-----|------|----------|
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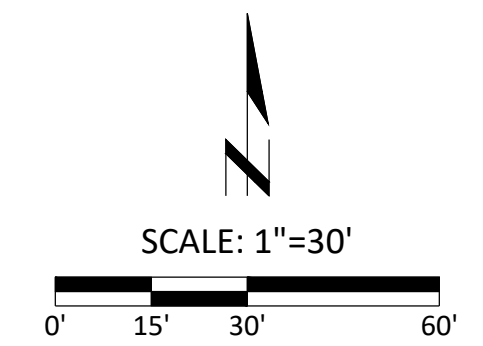
**PRELIMINARY IMPROVEMENT PLAN for
 HUNTINGTON OASIS APARTMENTS**
 3302-3388 NORTH HAYDEN ROAD SCOTTSDALE, ARIZONA

onsite utility plan



| | |
|--------------|------------|
| DRAWN: | PT |
| DESIGNED: | AS |
| CHECKED: | JH |
| DATE: | 11-23-2020 |
| JOB NO: | 20.122 |
| SHEET NUMBER | |



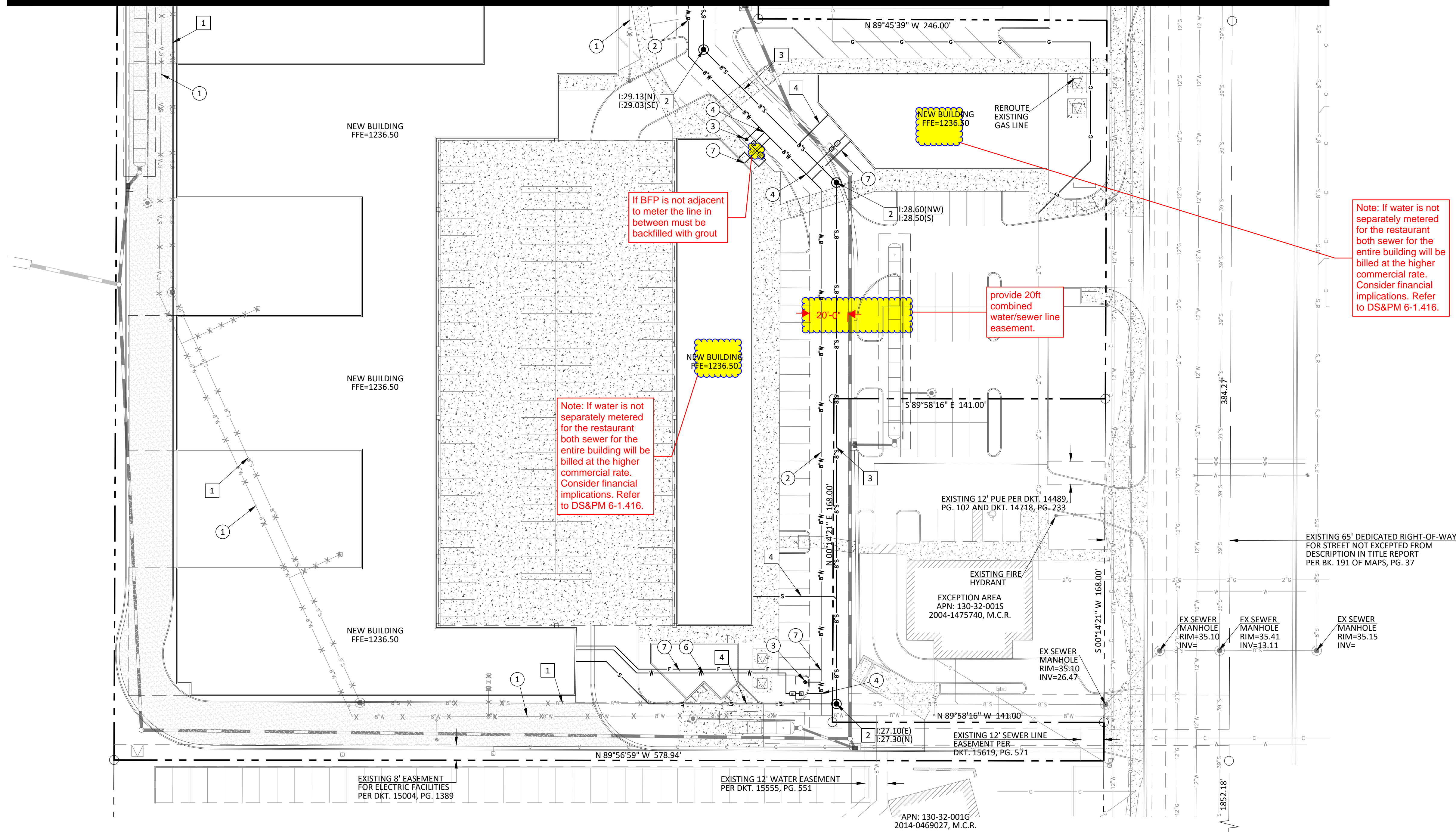


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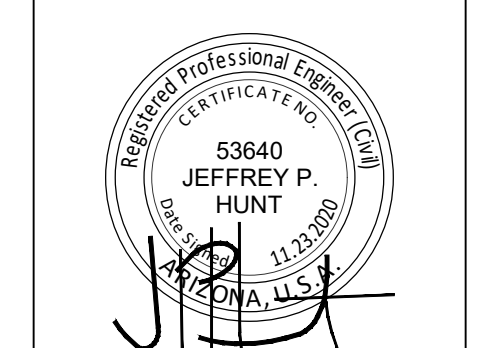
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MATCH LINE - SEE SHEET 4



PRELIMINARY IMPROVEMENT PLAN for HUNTINGTON OASIS APARTMENTS
 3302-3388 NORTH HAYDEN ROAD SCOTTSDALE, ARIZONA
 onsite utility plan



DRAWN: PT
 DESIGNED: AS
 CHECKED: JH
 DATE: 11-23-2020
 JOB NO: 20.122
 SHEET NUMBER



THESE PLANS PRELIMINARY AND ARE NOT FOR CONSTRUCTION OR RECORDING

Appendix D
Fire Flow Test Results

Arizona Flow Testing LLC

HYDRANT FLOW TEST REPORT

Project Name: Hayden and Osborn
Project Address: Hayden and Osborn (SWC), Scottsdale, Arizona, 85251
Client Project No.: Not Provided
Arizona Flow Testing Project No.: 20357
Flow Test Permit No.: C63122
Date and time flow test conducted: September 17, 2020 at 7:00 AM
Data is current and reliable until: March 17, 2021
Conducted by: Floyd Vaughan– Arizona Flow Testing, LLC (480-250-8154)
Coordinated by: Ray Padilla –City of Scottsdale-Inspector (602-541-0586)

Raw Test Data

Static Pressure: **91.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **81.0 PSI**
(Measured in pounds per square inch)

Pitot Pressure: **26.0 PSI**
(Measured in pounds per square inch)

Diffuser Orifice Diameter: One 4-inch Hose Monster
(Measured in inches)

Coefficient of Diffuser 0.7875

Flowing GPM: **1,917 GPM**
(Measured in gallons per minute)

GPM @ 20 PSI: **5,525 GPM**

Data with 19 PSI Safety Factor

Static Pressure: **72.0 PSI**
(Measured in pounds per square inch)

Residual Pressure: **62.0 PSI**
(Measured in pounds per square inch)

Distance between hydrants: Approx.: 300-Feet

Main size: Not Provided

Flowing GPM: **1,917 GPM**

GPM @ 20 PSI: **4,670 GPM**

Scottsdale requires a maximum Static Pressure of 72 PSI for AFES Design.

Flow Test Location

North ↑

