Tualatin Valley Fire & Rescue

October 1, 2020

Tabitha Boschetti
Assistant Planner
City of Tualatin
18880 SW Martinazzi Avenue
Tualatin, Oregon 97062

Re: Martin Development
Tax Lot I.D: 2S127BA0800, 2S127BA0900

Dear Tabitha,

Thank you for the opportunity to review the proposed site plan surrounding the above-named development project. These notes are provided regarding the plans received September 30, 2020 and are based on the current New Construction Guide. There may be more or less requirements needed based upon the final project design, however, Tualatin Valley Fire & Rescue will endorse this proposal predicated on the following criteria and conditions of approval.

FIRE APPARATUS ACCESS:

1. **FIRE ACCESS ROADS FOR NON-BUILDING FACILITIES:** Fire apparatus access is required for uses at fixed locations that are deemed as being a "facility" by the Fire Marshal. A "facility" includes exterior storage, processing or filling areas for flammable and combustible substances and hazardous materials; piers and wharves; recreational vehicle, mobile home and manufactured housing parks, sales and storage lots; permanent outdoor assembly venues for gatherings exceeding 1,000 persons; and similar uses. Access to facilities may be modified by the Fire Marshal in accordance with OFC 104.8 based on the specific use, frequency, location and other site conditions. (OFC 503.1.1)

2. **FIRE ACCESS ROAD DISTANCE FROM BUILDINGS:** The access shall extend to within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building or facility. (OFC 503.1.1)

3. **NO PARKING SIGNS:** Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC D103.6)

   See attached Sheet C1.10 for locations of fire lanes.

4. **NO PARKING:** Parking on emergency access roads shall be as follows (OFC D103.6.1-2):
   1. 20-26 feet road width – no parking on either side of roadway
   2. 26-32 feet road width – parking is allowed on one side

3. Greater than 32 feet road width – parking is not restricted

Note: For specific widths and parking allowances, contact the local municipality.

5. **PAINTED CURBS:** Where required, fire apparatus access roadway curbs shall be painted red (or as approved) and marked "NO PARKING FIRE LANE" at 25 foot intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background (or as approved). (OFC 503.3)

6. **SURFACE AND LOAD CAPACITIES:** Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with approved plans or the requirements of the Fire Code may be requested. (OFC 503.2.3)

7. **BRIDGES:** Private bridges shall be designed and constructed in accordance with the State of Oregon Department of Transportation and American Association of State Highway and Transportation Officials Standards *Standard Specification for Highway Bridges(HB17).* A building permit shall be obtained for the construction of the bridge if required by the building official of the jurisdiction where the bridge is to be built. The design engineer shall prepare a special inspection and structural observation program for approval by the building official. The design engineer shall give, in writing; final approval of the bridge to the fire district after construction is completed. Maintenance of the bridge shall be the responsibility of the party or parties that use the bridge for access to their property. The fire district may at any time, for due cause, ask that a registered engineer inspect the bridge for structural stability and soundness at the expense of the property owner(s) the bridge serves. Vehicle load limits shall be posted at both entrances to bridges when required by the Fire Marshal. Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, approved barriers, approved signs or both shall be installed and maintained when required by the Fire Marshal. (OFC 503.2.6)

8. **TURNING RADIUS:** The inside turning radius and outside turning radius shall not be less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & D103.3)

9. **ACCESS ROAD GRADE:** Fire apparatus access roadway grades shall not exceed 15%. Alternate methods and materials may be available at the discretion of the Fire Marshal (for grade exceeding 15%).

10. for aerial operations shall be as flat as possible. Front to rear and side to side maximum slope shall not exceed 10%.

11. **GATES:** Gates securing fire apparatus roads shall comply with all of the following (OFC D103.5, and 503.6):
    1. Minimum unobstructed width shall be not less than 20 feet (or the required roadway surface width).
    2. Gates shall be set back at minimum of 30 feet from the intersecting roadway or as approved.
    3. Electric gates shall be equipped with a means for operation by fire department personnel
    4. Electric automatic gates shall comply with ASTM F 2200 and UL 325.

Provide a means for operation by the fire department. Preferred method: Knox Brand Padlock #3770 (Exterior – All Weather Condition) with a NEMA rated "Fire Access" Box (example* – S-1514 includes switch)

12. **ACCESS DURING CONSTRUCTION:** Approved fire apparatus access roadways shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. Temporary address signage shall also be provided during construction. (OFC 3310.1)

13. **TRAFFIC CALMING DEVICES:** Shall be prohibited on fire access routes unless approved by the Fire Marshal. (OFC 503.4.1). Traffic calming measures linked here: http://www.tvfr.com/DocumentCenter/View/1578

    Speed bumps are indicated on the plans. These are not allowed. Speed cushions that are shaped to allow the wider axles of emergency apparatus to pass without hitting the raised cushion are allowed.

BUILDING ACCESS AND FIRE SERVICE FEATURES

14. **PREMISES IDENTIFICATION:** New and existing buildings shall have approved address numbers; building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property, including monument signs. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 1/2 inch. (OFC 505.1)

    Provide a visible address on the gate.

If you have questions or need further clarification, please feel free to contact me at 503-259-1419.

Sincerely,

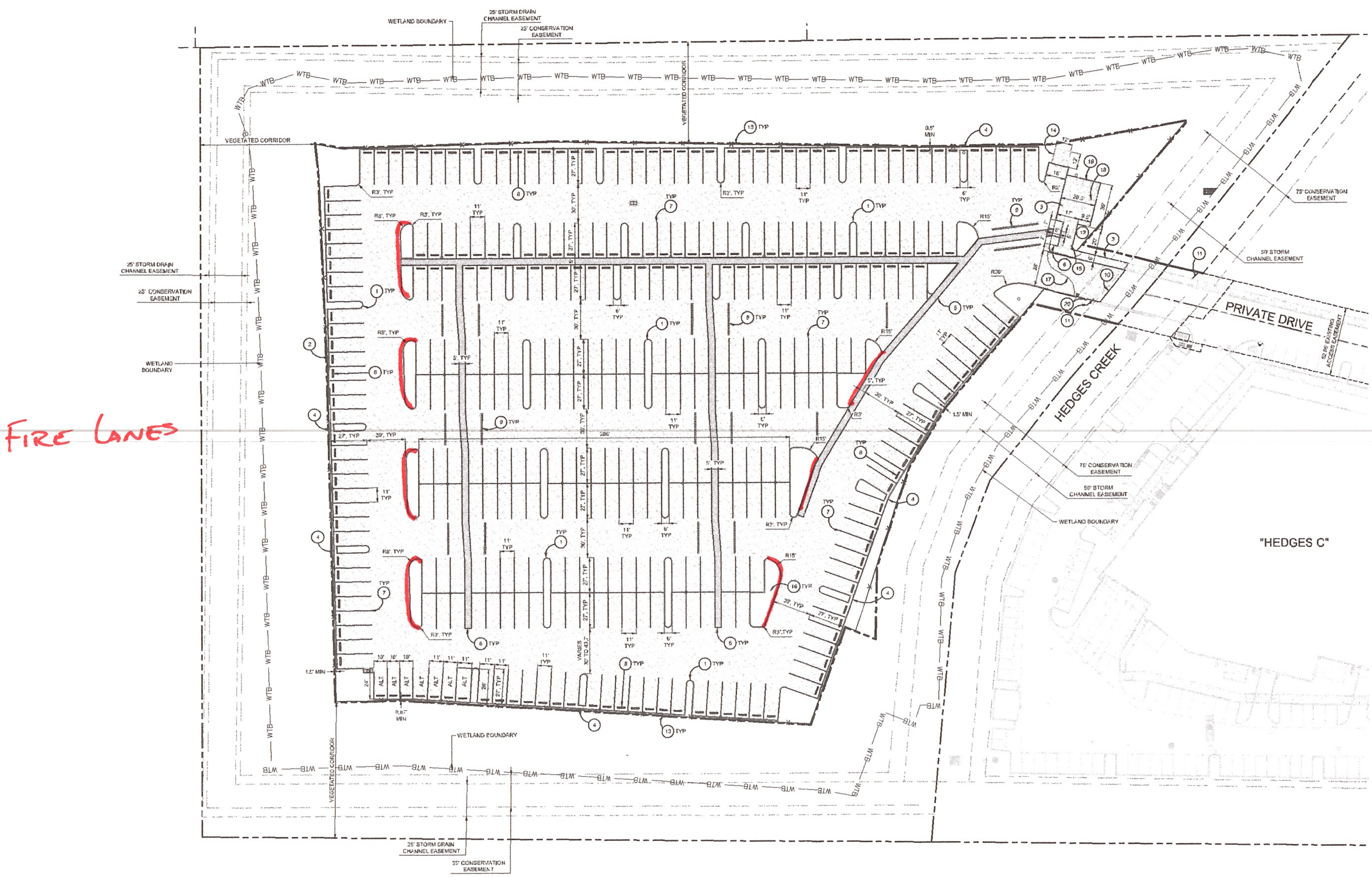
Tom Mooney

Tom Mooney
Deputy Fire Marshal II

Thomas.mooney@tvfr.com

Cc: File
City of Tualatin

A full copy of the New Construction Fire Code Applications Guide for Commercial and Multi-Family Development is available at http://www.tvfr.com/DocumentCenter/View/1296 Need new link



SITE PLAN

1 / C1.10

(IN FEET)
1 inch = 30 ft.

PAVEMENT LEGEND

*PAVEMENT SECTIONS SHOWN BELOW REFER TO THE GEOTECHNICAL REPORT BY GEOENGINEERS, INC. DATED JULY 10, 2019. ALL RECOMMENDATIONS THEREIN SHALL BE FOLLOWED.

ASPHALT PAVEMENT SECTION
ASPHALTIC CONCRETE (AC) OVER CRUSHED ROCK BASE (CRB) OVER COMPACTED SUBGRADE PER GEOTECHNICAL REQUIREMENTS

DRIVE AISLES: 4.0" AC OVER 11.0" CRB
PARKING STALLS: 3.0" AC OVER 8.0" CRB

CONCRETE PAVEMENT SECTION
PORTLAND CEMENT CONCRETE (PCC) OVER CRUSHED ROCK BASE (CRB) OVER COMPACTED SUBGRADE PER GEOTECHNICAL REQUIREMENTS

SITE SLABS-ON-GRADE: 6.0" PCC OVER 6.0" CRB, REINFORCED W/ #4 REBAR @ 12" OC, EW
SIDEWALKS: 4.0" PCC OVER 2.0" CRB, REINFORCED W/ #4 REBAR @ 24" OC, EW

PARKING LEGEND

27' × 11' — DELIVERY VAN STALL (TYPICAL)
27' (EXCLUSIVE OF OVERHANG) X 11'

24' × 10' ALT — DELIVERY VAN STALL (ALTERNATE)
24'-26' (EXCLUSIVE OF OVERHANG) X 10'

KEYNOTES

1. 6" CONCRETE VERTICAL CURB PER 1/C5.10
2. 6" DEEPENED CONCRETE VERTICAL CURB PER 2/C5.10, CONTRACTOR TO DETERMINE APPLICABLE LOCATIONS BASED ON FIELD CONDITIONS
3. CONCRETE SIDEWALK PER 3/C5.10
4. CONCRETE CURB CHANNEL FOR DRAINAGE PER 4/C5.10
5. STAMPED ASPHALT WALKWAY PER 5/C5.10
6. ACCESSIBLE CURB RAMP PER 6/C5.10
7. 4" WHITE PARKING STRIPE PER 7/C5.10
8. WHEEL STOP PER 8/C5.10
9. SPEED BUMP PER 9/C5.10
10. SAWCUT 12" ONTO BRIDGE SECTION AND REPLACE PAVEMENT FULL DEPTH PER 10/C5.10
11. PROVIDE VEHICLE LOAD LIMIT SIGN (AASHTO HS20) AT BRIDGE CROSSING PER 11/C5.10. COORDINATE REQUIREMENTS WITH FIRE MARSHAL
12. BIKE RACK PER ARCHITECTURAL PLANS
13. PERIMETER SECURITY FENCE PER ARCHITECTURAL PLANS
14. TRASH ENCLOSURE PER ARCHITECTURAL PLANS
15. ELECTRICAL TRANSFORMER ON CONCRETE PAD PER ELECTRIC SERVICE PROVIDER
16. SITE LIGHT (DESIGN-BUILD BY CONTRACTOR)
17. AUTOMATIC ENTRY GATE (DESIGN-BUILD BY CONTRACTOR). ADJUST CURB ALIGNMENTS TO ACCOMODATE WITHOUT DECREASING DRIVE LANE WIDTH
18. 20'x20' STAND UP SHELTER BY TENANT
19. PORTABLE TOILET BY TENANT
20. ADJUST CURB ALIGNMENT TO ACCOMMODATE EXISTING GAS VALVE

PARKING TABULATIONS	
11' x 27' DELIVERY VAN STALLS	342
11' x 24' DELIVERY VAN STALLS	7
TOTAL DELIVERY VAN STALLS	349

THE SURVEY INFORMATION SHOWN AS A BACKGROUND SCREEN ON THIS SHEET IS SHOWN FOR REFERENCE ONLY AND IS BASED ON A SURVEY BY WEDDLE SURVEYING

M MACKENZIE
Architecture · Interiors
Planning · Engineering

Client
MARTIN DEVELOPMENT NW
PO BOX 15523
SEATTLE, WA 98115

Project
HEDGES D PARKING LOT
11507 SW AMU STREET
TUALATIN, OREGON

REVISION SCHEDULE

Delta	Issued As	Issue Date

SHEET TITLE:
SITE PLAN

DRAWN BY: BTC
CHECKED BY: GMI
SHEET
C1.10

JOB NO. 2200339.00

ARCHITECTURAL REVIEW SUBMITTAL 09/01/20