



Town of Parker Community Development Department
 Development Review Division
 Attention: **Ashley Chasez**

Application Type: **Site Plan**
 Status: **First Referral**
 Application Name: **Parker Point F1 L10 Medical Office Building**
 Case/AP#: **SP23-058**
 Referral Received: August 11, 2023
 Comments Due: September 1, 2023

Application Location: Generally located on the southeast corner of Parker Road and Stroh Road

Review date: **August 11, 2023**
 Plan reviewer: **Randall L. Capra, rcapra@parkeronline.org**
 Phone: 303.805.3163

TOWN OF PARKER - FIRE/LIFE SAFETY:	C REVIEWED FOR CODE COMPLIANCE w/COMMENTS
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- 1st Submittal – Reviewed August 11, 2023
- 2nd Submittal – Reviewed November 14, 2023 (*comments in red, italicized font*)
- 3rd Submittal – Reviewed (*comments in bold, red, italicized font*)

Narrative: The applicant, Boulder Associates, is proposing a 30,000 Sq. Ft. medical office building. The site is located on the east side of Parker Road south of Stroh Road.

Code Reference: 2021 International Fire Code, 2021 International Building Code, 2020 NEC (Note – the Town of Parker will adopt the 2024 ICC codes which will be effective January 1, 2025. Any project that comes in prior to that date i.e., December 31, 2024, will be allowed to use the 2021 ICC codes.)

UNRESOLVED ISSUES/COMMENTS *The items noted below with a comment number (1, 2 etc.) are items that need to be corrected to show compliance with the applicable codes. Provide a “**required**” written response to this letter indicating where the corrections are made on the plans (cloud the plans as applicable). This will speed up the review process when resubmitting.*

1. The applicant shall be aware that **no vertical construction on this site will be allowed until such time that curb gutter and first lift of asphalt are installed**; a site inspection will be required to ensure that this requirement is made prior to allowing vertical construction to commence. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
2. The applicant has not provided code information on the construction type of the building; provide this information to ensure that the water supply shown is adequate. *Satisfied with the second submittal; applicant has noted compliance with this requirement. See code data at the end of this document.*
3. The location of the fire riser room is not approved; the location indicated is in one of the least accessible locations on the site. Relocate the riser room to the northeast corner of the building (an additional fire hydrant will be required at the northeast corner of the lot as well. Should the applicant locate the riser room in the area on the southern end of the building, east side, the hydrant shown would be acceptable and the n/e hydrant would not be required. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
4. The location of the required fire department connection (FDC) shall be in the area of the riser room and required fire hydrant (not isolated from the riser room as currently shown). The applicant shall provide a minimum 5-foot sidewalk from the emergency access lane to the riser room. Address this issue when resubmitting. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*

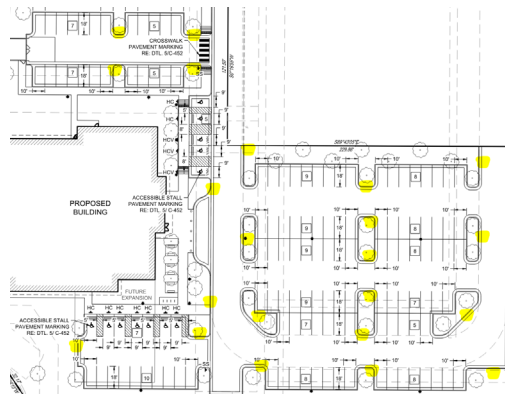
5. The applicant shall provide a minimum 5 x 5 pad in the area where the FDC will be located out of the riser room. Address this issue when resubmitting. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
6. Along with required code analysis for the building, the applicant shall provide a floor plan of the riser room indicating that the following conditions can be met (until the applicant provides the required information, the application will be held up... please ensure that the issue is addressed as required): *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
- An exterior door shall be provided into the riser room.
 - A door, either adjacent to the riser room or a door that provides immediate access into the building through the riser room shall be provided
 - The FACP will be required to be located on an interior wall in the fire sprinkler control valve room; ensure that the riser room is sized to accommodate both the FACP and the riser.
 - A three-foot clearance is required in front of the FACP.
 - The underground shall enter the building and turn up no further than 24 inches from foundation wall; three feet of clearance is required in front of the fire riser with a minimum of 12" of clearance behind the riser and 18" to each side of the riser.
 - *Domestic is not allowed to tie into the underground fire line (UFL).*
 - *Unless looped, the UFL and the hydrant are not allowed to be share the same dead-end water main.*
 - A sidewalk is required to be provided from the drive aisle to the riser room.
 - A 5' x 5' concrete pad shall be provided in front of the FDC with a sidewalk provided to the FDC.
 - **A detail of the riser room is required to show how the room is to be laid out (arranged), that all clearances are met, and that the exterior access has been provided into the riser room with the required access into the building. This is a requirement and will not be allowed to be deferred.**

Note – while additional utilities are allowed to be located in the riser room, the additional utilities are not allowed to encroach in any of the required areas for either FACP or the riser. This is one of the reasons why the floor plan is required.

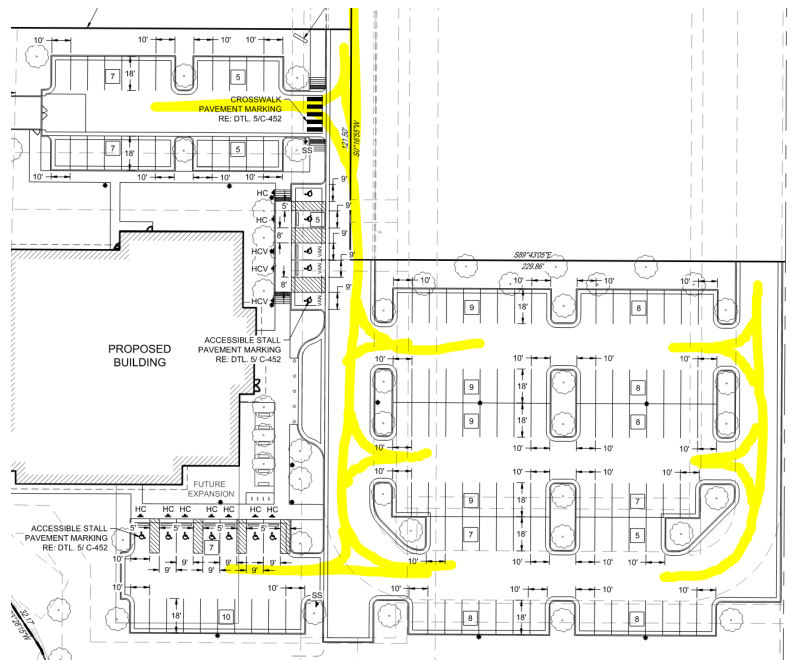
7. While the applicant has identified the location of the underground fire line (UFL) on the Overall Utility Plan. The applicant has not documented the size and length of the UFL (i.e., UFL, 32.6', 4" diameter) on the plan itself (not just in a note off to the side); the measurement shall be provided from the "T" in the water main to the flange within the building. When the location is approved for the riser room, the utility drawings will be re-evaluated. Address this issue when resubmitting. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
8. The Overall Utility Plan shall clearly show the location of the riser room (***ensuring that the riser room is sized to accommodate both the fire alarm control panel and the UFL***). A three-foot clearance is required in front of the FACP and the UFL with the UFL turning up at the flange 24 inches into the building. Room must be provided for both routine maintenance and fire suppression personnel to work within this room. Address this issue when resubmitting (as noted above in item number 5).
9. The utility drawings shall address the following when resubmitting: *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
- **Use the correct Fire Life Safety signature block** is provided on the correct pages; the signature block shall only be provided on the **cover sheet of the Utility Plan set and the Overall Utility page**. This block can be seen at the end of this response letter. **Note – the applicant has used the correct signature block, thank you!**
 - The domestic is not allowed to be pulled off of the underground fire line (UFL) if applicable.
 - The UFL is not allowed to share the same line as the fire hydrant.
 - The UFL is not allowed to enter any further than 24-inches into the building (and any less than 12-inches into the building (as noted above) if applicable.
 - The Utility drawings shall clearly identify the UFL by name, length and size on the plan set (a note can address this though the underground fire line itself shall also bear these notations. The measurement shall be made from the "T" at the water main ending at the flange in the fire sprinkler control valve room.
10. The Town of Parker requires that fire apparatus access roads meet the clear-width and weight-bearing standards of the jurisdiction in which the project is located. Roadways shall be designed to support the imposed weight of fire apparatus, 30-ton, two axle and 40-ton three, axle vehicles. **An unimpeded clear width of 26-feet shall be maintained at all times (26-feet for buildings that exceed 30-feet in height).** The applicant has not provided

the required 26-foot access road on all three sides of the accessible portion of the building. Address this issue when resubmitting. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*

- 11. The access drive in the north parking area exceeds 150', as measured from the center line of the access road that is perpendicular to the north access. Address this issue when resubmitting. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
- 12. Both the north and the south parking areas (on each side of the building) have very little room to negotiate when backing out of the westerly parking spots. If this is adequate, provide a detail that shows that enough room has been provided. Note – the location of the dumpster surround does not allow any vehicle to overhang the curb... which could be an issue down the road. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*
- 13. Any location where parked vehicles would obstruct the clear width requirement will require specifically worded signs that state "NO PARKING – FIRE LANE" signage; directional arrows shall be indicated on both sides of the sign for all signage. *This signage shall be red on white. Update design criteria has been provided at the end of this document; ensure compliance when resubmitting. Satisfied with the second submittal; applicant has noted compliance with this requirement.*



- 14. While the applicant has not provided an auto turn analysis indicating that apparatus can navigate all portions of this site, an auto turn analysis will be required addressing the areas shown below (in yellow) when resubmitting: *Satisfied with the second submittal; applicant has noted compliance with this requirement.*



- 15. An addressing plan for this site is required; please work with your planner and Douglas County specific to both the address and unit numbering for this project. This issue will need to be addressed and approved prior to making

application for building permits as the building address will be required on all construction drawings submitted for the building permit. *Satisfied with the second submittal; applicant has noted compliance with this requirement.*

16. The items noted above with a comment number (1, 2 etc.) are items that need to be corrected to show compliance with the applicable codes. Provide a “required” written response to this letter indicating where the corrections are made on the plans (cloud the plans as applicable). This will speed up the review process when resubmitting. **Note – This item is listed twice to emphasize the requirement to respond to the fire life safety response letter.** *Satisfied with the second submittal; applicant has noted compliance with this requirement.*

GENERAL COMMENTS (as applicable)

All engineering documents submitted to the Town of Parker shall bear the wet signature and seal of the engineer or architect in responsible charge of the design.

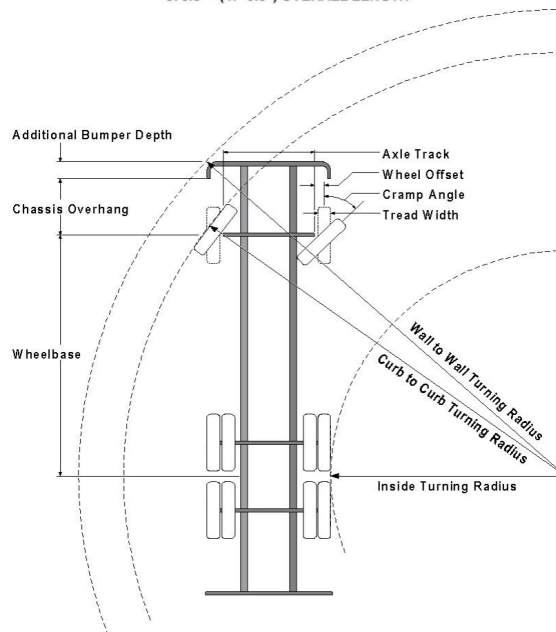
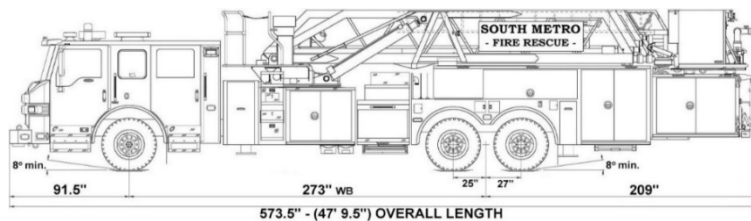
Water distribution and site access components shall be installed and in service prior to the construction of any portion of the structure, except by special permit issued by the Fire District.

Underground fire lines

When thrust blocks are used as part of the pipe restraint system, submitted plans for permit shall provide detailed documentation that the thrust blocks satisfy all requirements of 19 NFPA 24: 10.8.2, including specific thrust block dimensions and mathematical calculations for block dimensions per guidelines provided in Annex A.10.8.2.

FIRE ACCESS ROAD DESIGN CRITERIA

VEHICLE SPECIFICATIONS are provided for the largest apparatus in use by South Metro Fire Rescue. Fire Apparatus Access Roads shall be capable of accommodating this apparatus.



Vehicle Specifications

Length: 47' 9.5"

Width: 8' 5" - (10' 1" mirror to mirror)

Height: 10' 9"

Wheelbase: 273 in.

Design load: 80,000 pounds

Inside Cramp Angle: 40° Axle

Track: 83"

Wheel Offset: 5.3"

Tread Width: 13.5"

Turning Radii:

Inside Turn: 26 ft. 1 in.

Curb to curb: 41 ft. 11 in.

Wall to wall: 46 ft. 8 in.

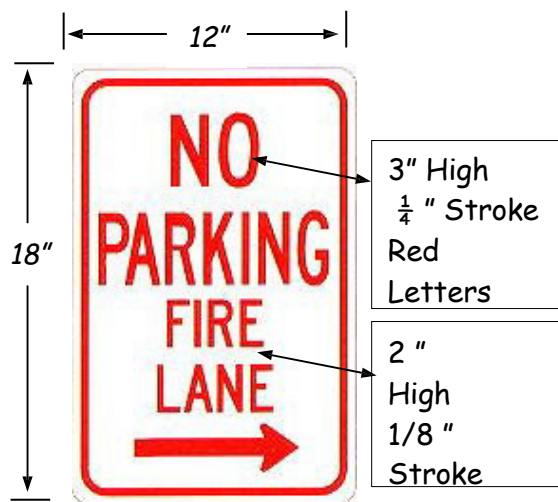
Where objects are present adjacent to the fire apparatus access road, particularly on turns and turn arounds which require backing, a reasonable safety margin shall be provided to prevent potential damage to the property and to the fire apparatus.

PRIVATE ROADS that provide access to more than two dwellings or one or more commercial buildings shall be constructed to meet the roadway standards approved by the South Metro Fire Rescue Authority for fire apparatus access. Private roads that do not meet the roadway standard may be accepted provided that alternative methods and materials are incorporated into the subdivision that addresses the fire and life safety of the citizens.

FIRE LANE SIGN PLACEMENT

Posting of Fire Lanes: The posting of the "Fire Lanes" is required.

Fire Lane Sign Dimensions. NO PARKING – FIRE LANE signs shall be 12 inches wide and 18 inches high.



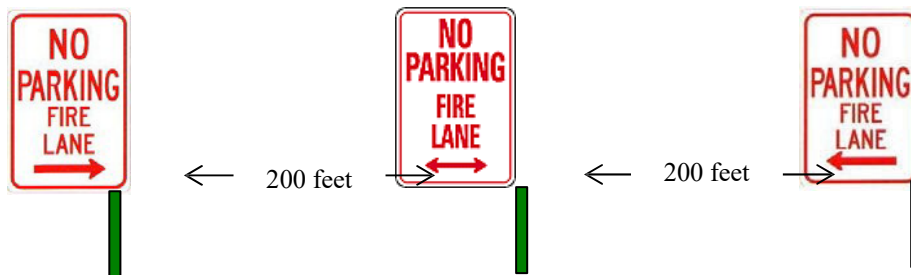
Fire Lane Sign Characteristics: Signs shall be engineer grade reflective sheeting on 0.80 aluminum with red lettering on a white background.

Fire Lane Sign Locations. Fire apparatus access roadways between 20 and 28 feet wide, signs shall be posted on *both sides*. Fire apparatus access roadways between 28 feet wide and 34 feet wide, signs may be posted on *one side only*.

Fire Lane Sign Installation. NO PARKING – FIRE LANE signs shall be installed as follows:

1. Bottom edge of the signs shall be 7 feet above surface (sidewalk) and post shall be placed 24 inches from flow line (curb).
2. One sign at the beginning of the restriction (one arrow pointing towards the restriction zone).
3. One sign at the end of the restriction (one arrow pointing back into restricted zone).
4. One sign at least every 150 ft. within the restricted area (double arrow pointing in each direction, to indicate the continuing restriction).
5. Spaced evenly within the restriction (for straight curbs/zones). For example, if the parking restriction zone is 300 ft long, only one double arrow sign is required at a distance of 150 ft. from the beginning of the restriction. If the restriction zone is 400 ft. long, two double arrow signs are required; spaced 100 ft. evenly from each other and from the beginning/ending signs.
6. Spaced so that at least one readable sign is visible in front of a parked vehicle from any point along the restriction (for curved curbs/zones and areas that may present visual obstacles.)
7. Set at an angle of no fewer than 30 degrees and no more than 45 degrees with the lane of traffic flow visible to approaching traffic.
8. Signs shall be provided at all normal and emergency access points to structures and within 20 feet of each fire hydrant and fire department connection (FDC) in compliance with UFC 901.4.2.
9. Some areas may need additional fire lane signs. Check with the Division of Life Safety for any additional requirements.

Fire Lane Sign Types. The diagrams below indicate the types of signs that may be used, and the recommended placement.



Additional sign styles may be used – provided the same type is used consistently.



Painting of Curbs or Streets. In addition to the required signage, South Metro Fire Rescue does permit fire lanes to be painted with curb or street markings. However, these markings shall not replace the required fire lane signs. Curbs may be painted red with 3-inch white block letters stating **NO PARKING – FIRE LANE**. Lettering shall be spaced every 15 feet.

FIRE CODE REVIEW/SIGNATURE BLOCK

All fire hydrants shall be installed according to water utility standards. The number and locations of the fire hydrants as shown on the Overall Utility Plan are correct as specified by the Town of Parker, Community Development Department.

Fire Code Official or Designated Representative

Date

(NOTE - Underground Fire Line (UFL) submittal documents must meet the requirements of NFPA 24 when submitting for review.)

Underground Fire Line - Submittal Requirements

Reference: 2019 NFPA 24 [Installation of Private Fire Service Mains and Their Appurtenances](#)

A separate permit is required and will be issued pending review of a detailed submittal which must include the following: [21 IFC 901.2]

4.1.1 Working plans shall be submitted for approval to the authority having jurisdiction before any equipment is installed or replaced.

4.1.2 Deviation from approved plans shall require permission of the authority having jurisdiction.

4.1.3 Working plans shall be drawn to an indicated scale on sheets of uniform size, with a plan of each floor as applicable, and shall include the following items that pertain to the design of the system:

- (1) Name of owner
- (2) Location, including street address
- (3) Point of compass
- (4) A graphic representation of the scale used on all plans
- (5) Name and address of contractor
- (6) Size and location of all water supplies
- (7) The following items that pertain to private fire service mains:
 - (a) Size
 - (b) Length
 - (c) Location
 - (d) Material (ductile iron, PVC, etc.)
 - (e) Point of connection to city main
 - (f) Sizes, types, and locations of valves, depth at which the top of the pipe is laid below grade
 - (g) Method of restraint (Meg-a-Lug or similar)
 - (h) Stamped and signed thrust block calculations specific to the soils conditions for the site
 - (i) Copy of the installer's state license

4.1.4 The working plan submittal shall include the manufacturer's installation instructions for any specially listed equipment, including descriptions, applications, and limitations for any devices, piping, or fittings. Submittals must include installation specifications for thrust blocks, corrosion protection, restraint system, bedding, detail of pipe under the building up to, and including, the flange. When it is intended that a different contractor will extend the fire line from a stopping point outside the building, to the inside flange, a second submittal and permit is required.

All plans shall be combined into a single pdf prior to uploading to the Town of Parker website.

All tees, plugs, reducers, valves, and hydrant branches shall be restrained against movement by thrust blocks [10.8.2] or restrained joint systems [10.8.3]. When thrust blocks are used as part of the pipe restraint system, submitted plans shall provide detailed documentation that the thrust blocks satisfy all requirements of Section 10.8.2, including specific thrust block dimensions and mathematical calculations for block dimensions per guidelines provided in Annex A.10.8.2.

Any individual or company who physically works on or installs any part of a fire suppression system, including underground supply lines, from public water lines to system risers and backflow preventers, **must** be registered with the Colorado Division of Fire Safety. [Dept. of Public Safety, Division of Fire Safety, Fire Suppression Program 8 CCR 1507-11:3.1.2] Documentation of valid annual registration is required with plan submittal.

The following website for the Colorado Division of Fire Safety will provide registration instructions.

<http://dfs.state.co.us/SuppAppsProclnsp.htm>

All submittals must display a wet stamp and original signature by a Colorado licensed professional engineer or NICET III, or higher, in fire suppression systems. [Dept. of Public Safety, Division of Fire Safety, Fire Suppression Program 8 CCR 1507

PROJECT DATA

BUILDING ADDRESS: PARKER POINTE SUBDIVISION LOT 7,8,9,10,
PARKER, CO 80134

PROJECT DESCRIPTION: 30,000 SF MULTI DISCIPLINE MEDICAL OFFICE BUILDING,
TWO STORIES ABOVE GRADE.

OCCUPANCY: 'B' OCCUPANCY

CONSTRUCTION TYPE: 2B-FULLY SPRINKLERED

GROSS BUILDING AREA:

GROSS BUILDING AREA	
NAME	AREA
FLOOR 1	15,625 SF
FLOOR 2	14,163 SF
TOTAL	29,788 SF

FLOOR TO FLOOR HEIGHTS: FIRST FLOOR: 14'-8"
SECOND FLOOR: 14'-0"

HAZARDOUS MATERIALS: HAZARDOUS MATERIALS ARE NOT USED, STORED OR
TRANSPORTED WITHIN THIS BUILDING IN QUANTITIES
SUFFICIENT TO REQUIRE PROTECTION.

APPLICABLE CODES: 2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL FUEL GAS CODE
2021 INTERNATIONAL FIRE CODE
2021 INTERNATIONAL ENERGY CONSERVATION CODE
2020 NATIONAL ELECTRICAL CODE
2017 ICC A117.1 ACCESSIBILITY CODE
2012 NFPA 101

DEFERRED SUBMITTALS: FIRE SUPPRESSION SYSTEM
FIRE ALARM SYSTEM