

Exhibit “B”

Memo

Subject: Engineering Land Use Comments for Sports Complex on SW Corner 4th and Baseline

Date: September 26, 2022

By: Terry, Keyes, P.E., City Engineer

These comments are based on existing conditions on the site.

The comments are preliminary and designed to help in creating a final engineering construction drawing for approval. While the comments should not be interpreted as the final engineering comments on the development, these comments attempt to cover all major public infrastructure, erosion control, and stormwater runoff requirements related to development of this site.

Comments in **red** engineering conditions of approval.

General

The site consists of two parcels totaling 2.10 acres at the southwest corner of Baseline and 4th Avenue.

All plans for public improvements must be designed by a registered professional engineer. Bonding for public improvements is typically required to ensure the improvements are completed in a satisfactory manner. Improvement plans for Baseline and Adair must be approved by both the City and Oregon Department of Transportation (ODOT). ODOT requires its own permits for work in their right-of-way. The timelines for ODOT review and permitting is typically longer than the city's timelines.

Street

Baseline

The frontage along Baseline is unimproved with a combination bike lane/shoulder adjacent to a road-side ditch. Street lights are mounted on PGE power poles. The overhead power lines on the south side of the street include PGE transmission lines near the top of the existing poles and PGE distribution lines midway up the poles. The poles also appear to support telecommunication lines.

Frontage improvements required by the City are similar to ODOT and include:

- Bike lane
- Concrete curb and gutter
- 6-foot parkway strip

- 6-foot concrete sidewalk
- Driveways entering Baseline shall meet the Cornelius Standard Detail for a *Commercial Driveway with a Parkway Strip (Detail S-22)* or the appropriate ODOT detail

The plans dated 9-9-22 show the above improvements.

The applicant is also required to place cobra-head street lights on dedicated poles along the Baseline frontage.

The applicant's plans show a new sidewalk and parkway strip along Baseline, connecting to the existing sidewalk where the right-turn lane/bus pull-out exists. The sidewalk in the right-turn lane is curb-tight, which is not optimal. However, because this sidewalk already exists, this sidewalk location is acceptable, assuming it is the minimum of 6-feet wide.

Where any obstructions exist in the sidewalk, e.g., power poles, light poles, hydrants, etc., the applicant is required to provide a minimum sidewalk clearance around the obstruction of 4-feet.

Normally the City requires street trees along the street frontage, however, since Baseline is a ODOT highway, ODOT prohibits trees in their right-of-way. Apparently, to ODOT, trees are a hazard to drivers, even if they offer protection from vehicles to pedestrians. To deal with ODOT's street tree prohibition, the city often requires the trees instead be placed on the property side of the sidewalk. However, along most of the Baseline frontage, no planting space exists because of the proximity of the sidewalk to the parking lot. **However, where space exists on the Baseline frontage near 4th, street trees shall be located on the south side of the sidewalk.**

All the improvements above , except the street trees, shall be within the Baseline right-of-way. If the current right-of-way is insufficient to contain these improvements, the applicant shall dedicate the additional right-of-way needed.

Along this stretch of Baseline are major PGE transmission lines with telecommunication lines located on the same poles. These transmission lines cannot be located underground. Since the PGE lines must remain overhead and street trees are not possible along most of the Baseline frontage, the applicant does not need to underground any of the overhead utilities along Baseline.

Finally, since Baseline is State highway, ODOT may have additional requirements for frontage improvements. If the City and ODOT requirements conflict, typically the more stringent requirement prevails.

Also, as an ODOT road, ODOT controls access to Baseline. **The applicant will need to gain permission from ODOT for the proposed access onto Baseline and any work in the Baseline right-of-way requires approval and permits from ODOT.**

The City did not require a traffic study for this development because the traffic volumes anticipated for this type of development are highly unlikely to cause any needs for mitigation measures.

4th Avenue

The frontage along 4th is improved with a concrete curb and gutter and a concrete curb-tight sidewalk. The sidewalk separates from the curb as it approaches the rail crossing.

Street lights are mounted on PGE power poles on the east side of 4th. No overhead power lines exist on the west side of the 4th. A power pole mounted light exists at the NE corner of 4th and the railroad crossing.

Street trees are required along the 4th Avenue frontage and are shown on the submitted site plan. **These trees shall meet the diversity and other requirements in the Cornelius Public Works Standards.** Also, their location should not block access to the storm sewer easement along the south edge of the parcel.

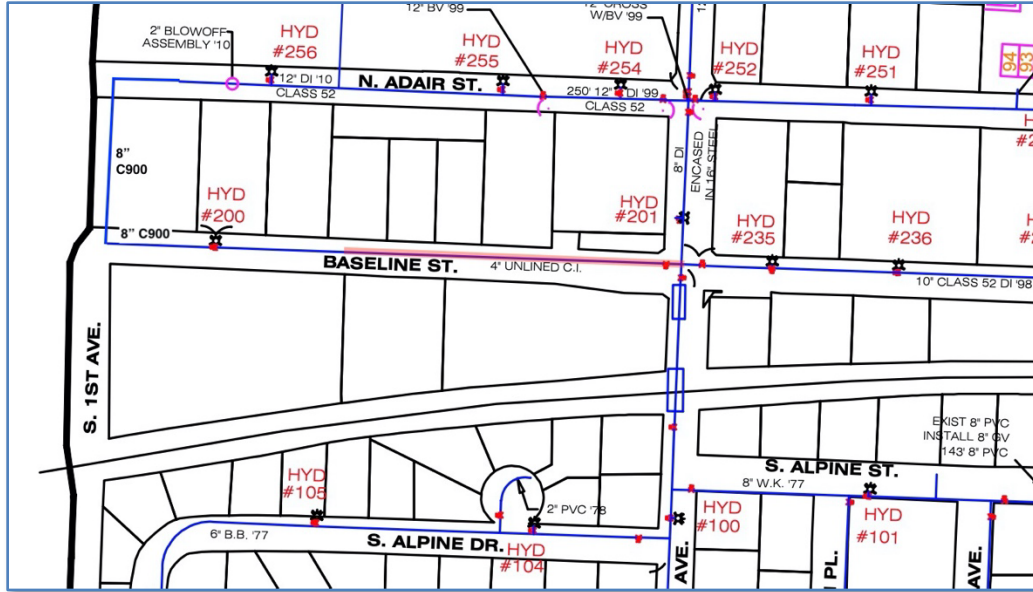
While the frontage is fully improved with curb/gutter and sidewalk, a couple of changes are required:

- **If the sidewalk on 4th is not 6-feet wide, it shall be widened to 6-feet to meet City collector standards.**
- **The portion of the sidewalk at the stormwater easement (adjacent to the railroad tracks) shall be replaced with drivable sidewalk (8" concrete on a 4" base with rebar) to allow for city maintenance vehicles that may drive on the easement.**

Water

An 8-inch ductile iron water main exists on 4th Avenue adjacent to the site. This main meets current standards. A 4-inch unlined cast iron water main exists along the Baseline frontage that does not meet standards.

The applicant is required to replace the water main along the Baseline frontage with an 8" C900 pipe. The area where this replacement is necessary is shown in the map below with red shading.



Fire hydrants exist at the northwest corner of 4th and Baseline and 160 feet west of the site on the north side of Baseline. **At least one and possibly two fire hydrants are required to be located on the south side of Baseline along the site frontage.** The Fire Department will determine the location of the hydrants.

Sanitary Sewer

A 10" sanitary sewer exists along the Baseline frontage. The applicant shall connect to this sanitary sewer. No public sanitary sewer improvements are required.

Stormwater

Conveyance

Stormwater on the south side of Baseline is handled by a roadside ditch. Some type of storm pipe exists on a portion of the south side of Baseline along the frontage, but this pipe is likely to be substandard and will need to be replaced.

As part of the improvements to the Baseline frontage, the applicant is required to install catch basins and the appropriate storm sewer to handle the right-of-way runoff.

4th contains a storm sewer along the frontage that carries runoff from the northeast. **The applicant's engineer needs to analyze the capacity of the existing pipe along the frontage. If the pipe lacks capacity to carry runoff from the basin at built-out, then the pipe shall be replaced by the applicant.**

The storm sewer on 4th turns west north of the railroad and discharges into a ditch that flows west along the south property line about 160 feet west of 4th Avenue. The applicant proposes a 20-foot storm easement adjacent to the railroad right-of-way.

While a maintenance access road is not required in this easement, the sidewalk that crosses the easement on 4th shall be reconstructed, as noted above, so that it can support maintenance vehicles.

Treatment, Detention, and LIDA

Stormwater runoff from all new development in urban Washington County must be treated and detained in accordance with Clean Water Services (CWS) Standards. The CWS requirements consist of three parts.

- 1) *Treatment* - All runoff from new impervious surfaces must be treated before release into the public storm system. Treatment for commercial sites like this typically entails use of biofiltration swales, rain gardens, or stormwater filters
- 2) *Hydromodification or Detention* - This requirement is based on a series of factors. These factors and their ratings for this site are:

Risk - low

Development Class - developed area

Project Size - large (over 80,000 sq.ft.)

These criteria place the project in CWS's *Category 2*. Category 2 projects require significant detention as spelled out in the CWS Design and Construction Standards. Detention is typically provided by underground pipes or ponds.

- 3) *Low Impact Development Approach (LIDA)* - Projects must also incorporate some type of LIDA or green approach to stormwater control. Surface stormwater facilities such as swales and detention ponds meet the LIDA requirement. Other approaches that meet LIDA include: pervious pavement and green roofs.

Therefore, the project will need to meet the CWS requirements for treatment, hydromodification, and LIDA.

The applicant proposes to use underground detention and treatment structures, that are allowed. The City Engineer will review these in more detail when reviewing the final engineering plans and stormwater report.

The preliminary plans do not appear to show the LIDA requirement above being addressed. The final engineering plan must meet the LIDA requirement.

Service Provider Letter

The applicant has a *Service Provide Letter* (SPL) from Clean Water Services and thus meets the requirement for an SPL.

Erosion Control

An erosion control plan is required for this project. Since 1 acre or more of land will be disturbed, the erosion control plan will need to meet the requirements for a 1200-CN permit.

From: [Dave Nemeyer](#)
To: [Tim Franz](#)
Subject: RE: Sam Kem Sports Court application
Date: Friday, August 26, 2022 11:49:36 AM

Ok, I am really torn on this one....as anything over 30 feet requires a 26 foot wide fire lane on one side of the building, and I just don't see where that's possible.

With that in mind, I have the following comments for this project:

1. Fire Department Connection (FDC) shall be a 4 inch storz thread type, and mounted on a 30 degree elbow turned downward.
2. Address posting shall be clearly visible from Baseline Street, with street numbers minimum 8 inches high for this type of building.
3. Approved signage indicating no parking – fire lane shall be posted along the north vehicle access area, as well as that which is in the southwest corner of the parking lot. These areas shall be posted on both sides as fire lanes.
4. Turning radius shall be 28' inside – 48' outside for the parking areas, as this ensures adequate turn arounds for fire and emergency vehicles
5. Provide fire extinguishers that meet or exceed the minimum 2A 10B C rating in approved locations throughout the interior of the complex.
6. Provide the fire department with a PDF file of the floor and site plans of this facility. This shall show all utility controls, fire protection equipment locations, and doors, as well as any appropriate room or location identifiers. We will use this for our pre-emergency planning purposes and mapping systems.

David Nemeyer

Division Chief – Fire & Life Safety

Forest Grove Fire & Rescue

1919 Ash Street

Forest Grove, Oregon 97116

Desk: 503.992.3177

From: Tim Franz <Tim.Franz@corneliusor.gov>
Sent: Friday, August 26, 2022 10:23 AM
To: Dave Nemeyer <dnemeyer@forestgrove-or.gov>
Subject: RE: Sam Kem Sports Court application

Hi Dave,

Sam is proposing the building to be approximately 38'2" high. It may ultimately be a little taller as he also has talked about placing solar panels on top of it.

Tim Franz, Senior Planner
City of Cornelius

*Community Development
1300 S. Kodiak Circle
Mailing: 1355 N. Barlow Street
Cornelius, OR 97113*

Phone: (503) 357-3011

From: Dave Nemeyer <dnemeyer@forestgrove-or.gov>
Sent: Friday, August 26, 2022 10:19 AM
To: Tim Franz <Tim.Franz@corneliusor.gov>
Subject: RE: Sam Kem Sports Court application

Hi Tim,

Did they settle on a building height for this project? We have some issues with their fire lanes if that place exceeds 30 feet to the top of a parapet.

Thanks!

Dave

David Nemeyer
*Division Chief – Fire & Life Safety
Forest Grove Fire & Rescue
1919 Ash Street
Forest Grove, Oregon 97116
Desk: 503.992.3177*

From: Tim Franz <Tim.Franz@corneliusor.gov>
Sent: Monday, August 22, 2022 1:46 PM
To: Rob Drake <rob.drake@corneliusor.gov>; Barbara Fryer <Barbara.Fryer@corneliusor.gov>; Terry Keyes <terry.keyes@corneliusor.gov>; Mark Crowell <mark.crowell@corneliusor.gov>; Rich Mead <rmead@forestgrove-or.gov>; Susan Rush <Susan.Rush@corneliusor.gov>; Dave Nemeyer <dnemeyer@forestgrove-or.gov>; 'Bob Ray' <Bob_Ray@co.washington.or.us>
Subject: Sam Kem Sports Court application

Good afternoon,

On September 27th the Planning Commission will be considering Sam's proposed project located at the corner of S 4th Ave and Baseline Street. Attached is a plan set for your review. There are other plans and information, so if you don't see what you are looking for, please let me know and try to get those to you.

He is proposing a Type III Site Design Review (DR-129-22), Type II Preliminary Land Partition Plat for the consolidation of the two lots into one new legal lot (LP-03-22) and a Type III Conditional Use Permit (CUP-04-22) to exceed the 35' building height limitation by 3'2".

If you have any comments for the staff report/record, please send them to me by September 12th.

Thanks,

*Tim Franz, Senior Planner
City of Cornelius
Community Development
1300 S. Kodiak Circle
Mailing: 1355 N. Barlow Street
Cornelius, OR 97113*

Phone: (503) 357-3011

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

From: [Dave Nemeyer](#)
To: [Tim Franz](#)
Subject: RE: Sam Kem Sports Court application
Date: Friday, August 26, 2022 1:26:36 PM

Also, can we add:

7. Provide a Knox brand key box near what is identified as the front/main entrance for this building.

David Nemeyer

Division Chief – Fire & Life Safety

Forest Grove Fire & Rescue

1919 Ash Street

Forest Grove, Oregon 97116

Desk: 503.992.3177

From: Tim Franz <Tim.Franz@corneliusor.gov>
Sent: Friday, August 26, 2022 12:04 PM
To: Dave Nemeyer <dnemeyer@forestgrove-or.gov>
Cc: Barbara Fryer <Barbara.Fryer@corneliusor.gov>
Subject: RE: Sam Kem Sports Court application

Thank you Dave.

We'll make these conditions of approval.

*Tim Franz, Senior Planner
City of Cornelius
Community Development
1300 S. Kodiak Circle
Mailing: 1355 N. Barlow Street
Cornelius, OR 97113*

Phone: (503) 357-3011

From: Dave Nemeyer <dnemeyer@forestgrove-or.gov>
Sent: Friday, August 26, 2022 11:49 AM
To: Tim Franz <Tim.Franz@corneliusor.gov>
Subject: RE: Sam Kem Sports Court application

Ok, I am really torn on this one....as anything over 30 feet requires a 26 foot wide fire lane on one side of the building, and I just don't see where that's possible.

With that in mind, I have the following comments for this project:

1. Fire Department Connection (FDC) shall be a 4 inch storz thread type, and mounted on a 30 degree elbow turned downward.
2. Address posting shall be clearly visible from Baseline Street, with street numbers minimum 8 inches high for this type of building.
3. Approved signage indicating no parking – fire lane shall be posted along the north vehicle access area, as well as that which is in the southwest corner of the parking lot. These areas shall be posted on both sides as fire lanes.
4. Turning radius shall be 28’ inside – 48’ outside for the parking areas, as this ensures adequate turn arounds for fire and emergency vehicles
5. Provide fire extinguishers that meet or exceed the minimum 2A 10B C rating in approved locations throughout the interior of the complex.
6. Provide the fire department with a PDF file of the floor and site plans of this facility. This shall show all utility controls, fire protection equipment locations, and doors, as well as any appropriate room or location identifiers. We will use this for our pre-emergency planning purposes and mapping systems.

David Nemeyer

Division Chief – Fire & Life Safety

Forest Grove Fire & Rescue

1919 Ash Street

Forest Grove, Oregon 97116

Desk: 503.992.3177

From: Tim Franz <Tim.Franz@corneliusor.gov>

Sent: Friday, August 26, 2022 10:23 AM

To: Dave Nemeyer <dnemeyer@forestgrove-or.gov>

Subject: RE: Sam Kem Sports Court application

Hi Dave,

Sam is proposing the building to be approximately 38’2” high. It may ultimately be a little taller as he also has talked about placing solar panels on top of it.

Tim Franz, Senior Planner

City of Cornelius

Community Development

1300 S. Kodiak Circle

Mailing: 1355 N. Barlow Street

Cornelius, OR 97113

Phone: (503) 357-3011

From: Dave Nemeyer <dnemeyer@forestgrove-or.gov>
Sent: Friday, August 26, 2022 10:19 AM
To: Tim Franz <Tim.Franz@corneliusor.gov>
Subject: RE: Sam Kem Sports Court application

Hi Tim,

Did they settle on a building height for this project? We have some issues with their fire lanes if that place exceeds 30 feet to the top of a parapet.

Thanks!

Dave

David Nemeyer
Division Chief – Fire & Life Safety
Forest Grove Fire & Rescue
1919 Ash Street
Forest Grove, Oregon 97116
Desk: 503.992.3177

From: Tim Franz <Tim.Franz@corneliusor.gov>
Sent: Monday, August 22, 2022 1:46 PM
To: Rob Drake <rob.drake@corneliusor.gov>; Barbara Fryer <Barbara.Fryer@corneliusor.gov>; Terry Keyes <terry.keyes@corneliusor.gov>; Mark Crowell <mark.crowell@corneliusor.gov>; Rich Mead <rmead@forestgrove-or.gov>; Susan Rush <Susan.Rush@corneliusor.gov>; Dave Nemeyer <dnemeyer@forestgrove-or.gov>; 'Bob Ray' <Bob_Ray@co.washington.or.us>
Subject: Sam Kem Sports Court application

Good afternoon,

On September 27th the Planning Commission will be considering Sam's proposed project located at the corner of S 4th Ave and Baseline Street. Attached is a plan set for your review. There are other plans and information, so if you don't see what you are looking for, please let me know and try to get those to you.

He is proposing a Type III Site Design Review (DR-129-22), Type II Preliminary Land Partition Plat for the consolidation of the two lots into one new legal lot (LP-03-22) and a Type III Conditional Use Permit (CUP-04-22) to exceed the 35' building height limitation by 3'2".

If you have any comments for the staff report/record, please send them to me by September 12th.

Thanks,

*Tim Franz, Senior Planner
City of Cornelius
Community Development
1300 S. Kodiak Circle
Mailing: 1355 N. Barlow Street
Cornelius, OR 97113*

Phone: (503) 357-3011

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.

If you believe you have received this email by mistake, please inform us by an email reply and then delete the message. Also, the integrity and security of this email cannot be guaranteed over the Internet.