

Arch 464  
ECS  
Spring 2013

Name \_\_\_\_\_

Quiz #2

## "Hugging Raindrops in San Diego"

For this problem you are the water use consultant (raindrop hugger) for UI Architecture graduate Jonathan Segal, FAIA, who has designed a mixed-use building for an inner city neighborhood in San Diego. The completed building features very insignificant landscape features that do little to control stormwater, much less celebrate it. Your role is to suggest greener and more poetic alternatives for water use and treatment throughout the building and on the site.

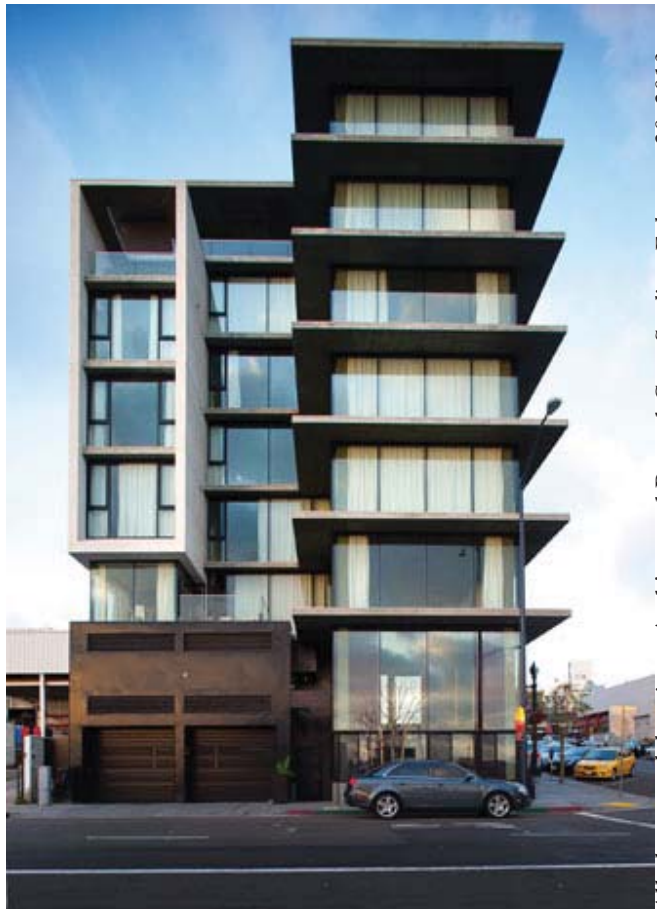
**Context.** The site is in a dense mixed-use neighborhood just north of downtown San Diego. San Diego has a mild climate with about 15 inches of rain each year. The building is connected to city water supply and sewers.

**Description.** *Architectural Record* described the project in its Case Studies, February 20, 2013. The text of that description is on pages 2–3 of the quiz.

**READ THE ENTIRE QUIZ BEFORE YOU BEGIN!**



*The building as seen from the east (southeast and northeast facades), above, and from the southwest, below.*



*All photos and drawings: Architectural Record Case Studies, February 20, 2013.*

**Housing Fit for 007:** Architect-developer Jonathan Segal named his 29-unit apartment building “The Q,” after James Bond’s resident gadgeteer. The tricks used here, though, are subtler than a shoe dagger.

When architect-developer Jonathan Segal named one of his recent buildings “The Q,” he says he was looking for “the cool factor, the debonair suaveness” of James Bond. Q is, famously, Agent 007’s gadget inventor, creator of dagger-edged shoes and mini–rocket launchers that masquerade as cigarettes. For this building in San Diego’s Little Italy, Segal aspired to Bond’s sleek sophistication, rather than a tricked-out design. But he did not anticipate the need to perform his own Q-like feat of swift transformation as the program changed, mid construction, from offices to housing.

Since launching his firm in 1989, Segal has mainly focused on market-rate residential work. Performing simultaneously as designer, client, and builder, he has completed 17 multifamily projects in San Diego, taking on challenging lots and derelict structures in undervalued neighborhoods on the upswing. This time, he says, “I got the idea to do an office building instead. They seemed to get better rents and cost less to construct.” And Little Italy is an increasingly desirable downtown district lacking offices. Set along a scenic harbor, it was once a commercial fishing neighborhood that declined with the local tuna industry and the construction in the 1960s of a freeway plowing through it. More recently, galleries, boutiques, and mixed-use residential projects have gentrified the area.

Segal envisioned The Q as a 90,000 square-foot “podium” for his family’s return to a neighborhood they loved (and had reluctantly left three years earlier): The offices and street-level commercial space would literally and financially underlie their 5,800-square-foot duplex penthouse. No sooner was the structure capped than the economy tanked and “the office market evaporated,” says Segal. With a nimbleness only possible for an architect-client, he quickly repurposed the building for mixed-use residential.

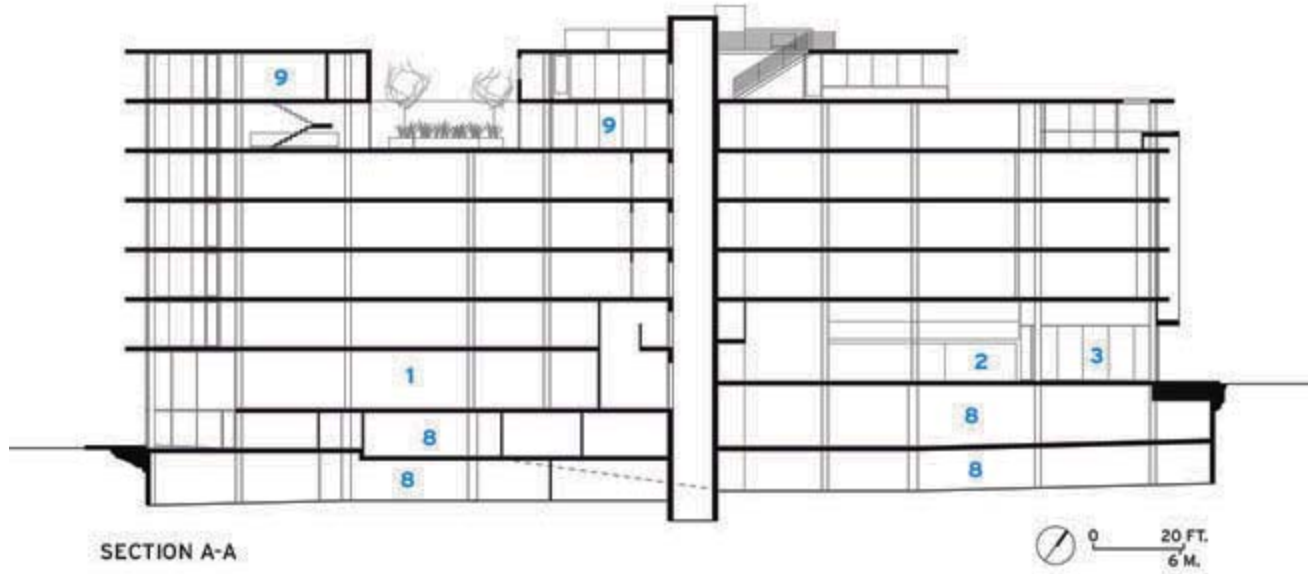
Since the overall form and fundamental elements had been in place before the program change, the project became akin to adaptive reuse. Befitting the neighborhood’s modest scale, Segal’s massing suggests a small cluster of buildings, rather than a single 200-by-50-foot megablock. Further lightening the visual impact, he made the building volumes clean-lined and transparent, with wraparound, floor-to-ceiling glass, punctuated by a brise-soleil of projecting concrete floor slabs. While the concrete structure required 700 new holes to accommodate apartment plumbing, the dramatic office glazing was a plus, offering the 29 residential units layout flexibility and unusual sleekness. To meet code, the number of apartments—all rentals, ranging from 400 to 1,800 square feet—corresponds precisely to the existing underground parking spaces. In the spirit of lofts, many of the tenants both live and work there.

Above a street-level restaurant and café, the taut, quasi-International Style skin becomes more solid, framed by a black-painted aluminum shell. At one corner of the building, Segal integrated Little Italy’s oldest home, the 1888 A.W. Pray House, a Gothic Victorian, which he relocated from the lot’s corner to the NW of The Q. Newly restored, it’s now a clothing boutique.

The Q has plenty of green features, though Segal denies being a “tree hugger” or even a proponent of LEED certification. Rooftop solar panels power the common areas, and deep overhangs shade low-E glazing. Operable windows bring air and light through the “gill slits,” or angled fins, along the northwest facade.

Though the rents, ranging from \$950 for a studio to \$5,200 for a two-bedroom duplex, exceed the neighborhood average, Segal says he leased everything instantly. So why has The Q succeeded when nearby residential lofts lie partially vacant? “We offered something different,” he suggests, “not boxes punched with holes, not transplanted suburban homes, but places that capitalize on the city experience.” Indeed, as you look out over the harbor or at the larger-than-life downtown skyline, it all seems stunningly urbane—you half expect your shoe phone to ring.

—Sarah Amelar

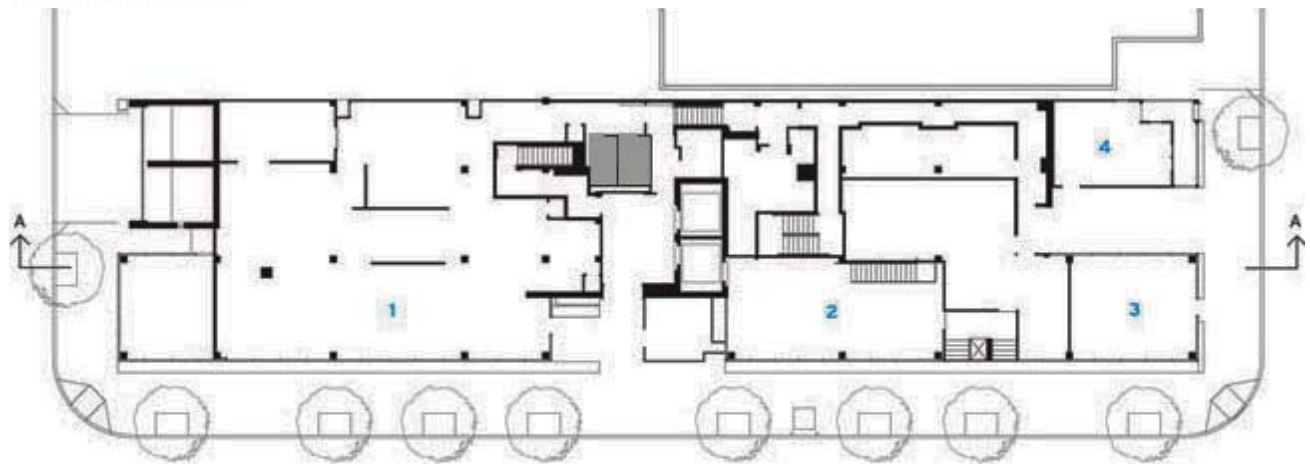


SECTION A-A

- |                         |                           |
|-------------------------|---------------------------|
| 1 MANELLO RESTAURANT    | 6 STUDIO APARTMENT        |
| 2 BENCOTTO RESTAURANT   | 7 THREE-BEDROOM APARTMENT |
| 3 CAFÉ                  | 8 PARKING                 |
| 4 RETAIL                | 9 PENTHOUSE               |
| 5 TWO-BEDROOM APARTMENT |                           |



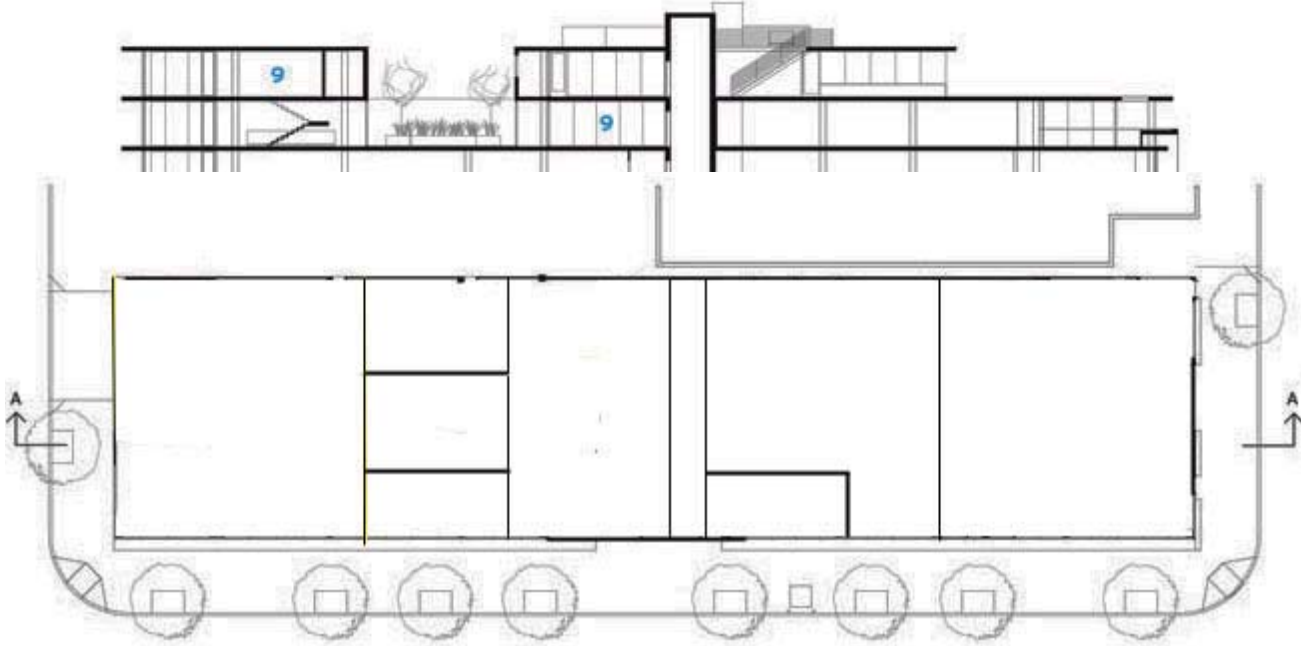
TYPICAL FLOOR PLAN



GROUND FLOOR PLAN

*Bathrooms are pochéd in the plans above.*

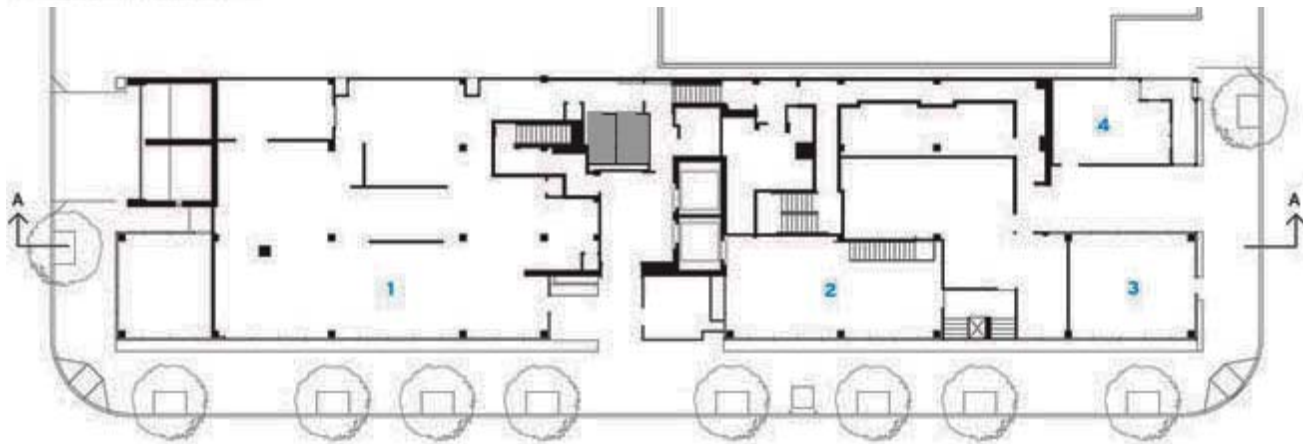
- 3 pts. 1. **Describe three** strategies the architect could have planned to employ (but didn't) to manage stormwater. Use the upper floor section as well as the roof and site plan below to **show** how each impacts the site plan. **Critique each** for its merits, aesthetics, and limitations on this site.



- 4 pts. 2. **Describe four** fixtures the architects could have planned to employ (but didn't; he followed code) to demonstrate alternative means to deal with gray and black water. On the typical plans below show where each would be located in the building. **Critique each** for its merits, aesthetics, and limitations in this building.



TYPICAL FLOOR PLAN



GROUND FLOOR PLAN

3 pts. 3. **Diagram** your proposal for an alternative water system for The Q, showing all inputs and outputs as well as the fixtures that use and dispose the water. Explain why your system exceeds code requirements and has a positive impact on the evapotranspiration cycle.

