

CURRENTS

UNIVERSITY AT STONY BROOK • SUNY •

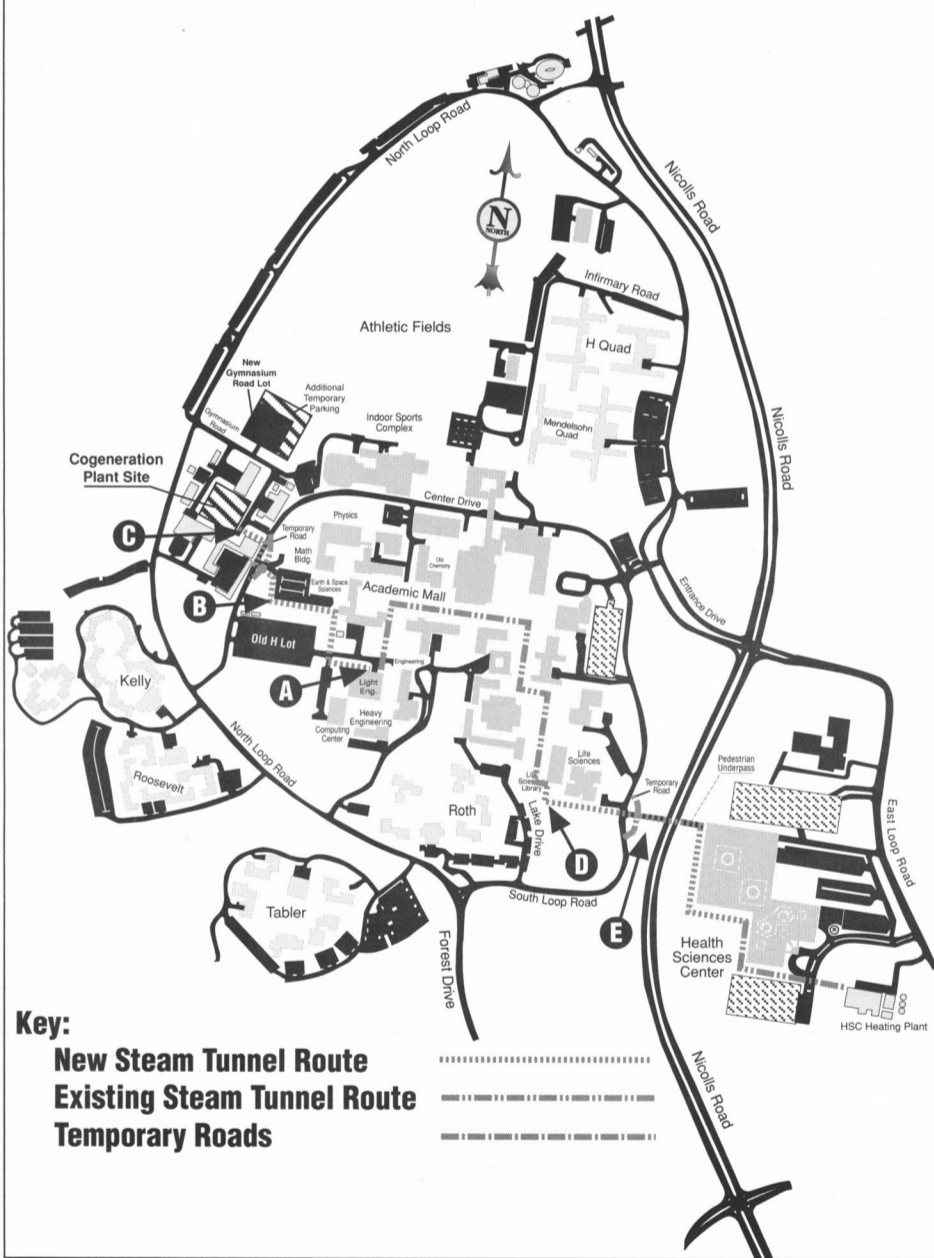
JANUARY/FEBRUARY 1994

Traffic, Pedestrian Disruptions Anticipated Construction Starts On Cogeneration Plant

January-February 1994

Construction Guide

(see detailed maps on other side)



Watch out for detours. Gird for delays. Construction has begun on one of the largest projects in SUNY history: a \$100 million, 40 megawatt cogeneration plant on the Stony Brook campus.

The cogeneration plant's large, gas-fired turbine will generate electricity, its exhaust heat byproduct creating steam to heat and cool most campus buildings including University Hospital. When it goes on line, the Stony Brook plant will allow the campus to reduce its average \$2.5 million per month energy bill.

But in order to accomplish that goal, for the next 16 months, students, faculty, staff and visitors may have to walk a bit further, change their motoring habits and/or find a new place to park. That's because several new sections of the steam tunnel portion of the cogeneration construction project zigzag through some of the most heavily trafficked areas of the campus. The steam tunnel — parts of which already exist under the Academic Mall — will link the cogeneration plant to the east campus power plant, providing it with a new primary source of steam. When the cogeneration plant becomes operational in 1995, the present east and west plants will serve as backups.

A Tough Task

With blueprints and brightly marked maps spread before him, Carl Hanes runs his

"We wanted to save as many trees as we could, so we devised a route that would have the least impact on the woods. We also built a temporary roadbed that will be put into use when the trenching reaches Center Drive so that vehicles can continue to use the road. We'll have to do the same thing over by the Life Sciences building when the steam tunnel crosses South Loop Road," he explains.

Ready By Summer, 1995

Although in most instances, the concrete steam tunnel will be installed in a trench about 10 feet deep and ten feet wide, federal safety regulations require that the contractor go out a foot on each side for every foot down. As a result, the sloped trench will be 30 feet wide at the top. "When you add the fencing and equipment, you can imagine how much space the construction area has to occupy," Mr. Hanes points out.

What makes the western end of the steam tunnel project particularly challenging, he says, is that it intersects with a road being built to serve a new \$13.6 million student activities center which is now under construction in the middle of the campus. Together, the two projects will cut a wide swath through that section of the campus, creating mounds of dirt, construction fencing and detours, whether you walk or ride. "Although we're trying to keep the disruption to a minimum, there's no question that it's going to have a significant impact on how all of us get around the campus, particularly in this area."

Operational by the summer, 1995 cooling season, the four-story cogeneration plant will rise on a two acre site that formerly housed a surface parking lot. A replacement lot just east of the site opened off Gymnasium Road this fall. Construction on the cogeneration building will begin once the turbine, boilers and other equipment are moved onto a thick concrete base.

In addition to the new power plant and several new sections of steam tunnel, the cogeneration project also includes some installation and connection work on the existing steam tunnel beneath the academic mall as well as installation of six-miles of gas pipeline along the east side of Nicholls Road from Route 25, Centereach to the campus after which it will follow Loop Road to the cogeneration plant site.

WHERE TO GET INFORMATION

In addition to regular coverage, *Currents* will be issuing these abbreviated Special Construction editions each month, providing detailed information, maps and suggestions for alternate routes around construction sites. Weekly updates and schedule changes will appear in **Monday Memo**, a summary of major campus news posted electronically on **SBNews** and distributed in a hard copy version at key locations around campus. You can also hear **Monday Memo** by dialing 632-NEWS. All construction schedules are approximate, subject to weather conditions.

finger along a row of dots and dashes that mark the new section of the steam tunnel running between the Light Engineering Building and the site of the cogeneration plant several thousand feet to the northeast. It is the point at which construction has begun.

Mr. Hanes, deputy to the president for special projects, has the difficult job of orchestrating the cogeneration construction schedule. He has been directly involved in all phases of the project since its inception more than four years ago.

"We didn't do this section of the steam tunnel in a straight line because we would have had to cut down one of the most beautiful wooded sections of the campus," he says, using his finger to trace the path of the new steam tunnel section along and through the Earth and Space Sciences parking lot and onto Center Drive, then over to the cogeneration plant site.

Construction Laydown Sites Designated

Where do you put thousands of feet of concrete forms, steel pipe and the heavy equipment you need to move them?

In an area contractors call a "lay-down" site.

For the cogeneration project, the logical location was a vacant tract just east and adjacent to the South P Lot. A second, smaller laydown site has been created off Gymnasium Road for equipment and materials in immediate use.

"The South P Lot location is an ideal laydown area," says Carl Hanes, deputy to the president for special projects. "It gives

the contractor good access to his supplies and yet is far enough away from the surrounding community to be an eyesore." The site is also accessible to the large trucks hauling materials and equipment being used to build the plant and related facilities, he adds.

A nearby sump is being leveled with clean fill from the construction area. "For the past several months, we've been working with the community to the south and east to level this unused sump. The cogeneration project's clean fill will allow us to continue this effort," Mr. Hanes says.

Work In Sections

The plant will be built by Walsh Construction under contract with Nissequogue Cogeneration Partners, a joint development corporation set up by Gas Energy Inc., a subsidiary of Brooklyn Union Gas and CEA USA Inc., a division of Public Service Enterprises Group Inc. of New Jersey. The corporation will build, own and operate the plant under a 20-year agreement with the state.

The steam tunnel portion is being done in sections, starting on the north side of the Light Engineering Building and moving toward the Earth and Space Sciences parking lot. The next section will move through the ESS parking lot to Center Drive turning east and north past a group of campus service buildings to the cogeneration plant site.

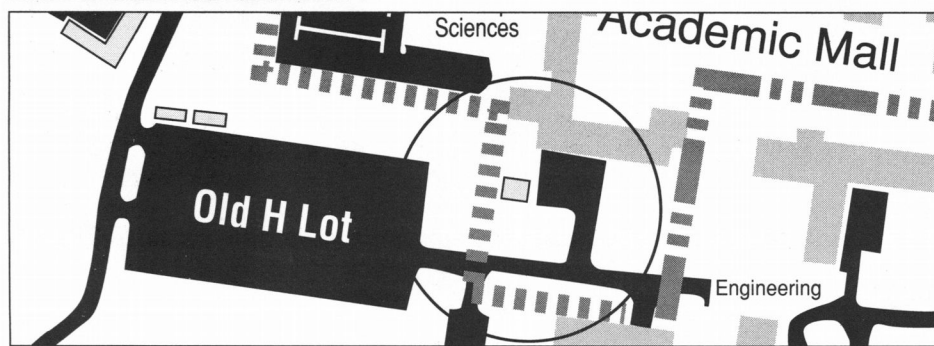
Continued on back

What To Expect In January-February

A Quick Guide To Getting Around Cogeneration Construction

*All Construction Dates Are Approximate, Subject To Weather Conditions

PROJECT A: ▼



Description: Steam Tunnel Installation from Light Engineering to the south side of the Earth and Space Sciences (ESS) parking lot.

What Will Be Done: A 30 foot wide, 800 foot-long trench will be dug by machine from the north side of the Light Engineering building to the east side of the ESS parking lot. The construction area will be surrounded by chain link fence.

Impact: A walkway from the Old H Lot (south of the ESS lot) used by pedestrians to reach the center of the campus will be blocked off.

Construction Period: Now through mid-April.*

Best Alternative: If you're walking from the ESS lot or the Old H Lot to the Math or Physics buildings and beyond, take the the Center Drive path or head south and use the walkway between the Computing Center and Light Engineering. Or park in the new Gymnasium Road lot.

PROJECT B: ▼

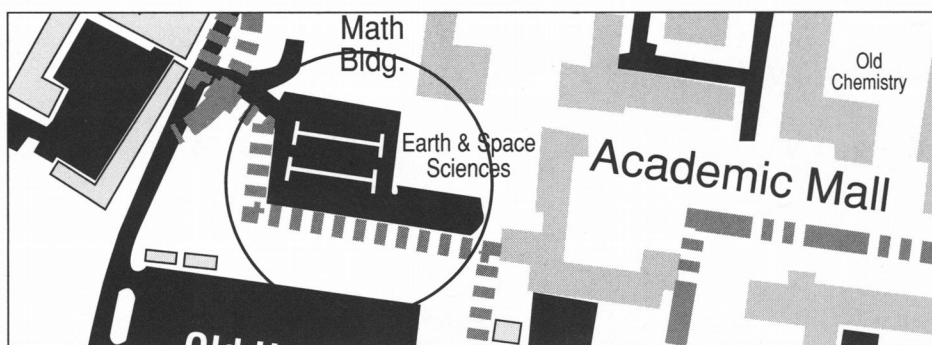
Description: Installation of a section concrete steam tunnel from the Earth and Space Sciences parking lot to Center Drive.

What Will Be Done: A 30 foot wide, 600 foot long trench will be dug by machine along the south side of the ESS parking lot to Center Drive. The construction area will be surrounded by chain link fence.

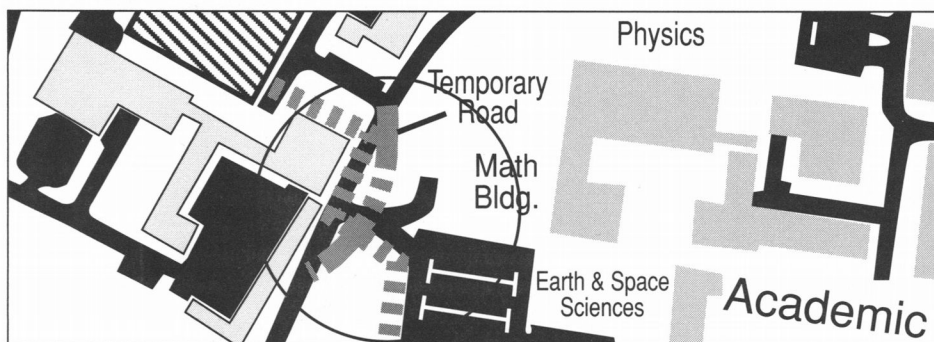
Impact: Some 145 parking spaces in the ESS lot will be temporarily lost.

Construction Period: February to early May.*

Best Alternative: Those who normally park in the ESS lot should be able to find space in the new Gymnasium Road lot where 150-160 additional temporary spaces have just been added.



PROJECT C: ▼



Description: Installation of a concrete steam tunnel along Center Drive to the cogeneration plant site.

What Will Be Done: A 30 foot wide 300 foot long trench will be dug by machine along the middle of Center Drive, swinging north and running along campus service buildings to the cogeneration plant site. A temporary two-lane bypass will be opened in the area to accommodate motorists who must use Center Drive. The ESS lot will be closed until this phase of construction is completed.

Impact: Motorists using Center Drive will be required to reduce speed to five miles per hour when traveling over the temporary roadbed. Campus bus riders may experience some delays.

Construction Period: End of January to May.*

Best Alternative: Avoid Center Drive if you can. Allow extra time if you take the bus. Those who normally park in the ESS lot should be able to find space in the new Gymnasium Road lot where 150-160 additional temporary spaces just have been added.

PROJECT D: ▼

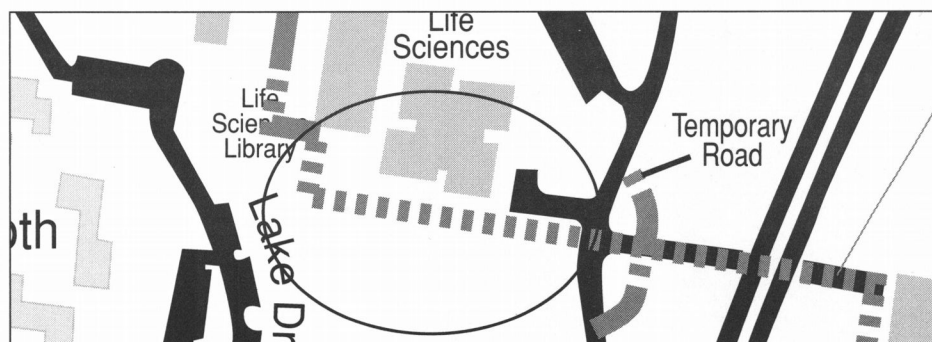
Description: Installation of concrete steam tunnel from the Life Sciences Building to South Loop Road.

What will be done: A 30 foot wide, 500 foot long trench will be dug by machine from the south side of the Life Sciences Library to South Loop Road. The construction area will be surrounded by chain link fence. A two-lane temporary section of South Loop Road will be built to accommodate vehicular traffic, but speed will be reduced to 5 miles per hour when traveling on the temporary lanes.

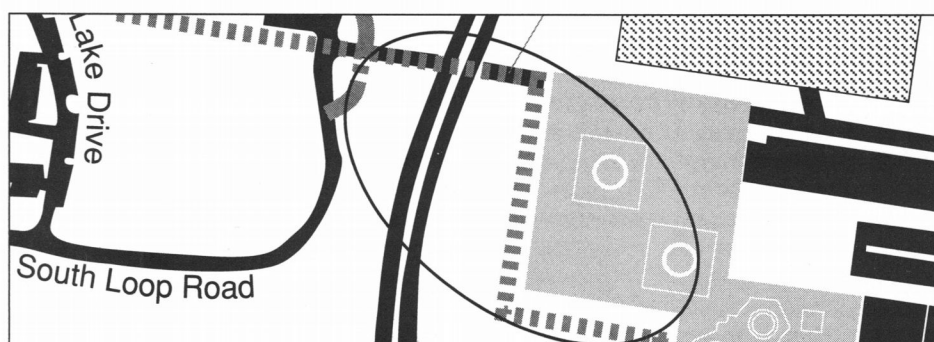
Impact: Motorists and bus riders will experience delays on this heavily traveled stretch.

Construction Period: End of February to May.*

Best Alternative: Take Nicolls Road if you're heading to the south campus or take the North Loop to Forest Drive.



PROJECT E: ▼



Description: Installation of a section of concrete steam tunnel from South Loop Road to the existing east campus tunnel system.

What will be done: A 30 foot wide, 1,100 foot long trench will be dug by machine from the east side South Loop Road through the Nicolls Road underpass that connects the west campus to the east campus in order to link up with an existing steam tunnel that starts at the Health Sciences Center and ends at the the East Campus Power Plant. The underpass roadway, now used by pedestrians, will be blocked off.

Impact: Those traveling on foot and by bicycle will be able to use an adjacent, previously blocked pedestrian underpass which is undergoing minor repairs. The ramped pedestrian walkway leads to the second level of the HSC.

Construction Period: March to June.*

Best Alternative: If you need to travel between both sides of the campus, use the pedestrian ramp or take the campus bus.

Cogeneration Plant Construction Will Bring Delays, Detours Over Next 16 Months

Continued from front

To accommodate loss of the ESS lot, a temporary parking lot is being built adjacent to the new Gymnasium Road lot. Also, a brief stretch of temporary roadbed has been installed paralleling Center Drive and was scheduled to be put into service as of Monday, January 24.

"Vehicles will have to move slowly over the temporary roadbed — perhaps no more than five miles per hour to be safe —

and this may cause some delays, particularly for buses," Mr. Hanes cautions. The temporary lanes will be in place through early May.

Pedestrians will be directed to other paths in the same area, since fencing and trenching will block some footpaths used to access sections of the campus.

The Academic Mall will be affected, albeit to a lesser extent. "A tunnel already exists under most of the Academic Mall and south to about the library area of the Life

Sciences Building. We will be installing new underground piping at tunnel access points along the mall, setting up workmen's access points and fencing within a confined area. But pedestrians will be able to walk around these installations with relative ease," Mr. Hanes says. Work on the existing tunnels in the Academic Mall will begin in mid-February and will run through early summer.

The last section of steam tunnel trenching will run along the Life Sciences Building

stairs, across South Loop Road and through an existing underpass that links the west campus to the east campus and the first level of the Health Sciences Center. While construction is underway, pedestrians will be directed to a repaired walkway that parallels the underpass roadbed and leads to the second level of the HSC. The remaining length of the steam pipe will snake through an existing utility tunnel that connects with the East Campus Power Plant.