



**INTERNATIONAL  
TECHNOLOGY  
CORPORATION**

N60258.000352  
NSY LONG BEACH  
SSIC # 5090.3

1994 JUL 18 PM 2: 48

15 July 1994

305957-ITNPR-0011

Project No. 305957

Mr. Joseph Joyce  
Code 1832.JJ  
Southwest Division  
Naval Facilities Engineering Command  
1220 Pacific Highway  
San Diego, California 92132-5190

**CONTRACT: N47408-92-D-3056 Delivery Order No. 0008**  
**Paints and Solvents - Long Beach Naval Shipyard Removal, Site 11**

**SUBJECT: IR Site 11 Long Beach Naval Shipyard - Slope Hydroseed**

Dear Mr. Joyce:

During our recent telephone conversation you had requested to receive documentation regarding the hydroseeding of the Site 11 slope at the Long Beach Naval Shipyard. Please find enclosed copies of the documentation regarding the seed mix and the circumstances under which the hydroseeding was performed. The following is a list of the documents or portions of documents with a description:

- Letter dated 4 October 1993 from Rob McGann of Hydro-Plant to Jim Franklin of IT Corporation.
  - This letter suggests a "Grow and Kill" weed eradication procedure to eliminate unwanted plant species at the site.
- Sections 3.13 and 3.14 and the Hydroseed Specification (Appendix A) from the Site Management Plan dated October 1993.
  - Clearing and grubbing (Section 3.13) and weed eradication (Section 3.14) procedures are presented. The seed mix and the grow and kill weed eradication procedure are specified.
- Letter dated 2 December 1993 from Lolita Batis of the Navy Contracts Office in Port Hueneme to IT Corporation.
  - This letter contains the Navy's comments on the Removal Action Work Plan and recommends that the weed eradication not be performed because there are concerns of exposing the slope to erosion during the rainy season.

SD/15-Jul-94/WP:nceaa/305957JJ.L1

Regional Office

5754 Pacific Center Boulevard, Suite 203 • San Diego, California 92121 • 619-554-0510

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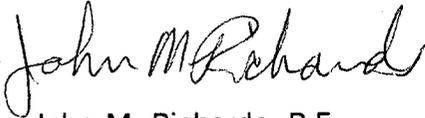
- Hydroseed Specification from the Removal Action Work Plan dated December 1994.
  - The clearing and grubbing and weed eradication sections were removed from the text of Work Plan but remained in the Specifications in Appendix A.
  - The seed mix presented in Removal Action Work Plan was revised from that presented in the Site Management Plan. The grow and kill weed eradication procedure, although deleted from the text of the Work Plan, was not removed from the Specifications.
- Request for Information No. IT-RFI-04 - submitted 25 January 1994 and approved 3 February 1994.
  - This RFI, signed by V.K. Nanda, states that it is acceptable to remove the ice plant from the slope as part of clearing and grubbing.
- Field Work Variance No. IT-VAR-005 submitted during the Weekly QA/QC meeting on 24 February.
  - This variance indicates the reason for changing from the seed mix presented in the Removal Action Work Plan back to the mix presented in the Site Management Plan dated October 1993.
- Letter dated 21 June 1994 from Rob McGann of Hydro-Plant to John Richards of IT Corporation
  - This letter provides certification of the seed mix supplied and the rates at which it was applied.
- Fax transmittal dated 29 June 1994 from V. K. Nanda - Long Beach Area R.O.I.C.C. to John Richards - IT Corporation.
  - This transmittal includes comments from Anna Ulaszewski concerning the plants growing at the site and the identification of two of the species currently growing at the site.
- Letter dated 12 July 1994 from Rob McGann of Hydro-Plant to John Richards of IT Corporation
  - This letter addresses the weed growth at the site and the reason IT had recommended the "Grow and Kill Weed Eradication Procedure". Attached to this correspondence is a letter from S & S Seeds to Hydro-Plant describing the maximum height of the plants in the seed mix used at Site 11.

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In addition to the above-listed documentation, I have had further discussions with Rob McGann of Hydro-Plant concerning the plant species identified by Ms. Ulaszewski at the site. According to Mr. McGann, these species are very aggressive weeds (ability to out-compete the slower growing ground covers for water and fertilizer and the ability to disperse as many as 1 to 3 million seeds per plant per season). The seeds from the clover can remain dormant for as long as 200 years before germinating. He also indicated that these seeds may have been present in the subsoils at the site and germinated following the hydroseed activity because of the increased availability of water due to the irrigation system and also the fertilizer applied with the seed mixture. Because of the aggressive nature of these weeds, adequate water supply, and fertilizer, the weeds have overrun the intended plants of the hydroseed mix. The intention of the "Grow and Kill" procedure was to eliminate unwanted plant species such as the weeds present at Site 11.

If you have any question regarding this matter or the information provided, please do not hesitate to call me at (619) 554-0510.

Sincerely,  
IT CORPORATION



John M. Richards, P.E.  
Project Manager

JMR:eab

cc: Jai Jeffery NFESC - COTR  
Anna Ulaszewski Long Beach NSY  
V. K. Nanda - Long Beach Area R.O.I.C.C.  
File (305957)

Letter: R. McGann to J. Franklin (October 1994)



## Hydro-Plant, Inc.

Hydroseeding and Erosion Control

356 South Pacific Street  
San Marcos, CA 92069-3894

Contractors Lic. #397933

(619) 744-7360  
FAX (619) 744-6559  
(714) 351-4343

October 4, 1993

International Technology Corporation  
Mr. James J. Franklin  
5754 Pacific Center Boulevard, Suite 203  
San Diego, California 92121

**RE: LONG BEACH NAVAL SHIPYARD**

Dear Jim:

This is in regards to our on-site inspection of the above referenced project. Please find listed below some suggestions for certain site conditions.

I would strongly suggest a "Grow And Kill" weed eradication procedure. This is accomplished by fertilizing and watering the slope. You will germinate any weed seed that may not be evident on the slope; as is the case with the referenced slope. After appropriate growth has been achieved the weeds should be sprayed with an appropriate contact weed killer. Monsanto's "Round-Up" is typically used since it works on plant tissue (absorbed through the leaves) and doesn't have any activity in the soil; which may interfere with the germination of the hydroseed mix. As with any chemicals and/or applications, contact a licensed pest control advisor/operator for specific details.

The "Grow And Kill" procedure should be done twice. This would assure you of getting some of the younger weed seeds to germinate. Normally, a dual "Grow And Kill" will require three to five weeks to complete. Sometimes this can be quicker depending on the severity of the weed seed distribution and the time of year.

As you mentioned, your landscape architect is re-designing the irrigation system. This is of vital importance because without 100% irrigation coverage you will have poor performance (germination) of the hydroseed mix. Ninety percent of my job evaluations show that irrigation problems (inadequate coverage, poor design or total mismanagement) is associated with poor performance of hydroseeding. In order to attain satisfactory growth you must have optimum conditions and maintenance. Without all of these factors in order, the outcome of a job could be very disappointing.

In regards to the application of the hydroseed mix and installation of the erosion control blanket. I would suggest the procedure if the erosion control blanket is installed before the application of the hydroseed. If this is the case, I would advise the following two step application.

Letter: R. McGann to J. Franklin (October 1994)

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October 4, 1993

**LONG BEACH NAVAL SHIPYARD**

First application: Mulch applied at 20% of the specified rate. The mulch should be mixed to a "soupy" consistency thus allowing the mulch and seed to get down between the cavities of the blanket. Seed should be applied at the specified rate.

Second application: Mulch applied at 80% (balance) of the specified rate. The fertilize should be applied at the specified rate; as well as the soil stabilant applied at the specified rate.

This second application is referred to as a "cap". This "cap" puts a layer over the seed bed, protecting the seed and offering the seed an environment it needs to germinate.

Another factor to consider is soil sampling. This will help in designing an appropriate seed mix and help in establishing a maintenance program for post fertilizers and/or soil enhancers, if needed.

Please fell free to contact me with any questions you may have.

Sincerely,



Rob McGann  
Estimator

### **3.11 Construction Submittals**

The Contract Data Requirement List (CDRL) is presented in the CQC Plan (Appendix B). The documents will be submitted in accordance with the distribution list.

### **3.12 Site Preparation**

Site preparation will include installing temporary construction barriers, temporary erosion control structures, locating utility lines, and removing the perimeter fence.

Construction/traffic barriers will be placed west of the slope within the parking lot. Vehicles will not be allowed to park adjacent to the slope. The barriers will consist of traffic lane markers with caution tape. The barriers will be removed at the end of the project.

Straw bale barriers will be placed around the perimeter of the catch basins (Appendix C, Sheets C-4 and C-5). The bales will be placed in a single row, with the ends of adjacent bales tightly abutting. The straw bale barriers will be inspected immediately after a rainfall event and at least daily during prolonged rainfall.

Existing utilities are shown in Sheets C-1 through C-3 of the construction drawings (Appendix C). Due to surface features, geophysical techniques will not be used to locate underground utilities. Utilities will be identified using the LBNSY utility maps.

The chainlink fabric at the top of the southern slope will be removed to provide access for regrading and placement of shotcrete. The fence posts will not be removed. The chainlink fabric will be stored on site and replaced after topsoil activities are completed. The level area perimeter fence may also be removed, if required.

### **3.13 Clearing and Grubbing**

Vegetation on the slope will be removed using mowers and weed removal equipment. The grasses and annuals will be trimmed to provide seed and soil contact during hydroseeding and to provide proper contact with the erosion control blankets. The ice plant (*Carpobrotus edulis*) will be removed, including the root ball which will be stripped of soil. The ice plant is inappropriate for the slope because mature plants tend to slip downslope due to their own weight, leaving open areas. The vegetation will be placed into roll-off boxes and disposed at a Class III landfill. Debris, including concrete and wood, will be removed from the slope, placed into a roll-off box and disposed at a Class III landfill. The location of surface debris is shown in Sheets C-4 through C-6, Appendix C. Actual debris removal will be field determined.

**3.14 Weed Eradication**

Prior to hydroseeding, the slope will be irrigated and fertilized to germinate weed seed that may be present. After appropriate growth has been achieved, the weeds will be sprayed with a contact weed killer.

## SECTION 02485

### HYDROSEEDING

#### PART 1 GENERAL

##### 1.01 SUMMARY

A. Section includes:

1. Seed bed preparation, fertilizer, amendments, seed, mulch, and hydroseeding.

B. Related sections:

1. Section 02230: Placing topsoil, soil tests

##### 1.02 DEFINITIONS

A. Long-term maintenance period: Period after the contract closeout

B. Short-term maintenance period: Period from time of application to the contract closeout.

##### 1.03 SUBMITTALS

A. Product Data: Indicate products supplied. Provide complete installation instructions proposed for use.

B. Quality Control Submittals

1. Certificates: Submit seed certificates or tags

##### 1.04 DELIVERY, STORAGE, AND HANDLING

A. Packing and shipping: Deliver grass seed in sealed containers. Deliver fertilizer in waterproof bags.

B. Acceptance at site: Reject damaged bags or containers.

C. Storage and protection: Store fertilizer on pellets. Store seed in shaded areas.

##### 1.05 WARRANTY

A. Guarantee all seeds are true to name and variety and free from weed.

1.06 MAINTENANCE

- A. Long-term maintenance services: Navy personnel will do the long-term maintenance. See Section 01800.
- B. Short-term maintenance services:
  - 1. After hydromulching, allow the mulch to set for 1 day before irrigating the hydroseeded areas. Vary the irrigation pattern to suit the growth rate and climatic conditions. Keep the soil moist, but not wet, at all times and particularly during the seeding germination period.
  - 2. Soil movement: Repair any erosion or soil slippage.
  - 3. Keep seeded areas free of weeds and debris. Dispose weeds and debris off the property.

PART 2 PRODUCTS

2.01 MATERIALS

A. Seed Mix:

Lbs/Acre	Species	Recommended Percent Purity/Germination
18	Atriplex semibaccata	90/80
10	Atriplex glauca	50/50
15	Limonium perezii	65/5
15	Limonium sinuatum	65/10
8	Limonium pectinatum	65/30
12	Atriplex rhagodies	80/50
1	Lasthenia chrysostoma	50/60
2	Achillea millefolium	98/70
6	Ambrosia psilostachya	4/20
2	Oenothera cheiranthifolia	98/75
30	Plantago insularis	98/75

- B. Fertilizer: Commercially available, suitable for the type of topsoil and growing conditions.
- C. Mulch: Wood fiber mulch, dyed green, suitable for hydroseeding application, free of noxious weed seeds.
- D. Water: Free of contaminants such as oil, alkalines, and salts.

**2.02 SOURCE QUALITY CONTROL**

- A. Tests: Review soil test report. Determine amendment and fertilizer requirements and incorporate into hydroseeding mix.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

- A. Verification of conditions: Verify that topsoil is prepared and ready for hydroseeding.

**3.02 PREPARATION**

- A. Verify that irrigation system is operable and sufficient to promote plant germination.
- B. Do not hydroseed until automatic irrigation controller is set to a watering schedule suitable to the time of year and the project site conditions.
- C. Weed eradication: Establish a weed growth by fertilizing and watering the slope. After establishing an obvious weed growth, spray weeds with a contact weed killer. Repeat this procedure to eradicate most of the weeds.

**3.03 DEMONSTRATION**

- A. Demonstrate that seeded areas attain a minimum of 80 percent coverage at the end of the maintenance period. Reseed any planting failure during this period.
- B. Furnish, pretreat, if necessary, apply, fertilize, and reseed with the same kind and quantity ratio specified in the original seed mix formula.

**3.04 PROTECTION**

- A. Protect the area from stormwater erosion and pedestrian traffic.

**END OF SECTION**

*Navy Comments to Site Management Plan*



DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING COMMAND  
CONTRACTS OFFICE  
NAVAL CONSTRUCTION BATTALION CENTER  
1000 23RD AVENUE  
PORT HUENEME, CA 93043-4301

4330 IN REPLY REFER TO:  
Ser 2723/3787  
December 2, 1993

IT Corporation/Regional Office  
William Penn Plaza  
3rd Floor, Box 802  
2790 Mosside Blvd.  
Monroeville, PA 15146-2792

Gentlemen:

This is in connection to Contract N47408-92-D-3056, Delivery Order No. 0007. In the Government's and DTSC's review of CDRL Item #A002, Site Management Plan, the following comments are provided for incorporation or response:

SITE MANAGEMENT PLAN -

• Page 3-1, Para. 3.1 and 3.3: Work items identified in these paragraphs should be scheduled such that the Site Walk is conducted immediately after the Preconstruction Meeting, or the following day. Previous projects have indicated that this premobilization survey of physical site characteristics by all major Contractor personnel is important to identify an efficient, systematic approach to the goals of the project. Security clearances should be completed prior to this visit, not after. The Contractor may obtain the necessary forms and submit the information to the NTR prior to the Preconstruction Meeting. Support personnel not identified prior to this meeting may be submitted by the Site Superintendent upon mobilization. Similarly, Base Permits may be completed early, and submitted at this meeting, if mobilization is scheduled to follow closely (note that utility cutovers should be included here, also).

• Page 3-4, Para. 3.13: Removal of the Ice Plant is not recommended. Site cosmetics and appearance is important, in that the site must appear neat and plants be healthy, but the plant mixture is important only with respect to erosion and infiltration control. A combination of ice plant with the seed mix is considered acceptable, provided that the project goals are met. Also, it is important to minimize the duration of bare slope exposure. Following removal of dead plants and debris from the hillside, the slope is subject to rapid erosion. In the interest of reducing this exposure time, it is recommended that healthy ice plant be left on the hillside.

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December 2, 1993

- Page 3-5, Para. 3.14: Weed eradication is not recommended, for the same reasons presented above.
- 4.0: While the objective of minimizing erosion is stated, the text lacks discussion of which tasks will be performed concurrently, and which tasks must be closely coordinated to avoid erosion. Include other discussion regarding coordination of the overall effort (e.g. space limitations, equipment limitations, etc.). To effectively complete this, clearing and grubbing must be added to the task list.
- Page 5-1, Para. 5.2: Recommend using mechanical compactor for trenches which will be covered with concrete, rather than compacting with the backhoe. Also, it is questionable as to whether or not 10 trenches will be possible, or desired, given that the Southern portion is not as wide (perhaps a North-South trench here). Concur with 50-ft. centers. Show proposed trench locations on the construction drawings. Perhaps soil boring would be more cost-effective - please investigate this option, which has the benefits of less soil disturbance and less material removed, and may eliminate compaction altogether.

APPENDIX A. SPECIFICATIONS -

- Include Section 01010, for completeness.
  - Section 01700: Include text and references to Section 01010, Non-compliance checklist, OSC Report, and other requirements relevant to project closeout.
  - Section 01800: The requirements of this Section are the Government's responsibility per Section 02485, Para. 1.06. These requirements would be expected of the Contractor for the O&M period, however. Reconcile.
- Para. 1.02.B: The second sentence does not read correctly. Rewrite. Include "repair".
- Section 02110, 1.04.B: Define, such as 02230, 1.04.A.

APPENDIX B. CQC ADDENDA -

- Page 10-1: Include applicable portions of Section 9 of the CQCP in Section 10 of the CQC Addenda, so that it is a "stand-alone document."

## *Navy Comments to Site Management Plan*

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- Table 10-1 serves a purpose, but the terms "visual inspection" and "inspection" must be defined more thoroughly in the text for 10.2. The CQC Addenda received from IT Corp. recently have lacked reference to the four-part inspection procedure (see below), and this is an excellent way to further define the inspections required. Reimplement this reference in this CQC Addenda, and continue to do so in future delivery orders.

- As per the Basic Contract, Part 6, Para. 6.9, and the Contract Quality Control Plan, Section 11.0, include text in the CQC Addenda which identifies the definable features of work, and the four-step inspection procedures, commonly referred to as the "Three-Phase Inspection" for some reason (preparatory, initial, follow-up, and completion), to be utilized. This is a standard DOD QC procedure, and it behouths IT to conform to it for all DOD work. The items listed under "Verification inspection is required..." on p. 10-1 are considered acceptable definable features of work; use this as a basis. Include Section 11 of the CQCP in the CQC Addenda, Section 10 to define the four steps. Expand and further define this by citing specific inspection items for each definable feature, as required.

For example, p. 10-5, "Topsoil Placement", a definable feature, will be followed by specific inspection criteria: The characteristics of the imported fill is a preparatory inspection item. A minimum of 6" of topsoil is an initial inspection and follow-up inspection item. Sand blast grit removal and topsoil replacement is also verified with initial and follow-up inspections. Completion inspection items for each definable feature are basically those items listed under 10.2, with some exceptions. Organize such that the features are listed, with the four inspection items as subheadings, and the inspection detail under each subhead.

- Table 7.1: Note (a) does not read correctly.

### SITE HEALTH AND SAFETY PLAN -

- Search and replace "PMP" with "SMP"

- Page 3-3, Para. 3.2.2: First sentence refers to Section 4.2 of the (S)MP. That reference contains no useful information, and references something else. Expand on this task in the SHSP. "Double referencing" is unsatisfactory for a SHSP, and it is preferred that no references be made, so that the SHSP is a stand-alone document.

## *Navy Comments to Site Management Plan*

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- Include Clearing and Grubbing in the task list. This task will possibly present the highest risk of exposure to airborne contaminants, and physical stress.
  - Table 3-1: Cu should be considered a contaminant of concern. There is an estimated 46,000 pounds of cuprous oxide at the site.
  - Table 3-3: Remove "stay in windy areas" from the Mosquito protection column.
  - Page 6-1, last sentence: Replace "client" with "Base Public Affairs Officer and NTR".
- 6-1: Identify the site control zones with a simple sketch, or on the contract drawings
- Page 11.7: Because there is a large amount of oil equipment in the area, it would seem prudent to include specific discussion regarding the response to an oil release. All employees should be notified that the location of underground utilities and piping may be incorrect or incomplete.
  - Appendix A: Eliminate the Site Location map. It provides no additional information, and may be confusing in an emergency.

### SCHEDULE -

- The schedule appears to be incorrect as of November 9, 1993, the date of receipt. Please revise, and do not send unusable schedules in the future. Coordinate events such that exposed slope does not linger over holiday periods.

Additionally, the following are SMP comments from the Environmental Protection Division, Long Beach Naval Shipyard:

- 3.5 Health and Safety Coordination. The contractor will need to coordinate with the Shipyard's Health and Safety personnel.
- 3.9 Equipment Decontamination. In regards to the "temporary storage tank" for the decon rinsate, Spill Prevention Control & Countermeasure Program Manager, Joe Marano, should be consulted to determine if the proposed method of handling and storing the rinsate conforms to the Shipyard's SPCC plan.

*Navy Comments to Site Management Plan*

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December 2, 1993

• 4.1 Construction Sequence. The Program Manager, Rob Robinson, from NPDES should be consulted to determine if the water from the Toe Drain can be discharged to the stormwater drainage system.

• 6.2.1 Water (Also, Table 6.1). If water is to be discharged to the sewer system, the Program Manager, Hoa Ninh, must be consulted to determine the criteria for sewerability of the water.

Nothing in this letter should be construed as a change to the contract requirements. If any such instance is perceived by your firm, the Contracting Officer should be notified immediately.

If there are any questions, please contact the undersigned at telephone (805) 982-6113.

Sincerely,

  
LOLITA L. BATIS  
Contract Specialist

Copy to:  
IT CORPORATION (Mr. Jim Franklin)  
San Diego, CA

**SECTION 02485**

**HYDROSEEDING**

**PART 1 GENERAL**

**1.01 SUMMARY**

**A. Section includes:**

1. Seed bed preparation, fertilizer, amendments, seed, mulch, and hydroseeding.

**B. Related sections:**

1. Section 02230: Placing topsoil, soil tests

**1.02 DEFINITIONS**

**A. Long-term maintenance period: Period after the contract closeout**

**B. Short-term maintenance period: Period from time of application to the contract closeout.**

**1.03 SUBMITTALS**

**A. Product Data: Indicate products supplied. Provide complete installation instructions proposed for use.**

**B. Quality Control Submittals**

1. Certificates: Submit seed certificates or tags

**1.04 DELIVERY, STORAGE, AND HANDLING**

**A. Packing and shipping: Deliver grass seed in sealed containers. Deliver fertilizer in waterproof bags.**

**B. Acceptance at site: Reject damaged bags or containers.**

**C. Storage and protection: Store fertilizer on pellets. Store seed in shaded areas.**

**1.05 WARRANTY**

**A. Guarantee all seeds are true to name and variety and free from weed.**

**1.06 MAINTENANCE**

- A. Long-term maintenance services: Navy personnel will do the long-term maintenance. See Section 01800.
- B. Short-term maintenance services:
  - 1. After hydromulching, allow the mulch to set for 1 day before irrigating the hydroseeded areas. Vary the irrigation pattern to suit the growth rate and climatic conditions. Keep the soil moist, but not wet, at all times and particularly during the seeding germination period.
  - 2. Soil movement: Repair any erosion or soil slippage.
  - 3. Keep seeded areas free of weeds and debris. Dispose weeds and debris off the property.

**PART 2 PRODUCTS**

**2.01 MATERIALS**

A. Seed Mix:

<u>Lbs/Acre</u>	<u>Species</u>	<u>Recommended % Purity/Germination</u>
5	Oenothera speciosa	90/65
2	Alyssum "Carpet of Snow"	98/80
4	Alyssum "Royal Carpet"	98/80
6	Verbena tenuisecta	90/75
10	Gazania splendens "Red Shades"	90/60
1	Helianthemum mutabile	98/75
2	Eschscholzia californica	98/75
4	Lupinus bicolor	98/80
4	Phacelia campanularia	98/75

- B. Fertilizer: Commercially available, suitable for the type of topsoil and growing conditions.
- C. Mulch: Wood fiber mulch, dyed green, suitable for hydroseeding application, free of noxious weed seeds.

- D. Water: Free of contaminants such as oil, alkalines, and salts.

## 2.02 SOURCE QUALITY CONTROL

- A. Tests: Review soil test report. Determine amendment and fertilizer requirements and incorporate into hydroseeding mix.

## **PART 3 EXECUTION**

### 3.01 EXAMINATION

- A. Verification of conditions: Verify that topsoil is prepared and ready for hydroseeding.

### 3.02 PREPARATION

- A. Verify that irrigation system is operable and sufficient to promote plant germination.
- B. Do not hydroseed until automatic irrigation controller is set to a watering schedule suitable to the time of year and the project site conditions.
- C. Weed eradication: Establish a weed growth by fertilizing and watering the slope. After establishing an obvious weed growth, spray weeds with a contact weed killer. Repeat this procedure to eradicate most of the weeds.

### 3.03 DEMONSTRATION

- A. Demonstrate that seeded areas attain a minimum of 80 percent coverage at the end of the maintenance period. Reseed any planting failure during this period.
- B. Furnish, pretreat, if necessary, apply, fertilize, and reseed with the same kind and quantity ratio specified in the original seed mix formula.

### 3.04 PROTECTION

- A. Protect the area from stormwater erosion and pedestrian traffic.

**END OF SECTION**

<b>CONTRACT NUMBER:</b> N47408-92-D-3056 Delivery Order #0008	<b>REQUEST FOR INFORMATION</b>	<b>RFI No.:</b> IT-RFI-04
<b>CONTRACTOR/SUPPLIER:</b> IT CORPORATION	<b>DRAWING SHEET:</b> <b>SPEC. SECTION:</b>	<b>DRAWING DETAIL/ SPEC. PARA:</b>
<b>TITLE/SUBJECT:</b> Clearing and Grubbing		
<b>DISCIPLINES:</b>	<b>COST EFFECT:</b> None	<b>ISSUED BY:</b> David A. Hicks
<b>DESCRIPTION OF PROBLEM:</b>  It was determined at the pre construction meeting that it would be more effective and efficient to remove all the ice plant from the slope. This vegetation will be placed into roll-off boxes and disposed at a Class III landfill.  <div style="display: flex; justify-content: space-between;"> <div data-bbox="162 877 716 919"> Date _____ Subcontractor/Supplier _____ </div> <div data-bbox="974 856 1153 919"> 25 January 1993  Date </div> <div data-bbox="1218 856 1510 919"> IT CORPORATION  General Contractor </div> </div>		
<b>FM: ROICC NW C/40</b> <b>TO: CONTRACTOR</b> <del>XXXXXX</del> Long Beach Area <span style="float: right;">3 Feb 94</span>  Ref: (a) RFI No. 4  1. Removal of existing ice plants from slope areas during clearing and grubbing operations is acceptable.  <div style="text-align: center;">   <b>V. K. NANDA</b>  By direction </div>  <b>Fax Copy to:</b> <b>Mr. Jai Jeffery</b> NFESC Fax DSN 551-4304 <b>Mr. Joseph Joyce</b> SWDIV Fax DSN 522-1242 <b>Ms. Lolita Batis</b> NAVFACCO Fax DSN 551-5396  <div style="display: flex; justify-content: flex-end; margin-right: 50px;"> Date _____ BY DIRECTION _____ </div>		
<input type="checkbox"/> Response may involve additional costs or time. If you feel additional costs or time is warranted, do not proceed without a contract modification. RFP to follow.  <input checked="" type="checkbox"/> Response is provided on the presumption of no increase in contract price or time. If additional costs or time is warranted, do not proceed without a contract mod.		





Letter: R. McGann to J. Richards (21 June 1994)



**Hydro-Plant, Inc.**  
Hydroseeding and Erosion Control

356 South Pacific Street  
San Marcos, CA 92069-3894

Contractors Lic. #397933

(619) 744-7360  
FAX (619) 744-6559  
(714) 351-4343

June 21, 1994

Mr. John Richards  
International Technology Corporation  
FAX: 554-0511

RE: LONG BEACH NAVAL SHIPYARD  
LONG BEACH, CALIFORNIA

Dear Jim:

Hydro-Plant, Inc. certifies that the following materials were applied at the above referenced project.

February 9, 1994

LBS./ACRE

Mulch: Wood Fiber	2,000
Fertilizer: Hydroblend	1,000
Additive: Gypsum	1,000
Soil sulphur	700
Seed: Atriplex semibaccata 90/80	18
Atriplex glauca 50/50	10
Limonium perezii 65/5	15
Limonium sinuatum 65/10	15
Limonium pectinatum 65/30	8
Atriplex rhagiodes 80/50	12
Achillea millefolium 98/70	3
Ambrosia psilostachya 4/20	6
Oenothera cheiranthifolia 98/75	2
Plantago insularis 98/75	30

April 7, 1994

Fertilizer: Landtech 100% Organic	1,000
Additive: Gypsum	370
Soil sulphur	240

If you should have any questions please contact our office.

Sincerely,

  
Rob McGann

Officer in Charge of Construction  
Resident Officer in Charge of Construction  
Long Beach Area  
Southwest Division, Naval Facilities Engineering Command  
Building 5  
Long Beach, California 90822-5080

FAX Transmission:

Date: 29 June 94

Pages: 3 (Inc Cover)

TO: IT Corporation (Command)

Mr. John Richards (Name)

Code: Project Manager

FAX: 619 554-0511

From: Vic Nanda

Code: 09RL-RE

Subj: RAC N47408-92-D-3056, DO # 0008, IR SITE 11 at Long Beach  
Naval Shipyard

Telephone: 310-547-6875  
DSN 360-6875

FAX: 310-547-7767  
DSN: 360-7767

Mr Richard:

1. Anna has reviewed the seed-mix (Faxed to her) and her comments are attached. It seems the mix proposed and the mix used on slope are not the same.
2. Our understanding is that the seed mix designed and used was for a low maintenance and low ground cover. The growth however on the slope at places is too high and blocking sprinklers.
3. Please check with your seed-mix subcontractor and/or CQC representative to verify what mix was used and possible cause for the high growth.

Thanks,



V. K. NANDA

FAX copy to:

RPM SWDIV Code 1832.JJ (Joseph Joyce) Fax DSN 522-1242  
COTR NFESC Code 112E4 (Jai Jeffery) Fax DSN 551-4304



FAX Transmittal: V. Nanda to J. Richards (29 June 1994)

**DEPARTMENT OF THE NAVY**  
LONG BEACH NAVAL SHIPYARD  
LONG BEACH, CALIFORNIA 90822-6099

**FACSIMILE TRANSMISSION**

ENVIRONMENTAL PROTECTION DIVISION  
Telephone: (310) 547-7868  
AUTOVON: 360-7868  
FAX: (310) 435-1032

DATE: 27 Jun 94 547-7767  
(fax number)

TO: Vic Nanda ROICC  
(name) (company)

FROM: C. Anna Ulaszewski  
(name)

TOTAL NUMBER OF PAGES INCLUDING COVER SHEET: 2

REMARKS:

I received the seed mix from John Richards of IT Corp. I've been able to identify some of the plant genera and a few species in this seed mix as being present on the slope, but not all. However, the predominate vegetation on the slope is Melilotus albus (white sweet clover) and Rudbeckia hirta(?) (Black Eyed Susan). Neither one of these were listed in the seed mix and neither were on the slope prior to hydroseeding.

The seed mix that was used on the slope is different than what we have been told was used.





BY: XEROX Telecopier 7021 ; 6-21-94 ; 10:19AM ;  
 BY: XEROX Telecopier 7017 ; 6-24-94 ; 3:25PM ;  
 JUN 21 '94 14:44 HYDRO-PLANT, INC.

21343510327  
 0195540511

21343510327 # 2  
 P.1/1

FAX Transmittal: V. Nanda to J. Richards (29 June 1994)



**Hydro-Plant, Inc.**  
 Hydroseeding and Erosion Control

386 South Pacific Street  
 San Marcos, CA 92069-3896

Company Lic. #307823

(818) 744-7360  
 FAX (818) 744-8559  
 (714) 991-4343

June 21, 1994

Mr. John Richards  
 International Technology Corporation  
 FAX: 554-0511

RE: LONG BEACH NAVAL AIRFIELD  
 LONG BEACH, CALIFORNIA

Dear Jim:

Hydro-Plant, Inc. certifies that the following materials were applied at the above referenced project.

February 9, 1994

LB#./ACRE

Mulch: Wood Fiber	2,000
Fertilizer: Hydroblend	1,000
Additive: Gypsum	1,000
Soil sulphur	700
Seeds: Atriplex semibaccata 90/80	12
Atriplex glauca 50/50	10
Linum peruvii 65/5	15
Linum sinuatum 65/10	15
Linum pectinatum 65/30	9
Atriplex strobilata 80/50	12
Achillea millefolium 98/70	3
Asterias pilostachya 4/20	6
Oenothera chairanthifolia 98/75	2
Plantago insularis 98/75	30

April 7, 1994

Fertilizer: Landtech 1000 Organic	1,000
Additive: Gypsum	370
Soil sulphur	240

If you should have any questions please contact our office.

Sincerely,

*[Handwritten signature]*  
 Joe Plant



Letter: R. McGann to J. Richards (12 July 1994)



## Hydro-Plant, Inc.

Hydroseeding and Erosion Control

356 South Pacific Street  
San Marcos, CA 92069-3894

Contractors Lic. #397933

(619) 744-7360  
FAX (619) 744-6559

July 12, 1994

Mr. John Richards  
International Technology Corporation  
5754 Pacific Center Boulevard, Suite 203  
San Diego, California 92121

RE: LONG BEACH NAVAL SHIPYARD

Dear John:

This is in regards to the weed growth problem at the above referenced jobsite. Without the preventative measures of a "Grow and Kill" on a site that has a recognized potential for a weed problem, there is no way of telling what weed growth will occur. Even with recognizing certain existing weeds, outside of pulling some soil samples for testing, it is virtually impossible to predict what weeds will come up.

It is my understanding that the slopes in question had been there for a number of years. It was uncertain if the soil was existing or imported. Also, I was informed that unknown spoils had been spread randomly at this site. Keeping this in mind, and making an observation of what was growing on site, I made the recommendation to Jim Franklin for a "Grow and Kill".

Please see enclosed letter from S & S Seeds regarding weed growth. If you should have any questions please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rob McGann'.

Rob McGann  
Estimator

Letter: R. McGann to J. Richards (12 July 1994)

S&S  
SEEDS

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July 11, 1994

Hydro Plant, Inc.  
356 S. Pacific Street  
San Marcos, CA 92069-3894

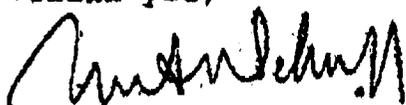
Re: Long Beach Naval Shipyard Seed Mix

To Whom It May Concern:

The seed mix for the Long Beach Naval Shipyard was planted in February. If the mix received adequate moisture for germination and growth and weed competition was minimal, all of the species should have germinated. By this time the plants should range from four inches to twelve inches in height. Maximum height at maturity is two feet for some species. Poor results could be caused by inadequate moisture or weed competition. Either condition could result in the mix not growing to its correct height and/or not surviving at all.

Atriplex semibaccata  
Atriplex glauca  
Limonium perezii  
Limonium sinuatum  
Atriplex rhagioides  
Ambrosia psilostachys  
Oenothera cheiranthifolia  
Plantago insularis  
Limonium pectinatum  
Achillea millefolium

Thank you,



Victor W. Schaff  
S&S Seeds